Environmental Assessment

Proposed Construction of Type III Hydrant Fueling System and Combined Mobility Processing Center

Seymour Johnson Air Force Base, North Carolina

United States Air Force
Air Combat Command
4th Fighter Wing

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ENVIRONMENTAL ASSESSMENT
PROPOSED CONSTRUCTION OF TYPE III HYDRANT FUELING SYSTEM AND COMBINED MOBILITY PROCESSING CENTER
SEYMOUR JOHNSON AIR FORCE BASE (SJAFB), NORTH CAROLINA

Purpose and Need for Action: The base needs to clear its flight line of structures that encroach into the airfield lateral safety clearance zone and replace these with facilities adjacent to the flight line. Specifically, pump houses in the clearance zone are old and difficult to repair causing fuel leaks that increase the potential for mission delays. The base also needs available and secure land adjacent to the flight line on which to build new flight line support facilities.

Description of the Proposed Action: The proposed action, the Full Development Alternative, allows efficient development of the wooded parcel of the Aircraft Operations and Mobility Development Area (AOMDA) on either side of McColpin Road between Blakeslee Avenue and Gentile Road for direct support of flight line activities. The proposed new facilities and associated utilities would be constructed between the proposed apron expansion (separate project) and Blakeslee Avenue. The following activities are included in the proposed action: (1) design and construction of flightline support facilities; (2) demolition of existing 1950's fuel system and pump houses adjacent to Taxiway A and construction of a Type III hydrant fueling system outside the airfield lateral safety clearance zone; (3) demolition of existing personnel deployment facility and passenger terminal (Buildings 4741 and 4743) and construction of a combined mobility processing center; and (4) relocation of McColpin Road to provide better access to the proposed facilities.

Alternatives to the Proposed Action: One other alternative was studied during this EA: the No Action Alternative. Four other alternatives were reviewed but eliminated from detailed analysis, as they did not meet minimum criteria for the proposed project.

Summary of Environmental Effects: The following findings are substantiated by the results of the Proposed Construction of Type III Hydrant Fueling System and Combined Mobility Processing Center Environmental Assessment, Seymour Johnson AFB, North Carolina.

Air Quality: SJAFB and the local region are currently in attainment for National Ambient Air Quality (NAAQS) Standards and the state equivalent North Carolina Ambient Air Quality Standards (NCAAQS). The proposed action would not cause an exceedence of deminimus levels for NAAQS or NCAAQS; therefore, a conformity analysis is not required. Potential impacts to air quality under the proposed action are anticipated to be negligible.

Soils: Ground disturbing activities could elevate levels of erosion in the study area and a sedimentation and erosion control plan will be required during construction activities. Through the use of best management practices such as silt fencing, potential impacts to soils under the proposed action are anticipated to be negligible and would be insignificant to local and regional conditions.

Land Use, Transportation, and Utilities: Proposed construction in the study area would result in no land use impacts to the base. Based on an environmental review of the area, the base concluded the area had little value to the Neuse River Watershed, and therefore the proposed project would be anticipated to have negligible impacts on the Neuse River Buffer Rules land use planning. Any potential negative impacts would be insignificant. Although short term increases in construction traffic would be anticipated, daily phasing of this traffic and other outlined strategies would make any potentially negative impacts to traffic on or adjacent to the base insignificant. It is not anticipated that utilities outside the study area would need to be upgraded to support the demand in the study area. The proposed project would not be expected to have any impact on utilities.

Water Resources: The project study area and cumulative project study area have approximately 3,220 linear feet of stream. This stream length would be completely culverted. The stream would be temporarily

impacted by erosion and sedimentation during the construction process. Downstream areas would also be temporarily impacted by construction activities. It is anticipated that impacts would be temporary, occurring only during construction activities, and would be insignificant. The riparian buffer in the study area and cumulative area would be completely cleared. Total cleared buffer would be approximately 8.0 acres but would not represent a significant impact.

North Carolina Department of Environment and Natural Resources, Division of Water Quality (NC DENR - DWQ) and United States Army Corps of Engineers (USACOE) permitting requirements for impacts to the stream and buffer would be met by payment of funds into wetland banks such as North Carolina's Ecosystem Enhancement Program (EEP).

Increased impervious surfaces in the area could reduce infiltration of stormwater into groundwater in the study area. Stormwater management systems developed in conjunction with the proposed project would take groundwater resources into account during design to avoid or minimize potential negative impacts. Any negative impacts to ground water would therefore be minimal and insignificant.

A stormwater management facility would be developed to collect and manage approximately 11.5 acres of runoff. This facility would be designed during the Neuse River Buffer Rule and Clean Water Act 401/404 permitting processes and approved by NC DENR - DWQ and USACOE prior to any construction in the study area. The stormwater facilities would be designed within the study area to the maximum extent practical and would include at a minimum containment diking for the above ground storage tanks and runoff treatment using an oil/water separator for paved parking areas. Additionally, the facilities would exclude any options that could present Bird Aircraft Strike Hazards in the AOMDA. These measures would avoid or minimize any potential negative impacts to stormwater/drainage under the proposed action. Any remaining impacts would be minimal and insignificant.

Hazardous Materials and Wastes and Solid Wastes: It is highly likely that demolition of the pump houses on the flight line would exceed the allowable limits for asbestos (160 square feet) and would therefore require an asbestos permit. The demolition of the pump houses would also require the disposal of materials contaminated with lead-based paint. By using accredited contractors for the handling and disposal of these materials, any negative impacts associated with lead based paint and asbestos in the proposed project would be anticipated to be insignificant.

New above ground storage tanks and fuel lines would be constructed as part of the hydrant fueling system. The system would contain standard safety features such as a containment dike to capture and contain fuel spills and potential soil and water contamination. With safety features installed, impacts would be anticipated to be avoided or minimized and would therefore be insignificant to the local environment.

Underground storage tanks and fuel lines associated with the existing pump houses adjacent to the flight line would be removed under this alternative. Soil and water surveys would be completed during the removal process. Any noted contaminated sites would be monitored and scheduled for clean up in accordance with applicable rules and regulations. Removal of these structures under the proposed action would therefore have a beneficial impact on the local environment.

Engineering and design of facilities may require use of part of the ERP site OT-29. During construction, the Air Force would remediate any portion of the site used under the proposed project. Where feasible, the base would purposefully avoid the ERP site and areas immediately adjacent to the site. Construction activities would avoid staging in this area where feasible. Therefore there would be no impacts to unused portions of this site under the proposed action and beneficial impacts due to accelerated clean up activities for any used portions.

Demolition and construction of facilities under the Development Alternative would result in the generation of solid wastes. To the extent possible, this waste material would be recycled. If necessary, some of the debris would be taken to an appropriate landfill for disposal. The proposed project would not be anticipated to contribute substantially to SJAFBs annual generation of solid wastes and therefore would not have significant impacts to the local landfill.

Biological Resources: Under the proposed development, the entire study area would be developed to support flight line activities. Most of the vegetation in the study area would be cleared. Vegetative material would be disposed of either in a landfill or by chipping and re-selling as mulch. Where feasible, construction would avoid cutting down any invasive species and transporting debris when species are fruiting to reduce spread of seeds. These activities would avoid or minimize any negative impacts associated with the proposed project. Any remaining negative impacts would be insignificant.

The area would be cleared of vegetation and landscaped as appropriate for an industrial area. This area is currently described as fragmented and degraded mesic mixed hardwood forest with little to no regional habitat value. The area is further isolated by surrounding human activities. Potential impacts to the biological habitat under the proposed action would therefore be negligible and insignificant.

Although the current Bird Aircraft Strike Hazards (BASH) environment was not reviewed by this study, the reduced density of species in the AOMDA would reasonably result in a reduction of potential BASH concerns that would otherwise be associated with the existing study area. Therefore, any negligible impacts from the proposed project on BASH issues would be positive.

No threatened or endangered species were identified in the project area, therefore, no impacts are anticipated.

The proposed action would require the filling of 0.008 acres of jurisdictional wetland within the riparian buffer in the study area. This impact is unavoidable but does not represent a substantial impact to wetlands or water quality due to the small size of the area. This area was included in the area described as the 30-foot riparian buffer and would be replaced under the NC DENR DWQ and USACOE permitting processes. Therefore, negative impacts from the filling of this wetland area would be negligible.

There is no practicable alternative to the location of the proposed facilities and the alteration of water resources in the study area. Preliminary layout designs also indicate that there is no practicable way to avoid culverting the stream and filling the wetland area. Since the wetland is directly adjacent to the stream and is so small, there is no way to prevent destruction of this small wetland area when the stream is relocated.

There are no regulated floodplains in or adjacent to the project area; therefore, the Development Alternative would impact no regulated floodplains.

Finding Of No Significant Impact / Finding of No Practicable Alternative: Based on the attached Environmental Assessment, conducted in accordance with the requirements of the National Environmental Policy Act, the Council on Environmental Quality Regulations, and Air Force Instruction 32-7061, I conclude the preferred alternative, construction of Type III hydrant fueling system and combined mobility processing center in the designated study area, would have no significant individual or cumulative impact upon the environment. I also find that there is no practicable alternative to this action. The action cannot be practically accomplished in a manner that would better minimize disturbance, preserve aquatic life and habitat, and protect water quality. Additionally, the use cannot practically be reduced in size or density, reconfigured or redesigned to better minimize disturbance, preserve aquatic life habitat, and protect water quality. Best management practices shall be used to minimize disturbance, preserve aquatic life and habitat, and protect water quality. The proposed action includes all practicable measures to avoid or minimize harm. An Environmental Impact Statement is not warranted, and one will not be prepared.

Bruce A. Wright

BRUCE A. WRIGHT
Lieutenant General, USAF
Commander

23 Jan 2005

DATE

Executive Summary

This Environmental Assessment (EA) describes the potential consequences resulting from a proposal to develop a parcel of the Aircraft Operations and Mobility Development Area (AOMDA) at Seymour Johnson Air Force Base (AFB), North Carolina. The development includes mission support facilities including a Type III hydrant fueling system and a combined mobility processing center. Of the five alternative sites considered only one site and the no action alternative were carried forward for full analysis.

Environmental Impact Analysis Process

This EA has been prepared by the United Stated Air Force (USAF), the 4th Fighter Wing in accordance with the requirements of the National Environmental Policy Act (NEPA) of 1969, the Council on Environmental Quality (CEQ) regulations implementing NEPA, and Air Force Instruction (AFI) 32-7061 (*The Environmental Impact Analysis Process*, 32 Code of Federal Regulations [CFR] 989).

Purpose and Need for Action

In today's age of heightened national and global security, it is more critical than ever that the USAF maintains its flight line readiness and support capabilities and quickly expands its support needs when necessary. The base needs to clear its flight line of structures that encroach into the airfield lateral safety clearance zone and replace these with facilities adjacent to the flight line. Specifically, pumphouses in the clearance zone are old and difficult to repair causing fuel leaks that increase the potential for mission delays. The base also needs available and secure land adjacent to the flight line on which to build new flight line support facilities. To meet these needs, the purpose of this project is to:

- demolish existing fuel system buildings and underground storage tanks adjacent to Taxiway A and construct a Type III hydrant fueling system with pump house and above-ground storage tanks located outside the airfield lateral safety clearance zone;
- demolish two existing deployment buildings and construct a combined mobility processing center and War Reserve Material (WRM) storage facility.

In developing siting alternatives for the location of the Type III hydrant fueling system and the combined mobility processing center, the base identified specific criteria that must be me. Specifically, proposed locations must be:

- within the AOMDA;
- in close proximity to the flight line;
- developable with sufficient land to construct the facilities and support structures;
- securable (away from and inside current base boundaries);
- readily accessible without substantial and major modifications to existing AOMDA facilities.

The only remaining practicable and available space in the AOMDA available to accommodate these facilities was identified and proposed. This area was a mostly undisturbed, wooded area that was originally targeted for flight line development activities in the AOMDA. Other areas were also reviewed as alternative locations. These areas were determined to be either adjacent to the base boundaries, outside the AOMDA, not adjacent to the flight line, or off base property and therefore not suitable for most flight line support facilities. SJAFB determined it was not feasible or reasonable to build facilities such as a hydrant fueling system adjacent to the base boundary for security reasons (Unified Facilities Criteria (UFC) 4-010-01, DoD Minimum Antiterrorism Standards for Buildings, 31 July 2001). Additionally, flight line support facilities must be located adjacent to the flight line.

Proposed Action and Alternatives

Two alternatives were studied during the analysis process of this EA, the Development Alternative and the No Action Alternative. No other alternative met the purpose and need for the proposed project.

Development Alternative

The proposed action, the Full Development Alternative, allows efficient development of the study area for direct support of flight line activities. The new facilities and associated utilities would be constructed in the study area between the proposed apron expansion (separate project) and Blakeslee Avenue. The following activities are included in the proposed action:

- Design and Construction of Flight Line Support Facilities: demolition of existing 1950's fuel system and pumphouses adjacent to Taxiway A and construction of a Type III hydrant fueling system outside the airfield lateral safety clearance zone and demolition of existing personnel deployment facility and passenger terminal (Buildings 4741 and 4743) and construction of a combined mobility processing center.
- Relocated Roadway: relocate McColpin Road from its existing alignment to provide better access to the proposed facilities.

As a result of the proposed action, the following actions would also be required in the study area:

- Alteration of Surface Waters: culvert and relocate area streams and construct a stormwater management facility as needed, to control stormwater runoff in the study area;
- Avoidance of Environmental Restoration Program (ERP) site OT-29, Hazardous Materials Spill Site.

No Action Alternative

This alternative refers to the continuations of existing conditions in the project study area without implementation of the proposed action. Under this alternative, Seymour Johnson Air Force Base would not construct new facilities in the project study area. McColpin Road would be maintained in its current

location. The existing pumphouses and tanks would remain as an encroachment to the airfield lateral safety clear zone. Additionally, the current pumphouses would continue to age and become difficult to repair. Leaks would occur more frequently and mission delays would become routine, creating the potential for protracted out-of-service time. Back up systems would not be able to support the mission if the current pumphouses failed during a high deployment period and large frame aircraft required support from mobile refueling vehicles. . Also, a combined mobility processing center would not be developed and would impede mission support activities.

Summary of Environmental Consequences

Air Quality

Although the new Type III hydrant fueling system could have emissions of volatile organic compounds, these would not be any greater than emissions from the existing pumphouses adjacent to the flight line. It is anticipated that emissions reduction from the demolition of the existing sources would balance any additional emissions generated by the new fuel hydrant system. No new air quality permit would be required for the construction of the Type III hydrant fueling system. The proposed action would not cause an exceedance of deminimus levels for National or North Carolina Ambient Air Quality Standards (NAAQS or NCAAQS).

Ground disturbing activities during clearing and construction could introduce elevated levels of particulate matter into the air. These impacts would be reduced or avoided to the maximum extent practicable through best management practices for clearing and construction activities only during times when air quality is good, using all practicable control measures to prevent the spread of fire to other areas, and by burning in small batches over time.

SJAFB is currently in attainment for NAAQS and NCAAQS. Potential impacts to air quality under the proposed action would therefore be anticipated to be negligible, not exceed air quality standards, and would be insignificant to local and regional air quality.

Soils

Ground disturbing activities during clearing and construction could introduce elevated levels of erosion in the study area. These impacts would be reduced or avoided to the maximum extent practicable through best management practices for clearing and construction activities including the use of silt fences and erosion control fabrics, replanting cleared areas as soon as possible after construction, and by using temporary seeding if construction is delayed. Additionally, landscaping after construction would be used to avoid future erosion. A sedimentation and erosion control plan in accordance with NPDES Permit No. NCG010000 would be required during construction activities. Implementation of the soil erosion and sedimentation control plan would avoid or minimize erosion and sedimentation into the streams during

culverting activities. Best management practices for control of sedimentation and erosion, such as those mentioned above, would be identified in the permit.

Potential impacts to soils under the proposed action would therefore be anticipated to be negligible and would be insignificant to local and regional conditions.

Land Use, Transportation, and Utilities

The land in the study area would be cleared of vegetation and the stream would be culverted. Open space and outdoor recreation land uses would be converted to aircraft operations and maintenance land uses. This would be consistent with the 1955 Base Master Plan and the 2003 Base General Plans for the study area and would result in no land use impacts to the base.

The North Carolina "Neuse River Buffer Rule" protects the Neuse River Watershed from development. Specifically, the Rule protects the Neuse River, tributaries to the Neuse River, and associated riparian buffers within 50 feet of the Neuse River and its tributaries. The proposed Development Alternative would require a permit to develop the study area. Based on an environmental review of the area, the base concluded the area had little value to the Neuse River Watershed, and therefore the proposed project would be anticipated to have negligible impacts on the Neuse River Buffer Rules land use planning. Any potential negative impacts would be insignificant.

McColpin Road would experience increased traffic volumes from construction of the proposed mobility processing center. Additionally, development of the study area would require an increased level of construction traffic on base. A specific haul route would be identified prior to construction to avoid or minimize any circulation impacts outside the study area. By scheduling delivery and removal of construction materials during non-peak traffic conditions on base, the short-term effect of construction traffic may be further minimized. By using these strategies, any potentially negative impacts to traffic on or adjacent to the base would be insignificant.

Supporting utilities would connect from existing lines and would extend into the study area to support proposed facilities. These utilities would include electrical, water, sanitary sewer, and storm sewer lines. Since the proposed facilities in the study area (the mobility processing center and the Type III hydrant fueling system) are replacing facilities proposed for demolition, no substantial increase in consumption demands would be anticipated. It is not anticipated that utilities outside the study area would need to be upgraded to support the demand in the study area. The proposed project would not be expected to have any impact on utilities.

Water Resources

The project study area and cumulative project study area have approximately 3,220 linear feet of stream. This stream length would be completely culverted. Detailed design specifications for the culvert would be developed during the permit process. The culvert would be capable of managing water flow from the project study area, upstream areas, and tributaries. The stream would be temporarily impacted by erosion and sedimentation during the construction process. Downstream areas would also be temporarily impacted by construction activities. Impacts would be minimized to the maximum extent practical using state approved best management practices.

The riparian buffer in the study area and cumulative area would be completely cleared. Vegetated material would be disposed of either in a landfill or by chipping and re-using as mulch. Total cleared buffer would be approximately 8.0 acres.

North Carolina Department of Environment and Natural Resources, Division of Water Quality (NC DENR - DWQ) and United States Army Corps of Engineers (USACOE) permitting requirements for impacts to the stream and buffer would be met by payment of funds into wetland banks such as North Carolina's Ecosystem Enhancement Program (EEP). Other possible methods of satisfying permit requirements would be explored as necessary, including possible restoration of other streams in or adjacent to the base. These options would be explored in supplemental studies only if full payment into wetland banks was not available.

Increased impervious surfaces in the area could reduce infiltration of stormwater into groundwater in the study area. Stormwater management systems developed in conjunction with the proposed project would take groundwater resources into account during design to avoid or minimize potential negative impacts. Any negative impacts to ground water would therefore be minimal and insignificant.

A stormwater management facility would be developed to collect and manage approximately 11.5 acres of runoff. This facility would be designed during the Neuse River Buffer Rule and Clean Water Act 401 permitting processes and approved by NC DENR - DWQ and USACOE prior to any construction in the study area. The stormwater facilities would be designed within the study area to the maximum extent practical and would include at a minimum containment diking for the above ground storage tanks and runoff treatment using an oil/water separator for paved parking areas. Additionally, the facilities would exclude any options that could present Bird Aircraft Strike Hazards (BASH) in the AOMDA. These measures would avoid or minimize any potential negative impacts to stormwater/drainage under the proposed action. Any remaining impacts would be minimal and insignificant.

Hazardous Materials and Wastes and Solid Wastes

It is highly likely that demolition of the pumphouses on the flight line would exceed the allowable limits for asbestos (160 square feet) and would therefore require an asbestos permit. An accredited contractor for the handling and disposal of asbestos would be used to ensure the proper disposal of this waste. The demolition of the pumphouses would also require the disposal of materials contaminated with lead-based paint. An accredited contractor for the abatement of lead-based paint would be used to ensure the proper disposal of this waste. By using accredited contractors for the handling and disposal of these materials, any negative impacts associated with lead based paint and asbestos in the proposed project would be anticipated to be insignificant.

New above ground storage tanks and fuel lines would be constructed as part of the Type III hydrant fueling system. The system would contain standard safety features such as a containment dike to capture and contain fuel spills and potential soil and water contamination. Fuel distribution piping would extend outside of the study area under the proposed action. These lines would connect to existing piping adjacent to the study area or would be located in the AOMDA in previously disturbed areas. With safety features installed, impacts would be anticipated to be avoided or minimized and would therefore be insignificant to the local environment.

Underground storage tanks and fuel lines associated with the existing pumphouses adjacent to the flight line would be removed under this alternative. These systems are old and in need of replacement due to increasing frequency of leakage. Soil and water surveys would be completed during the removal process. Any noted contaminated sites would be monitored and scheduled for clean up in accordance with applicable rules and regulations. Removal of these structures under the proposed action would therefore have a beneficial impact on the local environment.

Engineering and design of facilities may require use of part of the Environmental Restoration Program (ERP) site OT-29. During construction, the Air Force would remediate any portion of the site used under the proposed project. Where feasible, the base would purposefully avoid the ERP site and areas immediately adjacent to the site. This land would be held separate for the continued management and monitoring of the contaminated soils and groundwater. Also, construction activities would avoid staging in this area where feasible. Therefore there would be no impacts to unused portions of this site under the proposed action and beneficial impacts due to accelerated clean up activities for any used portions.

Demolition and construction of facilities under the Development Alternative would result in the generation of solid wastes. During the clearing and construction period significant quantities of landscape material would be removed from the area as well as hardscape (such as from the removal of the existing road). To the extent possible, this waste material would be recycled. If necessary, some of the debris would be

taken to an appropriate landfill for disposal. The proposed project would not be anticipated to contribute substantially to SJAFB's annual generation of solid wastes and therefore would not have significant impacts to the local landfill.

Biological Resources

Under the proposed development, the entire study area would be developed to support flight line activities. Most of the vegetation in the study area would be cleared. Vegetative material would be disposed of either in a landfill or by chipping and re-selling as mulch. A review for invasive plant species would be completed prior to clearing activities. Where feasible, construction would avoid cutting down any invasive species and transporting debris when species are fruiting to reduce spread of seeds. These activities would avoid or minimize any negative impacts associated with the proposed project. Any remaining negative impacts would be insignificant.

The area would be landscaped as appropriate for an industrial area. Native vegetation would be used to re-vegetate the area, however fruit and nut bearing species would be avoided. Common species accustomed to living in close proximity to the flight line and industrial type activities would be anticipated to re-colonize the area. The total density of plant and animal species in the study area is anticipated to be reduced under the proposed project as the clearing of natural areas would reduce the total habitat. As discussed in section 3.6.1, this area is currently described as fragmented and degraded mesic mixed hardwood forest with little to no regional habitat value. The area is further isolated by surrounding human activities. Potential impacts under the proposed action would therefore be negligible and insignificant.

