FINDING OF NO SIGNIFICANT IMPACT (FONSI)

UNITED STATES BORDER PATROL STATION, ALPINE, TEXAS

The United States Border Patrol's mission is to detect and prevent smuggling and illegal entry of aliens into the United States. The Violent Crime Control and Law Enforcement Act of 1994 allows for increasing the resources for the Border Patrol to help stem the flow of illegal aliens crossing the Southwest Border. The Immigration and Naturalization Service is proposing to construct a larger Border Patrol station in Alpine that would accommodate an increase from 25 Border Patrol agents to 100. The proposed Border Patrol station would be located on a 20-acre parcel of land along U.S. Highway 67/90, just west of Alpine's city limits, in Brewster County, Texas.

The existing station is located in a leased facility that formerly housed an automobile dealership and is inadequate to accommodate the station's need for additional office space, alien processing, interviewing and detention, as well as support facilities. Facilities that are proposed are a administration building, a vehicle maintenance shop, a helicopter landing pad, a fuel island, a car wash, a dog kennel, parking, perimeter chain link fence, high-pressure sodium lighting, security systems for the interior and exterior of site, landscaping with irrigation, and a 40-foot radio tower with satellite dish.

Besides the proposed action, the no-action alternative was considered. Although the no-action alternative would not have any environmental impacts, not constructing the proposed project would jeopardize the safety of the United States and have a detrimental impact to National security.

Human health and safety would benefit moderately in the long-term from the proposed project. Socioeconomics would also benefit from the project in the long-term with the increase in Border Patrol agent workforce, as well as in the short-term with the increase in construction workforce. Minimal long-term impact would occur to vegetation, wildlife, hydrology, floodplain, noise, land use, and aesthetics and could occur from the use of hazardous material or waste. Short-term impacts would occur to soils, air quality and noise during construction and could occur to human health and safety. No impact would occur to soils, geology, climate, air quality, groundwater, wetlands and other waters of the United States, special status species, cultural resources and irreversible or irretrievable resources in the long-term. It would not result in any moderate or significant, short or long-term, cumulative adverse effects and, therefore, is recommended. An Environmental Impact Statement (EIS) will not be generated for the proposed action.

Mr. Richard Defenbeck
Director of Facilities
Immigration and Naturalization Service

July 31st, 2000
Date

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EXECUTIVE SUMMARY

A new U.S. Border Patrol Station is being proposed in order to expand and accommodate an increase in Border Patrol agents. The Alpine Border Patrol Station is proposed to grow from its current 25 agents to a 100-agent station. The existing station is located in a leased facility that formerly housed an automobile dealership and is inadequate to accommodate the station's need for additional office space. The new border patrol is proposed to be located on a 20 acre parcel of land along U.S. Highway 67/90, just west of Alpine's city limits, in Brewster County, Texas.

Two actions were analyzed in this Environmental Assessment, the proposed action and the no action alternative. Four other sites were analyzed during the market survey but were determined unreasonable and eliminated as alternatives.

Overall, this project poses no significant environmental impacts to the environment. Minor long-term impact would occur to vegetation, wildlife, hydrology, floodplain, noise, land use, and aesthetics and could occur from the use of hazardous material or waste. Short-term impacts would occur to soils, air quality and noise during construction and could occur to human health and safety.

No impact would occur to soils, geology, climate, air quality, groundwater, wetlands and other waters of the United States, special status species, cultural resources and irreversible or irretrievable resources in the long-term. It would not result in any moderate or significant, short or long-term, cumulative adverse effects.

Socioeconomics would benefit from the project in the long-term with the increase in the Border Patrol agent workforce, as well as in the short-term with the increase in construction workforce. The project would have moderate long-term beneficial safety impacts to our National security by increasing the agents that patrol the United States-Mexican border. Human health would moderately benefit from the reduction of drug trafficking entering the country.

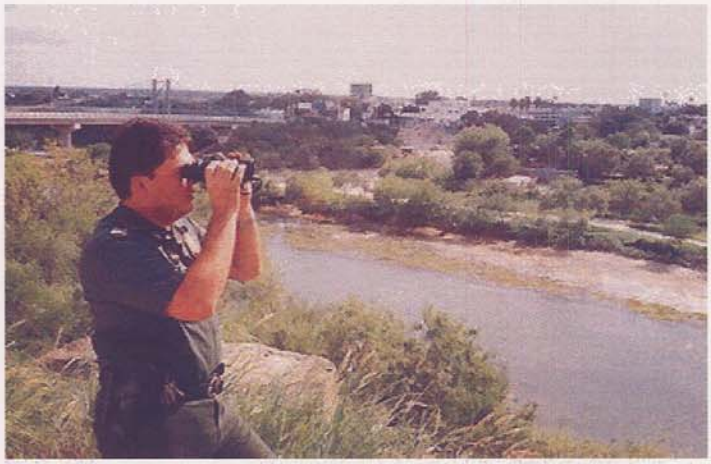
Although the no-action alternative would not have any environmental impacts, not constructing the proposed project would jeopardize the safety of the United States and have a detrimental impact to National security.

On the basis of the findings of the environmental assessment, no significant impact is anticipated from the proposed project on human health or the natural environment. A Finding of No Significant Impact is warranted and an Environmental Impact Statement is not required for this action.

1.0 INTRODUCTION

1.1 Background

The United States Border Patrol (BP) is the enforcement arm of the Immigration and Naturalization Service (INS).[1] Its mission is to detect and prevent smuggling and illegal entry of aliens into the United States. Patrol agents perform their duties along, and in the vicinity of, some 8,000 miles of international boundaries by automobile, boat, aircraft and afoot. The BP checks traffic, public transportation, and vessels, and patrols the interior by looking for illegal aliens in areas over 25 miles from the border. In addition, the BP assists Investigations and Inspections of the INS staff in carrying out their missions. To do this, the BP checks employers for illegal workers, visits local jails and state prisons to interview aliens, and identify alien smugglers.

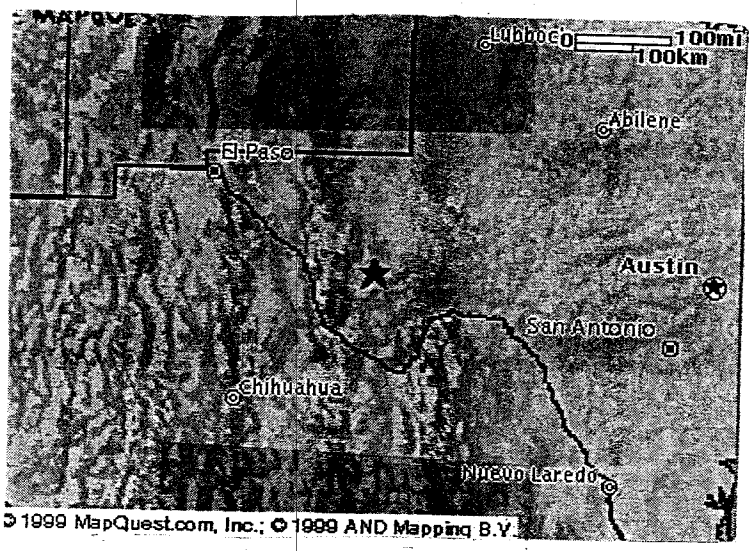


Linewatch along the Rio Grande.

Recently, the Border Patrol's enforcement strategy along the Southwest Border changed from apprehending aliens after they had illegally entered to deterring them from entering in the first place. The Violent Crime Control and Law Enforcement Act of 1994 allows for increasing the resources for the BP to help stem the flow of illegal aliens crossing the Southwest Border. To achieve this, the act authorized increases in the number of BP agents and support staff. More BP agents are to be deployed on the border to discourage aliens from entering illegally.

The Alpine BP Station is responsible for 132 miles of International Border along the Rio Grande within the County of Brewster.[2] Linewatch, traffic check, bus check, and freight-train check are conducted by the Alpine Station. The Station has two facilities: permanent checkpoint one on U.S. Highway 118, located 15 miles south of Alpine; and one on U.S. Highway 385, located 5 miles south of Marathon. These highways run north and south, originating from Big Bend National Park which is located on the U.S./Mexico border. The Station also includes a sub-office in the Big Bend National Park. See Figure 1 for the location of the city of Alpine.

Train Check - Texas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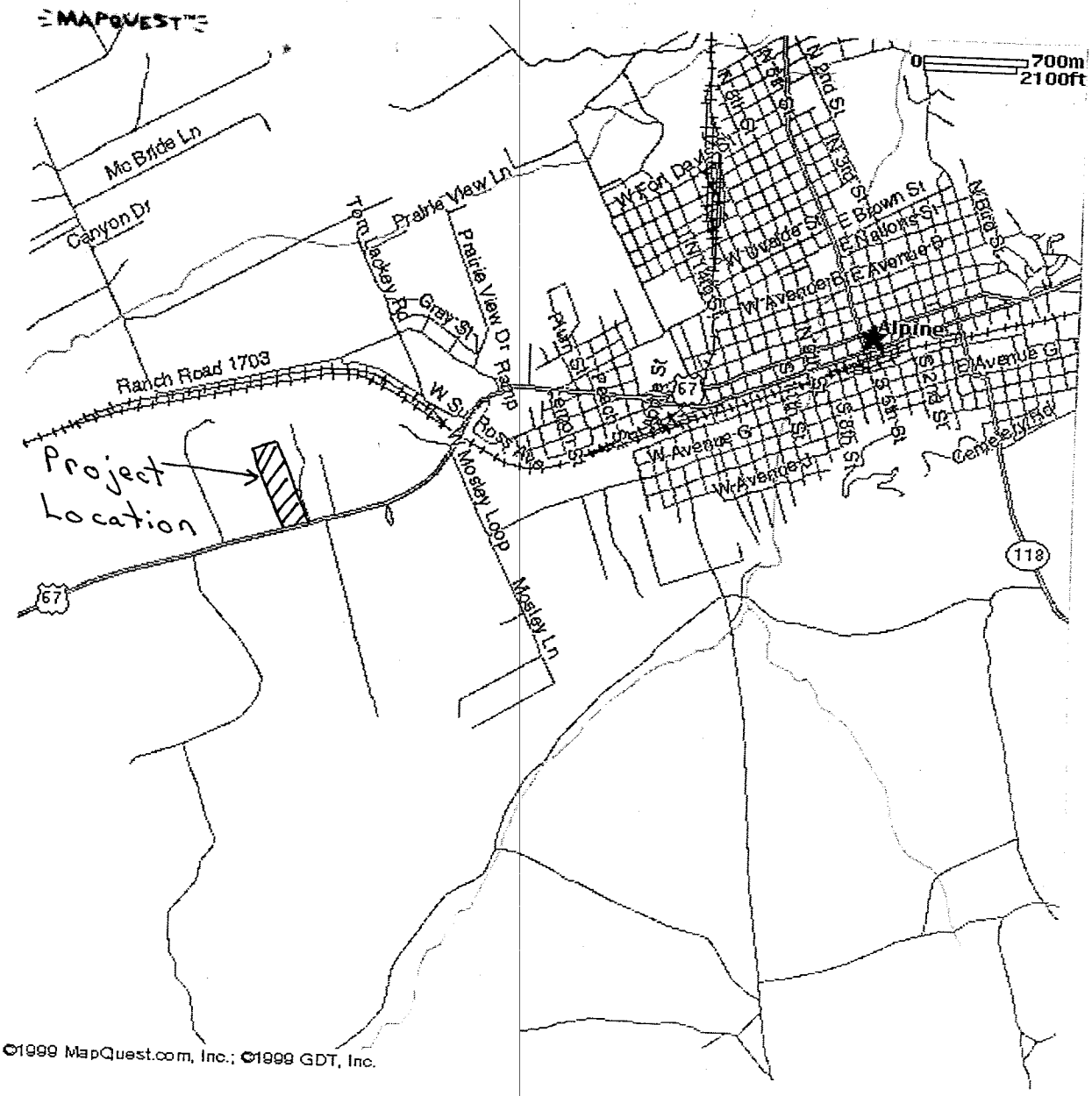
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Prairie View Ln
Tom Lackey Rd
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W Fort Davis St
N 2nd St
N 3rd St
E Brown St
E Nations St
W Uvalde St
W Avenue B
E Avenue B
Alpine
E Avenue G
W Avenue G
W Avenue J
S 2nd St
S 5th St
S 8th St
Cemetery Rd
67
118
Project Location
©1999 MapQuest.com, Inc.; ©1999 GDT, Inc.

Figure 1

1.2 Purpose and Need

The purpose of the project is to build a larger Border Patrol station that would accommodate the proposed increase in Border Patrol agents. The Alpine Border Patrol Station is proposed to grow from its current 25 agents to a 100-agent station. The existing station is located in a leased facility that formerly housed an automobile dealership and is inadequate to accommodate the station's need for additional office space, alien processing, interviewing and detention, as well as support facilities. Additional facilities needed that cannot be supported at the present location include a helicopter-landing pad, a fuel island and dog kennels.

There is a need to increase the size of the BP facility to accommodate the increase in BP agents as dictated by the Violent Crime Control and Law Enforcement Act of 1994. The two checkpoint facilities operated by the Alpine Station along Highways 118 and 385 are opened on a limited basis because of the current limited resources of the Alpine Station. FM 2627 originates in the town of La Linda, Coahuila, Mexico and connects to U.S. Highway 385. This has been a major route for smugglers on foot, in vehicles and on bicycles.

1.3 Location

The proposed Border Patrol station would be located on a 20 acre parcel of land along U.S. Highway 67/90, just west of Alpine's city limits, in Brewster County, Texas. See Figure 1 for the proposed site location map. Alpine is situated approximately 185 miles southeast of El Paso and 55 miles north of Big Bend National Park. The UTM of the property is Zone 13, 624925.8E, and 3357756.4N.

1.4 Scoping and Issues.

Scoping for this EA is based on potential issues at the proposed project site. They include human health and safety, floodplains, land use, noise, vegetation and wildlife. Other issues examined include wetlands, hydrology, cultural resources, special status species, geology, soils, climate, aesthetics, air quality, socioeconomics, groundwater and water quality. Appendix A contains a copy of the scoping letter, dated October 6, 1999, submitted to the Government agencies. Responses to the public scoping process from the government agencies are located in Appendix B.

1.5 Regulatory Compliance.

The National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. 4321 et seq., as implemented by Executive Orders 11514 and 11991 and the Council on Environmental Quality (CEQ) Regulations of November 29, 1978 (43 FR 55978) require that Federal agencies include in their decision-making process appropriate and careful consideration of all environmental effects of proposed actions, analyze potential environmental effects of proposed actions and their alternatives for public understanding and scrutiny, and avoid or minimize adverse effects of proposed actions. This Environmental Assessment

integrates these NEPA factors in the planning process as well as other Federal and state laws. These laws include:

- INS Procedures Relating to the Implementation of NEPA (28 CFR Part 61, Appendix C)
- Endangered Species Act of 1973
- Clean Water Act of 1972 and Amendments of 1977 (CWA)
- Clean Air Act of 1970 and Amendments of 1977 and 1990 (CAA)
- Noise Control Act of 1972
- Section 106 of the National Historic Preservation Act of 1966, as amended
- American Indian Religious Freedom Act of 1978
- Native American Graves Protection and Repatriation Act of 1990
- Resource Conservation and Recovery Act of 1976 and Amendments of 1984 (RCRA)
- Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)
- Pollution Prevention Act of 1990 (PPA)
- Federal Oil pollution Prevention Regulation, Title 40 Code of Federal Regulations (CFR) Part 112
- Toxic Substance Control Act of 1976 (TSCA)
- Executive Order (EO) 11990, "Protection of Wetlands", May 24, 1977
- EO 11988, "Floodplain Management", May 24, 1977
- EO 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations", February 11, 1994
- EO 12856, "Federal Compliance with Right to Know Laws and Pollution Prevention Requirements", August 3, 1993
- EO 13101, "Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition", September 14, 1998
- EO 12902, "Energy Efficiency and Water Conservation at Federal Facilities", March 8, 1994

2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

All actions by Federal agencies are mandated by the National Environmental Policy Act to be evaluated for alternative courses of action and locations so that decisions are made in the best interests of the public. Locations that were considered for the proposed project and included in the market survey are listed below. Sites 2 through 5 were considered unreasonable and eliminated as alternatives. The two alternatives ultimately considered were Site 1 and the no-action plan.

1) Site 1 is the preferred location and is located on a 20 acre parcel of land along U.S. Highway 67/90, just west of Alpine's city limits, in Brewster County, Texas. The property contains approximately 20% 100-year floodplain near the front of the property. A road crossing would be required through the floodplain to access the rear of the site.

2) Site 2 is a 20-acre parcel located approximately 2 miles east of Alpine City limits adjacent to U.S. Highway 90 between the road and Southern Pacific Railroad. The property contains approximately 80% floodplain that is also considered a waters of the United States. Construction would impact the waters of the U.S. and floodplain with this alternative. Also, a municipal landfill is located adjacent to this site. There may be possible impacts to human health and safety due to the adjacent landfill and its unknown contents.

3) Site 3 is a 23.37-acre tract just west of the city limits along RM 1703. It is located three city blocks west of the intersection of RM 1703 and U.S. Highway 90. Single-family residences are located adjacent to the property. Community controversy could limit the BP from incorporating a helicopter-landing pad and dog kennels due to noise impact to this residential area.

4) Site 4 is a 10-acre tract adjacent to southbound State Highway 118. It is located just south of the city limits. A portion of the parcel is located within a 100-year floodplain and is known to have flooding problems. This parcel would require additional expense for a flood control structure, such as a dike, or for additional fill material to limit flooding.

5) Site 5 is the existing BP station and is located in a leased facility that formerly housed an automobile dealership. It was originally intended to house 25 agents. The existing facility is inadequate to accommodate the increase in office space, alien processing, interviewing, detention and support facilities needed for the increase to a 100-agent station. Site expansion would be difficult since total property size is only two acres.

2.1 Proposed Plan.

The proposed project would consists of the following:

- A 18,244 sf administration building
- A 3,000 sf vehicle maintenance shop
- A 10,000 sf helicopter landing pad
- A fuel island
- A car wash
- A 15,000 sf dog kennel
- A 700 sf pump house
- Parking
- Perimeter chain link fence and high-pressure sodium lighting
- Security systems for the interior and exterior of site
- Landscaping with irrigation
- 40 foot radio tower with satellite dish

The proposed administration building would contain office, conference and muster areas, and support functions. See Figure 2 for the proposed site plan. The wing of the building

would provide segregated detention and interview rooms for aliens. Aliens would enter and exit the building through a sally port on the detention wing.

Light duty service to patrol vehicles stationed at Alpine would be performed by employees at the vehicle maintenance facility. Major vehicle work is done at the Marfa Sector Border Patrol. The vehicle maintenance building would include two vehicle maintenance bays: one electronics bay and one vehicle maintenance/paint bay. Welding capabilities would be provided in all vehicle maintenance bays.

