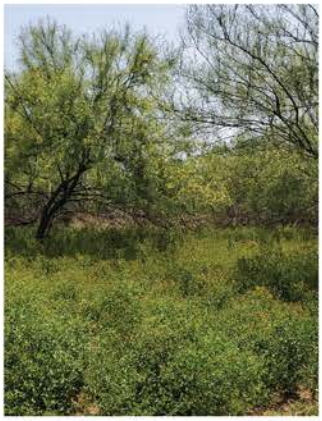
FINAL

ENVIRONMENTAL ASSESSMENT
FOR
THE NEW LAREDO SECTOR HEADQUARTERS
U.S. BORDER PATROL, LAREDO SECTOR, TEXAS
U.S. CUSTOMS AND BORDER PROTECTION
DEPARTMENT OF HOMELAND SECURITY
WASHINGTON, D.C.

OCTOBER 2022



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Project Proponent:	Department of Homeland Security U.S. Customs and Border Protection U.S. Border Patrol
Points of Contact:	U.S. Customs and Border Protection Border Patrol & Air and Marine Program Management Office 1331 Pennsylvania Avenue, NW Suite 1555, Mailstop 1102 Washington, D.C. 20229

EXECUTIVE SUMMARY

INTRODUCTION

U.S. Customs and Border Protection (CBP) is the law enforcement component of the Department of Homeland Security (DHS) responsible for securing the border and facilitating lawful international trade and travel. U.S. Border Patrol (USBP) is the uniformed law enforcement component within CBP responsible for securing the Nation's borders against the illegal entry of people and goods between ports of entry.

CBP is proposing to construct a new Sector Headquarters (LRTSHQ) in Laredo, Texas. The new LRTSHQ would replace the current facility, which does not have the capacity to meet current and future needs for USBP operations in the area. The new LRTSHQ and associated supporting infrastructure are designed for continuous operation in support of the Border Patrol Strategic Plan to gain and maintain effective control of the borders of the United States.

PROJECT LOCATION

The proposed LRTSHQ would be constructed in the southern portion of the City of Laredo, Texas, approximately one mile east of the U.S.-Mexico border at Laredo, Texas. The new LRTSHQ would be located approximately 10 miles south of the existing LRTSHQ. The proposed location alternatives evaluated in this Environmental Assessment (EA) are sufficient in size to construct the LRTSHQ main administrative building and associated infrastructure including a fueling station, communications tower, parking area, and maintenance facility. The two location alternatives are an approximately 130-acre parcel located immediately east of Highway 83 (Alternative 1) and an approximately 100-acre parcel located along the Highway 20 Loop (Alternative 2, the Preferred Alternative).

PURPOSE AND NEED

CBP plans to construct, operate, and maintain a new Sector Headquarters in Laredo, Texas (the Proposed Action) in support of the USBP mission to "safeguard the nation's borders, preserve public trust, and support the men and women who selflessly protect America" and facilitate the primary goals and objectives of the Border Patrol Strategic Plan (CBP 2020a). Based upon increasing trends in illegal border activities and the current insufficient facilities at the current LRTSHQ, additional USBP agents and other resources are required to enhance the operational capabilities of USBP within the Laredo Sector Area of Responsibility (AOR). The proposed construction of an upgraded permanent facility would address the occupational health, safety, security, and operational deficiencies that are found at the existing LRTSHQ.

The need for a new LRTSHQ is due to the increased decentralization of several HQ programs and the increasing number of agents that have been required to operate in the Laredo Sector AOR since its establishment to effectively support the USBP mission. The existing LRTSHQ has 365 employees working in over-crowded and inefficient conditions. The original Sector Headquarters was built in 1968 and intended for use by 59 USBP agents. The overcrowded working conditions have led to operational inefficiencies, safety concerns for agents, and the

need for costly off-site facilities leasing throughout Laredo to compensate for the extreme overcrowding. This has adversely affected the daily field operations, communications, administrative functions, and training efficiencies within the Laredo Sector.

PROPOSED ACTION AND ALTERNATIVES

The Proposed Action consists of the construction, operation, and maintenance of a new LRTSHQ and associated infrastructure that is intended to meet the purpose of and need for the CBP 2020 Border Patrol Strategic Plan (CBP 2020a). Following the construction of the new LRTSHQ, the existing facility would be returned to U.S. General Services Administration (GSA) for eventual sale or disposal. Two Action Alternatives and a No Action Alternative were carried forward for evaluation in this EA. The No Action Alternative reflects conditions within the project site should the Proposed Action not be implemented, as required by National Environmental Policy Act (NEPA) and Council on Environmental Quality (CEQ) regulations. Alternative 1 is a 130-acre parcel located adjacent to Highway 83 and Alternative 2, the Preferred Alternative, is a 100-acre parcel located along the Highway 20 Loop.

AFFECTED ENVIRONMENT AND CONSEQUENCES

Effects on the biotic environment such as land use, soils, vegetation, wildlife, and protected species would range from none to minor, and temporary to long-term. Effects on biological resources as a result of the Proposed Action are discussed below.

Implementation of Alternative 1 would result in a change from the current land use of undeveloped natural vegetation to a developed area in the form of the new LRTSHQ. Alternative 1 is located within Laredo city limits. There is a residential development immediately north of the proposed site, and the remaining adjacent land use includes oil and gas production and rangeland. Although Alternative 1 would convert approximately 130 acres of undeveloped land to a developed use, much of the AOR, even if developed near the Proposed Action, would remain undeveloped rangelands. The Proposed Action would have long-term, minor impacts on land use within the immediate or surrounding areas. Implementation of the Preferred Alternative would result in a change from the current land use of undeveloped natural vegetation to a developed area in the form of the new LRTSHQ. The City of Laredo is located to the north of the proposed site with the closest residential area almost 1 mile north of the proposed site. Adjacent land uses include oil and gas production and rangelands. Although the Preferred Alternative would convert approximately 100 acres of undeveloped land to a developed use, much of the AOR, even if developed near the Proposed Action, would remain undeveloped rangelands. The Proposed Action would have long-term, minor impacts on land use within the immediate or surrounding areas.

Five soil types are located at Alternative 1 and the Preferred Alternative. A maximum of 130 acres of soul could be disturbed with Alternative 1, and up to 100 acres of soil could be disturbed with the Preferred Alternative. None of the soils at either site are considered prime farmland or ecologically significant, and effects on soils as a result of the Proposed Action would be permanent and negligible.

Within Alternative 1, three vegetation communities were found during the biological surveys: Tamaulipan mixed shrubland (70 percent), disturbed grassland (29 percent), and bare ground/dirt roads (1 percent). Within the Preferred Alternative, four vegetation communities were found during the biological survey: old growth Tamaulipan mixed shrubland (80 percent), Tamaulipan Ramadero woodlands (10 percent), disturbed grassland (9 percent), and bare ground/dirt roads (1 percent). None of these vegetation communities is particularly desirable from an ecological standpoint, and cattle grazing has disturbed most of the acreage at both Alternative 1 and the Preferred Alternative. All areas temporarily disturbed by construction activities would be revegetated with a mixture of native plant seeds or nursery plantings or allowed to revegetate naturally. Impacts to vegetation would be long-term and minor at both Action Alternatives.

The permanent loss of approximately 130 acres at Alternative 1 would have a long-term, negligible impact on wildlife. The wildlife habitat present in the project site is both locally and regionally common, and the permanent loss of approximately 130 acres of wildlife habitat would not adversely affect the population viability or fecundity of any wildlife species in the region. Soil disturbance and operation of heavy equipment could result in the reasonably foreseeable impact to less mobile individuals such as lizards, snakes, and ground-dwelling species such as mice and rats. However, most wildlife would likely avoid harm by escaping to the surrounding habitat. The degradation and loss of habitat could also affect burrows and nests, as well as cover, forage, and other important wildlife resources. The loss of these resources would result in the displacement of individuals that would then be forced to compete with other wildlife for the remaining resources. The proposed LRTSHQ Preferred Alternative would have similar impacts on the wildlife resources as those described for Alternative 1. Approximately 100 acres of potential wildlife habitat would be removed. This site does contain undeveloped South Texas Brush Country vegetation which provides habitat for numerous wildlife species; however, much of this site has been degraded by cattle grazing in the area. The wildlife habitat present in the project site is both locally and regionally common, and the permanent loss of approximately 100 acres of wildlife habitat would not adversely affect the population viability or fecundity of any wildlife species in the region.

The Migratory Bird Treaty Act (MBTA) requires that federal agencies coordinate with USFWS if a construction activity would result in the "take" of a migratory bird. In accordance with compliance measures of the MBTA, Best Management Practices (BMPs) identified in Section 4.0 would be implemented if construction or clearing activities were scheduled during the nesting season (typically March 15 to September 15). In addition, the USFWS *Recommended Best Practices for Communication Tower Design, Siting, Construction, Operation, Maintenance, and Decommissioning* (USFWS 2021) would be implemented to reduce nighttime atmospheric lighting and the potential adverse effects of nighttime lighting on migratory bird and nocturnal flying species. BMPs related to noise and animal avoidance and escape measures are discussed in Section 4.0.

The Proposed Action is not likely to adversely affect federally-listed species, and BMPs would reduce disturbance and loss of Rare, Threatened, and Endangered (RTE) species. BMPs would include surveys prior to any construction activities scheduled during the nesting season, and covering or providing an escape ramp for all steep-walled holes or trenches left open at the end of the construction workday. No Critical Habitat is designated for any species with the potential

to occur at either Alternative 1 or the Preferred Alternative. Impacts to RTE species would be long-term and negligible. The impacts on sedentary state-listed species would be negligible due to the BMPs to be implemented, and due to the limited amount of disturbance to habitat relative to the amount of similar habitats within the ROI.

No groundwater would be withdrawn from the local aquifers for municipal purposes as a result of implementing either Action Alternative; therefore, it is anticipated that impacts to ground water resources would be negligible.

Surface water used for municipality purposes would be negligibly affected due to the increase in usage in the Laredo area. Alternative 1 would have long-term, minor impacts to wetlands (2.84 acres) and 2,214 linear feet of Waters of the U.S. The Preferred Alternative would have long-term, minor impacts on wetlands (0.005 acre) and 1,250 linear feet of Waters of the U.S. However, these impacts would be mitigated to a no net loss of wetlands if either alternative is chosen.

Alternative 1 has no acreage located within the 100-year floodplain, while the Preferred Alternative has a small portion (one acre) located within the 100-year floodplain and could result in a long-term, negligible impact on the surrounding environment. However, through mitigation, the facility design would be modified to accommodate its location within the floodplain.

Temporary increases in air pollution would occur from the use of construction equipment (combustion emissions) and the disturbance of soils (fugitive dust) during construction of the new LRTSHQ. Particulate emissions would occur as a result of construction activities such as vehicle trips, bulldozing, compacting, truck dumping, and grading operations. BMPs, such as dust suppression and maintaining equipment in proper working condition would reduce the temporary construction impacts. Furthermore, due to the location of the proposed LRTSHQ, good wind dispersal conditions in the AOR, and because Webb County is in attainment, impacts to air quality are expected to be short-term and negligible under the Proposed Action.

Alternative 1 is located in an area adjacent to a residential community with the nearest house located approximately 40 feet to the north of the eastern portion of the site. Construction noises would not be able to attenuate to acceptable levels prior to reaching the residential area due to the proximity of the surrounding houses. Mitigation efforts would need to be taken to limit the noise effects on the surrounding community which could include constructing noise barriers, limiting construction hours, and following the BMPs described in Section 4.7. Therefore, impacts on noise would be short-term but minor, as the site is located in proximity to residential housing. The Preferred Alternative project site is located in an area approximately 0.7 mile southeast of the nearest residential communities. All construction noises would attenuate to acceptable levels prior to reaching the residential area. Therefore, impacts on noise would be short-term and negligible under the Preferred Alternative.

No negative effects would occur to cultural resources under Alternative 1. During consultation, the State Historic Preservation Officer (SHPO) concurred with CBP's determination that none of the newly recorded archeological sites or isolated occurrences (IO) at Alternative 1 are recommended eligible for the National Register of Historic Places (NRHP) under any criteria.

As a result, no additional work is recommended for the Alternative 1 Areas of Potential Effects (APE) and no adverse effects on historic properties are anticipated from the development of the Alternative 1 APE. An area of the Preferred Alternative APE adjacent to the previously recorded site boundary of 41WB624 contained extensive surface and near-surface cultural material that is believed to be associated with and extending from the site. The SHPO concurs that site 41WB624 would require additional investigation to confirm its eligibility for listing on the NRHP and, therefore, remains undetermined. CBP is in the process of conducting an additional archaeological investigation to determine the site's NRHP eligibility. If the extension of site 41WB624 is determined to be eligible for the NRHP, avoidance or mitigation measures would be developed to minimize or eliminate adverse effects on historic properties. The investigation, additional consultation with the SHPO and Native American Tribes, and any required mitigation would be completed prior to the start of construction.

Alternatives 1 and 2 would result in negligible effects on the availability of utilities throughout the ROI because the current amperage available through the existing grid power system can withstand the anticipated electrical load of the proposed LRTSHQ. Additionally, the LRTSHQ would be tied into existing and available service transmission lines. All sewerage and potable water would be installed with the proper permits for installation and operation of these systems. The sewerage and potable water systems installed by CBP would only be used by CBP; therefore, there would be no reasonably foreseeable impacts related to the construction of the new LRTSHQ and potential development near the new LRTSHQ.

With the implementation of the Proposed Action, construction activities at the project site would have a temporary, minor impact on roadways and traffic adjacent to the project site. An increase of vehicular traffic along U.S. Highway 83 would occur from supplying materials, hauling debris, and from work crews commuting to the project site during construction activities. Upon completion of construction activities, the number of USBP agents traveling those roads to access the LRTSHQ would increase as well. This increase in volume of traffic associated with agents coming and going from the LRTSHQ would have long-term, negligible impacts on roadways and traffic as Highway 83 can withstand the projected volumes. Therefore, traffic impacts associated with construction and operation of the LRTSHQ would be long-term and negligible.

Construction of the proposed LRTSHQ as described in the Proposed Action would involve the use of heavy construction equipment; however, hazardous and regulated materials and substances would not impact the public, groundwater, or general environment. There is a potential for the release of hazardous materials such as fuels, lubricants, hydraulic fluids, and other chemicals during the construction activities. The impacts from spills of hazardous materials during construction would be minimized by utilizing BMPs during construction such as fueling only in controlled and protected areas away from surface waters, maintaining emergency spill cleanup kits at all sites during fueling operations, and maintaining all equipment in good operating condition to prevent fuel and hydraulic fluid leaks. The potential impacts of the handling and disposal of hazardous and regulated materials and substances during construction activities would be insignificant when mitigation measures and BMPs as described in Section 4 are implemented. Short-term, negligible effects would be anticipated at both Alternative 1 and 2.

The Proposed Action involves installing new communications equipment within the project site. As with any radio frequency (RF) transmitter, all of these systems would emit RF energy and electromagnetic (EM) radiation; therefore, a potential for adverse effects could occur. However, any adverse effects on human safety and wildlife would likely be negligible due to the minimal exposure limits associated with both the type of equipment used and the tower site location. The risk of exposure is further minimized because the tower would be less than 199 feet tall. The distance between the antennas (on top of the tower) and human populations would be too great to present a significant exposure risk. Though greater research is required to have a better understanding of the effects of RF energy on the avian brain, the potential effects on passing birds are expected to be long-term and negligible.

The Proposed Action would have negligible impacts on socioeconomics. Temporary, minor, beneficial impacts in the form of jobs and income for area residents, revenues to local businesses, and sales and use taxes to Webb County, Laredo, and the State of Texas from locally purchased building materials could be realized if construction materials are purchased locally and local construction workers are hired for road construction. Further, the Proposed Action would not result in disproportionately high and adverse human health or environmental effects on minority populations or low-income populations.

Under Alternative 1 and the Preferred Alternative, the proposed LRTSHQ would be located in a rural area, with residential structures located nearby. The additional agents and their families would likely live in Laredo or a surrounding town. The Proposed Action would not result in disproportionately high and adverse human health or environmental effects on minority populations and low income populations. There would be no environmental health, justice, or safety risks that disproportionately affect children.

BEST MANAGEMENT PRACTICES

BMPs were identified for each resource category that could potentially be affected. Many of these measures have been incorporated as standard operating procedures by CBP on similar past projects. BMPs are discussed in Section 4.0.

FINDINGS AND CONCLUSIONS

Based upon the analyses of the EA and the BMPs to be implemented, the Proposed Action would not have a significant effect on the environment. Therefore, no further analysis or documentation (e.g., Environmental Impact Statement) is warranted. CBP, in implementing this decision, would employ all practical means to minimize the potential for adverse impacts on the human and natural environments. BMPs are discussed in Section 4.0.

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1.0 PURPOSE OF AND NEED FOR THE PROPOSED ACTION

1.1 INTRODUCTION

United States (U.S.) Customs and Border Protection (CBP) has prepared an Environmental Assessment (EA) to address the potential effects, beneficial and adverse, resulting from the proposed construction and operation of a new U.S. Border Patrol (USBP) Sector Headquarters in Laredo, Texas. The proposed new USBP Laredo Sector Headquarters (LRTSHQ) would be constructed to accommodate 350 agents with the capability to expand in the future and would replace the current LRTSHQ, which does not have the capacity to meet current and future needs for USBP operations in the area. The current LRTSHQ was constructed in 1968 and has been expanded through structural modifications and additional modular buildings over the years. The new LRTSHQ and associated supporting infrastructure are designed for continuous operation in support of the Border Patrol Strategic Plan to gain and maintain effective control of the borders of the U.S. (CBP 2020a).

The LRTSHQ oversees nine stations: the Cotulla, Dallas, Freer, Hebbronville, Laredo North, Laredo South, Laredo West, San Antonio, and Zapata stations in Texas (CBP 2020b). The LRTSHQ Area of Responsibility (AOR) encompasses 96 counties and covers 84,041 square miles of southwest and northeast Texas and stretches from the U.S./Mexico border in Texas north to the Oklahoma and Arkansas state lines. The Laredo Sector is responsible for 136 southwest border miles along the Rio Grande River between Mexico and the U.S. The LRTSHQ plays an integral part in the overall Border Patrol Strategic Plan as a primary line of defense between the border with Mexico and the interior of the U.S. The AOR assigned to the Laredo Sector has several vital North American Free Trade Agreement corridors intersecting its boundaries and includes 10 Ports of Entry located along the U.S.-Mexico border. Current operations at the LRTSHQ ensure that resources, manpower, and technology are deployed along the U.S.-Mexico border, which is the LRTSHQ's primary responsibility.

1.2 PROJECT LOCATION

The proposed new LRTSHQ would be constructed within the City of Laredo, Texas, adjacent to the U.S.-Mexico border at Laredo, Texas (Figure 1-1). Laredo is located in the southern portion of Texas, in Webb County, and is within the South Texas Plains ecoregion (Texas Parks and Wildlife Department [TPWD] 2018). The new LRTSHQ would be located approximately 10 miles south of the existing LRTSHQ. Alternative 1 is a 130-acre parcel located off of Highway 83 and Alternative 2, the Preferred Alternative, is a 100-acre parcel located along the Highway 20 Loop. Both Action Alternatives are bound by Highways 83 and 20 to the west and east, respectively, the City of Laredo to the north, and undeveloped land to the south.

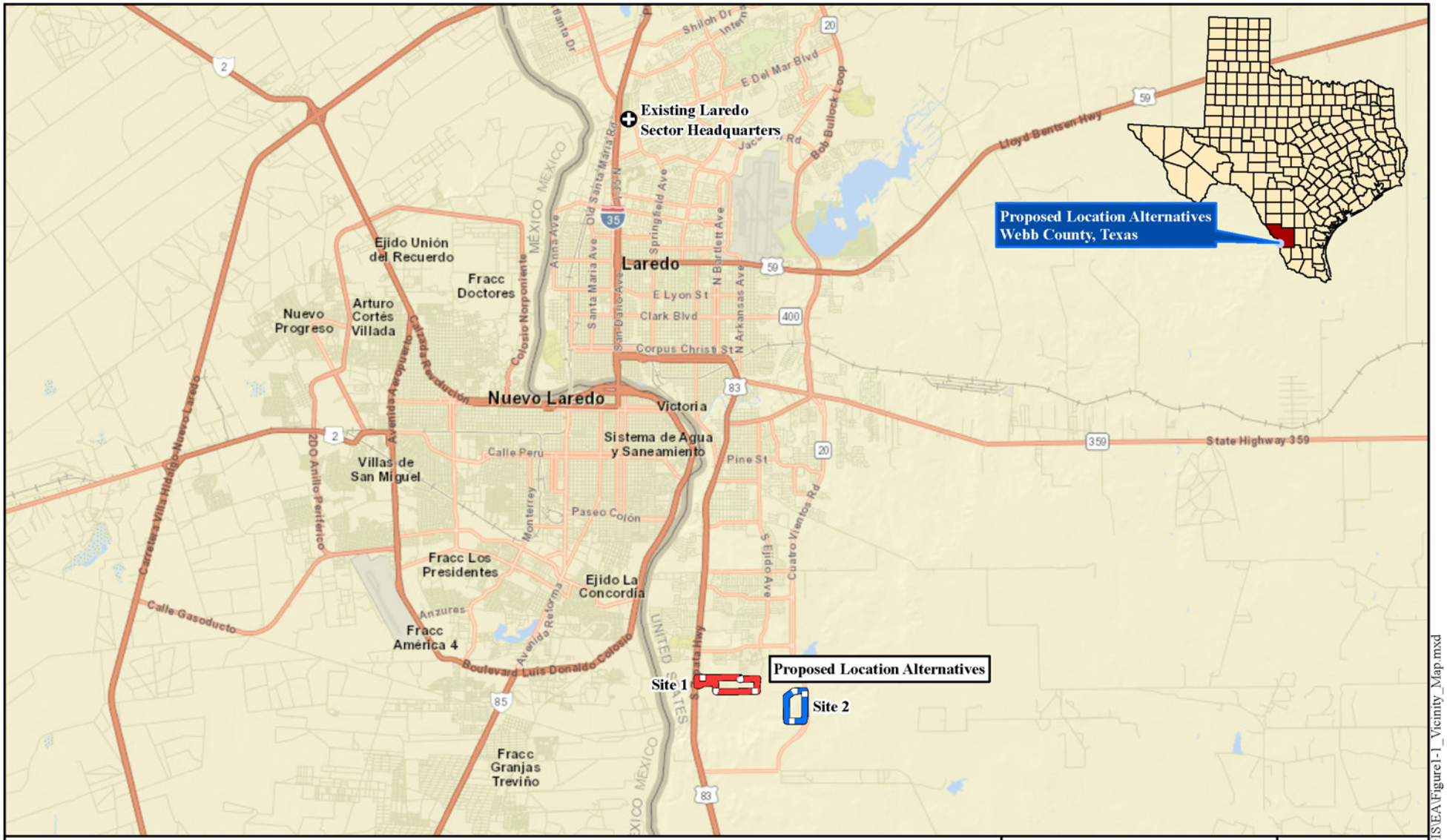


Figure 1-1. Vicinity Map

1.3 PURPOSE OF THE PROPOSED ACTION

CBP proposes to construct, operate, and maintain a new LRTSHQ (the Proposed Action) in support of the USBP mission to "safeguard the nation's borders, preserve public trust, and support the men and women who selflessly protect America." Based upon the increasing trends in illegal border activities and the current insufficient facilities at the LRTSHQ, additional USBP agents and other resources are required to enhance the operational capabilities of USBP within the Laredo Sector AOR. The mission and personnel of Laredo Sector have grown significantly since the current Headquarters complex was developed, and many Sector programs have been displaced to other locations or leased facilities throughout Laredo. This has adversely affected daily field operations, communications, administrative functions, and training efficiencies.

The installation of an upgraded permanent facility would address the occupational health, safety, security, and operational deficiencies that are found at the existing LRTSHQ and would allow USBP flexibility to adapt to future law enforcement challenges. Continuing to utilize the LRTSHQ location as a base of USBP operations is mission critical in the USBP commitment to maintain law and order on the Southern Border, stop potential terrorists, and prevent the illicit trafficking of people and contraband between the official ports of entry into the U.S. The Proposed Action would enhance the overall safety and efficiency of current and future operations within USBP Laredo Sector's AOR, as well as the safety of communities in the area.

1.4 NEED FOR THE PROPOSED ACTION

The need for a new LRTSHQ is due to the increased decentralization of several HQ programs and the increasing number of agents that have been required to operate in the LRTSHQ since its establishment to effectively support the USBP mission. The existing LRTSHQ has 365 employees working in over-crowded and inefficient conditions. The original Sector Headquarters was built in 1968 and intended for use by 59 USBP agents. The overcrowded working conditions has led to operational inefficiencies, safety concerns for agents, and the need for costly off-site facilities leasing throughout Laredo to compensate for the extreme overcrowding. This has adversely affected the daily field operations, communications, administrative functions, and training efficiencies within the Laredo Sector. The current facilities would not accommodate the projected increase in USBP agents and would hinder the USBP ability to respond to high-levels of illegal border-related activity.

The new facilities would replace existing deficient facilities currently located in various leased and temporary buildings and sites. The new facilities would be able to accommodate the growth in staffing due to existing and near-future operational demands placed upon the Laredo Sector.

1.5 SCOPE OF ENVIRONMENTAL ANALYSIS AND DECISIONS TO BE MADE

The scope of the EA includes an evaluation of the effects on the natural, cultural, social, economic, and physical environments resulting from the construction, installation, operation, and maintenance of a new Sector Headquarters within the Laredo Sector AOR. This evaluation reviews and discusses environmental trends and reasonably foreseeable planned actions within the potentially affected areas. This analysis does not include an assessment of operations

conducted in the field and away from the Sector Headquarters. The potentially affected natural and human environment is limited to resources associated with the City of Laredo and Webb County, Texas. Most potential effects will be limited to the construction site and immediately adjacent resources.

The EA assesses the environmental impacts of the Proposed Action and alternatives. The EA allows decision makers to determine if the Proposed Action would or would not have effects on the natural, cultural, social, economic, and physical environment, as well as whether the action can proceed to the next phase of project development or if an Environmental Impact Statement (EIS) is required. The process for developing the EA allows for input and comments on the Proposed Action from the concerned public, interested non-governmental groups, and interested government agencies to inform agency decision making. The EA was prepared as follows:

1. Conduct interagency and intergovernmental coordination for environmental planning. The first step in the National Environmental Policy Act (NEPA) process is to solicit comments from federal, state, and local agencies, as well as federally recognized tribes, about the proposed project to ensure that their concerns are included in the analysis.

2. Prepare a draft EA. CBP reviewed and addressed relevant comments and concerns received from any federal, state, and local agencies or federally recognized tribes during preparation of the draft EA.

3. Announce that the draft EA has been prepared. A Notice of Availability (NOA) was published in the *Laredo Morning Times* newspaper on April 22, 2022 to announce the public comment period and the availability of the draft EA and Finding of No Significant Impact (FONSI).

4. Provide a public comment period. A public comment period allows for all interested parties to review the analysis presented in the draft EA and provide feedback. The draft EA was made available to the public for a 30-day review beginning April 22, 2022. The draft EA was available for download from the CBP internet web page at the following URL address: https://www.cbp.gov/about/environmental-management.