Although the current BASH environment was not reviewed by this study, the reduced density of species in the AOMDA would reasonably result in a reduction of potential BASH concerns that would otherwise be associated with the existing study area. The clearing of trees from the study area would not create areas of open water since stormwater management facilities developed under the proposed action would prevent this occurrence. Therefore, any negligible impacts from the proposed project on BASH issues would be positive.

Based on Threatened and Endangered (T/E) species surveys, study area observations, NC Natural Heritage Foundation records, and informal correspondence with United States Fish and Wildlife Service, no protected species or habitat occurs in the project study area. Therefore, there are no anticipated impacts to threatened or endangered species under the Development Alternative.

The alternative would require the filling of 0.008 acres of jurisdictional wetland within the riparian buffer in the study area. This impact is unavoidable, but does not represent a substantial impact to wetlands or water quality due to the small size of the area. This area was included in the area described as the 30-

foot riparian buffer and would be replaced under the NC DENR DWQ and USACOE permitting processes. Therefore, negative impacts from the filling of this wetland area would be insignificant.

There is no practicable alternative to the location of the proposed facilities and the alteration of water resources in the study area. Preliminary layout designs also indicate that there is no practicable way to avoid culverting the stream and filling the wetland area. Since the wetland is directly adjacent to the stream and is so small, there is no way to prevent destruction of this small wetland area when the stream is relocated.

ES-1. Summary Matrix of Environmental Effects

Resource	**No-Action Alternative**	**Proposed Action**	**Cumulative Impacts**
Air Quality	None	Potential Negative, Negligible, Insignificant Impacts	None
Soils	None	Potential Negative, Negligible, Insignificant Impacts	Potential Negative, Negligible, Insignificant Impacts
Land Use, Transportation, and Utilities	None	Potential Negative, Negligible, Insignificant Impacts	Potential Negative, Negligible, Insignificant Impacts
Water Resources	None	Potential Negative but Insignificant Impacts to Water Resources	Potential Negative but Insignificant Impacts to Water Resources
Hazardous Materials and Wastes	Potentially Negative and Significant Impacts to Fuel Lines and USTs	Potential Negative but Insignificant Impacts to Lead Based Paint and Asbestos and Potential Positive Impacts to Fuel Lines and USTs	Potential Negative but Insignificant Impacts to Lead Based Paint and Asbestos
Biological Resources	None	Potential Negative but Insignificant Impacts to Natural Communities	Potential Negative but Insignificant Impacts Natural Communities

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Acronyms and Abbreviations

AFI	Air Force Instruction
AFPD	Air Force Policy Directive
AST	Aboveground Storage Tank
AOMDA	Aircraft Operations and Mobility Development Area
BASH	Bird Aircraft Strike Hazard
BMP	Best Management Practice
CAA	Clean Air Act
CEQ	Council of Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CEVP	Civil Engineer Environmental Analysis
CO	Carbon Monoxide
CWA	Clean Water Act
DoD	Department of Defense
DWQ	Division of Water Quality
EA	Environmental Assessment
EEP	Ecosystem Enhancement Program
EIS	Environmental Impact Statement
EO	Executive Order
ESA	Endangered Species Act
EPA	Environmental Protection Agency
ERP	Environmental Restoration Program
FFA	Federal Facility Agreement
FONPA	Finding of No Practicable Alternative
FONSI	Finding of No Significant Impact
HQ ACC	Headquarters Air Combat Command
HQ ACC / CV	Headquarters Air Combat Command Vice Commander
HWMP	Hazardous Waste Management Plan
IICEP	Interagency and Intergovernmental Coordination for Environmental Planning
MAP	Management Action Plan
NAAQS	National Ambient Air Quality Standards
NC DENR	North Carolina Department of Environment and Natural Resources,
NEPA	National Environmental Policy Act
NPL	National Priorities List
NO2	Nitrogen Dioxide
NSW	Nutrient Sensitive Water
O3	Ozone

Pb	Lead
PM10	Particulate Matter (10 microns)
RAPCON	Radar Approach Control
RCRA	Resource Conservation and Recovery Act
ROI	Region of Influence
SIP	State Implementation Plan
SJAFB	Seymour Johnson Air Force Base
SO2	Sulfur Dioxide
T/E	Threatened and Endangered
TSCA	Toxic Substances Control Act
USACOE	United States Army Corps of Engineers
USAF	United States Air Force
UST	Underground Storage Tank
WRM	War Reserve Material

1.0 Introduction

Seymour Johnson Air Force Base (SJAFB) has limited available space in its Aircraft Operations and Mobility Development Area (AOMDA) for proposed facilities required to support flight line activities. Two proposed flight line support facilities need to be located in the space-limited AOMDA in secure locations near the flight line. The facilities are a Type III hydrant fueling system and a combined mobility processing center.

An available area, which provides a secure location away from base boundaries and adjacent to the flight line, is a wooded parcel in the AOMDA (Figure 1). The parcel contains a small tributary to the Neuse River with a riparian buffer. The tributary is culverted from the south side of the site across the airfield. During dry weather, water from the base water system is added to the golf course lake to maintain a consistent water level. This lake feeds the tributary. The parcel also contains Environmental Restoration Program (ERP) Site OT-29 (a hazardous materials spill site) and an existing roadway. The current positions of the stream, ERP Site OT-29, and the roadway in the study area prevent the efficient and full use of prime flight line support land. Modification of the stream and roadway alignments would allow the development of both the Type III hydrant fueling system and a combined mobility processing center in the area.

This Environmental Assessment:

- describes the Purpose and Need for construction of the Type III hydrant fueling system and a combined mobility processing center in the AOMDA;
- defines alternatives reviewed to support the purpose and need;
- documents existing environmental issues and resources in the study area and potential impacts from the proposed action; and
- considers cumulative impacts from reasonably foreseeable proposed projects adjacent to the study area.

1.1 Background

SJAFB is a 3,233-acre military facility located in the city of Goldsboro, North Carolina. It is situated in the east-central portion and Coastal Plain region of the state. The base itself consists primarily of flat to gently rolling topography with elevations between 48 and 120 feet, mean sea level. SJAFB is located within the Neuse River watershed and is bordered by both the Neuse River and Stoney Creek.

Most of the acreage on SJAFB consists of improved grounds. The southern half of the base is comprised of the airfield complex and flight line. The remainder of the installation contains residential areas, a

variety of buildings and complexes, recreation facilities, training areas, small forested/undeveloped areas, and vacant tracts along the Neuse River and Stoney Creek.

SJAFB was established in 1942 during the Second World War. The base was deactivated in 1946 after the war. In 1949, the property was deeded to the City of Goldsboro. In December 1952, the City of Goldsboro transferred the base to the federal government. On-base land use zoning was first established in a base master plan in 1955 before the base was reactivated in April 1956. Currently, the 4th Fighter Wing is the host unit at SJAFB. Its mission is "Preparing and providing professional Expeditionary Air Forces to fulfill any 4 FW tasking...anytime, anywhere."

The USAF designated the area adjacent to the flight line as the Aircraft Operations and Mobility Development Area (AOMDA) for aircraft operations and flight line facilities. The AOMDA has the entire force protection stand off distance requirements necessary to allow any aircraft operation. The USAF intended the AOMDA to be developed as needed to support the USAF Mission and to remain flexible to the changing needs of national and global security.

Flight line support facilities have taken much of the available land in the AOMDA since 1956. Base closures throughout the country have increased mission requirements at remaining bases and filled up much available land with new support facilities. Congress must approve any new acquisition of surrounding land in an effort to maintain or reduce military infrastructure. This makes purchasing additional land adjacent to base boundaries exceedingly difficult and sometimes impossible. Additionally, the USAF has a goal of environmental stewardship and works to substantially limit impacts to natural resources. These regulations and goals make development of remaining open areas on base difficult regardless of the need.

As a result, space availability for flight line support projects is very limited, and efficient use of remaining space is a serious consideration. Nearly all of the open areas remaining are reserved for proposed mission development and modifications at SJAFB or are of limited value for secure facilities due to proximity to the base boundary.

Currently, two proposed flight line support facilities need to be located in the space-limited AOMDA in secure locations near the flight line. The facilities are a Type III hydrant fueling system and a combined mobility processing center.

Seymour Johnson Air Force Base is a strong asset to national and global security. Fighter groups and other personnel from SJAFB have participated successfully in numerous engagements in World War II,

the Korean conflict, Vietnam, and both Persian Gulf wars. To continue in this tradition, Seymour Johnson must maintain flexibility to meet and support changing mission needs.

1.2 Proposed Study Area

The study area proposed for flight line support development is a wooded parcel of the AOMDA on either side of McColpin Road between Blakeslee Avenue and Gentile Road (Figure 2). This parcel has good flight line access that makes it a valuable piece of un-developed land for future aircraft operations and mobility missions. The study area contains a small stream, a tributary of the Neuse River, with a wide riparian buffer and ERP Site OT-29 (an old hazardous material spill site with monitoring wells). The site also contains a radar tower that is proposed as a separate and independent project for relocation to another portion of the AOMDA.

The stream runs along the north and west sides of the study area with a tributary running from east to west near the southern edge of the study area. ERP Site OT-29 is centrally located in the study area with a plume that is slowly encroaching toward the stream. McColpin Road is located on the eastern side of the study area. The irregular positioning of these features in the study area presents serious challenges to the efficient use of this land for flight line support facilities.

1.3 Purpose and Need for the Proposed Action

In today's age of heightened national and global security, it is more critical than ever that the USAF maintains its flight line readiness and support capabilities and quickly expands its support needs when necessary. The base needs to clear its flight line of structures that encroach into the airfield lateral safety clearance zone and replace these with facilities adjacent to the flight line. Specifically, pumphouses in the clearance zone are old and difficult to repair causing fuel leaks that increase the potential for mission delays. The base also needs available and secure land adjacent to the flight line on which to build new flight line support facilities. To meet these needs, the purpose of this project is to:

- demolish existing fuel system buildings and underground storage tanks adjacent to Taxiway A and construct a Type III hydrant fueling system with pump house and above-ground storage tanks located outside the airfield lateral safety clearance zone;
- demolish two existing deployment buildings and construct a combined mobility processing center and War Reserve Material (WRM) storage facility.

1.4 Decision to be Made and the Decision Maker

This Environmental Assessment would result in a FONSI / FONPA to be signed by HQ ACC / CV. The decision to be made is whether to:

- limit or prevent development of the study area thereby preserving the natural riparian habitat (No Action Alternative); or

- implement the proposed action which includes:
  - construction of a Type III hydrant fueling system outside the airfield lateral safety clearance zone and demolition of existing fuel system adjacent to Taxiway A; and
  - construction of a combined mobility processing center and demolition of existing personnel deployment facility and passenger terminal (Buildings 4741 and 4743).

This Environmental Assessment is designed to aid the decision maker by discussing the potential environmental effects of these two alternatives.

1.5 Scope of Environmental Review

The National Environmental Policy Act (NEPA) is a federal statute requiring the identification and analysis of potential environmental impacts of proposed federal actions before those actions are implemented. NEPA mandates a structured approach to environmental impact analysis that requires federal agencies to use an interdisciplinary and systematic approach in their decision-making. This process evaluates potential environmental consequences associated with the proposed action and considers alternative courses of action. The intent of NEPA is to protect, restore, or enhance the environment through well-informed federal decisions.

The process for implementing NEPA is codified in 40 CFR §§ 1500 - 1508, Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act. NEPA established the Council on Environmental Quality (CEQ) to implement and oversee federal policy in these procedural provisions. The CEQ regulations require an Environmental Assessment (EA) be prepared to:

- briefly provide evidence and analysis for determining whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI) / Finding of No Practicable Alternative (FONPA);
- aid in an agency's compliance with NEPA when an EIS is unnecessary; and
- facilitate preparation of an EIS when one is necessary.

Air Force Policy Directive (AFPD) 32-70, Environmental Quality, states the USAF will comply with applicable federal, state, and local environmental laws and regulations. This directive also includes compliance with NEPA. The USAF implementing regulation for NEPA is Air Force Instruction (AFI) 32-7061, (*The Environmental Impact Analysis Process*, 32 Code of Federal Regulations [CFR] 989), which provides procedures for conducting USAF environmental impact analysis.

1.6 Applicable Regulatory Requirements

The Intergovernmental Coordination Act and *EO 12372, Intergovernmental Review of Federal Programs,* require federal agencies to cooperate with and consider state and local views in implementing a federal

action. *AFI 32-7060* requires the USAF to implement Interagency and Intergovernmental Coordination for Environmental Planning (IICEP), which is used for agency coordination and implementing scoping requirements.

Through the IICEP process, the USAF notifies relevant federal, state, and local agencies of the proposed action and allows them sufficient time to make known their environmental concerns specific to the action. This process also provides the USAF with the opportunity to cooperate with and consider state and local views in implementing a federal action. During the IICEP process for this project, the USAF coordinated with the United States Army Corps of Engineers (USACOE) and North Carolina Department of Environmental and Natural Resources – Division of Water Quality (NC DENR-DWQ). Chapter 6.0 presents a list of agencies and individuals contacted during the development and preparation of this EA.

Preliminary assessment of the proposed action and study area determined that certain regulatory requirements must be considered. The following subsections list relevant laws, regulations, and other requirements that were considered as part of this analysis. Regulatory requirements that do not pertain to the proposed action or study area include those relating to floodplains, cultural resources, socio-economic resources, and the noise environment. Floodplain areas as designated by Federal Emergency Management Act floodplain maps are confined to the southwestern corner of the base and do not occur in the project study area. No archaeological or historic resources were located in the project study area according to an archaeological survey completed in 1978 and accepted by the NC State Historic Preservation Officer by letter on 9 October 1978. No environmental justice populations, elderly communities, or children occur within the study area or within areas potentially impacted by the proposed action and therefore would not be impacted by the proposed project. The proposed action would have no change on the frequency or nature of takeoffs and landings on the flight line and would therefore have no impact on the noise environment in the study area. Proposed facilities are sited in compliance with the SJAFB Air Installation Compatible Use Zone Study. Interior office noise level reduction of 30 decibels would be provided in design and construction of proposed facilities.

1.6.1 Federal Regulatory Requirements

Air Quality

The Clean Air Act (CAA) establishes federal policy to protect and enhance the quality of the nation's air resources to protect human health and the environment. The CAA requires that adequate steps be implemented to control the release of air pollutants and prevent significant deterioration of air quality. The 1990 amendments to the CAA require federal agencies to determine the conformity of proposed actions to the State Implementation Plans (SIPs) for attainment of air quality goals.

Water Resources

The Clean Water Act (CWA) of 1977 (33 U.S.C. § 1344) and the Water Quality Act of 1987 (33 U.S.C. § 1251 as amended) establish federal policy to restore and maintain the chemical, physical, and biological integrity of the nation's waters and, where attainable, to achieve a level of water quality that provides for the protection and propagation of fish, shellfish, wildlife and recreation in and on the water. The U.S. Army Corps of Engineers is the authorized agency to grant permits for impacts to the nation's waters.

EO 11990, Protection of Wetlands, requires that federal agencies provide leadership and take actions to minimize or avoid the destruction, loss, or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands.

Hazardous Materials and Wastes

Hazardous materials and wastes are subject to federal regulation under the Solid Waste Disposal Act (as amended by the Resource Conservation and Recovery Act (RCRA)); the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); the Toxic Substances Control Act (TSCA); the Clean Water Act (CWA); and the Clean Air Act (CAA).

Biological Resources

The Endangered Species Act of 1973 (16 U.S.C. 1531 *et. seq*.) directs all federal departments and agencies to seek to conserve endangered species and threatened species and to cooperate with state and local agencies to resolve critical habitat issues in concert with conservation of endangered species.

1.6.2 State and Local Regulatory Requirements

Soils

Sedimentation Pollution Control Act of 1973 (as amended through 1999, North Carolina General Statute § 113A Article 4) provides for the creation, administration, and enforcement of a program and for the adoption of minimal mandatory standards that will permit development of the State of North Carolina to continue with the least detrimental effects from pollution by sedimentation.

Hazardous Materials and Wastes

Under "Criteria and Standards Applicable to Underground Storage Tanks (UST)" (15A NCAC 2N), North Carolina Department of Environment and Natural Resources, Division of Waste Management, UST Section requires notification of various activities regarding underground storage tanks.

Building demolition or renovation projects may disturb asbestos-containing materials. Such disturbances can result in the production of asbestos-containing dust which may contaminate a structure and are regulated under the North Carolina Asbestos Hazard Management Program (AHMP). The AHMP is

administered by the North Carolina Department of Health and Human Services, Division of Public Health, and was established under N.C. General Statute §130A-444-452 - Asbestos Hazard Management. The AHMP Rules adopted the National Emission Standards for Hazardous Air Pollutants (NESHAP) relating to asbestos demolition and renovation by reference. These regulations may be found at 40 CFR 61, Subpart M - National Emission Standard for Asbestos (40 CFR 61-141-157).

The North Carolina Lead-Based Paint Hazard Management Program, or LHMP (N.C. General Statute § 130A-453.01-453.11), administered by Health Hazards Control of North Carolina's Department of Health and Human Services, Division of Public Health, provides information to the public and to business and industry about this health hazard and ways to control or prevent lead poisoning. The LHMP certifies firms and individuals conducting lead-based paint management activities and issues permits for lead-based paint abatement projects.

Water Resources

The Neuse River Basin: Nutrient Sensitive Water Management Strategy: Protection of Existing Riparian Buffers (15A NCAC 2B .0233) protects and preserves existing riparian buffers in the Neuse River Basin to maintain their nutrient removal functions. The rule applies to 50-foot wide riparian buffers directly adjacent to surface waters in the Neuse River Basin.

The Clean Water Act of 1972 initiated strict control of wastewater discharges with responsibility of enforcement given to the Environmental Protection Agency (EPA). The EPA then created the National Pollutant Discharge Elimination System (NPDES) to track and control point sources of pollution. The primary method of control is by issuing permits to dischargers with limitations on wastewater flow and constituents. The EPA delegated permitting authority to the State of North Carolina, which permits stormwater discharge under North Carolina General Statute 143-215.1.

1.6.3 Environmental Permit Requirements

Permits that are anticipated to be required for this project are listed in Table 1 below. Additional forms and reports may be required under unforeseen circumstances, such as if contamination is found during the construction process.

Table 1. Environmental Permits		
Permit	**Administered by**	**Issues Addressed**
CAA Notification of Construction	NC DENR-Department of Air Quality (DAQ)	It may be necessary to notify the NCDAQ of construction of aboveground storage tanks (AST) for JP8 fuel and track the emissions of the ASTs.
NPDES	NC DENR-DWQ	Stormwater and drainage in the study area.
UST-2; Site Investigation Report for Permanent Closure of Change-in-Service of UST	NC DENR-DWM-UST Section	Required within 30 days after completion of closure or change-in-service of UST.
UST-3; Notice of Intent: UST Permanent Closure or Change-in-Service	NC DENR-DWM-UST Section	Required at least 30 days prior to commencing closure activities.
Sedimentation and Erosion Control Permit	NC DENR-Division of Land Resources - Land Quality Section	Sedimentation and Erosion Control during construction activities.
Asbestos Permit Application and Notification for Demolition/Renovation	Health Hazards Control Unit – NC Department of Health and Human Services – Division of Public Health	Asbestos monitoring and disposal from demolished facilities.
North Carolina Lead-Based Paint Abatement Permit	Health Hazards Control Unit – NC Department of Health and Human Services – Division of Public Health	Lead-Based Paint disposal from demolished facilities.
USACOE Individual 404 Permit	USCOE	Surface water impacts.
DWQ 401 Certification	NC DENR-DWQ	Surface water impacts.
General Variance for Airports to Neuse Buffer Rule	NC DENR-DWQ	Activities within protected stream buffers.

2.0 Description of the Proposed Action and Alternatives (DOPAA)

This chapter provides a description of the proposed action and alternatives reviewed in the analysis process. A background is provided that indicates how alternatives were developed and included for analysis based on the purpose and need to develop the AOMDA in support of the flight line mission for a relocated fueling system and combined mobility processing center. The preferred alternative is identified, and environmental commitments associated with the preferred alternative are summarized.

2.1 Formulation of Alternatives

In November 2000, Seymour Johnson noted the need to replace the current fueling system adjacent to the flight line and to construct a combined mobility processing center planned as follows:

- demolition of existing fuel system buildings and underground storage tanks adjacent to Taxiway A and construction of a Type III hydrant fueling system with pump house and above-ground storage tanks located outside the airfield lateral safety clearance zone;
- demolition of two existing deployment buildings and the construction of a combined mobility processing center and War Reserve Material (WRM) storage facility;

This need was noted during a comprehensive review of upcoming projects identified to meet the requirements for flight line and mission growth and how and where these projects could be implemented. These other projects included:

- demolition of existing Control Tower and Radar Approach Control (RAPCON) structure and the construction of a new structure to house Base Operations, Control Tower, RAPCON, and In-Flight Kitchen;
- construction of a technical training classroom structure in which aircraft repair would be taught;
- construction of additional aircraft parking for future mission growth; and
- construction of a future mission squadron operations/aircraft maintenance unit and covered maintenance facility.

Many of these projects were sited in available land in the AOMDA. A review of remaining available areas in the AOMDA indicated that much of the previously disturbed, developable space was being held for other specific future mission needs. .

In developing siting alternatives for the location of the Type III hydrant fueling system and the combined mobility processing center, the base identified specific criteria that must be met. Specifically, proposed locations must be:

- within the AOMDA;

- in close proximity to the flight line;
- developable with sufficient land to construct the facilities and support structures;
- securable (away from and inside current base boundaries);
- readily accessible without substantial and major modifications to existing AOMDA facilities.

The only remaining practicable and available space in the AOMDA available to accommodate these facilities was identified and proposed. This area was a mostly undisturbed, wooded area that was originally targeted for flight line development activities in the AOMDA. Other areas were also reviewed as alternative locations. These areas were determined to be either adjacent to the base boundaries, outside the AOMDA, not adjacent to the flight line, or off base property and therefore not suitable for most flight line support facilities. SJAFB determined it was not feasible or reasonable to build facilities such as a hydrant fueling system adjacent to the base boundary for security reasons (Unified Facilities Criteria (UFC) 4-010-01, DoD Minimum Antiterrorism Standards for Buildings, 31 July 2001). Additionally, flight line support facilities must be located adjacent to the flight line.

Federal Aviation Administration Advisory Circular 150-5345-45A; AFMAN 32-1123; United States Air Force (USAF/XOO/ILE) Policy Memo (Airfield Obstruction Reduction Initiative, 1 Feb 01) and Unified Facilities Criteria (UFC)-3-260-01 require the clearing of the flight line of as many structures as possible. Fuel pumphouses currently located on the flight line would need to be demolished and relocated to an adjacent area. Base planners developed a proposal to relocate the fuel pumphouses as a Type III hydrant fueling system to a compliant location in the study area. Preliminary review of the proposal indicated that the support facilities could be located primarily on the east side of the study area adjacent to the existing road to avoid potential impacts to the stream, buffer area, and ERP Site OT-29. The USAF could not approve any other positioning of the facilities in the study area that would impact the stream, wetland, buffer area, or ERP Site OT-29 since potential impacts were shown to be avoidable under the preliminary review for the siting of this facility in the study area. Under this preliminary review and the proposed positioning of the facilities in the study area, the remaining wooded property in the study area containing the stream and buffer would have limited access and would be less developable.