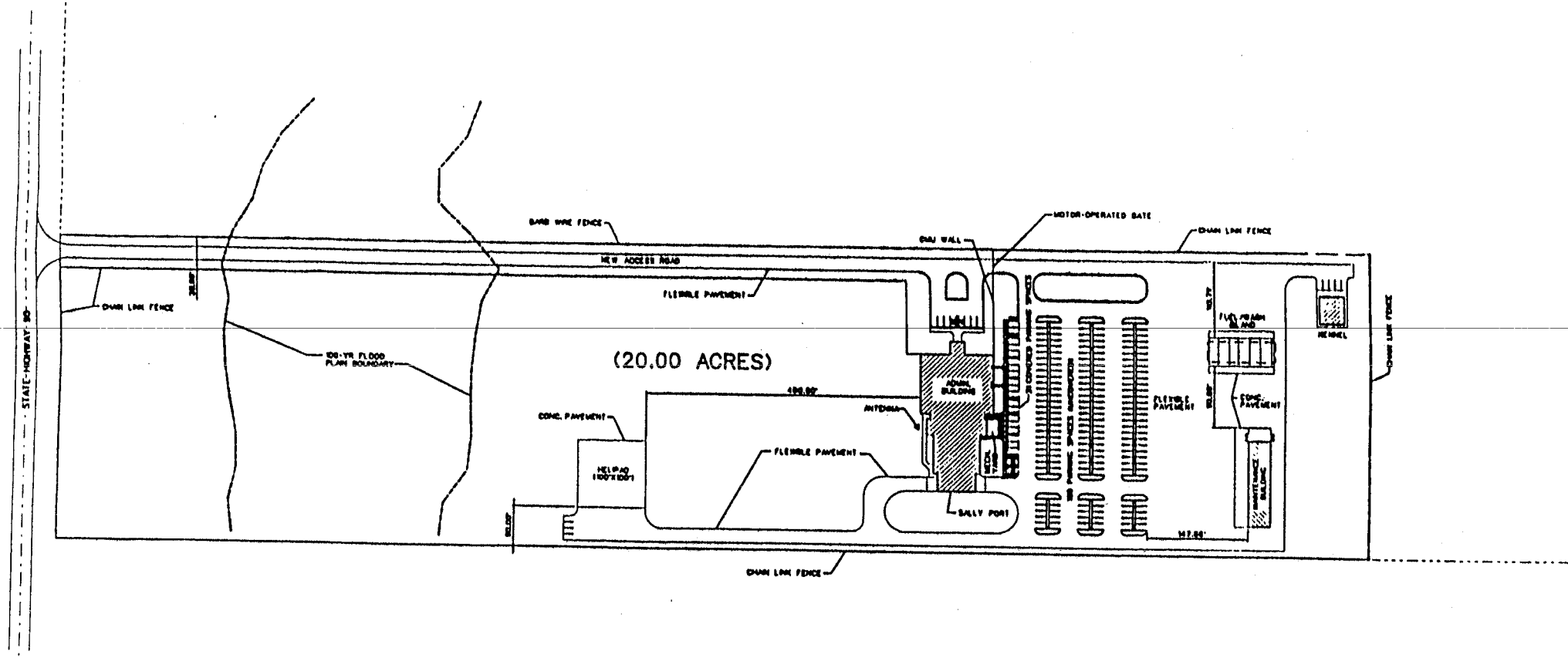
Used motor oil and anti-freeze would be stored in separate aboveground storage tanks (AGTs) adjacent to the vehicle maintenance building for recycling. Tires would also be stored for recycling near the vehicle maintenance building within a fenced area with a lockable gate. An air compressor would be provided outside the facility (furthest away from buildings as possible). The compressor would be roofed and secured within a chain link fence and lockable gate.

Additionally, helicopters are used extensively in BP operations for the transportation of aliens. The helicopters are stationed at Marfa Air Operations, but conducts flights and operations throughout the Marfa Sector. Providing a landing pad and fuel at the Alpine Station would optimize the performance of the air operations. Runway lighting meeting FAA guidelines would be provided at the helicopter pad and the road leading up to the pad.

Three AGTs for fuel are proposed: one 4000 gal. diesel fuel tank and one 12,000 gal. unleaded gas tank at the vehicle fuel island for BP vehicles; one 6,000 gal. jet fuel tank at the helicopter pad.

Wastewater from the car wash would be recycled for future car washing. The kennel would support the K9 services used for identifying smugglers at the checkpoints and at other operational locations.

A septic tank would be required as city sanitary sewer is not available. A waste station is proposed to empty wastewater from BP buses. A 6-inch city water line is available on the south side of Highway 90. Water pressure is inadequate for fire protection, so a pump house is proposed. A two-inch "poly" high-pressure gas line is available on the south side of Highway 90.



SITE PLAN - BORDER PATROL STATION - ALPINE, TX

200 0 200 400

SCALE: 1" = 200'

N

Figure 2

2.2 The No-Action Alternative. Under this alternative, no increase in BP space would occur. There would be no space available for an increase in BP agents and operations. The Violent Crime Control and Law Enforcement Act of 1994 would not be abided. Security at our National borders would not improve and may even be in jeopardy from an increase in aliens.

3.0 EXISTING ENVIRONMENT

This section describes only those environmental resources that are relevant to the decision being made. It does not describe the entire existing environment, but only those environmental resources that could be affected by the alternatives if they were implemented. This section, in conjunction with the description of the "no-action" alternative, forms base-line conditions for determining the environmental impacts of the proposed action.

3.1 Physical Environment

3.1.1. Land Use

The proposed project site is within the County of Brewster. The County has no zoning designations within its jurisdiction. The site is currently open space. Presently, the site is being leased by an adjacent single-family residence with two horses. The horses graze periodically on the site. The site has been used as rangeland in the past. Land to the west of the site is also rangeland. See Figures 1-4 for pictures of surrounding views. Just to the north of the site is the Southern Pacific/Atchison, Topeka and Santa Fe Railroad. Land to the north of the railroad contains 5 to 10 acre single-family residences in a subdivision called Sunny Glen Development. A subdivision of trailer homes is located to the east. State Highway 90 and the Big Bend Sportsman Club, that would be used by the BP agents for firing practice, is located to the south of the proposed site. Alpine-Casparis Municipal Airport is located approximately 2 miles northeast of the site.

3.1.2 Aesthetics

The site is an open space area with semi-desert vegetation consisting of mostly grasses and scattered shrubs. Site disturbance is minimal with two dirt roads on the northern end of the site and a curved berm used in the past as a stock tank to the south of the roads. The site is bordered to the east and south by a barbed wire fence. The views to the south and west are the most pleasing with the Davis Mountains (including Twin Peaks) in the background. The site slopes up toward the north, which concludes the view to the north as mostly sky and mountain. The view to the east is the trailer park and the city of Alpine.

3.1.3 Geology/Soils

Alpine is part of the Trans-Pecos region, an area almost synonymous with the Texas portion of the Basin and Range topographic province [3]. The province boundaries include

the Rio Grande to the south and west, the Texas-New Mexico boundary to the north, and the Pecos River Valley and Stockton Plateau to the west. The Trans-Pecos region contains higher elevations and greater local relief than anywhere else in Texas. Mount

Figure 3: Northern View of Site.

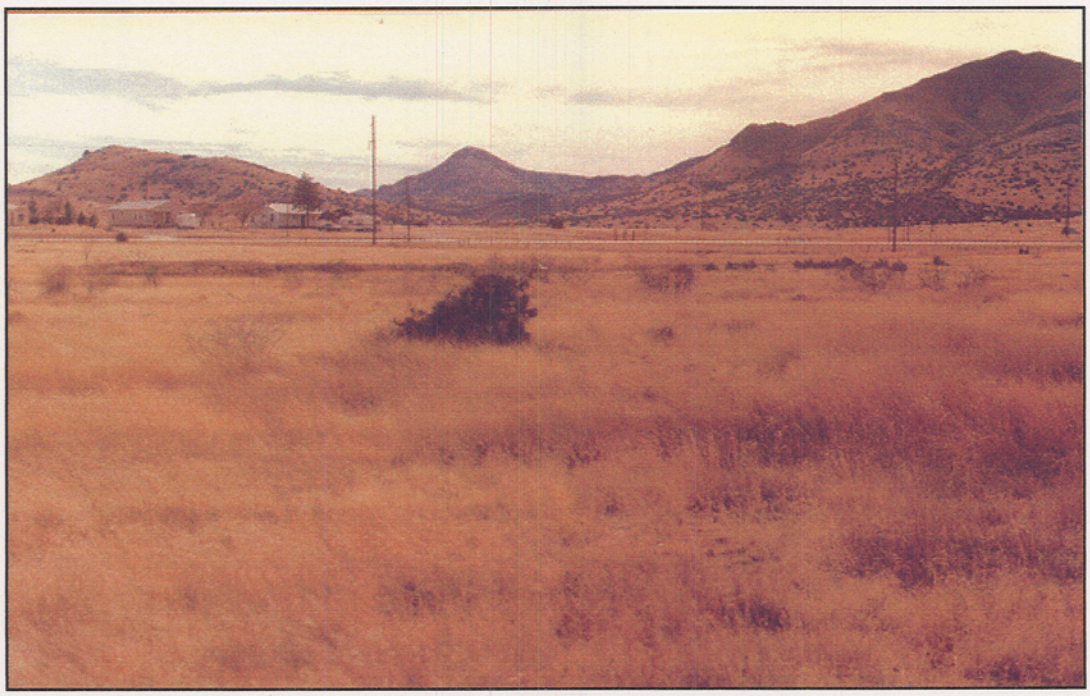


Figure 4: Southern View of Site.

Figure 5: Eastern View of Site.

Figure 6: Western View of Site.

Livermore, located west of Fort Davis, is the highest elevation of the Davis Mountains with an elevation of 8382 feet. The Twin Peaks, also called Twin Sisters, have an elevation of 6133 feet (northern peak) and 6112 feet (southern peak).[4] Another mountain within view of Alpine is Ranger Peak with an elevation of 6246. The elevation of the proposed site is approximately 4600 feet.

The parent rock in the Alpine area, including the Davis Mountains, is igneous in origin from the Tertiary period. The Davis Mountains are characterized by areas of steep slopes compared to other plateau-like mountain slopes of the Trans-Pecos.

The soils on the proposed project site contain the Boracho-Espy complex, gently undulating and highly erodable.[5] The Boracho series consists of soils that are very shallow and shallow to a petrocalcic horizon. They are well drained, undulating uplands soils of valleys and piedmont slopes. These nearly level to strongly rolling soils formed in gravelly colluvial materials. Typically, the surface layer is grayish-brown, very gravelly loam about 10 inches thick. The next layer is pinkish-white indurated caliche about 10 inches thick. The lower layer is pinkish-white, weakly cemented, very gravelly loam.

The Espy series consists of soils that are shallow to a petrocalcic horizon. They are well-drained soils with moderately permeable surface layers over very slowly permeable petrocalcic horizons. The soil formed in loamy and gravelly materials from igneous hills and mountains. Typically, the surface layer is grayish-brown loam about 11 inches thick. The next layer is pinkish-gray clay loam 5 inches thick. An indurated caliche layer 8 inches thick is at a depth of 16 inches. The substratum is pinkish-white calcareous fine sandy loam over weathered tuff at 48 inches.

3.1.4 Climate

The climate of the Trans-Pecos is generally arid. It is cool and dry during the winter and hot and dry during the summer. [6] The average summer high temperature of Alpine is 86 degrees Fahrenheit with the average summer low temperature being 62 degrees F.[7] The average winter high temperature in Alpine is 59 degrees Fahrenheit with an average winter low of 33 degrees F. The average annual precipitation is approximately 393 mm with the majority falling during July, August, and early September in the form of summer thundershowers.[3] The combination of clear skies, high altitudes and southerly location enable the Trans-Pecos to receive the highest mean annual solar radiation of any location within the Unites States.

3.1.5. Air Quality

Based on the National Ambient Air Quality Standards (NAAQS) for Criteria Pollutants, Brewster County is in attainment status for air quality with regards to ozone and particulate matter. [8] Brewster County is not included in the top 40 counties with toxic releases. [9] The lowest amount of toxic release by a county in Texas is 509, 781 pounds.

3.1.6 Noise

Faint noise heard on the proposed BP site consists of vehicle traffic from U.S. Highway 90 adjacent to the proposed site, gunshots from the firing range across Hwy. 90, and planes from the Alpine-Casparis Municipal Airport located approximately 2 miles northeast of the site. Freight trains from the Southern Pacific/Atchison, Topeka and Santa Fe Railroad ¼ mile to the north was a louder source of noise on the site. Natural sound on the site came from the wind, an occasional passing bird, as well as the horses from the neighboring trailer park that were grazing on the proposed site.

3.2 Water

3.2.1 Groundwater

Groundwater is located approximately 200-800 feet below the surface within the Igneous minor aquifer. Minor aquifers supply a large quantity of water in a small area or a relatively small quantity of water in a large area. On-site drilling would need to be conducted to determine the exact depth of groundwater. The City of Alpine has a well field approximately 2 miles north of the site at Sunny Glen Well Field. [10] The depth of this well is 200 feet. Another well will be drilled in the near future to a depth of 800 feet. Alpine is not in an area experiencing significant groundwater decline from the years1975 to 1985. [11] Significant is defined as more than 20 feet in a water table area or 50 feet in an artesian area.

3.2.2 Hydrology and Floodplain

Hydrology on the proposed project site flows from west to east, then to an existing floodplain that traverses the southern portion of the site. The Flood Insurance Rate Map (FIRM) of Brewster County Texas [12] shows this floodplain as Zone A, an area of 100-year flood with base flood elevation and flood hazard factors not determined. The U.S. Army Corps of Engineers, Albuquerque District, performed a floodplain analysis of the site for the BP. At the west boundary of the site, the hydraulic depth is 0.54 feet and the top width of the floodplain is 350 feet based on a 100-year flow of 359 cfs. [13] The new floodplain boundaries on the site are shown on the proposed site plan (Figure 2).

3.2.3 Wetlands and other Waters of the U.S.

No wetlands or other waters of the U.S. are present on the site. The dominant vegetation on the site, sideoats grama (*Bouteloua curtipendula*) and blue grama (*Bouteloua gracilis*), are upland plant species. The Boracho and Espy soil series on the site are classified as well drained and are not hydric soils. The site is part of the Rio Grande river basin. The nearest waters of the U.S. to the site is an unnamed intermittent stream located approximately 0.4 miles southeast of the site. Water flows from the proposed site to this unnamed tributary and then on to Toronto Creek at a location approximately 2 miles northeast of the site. Ultimately, hydrology flows to the Pecos River and then to the Rio Grande.

3.3 Biological Environment

3.3.1 Vegetation

Alpine, New Mexico is in the semidesert grassland floristic community. [14] It is a perennial grass-scrub dominated landscape situated adjacent to the Chihuahuan desertscrub. The dominant vegetation observed during the site visit on October 13 and 14, 1999 is grass, specifically, sideoats grama (*Bouteloua curtipendula*) and blue grama (*Bouteloua gracilis*). Other grass species on the site include the following:

Wright threeawn, *(Aristida wrightii)*
Fall witchgrass, *(Leptoloma cognatum)*
Alkali sacaton, *(Sporobolus airoides)*
Fluffgrass, (*Erioneuron pulchellum)*
New Mexico little bluestem, *(Andropogon scoparius* var. *neo mexicana)*
Wooton threeawn, (*Aristida pansa)*
Plains bristlegrass, (*Setaria leucopila)*
Indian grass, *(Sorghastrum nutans)*
Black grama, *(Bouteloua eriopoda)*

Forbs observed on the project site include the following:

Featherleaf spine aster, *(Machaeranthera australis)*
Cocklebur, *(Xanthium strumarium)*
Common sunflower, *(Helianthus annuus)*
Woollyleaf bursage, *(Ambrosia grayi)*
Rough gumweed, *(Grindelia scabra)*
Rough blackfoot, *(Melampodium hispidium)*
Frostweed *(Cryptantha albida)*
Mexican thistle, *(Eryngium heterophyllum)*
Fireweed, *(Kochia scoparia)*
Russian tumbleweed *(Salsola kali)*
Wright cudweed, *(Gnaphalium wrightii)*
Woolly sumpweed, *(Iva dealbata)*
Hairy tubetongue, (*Siphinoglossa pilosella)*

Shrubs were scattered within the proposed site and included the following species:

Rough Ephedra *(Ephedra nevadensis* var. *aspera)*
Catclaw mimosa *(Mimosa biuncifera)*
Rubber rabbit-bush (*Chrysothamnus nauseosus)*
Honey mesquite *(Prosopis juliflora* var. *glandulosa)*
Broom Snakeweed *(Gutierrezia sarothrae)*
Crucifixion plant *(Koeberlinia spinosa)*
Javelina bush *(Condalia ericoides)*
Butterflybush *(Buddleja scordioides)*

Horse crippler *(Echinocactus texensis)*
Prickly pear *(Opuntia* sp.*)*

3.3.2 Wildlife

Mammals

Mammals that were observed during the site visit on October 13 and 14, 1999, were the Black-tailed jack rabbit *(Lepus californicus)* and the Desert cottontail *(Sylvilagus audubonii)* (Order Lagomorpha). Other mammals that may frequent the site are included in Table 1 [15].

Table 1: List of Mammals That May Frequent the Proposed Site

Order Chiroptera
Masked bat *(Myotis leibii)*
Brazilian free-tailed bat *(Tadarida brasiliensis)*
Big brown bat *(Eptesicus fuscus)*
Big free-tailed bat *(Nyctinomops macrotis)*
Order Rodentia
Botta's pocket gopher *(Thomomys bottae)*
Silky pocket mouse *(Perognathus flavus)*
Deer mouse *(Peromyscus maniculatus)*
Long-tailed grasshopper mouse *(Onychomys torridus)*
Short-tailed grasshopper mouse *Onychomys leucogaster)*
Long-tailed harvest mouse *(Reithrodontomys fulvescens)*
Gray harvest mouse (R*eithrodontomys montanus)*
Hispid cotton rat (*Sigmondon hispidus)*
Merriam kangaroo rat *(Dipodomys merriami)*
Mexican ground squirrel (*Spermophilus mexicanus)*
Yellow-faced pocket gopher *(Pappogeomys castanops)*
Order Carnivora
Hog-nosed skunk *(Conepatus mesoleucus)*
Badger *(Taxidea taxus)*
Desert fox *(Vulpes macrotis)*
Coyote *(Canis latrans)*

Amphibians/Reptiles

The proposed site may contain characteristics that could provide a suitable habitat for the following species of amphibians and reptiles [16]:

Couch spadefoot *(Scaphiopus couchii)*
Southern spadefoot *(Scaphiopus multiplicatus)*
Plains spadefoot *(Scaphiopus bombifrons)*
Great Plains toad *(Bufo cognatus)*
Green toad *(Bufo dibilis)*
Red-spotted toad *(Bufo punctatus)*

Desert box turtle *(Terrapene ornata luteola)*
Southern prairie lizard *(Sceloporus undulatus consobrinus)*
Side-blotched lizard *(Uta stansburiana)*
Texas-banded gecko *(Coleonyx brevis)*
Chihuahuan spotted whiptail *(Cnemidophorus exsanguis)*
Little striped whiptail *(Cnemidophorus inornatus)*
Texas blind snake *(Leptotyphlops dulcis)*
Mexican hognose snake *(Heterodon nasicus kennerlyi)*
Bullsnake *(Pituophis melanoleucus sayi)*
Glossy snake *(Arizona elegans)*
Desert kingsnake *(Lampropeltis getulus splendida)*
Chihuahuan hook-nose snake *(Gyalopion canum)*
Southwestern black-headed snake *(Tantilla hubartsmithi)*
Plains black-headed snake *(Tantilla nigriceps)*
Night snake *(Hypsiglena torquata)*
Western diamondback rattlesnake *(Crotalus atrox)*

Birds

Resident bird species include summer breeding birds that may reside on the site during the spring and summer, leaving in the fall; wintering birds that arrive in the fall, reside during the winter and leave in the spring; as well as species that inhabits the area on a year-round basis. They include [17]:

Red-tailed hawk *(Buteo jamaicensis)*
Great horned owl *(Bubo virginianus)*
Common barn owl *(Tyto alba)*
American kestrel *(Falco sparverius)*
Bewick's wren *(Thryomanes bewickii)*
Rock wren *(Salpinctes obsoletus)*
Crissal thrasher *(Toxostoma crissale)*
Pyrrhuloxia *(Cardinalis sinuatus)*
American pipit *(Anthus rubescens)*
Loggerhead shrike *(Lanius ludovicianus)*
House sparrow *(Passer domesticus)*
Lark sparrow *(Chondestes grammacus)*
Cassin's sparrow *(Aimophila cassinii)*
Lesser goldfinch *(Cardvelis psaltria)*
House finch *(Carpodacus mexicanus)*
Eastern meadowlark *(Sturnella magna)*
White-winged dove *(Zenaida asiatica)*
Morning dove *(Zenaida macroura)*
Say's phoebe *(Sayornis saya)*
Horned lark *(Eremophila alpestris)*
Canyon wren *(Catherpes mexicanus)*
Cactus wren *(Campylorhynchus brunneicapillus)*
Black-tailed gnatcatcher *(Polioptila melanura)*
Northern mockingbird *(Mimus polyglottos)*
Curve-billed thrasher *(Toxostoma curvirostre)*
Northern cardinal *(Cardinalis cardinalis)*
Rufous-crowned sparrow *(Aimophila ruficeps)*
Black-throated sparrow *(Amphispiza bilineata)*
Ladder-backed woodpecker *(Picoides scalaris)*
Greater roadrunner *(Geococcyx californianus)*
Rufous-sided towhee *(Pipilo erythrophthalmus)*
Western meadowlark *(Sturnella neglecta)*

3.3.3 Special Status Species

Two agencies have primary responsibility for the conservation of plant and animal species in Texas. The U.S. Fish and Wildlife Service (USFWS) has responsibility for Federally listed plant and animal species and the Texas Parks & Wildlife Department has responsibility for state listed plant and animal species. Each agency maintains a list of plant and animal species, which have been classified or are candidates for classification as protected, based on present status and potential threat to future survival or recruitment. Agency coordination letters in response to the scoping process is located in Appendix B and includes a list of species that potentially occur in Brewster County and may occur near the proposed project area, as well as Table 2.