5. Prepare a final EA. A final EA has been prepared following the public comment period. The final EA addresses relevant comments and concerns received from all interested parties during the public comment period.

6. Issue a FONSI. The final step in the NEPA process is the signature of a FONSI, if the environmental analysis supports the conclusion that impacts on the quality of the human and natural environments from implementing the Proposed Action would not be significant. In this case, no EIS would be prepared.

1.6 APPLICABLE ENVIRONMENTAL GUIDANCE, STATUTES, AND REGULATIONS

CBP follows all applicable federal laws and regulations for environmental protection and management. The EA was developed in accordance with the requirements of NEPA, updated regulations issued by the Council on Environmental Quality (CEQ) published in 40 Code of Federal Regulations (CFR) Parts 1500-1508 and 1515-1518 (CEQ 2020a), and Department of Homeland Security (DHS) Directive Number 023-01, Rev.01, and DHS Instruction Manual 023-01-001-01, Rev. 01, *Implementation of the National Environmental Policy Act* and other pertinent environmental statutes, regulations, and compliance requirements. The EA is the vehicle for compliance with all applicable environmental statutes, such as the Endangered Species Act (ESA) of 1973, 16 United States Code (U.S.C.) Part §1531 et seq., as amended, and the National Historic Preservation Act (NHPA) of 1966, 16 U.S.C. §470a et seq., as amended.

1.7 PUBLIC INVOLVEMENT

In accordance with 40 CFR §1501.9, 1503, 1506.6, and 1508.1 (k), CBP initiated public involvement and agency scoping activities to identify significant issues related to the Proposed Action. CBP is consulting, and will continue to consult, with appropriate local, state, Tribal, and federal government agencies throughout the EA process. Formal and informal coordination has been conducted with the following agencies and included in Appendix A:

Federal Agencies:

- United States Fish and Wildlife Service (USFWS)
- United States Environmental Protection Agency (USEPA)
- United States Army Corps of Engineers (USACE)
- United States Department of the Interior (DOI)

State Agencies:

- Texas Parks and Wildlife Department (TPWD)
- Texas Historical Commission (THC)
- Texas Department of Transportation (TxDOT)
- Texas Commission on Environmental Quality (TCEQ)

Tribal:

- The Comanche Nation
- Mescalero Apache Tribe of the Mescalero Reservation
- Tonkawa Tribe of Indians of Oklahoma
- Apache Tribe of Oklahoma
- Wichita and Affiliated Tribes

Local:

- Webb County
- City of Laredo

1.7.1 Scoping Process

CBP initiated the scoping process on November 8, 2021, to solicit comments and information from the agencies and stakeholder groups listed in Section 1.7. Responses and suggestions were received from the United States Fish and Wildlife Service (USFWS), Texas Parks and Wildlife Department (TPWD), and Texas Historic Commission (THC). Webb County had no comments on the project. Copies of the responses are included in Appendix A.

2.0 PROPOSED ACTION AND ALTERNATIVES

Two Action Alternatives and one No Action Alternative were identified and considered during the planning stages of the proposed project. The Proposed Action consists of the construction of a new LRTSHQ and associated infrastructure that meet the purpose of and need for the project. As required by NEPA and CEQ regulations, the No Action Alternative reflects conditions within the project site should the Proposed Action not be implemented. Both potential LRTSHQ sites were carried forward for evaluation in the EA.

2.1 PROPOSED ACTION

The Proposed Action would construct a new LRTSHQ in southern Laredo, Texas (see Figure 2-1). Based upon potential site designs, it has been determined that a 100-acre project site is sufficient to construct the LRTSHQ main administrative building and associated infrastructure including a fueling station, communications tower, parking area, training building, forensics lab, and vehicle maintenance facility. Following the construction of the new LRTSHQ, the existing facility would be returned to U.S. General Services Administration (GSA) for eventual sale or disposal. The two location alternatives that CBP are evaluating as part of this EA are discussed below in Section 2.2, and the numbering of the Action Alternatives does not necessarily indicate preference.

2.1.1 Proposed Station Design

The new LRTSHQ is currently planned for 350 employees with the capability for future expansion to meet current and future increased labor demands to meet the objectives of USBP in the Laredo Sector's AOR. Additionally, the site would have the capability to house the vehicles, animals, equipment, and other materials necessary to meet the objectives of the LRTSHQ. The proposed Sector Headquarters design and construction would meet USBP facilities guidelines and security standards. The new facilities will be designed in accordance with the *Guiding Principles for Sustainable Federal Buildings and Associated Instructions* (CEQ 2020b). A conceptual design layout of the proposed LRTSHQ is included below in Figure 2-2.

The proposed new LRTSHQ would include some or all of the following components:

- Main administration building
- 20-bay vehicle maintenance facility
- Helicopter landing pad
- Muster rooms
- Training building
- Field support and communications
- Facility maintenance and administrative spaces
- On-site fuel tanks
  - Diesel
  - Unleaded
- Forensics lab
- FIPS201/HSPD-12 compliant security systems
- One-bay carwash facility
- Security lighting
- 8-foot-high chain link security fencing
- Communication building
- Less than 199-foot-high communications tower
- Short-stay canine kennels for 60 law enforcement working dogs
- Equestrian facilities for 16 horses
- Parking area

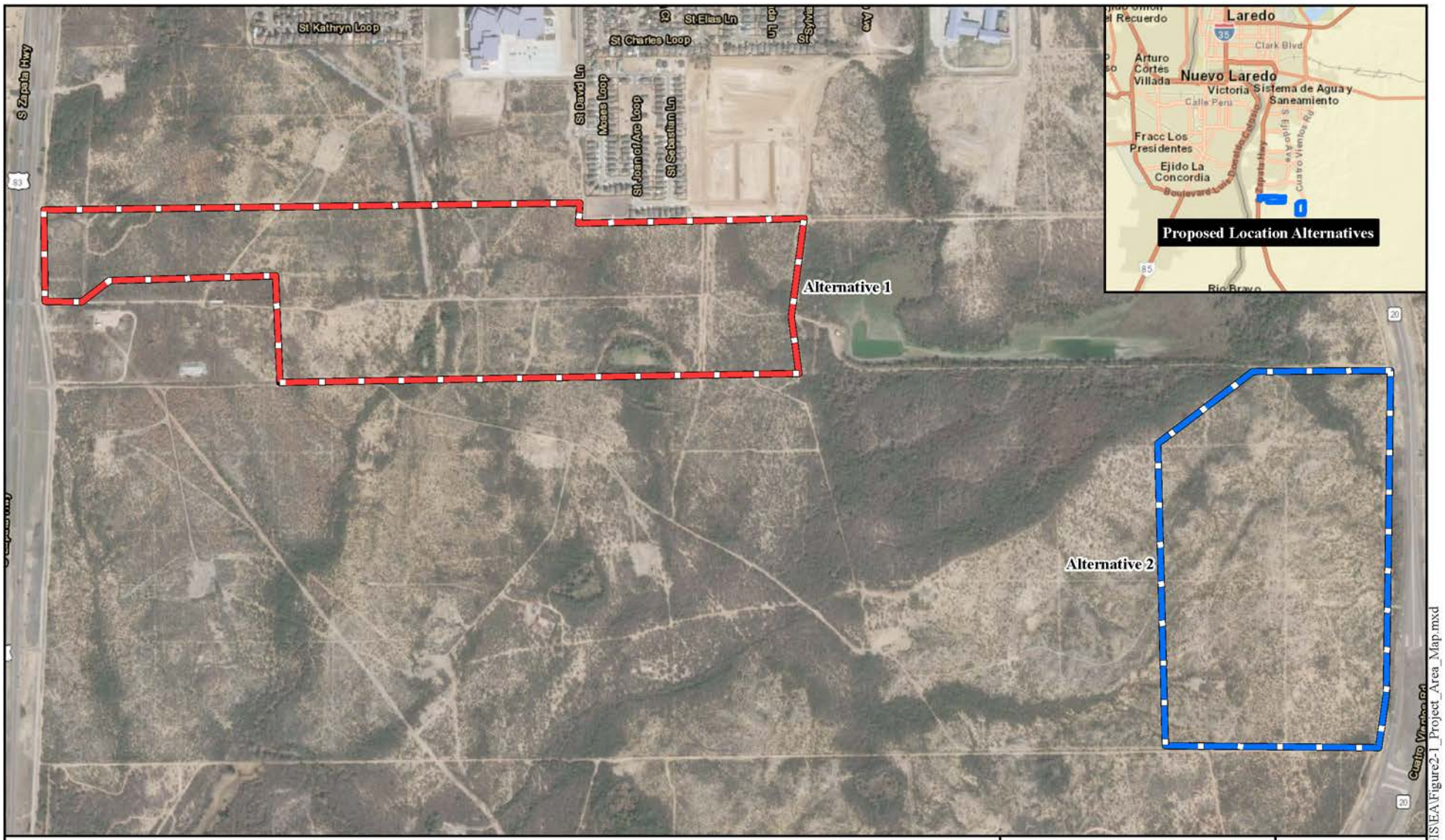
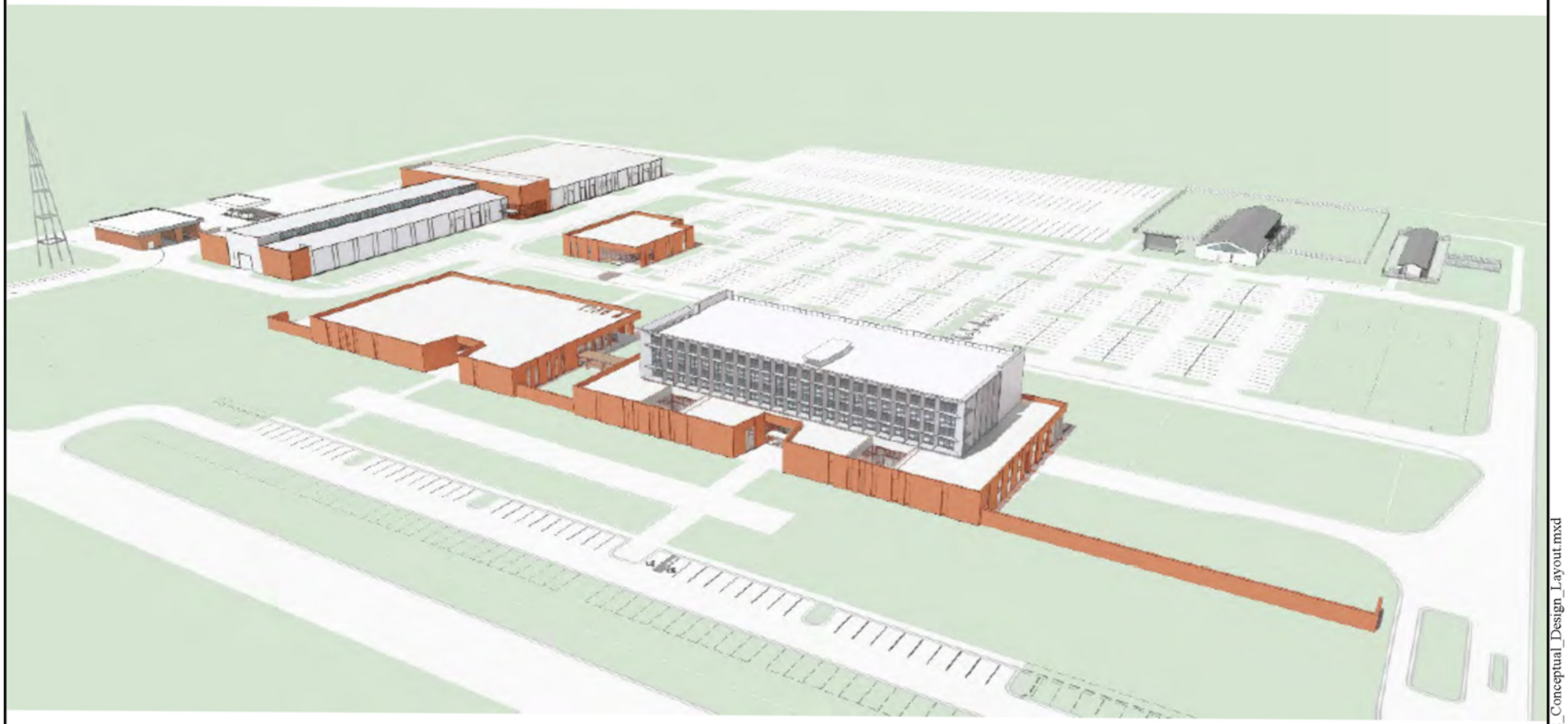


Figure 2-1. Project Area Map



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March 2022

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Figure 2-2. Conceptual Design Layout of the Proposed LRTSHQ

The primary buildings constructed on-site would be an approximately 87,000 square-foot, main administrative building and an approximately 32,000 square-foot training building in accordance with USBP Facilities Guidelines Standards. The new buildings would provide office space, storage space, weapons and ammunition storage, a muster area, locker rooms, an exercise facility, forensics lab, and a general training area. Facilities would be included to accommodate the following staff: Border Patrol Agents, Border Patrol Professional Staff, Office of Chief Counsel, Human Resource Management, Labor Employee Relations, Facilities Management & Engineering, Office of Information Technology, and Other Government Agencies.

The twenty-bay centralized vehicle service and maintenance facility would have space for parts storage, a grease and oil station, and tire changing station, including wheel balance and alignment. A two-point, above-ground fueling island with an unleaded gasoline tank and a diesel tank would be included. A one-bay car wash including vacuum and pre-wash, a vehicle impound lot for temporary storage, and pre- and post-vehicle inspection booth would also be part of the facility.

The LRTSHQ would accommodate parking for 771 total vehicles including spaces for Government-owned vehicles (GOV), personal vehicles, service vehicles, and visitors. Approximately 50 percent of the parking spaces would be set-aside for the GOV and other specialized vehicles, including heavy equipment. Sixteen horses would be stabled at the LRTSHQ, and equestrian support facilities would include a hay barn, round pen, turn out, and a training pavilion. The LRTSHQ would have sixty short stay canine kennels for law enforcement working dogs.

Other site elements include a self-supporting radio tower with a communications building or space in the main building. Public power, water and septic systems, communication systems, and gas utilities would be utilized by the LRTSHQ. The entire facility would be provided with automatically controlled emergency back-up power, as well as an uninterruptible power system for critical loads.

Two Action Alternatives and the No Action Alternative, as required by CEQ, are evaluated in the EA. The alternative descriptions are presented in the following paragraphs.

2.1.2 Alternative 1

Alternative 1 consists of approximately 130 acres and is located immediately east of Highway 83 (see Figure 2-1). This tract is currently within a residential zone, with residential housing located to the north of this site. It is undeveloped and consists of primarily Tamaulipan shrubland and disturbed grassland that has been used previously for cattle grazing. If Alternative 1 is chosen, CBP would acquire the 130-acre parcel via a purchase from the private landowner.

2.1.3 Alternative 2 (Preferred Alternative)

The Preferred Alternative is located along Highway 20 (Cuatro Vientos Boulevard), south of Laredo, Texas. This tract consists of primarily undeveloped Tamaulipan shrubland and disturbed grassland and is currently zoned for residential use. The approximately 100-acre tract is located along the Highway 20 Loop with undeveloped land surrounding this location that was previously

utilized for cattle grazing (see Figure 2-1). If the Preferred Alternative is chosen, CBP would acquire the parcel via a purchase from the private landowner.

2.2 NO ACTION ALTERNATIVE

The No Action Alternative would preclude the construction, operation, and maintenance of a new Sector Headquarters. The existing LRTSHQ would continue to be inadequate for the support of operations within the Laredo Sector and would have to accommodate the projected increase in USBP agents but would not be able to do so while operating in an effective manner. Consequently, this alternative would hinder the USBP ability to respond to high-levels of illegal border-related activity. The No Action Alternative does not meet the purpose and need for the proposed project but will be carried forward for analysis as required by CEQ regulations. The No Action Alternative describes the existing conditions in the absence of the Proposed Action.

2.3 ALTERNATIVES SUMMARY

The three alternatives selected for further analysis are the No Action Alternative, Alternative 1, and Alternative 2 (the Preferred Alternative). Both Action Alternatives fully meet the purpose of and need for the project, and the construction sites offer the best combination of terrain, environment, land ownership, and operational requirements to serve as a command center for conducting the USBP operations within the Laredo Sector. An evaluation of how the Proposed Action meets the project's purpose and need is provided in Table 2-1.

Table 2-1. Alternatives Matrix: Purpose of and Need for Alternatives

Purpose and Need	Alternative 1	Alternative 2 (Preferred Alternative)	No Action Alternative
Appropriate facilities to allow the USBP to operate more efficiently, safely, and securely - resulting in more effective deployment of required assets in the area of responsibility to prevent illegal activities - and ensure chain of custody.	Yes	Yes	No
Facilities that will enable the USBP to attain and maintain compliance with standards, regulations, and mandates.	Yes	Yes	No
Facilities will enable the USBP to provide safer handling of detainees with dedicated and isolated air supply systems, separation from secured storage areas, including weapons storage, and will result in overall safer operations.	Yes	Yes	No
Provide additional space and facilities for expansion of the LRTSHQ to a 350-employee station plus support staff.	Yes	Yes	No
Provide facilities necessary for an increased effectiveness of USBP agents in the performance of their duties (e.g., vehicle maintenance shop, fuel storage, vehicle parking, detention and processing space, forensics lab, helicopter landing pad, secure vehicle seizure lot, short stay canine kennels, stables and associated equestrian facilities, and communication tower).	Yes	Yes	No
Provide an opportunity for future expansion as necessary.	Yes	Yes	No

2.4 RECENT, ONGOING, AND REASONABLY FORESEEABLE PROJECTS WITHIN THE GEOGRAPHIC BASELINE OF THE PROPOSED ACTION

Recent, ongoing, and reasonably foreseeable proposed projects were identified in the development of this EA. These projects include CBP projects, as well as other agencies that could have projects within the geographic baseline of the Proposed Action. If a proposed project presumptively would have effects that are reasonably foreseeable and have a close causal relationship with the Proposed Action or alternatives it is included in the affected environment and consequences section of this EA. However, if the effects of the proposed project are remote in time, geographically remote, or would be a result of a lengthy causal chain the proposed project was not included in the affected environment and consequences section of this EA per 40 CFR §1508.1(g).

The following projects were reviewed and CBP has determined that the effects of these projects are remote in time, geographically remote, or would be a result of a lengthy causal chain and are not included in the environmental consequences section of this EA.

CBP Projects

- Construction of a new Laredo Air Branch facility at the Laredo International Airport
- Construction of a new Freer Border Patrol Station and Checkpoint
- Construction of the Freer Checkpoint Health and Life Safety Improvements on a 10-acre site, which will include signage and safety measures to address access and egress traffic, additional secure parking, equipment storage, relocating vehicle lift inspection equipment, and a vehicle impound area.
- Maintenance and repair of tactical infrastructure along the U.S.-Mexico international border in the El Paso, Big Bend, Del Rio, Laredo, and Rio Grande Valley sectors.
- Construction and maintenance of 32 RVSS towers and associated roads within the Falfurrias, Brownsville, Harlingen, Fort Brown, and Kingsville Station's AORs.
- Construction and maintenance of 40 RVSS and three relay towers and associated roads within the Rio Grande city, McAllen, and Weslaco Stations' AORs.
- Construction and maintenance of 70 RVSS and 14 relay towers and associated roads within the Laredo North, Laredo South, Laredo West, Zapata, Cotulla, Hebbronville, and Freer Stations' AORs.
- Construction of approximately 65 miles of border wall in the Rio Grande Valley Sector.

CBP determined not to include these ongoing and planned projects for discussion in the environmental consequences section of this EA because the potential effects of these projects are geographically remote (i.e., over 20 miles), remote in time, or the result of a lengthy causal chain when considering effects relating to the Proposed Action.

Other Agencies and Entities with Projects in the ROI

Multiple highway repair projects have been identified by the Texas Department of Transportation (TxDOT) to be completed within the next few years (TxDOT 2022). U.S. Highways 83 and 20 are both identified on the TxDOT Project Tracker as sites for potential projects. The stretch of U.S. Highway 83 that runs adjacent to Alternative 1 requires a seal coat be applied to the road surface. The coating would be applied to approximately five miles of U.S.

Highway 83. The estimated start and finish date for this work is yet to be determined (TxDOT 2022).

A stretch of U.S. Highway 20 that runs adjacent to the Preferred Alternative is scheduled for light pole installation to illuminate an approximately 3-mile stretch of the highway. The estimated start and finish date for this work is yet to-be-determined (TxDOT 2022).

The City of Laredo publishes past and current projects (City of Laredo 2022). In 2021, the City of Laredo resurfaced over 100 blocks throughout the city, relocated and upgraded effluent and waterlines, and implemented parking upgrades at the Laredo International Airport. In addition to past projects, the City of Laredo plans to replace emergency vehicles (e.g., fire engines and ambulances), upgrade the waterline downtown, rehabilitate sewers, improve drainage capabilities of Flores Street, install new manholes and mud valves in South Laredo, and various other drainage and municipal projects.

3.0 AFFECTED ENVIRONMENT AND CONSEQUENCES

3.1 PRELIMINARY IMPACT SCOPING

This section describes the natural and human environments that exist within the region of influence (ROI) as well as the potential impacts of the No Action Alternative and the Proposed Action outlined in Section 2.0 of this document. The ROI for the new LRTSHQ is the City of Laredo and Webb County, Texas. The Proposed Action would be located on federal land acquired from a private seller. Only those issues that have the potential to be affected by any of the alternatives are described, per CEQ guidance (40 CFR § 1501.9 [3]).

Some topics are limited in scope due to the lack of effect from the Proposed Action on the resource or because that particular resource is not located within the project site (Table 3-1).

Table 3-1. Resources Analyzed in the Environmental Impact Analysis Process

Resource	Potential to Be Affected by Implementation of the Proposed Action	Analyzed in This EA	Rationale for Elimination
Wild and Scenic Rivers	No	No	No rivers designated as Wild and Scenic Rivers (16 U.S.C. § 551, 1278[c], 1281[d]) are located within or near the project site
Land Use	Yes	Yes	Not Applicable
Geology	No	No	No geologic resources would be affected
Soils	Yes	Yes	Not Applicable
Prime Farmlands	No	No	No prime farmlands would be affected
Water Resources	Yes	Yes	Not Applicable
Floodplains	Yes	Yes	Not Applicable
Vegetative Habitat	Yes	Yes	Not Applicable
Wildlife Resources	Yes	Yes	Not Applicable
Threatened and Endangered Species	Yes – Not likely to adversely affect	Yes	Not Applicable
Cultural, Archeological, and Historical Resources	Yes	Yes	Not Applicable
Air Quality	Yes	Yes	Not Applicable
Noise	Yes	Yes	Not Applicable
Utilities and Infrastructure	Yes	Yes	Not Applicable
Radio Frequency Environment	Yes	Yes	Not Applicable
Roadways and Traffic	Yes	Yes	Not Applicable
Aesthetic and Visual Resources	No	No	No aesthetic or visual resources would be affected
Hazardous Materials	Yes	Yes	Not Applicable
Unique and Sensitive Areas	No	No	No unique or sensitive areas would be affected

Resource	Potential to Be Affected by Implementation of the Proposed Action	Analyzed in This EA	Rationale for Elimination
Socioeconomics	No	Yes	Not Applicable
Environmental Justice and Protection of Children	No	Yes	Not Applicable

Per 40 CFR §1508.1(g), effects are defined as changes to the human environment from the Proposed Action or alternatives that are reasonably foreseeable and have a close causal relationship to the Proposed Action or alternatives, including those effects that occur at the same time and place as the Proposed Action or alternatives and may include effects that are later in time or farther removed in distance from the Proposed Action or alternatives.

For this EA, per 40 CFR §1508.1(g), effects are not considered if they are remote in time, geographically remote, or would be as a result of a lengthy causal chain. They were also not considered if CBP has no ability to prevent the effect or if the effect would occur regardless of the Proposed Action. Also, per 40 CFR §1501.3(b)(2), CBP has considered as appropriate to the Proposed Action whether effects would be short-term, long-term, beneficial or adverse. CBP also considered the effects on public health and safety and whether effects would violate federal, state, tribal, or local law protecting the environment.

Effects include ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic (such as the effects on employment), social, or health effects. Effects may also include those resulting from actions that may have both beneficial and detrimental effects, even if on balance the agency believes that the effect would be beneficial. As discussed in this section, the alternatives may create temporary, short-term, long-term, or permanent effects.

Whether an effect is significant depends on the potentially affected environment and degree of effects of the action (1501.3(b)). The potentially affected environment refers to the setting in which the impact occurs and may include society as a whole, the affected region, the affect interests, and the locality. Effects on each resource can vary in degree or magnitude from a slightly noticeable change to a total change in the environment. For the purpose of this analysis, the intensity of effects would be classified as negligible, minor, moderate, or major. The intensity thresholds are defined as follows:

- Negligible: A resource would not be affected or the effects would be at or below the level of detection, and changes would not be of any measurable or perceptible consequence.
- Minor: Effects on a resource would be detectable, although the effects would be localized, small, and of little consequence to the sustainability of the resource. Mitigation measures, if needed to offset adverse effects, would be simple and achievable.

- Moderate: Effects on a resource would be readily detectable, long-term, localized, and measurable. Mitigation measures, if needed to offset adverse effects, would be extensive and likely achievable.
- Major: Effects on a resource would be obvious and long-term and would have substantial consequences on a regional scale. Mitigation measures to offset the adverse effects would be required and extensive, and success of the mitigation measures would not be guaranteed.

The following discussions describe and, where possible, quantify the potential effects of each alternative on the resources within or near the project site. It is assumed that the entire tract of land where the Proposed Action is located would be used by CBP resulting in a permanent impact of up to 130 acres. All construction activities, staging areas, and final siting of the various LRTSHQ components would occur within the 100 or 130-acre tract of land.

3.2 LAND USE

The existing land use at both site alternatives is rangeland and undisturbed vegetative habitat. Nearby existing land use includes residential communities and rangeland.

Webb County encompasses approximately 2,151,360 acres, with a significant portion of the county being classified as rangeland. A total of 656 farms are located within Webb County, and these farms comprise nearly 1,844,858 acres. Ninety-two percent of the farms in Webb County are classified as pastureland for the production of livestock and poultry; four percent of farms are being used as woodland; two percent of farms are in use as cropland; and the remaining two percent of farms are classified as other (United States Department of Agriculture [USDA] 2017). The land uses at each of the potential sites considered are described below.

The current land use at Alternative 1 is vacant land utilized for cattle grazing and is comprised of undisturbed vegetative habitat. Nearby existing land use includes residential communities and multiple schools located to the north of the site, Highway 83 to the west, and disturbed Tamaulipan shrubland to the south and east.

The existing land use at the Preferred Alternative is vacant land utilized for cattle grazing and undisturbed vegetative habitat. Nearby existing land use includes some residential properties to the north, Highway 20 to the east, and disturbed Tamaulipan Shrubland to the south and west.