Base planners were also developing a proposal for a new flight line combined mobility processing center. As with the hydrant fueling system and associated pumphouses, the proposed location for this center was in the wooded AOMDA adjacent to the flight line. Portions of the current processing facilities would be demolished under a separate proposed apron expansion project. A new consolidated center adjacent to the flight line and apron would allow more efficient processing of military members for deployment. Due to the positioning of the proposed Type III hydrant fueling system in the study area, remaining available space for the combined mobility processing center in this area was too limited.

Base planners realized that the proposed study area could not be developed project-by-project without a substantial waste of prime flight line support land area in the AOMDA. Also, breaking this area into several small projects could result in a false reduction of the overall cumulative impacts to the natural resources in the area. For a full analysis of the study area and for most efficient design and layout of the proposed Type III hydrant fueling system and combined mobility processing center, base planners developed a proposal for the review of the entire area for development of these facilities. The base identified two alternatives:

- Full Development Alternative: This alternative allows full development of the proposed study area in the AOMDA for a Type III hydrant fueling system and a combined mobility processing center to support the project's purpose and need. The roadway would also be relocated to provide better access to the entire study area for new facilities; and
- No Action Alternative: This alternative considers no replacement of the existing fueling system adjacent to the flight line and no development of a combined mobility processing center. Under this alternative, the open AOMDA land in the study area would remain undeveloped.

2.2 Detailed Description of the Proposed Action

The proposed action, the Full Development Alternative, allows efficient development of the study area for direct support of flight line activities (Figure 3). The new facilities and associated utilities would be constructed in the study area between the proposed apron expansion (separate project) and Blakeslee Avenue. The following activities are included in the proposed action and are discussed in detail below:

- Design and Construction of Flight line Support Facilities: demolition of existing 1950's fuel system and pumphouses adjacent to Taxiway A , construction of a Type III hydrant fueling system outside the airfield lateral safety clearance zone, demolition of the existing personnel deployment facility and passenger terminal (Buildings 4741 and 4743), and construction of a combined mobility processing center.
- Relocated Roadway: relocate McColpin Road from its existing alignment to provide better access to the proposed facilities.

As a result of the proposed action, the following actions would also be required in the study area:

- Alteration of Surface Waters: culvert and relocate area streams and construct a stormwater management facility as needed to control stormwater runoff in the study area,
- Avoidance of Environmental Restoration Program (ERP) site OT-29, Hazardous Materials Spill Site.

<u>Design and Construction of Flight line Support Facilities:</u>

Construction of flight line support facilities would consist of two main actions:

- construction of a Type III hydrant fueling system outside the airfield lateral safety clearance zone and demolition of existing fuel system adjacent to Taxiway A;

- construction of a combined mobility processing center and demolition of existing personnel deployment facility and passenger terminal (Buildings 4741 and 4743).

The new facilities would be constructed in the study area between the proposed apron expansion (independent project to be analyzed separately from this proposed action) and Blakeslee Avenue (Figure 3).

Type III Hydrant Fueling System

Headquarters Air Force Airfield Obstruction Reduction Initiative requires the removal of as many structures as possible from the flight line. The existing fuel pump and hydrant system is located within the airfield lateral safety clearance zone and is considered an aircraft hazard in violation of Unified Facilities Criteria (UFC) 3-260-01 and must be demolished and relocated near the existing runway. Additionally, these three pumphouses were constructed in the 1950's, are antiquated, and require constant maintenance. The underground piping systems are prone to failure and parts to repair the hydrant system are difficult or impossible to find.

The base proposes to demolish the existing pumphouses and remove six underground storage tanks (each with a 50,000 gallon capacity), pavement, piping, and associated structures such as oil-water separators. The proposed action would replace the demolished systems in the study area with a constant pressure Type III hydrant fueling system. This would include the construction of a 24,000 gallons-per-minute (GPM) pumphouse and two 10,000 barrel (BBL) tanks as well as backup power, outlet pits, distribution piping, cathodic protection/leak detection systems on piping/tanks, recovery system, sloped containment dike, pantographs, truck filling stands, and all other necessary support. The hydrant fueling system must be capable of supporting hot pit refueling, transient aircraft refueling, and the operations of the 916th Air Refueling Wing.

Mobility Processing Center

A new operations and mobility processing center is also proposed for construction in the study area. Since the base plans to expand the aircraft parking apron under a separate project, structures in the expansion area would be demolished and relocated in available and appropriate space in the AOMDA. Two such facilities are Building 4741, Personnel Deployment Facility and Building 4743, Passenger Terminal. The functions of these facilities could be compared to a commercial airport terminal, but in the case of the USAF, it is for the processing of service members being deployed and for flight planning. SJAFB proposes combining the operations of these facilities in a new combined mobility processing center for more efficient use of space and streamlining of flight line processes. The new facility would also include Mobility Bag Storage which is now located in Bldg 3500 (Base Supply).

The consolidated mobility processing center would be used by deploying personnel as a one-stop administrative facility. Personnel would pick up his or her mobility bags, receive a deployment location briefing, and move through a processing line. The processing line provides deploying personnel with a last chance to complete wills, powers of attorney and other such documentation immediately prior to boarding the aircraft. The Mobility processing center needs to be near the aircraft parking apron so troops can load on the aircraft directly from the facility. The Mobility processing center is directly linked to the wing mission and is vital to the base.

The new consolidated mobility processing center would be utilized by deploying personnel of the 4th Fighter Wing and the 916th Air Refueling Wing. The new facility would consist of an approximately an 80,000 square-feet building with 126,000 square feet of paved area for sidewalks and parking.

Utilities

Supporting utilities would be added to the study area and connected to the proposed facilities. These would include electrical, water, sanitary sewer, and storm sewer lines.

Relocated Roadway

McColpin Road is a two-lane curb and gutter facility approximately 20 feet wide. This road would be realigned from its existing location to provide better access to the proposed new facilities. Figure 3 illustrates one proposed layout for the study area including the relocated road. The new road would maintain the same design criteria as the current road. The intersections of McColpin Road at Blakeslee Avenue and at Gentile Road may need to be shifted to accommodate the new roadway alignment. This would be determined during the final engineering layout and design of the proposed facilities in the study area.

The following actions would be completed to support completion of the proposed action in the study area.

Alteration of Surface Waters:

The project study area has 2,120 linear feet of stream. This project would completely culvert this stream length. Detailed design specifications for the culvert would be developed during the permitting process. The culvert would be capable of managing water flow from the project study area, upstream areas, and tributaries (Figure 4).

A small jurisdictional wetland was identified and delineated inside the project study area. This wetland is less than a hundredth of an acre and is located immediately adjacent to the stream. Due to its location adjacent to the stream and its very small size, under the proposed project there is no practicable alternative but to fill this wetland.

The proposed project would require the clearing of 2.8 acres of wooded riparian habitat in the 30-foot buffer zone of the project study area (Figure 4). Another 1.4 acres of wooded riparian habitat would be cleared in the 20-foot buffer zone. Approximately 0.6 acres of the buffer zone in the study area that are actively mowed by SJAFB grounds maintenance would also be impacted. These maintained areas are considered lower quality buffer.

A stormwater management facility would be designed during the permit process, as needed, to control stormwater runoff in the study area. The facility would include at a minimum containment diking for the above ground storage tanks and runoff treatment using an oil/water separator for paved parking areas.

All of these alterations are reasonably expected to be insignificant as discussed in section 4.4.

Avoidance of ERP OT-29, Hazardous Materials Spill Site:

Environmental Restoration Program (ERP) Site OT-29 is located in the project study area. The site would continue to be monitored to avoid any encroachment of contaminants into the stream, as the stream is culverted. The base plans to provide complete clean up of this site to unrestricted use by 2033. If possible, proposed facilities would be designed in such a way to speed potential clean up of this site. A proposal, to be reviewed separately, suggests creation of stormwater management facilities in coordination with clean up of the site.

2.3 Identification of Projects Reviewed for Cumulative Impacts

2.3.1 Reasonably Foreseeable Projects

In Section 2.1, Formulation of Alternatives, projects were identified by base planners as necessary for mission support. Proposed locations for these projects were identified adjacent to the study area for the proposed action and could have cumulative impacts on the environment. These foreseeable projects included:

- demolition of existing Control Tower and RAPCON structure and the construction of a new structure to house Base Operations, Control Tower, RAPCON, and In-Flight Kitchen;
- construction of a technical training classroom structure in which aircraft repair would be taught;
- construction of additional aircraft parking; and
- construction of a squadron operations/aircraft maintenance unit and covered maintenance facility.

2.3.2 Cumulative Alteration of Surface Waters

While the projects listed above would be reviewed independently of the proposed project for potential environmental impacts, it is reasonably foreseeable that there would be cumulative stream and riparian buffer impacts. These impacts are reasonably expected to be insignificant as discussed in section 4.4.

Areas adjacent to the project study area, referred to in this EA as the cumulative study area, have approximately 1,100 linear feet of stream that would be impacted by other projects proposed by SJAFB. These projects propose to completely culvert this stream length. Detailed design specifications for the culvert would be developed during the permit process. The culvert would be capable of managing the cumulative water flow from the areas adjacent to and including the project study area (Figure 5). This culvert system would connect to a twin 66-inch diameter, 1,850 linear feet culvert, which runs under the airfield.

The cumulative study area contains 0.8 acres of wooded riparian habitat in the 30-foot buffer zone that would be impacted by the projects listed in section 2.3.1 (Figure 5). Another 0.5 acres of wooded riparian habitat would be cleared in the 20-foot buffer zone in these adjacent areas.

Approximately 1.9 acres of the buffer zone in the study area that are actively mowed by SJAFB grounds maintenance would also be impacted. These maintained areas are considered lower quality buffer.

2.4 Description of the No Action Alternative

The No Action Alternative serves as a benchmark against which the proposed action, the Development Alternative, can be evaluated. The No Action Alternative refers to the continuation of existing conditions in the project study area without implementation of the proposed action. Under this alternative, Seymour Johnson Air Force Base would not replace the existing fueling system adjacent to the flight line and would not develop a combined mobility processing center. McColpin Road would be maintained in its current location.

Each component of the proposed action as detailed above would not be realized. The existing pumphouses and tanks would continue to encroach into the airfield lateral safety clearance zone. Additionally, the current pumphouses would continue to age and become more difficult to repair. Leaks would occur more frequently and mission delays would become routine, creating the potential for protracted out-of-service time. Back up systems would not be able to support the mission if the hydrant system fails during a high deployment period when large frame aircrafts require support from mobile refueling vehicles. Also, a combined mobility processing center would not be developed and would impede mission support activities.

2.5 Identification of Alternatives Eliminated from Further Consideration

Figure 6 indicates areas that were considered as possible alternatives to the proposed action.

Area A – Areas adjacent to the Alert Apron would be inappropriate for the proposed facilities. This area is used for loading live ammunition onto fighter planes, and adjacent areas are within the explosive arc.

Area B – The area directly to the east of the study area is reserved for other mission facilities. Currently a new covered maintenance facility, a mission squadron operations/aircraft maintenance unit, and additional apron space are proposed as separate projects to support current and potential future mission activities. The facilities would eventually use this entire area and would require the relocation of portions of the golf course.

Area C – This area is adjacent to the base boundary and would not be appropriate for a fuel pump station for security reasons. The area is also too far away from the flight line area where personnel would be deployed. It would not be practical as a mobility processing center.

Area D – Any area off base property would be inappropriate for the proposed facilities. Off base property would require acquisition of land and congressional approval. Additionally, property off the base would present obstacles similar to those discussed in Area C.

A review of the study area and proposed facilities for the study area indicated that there was no possible way to position the Type III hydrant fueling system and the consolidated mobility processing center into the study area without significant impacts to the stream and associated riparian buffer.

One of the major objectives in locating the proposed action is to be consistent with current and historic Base Comprehensive Plans. It is also necessary to consider other development plans for the area and to include these projected activities in the siting of the proposed action. Due to the location of the airfield and the need for the above-described facilities to be located adjacent to the airfield, there are no reasonable alternatives to the proposed action.

2.6 Identification of the Preferred Alternative

The preferred alternative is the Full Development Alternative (the proposed action, as described in Section 2.2). No other alternative supports the Purpose and Need for the proposed action.

2.7 Summary of Environmental Compliance Issues

Table 2 below provides a summary of environmental compliance actions required for implementation of the Development Alternative.

Table 2. Summary of Environmental Compliance Issues

Resource	Description
Air Quality	• **Use best management practices to reduce/avoid short-term construction impacts.**
Soils	• **Use best management practices to reduce/avoid erosion.** • **Landscape after construction.** • **Acquire sedimentation and erosion control permit to avoid or minimize erosion and sedimentation into the streams during culverting activities.** • **Phase projects to minimize cumulative impacts.**
Transportation	• **Redesign geometry of intersection to increase sight distance and safety.** • **Identify specific haul for to avoid or minimize any circulation impacts.** • **Schedule delivery and removal of construction materials during non-peak traffic conditions on base**
Stream and Buffer	• **Pay funds into NC Wetland Restoration Program or develop other strategies for completion of permitting requirements.** • **Use best management practices to reduce/avoid erosion into surface waters.** • **Dispose of vegetative material in a landfill, by burning, or by chipping and re-selling as mulch.**
Stormwater Drainage	• **Develop stormwater management system within the study area to the maximum extent practical considering groundwater resources.**
Asbestos	• **Dispose of wastes contaminated with asbestos from the demolition of buildings using approved best management practices for the safe handling and disposal of this waste.**
Lead Based Paint	• **Dispose of wastes contaminated with lead based paint from the demolition of buildings using approved best management practices for the safe handling and disposal of this waste.**
Fuel lines and Underground Storage Tanks	• **Complete soil and water surveys during the removal process of underground storage tanks. Monitor any noted contaminated sites and schedule for clean up.**
ERP Site OT-29	• **Avoid staging construction activities in this area** • **Review possible combined stormwater facility / site cleanup activities for feasibility**
Solid Wastes	• **Recycle waste material. If necessary, take debris to an appropriate landfill for disposal**
Natural Communities	• **Landscape study area as appropriate for AOMDA**

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3.0 Affected Environment

This chapter describes relevant environmental conditions at SJAFB for resources potentially affected by the Development Alternatives and the No Action Alternative described in Chapter 2. In compliance with guidelines contained in NEPA and CEQ regulations and AFI 32-7061, the description of the existing environment focuses on those environmental resources potentially subject to impacts.

A preliminary environmental review identified the resources that would be impacted under the proposed action. These resources include air quality, soils, land use, water resources, hazardous materials and wastes, and biological environment. These resources are discussed in more detail in the following sections.

Resources that would not be impacted or would only have negligible impacts include cultural resources, socioeconomics, visual environment, and the noise environment. Further analysis and reporting of these resources was not necessary for this Environmental Assessment. Floodplain areas as designated by Federal Emergency Management Act (FEMA) floodplain maps are confined to the southwestern corner of the base and do not occur in the project study area. No archaeological or historic resources were located in the project study area according to an archaeological survey completed in 1978 and accepted by the NC State Historic Preservation Officer by letter on 9 October 1978. No environmental justice populations, elderly communities, or children occur within the study area and therefore would not be impacted by the proposed project. The proposed action would not impact the frequency or nature of takeoffs and landings on the flight line and would therefore have no impact on the noise environment in the study area. Proposed facilities are sited in compliance with the SJAFB Air Installation Compatible Use Zone Study. Interior office noise level reduction of 30 decibels would be provided in design and construction of proposed facilities. Because of the nature of the noise environment in the AOMDA adjacent to the flight line, construction noise associated with the proposed project would have no noticeable impact in or near the study area.

For each resource discussed below, the nature of potential direct, indirect, and cumulative impacts from the proposed project was considered when identifying the extent of existing conditions to discuss for that resource. This is because potential impacts the proposed project may have on each resource are not necessarily limited to inside the construction boundaries for the proposed project. This “impact area” is called the Region of Influence (ROI) of the proposed project on the resource. As an example, the ROI for surface waters extends outside the proposed project’s study area boundaries. This larger ROI is formed because water inside the study area that may be directly impacted by construction activities can typically flow and intermix with adjoining surface water bodies outside the study area. The resource sections below include a description of associated ROI when it varies from the study area boundaries.

3.1 Air Quality

The Federal Clean Air Act of 1970 and the Clean Air Act Amendments in 1977 required the adoption of ambient air quality standards. These were established in order to protect public health, safety, and welfare from known or anticipated effects of sulfur dioxide (SO_2), particulates (PM10), carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), and lead (Pb). National Ambient Air Quality Standards (NAAQS) for these pollutants have been established.

The Region of Influence for the air quality environment extends to the entire Goldsboro region, which include SJAFB. This region and SJAFB are currently in attainment for NAAQS and the state equivalent NC AAQS. The base currently holds Air Permit No. 03743R15 from the North Carolina Division of Air Quality for the construction and operation of air emission sources or air cleaning devices and appurtenances. The permit is effective from July 9, 2002 until September 30, 2005 and covers 19 air emission sources and 1 control device on the installation. These sources and devices are located outside the project study area.

Equipment leak emissions at Seymour Johnson AFB are those VOC (Volatile Organic Carbon) and HAP (hazardous air pollutant) emissions that result when fuel (either gaseous or liquid) leaks from petroleum/oil/lubricant (POL) facility equipment. Potential equipment leak emission points at the base include service stations, fill stands for loading/unloading tank trucks, bulk storage tanks, and refueling hydrants. Equipment leak emissions originate from the following sources or components: pump seals, valves, pressure relief valves, flanges, open-ended lines and sampling connections. Actual equipment counts were performed for the 1995 Air Emission Inventory. There have been no significant changes in equipment since these counts were conducted. Approximately 95% of the equipment components handle JP-8, with the remaining components evenly divided between diesel and gasoline.

3.2 Soils

Based on mapped soil data obtained from the USDA Soil Survey for Wayne County dated June 1974, the soils in the project area are Wagram series soils. These soils are generally well-drained, nearly level to strongly sloping soils on smooth, convex and rounded sides of broad divides. The two soils represented in the project area are Wagram loamy sand, 0 to 6 percent slopes and Wagram loamy sand, 6 to 10 percent slopes. The typical seasonal high water table for these soils is below five feet and the soils demonstrate a moderately high permeability.

3.3 Land Use, Transportation, and Utilities

3.3.1 Land Use

According to the May 2003 General Plan, the base consists of approximately 1,328 acres of improved grounds and 700 acres of semi-improved grounds. The remaining land area constitutes unimproved areas. The characteristics of the different grounds categories are listed below:

- improved grounds require extensive maintenance including mowing, irrigation, and landscaping. Improved areas include housing lawn areas, athletic fields, golf course, and administrative facilities.
- semi-improved grounds require infrequent or unscheduled mowing and maintenance, and little or no irrigation. Semi-improved areas include grounds adjacent to the airfield, picnic areas, ranges, golf course roughs, and munitions storage area.
- unimproved grounds do not require maintenance except occasional brush control.

The basic functional land use types present on base are summarized in Table 3. The study area consists of 27.3 acres of aircraft operations and maintenance, open space, and outdoor recreation land uses (Base General Plan, 2003). Future land use planned for the study area is aircraft operations and maintenance. This is consistent with the 1955 Base Master Plan that indicated the study area would be part of the Aircraft Operations and Maintenance Development Area. Nearby land uses include airfield (and airfield pavement), airfield operations and maintenance, outdoor recreation, and open space.

Table 3. Installation Land Use, SJAFB

Land Use Type	Land Use Description
Airfield	Airfield comprises the southern one-third of installation and consists of approximately 1,075 acres. The runway is approximately 12,000 feet in length and accommodates F-15Es, KC-135s, and cargo aircraft such as C-5s on a regular basis.
Aircraft Operations and Maintenance	Aircraft operations and maintenance are located east of the F-15 parking apron and north of the eastern parking apron (916th Air Refueling Wing). This land use type consists of approximately 317 acres or one tenth of the total base.
Industrial	Industrial areas of the base include numerous warehouses, storage facilities, power plants, the Civil Engineering compound, and the Federal Prison Camp. Industrial land use consists of approximately 432 acres and 13.4 percent of the total base land use.
Administrative	There are two main administrative land use areas of the base. The Wing Headquarters, 4th Mission Support Group Headquarters are located along Wright Brothers and Cannon Avenues. The 916th Air Refueling Wing Headquarters, the 4th Maintenance Group, and 4th Operations Group Headquarters are located near the eastern parking apron. Administrative land use makes up approximately 2.3 percent of the base or 73 acres.

Table 3. Installation Land Use, SJAFB (Continued)

Land Use Type	Land Use Description
Community (Commercial)	Community (Commercial) land use consists of the Commissary, Base Exchange, Bowling Center, theater, AAFES gas station, community center, and Enlisted Club. Community (Commercial) land use makes up approximately 1.7 percent of the base, approximately 58 acres.
Community (Service)	Community (Service) land use is interspersed with the Community (Commercial) areas and consists mainly of the base Chapel and childcare centers. This land use type consists of approximately eight acres or 0.2 percent of the base.
Medical	Medical land use is located near the base's main gate and includes the Koritz Clinic and Keicker Dental Clinic. Medical land use makes up approximately 0.6 percent of the base or 21.5 acres.
Housing (Accompanied)	The Housing (Accompanied) areas of the base include Wayne Manor, Berkeley Village, and a mobile home park. This area makes up 14.2 percent or 460 acres of the base land use.
Housing (Unaccompanied)	The Housing (Unaccompanied) areas of the base are located between Wright Brothers and Cannon avenues. Unaccompanied housing land use makes up 1.2 percent of the base or 38 acres.
Outdoor Recreation	Outdoor recreation areas are located throughout the base and include the Three Eagles Golf Course, a skeet range, nature trails, various athletic fields, running paths, and picnic areas. Outdoor recreational areas make up 8.1 percent or 285 acres of the base land use.
Open Space	Open space is located throughout the base and includes 462 acres or 14.3 percent of the base land use.
Water	The base is bordered on the west and the north by the Neuse River and Stoney Creek, respectively. There are also ponds associated with the Golf course and several creeks and ditches that traverse the base. There is approximately three acres or 0.1 percent of the total land that is covered by water.

Reference: Base General Plan, May 2003

The Neuse River Buffer Rule (15A NCAC 2B) regulates land use activities adjacent to the Neuse River and its tributaries. Section 3.4.1 provides a brief discussion of the buffer rules and the buffer area in and adjacent to the project study area.

3.3.2 Transportation

The transportation facility network connects SJAFB to the city of Goldsboro and represents the ROI for the proposed project. These facilities extend onto SJAFB and join with roads in and adjacent to the study area. Specific roads that would be directly influenced by the proposed project include Blakeslee Avenue, McColpin Road, and Gentile Road. These are two lane facilities with low traffic flow. Currently the geometry at the intersections of Blakeslee Avenue and McColpin Road and at McColpin Road and

Gentile Road is not optimal for maximum safety and sight distance. Additionally, the intersection of Blakeslee Avenue and McColpin Road is immediately adjacent to the driveway for Building 10271.