TABLE 2: FEDERAL AND STATE LISTED SPECIES IN BREWSTER COUNTY			
Species	*Scientific Name*	*Federal*	*State*
American peregrine falcon	*Falco peregrinus anatum*	E	LE
Least tern	*Sterna antillarum*	E	-
Whooping crane	*Grus Americana*	E	-
Arctic peregrine falcon	*Falco peregrinus tundrius*	T	T
Bald eagle	*Haliaeetus leucocephalus*	T	-
Piping plover	*Charadrius melodus*	T	-
Black-capped vireo	*Vireo atricapillus*	E	E
Golden-cheeked warbler	*Dendroica chrysoparia*	E	-
Northern aplomado falcon	*Falco femoralis septentrionalis*	E	-
Southwestern willow flycatcher	*Empidonax traillii extimus*	E	E
White-tailed hawk	*Buteo albicaudatus*	-	T
Zone-tailed hawk	*Buteo albonotatus*	-	T
Gray hawk	*Buteo nitidus*	-	T
Common black-hawk	*Buteogallus anthracinus*		
Mexican long-nosed bat	*Leptonycteris nivalis*	E	E
Gray Wolf	*Canis lupus*	E	E
Spotted bat	*Euderma maculatum*	-	T
Ocelot	*Felis pardalis*	E	E
White-nosed coati	*Nasua narica*	-	T
Black bear	*Ursus americanus*	T	T
Reticulated gecko	*Coleonyx reticulates*	-	T
Texas tortoise	*Gopherus berlandieri*	-	T
Chihuahuan mud turtle	*Kinosternon hirtipes*	-	T
Texas horned lizard	*Phrynosoma cornutum*	-	T
Big Bend Blackhead snake	*Tantilla rubra*	-	T
Texas lyre snake	*Trimorphodon biscutatus*	-	T
Big Bend gambusia	*Gambusia gaigei*	E	-
Davis' green pitaya	*Echinocereus viridiflorus var. davisii*	E	E
Nellie cory cactus	*Coryphantha minima*	E	E
Terlingua Creek cats-eye	*Cryptantha crassipes*	E	E
Bunched cory cactus	*Coryphantha ramillosa*	T	T
Chisos Mountain hedgehog cactus	*Echinocereus chisoenis var. chisoensis*	T	T
Hinckley's oak	*Quercus hinckleyi*	T	-
Lloyd's Mariposa cactus	*Echinomastus mariposensis*	T	T
Wilkinson's whitlow-wort	*Paronychia wilkinsonii*	SOC	-
Sonora fleabane	*Erigeron mimegletes*	SOC	-
E=endangered; T=threatened; SOC=Species of Concern			

Listed species that are primarily found in aquatic habitats which are not situated near the proposed site include the least tern, bald eagle, piping plover, common black-hawk, gray hawk, white tailed hawk, southwestern willow flycatcher, the ocelot, Chihuahuan mud turtle and Big Bend gambusia. The whooping crane nests near sandbars of the Rio Grande and will forage nearby. The zone-tailed hawk frequents river woodlands, desert mountains, and canyons.[18] The black-capped vireo's habitats include oak scrub, brushy hills, and rocky canyons. Proximity to riparian habitat may be an important determinant of vireo colonization. Cliff or cave dwellers include the American peregrine falcon, Arctic peregrine falcon, spotted bat and the Mexican long-nosed bat. None of these habitats are located near the project site.

Species that live mainly in forests or woodlands include the gray wolf, coati, and black bear. The proposed site does not contain trees, only shrubs and herbaceous vegetation. The golden-cheeked warbler's habitat is in oaks, junipers and streamside trees which are not located on the site. The Texas tortoise prefers open scrub woods, arid brush, lomas, grass-cactus association, or open brush with grass understory.[19] The percent cover of brush on the site may be too low for the Texas tortoise to prefer the site. The Texas lyre snake is chiefly a rock-dwelling snake, as well as the reticulated gecko, where they can find convenient shelter under rocks during daylight. The subject property contains no rocks (see figures 3-6). The Texas horned lizard prefers sparse plant growth in its habitat. The aplomado falcon frequents grassy plains interspersed with mesquite, cactus, and yucca. The project site may get visits from this falcon, however, yucca is not located on the project site. No threatened or endangered plant species were observed on the site during the field visit.

Davis' green pitaya grows in rock crevices within hills between 4,000 – 4,500 feet. Nellie cory cactus lives in gravelly soil of hills in grasslands at about 4,000 – 4,500 feet. Bunched cory cactus, Lloyd's Mariposa cactus and Chisos Mountain hedgehog cactus live on limestone soils of hills in the desert. Hinckley oak is restricted to dry limestone slopes generally below 5,000 feet in elevation, within the desert scrub community.[20]

Two species of concern that presently are known to occur in the vicinity of the project site are the Wilkinson's whitlow-wort and the Sonora fleabane. The Wilkinson's whitlow-wort inhabits shallow rocky soils in crevices on novaculite hills or outcrops. The Sonora fleabane inhabits grasslands in shallow clay soils over limestone, perhaps more frequent in areas which are poorly drained in spring. The soils on the site are composed of loam, not clay and are not rocky, but gravelly. No novaculite hills or outcrops are located on the site. The soil types on the property are not conducive to these two species of concern.

3.4 Socioeconomic Environment and Environmental Justice

The total population of Brewster County has grown from 7, 573 in 1980 to 9,840 in 1995. In 1992, the total population was 8905.[21] The ethnic breakdown for Brewster County in 1992 was 4961 white (non-Hispanic), 3862 Hispanic, and 82 black. The county work force for the year 2000 is 9,265. The unemployment rate is 2.5%. The average weekly

wage is $353.72. The average cost of a lot is $5,000 [22]. Building cost is approximately $45 per square foot.

Alpine is the county seat and largest community within Brewster County. The total population of Alpine in 1995 was 6,187. The largest employer in Alpine is Sul Ross State University. Sul Ross has approximately 371 employees and 2300 students enrolled in the University. Alpine has 8 hotels and motels, with a total of 371 rooms, and two bed and breakfasts. Three banks provide local financing to the Alpine area. There are 18 restaurant and dining facilities seating 20 to 100 people. There are 400 banquet/meeting facilities in the Alpine area. Recreational facilities includes 3 parks, a golf course, 14 public tennis courts, 2 public swimming pools, public and private hunting facilities, a shooting range and camping facilities.

3.5 Human Health and Safety

Alpine is served by Big Bend Regional Medical Center, a 50-bed hospital located just north of Alpine [23]. Alpine is home to 6 general practitioners, 2 dentists, and 1 optometrist. West Texas Ambulance Service provides ambulance service to the Alpine area. Fire protection is from a volunteer department with a Protection Code rating of 7. Police protection is provided by nine city officers and Brewster County Sheriff deputies.

Since the site has been rangeland without previous development and no existing structures are located on it, it is unlikely that the site would contain hazardous materials or wastes. There are no properties within Brewster County that appear on the Environmental Protection Agency's Comprehensive Environmental Response, Compensation, and Liability list (CERCLIS)[24] or the National Priority List (NPL). [25] CERCLIS sites are known locations of hazardous waste contamination and the NPL list prioritizes this list of properties that need to be cleaned up first.

The proposed BP station would repair BP vehicles in the vehicle maintenance building. A paint booth would be included in a vehicle maintenance bay. Used motor oil and anti-freeze for recycling would be stored in separate aboveground-contained storage tanks adjacent to the vehicle maintenance building. Used oil and antifreeze is not considered a hazardous waste according to Federal and state law.[26] The design parameters to be used for the oil and antifreeze recycling require a manufactured above ground contained tank system, such as the Myers WOSS. These tank systems are complaint with Federal regulations. All manufacture recommended installation requirements would be met. Three fuel tanks are proposed: one 4000 gal. diesel fuel tank and one 12,000 gal. unleaded gas tank at the vehicle fuel island for BP vehicles; one 6,000 gal. jet fuel tank at the helicopter pad. Tires would also be stored on the site for recycling. A waste station is proposed to empty wastewater from BP buses.

A septic tank is proposed since no city sewer line hookup is available. The existing utilities are currently terminated within a half-mile of the property. The installation of the septic system would be designed to accommodate the connection to the city system upon the extension of the utilities to the property line. The septic system would be

located south of the proposed structures and north of the floodplain. The septic system would be designed to accommodate the station without impacting neighboring properties.

3.6 Cultural Resources.

Prior to the cultural resources survey, the records of the Texas State Historic Preservation Office and the Texas Archaeological Research Laboratory were checked by telephone. The project location had not been surveyed. No cultural properties that have been listed or are eligible for listing on the State or the National Registers of Historic Places are within or near the proposed project location. A cultural resources survey was conducted on October 13 and 14, 1999, and January 26, 2000, by a qualified USACE archaeologist. The entire location was covered by an intensive pedestrian survey conducted in parallel zigzag transects varying from nine to 15 meters apart depending on ground visibility. A change in the proposed layout of the facilities necessitated additional survey; a total of 37 acres were surveyed. This additional area provides an ample buffer for equipment and materials between the actual construction locations and the adjacent unsurveyed parcels to the north and west. Existing fences will prevent accidental incursions beyond the eastern or southern project limits.

Given the ecological nature of the project area, the remains associated with rather short-term resource exploitation facilities of hunter gatherers and homesteading and ranching were the most likely to occur. While prepared to record a wide rang of functionally specific sites and isolated artifacts from all temporal periods, nothing was found except for modern debris. No cultural resources were located during the field investigation. As used in this EA, the category of cultural resources includes prehistoric and historic archaeological sites and isolated artifacts. [27]

4.0 FORESEEABLE EFFECTS

A foreseeable effect is defined as a possible modification in the existing environment brought about by development activities. Impacts can be beneficial or adverse, a result of a direct or an indirect action, and permanent (long-term) or temporary (short-term). Impacts can vary in degree from a slightly discernable change to a total change in the environment. Short-term impacts usually occur during and immediately after the construction of the project. Although short in duration, such impacts may be obvious and disruptive. For this project, short-term impacts are defined as those lasting 2 years or less, whereas long-term impacts are those lasting more than 2 years.

Significance criteria are presented for each affected resource. These criteria are based on existing regulatory standards, scientific and environmental documentation, and/or professional judgment. Potential impacts for this project were classified at one of four levels: significant, moderate, negligible, and no impact. Significant impacts (as defined in Council on Environmental Quality [CEQ] guidelines 40 CFR 1500-1508) are effects that are most substantial and therefore should receive the greatest attention in decision-making. Moderate impacts do not meet the criteria to be classified as significant but nevertheless result in change that is easy to detect. Negligible impacts result in little or

no effect to the existing environment and cannot be easily detected. In the following discussions, impacts are considered to be adverse unless identified as beneficial.

Cumulative impacts are those, which result from the incremental impacts of an action added to other past, present, and reasonably foreseeable actions, regardless of who is responsible for such actions. Irreversible and irretrievable impacts are permanent reductions or losses of resources that, once lost, cannot be regained. Cumulative impacts and irreversible and irretrievable commitment of resources are discussed in separate sections following the discussion of resources.

4.1 Physical Environment.

4.1.1 Land Use

The land use of the proposed site would change from passive open space to active use by the U.S. Border Patrol. Land use would change by the addition of vehicles, an administration building, vehicle maintenance shop, a helicopter landing pad, a fuel island, a car wash, a dog kennel, parking, a radio, utilities and traffic. Since no zoning designations are in effect in Brewster County, no impact to zoning would occur. Since the project site is not being actively used except by grazing horses, minimal impact to existing land use would occur on the project site. No impact would occur to surrounding properties' land use. Helicopters would be used on the project site where none were used prior. However, transportation by vehicles, buses, trucks, trains and airplanes is already being used on surrounding properties. Transportation by helicopters would not be a significant land use change. Overall, land use would have a negligible long-term impact to the surrounding community.

4.1.2 Aesthetics

Visual observation of the site would change from a vegetated semi-desert landscape to a moderately developed landscape. Views of the site would be moderately impacted from the standpoint of the residential trailer park since a larger population of people would be affected from that direction. Views from the north, south, and west would be minimally impacted due to a small number of people potentially viewing the site from those standpoints. Direct views of the surrounding mountains would not be impacted from any standpoint. Overall, impacts to aesthetics would be minimal.

4.1.3 Geology/Soils

The Boracho and Espy soils are highly erodable soils. Best Management Practices (BMPs) would be implemented during project construction to minimized impacts to these soils. These practices would include a silt fence around construction areas to contain sediment in runoff. Exposed soil would be watered down to minimize wind blown soil particles. Temporary and permanent seeding would occur after construction to stabilize exposed graded areas. Impacts to soils would be negligible during construction with the use of BMPs. Impacts to geology would not occur.

4.1.4 Climate

There would be no impact on existing climate resulting from the proposed project.

4.1.5 Air Quality

There would be a negligible short-term effect on air quality during construction. It would consist of emissions from construction equipment and soil dust generated by earthwork. Dust generated from construction activities would be reduced by implementing dust control measures, such as periodic watering of the soil. The emissions are not considered significant and would not affect Brewster County's attainment status with the State of Texas. No impact to air quality would occur on a long-term basis.

4.1.6 Noise

A negligible increase in noise would occur with the proposed helicopter and helipad. The helicopter would enter and exit the proposed site on an infrequent basis, which would minimize the disturbance from helicopter noise. The helicopter would only enter the proposed site for the transportation of aliens into the BP, and then to exit. The majority of the time the helicopter would be patrolling the borders. The helicopter would be stationed at the Marfa Sector, which also limits the ingress and egress of the helicopter into Alpine Station. Helicopter flights would not pass over the existing trailer park to the east, or any other residential area at low flight.

The proposed site is located within an area that already contains a number of moderately loud sources of transportation noises. Planes from the Alpine-Casparis Municipal Airport and freight trains from the Southern Pacific/Atchison, Topeka and Santa Fe Railroad are sources of noise that compare in loudness to the proposed helicopters. Noise impact would be minimal due to the existing neighboring noise and the occasional ingress and egress of the helicopter into the Alpine BP.

Noise would increase on a short-term basis during standard construction operations. Nighttime construction is not expected.

4.2 Water

4.2.1 Groundwater

No impacts to groundwater are expected to occur. A groundwater well for the project is not proposed at this time. Water for the proposed BP site would be derived from an existing water utility line owned by the City of Alpine along U.S. Highway 90. Although the City of Alpine pumps water from a well, there should be no significant decrease in groundwater level with the addition of a new BP station.

The Spill Prevention Control and Countermeasure (SPCC) Plan would be implemented if a spill occurred from the fuel tanks, waste oil or antifreeze barrel AGT. The groundwater

is sufficiently deep that any spill would not contact the groundwater. Implementation of the SPCC would take place immediately. No underground storage tanks (USTs) are proposed for the proposed project. No impacts to groundwater from the proposed site are expected from this project.

4.2.2 Hydrology and Floodplain

Runoff patterns on the proposed site would change due to the addition of vertical structures. This change would have a negligible long-term impact on hydrology. Development would be limited to a 20-foot road crossing within the existing floodplain near the front of the property. The proposed road would be constructed with a culvert(s) so as not to restrict flood flows from west to east. No other structures are proposed in the floodplain. No change in floodplain boundaries or hydraulic depth is expected with the proposed project. The 100-year floodplain would not be reduced. Negligible impact to the existing floodplain from road construction would occur with the proposed project.

4.2.3 Wetlands and other Waters of the U.S.

Since no wetlands or other waters of the U.S. occur within the proposed project boundaries, no impact to waters would occur. A letter from the U.S. Army Corps of Engineers, Albuquerque District, El Paso Regulatory Office, dated November 16, 1999, which concurs with this finding, is included in Appendix B.

4.3 Biological Environment

4.3.1 Vegetation

A large portion of the site would not be impacted by the proposed development and natural vegetation would remain. However, permanent removal of vegetation would occur with the construction of the proposed facilities listed in Section 2.1. Other areas that are graded or tracked by construction equipment would be landscaped with native Texas vegetation that requires low or no water and maintenance or seeded with a native Texas seed mix, which would be used as a permanent soil stabilizer. The specific plant species used Minor long-term impacts to the semi-desert vegetation are expected to occur.

4.3.2 Wildlife

The radio tower would be limited to a height of 40 feet, which would help reduce avian collisions. Other warning requirements of the FAA and City ordinance would be followed. Birds are at slight risk from collisions during helicopter operations since helicopter flights are conducted within 100 to 500 AGL (above ground level). The risks of strikes with birds are always a safety consideration in BP flight operations and measures are included to minimize or eliminate any potential.

Permanent displacement to wildlife would occur to a small degree with the construction of the proposed facilities. Displacement of wildlife in the surrounding area could occur as a result of construction activities and have a negligible short-term effect. Overall, impacts to wildlife would be minimal.

4.3.3 Special Status Species

None of the species listed in the Texas Parks & Wildlife letter, dated November 5, 1999, or the U.S. Fish and Wildlife Service letter, dated November 10, 1999, (Appendix B) were observed during the site visit of October 13 and 14, 1999. Since the site has been grazed, the potential of any threatened or endangered plant species on the site is negligible. No evidence of nesting by bird species was found. The proposed project would not impact any threatened or endangered bird species flying overhead. No impact to threatened or endangered species would occur on the proposed site.

4.4 Socioeconomic Environment and Environmental Justice

The proposed project would have a minor long-term benefit to the local economy by increasing the demand for goods and services from the increase of border patrol agents. Local purchases of food, gasoline, housing, and other products would provide an increase in income for local businesses. An additional short-term increase would also occur during construction with the construction work force. No adverse impacts on minority and low-income populations are expected. Under the definition of Executive Order 12898, there would be no adverse environmental justice impacts by the proposed action.

4.5 Human Health and Safety

The proposed BP station would include many safety features to reduce any threat from aliens. It would include bullet-resistant glazing (approximately 3-4 feet wide) between the lobby and the receptionist with a microphone-speaker system and a pass-through drawer. The door leading from the lobby to the corridor would be fully glazed and would also be bullet-resistant glazed. Concrete Masonry Unit (CMU) construction would be required for the lobby to protect BP personnel from through-wall attacks. A new lockable storefront-style door (full glazing in aluminum frames) would be provided to control visitor access to the office spaces. Lockable doors would be installed throughout most of the new station to protect personnel.

The control room would have complete visual control of the Sally Port via monitors as well as electronic control of the Sally Port gates and all Processing Area doors. Bullet-resistant glazing is also required for the control room. The proposed ammunition room would require key-card access, plus a locking cylinder (deadbolt). The doors would be constructed of 14-gage steel. Ammunition would be stored on pallets. The detention doors would be full-vision doors and constructed of 14-gauge steel and attack-resistant laminated glazing.

A fire suppression system would be installed in the new BP station that is not available in the existing facility. The primary fire alarm signals from the maintenance building and the dog kennel would be monitored from within dispatch. If the signal is not answered within a designated time, it would be transmitted to the Marfa Sector HQ via telephone. An eyewash station would be provided in a vehicle maintenance bay.

Impacts from hazardous waste and materials used and stored on the proposed site are not expected. Used oil and antifreeze in the AGT would be stored on site until it is picked up by a registered commercial recycler and transporter of used oil. Vehicle maintenance waste, such as the motor oil, anti-freeze and paint waste, is considered a municipal waste, not an industrial waste.[28] Registration with the State of Texas is not required if recycling, transportation and disposal of these wastes are kept within the state of Texas and quantities of waste do not exceed the large quantity generator status. Bill of Lading Records would be kept for oil, antifreeze, and paint picked up by the registered waste transporter.

Fuel tanks would be equipped with monitoring and alarm systems in case of a spill. A Spill Prevention Control and Countermeasure (SPCC) Plan would be available on the project site at all times and implemented if a spill from an AGT occurred. The SPCC will address all of the potential operations at the station. It will be prepared within one year of operations at the BPS.

Only 16-20 tires are proposed to be stored for recycling on the site at any one time. Registration with the TNRCC Tire Mgmt. Program would not be required unless tires reach an amount of 500 on the ground or 2000 on a trailer. Overall, impact from the use of hazardous materials or waste would be minimal.

Runway lighting meeting FAA guidelines would be provided at the helicopter pad and the road leading up to the pad.

It would have moderate long-term beneficial safety impacts to our National security by increasing the agents that patrol the United States-Mexican border. Human health would moderately benefit from the reduction of drug trafficking entering the country. In the long-term, a moderate benefit would occur to human health and safety due to the proposed project and increasing the number of BP agents to reduce the number of illegal aliens entering the U.S. The proposed project would have a negligible short-term health and safety impact based on inherent hazards in vertical construction.

4.6 Cultural Resources

A variety of project activities could result in impacts to sites eligible for the National Register of Historic Places (NRHP). Significant impacts include physical disturbance, the isolation of an eligible cultural resource from its context, the introduction of visual, audible, or atmospheric elements that significantly alter its setting or is out of character with a NRHP eligible site or disturbance to important sites of religious or cultural significance for Native Americans.

