Final

ENVIRONMENTAL ASSESSMENT
ESTABLISHMENT OF
ARMED FORCES RESERVE CENTER (AFRC)
SEAGOVILLE, TEXAS
BRAC 2005

Prepared for:

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Commanding

Prepared by:

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March 2007

Printed on Recycled Paper

FINDING OF NO SIGNIFICANT IMPACT
ENVIRONMENTAL ASSESSMENT
FOR THE
ESTABLISHMENT OF
ARMED FORCES RESERVE CENTER (AFRC)
SEAGOVILLE, TEXAS
BRAC 2005

The Defense Base Closure and Realignment (BRAC) Commission, in response to the Defense Base Closure and Realignment Act of 1990, as amended, recommended the establishment of the Armed Forces Reserve Center (AFRC) at the Seagoville U.S. Army Reserve Center (USARC), Texas. Establishment of the AFRC will involve realigning units from the Hanby-Hayden USARC in Mesquite, Texas to the new Seagoville AFRC.

Pursuant to the Council on Environmental Quality regulations (40 Code of Federal Regulations Parts 1500-1508) implement the procedural provisions of the National Environmental Policy Act (NEPA), 42 U.S. Code Section 4321 et seq., as amended, and Army Regulations 200-2 (*Environmental Effects of Army Actions*), the U.S. Army Corps of Engineers, Mobile District, has prepared an Environmental Assessment (EA) and Finding of No Significant Impact (FNSI), which addresses the proposed construction and operation of the AFRC at Seagoville.

Proposed Action

The proposed action is to construct and operate a new 1000-member AFRC at the Seagoville USARC to accommodate the units realigned from the Hanby-Hayden USARC. A new 100,389 square foot (SF) building, 7,267 SF Vehicle Maintenance Shop, parking areas, and an Organization Storage Unit, would need to be constructed. The new facility would provide administrative, assembly, educational, storage, storage vault, weapons simulators and physical fitness training facilities to accommodate five Reserve units. The new AFRC is proposed to be constructed on three different parcels adjacent to the main cantonment area.

Alternatives Considered

No other action alternatives were considered during the preparation of this EA. The Seagoville USARC contains only 205 acres. The only undeveloped areas comprise the natural resources restoration area that was created through the 90th Regional Readiness Command's Integrated Natural Resources Management Plan. Thus, the proposed location is the only area at which the AFRC could be constructed. Other schedules and leasing of off-post facilities were considered but eliminated from detailed analyses.

The No Action Alternative has also been carried forward throughout the EA to serve as a baseline for comparison to the other alternatives. No other alternatives, including scheduling, off-post leasing, and renovations of other buildings on-post, were considered viable.

Factors Considered In Determining That No Environmental Impact Statement is Required

Implementation of the Proposed Action at the preferred location would result in minor, permanent effects to vegetation, wildlife, soils, aesthetics, and land use. The Proposed Action would cause the permanent conversion of up to 5 acres of disturbed and maintained grassland to hard surfaces and buildings and remove this land from further biological productivity and

other uses. Because the proposed location has been disturbed by past development, and, thus, provides limited wildlife habitat, the loss of 5 acres would be insignificant.

Temporary increases of vehicle traffic would be expected during the construction. Traffic congestion along West Simonds Road and U.S. Highway 175, the main arteries into the Seagoville USARC, would be permanently increased, especially during peak exit hours. The amount of traffic expected to occur on a daily basis represents less than 1 percent of the current traffic volume. Therefore, the operation of the AFRC would result in slight long-term increases in traffic.

In addition, temporary and minor adverse effects to air quality, noise, and utilities would occur during the construction period. No violations of the region's air or water quality standards would be expected. Emissions generated during the construction are well below the *de minimus* thresholds for ozone and other pollutants that affect ozone. Best management practices would be implemented to ensure stormwater during and after construction is controlled and downstream sedimentation is either eliminated or is negligible.

No impacts would occur to Federal or state protected species, cultural resources, or hazardous waste facilities.

Slight benefits to local and regional employment and personal income would be expected during the construction; however, since the realigned units would come from less than 15 miles away, long-term insignificant adverse impacts to the region's economy would occur. The Dallas-Fort Worth Metroplex would easily accommodate the additional employment, sales volumes, income and taxes generated by these activities.

The cumulative effects of the proposed action on Seagoville would also be considered insignificant. There are no current plans for other development on the Seagoville USARC. Construction of the AFRC would occur within previously disturbed areas.

Several environmental protection measures (as described in Section 4.15 of the EA) shall be implemented to further reduce or avoid adverse impacts. These include using native seeds to revegetating temporary construction areas, avoiding take of migratory birds and bird nests, implementing BMPs to control erosion and sedimentation, and implementing a spill control and countermeasures plan for hazardous waste during the construction activities.

Public Comment

The EA and draft FNSI were released to the public for review and comment for a 30-day period beginning on 7 February 2007. The Notice of Availability was published in the *Dallas Morning News*. The EA and draft FNSI were also available for review at Seagoville Public Library, located at 702 North Highway 175, Seagoville, Texas, and on the internet at http://www.hqda.army.mil/acsim/brac/env_ea_review.htm. Comments on the documents were accepted through 9 March. Two letters from the Texas Department of Transportation and the U.S. Fish and Wildlife Service were received. Both of these letters concurred with the findings presented in the EA. Copies of these letters are included in Appendix B of this EA.

Conclusions

Based on information gathered and presented in the EA, it has been determined that the Proposed Action would have no significant direct, indirect, or cumulative adverse impacts on the quality of the natural and human environment. Consequently, an Environmental Impact Statement is not required and will not be prepared.

James R. Sholar
Major General, US Army Reserve
Commanding

SIGNED 3 APR 07

ENVIRONMENTAL ASSESSMENT
FOR THE
ESTABLISHMENT OF
ARMED FORCES RESERVE CENTER (AFRC)
SEAGOVILLE, TEXAS
BRAC 2005

Prepared by:

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LEAD AGENCY: Mobile District, U.S. Army Corps of Engineers

TITLE OF PROPOSED ACTION: Environmental Assessment for the Establishment of Armed Forces Reserve Center (AFRC), Seagoville, Texas BRAC 2005

AFFECTED JURISDICTION: Dallas County, Texas

PREPARED BY: Peter F. Taylor, Jr., Colonel, U.S. Army Corps of Engineers, Mobile District, Commanding

TECHNICAL ASSISTANCE FROM: Gulf South Research Corporation

APPROVED BY: James R. Sholar, Major General, US Army Reserve, Commanding

ABSTRACT: This Environmental Assessment (EA) addresses the potential effects of the proposed construction and operation of the Armed Forces Reserve Center (AFRC) at Seagoville, Texas, as proposed by the Defense Base Closure and Realignment Commission's recommendation. The proposed action would result in a net increase of less than 50 full-time military and civilian personnel at the existing Seagoville Reserve Complex. To accommodate the proposed AFRC, a new 100,389 square foot building is proposed to be constructed. In addition, a 7,267 square foot vehicle maintenance shop; a 5,565 square foot organizational unit storage; associated parking facilities; and a storm water detention basin would also be constructed. The construction would permanently convert approximately 9 acres of maintained lawn and disturbed grasslands to hard surfaces. Another acre would be converted to the detention basin. No long term or significant impacts to prime or unique farmland soils, protected species, cultural resources, water quality, or socioeconomic resources would occur as a result of the proposed action. Temporary and insignificant impacts to air quality, noise, and traffic patterns would occur during construction activities. No other alternatives or alternate sites were evaluated during the preparation of the EA.

REVIEW PERIOD: The EA and draft FNSI were released to the public for review and comment for a 30-day period beginning on 7 February 2007. The Notice of Availability was published in the *Dallas Morning News*. The EA and draft FNSI were also available for review at Seagoville Public Library, located at 702 North Highway 175, Seagoville, Texas, and on the internet at http://www.hqda.army.mil/acsim/brac/env_ea_review.htm. Comments on the documents were accepted through 9 March. Two letters from the Texas Department of Transportation and the U.S. Fish and Wildlife Service were received. Both of these letters concurred with the findings presented in the EA. Copies of these letters are included in Appendix B of this EA.

Conclusion

The USACE released the draft EA and Finding of No Significant Impact to the public for 30-day review and comment period from March 18 to April 17, 2007. Notification of the availalability the documents and the review period were published in the Albuquerque Sunday Journal. No comments were received from the public regarding this proposed action.

After careful review of the EA and the proposed actions and alternates, I have concluded that the proposed actions would not have a significant impact on the quality of the human or natural environment. Therefore, issuance of a Finding of No Significant Impact is warranted, and an Environmental Impact Statement is not required. This Analysis fulfills the requirements of the National Environmental Impact Policy Act and the implementing regulations promulgated by the Council on Environmental Quality.

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JEFF MUNDEY, P.E. DATE
Deputy Command Civil Engineer
Directorate of Installations and Mission Support
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EXECUTIVE SUMMARY

DRAFT ENVIRONMENTAL ASSESSMENT ESTABLISHMENT OF ARMED FORCES RESERVE CENTER SEAGOVILLE, TEXAS

Introduction: In accordance with the National Environmental Policy Act of 1969 (NEPA), the U.S. Army Corps of Engineers (USACE), Mobile District has prepared this Environmental Assessment (EA) for the establishment of an Armed Forces Reserve Center (AFRC) at Seagoville, Texas. This EA discusses the potential environmental effects of the proposed construction and operation of the AFRC on the human and natural environment at and surrounding Seagoville.

Background/Setting: The Seagoville U.S. Army Reserve Center (USARC) is located approximately 17 miles southeast of downtown Dallas, Texas. The Seagoville Federal Correction Institution, which transferred 205 acres to the Department of the Army in 1973 to construct the Seagoville USARC, is located along the northern border of the complex. The complex provides various field and classroom training opportunities including equipment loading/off-loading ramps, equipment driving courses, small arms firing range, Deployable Medical Equipment, and field sanitation procedures. The complex also contains a recreational lake and an extensive natural resources restoration program.

Proposed Action: The establishment of the AFRC at Seagoville is required by the Defense Base Closure and Realignment Act of 1990, as amended, and the recommendations made by the Defense Base Closure and Realignment Commission. Establishment of the AFRC will involve realigning units from the Hanby-Hayden U.S. Army Reserve Center (USARC) in Mesquite, Texas to the Seagoville USARC. The existing facilities at the Seagoville USARC are fully occupied. Thus, a new facility is required to accommodate the AFRC.

The new facilities would be approximately 113,221 square feet including appurtenant parking, maintenance and storage facilities and a storm water detention basin. The entire facility would require approximately 10 acres and be constructed on three different parcels within the cantonment area of Seagoville USARC. No additional expansion to or demands on training areas or airspace would be required for the proposed action. No additional weapons systems would be associated with the establishment or operation of the AFRC.

Alternatives: No other alternatives relative to different sites, scheduling, using other existing facilities, or leasing space off-post are viable and, thus, were not addressed in the EA. Use of off-post leased space to meet the AFRC's requirements would involve several major drawbacks. Anti-terrorism/force protection policies specify certain facilities characteristics, such as physical security features. Use of leased space in the private sector would hinder these protection policies and would adversely affect command and control functions, result in higher operational costs, and impair efficient use of resources. No other facilities are available on the installation that could accommodate the requirements of the AFRC.

Environmental Consequences: Construction of the AFRC facility at the proposed location would permanently convert approximately 9 acres of maintained grassland to impervious surfaces. The detention basin would require another acre, but it would not be impervious. Construction would cause temporary and insignificant increases to noise, air emissions, traffic, and soil erosion/sedimentation. Ambient conditions would return upon completion of the

construction activities, with the exception of traffic. Increased traffic would occur along West Simonds Road. Most of the increase would occur on weekends when other installation and local traffic would be reduced. Less than 50 full-time employees would be added to the daily traffic demands. No impacts would occur to cultural resources, protected species, prime farmland soils, or water quality or supply. Insignificant impacts to wildlife habitat and populations, aesthetic and visual resources, and utilities would occur as a result of the establishment of the AFRC at the proposed site. Socioeconomic resources would incur beneficial, but insignificant, long-term impacts by the net increase of up to 50 full-time military and civilian personnel employed at the post and the concomitant increases in income and taxes.

Environmental Protection Measures: All temporarily disturbed sites should be re-seeded as soon as practicable after completion of the construction activities to control erosion and sedimentation. Native vegetation seeds should be used for all re-seeding activities, in accordance with Section 7(c)(1) of the Endangered Species Act and the installation's Integrated Natural Resources Management Plan. A Storm water Pollution Prevention Plan (SWPPP) and Notice of Intent will need to be prepared and submitted prior to construction. The SWPPP will identify best management practices (BMP) to be implemented for erosion and sedimentation control during construction. If straw bales are used, weed seed-free straw should be used to avoid introduction or expansion of invasive or noxious weeds.

Wetting solutions, including water, would be applied to disturbed soils within the construction site to control fugitive dust. All construction equipment and material would be properly maintained and stored to reduce air emissions and avoid potential spills of hazardous materials.

If the breeding/nesting season for migratory birds can not be avoided during the initial grubbing and clearing of the site, breeding bird pairs and nests would need to be identified and avoided, in accordance with the Migratory Bird Treaty Act.

Conclusion: The data presented in the EA documents that the best available site for the proposed construction and operation of the AFRC is at the proposed location and that development of this site would result in insignificant adverse impacts to the area's human and natural environment.

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SECTION 1.0
PURPOSE, NEED, AND SCOPE

1.0 PURPOSE, NEED, AND SCOPE

1.1 INTRODUCTION

On September 8, 2005, the Defense Base Closure and Realignment (BRAC) Commission recommended that certain realignment actions occur at Seagoville, Texas. These recommendations were approved by the President on September 23, 2005, and forwarded to Congress. The Congress did not alter any of the BRAC Commission's recommendations, and on November 9, 2005, the recommendations became law. The BRAC Commission recommendations must now be implemented as provided for in the Defense Base Closure and Realignment Act of 1990 (Public Law 101-510), as amended.

The BRAC Commission recommended the closure of the Hanby-Hayden United States (U.S.) Army Reserve Center (USARC) in Mesquite, Texas (east of Dallas) and relocation to a new Armed Forces Reserve Center (AFRC) at Seagoville USARC (south of Dallas). To enable implementation of this recommendation, the Army proposes to provide necessary facilities to support the changes in force structure. This Environmental Assessment (EA) analyzes and documents environmental effects associated with the Army's proposed action at Seagoville USARC. Details on the proposed action are presented later in Section 2.

1.2 PURPOSE AND NEED

The purpose of the proposed action is to implement the BRAC Commission's recommendation pertaining to the realignment of the Hanby-Hayden USARC at Seagoville USARC. The need for the proposed action is to improve the ability of the Nation to respond rapidly to challenges of the 21st Century. The Army is legally bound to defend the U.S. and its territories, support National policies and objectives, and defeat nations responsible for aggression that endangers the peace and security of the U.S. To carry out these tasks, the Army must adapt to changes in world conditions and must improve its capabilities to respond to a variety of circumstances across the full spectrum of military operations. The following discusses four major initiatives that contribute to the Army's need for the proposed action.

1.2.1 Base Realignment and Closure

In previous rounds of BRAC, the explicit goal was to save money and downsize the military in order to reap a "peace dividend." In the 2005 round of BRAC, the Department of Defense (DoD) sought to reorganize its installation infrastructure to most efficiently support its forces, increase operational readiness and facilitate new ways of doing business. Thus, BRAC represents more than cost savings. It supports advancing the goals of transformation, improving military capabilities, and enhancing military value. The Army needs to carry out the BRAC recommendations at Seagoville USARC to achieve the objectives for which Congress established the BRAC process.

1.2.2 Army Transformation and the Army Modular Force

On October 12, 1999, the Secretary of the Army and the Chief of Staff articulated a vision about people, readiness, and transformation of the Army to meet challenges emerging in the 21st Century and the need to be able to respond more rapidly to different types of operations requiring military action. The strategic significance of land forces continues to lie in the Army's ability to fight and win the Nation's wars and in providing options to shape the global environment to the benefit of the U.S. and its allies. Transformation responds to the Army's

need to become more strategically responsive and dominant at every point on the spectrum of operations. This EA evaluates a proposed action that comports with the transformation process, which is designed to provide the U.S. with combat forces that are more responsive, deployable, agile, versatile, lethal, survivable, and sustainable.

1.2.3 Integrated Global Presence and Basing Strategy (IGPBS)

At the request of the Chairman of the Joint Chiefs of Staff, combatant commanders submitted a series of recommendations for overseas basing plans for their respective areas of responsibility. The recommendations were part of an interagency assessment of the DoD's long-term overseas force projection and basing needs. The assessment resulted in a series of recommendations known as the IGPBS, which outlines the size, character, and location of long-term overseas forces. On the basis of the IGPBS results, the Secretary of Defense announced that some forces currently based overseas would return to the U.S. over a period of years. The 2005 BRAC recommendations take into account, and adopt some of the basing recommendations of the IGPBS.

1.2.4 Installation Sustainability

On October 1, 2004, the Secretary of the Army and the Chief of Staff issued *The Army Strategy for the Environment.* The strategy focuses on the interrelationships of mission, environment, and community. A sustainable installation simultaneously meets current and future mission requirements, safeguards human health, improves quality of life, and enhances the natural environment. A sustained natural environment is necessary to allow the Army to train and maintain military readiness.

1.3 SCOPE

This EA has been developed in accordance with the National Environmental Policy Act (NEPA) of 1969, the President's Council on Environmental Quality (CEQ) *Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act*, (40 *Code of Federal Regulations* [CFR] Parts 1500–1508), and the Army's environmental implementing regulations, *Environmental Analysis of Army Actions* (32 CFR Part 651). Its purpose is to inform decision makers and the public of the likely environmental consequences of the proposed action and alternatives.

This EA identifies, documents, and evaluates environmental effects of the construction and operation of the AFRC at Seagoville USARC to accommodate the proposed realignments from the Hanby-Hayden USARC in Mesquite, Texas. Seagoville USARC is located in Dallas County, south-southeast of the City of Dallas and encompasses approximately 205 acres, including cantonment areas and recreational areas (Figure 1-1). Although the Hanby-Hayden USARC will be closed and realigned to Seagoville USARC, those actions and the impacts at Hanby-Hayden USARC are not addressed herein. An interdisciplinary team of environmental scientists, biologists, planners, economists, engineers, archaeologists, historians, and military technicians has analyzed the proposed action and alternatives in light of existing conditions and has identified relevant beneficial and adverse effects associated with the action.

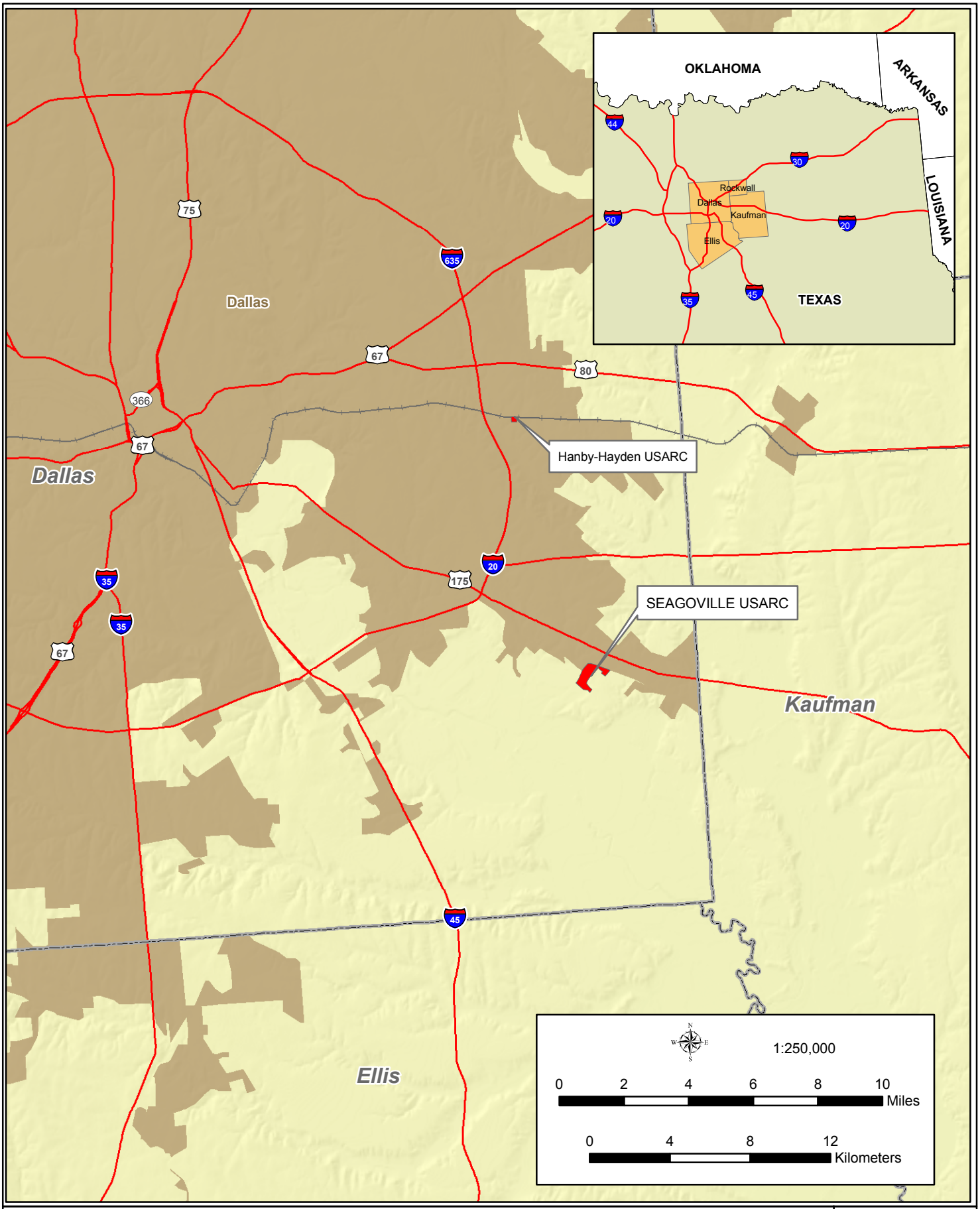

Figure 1-1: Seagoville USARC Vicinity Map

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The Defense Base Closure and Realignment Act of 1990 specifies that the NEPA does not apply to actions of the President, the Commission, or the DoD, except "(i) during the process of property disposal, and (ii) during the process of relocating functions from a military installation being closed or realigned to another military installation after the receiving installation has been selected but before the functions are relocated" (Sec. 2905(c)(2)(A), Public Law 101-510, as amended). The law further specifies that in applying the provisions of the NEPA to the process, the Secretary of Defense and the secretaries of the military departments concerned do not have to consider "(i) the need for closing or realigning the military installation which has been recommended for closure or realignment by the Commission, (ii) the need for transferring functions to any military installation which has been selected as the receiving installation, or (iii) military installations alternative to those recommended or selected" (Sec. 2905(c)(2)(B)). The Commission's deliberation and decision, as well as the need for closing or realigning a military installation, are exempt from the NEPA. Accordingly, this EA does not address the need for realignment.

1.4 PUBLIC INVOLVEMENT

The Army invites public participation in the NEPA process. Consideration of the views and information of all interested persons promotes open communication and enables better decision-making. All agencies, organizations, and members of the public having a potential interest in the proposed action, including minority, low-income, disadvantaged, and Native American groups are urged to participate in the decision-making process.

Public participation opportunities with respect to this EA and decision-making on the proposed action are guided by 32 CFR Part 651. The EA has been made available to the public for 30 days, along with a draft Finding of No Significant Impact (FNSI). At the end of the 30-day public review period, the Army will consider any comments submitted by individuals, agencies, or organizations on the proposed action, the EA, or draft FNSI. As appropriate, the Army may then execute the FNSI and proceed with implementation of the proposed action. If it is determined prior to issuance of a final FNSI that implementation of the proposed action would result in significant impacts, the Army will publish in the *Federal Register* a notice of intent to prepare an environmental impact statement, commit to mitigation actions sufficient to reduce impacts below significant levels, or not take the action.