3.2.1 Alternative 1: Site 1 Alternative

Implementation of this alternative would result in a change from the current land use of undeveloped natural vegetation to a developed area in the form of the new LRTSHQ. The closest developed area is Laredo, Texas, and the proposed site falls within the city limits. Adjacent land uses include oil and gas production and rangelands. The City of Laredo is located to the north of the proposed site with the closest residential area immediately north of the proposed site. Although Alternative 1 could convert approximately 130 acres of undeveloped land to developed use, a majority of the AOR would likely remain undeveloped rangelands. The Proposed Action would have long-term, minor impacts on land use within the immediate or surrounding areas.

3.2.2 Alternative 2: Preferred Alternative

Implementation of this alternative would result in a change from the current land use of undeveloped natural vegetation to a developed area in the form of the new LRTSHQ. The closest developed area is Laredo, Texas, and the proposed site falls within the city limits. Adjacent land uses include oil and gas production and rangelands. The City of Laredo is located to the north of the proposed site with the closest residential area being almost 1-mile north of the proposed site. Although the Preferred Alternative would convert approximately 100 acres of undeveloped land to developed use, much of the AOR even if developed near the Proposed Action would remain undeveloped rangelands. The Proposed Action would have long-term, minor impacts on land use within the immediate or surrounding areas.

3.2.3 Alternative 3: No Action Alternative

The No Action Alternative would have no impacts, either beneficial or detrimental, on land use in the AOR. CBP would not acquire any property and would continue to use the current LRTSHQ. No construction activities would occur as part of the No Action Alternative; therefore, no land use impacts would occur.

3.3 SOILS

There are five soil types associated with the proposed new LRTSHQ site alternatives (Figure 3-1). According to the *Natural Resources Conservation Service Web Soil Survey of Webb County, Texas*, soils in Alternative 1 are mapped as: Copita fine sandy loam, 0 to 3 percent slopes (CpB) and Verick fine sandy loam, 1 to 5 percent slopes (VkC). Soils in the Preferred Alternative are mapped as: Copita fine sandy loam, 0 to 3 percent slopes (CpB); Verick fine sandy loam, 1 to 5 percent slopes (VkC); Nido-Rock outcrop complex, hilly (NDF); Maverick-Catarina complex, gently rolling (MCE); and Tela sandy clay loam, 0 to 1 percent slopes, frequently flooded (Te). None of these soils are considered prime farmland soil (USDA 2021).

The Copita series consists of well drained, moderately deep soils over sandstone that occur on side slopes of low hills. It is primarily used for rangeland and wildlife habitat; although, small areas are cultivated for crops such as cotton (*Gossypium hirsutum*) and grain sorghum (*Sorghum bicolor*) in the extreme eastern area of the series province. CpB is found at both site alternatives at low frequencies; it comprises approximately one percent of Alternative 1 and 0.1 percent of the soil at the Preferred Alternative.

The Verick series consists of shallow, well drained, moderately permeable soils that formed in loamy residuum derived from sandstone bedrock of Tertiary age. It is primarily used as rangeland and wildlife habitat. In a climax condition, it is primarily dominated by grasses such as two flower trichloris (*Trichloris crinita*), pink pappusgrass (*Pappophorum bicolor*), plains bristlegrass (*Setaria leucopila*), pinhole bluestem (*Bothriochloa barbinodis*), and hooded windmill grass (*Chloris cucullata*). VkC is the primary soil found within the Alternative 1 parcel, covering 99 percent, and covers approximately half of the Preferred Alternative.

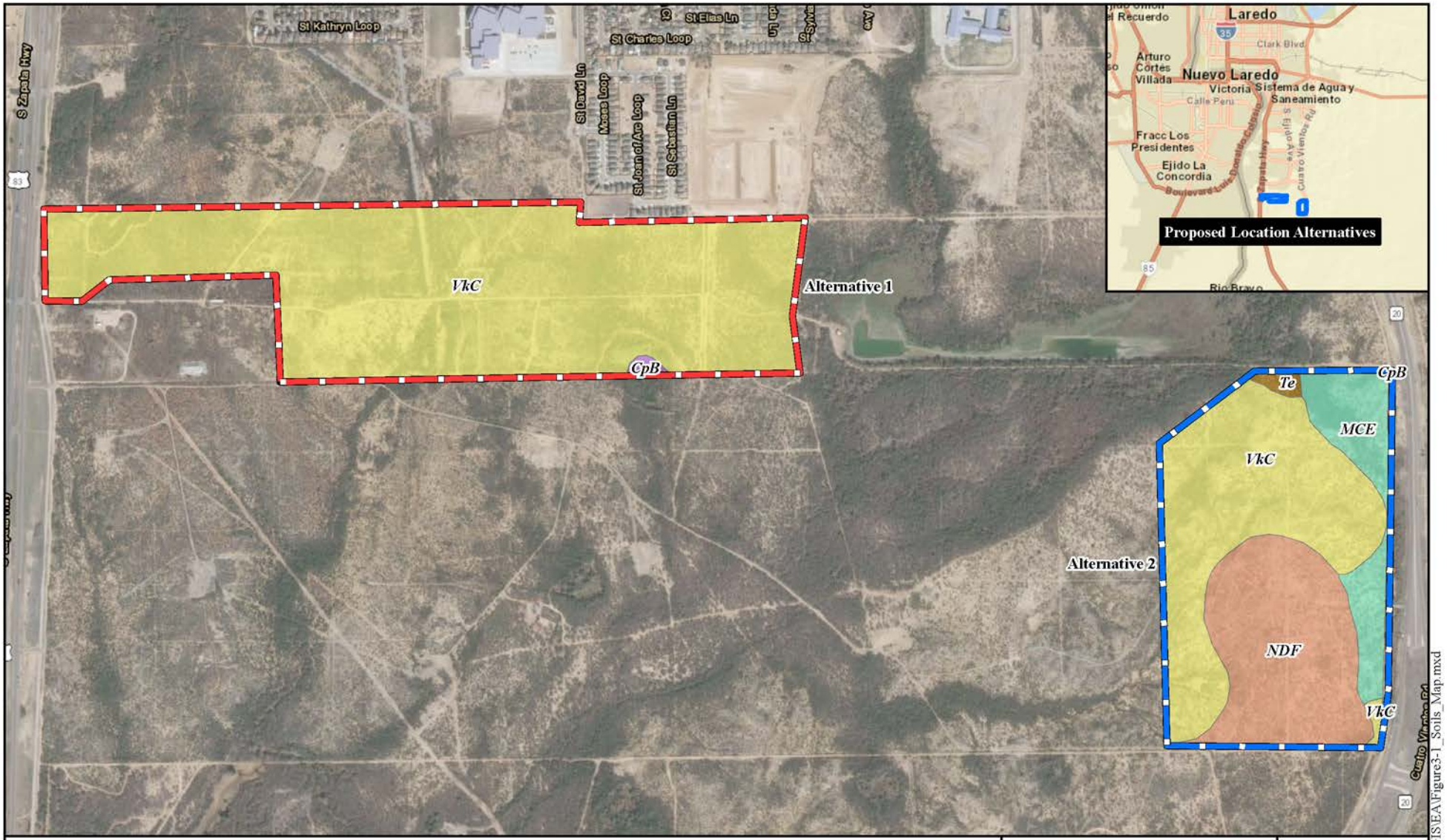

Figure 3-1. Soils Map

The Maverick-Catarina complex are moderately deep to deep soils on hills and in narrow valleys. The soil ranges from moderate to well drained. The surface runoff is medium to rapid, and permeability is slow. These soils are used mostly as rangeland and as habitat for wildlife.

Under normal conditions, the native vegetation provides adequate food and cover for wildlife. The carrying capacity of these soils is lower than that of the more productive surrounding soils due to salinity, very low available water capacity, slope, and the hazard of water erosion. MCE covers approximately 13 percent of the Preferred Alternative.

The Nido-Rock complex consists of very shallow, gently sloping to sloping Nido soil on summits and side slopes of hills and ridges and areas of Rock outcrop. This soil is well drained, and permeability is moderate. The hazard of water erosion is severe due to the presence of steep slopes and rapid surface runoff. It is used as rangeland, despite the low forage yields for cattle, and as habitat for wildlife. Under normal conditions, heavy brush growth on this soil provides cover for a variety of wildlife, but the shallow soil does not produce an abundance of food plants other than browse. NDF covers approximately 35 percent of the Preferred Alternative.

The Tela Series consists of very deep, well drained, moderately permeable soils that formed in loamy alluvium and occur along drainageways. The soils are occasionally flooded for short durations when they receive runoff water of low velocity from infrequent tropical storms. They are used mainly for livestock grazing and wildlife habitat; few areas with this soil type are used for crop production of grain sorghum. Native vegetation is mostly a thick overstory of mesquite (*Prosopis glandulosa*), whitebrush (*Aloysia gratissima*), and huisache (*Vachellia farnesiana*) with a ground cover of trichloris (*Trichloris* sp.), lovegrass tridens (*Tridens eragrostoides*), plains bristlegrass, and hooded windmill grass. The Tela Series is only found at the Preferred Alternative and covers one percent of the property.

3.3.1 Alternative 1: Site 1 Alternative

Under Alternative 1, up to 130 acres of soils (of which none are considered prime farmland soils) would be permanently disturbed or removed from biological production at the new LRTSHQ. The effects from the disturbance and removal from biological production of approximately 130 acres of soil would be negligible due to the small size of the project footprint relative to the amount of the same soils throughout the ROI. Upon completion of construction, all temporary disturbance areas would be revegetated with a mixture of native plant seeds or nursery plantings or allowed to revegetate naturally, if applicable.

The Proposed Action could result in long-term beneficial impacts on soils within the ROI by reducing the adverse impacts of illegal cross-border violator (CBV) activities in the project site. The proposed LRTSHQ would enhance the CBP detection and threat classification capabilities and increase the efficiency of operational activities within the Laredo Sector AOR. Over time, the enhancement of detection capabilities and an increase in operational efficiency could increase the deterrence of illegal CBV activity within the area.

Pre- and post-construction stormwater pollution prevention plan (SWPPP) measures would be implemented to control soil erosion. The permanent loss of 130 acres of soils from the Proposed Action would not be considered a significant effect.

3.3.2 Alternative 2: Preferred Alternative

Under the Preferred Alternative, approximately 100 acres of soils (of which none are considered prime farmland soils) would be permanently disturbed or removed from biological production at the new LRTSHQ. The effects from the disturbance and removal from biological production of approximately 100 acres of soil would be negligible due to the small size of the project footprint relative to the amount of the same soils throughout the ROI. Upon completion of construction, all temporary disturbance areas would be revegetated with a mixture of native plant seeds or nursery plantings or allowed to revegetate naturally, if applicable.

The Proposed Action could result in long-term beneficial impacts on soils within the ROI by reducing the adverse impacts of illegal CBV activities in the project site. The proposed LRTSHQ would enhance the CBP detection and threat classification capabilities and increase the efficiency of operational activities within the Laredo Sector AOR. Over time, the enhancement of detection capabilities and an increase in operational efficiency could increase the deterrence of illegal CBV activity within the area.

Pre- and post-construction SWPPP measures would be implemented to control soil erosion. The permanent loss of 100 acres of soils from the Proposed Action would not be considered a significant effect.

3.3.3 Alternative 3: No Action Alternative

No ground-disturbing activities would occur as a result of this alternative. CBP would not acquire any property and would continue to use the current LRTSHQ. Therefore, the No Action Alternative would have no impacts, either beneficial or adverse, on soils.

3.4 VEGETATIVE HABITAT

The project site is located in the South Texas Brush Country as characterized by TPWD (TPWD 2020a). This ecoregion exists from east of the Rio Grande and south of the Balcones Escarpment. The average temperature is 73 degrees Fahrenheit, with an average annual rainfall ranging from 16 inches in the west to 30 inches in the east. The South Texas Brush Country Ecoregion is a diverse ecoregion because it has elements of three converging vegetative communities: Chihuahuan Desert to the west, Tamaulipan thornscrub and subtropical woodlands along the Rio Grande, and coastal grasslands to the east. It is transected by numerous arroyos and streams and is generally covered in low-growing thorny vegetation (TPWD 2020a).

Common tree species for the area includes pecan (*Carya illinoiensis*), sugarberry (*Celtis laevigata*), anacua (*Ehretia anacua*), Texas ebony (*Pithecellobium flexicaule*), sabal palm (*Sabal palmetto*), black willow (*Salix nigra*), Texas persimmon (*Diospyros texana*), honey mesquite, lotebush (*Ziziphus obtusifolia*), huisache (*Acacia farnesiana*), and Texas wild olive (*Cordia boissieri*). Shrubs that are most common in this ecoregion include fiddlewood (*Citharexylum berlandieri*), desert yaupon (*Schaefferia cuneifolia*), Rio Grande abutilon (*Abutilon hypoleucum*), whitebrush, agarita (*Mahonia trifoliolata*), American beauty-berry (*Callicarpa americana*), lantana (*Lantana urticoides*), cenizo (*Leucophyllum frutescens*), Turk's cap (*Malvaviscus drummondii*), rose pavonia (*Pavonia lasiopetala*), and autumn sage (*Salvia greggii*). Common vines, grasses, and wildflowers according to TPWD are marsh's pipevine (*Aristolochica* sp.), old

man's beard (*Clematis drummondii*), sideoats grama (*Bouteloua curtipendula*), slender grama (*Bouteloua repens*), buffalograss (*Buchloe dactyloides*), inland sea-oats (*Chasmanthium latifolium*), plains lovegrass (*Eragrostis intermedia*), little bluestem (*Schizachyrium scoparium*), heartleaf hibiscus (*Hibiscus matianus*), scarlet sage (*Salvia coccinea*), red prickly poppy (*Argemone sanguinea*), and purple phacelia (*Phacelia bipinnatifida*) (TPWD 2020a). A complete list of flora species observed during biological surveys of the proposed LRTSHQ sites is included in Table 3-2.

Table 3-2. Observed Flora Species of the Proposed LRTSHQ Alternatives

Common Name	Scientific Name	Alternative 1	Alternative 2 (Preferred Alternative)
Allthorn	*Koeberlinia spinosa*	X	X
American century plant	*Agave americana*	X	
Berlandier's hedgehog cactus	*Echinocereus berlandieri*	X	X
Berlandier's sundrop	*Oenothera berlandieri*	X	
Bermudagrass	*Cynodon dactylon*	X	X
Bicolor fanmustard	*Nerisyrenia camporum*	X	
Blackbrush acacia	*Vachellia rigidula*	X	X
Brasil	*Condalia hookeri*	X	X
Bristleleaf pricklyleaf	*Thymophylla tenuiloba*	X	
Bufflegrass	*Pennisetum ciliare*	X	X
Camphor weed	*Heterotheca subaxillaris*	X	X
Cenizo	*Leucophyllum frutescens*	X	X
Christmas cholla	*Cylindropuntia leptocaulis*	X	X
Coastal germander	*Teucrium cubense*	X	X
Cocklebur	*Xanthium* sp.	X	
Coyotillo	*Karwinskia humboldtiana*	X	X
Creosote	*Larrea tridentata*	X	X
Dahlia hedgehog cactus	*Echinocereus poselgeri*	X	X
Desert tobacco	*Nicotiana obtusifolia*	X	
Dog cholla	*Grusonia schotti*		X
Engelmann's prickly pear	*Opuntia engelmannii*	X	X
Glory of Texas	*Thelocactus bicolor*		X
Goat bush	*Castela erecta* subsp. *texana*	X	X
Grama grass	*Bouteloua* spp.	X	X
Granjeno	*Celtis pallida*	X	X
Guajillo	*Acacia berlandieri*	X	X
Guayacan	*Guaiacum angustifolium*	X	X
Honey mesquite	*Prosopis glandulosa*	X	X
Horse crippler cactus	*Echinocactus texensis*	X	
Huisache	*Vachellia farnesiana*	X	X
Huisachillo	*Vachellia bravoensis*	X	X

Common Name	Scientific Name	Alternative 1	Alternative 2 (Preferred Alternative)
Indian blanket	*Gaillardia pulchella*	X	X
Laredo flax	*Linum elongatum*	X	
Laredo sand mat	*Chamaesyce laredana*	X	
Leatherstem	*Jatropha dioica*	X	X
Lime-prickly ash	*Zanthoxylum fagara*		X
Little nipple cactus	*Mammillaria heyderi*	X	X
London rocket	*Sisymbrium irio*	X	X
Lotebush	*Ziziphus obtusifolia*	X	X
Mormon tea	*Ephedra antisiphylitica*	X	X
Parralena	*Thymophylla pentachaeta*	X	X
Prairie coneflower	*Ratibida columnifera*	X	
Purple three-awn	*Aristida purpurea*	X	X
Retama	*Parkinsonia aculeata*	X	X
Saltcedar	*Tamarix ramosissima*	X	X
Sheer's fishhook cactus	*Sclerocactus scheeri*	X	X
Silver-leaf nightshade	*Solanum elaeagnifolium*	X	X
Small-headed sneezeweed	*Helenium microcephalum*	X	
Spanish dagger	*Yucca treculeana*	X	X
Strawberry cactus	*Echinocereus enneacanthus*	X	X
Sweet Indian mallow	*Abutilon fruticosum*	X	
Texas ebony	*Ebenopsis ebano*	X	X
Texas lantana	*Lantana urticoides*	X	
Texas paloverde	*Parkinsonia texana*	X	X
Texas persimmon	*Diospyros texana*	X	
Three-awn grass	*Aristida* sp.	X	X
Tiquilia	*Tiquilia canescens*	X	X
Tuberose	*Manfreda* sp.		X
Two-leaved senna	*Senna bauhinioides*	X	
Wolfberry	*Lycium berlandieri*	X	X
Yellow-flowered pincushion cactus	*Mammillaria spaerica*	X	X

Within Alternative 1, three vegetation communities were found during the biological surveys conducted in May 2021: Tamaulipan mixed shrubland (70 percent), disturbed grassland (29 percent), and bare ground/dirt roads (1 percent). Figure 3-2 presents the vegetation communities present at Alternative 1 as mapped by the United States National Vegetation Classification (USNVC) Standard/System (USNVC 2022).

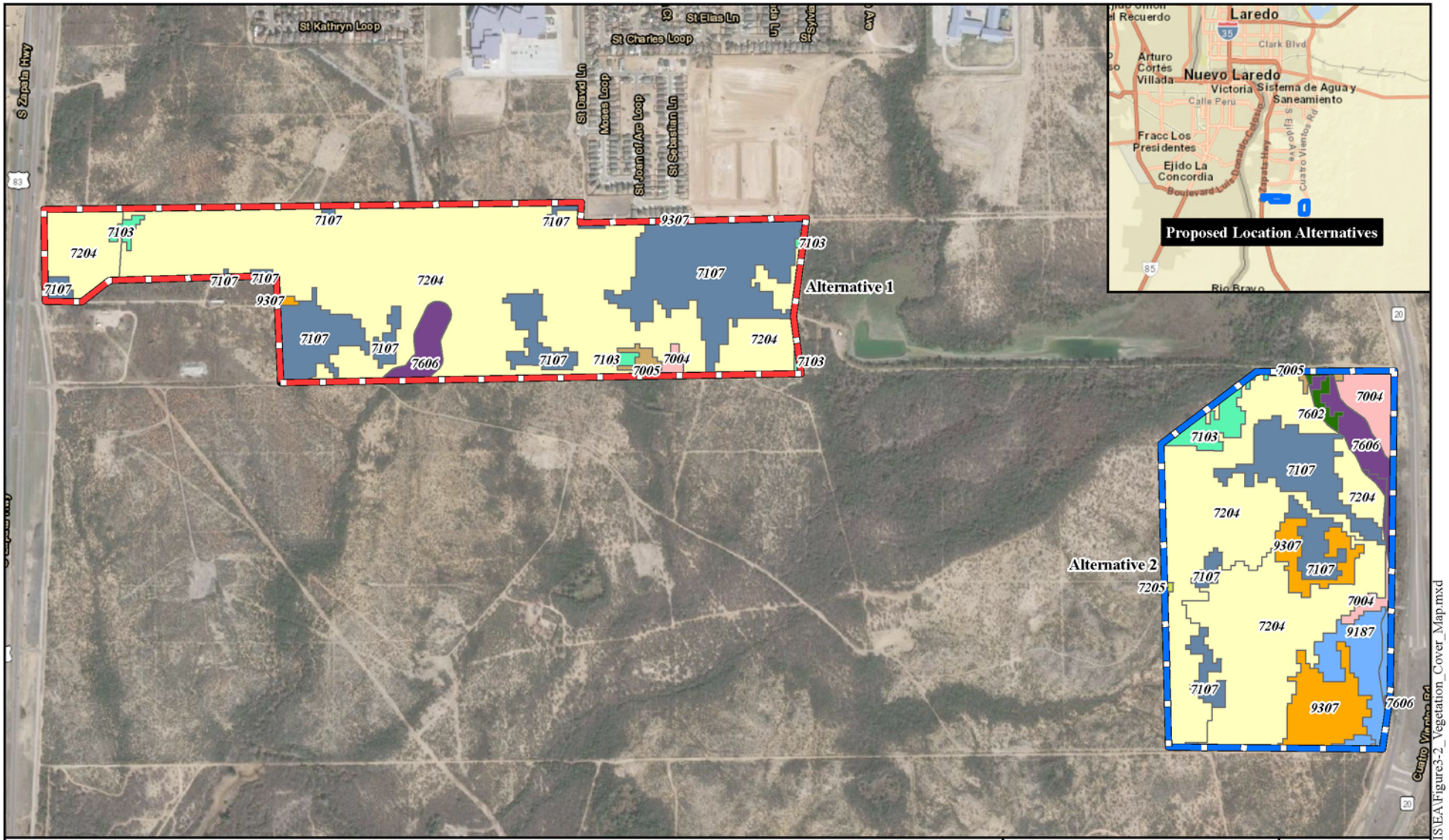

Figure 3-2. Vegetation Cover Map

Within the Preferred Alternative, four vegetation communities were found during the biological survey: old growth Tamaulipan mixed shrubland (80 percent), Tamaulipan Ramadero woodlands (10 percent), disturbed grassland (9 percent), and bare ground/dirt roads (1 percent). Figure 3-2 presents the vegetation communities present at the Preferred Alternative as mapped by the USNVC Standard/System (USNVC 2022).

3.4.1 Alternative 1: Site 1 Alternative

Alternative 1 would have a permanent, minor impact on vegetation in the project site. Approximately 130 acres of South Texas Brush Country vegetative community would be permanently affected as a result of the construction of the proposed LRTSHQ. The South Texas Brush Country vegetative community that would be affected by the construction of the proposed LRTSHQ is both locally and regionally common, and the permanent loss of the limited amount of acreage would not adversely affect the population viability of any plant species in the region. In order to ensure that the Proposed Action does not actively promote the establishment of non-native and invasive species in the area, best management practices (BMPs; described in Section 4.0) would be implemented to minimize the spread and reestablishment of non-native vegetation. Upon completion of construction, all temporary disturbance areas would be revegetated with a mixture of native plant seeds or nursery plantings or allowed to revegetate naturally. These BMPs, as well as measures protecting vegetation in general, would reduce potential impacts from non-native invasive species to a negligible amount.

The South Texas Brush Country ecoregion encompasses approximately 28,000 square miles in south Texas. Therefore, due to the permanent impact of only 130 acres on native vegetation, in conjunction with other past, ongoing, and proposed regional projects, the Proposed Action would not create a significant effect on vegetative habitat in the region. The Proposed Action could result in reasonably foreseeable long-term beneficial impacts on vegetative habitat by reducing the adverse impacts of illegal cross-border violator activities in the Laredo Sector AOR. The proposed LRTSHQ would enhance the CBP detection and threat classification capabilities and increase the efficiency of operational activities. Over time, the enhancement of detection capabilities and an increase in operational efficiency could increase the deterrence of illegal cross-border violator activity.

3.4.2 Alternative 2: Preferred Alternative

Under the Preferred Alternative, the proposed LRTSHQ would have the same impacts on the vegetative habitat as described above. Approximately 100 acres of South Texas Brush Country vegetative community would be permanently affected as a result of the construction of the proposed LRTSHQ. In order to ensure that the Proposed Action does not actively promote the establishment of non-native and invasive species in the area, BMPs, described in Section 4.0, would be implemented to minimize the spread and reestablishment of non-native vegetation.

3.4.3 Alternative 3: No Action Alternative

Under the No Action Alternative, no impacts on vegetative habitat would occur as construction activities would not be completed. Under the No Action Alternative, the CBP detection and threat classification capabilities would not be enhanced, and operational efficiency would not be improved within the Laredo Sector's AOR, so illegal cross-border violator activities would continue to impact vegetative habitat in the AOR.

3.5 WILDLIFE RESOURCES

The ROI is within the Southwest Plateau and Plains Dry Steppe and Shrub Province (U.S. Forest Service [USFS] 2015). Common mammals within this province include the coyote (*Canis latrans*), ringtail (*Bassariscus astutus*), American hog-nosed skunk (*Conepatus leuconotus*), white-tailed deer (*Odocoileus virginianus*), Mexican ground squirrel (*Spermophilus mexicanus*), Texas pocket gopher (*Geomys personatus*), southern plains woodrat (*Neotoma micropus*), raccoon (*Procyon lotor*), gray fox (*Urocyon cinereoargenteus*), bobcat (*Lynx rufus*), collared peccary (*Pecari tajacu*), striped skunk (*Mephitis mephitis*), nine-banded armadillo (*Dasypus novemcinctus*), eastern cottontail (*Sylvilagus floridanus*), desert cottontail (*Sylvilagus audubonii*), fulvous harvest mouse (*Reithrodontomys fulvescens*), and hispid cotton rat (*Sigmodon hispidus*) (TPWD 2019).

Bird species are especially abundant in this region as the Central and Mississippi flyways converge in south Texas. Additionally, south Texas is the northernmost range for many of the Neotropical species of Central America. Approximately 500 avian species, including Neotropical migrants, shorebirds, raptors, and waterfowl can occur in south Texas. Common birds that frequent south Texas include the plain chachalaca (*Ortalis vetula*), green kingfisher (*Chloroceryle americana*), common pauraque (*Nyctidromus albicollis*), elf owl (*Micrathene whitneyi*), white-winged dove (*Zenaida asiatica*), tropical kingbird (*Tyrannus melancholicus*), buff-bellied hummingbird (*Amazilia yucatanensis*), green jay (*Cyanocorax yncas*), long-billed thrasher (*Toxostoma longirostre*), white-collared seedeater (*Sporophila torqueola*), groove-billed ani (*Crotophaga sulcirostris*), great kiskadee (*Pitangus sulphuratus*), and olive sparrow (*Arremonops rufivirgatus*) (TPWD 2016).

Common reptiles and amphibians include the blue spiny lizard (*Sceloporus serrifer*), Laredo striped whiptail (*Aspidoceles laredoensis*), prairie racerunner (*Aspidoceles sexlineata viridis*), Texas spiny softshell turtle (*Apalone spinifera emoryi*), Rio Grande cooter (*Pseudemys gorzugi*), Rio Grande leopard frog (*Lithobates berlandieri*), Rio Grande chirping frog (*Eleutherodactylus cystignathoides*), Gulf Coast toad (*Incilius valliceps*), and the giant (marine) toad (*Rhinella marina*) (TPWD 2019).

A list of wildlife observed during biological surveys is included in Table 3-3. Sensitive species and other significant biological observations are shown on Figure 3-3.