No impact would occur to cultural resources as a result of the proposed action. A file search resulted in a finding of no sites in the area, and further examination of the project location by a qualified archaeologist revealed no cultural resources. Should any cultural resources be identified during construction, the work would cease in the area of discovery, the Texas SHPO and the Albuquerque District would be contacted and appropriate measures would be taken.

4.7 Cumulative Impacts

In consideration of the past, present, and future foreseeable, reasonable actions, the cumulative impacts of the proposed project would be negligible on the resources within the project area. Little development already exists in the vicinity of the proposed project. There are no planned Federally funded or non-Federal projects in the vicinity of the proposed project. The proposed project in addition to the existing constructed facilities and houses in the area would create a minor cumulative impact.

4.8 Irreversible and Irretrievable Commitment of Resources

An irreversible and irretrievable commitment of resources is where the existing resources on the site are lost forever. The proposed project would not create an irreversible or irretrievable commitment of resources. The resources present would only be impacted during the life of the project. The buildings could be taken down at a future date and open space returned. The semi-desert vegetation would return after a period of time of abandonment. No resource present on the site would be lost forever due to the proposed project.

4.9 No-action Alternative

The no-action alternative would have no impact on land use, aesthetics, geology, soils, climate, air quality, noise, groundwater, hydrology, floodplain, wetlands or other waters of the U.S., vegetation, wildlife, special status species, socioeconomics, human health, human safety, cultural resources, cumulative impacts, irreversible or irretrievable impacts, nor increase hazardous waste or materials.

4.10 Mitigation

Impacts to the environment are being avoided and minimized to the best extent possible. Impacts to the floodplain are being minimized to the best extent practicable. The minor impacts to the environment from the proposed project do not warrant any compensation. Mitigation is not proposed for this project.

5.0 CONCLUSIONS

The no-action alternative would have no effect on the human environment, however, under this alternative, the U.S. Border Patrol would not be able to increase the number of border patrol agents to control drug smuggling and alien entry into the United States.

Human health and safety of the U.S. would be jeopardized. In the long-term, human health and safety would benefit moderately from the proposed project. Socioeconomics would also benefit from the project with the increase in BP agents and construction workforce. Minimal long-term impact would occur to vegetation, wildlife, hydrology, floodplain, noise, land use, and aesthetics and could occur from the use of hazardous material or waste. Short-term impacts would occur to soils, air quality and noise during construction and could occur to human health and safety. No impact would occur to soils, geology, climate, air quality, groundwater, wetlands and other waters of the United States, special status species, cultural resources and irreversible or irretrievable resources in the long-term. It would not result in any moderate or significant, short or long-term, cumulative adverse effects and, therefore, is recommended. An Environmental Impact Statement (EIS) will not be generated for the proposed action.

6.0 PREPARATION AND COORDINATION

6.1 Preparation

This Environmental Assessment (EA) was prepared for the Immigration and Naturalization Service, Border Patrol by the U.S. Army Corps of Engineers, Albuquerque District (USACE). Personnel primarily responsible for the preparation include:

Julie A. Hall	B.S. Biology, USACE
John D. Schelberg	Ph.D. Anthropology, USACE
Mark C. Harberg	M.S.Biology, USACE
Peter K. Doles	P.E., Project Management, USACE

6.2 Coordination

6.2.1 Agencies and Governments Included in the Scoping Process and Draft EA Consultation

David C. Frederick
U.S. Fish and Wildlife Service
Austin Ecological Services Office
10711 Burnet Road, Suite 200
Austin, Texas 78758

Renee Fields
Wildlife Habitat Assessment Program
Texas Parks & Wildlife Department
4200 Smith School Road
Austin, Texas 78744-3291

Rob Lawrence
USEPA, Region 6
Office of Planning and Coordination (6EN-XP)

1445 Ross Avenue
Dallas, Texas 75202-2733

Mr. Frank Espino
Texas Natural Resource Conservation Commission
7500 Viscount Blvd., Suite 147
El Paso, Texas 79925-5633

Dan Malanchuk
Regulatory Office
U.S. Army Corps of Engineers
P.O. Box 6096
Ft. Bliss, Texas 79906

Mark Donet
Natural Resource Conservation Service
P.O. Box 1018
Alpine, Texas 79831

Mr. F. Lawrence Oaks
State Historic Preservation Officer
Texas Historical Commission
P.O. Box 12276
Austin, Texas 78711

Judge Val Beard
County Judge
P.O. Box 1630
Alpine, Texas 79831

Doug Lively
City Manager
309 W. Saul Ross
Alpine, Texas 79830

6.2.2 Agencies and Governments Formally or Informally Consulted for the Preparation of this EA Include:

USACE
Albuquerque District
El Paso Regulatory Office

U.S. Fish and Wildlife Service
Austin Ecological Services Office

U.S. Environmental Protection Agency
Office of Planning and Coordination

U.S. Department of Agriculture
Natural Resource Conservation Service

Texas Parks & Wildlife Department
Wildlife Habitat Assessment Program
Wildlife Division

Texas Historical Commission
State Historic Preservation Officer

Texas Natural Resource Conservation Commission

County of Brewster
County Judge

7.0 REFERENCES

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APPENDIX A

DEPARTMENT OF THE ARMY
ALBUQUERQUE DISTRICT, CORPS OF ENGINEERS
4101 JEFFERSON PLAZA, NE
ALBUQUERQUE, NEW MEXICO 87109-3435
FAX (505) 342-3199

Reply to
Attention of:

RECEIVED
OCT 08 1999
TEXAS HISTORICAL COMMISSION

October 6, 1999

Engineering and Construction Division
Environmental Resources Branch

James E. Bruseth, Ph.D
State Historic Preservation Officer
Texas Historical Commission
P.O. Box 12276
Austin, Texas 78711

Dear Dr. Bruseth:

The U.S. Army Corps of Engineers, Albuquerque District, is working with the Immigration and Naturalization Service (INS) on an Environmental Assessment (EA) for the construction of a new border patrol station on a 15-20 acre parcel of land along U.S. Hwy. 67/90, just west of Alpine's city limits, in Brewster County, Texas. See Exhibit 1 for the proposed location map.

The Alpine Station includes all of Brewster County. This station is responsible for 132 miles of International Border along the Rio Grande River. It supports traffic checkpoint operations in Alpine and Marathon, Texas and a sub-office in Big Bend National Park. Linewatches, traffic checks, bus checks, and freight-train checks are conducted within the Alpine Station area. The Alpine Station is currently located in a leased building that formerly housed an automobile dealership. The station was originally planned to employ only 25 agents. Presently, it is anticipated that the staff will grow to 65 agents. Space for offices, alien processing, and interviewing is limited because of its original configuration.

The new facility would include an administration building that includes office space, conference and muster areas, as well as segregated detention and interview rooms for aliens. Aliens would enter and exit the building through a sally port on the detention wing. The design would also include a vehicle maintenance and warehouse building, fuel island, a car wash, a parking area, a dog kennel, a horse stable, a helicopter-landing pad, perimeter fence and lighting, a radio tower, security systems and landscaping with irrigation. The proposed locations for these structures are shown on Exhibit 2.

The front of the property adjacent to Hwy. 67/90 contains a 100-year floodplain (Zone A). One alternative may be to locate the kennel, horse stable and helicopter-landing pad within this

The front of the property adjacent to Hwy. 67/90 contains a 100-year floodplain (Zone A). One alternative may be to locate the kennel, horse stable and helicopter-landing pad within this flood zone. These structures are compatible with floodplain construction. The preferred alternative would be to eliminate any construction within this floodplain. The floodplain would be avoided by building these structures in a 5-acre area originally reserved for future border patrol expansion.

Please send us a current list of federally listed or proposed threatened and endangered species that may occur in Brewster County, as well as any other comments or concerns you may have for the proposed project. Send your correspondence within 30 days from the date of this letter to:

Ms. Julie Hall
U.S. Army Corps of Engineers, Albuquerque District
Environmental Resources Branch
4101 Jefferson Plaza, NE
Albuquerque, New Mexico 87109-3435

If you have any questions or need additional information, please contact Ms. Hall at (505) 342-3281, or fax (505) 342-3199, or e-mail address julie.hall@spa02.usace.army.mil. Thank you.

Sincerely,

for Mark C. Harberg
Chief, Environmental Resources Branch

Enclosures

APPENDIX B

DEPARTMENT OF THE ARMY
ALBUQUERQUE DISTRICT, CORPS OF ENGINEERS
4101 JEFFERSON PLAZA, NE
ALBUQUERQUE, NEW MEXICO 87109-3435
FAX (505) 342-3199

Reply to
Attention of:

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OCT 08 1999
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October 6, 1999

Engineering and Construction Division
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Texas Historical Commission
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The front of the property adjacent to Hwy. 67/90 contains a 100-year floodplain (Zone A). One alternative may be to locate the kennel, horse stable and helicopter-landing pad within this

flood zone. These structures are compatible with floodplain construction. The preferred alternative would be to eliminate any construction within this floodplain. The floodplain would be avoided by building these structures in a 5-acre area originally reserved for future border patrol expansion.

Please send us your comments or concerns you may have for the proposed project. Send your correspondence within 30 days from the date of this letter to:

Ms. Julie Hall
U.S. Army Corps of Engineers, Albuquerque District
Environmental Resources Branch
4101 Jefferson Plaza NE
Albuquerque, New Mexico 87109-3435

If you have any questions or need additional information, please contact Ms. Hall at (505) 342-3281, or fax (505) 342-3199, or e-mail address julie.hall@spa02.usace.army.mil. Thank you.

Sincerely,

for Mark C. Harberg
Chief, Environmental Resources Branch

Enclosures

NO SURVEY REQUIRED
PROJECT MAY PROCEED
by
for F. Lawerence Oaks
State Historic Preservation Officer
Date 11/1/99

DEPARTMENT OF THE ARMY
ALBUQUERQUE DISTRICT, CORPS OF ENGINEERS
4101 Jefferson Plaza, NE
Albuquerque, New Mexico 87109-3435

Reply to Attention of:

3 February 2000

Engineering and Construction
Division
Environmental Resources
Branch

RECEIVED
FEB 07 2000
TEXAS HISTORICAL COMMISSION

Mr. F. Lawerence Oaks
Texas State Historic Preservation Officer
Texas Historical Commission
P.O. Box 12276
Austin, TX 78711-2276

ATTN. Mr. Myles Miller

Dear Mr. Oaks:

In accordance with 36 CFR 800, the U. S. Army Corps of Engineers, Albuquerque District, is providing for your review and comment a copy of the survey report entitled *A Cultural Resources Survey for the Immigration and Naturalization Service, United States Border Patrol, Proposed Border Patrol Station; Alpine, Texas*. The survey was completed in conjunction with the preparation of an Environmental Assessment.

A 20-acre plot will be purchased for the proposed construction project; 37 acres were surveyed for cultural resources. The location surveyed includes ample space for staging areas and buffer zones. The specific location information is detailed in the enclosed report. No cultural resources were found; therefore, the construction will cause no effect. We are seeking your concurrence in our determination of "No Historic Properties Affected".

The Border Patrol is currently occupying a remodeled automobile dealership building which is inadequate for current requirements and is too small for projected increases in staff. The proposed location is unoccupied pasture land.

As noted, no cultural resource sites or isolated artifacts were found. While it is unlikely that subsurface cultural material exists, if previously unrecorded material is exposed during construction, all work will cease in the vicinity of the discovery and archaeologists from this office will assess the situation. No work will proceed until consultation with your office has been completed.

If you have any questions or require additional information concerning this project, please contact Dr. John D. Schelberg at (505) 342-3359. Thank you for your attention to this matter.

Sincerely:

Mark C. Harberg

Mark C. Harberg
Chief, Environmental Resources Branch

Enclosure

Copy Furnished (w/o enclosure)

Don Klima, Director
Advisory Council on Historic Preservation
Office of Planning and Review
12136 West Bayaud Avenue, #330
Lakewood, CO 80228-2115

I Concur _____
F. Lawerence Oaks
Executive Director
Texas Historical Commission

NO EFFECT
On National Register-eligible/listed properties
or State Archeological Landmarks
PROJECT MAY PROCEED
by _____
for F. Lawerence Oaks
State Historic Preservation Officer
Date 2-14-00

DEPARTMENT OF THE ARMY
ALBUQUERQUE DISTRICT, CORPS OF ENGINEERS
EL PASO REGULATORY OFFICE
P.O. BOX 6096
FORT BLISS, TEXAS 79906-0096
FAX (915) 568-1348

REPLY TO
ATTENTION OF:

November 16, 1999

Operations Division
Regulatory Branch

U.S. Army Corps of Engineers, Albuquerque District
Attn: Ms. Julie Hall
Environmental Resources Branch
4101 Jefferson Plaza, NE
Albuquerque, NM 87109-3435

Dear Ms. Hall:

Reference is made to the letter dated October 22, 1999 regarding the proposed construction of a new Border Patrol station near Alpine, Brewster County, Texas. (Action No. 1999 00368)

We have studied the project description, other records, and documents available to us. The project is not regulated under the provisions of Section 404 of the Clean Water Act and a Department of the Army permit will not be required. This determination was made because the project site does not encompass any jurisdictional Waters of the United States.

If you have any questions, please feel free to write or call me at (915) 568-1359.

Sincerely,

Daniel Malanchuk
Chief, El Paso Regulatory Office

TEXAS
PARKS &
WILDLIFE

COMMISSIONERS

LEE M. BASS
CHAIRMAN, FT. WORTH

RICHARD (DICK) HEATH
VICE-CHAIRMAN, DALLAS

ERNEST ANGELO, JR.
MIDLAND

JOHN AVILA, JR.
FT. WORTH

CAROL E. DINKINS
HOUSTON

ALVIN L. HENRY
HOUSTON

KATHARINE ARMSTRONG IDSAL
DALLAS

NOLAN RYAN
ALVIN

MARK E. WATSON, JR.
SAN ANTONIO

PERRY R. BASS
CHAIRMAN-EMERITUS
FT. WORTH

ANDREW SANSOM
EXECUTIVE DIRECTOR

To manage and conserve the natural and cultural resources of Texas for the use and enjoyment of present and future generations.

November 5, 1999

Ms. Julie Hall
U.S. Army Corp of Engineers
Albuquerque District
Environmental Resources Branch
4101 Jefferson Plaza NE
Albuquerque, New Mexico 87109-3435

RE: Construction of U.S. Border Control Facility, Brewster County.

Dear Ms. Hall:

This letter is in response to your request for review of the environmental report prepared to identify the impacts associated with the construction the new U.S. Border Control facility referenced above. Texas Parks and Wildlife Department staff have reviewed the document and have the following comments concerning this project.

The proposed complex would be constructed on 15 to 20 acres of land along U.S. Highway 67/90, just west of Alpine city limits. The proposed new facility will include the following: an administrative building, a vehicle maintenance and warehouse building, fuel island, car wash, parking areas, dog kennel, horse stable, helicopter-landing pad, perimeter fence and lighting, radio tower, security systems, and landscaping with irrigation.

The impact to wildlife habitat cannot be predicted because the natural resources that are present on this parcel of land are not described. A description of the vegetative communities and aquatic resources that will be affected by construction are helpful for biological review. Other aids to biological review are photographs, both aerial and ground level, along with topographic maps of the proposed site. I have attached *Texas Parks and Wildlife Department Suggested Guidelines for Preparation of Environmental Assessment Documents* for your assistance.

In general the Department recommends that all activities should be performed to minimize the amount of existing native flora and fauna disturbed. Particular care should be taken to avoid adverse impacts to the special species (see attached list for Brewster County) and native vegetation that provides habitat for wildlife. Construction activities should avoid wetland habitats, riparian drainages, and dense, mature native brush. Impacts upon existing native vegetation, especially woody species, should be strictly minimized as much as practical.

4200 SMITH SCHOOL ROAD
AUSTIN, TEXAS 78744-3291
512-389-4800
www.tpwd.state.tx.us

A search of the Texas Biological and Conservation Data System (BCD) revealed presently known occurrences of two rare plants in the vicinity of the project site. Wilkinson's whitlow-wort, *Paronychia wilkinsonii*, is a member of the Pink family (Caryophyllaceae). Sonora fleabane, *Erigeron mimegletes*, is a member of the Sunflower family (Asteraceae). Both are former category 2 plants that are classified as G2 and S2. The global rank of G2 indicates that both plants have 6 to 20 occurrences known globally. They are imperiled and are very vulnerable to extinction throughout their range. The state rank of S2 mean that 6 to 20 occurrences are known in Texas. They are imperiled in the state due to their rarity and are very vulnerable to extirpation.

The BCD information is based on the best data currently available to the state regarding threatened, endangered, or otherwise sensitive species. However, these data do not provide a definite statement as to the presence or absence of special species or natural communities within your project area, nor can these data substitute for an evaluation by qualified biologists. If you have questions about these rare plants, please contact TPWD botanist Jackie Poole at (512) 912-7019.

This information is intended to assist you in avoiding harm to species that occur on your sites. Some species are especially sensitive to collection and harassment therefore these records are for your reference only. **Please contact one of the Texas Parks and Wildlife BCD Information Managers before publishing data or otherwise disseminating any specific locality information (512-912-7011).** I have enclosed a list of sensitive species that occur in Brewster County for you assistance.

The front of the property contains a 100-year floodplain. The map included with your letter does not show a drainage nearby. Toronto Creek appears close to your project location. Natural buffers contiguous to wetlands and aquatic systems should remain undisturbed to preserve wildlife cover, food sources, and travel corridors. Removal of large trees and native vegetation should be avoided during project and mitigation site development. Floodplains and the riparian vegetation and wetlands they support act as natural buffers to floods and aid in water quality maintenance and groundwater recharge. These benefits can be lost through the clearing of vegetation, filling, and excavation activities associated with development. In addition to providing valuable foraging and nesting habitat to fish and wildlife, floodplains represent an important cultural resource to the public. Therefore, this Department cannot support proposed projects that may adversely impact or reduce the 100-year floodplain.

The proposed facility includes plans for a radio tower. Collisions with communications towers (cellular, radio, microwave, and television) and electrocution are a known causes avian mortality. In order to reduce avian mortality, the Department recommends that this microwave tower be marked to reduce collisions and designed to eliminate potential for electrocution. Marking the tower and guyed lines with appropriate balls and/or streamers can reduce collisions by increasing visibility to birds. Moreover, recent studies have indicated that bird casualties would be dramatically reduced by the utilization of red (not white) beacon flashing lighting on towers. Apparently, the alternating periods of light and darkness enable the birds to adjust, become aware of their surroundings, and avoid tower structures. Please design power connections to avoid bird electrocutions. There is a web site (http://www.towerkill.com) that contains information about prevention of bird electrocution. If you would like more information about bird electrocution, please contact me.

The environmental document states that landscaping and irrigation will be installed. The Department recommends that this U.S. Border Control Station be landscaped with drought-resistant, low-maintenance plants consistent with the desert environment. Irrigation, when needed, should emphasize drip or low flow subsurface applications. Native plant and forage species beneficial to fish and wildlife endemic to the project area should be used in landscape design plans. The establishment of native vegetation that is valuable to wildlife would offset some of the negative impact of this project. Establish a relatively high diversity of native vegetation to allow for a high variability flowers and fruits to provide wildlife food throughout the year. Native plants are adapted to the local environment and will persist through periods of environmental stress. Most exotic plants cannot similarly persist and are also overrated as wildlife food and cover. However, a few exotic species can establish themselves by out-competing native plants. They then become serious persistent pests, difficult if not impossible to control or eradicate. Exotic species should, therefore, be omitted from permanent landscape plans. Minimize the use of turf grasses while maximizing the use of woody shrubs to reduce moisture evaporation from the soil. Where turf grasses are required, native species that spread vigorously with rhizomes and stolons such as buffalograss should be used. Please contact me for a list of site specific plants that are valuable to wildlife.

Where runoff is a problem, please implement measures to prevent erosion until native vegetation has been reestablished on disturbed areas. Soil erosion prevention techniques include hay bales and silt screens. In order to enhance the stabilization of exposed soils, newly graded areas should be seeded or sodded with native grasses, while graded embankments should not exceed a 4:1 slope.