Throughout this process, the public may obtain information on the status and progress of the proposed action and the EA through the 90th Regional Readiness Command's (RRC) Environmental Manager, by calling Mr. James Wheeler II at (501) 771-7992.

1.5 REGULATORY FRAMEWORK

A decision on whether to proceed with the proposed action rests on numerous factors such as mission requirements, schedule, availability of funding, and environmental considerations. In addressing environmental considerations, Seagoville USARC and the 90th RRC are guided by relevant statutes (and their implementing regulations) and Executive Orders (EO) that establish standards and provide guidance on environmental and natural resources management and planning. Construction and operation of the AFRC at the Seagoville USARC requires compliance with the Federal regulations and EOs presented below in Table 1-1. The current compliance status is also presented.

Table 1-1. Summary of Relevant Regulations Including Potential Permits or Licensing Requirements

Issue	Action Requiring Permit, Approval, or Review	Agency	Permit, License, Compliance, or Review/Status	Status of Compliance with Relevant Laws and Regulations
FEDERAL				
Sound/ Noise	Noise Control Act of 1972 (42 USC 4901 et seq.), as amended by Quiet Communities of 1978 (P.L. 95-609)	United States Environmental Protection Agency (EPA)	Compliance with surface carrier noise emissions	Full compliance will be achieved upon implementation of construction activities.
Air	Clean Air Act and amendments of 1990 (42 USC 7401-7671q) 40 CFR 50, 52, 93.153(b)	EPA	Compliance with National Ambient Air Quality Standards (NAAQS) and emission limits and/or reduction measures	Full compliance; emissions will be below *de minimus* thresholds.
Water	Clean Water Act of 1977 (33 USC 1342) 40 CFR 122	USEPA	Section 402(b) National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges for Construction Activities-Stormwater Pollution Prevention Plan (SWPPP)	SWPPP and Notice of Intent will be prepared prior to construction. Full compliance will be achieved prior to implementation of construction activities
	Executive Order 11988 (Floodplain Management), as amended by Executive Order 12608	Water Resources Council, Federal Emergency Management Agency (FEMA), CEQ	Compliance	Full compliance.
	Executive Order 11990 (Protection of Wetlands), as amended by Executive Order 12608	U.S. Army Corps of Engineers (USACE) and U.S. Fish and Wildlife Service (USFWS)	Compliance	Full compliance
	Clean Water Act of 1977 (33 USC 1341 et seq.)	USACE and Texas Commission on Environmental Quality (TCEQ)	Section 401/404 Permit	Wetlands will be avoided; no permit required.
	Coastal Zone Management Act of 1972 (16 USC 1456[c]) Section 307	National Oceanic and Atmospheric Administration	Compliance	Seagoville is not within the coastal zone.
Soils	Resource Conservation and Recovery Act of 1976 (42 USC 6901-6992k), as amended by Hazardous and Solid Waste Amendments of 1984 (P.L. 98-616; 98 Stat. 3221)	EPA	Proper management, and in some cases, permit for remediation	Full compliance will be achieved prior to implementation of construction activities

Table 1-1, continued

Issue	Action Requiring Permit, Approval, or Review	Agency	Permit, License, Compliance, or Review/Status	Status of Compliance with Relevant Laws and Regulations
Soils, cont'd	Comprehensive, Environmental Response, Compensation, Liability Act of 1980 (42 USC 9601-9675), as amended by Emergency Planning and Community Right-To-Know-Act of 1986 (42 USC 11001 et seq.) Release or threatened release of a hazardous substance	EPA	Development of emergency response plans, notification, and cleanup	Full compliance.
	Farmland Protection Policy Act of 1981 (7 USC 4201 et seq.) 7 CFR 657-658 Prime and unique farmlands	Natural Resource Conservation Service (NRCS)	NRCS determination via Form AD-1006	Full compliance since no prime farmland soils occur at any of the proposed sites.
Natural Resources	Endangered Species Act of 1973, as amended (16 USC 1531-1544)	USFWS	Compliance by lead agency and/or consultation to assess impacts and, if necessary, develop mitigation measures	Full compliance since no protected species would be impacted.
	Migratory Bird Treaty Act of 1918	USFWS	Compliance by lead agency and/or consultation to assess impacts and, if necessary, develop mitigation measures	Full compliance will be achieved upon implementation of construction activities. Bird surveys will be required if initial grubbing and clearing can not avoid nesting season.
	Bald and Golden Eagle Act of 1940, as amended	USFWS	Compliance by lead agency and/or consultation to assess impacts and, if necessary, obtain permit	No effects to bald or golden eagles; full compliance.
Health and Safety	Occupational Safety and Health Act of 1970	Occupational Safety and Health Administration (OSHA)	Compliance with guidelines including Material Safety Data Sheets	Full compliance will be achieved upon implementation of construction activities.
Cultural/ Archaeo-logical	National Historic Preservation Act of 1966	Advisory Council on Historic Preservation through State Historic Preservation Officer	Section 106 Consultation	Full compliance will be achieved upon implementation of construction activities.
	Archaeological Resources Protection Act of 1979	Affected land-managing agency	Permits to survey and excavate/ remove archaeological resources on Federal lands; Native American tribes with interests in resources must be consulted prior to issue of permits	Full compliance.

Table 1-1, continued

Issue	Action Requiring Permit, Approval, or Review	Agency	Permit, License, Compliance, or Review/Status	Status of Compliance with Relevant Laws and Regulations
Cultural/ Archaeo-logical, cont'd	EO 13175 (*Consultation and Coordination with Indian Tribal Governments*)	Bureau of Indian Affairs	Coordinate directly with Tribes claiming cultural affinity to project areas	Full compliance
Social/ Economic	Executive Order 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations) of 1994	EPA	Compliance	Full compliance since no minority or low income populations would be affected.
	EO 13045 (*Protection of Children from Environmental Health Risks and Safety Risks*)	EPA	Compliance	Full compliance since no children would be exposed to the construction activities.
	EO 13101 (*Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition*)	EPA	Compliance	Full compliance
	EO 13123 (*Greening the Government Through Efficient Energy Management*)	EPA	Compliance	Full compliance
	EO 13148 (*Greening the Government Through Leadership in Environmental Management*)	EPA	Compliance	Full compliance

These authorities are addressed in various sections throughout this EA when relevant to particular environmental resources and conditions. The full text of the laws, regulations, and EOs is available on the Defense Environmental Network & Information Exchange Web site at http://www.denix.osd.mil.

SECTION 2.0
PROPOSED ACTION

2.0 PROPOSED ACTION

2.1 INTRODUCTION

The BRAC Commission approved the following DoD recommendation concerning Seagoville AFRC:

> "Close the Hanby-Hayden United States Army Reserve Center in Mesquite, TX and relocate units to a new Armed Forces Reserve Center with an Organizational Maintenance Shop on United States Army Reserve Property in Seagoville, TX. The new AFRC shall have the capability to accommodate Texas National Guard Units from the following Texas ARNG Readiness Centers: Dallas #2, Kaufman and Terrell (including the Organizational Maintenance Shop), TX, if the state decides to relocate those National Guard units."

Therefore, the Proposed Action is to construct and operate a new AFRC at Seagoville to accommodate the closure and realignment of the Hanby-Hayden USARC.

2.2 PROPOSED IMPLEMENTATION

To comply with the BRAC Commission's recommendations and Congress' mandate, a new 1,000-member AFRC would be required to be constructed at Seagoville. The new AFRC would include administrative, assembly, educational, storage, storage vault, weapons simulators and physical fitness training facilities to accommodate five Reserve units. Over 112,000 square feet (SF) of space is required to accommodate the new AFRC operations (Table 2-1). A 2-story building comprising 100,389 SF is currently envisioned as the main AFRC facility; the AFRC would also have associated parking areas, sidewalks and landscaping. A 7,267 SF vehicle maintenance facility, 5,565 SF organizational unit storage, and other support facilities would also be constructed. All other appurtenant infrastructure (e.g., plumbing; electrical systems; heating, ventilation and air conditioning [HVAC] systems; and Anti-terrorism/Force Protection [AT/FP] systems) will also be provided. In addition, a storm water detention basin would be constructed to control runoff into area streams. These inactivation and realignment actions, beginning in Fiscal Year (FY) 2007, support the Army modular force and transformation.

Table 2-1. Proposed Construction Projects

Project No.	Facility	Square Feet
64505	Armed Forces Reserve Center	100,389
64505	Vehicle Maintenance Shop	7,267
64505	Organizational Unit Storage	5,565
	Total	**113,221**

The total area expected to be disturbed is approximately 10 acres, consisting of three separate parcels. The new AFRC. vehicle maintenance shop and Military Equipment Parking (MEP) would require about 5 acres. The parking lot would require about 4 acres and the detention basin would require about 1 acre (Figure 2-1).

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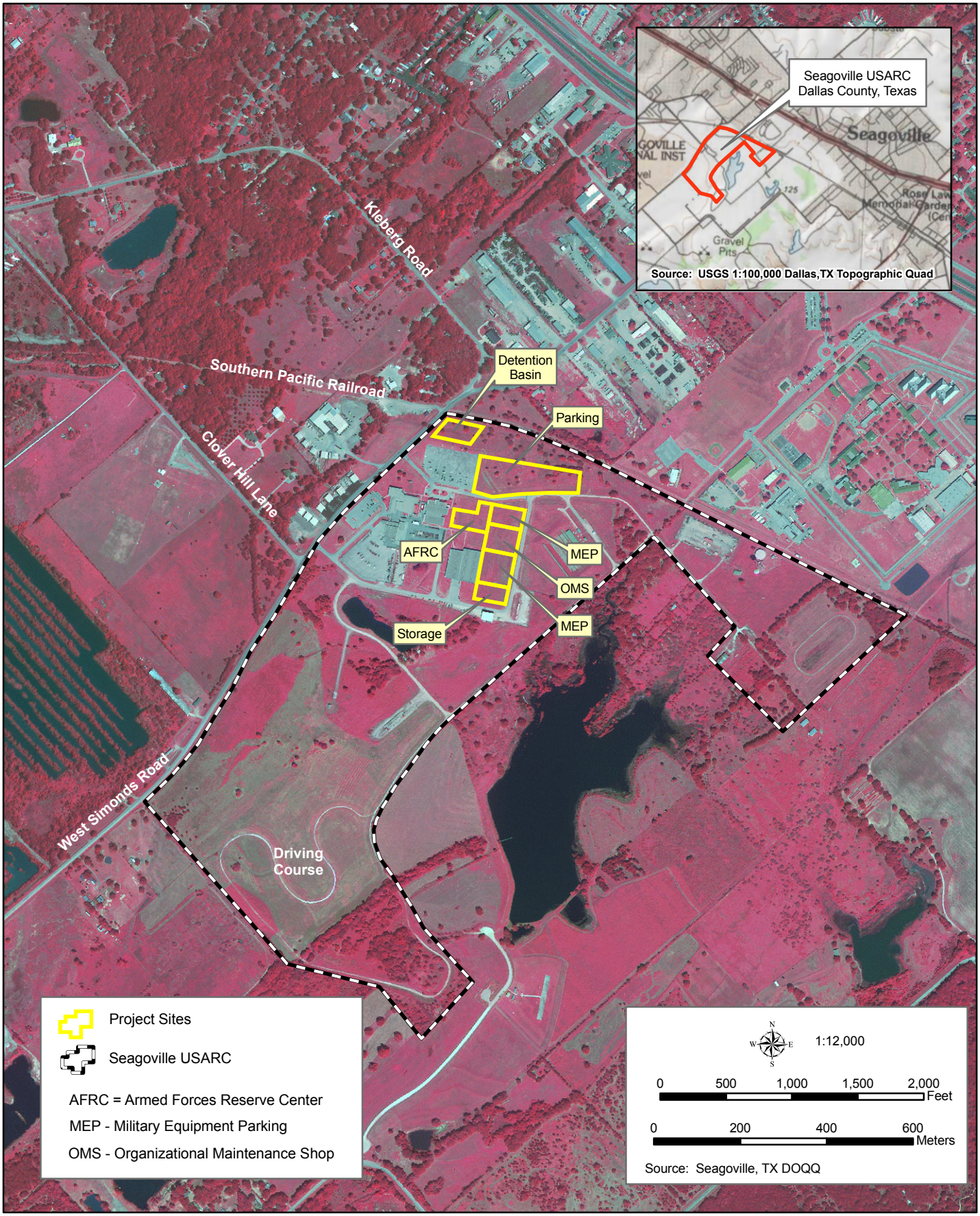

Figure 2-1: Seagoville Proposed AFRC Location

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2.2.1 Force Structure

The recommendation would realign the Army Reserve units from Hanby-Hayden USARC in Mesquite to the new AFRC at Seagoville, Texas. As a result of this force structure change, there would be a net increase of up to 50 active duty and civilian personnel at Seagoville AFRC (Fiel 2006).

2.2.2 Garrison Facilities

The Seagoville USARC is situated within the Dallas-Fort Worth Metroplex, and the units realigned from Hanby-Hayden USARC would be moving less than 10 miles away. Therefore, no additional or new housing would be required. In addition, no demolition would be required as part of this action.

2.2.3 Training Facilities

There would be no change to range size or operations as a result of the proposed action. The realigned Reserve units would continue to use the ranges and facilities that they currently use, primarily at Fort Hood, Texas. The driving course, located on the southern end, of the installation could experience a slight increase in use.

2.2.4 Weapon Systems

There would be no change to the type, number and frequency of weapon systems used at Seagoville USARC as a result of the proposed action.

2.2.5 Schedule

Under the BRAC law, the Army must initiate all realignments no later than September 15, 2007, and complete all realignments no later than September 15, 2011. Implementation of the proposed action would occur over a span of approximately 3 years. Construction of the proposed facility is anticipated to begin the third quarter of Fiscal Year (FY) 2007 and be completed in the last quarter of FY 2008. The realignment would be completed by the end of FY 2009.

2.2.6 Siting

The Seagoville USARC has limited open space available for development. General siting criteria established by the Army include consideration of compatibility between the functions to be performed and the installation land use designation for the site, adequacy of the site for the function required, proximity to related activities, distance from incompatible activities, availability and capacity of roads, efficient use of property, development density, potential future mission requirements, and special site characteristics, including environmental incompatibilities.

Specific siting criteria include consideration of location of the workforce and efficient, streamlined management of functions. Collocation of similar types of functions, as opposed to dispersion, allows more efficient use of equipment, vehicles, and other assets. Using these criteria and given the limited space available at Seagoville USARC, only one location is suitable for the construction of the AFRC. Although Seagoville USARC contains a large, seemingly undeveloped area in the southern portion of the installation, this area is used as an equipment driving course and as a natural area restoration program, in accordance with the installation's Integrated Natural Resources Management Plan (INRMP). Use of this area would be in conflict with the current training opportunities and the installation's INRMP, which is mandated by the Sike's Act.

The proposed location for the new AFRC construction, shown in Figure 2-2, conforms to Seagoville USARC's real property plan (which seeks to generally collocate like uses and to separate incompatible uses) and the installation's INRMP. This project has been coordinated with the installation physical security plan and all required AT/FP measures would be included.

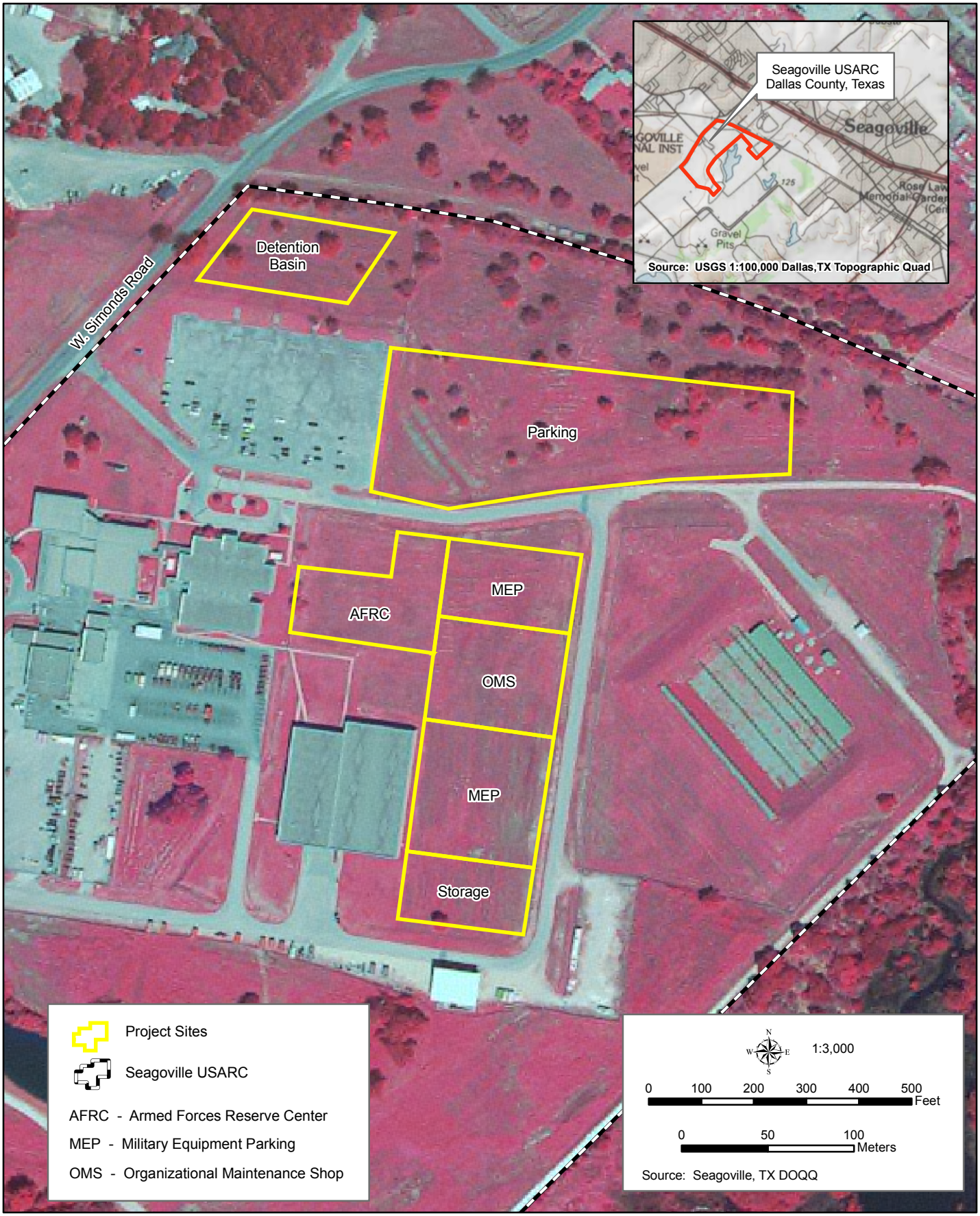

Figure 2-2: Project Sites

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SECTION 3.0
ALTERNATIVES

3.0 ALTERNATIVES

3.1 INTRODUCTION

No other action alternatives, including alternate site locations, were considered during the preparation of this EA. As indicated above, only one location (consisting of separate, but adjacent parcels) is suitable for the proposed construction of the new AFRC on Seagoville, due to its relatively small size, current development, and conformity with the installation's INRMP. The No Action Alternative and other alternative approaches that were eliminated early in the planning process are discussed in the following paragraphs.

3.2 NO ACTION ALTERNATIVE

CEQ regulations require inclusion of the No Action Alternative. Under the No Action Alternative, the AFRC would not be established at Seagoville USARC. However, since this realignment has been mandated by Congress and the President, the No Action Alternative would serve only as a baseline against which the impacts of the proposed action and alternatives can be evaluated.

3.3 ALTERNATIVES ELIMINATED FROM FURTHER CONSIDERATION

3.3.1 Use of Other Facilities to Accommodate Realigned Units

The Seagoville USARC has considered all means of accommodating the proposed realignment using or renovating existing space as well as off-post space that is available for leasing. Use of off-post leased space to meet Seagoville AFRC's requirements would involve several major drawbacks. AT/FP policies specify certain facilities characteristics, such as physical security features, set-back from roadways, and "hardened" construction. Implementation of these measures would substantially increase the cost of leasing and might be prohibited by lessors, further complicating the potential to use leased space. Consequently, use of leased space in the private sector – having personnel and equipment both on-post and off-post – would adversely affect command and control functions, result in higher operational costs, and impair efficient use of resources. For these reasons, use of leased space is not feasible and is not further evaluated in this EA.

Construction of new facilities is driven by the need to ensure adequate space is available for mission requirements. Seagoville USARC's existing facility space is, with very minor exception, fully utilized for current mission requirements. As a consequence, new construction at the Seagoville USARC is required, and the alternative to use or renovate existing facilities is not discussed further in this EA.

3.3.2 Schedule

Alternatives for scheduling of proposed realignment actions are principally affected by three factors: the availability of facilities to house realigned personnel and functions, efforts to minimize potential disruption of mission activities based on the number of personnel involved in the relocation or the amount of work to be performed, and early realization of benefits to be gained by completion of the realignments. In most cases, minor shifts in schedule would not produce different environmental results.

The schedule for implementation of the proposed action must balance facilities construction timeframes, planned arrival dates of inbound units and stand-up dates of newly-established units, all within the 6-year limitation of the BRAC law. Realignment earlier than that shown in the schedule discussed above is not feasible in light of the time required to build facilities. Shifting of schedules to accomplish realignment at a later date would unnecessarily delay realization of benefits to be gained and would disrupt mission activities. Since earlier implementation is not possible, and since delay is avoidable and unnecessary, alternative schedules are not further evaluated in this EA.

SECTION 4.0
AFFECTED ENVIRONMENT AND CONSEQUENCES

4.0 AFFECTED ENVIRONMENT AND CONSEQUENCES

4.1 INTRODUCTION

This section of the EA describes the natural and human environment that exists at and surrounding Seagoville USARC, and the potential effects to those resources as a result of the proposed action and alternatives. Only those parameters that have the potential to be affected by the proposed action and alternatives are described, as per CEQ guidance (40 CFR 1501.7 [3]). Therefore, resources and items, such as climate, air space, energy sources, communication systems, and solid waste, are not addressed for the following reasons:

- Climate—the proposed project would not affect, nor be affected by, climate.
- Air space—the proposed project does not involve any additional aircraft training and thus air space would not be affected.
- Geology—the project would not affect regional geological features nor cause an existing geologic feature to become unstable
- Coastal zone—the project site is not located within Texas' coastal zone
- Energy sources—slight increases in energy consumption would occur during the construction of the AFRC facility. However, the majority of the energy demands at Seagoville USARC would be met by the same regional grid as currently provided at Hanby-Hayden USARC in Mesquite.
- Communication systems—the project would have negligible additional demand or other impact on local or regional communication systems.
- Solid waste—the proposed action would not result in increased production of solid waste in the region, since the personnel would be realigned from the Hanby-Hayden USARC in Mesquite.

An impact (consequence or effect) is defined as a modification to the human or natural environment that would result from the implementation of an action. The impacts can be either beneficial or adverse, and can be either directly related to the action or indirectly caused by the action (secondary, indirect, or synergistic effects). The effects can be temporary (short-term), long lasting (long-term), or permanent. For purposes of this EA, temporary effects are defined as those that would last less than 3 years after completion of the action. Long-term impacts are defined as those that would last up to 20 years. Permanent impacts would require an irretrievable commitment of resources.

Impacts can vary in degree or magnitude from a slightly noticeable change to a total change in the environment. The significance of the impacts presented in this EA is based upon existing regulatory standards, scientific and environmental knowledge, and/or best professional opinions of the authors of the EA. The significance of the impacts on each resource will be described as significant, moderate, minimal, insignificant (or negligible), or no impact. Significant impacts are those effects that would result in substantial changes to the environment and should receive the greatest attention in the decision-making process.