Table 3-3. Observed Wildlife Species of the Proposed LRTSHQ Alternatives

Common Name	Scientific Name	Alternative 1	Alternative 2 (Preferred Alternative)
Birds			
Ash-throated flycatcher	*Myiarchus cinerascens*	X	
Audubon's oriole	*Icterus graduacauda*	X	X
Barn swallow	*Hirundo rustica*	X	
Bewick's wren	*Thryomanes bewickii*	X	X
Black vulture	*Coragyps atratus*	X	X

Common Name	Scientific Name	Alternative 1	Alternative 2 (Preferred Alternative)
Black-bellied whistling duck	*Dendrocygna autumnalis*	X	
Black-tailed gnatcatcher	*Polioptila melanura*	X	X
Black-throated sparrow	*Amphispiza bilineata*	X	X
Blue grosbeak	*Passerina caerulea*	X	
Brown-crested flycatcher	*Myiarchus tyrannulus*		X
Brown-headed cowbird	*Molothrus ater*	X	
Bullock's oriole	*Icterus bullockii*	X	
Cactus wren	*Campylorhynchus brunneicapillus*	X	X
Chihuahuan raven	*Corvus cryptoleucus*	X	X
Chimney swift	*Chaetura pelagica*		X
Chipping sparrow	*Spizella passerina*	X	
Clay-colored sparrow	*Spizella pallida*	X	X
Common ground dove	*Columbina passerina*	X	X
Couch's kingbird	*Tyrannus couchii*	X	X
Crested caracara	*Caracara cheriway*	X	X
Golden-fronted woodpecker	*Melanerpes aurifrons*	X	X
Gray catbird	*Dumetella carolinensis*	X	
Great egret	*Ardea alba*		X
Great kiskadee	*Pitangus sulphuratus*		X
Great-tailed grackle	*Quiscalus mexicanus*	X	X
Greater roadrunner	*Geococcyx californianus*	X	
Green jay	*Cyanocorax yncas*	X	X
House sparrow	*Passer domesticus*	X	
Killdeer	*Charadrius vociferus*	X	X
Lesser goldfinch	*Spinus psaltria*	X	
Lesser nighthawk	*Chordeiles acutipennis*	X	X
Long-billed thrasher	*Toxostoma longirostre*		X
Mourning dove	*Zenaida macroura*	X	X
Nashville warbler	*Leiothlypis ruficapilla*	X	X
Northern cardinal	*Cardinalis cardinalis*	X	X
Northern harrier	*Circus hudsonius*	X	
Northern mockingbird	*Mimus polyglottos*	X	X
Olive sparrow	*Arremonops rufivirgatus*	X	X
Orchard oriole	*Icterus spurius*	X	
Painted bunting	*Passerina ciris*	X	X

Common Name	Scientific Name	Alternative 1	Alternative 2 (Preferred Alternative)
Plain chachalaca	*Ortalis vetula*	X	X
Pyrrhuloxia	*Cardinalis sinuatus*	X	
Red-billed pigeon	*Patagioenas flavirostris*		X
Red-winged blackbird	*Agelaius phoeniceus*	X	X
Scaled quail	*Callipepla squamata*	X	X
Scissor-tailed flycatcher	*Tyrannus forficatus*	X	X
Summer tanager	*Piranga rubra*		X
Swainson's hawk	*Buteo swainsoni*	X	
Turkey vulture	*Cathartes aura*	X	X
Unknown hummingbird	*Archilochus* spp.	X	
Unknown swallow	*Petrochelidon* spp.	X	
Verdin	*Auriparus flaviceps*	X	X
White-winged dove	*Zenaida asiatica*	X	X
Yellow warbler	*Setophaga petechia*	X	
Yellow-billed cuckoo	*Coccyzus americanus*	X	X
Yellow-breasted chat	*Icteria virens*	X	
Mammals			
Coyote	*Canis latrans*		X
Desert cottontail rabbit	*Sylvilagus audubonii*	X	X
Black-tailed jackrabbit	*Lepus californicus*	X	X
Domestic cattle	*Bos taurus*	X	X
Wild boar	*Sus scrofa*	X	X
White-footed mouse	*Peromyscus leucopus*	X	
White-tailed deer	*Odocoileus virginianus*	X	X
Invertebrates			
American snout	*Libytheana carinenta*	X	X
Ceraunus blue	*Hemiargus ceraunus*	X	X
Common green darner	*Anax junius*	X	
Queen	*Danaus gilippus*	X	X
Variegated fritillary	*Euptoieta claudia*	X	X
Texas tan tarantula	*Aphonopelma anax*		X
Thisbe’s tarantula hawk	*Pepsis thisbe*	X	X
Reptiles			
Texas spotted whiptail	*Aspidoscelis gularis*	X	X
Texas spiny lizard	*Sceloporus olivaceus*		X
Texas tortoise	*Gopherus berlandieri*	X	
Western diamond-backed rattlesnake	*Crotalus atrox*		X
Western narrow-mouth toad	*Gastrophryne olivacea*		X

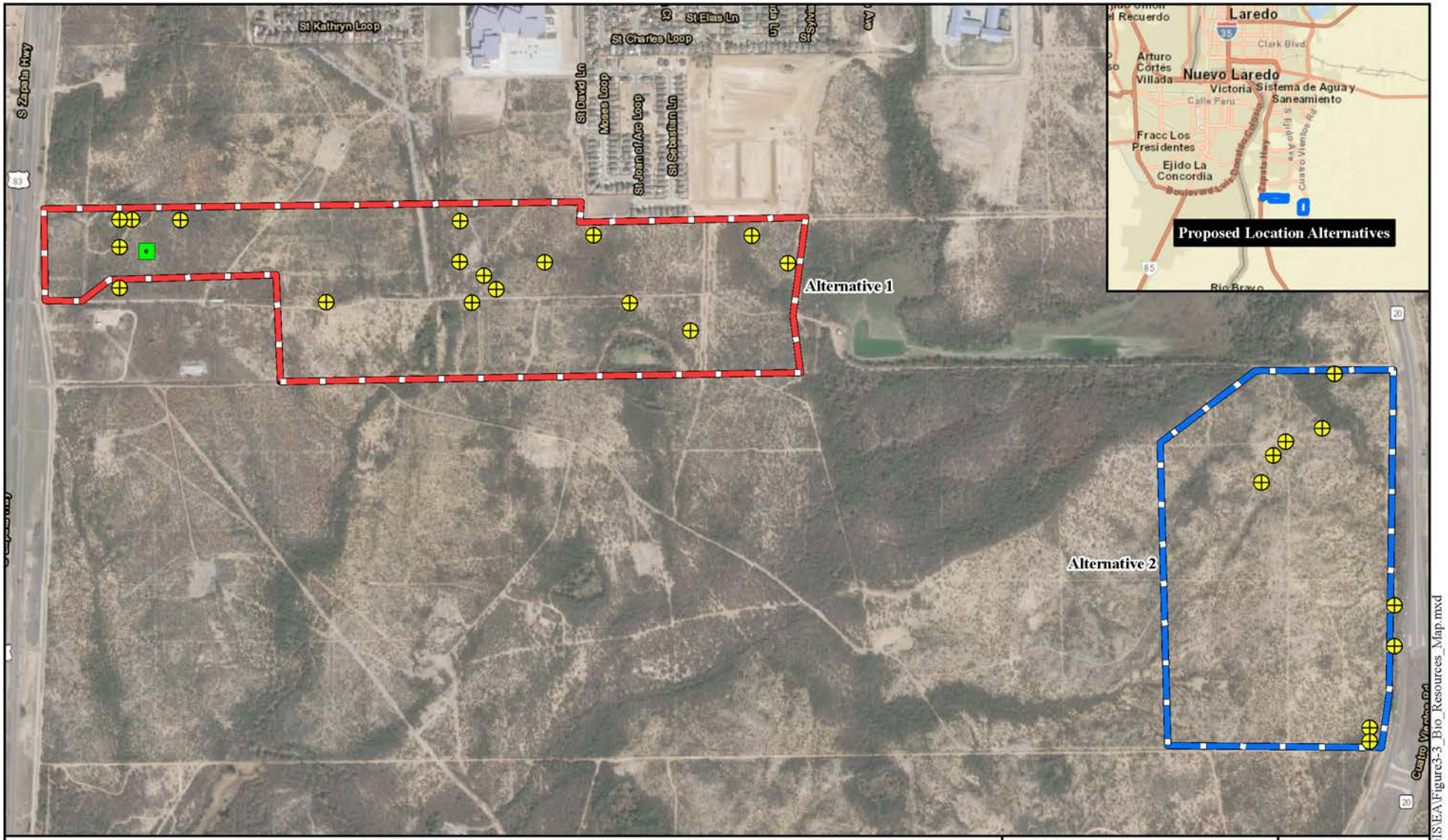

Figure 3-3. Biological Resources Map

3.5.1 Alternative 1: Site 1 Alternative

The permanent loss of approximately 130 acres would have a long-term, negligible impact on wildlife. Soil disturbance and operation of heavy equipment could result in a reasonably foreseeable impact to less mobile individuals such as lizards, snakes, and ground-dwelling species such as mice and rats. However, most wildlife would likely avoid harm by escaping to the surrounding habitat. The degradation and loss of habitat could also affect burrows and nests, as well as cover, forage, and other important wildlife resources. The loss of these resources would result in the displacement of individuals that would then be forced to compete with other wildlife for the remaining resources. Although this competition for resources could result in a reduction of total population size, such a reduction would be extremely minimal in relation to total population size and would not result in long-term effects on the sustainability of any wildlife species. The wildlife habitat present in the project site is both locally and regionally common, and the permanent loss of approximately 130 acres of wildlife habitat would not adversely affect the population viability or fecundity of any wildlife species in the region. Additionally, upon completion of construction, all temporary disturbance areas would be revegetated with a mixture of native plant seeds or nursery plantings or allowed to revegetate naturally.

The MBTA requires that federal agencies coordinate with USFWS if a construction activity would result in the "take" of a migratory bird. In accordance with compliance measures of the MBTA, BMPs identified in Section 4.0 would be implemented if construction or clearing activities were scheduled during the nesting season (typically March 15 to September 15). Figure 3-3 shows the locations of observed bird nests found during biological resources surveys.

Lighting would attract or repel various wildlife species within the vicinity of the project site. The presence of lights within the project site could also produce some long-term behavioral effects, although the magnitude of these effects is not presently known. Some species, such as insectivorous bats, may benefit from the concentration of insects that would be attracted to the lights. Continual exposure to light has been proven to slightly alter circadian rhythms in mammals and birds. Studies have demonstrated that under constant light, the time an animal is active, compared with the time it is at rest, increases in diurnal animals, but decreases in nocturnal animals (Carpenter and Grossberg 1984). Outdoor lighting can disturb flight, navigation, vision, migration, dispersal, oviposition, mating, feeding and crypsis in some moths. In addition, it may disturb circadian rhythms and photoperiodism (Frank 1988). It has also been shown that, within several weeks under constant lighting, mammals and birds would quickly stabilize and reset their circadian rhythms back to their original schedules (Carpenter and Grossberg 1984). While the number of lights within the boundary of the proposed LRTSHQ site is not presently known, artificial lighting concentrated around a single 130-acre developed area would not significantly disrupt activities of wildlife populations across the region, since similar habitat is readily available to the north, east, west, and south for wildlife relocation. Lighting BMPs would be applied to all outdoor lighting once construction is complete, further minimizing the potential impacts. Finally, construction activities would be limited primarily to daylight hours, whenever possible; therefore, construction impacts on wildlife would be insignificant, since the highest period of movement for most wildlife species occurs during night-time or low daylight hours.

Periodic noise from construction activities and subsequent operational activities would have moderate and intermittent impacts on the wildlife communities located adjacent to the project site. However, because similar habitat is readily available, wildlife would easily relocate. Vehicle traffic on Highways 83 and 20 currently influences the behavioral responses of wildlife in the area. Upon completion of the proposed LRTSHQ, the number of vehicles would increase slightly, but would not result in a substantial increase in vehicle noise. A behavioral response to noise varies among species of animals and even among individuals of a particular species. Variations in response may be due to temperament, sex, age, or prior experience. Minor responses include head-raising and body-shifting, and usually, more disturbed mammals would travel short distances. Panic and escape behavior results from more severe disturbances, causing the animal to leave the area (Fletcher and Busnel 1978). Over the long term, wildlife populations that have not already habituated to noise generated by Highways 83 and 20 would adapt to the normal operations conducted at the new LRTSHQ and would typically avoid human interaction. BMPs, as outlined in Section 4.0, would reduce noise associated with operation of the construction equipment and everyday vehicle traffic associated with the new LRTSHQ.

The USFWS *Recommended Best Practices for Communication Tower Design, Siting, Construction, Operation, Maintenance, and Decommissioning* (USFWS 2021) would be implemented to reduce nighttime atmospheric lighting and the potential adverse effects of nighttime lighting on migratory bird and nocturnal flying species.

There is a possibility that the proposed tower could pose hazards to migratory birds and even some bird mortality through bird strikes with the tower. The loss of a few individual birds from the tower operation would not adversely affect the population viability or fecundity of bird species in the region. The number and extent of bird strikes in relation to the size of migratory bird populations and the extent of the migratory flyway would be minor and would not affect sustainability of migratory bird populations in the region. The Proposed Action would, however, have a long-term, negligible adverse effect on migratory birds.

BMPs such as surveys prior to any construction activities scheduled during nesting season and covering or providing an escape ramp for all steep-walled holes or trenches left open at the end of the construction workday would be implemented to reduce disturbance and loss of wildlife. The proposed tower could provide raptor perch and nesting sites, but BMPs would also be used to discourage this activity.

3.5.2 Alternative 2: Preferred Alternative

Under the Preferred Alternative, the proposed LRTSHQ would have similar impacts on the wildlife resources as described above (see Figure 3-3). Approximately 100 acres of potential wildlife habitat would be removed. This site does contain undeveloped South Texas Brush Country vegetation which provides habitat for numerous wildlife species; however, much of this site has been degraded by cattle grazing in the area. The wildlife habitat present in the project site is both locally and regionally common, and the permanent loss of approximately 100 acres of wildlife habitat would not adversely affect the population viability or fecundity of any wildlife species in the region.

3.5.3 Alternative 3: No Action Alternative

No wildlife or aquatic resources would be adversely affected by the No Action Alternative.

3.6 THREATENED AND ENDANGERED SPECIES

The ESA was enacted to protect and recover imperiled species and the ecosystems upon which these species (endangered and threatened) depend for their survival. All federal agencies are required to implement protective measures for designated species and to use their authorities to further the purposes of the ESA. The Secretary of the Interior and the Secretary of Commerce (marine species) are responsible for the identification of threatened or endangered species and development of any potential recovery plan. USFWS is the primary agency responsible for implementing the ESA and is responsible for birds and other terrestrial and freshwater species. USFWS responsibilities under the ESA include (1) the identification of threatened and endangered species; (2) the identification of critical habitats for listed species; (3) implementation of research on, and recovery efforts for, these species; and (4) consultation with other Federal agencies concerning measures to avoid harm to listed species.

An endangered species is a species officially recognized by USFWS as being in danger of extinction throughout all or a significant portion of its range. A threatened species is a species likely to become endangered within the foreseeable future throughout all or a significant portion of its range. Proposed species are those that have been formally submitted to Congress for official listing as threatened or endangered. Species may be considered eligible for listing as endangered or threatened when any of the five following criteria occur: (1) current/imminent destruction, modification, or curtailment of their habitat or range; (2) overuse of the species for commercial, recreational, scientific, or educational purposes; (3) disease or predation; (4) inadequacy of existing regulatory mechanisms; and (5) other natural or human-induced factors affecting their continued existence.

In addition, USFWS has identified species that are candidates for listing as a result of identified threats to their continued existence. The candidate designation includes those species for which USFWS has sufficient information to support proposals to list as endangered or threatened under the ESA; however, proposed rules have not yet been issued because such actions are precluded at present by other listing activity. Although not afforded protection by the ESA, candidate species may be protected under other federal or state laws.

Federally Listed Species

There are a total of six federally-listed endangered species with the potential to occur within Webb County (USFWS 2022). A list of these species is presented in Table 3-4. In addition, the monarch butterfly (*Danaus plexippus*), a candidate species for federal listing, has the potential to occur within the project area but is not discussed below. Biological surveys of the proposed LRTSHQ site were conducted by Gulf South Research Corporation in May 2021. These investigations included surveys for all federal and state-listed species potentially occurring at or near the proposed LRTSHQ site. During the investigations, no federally-listed species were observed. CBP has consulted with the USFWS regarding the potential impacts to listed species as they relate to the construction of the Proposed Action. Following consultation, the USFWS concurred with the CBP determinations (see Appendix A). Piping plover (*Charadrius melodus*)

and red knot (*Calidris canutus rufa*) were excluded from the discussion below as these species only need to be considered in the planning process for wind related projects within the migratory route and the Proposed Actions for this project do not fit this category.

Table 3-4. Federally Listed Species with the Potential to Occur in Webb County, Texas

Common Name	Status	Habitat	Potential to Occur at Site	Effect Determination
Mammals				
Gulf Coast Jaguarundi (*Puma yagouaroundi cacomitli*)	*E*	Dense, thorny scrub, especially near water.	No	Not likely to adversely effect.
Ocelot (*Leopardus pardalis*)	*E*	Dense, thorny shrub lands of the Lower Rio Grande Valley and Rio Grande Plains. Deep, fertile clay or loamy soils are generally needed to produce suitable habitat.	No	Not likely to adversely effect.
Birds				
Piping Plover (*Charadrius melodus*)	*T*	Exposed islands and sandbars along river banks.	No	No effect.
Red Knot (*Calidris canutus rufa*)	*T*	Coastal habitats and islands.	No	No effect.
Invertebrates				
Texas Hornshell (*Popenaias popeii*)	*E*	Narrow areas of rivers and streams with travertine bedrock and fine-grained sand, clay or gravel in the crevices	No	No effect.
Flowering Plants				
Ashy Dogweed (*Thymophylla tephroleuca*)	*E*	Sandy soils in level or gently rolling grasslands with scattered shrubs.	Yes	Not likely to adversely effect.

Source: USFWS 2020

Ocelot (*Leopardus pardalis*)

The ocelot (Photograph 3-1) was listed as endangered in 1982 under the authority of the Endangered Species Conservation Act of 1969 (USFWS 2016). The 1969 Endangered Species Conservation Act maintained separate lists for foreign and native wildlife. The ocelot appeared on the foreign list, but due to an oversight, the ocelot did not appear on the native list. Following passage of the ESA, the ocelot was included on the January 4, 1974, list of "Endangered Foreign Wildlife" that "grandfathered" species from the lists under the 1969 Endangered Species Conservation Act into a new list under the ESA (USFWS 2010). The entry for the ocelot included "Central and South America" under the "Where found" column in the new ESA list. Endangered status was extended to the U.S. portion of the ocelot's range for the first time with a final rule published July 21, 1982 (USFWS 1982). The "Historic range" column for the ocelot's entry in the rule reads, "U.S.A. (TX, AZ) south through Central America to South America." The entry on the current list (USFWS 2016) is essentially the same, and reads "U.S.A. (TX, AZ) to Central and South America." The species has a recovery priority number of 5C, meaning that it has a low potential for recovery with a relatively high degree of conflict with development projects.

Photograph 3-1. Ocelot (Source: USFWS)

The ocelot is a medium-sized spotted cat with nocturnal habits (USFWS 2016). The ocelot belongs to the genus *Leopardus*, which also includes the margay (*Leopardus wiedii*) and the oncilla (*Leopardus tigrinus*). The ocelot is further divided into as many as 11 subspecies that range from the southwestern U.S. to northern Argentina (USFWS 2016). Two subspecies occur in the U.S.: the Texas/Tamaulipas ocelot (*L. p. albescens*) and the Arizona/Sonora ocelot (*L. p. sonoriensis*) (USFWS 2016).

The ocelot uses a wide range of habitats throughout its range in the Western Hemisphere (USFWS 2016). Despite this, the species does not appear to be a habitat generalist. Ocelot spatial patterns are strongly linked to dense cover or vegetation, suggesting that it uses a fairly narrow range of microhabitats (USFWS 2016). South Texas ocelots prefer shrub communities with greater than 95 percent canopy cover and avoids areas with intermediate (50 to 75 percent) to no canopy cover (USFWS 2016). Other microhabitat features important to ocelots appear to be canopy height (greater than 7.8 feet) and vertical cover (89 percent visual obscurity at 3 to 6 feet). Ground cover at locations used by ocelots was characterized by a high percentage of coarse woody debris (50 percent) and very little herbaceous ground cover (3 percent), both consequences of the dense woody canopy (USFWS 2016). Between 1980 and 2010 the ocelot was documented by photographs or specimen in Cameron, Willacy, Kenedy, Hidalgo, and Jim Wells counties (USFWS 2016). Currently, the Texas population of ocelots is believed to be fewer than 50 individuals, composing two separated populations in south Texas. The Laguna Atoscosa National Wildlife Refuge primarily supports one of these populations and the other occurs in Willacy and Kenedy counties on private ranches (USFWS 2016). Individuals occurring in Texas outside these areas are occasionally observed but are likely wandering or released and not part of a breeding population. A third population of the Texas subspecies of

ocelot occurs in Tamaulipas, Mexico, but is geographically isolated from ocelots in Texas. Genetic evidence shows little or no recent genetic exchange between these populations (USFWS 2016). A separate subspecies of ocelot is occasionally found in southern Arizona but is disjunct from populations in Texas.

Photograph 3-2. Gulf Coast Jaguarundi (Source: USFWS)

Gulf Coast Jaguarundi (*Puma yagouaroundi cacomitli*)
The Gulf Coast subspecies of jaguarundi (Photograph 3-2) was listed under the ESA as endangered in 1976 (41 FR 24062). The jaguarundi is a small cat, slightly larger than a house cat (*Felis catus*). With a slender build, long neck, short legs, small and flattened head, and long tail, resembling a weasel (*Mustela* sp.) more than other felines (USFWS 2013).

The jaguarundi is a lowland, nocturnal species, inhabiting forest and brush (USFWS 2013). Within Mexico it occurs in the eastern lowlands and has not been recorded in the Central Highlands (USFWS 2013). In southern Texas, jaguarundis have used dense thorny shrublands.

In Texas, jaguarundis have historically been limited to the southern portion of the state, including Cameron, Hidalgo, Willacy, and Starr counties (USFWS 2013). However, there are no verified records of the subspecies beyond extreme southern Texas, and there is not enough information to determine how abundant the subspecies was historically (USFWS 2013). No historical records of jaguarundis have been documented north of the Rio Grande Valley of Texas (USFWS 2013). The last confirmed sighting of this subspecies within the U.S. was in April 1986, when a road-killed specimen was collected 2 miles east of Brownsville, Texas, and positively identified as a

jaguarundi. Numerous unconfirmed sightings have been reported since then, including some sightings with unidentifiable photographs, but no U.S. reports since April 1986 have been confirmed as jaguarundi. Unconfirmed sightings of jaguarundi were reported in the mid-1980s and in 1993 for Webb County (USFWS 2013). The closest known Gulf Coast jaguarundis to the U.S. border are found to the southwest in Nuevo Leon, Mexico. The USFWS released the first revision to the Gulf Coast Jaguarundi Recovery Plan in December 2013 (USFWS 2013). This new recovery plan only applies to the Gulf Coast subspecies of the jaguarundi.

Texas Hornshell (*Popenaias popeii*)

The Texas hornshell is a medium-sized freshwater mussel native to the Rio Grande Basin in Texas, New Mexico, and Mexico. The Texas hornshell was once found throughout the Rio Grande drainage in the U.S. and Mexico, as well as Mexican Gulf Coast streams. Now, there are only five known populations of Texas hornshell remaining in the U.S. Its outer shell surface appears olive green to dark brown and may grow to be more than 4.5 inches long and live up to 20 years. The species had not been observed in the Rio Grande River since the mid-1970s until the discovery of a large population (604 live specimens recorded) of Texas hornshell was made in 2011 near Laredo. The conservative estimate of more than 8,000 individuals made this Laredo population by far the largest ever reported from Texas, New Mexico, or Mexico.

Photograph 3-3. Texas Hornshell (Source: Wikimedia Commons 2013a

The primary factors affecting population conditions of the Texas hornshell is river fragmentation due to habitat inundation and alterations of the natural streamflow regime (by impoundments, drought, groundwater withdrawal and resultant mussel-smothering sediment accumulation) and degradation of water quality within its range. The section of the Rio Grande in and above Laredo where the only large known population of Texas hornshell was found was designated a mussel sanctuary (where mussel harvest is prohibited), but they are still vulnerable to water flow alteration that could potentially damage their remaining habitat.

No suitable habitat is found within the proposed project area; although BMPs would be followed to prevent sediment erosion and surface water contamination which could further degrade their habitat within Webb County.

Ashy Dogweed (*Thymophylla tephroleuca*)
Ashy dogweed grows in the South Texas Brush Country of Webb and Zapata counties and historically in Starr County (USFWS 2011). Ashy dogweed is an erect perennial with numerous, woolly, 10 to 30 centimeters (cm) tall stems and minute, oil-bearing cells which give off a strong aroma when the plant is crushed. Floral stalks are capped with a yellow flower head consisting of a flat disc composed of 30 to 70 tiny flowers called disc florets surrounded by usually 12 to 13 golden yellow petals. Ashy dogweed occurs in sandy soils within the South Texas Plains among Tamaulipan thornscrub associates on level or gently rolling grasslands with scattered shrubs.

Photograph 3-4. Ashy Dogweed (Source: Texas Parks and Wildlife Department)

he Webb County population forms the northernmost point of the species' known range (USFWS 2011). However, since 95 percent of Texas is privately-owned and access is limited, the true status of the species on unsurveyed land is unknown. Severe habitat alteration may have played a role in this species' rarity; introduced grasses, intensive grazing, brush clearing, and oil and gas development have drastically changed most of the native grassland in this area.

State-Listed Species

TPWD currently lists 74 fish and wildlife species as endangered, and 148 species as threatened under Texas Administrative Codes §65.175 and §65.176 (TPWD 2020b). One state-listed species, Texas tortoise (*Gopherus berlandieri*), was observed during biological surveys. Appendix B has a complete list of all rare, threatened, and endangered species with the potential to occur in Webb County.

Critical Habitat

The ESA also calls for the conservation of what is termed critical habitat, the areas of land, water, and air space that an endangered species needs for survival. Critical habitat also includes such things as food and water, breeding sites, cover or shelter, and sufficient habitat area to provide for normal population growth and behavior. One of the primary threats to many species is the destruction or modification of essential habitat by uncontrolled land and water developments. Critical Habitat has been proposed for the Texas hornshell, a federally-endangered species, within Webb County; although, the habitat is confined to the Rio Grande River and no suitable habitat is found within either LRTSHQ site alternative (USFWS 2022).

3.6.1 Alternative 1: Site 1 Alternative

The Proposed Action is not likely to adversely affect any threatened or endangered species or their habitat. The ocelot and jaguarundi could potentially wander into the project site; however, South Texas Brush Country is not the prototypical habitat for either species and it is highly unlikely that either cat would occupy or use the site permanently. As mentioned previously, both cats prefer to inhabit thick thornscrub habitats near water with restrictive canopy cover, ground cover, and vertical cover limitations that do not exist at the project site. Therefore, CBP has determined the Proposed Action is not likely to adversely effect the ocelot or jaguarundi. No ashy dogweed was observed during biological surveys and the habitat at the proposed sites is not preferred by ashy dogweed; therefore, the Proposed Action is not likely to adversely affect ashy dogweed. No suitable habitat is found within the proposed project area for Texas hornshell; although BMPs should be followed to prevent sediment erosion and surface water contamination which could further degrade their habitat within Webb County.