3.3.3 Utilities

The study area currently has lines for electricity, water, sanitary sewer, and storm water sewer. SJAFB owns all of the utilities on base. The base purchases potable water from the City of Goldsboro, and sanitary sewer discharge is treated by the City of Goldsboro. The base purchases electricity from Progress Energy. Storm sewer discharge is disposed of on base and through outfalls to the Neuse River.

3.4 Water Resources

The review of water resources extends outside the proposed project's study area boundaries. Because of the nature of water bodies, it is important to note the larger system in which a potentially impacted water body exists, which defines the ROI for each type of water resource.

3.4.1 Surface Water

The primary surface water resources on SJAFB include the Neuse River and Stoney Creek. These two waters are located in the Neuse River drainage basin, which covers approximately 5,710 square miles of North Carolina's coastal plain and piedmont provinces. The Neuse River runs along the southwest boundary of the base and is categorized by the North Carolina Department of Environment and Natural Resources (NC DENR) as a Class C Nutrient Sensitive Water (NSW). This classification means it is freshwater and protected for secondary recreation, fishing, aquatic life, and wildlife. All freshwaters are classified to protect these uses at a minimum. The classification also identifies the Neuse River as a nutrient sensitive water which is subject to growths of microscopic or macroscopic vegetation requiring limitations on nutrient inputs. The Neuse River begins at the confluence of the Eno and Flat Rivers in Durham County and flows in a general southeast direction for $\pm$222 river miles before emptying into Pamlico Sound at Maw Point. SJAFB is located approximately 110 miles upstream from the Neuse River's confluence with Pamlico Sound. Stoney Creek runs along the northwest boundary of the base and is also categorized as a Class C NSW surface water. Stoney Creek is a tributary to the Neuse River and their confluence lies on the western boundary of SJAFB.

The study area contains a small tributary of the Neuse River. A wooded riparian buffer surrounds most of the stream. The stream runs from the north to south and is culverted on either end of the study area. The northern culverts are under Blakeslee and McColpin Roads. The southern culvert extends under the flight line from the south side of the study area to the south side of the airfield. The stream is frequently isolated from areas of the stream outside the study area by low water flow through the culverts. The stream is fed from the north by the golf course lake. During dry weather, water from the base water system is added to the golf course lake to maintain a consistent water level.

A tributary to the main stream in the study area runs from east to west and enters the main stream near the southwestern corner of the study area. The easternmost portion of the stream has a wooded riparian buffer. The western section of the stream is channelized with a maintained grass buffer. The stream is culverted under McColpin Road.

The project study area and the additional cumulative impacts study area (as described in section 2.3 and Figure 5) has approximately 3,220 linear feet of streams (Table 4). The streams are perennial and average approximately 8 feet across. In the wooded areas, they have natural curves and moderate flow. In maintained areas, they are straightened, heavily vegetated, and heavily braided with low flow.

The streams have been significantly eroded by stormwater flow and are unlikely to maintain their current channel under such pressures. The sections of the streams that currently have wooded riparian buffer show extreme bank undercuts and steep bank slopes with some riffle pool structure. The substrate through most of the project area is heavily silted although there are some areas of cobble substrate and some areas of exposed rock. The wooded area does support biological activity and contains small fish, a variety of aquatic and non aquatic insects, crustaceans and a few invasive mussel species. There is evidence of use by foraging mammals including raccoons and squirrels. The riparian buffer also supports a seemingly small bird population of those bird species that can survive with a great deal of human activity nearby. The overall habitat value of the stream is small considering that it is a small fragmented stand of forested riparian buffer surrounded by significant human activity and little vegetation beyond the occasional planting for ornamental value. While this area may serve to filter some runoff from base activities prior to its convergence with the Neuse River, it is unlikely due to the amount of water that passes through this area during storm events that any significant calming or filtering is occurring.

The Neuse River Basin: Nutrient Sensitive Water Management Strategy: Protection of Existing Riparian Buffers (15A NCAC 2B .0233) serves to protect and preserve existing riparian buffers in the Neuse River Basin to maintain their nutrient removal functions. The rule applies to 50-foot wide riparian buffers directly adjacent to surface waters in the Neuse River Basin. Land uses within the 30-foot wide Zone 1 and 20-foot wide Zone 2 areas are categorized as “exempt”, “allowable”, “allowable with mitigation”, or “prohibited”. A full description of listed activities is located in 15A NCAC 2B .0233.

Persons who wish to undertake uses designated as “allowable” or “allowable with mitigation” shall submit a request for a "no practical alternatives" determination to the Division or to the delegated local authority. Persons who wish to undertake uses designated as prohibited may pursue a variance. A minor variance request pertains to activities that are proposed only to impact any portion of Zone 2 of the riparian buffer.

A major variance request pertains to activities that are proposed to impact any portion of Zone 1 or any portion of both Zones 1 and 2 of the riparian buffer.

The wooded land adjacent to the streams is protected under the Neuse River Buffer Rule (15A NCAC 2B). The wooded habitat consists of a fragmented and degraded mesic mixed hardwood forest dominated by loblolly pine (*Pinus taeda*) and sweet gum (*Liquidambar styraciflua).* Zone 1 of the buffer extends 30 feet from the stream bank with Zone 2 of the buffer extending another 20 feet further.

There are 3.6 acres of wooded riparian habitat in the 30-foot buffer zone of the project study area and the cumulative study area (Table 4, Figure 5). Another 1.9 acres of wooded riparian habitat is located in the 20-foot buffer zone. Approximately 1.7 acres and 0.8 acres are located Zones 1 and 2, respectively, that are actively mowed by SJAFB grounds maintenance.

The stream was delineated using Global Positioning System (GPS) on September 3, 2003. The centerline of the stream was identified at each curve with the distance to the edge of the stream bank recorded at each point. This data was imported into Microstation CADD software, Version 7, and overlaid on aerial photography. Buffer limits were calculated perpendicularly from the edge of stream. Areas over maintained lawns were identified separately, and total areas were calculated.

Table 4. Stream And Buffer Impacts

Resource	Study Area	"Cumulative" Area	Total
Stream / wooded	1755 linear feet	443 linear feet	2198 linear feet
Stream / maintained	362 linear feet	660 linear feet	1022 linear feet
Wetland	0.008 acres	0.0 acres	0.008 acres
30 ft buffer / wooded	2.8 acres	0.8 acres	3.6 acres
30 ft buffer / maintained	0.3 acres	1.4 acres	1.7 acres
20 ft buffer / wooded	1.4 acres	0.5 acres	1.9 acres
20 ft buffer / maintained	0.3 acres	0.6 acres	0.8 acres*

*Calculations were rounded to the nearest tenth of an acre.

3.4.2 Ground Water

SJAFB is located within the Piedmont physiographic province. The surficial unconfined aquifer is underlain by a series of interbedded sands and clays making up the regional, confined aquifer units of the Black Creek aquifer. At SJAFB, the productive zones of the Black Creek aquifer are found below 10 feet mean sea level, which is approximately 90 feet below land surface at the base. Beneath the Black Creek aquifer, the Cape Fear Formation contains the third major aquifer system in the area. Depth to groundwater within the surficial aquifer ranges from approximately one foot below land surface near the Neuse River and its tributaries to about 15 feet below land surface in the central portion of SJAFB. This depth ranges from five feet to 15 feet in the project study area. The average hydraulic conductivity of the

surficial aquifer in the vicinity of SJAFB has been reported to range from 5 to 40 ft/day. (OT-29 5 Year Review Report, 2003)

Flow in the surficial aquifer is influenced primarily by topography. The overall direction of flow in the surficial aquifer on the installation is from the higher central portion of the base northward into Stoney Creek, westward into the Neuse River, or southward into the southern drainage ditch. Groundwater occurs at shallow depths within the surficial deposits. Based on wells south of the Neuse River, typical yields in the surficial aquifer are less than 10 gallons per minute.

SJAFB currently monitors groundwater levels in at least 60 wells across the installation that were installed as required in the SJAFB ERP, RCRA, and UST programs. In addition to recording groundwater levels, groundwater quality is also analyzed periodically as required by the different ERP, RCRA, and UST programs.

As also discussed in section 3.5.3, a contaminated groundwater plume is located at the site. Contamination includes Jet Propellant-4 (JP-4) and chlorinated volatile organic compounds. Investigation, treatment, and monitoring activities have been ongoing since 1989 and are discussed in detail in the OT-29 5 Year Review Report, 2003.

3.4.3 Stormwater/Drainage

The study area is contained in the Seymour Johnson Industrial Drainage Area 11b (Table 5). This drainage area includes facilities for aircraft maintenance, hazardous materials storage, munitions maintenance, and petroleum, oils, and lubricants storage and transfer. Stormwater in the project study area currently drains into the study area streams (Figure 5). Much of the stormwater run off is dispersed and filtered by wooded riparian buffer to the area stream. The drainage areas are described in Table 5 below.

Table 5. Description of Drainage Areas

Drainage Area	Total Area (ft^2)	Building Area (ft^2)	Paved Area (ft^2)	Total Impervious Surface Area (ft^2)	Total Pervious Surface Area (ft^2)	Percentage Impervious Surface Area (%)
11b	21,332,741	451,646	5,448,954	5,900,600	15,432,141	28
Study Area	1,189,170	16,600	82,250	98,850	1,090,320	8

SJAFB currently holds an active National Pollutant Discharge Elimination System (NPDES) permit, NCS000335, May 2002. This permit became effective on June 1, 2002 and will expire on May 31, 2007. The permit allows stormwater discharge to receiving waters designated as Stoney Creek and the Burge Road drainage ditch that flows to the Neuse River, class C, NSW streams in the Neuse River Basin.

Discharge limitations, monitoring requirements, and other conditions included in the permit are reviewed and managed under the approved Storm Water Pollution Prevention Plan (SWPPP, 2003).

3.5 Hazardous Materials and Wastes and Solid Wastes

SJAFB generated 47,493 lbs of EPA regulated hazardous waste in calendar year 2003. The utilization and maintenance of jet aircraft in the fulfillment of the military mission promises a continuation of this condition into the indefinite future. Hazardous wastes generated by any activity on base are subject to Resource Conservation and Recovery Act (RCRA) regulation(Hazardous Waste Management Plan [HWMP], 1999).

According to the Hazardous Waste Management Plan, hazardous material is any material that has not become a waste, has been designated in 49 CFR 172.101- Hazardous Materials Table, and has been determined by the Department of Transportation to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce.

Hazardous waste is any material that is reactive, corrosive, ignitable, toxic, or published in the Hazardous Waste Listing (40 CFR 261, Subpart D). Radioactive waste is regulated under separate guidance. Petroleum products that do not have hazardous characteristics and are not reflected on the Hazardous Waste Listing are not subject to the program requirements (HWMP, 1999).

The Hazardous Waste Management Plan for SJAFB identifies sixty-two initial accumulation points of hazardous waste generation on the installation. Twenty of those locations are designated as high volume waste generators. A high volume generator is a generator that accumulates 3 or more 55-gal drums of hazardous waste in 12 consecutive months.

Ultimate responsibility for hazardous waste control, as well as the overall responsibility for any environmental impacts to SJAFB, lies with the Wing Commander. However, due to the complex nature of the facility, numerous components of the installation have direct and daily responsibility for functions that generate hazardous waste. These components are listed in the Hazardous Waste Management Plan (HWMP, 1999) and in Appendix E of the INRMP (INRMP, 1998).

3.5.1 Lead Based Paint and Asbestos

An inspection for lead based paint and asbestos was completed for the existing fuel pumphouses (proposed for demolition under the proposed action) adjacent to the flight line, buildings 4551, 4552, and 4953, in December 2002. The inspection found asbestos in several locations throughout these buildings in floor tiles, pipe insulation, corrugated cement, and roofing materials. Lead based paint was detected in samples ranging from 0.006% to as high as 3.731% lead by weight (4 CES/CEOL5 Memos, 2002).

3.5.2 Fuel Lines and Underground Storage Tanks

Each of the three pumphouses along the flight line has six USTs associated with them, which were installed in 1952. Each UST is a single walled, steel tank with a capacity of 50,000 gallons. The piping systems associated with the pumphouses have been known to leak. Recent leaks have been or are being currently remediated in accordance with all applicable rules and regulations.

3.5.3 Environmental Restoration Program

The Department of Defense (DoD) developed the Environmental Restoration Program (ERP) to identify, investigate, and remediate potentially hazardous material disposal sites that existed on DoD property prior to 1984. As a result of past waste and resource management practices at SJAFB, some areas of the installation have become contaminated by various toxic and/or hazardous compounds (MAP, 1995). Air Combat Command policy requires that any project on or near a SJAFB ERP site be coordinated through the Seymour Johnson ERP Manager.

Radar Tower Road ERP Site, 0T-29, was discovered in 1989. The site encompasses approximately 2.25 acres in the study area north of the flight line. Approximately half of the site is wooded. A paved parking lot, grassy area, and the radar tower building cover the remainder. The groundwater and soil at the site are contaminated with Jet Propellant-4 (JP-4) and chlorinated volatile organic compounds. Contamination is found as a light non-aqueous phase liquid (LNAPL) plume and a dissolved-phase volatile organic compound (VOC) groundwater plume.

The source (or sources) of the petroleum and chlorinated VOCs has not been defined. Historic operations in the area are uncertain and site investigations since 1989 could not identify source locations or boundaries. Investigation, treatment, and monitoring activities have been ongoing since 1989 and are discussed in detail in the OT-29 5 Year Review Report, 2003.

A recovery trench was installed at the site to arrest the leading edge of the contaminant plume and protect the stream in the study area (on the southwest side of the plume). Monitoring of the system and associated wells shows that the trench has been effective, although the plume appears to be moving towards the edges of the trench. The base plans to extend the length of the trench to prevent the contaminants from traveling beyond the management system. The trench will be expanded by 20 feet on the radar side of the trench and 10 feet on the opposite side. This extension is planned to be complete by July 2004. Groundwater elevation in this area is from 5 to 15 feet below ground surface.

3.5.4 Solid Wastes

Solid Waste generated on SJAFB is removed by contract services to the Wayne County landfill. In FY03 the base generated 6,551 tons of solid waste with 44.7% of that total diverted through recycling and reuse.

3.6 Biological Resources

3.6.1 Natural Community

The wooded portion of the study area consists of a fragmented and degraded mesic mixed hardwood forest dominated by loblolly pine (*Pinus taeda*) and sweet gum (*Liquidambar styraciflua*). The understory is dense and diverse with areas of encroachment by kudzu (*Pueraria montana* var. *lobata)*, Japanese honeysuckle (*Lonicera japonica*), and other exotic or invasive species. The maintained portion of the study area is grass that is regularly mowed by base maintenance. Common wildlife species have adapted to living adjacent to industrial environments such as those in the study area. These species consist of common birds, mammals, reptiles, fish, and insects native to North Carolina.

3.6.2 Threatened and Endangered Species

The Endangered Species Act (ESA) requires military installations to protect and conserve federally listed threatened and endangered plants and animals and their critical habitats. In addition, the ESA requires that installations having a listed species develop specific plans for preservation of these species and their habitats. AFPD 32-70 further requires that all installations must prepare and maintain a current inventory of threatened and endangered (T/E) species and habitat as part of the base habitat inventory.

The Natural Area Survey of SJAFB completed in 1994 and a follow-up survey for Red Cockaded Woodpeckers in 2002 found no T/E species or their habitat at SJAFB and projected little likelihood of any such occurrence in the vicinity of the base. A review of the North Carolina Natural Heritage Program listed species in Wayne County as of January 2004 (Table 6) and suitable habitat for these species revealed that none of these species occur, or are likely to occur, on Seymour Johnson Air Force Base or in the study area. This conclusion was supported by site observations and by informal correspondence with the United States Fish and Wildlife Service (Carter and Burgess, 2003).

3.6.3 Wetlands

Executive Order 11990 (Protection of Wetlands) requires all federal agencies to provide leadership in the protection of wetlands. The study area contains one jurisdictional wetland. The wetland is 0.008 acres and is located adjacent to the stream as shown in Figure 7. No other wetlands are located within the study area.

Table 6. Protected Species in Wayne County, North Carolina

Major Group	Scientific Name	Common Name	Status	
			Federal	State
Mammal	*Corynorhinus rafinesquii*	Rafinesque's Big-eared Bat	FSC	T
Mammal	*Sciurus niger*	Eastern Fox Squirrel	-	SR
Bird	*Ictinia mississippiensis*	Mississippi Kite	-	SR
Bird	*Lanius ludovicianus ludovicianus*	Loggerhead Shrike	-	SC
Bird	*Picoides borealis*	Red-cockaded Woodpecker	E	E
Reptile	*Crotalus horridus*	Timber Rattlesnake	-	SC
Reptile	*Deirochelys reticularia*	Chicken Turtle	-	SR
Reptile	*Heterodon simus*	Southern Hognose Snake	FSC	SC
Reptile	*Masticophis flagellum*	Coachwhip	-	SR
Amphibian	*Hyla andersonii*	Pine Barrens Treefrog	-	SR
Amphibian	*Necturus lewisi*	Neuse River Waterdog	-	SC
Fish	*Lythrurus matutinus*	Pinewoods Shiner	FSC	SR
Fish	*Noturus furiosus*	Carolina Madtom	-	SC (PT)
Mollusk	*Elliptio lanceolata*	Yellow Lance	FSC	E
Mollusk	*Elliptio roanokensis*	Roanoke Slabshell	-	T
Mollusk	*Fusconaia masoni*	Atlantic Pigtoe	FSC	E
Insect	*Neurocordulia molesta*	Smoky Shadowdragon	-	SR
Vascular Plant	*Carex tenax*	Wire Sedge	-	SR-P
Vascular Plant	*Chamaesyce cordifolia*	Heartleaf Sandmat	-	SR-P
Vascular Plant	*Galactia mollis*	Soft Milk-pea	-	SR-P
Vascular Plant	*Litsea aestivalis*	Pondspice	FSC	SR-T
Vascular Plant	*Ludwigia brevipes*	Long Beach Seedbox		SR-T
Vascular Plant	*Schoenoplectus etuberculatus*	Canby's Bulrush	-	SR-P
Vascular Plant	*Utricularia floridana*	Florida Bladderwort	-	SR-T

Source: North Carolina Natural Heritage Program 2003

E – Listed Species, FSC – Federal Species of Concern, SC – Special Concern
SC (PT) – Special Concern (Proposed Threatened), SR – Significantly Rare
SR-P – Significantly Rare – Peripheral, SR-T – Significantly Rare - Throughout
T – Threatened Species

The wetland was delineated using 1987 Corps of Engineers Wetlands Delineation Manual guidelines. It consisted of a small depressional wetland within the floodplain of the stream. The wetland is characterized by facultative wetland vegetation and appears to be fed by overflow from the stream during storm events. The boundaries around the wetland were captured using Global Positioning System (GPS) on September 3, 2003. This data was imported into Microstation CADD software, Version 7, and overlaid on aerial photography. The exact area was calculated.

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4.0 Environmental Consequences

Chapter 4 presents the environmental consequences of the No Action Alternative and the Development Alternative (the proposed action) for each of the resources discussed in Chapter 3. To analyze the consequences for each resource defined in Chapter 3, the elements of the proposed action (as discussed in Chapter 2) are individually reviewed for how the resource could be impacted by each element. Where a quantitative assessment of direct impacts could be calculated, it is identified the resource. Where quantitative impacts could not be calculated, potential impacts were identified qualitatively based on professional experience of assessors and on reviews of impacts from similar types of projects on similar resources. Cumulative impacts of the proposed action with other foreseeable future actions are also presented in this Chapter using the same methods.

4.1 Air Quality

No Action Alternative

No changes to the air quality or air quality permits are anticipated under the No Action Alternative.

Development Alternative

Although the new Type III hydrant fueling system could have VOC and HAP emissions as discussed in section 3.1, these would not be expected to be substantially different or higher than emissions from the existing pumphouses adjacent to the flight line. It is anticipated that emissions reduction from the demolition of the existing sources would balance or exceed any additional emissions generated by the new Type III hydrant fueling system. No new air quality permit would be required for the construction of the Type III hydrant fueling system, although the base would notify NC DENR prior to beginning construction.

Ground disturbing activities during clearing and construction could introduce elevated levels of particulate matter into the air.

Potential impacts to air quality under the proposed action would therefore be anticipated to be negligible and would be insignificant to local and regional air quality. The proposed action would not cause an exceedance of deminimus levels for National or NC Ambient Air Quality Standards (NAAQS or NC AAQS).

Cumulative Impacts

This action would not induce cumulative air quality impacts.

4.2 Soils

No Action Alternative

No changes to the soils in the study area are anticipated under the No Action Alternative.

Development Alternative

Ground disturbing activities during clearing and construction could introduce elevated levels of erosion in the study area. These impacts would be reduced or avoided to the maximum extent practicable through best management practices for clearing and construction activities including the use of silt fences and erosion control fabrics, replanting cleared areas as soon as possible after construction, and by using temporary seeding if construction is delayed. Additionally, landscaping after construction would be used to avoid future erosion. A sedimentation and erosion control plan in accordance with NPDES Permit No. NCG010000 would be required during construction activities. Implementation of the soil erosion and sedimentation control plan would avoid or minimize erosion and sedimentation into the streams during culverting activities. Best management practices for control of sedimentation and erosion, such as those mentioned above, would be identified in the permit.

Potential impacts to soils under the proposed action would therefore be anticipated to be negligible and would be insignificant to local and regional conditions.

Cumulative Impacts

Activities at adjacent sites could increase the levels of soil erosion in and near the study area. This potential impact would be avoided and minimized by sequencing construction of proposed activities over several years and allowing vegetation and landscaping to stabilize disturbed areas.

Potential cumulative impacts to soils under the proposed action would also be anticipated to be negligible and would be insignificant to local and regional conditions.

4.3 Land Use, Transportation, and Utilities

4.3.1 Land Use

No Action Alternative

No changes to the land use in the study area are anticipated under the No Action Alternative.

Development Alternative

The land in the study area would be cleared of vegetation and the stream would be culverted. Open space and outdoor recreation land uses would be converted to aircraft operations and maintenance land uses. This would be consistent with the 1955 Base Master Plan and the 2003 Base General Plans for the study area and would result in no land use impacts to the base.

The North Carolina "Neuse River Buffer Rule" protects the Neuse River Watershed from development. Specifically, the Rule protects the Neuse River, tributaries to the Neuse River, and associated riparian buffers within 50 feet of the Neuse River and its tributaries. The proposed Development Alternative would require a permit to develop the study area. Based on the discussion of existing conditions and potential impacts to the streams and buffer (sections 3.4.1 and 4.4.1, respectively), the base concluded the area had little value to the Neuse River Watershed, and therefore the proposed project would be anticipated to have negligible impacts on the Neuse River Buffer Rules land use planning. Any potential negative impacts would be insignificant.

Cumulative Impacts

Potential impacts from adjacent proposed projects would the similar to those for the Development Alternative. Cumulative impacts on the Neuse River Buffer are discussed in section 4.4.1. As with the Development Alternative, cumulative actions adjacent to the study area would be anticipated to have negligible impacts on the Neuse River Buffer Rules land use planning. Any potential negative impacts would be insignificant.

4.3.2 Transportation

No Action Alternative

No changes to the transportation facilities in the study area are anticipated under the No Action Alternative.