4.2 LAND USE

4.2.1 Affected Environment

4.2.1.1 Regional Setting

The Seagoville USARC is situated approximately 17 miles south-southeast of Dallas, Texas and is surrounded by a variety of land uses, including Federal lands, private residences, urban and commercial development and gravel mining activities (Figure 4-1). The Seagoville Federal Correction Institution, which transferred 205 acres to the Department of the Army in 1973 to construct the Seagoville USARC, is located along the northern border. The lands to the east and south are primarily used for grazing. A gravel mining operation is also located east of the Seagoville USARC. A low-density housing area is located along the southwestern border and commercial properties are located on the northwestern boundary of the installation (U.S. Army 2004).

4.2.1.2 Installation Land Use

The installation includes nine different training areas, a Deployable Medical Equipment (DEPMED) area, and the main cantonment area (Figure 4-2). A 25-meter small arms training range is located in Training Area D, west of the proposed AFRC site. Training Area C, which is located south of the proposed AFRC site, provides field sanitation training opportunities. The Joe Baker Lake and Recreational Area is located south-southwest of the proposed site and provides various outdoor recreational opportunities for military and civilian personnel and their dependents. The Training Areas A and B are located south of the Joe Baker Lake and Recreation Area. These areas provide support training in air/rail loading; Nuclear, Biological and Chemical (NBC) defense; and tracked and wheeled equipment driving (U.S. Army 2004). These areas are also the primary focus area of the natural restoration program outlined by the installation's INRMP. The firing range is located within Training Area I. The remaining training areas provide various training opportunities including physical fitness, military equipment parking, and DEPMED.

4.2.1.3 Current and Planned Development

No other construction is planned for the Seagoville USARC in the reasonably foreseeable future.

4.2.2 Environmental Consequences

4.2.2.1 Preferred Alternative

Implementation of the Proposed Action would permanently convert approximately 9 acres of maintained or disturbed grassland to impervious pavement and buildings. The detention basin would remove another acre from future uses. The types of training and administrative uses at Seagoville USARC would not change as a result of the proposed action. Use of the driving course could be increased as a result of the proposed realignment, but there would be no change in its designated use. The use of the proposed site location is consistent with the installation's mission, policies and plans and, thus, is considered an insignificant impact to land use.

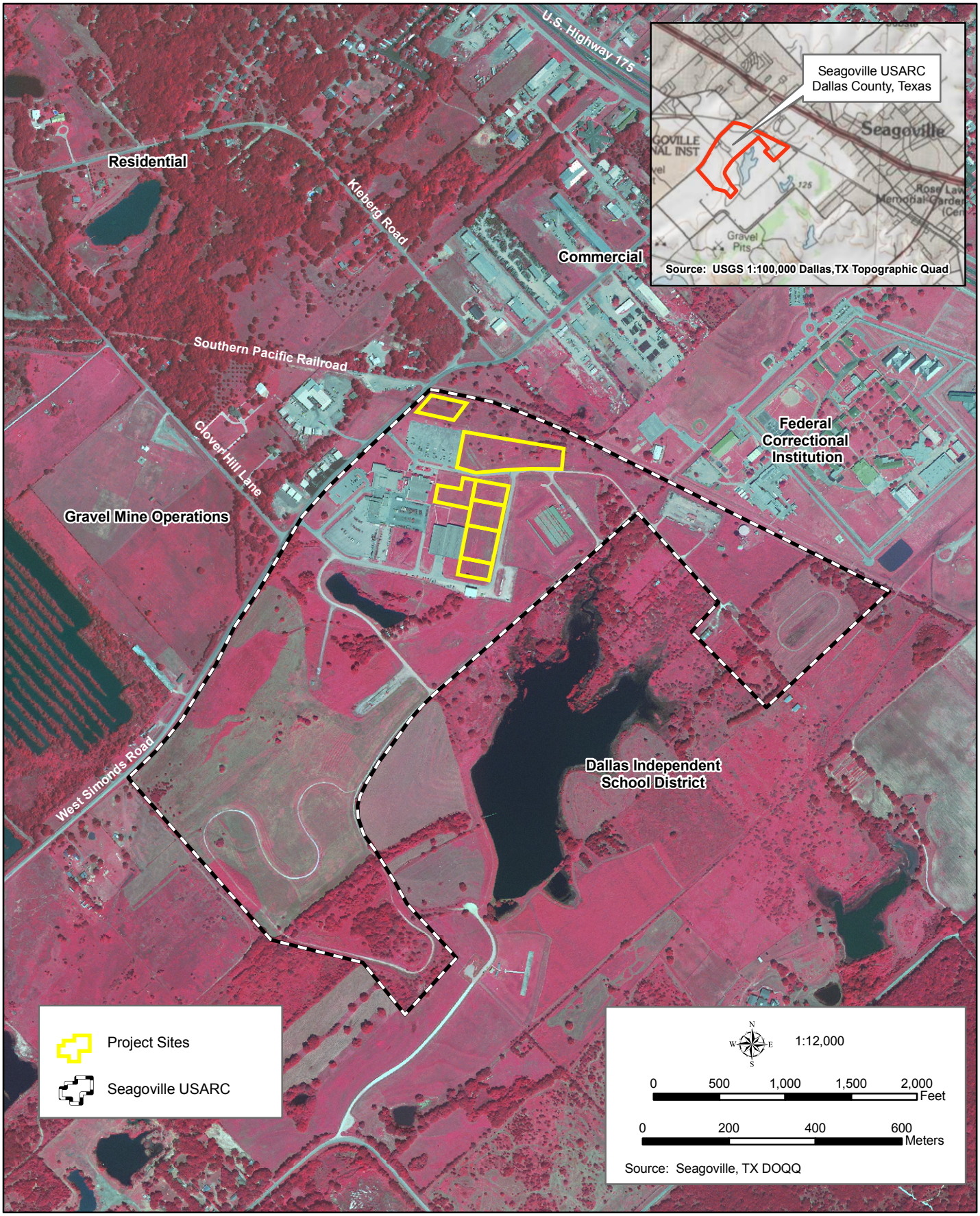

Figure 4-1: Land Use near Seagoville USARC

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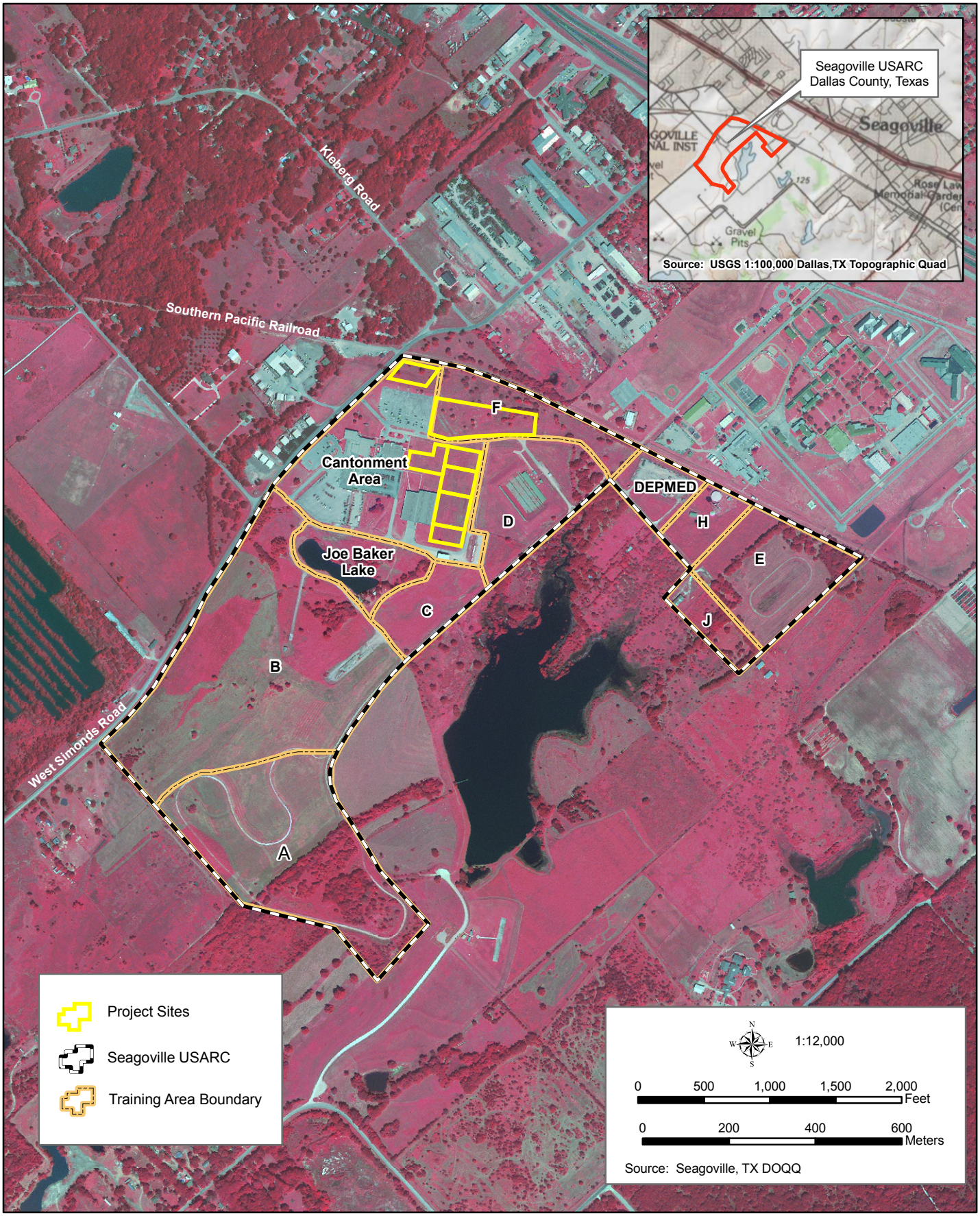

Figure 4-2: Seagoville USARC Training Areas

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4.2.2.2 No Action Alternative

No direct short-term changes in land use to the proposed construction sites would occur under the No Action Alternative. There is the potential that any of the three sites would be developed in the long-term given that all three sites are situated within a military cantonment area.

4.3 AESTHETICS AND VISUAL RESOURCES

4.3.1 Affected Environment

The Seagoville USARC has been developed over the past several decades such that most, if not all, of the land has been disturbed at some time. Still, the complex supports various visual qualities, particularly in the areas south of the cantonment area. The Joe Baker Lake and recreational area provides several outdoor recreation opportunities including picnic areas, boating and fishing. The natural restoration area, situated in and around the previous Nuclear, Biological and Chemical training area, provides scenic vistas of riparian areas, emergent wetlands and prairies.

4.3.2 Environmental Consequences

4.3.2.1 Preferred Alternative

Construction and operation of the AFRC at the proposed site would eliminate approximately 9 acres of maintained grassland and permanently replace these acres with pavement and hard structures. The detention basin would revegetate within 2 years. The proposed AFRC site would be located on the north side of the cantonment area and out of sight of the more aesthetically pleasing areas to the south. Temporary construction areas would need to be immediately replanted with native vegetation to avoid additional long-term or permanent adverse effects to the area's aesthetic resources. Nonetheless, because of the small amount of acreage impacted, the land uses surrounding Seagoville USARC, distance of the proposed site from the recreational and natural resources restoration areas, and the historical use of the proposed site for military construction projects, the permanent and temporary effects would not be considered significant.

4.3.2.2 No Action Alternative

Implementation of the No Action Alternative would allow the construction sites to remain in the current conditions, at least for the short term. The proposed site would continue to be a maintained grassland with limited visual qualities. However, the proposed construction sites are subject to future development given that they are contained within the cantonment area of a military installation.

4.4 AIR QUALITY

4.4.1 Affected Environment

The Seagoville USARC and Dallas County are located within the Environmental Protection Agency's (EPA) Region VI. Dallas County and portions of all of other surrounding counties are classified as a non-attainment maintenance area for the 8-hour ozone standard. The deadline for the Texas Commission on Environmental Quality (TCEQ) to bring this region into attainment is 2010. Dallas County is in attainment for all other criteria pollutants (EPA 2006).

Ozone pollution near the ground is the most widespread air quality problem in the U.S. The public in nearly 100 major cities in the U.S. is periodically exposed to harmful concentrations of

ozone. The biggest concern with high ozone concentrations is the damage it causes to human health and vegetation. High concentrations of ozone can cause shortness of breath, coughing, wheezing, headaches, nausea, and throat and lung irritation. People who suffer from lung diseases like bronchitis, pneumonia, emphysema, asthma, and colds have even more trouble breathing when the air is polluted. These effects can be worse for anyone who spends significant periods of time exercising or working outdoors.

4.4.1.1 Installation Air Pollutant Emissions

The Seagoville USARC is not required to have an air quality permit (Hartsell 2006). No emission inventories have been conducted for the minor fugitive emissions (e.g., HVAC) that could occur at the installation.

4.4.2 Environmental Consequences

4.4.2.1 Preferred Alternative

Temporary increases in air pollution would occur from the use of construction equipment in building new facilities and the clearing and leveling of land for new construction. Dust, diesel emissions, and particulate matter are expected to temporarily increase during the first 12 to 18 months of the project. Due to the short duration of the construction project, any increases or impacts on ambient air quality are expected to be short-term and minor.

Calculations were performed to estimate the total air emissions from the new construction activities. Calculations were made for standard construction equipment such as bulldozers, excavators, front end loaders, back hoes, cranes, and dump trucks. Assumptions were made regarding the type of equipment, duration of the total number of days each piece of equipment would be used, and the number of hours per day each type of equipment would be used. The assumptions and resulting calculations are presented in Appendix B.

The total air quality emissions, as presented in Appendix B, were calculated to determine the applicability of the General Conformity Rule. The General Conformity rule applies to areas that have been designated as a non-attainment zone for an air pollutant, such as the Dallas-Fort Worth area. Regulations set forth in 40 CFR 51 Subpart W-Determining Conformity of the General Federal Action to State or Federal Implementation Plans determine if additional permits are needed. According to 40 CFR 51.853(b), Federal actions require a Conformity Determination for each pollutant where the total of direct and indirect emissions in a non-attainment or maintenance area caused by a Federal action would equal or exceed any of the rates in paragraphs 40 CFR 51.853(b)(1) or (2). A summary of the total emissions are presented in Table 4-1. As can be seen from this table, the proposed construction activities do not exceed thresholds and, thus, do not require a Conformity Determination.

Table 4-1. Total Air Emissions (tons/year) from Construction Activities vs. the *de minimus* Levels

Pollutant	Total	*de minimus* Thresholds
Nitrogen Oxides (NO_x)	17.79	50
Sulphur Dioxide (SO_2)	11.10	100
Volatile Organic Carbon (VOC)	3.50	50

Source: 40 CFR 51.853 and GSRC

The proposed AFRC would not require any back-up generators, above ground tanks (AST) or underground tanks (UST) for fuel storage or other facilities or equipment that would generate emissions required to be permitted. Air emissions for the Dallas region, due to routine commuting activities, are expected to be similar before and after the proposed relocation of facilities. The primary difference in the commute will be that the destination will be in a different location in the county. Similarly, on-site operations such as air conditioners or air compressors would not increase emissions to the region's airshed, relative to the current operations at the existing USARC.

4.4.2.2 No Action Alternative

The Seagoville USARC would continue to operate as it does now and remain in compliance under the No Action Alternative. The installation would continue to investigate methods for reducing its overall emissions.

4.5 NOISE

4.5.1 Affected Environment

Noise is generally described as unwanted sound, which is identified by either objective effects (hearing loss, damage to structures, etc.) or subjective judgments (community annoyance). Sound is represented on a logarithmic scale with a unit called the decibel (dB). Sound on the decibel scale is referred to as a sound level. The threshold of human hearing is approximately 0 dB, and the threshold of discomfort or pain is around 120 dB.

Sound levels are computed over a 24-hour period and adjusted for nighttime annoyances to produce the day-night average sound level (DNL). DNL is the community noise measurement recommended by the EPA and has been adopted by most Federal agencies (EPA 1974). A-weighted decibels (dBA) are used to express the relative loudness of sounds in air as perceived by the human ear (Generac Power Systems, Inc. 2004). A-weighting is necessary to compare the effects of sounds on the human body, because the human ear is less sensitive at low frequencies than at high frequencies. Several examples of noise levels in dBA are listed in Table 4-2. A DNL of 65 dBA is most commonly used for noise planning purposes and represents a compromise between community impact and the need for activities like construction. Areas exposed to DNL above 65 dBA are generally not considered suitable for residential use. A DNL of 55 dBA was identified by EPA as a level below which there are effectively no adverse impacts (EPA 1974).

As discussed previously, the Seagoville USARC is surrounded by other commercial and light industrial facilities. As such, the installation is subjected to various noises such as vehicle traffic, heavy equipment and aircraft. However, the vegetation surrounding the complex and the vast natural areas in the southern portion of the installation attenuate much of the noise generated off the installation. The 25-meter firing range, located immediately to the east of the cantonment area, is the primary source of noise on the installation. Other noise sources, including training in heavy equipment driving, would occur along the driving course.

Table 4-2. A-Weighted (dBA) Sound Levels of Typical Noise Environments

dBA	Overall Level	Noise Environment
120	Uncomfortably Loud (32 times as loud as 70 dBA)	Military jet takeoff at 50 feet
100	Very loud (8 times as loud as 70 dBA)	Jet flyover at 1,000 feet
90	Very Loud	Heavy-duty truck, average traffic
80	Loud (2 times as loud as 70 dBA)	Propeller plane flyover at 1,000 feet Diesel truck 40 mph at 50 feet
70	Moderately loud	Freeway at 50 feet from pavement edge Vacuum cleaner (indoor)
65	Moderately loud	Gas powered generator
60	Relatively quiet (1/2 as loud as 70 dBA)	Air conditioning unit at 10 feet Dishwasher at 10 feet (in door)
50	Quiet (1/4 as loud as 70 dBA)	Large transformers Small private office (in door)
40	Very quiet (1/8 as loud as 70 dBA)	Bird calls Lowest limit of urban ambient sound
10	Extremely quiet (1/64 as loud as 70 dBA)	Just audible
0	Threshold of hearing	

Source: Wyle Research Corporation 1992

4.5.2 Environmental Consequences

4.5.2.1 Preferred Alternative

Temporary and minimal increases in noise would occur during the construction of the AFRC. The construction activities potentially causing elevated noise levels within the project area would include diesel and gasoline powered generators, trucks, and construction equipment. As indicated in Table 4-2 above, heavy duty trucks generate a noise level of approximately 90 dBA at 50 feet. Attenuation to 65 dBA would occur at a distance of approximately 800 to 1,000 feet depending on climatic conditions, topography, vegetation, and man-made barriers (Generac Power Systems, Inc. 2004). Noise levels for other types of construction equipment range from the loudest, tractors and backhoes (70 to 95 dBA) to pumps and generators (65 to 85 dBA) (Bugliarello et al. 1976). The only sensitive noise receptor located within 2,000 feet of the proposed site is the Joe Baker Lake and Recreation Area, which is located on the military complex. Therefore, no significant impact to ambient noise levels would occur from the construction of the proposed AFRC.

Operation of the AFRC at this site would also increase traffic noise. The proposed action would be expected to add up to 50 full-time military and civilian employees to the daily commuting traffic on a given weekday. Most of the activity at the AFRC would occur during weekends, when other base traffic is substantially reduced. If all of the Reserve units are on post on the same weekend, up to 1,500 reservists and civilians could commute to the installation. Therefore, operation of the AFRC at this site would be expected to contribute to or increase the base's ambient noise during certain periods. These periods would occur sporadically and be only temporary; thus, the increase would be considered insignificant.

4.5.2.2 No Action Alternative

Implementation of the No Action Alternative would cause no temporary or long-term increases to the ambient noise levels.

4.6 SOILS

4.6.1 Affected Environment

The project site is composed of four different soil types: (1) Radar Mabank complex on 0 to 2 percent slopes, (2) Crockett fine sandy loam on 1 to 3 percent slopes, (3) Siwala fine sandy loam on 2 to 8 percent slopes and (4) Wilson clay loam. The majority of the proposed construction site contains the Radar Mabank soils (Figure 4-3). These soils have some limitations for construction of buildings due to their shrink-swell potential. Such limitations would have to be considered during the design and construction of the AFRC and associated facilities (Natural Resources Conservation Service [NRCS] 2006).

The Farmland Protection Policy Act of 1990 defines prime farmland as "…land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides, labor, and without intolerable soil erosion." Unique farmland is defined as "…land, other than prime farmland, that is used for the production of specific high-value food and fiber crops, such as, citrus, nuts, olives, cranberries, fruits, and vegetables." None of the soils within or near the proposed Seagoville USARC are considered prime farmlands (NRCS 2006).

4.6.2 Environmental Consequences

4.6.2.1 Preferred Alternative

Construction of the AFRC would remove approximately 6 acres of Radar Mabank, 1 acre of Siwala fine sandy loam, 3 acres of Crockett fine sandy loam and less than 0.1 acre of Wilson clay loam, from future biological productivity. Because the area to be disturbed is greater than 1 acre, a Stormwater Pollution Prevention Plan (SWPPP) and Notice of Intent would need to be prepared as part of a Texas Discharge Pollution Elimination System (TPDES) General Construction Permit, through the TCEQ. The SWPPP would identify best management practices (BMP), which would be implemented to reduce soil erosion and sedimentation from the construction site. Wind erosion of the site's soils would be reduced by applying water or other wetting solutions during dry periods.

Operation of the AFRC would have no effect on the installation's soils. No increases in field training exercises, which could contribute to soil disturbance and erosion, would be expected from the establishment of the AFRC. As mentioned previously, the driving course could experience some increased use; however, no off-road driving is expected. Therefore, some permanent, but insignificant impacts to soils would occur as a result of the construction and operation of the AFRC.

4.6.2.2 No Action Alternative

Under the No Action Alternative, no soils would be disturbed by construction activities.

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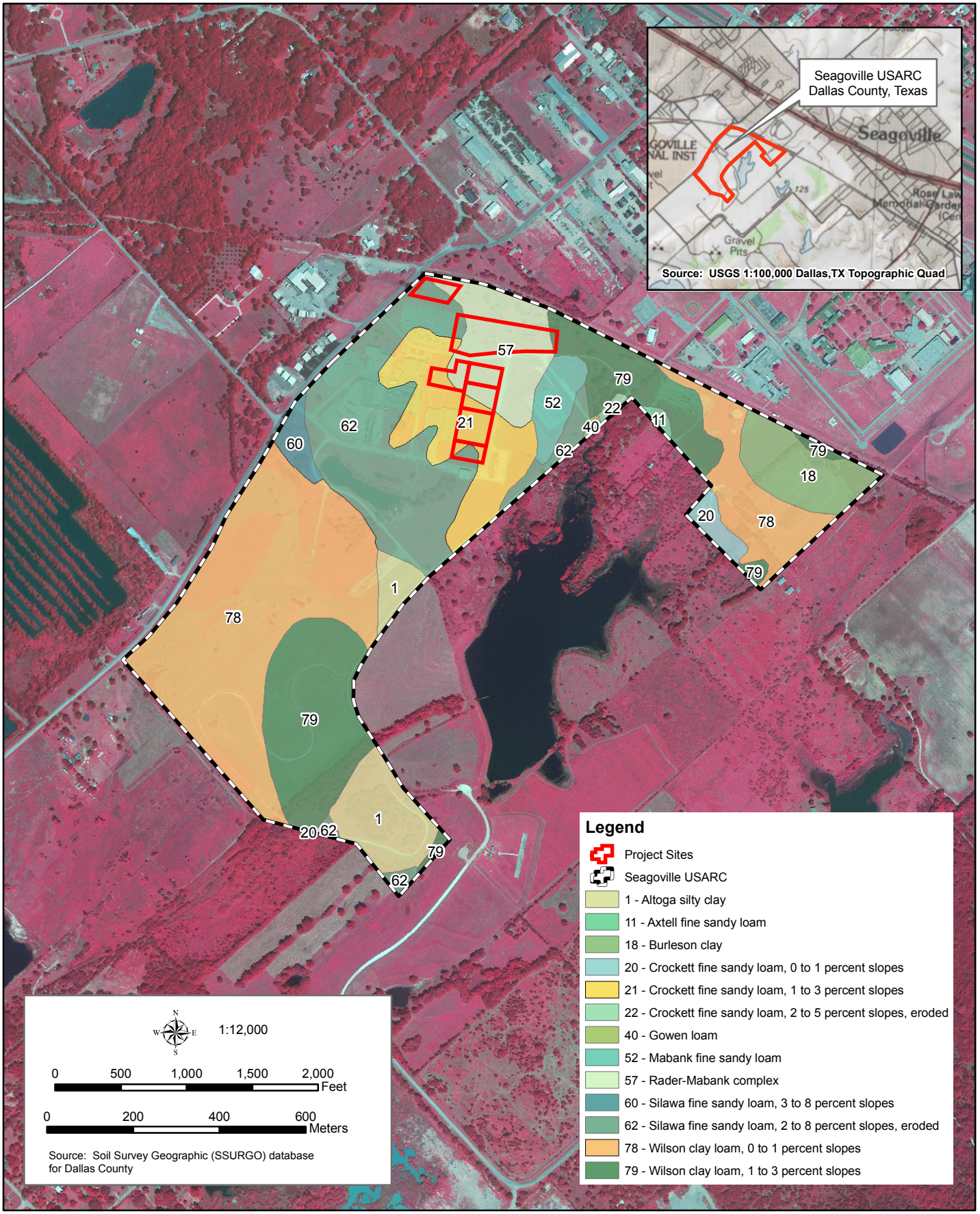

Figure 4-3: Soils within Seagoville USARC

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4.7 WATER RESOURCES

4.7.1 Affected Environment

4.7.1.1 Surface Water

Surface waters and floodplains within the vicinity of the project are illustrated in Figure 4-4. The Seagoville USARC is located within the Upper Trinity Watershed. Lakes, streams, and wetland surface waters are located within and near the installation. No waters within the Seagoville USARC have state approved designated uses and none are listed as Clean Water Act (CWA) of 1972, Section 303(d) impaired waters (U.S. Army 2004).