TPWD lists several state-listed species that may occur within or near the project site. Under the Proposed Action, approximately 100 acres of South Texas Brush Country vegetative habitat would be permanently affected. Mobile species such as the Texas horned lizard and Texas indigo snake (*Drymarchon melanurus*) may be temporarily displaced by construction activities; however, these highly mobile species typically utilize large expanses of suitable habitat and the effects of disturbance and alterations to small segments are likely to be minimal to negligible to populations of these species. Grubbing, digging, clearing, or ground-leveling activities at the LRTSHQ site may result in the incidental take of some individuals of more sedentary state-listed species such as the Texas tortoise (*Gopherus berlandieri*). The impacts on sedentary state-listed

species would be negligible due to the BMPs to be implemented and due to the limited amount of disturbance to habitat relative to the amount of similar habitat within the ROI.

3.6.2 Alternative 2: Preferred Alternative

The Proposed Action is not likely to adversely affect any threatened or endangered species or their habitat. The ocelot and jaguarundi could potentially wander into the project site; however, South Texas Brush Country is not the prototypical habitat for either species and it is highly unlikely that either cat would occupy or use the site. The northern edge of the site contains Tamaulipan Ramadero woodlands. This forest is not considered potential habitat as it lacks the restrictive canopy cover, ground cover, and vertical cover limitations. Therefore, CBP has determined that the Proposed Action is not likely to adversely affect the ocelot and jaguarondi would occur as a result of the Proposed Action. No ashy dogweed was observed during biological surveys and the habitat at the proposed site is not preferred by ashy dogweed; therefore, the Proposed Action is not likely to adversely affect ashy dogweed. No suitable habitat is found within the proposed project area for Texas hornshell; although BMPs should be followed to prevent sediment erosion and surface water contamination which could further degrade their habitat within Webb County.

The potential effects on TPWD state-listed species for this potential site are the same as the effects described in Section 3.6.1.

3.6.3 Alternative 3: No Action Alternative

Under the No Action Alternative, there would be no impacts on threatened or endangered species or their Critical Habitats as no construction activities would occur.

3.7 GROUNDWATER

The project site has multiple aquifers that provide groundwater to this region. The major aquifers are the Gulf Coast aquifer in southeastern Webb County, the Laredo aquifer in central Webb County, and the Carrizo-Wilcox aquifer throughout much of Webb County. Minor aquifers are the Yegua-Jackson aquifer in eastern Webb County and the Queen City-Bigford aquifer in central Webb County.

The Gulf Coast Aquifer is a major aquifer paralleling the Gulf of Mexico coastline from the Louisiana border to the border of Mexico that covers 41,970 square miles and 56 counties in Texas. It consists of several aquifers, including the Jasper, Evangeline, and Chicot aquifers, which are composed of discontinuous sand, silt, clay, and gravel beds of Miocene to Holocene age (Texas Water Development Board [TWDB] 2016). Recharge to the Gulf Coast aquifer occurs primarily through the direct infiltration of precipitation on the outcrop. The Gulf Coast aquifer in Webb County receives an estimated 15,500 acre-feet per year (acre-ft/yr) of recharge on the outcrop (USGS 2004). The regional ground-water-flow direction in the Gulf Coast aquifer is downdip to the east and southeast toward the Gulf of Mexico. Water withdrawn from the Gulf Coast aquifer in Webb County is fresh to slightly saline and is withdrawn for domestic, stock, irrigation, industrial, and public supply uses.

The Yegua-Jackson aquifer, a minor aquifer that crosses 34 counties in the southeastern part of Texas, covers 10,932 square miles from the Texas-Louisiana border to Mexico (TWDB 2020). The Yegua-Jackson aquifer has a reported annual groundwater availability of 100,988 acre-feet and an annual groundwater supply of 16,462 acre-feet per year (TWDB 2017). This aquifer is composed of interbedded sand, silt, and clay layers. The water quality varies greatly due to sediment composition in the aquifer formations; the Yegua-Jackson aquifer becomes highly mineralized with increased depth. However, groundwater is produced from the sand units within the aquifer, which contains 50-1,000 milligrams per liter of dissolved solids. Shallow wells occur over most of the Yegua-Jackson aquifer for domestic and livestock purposes. In addition to livestock, water from this aquifer is also used in municipal, industrial, irrigation purposes (TWDB 2020).

The Laredo aquifer consists primarily of interbedded sandstones and glauconitic sandstones at the base and top of the aquifer. The sandstones are separated by thinned sequences of shale with glauconitic marl, clay, and in the middle part of the aquifer some fossiliferous limestone (Eargle 1968). The Laredo aquifer is bounded by the overlying Yegua aquifer and the underlying Queen City-Bigford aquifer. The Laredo aquifer receives an estimated 33,000 acre-ft/yr of recharge mainly by infiltration of precipitation (USGS 2004). Water is withdrawn from the Laredo aquifer for domestic, stock, irrigation, commercial, institutional, and public supply uses.

The Queen City-Bigford aquifer is composed of repetitive sequences of thick, massive sandstones of the Queen City Sand and the Bigford Formation that are stacked one on top of the other. The El Pico confining unit, composed of a thick sequence of shales, shaley sands, and coals, separates the Laredo aquifer from the Queen City-Bigford aquifer in Webb County Recharge to the Queen City-Bigford aquifer probably occurs mainly by infiltration of precipitation and about 45,000 acre-ft/yr of recharge would enter the aquifer in its outcrop (USGS 2004).

The Carrizo-Wilcox Aquifer is a major aquifer that covers 36,718 square miles from the Louisiana border to the Mexico border in a wide band adjacent to and northwest of the Gulf Coast Aquifer TWDB (2016). It is the most productive aquifer in Webb County and underlies the Queen City-Bigford aquifer. The Carrizo-Wilcox aquifer is a coarser grained, more massive cross-bedded sand than the overlying strata (USGS 2004). A narrow band of the Carrizo-Wilcox aquifer crops out in extreme northwestern Webb County, and the aquifer is present in the subsurface throughout the rest of the county. Recharge occurring by infiltration of precipitation on the outcrop in the county is estimated to be only about 950 acre-ft/yr; however, the Carrizo-Wilcox aquifer receives substantial recharge through its outcrop outside of Webb County (USGS 2004). Water from the Carrizo-Wilcox aquifer is fresh to slightly saline and commonly is used for commercial and industrial purposes and public supply in Webb County.

3.7.1 Alternative 1: Site 1 Alternative

No water would be withdrawn from the local aquifers for municipal purposes as a result of this alternative; therefore, it is anticipated that impacts to ground water resources would be negligible.

Disturbed soils and hazardous substances (e.g., antifreeze, fuels, oils, and lubricants) could have the potential to impact water quality during a rain event. However, through the use of BMPs these effects would be minimized and negligible. A Construction Stormwater General Permit would be obtained prior to construction, and this would require approval of a site-specific SWPPP. A site-specific Spill Prevention, Control and Countermeasure Plan (SPCCP) would also be instituted prior to the start of construction. BMPs outlined in these plans would reduce potential migration of soils, oil and grease, and construction debris into local surface waters. Once the construction project is complete, any temporary construction footprints would be revegetated with native vegetation, as outlined in the SWPPP, which would mitigate the potential of non-point source pollution to enter local groundwaters. Further discussion of specific BMPs to be followed can be found in Section 4.0.

3.7.2 Alternative 2: Preferred Alternative

Under the Preferred Alternative, the proposed LRTSHQ would have the same impacts on the groundwater as described above.

3.7.3 Alternative 3: No Action Alternative

Under the No Action Alternative, no construction activities would occur; therefore, no impacts to groundwater would occur.

3.8 SURFACE WATER AND WATERS OF THE U.S.

The Clean Water Act (CWA) §303[d][1][A] requires that each state monitor surface waters and compile a "303[d] List" of impaired streams and lakes. The proposed LRTSHQ is located in the Rio Grande River Basin, which travels 1,901 miles from the San Juan Mountains of Colorado to the Gulf of Mexico near Corpus Christi; the total drainage area is 335,000 square miles (TCEQ 2016).

The City of Laredo uses surface water from the Rio Grande River as its source of municipal water. The two water treatment plants in the City of Laredo are the Jefferson Water Treatment Plant, which has a capacity of 65 million gallons per day (MGD), and the El Pico Water Treatment Plant, which has a capacity of 20 MGD, for a combined capacity of 85 MGD. The average daily consumption during 2019 was approximately 33.77 million gallons per day and peak demand for 2019 was 53.43 million gallons per day (City of Laredo 2019).

Waters of the U.S. are defined within the CWA, and jurisdiction is addressed by USACE and USEPA. There could be temporary impacts to Waters of the U.S. if drainage structures within agricultural ditches need replacement. Wetlands are a subset of the Waters of the U.S. that may be subject to regulation under Section 404 of the CWA (40 CFR 230.3). Wetlands are those areas inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. The Waters of the U.S. conditions at each of the potential site alternatives are discussed in the following sections.

Under Executive Order (EO) 11990 – *Protection of Wetlands*, new construction by government agencies should “avoid to the extent possible the long- and short-term adverse impacts associated

with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative." Consultation with USACE was initiated to ensure that the Proposed Action would be in compliance with EO 11990 and limit any potential impacts to wetlands in the surrounding area.

3.8.1 Alternative 1: Site 1 Alternative

Water usage for the new LRTSHQ is estimated to be approximately 30,000 gallons per day for a total of approximately 10.9 million gallons per year. As mentioned previously, the annual surface water supply is approximately 33.77 MGD, which is a total of approximately 12.3 billion gallons per year. Because the new LRTSHQ would only use approximately 0.0008 percent of the annual surface water available from the Rio Grande River per year, it is anticipated that impacts to water availability would be long-term and negligible. Because the new LRTSHQ would only use a small portion of the annual surface water available, it is anticipated that impacts to water availability would be long-term and negligible.

The Proposed Action may potentially have temporary, negligible impacts on surface waters as a result of increases in erosion and sedimentation during periods of construction. Disturbed soils and hazardous substances (e.g., antifreeze, fuels, oils, and lubricants) could have the potential to impact water quality during a rain event. However, due to the lack of surface waters present at the proposed LRTSHQ and, through the use of BMPs, these effects would be minimized and negligible. A Construction Stormwater General Permit would be obtained prior to construction, and this would require approval of a site-specific SWPPP. A site-specific SPCCP would also be instituted prior to the start of construction. BMPs outlined in these plans would reduce potential migration of soils, oil and grease, and construction debris into local surface waters. Once the construction project is complete, any temporary construction footprints would be revegetated with native vegetation, as outlined in the SWPPP, which would mitigate the potential of non-point source pollution to enter local surface waters.

Portions of Alternative 1 contain potentially jurisdictional wetlands in the form of a forested wetland and Waters of the U.S. in the form of a perennial stream system that drains into the San Indelfonso Creek which feeds into the Rio Grande River outside of the project area. If this alternative were chosen, approximately 2.84 acres of wetlands and 2,214 linear feet of Waters of the U.S. would be permanently affected (Figure 3-4). However, CBP would consult with USACE to obtain the necessary permits for fill of these wetlands. Any adverse impacts on the aquatic environment would be offset by mitigation requirements, which may include restoring, enhancing, creating and preserving aquatic functions and values; therefore, no net loss of wetlands would occur. A long-term, minor effect on surface water resources would be anticipated under this alternative.

3.8.2 Alternative 2: Preferred Alternative

Under the Preferred Alternative, the proposed LRTSHQ would have similar impacts on surface water resources from municipal use as described above. All permits, SWPPP, BMPs, and SPCCP would be obtained and followed as described for Alternative 1.

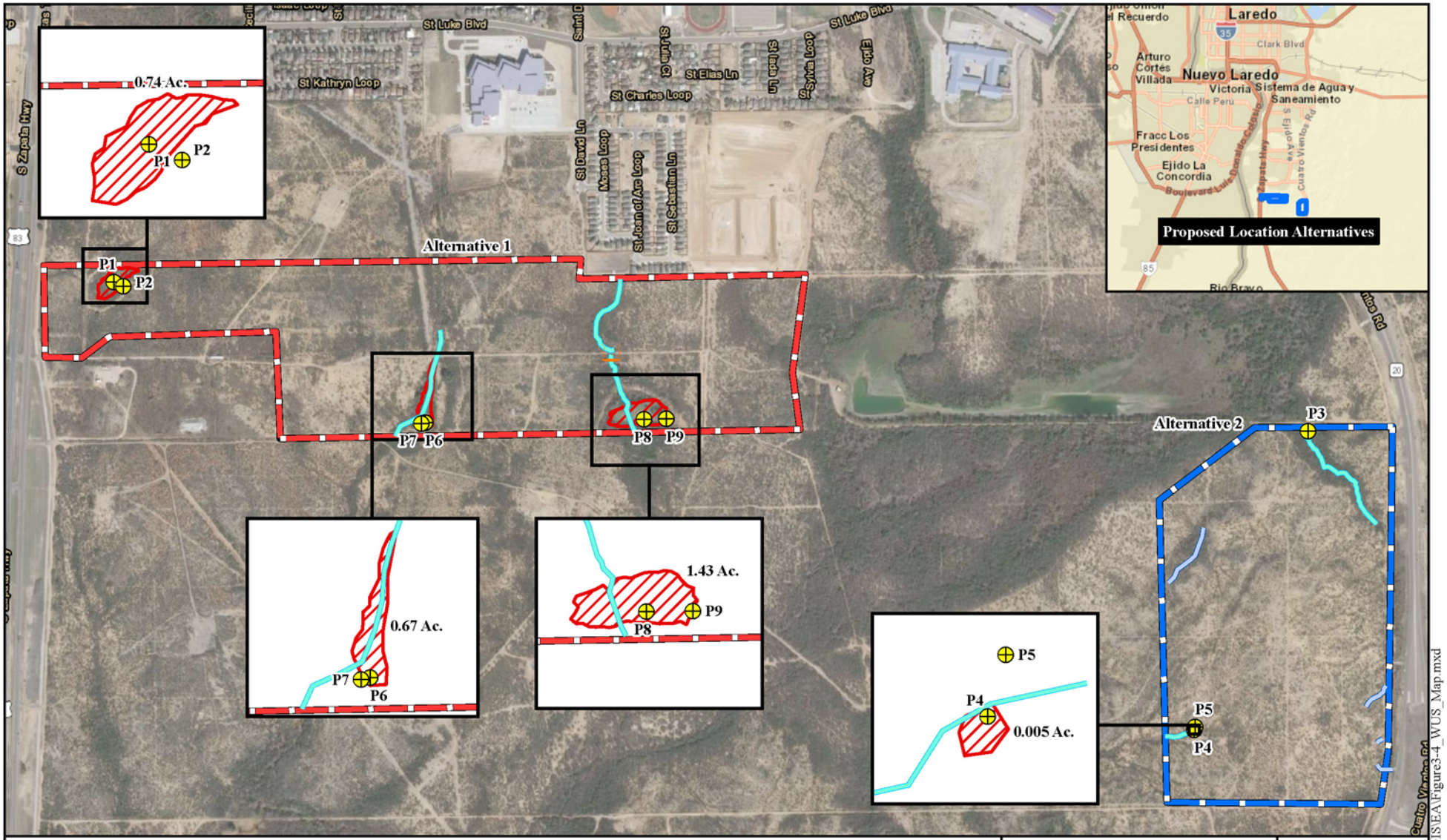

Figure 3-4. Waters of the U.S. Map

Portions of the Preferred Alternative contain potentially jurisdictional wetlands in the form of a forested wetland and Waters of the U.S. in the form of a perennial stream system that drains into the San Indelfonso Creek which feeds into the Rio Grande River outside of the project area. If this alternative were chosen, approximately 0.005 acre of wetlands and 1,250 linear feet of Waters of the U.S. would be permanently affected (see Figure 3-4). However, CBP would consult with USACE to obtain the necessary permits for fill of these wetlands. Any adverse impacts on the aquatic environment would be offset by mitigation requirements, which may include restoring, enhancing, creating and preserving aquatic functions and values; therefore, no net loss of wetlands would occur. A long-term, minor effect on surface water resources would be anticipated under this alternative.

3.8.3 Alternative 3: No Action Alternative

Under the No Action Alternative, no construction would occur; therefore, no impacts to surface waters or Waters of the U.S. would occur.

3.9 FLOODPLAINS

A floodplain is the area adjacent to a river, creek, lake, stream, or other open waterway that is subject to flooding when there is a major rain event. Floodplains are further defined by the likelihood of a flood event. If an area is in the 100-year floodplain, there is a 1-in-100 chance in any given year that the area will flood. Federal Emergency Management Agency (FEMA) floodplain maps were reviewed to identify if the project site is located within mapped floodplains (FEMA 2021).

Compliance with EO 11990 – *Protection of Wetlands* and EO 11988 – *Floodplain Management* would also be incorporated into the site design. Under EO 11990 – *Protection of Wetlands*, new construction by government agencies should "avoid to the extent possible the long- and short-term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative." Consultation with USACE was initiated to ensure that the Proposed Action would be in compliance with EO 11990 and limit any potential impacts to floodplains in the surrounding area. EO 11988 – *Floodplain Management*, states that "If an agency has determined to, or proposes to, conduct, support, or allow an action to be located in a floodplain, the agency shall consider alternatives to avoid adverse effects and incompatible development in the floodplains."

3.9.1 Alternative 1: Site 1 Alternative

No portion of Alternative 1 is located within the 100-year floodplain; there is minimal flood hazard within the entire boundary (Figure 3-5). The Proposed Action would not increase the risk or impact of floods on human safety, health, and welfare, or adversely impact the beneficial values that floodplains serve. Additionally, the Proposed Action would not increase duration, frequency, elevation, velocity or volume of flood events because the project site is not located within a floodplain. Therefore, the Proposed Action would have no impacts on floodplains and would be in compliance with EO 11988.

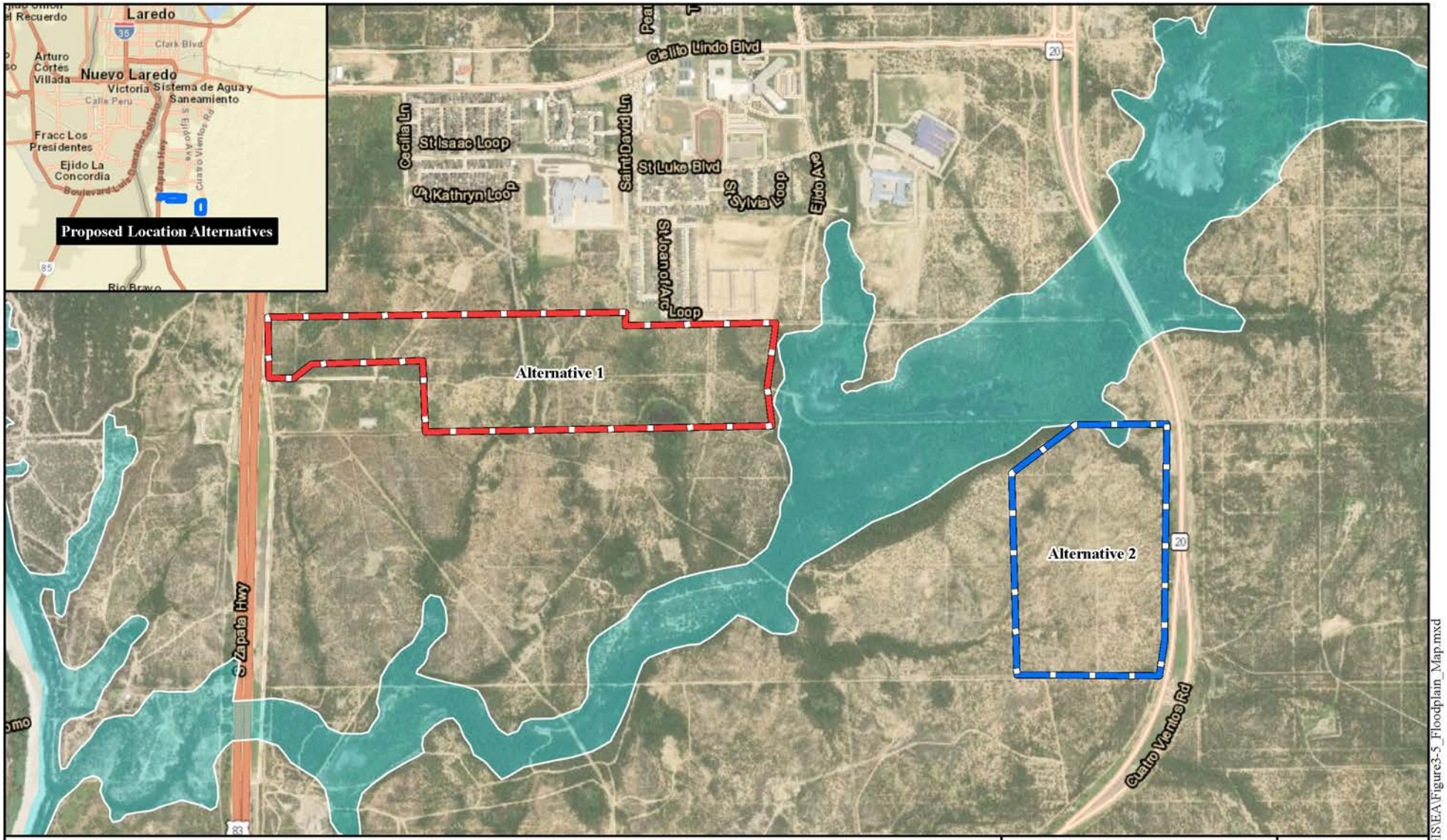

Figure 3-5. Floodplain Map

3.9.2 Alternative 2: Preferred Alternative

The majority of the Preferred Alternative is located outside of the 100-year floodplain; approximately one acre of this site, along the northern boundary, falls within the 100-year floodplain and is classified as Zone A (FEMA 2021; see Figure 3-5). However, through mitigation, the facility design would be modified to minimize potential impacts on the floodplain and avoid this portion of the site within the floodplain. The Proposed Action would not increase the risk or impact of floods on human safety, health, and welfare, or adversely impact the beneficial values that floodplains serve. Additionally, the Proposed Action would not increase duration, frequency, elevation, velocity or volume of flood events because the project site would be constructed in a way to avoid the floodplain. Therefore, the Proposed Action would have a permanent, negligible effect on floodplains and would be in compliance with EO 11988.

3.9.3 Alternative 3: No Action Alternative

Under the No Action Alternative, no construction activities would occur; therefore, there would be no impacts on floodplains.

3.10 AIR QUALITY

The USEPA established National Ambient Air Quality Standards (NAAQS) for specific pollutants determined to be of concern with respect to the health and welfare of the general public. Ambient air quality standards are classified as either "primary" or "secondary." The major pollutants of concern, or criteria pollutants, are carbon monoxide (CO), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), ozone (O_3), particulate matter less than 10 microns (PM-10), particulate matter less than 2.5 microns (PM-2.5), and lead (Pb). NAAQS represent the maximum levels of background pollution that are considered safe, with an adequate margin of safety, to protect the public health and welfare. The NAAQS are included in Table 3-5.

Areas that do not meet these NAAQS standards are called non-attainment areas; areas that meet both primary and secondary standards are known as attainment areas. The Federal Conformity Final Rule (40 CFR Parts 51 and 93) specifies criteria and requirements for conformity determinations of federal projects. The Federal Conformity Rule was first promulgated in 1993 by the USEPA, following the passage of Amendments to the Clean Air Act in 1990. The rule mandates that a conformity analysis be performed when a federal action generates air pollutants in a region that has been designated a non-attainment or maintenance area for one or more NAAQS.

A conformity analysis is the process used to determine whether a federal action meets the requirements of the General Conformity Rule. It requires the responsible federal agency to evaluate the nature of a Proposed Action and associated air pollutant emissions and calculate emissions that may result from the implementation of the Proposed Action. If the emissions exceed established limits, known as *de minimis* thresholds, the proponent is required to perform a conformity determination and implement appropriate mitigation measures to reduce air emissions. The USEPA has designated Webb County as in attainment for all NAAQS (USEPA 2020b).

Table 3-5. National Ambient Air Quality Standards

Pollutant	Primary Standard		Secondary Standard	
	Level	Averaging Times	Level	Averaging Times
Carbon Monoxide	9 ppm (10 mg/m^3)	8-hour [1]	None	None
	35 ppm (40 mg/m^3)	1-hour [1]	None	None
Lead	0.15 µg/m^3 [2]	Rolling 3-Month Average	Same as Primary	Same as Primary
	1.5 µg/m^3	Quarterly Average	Same as Primary	Same as Primary
Nitrogen Dioxide	53 ppb [3]	Annual (Arithmetic Average)	Same as Primary	Same as Primary
	100 ppb	1-hour [4]	None	None
Particulate Matter (PM_{10})	150 µg/m^3	24-hour [5]	Same as Primary	Same as Primary
Particulate Matter ($PM_{2.5}$)	12.0 µg/m^3	Annual [6] (Arithmetic Average)	15.0 µg/m^3	Annual [6] (Arithmetic Average)
	35 µg/m^3	24-hour [7]	Same as Primary	Same as Primary
Ozone	0.075 ppm (2008 std)	8-hour [8]	Same as Primary	Same as Primary
	0.070 ppm (2015 std)	8-hour [9]	Same as Primary	Same as Primary
	0.12 ppm	1-hour [10]	Same as Primary	Same as Primary
Sulfur Dioxide	75 ppb [11]	1-hour	0.5 ppm	3-hour [1]

Source: USEPA 2020a

Units of measure for the standards are parts per million (ppm) by volume, parts per billion (ppb - 1 part in 1,000,000,000) by volume, milligrams per cubic meter of air (mg/m^3), and micrograms per cubic meter of air (µg/m^3).

[1] Not to be exceeded more than once per year.

[2] Final rule signed October 15, 2008.

[3] In areas designated nonattainment for the Pb standards prior to the promulgation of the current (2008) standards, and for which implementation plans to attain or maintain the current (2008) standards have not been submitted and approved, the previous standards (1.5 µg/m^3 as a calendar quarter average) also remain in effect.

[4] The official level of the annual NO_2 standard is 0.053 ppm, equal to 53 ppb, which is shown here for the purpose of clearer comparison to the 1-hour standard

[5] To attain this standard, the 3-year average of the 98th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 100 ppb (effective January 22, 2010).

[6] Not to be exceeded more than once per year on average over 3 years.

[7] To attain this standard, the 3-year average of the weighted annual mean $PM_{2.5}$ concentrations from single or multiple community-oriented monitors must not exceed 15.0 µg/m^3.

[8] To attain this standard, the 3-year average of the 98th percentile of 24-hour concentrations at each population-oriented monitor within an area must not exceed 35 µg/m^3 (effective December 17, 2006).

[9] (a) To attain this standard, the 3-year average of the fourth-highest daily maximum 8-hour average O_3 concentrations measured at each monitor within an area over each year must not exceed 0.070 ppm. (effective December 28, 2015).