This project includes plans to construct a helicopter pad. Many wildlife travel corridors associated with both mammals and birds are associated with the various mountain ranges and interconnecting passes within this entire region. When in close proximity to mountains or passes, the risks of strikes with birds or bats (whether resident or migratory) during low level aircraft flights should be considered high. Little information exists concerning the overall biological or behavioral effects of low altitude flights by aircraft on wildlife. Adverse effects would be lessened by selection of higher flight altitudes. To minimize possible disturbances to wildlife, all flights should maintain a minimum of 800 feet AGL if possible. To minimize disturbance to bats and wildlife with crepuscular activity periods, flights should be scheduled before or after twilight periods. Texas Parks and Wildlife facilities in the area include Big Bend Ranch and Davis Mountains State Parks, the Chinati Mountains Property, and Wildlife Management Areas at Elephant Mountain and Black Gap. The Department requests that you avoid flight routes over these areas if possible.

You should be aware of flight operation parameters conducted by pilots of this Department. This information is provided to identify potential for midair collisions between the INS and Department aircraft. Department wildlife surveys and law enforcement flights in this area are conducted under VFR flight rules with single and multiengine STOL type aircraft at altitudes of 100 to 300 feet AGL. These flights typically operate from sunrise to 11:00 a.m. and from 6:00 p.m. to dark at airspeeds below 100 knots and on routes which follow lines of latitude and longitude by dead reckoning, loran, or GPS over an entire county. The wildlife survey flights occur primarily during the months of August, September, and October. Department aircraft are also used for night law enforcement surveillance during November, December, and January under VFR flight rules at altitudes of 3000 to 4000 feet and at airspeeds below 150 knots. Dissimilarity of aircraft and operational mission dictates caution for aircrews of our organizations.

I appreciate the opportunity to review and comment on your project. If you have any questions or require further assistance, please contact me in San Marcos at (512) 396-9211 or by e-mail at rfields@itouch.net.

Sincerely,

Renée Fields

Renée Fields
Wildlife Habitat Assessment Program
Wildlife Division

Attachments (2)

Texas Parks and Wildlife Department Suggested Guidelines for Preparation of Environmental Assessment Documents

Following is an outline of categories of information needed to evaluate a proposed project or action. Every effort should be made to supply quantified data. If subjective data is all that can be supplied, documentation verifying the credentials of the data collector should be provided.

An asterisk notes categories considered essential for adequate biological review by this agency (*). Depending on the complexity and scope of the proposed project or action, or requirements by other agencies, all the items listed below may be required.

Whenever practical, environmental documents should be supported by aerial photography, topographic maps, schematics, charts, tables, etc. with minimum narrative sufficient to describe, quantify, and qualify the data.

A. Project Description

* • Identify who is proposing the project.

* • Identify who is conducting the assessments and provide credentials of this person(s).

* • Describe the purpose of the project.

* • Define the scope of work.

* • Identify the project area and study area (total acres, miles of ROW)

* • Identify the timetable projected for the entire project

* • Describe any required coordination and review for the project.

* • List or describe any required public input.

• Provide historical information significant to the project.

B. Description of the Affected Environment

1. Natural Resources

• Describe the geology within the study area.

* • Describe the soils present and their characteristics.

* • Describe the landform (topography) and the natural processes impacting the present landform.

• Describe the climatic factors affecting the study area.

* • Describe the supply and quality of surface water resources in the study area.

* • Describe the supply and quality of groundwater resources including aquifer recharge zones occurring within the study area.

* • Describe natural hazards affecting the study area, i.e. tidal influences, flood activity, etc.).

• Describe the quality of the air in the study area.

* • Describe the vegetation communities (cover type) specifically impacted by the project to include: dominant plant species, estimated

height of trees, woody shrubs or brush; and estimated canopy coverage of woody vegetation. Total acreage of each cover type disturbed by the project should also be listed.

* • Describe the fauna that would be associated with the dominant vegetation cover types identified above.

* • Identify "sensitive" ecosystems which occur in the study area such as: springs, streams, rivers, floodplains, vegetation corridors, bottomland hardwoods, wetlands, bays, estuaries, native grasslands, etc.

* • Describe the occurrence of threatened/endangered species (or their habitats) and unique or rare natural communities which occur in the study area.

a. On site inspection of the study area for permanent or seasonal occurrence.

b. On site inspection of the study area for occurrence of habitat.

c. Interviews with recognized experts on all species with a potential of occurrence.

d. Literature review of data applicable to a potential occurring species concerning species distribution, habitat needs, and biological requirements.

2. Cultural Resources

* • Identify public use and open space areas in the vicinity of the proposed project such as parks, natural areas, wildlife preserves and management areas.

• Identify previous, present, and proposed land uses within the study area.

• Identify significant archeological features within the study area.

• Identify significant historical features in the study area with special consideration of "National Register of Historic Places" properties.

• Identify rights-of-ways, easements, public utilities, and transportation features within the study area.

• Identify noise pollution sources and current noise levels within the study area.

• Identify existing and proposed public health and hazardous waste facilities that exist in the study area such as land fills, hazardous waste sites, wastewater treatment facilities, septic tanks, etc.

• Identify socioeconomic factors, if applicable.

*C. Project Alternatives

List and describe project alternatives (including "no action") and associated impacts (direct and indirect) to described resources. If the project is potentially large in scope, cumulative effects with other similar projects may be required.

*D. Mitigation

A major responsibility of TPWD is to conserve and protect the state's fish, wildlife, and plant resources. Certain categories of these biotic resources warrant special consideration. These include habitats that are locally and regionally scarce, habitats supporting unique species or communities, stream and river ecosystems, bays, estuaries, wetlands, bottomland hardwoods, and native grasslands. All projects that could adversely affect these resources should be fully evaluated, and where possible, implementation of less damaging alternatives undertaken. If it is determined that a project or action will potentially affect fish, wildlife or plant resources, a process for adverse impact reduction should be initiated. Mitigation measures should be developed and implemented sequentially as follows:

1. AVOIDANCE: Avoiding adverse impacts through changes in project location, design, operation, or maintenance procedures, or through selection of other less damaging alternatives to the project or action.

2. MINIMIZATION: Minimizing impacts and by project modification or rectification to restore or improve impacted habitat to pre-project condition; or through reducing the impacts over time by preservation and maintenance operations during the life of the project or action.

3. COMPENSATION: Compensating for unavoidable impacts by providing replacement or substitute resources (including appropriate management) for losses caused by project construction, operation, or maintenance.

Mitigation should be an integral part of any action or project that adversely affects fish, wildlife, and habitats upon which they depend. Failure to adequately avoid or minimize adverse impacts or to adequately compensate for unavoidable losses of natural resources is a serious deficiency in any project plan and may cause delays in this Department's review and assessment of the adverse impacts upon fish & wildlife resources. In assessing project impacts, reasonable foreseeable secondary and cumulative impacts should be included.

*E. Coordination

Provide copies of pertinent coordination correspondence.

*F. Document Preparers and Their Qualifications

*G. Bibliography

(References: 40 CFR Parts 1500-1508 and various EPA handouts concerning Environmental Assessment documentation.)

T AS PARKS AND WILDLIFE DEP TMENT
ENDANGERED RESOURCES BRANCH
SPECIAL SPECIES LIST
BREWSTER COUNTY

Revised:
98-05-01

Scientific Name	Common Name	Federal Status	State Status
*** BIRDS			
BUTEO ALBICAUDATUS	WHITE-TAILED HAWK		T
BUTEO ALBONOTATUS	ZONE-TAILED HAWK		T
BUTEO NITIDUS	GRAY HAWK		T
BUTEOGALLUS ANTHRACINUS	COMMON BLACK-HAWK		T
CHARADRIUS MONTANUS	MOUNTAIN PLOVER	C1	
EMPIDONAX TRAILLII EXTIMUS	SOUTHWESTERN WILLOW FLYCATCHER	LE	E.
FALCO PEREGRINUS	PEREGRINE FALCON	E/SA	
FALCO PEREGRINUS ANATUM	AMERICAN PEREGRINE FALCON	LE	E
FALCO PEREGRINUS TUNDRIUS	ARCTIC PEREGRINE FALCON	E/SA	T
VIREO ATRICAPILLUS	BLACK-CAPPED VIREO	LE	E
*** FISHES			
CAMPOSTOMA ORNATUM	MEXICAN STONEROLLER		T
CYCLEPTUS ELONGATUS	BLUE SUCKER		T
CYPRINODON EXIMIUS	CONCHOS PUPFISH		T
GAMBUSIA GAIGEI	BIG BEND GAMBUSIA	LE	E
NOTROPIS CHIHUAHUA	CHIHUAHUA SHINER		T
NOTROPIS JEMEZANUS	RIO GRANDE SHINER		
*** INSECTS			
AMPLYPTERUS BLANCHARDI	BLANCHARDS' SPHINX MOTH		
DERONECTES NEOMEXICANA	BONITA DIVING BEETLE		
*** MAMMALS			
CANIS LUPUS (extirpated)	GRAY WOLF	LE	E
CYNOMYS LUDOVICIANUS ARIZONENSIS	ARIZONA BLACK-TAILED PRAIRIE DOG		
EUDERMA MACULATUM	SPOTTED BAT		T
EUMOPS PEROTIS CALIFORNICUS	GREATER WESTERN MASTIFF BAT		
FELIS PARDALIS	OCELOT	LE	E
LEPTONYCTERIS NIVALIS	GREATER LONG-NOSED BAT	LE	E
MYOTIS THYSANODES	FRINGED MYOTIS BAT		
MYOTIS VELIFER	CAVE MYOTIS BAT		
MYOTIS VOLANS	LONG-LEGGED MYOTIS BAT		
MYOTIS YUMANENSIS	YUMA MYOTIS BAT		
NASUA NARICA	WHITE-NOSED COATI		T
SIGMODON OCHROGNATHUS	YELLOW-NOSED COTTON RAT		
SYLVILAGUS FLORIDANUS ROBUSTUS	DAVIS MOUNTAINS COTTONTAIL		
URSUS AMERICANUS	BLACK BEAR	T/SA	T
*** MOLLUSKS			
HUMBOLDTIANA CHISOSENSIS	CHISOS MOUNTAINS THREEBAND		
HUMBOLDTIANA TEXANA	STOCKTON PLATEAU THREEBAND		
*** REPTILES			
COLEONYX RETICULATUS	RETICULATED GECKO		T
GOPHERUS BERLANDIERI	TEXAS TORTOISE		T

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KINOSTERNON HIRTIPES	CHIHUAHUAN MUD TURTLE		T
PHRYNOSOMA CORNUTUM	TEXAS HORNED LIZARD		T
TANTILLA RUBRA	BIG BEND BLACKHEAD SNAKE		T
TRACHEMYS GAIGEAE	BIG BEND SLIDER		
TRIMORPHODON BISCUTATUS	TEXAS LYRE SNAKE		T
*** VASCULAR PLANTS			
ACLEISANTHES WRIGHTII	WRIGHT'S TRUMPETS		
AGALINIS CALYCINA	LEONCITA FALSE FOXGLOVE		
AGAVE GLOMERULIFLORA	CHISOS AGAVE		
ALLOLEPIS TEXANA	TEXAS FALSE SALTGRASS		
ANDRACHNE ARIDA	TRANS-PECOS MAIDENBUSH		
BATESIMALVA VIOLACEA	PURPLE GAY-MALLOW		
BONAMIA OVALIFOLIA	BIGPOD BONAMIA		
BOUTELOUA KAYI	KAY'S GRAMA		
BRICKELLIA BRACHYPHYLLA VAR HINCKLEYI	HINCKLEY'S BRICKELLBUSH		
BRICKELLIA BRACHYPHYLLA VAR TERLINGUENSIS	TERLINGUA BRICKELLBUSH		
BRONGNIARTIA MINUTIFOLIA	LITTLE-LEAF BRONGNIARTIA		
CARDAMINE MACROCARPA VAR TEXANA	TEXAS LARGESEED BITTERCRESS		
CASTILLEJA ELONGATA	TALL PAINTBRUSH	C1	
CEREUS GREGGII VAR GREGGII	DESERT NIGHT-BLOOMING CEREUS		
CHAMAESYCE CHAETOCALYX VAR TRILIGULATA	THREE-TONGUE SPURGE		
CHAMAESYCE GOLONDRINA	SWALLOW SPURGE		
CHAMAESYCE JEJUNA	DWARF BROOMSPURGE		
CORYPHANTHA ALBICOLUMNARIA	WHITE COLUMN CACTUS		
CORYPHANTHA DASYACANTHA VAR DASYACANTHA	DENSE CORY CACTUS		
CORYPHANTHA DUNCANII	DUNCAN'S CORY CACTUS		
CORYPHANTHA HESTERI	HESTER'S CORY CACTUS		
CORYPHANTHA MINIMA	NELLIE CORY CACTUS	LE	E
CORYPHANTHA RAMILLOSA	BUNCHED CORY CACTUS	LT	T
CROTON POTTSII VAR THERMOPHILUS	LEATHERWEED CROTON		
CRYPTANTHA CRASSIPES	TERLINGUA CREEK CAT'S-EYE	LE	E
DALEA BARTONII	COX'S DALEA		
ECHINOCEREUS CHISOENSIS VAR CHISOENSIS	CHISOS MOUNTAINS HEDGEHOG CACTUS	LT	T
ECHINOCEREUS CHLORANTHUS VAR NEOCAPILLUS	GOLDEN-SPINE HEDGEHOG CACTUS		
ECHINOCEREUS VIRIDIFLORUS VAR CORRELLII	CORRELL'S GREEN PITAYA		
ECHINOCEREUS VIRIDIFLORUS VAR DAVISII	DAVIS' GREEN PITAYA	LE	E
ERIGERON MIMEGLETES	SONORA FLEABANE		
ERIOGONUM SUFFRUTICOSUM	BUSHY WILD-BUCKWHEAT		

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ESCOBARIA CHAFFEYI	CHAFFEY'S CORY CACTUS		
FESTUCA LIGULATA	GUADALUPE MOUNTAINS FESCUE	C1	
GALIUM CORRELLII	CLIFF BEDSTRAW		
GAURA BOQUILLENSIS	BOQUILLAS LIZARDTAIL		
GENISTIDIUM DUMOSUM	BRUSH-PEA		
HEDEOMA PILOSUM	OLD BLUE PENNYROYAL		
HEDYOTIS BUTTERWICKIAE	MARY'S BLUET		
HEDYOTIS POOLEANA	JACKIE'S BLUET		
HEXALECTRIS REVOLUTA	CHISOS CORAL-ROOT		
HEXALECTRIS WARNOCKII	WARNOCK'S CORAL-ROOT		
JUSTICIA WRIGHTII	WRIGHT'S WATER-WILLOW		
KALLSTROEMIA PERENNANS	PERENNIAL CALTROP		
LECHEA MENSALIS	CHISOS PINWEED		
LYCIUM TEXANUM	TEXAS WOLF-BERRY		
MATELEA TEXENSIS	TEXAS MILKVINE		
NEOLLOYDIA MARIPOSENSIS	LLOYD'S MARIPOSA CACTUS	LT	T
OPUNTIA AUREISPINA	GOLDEN-SPINE PRICKLY-PEAR		
OPUNTIA IMBRICATA VAR ARGENTEA	SILVER CHOLLA		
OSTRYA CHISOSENSIS	BIG BEND HOP-HORNBEAM		
PARONYCHIA WILKINSONII	WILKINSON'S WHITLOW-WORT		
PERITYLE BISETOSA VAR APPRESSA	APPRESSED TWO-BRISTLE ROCK-DAISY		
PERITYLE BISETOSA VAR BISETOSA	TWO-BRISTLE ROCK-DAISY		
PERITYLE BISETOSA VAR SCALARIS	STAIRSTEP TWO-BRISTLE ROCK-DAISY		
PERITYLE DISSECTA	SLIMLOBE ROCK-DAISY		
PERITYLE VITREOMONTANA	GLASS MOUNTAINS ROCK-DAISY		
PHACELIA PALLIDA	PALE PHACELIA		
PHYLLANTHUS ERICOIDES	HEATHER LEAF-FLOWER		
POA STRICTIRAMEA	DESERT MOUNTAINS BLUEGRASS		
POLYGALA MARAVILLASENSIS	MARAVILLAS MILKWORT		
PROBOSCIDEA SPICATA	MANY-FLOWERED UNICORN-PLANT		
PRUNUS MURRAYANA	MURRAY'S PLUM		
QUERCUS GRACILIFORMIS	CHISOS OAK		
QUERCUS ROBUSTA	ROBUST OAK		
QUERCUS TARDIFOLIA	LATELEAF OAK		
RORIPPA RAMOSA	DURANGO YELLOW-CRESS		
SEDUM HAVARDII	HAVARD'S STONECROP		
SEDUM ROBERTSIANUM	ROBERTS' STONECROP		
SELAGINELLA VIRIDISSIMA	GREEN SPIKEMOSS		
SENNA ORCUTTII	ORCUTT'S SENNA		
SENNA RIPLEYANA	RIPLEY'S SENNA		
STREPTANTHUS CUTLERI	CUTLER'S TWISTFLOWER		
THELOCACTUS BICOLOR VAR FLAVIDISPINUS	STRAW-SPINE GLORY-OF-TEXAS		
ZANTHOXYLUM PARVUM	SHINNER'S TICKLE-TONGUE	C1	

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Codes:

LE,LT - Federally Listed Endangered/Threatened
PE,PT - Federally Proposed Endangered/Threatened
E/SA,T/SA - Federally Endangered/Threatened by Similarity of Appearance
C1 - Federal Candidate, Category 1; information supports proposing to list as endangered/threatened
DL,PDL - Federally Delisted/Proposed Delisted
E,T - State Endangered/Threatened

Species appearing on these lists do not all share the same probability of occurrence within a county. Some species are migrants or wintering residents only. Additionally, a few species may be historic or considered extirpated within a county. Species considered extirpated within the state are so flagged on each list. Each county's revised date reflects the last date any changes or revisions were made for that county, to reflect current listing statuses and taxonomy.

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Austin Ecological Services Office
10711 Burnet Road, Suite 200
Austin, Texas 78758
(512)490-0057

NOV 10 1999

2-15-00-I-0079

Julie Hall
U.S. Army Corps of Engineers, Albuquerque District
Environmental Resources Branch
4101 Jefferson Plaza, NE
Albuquerque, New Mexico 87109-3435

Dear Ms. Hall:

This responds to your October 6, 1999 letter requesting a current list of federally listed or proposed threatened or endangered species that may occur in Brewster County, Texas. It is our understanding this information will be used in preparation of an Environmental Assessment for the proposed construction of a new border patrol station on a 15-20-acre parcel of land along U.S. Highway 67/90, just west of the City of Alpine's city limits. For your reference, we have also enclosed a copy of "Threatened and Endangered Species of Texas–Revised June 1995." This publication provides information about the life history, distribution, and habitat descriptions of Texas' federally listed species.

We recommend that you evaluate areas to be cleared or modified by the proposed project to determine if they are suitable for any federally listed or proposed threatened or endangered species. If suitable habitat is found in the vicinity of the proposed project area, surveys should be performed to determine if the area is actually being used by the species. Generally, the U.S. Fish and Wildlife Service (Service) believes that the best evaluation and determination of endangered species impacts result when surveys are done within the project area. Often endangered species habitat will not be present at all and the project can then proceed without further concern. If suitable habitat for any federally listed or proposed threatened or endangered species exists within or adjacent to the proposed project area and may be impacted, we recommend that you contact this office further for recommendations on how to avoid or minimize impacts.

If the species is present, the project can often be modified to avoid all impacts, and if this cannot be done, any compensation needed can be fairly and accurately evaluated. If impacts cannot be avoided, we recommend that the Corps pursue formal consultation, through Section 7 of the Endangered Species Act (Act). Section 7 of the Act requires that all Federal agencies consult with the Service to ensure that actions authorized, funded, or carried out by such agencies do not jeopardize the continued existence of any listed threatened or endangered species or adversely modify or destroy critical habitat of such species. It is the primary responsibility of the Corps, as

the federal action agency, to determine whether any action it authorizes, funds, or carries out may affect a federally listed or proposed species. We have enclosed fact sheets that describe the Section 7 process for future reference.

We appreciate your concern for endangered species and their habitats and look forward to reviewing the Draft Environmental Assessment. If we can be of further assistance, please contact Dianne Williams at 512/490-0057, extension 231.

Sincerely,

E. Dawn Whitehead

for David C. Frederick
Supervisor

Enclosures

Federally Listed as Threatened and Endangered Species of Texas
June 30, 1999

This list represents species that may be found in counties throughout the state. It is recommended that the field station responsible for a project area be contacted if additional information is needed (see enclosed map).

DISCLAIMER

This County by County list is based on information available to the U.S. Fish and Wildlife Service at the time of preparation, date on page 1. This list is subject to change, without notice, as new biological information is gathered and should not be used as the sole source for identifying species that may be impacted by a project.