Development Alternative

Under the proposed project, McColpin road would be straightened in the study area. The intersections of Blakeslee Road and McColpin Road and of McColpin Road and Gentile Road would be relocated eastward. The geometry of these intersections would be reconfigured to ensure a perpendicular design. This would increase sight distance and safety.

McColpin Road would experience increased traffic volumes from construction of the proposed mobility processing center. The road would remain a two-lane facility with sufficient capacity to accommodate traffic from the mobility processing center.

Development of the study area would require an increased level of construction traffic on base. A specific haul route would be identified prior to construction to avoid or minimize any circulation impacts outside the study area. By scheduling delivery and removal of construction materials during non-peak traffic conditions on base, the short-term effect of construction traffic may be further minimized.

By using the above strategies, any potentially negative impacts to traffic on or adjacent to the base would be insignificant.

Cumulative Impacts

No traffic improvements are indicated for adjacent proposed projects. No cumulative impacts would be anticipated.

4.3.3 Utilities

No Action Alternative

No changes to utilities adjacent to the study area are anticipated under the No Action Alternative.

Development Alternative

Supporting utilities would connect from existing lines and would extend into the study area to support proposed facilities. These utilities would include electrical, water, sanitary sewer, and storm sewer lines. Since the proposed facilities in the study area (the mobility processing center and the Type III hydrant fueling system) are replacing facilities proposed for demolition, no substantial increase in consumption demands would be anticipated. It is not anticipated that utilities outside the study area would need to be upgraded to support the demand in the study area.

The proposed project would not be expected to have any impact on utilities.

Cumulative Impacts

Utilities may need to be extended into areas adjacent to the project study area under other proposed projects. These proposed projects have not been developed to the point where utility need has been defined. Further studies during the environmental documentation for those projects would be required to determine cumulative impacts. Since construction of these other projects would be phased over many years, it is unlikely that there would be any cumulative negative impacts to utilities.

4.4 Water Resources

4.4.1 Surface Water

No Action Alternative

As discussed in section 3.5.3, contaminated groundwater is moving in the general direction of the stream in the study area. Current management of the contamination site is preventing the hazardous wastes in the ground water from entering the stream. However, under the No Action Alternative the protective action of physically separating the stream from the contaminated groundwater through culverting of the stream would not be taken. Current and planned management of the ERP site OT-29 makes potential contamination unlikely even without the physical separation, however the possibility of future

contamination would remain. No changes to surface waters in the study area would be anticipated under the No Action Alternative.

Development Alternative

The project study area has approximately 2,120 linear feet of stream. This project proposes to completely culvert this stream length. Detailed design specifications for the culvert would be developed during the permit process. The culvert would be capable of managing water flow from the project study area, upstream areas, and tributaries. The stream would be temporarily impacted by erosion and sedimentation during the construction process. Downstream areas may also be temporarily impacted by construction activities in the project study area as construction sediment flows downstream. It is anticipated that these impacts would be temporary, occurring only during construction activities. Silt fencing and other recognized best management practices would minimize any potential construction impacts.

The riparian buffer in the area would be completely cleared under the Development Alternative. Vegetative material would be disposed of either in a landfill or by chipping and re-selling as mulch. Total cleared buffer under the Development Alternative would be approximately 4.8 acres.

Calculated stream and buffer impacts from the proposed action are shown in Table 7a.

Table 7a. Stream And Buffer Impacts From Proposed Project (Direct)

Resource	Area
Stream / wooded	1755 linear feet
Stream / maintained	362 linear feet
Wetland	0.008 acres
30 ft buffer / wooded	2.8 acres
30 ft buffer / maintained	0.3 acres
20 ft buffer / wooded	1.4 acres
20 ft buffer / maintained	0.3 acres

As discussed in section 3.4.1, the stream is located between the golf course and the flight line and is culverted on both ends. The stream sections outside the study area is heavily modified and channelized with little to no remaining buffer. Additionally, although the riparian buffer is mostly complete inside the study area, it is isolated by its location on the base in the AOMDA.

Although impacts to the stream and buffer would be negative to the local environment inside the study area, the overall impacts would be insignificant based on the discussion of the existing environment in section 3.4.1.

USACOE and NC DENR DWQ permitting requirements for impacts to the stream and buffer would be met by payment of funds into wetland banks such as North Carolina's Ecosystem Enhancement Program (EEP).

Impacts to streams are calculated at a 2 to 1 ratio by the USACOE and at a 1 to 1 ratio by the NC DENR – DWQ. The USACOE ratio may be lowered through additional on-site stormwater controls. For the purposes of this EA, the 2 to 1 ratio was used to calculate impacts. This amount may be reduced during the permitting process if additional stormwater management options are proposed. Therefore, for every linear foot of stream impacted, two linear feet of compensation is required. The total number of linear feet of stream to be compensated is multiplied by $200 per linear foot (USACOE required fee).

Impacts acres in Zone 1 (30 foot buffer area) are calculated at a 3 to 1 ratio. For every acre of impacted buffer, three acres of compensation is required. Impacts to Zone 2 (20 foot buffer area) are calculated at a 1.5 to 1 ratio. For every acre of impacted buffer, one and a half acres of compensation is required. Total number of acres to be compensated is multiplied by $0.96 per square foot or $41,625 per acre (NC DENR – DWQ required fee).

Other possible methods of satisfying permit requirements would be explored as necessary, including possible restoration of other streams in or adjacent to the base. These options would be explored in supplemental studies only if full payment into mitigation banks was not available.

Cumulative Impacts

Areas adjacent to the project study area have approximately 1,100 linear feet of stream that would be impacted by other projects proposed by SJAFB (as discussed in section 2.3.2). These projects propose to completely culvert this stream length. Detailed design specifications for the culvert would be developed during the permit process. The culvert would be capable of managing the cumulative water flow from the areas adjacent to and including the project study area. This culvert system would connect to a twin 66-inch diameter, 1,850 linear feet culvert, which runs under the airfield. The stream would be temporarily impacted by erosion and sedimentation during the construction process. Downstream areas would also be temporarily impacted by construction activities. It is anticipated that impacts would be temporary, occurring only during construction activities. Silt fencing and other recognized best management practices would minimize construction impacts.

The riparian buffer in the adjacent areas would also be completely cleared under the other proposed actions. Vegetative material would be disposed of either in a landfill or by chipping and re-using as mulch. The cumulative total of cleared buffer under the Development Alternative and other proposed actions would be approximately 3.3 acres.

Calculated stream and buffer impacts adjacent to the study area caused by other proposed actions are shown in Table 7b.

Table 7b. Stream And Buffer Impacts From Adjacent Proposed Projects (Cumulative)	
Resource	**Area**
Stream / wooded	443 linear feet
Stream / maintained	660 linear feet
30 ft buffer / wooded	0.8 acres
30 ft buffer / maintained	1.4 acres
20 ft buffer / wooded	0.5 acres
20 ft buffer / maintained	0.6 acres

As discussed in section 3.4.1, the stream is located between the golf course and the flight line and is culverted on both ends. The stream sections outside the study area are heavily modified and channelized with little to no remaining buffer.

Due to the degraded nature of the buffer outside the study area, cumulative impacts to the stream and buffer would be minimal. Additionally, the overall impacts would be insignificant considering the local environment immediately upstream and downstream of the study area.

USACOE and NC DENR DWQ permitting requirements for impacts to the stream and buffer would be met by payment of funds into wetland banks such as North Carolina's Ecosystem Enhancement Program or with other methods, as necessary, as discussed above.

4.4.2 Ground Water

No Action Alternative

Under this alternative, the contaminated ground water plume would continue to be managed. Restoration would still be accomplished by 2030 as currently planned. No other impacts to groundwater would be anticipated under the No Action Alternative.

Development Alternative

While developing the stormwater management system for the study area, it is possible that an accelerated clean up schedule for ERP site OT-29 could be developed in coordination with construction activities. This idea is conceptual and would require further development before potential beneficial impacts could be identified.

Increased impervious surfaces in the area could reduce infiltration of stormwater into groundwater in the study area. Stormwater management systems developed in conjunction with proposed project would

take groundwater resources into account during design to avoid or minimize potential negative impacts. Any negative impacts to ground water would therefore be minimal and insignificant.

Cumulative Impacts

Cumulative reduction in pervious services could have an impact on groundwater resources. Stormwater management systems developed in conjunction with proposed projects would take groundwater resources into account during design to avoid or minimize potential negative impacts. Any cumulative negative impacts to ground water would therefore be minimal and insignificant.

4.4.3 Stormwater/Drainage

No Action Alternative

No changes to stormwater or drainage would be anticipated under the No Action Alternative.

Development Alternative

Clearing of the land and culverting of the streams could have a substantial impact on stormwater collection and runoff in the study area. Table 8 provides a comparison of the estimated no build and build drainage conditions for the Industrial Drainage Area 11b and for the study area.

Table 8. Comparison of Drainage Areas under Development Alternative

Drainage Area	Total Area (ft^2)	Building Area (ft^2)	Paved Area (ft^2)	Total Impervious Surface Area (ft^2)	Total Pervious Surface Area (ft^2)	Percentage Impervious Surface Area (%)
11b – No Build Conditions	21,332,741	451,646	5,448,954	5,900,600	15,432,141	28
11b – Build Conditions	21,332,741	535,856	5,801,704	6,337,560	14,995,181	30
Study Area – No Build Conditions	1,189,170	16,600	82,250	98,850	1,090,320	8
Study Area – Build Conditions	1,189,170	68,370	433,460	501,830	687,340	42

A stormwater management facility would be developed to collect and manage approximately 11.5 acres of runoff under the proposed action. This facility would be designed during the Neuse Buffer and 401 permit process and approved by NC DENR DWQ and USACOE prior to any construction in the study area. The stormwater facilities would be designed within the study area to the maximum extent practical and would exclude any options that could present Bird Aircraft Strike Hazards (BASH) in the AOMDA. These measures would avoid or minimize any potential negative impacts to stormwater/drainage under the proposed action. Any remaining impacts would be minimal and insignificant.

The stormwater facilities under the proposed action would include at a minimum:

Containment Diking

The above ground storage tanks associated with the new Type III hydrant fueling system would be designed with a containment dike. The containment structure must be designed and installed in such a way that the exposure area is both isolated from adjacent stormwater runoff and would also contain any release of collected precipitation (i.e., contaminated storm water). The contained and potentially contaminated stormwater would not be released to the storm drainage system, sanitary sewer, or base pre-treatment system prior to visual inspection or required chemical (i.e., pollutant) analysis.

Runoff Treatment Using Oil/Water Separator

An oil/water separator would be located near paved areas associated with the new Type III hydrant fueling system. The separator would be instrumental in removing petroleum, oils, and lubricants from stormwater runoff. Oil/water separator inspections and oil removal would be conducted on a regular basis according to the recommendations in the Multiservice Oil/Water Separator Guidance Manual, 11 June 1999.

Other possible structural stormwater best management practices (BMPs) that may be used to avoid or minimize stormwater/drainage impacts from the proposed project are discussed below. Structural BMPs include engineered and constructed systems that are designed to provide for water quantity and/or water quality control of storm water runoff.

Flow Diversion Structures

Flow diversion structures include channels, gutters, drains, sewers, diversion dikes, and graded areas and pavement. Channels, gutters, drains and sewers are also known as stormwater conveyances. These structures are used to channel stormwater runoff away from industrial areas and potential sources of pollutants. Diversion dikes are used to prevent the flow of stormwater runoff onto industrial areas and are often found in the form of compacted soil berms. Graded areas and pavement are land surfaces that are sloped to allow runoff to flow away from industrial area.

Infiltration Measures

Infiltration measures are surface or subsurface structures that allow for infiltration of stormwater runoff. Infiltration occurs rapidly because the materials used are porous. Infiltration measures are advantageous since they provide treatment of runoff, recharge groundwater, and preserve natural stream flow. Typical infiltration measures include vegetated filter strips, grass swales, level spreaders, porous pavement, surface basins, and subsurface structures.

Vegetated filter strips are areas of natural vegetation or artificially planted areas used to provide infiltration, remove pollutants such as sediment, and reduce stormwater flow and velocity. Vegetated filters strips are also referred to as riparian buffers and must be implemented adjacent to natural streams.

Grass swales, often referred to as “ditches”, are vegetated depressions often found along roads that transport, filter, and remove sediments from stormwater flow. Runoff travels slowly through the swales allowing pollutants to infiltrate into the soil.

Level spreaders are devices used at stormwater outlets, conveyances, or dikes. The level spreader is used to spread out stormwater flow into sheet flow over a vegetated area allowing the flow velocity to be reduced and infiltration to be increased.

Porous pavement allows stormwater to infiltrate so that the velocity and amount of runoff from a site can be reduced. Porous pavement is often found in the form of precast concrete grids or porous asphalt and is often used in passenger vehicle parking lots.

Surface basins are used for detention /retention of surface runoff and generally require larger areas of open land to construct and operate. These structures may also require greater maintenance. The benefit of surface basins is that they can contain larger volumes of runoff than most other storm water BMPs. The basin could also be designed as a secondary contaminant control measure.

Subsurface structures are stormwater storage areas typically constructed beneath parking lots or landscaped areas and other open spaces. The advantage of these structures is that they do not require valuable surface space and they can contain greater volumes of runoff than other BMPS. The depth of the subsurface structure needs to be designed so that it does not fall below the top of the groundwater table, which ranges from 5 to 15 feet below the surface in the study area.

Possible structural stormwater best management practices (BMPs) that may be used to compensate stormwater impacts from the proposed project include engineered and constructed systems designed to provide for water quantity and/or water quality control of storm water runoff. The exact combination of stormwater BMPs to be included in the study area would be developed during the facilities design. It is anticipated that approximately 11.5 acres of stormwater would be managed on-site in the study area. Under the Clean Water Act 401 permitting process, NC DENR-DWQ and USACOE would be consulted and would have approval of the final stormwater controls implemented prior to construction.

Construction NPDES Permit No. NCG010000 is a general permit to discharge stormwater associated with construction activities disturbing five (5) acres of land prior to 10 March 2003 and construction activities disturbing one (1) or more acres of land as of 10 March 2003. This permit allows the permittee to discharge stormwater associated with construction activity as long as the discharge is controlled, limited, and monitored. A copy of the general permit is provided in Appendix H of the SWPPP, 2003. Specific requirements of the permit as they apply to SJAFB are discussed in detail in the SWPPP.

Cumulative Impacts

Proposed projects adjacent to the study area could eventually cause cumulative impacts to stormwater drainage in the area. At the development of this environmental assessment, data was not available to complete a full assessment of those impacts. As environmental documentation and permitting is completed for those projects, cumulative stormwater impacts would be fully evaluated and avoided/minimized as appropriate. Any potential cumulative impacts would be minimal and insignificant.

4.5 Hazardous Materials and Wastes and Solid Wastes

4.5.1 Lead Based Paint and Asbestos

No Action Alternative

Structures with identified levels of asbestos and lead-based paint would not be demolished. No impacts are anticipated from the No Action Alternative.

Development Alternative

It is highly likely that demolition of the pumphouses on the flight line would exceed the allowable limits for asbestos (160 square feet) and would therefore require an asbestos permit. An accredited contractor for the handling and disposal of asbestos would be used to ensure the proper disposal of this waste.

The demolition of the pumphouses would also require the disposal of materials contaminated with lead-based paint. An accredited contractor for the abatement of lead-based paint would be used to ensure the proper disposal of this waste.

By using accredited contractors for the handling and disposal of these materials, any negative impacts associated with lead based paint and asbestos in the proposed project would be anticipated to be insignificant.

Cumulative Impacts

Other buildings near the flight line are proposed to be demolished under the proposed expansion of the apron (under a separate project). Each of these buildings would require a survey to determine if asbestos or lead based paint is present. As most of the facilities on base were constructed around the 1950s, it is

extremely likely that these substances would be found. It is anticipated that demolition of these structures would be phased over several years, which would allow for the proper disposal of these substances.

By using accredited contractors for the handling and disposal of these materials and by phasing projects, any cumulative negative impacts associated with lead based paint and asbestos would be anticipated to be insignificant.

4.5.2 Fuel Lines and Underground Storage Tanks

No Action Alternative

Under the No Action Alternative, underground storage tanks (UST) adjacent to the flight line would not be removed. Additionally, fuel lines associated with the pumphouses on the flight line would remain in use. As these systems age, leaks will become increasingly likely, which raises the potential of larger spills and contamination to soils and groundwater in the vicinity. While not considered to be significant at the time of this analysis, as the potential for leaks increases, so does the potential that impacts could become significant to soils, groundwater and other resources in the vicinity.

Development Alternative

New above ground storage tanks and fuel lines would be constructed as part of the new Type III hydrant fueling system. The system would contain standard safety features such as a containment dike to capture and contain fuel spills and potential soil and water contamination. Fuel distribution piping would extend outside of the study area under the proposed action. These lines would connect to existing piping adjacent to the study area or would be located in the AOMDA in previously disturbed areas. With safety features installed, impacts would be anticipated to be avoided or minimized and would therefore be insignificant to the local environment.

Underground storage tanks and fuel lines associated with the existing pumphouses adjacent to the flight line would be removed under this alternative. Soil and water surveys would be completed during the removal process. Any noted contaminated sites would be monitored and scheduled for clean up in accordance with applicable rules and regulations. The removal of these structures represents a beneficial impact on the environment. As noted in section 3.5.2, these systems are old and in need of replacement due to increasing frequency of leakage. Removal of these structures under the proposed action would therefore have a beneficial impact on the local environment.

Cumulative Impacts

Foreseeable and planned construction projects outside the study area did not identify or involve any fuel lines or UST components. Therefore, no cumulative impacts are anticipated.

4.5.3 Environmental Restoration Program

No Action Alternative

Under the No Action Alternative, the base Environmental Restoration Program would continue to monitor and manage the contaminated site. No change would be anticipated based on this alternative.

Development Alternative

Engineering and design of facilities may require use of part of the ERP site OT-29. During construction, the Air Force would remediate any portion of the site used under the proposed project. Where feasible, the base would purposefully avoid the ERP site and areas immediately adjacent to the site. This land would be held separate for the continued management and monitoring of the contaminated soils and groundwater. Also, construction activities would avoid staging in this area where feasible. Therefore there would be no impacts to unused portions of this site under the proposed action and beneficial impacts due to accelerated clean up activities for any used portions.

As stormwater management facilities are designed for the proposed project, possible combined stormwater facility / site clean-up activities would be reviewed for feasibility. The potential for accelerated clean up in conjunction with stormwater management facility is still conceptual and would need further study.

Any contaminated soils found in association with the fuel pumphouses on the flight line would be identified and managed as discussed in section 4.5.2.

Cumulative Impacts

Other foreseeable and planned construction projects outside the project study area did not identify any known contaminated sites. Therefore, no cumulative impacts are anticipated.

4.5.4 Solid Wastes

No Action Alternative

Under the No Action Alternative, no demolition of facilities would occur. No change would be anticipated based on this alternative.

Development Alternative

Demolition and construction of facilities under the Development Alternative would result in the generation of solid wastes. During the clearing and construction period significant quantities of landscape material would be removed from the area as well as hardscape (such as from the removal of the existing road). To the extent possible, this waste material would be recycled. If necessary, some of the debris would be taken to an appropriate landfill for disposal. The proposed project would not be anticipated to contribute

substantially to SJAFBs annual generation of solid wastes and therefore would not have significant impacts to the local landfill.

Cumulative Impacts

Other buildings near the flight line are proposed to be demolished during the proposed expansion of the apron (separate project). Each of these buildings would generate solid wastes during demolition. It is anticipated that demolition of these structures would be phased over several years, which would allow for phased disposal of these substances to minimize solid waste impacts. The disposal process would follow the process discussed for the Development Alternative above.

Since these projects would be phased, they would not be anticipated to contribute substantially to SJAFBs annual generation of solid wastes and therefore would not have significant cumulative impacts to the local landfill.

4.6 Biological Resources

4.6.1 Natural Communities

No Action Alternative

The study area would remain in its current condition and the natural communities would not be impacted under the No Action Alternative.

Development Alternative

Under the proposed development, the entire study area would be developed to support flight line activities. Most of the vegetation in the study area would be cleared. As discussed in section 4.1, vegetative material would be disposed of either in a landfill or by chipping and re-selling as mulch. A review for invasive plant species would be completed prior to clearing activities. Where feasible, construction would avoid cutting down any invasive species and transporting debris when species are fruiting to reduce spread of seeds. These activities would avoid or minimize any negative impacts associated with the proposed project. Any remaining negative impacts would be insignificant.

The area would be landscaped as appropriate for an industrial area. Native vegetation would be used to re-vegetate the area, however fruit and nut bearing species would be avoided. Common species accustomed to living in close proximity to the flight line and industrial type activities would be anticipated to re-colonize the area. The total density of plant and animal species in the study area is anticipated to be reduced under the proposed project as the clearing of natural areas would reduce the total habitat. As discussed in section 3.6.1, this area is currently described as fragmented and degraded mesic mixed hardwood forest with little to no regional habitat value. The area is further isolated by surrounding human activities. Potential impacts under the proposed action would therefore be negligible and insignificant.

Although the current BASH environment was not reviewed by this study, the reduced density of species in the AOMDA would reasonably result in a reduction of potential BASH concerns that would otherwise be associated with the existing study area. The clearing of trees from the study area would not create areas of open water since stormwater management facilities proposed in Section 4.4.3 would prevent this occurrence. Therefore, any negligible impacts from the proposed project on BASH issues would be positive.

Cumulative Impacts

The area to the east of the study area currently contains a portion of the base golf course. It is anticipated that future proposed projects would require the movement of the golf course to other areas of the base away from the industrial area to allow continued development of the flying mission. While impacts associated with this would be studied independently, it is anticipated that this would cause a cumulative impacts to the natural environment. It is anticipated that as other areas of the base are developed to support a new golf course location, any impacts for loss of habitat would be offset by creation of new similar habitat away from the AOMDA. Separate environmental documentation on these future projects would be required to fully evaluate cumulative impacts. Therefore, no cumulative impacts would be anticipated.

4.6.2 Threatened and Endangered Species

Based on information obtained from SJAFB and readily available data from federal and state agencies, it is unlikely that any protected species occur within the project area. Therefore, there are no anticipated impacts to threatened or endangered species under the No Action Alternative and the Development Alternative.

4.6.3 Wetlands

Executive Order 11990, Protection of Wetlands requires that each agency take action to minimize the destruction, loss or degradation of wetlands. According to AFI 32-7064, USAF installations will avoid starting or assisting new construction located in wetlands unless there are no practicable alternatives to such construction. Any proposed design for development or construction must include all practicable measures to minimize harm to wetlands and demonstrate that potential impacts have been analyzed at the appropriate level of environmental impact analysis. In making final decisions, the USAF will take into account the requirements of the military mission, the economic and environmental impact, and other pertinent factors.

No Action Alternative

The wetland in the study area would not be impacted under the No Action Alternative.

Development Alternative

The alternative would require the filling of 0.008 acres of jurisdictional wetland within the riparian buffer in the study area. This impact is unavoidable, but does not represent a substantial impact to wetlands or water quality due to the small size of the area. This area was included in the area described as the 30-foot riparian buffer and would be replaced under the permit process as indicated in Table 7a. Therefore, negative impacts from the filling of this wetland area would be insignificant.