(b) The previous (2008) O_3 standards (0.075 ppm) additionally remain in effect in some areas.

[10] The previous SO_2 standards (0.14 ppm 24-hour and 0.03 ppm annual) will additionally remain in effect in certain areas: (1) any area for which it is not yet 1 year since the effective date of designation under the current (2010) standards, and (2)any area for which an implementation plan providing for attainment of the current (2010) standard has not been submitted and approved and which is designated nonattainment under the previous SO_2 standards or is not meeting the requirements of a SIP call under the previous SO_2 standards (40 CFR 50.4(3)). A SIP call is an EPA action requiring a state to resubmit all or part of its State Implementation Plan to demonstrate attainment of the required NAAQS.

Greenhouse Gases and Climate Change

Global climate change refers to a change in the average weather on the earth. Greenhouse Gases (GHG) are gases that trap heat in the atmosphere. They include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), fluorinated gases including chlorofluorocarbons (CFC) and

hydrochlorofluorocarbons (HFC), and halons, as well as ground-level O_3 (California Energy Commission 2007).

3.10.1 Alternative 1: Site 1 Alternative

Temporary and minor increases in air pollution would occur from the use of construction equipment (combustion emissions) and the disturbance of soils (fugitive dust) during construction of the new LRTSHQ. Particulate emissions would occur as a result of construction activities such as vehicle trips, bulldozing, compacting, truck dumping, and grading operations. Construction activities would also generate minimal hydrocarbon, NO_2, CO_2, and SO_2 emissions from construction equipment and support vehicles. Fugitive dust would be generated during these construction activities, especially during land clearing activities. Fugitive dust and other emissions would minimally increase as a result of construction; however, these emissions would be temporary and return to pre-project levels upon the completion of construction. Emissions as a result of the Proposed Action are expected to be below the *de minimus* threshold (i.e., 100 tons per year) and therefore would not be considered significant. BMPs, such as dust suppression and maintaining equipment in proper working condition would reduce the temporary construction impacts. Furthermore, due to the location of the proposed LRTSHQ, good wind dispersal conditions in the AOR, and because Webb County is in attainment, impacts to air quality are expected to be minimal under the Proposed Action.

3.10.2 Alternative 2: Preferred Alternative

Under the Preferred Alternative, the proposed LRTSHQ would have the same impacts on air quality as described above.

3.10.3 Alternative 3: No Action Alternative

The No Action Alternative would not result in any impacts on air quality because there would be no construction activities.

3.11 NOISE

Noise is generally described as unwanted sound, which can be based either on objective effects (e.g., hearing loss, damage to structures) or subjective judgments (e.g., community annoyance). Sound is usually represented on a logarithmic scale in a unit called the decibel (dB). Sound on the decibel scale is referred to as sound level. The perceived threshold of human hearing is 0 dB, and the threshold of discomfort or pain is around 120 dB (USEPA 1974). The A-weighted sound level (dBA) is a measurement of sound pressure adjusted to conform to the frequency response of the human ear.

Noise levels occurring at night generally produce a greater annoyance than do the same levels occurring during the day. It is generally agreed that people perceive intrusive noise at night as being 10 dBA louder than the same level of intrusive noise during the day, at least in terms of its potential for causing community annoyance. This perception is largely because background environmental sound levels at night in most areas are also about 10 dBA lower than those during the day. Long-term noise levels are computed over a 24-hour period and adjusted for nighttime annoyances to produce the day-night average sound level (DNL). DNL is the community noise

metric recommended by the USEPA and has been adopted by most federal agencies (USEPA 1974).

The construction of the proposed LRTSHQ would require the use of common construction equipment. Table 3-6 describes noise emission levels for construction equipment that range from 47 dBA to 85 dBA at a distance of 50 feet (FHWA 2007).

Table 3-6. A-Weighted (dBA) Sound Levels of Construction Equipment and Modeled Attenuation at Various Distances[1]

Noise Source	50 feet	100 feet	200 feet	500 feet	1000 feet
Bulldozer	82	76	70	62	56
Concrete mixer truck	85	79	73	65	59
Crane	81	75	69	61	55
Drill rig	85	79	73	65	59
Dump truck	84	78	72	64	58
Excavator	81	75	69	61	55
Front-end loader	79	73	67	59	53
Generator	47	41	35	26	20

Source: FHWA 2007

1. The dBA at 50 feet is a measured noise emission. The 100- to 1,000-foot results are GSRC modeled estimates.

Assuming the worst case scenario of 85 dBA from general construction equipment, the noise model predicts that noise emissions would have to travel 1,138 feet before they would be attenuated to acceptable levels equal to or below 57 dBA, which is the criterion for National Monument and Wildlife Refuges (23 CFR § 722, Table 3-6), or 482 feet to attenuate to 65 dBA, which is the criterion for residential receptors.

3.11.1 Alternative 1: Site 1 Alternative

Alternative 1 is located in an area adjacent to a residential community with the nearest house located approximately 40 feet to the north of the eastern portion of the site. Construction noises would not be able to attenuate to acceptable levels prior to reaching the residential area due to the proximity of the surrounding houses. Mitigation efforts would need to be taken to limit the noise effects on the surrounding community which could include constructing noise barriers, limiting construction hours, and following the BMPs described in Section 4.7. Therefore, impacts on noise would be short-term but minor, as the site is located in proximity to residential housing.

3.11.2 Alternative 2: Preferred Alternative

The project site is located in an area approximately 0.7 mile southeast of the nearest residential communities. All construction noises would attenuate to acceptable levels prior to reaching the residential area. Therefore, impacts on noise would be short-term and negligible.

3.11.3 Alternative 3: No Action Alternative

Under the No Action Alternative, no construction would occur; therefore, no impacts on noise would occur.

3.12 CULTURAL, HISTORICAL, AND ARCHEOLOGICAL RESOURCES

Cultural resources include historic properties, archeological resources, and sacred sites. Historic properties are defined by the National Historic Preservation Act (NHPA) as any prehistoric or historic district site, building, structure, or object included on, or eligible for inclusion in the National Register of Historic Places (NRHP), including artifacts, records, and material remains relating to the district, site, building, structure, or object (National Park Service [NPS] 2006a). To be considered eligible for the NRHP, a property would need to possess integrity of location, design, setting, materials, workmanship, feeling, and association and must also meet at least one of the following four criteria (NPS 2002):

A. Be associated with events that made a significant contribution to the broad pattern of our history
B. Be associated with the lives of significant persons in our past
C. Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction
D. Have yielded, or be likely to yield, information important in history or prehistory

A Traditional Cultural Property (TCP) is a specific type of historic property that is eligible for inclusion in the NRHP because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining and continuing the cultural identity of the community (Parker and King 1998). Given the broad range in types of historic properties, historic properties can often include other types of cultural resources such as cultural items, archeological resources, sacred sites, and archeological collections.

Cultural items as defined by the Native American Graves Protection and Repatriation Act (NAGPRA) are defined as human remains, as well as both associated and unassociated funerary objects, sacred objects, and objects of cultural patrimony or objects that have an ongoing historical, traditional, or cultural importance to a Native American group or culture (NPS 2006b). Archeological resources, as defined by the Archeological Resources Protection Act (ARPA), consist of any material remains of past human life or activities that are of archeological interest and are at least 100 years of age. Such items include, but are not limited to, pottery, basketry, bottles, weapons, weapon projectiles, tools, structures or portions of structures, pit houses, rock paintings, rock carvings, intaglios, graves, human skeletal remains, or any portion or piece of those items (NPS 2006c). Sacred sites are defined by EO 13007, Indian Sacred Sites, as any specific, discrete, narrowly delineated location on Federal land that is identified by a Native American tribe or Native American individual determined to be an appropriately authoritative representative of a Native American religion as sacred by virtue of its established religious significance, or ceremonial use by, a Native American religion, provided that the tribe or appropriately authoritative representative of a Native American religion has informed the federal land-owning agency of the existence of such a site (NPS 1996).

Existing Archeological Site and Previously Conducted Archeological Surveys

Twelve previously conducted archeological investigations were on record with the *Texas Archeological Sites Atlas* within a 1.61-kilometer (km) (1-mile) radius of the two proposed site alternatives (Figures 3-6 and 3-7). Eight of the 12 investigations overlap with the proposed sites. Six of those are associated with a single roadway project. These investigations include Atlas numbers 8400001489, 8400008520, 8400009606, 8500011453, 8500011871, 8500013508, 8500014152, and 8500017233. No NRHP-listed properties or districts, Recorded Texas Historic Landmarks (RTHLs), or Official Texas Historical Markers (OTHMs) are located within the 1-mile search radius of the Area of Potential Effect (APE). More detailed information regarding the investigations is presented below organized by survey area below.

Table 3-7. Previously Conducted Archeological Investigations within 1 Mile of the Area of Potential Effect.

Atlas Number	Title/Sponsor	Project Type	Texas Antiquities Commission Permit	Sites Discussed
8400001489	N/A	Survey	N/A	N/A
8400008520	N/A	Survey	N/A	N/A
8400008925	Texas Water Development Board 1997 Annual Report to the Texas Historical Commission for Texas Antiquities Permit 1779	Survey	1779	N/A
8400009606	Federal Highway Administration and Texas Department of Transportation	Survey	N/A	N/A
8500000340	Texas Department of Transportation	Survey	N/A	N/A
8500011453	Texas Department of Transportation	Survey	N/A	N/A
8500011512	USACE-Fort Worth District	Survey	N/A	Site E-1 recorded; site form used?
8400011871	Cuatro Vientos – A Reconsideration of Seven Prehistoric Sites in the Lower Rio Grande Plains of South Texas; Texas Department of Transportation	Survey	3755	41WB441, 41WB572, 41WB577, 41WB578, 41WB621, 41WB622, and 41WB623
8500013508	Webb County	Survey	2593	N/A
8500014152	Cuatro Vientos – A Reconsideration of Seven Prehistoric Sites in the Lower Rio Grande Plains of South Texas; Texas Department of Transportation	Survey	3755	41WB441, 41WB572, 41WB577, 41WB578, 41WB621, 41WB622, and 41WB623
8500017233	Texas Department of Transportation	Survey	N/A	41WB624
8500025734	U.S. Customs and Border Protection	Survey	N/A	N/A

Source: THC 2021

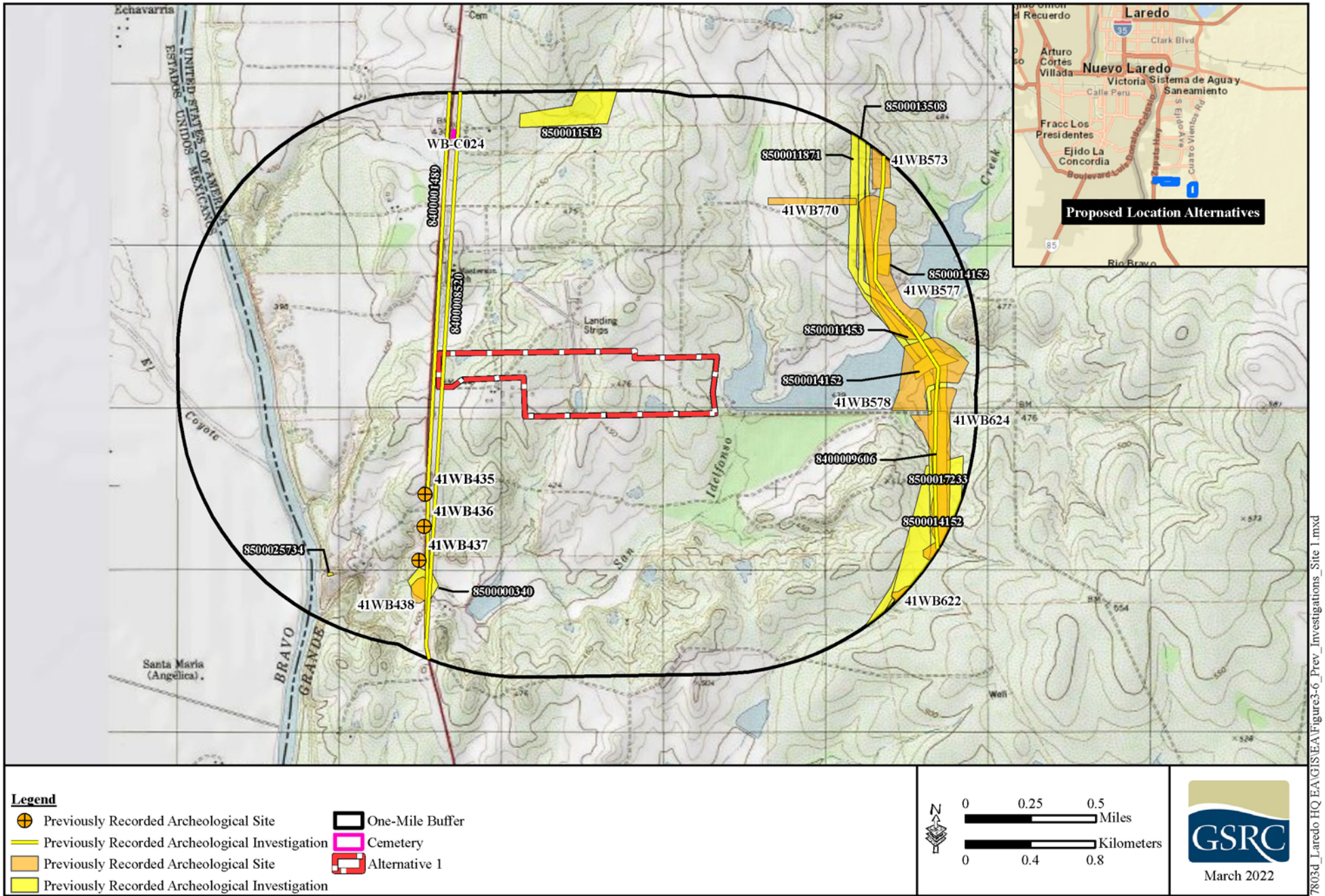

Figure 3-6. Site 1 Cultural Resources Map – Previous Investigations

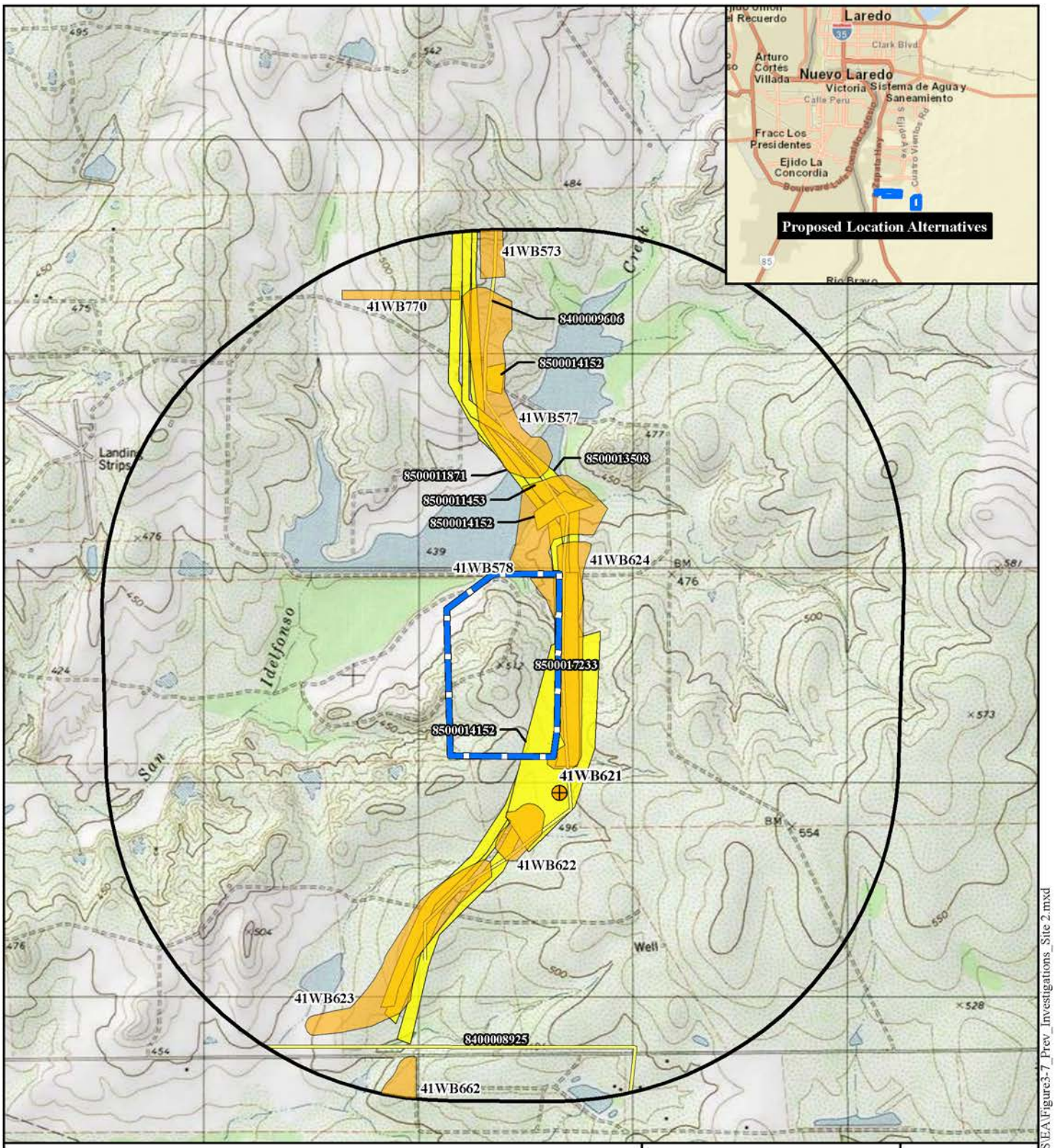

Figure 3-7. Site 2 Cultural Resources Map – Previous Investigations

There are 14 previously recorded archeological sites and one historical cemetery located within a 1.61-km (1-mile) radius of the two proposed site alternatives (see Figures 3-6 and 3-7). More detailed information regarding the previously recorded archeological resources is presented in Table 3-8.

Table 3-8. Previously Recorded Archeological Resources Recorded within 1 Mile of the Area of Potential Effect.

Atlas Number	Number/Name	Site Type	Designation/Eligibility
Archeological Sites			
9479043599	41WB435	Prehistoric	1/30/1997 - Ineligible
9479043699	41WB436	Prehistoric	1/30/1997 - Ineligible
9479043799	41WB437	Prehistoric open campsite with burned rock midden and lithic scatter	1/30/1997 - Undetermined 9/9/1997 - Eligible
9479043899	41WB438	Prehistoric	1/30/1997 - Undetermined 9/9/1997 - Undetermined
9479057299 9479057201 9479057202 9479057203	41WB572	Prehistoric open campsite with adjacent lithic procurement locale	2/13/2001 - Ineligible within ROW 1/5/2005 - Undetermined 9/2/2005 - Ineligible 3/9/2007 - Ineligible
9479057399 9479057301 9479057302	41WB573	Prehistoric campsite with lithic reduction area	2/13/2001 - Undetermined 5/28/2001 - Undetermined 2/12/2004 - Undetermined
9479057799 9479057701 9479057702	41WB577	Prehistoric campsite with lithic reduction area	2/13/2001 - Undetermined 1/5/2005 - Undetermined 9/2/2005 - Undetermined 3/9/2007 - Ineligible
9479057899 9479057801 9479057802	41WB578	Prehistoric campsite with lithic reduction area	2/13/2001 - Undetermined 1/5/2005 - Undetermined 9/2/2005 - Undetermined 3/9/2007 - Undetermined
9479062199 9479062101	41WB621	Prehistoric campsite and a lithic reduction area	3/9/2007 - Ineligible 1/5/2005 - Undetermined 9/2/2005 - Ineligible
9479062299 9479062201 9479062202	41WB622	Open campsite and lithic procurement locale	1/5/2005 - Undetermined 9/2/2005 - Ineligible 3/9/2007 - Ineligible
9479062399 9479062301 9479062302	41WB623	Open campsite and lithic procurement locale	1/5/2005 - Undetermined 9/2/2005 - Ineligible 3/9/2007 - Ineligible
9479062499 9479062401	41WB624	Prehistoric campsite and lithic reduction area	1/5/2005 - Undetermined 2/1/2010 - Ineligible within ROW
9479066201	41WB662	Prehistoric open campsite	8/3/2007 - Ineligible within ROW
9479077001	41WB770	Prehistoric lithic procurement locale	No review on record
Cemetery			
7479002405	WB-C024	Unknown Cemetery (N. Of Masterson Sch.)	N/A

Archeological Survey Results

GSRC personnel conducted an intensive archeological survey of Alternative 1 and the Preferred Alternative on May 5, 2021 for the proposed LRTSHQ on behalf of CBP (Lindemuth 2022). The investigation included a pedestrian survey utilizing transects spaced 30 m (100 ft) apart and the excavation of 73 and 69 Soil Test Pits (STPs) across the Alternative 1 and the Preferred Alternative APEs respectively. The CBP investigation constituted a good faith effort to take into account any adverse effects that may occur as a result of the proposed undertaking in compliance with Section 106 of NHPA (Public Law 89-665; 54 U.S.C. 300101 et seq).

Six (21-6, 22-5, 24-3, 24-4, 24-5, and 24-6) of the 66 transect STPs within the Preferred Alternative APE and four (17-1 to 17-4) of the 73 transect STPs excavated within the Alternative 1 APE were positive for cultural material. This resulted in the expansion and updating of one archeological site (41WB624) within the Preferred Alternative APE and the recording of six new archeological sites (41WB945, 41WB946, 41WB947, 41WB948, 41WB949, and 41WB950), and one Isolated Occurrence (IO) within the Alternative 1 APE. Four of the archeological sites (41WB945, 41WB947, 41WB949, and 41WB950) and the IO consisted of prehistoric open campsites. Two of those sites (41WB945 and 41WB950) contained temporally/culturally diagnostic material that indicated a Middle Archaic to Late Prehistoric use of both of those site areas. The remaining three archeological sites (41WB624, 41WB946, and 41WB948) were multicomponent sites with prehistoric components and intrusive historic (modern) components. The prehistoric components of two of those sites (41WB624 and 41WB946) contained diagnostic cultural material that indicated a Middle Archaic to Late Prehistoric and Late Archaic use of those two site areas respectively. The intrusive historic components of all three of these sites dated to the Modern period with middle to late twentieth century occupations.

Alternative 1

None of the of the newly recorded archeological sites or IO are recommended eligible for the NRHP under any criteria. As a result, no additional work is recommended for the Alternative 1 APE and no adverse effects on historic properties are anticipated from the development of the Alternative 1 APE.

Alternative 2

Artifacts recorded from the transect positive STPs were limited to lithic debitage and were recovered from 0 to 20 centimeters below grounds surface (cmbgs). In addition to the transect STPs excavated, an extensive surface scatter of artifacts was noted across the APE overlapping with the previously recorded archeological site 41WB624 in both the northern and southern portions of the APE. In addition, artifacts were noted and mapped along the eastern portion of the APE within 20 meters or less of the previously recorded site boundary of 41WB624. Since the surface scatter of artifacts extended into the previously recorded 41WB624 site boundary at both the northeastern and southeastern ends of the APE, the scatter was recorded as an extension of that previously recorded site.

Given the extensive surface distribution of artifacts at the Preferred Alternative, a complete inventory of artifacts associated with the site was beyond the scope of the initial identification survey and could not be completed. As a result, the site is estimated to have non-diagnostic artifacts numbering in the thousands. In addition, a walking inventory and plotting of stone tools

was also conducted across the site, though this does not represent a complete inventory of stone tools present at the site which is quite extensive. Despite the limited sampling of the stone tools conducted, a total of 353 stone tools were recorded, measured, photographed, and plotted across the site. Stone tools recorded included hafted and unhafted bifaces, multidirectional and unidirectional core tools, and unimarginal, bimarginal, and combination flake tools. Seven features were noted during the recording of the site. Most of the features noted were thermally altered rock concentrations but also included a possible chipping station or lithic reduction locus, a historic post and associated historic artifact scatter, and a historical bottle dump.

Consultation has been conducted with the THC and with federally recognized Native American tribes that claim a cultural affinity to the area. Copies of consultation letters sent to tribes are provided in Appendix A. THC has concurred with CBP's effect determination for the sites that would be affected from the development of the proposed action, a copy of this response is provided in Appendix A.

3.12.1 Alternative 1: Site 1 Alternative

Archeological and aboveground resources surveys were conducted for Alternative 1. During consultation, the State Historic Preservation Officer (SHPO) concurred with CBP's determination that none of the newly recorded archeological sites or isolated occurrences (IO) at Alternative 1 are recommended eligible for the National Register of Historic Places (NRHP) under any criteria. As a result, no additional work is recommended for the Alternative 1 Areas of Potential Effects (APE) and no adverse effects on historic properties are anticipated from the development of the Alternative 1 APE.

3.12.2 Alternative 2: Preferred Alternative

Archeological and aboveground resources surveys were conducted for the Preferred Alternative. An area of the Preferred Alternative APE adjacent to the previously recorded site boundary of 41WB624 contained extensive surface and near-surface cultural material that is believed to be associated with and extending from the site. The SHPO concurs that site 41WB624 would require additional investigation to confirm its eligibility for listing on the NRHP and, therefore, remains undetermined. CBP is in the process of conducting an additional archaeological investigation to determine the site's NRHP eligibility. If the extension of site 41WB624 is determined to be eligible for the NRHP, avoidance or mitigation measures would be developed to minimize or eliminate adverse effects on historic properties. The investigation, additional consultation with SHOP and Native American Tribes, and any required mitigation would be completed prior to the start of construction.

3.12.3 Alternative 3: No Action Alternative

Under the No Action Alternative, no construction would occur; therefore, no impacts to cultural resources would be anticipated.

3.13 UTILITIES AND INFRASTRUCTURE

AEP Texas, a unit of American Electric Power company, distributes electrical energy on behalf of the various Retail Electric Providers operating within the project site. Commercial grid power is currently available and would be used to power the proposed LRTSHQ.

Infrastructure near the project area includes Highway 83 and Highway 20, which are the major routes through Laredo and the surrounding towns. No new public infrastructure would be required for ingress or egress at the proposed LRTSHQ. Numerous road construction and improvement projects are scheduled to be completed in the next four years within Webb County.

Potable water would be supplied via existing infrastructure provided and maintained by the City of Laredo. Water usage for the new LRTSHQ is estimated to be approximately 30,000 gallons per day for a total of approximately 10.9 million gallons per year. As mentioned previously, the annual surface water supply is approximately 33.77 MGD, which is a total of approximately 12.3 billion gallons per year. Because the new LRTSHQ would only use approximately 0.0008 percent of the annual surface water available within the Rio Grande River Basin per year, it is anticipated that impacts to water availability would be long-term and negligible.

Sewerage would be handled through the construction of a fully automated anaerobic septic system. All proper permits would be acquired prior to installation or operation of the septic system in compliance with TCEQ guidelines. The effects of installing the new septic system are considered insignificant.