Texas requires the completion of a Stormwater Discharge Permit for construction site erosion control, which is issued by the TCEQ, prior to initiation of construction. Through the permitting process, the Army would develop methods to minimize erosion and control stormwater runoff both during and after construction by utilizing BMPs and meeting performance standards established by the TCEQ. The Army would develop a site specific SWPPP and Erosion Control Plan describing the BMPs that would be used on-site for erosion control.

4.7.1.2 Hydrogeology/Groundwater

The Seagoville USARC overlies the Woodbine Formation within the Trinity-Woodbine Aquifer. Water quality deteriorates with depth throughout the Woodbine Formation, which contains extensive sections of slightly to moderately saline groundwater in the down-dip portions of the aquifer. Some shallow zones in and near the outcrop also contain slightly to moderately saline groundwater, although this is uncommon (Texas Water Development Board [TWDB] 2004).

TWDB (2004) recorded that nitrate and fluoride exceeded EPA's primary maximum contaminant levels in 3 percent and 7 percent of tested wells, respectively. Several parameters, including total dissolved solids, sulfate, fluoride, iron, and manganese, are above the EPA's secondary drinking water standards in approximately one-third of the wells, primarily in the down-dip portions of the aquifer. Chloride exceeded the secondary standard in 10 percent of wells sampled by TWDB (2004), also in the down-dip portions of the aquifer. The action level for lead was exceeded in 10 percent of the TWDB (2004) wells.

Trinity-Woodbine Aquifer use in Dallas County was 14,581 acre-feet per year (ac-ft/yr) in 1980, but withdrawals were greatly decreased to 7,402 ac-ft/yr by 1990 and 4,869 ac-ft/yr by 2000 (TWDB 2004). This reduction in withdrawal can be attributed to a reliance on increased surface water reservoirs.

4.7.1.3 Floodplain

EO 11988 (*Floodplain Management*) directs Federal agencies to avoid developments within floodplains. Floodways are defined as lands within the 100-year floodplain and have a 1 percent chance of becoming inundated by peak flows during any given year. Figure 4-4 depicts the floodplain and other surface water features in the project region. As can be seen, the proposed site is located above the 100-year floodplain.

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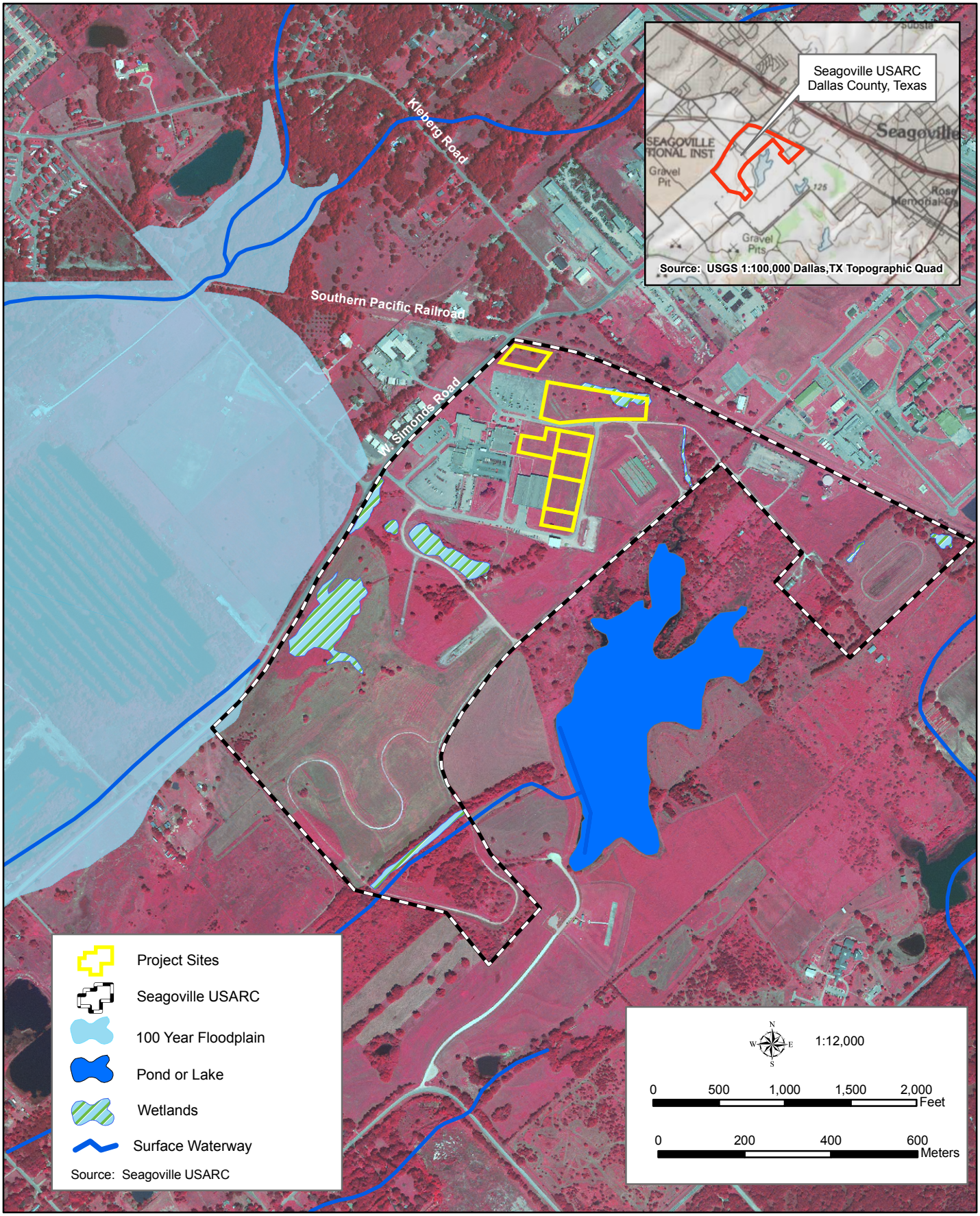

Figure 4-4: Surface Water and 100 Year Floodplain near Seagoville USARC

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4.7.2 Environmental Consequences

4.7.2.1 Preferred Alternative

The Preferred Alternative would not result in significant impacts to water resources. A SWPPP would be prepared and followed to prevent impacts to surface water bodies. BMPs would be followed to prevent impacts to surface and groundwater. Because the proposed site is above the 100-year floodplain, the proposed action would be in compliance with EO 11988.

4.7.2.2 No Action Alternative

Under the No Action Alternative, no new development would occur. Baseline conditions for surface and ground waters as described above would remain unchanged.

4.8 BIOLOGICAL RESOURCES

4.8.1 Affected Environment

The project site is located within the Blackland Prairie Ecoregion (Texas Parks and Wildlife Department [TPWD] 2001). Figure 4-5 depicts the general vegetation community types that occur on the installation. Those areas described as Modified Vegetation have been heavily disturbed and are routinely maintained. As part of an overall installation natural resources restoration program, many of the developed areas have been planted with native plants as part of the landscaping. These areas are identified as Urban Wildscape on Figure 4-5. The Native Prairie areas are the locations where most of the focus of the restoration activities have been placed. These areas are being allowed to return to their natural species, with some engineering modifications to promote wetlands development. Species found in native prairie areas include little bluestem (*Schizachyrium scoparium*), Indiangrass (*Sorghastrum nutans*), prairie-clover (*Petalostemum* sp.), and late coneflower (*Rudbeckia serotina*). Woody vegetation communities occur as riparian corridors and are comprised of slippery elm (*Ulmus rubra*), pecan (*Carya illinoensis*), hackberry (*Celtis laevigata*) and black willow (*Salix nigra*) (U.S. Army 2004). Letters were sent to the U.S. Fish and Wildlife Service (USFWS) and TPWD requesting concurrence that the proposed actions would not have a significant impact on Federal or state-protected species or other sensitive resources. Both agencies provided their concurrence with this determination (Appendix B).

4.8.1.1 Preferred Alternative Site

4.8.1.1.1 Vegetation

The project site has been previously disturbed and its vegetation is typical of mowed and maintained grassy urban areas. Bermudagrass (*Cynodon dactlyon*), goosefoot (*Chenopodium* sp.) and other common grass species are the dominant vegetation species of the proposed building site. Several pecan trees are scattered throughout the grasslands in the proposed parking area. Other invasive species were also common in this area, including Johnsongrass (*Sorghum halpense*), crabgrass (*Digitaria ciliaris*), hairy bedstraw (*Galium pilosum*) and barnyard grass (*Echinochloa crus-pavonis*).

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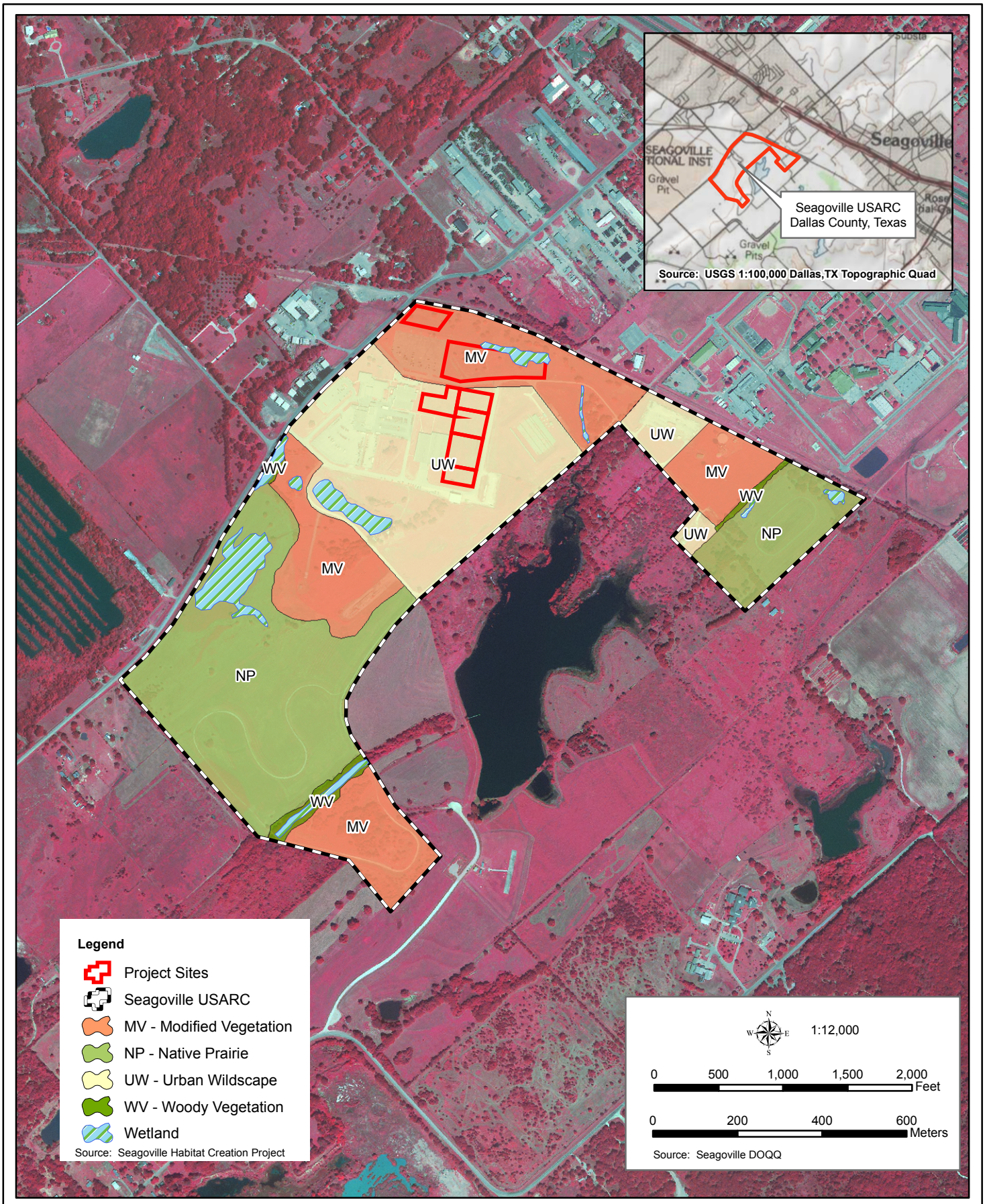

Figure 4-5: General Vegetation within the Preferred Site Location

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4.8.1.1.2 Wildlife

The 90th RRC's INRMP provided detailed discussions of faunal resources for the Seagoville USARC (U.S. Army 2004). Common wildlife reported in the INRMP included American crow (*Corvus brachythynchos*), great-tailed grackle (*Quiscalus mexicanus*), northern mockingbird (*Mimulus polyglottos*), turkey vulture (*Cathartes aura*), fox squirrel (*Sciurus niger*), and white-tailed deer (*Odocoileus virginianus*). The project sites have been previously disturbed and are adjacent to buildings and paved areas (i.e., roads, parking lots). During a site visit on June 12, 2006, no wildlife was observed within the proposed building construction sites.

4.8.1.1.3 Sensitive Species

The Endangered Species Act (ESA) of 1973 was enacted to provide a program for the preservation of endangered and threatened species and to provide protection for the ecosystems upon which these species depend for their survival. All Federal agencies are required to implement protection programs for designated species and to use their authorities to further the purposes of the act. The USFWS's list of Federally protected species within Dallas County was cross-referenced with the 90th RRC's INRMP (U.S. Army 2004) to determine which protected species could potentially occur in the area. No Federally protected species have the potential to occur on Seagoville USARC.

Similar legislation to the ESA has been passed by the State of Texas. The executive director of the TPWD has the responsibility of listing species within the state. Table 4-3 contains Federal- and state-listed species that may occur in Dallas County. The proposed project sites do not contain habitat commonly utilized by the Federal- and state-listed species.

Table 4-3. Federal/State-Listed Species that Occur or May Occur in Dallas County

Common Name	Scientific Name	Federal Status	State Status
Arctic Peregrine Falcon	*Falco peregrinus tundrius*	--	T
Bald Eagle	*Haliaeetus leucocephalus*	AD, T	T
Interior Least Tern	*Sterna antillarum athalassos*	E	E
Piping Plover	*Charadrius melodus*	T*	--
Whooping Crane	*Grus americana*	E	E
Wood Stork	*Mycteria americana*	--	T
Texas Horned Lizard	*Phrynosoma cornutum*	--	T
Timber Rattlesnake	*Crotalus horridus*	--	T

Source: TPWD 2006, USFWS 2006
E=Endangered
T=Threatened
AD=Proposed Delisting
*Piping Plover are listed as endangered in the Great Lakes portion of their range.

4.8.1.1.4 Wetlands

Wetlands are those areas inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions (Environmental Laboratory 1987). The U.S. Army (2004) reported eight non-jurisdictional and one jurisdictional wetland sites and other Waters of the U.S. on Seagoville USARC. One of the reported non-jurisdictional sites is within the area proposed for the parking site (see Figure 4-4). A confirmatory delineation of this site was conducted on 2 November 2006 in accordance with the *1987 Corps of*

Engineers Wetland Delineation Manual (Environmental Laboratory 1987). The wetland area did not contain a predominance of wetland species nor primary hydrology indicators. The soil matrix colors were border-line hydric. A dense clay layer was observed at a depth of 8 inches which appeared to perch water near the surface and provide saturation of surface soil. No other connections to nearby jurisdictional waters of the U.S. were observed. For all these reasons, this wetland was delineated as a non-jurisdictional wetland (see Appendix D).

EO 11990 (*Protection of Wetlands*) directs Federal agencies to avoid developments within wetlands. Wetlands provide critical ecosystem functions such as flood control and nutrient cycling. Wetlands also typically support a greater diversity of species than surrounding habitats and can serve as travel corridors among distant patches of suitable habitat. Section 404 of the CWA regulates development within wetlands and Waters of the U.S.

4.8.2 Environmental Consequences

4.8.2.1 Preferred Alternative

Under the Preferred Alternative, up to 10 acres of maintained grasslands would be permanently lost. The detention basin (1 acre) would be expected to re-vegetate naturally and provide some wildlife habitat in the long term. The Preferred Alternative would not result in significant impacts to biological resources. Individuals of regionally abundant wildlife species would be displaced to adjacent, higher quality habitat by the Preferred Alternative. An increase in the number of soldiers on the facility would result in an increase in the number of temporary disturbances to wildlife. Training activities would be similar to the training activities currently occurring on the facility; however, the frequency of small arms and driving course training activities would slightly increase. Such activities would only cause temporary disruptions to wildlife in the immediate area during the training.

The proposed project sites do not support suitable habitat for Federal- or state-listed threatened and endangered species and thus, threatened and endangered species would not be impacted.

The construction of the proposed parking facility would impact the wetland area on the northeast end of the parking area; however, this wetland is considered to be a non-jurisdictional wetland (U.S. Army 2004; GSRC). Training activities would be similar to the training activities currently occurring on the facility; however the frequency of training activities along the driving course would slightly increase, but would remain on the course and, therefore, not impact any potentially jurisdictional wetlands.

4.8.2.2 No Action Alternative

Under the No Action Alternative, no new development would occur. Baseline conditions for biological resources as described above would remain unchanged or would improve slightly over time.

4.9 CULTURAL RESOURCES

4.9.1 Affected Environment

Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended, requires Federal agencies to identify and assess the effects of their undertakings on cultural properties included in or eligible for inclusion in the NRHP and to afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on such undertakings. Federal agencies must consult with the appropriate state and local officials including the State Historic

Preservation Officer (SHPO), Indian tribes, applicants for Federal assistance, and members of the public and consider their views and concerns about historic preservation issues. The ACHP is authorized to promulgate such rules and regulations as it deems necessary to govern the implementation of Section 106 in its entirety. Those regulations are contained in the Code of Federal Regulations as 36 CFR Part 800, "Protection of Historic Properties".

4.9.1.1 Cultural Overview

4.9.1.1.1 Dallas County

Prehistoric occupation in the U.S. is generally divided into three major periods that vary regionally: the Paleo-Indian Period, the Archaic Period, and the Late Prehistoric Period. These periods are defined by the presence of particular diagnostic artifacts such as projectile points, certain types of pottery, and occasionally, particular site locations. Certain artifacts can also be used to recognize historic affiliations.

The primary Indians in the region were the Anadarkos, a Caddoan group, who settled in villages along the Trinity River. Probably the first European contact with the area occurred when the Moscoso expedition entered the northeastern corner of the future Dallas County in 1542. The area was an ideal place to settle because of its rich soil and ample water. The Republic of Texas built the Military Road from Austin through the site of future Dallas to the Red River. Other roads leading to Jefferson, Houston, and the Gulf Coast soon crossed at Dallas. On March 30, 1846, Dallas County was officially formed by order of the state legislature from portions of Nacogdoches and Robertson counties, and was named for George Mifflin Dallas, Vice President of the U.S. under James K. Polk (TSHA 2005).

Between 1880 and 1920, Dallas County remained primarily rural and agricultural, although manufacturing was growing. People were leaving farms in rural Dallas County and surrounding counties to move to Dallas and other Dallas County communities. The number of manufacturers in Dallas County more than tripled between 1947 and 1987. The number of employees in manufacturing grew even more rapidly. In addition to manufacturing, other businesses were burgeoning as well. Every major industry at least tripled its number of employees between 1953 and 1989. The three largest employers in 1953 were manufacturing, retail trade, and wholesale trade. This boom time lasted into the early 1980s for all types of employers. Subsequently, between 1980 and 1989, construction fell off by 33 percent and manufacturing declined. By 1950, 90 percent of Dallas County was considered urban. In 1950 the whole county was officially classified as the Dallas Metropolitan Statistical Area by the U.S. Census Bureau. The population tripled between 1950 and 1990.

4.9.1.1.2 Seagoville USARC

According to the installation's Integrated Cultural Resources Management Plan (ICRMP), the site has been disturbed over the years by various construction activities and offers no historically significant resources for advancing the cultural heritage of the area. Past surveys documented in the ICRMP have indicated there are no cultural resources sites or historic structures at or near the proposed construction sites.

4.9.2 Environmental Consequences

4.9.2.1 Preferred Alternative

The Texas Historical Commission (THC) was consulted during the preparation of this EA and the THC concurred with the determination of no adverse effect (see Appendix B,

Correspondence). Past surveys, as documented in the 90th RRC's ICRMP, indicated no historic properties were discovered at this site. Consequently, no historic properties, as defined by Section 106 of the NHPA, would be impacted by implementation of the Preferred Alternative. There is always the possibility of inadvertent discovery of deeply buried cultural materials during construction that were not identified during the archaeological field investigations. If any cultural material is uncovered, the construction manager should halt all activities and notify the 90th RRC environmental staff, who would then alert THC and 90th RRC staff archaeologists.

4.9.2.2 No Action Alternative

Under the No Action Alternative, there would be no ground disturbance and conditions would remain status quo.

4.10 SOCIOECONOMIC RESOURCES

4.10.1 Affected Environment

4.10.1.1 Population

Dallas, Tarrant and Collin counties are considered the Region of Influence (ROI) for the Proposed Action relative to socioeconomic effects. This area is part of the Dallas-Fort Worth-Arlington Metropolitan Statistical Area (MSA). The counties 2004 population are presented in Table 4-4. As can be seen, the racial mix of the ROI consists predominantly of Caucasians and African Americans. The remainder is divided among Asians, people claiming to be two or more races, Native Americans, and Native Hawaiians or other Pacific Islanders. The ROI has a significant portion of the population (24 percent) that claims Hispanic or Latino origins (U.S. Census Bureau 2004).