Edwards Aquifer species: (Edwards Aquifer County) refers to those six counties within the Edwards Aquifer region. The Edwards Aquifer underlies portions of Kinney, Uvalde, Medina, Bexar, Hays, and Comal Counties (Texas). The Service has expressed concern that the combined current level of water withdrawal for all consumers from the Edwards Aquifer adversely affects aquifer-dependent species located at Comal and San Marcos springs during low flows. Deterioration of water quality and/or water withdrawal from the Edwards Aquifer may adversely affect eight federally-listed species.

Comal Springs riffle beetle	(E)	*Heterelmis comalensis*
Comal Springs dryopid beetle	(E)	*Stygoparnus comalensis*
Fountain darter	(E w/CH)	*Etheostoma fonticola*
Peck's cave amphipod	(E)	*Stygobromus (=Stygonectes) pecki*
San Marcos gambusia	(E w/CH)	*Gambusia georgei*
Texas wild-rice	(E w/CH)	*Zizania texana*
Texas blind salamander	(E)	*Typhlomolge rathbuni*
San Marcos salamander	(T □w/CH)	*Eurycea nana*

* The Barton Springs salamander is found in Travis County but may be affected by activities within the Barton Springs Segment of the Edwards Aquifer, which includes portions of Northern Hays County.

Migratory Species Common to many or all Counties: Species listed specifically in a county have confirmed sightings. If a species is not listed they may occur as migrants in those counties.

American peregrine falcon	(E‡)	*Falco peregrinus anatum*
Least tern	(E ˜)	*Sterna antillarum*
Whooping crane	(E w/CH)	*Grus americana*
Arctic peregrine falcon	(TSA)	*Falco peregrinus tundrius*
Bald eagle	(T)	*Haliaeetus leucocephalus*
Piping plover	(T)	*Charadrius melodus*
Loggerhead shrike	(SOC)	*Lanius ludovicianus*
White-faced ibis	(SOC)	*Plegadis chihi*

Brewster County

American peregrine falcon	(E‡)	*Falco peregrinus anatum*
Black-capped vireo	(E)	*Vireo atricapillus*
Golden-cheeked warbler	(E)	*Dendroica chrysoparia*
Northern aplomado falcon	(E)	*Falco femoralis septentrionalis*
Southwestern willow flycatcher	(E‡)	*Empidonax traillii extimus*
Whooping crane	(E w/CH)	*Grus americana*
Mexican long-nosed bat	(E)	*Leptonycteris nivalis*
Big Bend gambusia	(E)	*Gambusia gaigei*
Davis' green pitaya	(E)	*Echinocereus viridiflorus* var. *davisii (=E. davisii)*

Nellie cory cactus	(E)	*Coryphantha (=Escobaria =Mammillaria) minima*
Terlingua Creek cats-eye	(E)	*Cryptantha crassipes*
Bunched cory cactus	(T)	*Coryphantha ramillosa*
Chisos Mountain hedgehog cactus	(T)	*Echinocereus chisoensis* (=reichenbachii) var. *chisoensis*
Hinckley's oak	(T)	*Quercus hinckleyi*
Lloyd's Mariposa cactus	(T)	*Echinomastus(=Echinocactuss, =Sclerocacuts) mariposensis*
Mountain plover	(P/T)	*Charadrius montanus*
Tall paintbrush	(C)	*Castilleja elongata*
Guadalupe fescue	(C)	*Festuca ligulata*
Shinner's tickle-tongue	(C)	*Zanthoxylum parvum*
Leoncita false foxglove	(SOC)	*Agalinis calycina*
Texas false saltgrass	(SOC)	*Allolepsis texana*
Ferruginous hawk	(SOC)	*Buteo regalis*
Baird's sparrow	(SOC)	*Ammodramus bairdii*
Loggerhead shrike	(SOC)	*Lanius ludovicianus*
Northern goshawk	(SOC)	*Accipiter gentilis*
Northern gray hawk	(SOC)	*Buteo nitidus maximus*
Texas olive sparrow	(SOC)	*Arremonops rufivirgatus rufivirgatus*
Western burrowing owl	(SOC)	*Athene cunicularia hypugea*
White-faced ibis	(SOC)	*Plegadis chihi*
Davis Mountain cottontail rabbit	(SOC)	*Sylvilagus floridanus robustus*
Greater western mastiff bat	(SOC)	*Eumops perotis californicus*
Presidio mole	(SOC)	*Scalopus aquaticus texanus*
Spotted bat	(SOC)	*Euderma maculatum*
Texas horned lizard	(SOC)	*Phrynosoma cornutum*
Blotched gambusia	(SOC)	*Gambusia senilis*
Blue sucker	(SOC)	*Cycleptus elongatus*
Chihuahua shiner	(SOC)	*Notropis chihuahua*
Conchos pupfish	(SOC)	*Cyprinodon eximius*
Mexican stoneroller	(SOC)	*Campostoma ornatum*
Proserpine shiner	(SOC)	*Cyprinella proserpina*
Rio Grande darter	(SOC)	*Etheostoma grahami*
Rio Grande shiner	(SOC)	*Notropis jemezanus*
Blanchards' sphinx moth	(SOC)	*Adhemarius blanchardorum*
Bonita diving beetle	(SOC)	*Deronectes neomexicana*
Subtropical blue-black tiger beetle	(SOC)	*Cicindela nigrocoerula subtropica*
Big Bend (Desert Mts.) bluegrass	(SOC)	*Poa strictiramea*
Big Bend hop hornbeam	(SOC)	*Ostrya chisosensis*
Bigpod bonamia	(SOC)	*Bonamia ovalifolia*
Bush-pea	(SOC)	*Genistidium dumosum*
White column cory cactus	(SOC)	*Coryphantha albicolumnaria*
Bushy wild-buckwheat	(SOC)	*Eriogonum suffruticosum*
Chaffey's cory cactus	(SOC)	*Coryphantha chaffeyi*
Chisos agave	(SOC)	*Agave glomeruliflora*
Chisos coral-root	(SOC)	*Hexalectris revoluta*
Chisos pinweed	(SOC)	*Lechea mensalis*
Cliff bedstraw	(SOC)	*Galium correllii*
Cox's dalea	(SOC)	*Dalea bartonii*
Cutler's twistflower	(SOC)	*Streptanthus cutleri*
Dense cory cactus	(SOC)	*Coryphantha dasyacantha* var. *dasyacantha*
Desert night-blooming cereus	(SOC)	*Cereus greggii* var. *greggii*
Duncan's cory cactus	(SOC)	*Coryphantha duncanii*

Glass Mountain coral-root	(SOC)	*Hexalectris nitida*
Glass Mountain rock-daisy	(SOC)	*Perityle vitreomontana*
Golden-spine hedgehog cactus	(SOC)	*Echinocereus chloranthus* var. *neocapillus*
Golden-spined prickly-pear	(SOC)	*Opuntia aureispina*
Heather leaf-flower	(SOC)	*Phyllanthus ericoides*
Hester's cory cactus	(SOC)	*Coryphantha hesteri*
Hinckley's brickelbush	(SOC)	*Brickellia brachyphylla* var. *hinckleyi*
Lateleaf oak	(SOC)	*Quercus tardifolia*
Little-leaf brongniartia	(SOC)	*Brongniartia minutifolia*
Long spur columbine	(SOC)	*Aquilegia longissima*
Many-flowered unicorn plant	(SOC)	*Proboscidea spicata*
Maravillas milkwort	(SOC)	*Polygala maravillasensis*
Mary's bluet	(SOC)	*Hedyotis butterwickiae*
Old blue mock pennyroyal	(SOC)	*Hedeoma pilosum*
Pale phacelia	(SOC)	*Phacelia pallida*
Perennial caltrop	(SOC)	*Kallstroemia perennans*
Purple gay-mallow	(SOC)	*Batesimalva violacea*
Ripley's senna	(SOC)	*Senna ripleyana*
Robert's stonecrop	(SOC)	*Sedum robertsianum*
Silver cholla	(SOC)	*Opuntia imbricata* var. *argentea*
Slender oak	(SOC)	*Quercus graciliformis*
Sonora fleabane	(SOC)	*Erigeron mimegletes*
Stairstep two-bristle rock-daisy	(SOC)	*Perityle bisetosa* var. *scalaris*
Straw-spine glory of Texas	(SOC)	*Thelocactus bicolor* var. *flavidispinus*
Swallow spurge	(SOC)	*Chamaesyce golondrina*
Terlingua brickelbush	(SOC)	*Brickellia brachyphylla* var. *terlinguensis*
Texas milkvine	(SOC)	*Matelea texensis*
Texas wolfberry	(SOC)	*Lycium texanum*
Three-tongued spurge	(SOC)	*Chamaesyce chaetocalyx* var. *triligulata*
Trans-Pecos maidenbush	(SOC)	*Andrachne arida*
Two-bristle rock-daisy	(SOC)	*Perityle bisetosa* var. *bisetosa*
Texas purple spike	(SOC)	*Hexalectris warnockii*
Wilkinson's whitlow-wort	(SOC)	*Paronychia wilkinsonii*
Wright's water-willow	(SOC)	*Justicia wrightii*

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Statewide or areawide migrants are not included by county, except where they breed or occur in concentrations. The whooping crane is an exception; an attempt is made to include all confirmed sightings on this list.

E	=	Species in danger of extinction throughout all or a significant portion of its range.
T	=	Species which is likely to become endangered within the foreseeable future throughout all or a significant portion of its range.
C	=	Species for which the Service has on file enough substantial information to warrant listing as threatened or endangered.
CH	=	Critical Habitat (in Texas unless annotated ‡)
P/T	=	Species proposed to be listed as threatened.
TSA	=	Threatened due to similarity of appearance.
SOC	=	Species for which there is some information showing evidence of vulnerability, but not enough data to support listing at this time.
□	=	with special rule
‡	=	CH designated (or proposed) outside Texas
~	=	protection restricted to populations found in the "interior" of the United States. In Texas, the least tern receives full protection, except within 50 miles (80 km) of the Gulf Coast.

INTERAGENCY CONSULTATION ON THE ENDANGERED SPECIES ACT

(Sec. 7, Endangered Species Act of 1973, as amended; 50 CFR 402; 50 CFR 17, Subpart I; FR 51(106): 19926-19963, 6/3/86)

Section 7 of the Endangered Species Act requires that all Federal agencies consult/confer with the U.S. Fish and Wildlife Service (Service) or the National Marine Fisheries Services regarding endangered species. This consultation is necessary to insure that actions authorized, funded, or carried out by such agencies do not jeopardize the continued existence of any listed or proposed (to be listed) endangered or threatened species or adversely modify or destroy critical habitat of such species. The purpose of these requirements is to identify and resolve, at the early planning stage, potential conflicts between the action and these species and their critical habitat.

For Section 7 consultation purposes, actions are placed in two categories: one consisting of major construction actions significantly affecting the quality of the human environment and a second consisting of non-construction actions. A major construction action is defined as a construction action which will require preparation of an Environmental Impact Statement (EIS). Actions not requiring an EIS are treated as non-construction actions.

CONSULTATION PROCESS

NON-CONSTRUCTION ACTIONS. For actions in this category, it is incumbent upon the Federal action agency to assess whether its action may effect endangered and threatened species. If no effect will occur, there is no need for further consultation. However, if it is determined that the proposed action "may affect" listed species, the Federal action agency shall initiate formal Section 7 consultation with the Service unless an exception has been granted. Exceptions may be made if there is a determination by the action agency, and written concurrence by the Service, that the proposed action will not adversely impact any endangered or threatened species.

While not required, a list of listed or proposed species found in the vicinity of the proposed action may be obtained from the Service by the Federal agency or their designated agent to help determine if an effect may occur.

CONSTRUCTION ACTIONS. For proposed actions in this category, the Federal agency or their agent requests from the Service a list of any species listed or proposed to be listed that may be affected by the action. The Service will provide this information within 30 days after receiving the request.

Based on the list provided by the Service, the Federal action agency, or their delegated agent, conducts a biological assessment of the total area affected by the proposed project to identify impacts upon those species as a result of the proposed action. This assessment shall be completed within 180 days after receiving a list of species from the Service. If the assessment is not initiated within 90 days after receipt of the species list, the accuracy of the list should be verified before conducting the assessment.

PROPOSED SPECIES AND PROPOSED CRITICAL HABITAT. If the proposed Federal action is likely to jeopardize species proposed for listing as endangered or threatened, or to adversely modify proposed critical habitat, Section 7 requirements are met by having a conference with the Service. Information similar to that listed above for formal consultation is needed from the action agency when conferring with the Service on proposed species and/or proposed critical habitat.

SECTION 7
GUIDANCE CHECKLIST

If it is determined that the action **may affect** listed threatened and/or endangered species, a request to initiate formal Section 7 consultation should be sent to this office, as provided by the Endangered Species Act. A request for formal consultation should include the following:

1. A description of the proposed action.

2. A description of the specific area that the action may affect.

3. A description of any listed species or critical habitat that may be affected by the action.

4. A description of the manner in which the action may affect (directly or indirectly) any listed species or critical habitat.

5. Reports, including any environmental impact statement, environmental assessment, biological assessment, or biological evaluation prepared for the proposed action.

6. Any other relevant information on the action, the affected listed species, or its critical habitat.

Information relating to the Section 7 consultation process is enclosed for your use in project planning (Enclosure 1).

APPENDIX C

DEPARTMENT OF THE ARMY
ALBUQUERQUE DISTRICT, CORPS OF ENGINEERS
4101 Jefferson Plaza, NE
Albuquerque, New Mexico 87109-3435

Reply to Attention of:

3 February 2000

Engineering and Construction
Division
Environmental Resources
Branch

Mr. F. Lawerence Oaks
Texas State Historic Preservation Officer
Texas Historical Commission
P.O. Box 12276
Austin, TX 78711-2276

ATTN. Mr. Myles Miller

Dear Mr. Oaks:

In accordance with 36 CFR 800, the U. S. Army Corps of Engineers, Albuquerque District, is providing for your review and comment a copy of the survey report entitled *A Cultural Resources Survey for the Immigration and Naturalization Service, United States Border Patrol, Proposed Border Patrol Station; Alpine, Texas*. The survey was completed in conjunction with the preparation of an Environmental Assessment.

A 20-acre plot will be purchased for the proposed construction project; 37 acres were surveyed for cultural resources. The location surveyed includes ample space for staging areas and buffer zones. The specific location information is detailed in the enclosed report. No cultural resources were found; therefore, the construction will cause no effect. We are seeking your concurrence in our determination of "No Historic Properties Affected".

The Border Patrol is currently occupying a remodeled automobile dealership building which is inadequate for current requirements and is too small for projected increases in staff. The proposed location is unoccupied pasture land.

As noted, no cultural resource sites or isolated artifacts were found. While it is unlikely that subsurface cultural material exists, if previously unrecorded material is exposed during construction, all work will cease in the vicinity of the discovery and archaeologists from this office will assess the situation. No work will proceed until consultation with your office has been completed.

If you have any questions or require additional information concerning this project, please contact Dr. John D. Schelberg at (505) 342-3359. Thank you for your attention to this matter.

Sincerely:

Mark C. Harberg

Mark C. Harberg
Chief, Environmental Resources Branch

Enclosure

Copy Furnished (w/o enclosure)

Don Klima, Director
Advisory Council on Historic Preservation
Office of Planning and Review
12136 West Bayaud Avenue, #330
Lakewood, CO 80228-2115

I Concur _____
F. Lawerence Oaks
Executive Director
Texas Historical Commission

A CULTURAL RESOURCES SURVEY FOR THE IMMIGRATION AND NATURALIZATION SERVICE UNITED STATES BORDER PATROL PROPOSED BORDER PATROL STATION; ALPINE, TEXAS

Prepared by

John D. Schelberg, Ph.D.
Archaeologist
U.S. Army Corps of Engineers
Albuquerque District

2 February 2000

Report COE-00-01

ABSTRACT

On 13-15 October 1999 and 26 January 2000, an archaeologist from the U.S. Army Corps of Engineers, Albuquerque District, conducted a cultural resources inventory survey in anticipation of the construction of a new station for the Immigration and Naturalization Service (INS), U.S. Border Patrol, Alpine, Texas. The new station at the eastern edge of Alpine will replace the existing, but inadequate, station at the west end of town. Thirty-seven acres were surveyed. With the exception of modern debris, no cultural resources from any temporal period or category, that is sites or isolated artifacts, were observed. One dirt stock tank was bulldozed across an ephemeral drainage at the southern end, and several informal two-track dirt roads occurred at the northern end. There are no buildings. The Albuquerque District is of the opinion that the proposed project will have no effect on the cultural resources of Alpine or the surrounding region.

INTRODUCTION

On 13-15 October 1999 and 26 January 2000, an archaeologist from the U.S. Army Corps of Engineers, Albuquerque District, surveyed approximately 37 acres (15 hectares) approximately 1.5 miles (2.4 km) west of the city limits of Alpine, Texas. The work was conducted on behalf of the Immigration and Naturalization Service (INS), U.S. Border Patrol. This report presents the results of the survey and is seeking concurrence for a determination of "No Historic Properties Affected" as no cultural resources were found. In keeping with the National Historic Preservation Act of 1966, as amended, the study was undertaken in anticipation of the construction of a Border Patrol station and associated facilities. Construction is required to replace the existing inadequate station which had been an automobile dealership prior to its conversion for the INS. An intensive survey was conducted with transects spaced approximately 10 to 15 meters apart, depending on visibility.

Project Description and Location

The cultural resources surveys were completed in anticipation of facilities construction on behalf of the INS. The existing station is a converted automobile dealership which is now too small and cannot be expanded to accommodate the increased numbers of personnel expected to be hired in the next two to three years. In addition to the office building, the following facilities will also be constructed as components of the complex: parking lots, a helicopter landing pad, a fueling station, a vehicle maintenance building, a dog kennel, access road, and perimeter fencing. The access road will take off from the existing State Highway 67/90. A 20-acre plot of land will be purchased; however, the southern five acres are within the 100-year flood plain and will not be used for construction (Figure 2). In order to allow for potential expansion to the west, an additional 10 contiguous acres were surveyed; this also provides an extensive buffer for construction activities. Due to a change in the facilities design following the original survey, an additional seven acres were surveyed to the north. As no more than five of these acres will be impacted the additional acreage provides a construction buffer and permits any additional last minute changes which may occur.

The project area is detailed on the enclosed copy of the Alpine South, Texas U.S.G.S. 1972 Quadrangle (Figure 1) and in Table 2. The eastern boundary of the surveyed area was defined by a barbed wire fence adjacent to a dirt road and several mobile homes; the southern boundary was defined by State Highway 67/90; the western and northen boundaries were defined by alignments with overhead power line poles. A facility layout design change after the survey was completed resulted in an expansion of the plot to the north rather than to the west. One result of this change is a 100-meter wide strip which was surveyed to the west but which will not be utilized for construction. Therefore, it provides a more than adequate buffer to the west. The buffer to the north is about 50 meters. The elevation ranges from 4600 to 4640 feet above mean sea level. With this report the Corps is seeking formal concurrence with the determination of "No Historic Properties Affected" the proposed INS facilities construction.