3.13.1 Alternative 1: Site 1 Alternative

Alternative 1 would result in negligible effects on the availability of utilities throughout the ROI because the current amperage available through the existing grid power system can withstand the anticipated electrical load of the proposed LRTSHQ. Additionally, the LRTSHQ would be tied into existing and available service transmission lines. All sewerage and potable water would be installed with the proper permits for installation and operation of these systems. Also, the sewerage and potable water systems installed by CBP would only be used by CBP; therefore, there would be no reasonably foreseeable impacts related to the construction of the new LRTSHQ and potential development near the new LRTSHQ.

3.13.2 Alternative 2: Preferred Alternative

Under the Preferred Alternative, the impact of the proposed LRTSHQ on the utilities and infrastructure would be the same as described in the section above.

3.13.3 Alternative 3: No Action Alternative

Under the No Action Alternative, the proposed LRTSHQ would not be constructed. The No Action Alternative would not affect the availability of utilities or require construction of additional facilities.

3.14 ROADWAYS AND TRAFFIC

U.S. Interstate 35 is the main north-south route in Webb County, Texas. At a total of 1,568 miles long, it extends nearly 500 miles within Texas from the international border in Laredo, Texas, to the Oklahoma border near Gainesville and eventually terminates near Duluth, Minnesota. U.S. Highway 83 is another major north-south route through Webb County that covers 895 miles within Texas from the City of Brownsville to the Oklahoma border near Perryton and continues 1,885 total miles to the Canadian border north of Westhope, North Dakota (Figure 3-8).

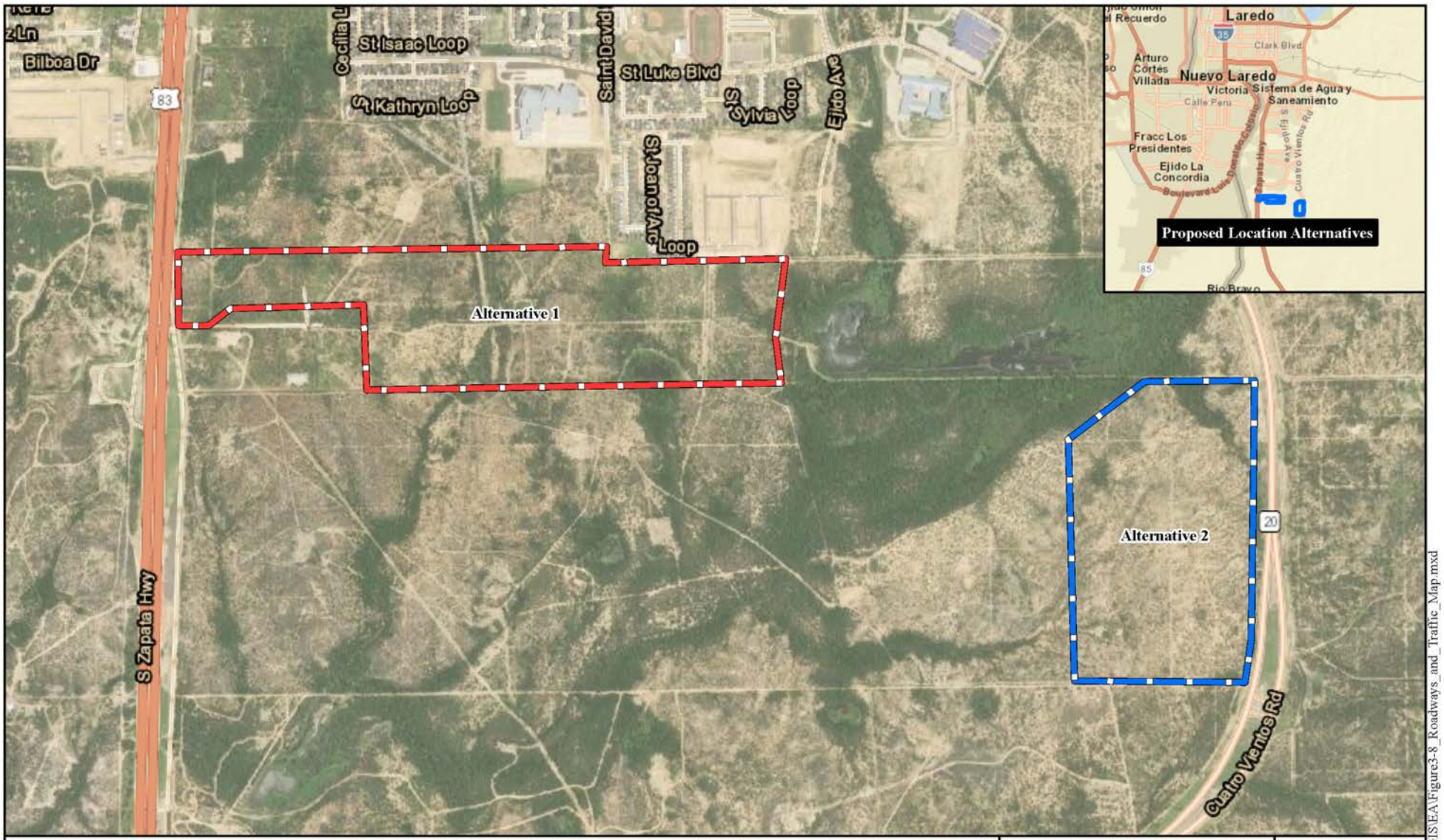

Figure 3-8. Roadways and Traffic Map

The main east-west routes through Webb County are U.S. Highway 59 and State Highway 359. Highway 59 runs the length of the country from Lancaster, Minnesota to Laredo, Texas. Although Highway 59 runs north-south across the country, it runs east-west in Webb County, Texas.

Annual average daily traffic (AADT) is the standard measurement for vehicle traffic load on a section of road; it is calculated by recording the total volume of vehicle traffic on a highway or road for a year and dividing that value by 365 days. Alternative 1 would be located directly off of U.S. Highway 83 to the south of the City of Laredo, Texas. According to TxDOT, the AADT for U.S. Highway 83 at the location of the proposed site was 10,047 vehicles per day in 2018. The Preferred Alternative would be located directly off of U.S. Highway 20 to the south of the City of Laredo, Texas. According to TxDOT, the AADT for U.S. Highway 20 at the location of the proposed site was 11,655 vehicles per day in 2020 and 12,777 vehicle per day in 2019 (TxDOT 2020).

3.14.1 Alternative 1: Site 1 Alternative

With the implementation of the Proposed Action, construction activities at the project site would have a temporary, minor impact on roadways and traffic adjacent to the project site. An increase of vehicular traffic along U.S. Highway 83 would occur from supplying materials, hauling debris, and from work crews commuting to the project site during construction activities. Upon completion of construction activities, the number of USBP agents traveling those roads to access the LRTSHQ would increase as well. This increase in volume of traffic associated with agents coming and going from the LRTSHQ would have negligible impacts on roadways and traffic as Highway 83 can withstand the projected volumes. Therefore, traffic impacts associated with construction and operation of the LRTSHQ would be long-term and negligible.

3.14.2 Alternative 2: Preferred Alternative

Under the Preferred Alternative, the construction of the new LRTSHQ would have similar impacts on roadways and traffic as described for Alternative 1. The increase in volume of traffic associated with 350 agents coming and going from the LRTSHQ would have long-term, negligible impacts on roadways and traffic given the current AADT on Highway 20.

3.14.3 Alternative 3: No Action Alternative

Under the No Action Alternative, no impacts to roadways and traffic would occur.

3.15 HAZARDOUS MATERIALS

Hazardous materials are substances that cause physical or health hazards (29 CFR 1910.1200). Materials that are physically hazardous include combustible and flammable substances, compressed gases, and oxidizers. Health hazards are associated with materials that cause acute or chronic reactions, including toxic agents, carcinogens, and irritants. Hazardous materials are regulated in Texas by a combination of mandated laws promulgated by the USEPA and the TCEQ.

A Phase I Environmental Site Assessment was conducted for the proposed project site in accordance with the American Society for Testing and Materials (ASTM) International Standard E1527-13. This assessment was performed to evaluate any potential environmental risk associated with the construction and operation of the proposed LRTSHQ. The assessment included a search of federal and state records of known hazardous waste sites, potential hazardous waste sites, and remedial activities and included sites that are either on the National Priorities List or being considered for the list. According to information gathered from document searches, interviews, and the site reconnaissance, no recognized environmental conditions exist in the immediate vicinity of the subject property (GSRC 2022).

3.15.1 Alternative 1: Site 1 Alternative

Construction of the proposed LRTSHQ as described in the Proposed Action would involve the use of heavy construction equipment. There is a potential for the release of hazardous materials such as fuels, lubricants, hydraulic fluids, and other chemicals during the construction activities. The impacts from spills of hazardous materials during construction would be minimized by utilizing BMPs during construction such as fueling only in controlled and protected areas away from surface waters, maintaining emergency spill cleanup kits at all sites during fueling operations, and maintaining all equipment in good operating condition to prevent fuel and hydraulic fluid leaks. Hazardous material impacts would be short-term and negligible.

All hazardous and regulated wastes and substances generated by operation of the new LRTSHQ would be collected, characterized, labeled, stored, transported, and disposed of in accordance with all federal, state, and local regulations, including proper waste manifesting procedures. All other hazardous and regulated materials or substances would be handled according to materials safety data sheet instructions and would not affect water, soils, vegetation, wildlife, or the safety of USBP agents and staff. The fuel Aboveground Storage Tanks (ASTs) installed at the new LRTSHQ would be double-walled and contained within all protective measures needed to prevent the release of any tank spills. The vehicle maintenance facility would be equipped with oil/water separators to collect any petroleum or other automotive fluids spilled, and waste automotive fluids would be collected and disposed of in accordance with state regulations. Therefore, hazardous and regulated materials and substances would not impact the public, groundwater, or general environment.

The potential impacts of the handling and disposal of hazardous and regulated materials and substances during construction activities would be insignificant when mitigation measures and BMPs as described in Section 4.0 are implemented.

During the site reconnaissance survey of Alternative 1, two individual signs indicating a high-pressure gas pipeline were observed at Alternative 1. Using a combination of the site reconnaissance survey and online databases, such as the National Pipeline Mapping System (NPMS) and the Railroad Commission of Texas (RCC), at least three high pressure gas pipelines were observed crossing the subject property. Neither the NPMS or RRC maps show a pipeline intersecting with the location of the pipeline sign in the eastern portion of the subject property. However, the RRC map does show a natural gas gathering pipeline intersecting the location of the other sign. The RRC map also shows a natural gas gathering pipeline not observed during the site reconnaissance survey or NPMS map running diagonally through Alternative 1, and a

pipeline running north to south through the eastern portion of Alternative 1. In all, three pipelines are confirmed to intersect Alternative 1 with the potential for a fourth pipeline to be present. Figure 3-9 shows features collected during the Phase 1 Environmental Site Assessment. The Phase 1 Environmental Site Assessment was conducted on January 11, 2022.

3.15.2 Alternative 2: Preferred Alternative

Under the Preferred Alternative, the construction of the new LRTSHQ would have the same risks and potential impacts involving hazardous materials as described above and would follow the same BMPs as described in Section 4.0.

Features identified during the Phase I Environmental Site Assessment are shown in Figure 3-10. The site reconnaissance and desktop surveys concluded that there are no known pipelines crossing the Preferred Alternative. The Phase 1 Environmental Site Assessment was conducted on January 11, 2022.

3.15.3 Alternative 3: No Action Alternative

Under the No Action Alternative, no construction activities would occur; therefore, no existing hazardous materials risks would be encountered and no potential for hazardous materials spills during LRTSHQ construction would be realized. No impacts from hazardous materials would result from the No Action Alternative.

3.16 RADIO FREQUENCY ENVIRONMENT

The radio frequency (RF) environment refers to the presence of electromagnetic (EM) radiation emitted by radio waves and microwaves on the human and biological environment. EM radiations are self-propagating waves of electric and magnetic energy that move through space via radio waves and microwaves emitted by transmitting antennas. RF is a frequency or rate of oscillation within the range of about 3 hertz and 300 gigahertz. This range corresponds to frequency of alternating current and electrical signals used to produce and detect radio waves. The EM radiation produced by radio waves and microwaves carry energy and momentum and can interact with matter.

The Federal Communications Commission (FCC) is responsible for licensing frequencies and ensuring that the approved uses would not interfere with television or radio broadcasts or substantially affect the natural or human environments. The FCC adopted recognized safety guidelines for evaluating RF exposure in the mid-1980s (Office of Engineering and Technology [OET] 1999). Specifically, in 1985, the FCC adopted the 1982 American National Standards Institute (ANSI) guidelines to evaluate exposure due to RF transmitters that are licensed and authorized by the FCC (OET 1999). In 1992, ANSI adopted the 1991 Institute of Electrical and Electronics Engineers (IEEE) standard as an American National Standard (a revision of its 1982 standard) and designated it as ANSI/IEEE C95.1-1992 (OET 1999). The FCC proposed to update its rules and adopt the new ANSI/IEEE guidelines in 1993, and in 1996 the FCC adopted a modified version of the original proposal.

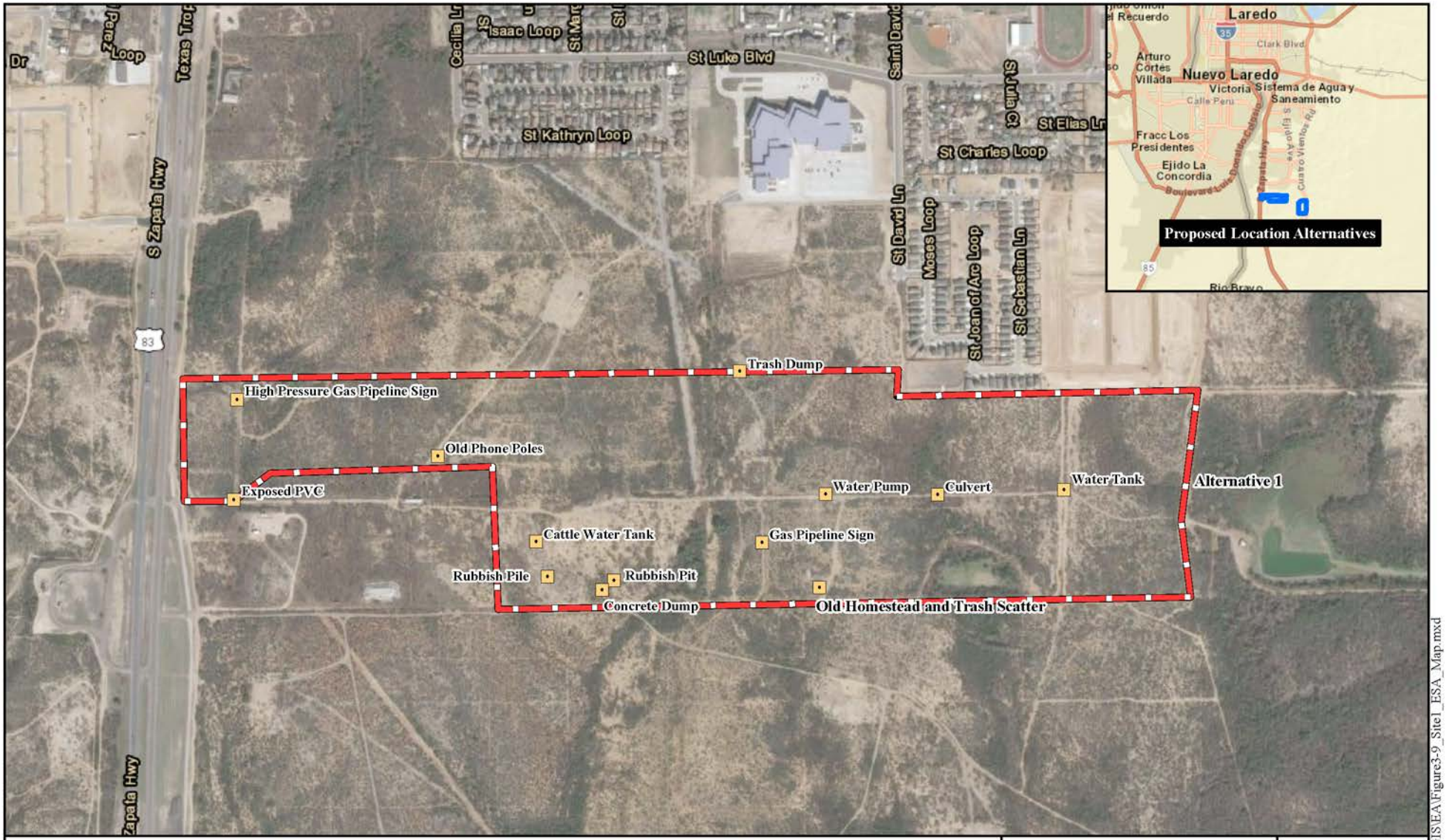

Figure 3-9. Site 1 Hazardous Resources Map – Previous Investigations

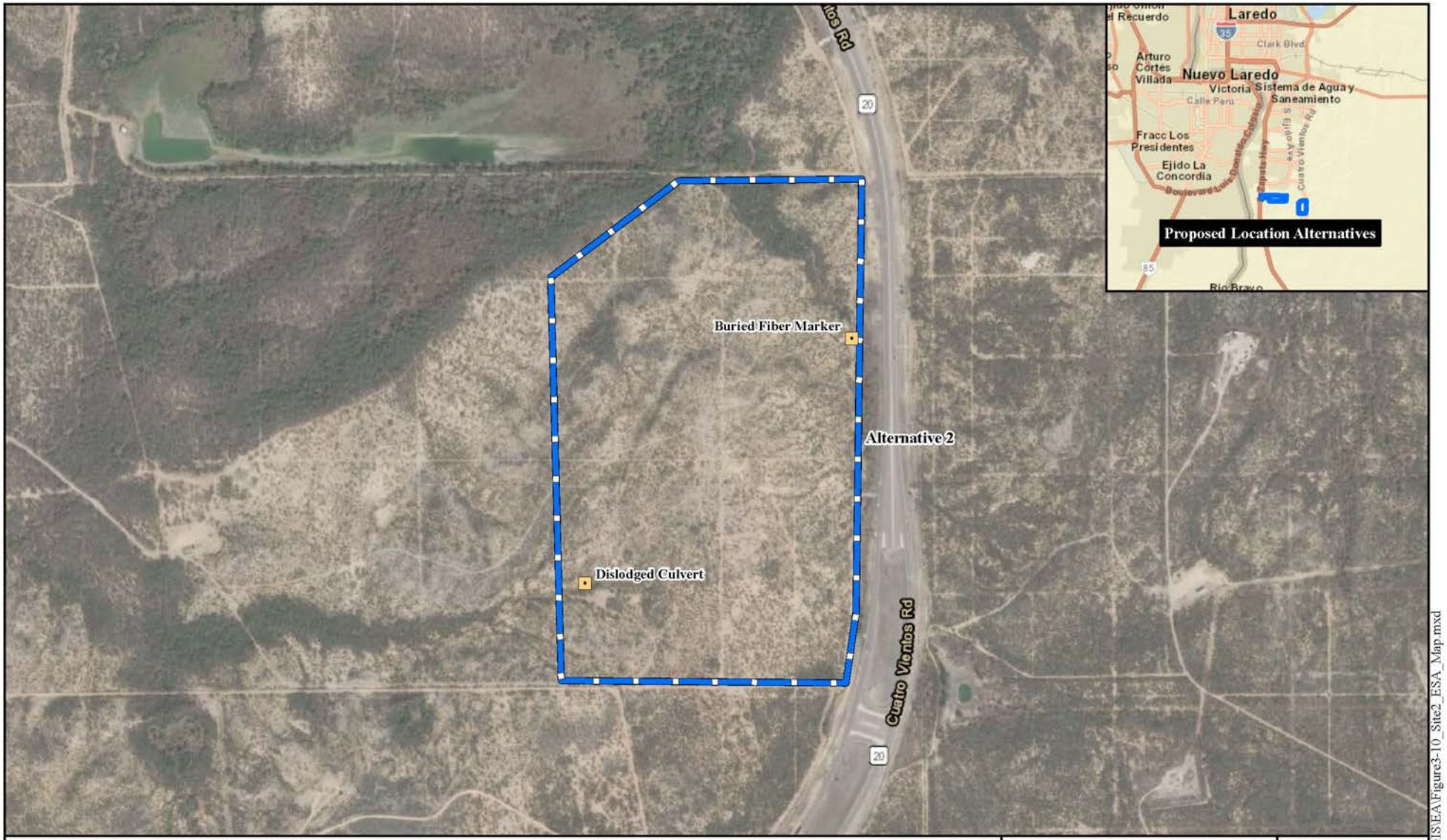

Figure 3-10. Site 2 Hazardous Resources Map – Previous Investigations

The FCC guidelines are also based on the National Council on Radiation Protection and Measurements (NCRP) exposure guidelines. The NCRP and ANSI/IEEE exposure criteria identify the same threshold levels at which harmful biological effects may occur. The whole-body human absorption of RF energy varies with the frequency of the RF signal. The most restrictive limits on exposure are in the frequency range of 30 to 300 megahertz, where the human body absorbs RF energy most efficiently when exposed in the air field of an RF transmitting source (ANSI/IEEE C95.1-1992). There are two tiers or exposure limits: occupational or "controlled" and general or "uncontrolled." Controlled exposure is when people are exposed to RF fields as a part of their employment and they have been made fully aware of the potential exposure and can exercise control over their exposure. Uncontrolled exposure is when the general public is exposed or when persons employed are not made fully aware of the potential for exposure or cannot exercise control over their exposure.

In order for a transmitting facility or operation to be out of compliance with the FCC RF guidelines in an area where levels exceed Maximum Permissible Exposure (MPE) limits, it must first be accessible to the public. The MPE limits indicate levels above which people may not be safely exposed regardless of the location where those levels occur.

Adverse biological effects associated with RF energy are typically related to the heating of tissue by RF energy. This is typically referred to as a "thermal" effect, where the EM radiation emitted by an RF antenna passes through and rapidly heats biological tissue, similar to the way a microwave oven cooks food. The Health Physics Society indicates that numerous studies have shown that environmental levels of RF energy routinely encountered by the general public are typically far below levels necessary to produce significant heating and increased body temperature and are generally only associated with workplace environments near high-powered RF sources used for molding plastics or processing food products. In such cases, exposure of human beings to RF energy could be exceeded, thus requiring restrictive measures or actions to ensure their safety (Classic 2007).

There is also some concern that signals from some RF devices could interfere with pacemakers or other implanted medical devices. However, it has never been demonstrated that signals from a microwave oven are strong enough to cause such interference (OET 1999). Furthermore, EM shielding was incorporated into the design of modern pacemakers to prevent RF signals from interfering with the electronic circuitry in the pacemaker (OET 1999).

Other non-thermal adverse effects such as disorientation of passing birds by RF waves are also of concern. Past studies on effects of communications towers were noted by Beason (1999) during the 1999 Workshop on Avian Mortality at Communication Towers (Evans and Manville 2000). During this workshop, Beason (1999) noted that most research on RF signals produced by communications towers generally have no disorientation effects on migratory birds. However, more research is needed to better understand the effects of RF energy on the avian brain.

Currently, CBP, USFWS, local law enforcement agencies, and the military use 2-way radios as part of their daily operations in the project site. Further, several of these agencies operate and maintain radio repeaters within the ROI.

3.16.1 Alternative 1: Site 1 Alternative

Alternative 1 would install new communications equipment within the project site. As with any RF transmitter, all of these systems would emit RF energy and EM radiation; therefore, a potential for adverse effects could occur. However, any adverse effects on human safety and wildlife would likely be negligible due to the minimal exposure limits associated with both the type of equipment used and the tower site location. The risk of exposure is further minimized because the tower would be less than 199 feet tall. The distance between the antennas (on top of the tower) and human populations would be too great to present a significant exposure risk. Under normal operating conditions, maintenance personnel working near the tower site would not be exposed to any RF energy that exceeds MPE limits set by the FCC. All CBP tower climbers would have RF monitors that would alarm to indicate an unsafe RF environment. Additionally, RF hazard warning signage would be in place on the site.

Though greater research is required to have a better understanding of the effects of RF energy on the avian brain, the potential effects on passing birds are expected to be negligible as well. Any disorientating effect, if experienced, would be temporary and would occur only at distances close to the antennas.

No RF energy levels emitted from the proposed equipment are outside OSHA safety standards.

3.16.2 Alternative 2: Preferred Alternative

Under the Preferred Alternative, the new proposed LRTSHQ site would have the same impacts on the RF environment as described in the section above.

3.16.3 Alternative 3: No Action Alternative

Under the No Action Alternative, the new LRTSHQ would not be constructed. Daily radio operations by CBP and USFWS, and local law enforcement would continue within the ROI. The existing RF emitted would continue to have adverse, negligible impacts on the human or natural environments.

3.17 SOCIOECONOMICS

This socioeconomics section outlines the basic attributes of population and economic activity in Webb County, Texas. The closest town to the proposed Sector Headquarters is Laredo, Texas, which is in Webb County. The location for the proposed LRTSHQ is within the city limits of Laredo, Texas, and some of the new personnel would be expected to live in Laredo. As a result, Webb County is considered the ROI for socioeconomics.

The proposed LRTSHQ would be designed for 350 employees with the potential for future expansion, which is comparable to the number of agents currently working at the existing LRTSHQ. This increase would be designed to accommodate the growth anticipated in Laredo Sector's AOR and shifting illegal immigration patterns from enforcement initiatives further east along the southern border.

Affected Environment

Demographic data, shown in Table 3-9, provide an overview of the socioeconomic environment in the ROI. In 2019, Webb County had an estimated population of 276,652 (U.S. Census Bureau 2019). From 2010 to 2019, the population of Webb County grew at an average annual rate of 1.07 percent. In the same time frame, the population of Texas grew at an average annual rate of 1.55 percent, and the U.S. at a slower rate of 0.68 percent (U.S. Census Bureau 2019).

Table 3-9. Population, Income, Labor Force, and Unemployment

	2019 Population Estimate	Average Annual Growth Rate 2010-2019 (Percent)	Per Capita Income (Dollars) (2019)	Per Capita Income As a Percent of the United States (Percent)	Unemployment Rate (2019) (Percent)
Webb County, Texas	276,652	1.07	18,466	54	3.7
Texas	28,995,881	1.55	31,277	92	3.5
United States	328,239,523	0.68	34,103	100	3.7

Source: U.S. Census Bureau 2019, BLS 2020a, BLS 2020b, BLS 2020c

Per capita income in the ROI is very low compared to Texas and the U.S., with average per capita income in Webb County approximately 54 percent of the U.S. The unemployment rate in Webb County (3.7 percent) is in line with both Texas and the U.S. (U.S. Bureau of Labor Statistics [BLS] 2020a, BLS 2020b, BLS 2020c).

Impacts on socioeconomic conditions would be considered significant if they included displacement or relocation of residences or commercial buildings or increases in long-term demands for public services in excess of existing and projected capacities.

3.17.1 Alternative 1: Site 1 Alternative

The proposed LRTSHQ would be located in a rural area directly off of U.S. 83, within the city limits of Laredo. The proposed LRTSHQ could add agents and their families moving into the area, needing homes, schools, and public services. Those agents and their families would be expected to live in Laredo or the surrounding towns. With an estimated population of 261,639, Laredo is a much larger city than other cities within Webb County and would offer many more options for housing, schools, shopping, and other amenities, leading many agents to choose to live in Laredo, which would be better able to handle the increased demand for housing and public services. With many of the additional agents and their families expected to choose to live in Laredo, increases in the demand for public services in excess of existing and projected capacities would not be expected. A majority of agents that stationed at the new facility will already have been living in Laredo while stationed at the old facility.