As discussed in Chapter 2, there is no practicable alternative to the location of the proposed facilities and the alteration of water resources in the study area. Preliminary layout designs also indicate that there is no practicable way to avoid culverting the stream and filling the wetland area. Since the wetland is directly adjacent to the stream and is so small, there is no way to prevent destruction of this small wetland area when the stream is relocated.

Cumulative Impacts

No wetlands were identified in areas adjacent to the study area, therefore no cumulative impacts are anticipated.

4.7 Irreversible and Irretrievable Commitments of Resources

NEPA requires that environmental analysis include identification of "…any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented." Irreversible and irretrievable resource commitments are related to the use of nonrenewable 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 and minerals) that cannot be replaced within a reasonable time frame. Irretrievable resource commitments involve the loss in value of an affected resource that cannot be restored as a result of the action (e.g., extinction of a threatened or endangered species or the disturbance of a cultural site).

For the proposed action, most resource commitments are neither irreversible nor irretrievable. Most environmental consequences are short term and temporary (such as air emissions from construction) or longer lasting but negligible (e.g. utility increases). Those limited resources that may involve a possible irreversible or irretrievable commitment under the proposed action are discussed below.

Construction of the Type III hydrant fueling system and the mobility processing center would require consumption of limited amounts of materials typically associated with interior and exterior construction (e.g., concrete wiring, insulation, and windows). The amount of these materials used is not expected to significantly decrease the availability of the resources. The proposed facilities and projects reviewed for

cumulative impacts would disturb 3,220 linear feet of stream and 8 acres of riparian buffer (which include 0.008 acres of wetlands) that would be compensated by paying into the North Carolina Ecosystem Enhancement Program (EEP) in accordance with USACOE and NC DENR-DWQ. Other possible methods of satisfying permit requirements would be explored as necessary, including possible restoration of other streams in or adjacent to the base. These options would be explored in supplemental studies only if full payment into mitigation banks was not available.

4.8 Summary Matrix of Impacts

Table 9 summarizes the potential environmental effects of the proposed action and no action alternative based on the detailed impact analyses discussed in the sections 4.1 through 4.6.

Table 9. Summary Matrix of Environmental Impacts

Resource	No-Action Alternative	Proposed Action	Cumulative Impacts
Air Quality	None	Potential Negative, Negligible, Insignificant Impacts	None
Soils	None	Potential Negative, Negligible, Insignificant Impacts	Potential Negative, Negligible, Insignificant Impacts
Land Use, Transportation, and Utilities	None	Potential Negative, Negligible, Insignificant Impacts	Potential Negative, Negligible, Insignificant Impacts
Water Resources	None	Potential Negative but Insignificant Impacts to Water Resources	Potential Negative but Insignificant Impacts to Water Resources
Hazardous Materials and Wastes	Potentially Negative and Significant Impacts to Fuel Lines and USTs	Potential Negative but Insignificant Impacts to Lead Based Paint and Asbestos and Potential Positive Impacts to Fuel Lines and USTs	Potential Negative but Insignificant Impacts to Lead Based Paint and Asbestos
Biological Resources	None	Potential Negative but Insignificant Impacts to Natural Communities	Potential Negative but Insignificant Impacts Natural Communities

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5.0 List of Preparers

Michael Deering, PLS
Benton and Associates
Registered Surveyor

Wayne Hyatt, PLS, EIS
Carter & Burgess
Engineering Designer

Julie Hunt
Carter & Burgess
Project Manager
M.S. Biology

Ginger Tennant, PWS, AICP
Carter & Burgess
Environmental Scientist
M.S Biology

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6.0 List of Persons and Agencies Consulted

Johanna Arnold, PhD
4 CES/CEV

Greg Ditzler
4 CES/CEV

Ed Ellis
4 CES/CECP

Dennis Goodson
4 CES/CEC

Paul Green
HQ ACC /CEV

Bryan Henderson
4 CES/CEV

Scott Jones
United States Army Corps of Engineers
Wilmington District

Jeff Jurek
North Carolina Wetland Restoration Program

Douglas Owen
4 CES/CEOL5

David Shifflet
HQ ACC /CEV

Frank Werner
4 CES/CEV

Ronnie Wilson
4 CES/CEV

Bob Zarzecki
North Carolina Department of Environment and Natural Resources
Division of Water Quality

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7.0 List of References

Carter and Burgess. 2003. Informal telephone correspondence with US Fish and Wildlife regarding protected species.

Department of Defense. 2001. Unified Facilities Criteria (UFC) 4-010-01, DoD Minimum Antiterrorism Standards for Buildings. 31 July 2001.

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_____. 2002. Follow-up to The Nature Conservancy Inventory, Seymour Johnson AFB, North Carolina. 2002.

_____. 2004. County Status List. http://www.ncsparks.net/nhp/search.html

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_____. 1995. Hazardous Waste Management Plan (HWMP), Seymour Johnson AFB, North Carolina.

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_____. 2002. 4 CES/CEOL5 Memo, Facility Inspection/Assessment Letter for Building 4552, Seymour Johnson AFB, North Carolina. December, 26 2002

_____. 2002. 4 CES/CEOL5 Memo, Facility Inspection/Assessment Letter for Building 4953, Seymour Johnson AFB, North Carolina. December, 30 2002

_____. 2002. 4 CES/CEOL5 Memo, Facility Inspection/Assessment Letter for Building 4551, Seymour Johnson AFB, North Carolina. December, 31 2002

_____. 2002. SJAFB CY 2002 Air Emissions Inventory Report, Seymour Johnson AFB, North Carolina

_____. 2003. Base General Plan, Seymour Johnson AFB, North Carolina. May 2003

_____. 2003. OT-29 5 Year Review Report, Seymour Johnson AFB, North Carolina.

_____. 2003. Storm Water Pollution Prevention Plan (SWPPP), Seymour Johnson AFB, North Carolina. December 2003.

United States Department of Agriculture Soil Conservation Service. 1974. Soil Survey of Wayne County, North Carolina. June 1974.

APPENDIX A

FIGURES

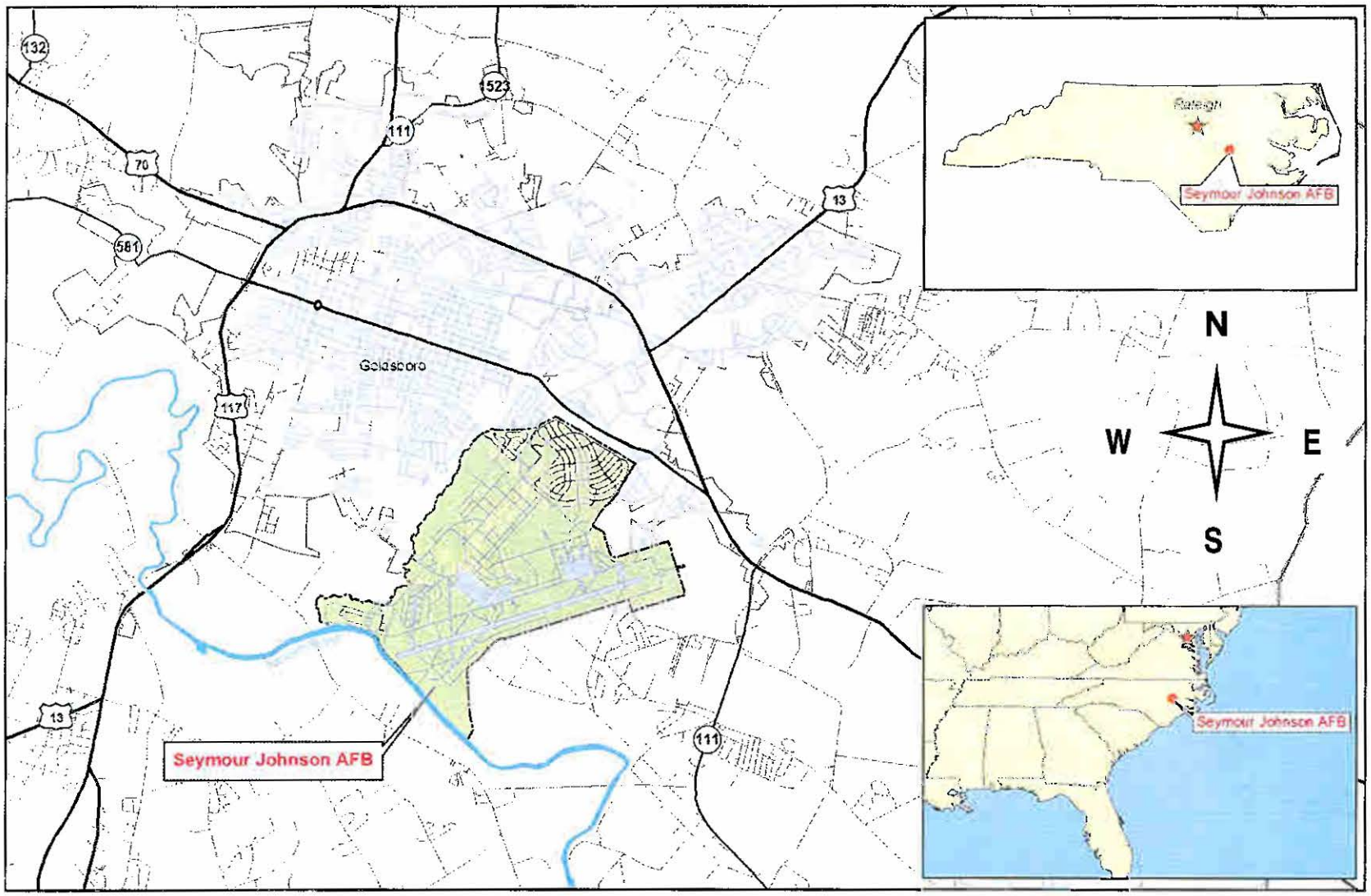

Figure 1
Seymour Johnson Air Force Base

Figure from Stormwater Pollution Prevention Plan prepared by URS Group, Inc., September, 2003

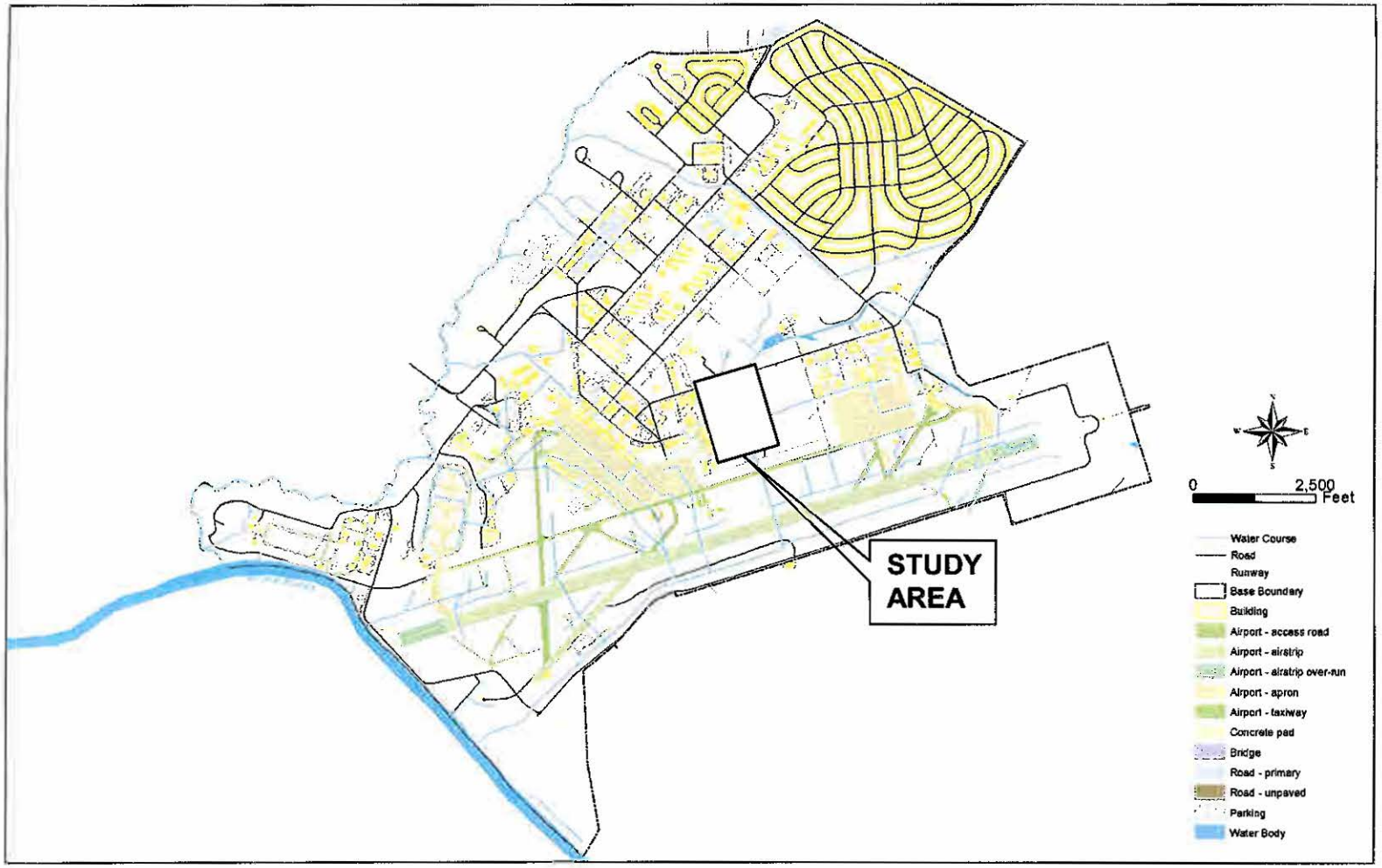

Figure 2
Study Area

Figure from Stormwater Pollution Prevention Plan prepared by URS Group, Inc., September, 2003