Table 4-4. Population and Race

Geographic Region	Total Population	Race							
		White (%)	African American (%)	Native American (%)	Asian (%)	Native Hawaiian or other Pacific Islander (%)	Some Other Race (%)	Two or more Races (%)	Hispanic or Latino Origin of any Race (%)
Texas	21,912,164	73.9	11.0	0.4	3.2	0.1	9.7	1.7	34.9
Dallas County	2,291,071	59.1	20.3	0.4	4.3	0.1	13.4	2.4	35.6
Tarrant County	1,595,072	68.0	13.4	0.5	4.2	0.2	11.6	2.1	24.1
Collin County	655,994	77.9	6.7	0.4	9.8	0	3.3	1.9	12.8

Sources: U.S. Census Bureau 2004 and BEA 2004

4.10.1.2 Income and Employment

As shown in Table 4-5, in 2004 Dallas County had a per capita personal income (PCPI) of $38,606. This PCPI ranked 6th in the state and was 126 percent of the state average ($30,732) and 117 percent of the National average ($33,050). The 2004 PCPI reflected an increase of 4.8 percent from 2003. The 2003-2004 state change was 4.3 percent and the National change was 5.0 percent. In 1994, the PCPI of Dallas County was $25,553 and ranked 9th in the state. The 1994-2004 average annual growth rate of PCPI was 4.2 percent. The average annual growth rate for the state was 4.3 percent and for the Nation was 4.1 percent (BEA 2004). PCPI data for Tarrant and Collin counties for 2004 were not available.

Table 4-5. Per Capita Personal Income (PCPI)

	Per Capita Personal Income (PCPI) 2004	State Rank	Percent State Average	Percent National Average	Average Annual Growth Rate 1994-2004 (%)
Nation (Average)	$33,050	NA	NA	100	4.1
Texas (Average)	$30,732	29	100	93	4.3
Dallas County	$38,606	6	126	117	4.2

NA=Not Applicable
Source: BEA 2004

Total personal income (TPI) includes net earnings by place of residence; dividends, interest, and rent; and personal current transfer receipts received by the residents within the ROI. In 2004, the TPI of the 3-county area was nearly $167 billion. The TPI for these three counties ranked in the top six counties of the state. The 2004 TPI reflected an increase of over 5 percent from 2003. The 1994-2004 average annual growth rate of TPI was 5.6 percent for Dallas County and over 10 percent for Collin County. The average annual growth rate for the state was 6.3 percent and for the Nation was 5.2 percent (Table 4-6) (BEA 2004).

Table 4-6. Total Personal Income

Geographic Region	Total Personal Income		2004 State Rank	Percent State Total	Average Annual Growth Rate 1994-2004 (%)
	1994	2004			
Texas	$374,790,691,000	$690,587,968,000	NA	100	6.3
Dallas County	$51,089,360,000	$88,450,084,000	2	12.8	5.6
Tarrant County	$28,056,736,000	$51,951,087,000	3	7.5	6.4
Collin County	$9,909,936,000	$26,442,157,000	6	3.8	10.3

NA=Not Applicable
Source: BEA 2004

The total number of jobs in the ROI was over 3 million for 2004 (Table 4-7). The number of jobs is down slightly from the number of jobs in 2001 in Dallas County, but up substantially in Collin County. The largest employer classification was retail trade (172,469 jobs), followed by government and government enterprises (163,506 jobs), and professional and technical services (152,253 jobs) (BEA 2004). The unemployment rate is highest in Dallas County and lowest in Collin County, but all three counties were below the unemployment rate for the state of Texas and the Nation in 2000. However, Dallas County experienced an increase in the unemployment rate (9.3 percent) that was more than doubled from 2000 to 2004, which surpassed the unemployment rate of the state (U.S. Census Bureau 2004).

Table 4-7. Total Number of Jobs and Employment

Geographic Area	Total Number of Jobs			Unemployment Rate	
	2001	2004	% Change	2000 (%)	2004 (%)
Texas	12,356,260	12,652,267	2.34	6.1	8.1
Dallas County	1,881,500	1,801,352	- 4.26	3.8	9.3
Tarrant County	897,896	911,720	2.52	3.2	5.6
Collin County	270,423	315,678	14.34	2.2	4.6

Source: U.S. Census Bureau 2004 and BEA 2004

In 2000, the percentage of all people in poverty in the ROI (Dallas, Tarrant, and Collin counties) averaged 9.6 percent and 15.4 percent for the State of Texas (Table 4-8). This percentage is less than the percentage of people below the poverty level for the State of Texas (15.4 percent) and the U.S. (12.4 percent); however, the percentage of people within Dallas County (13.4 percent) who live in poverty are above the National rate. Median household income for the three counties within the ROI range from $43,444 in Dallas County to $70,835 in Collin County. All three counties reported median household incomes above that of the State of Texas ($36,043) and the U.S. ($41,994) (U.S. Census Bureau 2000). The median household income in Collin County is nearly double that of the State of Texas.

Table 4-8. 2000 Poverty and Median Income by County

Location	Number in Poverty of All Ages	Percentage in Poverty	Median Income
Nation	33,899,812	12.4	$41,994
Texas	3,117,609	15.4	$36,043
Dallas County	293,267	13.4	$43,444
Tarrant County	150,488	10.6	$46,179
Collin County	23,784	4.9	$70,835

Source: U.S. Census Bureau 2004

4.10.1.3 Housing

The total number of housing units in the ROI was over 1.6 million in 2004 (Table 4-9), of which over 94 percent were occupied. The majority of these (54 percent) were owner occupied. Comparatively, the owner occupied houses for the state was estimated at 57 percent of the occupied houses (U.S. Census Bureau 2004).

Table 4-9. Housing Units

Location	Total Housing Units	Status		
		Occupied		Vacant
		Owned	Rented	
Texas	8,157,575	4,716,959	2,676,395	764,221
Dallas County	854,119	424,847	382,774	46,498
Tarrant County	565,830	324,653	209,211	31,966
Collin County	194,892	124,916	57,054	12,922

Source: U.S. Census Bureau 2004

4.10.1.4 Environmental Justice

EO 12898 (*Environmental Justice*) requires all Federal agencies to identify and address disproportionately high and adverse effect of their programs, policies, and activities on minority and low-income populations. As indicated previously, although the majority of the population in the ROI claims to be Caucasians, about 24 percent claim Hispanic origin and about 13 percent claim to be African American. In addition, approximately 13 percent of the ROI population is considered to live below the poverty level. Consequently, there is a potential for the BRAC actions to encounter environmental justice issues within the ROI. However, there are no private residential areas or businesses located within or near either site, since the sites are located on a military installation.

4.10.1.5 Protection of Children

EO 13045 (*Protection of Children*) requires each Federal agency "to identify and assess environmental health risks and safety risks that may disproportionately affect children"; and "ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks." In the ROI, about 9 percent of the population is 5 years old or less and 31 percent are younger than 18 years (U.S. Census Bureau 2000). There are no residential areas on the installation; thus, no health or safety effects to children are anticipated.

4.10.2 Environmental Consequences

4.10.2.1 Preferred Alternative

The proposed establishment of the AFRC would result in the net gain of about 50 full-time military and civilian personnel. To assess the impacts of the Proposed Action, the Army's Economic Impact Forecast System (EIFS) was used to model the effects to employment, income and population. The results are presented in Appendix D and summarized below.

The EIFS analyses indicated that the Proposed Action would produce no major socioeconomic effects in the ROI. Income and employment would be expected to see a decrease of less than 1 percent, although business sales volumes would be expected to see a slight increase. As indicated above, there is more than adequate housing available within the ROI.

4.10.2.2 No Action Alternative

Under the No Action Alternative, socioeconomic conditions would remain status quo.

4.11 TRANSPORTATION

4.11.1 Affected Environment

Numerous modes of transportation are available to serve the Seagoville USARC including air, rail and highway access. The Dallas Love Field Airport is located approximately 20 miles to the northwest. The Dallas Love Field Airport provides commercial and general aviation services. The Southern Pacific Railroad is located along the complex's northern border.

The Seagoville USARC is served by many state and local roads (Figure 4-6). U.S. Highway 175 is located approximately 0.6 mile northeast of the complex and is a main thoroughfare between Seagoville and Dallas. Interstate 20 (I-20) is located approximately 4 miles northwest of the Seagoville USARC via U.S. Highway 175; I-20 is a major east-west thoroughfare between Dallas and Fort Worth. West Simonds Road serves as the main entrance to the complex. According to 2004 traffic maps, an average of 5,530 vehicles utilize U.S. Highway 175 near the intersection of West Simonds Road in a 24-hour period (Texas Department of Transportation 2004). The Seagoville USARC has a limited number of paved and gravel roads that service the installation. Paved roads are generally limited to the cantonment area. The training areas are accessed via gravel roads.

4.11.2 Environmental Consequences

4.11.2.1 Preferred Alternative

Construction of the AFRC would have no effect on regional rail or air service. Vehicle traffic on post would be increased during the construction period, primarily on West Simonds Road and U.S. Highway 175. Vehicle traffic off the installation would also increase along the major arteries, particularly the Belt Line and I-20, as construction crews and equipment commute to and from the construction site. Most equipment would be left on-site to alleviate on- and off-installation traffic.

Operation of the AFRC would also create temporary and minor increases to the installation's vehicle traffic. Congestion would occur primarily along West Simonds Road, and U.S. Highway 175, which are essentially the only routes into the Seagoville USARC. As mentioned previously, up to 50 additional vehicles would be expected to access Seagoville USARC on a daily basis as a result of the implementation of the Preferred Alternative. This relatively low number of vehicles represents less than a 1 percent addition to the traffic volume in this area. Therefore, construction and operation of the AFRC would result in minor adverse impacts to the traffic on or off the Seagoville USARC.

4.11.2.2 No Action Alternative

Under the No Action Alternative, there would be no effect to vehicle traffic on or off-post. Air and rail service would be maintained at status quo.

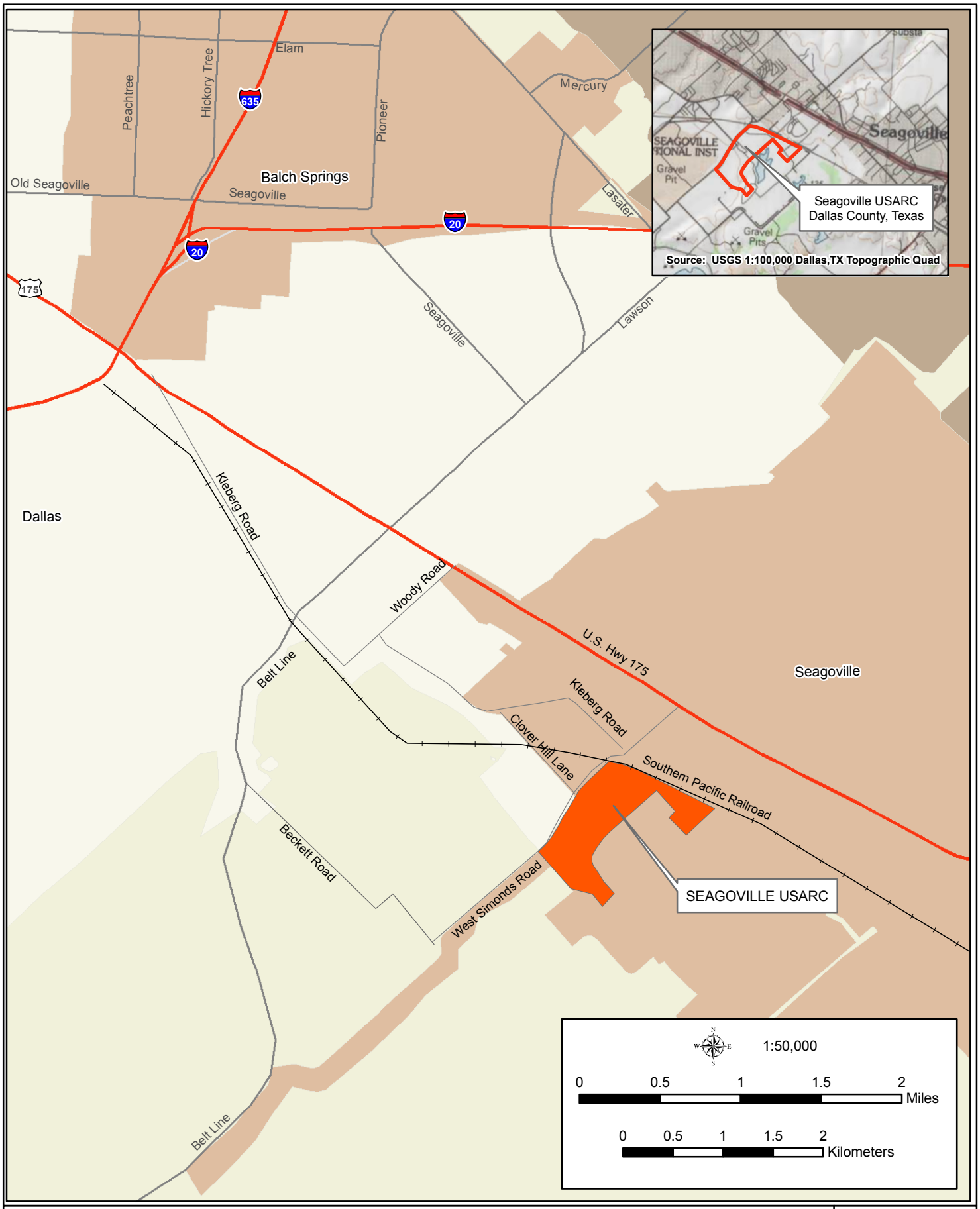

Figure 4-6: Transportation Routes near Seagoville USARC

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4.12 UTILITIES

4.12.1 Affected Environment

4.12.1.1 Potable Water Supply

The Seagoville USARC obtains its potable water supply from the City of Seagoville. The city purchases all their potable water from the City of Dallas. Currently, only about 33 percent of the total available capacity is being purchased. In addition, the city is in the process of building a second water tower in the southeastern part of town, which would double their existing capacity (Hitt 2006).

4.12.1.2 Wastewater System

The complex discharges wastewater into the City of Seagoville's sewer system. The city's wastewater system capacity is currently undergoing a major upgrade project. The upgrade would include a new wastewater force main to the City of Mesquite, where it will be treated by the Mesquite wastewater treatment plant. The upgrades are expected to be completed by September 2007 and would accommodate the anticipated future population of approximately 27,000 (Hitt 2006).

4.12.1.3 Stormwater System

The Seagoville USARC does not currently possess an Industrial Stormwater Permit since there are no industrial discharges that are exposed to stormwater (Wheeler 2006). Stormwater from parking lots and other open fields drain into open ditches and then to area creeks and channels.

4.12.2 Consequences

4.12.2.1 Preferred Alternative

Construction of the proposed AFRC facility at the Seagoville USARC would have temporary and insignificant effects on the installation's potable water supply, wastewater treatment system and stormwater discharges. Construction crews would bring water on-site for their personnel, and portable latrines would collect sanitary waste. Since the site is greater than 1 acre, a TPDES Stormwater Discharge Permit would be required prior to construction. This permit would require that a SWPPP and Notice of Intent be prepared and filed with the EPA through the TCEQ. The SWPPP would identify BMPs that are required to be implemented to control stormwater erosion and runoff from the site and sedimentation into downstream areas. Upon completion of the construction activities, all disturbed areas that are not going to be landscaped and routinely maintained should be reseeded with native vegetation, in compliance with Section 7(c)(1) of the ESA and the installation's INRMP.

Operation of the AFRC would result in minor increases in demand on the City of Seagoville's water supply and wastewater treatment systems. However, as indicated above, both of these systems have sufficient capacity to accommodate these additional demands as well as other anticipated growth in the area. The AFRC OMS would be designed to ensure that oil/water separators are above-ground, three-stage, fiberglass tanks, or similar design to ensure that stormwater from the facility is contained. Consequently, an industrial stormwater discharge permit is not expected to be required.

4.12.2.2 No Action Alternative

Under the No Action Alternative, no construction of the AFRC facility would occur; thus, no effects would occur to the installation's stormwater system or existing discharges. Furthermore, no additional demands, temporary or long-term, on Seagoville USARC's water supply or wastewater treatment systems would occur under this alternative.

4.13 HAZARDOUS AND TOXIC SUBSTANCES

4.13.1 Affected Environment

4.13.1.1 Uses of Hazardous Materials

Hazardous materials such as petroleum, oil, lubricants (POL), and chemicals associated with the operation of vehicle maintenance and industrial shops are generated at the Seagoville USARC.

4.13.1.2 Storage and Handling Areas

There are no treatment, storage, or disposal facilities on the installation. An off-post Defense Reutilization and Marketing Office (DRMO) organizes off-site disposal of waste by outside contractors.

4.13.1.3 Hazardous Waste Disposal

Solid waste is removed to an off-base disposal site operated by the City of Seagoville.

4.13.1.4 Site Contamination and Cleanup

A search was conducted on the EPA's Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS). CERCLIS contains information on hazardous waste sites, potential hazardous waste sites, and remedial activities, including sites that are on the National Priorities List (NPL) or being considered for the NPL.

Seagoville USARC does not have a NPL site. However, the site was historically a prison farm, and POL, pesticide, or herbicide might have been used at or near the proposed building sites.

4.13.1.5 Special Hazards

There are no known special hazards associated with the proposed construction sites.

4.13.2 Environmental Consequences

4.13.2.1 Preferred Alternative

The potential exists for POL storage at the temporary staging areas to maintain and refuel construction equipment; however, these activities would include primary and secondary containment measures. Clean-up materials (e.g., oil mops) would also be maintained at the site to allow immediate action in case an accidental spill occurs. Drip pans would be provided for stationary equipment to capture any POL accidentally spilled during maintenance activities or leaks from the equipment. The AFRC OMS would recycle parts cleaner solution. Hazardous materials would be disposed of through the AFRC DRMO. No USTs or ASTs would be required during construction or in implementation of the new facilities.

In addition, a Spill Prevention, Containment and Countermeasures Plan (SPCCP) would be in place prior to the start of construction and all personnel would be briefed on the implementation and responsibilities of this plan; therefore, the Preferred Action Alternative would not result in a significant hazard to the public or environment regarding the transport, use, or disposal of hazardous materials.

4.13.2.2 No Action Alternative

The potential release of hazardous materials during construction would not occur under the No Action Alternative because no construction would occur.

4.14 CUMULATIVE EFFECTS SUMMARY

This section of the EA addresses the potential cumulative impacts associated with the implementation of the alternatives and other projects/programs that are planned for the region. The CEQ defines cumulative impacts as the incremental impact of multiple present and future actions with individually minor but collectively significant effects. Cumulative impacts can be concisely defined as the total effect of multiple land uses and developments, including their interrelationships, on the environment.

Seagoville USARC has been a military installation since 1973 and has continuously been developed as DoD missions, organizations, needs and strategies have evolved. Prior to that, the site was used as a Federal penitentiary. As such, the entire site has been developed or disturbed over the past several decades.

The proposed construction and operation of the AFRC would increase the developed areas on Seagoville USARC by 10 acres, if the Preferred Alternative site is selected. Operation of the AFRC would not result in cumulative impacts to training ranges or air space, ambient noise levels, water quality or supply, or air quality. Transportation routes and demands would be increased, primarily on the weekends when most or all of the Reserve Units would arrive.

No other development is planned or proposed for the Seagoville USARC in the reasonably foreseeable future. As the natural restoration plan continues and matures, the native vegetation and wildlife communities would expand. The aesthetic quality of the complex, particularly the southern portion would also be enhanced. Thus, the proposed action would not result in significant cumulative impacts to the human and natural environment within and surrounding the Seagoville USARC.

4.15 ENVIRONMENTAL PROTECTION MEASURES

This section of the EA describes those measures that could be implemented to reduce or eliminate potential adverse impacts to the human and natural environment. The environmental protection measures are presented for each resource category that could be potentially affected. These proposed measures would be coordinated through the appropriate land managers and administrators, and regulatory agencies.

4.15.1 Vegetation and Wildlife

Native seeds or plants, which are compatible with the enhancement of protected species, would be used to the extent feasible, as required under Section 7(c)(1) of the ESA and the 90th RRC's INRMP, to reseed temporarily disturbed areas once construction is complete.

The Migratory Bird Treaty Act (MBTA) requires that private contractors obtain a construction permit if the construction activity is scheduled during the nesting season. The nesting season for this area is typically March 15 through September 15. Active nests would need to be identified and avoided to the extent practicable. Another environmental protection measure that would be considered is to schedule all construction activities outside the nesting season.

Additional measures would include BMPs, as described previously, during construction to minimize or prevent erosion and soil loss. If straw bales are used as part of the BMPs, weed seed-free straw bales should be used to eliminate the potential of spreading invasive species.

4.15.2 Air Quality

As mentioned previously, emissions associated with construction activities would be insignificant and well below *de minimus* thresholds. Proper and routine maintenance of all vehicles and other equipment would be implemented to ensure that emissions are within the design standards of all construction equipment. Dust suppression methods would be implemented to minimize fugitive dust. Seagoville USARC will also continue to investigate methods to further reduce the installation's overall emissions.

4.15.3 Water Resources

The proposed construction activities would require a SWPPP, which would be prepared and submitted to the TCEQ and EPA, as part of the TPDES permit process. The SWPPP would identify BMPs that would be implemented before, during, and after construction.

4.15.4 Cultural Resources

If any cultural resources are uncovered during construction, the THC would be notified and all construction activities would stop until a qualified archaeologist can assess the significance of the cultural remains.

4.15.5 Hazardous and Toxic Substances

Hazardous and toxic materials/wastes in the project area during construction would likely consist of POL. If hazardous waste is generated, it would be disposed of according to Federal, state and local regulations, as well as existing Army regulations and procedures. No maintenance to construction equipment would be conducted on-site, minimizing the potential for spills or direct contact with POLs. Equipment and vehicles parked overnight, or left for lengthy periods on site, would be fitted with drip pans. On-site use of construction equipment, use of chemical products, and wastes generated during construction would comply with all Federal, state, and local regulations relating to protecting the environment from hazardous materials and containing spills. No hazardous wastes would be stored on the site. There would be a Site Specific Spill Plan that describes what actions should be taken in case of a hazardous or toxic spill.

SECTION 5.0
FINDINGS AND CONCLUSIONS

5.0 FINDINGS AND CONCLUSIONS

5.1 FINDINGS

5.1.1 Consequences of the Preferred Alternative

The proposed action would result in the permanent conversion of 9 acres of maintained grassland to hard surfaces and buildings. The conversion is consistent with the installation's land use policies and guidelines. The detention basin would be earthen and become re-vegetated. No impacts to Federal or state protected species would occur. No violations of the installation's air or water quality permits would be expected; BMPs would be implemented to ensure stormwater during and after construction is controlled and downstream sedimentation is either eliminated or is negligible. Temporary increases in noise would be expected during the construction. Transportation would be increased during and after construction. Up to 50 additional full-time employees are expected to commute to the AFRC on a daily basis. Most of the increases in traffic associated with the AFRC would occur on weekends, however. No long-term impacts relative to utilities or hazardous waste and materials would be expected from the proposed construction and operation of the AFRC.

Slight benefits to local and regional employment and personal income would be expected during the construction. Realignment of the Hanby-Hayden USARC to Seagoville USARC would provide some long-term benefits in TPI and PCPI, sales taxes, and property taxes. However, these benefits would be insignificant when compared to the Dallas-Fort Worth Metroplex. A summary of the potential effects from the Proposed Action and No Action is presented in Table 5-1.

No significant cumulative impacts are expected to result from the proposed action since no other development or construction projects are planned in the reasonably foreseeable future. Continuation of the natural restoration program would expand and enhance the wildlife populations and habitat, as well as the aesthetic values of the complex.

5.1.2 Consequences of the No Action Alternative

Under the No Action Alternative, the existing human and natural environment at Seagoville USARC would remain status quo, at least for the short term. Since the area is under DoD control and managed for military training and other missions, there is a possibility that the proposed construction sites could be developed at some point in the future.

5.2 CONCLUSIONS

Based on the information presented in the previous sections, it is concluded that the best available site for the proposed construction and operation of the AFRC is at the proposed location and that development of this site would result in insignificant adverse impacts to the area's human and natural environment. Therefore, issuance of a FNSI is warranted and no additional NEPA documentation (i.e., Environmental Impact Statement) is required.