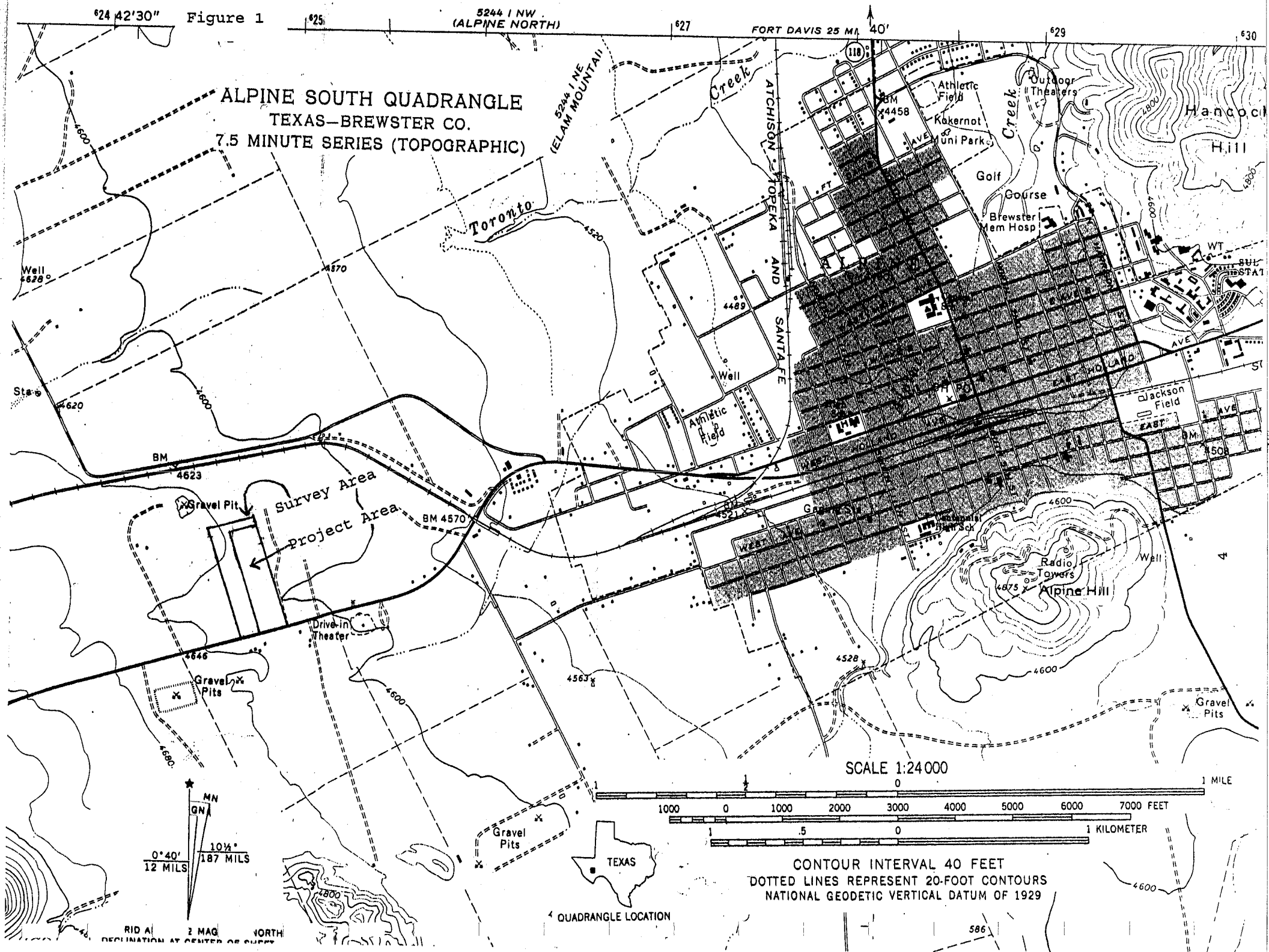
ENVIRONMENT

Alpine is located within the Basin and Range topographic province of the Trans-Pecos region. The Trans-Pecos region consists of mountains, canyons, and stretches of plateaus and plains between two river valleys, the Rio Grande on the west and the Pecos on the east. The Rio Grande is the only permanently flowing river in the area. In recent times the demands on the river cause it to dry up, although it is replenished above Presidio, approximately 60 miles southeast of Alpine, with inflow from the Rio Conchos which drains the eastern slope of the Sierra Madre Occidental in Mexico (Lloyd and Schmidt 1980:307). This province covers approximately 57,000 square kilometers (22,000 square miles) and, except for the El Paso area, is the most sparsely populated rural area of Texas. The province averages 1200 m (3,936 feet) in elevation with many widely spaced southeast-northwest trending fault-block mountain ranges rising an additional 600 to 900 m (1,968 to 2,952 feet) above the lowlands. The valleys between the mountains are filled with material eroded from the mountains. The project area is within the interior subregion of the Trans-Pecos; the latter is characterized by true basin and range topography and includes volcanic outcrops, limestone canyons, dune fields, and saline flats (Hicks 1989:13).

The Trans-Pecos corresponds closely with the Chihuahuan Desert which is characterized by a semiarid, continental climate of low humidity, hot summers, mild winters, and short fall and spring seasons. About three-fourths of the annual precipitation falls during the warmest six months of the year with the maximum in July, August, and September (Lloyd and Schmidt 1980:305-307).

Alpine is situated in Brewster County which is the largest and least populated county in Texas The average annual precipitation in Alpine is 393 mm (15.5 in.)(Powell 1980:299); the lowest recorded temperature is minus two degrees Fahrenheit (F) while the higher are rarely over 100 degrees F and the annual average is 75 degrees F (Powell 1980:299; Winchell, et al. 1992:7). Of the 3,253,800 acres within Brewster County, approximately 96 percent is used as rangeland for cattle, sheep, and goats while agriculture is a distant second and generally limited to pecans and apples. No mining other than sand and gravel occurs presently; mining of fluorspar, bituminous coal, mercury, gold, silver, lead, zinc, and copper was undertaken in the county. Mining declined rapidly after World War II (JTF-6 1994:IV-1-9, 37).

Figure 1



ALPINE SOUTH QUADRANGLE
TEXAS—BREWSTER CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)
5244 I NW (ALPINE NORTH)
5244 I NE (ELAM MOUNTAIN)
FORT DAVIS 25 MI.
Toronto Creek
ATCHISON TOPEKA AND SANTA FE
Athletic Field
Kokernot Muni Park
Outdoor Theaters
Golf Course
Brewster Mem Hosp
Hancock Hill
Jackson Field
Radio Towers
Alpine Hill
Survey Area
Project Area
Gravel Pit
Drive-in Theater
Gravel Pits
Well
BM 4623
BM 4570
BM 4458
BM 4508
4489
4528
4563
4646
4620
4628
4570
4520
4600
4800
4680
4875
586
SCALE 1:24 000
1 MILE
7000 FEET
1 KILOMETER
CONTOUR INTERVAL 40 FEET
DOTTED LINES REPRESENT 20-FOOT CONTOURS
NATIONAL GEODETIC VERTICAL DATUM OF 1929
TEXAS
QUADRANGLE LOCATION
MN
GN
0°40'
12 MILS
10½°
187 MILS

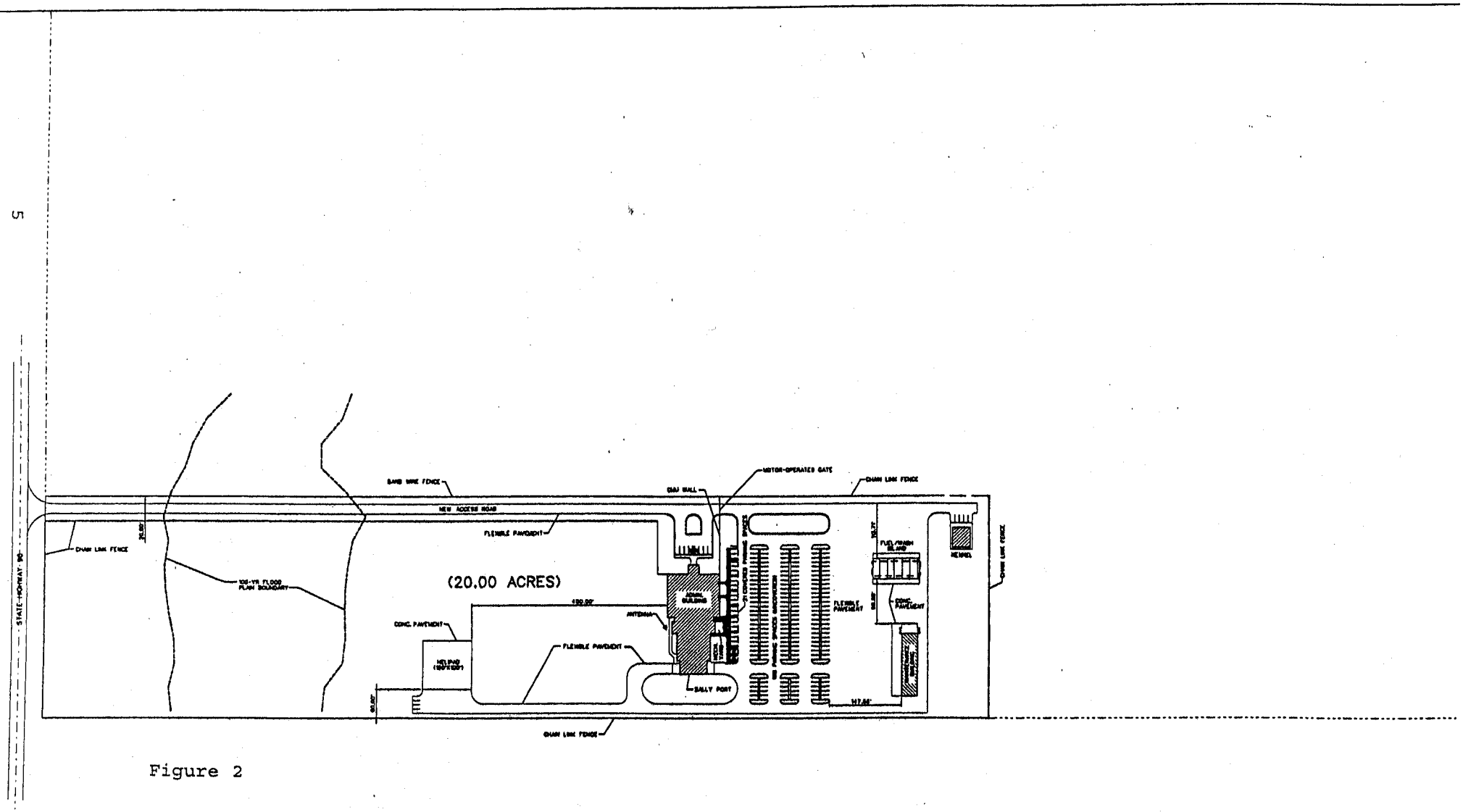


Figure 2

SITE PLAN - BORDER PATROL STATION - ALPINE, TX

200 0 200 400

SCALE: 1" = 200'

Alpine is within the Grasslands Vegetative Community and within reasonable walking distance of both the Desert-Scrub and Montane Woodland Communities. The latter community is within the Davis Mountains. The grasslands are the most developed on plateaus, rolling hills, and basin floors, although much of the original grassland associations have been lost to desert scrub as a result of overgrazing, erosion, and drought. The best remaining examples are in the Alpine, Marfa, Valentine, and Fort Davis areas (Powell 1980:299-300). Three major soil associations characterize Brewster County: Lozier-Upton (Rock outcrop); Brewster-Lozier (Rock Outcrop); and Reeves-Reakor-Upton. The latter is the dominant type and is marked by level to undulating soils, loamy or clayey throughout, with accumulations of gypsum, or powdery or indurated lime. The rock outcrop-Brewster-Lozier occurs along the river and inland areas in and adjacent to Big Bend National Park while the Lozier-Upton (rock outcrop) occurs mostly away from the Rio Grande (JTF-6 1994:IV-11-13). Groundwater used for irrigation and public water supply comes from the Alluvium and Bolson aquifer which is an intermittent and unconfined system consisting of sand, gravel, silt, and clay and ranging in depth from 100 to 1,000 feet but may go as deep as 3,000 feet (JTF-6 1994:IV-27).

Vegetation

Three major vegetative communities occur in Brewster County: Creosotebush-Lechuguilla Shrub; Mesquite-Juniper Brush; Gray Oak-Pinyon Pine-Alligator Juniper Parks/Woods. The project area is within the Chihuahuan Desert, and its lower elevations place the vegetation within the typical range of the northern Chihuahuan Desert scrub. Paleoecological data from fossil packrat middens indicate that this desert reached its northern extent less than 8,000 years ago when the climate shifted towards increasing aridity although it is now expanding into overgrazed grassland weakened by erosion and drought. The lower elevation Chihuahuan Desert is dominated by various shrub and semisucculent species, such as Lechuguilla (Agave lechuguilla), Sotol (Dasylirion spp.), Yucca (Yucca spp.), Creosotebush (Larrea tridentata) (probably introduced from Argentina into Mexico from whence it spread), Catclaw Mimosa (Mimosa biuncifera), Acacias (Acacia constricta and A. neovernicosa), Honey Mesquite (Prosopis glandulosa), Fourwing Saltbush (Atriplex canescens), Tarbush (Flourenia cernua), Allthorn (Koeberlinia spinosa), Cane Cholla (Opuntia spp.), prickly pear cacti, and Ocotillo (Fouquieria splendens). Higher elevations include gray oak (Quercus grisea), pinyon pine (Pinus cembroides), and Alligator juniper (Juniperus deppena). Grasses include Gramas, Threeawns, Tridens, and Fluffgrass (Powell 1980:299-301). See Table 1 for a list of the vegetation recorded at the time of the survey.

Vertebrates

Characteristic wildlife species of the Chihuahuan Desert occurring in the vicinity of Alpine include blacktail jackrabbit, desert pocket gopher, desert pocket mouse and other species of mice, bannertail kangaroo rat, quail, several species of ground squirrels, Chihuahuan raven, Texas banded gecko, several species of lizards, snakes, coyotes, deer, and antelope. Hundreds of other terrestrial vertebrate species likely occurred prehistorically in this setting prior to modern impacts (Powell 1980:299-302; Winchell, et al. 1992:9-10). Other

Table 1: Vegetation

Alpine, Texas, is in the semidesert grassland floristic community, a perennial grass-scrub dominated landscape situated adjacent to the Chihuahuan desertscrub. The dominant vegetation observed during the October 13 and 14, 1999, site visit is grass, specifically, sideoats grama (*Bouteloua curtipendula*) and blue grama (*Bouteloua gracilis*). Other grass species on the site include:

Wright threeawn, *(Aristida wrightii)*
Fall witchgrass, *(Leptoloma cognatum)*
Alkali sacaton, *(Sporobolus airoides)*
Fluffgrass, (*Erioneuron pulchellum)*
New Mexico little bluestem, *(Andropogon scoparius* var. *neo mexicana)*
Wooton threeawn, (*Aristida pansa)*
Plains bristlegrass, (*Setaria leucopila)*
Indian grass, *(Sorghastrum nutans)*
Black grama, *(Bouteloua eriopoda)*

Forbs observed on the project site include the following:

Featherleaf spine aster, *(Machaeranthera australis)*
Cocklebur, *(Xanthium strumarium)*
Common sunflower, *(Helianthus annuus)*
Woollyleaf bursage, *(Ambrosia grayi)*
Rough gumweed, *(Grindelia scabra)*
Rough blackfoot, *(Melampodium hispidium)*
Frostweed *(Cryptantha albida)*
Mexican thistle, *(Eryngium heterophyllum)*
Fireweed, *(Kochia scoparia)*
Russian tumbleweed *(Salsola kali)*
Wright cudweed, *(Gnaphalium wrightii)*
Woolly sumpweed, *(Iva dealbata)*
Hairy tubetongue, (*Siphinoglossa pilosella)*

Shrubs were scattered within the proposed site and included the following species:

Rough Ephedra *(Ephedra nevadensis* var. *aspera)*
Catclaw mimosa *(Mimosa biuncifera)*
Rubber rabbit-bush (*Chrysothamnus nauseosus)*
Honey mesquite *(Prosopis juliflora* var. *glandulosa)*
Broom Snakeweed *(Gutierrezia sarothrae)*
Crucifixion plant *(Koeberlinia spinosa)*
Javelina bush *(Condalia ericoides)*
Butterflybush *(Buddleja scordioides)*
Horse crippler *(Echinocactus texensis)*
Prickly pear *(Opuntia* sp.*)*

than birds including several hawks, cottontail and jackrabbits were the only living creatures observed during the survey.

METHODOLOGY

Prior to the survey, telephone consultations were held with Mr. Myles Miller of the Texas State Historic Preservation Office and Ms. Carolyn Spock of the Texas Archaeological Research Laboratory. Ms. Spock indicated that six sites were located on the Alpine South USGS quadrangle but none were in the vicinity of the proposed project. With the exception of relatively dense vegetation on the north slope of the drainage within the 100 year flood plain and immediately adjacent to State Highway 90, visibility was excellent and over 90 percent of the ground could be observed. In those area of denser vegetation the visibility varied from 40 to 75 percent. The 100 percent pedestrian inventory survey was conducted with transects varying from 10 to 15 m wide. The sides of the drainage in the southern portion of the plot were gentle and covered with vegetation. There were no arroyos or erosional depressions to inspect for cultural or stratigraphic issues.

BRIEF CULTURAL OVERVIEW

Prior to conducting the survey, it was anticipated that cultural resources from any temporal period, including the historic, could be present. While the Corps of Engineers, Albuquerque District (AD), has sponsored cultural resources survey and excavation in El Paso, Texas, for over 15 years, AD has undertaken no projects in the Alpine area. Sites recorded in conjunction with the projects in the El Paso area include both the prehistoric and historic periods. The most common site type is the lithic scatter; however, sites range from baking pits to ceramic scatters to pit house villages from the Archaic and Formative (Jornada Branch of the Mogollon) Periods. O'Laughlin (1980) discussed stratified burned Archaic dwellings which were avoided through redesign of a dam and Carmichael (1985) reported on the excavation of ephemeral pit houses at two campsites near Keystone Dam. Sites from the Historic Period could include early Spanish Contact, Mexican, Anglo, and Indian.

Given the ecological nature of the project area, the remains associated with rather short-term resource exploitation facilities of hunter gatherers were the most likely to occur. The majority of the prehistoric occupations consist of open-air sites associated with habitation and resource procurement. Rock-shelters were frequently used but are rare in the vicinity of the project. Artifacts include scatters of lithics and some ceramics. Concentrations of burned rock can be common.

As of 1993, 907 archaeological sites were listed for Brewster County (JTF-6 1994:IV-93) but as noted above only six occur on the Alpine South quad. While we were prepared to record a wide range of functionally specific sites and isolated artifacts from all temporal periods, nothing except for modern debris was found.

The Trans-Pecos region has been variously divided into subregions. Mallouf (1985, in JTF6 IV-86-90 and in Hicks 1989) created a western and a larger eastern unit; whereas, Hicks (1989) reconfigured Mallouf's into a tripartite set with a

Puebloan (roughly equivalent to his western), an Interior, and a Plains. The latter two essentially equate to his eastern unit. The Puebloan includes the El Paso area (which Mallouf did not include), the Hueco-Bolson in the northeast of the Trans-Pecos, and the Rio Grande Valley. The Interior Trans-Pecos consists of the mountain and range section between the Rio Grande and the Pecos River.

In this area, the prehistoric period is subdivided into five temporal periods: Paleo from 10,000 to 6,500 BC; Early Archaic from 6,500 to 3,000 BC; Middle Archaic from 3,000 to 500 BC; Late Archaic from 500 BC to A.D. 1,000; and Late Prehistoric from A.D. 1,000 to 1,600. The periods are essentially based on the presence of diagnostic projectile points and are representative of changes in subsistence practices, settlement patterns, and technology. The chronological framework is an approximation as there are few absolute dates from the interior subregion of the Trans-Pecos. Of the 51 published radiocarbon dates from sites only five are prior to 2000 BP and almost none were associated with diagnostics. Many of the locations were used and reused through time resulting in spatially extensive sites but few contain any stratigraphic depth (Winchell et al. 1992:10-11; see also Ing et al. 1996; JTF-6 1994:IV-94-107).

The focus of the Paleo and Archaic hunting and gathering changed through time as the Pleistocene megafauna gave way to modern flora and fauna. There are few early Paleo-Indian sites in the Trans-Pecos region. More sites occur during the Folsom aspect and a significant habitation site was recorded south of Van Horn, approximately 100 miles northwest of Alpine. Late Paleo-Indian sites have been found along the margins of playa lakes and creek terraces. The smaller point sizes, increases in the proportion of ground stone, and more intensely reused sites with ring middens and pit ovens suggest more reliance on such plants as prickly pear, sotol, and lechuguilla during the Archaic. While sites occur at all elevations, some differences in distribution occur. In the Interior subregion, Early and Middle Archaic sites apparently are restricted to higher elevations in the Guadalupe and Davis Mountains and at lower elevations in the Big Bend. During the Late Archaic, sites are found in all environments in all areas of the Interior.

Cultigens such as maize, chili, and cotton appear to have been introduced as early as A.D. 200 to 500. The Late Prehistoric is defined by the presence of arrow points and ceramics and, along the Rio Grande, cultigens - especially associated with the Jornada Branch of the Mogollon in the El Paso area. Similar puebloan communities were established along the Rio Grande and the Rio Conchos by A.D. 1200. Some suggest that these La Junta settlements (the Bravo Valley aspect) were a southern extension of the Jornada Mogollon and further suggest that they were the ancestors of the Patarabueye whom the Spanish contacted in the late 16th century. Nonagricultural groups such as the Jumano may have interacted and even periodically lived with the Patarabueye. Some 30 miles northwest of Alpine, corn cobs dating from the Late Prehistoric period were found in a rockshelter. (Winchell et al. 1992:11-15; Edwards and Peter 1993:12; JTF-6 1994:IV-94-107; see Hicks 1989; and Ing et al. 1996 for extensive discussions of these periods).