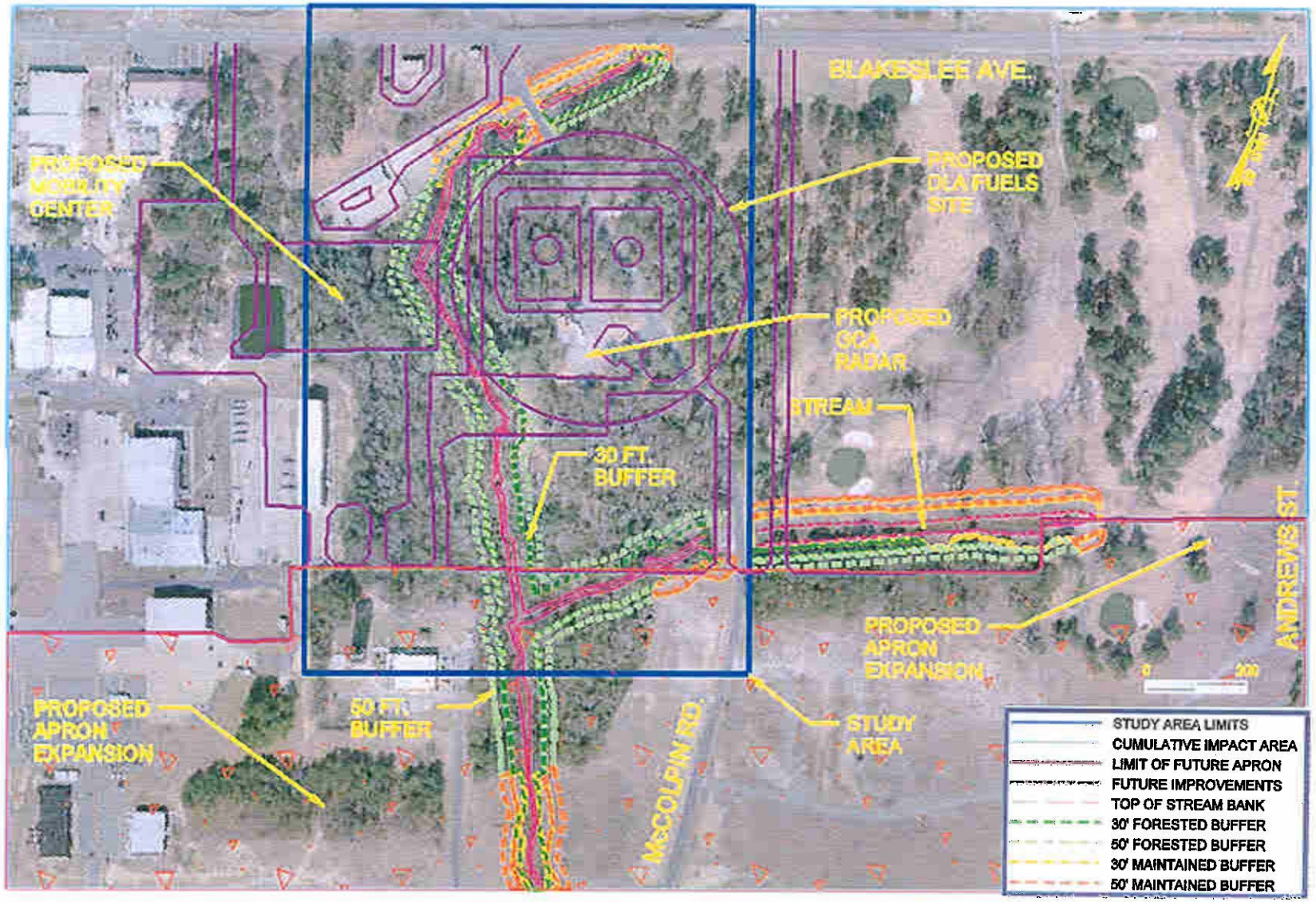

Figure 3
Proposed Development Alternative

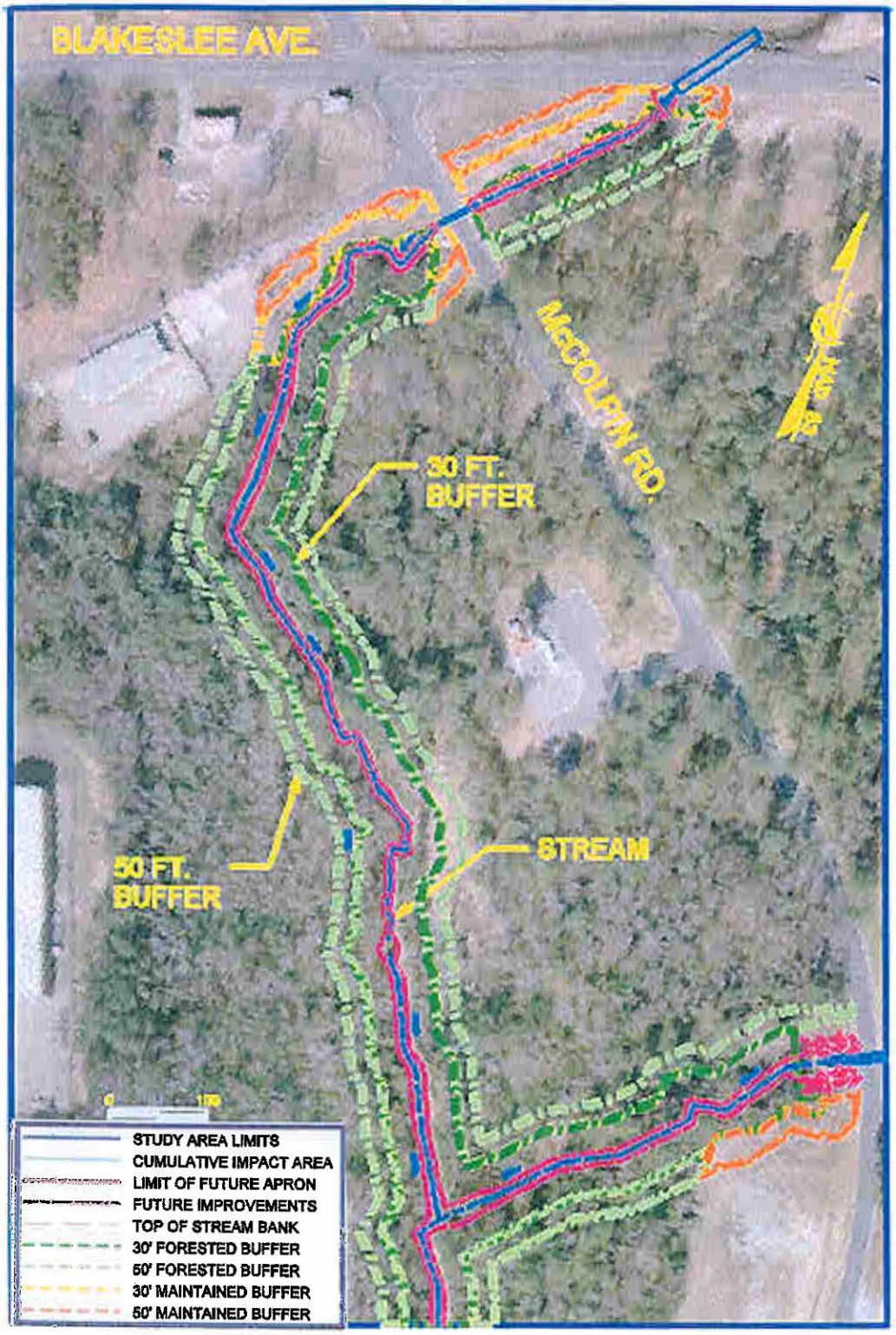

Figure 4
Study Area Streams and Buffers

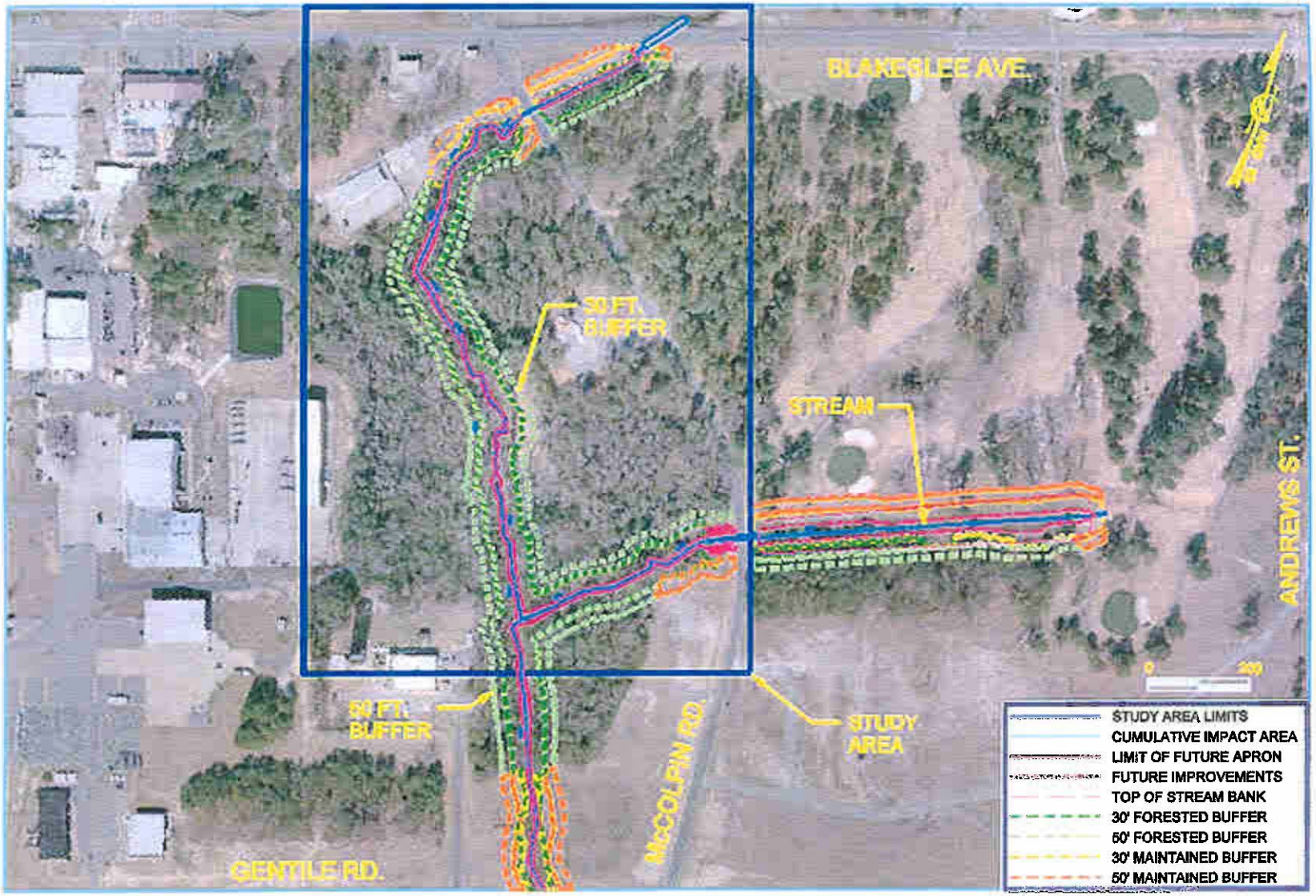

Figure 5
Expanded Study Area for Surface Waters and Drainage

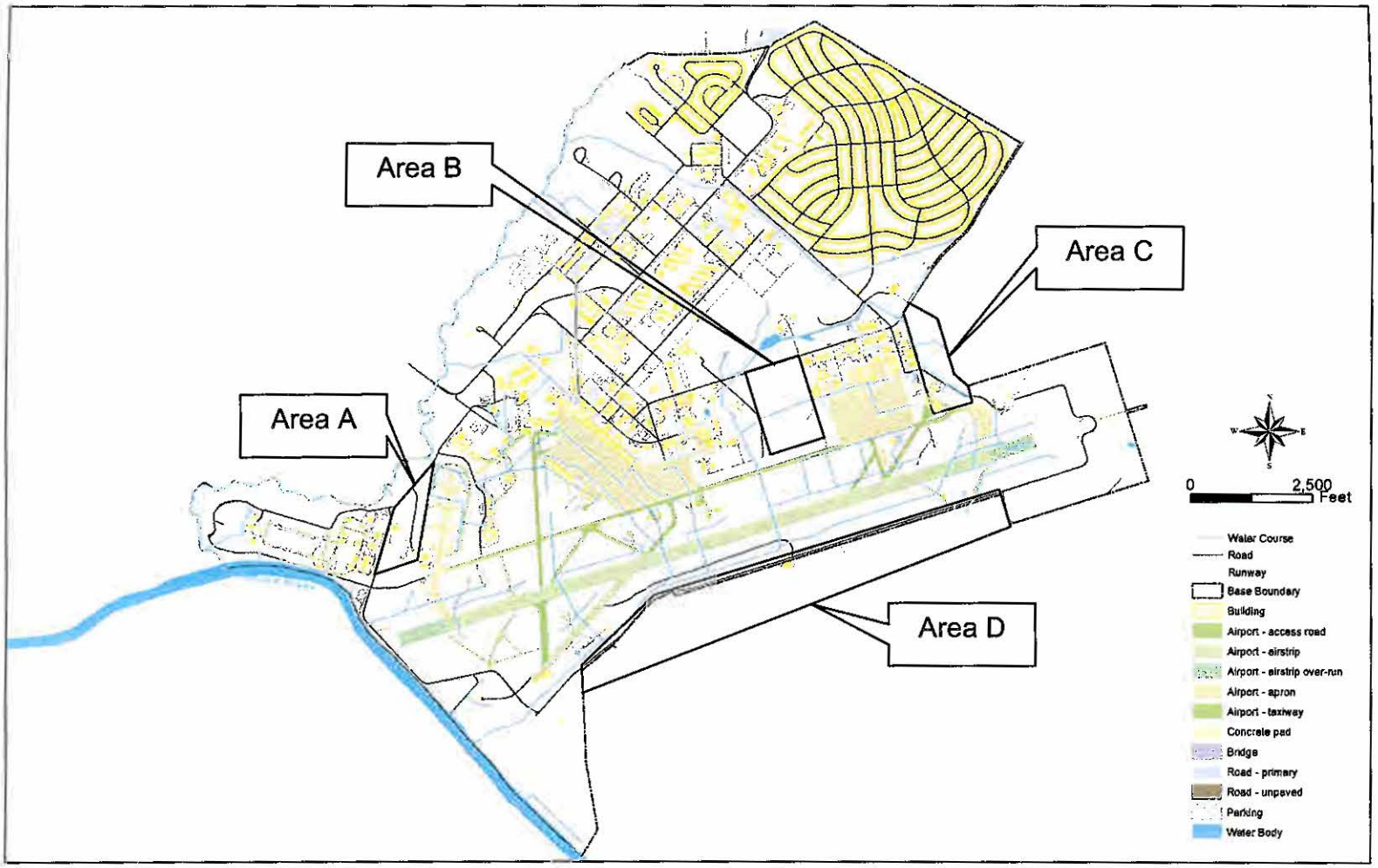

Figure 6
Areas Eliminated from Further Consideration

Figure from Stormwater Pollution Prevention Plan prepared by URS Group, Inc., September, 2003

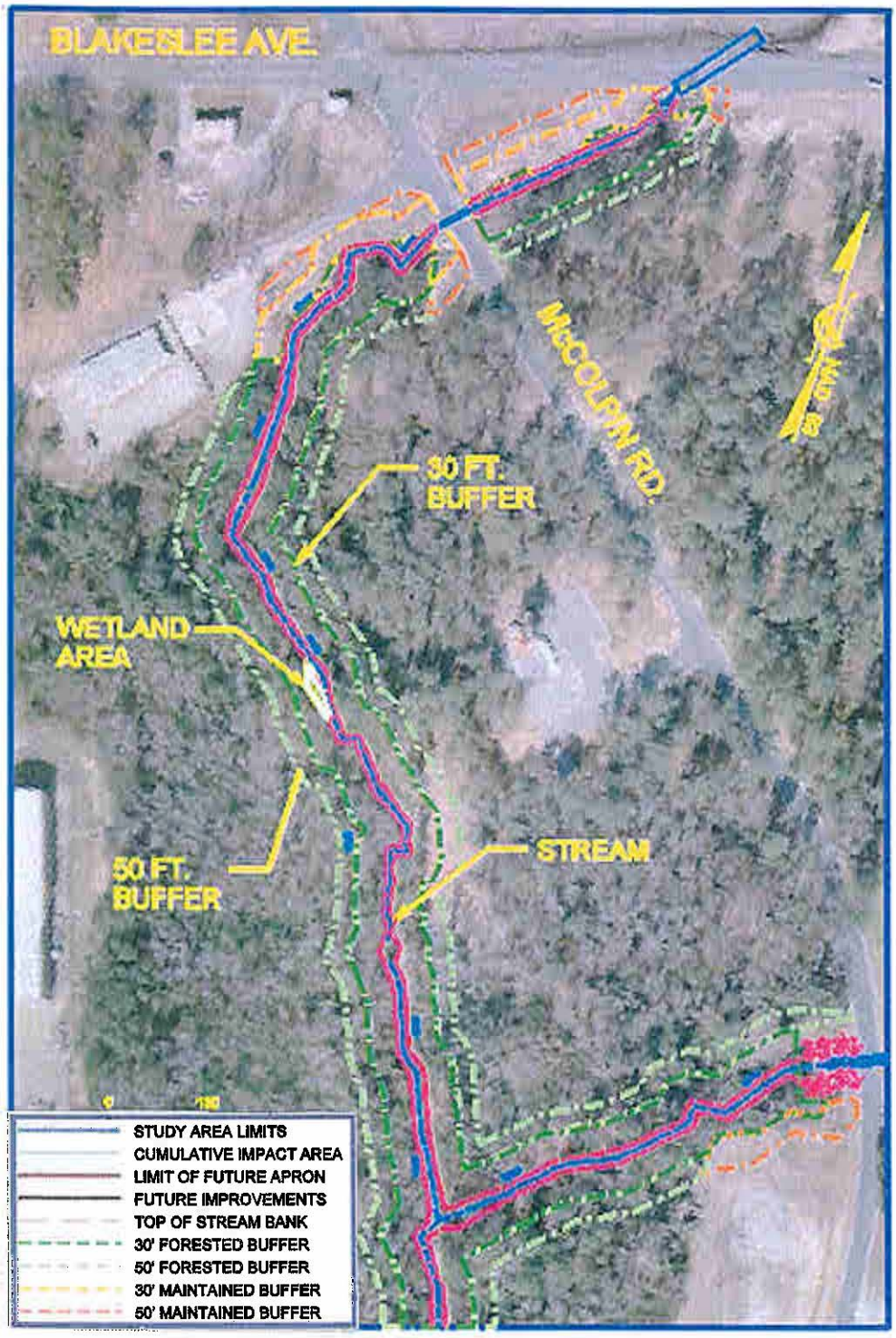

Figure 7
Wetland Area

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APPENDIX B

PERMITS
(AND ASSOCIATED CORRESPONDENCE)

January 8, 2004

Regulatory Division

Action ID No. 200310878

Ms. Julie E. Hunt
Carter and Burgess
5811 Glenwood Avenue Suite 300
Raleigh, NC 27612

Dear Ms. Hunt:

This correspondence confirms our receipt of your e-mail dated December 9, 2003, regarding the Draft Environmental Assessment (DEA) that has been prepared by the Air Force for evaluation of the environmental consequences associated with the proposal to develop a parcel of the Aircraft Operations and Mobility Development Area (AOMDA) at Seymour Johnson Air Force Base in North Carolina for a Type III fuel hydrant system and a mobility processing center. The purpose of this correspondence is to provide you with comments from the U.S. Army Corps of Engineers, Wilmington District's Regulatory Division. Please be advised that these comments are restricted to activities proposed for North Carolina.

The DEA identifies a single, preferred alternative for the 1) demolition of existing fuel system adjacent to Taxiway A and construction of a Type III hydrant fueling system outside the airfield lateral safety clearance zone and 2) demolition of existing personnel deployment facility and passenger terminal (Buildings 4741 and 4743) and construction of a combined mobility processing center. This alternative involves construction work within wetlands and waters of United States at the Seymour Johnson Air Force Base (SJAFB) in Goldsboro, Wayne County, North Carolina.

Review of the DEA revealed that the following must be addressed:

1. Early coordination is key to the expeditious evaluation of this proposal. I strongly recommend that you begin coordinating with Mr. Scott Jones of my staff, telephone (252) 975-1616, extension 27, regarding this project.

2. Department of the Army (DA) permit authorization, pursuant to Section 404 of the Clean Water Act, will be required for the discharge of excavated or fill material in waters of the United States, including wetlands, in conjunction with this project, including disposal of construction debris, borrow, wasting and other associated construction activities. Specific permit requirements will depend on design of the project, extent of fill work within wetlands and streams (dimensions, fill amounts, etc.), construction methods, and other factors.

3. The DEA does not document methodology used to map the size and location of wetland resources at SJAFB within the proposed project area. A much more in-depth discussion of the analysis must be conducted pursuant to the 1987 Corps of Engineers Wetlands Delineation Manual. Additionally, please be aware that U. S. Army Corps of Engineers (USACE) confirmation of the jurisdictional determinations referenced within the DEA has not been obtained.

4. On February 6, 1990, the DA and the U.S. Environmental Protection Agency signed a memorandum of agreement (MOA) establishing procedures to determine the type and level of mitigation necessary to comply with the Clean Water Act Section 404(b)(1) Guidelines. Permits for work within wetlands or other special aquatic sites are available only if the proposed work is the least environmentally damaging, practicable alternative. This MOA provides for first, avoiding impacts to waters and wetlands through the selection of the least damaging, practicable alternative; second, taking appropriate and practicable steps to reduce impacts on waters and wetlands; and finally, compensating for any remaining unavoidable impacts to the maximum practicable extent.

5. The DEA should also address your plans to provide compensatory mitigation for unavoidable impacts to waters of the United States, including wetlands. Specifically, it does not provide acknowledgement by the North Carolina Wetlands Restoration program that payment for described impacts is viable. Please describe any alternate compensatory mitigation options as needed.

6. Section 3.4 – Water Resources does not provide an adequate description of surface waters within the described study area. Please include additional information related to the stream's physical characteristics, stability, biology, and habitat value.

Please be advised that we may have additional questions and comments as our review of this proposal continues.

Thank you for your time and cooperation. If you have any questions, please contact Mr. Scott Jones of my Washington Regulatory Field Office staff; telephone (252) 975-1616, extension 27.

Sincerely,

FILENAME: SJAFB DEA Comments.doc
CESAW-RG-W/Lekson/sw/s

Mail/
File/

David M. Lekson, P.W.S.
Chief, Washington Regulatory Field Office

Copies Furnished:

Mr. Ronald J. Mikulak, Chief
Wetlands Regulatory Section
Water Management Div.
U.S. Environmental Protection Agency
61 Forsyth Street, SW
Atlanta, GA 30303

Mr. Garland B. Pardue
U.S. Fish and Wildlife Service
Fish and Wildlife Enhancement
Post Office Box 33726
Raleigh, North Carolina 27636-3726

Mr. Ron Sechler
National Marine Fisheries Service
Habitat Conservation Division
Pivers Island
Beaufort, North Carolina 28516

Mr. John Dorney
Division of Environmental Management
North Carolina Department of Environment
and Natural Resources
1650 Mail Service Center
Raleigh, North Carolina 27699-1650

Mr. Pat McClain
Division of Land Resources
North Carolina Department of Environment
and Natural Resources
943 Washington Square Mall
Washington, North Carolina 27889

Blind Copies Furnished:

CESAW- RG-W/Jones

DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS
Washington Regulatory Field Office
P.O. Box 1000
Washington, North Carolina 27889-1000

IN REPLY REFER TO

May 24, 2004

Regulatory Division

Action ID No. 200310878

Ms. Julie E. Hunt
Carter and Burgess
5811 Glenwood Avenue Suite 300
Raleigh, North Carolina 27612

Dear Ms. Hunt:

This correspondence confirms our receipt of your e-mail dated May 14, 2004, regarding the Environmental Assessment (EA) that has been prepared by the United States Air Force for evaluation of the environmental consequences associated with the proposal to develop a parcel of the Aircraft Operations and Mobility Development Area (AOMDA) at Seymour Johnson Air Force Base in North Carolina for a Type III fuel hydrant system and a mobility processing center. The purpose of this correspondence is to provide you with comments from the U.S. Army Corps of Engineers, Wilmington District's Regulatory Division.

Specifically, the EA identifies a single, preferred alternative for: a) the demolition of existing fuel system adjacent to Taxiway A and construction of a Type III hydrant fueling system outside the airfield lateral safety clearance zone; b) demolition of the existing personnel deployment facility and passenger terminal (Buildings 4741 and 4743) and construction of a combined mobility processing center; and c) relocation of McColpin Road. This alternative involves the alteration of existing Department of the Army jurisdictional waters and wetlands at the Seymour Johnson Air Force Base (SJAFB) in Goldsboro, Wayne County, North Carolina.

As indicated in previous correspondence to you, Department of the Army (DA) permit authorization, pursuant to Section 404 of the Clean Water Act, will be required for the discharge of excavated or fill material into waters of the United States, including wetlands, in conjunction with this project, including disposal of construction debris, borrow, wasting, and other associated construction activities. Specific permit requirements will depend on design of the project, extent of fill work within waters and wetlands (dimensions, fill amounts, etc.), construction methods, and other factors.

On February 6, 1990, the DA and the U.S. Environmental Protection Agency signed a memorandum of agreement (MOA) establishing procedures to determine the type and level of mitigation necessary to comply with the Clean Water Act Section 404(b)(1) Guidelines. Permits

for work within wetlands or other special aquatic sites are available only if the proposed work is the least environmentally damaging, practicable alternative. This MOA provides for first, avoiding impacts to waters and wetlands through the selection of the least damaging, practicable alternative; second, taking appropriate and practicable steps to reduce impacts on waters and wetlands; and finally, compensating for any remaining unavoidable impacts to the maximum practicable extent.

We have additional concerns that the Air Force continues toward development of the AOMDA without fully considering the implications of the statutory requirements of Section 404 of the Clean Water Act. This includes, but is not limited to, additional analysis of alternatives (including changes to the project and availability of other sites), additional on-site or in-kind mitigation alternatives, and the U. S. Army Corps of Engineers' responsibility for considering the public interest in making its permit decisions. Please be advised that any commitments the Air Force has made toward redevelopment of the AOMDA in Wayne County in no way obligates the Corps of Engineers to issue a permit authorizing the new hydrant system and mobility processing center as proposed.

Thank you for your time and cooperation. If you have any questions, please contact Mr. Scott Jones of my Washington Regulatory Field Office staff, telephone (252) 975-1616, extension 27.

Sincerely,

David M. Lekson

David M. Lekson, P.W.S.
Chief, Washington Regulatory Field Office

Copies Furnished:

Mr. Ronald J. Mikulak, Chief
Wetlands Regulatory Section
Water Management Div.
United States Environmental Protection Agency
61 Forsyth Street, SW
Atlanta, GA 30303

Mr. Garland B. Pardue
United States Fish and Wildlife Service
Fish and Wildlife Enhancement
Post Office Box 33726
Raleigh, North Carolina 27636-3726

Mr. Ron Sechler
National Marine Fisheries Service
Habitat Conservation Division
Pivers Island
Beaufort, North Carolina 28516

Mr. John Dorney
Division of Water Quality
North Carolina Department of Environment
and Natural Resources
1650 Mail Service Center
Raleigh, North Carolina 27699-1650

Mr. Pat McClain
Division of Land Resources
North Carolina Department of Environment
and Natural Resources
943 Washington Square Mall
Washington, North Carolina 27889

DEPARTMENT OF THE AIR FORCE
4TH FIGHTER WING (ACC)
SEYMOUR JOHNSON AIR FORCE BASE NC

JAN 20 2004

Lt Col Michael J. Coats
Commander, 4th Civil Engineer Squadron
1095 Peterson Avenue
Seymour Johnson AFB NC 27531-2355

Mr. Jeff Jurek
NC DENR
Wetlands Restoration Program
1619 Mail Service Center
Raleigh, NC 27699-1619

Dear Mr. Jurek

Seymour Johnson AFB is proposing the development of land adjacent to the base flight line. A tributary to the Neuse River is located in this area. It is proposed to completely culvert this stream at a length of 3,220 linear feet and fill the area. The Neuse River Buffer Regulations (15 NCAC 2B .0233) and Section 404 and 401 of the Clean Water Act apply to this stream. The US Air Force proposes to mitigate for impacts to the stream, stream buffer, and wetland area by paying in the available mitigation fund (North Carolina Wetlands Restoration Program).

The study area is on Seymour Johnson AFB in Wayne County, North Carolina, Middle Neuse Watershed, Catalog Number 03020202. According to GPS survey data, impacts to be mitigated are as follows:

Resource	Calculated Impacts*	Figure
Stream (forested)	2198 linear feet	1
Stream (channelized)	1022 linear feet	2, 3, 4
Wetland	0.008 acres	5
30 foot forested buffer	3.6 acres	1, 6
30 foot maintained buffer	1.7 acres	2, 3, 4
50 foot forested buffer	1.9 acres	1, 6
50 foot maintained buffer	0.8 acres	2, 3, 4

* - Buffer areas were calculated from the edge of stream bank. Stream width is approximately 5 to 8 feet.

The United States Air Force formally requests approval to pay into the Wetland Restoration Fund to accomplish the necessary mitigation required for the proposed project. This EA is being accomplished in coordination with the US Army Corp of Engineers and North Carolina Department of Environmental and Natural Resources, Division of Water Quality.