Table 5-1. Summary Matrix of Potential Impacts

Affected Resource	No Action Alternative	Proposed Action Alternative
Land Use	No impacts to land use are expected.	Approximately 10 acres of maintained grassland would be converted to the facility, parking areas and detention basin. The facility is consistent with planned development on post.
Aesthetics	No adverse impacts are expected.	Slight degradation during construction but no significant long-term impacts would occur to the installation's visual qualities.
Air Quality	No adverse effects are anticipated.	Minor temporary effects to air quality during construction would occur. Pre-project conditions would return upon cessation of construction activities. All emissions would be below *de minimus* thresholds.
Noise	No adverse impacts are expected.	Minor temporary increases in ambient noise levels during construction. Pre-project conditions would return upon cessation of construction activities. Construction would be limited to daylight hours only. Due to the distance to other noise receptors, construction noise would be attenuated. Operation of the facility would create insignificant increase in noise over the current conditions.
Soils	No impacts to soils are expected.	Approximately 10 acres of soil would be disturbed and permanently removed from potential biological productivity.
Water Resources	No adverse impacts would occur.	No significant impact to region's water supply or water quality. No potentially jurisdictional wetlands occur on the proposed site.
Biological Resources	No impacts are expected.	About 10 acres of maintained grassland would be permanently removed. Approximately 1 acre of vegetation within the detention basin would become reestablished.
Cultural Resources	No effects are anticipated.	No impacts are expected.
Socioeconomics	No effect on the regional or local economy would be expected.	Insignificant adverse effects on traffic and public utilities during construction are anticipated. Slight beneficial impacts to the City of Seagoville once the realignment is complete.
Transportation	No adverse impacts are expected.	Slight increase in local traffic along West Simonds Road; no major congestion is expected.
Utilities	No adverse impacts are expected.	Slight increase in the demands on the City of Seagoville's public systems. More than sufficient capacity is available to meet these demands.
Hazardous Materials	No adverse impacts are expected.	No impacts are expected to occur.

SECTION 6.0
LIST OF PREPARERS

6.0 LIST OF PREPARERS

The following people were primarily responsible for preparing this Environmental Assessment.

NAME	AGENCY/ORGANIZATION	DISCIPLINE/EXPERTISE	EXPERIENCE	ROLE IN PREPARING EA
Larry Olliff	USACE Mobile/Savannah District	Environmental Studies	4 years in NEPA and 16 years in environmental studies	USACE Technical Manager
Suna Adam Knaus	GSRC	Forestry/Wildlife	16 years natural resources	EA Review
Chris Ingram	GSRC	Biology/Ecology	30 years NEPA and natural resources	Project Manager, DOPAA, Physical Resources
Eric Webb, Ph.D.	GSRC	Ecology/Wetlands	16 years natural resources and NEPA Studies	EA Technical Review
Maria Bernard Reid	GSRC	Ecology	4 years NEPA and natural resources studies	EA Preparation; Field surveys; Biology; Hazardous Materials
Carl Welch	GSRC	Archaeology	7 years Professional Archaeologist/Cultural Resources	Cultural Resources
Aaron Caldwell	GSRC	Environmental Studies	5 years NEPA and natural resources	EA Preparation; Field surveys; Biological and Water Resources
Steve Kolian	GSRC	Environmental Studies	12 years environmental and marine science	Air quality
Ron Webster	Ray Clark Group, LLC	Socioeconomics/Civil Engineering	35 years NEPA studies and socioeconomic analyses	EIFS modeling and analysis

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SECTION 7.0
DISTRIBUTION LIST

7.0 DISTRIBUTION LIST

A list of the persons and agencies who received a copy of the EA is presented below.

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ATTN: Mr. Bill Martin
Texas Historical Commission
1511 Colorado Street
Austin, Texas 78701

Mr. Tony Walker
Texas Commission on Environmental Quality
2309 Gravel Drive
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Mr. Nathan Garner
Regional Director
Texas Parks and Wildlife Department, Region 3
11942 Farm Rd. 848
Tyler, Texas 75707

Mr. Tom Cloud, Field Supervisor
U.S. Fish and Wildlife Service
Arlington, Ecological Services Field Office
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Austin, TX 78701-2483

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SECTION 8.0
REFERENCES

8.0 REFERENCES

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SECTION 9.0
PERSONS CONSULTED

9.0 PERSONS CONSULTED

The following persons were consulted during the preparation of this EA.

Mr. James Wheeler, II, Chief, Environmental Division, 90th Regional Readiness Command, U.S. Army Reserve, Camp Pike, North Little Rock Arkansas

Mr. John Waters, Area Facility Operations Specialist, Environmental Division (Contractor), 90th Regional Readiness Command, U.S. Army Reserve, Seagoville, Texas

Mr. David Fiel, Environmental Division, 90th Regional Readiness Command, U.S. Army Reserve, Seagoville, Texas

Mr. Larry Lemon, Master Planner, Environmental Division, 90th Regional Readiness Command, U.S. Army Reserve, Camp Pike, North Little Rock Arkansas

Mr. Chris Kinslow, Environmental Division (Contractor), 90th Regional Readiness Command, U.S. Army Reserve, Camp Pike, North Little Rock Arkansas

Mr. Denny Wheat, City Manager, City of Seagoville, Texas

Mr. Mike Hitt, Public Works Director/Assistant City Manager, City of Seagoville, Texas

Ms. Julie Pollard, Texas Department of Transportation, Transportation Planning and Programming

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SECTION 10.0
ACRONYMS AND ABBREVIATIONS

10.0 ACRONYMS AND ABBREVIATIONS

ac-ft/yr	acre-feet per year
ACHP	Advisory Council on Historic Preservation
AFRC	Armed Forces Reserve Center
AR	Army Regulations
ASTs	above ground storage tanks
AT/FP	Anti-Terrorism/Force Protection
BEA	Bureau of Economic Analysis
BMP	best management practices
BRAC Commission	Defense Base Closure and Realignment Commission
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CZMA	Coastal Zone Management Act
dBA	decibels A-weighted scale
DNL	Day-Night Level
DoD	Department of Defense
EA	Environmental Assessment
EBS	Environmental Baseline Survey
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FNSI	Finding of No Significant Impact
FY	Fiscal Year
GIS	Geographic Information System
HAP	Hazardous Air Pollutant
HVAC	heating, ventilation, and air conditioning
IAP	Installation Action Plan
ICRMP	Integrated Cultural Resources Management Plan
IGPBS	Integrated Global Presence and Basing Strategy
INRMP	Integrated Natural Resources Management Plan
IRP	Installation Restoration Plan
MBTA	Migratory Bird Treaty Act
MSA	Metropolitan Statistical Area
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act of 1969
NRCS	Natural Resource Conservation Service
OSHA	Occupational Safety and Health Administration
PCPI	per capita personal income
POL	petroleum, oils, and lubricants
ROI	region of influence
SF	square feet
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SWF	Fort Worth District (of the USACE)
SWD	Southwest Division (of the USACE)
SWPPP	Stormwater Pollution Prevention Plan
TCEQ	Texas Commission on Environmental Quality
THC	Texas Historical Commission

TPDES	Texas Pollution Discharge Elimination System
TPWD	Texas Parks and Wildlife Department
TWDB	Texas Water Development Board
TPI	total personal income
TPY	tons per year
U.S.	United States
USACE	U.S. Army Corps of Engineers
USARC	U.S. Army Reserve Center
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service

APPENDIX A
AIR EMISSIONS CALCULATIONS

Appendix A. Calculation of Pollutant Emissions from Construction Equipment at Seagoville, Texas

Construction Emissions:	Calculation Assumptions				
Construction Equipment	Days/yr	Hrs/ day	Horse power	Type of Fuel	Total hp-hr
Dump truck	30	12	340	Diesel	122,400
Excavator	30	12	463	Diesel	166,680
Bull dozer	30	12	324	Diesel	116,640
724J Highlift front end loader	30	12	215	Diesel	77,400
Crane	180	12	275	Diesel	594,000
Back hoe	180	12	92	Gasoline	198,720

Construction Emissions:	Calculation Results for NOx				
Construction Equipment	Emission Factor (1)	Unit	Total hp-hr	Total Emmissions	Total in tns/yr
Dump truck	0.031	lb/hp-hr	122,400	3,794	1.90
Excavator	0.031	lb/hp-hr	166,680	5,167	2.58
Bull dozer	0.031	lb/hp-hr	116,640	3,616	1.81
724J Highlift front end loader	0.031	lb/hp-hr	77,400	2,399	1.20
Crane	0.031	lb/hp-hr	594,000	18,414	9.21
Back hoe	0.011	lb/hp-hr	198,720	2,186	1.09
Total Emissions					**17.79**

Construction Emissions:	Calculation Results for CO				
Construction Equipment	Emission Factor (1)	Unit	Total hp-hr	Total Emmissions	Total in tns/yr
Dump truck	0.00668	lb/hp-hr	122,400	818	0.41
Excavator	0.00668	lb/hp-hr	166,680	1,113	0.56
Bull dozer	0.00668	lb/hp-hr	116,640	779	0.39
724J Highlift front end loader	0.00668	lb/hp-hr	77,400	517	0.26
Crane	0.00068	lb/hp-hr	594,000	404	0.20
Back hoe	0.439	lb/hp-hr	198,720	87,238	43.62
Total Emissions					**45.43**

Construction Emissions:	Calculation Results for SOx				
Construction Equipment	Emission Factor (1)	Unit	Total hp-hr	Total Emmissions	Total in tns/yr
Dump truck	0.0205	lb/hp-hr	122,400	2,509	1.25
Excavator	0.0205	lb/hp-hr	166,680	3,417	1.71
Bull dozer	0.0205	lb/hp-hr	116,640	2,391	1.20
724J Highlift front end loader	0.0205	lb/hp-hr	77,400	1,587	0.79
Crane	0.0205	lb/hp-hr	594,000	12,177	6.09
Back hoe	0.000591	lb/hp-hr	198,720	117	0.06
Total Emissions					**11.10**

Construction Emissions:	Calculation Results for PM-10				
Construction Equipment	Emission Factor (1)	Unit	Total hp-hr	Total Emmissions	Total in tns/yr
Dump truck	0.022	lb/hp-hr	122,400	2,693	1.35
Excavator	0.022	lb/hp-hr	166,680	3,667	1.83
Bull dozer	0.022	lb/hp-hr	116,640	2,566	1.28
724J Highlift front end loader	0.022	lb/hp-hr	77,400	1,703	0.85
Crane	0.022	lb/hp-hr	594,000	13,068	6.53
Back hoe	0.000721	lb/hp-hr	198,720	143	0.07
Total Emissions					**11.92**

Construction Emissions:	Calculation Results for VOCs				
Construction Equipment	Emission Factor (1)	Unit	Total hp-hr	Total Emmissions	Total in tns/yr
Dump truck	0.0025141	lb/hp-hr	122,400	308	0.15
Excavator	0.0025141	lb/hp-hr	166,680	419	0.21
Bull dozer	0.0025141	lb/hp-hr	116,640	293	0.15
724J Highlift front end loader	0.0025141	lb/hp-hr	77,400	195	0.10
Crane	0.0025141	lb/hp-hr	594,000	1,493	0.75
Back hoe	0.021591	lb/hp-hr	198,720	4,291	2.15
Total Emissions					**3.50**

1. Source: AP 42, Fifth Edition, Volume 1 Chapter 3: Stationary Internal Combustion Sources, 1996

APPENDIX B
CORRESPONDENCE

DEPARTMENT OF THE ARMY
HEADQUARTERS, UNITED STATES ARMY 90TH REGIONAL READINESS COMMAND
CAPTAIN MAURICE L. BRITT UNITED STATES ARMY RESERVE CENTER
8000 CAMP ROBINSON ROAD
NORTH LITTLE ROCK, ARKANSAS 72118-2205

September 11, 2006

Reply to Attention of Environmental Division

Mr. F. Lawrence Oaks
State Historic Preservation Officer
ATTN: Mr. Bill Martin
Texas Historical Commission
1511 Colorado Street
Austin, Texas 78701

Dear Mr. Oaks:

The Defense Base Closure and Realignment Act of 1990 (Public Law 101-510), as amended, implements recommendations made during the fall of 2005, by the Defense Base Closure and Realignment Commission (BRAC Commission). One of the proposed actions is to close the Hanby-Hayden U.S. Army Reserve Center (USARC) in Mesquite and realign the units to a new Armed Forces Reserve Center (AFRC) in Seagoville.

A new facility will be required to provide classroom training and administrative support for the five Reserve units assigned to the new AFRC. The design standards indicate that approximately 100,000 square feet (SF) of offices and classrooms are required to accommodate the 400- to 500 member AFRC operations. The new AFRC would also include a 7,300-SF vehicle maintenance shop. Parking facilities and storage areas will also be incorporated into the design. The total amount of disturbed area is expected to be less than 10 acres. No additional weapons systems or demands on training ranges are required for the proposed action.

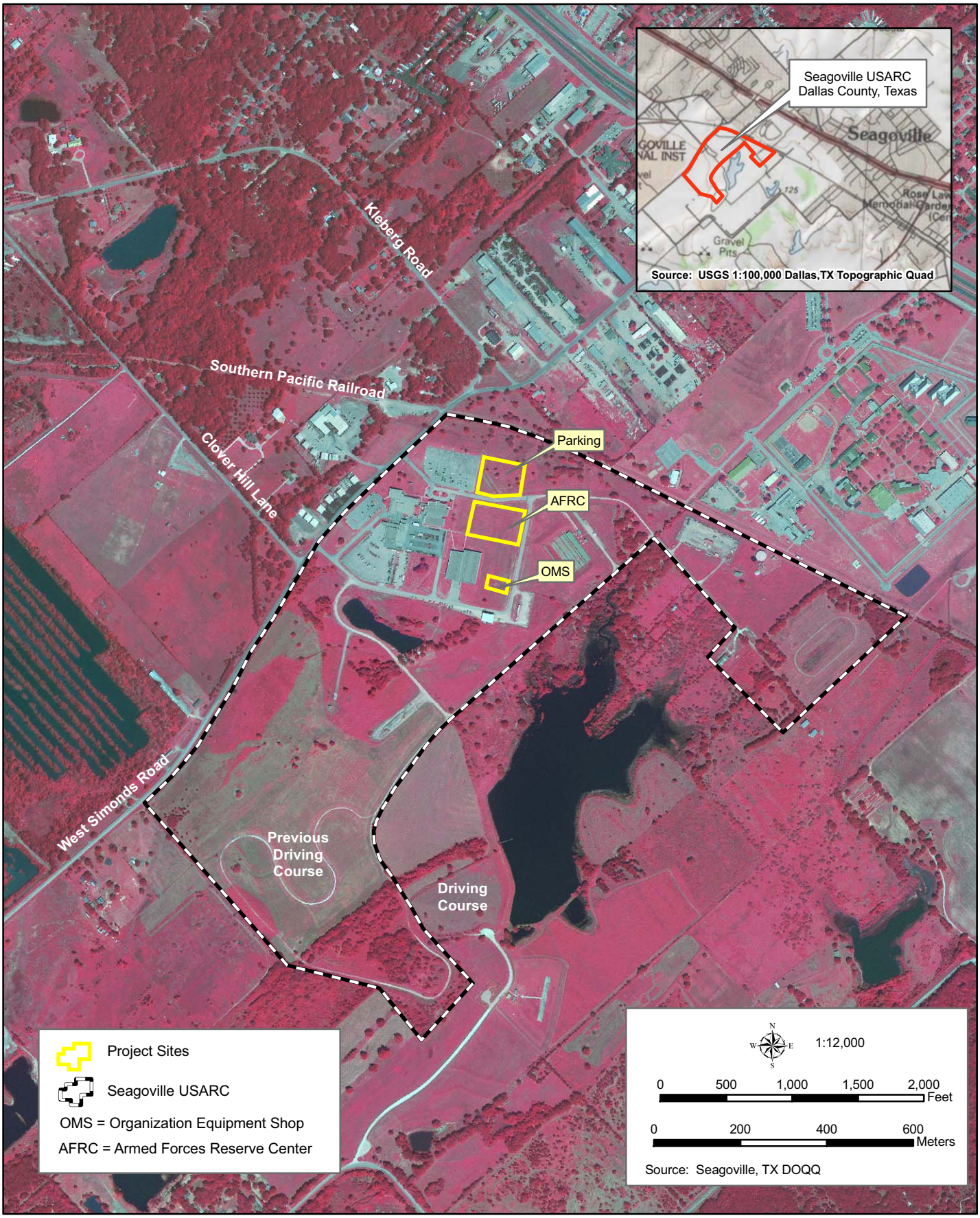
Only one site is considered suitable for the construction of the AFRC at the Seagoville Complex, due to the limited size of the installation, past development on post (see Enclosure A), and to ensure compliance with the installation's Integrated Cultural Resources Management Plan (ICRMP). The U.S. Army Corps of Engineers (USACE), Mobile District is in the process of preparing an Environmental Assessment (EA), which will assess the potential impacts of constructing and operating the new AFRC at this site.

Previous archaeological and historic building surveys, which were used in developing the ICRMP, have revealed that there are no cultural resources present on the installation which could be affected by the proposed action. Therefore, we request your concurrence of no effect in accordance with 36 CFR 800. We will send you a copy of the EA when it is released to the public, which is currently anticipated to occur in late October. If you have any questions, please do not hesitate to call me at (501)771-7992.

Sincerely,

James Wheeler, II
Chief, Environmental Division
90th Regional Readiness Command

Enclosure



Seagoville Enclosure A

GSRC

July 2006

DEPARTMENT OF THE ARMY
HEADQUARTERS, UNITED STATES ARMY 90TH REGIONAL READINESS COMMAND
CAPTAIN MAURICE L. BRITT UNITED STATES ARMY RESERVE CENTER
8000 CAMP ROBINSON ROAD
NORTH LITTLE ROCK, ARKANSAS 72118-2205

September 11, 2006

Reply to Attention of Environmental Division

Mr. Nathan Garner
Regional Director
Texas Parks and Wildlife Department, Region 3
11942 Farm Rd. 848
Tyler, Texas 75707

Dear Mr. Garner:

The Defense Base Closure and Realignment Act of 1990 (Public Law 101-510), as amended, implements recommendations made during the fall of 2005, by the Defense Base Closure and Realignment Commission (BRAC Commission). One of the proposed actions is to close the Hanby-Hayden U.S. Army Reserve Center (USARC) in Mesquite and realign the units to a new Armed Forces Reserve Center (AFRC) in Seagoville, Dallas County, Texas.

A new facility will be required to provide classroom training and administrative support for the five Reserve units assigned to the new AFRC. The design standards indicate that approximately 100,000 square feet (SF) of offices and classrooms are required to accommodate the 400- to 500 member AFRC operations. The new AFRC would also include a 7,300-SF vehicle maintenance shop. Parking facilities and storage areas will also be incorporated into the design. The total amount of disturbed area is expected to be less than 10 acres. No additional weapons systems or demands on training ranges are required for the proposed action.

Only one site is considered suitable for the construction of the AFRC at the Seagoville Complex, due to the limited size of the installation, past development on post (see Enclosure A), and to ensure compliance with the installation's Integrated Natural Resources Management Plan. The U.S. Army Corps of Engineers (USACE), Mobile District is in the process of preparing an Environmental Assessment (EA), which will assess the potential impacts of constructing and operating the new AFRC at this site.

Surveys have been performed at the proposed construction sites; all sites have been disturbed by previous military construction. Bermudagrass (*Cynodon dactlyon*), goosefoot (*Chenopodium* sp.) and other common grass species are the dominant vegetation species of the proposed building sites. Several pecan trees are scattered throughout the grasslands in the proposed parking area. Other invasive species were also common in this area, including Johnsongrass (*Sorghum halpense*), crabgrass (*Digitaria ciliaris*), hairy bedstraw (*Galium pilosum*) and barnyard grass (*Echinochloa crus-pavonis*). Photographs of the sites are included as Enclosure B.

No Federal or state-protected species were observed and the surveys indicated that the sites do not provide suitable habitat for these species. Previous surveys which have been coordinated through your office and documented in the installation's Integrated Natural Resources Management Plan have reached these same conclusions. Although the state-protected Texas horned lizard (*Phrynosoma cornutum*) could possibly occur on the Seagoville Reserve Complex, the density of grasses and other herbaceous plants would preclude these sites of being considered quality habitat. Species that have the potential to occur in Dallas County and were taken into consideration during the surveys are listed below.

Common Name	Scientific Name	Federal Status	State Status
Arctic Peregrine Falcon	*Falco peregrinus tundrius*	--	T
Bald Eagle	*Haliaeetus leucocephalus*	T	T
Interior Least Tern	*Sterna antillarum athalassos*	E	E
Piping Plover	*Charadrius melodus*	T	--
Whooping Crane	*Grus americana*	E	E
Wood Stork	*Mycteria americana*	E	T
Texas Horned Lizard	*Phrynosoma cornutum*	--	T
Timber Rattlesnake	*Crotalus horridus*	--	T

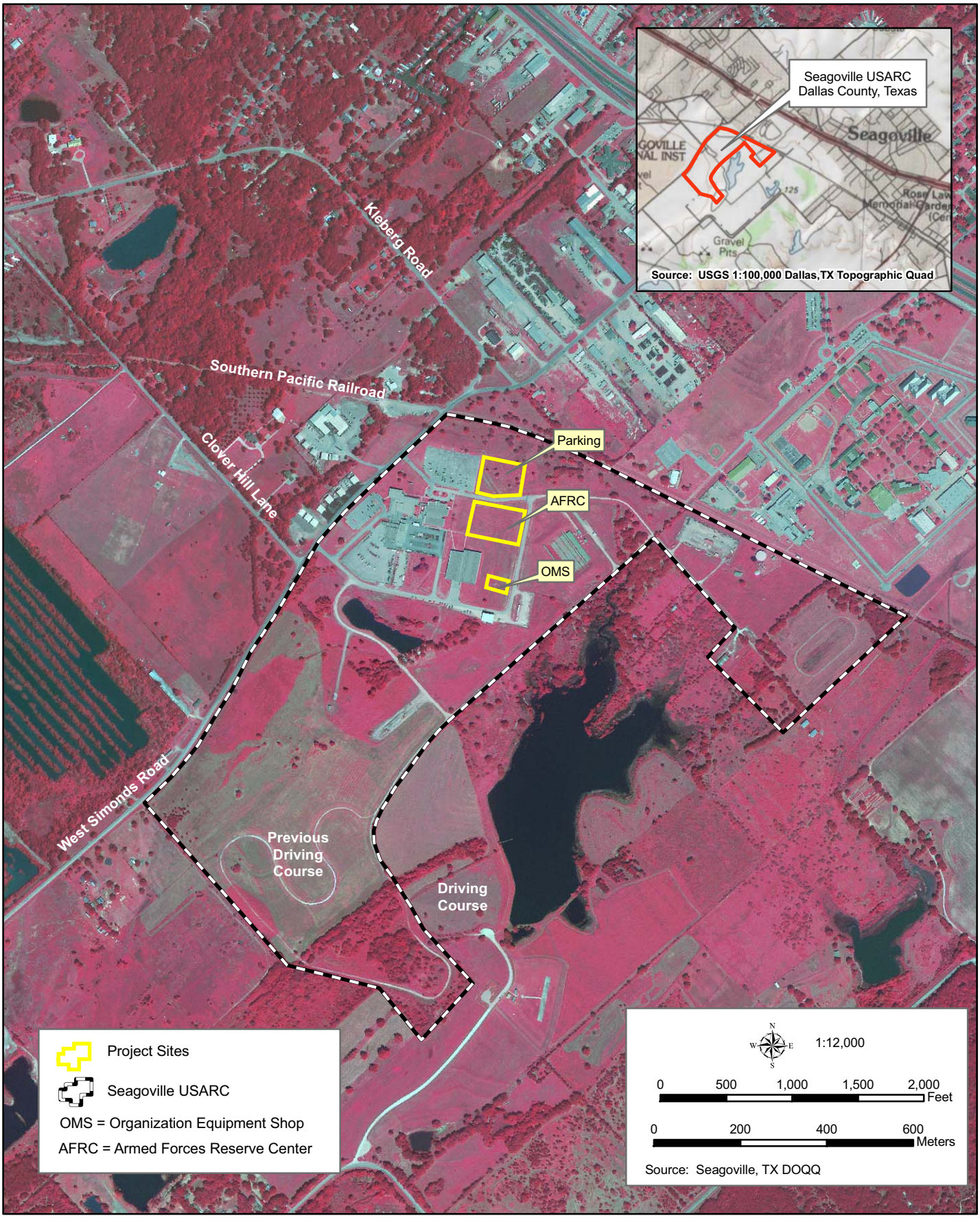
Based on these surveys and the knowledge that the 90th Regional Readiness Command has regarding its protected species populations, we have determined that the proposed action would have no effect on any Federal or state-listed species. Because of the limited size and low quality of the habitat, insignificant impacts to other wildlife populations would occur as a result of the construction of the ARC.