The Historic Period is also broken into five temporal periods: Spanish Exploration from 1535 to 1659; the Spanish Colonial from 1659 to 1821; the Mexican from 1821 to 1836; the Texas Republic and Nineteenth Century American

from 1836 to 1900; and the Twentieth Century American from 1900. While no remains have been found archaeologically in this area, the expeditions of Cabeza de Vaca (1535), Rodriques-Chamuscado (1581), Espejo (1582), and Onate (1598) passed through the Trans-Pecos region. The latter three explorers set out from Santa Barbara in northern Mexico and followed the Rio Conchos north to its confluence with the Rio Grande - essentially at the current town of Presidio. Then it was called La Junta do los Rios and the early Spanish recorded the Patarabueyes and the Jumano. Brune (1975: Figure 2) indicates that the Chihuahua Road of the 1840s paralleled de Vaca route through the Alpine area. Missions and presidios were established in 1683 in the La Junta area and subsequently throughout the Trans-Pecos during the Spanish Colonial Period. Their impetus was to protect the local populations from the depredations of the Plains Indians, especially the Comanche and Apache, and to consolidate the northern borders (Winchell et al. 1992:16-17; Hicks 1989; JTF-6 1994:IV-107-113; Ing et al. 1996).

Alpine was originally established as Murphyville in 1882 but its first name was San Lorenzo. It was named Alpine in 1888 and is currently the Brewster County seat. Early explorers traversed this portion of Texas. Cabeza de Vaca possibly used a spring in the Alpine Valley in 1535, and Espejo is believed to have camped at this spring in 1583 (Brune 1975:35). In 1682, Mendoza crossed Paisano Pass between Marfa and Alpine and wrote a brief description of the grass-filled Alpine Valley. He named the spring San Lorenzo. (According to Brune, 1975:35, Mendoza named the spring in 1684). Following an attack on a Mexican-American trading party by Mescaleros led by Alsate the name of the springs became Charco de Alsate. In the 1850s John Burgess freighted supplies for the United States Government through this area and Charco de Alsate became known as Burgess Springs. In 1880, Lawrence Haley and George Crosson brought 3,000 head of sheep into the valley and soon other ranchers followed. During the winter and spring of 1882 railroad construction workers lived in tents in the valley, and on January 12, 1883, the first train arrived. A Southern Pacific Railroad section station was established and called Osborne, but within a year the name became Murphyville. Thomas O. Murphy had acquired water rights to Burgess Springs and also land in the valley. On November 10, 1883, the town was platted with the Presidio County clerk located in Fort Davis. In 1887, the Texas Legislature divided the huge Presidio County into Jeff Davis and Brewster counties and in 1888 the town's name was changed once again, this time to Alpine. With the coming of the railroad, sheep and cattle ranches were established. In 1917, Sul Ross Normal College was permanently established (O'Keefe 1996:3-27; see also Daugherty and Elizondo 1996:33-49; and Dillard 1996:87-107).

Several Texas Historic Landmark properties (THL) occur in Alpine. Among these, the Holland Hotel (THL 1980) was built in 1912, during the mercury mining boom days, for John R. Holland. Others include Our Lady of Peace Parish Hall (THL 1965) built in 1892 originally as a church; and the First Methodist Church (THL 1965) constructed in 1889. The Brewster County Court House (THL 1965) was constructed in 1887 when Brewster County was created; it was worked on during the depression through a Federal Emergency Administration of Public Works project (Project Number 9604). No THL is within three miles of the proposed project.

RESULTS OF SURVEY

Neither prehistoric nor historic cultural resources of any kind were observed in the proposed project area. There were no standing structures. The only major disturbance was the dirt stock tank bladed into the drainage; this was done many years ago and dirt berm is thoroughly vegetated. Two informal, and only occasionally used, two-track dirt roads crossed the northern end of the project location. Several long-time residents of this area pointed out that in the 1920s and 1930s a track used on weekends for horse racing was located approximately one-quarter mile to the northwest of the north edge of the surveyed plot. A wide curving depression is still visible.

The only artifact older than recent was a 1929 Texas license plate for the front; while extremely rusty, it appeared to be numbered: 176 C 957. In addition to broken window and bottle glass of recent vintage, plastic bags or containers, and aluminum and rusty tin cans, 23 golf balls were counted. Several residents of the mobile homes bordering the eastern boundary use this vacant land as an informal driving range. A metal shafted target arrow was sticking in the ground at an angle of approximately 60 degrees. The parabolic-shaped stock tank measured approximately 73 m east to west and 27 m north to south and is situated within the 100-year flood plain.

Table 2: Survey Area Location

Alpine South, Texas; 7.5 min U.S.G.S. Quad. 1972

Location: UTM Zone 13;
Northwest Corner: 624540 m E; 3358250 m N
Northeast Corner: 624780 m E; 3358330 m N
Southwest Corner: 624730 m E; 3357690 m N
Southeast Corner: 624990 m E; 3357760 m N

Elevation: 4600 to 4640 feet above sea level

Project Area: 20 acres (8.1 ha)
Surveyed Area: 37 acres (15 ha)

RECOMMENDATIONS

The Corps of Engineers, Albuquerque District, is of the opinion that the proposed construction project will have No Effect on the cultural resources of Alpine, Texas. No cultural resources of any kind occur primary construction zone. In addition, the plot is sufficiently large to accommodate all requisite staging area within the surveyed location. Nevertheless, it is possible that cultural resources may be exposed during construction. If anything is exposed, all work will stop in the area of the discovery, and it will be evaluated by archaeologists from the Albuquerque District and the Texas State Historic Preservation Office. No work will proceed until consensus has been reached concerning the eligibility of any discovery. Therefore, as no historic properties will be affected, clearance for this construction project is recommended.

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APPENDIX D

A-INS-60045-TX MN.

DEPARTMENT OF THE ARMY
ALBUQUERQUE DISTRICT, CORPS OF ENGINEERS
4101 JEFFERSON PLAZA, NE
ALBUQUERQUE, NEW MEXICO 87109-3435
FAX (505) 342-3199

Reply to
Attention of:

April 27, 2000

Engineering and Construction Division
Environmental Resources Branch

U.S. Environmental Protection Agency
Region 6
Office of Planning & Coordination (EN-XP)
1445 Ross Avenue
Dallas, Texas 75202-2733

EPA has reviewed this document and has no comments.

Reviewer: [illegible] Date: 5/30/2000

Mr. Rob Lawrence
USEPA, Region 6
Office of Planning and Coordination (6EN-XP)
1445 Ross Avenue
Dallas, Texas 75202-2733

Dear Mr. Lawrence:

The Immigration and Naturalization Service (INS) is proposing to construct a new border patrol station on a 20 acre parcel of land along U.S. Highway 67/90, just west of Alpine's city limits, in Brewster County, Texas. Enclosed for your review is the Draft Environmental Assessment (DEA) for this proposed project. The U.S. Army Corps of Engineers (Corps), Albuquerque District, is expediting the DEA. The Corps is sending copies of the DEA and soliciting comments from Federal, State and local interests to comply with the National Environmental Policy Act (NEPA).

Please review the DEA and provide any written comments to the above address, Attn: Ms. Julie Hall, Environmental Resources Branch. Written comments must be received **no later than May 31, 2000**, so that comments can be addressed and revisions made to the DEA in a timely manner. If we do not receive comments by this date, we will assume you have no concerns or have no objections to the project. You may facsimile your correspondence to (505) 342-3668. If you have any questions or need additional information, please contact Ms. Julie Hall at (505) 342-3281 or e-mail at julie.hall@spa01.usace.army.mil.

Sincerely,

Mark C. Harberg

Mark C. Harberg
Chief, Environmental Resources Branch

Enclosure

TEXAS PARKS & WILDLIFE

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To manage and conserve the natural and cultural resources of Texas for the use and enjoyment of present and future generations.

4200 SMITH SCHOOL ROAD
AUSTIN, TEXAS 78744-3291
512-389-4800
www.tpwd.state.tx.us

June 8, 2000

Mark C. Harberg
Chief, Environmental Resources Branch
U.S. Army Corps of Engineers
Albuquerque District
Environmental Resources Branch
4101 Jefferson Plaza, NE
Albuquerque, New Mexico 87109-3435

RE: Construction of U.S. Border Patrol Station, Brewster County

Dear Mr. Harberg:

This letter is in response to your request for review of the Environmental Assessment (EA) document prepared to identify the impacts associated with the construction of the U.S. Border Patrol Station referenced above. Texas Parks and Wildlife Department staff have reviewed the document and offer the following comments concerning the project.

The proposed border patrol station would be constructed on a 20-acre parcel of land west of Alpine on U.S. Highway 67/90. The station will include an administrative building, a vehicle maintenance shop, helicopter landing pad, fuel island, car wash, dog kennel, pump house, parking areas, perimeter fence and lighting, security systems, radio tower and satellite dish, and landscaping with irrigation.

The EA states that disturbed areas will be landscaped with native Texas vegetation that requires little or no water and maintenance or seeded with a native Texas seed mix. The Department recommends the use of native species such as the species listed in the vegetation inventory in section 3.3.1 of the EA. Establish a relatively high diversity of vegetation to allow for a high variability of flowers and fruits to provide wildlife food types throughout the year. A supplemental list of plant species native to the project area has been attached for your information. Landscaping and revegetation plans should utilize existing drainage patterns rather than attempting to create modified or new drainages. Irrigation, when needed, should emphasize drip or low flow subsurface applications.

Based on the information provided, there should be minimal adverse impacts on fish and wildlife habitats.

I appreciate the opportunity to review and comment on your project.

Sincerely,

Danny Allen
Wildlife Habitat Assessment Program
Wildlife Division

Attachment

DLA:pmo.7726

SELECT SPECIES WITH ECO_CODE EQ TRANS-PECOS
AND WITH TOP_CODE EQ UPLAND

SPECI CODE	COMMON NAME.....	SCIENTIFIC NAME.....	WILDLIFE.. USE	EROSION... CONTROL
10	AGARITO	MAHONIA TRIFOLIOLATA	POOR	GOOD
8	ALKALI SACATON	SPOROBOLUS AIROIDES	GOOD	EXCELLENT
238	ALLTHORN	KOEBERLINIA SPINOSA	POOR	FAIR
119	AMERICAN BITTERSWEET	CELASTRUS SCANDENS	GOOD	GOOD
256	ARIZONA WHITE OAK	QUERCUS ARIZONICA	FAIR	GOOD
237	ASHE JUNIPER	JUNIPERUS ASHEI	GOOD	EXCELLENT
257	AUTUMN SAGE	SALVIA GREGGII	POOR	FAIR
228	AWNLESS BUSH SUNFLOW	SIMSIA CALVA	FAIR	FAIR
162	BEEBALM (WILD BERGAM	MONARDA FISTULOSA	POOR	FAIR
56	BIG BLUESTEM	ANDROPOGON GERARDII	GOOD	EXCELLENT
70	BIG SACATON	SPOROBOLUS WRIGHTII	GOOD	EXCELLENT
259	BIG-TOOTH MAPLE	ACER GRANDIDENTATUM	FAIR	GOOD
31	BLACK CHERRY	PRUNUS SEROTINA	GOOD	EXCELLENT
129	BLACK GRAMA	BOUTELOUA ERIOPODA	GOOD	EXCELLENT
151	BLACKBRUSH	ACACIA RIGIDULA	FAIR	FAIR
60	BLUE GRAMA	BOUTELOUA GRACILIS	GOOD	EXCELLENT
213	BLUE SAGE	SALVIA AZUREA	FAIR	GOOD
62	BUFFALOGRASS	BUCHLOE DACTYLOIDES	GOOD	EXCELLENT
292	CAREX SPP.	SEDGES	GOOD	GOOD
156	CAROLINA SNAILSEED	COCCULUS CAROLINUS	GOOD	GOOD
150	CATCLAW ACACIA	ACACIA GREGGII	FAIR	FAIR
255	CENTURY PLANT	AGAVE SPP.	FAIR	FAIR
140	CHINKAPIN OAK	QUERCUS MUHLENBERGII	GOOD	GOOD
261	CHOLLA	OPUNTIA (MULTIPLE SPECIES)	FAIR	FAIR
187	COMMON BEEBUSH (WHIT	ALOYSIA GRATISSIMA	FAIR	GOOD
7	COMMON CHOKECHERRY	PRUNUS VIRGINIANA	EXCELLENT	EXCELLENT
65	COMMON CURLYMESQUITE	HILARIA BERLANGERI	GOOD	EXCELLENT
262	COMMON LANTANA	LANTANA HORRIDA	POOR	FAIR
87	COMMON REED	PHRAGMITES AUSTRALIS	GOOD	EXCELLENT
181	CREOSOTEBUSH	LARREA TRIDENTATA	FAIR	FAIR
2	CROTON, SPP.	CROTON, SPP.	EXCELLENT	EXCELLENT
263	DESERT MYRTLECROTON	BERNARDIA OBOVATA	POOR	POOR
193	DESERT OLIVE (NARROW	FORESTIERA ANGUSTIFOLIA	FAIR	POOR
220	DESERT YAUPON	SCHAEFFERIA CUNEIFOLIA	FAIR	POOR
55	DOWNY VIBURNUM (RUST	VIBURNUM RUFIDULUM	EXCELLENT	EXCELLENT
24	EASTERN REDBUD	CERCIS CANADENSIS	FAIR	FAIR
239	ELBOWBUSH	FORESTIERA PUBESCENS	FAIR	GOOD
264	EMORY OAK	QUERCUS EMORYI	FAIR	GOOD
190	ENGELMANN DAISY	ENGELMANNIA PINNATIFIDA	FAIR	GOOD
208	EVERGREEN SUMAC	RHUS VIRENS	FAIR	FAIR
197	FALSE MESQUITE	CALLIANDRA CONFERTA	FAIR	GOOD
265	FAXON YUCCA	YUCCA FAXONIANA	FAIR	GOOD

SELECT SPECIES WITH ECO_CODE EQ TRANS-PECOS
AND WITH TOP_CODE EQ UPLAND

SPECI CODE	COMMON NAME.....	SCIENTIFIC NAME.....	WILDLIFE.. USE	EROSION... CONTROL
116	FEATHER DALEA	DALEA FORMOSA	GOOD	GOOD
147	FERN ACACIA (PRAIRIE	ACACIA ANGUSTISSIMA	FAIR	GOOD
45	FOURWING SALTBUSH	ATRIPLEX CANESCENS	GOOD	GOOD
107	FRAGRANT SUMAC	RHUS AROMATICA	EXCELLENT	EXCELLENT
267	GAMBEL OAK	QUERCUS GAMBELII	GOOD	GOOD
170	GOATBUSH	CASTELA TEXANA	POOR	POOR
209	GOLDEN CURRANT	RIBES AUREUM	FAIR	FAIR
268	GRAY OAK	QUERCUS GRISEA	FAIR	GOOD
66	GREEN SPRANGLETOP	LEPTOCHLOA DUBIA	GOOD	EXCELLENT
269	GREGG ASH	FRAXINUS GREGGII	FAIR	FAIR
149	GUAJILLO	ACACIA BERLANDIERI	GOOD	GOOD
270	GUAYACAN	GUAIACUM ANGUSTI-FOILIUM	FAIR	FAIR
20	GUM BUMELIA (CHITTAM	BUMELIA LANUGINOSA	GOOD	GOOD
61	HAIRY GRAMA	BOUTELOUA HIRSUTA	GOOD	GOOD
233	HEATH ASTER	ASTER ERICOIDES	FAIR	GOOD
126	HONEY MESQUITE	PROSOPIS GLANDULOSA VAR. GL	GOOD	EXCELLENT
95	ILLINOIS BUNDLE FLOW	DESMANTHUS ILLINOENSIS	EXCELLENT	EXCELLENT
194	INDIAN BLANKET	GAILLARDIA PULCHELLA	FAIR	FAIR
272	KIDNEYWOOD	EYSENHARDTIA TEXANA	POOR	POOR
68	LITTLE BLUESTEM	SCHIZACHYRIUM SCOPARIUM	GOOD	EXCELLENT
274	LITTLE-LEAF SUMAC	RHUS MICROPHYLLA	FAIR	FAIR
273	LITTLELEAF LEADTREE	LEUCAENA RETUSA	FAIR	FAIR
230	LOTEBUSH	ZIZYPHUS OBTUSIFOLIA	GOOD	GOOD
275	MESCALBEAN (TEXAS MO	SOPHORA SECUNDIFLORA	POOR	POOR
276	MEXICAN BUCKEYE (MON	UNGNADIA SPECIOSA	POOR	POOR
247	MEXICAN PRIMROSE	OENOTHERA SPECIOSA	POOR	GOOD
277	MOUNTAIN MAHOGANY	CERCOCARPUS MONTANUS	FAIR	GOOD
314	NETLEAF HACKBERRY	CELTIS RETICULATA	GOOD	FAIR
28	OSAGE ORANGE (BOIS D	MACLURA POMIFERA	GOOD	GOOD
315	PINCHOT JUNIPER (RED	JUNIPERUS PINCHOTII	GOOD	EXCELLENT
241	PLAINS COREOPSIS (GO	COREOPSIS TINCTORIA	FAIR	GOOD
207	PRAIRIE SUMAC	RHUS LANCEOLATA	FAIR	FAIR
199	PRAIRIE SUNFLOWER	HELIANTHUS PETIOLARIS	GOOD	FAIR
278	PRICKLYPEAR	OPUNTIA SPP.	FAIR	FAIR
204	PROSTRATE KNOTWEED	POLYGONUM AVICULARE	FAIR	FAIR
189	PURPLE CONEFLOWER	ECHINACEA PALLIDA	FAIR	FAIR
118	PURPLE PRAIRIE CLOVE	DALEA PURPUREA	GOOD	GOOD
318	REDROOT PIGWEED	AMARANTHUS RETROFLEXUS	FAIR	FAIR
138	RIVERBANK GRAPE	VITIS RIPARIA	EXCELLENT	EXCELLENT
279	SACAHUISTA (BEARGRAS	NOLINA SPP.	FAIR	GOOD
154	SAND BLUESTEM	ANDROPOGON GERARDII VAR. PA	GOOD	GOOD
128	SAND DROPSEED	SPOROBOLUS CRYPTANDRUS	GOOD	EXCELLENT

SELECT SPECIES WITH ECO_CODE EQ TRANS-PECOS
AND WITH TOP_CODE EQ UPLAND

SPECI CODE	COMMON NAME.....	SCIENTIFIC NAME.....	WILDLIFE.. USE	EROSION... CONTROL
191	SAND LOVEGRASS	ERAGROSTIS TRICHODES	GOOD	GOOD
280	SANDPAPER OAK (VASEY	QUERCUS PUNGENS	FAIR	POOR
59	SIDEOATS GRAMA	BOUTELOUA CURTIPENDULA	GOOD	EXCELLENT
179	SILVER BLUESTEM	BOTHRIOCHLOA LAGUROIDES	FAIR	GOOD
282	SKELETONLEAF GOLDEN-	VIGUIERA STENOLOBA	FAIR	GOOD
124	SLIMLEAF SCURFPEA (W	PSORALIDIUM TENUIFLORA	FAIR	FAIR
283	SOAPTREE YUCCA	YUCCA ELATA	FAIR	GOOD
284	SOTOL	DASYLIRION SPP.	FAIR	FAIR
4	SWITCHGRASS	PANICUM VIRGATUM	EXCELLENT	EXCELLENT
157	TEXAS COLUBRINA	COLUBRINA TEXENSIS	FAIR	FAIR
322	TEXAS MULBERRY	MORUS MICROPHYLLA	GOOD	EXCELLENT
25	TEXAS PERSIMMON	DIOSPYROS TEXANA	GOOD	EXCELLENT
323	TEXAS SIGNALGRASS (T	BRACHIARIA TEXANA	FAIR	GOOD
286	THOMPSON YUCCA	YUCCA THOMPSONIANA	FAIR	GOOD
287	TORREY YUCCA (SPANIS	YUCCA TORREYI	FAIR	GOOD
325	TROPIC CROTON	CROTON GLANDDULOSUS	FAIR	GOOD
206	UPRIGHT PRAIRIE CONE	RATIBIDA COLUMINFERA	FAIR	FAIR
327	WESTERN RAGWEED	AMBROSIA CUMANENSIS	GOOD	FAIR
289	WESTERN SOAPBERRY	SAPINDUS SAPONARIA VAR. DRU	POOR	FAIR
130	WESTERN WHEATGRASS	ELYTRIGIA SMITHII (AGROPYRO	GOOD	EXCELLENT
188	WESTERN YARROW	ACHILLEA MILLEFOLIUM	FAIR	GOOD
47	WINTERFAT	CERATOIDES LANATA	GOOD	EXCELLENT
3	YELLOW INDIANGRASS	SORGHASTRUM NUTANS	EXCELLENT	EXCELLENT
332	YELLOW SWEETCLOVER	MELILOTUS OFFICINALIS	GOOD	GOOD