Sincerely

MICHAEL J. COATS, Lt Col, USAF

Attachments:
1. Map
2. Stream and Buffer Figures

cc:
US Army Corps of Engineers, Mr. Scott Jones
NCDENR, DWQ, Mr. Bob Zarzecki

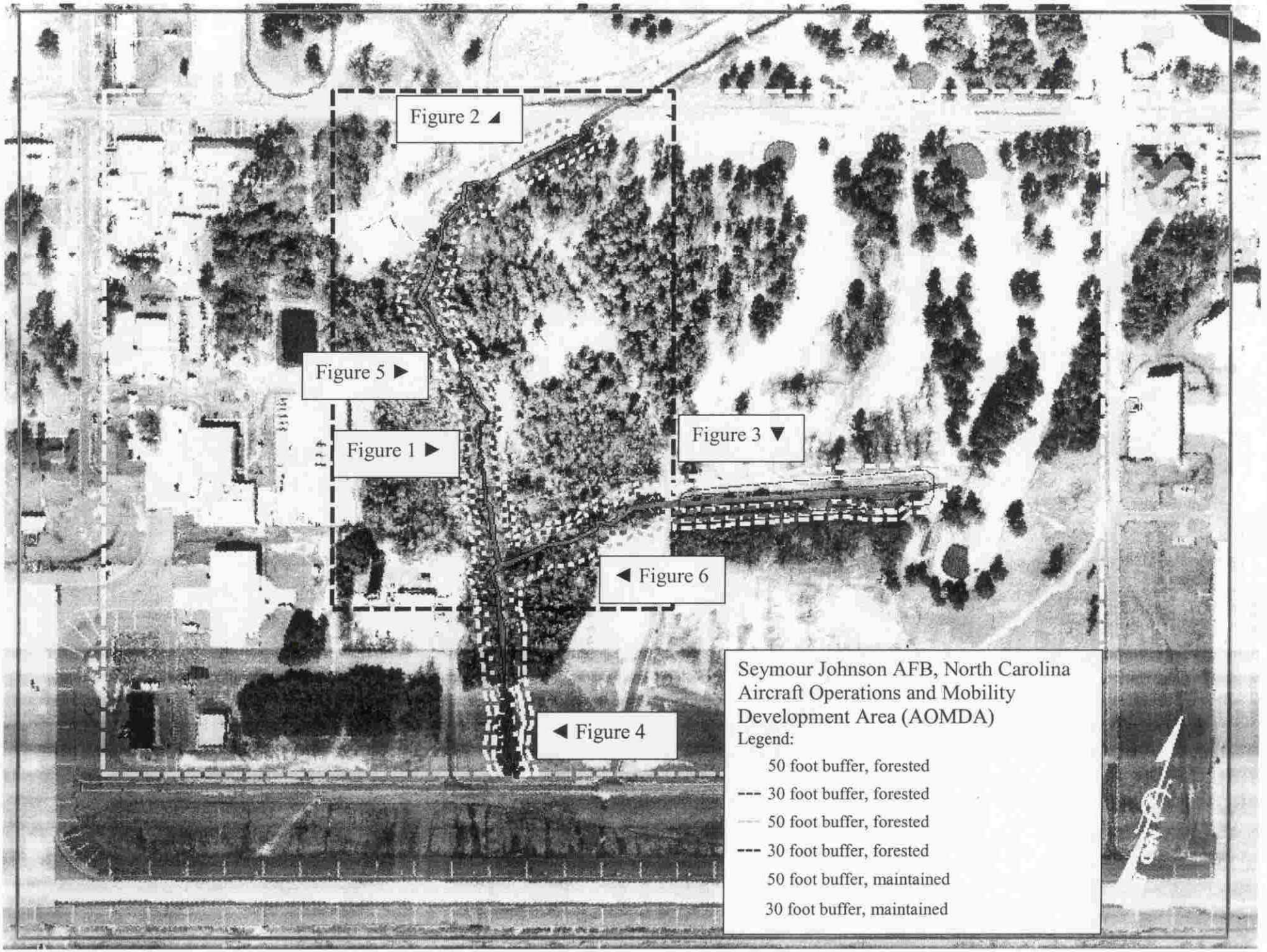


Figure 2 ◢
Figure 5 ►
Figure 1 ►
Figure 3 ▼
◄ Figure 6
◄ Figure 4
Seymour Johnson AFB, North Carolina
Aircraft Operations and Mobility
Development Area (AOMDA)
Legend:
50 foot buffer, forested
30 foot buffer, forested
50 foot buffer, forested
30 foot buffer, forested
50 foot buffer, maintained
30 foot buffer, maintained

Stream and Buffer Figures

Figure 1

Figure 4

Figure 2

Figure 5

Figure 3

Figure 6

DEPARTMENT OF THE AIR FORCE
4TH FIGHTER WING (ACC)
SEYMOUR JOHNSON AIR FORCE BASE NC

Lt Col Lowell A. Nelson
Commander, 4th Civil Engineer Squadron
1095 Peterson Avenue
Seymour Johnson AFB NC 27531-2355

JUN 30 2005

Mr. Jeff Jurek
NC DENR
Ecosystem Enhancement Program
1619 Mail Service Center
Raleigh, NC 27699-1619

Ref: Seymour Johnson AFB, Expansion of Support Facilities, Wayne County NC

Dear Mr. Jurek

Seymour Johnson AFB submitted a request to your office on 20 Jan 04 to completely culvert approximately 3,220 linear feet of a tributary stream to the Neuse River Basin in support of a mission-essential facility project. As a result of this required action, SJAFB requested to offset the stream, stream buffer, and wetland impacts by payment into the NC Ecosystem Enhancement Program's NCEEP mitigation fund.

On 17 Feb 04, your office responded to our request outlining the necessary steps that must be taken prior to approval. In accordance with your guidance, we have contacted the US Army Corps of Engineers and the NC Division of Water Quality/401 Unit, and have received approval from these agencies that payment into the NCEEP for impacts associated with this project is appropriate. Furthermore, upon consultation with your office, we were informed that the NCEEP could accept full payment into the fund versus the partial payment previously noted.

According to GPS survey data performed by the Air Force, **actual** impacts to be mitigated are as follows:

Resource	Calculated Impacts*	Mitigation Ratio	Needed Mitigation Acceptance
Total Stream Length	3,085 feet	1 : 2	6,170 feet
Wetland	0.008 acres	N/A**	N/A**
Zone 1 buffer (30 feet)	186,643 sq ft	1 : 3	559,929 sq ft
Zone 2 buffer (additional 20 feet)	118,952 sq ft	1 : 1.5	178,428 sq ft
Total Mitigation Max requested			**738,357 sq ft**

* - Buffer areas were calculated from the edge of stream bank. Stream width varies from approximately 5 to 8 feet.

** - CoE has determined that no mitigation will be required.

A conservative estimate of potential stream and riparian buffer impacts was calculated during the Environmental Assessment phase of the project. This methodology included a GPS stream and wetland delineation (completed in 2003) and data points at each turn in the stream with data for top of stream bank at each point. The stream information was input into ArcView and was used to calculate the total approximate stream length. A series of buffers were then applied over the stream length. The 30-foot buffer included all the area inside the 30-foot buffer lines, including impervious areas and stream surface water. The 20-foot buffer included all area between the 20-foot and 30-foot buffer lines including impervious surfaces.

For our permit application (and for this request), the GPS points were connected into a single polygon line in ArcView. Stream areas culverted under McColpin Road were excluded from stream length and buffer calculations. Surface water area (from top of bank to top of bank) was excluded in the 30-foot buffer calculation. This new calculation provides a more accurate estimation of the impact area requiring mitigation than reported in the April 2004 Environmental Assessment and the impacts requested for mitigation acceptance in our letter of 20 Jan 04.

Since the original acceptance letter from your office has expired, we are requesting that you review this submittal and provide this office with a valid letter of acceptance. The mitigation will be performed in accordance with the Memorandum of Understanding between the NCDENR and the USACOE dated 4 Nov 98.

Mr. Bryan Henderson of my Environmental Flight will be coordinating these efforts with the appropriate agencies. He may be reached at (919) 722-7440. I appreciate your assistance and continued support.

Sincerely

LOWELL A. NELSON, Lt Col, USAF

Attachments:
1. NCDENR Acceptance Letter, February 17, 2004
2. Project Map

cc:
US Army Corps of Engineers, Mr. Scott Jones
NCDENR, DWQ Regional Office - Washington, Mr. Tom Steffens

File 25-2 JA

RECEIVED

MAR 0 8 2004

NCDENR

North Carolina Department of Environment and Natural Resources

Michael F. Easley, Governor

William G. Ross Jr., Secretary

February 17, 2004

Corrected

Lt. Col. Michael J. Coats
Commander, 4th Civil Engineer Squadron
1095 Peterson Avenue
Seymour Johnson Air Force Base, NC 27531

Subject: Project: Syemour Johnson Air Force Base, Expansion of support facilities
County: Wayne

The purpose of this letter is to notify you that the North Carolina Ecosystem Enhancement Program (NCEEP) is willing to accept payment for stream, wetlands and buffer impacts associated with the subject project. Please note that the decision by the NCEEP to accept the mitigation requirements of this project does not assure that this payment will be approved by the U.S. Army Corps of Engineers and the N.C. Division of Water Quality Wetlands/401 Unit. It is the responsibility of the applicant to contact these agencies to determine if payment to the NCEEP for impacts associated with this project is appropriate.

This acceptance is valid for six months from the date of this letter. **If we have not received a copy of the issued 404 Permit/401 Certification within this time frame, this acceptance will expire.**

Based on the information supplied by you in a letter dated January 20, 2004, the stream and wetlands restoration that is necessary to satisfy the compensatory mitigation requirements for this project is summarized in the following table. The maximum amount of mitigation that the NCEEP will accept for this project is also indicated in this table.

	Stream (linear feet)	Wetlands Riparian (acres)	Wetlands Non-Riparian (acres)	Riparian Buffer (sq. ft.)
Impact	3220		.008	348,480
Mitigation Max	6440		.016	696,960

The stream, non-riparian wetlands and buffer mitigation will be provided as specified in the 401 Water Quality Certification and/or Section 404 Permit for impacts associated with the subject project in Cataloging Unit 03020201 of the Neuse River Basin. The mitigation will be performed in accordance with the Memorandum of Understanding between the N.C. Department of Environment and Natural Resources and the U.S. Army Corps of Engineers dated November 4, 1998.

If you have any questions or need additional information, please contact Carol Shaw at (919) 733-5208.

Sincerely,

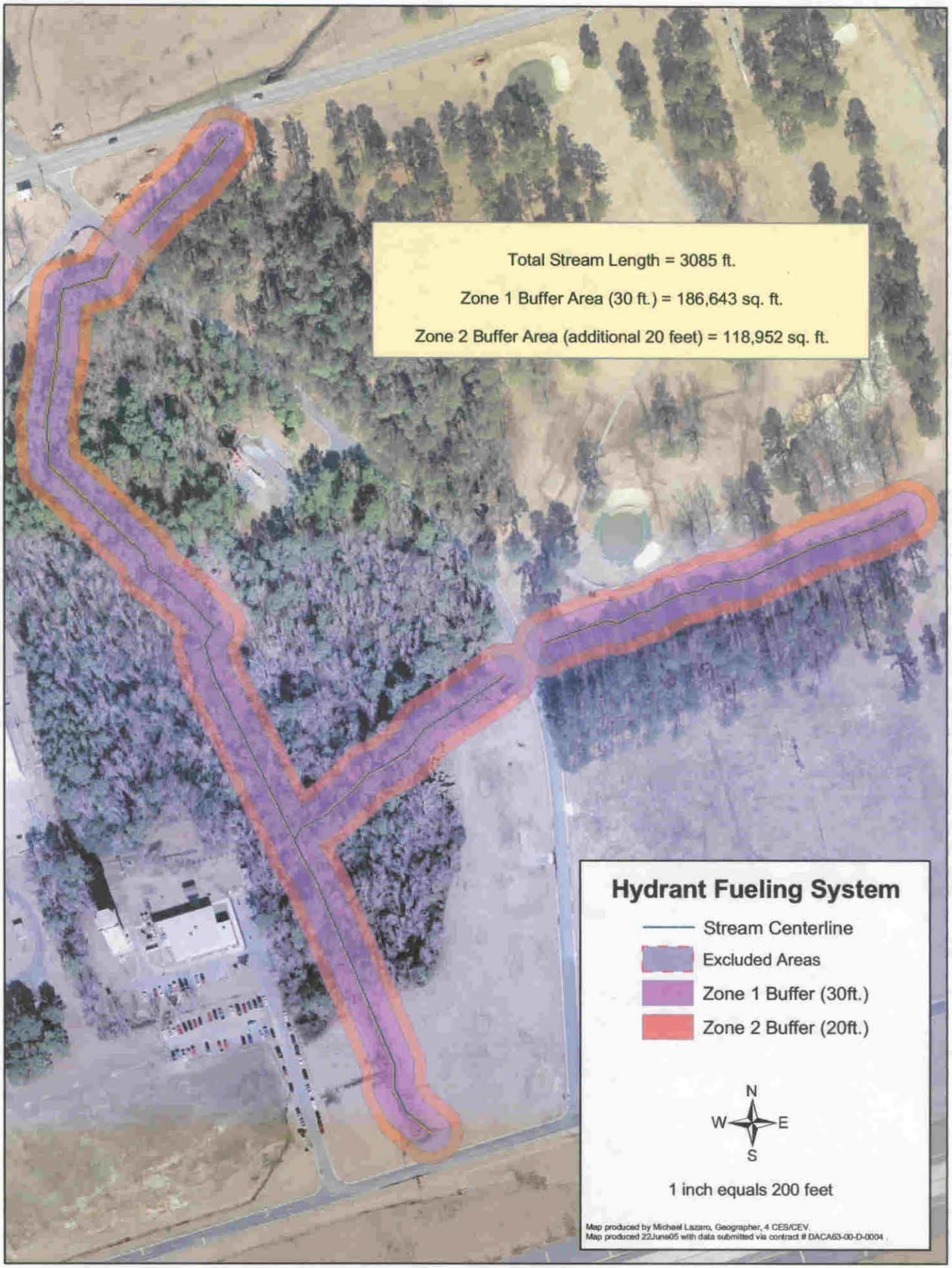
Ronald E Ferrell

Ronald E. Ferrell,
Director of Operations

cc: Cyndi Karoly, Wetlands/401 Unit
Scott Jones, USACOE-Washington
Tom Steffens, DWQ Regional Office-Washington
File

NC DENR Ecosystem Enhancement Program
1619 Mail Service Center, Raleigh, North Carolina 27699-1619
Phone: 919-733-5208 \ FAX: 919-733-5321 \ Internet: h2o.enr.state.nc.us/wrp/

Atch


Total Stream Length = 3085 ft.
Zone 1 Buffer Area (30 ft.) = 186,643 sq. ft.
Zone 2 Buffer Area (additional 20 feet) = 118,952 sq. ft.
Hydrant Fueling System
Stream Centerline
Excluded Areas
Zone 1 Buffer (30ft.)
Zone 2 Buffer (20ft.)
N
W
E
S
1 inch equals 200 feet
Map produced by Michael Lazaro, Geographer, 4 CES/CEV.
Map produced 22June05 with data submitted via contract # DACA63-00-D-0004

APPENDIX C

INTERGOVERNMENTAL AND PUBLIC REVIEW

DEPARTMENT OF THE AIR FORCE
4TH FIGHTER WING (ACC)
SEYMOUR JOHNSON AIR FORCE BASE NC

APR 16 2004

LtCol Michael J. Coats
Commander, 4th Civil Engineering Squadron
1095 Peterson Avenue
Seymour Johnson AFB NC 27531-2355

Mrs. Chrys Baggett, Director
North Carolina Department of Administration
NC State Clearing House
1302 Mail Service Center
Raleigh NC 27699-1303

Dear Mrs. Baggett

Please find attached sixteen (16) copies of the Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) for: Proposed Construction of Type III Hydrant Fueling System and Combined Mobility Processing Center at Seymour Johnson Air Force Base, North Carolina.

Please distribute for review in accordance with Executive Order 12372, July 14, 1982; Executive Order 12416, April 8, 1983; and the Memorandum of Understanding between the Department of Defense and the State Single Point of Contact, October 21, 1985.

If you have any questions regarding the Draft EA, please contact Dr. Johanna E. Arnold at 919-722-5168 or by e-mail at johanna.arnold@seymourjohnson.af.mil.

Sincerely

Chris Likely FOR LTCOL COATS
MICHAEL J. COATS, LtCol, USAF

Attachments:
1. Draft Environmental Assessment (16 copies)
2. Draft Finding Of No Significant Impact (16 copies)

Global Power For America

North Carolina
Department of Administration

Michael F. Easley, Governor

Gwynn T. Swinson, Secretary

May 21, 2004

Dr. Johanna E. Arnold
Department of the Air Force -4th Fighter
Deputy Civil Engineer
1095 Peterson Avenue
Seymour Johnson AFB, NC 27531-2355

Dear Dr. Arnold:

Re: SCH File # 04-E-0000-0295; Finding of No Significant Impact; Proposed Construction of Type III Hydrant Fueling System and Combined Mobility Processing Center at Seymour Johnson AFB

The above referenced environmental impact information has been submitted to the State Clearinghouse under the provisions of the National Environmental Policy Act. According to G.S. 113A-10, when a state agency is required to prepare an environmental document under the provisions of federal law, the environmental document meets the provisions of the State Environmental Policy Act. Attached to this letter for your consideration are the comments made by agencies in the course of this review.

If any further environmental review documents are prepared for this project, they should be forwarded to this office for intergovernmental review.

Should you have any questions, please do not hesitate to call.

Sincerely,

Chrys Baggett

Ms. Chrys Baggett
Environmental Policy Act Coordinator

Attachments

cc: Region P

Mailing Address:
1301 Mail Service Center
Raleigh, NC 27699-1301

Telephone: (919)807-2425
Fax (919)733-9571
State Courier #51-01-00
e-mail Chrys.Baggett@ncmail.net

Location Address:
116 West Jones Street
Raleigh, North Carolina

NCDENR

North Carolina Department of Environment and Natural Resources

Michael F. Easley, Governor

William G. Ross Jr., Secretary

MEMORANDUM

TO: Chrys Baggett
State Clearinghouse

FROM: Melba McGee
Environmental Review Coordinator

SUBJECT: 04-0295 Scoping Proposed Construction of Type III Hydrant Fueling System and Combined Mobility Processing Center

DATE: May 18, 2004

The Department of Environment and Natural Resources has reviewed the proposed information. The attached comments are for the applicant's information.

Thank you for the opportunity to review.

Attachments

1601 Mail Service Center, Raleigh, North Carolina 27699-1601
Phone: 919-733-4984 \ FAX: 919-715-3060 \ Internet: www.enr.state.nc.us/ENR

Michael F. Easley, Governor
William G. Ross Jr., Secretary
North Carolina Department of Environment and Natural Resources

Alan W. Klimek, P. E. Director
Division of Water Quality
Coleen H. Sullins, Deputy Director
Division of Water Quality

April 30, 2004

MEMORANDUM

TO: Melba McGee, Department of Environment and Natural Resources

FROM: Alex Marks, Division of Water Quality

SUBJECT: Scoping: EA and FONSI Proposed Construction of Type III Hydrant Fueling System and Combined Mobility Processing Center; DWQ #13404, SCH #04-0295

The Local Government Assistance Unit (Unit) and the 401/Wetlands Unit (401 Unit) of the Division of Water Quality's Water Quality Section have reviewed the subject scoping document. The 401 Unit is responsible for the issuance of Section 401 Water Quality Certifications for activities impacting waters of the state (wetlands and streams) and for approvals under the Neuse Buffer Rules. Construction of the proposed facilities would involve filling up to 2,120 linear feet of perennial streams.

Overall, the document contains a thorough description of the resources to be impacted by the proposed work. Our primary comment is that it is imperative stream and buffer mitigation plans are included with the application for 401/404 Permits. In addition, we urge the USAF to contact the Ecosystem Enhancement Program (EEP) as soon as possible to secure confirmation from that they will be able to perform the proposed mitigation. If the EEP cannot accept the responsibility for the mitigation work, rapid progress should be made in developing an alternate mitigation plan. The USAF is reminded that application's lacking a stream and buffer mitigation plan will be placed indefinitely on hold as incomplete in accordance with 15A NCAC 2H. 0506(h).

Based upon the description provided in the EA/FONSI, an Individual 401 Water Quality Certification will be required for this project. Final permit authorization will require formal application by USAF and written concurrence from the Division. This approval will be contingent upon evidence of avoidance and minimization of wetland and stream impacts, and provision of buffer and stream mitigation for unavoidable impacts.

DWQ appreciates the opportunity to provide comments on this EA/FONSI. The applicant is reminded that issuance of a 401 Water Quality Certification requires satisfaction of water quality concerns, to ensure that water quality standards are met and no wetland or stream uses are lost.

Questions regarding the 401 Certification Program as it relates to airport projects should be directed to Cyndi Karoly at (919) 733-9721.

Fred Hill

RECEIVED
MAY 10 2004
PUBLIC WATER SUPPLY

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH

Project Number
04-0295
County
Wayne

Inter-Agency Project Review Response

Project Name Proposed Construction of Type III Hydrant Fueling System and Combined Mobility Processing Center Type of Project EA

Comments provided by: Seymour Johnson, Air Force Base

- ☐ Regional Program Person
- ☒ Regional Engineer for Public Water Supply Section
- ☐ Central Office program person

Name: FRED HILL Date: 5-7-04

Telephone number: 252) 946-3942

Program within Division of Environmental Health:

- ☑ Public Water Supply
- ☐ Other, Name of Program: _____

Response (check all applicable):

- ☑ No objection to project as proposed
- ☐ No comment
- ☐ Insufficient information to complete review
- ☐ Comments attached
- ☑ See comments below

GOLDSBORO'S SURFACE WATER PLANT INTAKE IS UPSTREAM ON THE NEUSE RIVER & WOULD NOT BE AFFECTED.

- NO DOWNSTREAM INTAKES SERVE POTABLE WATER SYSTEMS.
- POTABLE WATER SERVICE & DISTRIBUTION LINES IN THE PROJECT AREA MAY NEED TO BE RELOCATED. ANY SUCH ALTERATIONS WILL REQUIRE APPROVAL OF ENGINEERING PLANS & SPECS BY THE PWS SECTION.

Return to:

Public Water Supply Section
Environmental Review Coordinator
for the
Division of Environmental Health

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH

Project Number
County

Inter-Agency Project Review Response

Project Name _____ Type of Project_____

☐ The applicant should be advised that plans and specifications for all water system improvements must be approved by the Division of Environmental Health prior to the award of a contract or the initiation of construction (as required by 15A NCAC 18C .0300et. seq.). For information, contact the Public Water Supply Section, (919) 733-2321.

☐ This project will be classified as a non-community public water supply and must comply with state and federal drinking water monitoring requirements. For more information the applicant should contact the Public Water Supply Section, (919) 733-2321.

☐ If this project is constructed as proposed, we will recommend closure of _____ feet of adjacent waters to the harvest of shellfish. For information regarding the shellfish sanitation program, the applicant should contact the Shellfish Sanitation Section at (252) 726-6827.

☐ The soil disposal area(s) proposed for this project may produce a mosquito breeding problem. For information concerning appropriate mosquito control measures, the applicant should contact the Public Health Pest Management Section at (252) 726-8970.

☐ The applicant should be advised that prior to the removal or demolition of dilapidated structures, a extensive rodent control program may be necessary in order to prevent the migration of the rodents to adjacent areas. For information concerning rodent control, contact the local health department or the Public Health Pest Management Section at (919) 733-6407.

☐ The applicant should be advised to contact the local health department regarding their requirements for septic tank installations (as required under 15A NCAC 18A. 1900 et. sep.). For information concerning septic tank and other on-site waste disposal methods, contact the On-Site Wastewater Section at (919) 733-2895.

☐ The applicant should be advised to contact the local health department regarding the sanitary facilities required for this project.

☐ If existing water lines will be relocated during the construction, plans for the water line relocation must be submitted to the Division of Environmental Health, Public Water Supply Section, Technical Services Branch, 1634 Mail Service Center, Raleigh, North Carolina 27699-1634, (919) 733-2321.

☐ For Regional and Central Office comments, see the reverse side of this form.

_____ _____ _____

Reviewer Section/Branch Date

News Release

United States Air Force

4th Fighter Wing Public Affairs
1510 Wright Brothers Ave., Ste. 200
Seymour Johnson AFB, N.C. 27531-2468
Tele: (919) 722-0027 DSN: 722-0027
Fax: (919) 722-0007 DSN: 722-0007

Release No. 04-04-02
April 15 2004

CONSTRUCTION PROPOSAL

SEYMOUR JOHNSON AIR FORCE BASE, N.C. – Seymour Johnson Air Force Base has proposed to construct a type III hydrant fueling system and combined mobility processing center.

The base has prepared a draft environmental assessment and draft finding of no significant impact for the construction of a type III hydrant fueling system and combined mobility processing center.

A copy of the draft EA and the draft FONSI can be reviewed by the public from Friday, April 16, 2004 to Monday, May 17, 2004 at the Wayne County Public Library's main branch located at 1001 E. Ash Street, Goldsboro N.C.

Electronic copies of the Draft EA and the draft FONSI may be requested by contacting Dr. Johanna Arnold at Johanna.Arnold@seymourjohnson.af.mil. Comments can be mailed to 4 CES/CEV, 1095 Peterson Avenue, Seymour Johnson AFB, NC 27531-2355; faxed to (919) 722-5179; or e-mailed to Johanna.Arnold@seymourjohnson.af.mil and must be received by Friday, May 21, 2004 at 4:30 p.m. For more information, contact Dr. Johanna Arnold at (919) 722-5168.

- 30 -