We respectfully ask that you provide written concurrence with our determination. We would appreciate your prompt attention and response. If you have any questions, please do not hesitate to call me at (501)771-7992.

Sincerely,

James Wheeler, II
Chief, Environmental Division
90th Regional Readiness Command

Enclosures



Seagoville Enclosure A

GSRC

July 2006

Photograph 1. AFRC Site Looking Northwest

Photograph 2. Parking Area Looking East

Enclosure B. Photographs of Proposed Sites

DEPARTMENT OF THE ARMY
HEADQUARTERS, UNITED STATES ARMY 90TH REGIONAL READINESS COMMAND
CAPTAIN MAURICE L. BRITT UNITED STATES ARMY RESERVE CENTER
8000 CAMP ROBINSON ROAD
NORTH LITTLE ROCK, ARKANSAS 72118-2205

September 11, 2006

Reply to Attention of Environmental Division

Mr. Tom Cloud, Field Supervisor
U.S. Fish and Wildlife Service
Arlington, Texas Ecological Services Field Office
711 Stadium Drive, Suite 252
Arlington, Texas 76011

Dear Mr. Cloud:

The Defense Base Closure and Realignment Act of 1990 (Public Law 101-510), as amended, implements recommendations made during the fall of 2005, by the Defense Base Closure and Realignment Commission (BRAC Commission). One of the proposed actions is to close the Hanby-Hayden U.S. Army Reserve Center (USARC) in Mesquite and realign the units to a new Armed Forces Reserve Center (AFRC) in Seagoville, Dallas County, Texas.

A new facility will be required to provide classroom training and administrative support for the five Reserve units assigned to the new AFRC. The design standards indicate that approximately 100,000 square feet (SF) of offices and classrooms are required to accommodate the 400- to 500 member AFRC operations. The new AFRC would also include a 7,300-SF vehicle maintenance shop. Parking facilities and storage areas will also be incorporated into the design. The total amount of disturbed area is expected to be less than 10 acres. No additional weapons systems or demands on training ranges are required for the proposed action.

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Surveys have been performed at the proposed construction sites; all sites have been disturbed by previous military construction. Bermudagrass (*Cynodon dactlyon*), goosefoot (*Chenopodium* sp.) and other common grass species are the dominant vegetation species of the proposed building sites. Several pecan trees are scattered throughout the grasslands in the proposed parking area. Other invasive species were also common in this area, including Johnsongrass (*Sorghum halpense*), crabgrass (*Digitaria ciliaris*), hairy bedstraw (*Galium pilosum*) and barnyard grass (*Echinochloa crus-pavonis*). Photographs of the sites are included as Enclosure B.

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Bald Eagle	*Haliaeetus leucocephalus*	T	T
Interior Least Tern	*Sterna antillarum athalassos*	E	E
Piping Plover	*Charadrius melodus*	T	--
Whooping Crane	*Grus americana*	E	E
Wood Stork	*Mycteria americana*	E	T
Texas Horned Lizard	*Phrynosoma cornutum*	--	T
Timber Rattlesnake	*Crotalus horridus*	--	T

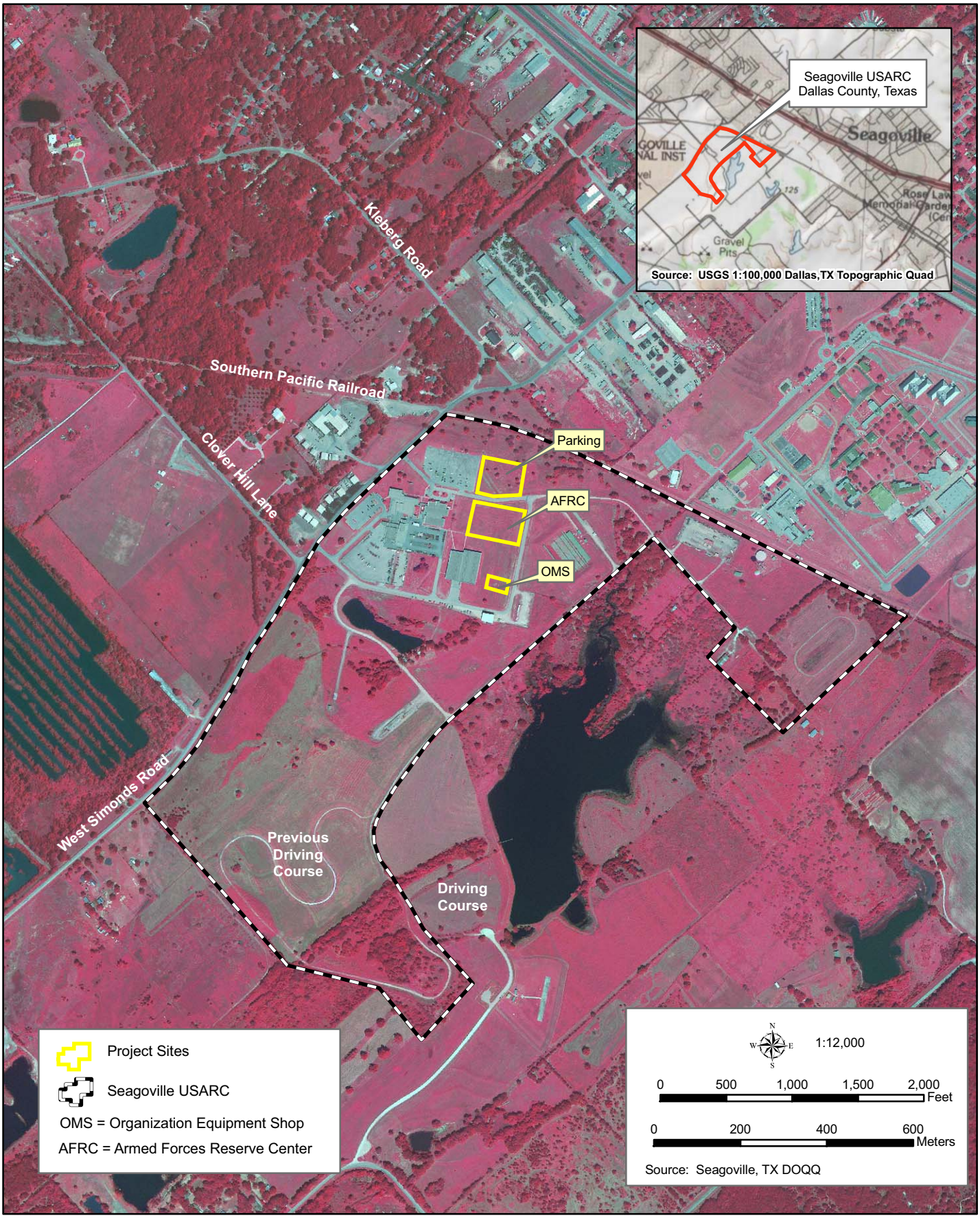
Based on these surveys and the knowledge that the 90th Regional Readiness Command has regarding its protected species populations, we have determined that the proposed action would have no effect on any Federal or state-listed species. Because of the limited size and low quality of the habitat, insignificant impacts to other wildlife populations would occur as a result of the construction of the ARC.

We respectfully ask that you provide written concurrence with our determination. We would appreciate your prompt attention and response. If you have any questions, please do not hesitate to call me at (501)771-7992.

Sincerely,

James Wheeler, II
Chief, Environmental Division
90th Regional Readiness Command

Enclosures



Seagoville Enclosure A

GSRC

July 2006

Photograph 1. AFRC Site Looking Northwest

Photograph 2. Parking Area Looking East

Enclosure B. Photographs of Proposed Sites

DEPARTMENT OF THE ARMY
HEADQUARTERS, UNITED STATES ARMY 90TH REGIONAL READINESS COMMAND
CAPTAIN MAURICE L. BRITT UNITED STATES ARMY RESERVE CENTER
8000 CAMP ROBINSON ROAD
NORTH LITTLE ROCK, ARKANSAS 72118-2205

September 11, 2006

Reply to Attention of Environmental Division

Mr. F. Lawrence Oaks
State Historic Preservation Officer
ATTN: Mr. Bill Martin
Texas Historical Commission
1511 Colorado Street
Austin, Texas 78701

Dear Mr. Oaks:

The Defense Base Closure and Realignment Act of 1990 (Public Law 101-510), as amended, implements recommendations made during the fall of 2005, by the Defense Base Closure and Realignment Commission (BRAC Commission). One of the proposed actions is to close the Hanby-Hayden U.S. Army Reserve Center (USARC) in Mesquite and realign the units to a new Armed Forces Reserve Center (AFRC) in Seagoville.

A new facility will be required to provide classroom training and administrative support for the five Reserve units assigned to the new AFRC. The design standards indicate that approximately 100,000 square feet (SF) of offices and classrooms are required to accommodate the 400- to 500 member AFRC operations. The new AFRC would also include a 7,300-SF vehicle maintenance shop. Parking facilities and storage areas will also be incorporated into the design. The total amount of disturbed area is expected to be less than 10 acres. No additional weapons systems or demands on training ranges are required for the proposed action.

Only one site is considered suitable for the construction of the AFRC at the Seagoville Complex, due to the limited size of the installation, past development on post (see Enclosure A), and to ensure compliance with the installation's Integrated Cultural Resources Management Plan (ICRMP). The U.S. Army Corps of Engineers (USACE), Mobile District is in the process of preparing an Environmental Assessment (EA), which will assess the potential impacts of constructing and operating the new AFRC at this site.

Previous archaeological and historic building surveys, which were used in developing the ICRMP, have revealed that there are no cultural resources present on the installation which could be affected by the proposed action. Therefore, we request your concurrence of no effect in accordance with 36 CFR 800. We will send you a copy of the EA when it is released to the public, which is currently anticipated to occur in late October. If you have any questions, please do not hesitate to call me at (501)771-7992.

Sincerely,

James Wheeler, II
Chief, Environmental Division
90th Regional Readiness Command

Enclosure

NO HISTORIC
PROPERTIES AFFECTED
PROJECT MAY PROCEED
By _____
for F. Lawerence Oaks
State Historic Preservation Officer
Date 9/13/06
Track# _____

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
WinSystems Center Building
711 Stadium Drive, Suite 252
Arlington, Texas 76011

21420-2006-FA-0220

September 12, 2006

Mr. James Wheeler, II
Chief, Environmental Division
Department of the Army
Headquarters, United States Army 90th Regional Command
Captain Maurice L. Britt United States Army Reserve Center
8000 Camp Robinson Road
North Little Rock, Arkansas 72118-2205

Re: Construction of a new Armed Forces Reserve Center (AFRC) in Seagoville, Texas

Dear Mr. Wheeler:

Thank you for your letter dated August 10, 2006 inquiring of any issues or concerns we may have regarding construction of a new Armed Forces Reserve Center (AFRC) in Seagoville, Texas. The new facility would provide classroom training and administrative support for five Reserve units. The Seagoville facility would include approximately 100,000 square feet of offices and classrooms and 7,300 square feet for a vehicle maintenance shop. The total amount of disturbed area for the Seagoville facility would be less than 10 acres.

Based on the information provided, the facility would be constructed on a site considered suitable for development due to the limited size of the installation, past development, and compliance with the current Integrated Natural Resources Management Plan. We concur that due to the lack of suitable habitat, it is unlikely that any federally listed threatened or endangered species would utilize the project area. Therefore, we do not have any concerns or issues regarding this proposed project at this time.

We look forward to working with you and your staff in planning natural resource management for your facility and reviewing the Environmental Assessment. Please contact Ms. Carol Hale at (817) 277-1100 if you have any questions.

Sincerely,

Tom Cloud

Thomas J. Cloud, Jr.
Field Supervisor

TEXAS PARKS & WILDLIFE

September 21, 2006

James Wheeler, II
Chief, Environmental Division
90th Regional Readiness Command
8000 Camp Robinson Rd.
N. Little Rock, AR 72118-2205

Dear Mr. Wheeler:

I have reviewed the information you sent to me concerning the construction of new training facilities at each Armed Forces Reserve Center in Grand Prairie and Seagoville, Texas. These proposed construction sites have been previously disturbed and the current vegetation consists mainly of exotics. The loss of this already degraded habitat should not be detrimental to local wildlife. I concur with the finding of no effect on any state or federal-listed species.

Sincerely,

Nathan Garner - TPWD
Regional Director, Wildlife Region 3
11942 FM 848
Tyler, Texas 75707
903-566-1626 ext 221

NPG:tmb

4200 SMITH SCHOOL ROAD
AUSTIN, TEXAS 78744-3291
512.389.4800

www.tpwd.state.tx.us

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
WinSystems Center Building
711 Stadium Drive, Suite 252
Arlington, Texas 76011

March 6, 2007

21420-2006-FA-0220

Mr. James Wheeler, II
Chief, Environmental Division
Department of the Army
Headquarters, United States Army 90th Regional Command
Captain Maurice L. Britt United States Army Reserve Center
8000 Camp Robinson Road
North Little Rock, Arkansas 72118-2205

Re: Final Environmental Assessment for the proposed Establishment of the Armed Forces Reserve Center (AFRC) Seagoville, Texas BRAC 2005

Dear Mr. Wheeler:

Thank you for your letter dated February 5, 2007 requesting our review of the Environmental Assessment (EA) and draft Finding of No Significant Impact (FONSI) for the proposed construction and operation of the Armed Forces Reserve Center (AFRC) in Seagoville, Texas. The new facility would provide classroom training and administrative support for the 400 to 500 member AFRC operations. The Seagoville facility would include approximately 100,000 square feet of offices and classrooms and 7,300 square feet for a vehicle maintenance shop. The total amount of disturbed area for the Seagoville facility would be less than 10 acres.

Based on the information provided, the facility would be constructed on sites considered suitable for development due to the limited size of the installations, past development, and compliance with the current Integrated Natural Resources Management Plans. We concur with the conclusions in the EA and FONSI and have no further comments at this time.

We appreciate the opportunity to evaluate and provide assistance on this project and any future changes that may occur. Please contact Carol S. Hale of this office at the above address or telephone number (817) 277-1100 if you have any questions or require additional assistance.

Sincerely,

Tom Cloud

Thomas J. Cloud, Jr.
Field Supervisor

Texas Department of Transportation
DEWITT C. GREER STATE HIGHWAY BLDG. • 125 E. 11TH STREET • AUSTIN, TEXAS 78701-2483 • (512) 463-8585

March 1, 2007

James Wheeler, II
Chief, Environmental Division
90th Regional Readiness Command
Captain Maurice L. Britt United States Army Reserve Center
8000 Camp Robinson Road
North Little Rock, AK 72118-2205

Re: Environmental Assessment and Draft FONSI
Armed Forces Reserve Center (AFRC)
Seagoville
Dallas County, Texas

Dear Mr. Wheeler:

The Environmental Affairs Division and Dallas District of the Texas Department of Transportation (TxDOT) have completed their review of the Environmental Assessment (EA) submitted in your letter dated February 5, 2007. The Seagoville USARC is located in Seagoville, approximately 0.6 mile southwest of US 175. IH 20 is located approximately 4 miles northwest of the Seagoville USARC via US 175. West Simonds Road serves as the main entrance to the complex. The proposed project would not adversely affect any TxDOT facilities or future plans. According to the EA, the project would increase traffic by less that 1% on US 175. We have no further comments concerning the document.

Thank you for affording TxDOT the opportunity to comment on this proposed project. If you have any questions or require further assistance, please contact Robert Hall in the Dallas-TxDOT office at 214 320 6157 or Margaret Canty in the Environmental Affairs Division at 512 416 2598.

Sincerely,

James P. Barta, Jr. P.E.
Director, Project Management Section
Environmental Affairs Division

APPENDIX C
ECONOMIC IMPACT FORECAST SYSTEM

Analysis of Socioeconomic Effects for the Seagoville, Texas AFRC/ BRAC05

Introduction

The socioeconomic analysis requirements of NEPA have been established over the years through successful early NEPA litigation ("McDowell vs Schlesinger", US District Court, Western District of Missouri, Western Division, No. 75-CV-234-W-4 (June 19,1975) and "Breckinridge vs Schlesinger", US District Court, Eastern District of Kentucky, No. 75-100 (October 31,1975)), as well as the practical need for communication and collaboration with affected communities. The social and economic effects of Base Realignment and Closure (BRAC) actions are especially relevant and important, as these issues are often the source of community concerns and subsequent controversies.

The Economic Impact Forecast System (EIFS) and the Hierarchical Approach.

The Model:

The Economic Impact Forecast System (EIFS) (Huppertz, Claire E.; Bloomquist, Kim M.; Barbehenn, Jacinda M.; EIFS 5.0 Economic Impact Forecast System, User's Reference Manual; USACERL Technical Report TA-94/03; July 1994.) has been a mainstay of Army NEPA practice since its initial development and implementation in the mid-70s. EIFS provides a mechanism to estimate impacts, and ascertain the "significance" of projected impacts, using the Rational Threshold Value (RTV) technique. This analysis and determination can be readily documented, and if significance thresholds are not exceeded, the analysis can be completed. EIFS was designed to address NEPA applications, providing a "two-tier" approach to the process; (1) a simple and quick aggregate model (sufficient to ascertain the overall magnitude of impacts) and (2) a more detailed, sophisticated input-output (I-O) model to further analyze impacts that appear significant, in NEPA terms, and worthy of additional expenditures and analyses. This "two-tier" approach is consistent with the two common levels of NEPA analysis, the Environmental Assessment (EA) and the Environmental Impact Statement (EIS). EIFS has facilitated efficient and effective completion of such analyses for approximately 3 decades.

Complete documentation of the model, its development, and applicable theoretical underpinnings is available in numerous publications:

Huppertz, Claire E.; Bloomquist, Kim M.; Barbehenn, Jacinda M.; EIFS 5.0 Economic Impact Forecast System, User's Reference Manual; USACERL Technical Report TA-94/03; July 1994.

Isard, W., Methods of Regional Analysis, MIT Press, 1960.

Isard, W. and Langford,T., Regional Input-Output Study: Recollections, Reflections, and Diverse Notes on the Philadelphia Experience, MIT Press, 1971.

Isserman, A., "The Location Quotient Approach to Estimating Regional Economic Impacts", AIP Journal, January, 1977, pp. 33-41.

Isserman, A., "Estimating Export Activity in a Regional Economy: A Theoretical and Empirical Analysis of Alternative Methods", International Regional science Review, Vol. 5, 1980, pp. 155-184.
Leigh, R., " The Use of Location Quotients in Urban Economic Base Studies", Land Economics, Vol 46, May, 1970, pp 202-205.
Mathur, V.K. and Rosen, H.S. , "Regional Employment Multiplier: A new Approach", Land Economics, Vol 50, 1974, pp 93-96.
Mayer, W. and Pleeter, S., "A Theoretical Justification for the Use of Location Quotients", Regional Science and Urban Economics, Vol 5, 1975, pp 343-355.
Robinson, D.P., Hamilton, J.W., Webster, R.D., and Olson, M.J., Economic Impact Forecast System (EIFS) II: User's Manual, Updated Edition, Technical Report N-69/ADA144950, U.S. Army Construction Engineering Research Lab (USACERL),1984.
Robinson, D.P. and Webster,R.D., Enhancements to the Economic Impact Forecast System (EIFS), Technical Report N-175/ADA142652, USACERL, April, 1984.
Rogers, Claudia and Webster, Ron, "Qualitative Answers to Quantitative Questions", Impact Assessment, IAIA, Vol.12, No.1, 1999.
Thompson, W., A Preface to Urban Economics, Johns Hopkins Press, 1965.
Tiebout, C., The Community Economic Base, New York Committee for Economic Development, 1962.
USACERL, " Methods for Evaluating the Significance of Impacts: The RTV and FSI Profiles"; USACERL EIFS Tutorial; July 1987.
U.S. Army, Department of the Army, DA Pamphlet 200-2, "Economic Impact Forecast System-User Instructions", 1980.
U.S. Army, "Base Realignment and Closure "How-To" Manual for Compliance with the National Environmental Policy Act", revised and published as official Department of Army Guidance, 1995.
U.S. Army, Army Regulation 5-20, "Commercial Activities"
U.S. Army, Department of the Army, DA Pamphlet 200-2, "Economic Impact Forecast System-User Instructions", 1980
Webster, R.D.and Shannon, E.; The Rational Threshold Value (RTV) Technique for the Evaluation of Regional Economic Impacts; USACERL Technical Report TR N-49/ADA055561; 1978.
Webster, R.D., Hamilton, J.W., and Robinson, D.P., "The Two-Tier Concept for Economic Analysis: Introduction and User Instructions", USACERL Technical Report N-127/ADA118855.

These efforts reflect development of a tool for specific NEPA application, following the successful NEPA litigation referenced in the Introduction. As EIFS has been used for Army NEPA analyses, the results of EIFS analyses have been reviewed by stakeholder (affected community) representatives, and, as a result of BRAC application, twice reviewed by the Government Accounting Office (GAO). During such reviews, the analyses and resultant decisions were upheld, and EIFS was lauded as a uniform (non-arbitrary and non-capricious) approach to such requirements. Drawing from a national, uniform database, and using a common, systematic approach, EIFS allowing the improved comparison of project alternatives (the heart of NEPA analysis), and provides comparable analyses across the U.S.

NEPA Process Improvement:

Since NEPA was implemented, it has been commonly criticized as expensive and time-consuming. While these criticisms have been often justified, the President's Council on Environmental Quality (CEQ) has actively promoted NEPA process improvements; first

in the publication of the CEQ NEPA regulations (CEQ, Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act, Reprint, 40 CFR Parts 1500-1508, Executive Office of the President, Council on Environmental Quality, 1992.), and, more recently, through a NEPA anniversary introspective (CEQ, The National Environmental Policy Act: A Study of its Effectiveness After Twenty-five Years, Executive Office of the President, Council on Environmental Quality, January, 1997.) and the formal CEQ NEPA Task Force (CEQ, The NEPA Task Force Report to the Council on Environmental Quality: Modernizing NEPA Implementation; September, 2003.). All three CEQ initiatives call for more "focus" on NEPA documents, eliminating the analyses of minor or unimportant issues, and focusing, instead, on those issues that should be part of an informed agency decision. The use of EIFS, and the "two-tier" approach is consistent with these CEQ recommendations.

Determining Significance:

While EIFS was being developed, communities began to question the rationale for determining the significance of socioeconomic impacts. USACERL was directed to develop a defensible procedure for such a determination, resulting in the Rational Threshold Value (RTV) technique (Webster, R.D.; and Shannon, E.; The Rational Theshold Value (RTV) Technique for the Evaluation of Regional Economic Impacts; USACERL Technical Report TR N-49/ADA055561; 1978). This technique relies on the yearly Bureau of Economic Analysis (BEA) time series data on employment, income, and population to evaluate historical trends with in a subject community (region); and uses those trends to measure the "resilience" of the local community to change, or its ability to accommodate such change. This approach has worked well when communicating with affected communities. The combined use of RTV with the EIFS model meet the two pronged approach for significance determinations, intensity and context (CEQ, 1992)

The initial EIFS implementation (USACERL, 1975) included the analysis of numerous variables: business volume, personal income, employment, government revenues and expenditures, income and employment distribution, local housing impacts, regional economic stability, school system impacts, government bond obligations, population, welfare and dependency, social control, and aesthetic considerations. These selection of these variables was based on the predictive capability of forecasting techniques and data availability. Over some 30 years of practice, pragmatism and sufficiency led to the use of sales volume, employment, personal income, and population as indicators of impacts (as a "first tier" approximation of effects). These effects can also be readily evaluated (and significance determined) using the BEA time series data. Population, important in its own right, is also a valuable indicator of other factors (e.g., impact on local government revenues and expenditures, housing, local school systems, and the change in welfare and dependency), as impacts on such variables are driven, to a large extent, by a population change.

BEA time series data is used to analyze the four variables for the ROI, the RTV model produces thresholds for assessing the magnitude of impacts. The RTV technique is

simple, starting with a straight line between the first year of record and the last year of record for that variable, establishing the average rate of change over time. Then, each yearly deviation from that growth rate is calculated and converted to a percentage. The largest historical changes (both increase and decrease) are used to define significance thresholds. The following figure illustrates the RTV concept:

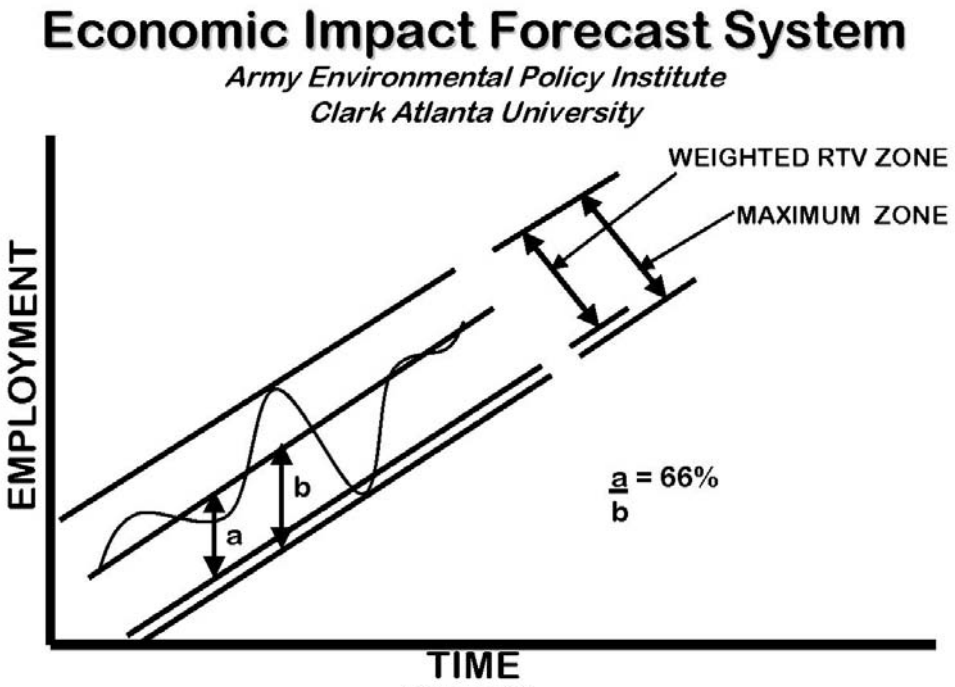


Figure 10
Visual Depiction of the RTV Technique

A "factor of safety" is applied to negative thresholds, as shown in the figure, to produce a conservative analysis; while 100% of the maximum positive thresholds is used; as indicated below:

	Increase	Decrease
Total sales volume	100 percent	75 percent
Total employment	100 percent	66 percent
Personal Income	100 percent	66 percent
Total population	100 percent	50 percent

The maximum positive historical fluctuation is used because of the positive connotations generally associated with economic growth. While economic growth can produce

unacceptable impacts and the "smart growth" concept is increasingly favored, the effects of reductions and closures are usually much more controversial. These adjustments, while arbitrary, are sensible. The negative sales volume threshold is adjusted by 75%, as sales volume impacts can be absorbed by such factors as the manipulation of inventory, new equipment, etc; and the impacts on individual workers or proprietors is indirect, if at all. Changes in employment and income, however, are impacts that immediately affect individuals; thus they are adjusted by 66%. Population is extremely important, as an indicator of other social issues, and is thus adjusted by 50%.

To adjust dollar amounts for inflation (to create "constant dollars" prior to calculations), the Consumer Price Index (CPI) is used for appropriate years, and all dollar values are adjusted to 1987 equivalents.

The main strength of the RTV approach stems from its reliance on data for each individual ROI. This approach addressed previous criticism of more simple approaches that applied arbitrary criteria to all communities. This approach establishes unique criteria, representative of local community patterns, and, while a community may not completely agree, a common frame of reference is established. Critics of the RTV technique have questioned the arbitrary selection of the maximum allowable deviations to indicate impact significance, but the process has proven workable over the years.

The Application of EIFS to the Proposed Action

To effect these analyses, the inputs to the EIFS model must be estimated. The normal EIFS inputs include:

Number of affected (moving) civilians and their salaries
Number of affected (moving) military employees and their salaries
Percentage of affected military employees living on-post
Changes in local procurement, contracting, and purchases
Definition of the multi-county region of influence (ROI)

This data has often proven difficult to obtain, given the current immaturity of the proposed BRAC actions, or the inability to produce an early, detailed Description of Proposed Action and Alternatives (DOPAA), from which these input data could be extracted. In order to produce the required analyses, numerous data sources can be used as potential sources for EIFS input data. To initiate this analysis, Appendix B of the BRAC Commission announcement was reviewed; followed by inquiries from the affected installations, a part of DOPAA development. This data source provides no indication of timing, or the number of years required to implement the BRAC recommendations in the ROI. The changes in military and civilian employment were verified, estimates of salary levels were derived, and major changes in local procurements were ascertained (primarily any major construction required to support the proposed action).

Once input data, describing the nature of the proposed BRAC action, has been determined, the EIFS region of influence (ROI), a multi-county determination, must be

defined. The regional definitions were taken directly from Appendix B of the BRAC announcement, which used the Metropolitan Statistical Areas (MSAs) where available, or counties in which the installation resides, if MSAs were not applicable. For the Seagoville AFRC, the Dallas-Plano-Irving MSA was used, including the following Texas counties:

The estimated inputs were used to produce EIFS reports (model results) for changes in total business volume, employment, income, and population. These are best shown as percentages (of the activity in the total ROI), and can be compared to the RTVs for that variable in that ROI. The following EIFS documentation is provided; detailing the inputs, documenting projected changes, and evaluating the potential significance of the predicted change, based on the RTV technique. To further clarify the basis for the significance determination, the model results are followed by the detailed time series data from BEA, and the RTV derivations.

STUDY AREA

48085	Collin, TX
48113	Dallas, TX
48119	Delta, TX
48121	Denton, TX
48139	Ellis, TX
48231	Hunt, TX
48257	Kaufman, TX
48397	Rockwall, TX

FORECAST INPUT

Change In Local Expenditures	$19,500,000
Change In Civilian Employment	0
Average Income of Affected Civilian	$0
Percent Expected to Relocate	0
Change In Military Employment	0
Average Income of Affected Military	$0
Percent of Military Living On-post	0

FORECAST OUTPUT

Employment Multiplier	3.93	
Income Multiplier	3.93	
Sales Volume - Direct	$14,538,170	
Sales Volume - Induced	$42,596,830	
Sales Volume - Total	$57,135,000	0.02%
Income - Direct	$2,284,010	
Income - Induced	$6,692,150	
Income - Total	$8,976,161	0.01%
Employment - Direct	48	
Employment - Induced	140	
Employment - Total	188	0.01%
Local Population	0	
Local Off-base Population	0	0%

RTV SUMMARY

	Sales Volume	Income	Employment	Population
Positive RTV	6.03 %	5.96 %	5.22 %	1.36 %
Negative RTV	-9.32 %	-8.15 %	-4.15 %	-1.25 %

RTV DETAILED

SALES VOLUME

Year	Value	Adj_Value	Change	Deviation	%Deviation
1969	5829852	25476453	0	0	0
1970	6199870	25605464	129011	-2341267	-9.14
1971	6606901	26163328	557864	-1912414	-7.31
1972	7348354	28144195	1980867	-489411	-1.74
1973	8274373	29870486	1726290	-743988	-2.49
1974	9290488	30194086	323600	-2146678	-7.11
1975	10104980	30112841	-81245	-2551523	-8.47
1976	11459984	32317154	2204314	-265964	-0.82
1977	13109723	34609670	2292516	-177762	-0.51
1978	15466790	38048304	3438634	968356	2.55
1979	18050453	39891502	1843198	-627080	-1.57
1980	20999981	40739964	848463	-1621815	-3.98
1981	24083754	42387407	1647442	-822836	-1.94
1982	26593979	44146004	1758597	-711681	-1.61
1983	29571209	47609647	3463643	993365	2.09

1984	34251762	52747712	5138065	2667787	5.06
1985	38186294	56897578	4149866	1679588	2.95
1986	40110184	58560870	1663292	-806986	-1.38
1987	41832242	64839973	6279103	3808825	5.87
1988	44025281	59874383	-4965590	-7435868	-12.42
1989	47070322	60720714	846331	-1623947	-2.67
1990	49981070	61476717	756003	-1714275	-2.79
1991	52373425	61800639	323922	-2146356	-3.47
1992	56440305	64341947	2541308	71030	0.11
1993	60151793	66768491	2426544	-43734	-0.07
1994	64235401	69374236	2605745	135467	0.2
1995	68765357	72203622	2829386	359108	0.5
1996	75258231	76763394	4559773	2089495	2.72
1997	83625652	83625652	6862258	4391980	5.25
1998	93490053	91620254	7994602	5524324	6.03
1999	101594796	97531002	5910748	3440470	3.53
2000	112392841	104525343	6994341	4524063	4.33

INCOME

Year	Value	Adj_Value	Change	Deviation	%Deviation
1969	6529644	28534544	0	0	0
1970	7137514	29477934	943390	-1746556	-5.92
1971	7694570	30470497	992564	-1697382	-5.57
1972	8558809	32780238	2309740	-380206	-1.16
1973	9662662	34882209	2101971	-587975	-1.69
1974	10905233	35442007	559798	-2130148	-6.01
1975	11951620	35615828	173821	-2516125	-7.06
1976	13411001	37819022	2203194	-486752	-1.29
1977	15056216	39748412	1929390	-760556	-1.91
1978	17700768	43543890	3795478	1105532	2.54
1979	20623772	45578537	2034647	-655299	-1.44
1980	23963396	46488990	910453	-1779493	-3.83
1981	27705795	48762199	2273209	-416737	-0.85
1982	30802635	51132373	2370174	-319772	-0.63
1983	33901865	54582003	3449630	759684	1.39
1984	39128045	60257188	5675185	2985239	4.95
1985	43484987	64792631	4535443	1845497	2.85
1986	45593879	66567065	1774434	-915512	-1.38
1987	47514730	73647829	7080764	4390818	5.96

1988	50044695	68060786	-5587043	-8276989	-12.16
1989	53736665	69320296	1259510	-1430436	-2.06
1990	57674665	70939839	1619543	-1070403	-1.51
1991	60407928	71281352	341513	-2348433	-3.29
1992	64988280	74086638	2805286	115340	0.16
1993	68879191	76455903	2369265	-320681	-0.42
1994	73765863	79667135	3211232	521286	0.65
1995	78997184	82947039	3279904	589958	0.71
1996	86025701	87746213	4799174	2109228	2.4
1997	94992658	94992658	7246445	4556499	4.8
1998	105313872	103207597	8214939	5524993	5.35
1999	112334298	107840924	4633327	1943381	1.8
2000	123239576	114612807	6771883	4081937	3.56

EMPLOYMENT

Year	Value	Change	Deviation	% Deviation
1969	834907	0	0	0
1970	838606	3699	-46869	-5.59
1971	846849	8243	-42325	-5
1972	890928	44079	-6489	-0.73
1973	948934	58006	7438	0.78
1974	979095	30161	-20407	-2.08
1975	969554	-9541	-60109	-6.2
1976	1007295	37741	-12827	-1.27
1977	1062527	55232	4664	0.44
1978	1139521	76994	26426	2.32
1979	1211786	72265	21697	1.79
1980	1269175	57389	6821	0.54
1981	1328948	59773	9205	0.69
1982	1369761	40813	-9755	-0.71
1983	1422359	52598	2030	0.14
1984	1554130	131771	81203	5.22
1985	1650231	96101	45533	2.76
1986	1673502	23271	-27297	-1.63
1987	1721689	48187	-2381	-0.14
1988	1736668	14979	-35589	-2.05
1989	1758981	22313	-28255	-1.61
1990	1773565	14584	-35984	-2.03
1991	1794448	20883	-29685	-1.65

1992	1798430	3982	-46586	-2.59
1993	1852991	54561	3993	0.22
1994	1920329	67338	16770	0.87
1995	2003108	82779	32211	1.61
1996	2083724	80616	30048	1.44
1997	2185929	102205	51637	2.36
1998	2280051	94122	43554	1.91
1999	2361065	81014	30446	1.29
2000	2453087	92022	41454	1.69

POPULATION

Year	Value	Change	Deviation	% Deviation
1969	1555556	0	0	0
1970	1613498	57942	-1973	-0.12
1971	1644442	30944	-28971	-1.76
1972	1662842	18400	-41515	-2.5
1973	1706578	43736	-16179	-0.95
1974	1753341	46763	-13152	-0.75
1975	1786564	33223	-26692	-1.49
1976	1829409	42845	-17070	-0.93
1977	1863793	34384	-25531	-1.37
1978	1909381	45588	-14327	-0.75
1979	1960373	50992	-8923	-0.46
1980	2032153	71780	11865	0.58
1981	2084667	52514	-7401	-0.36
1982	2153251	68584	8669	0.4
1983	2222329	69078	9163	0.41
1984	2294823	72494	12579	0.55
1985	2384776	89953	30038	1.26
1986	2470039	85263	25348	1.03
1987	2514111	44072	-15843	-0.63
1988	2537779	23668	-36247	-1.43
1989	2578308	40529	-19386	-0.75
1990	2639819	61511	1596	0.06
1991	2707758	67939	8024	0.3
1992	2769442	61684	1769	0.06
1993	2837922	68480	8565	0.3
1994	2908867	70945	11030	0.38
1995	2985702	76835	16920	0.57

1996	3076605	90903	30988	1.01
1997	3178447	101842	41927	1.32
1998	3283020	104573	44658	1.36
1999	3381283	98263	38348	1.13
2000	3472825	91542	31627	0.91

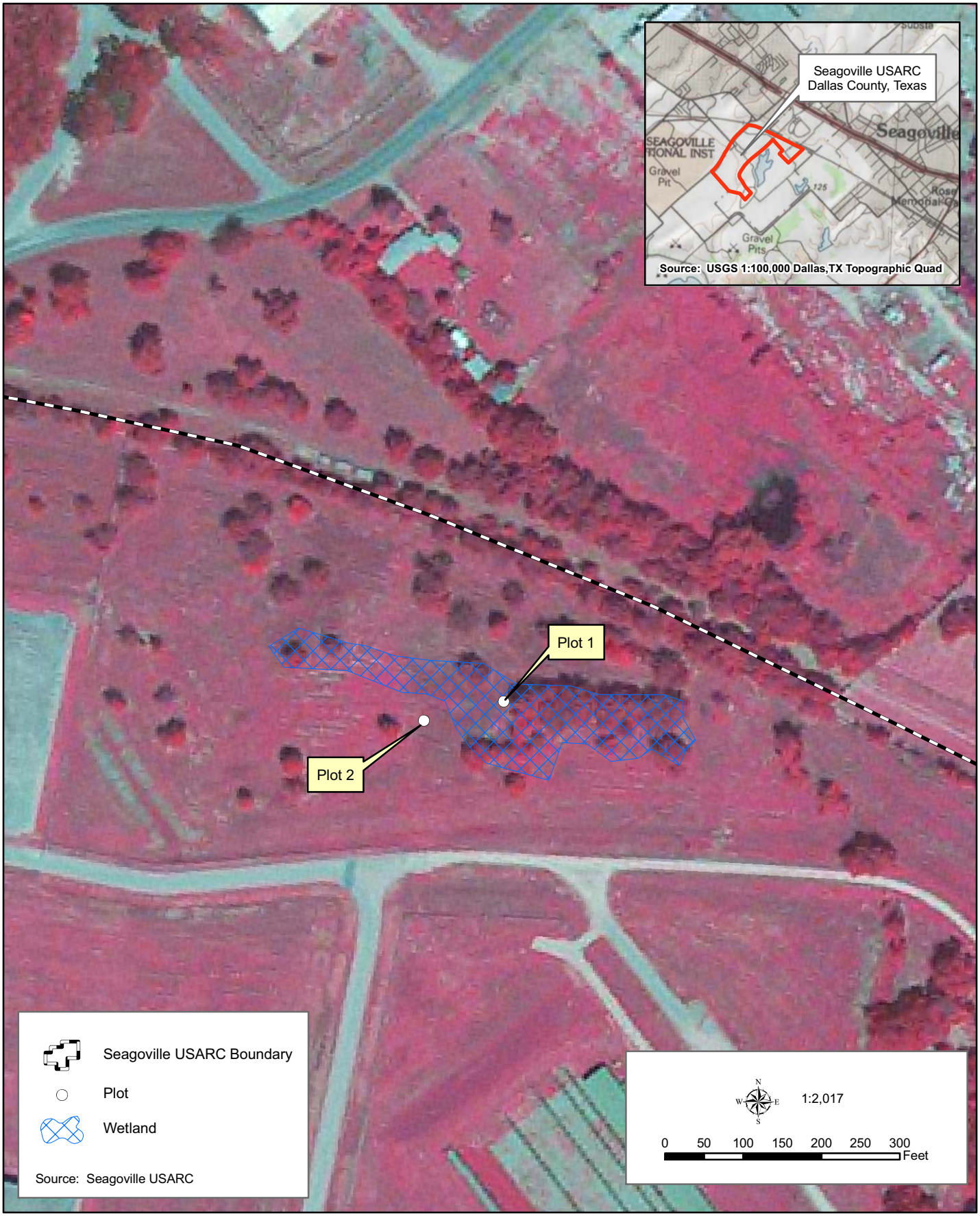
Summary of Results

As shown, the EIFS analyses are based on $35m in MCA construction.

The EIFS analyses indicated that the proposed action will produce no major socioeconomic effects in the Seagoville ROI (community). The projected changes in business volume, income, employment, and population were 0.02%, 0.01%, 0.01%, and 0.0%, respectively. These compare to calculated respective RTVs of 6.03%, 5.96%, 5.22%, and 1.36%, indicating no likely significant effects.

These significance determinations are "conservative"--well within any errors produced through assumed EIFS input values. While these inputs could be refined, the results of the analysis (final determination) will certainly remain unchanged.

APPENDIX D
WETLAND DATA FORMS



Appendix D: Wetland Delineation Plot Locations

GSRC

December 2006

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	**Seagoville Reserve Center**	Date:	**2-Nov-06**
Applicant/Owner:		County:	**Dallas**
Investigator:	**B. Turk**	State:	**Texas**
Do Normal Circumstances exist on the site?	**Yes**	Community ID:	**Depression**
Is the site significantly disturbed (Atypical Situation)?	**No**	Transect ID:	
Is the area a potential Problem Area?	**No**	Plot ID:	**#1**
(If needed, explain on reverse.)			

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. ***Celtis laevigata***	**T**	**FACW**	9.		
2. ***Ambrosia artemisiifolia***	**H**	**FACU**	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). **50%**

Remarks:

HYDROLOGY

☐ Recorded Data (Describe in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other

☑ No Recorded Data Available

Field Observations

Depth of Surface Water: **NONE** (in.)

Depth to Free Water in Pit: **NONE** (in.)

Depth to Saturated Soil: **NONE** (in.)

Wetland Hydrology Indicators

Primary Indicators:
- _____ Inundated
- _____ Saturated in Upper 12 Inches
- _____ Water Marks
- _____ Drift Lines
- _____ Sediment Deposits
- _____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- Y Oxidized Root Channels in Upper 12 Inches
- _____ Water-Stained Leaves
- _____ Local Soil Survey Data
- - FAC Neutral Test
- _____ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name
(Series and Phase): _____ Drainage Class: _____

Field Observations
Taxonomy (Subgroup): _____ Confirm Mapped Type ?

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-8	**A**	**10YR4/2**			**Clay loam**
8+	**B**	**10YR5/2**			**Clay**

Hydric Soil Indicators:

	Histosol	**Y**	Concretions
	Histic Epipedon		High Organic Content in Surface Layer in Sandy Soils
	Sulfidic Odor		Organic Streaking in Sandy Soils
	Aquic Moisture Regime		Listed on Local Hydric Soils List
	Reducing Conditions		Listed on National Hydric Soils List
Y	Gleyed or Low-Chroma Colors		Other (Explain in Remarks)

Remarks:
* No mottling was observed; extremely dense clay encountered at approximately 8 inches beneath the surface.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	**No**	
Wetland Hydrology Present?	**No**	**Is this Sampling Point Within a Wetland?**
Hydric Soils Present?	**Yes**	**No**

Remarks :
Photograph 1 facing east and Photograph 2 facing north

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	**Seagoville Reserve Center**	Date:	**2-Nov-06**
Applicant/Owner:		County:	**Dallas**
Investigator:	**B. Turk**	State:	**Texas**
Do Normal Circumstances exist on the site?	**Yes**	Community ID:	**Open field**
Is the site significantly disturbed (Atypical Situation)?	**Yes**	Transect ID:	
Is the area a potential Problem Area?	**No**	Plot ID:	**#2**
(If needed, explain on reverse.)			

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. ***Cynodon dactylon***	**H**	**FACU**	9.		**#N/A**
2. ***Paspalum notatum***	**H**	**FACU+**	10.		**#N/A**
3. ***Sorghum halepense***	**H**	**FACU**	11.		**#N/A**
4.		**#N/A**	12.		**#N/A**
5.		**#N/A**	13.		**#N/A**
6.		**#N/A**	14.		**#N/A**
7.		**#N/A**	15.		**#N/A**
8.		**#N/A**	16.		**#N/A**

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). **0%**

Remarks:

HYDROLOGY

☐ Recorded Data (Describe in Remarks):
- ☐ Stream, Lake, or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other

☑ No Recorded Data Available

Field Observations

Depth of Surface Water: **NONE** (in.)

Depth to Free Water in Pit: **NONE** (in.)

Depth to Saturated Soil: **NONE** (in.)

Wetland Hydrology Indicators

Primary Indicators:
- _____ Inundated
- _____ Saturated in Upper 12 Inches
- _____ Water Marks
- _____ Drift Lines
- _____ Sediment Deposits
- _____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- _____ Oxidized Root Channels in Upper 12 Inches
- _____ Water-Stained Leaves
- _____ Local Soil Survey Data
- - FAC Neutral Test
- _____ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name
(Series and Phase): _____ Drainage Class: _____

Field Observations
Taxonomy (Subgroup): _____ Confirm Mapped Type ?

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0 - 10	**A**	**7.5YR3/2**			**Clay loam**
10+	**B**	**10YR5/3**	**7.5YR3/1**	**Few/Distinct**	**Clay**

Hydric Soil Indicators:

	Histosol		Concretions
	Histic Epipedon		High Organic Content in Surface Layer in Sandy Soils
	Sulfidic Odor		Organic Streaking in Sandy Soils
	Aquic Moisture Regime		Listed on Local Hydric Soils List
	Reducing Conditions		Listed on National Hydric Soils List
	Gleyed or Low-Chroma Colors		Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	**No**	
Wetland Hydrology Present?	**No**	**Is this Sampling Point Within a Wetland?**
Hydric Soils Present?	**No**	**No**

Remarks :
Photographs 3 and 4 looking east

Photograph 1. Soil at Plot #1 facing east

Photograph 2. Overview of vegetation at Plot #1 facing north

Photograph 3. Soil at Plot #2 facing east

Photograph 4. Overview of vegetation at Plot #2 facing east