Temporary, minor, beneficial impacts in the form of jobs and income for area residents, revenues to local businesses, and sales and use taxes to Webb County, Laredo, and the State of Texas from locally purchased building materials could be realized if construction materials are purchased locally and local construction workers are hired for road construction.

3.17.2 Alternative 2: Preferred Alternative

Under the Preferred Alternative, the proposed LRTSHQ would have the same impacts on the surrounding communities as described above as it is also located in a residential area within the City of Laredo.

3.17.3 Alternative 3: No Action Alternative

Under the No Action Alternative, the proposed LRTSHQ would not be constructed in Webb County, so there would be no direct socioeconomics impacts. The USBP ability to detect and interdict illicit cross-border activity would not be enhanced, so impacts from illegal activity would continue.

3.18 ENVIRONMENTAL JUSTICE AND PROTECTION OF CHILDREN

EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, was issued by President Clinton on February 11, 1994. It was intended to ensure that proposed federal actions do not have disproportionately high and adverse human health and environmental effects on minority and low-income populations and to ensure greater public participation by minority and low-income populations. It required each agency to develop an agency-wide environmental justice strategy. A Presidential Transmittal Memorandum issued with the EO states that "Each federal agency shall analyze the environmental effects, including human health, economic and social effects, of federal actions, including effects on minority communities and low-income communities, when such analysis is required by the NEPA 42 U.S.C. section 4321, et seq."

EO 12898 does not provide guidelines as to how to determine concentrations of minority or low-income populations. However, analysis of demographic data on race, ethnicity, and poverty provides information on minority and low-income populations that could be affected by the proposed actions. The 2010 Census reports numbers of minority individuals and the U.S. Census American Community Survey (ACS) provides the most recent poverty estimates available. Minority populations are those persons who identify themselves as Black, Hispanic, Asian American, American Indian/Alaskan Native, Pacific Islander, or Other. Poverty status is used to define low-income. Poverty is defined as the number of people with income below poverty level, which was $26,200 for a family of four in 2020 (U.S. Department of Health and Human Services [HHS] 2020). A potential disproportionate impact may occur when the percent minority in the study area exceeds 50 percent and/or the percent low-income exceeds 20 percent of the population. Additionally, a disproportionate impact may occur when the percent minority and/or low-income in the study area are meaningfully greater than those in the region. The potential for impacts on the health and safety of children is greater in areas where projects are located near residential areas. U.S. Census data for minority population and poverty rates for the ROI are presented in Table 3-10.

Table 3-10. Minority Population and Poverty Rates for the Region of Interest

	Minority Population (Percent)	All Ages in Poverty (Percent)
Webb County	96.4	20.9
Texas	58.5	13.6
United States	39.6	10.5

Source: U.S. Census Bureau 2019

3.18.1 Alternative 1: Site 1 Alternative

Under Alternative 1, the proposed LRTSHQ would be located in a rural area, with residential structures located nearby. The closest residence to Alternative 1 is located 40 feet north of the eastern boundary of the proposed project location. Mitigation efforts would need to be taken to limit the noise effects on the surrounding community which could include constructing noise barriers, limiting construction hours, and following the BMPs described in Section 4.7.

The additional agents and their families would be expected to live in Laredo or a surrounding town. The Proposed Action would not result in disproportionately high and adverse human health or environmental effects on minority populations and low income populations. There would be no environmental health or safety risks that disproportionately affect children.

3.18.2 Alternative 2: Preferred Alternative

Under the Preferred Alternative, the proposed LRTSHQ would be located in a rural area, with limited residential structures located nearby and would have similar impacts on the surrounding community as described above. With no homes located in the area of the proposed LRTSHQ, the Proposed Action would not result in disproportionately high and adverse human health or environmental effects on minority populations and low income populations. It is located in a primarily undeveloped area within the city limits of Laredo with the closest residential housing located approximately 0.78 mile northeast of the project site.

3.18.3 Alternative 3: No Action Alternative

Under the No Action Alternative, the proposed LRTSHQ would not be constructed. There would be no impacts on people, so there would be no disproportionately high and adverse human health or environmental effects on minority populations and low income populations. There would be no environmental health or safety risks that could disproportionately affect children.

3.19 SUMMARY OF IMPACTS

Table 3-11 is provided to summarize the impacts of the No Action Alternative and two Action Alternatives on each of the elements discussed in this section (Affected Environment and Consequences).

Table 3-11. Summary Matrix of Potential Impacts

Affected Environment	Alternative 1	Alternative 2 (Preferred Alternative)	No Action Alternative
Land Use	Alternative 1 would have long-term, minor impact on land use. Approximately 130 acres of undeveloped land would be converted to a developed land use.	The Preferred Alternative would have long-term, minor impact on land use. Approximately 100 acres of undeveloped land would be converted to a developed land use.	No impacts would occur.
Soils	Alternative 1 would have a permanent negligible effect on soils. Impacts on approximately 130 acres of soil would occur through the conversion of undeveloped land to use as a LRTSHQ. The small size of the project footprint relative to the amount of the same soils throughout the ROI will reduce the effects on the local area.	The Preferred Alternative would have a negligible effect on soils. Impacts on approximately 100 acres of soil would occur through the conversion of undeveloped land to use as the LRTSHQ. The small size of the project footprint relative to the amount of the same soils throughout the ROI will reduce the effects on the local area.	No impacts would occur.
Vegetative Habitat	Alternative 1 would permanently alter approximately 130 acres of native vegetative habitat. The plant community associated with the project site is both locally and regionally common, and the permanent loss of approximately 130 acres of vegetation would not adversely affect the population viability of any plant or animal species in the region. Impacts to vegetation would be permanent and minor.	The Preferred Alternative would permanently alter approximately 100 acres of native vegetative habitat. The plant community associated with the project site is both locally and regionally common, and the permanent loss of approximately 100 acres of vegetation would not adversely affect the population viability of any plant or animal species in the region. Impacts to vegetation would be permanent and minor.	No impacts would occur.
Wildlife Resources	Alternative 1 would have a long term, negligible impact on wildlife resources due to the permanent removal of approximately 130 acres of habitat.	The Preferred Alternative would have a long term, negligible impact on wildlife resources due to the permanent removal of approximately 100 acres of habitat.	No impacts would occur.
Threatened and Endangered Species	Alternative 1 is not likely to adversely affect Federally protected species. No designated Critical Habitat is present within the project footprint.	The Preferred Alternative is not likely to adversely affect to any Federally protected species. No designated Critical Habitat is present within the project footprint.	No impacts would occur.
Groundwater	Alternative 1 would have negligible effect on groundwater resources.	The Preferred Alternative would have negligible effect on groundwater resources.	No impacts would occur.

Affected Environment	Alternative 1	Alternative 2 (Preferred Alternative)	No Action Alternative
Surface Waters and Waters of the U.S.	Surface water quality could be negligibly affected during construction activities as a result of erosion and sedimentation. However, due to the surface waters present at the proposed LRTSHQ and through the use of BMPs these effects would be minimized. Long-term, minor impacts to 2.84 acres of wetlands and 2,214 linear feet of Waters of the U.S. would occur. However, these impacts would be mitigated and permitted prior to any construction activities.	Surface water quality could be negligibly affected during construction activities as a result of erosion and sedimentation. However, due to the surface waters present at the proposed LRTSHQ and through the use of BMPs these effects would be minimized. Long-term, minor impacts to 0.005 acre of wetlands and 1,250 linear feet of Waters of the U.S. would occur. However, these impacts would be mitigated and permitted prior to any construction activities.	No impacts would occur.
Floodplains	Alternative 1 would not increase the risk or impact of floods on human safety, health, and welfare, or adversely impact the beneficial values that floodplains serve.	Permanent, negligible affects to floodplains could result from the Preferred Alternative. The Preferred Alternative has one acre of land within the 100-year floodplain. However, this risk would be mitigated through alterations to the construction design. It would not increase the risk or impact of floods on human safety, health, and welfare, or adversely impact the beneficial values that floodplains serve.	No impacts would occur.
Air Quality	Temporary and minor increases in air pollution would occur from the use of construction equipment (combustion emissions) and the disturbance of soils (fugitive dust) during construction.	Temporary and minor increases in air pollution would occur from the use of construction equipment (combustion emissions) and the disturbance of soils (fugitive dust) during construction.	No impacts would occur.
Noise	Short-term, minor increases in noise would occur during construction at Alternative 1.	Short-term and negligible increases in noise would occur during construction at the Preferred Alternative.	No impacts would occur.
Cultural, Historical, and Archeological Resources	Alternative 1 would have no effect on historically significant properties or resources.	If the extension of site 41WB624 is determined to be eligible for the NRHP, avoidance or mitigation measures would be developed to minimize or eliminate adverse effects historic properties.	No impacts would occur.
Utilities and Infrastructure	Negligible demands on power utilities would be required as a result of Alternative 1. Sewerage and potable water would be built into the site; impacts would be negligible and long-term.	Negligible demands on power utilities would be required as a result of the Preferred Alternative. Sewerage and potable water would be built into the site; impacts would be negligible and long-term.	No impacts would occur.

Affected Environment	Alternative 1	Alternative 2 (Preferred Alternative)	No Action Alternative
Roadways and Traffic	Construction activities would have a temporary, minor impact on roadways and traffic within the region. The increase of vehicular traffic would occur to supply materials and work crews at the project site during construction. A negligible, long-term increase in vehicular traffic would result from daily CBP usage.	Construction activities would have a temporary, minor impact on roadways and traffic within the region. The temporary increase of vehicular traffic would occur to supply materials and work crews at the project site during construction. A negligible, long-term increase in vehicular traffic would result from daily CBP usage.	No impacts would occur.
Hazardous Materials	Alternative 1 would not result in the exposures of the environment or public to any hazardous materials. The potential exists for releases of petroleum, oil, and lubricant during construction activities. BMPs would be implemented to minimize any potential contamination during construction activities. Alternative 1 would have short-term, negligible effects on the environment in regard to hazardous wastes or materials.	The Preferred Alternative would not result in the exposures of the environment or public to any hazardous materials. The potential exists for minor releases of petroleum, oil, and lubricant during construction activities. BMPs would be implemented to minimize any potential contamination during construction activities. Alternative 2 would have short-term, negligible effects on the environment in regard to hazardous wastes or materials.	No impacts would occur.
Radio Frequency Environment	Negligible, long-term impacts from RF energy due to the minimal exposure limits associated with both the type of equipment used and the tower site location.	Negligible, long-term impacts from RF energy due to the minimal exposure limits associated with both the type of equipment used and the tower site location.	No impacts would occur.
Socioeconomics	Alternative 1 would have negligible impacts on local socioeconomics.	The Preferred Alternative would have negligible impacts on local socioeconomics.	No impacts would occur.
Environmental Justice	Alternative 1 would not result in disproportionately high and adverse human health or environmental effects on minority populations and low-income populations. Impacts regarding environmental justice would be negligible.	The Preferred Alternative would not result in disproportionately high and adverse human health or environmental effects on minority populations and low-income populations. Impacts regarding environmental justice would be negligible.	No impacts would occur.

4.0 BEST MANAGEMENT PRACTICES

This chapter describes those measures that will be implemented to reduce or eliminate potential adverse impacts on the human and natural environments. Many of these measures have been incorporated as standard operating procedures by CBP on past projects. BMPs will be presented for each resource category that would be potentially affected. It should be emphasized that these are general BMPs and the development of specific BMPs will be required for certain activities implemented under the Action Alternatives. The proposed BMPs will be coordinated through the appropriate agencies and land managers/administrators, as required.

It is federal policy to reduce adverse impacts through the sequence of avoidance, minimization, and, finally, compensation. Compensation varies and includes activities such as restoration of habitat in other areas, acquisition of lands, etc., and is typically coordinated with the appropriate federal and state resource agencies.

4.1 GENERAL PROJECT PLANNING CONSIDERATIONS

1. If required, night-vision-friendly strobe lights necessary for CBP operational needs will use the minimum wattage and number of flashes per minute necessary to ensure operational safety.

2. Avoid contamination of ground and surface waters by storing concrete wash water, and any water that has been contaminated with construction materials, oils, equipment residue, etc., in closed containers on-site until removed for disposal. This wash water is toxic to wildlife. Storage tanks must have proper air space (to avoid rainfall-induced overtopping), be on-ground containers, and be located in upland areas instead of washes.

3. Avoid lighting impacts during the night by conducting construction and maintenance activities during daylight hours only. If night lighting is unavoidable, 1) use special bulbs designed to ensure no increase in ambient light conditions, 2) minimize the number of lights used, 3) place lights on poles pointed down toward the ground, with shields on lights to prevent light from going up into sky, or out laterally into landscape, and 4) selectively place lights so they are directed away from all native vegetative communities.

4. CBP will avoid the spread of non-native plants by not using natural materials (e.g., straw) for on-site erosion control. If natural materials must be used, the natural material would be certified weed and weed-seed free. Herbicides not toxic to listed species that may be in the area can be used for non-native vegetation control. Application of herbicides will follow federal guidelines and can be used according to in accordance with label directions.

5. CBP will ensure that all construction will follow DHS *Directive 025-01* for Sustainable Practices for Environmental, Energy, and Transportation Management.

6. CBP will place drip pans under parked equipment and establish containment zones when refueling vehicles or equipment.

4.2 SOILS

1. Clearly demarcate the perimeter of all new areas to be disturbed using flagging or temporary construction fencing. Do not allow any disturbance outside that perimeter.

2. The area of disturbance will be minimized by limiting deliveries of materials and equipment to only those needed for effective project implementation.

3. Within the designated disturbance area, grading or topsoil removal will be limited to areas where this activity is needed to provide the ground conditions necessary for construction or maintenance activities.

4. Rehabilitation will include revegetating or the distribution of organic and geological materials (i.e., boulders and rocks) over the disturbed area to reduce erosion while allowing the area to naturally vegetate.

4.3 BIOLOGICAL RESOURCES

1. Materials used for on-site erosion control will be free of non-native plant seeds and other plant parts to limit potential for infestation.

2. Identify by its source location any fill material, sandbags, hay bales, and mulch brought in from outside the project site. These materials will be free of non-native plant seeds and other plant parts to limit potential for infestation.

3. Native weed free seeds or plants will be used to revegetate temporarily disturbed areas.

4. Obtain materials such as gravel, topsoil, or fill from existing developed or previously used sources that are compatible with the project site and are from legally permitted sites. Do not use materials from undisturbed areas adjacent to the project site.

5. To prevent entrapment of wildlife species, ensure that excavated, steep-walled holes or trenches are either completely covered by plywood or metal caps at the close of each workday or provided with one or more escape ramps (at no greater than 1,000-foot intervals and sloped less than 45 degrees) constructed of earthen fill or wooden planks.

6. Each morning, before the start of construction or maintenance activities and before such holes or trenches are filled, ensure that they are thoroughly inspected for trapped animals. Ensure that any animals discovered are allowed to escape voluntarily (by escape ramps or temporary structures), without harassment, and before construction activities resume, or are removed from the trench or hole by a qualified person and allowed to escape unimpeded.

7. The MBTA (16 U.S.C. 703-712, [1918, as amended 1936, 1960, 1968, 1969, 1974, 1978, 1986 and 1989]) requires that federal agencies coordinate with the USFWS if a construction activity would result in the take of a migratory bird. If construction or

clearing activities are scheduled during nesting season (March 15 through September 15) within potential nesting habitats, surveys will be performed to identify active nests. If construction activities will result in the take of a migratory bird, then coordination with the USFWS and TPWD will be required and applicable permits would be obtained prior to construction or clearing activities. Other mitigation measures that would be considered are to install visual markers on any guy wires used, and to schedule all construction activities outside nesting season, negating the requirement for nesting bird surveys. The proposed tower would also comply with USFWS guidelines for reducing fatal bird strikes on communications towers (USFWS 2021), to the greatest extent practicable.

8. If an active nest is found, a buffer zone will be established around the nest and no activities will occur within that zone until nestlings have fledged and abandoned the nest.

9. If construction is scheduled during the migratory bird nesting season, steps will be taken to prevent migratory birds from establishing nests in the potential impact area. These steps could include covering equipment and structures, and use of various excluders (e.g., noise) if necessary.

10. Anti-perching devices will be incorporated into the site design and installed on the tower.

11. CBP will not, for any length of time, permit any pets inside the project area or adjacent native habitats. This BMP does not pertain to law enforcement animals.

12. Construction workers will check under equipment before each use for the presence of Texas tortoise. If a Texas tortoise is found, the tortoise will be allowed to leave the project area on its own, or a qualified biologist can remove the tortoise from the project area and relocate it to suitable adjacent habitat.

4.4 CULTURAL RESOURCES

1. In the event that unanticipated archeological resources are discovered during construction or any other project-related activities, the project proponent or contractor shall immediately halt all activities in the area of the discovery and within 24 hours notify the Energy and Environmental Management Division (EEMD) of such a discovery. Work at that specific isolated area where the discovery occurred cannot resume until the appropriate historic preservation official has made a determination. Work may continue in areas outside of the area of discovery, where no cultural materials are present.

2. In the event that human remains are inadvertently discovered all ground-disturbing activity would cease immediately. The Project Manager would immediately notify CBP and EEMD. CBP would notify state police within 24 hours of the discovery and follow their directions for securing the site pending examination of a medical examiner/coroner. Law enforcement and the coroner would determine whether or not the discovery constitutes a crime scene. CBP would coordinate with the state police and the coroner regarding when construction activities can resume. No work may proceed without the

written authorization of CBP. CBP would notify the Advisory Council on Historic Preservation, the appropriate SHPO or Tribal Historic Preservation Officer, any affected Native American Tribe, and any affected federal agency of the discovery in writing within two business days. NAGPRA would be followed if the discovery is determined to be of Native American origin. The CBP established standard operating procedures for inadvertent discoveries would be adhered to in all cases.

4.5 AIR QUALITY

1. Soil watering will be utilized to minimize airborne particulate matter created during construction activities. Bare ground may be covered with hay or straw to lessen wind erosion during the time between LRTSHQ construction and the revegetation of temporary impact areas with a mixture of native plant seeds or nursery plantings (or both). All construction equipment and vehicles will be kept in good operating condition to minimize exhaust emissions.

4.6 WATER RESOURCES

1. Wastewater is to be stored in closed containers on-site until removed for disposal. Wastewater is water used for project purposes that is contaminated with construction materials or from cleaning equipment and thus carries oils or other toxic materials or other contaminants as defined by federal or state regulations.
2. Avoid contamination of ground and surface waters by collecting concrete wash water in open containers and disposing of it off-site.

3. Avoid contaminating natural aquatic and wetland systems with runoff by limiting all equipment maintenance, staging, and laydown and dispensing hazardous liquids, such as fuel and oil, to designated upland areas.

4. Cease work during heavy rains and do not resume work until conditions are suitable for the movement of equipment and materials.

5. Erosion control measures and appropriate BMPs, as required and promulgated through a site-specific SWPPP and engineering designs, will be implemented before, during, and after soil-disturbing activities.

6. Areas with highly erodible soils will be given special consideration when preparing the SWPPP to ensure incorporation of various erosion control techniques, such as straw bales, silt fencing, aggregate materials, wetting compounds, and rehabilitation, where possible, to decrease erosion.

7. All construction and maintenance contractors and personnel will review the CBP-approved spill protection plan and implement it during construction and maintenance activities.

8. Wastewater from pressure washing must be collected. A ground pit or sump can be used to collect the wastewater. Wastewater from pressure washing must not be discharged into any surface water.

9. If soaps or detergents are used, the wastewater and solids must be pumped or cleaned out and disposed of in an approved facility. If no soaps or detergents are used, the wastewater must first be filtered or screened to remove solids before being allowed to flow off-site. Detergents and cleaning solutions must not be sprayed over or discharged into surface waters.

4.7 NOISE

1. Avoid noise impacts during the night by conducting construction and maintenance activities during daylight hours only.

2. All OSHA requirements will be followed. To lessen noise impacts on the local wildlife communities, construction will only occur during daylight hours. All motor vehicles will be properly maintained to reduce the potential for vehicle-related noise.

4.8 SOLID AND HAZARDOUS WASTES

1. BMPs will be implemented as standard operating procedures during all construction activities, and will include proper handling, storage, and/or disposal of hazardous and/or regulated materials. To minimize potential impacts from hazardous and regulated materials, all fuels, waste oils, and solvents will be collected and stored in tanks or drums within a secondary containment system that consists of an impervious floor and bermed sidewalls capable of containing the volume of the largest container stored therein. The refueling of machinery will be completed in accordance with accepted industry and regulatory guidelines, and all vehicles will have drip pans during storage to contain minor spills and drips. Although it is unlikely that a major spill would occur, any spill of reportable quantities will be contained immediately within an earthen dike, and the application of an absorbent (e.g., granular, pillow, sock) will be used to absorb and contain the spill.

2. CBP will contain non-hazardous waste materials and other discarded materials, such as construction waste, until removed from the construction and maintenance sites. This will assist in keeping the project site and surroundings free of litter and reduce the amount of disturbed area needed for waste storage.

3. CBP will minimize site disturbance and avoid attracting predators by promptly removing waste materials, wrappers, and debris from the site. Any waste that must remain more than 12 hours should be properly stored until disposal.

4. All waste oil and solvents will be recycled. All non-recyclable hazardous and regulated wastes will be collected, characterized, labeled, stored, transported, and disposed of in accordance with all applicable federal, state, and local regulations, including proper waste manifesting procedures.

5. Solid waste receptacles will be maintained at the project site. Non-hazardous solid waste (trash and waste construction materials) will be collected and deposited in on-site receptacles. Solid waste will be collected and disposed of by a local waste disposal contractor.

6. Disposal of used batteries or other small quantities of hazardous waste will be handled, managed, maintained, stored, and disposed of in accordance with applicable federal and state rules and regulations for the management, storage, and disposal of hazardous materials, hazardous waste and universal waste. Additionally, to the extent practicable, all batteries will be recycled locally.

7. All rainwater collected in secondary containment will be pumped out, and secondary containment will have netting to minimize exposure to wildlife.

8. A properly licensed and certified hazardous waste disposal contractor will be used for hazardous waste disposal, and manifests will be traced to final destinations to ensure proper disposal is accomplished.

4.9 ROADWAYS AND TRAFFIC

1. Construction vehicles and equipment will be transported on established roads with proper flagging and safety precautions.

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6.0 ACRONYMS/ABBREVIATIONS

ACS	U.S. Census American Community Survey
AADT	Annual average daily traffic
ANSI	American National Standards Institute
AOR	Area of Responsibility
APE	Area of Potential Effect
ARPA	Archeological Resources Protection Act
ASTM	American Society for Testing and Materials
BMP	Best management practices
CBP	U.S. Customs and Border Protection
CBV	cross-border violator
CEQ	Council on Environmental Quality
CFC	chlorofluorocarbons
CFR	Code of Federal Regulations
CH_4	methane
CMBGS	centimeters below ground surface
CO_2	Carbon dioxide
CWA	Clean Water Act
dBA	A-weighted decibel
DHS	Department of Homeland Security
DNL	Day-night average sound level
DOI	U.S. Department of the Interior
EA	Environmental Assessment
EIS	Environmental Impact Statement
EO	Executive Order
ESA	Endangered Species Act
FCC	Federal Communications Commission
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FONSI	Finding of No Significant Impact
GOV	Government Owned Vehicle
GHG	Greenhouse Gases
GSA	General Services Administration
HFC	hydrochlorofluorocarbons
IEEE	Institute of Electrical and Electronics Engineers
LRT	Laredo Sector
MBTA	Migratory Bird Treaty Act
MPE	Maximum Permissible Exposure
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
NCRP	National Council on Radiation Protection and Measurements
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NOA	Notice of Availability

NPS	National Park Service
NRHP	National Register of Historic Places
OET	Office of Engineering and Technology
OSHA	Occupational Safety and Health Administration
RF	radio frequency
ROI	region of influence
SHPO	State Historic Preservation Officer
SPCCP	Spill Prevention, Control and Countermeasure Plan
SWPPP	Stormwater Pollution Prevention Plan
TCEQ	Texas Commission on Environmental Quality
TCP	Traditional Cultural Property
THC	Texas Historical Commission
TPWD	Texas Parks and Wildlife Department
TWDB	Texas Water Development Board
TxDOT	Texas Department of Transportation
USACE	U.S. Army Corps of Engineers
USBP	U.S. Border Patrol
U.S.C.	United States Code
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USNVC	U.S. National Vegetation Classification
WWTP	Waste Water Treatment Plant

APPENDIX A
CORRESPONDENCE AND COORDINATION

DISTRIBUTION LIST FOR THE COORDINATION LETTERS FOR THE PROPOSED NEW LAREDO SECTOR HEADQUARTERS, LAREDO TEXAS, U.S. CUSTOMS AND BORDER PROTECTION, U.S. BORDER PATROL

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Mark Havens
Deputy Land Commissioner
Texas General Land Office
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Honorable Tano Tijerina
Webb County Judge
1000 Houston St., 3rd Floor
Laredo, TX 78040

Mayor Pete Saenz
City of Laredo
1110 Houston Street
Laredo, Texas 78040
jollervide@ci.laredo.tx.us (Jose Ollervides- Assistant to the Mayor)

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Tribal Historic Preservation Officer
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Bobby Komardley
Chairman
Apache Tribe of Oklahoma
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bkomardley@outlook.com

Robin Williams
Tribal Historic Preservation Officer
Wichita and Affiliated Tribes
P.O. Box 729
Anadarko, OK 73005
THPO@wichitatribe.com

1300 Pennsylvania Avenue NW
Washington, DC 20229

U.S. Customs and Border Protection

November 8, 2021

David Gray
Acting Regional Administrator
U.S. Environmental Protection Agency, Region 6
1201 Elm Street Dallas, TX 75270
Submitted via email to: gray.david@epa.gov

RE: ***Proposed New Laredo Sector Headquarters, Laredo, Texas, U.S. Customs and Border Protection, U.S. Border Patrol***

Dear Mr. Gray:

United States (U.S.) Customs and Border Protection (CBP) is preparing an Environmental Assessment (EA) to address the potential effects, beneficial and adverse, resulting from the proposed construction and operation of a new U.S. Border Patrol (USBP) Sector Headquarters in Laredo, Texas (LRTSHQ). Currently, the LRTSHQ's lack of space is a safety hazard and has a substantial impact on USBP's operational effectiveness. The purpose of the proposed new LRTSHQ would be to accommodate existing staff plus allow enforcement flexibility up to 200 agents, reduce overcrowding, and provide adequate equipment storage facilities, ample vehicle parking spaces and a safe working environment for station personnel, detainees, and visitors.

CBP is analyzing two location alternatives for the proposed LRTSHQ facility in Laredo, Texas. The proposed location alternatives are undeveloped parcels that are owned by private landowners (see Enclosure 1). Site 1 is a 130-acre parcel of land located along Highway 83 South and Site 2 is a 100-acre parcel along the Highway 20 loop (see Enclosure 2). Both of the proposed locations are primarily composed of undeveloped Tamaulipan shrubland and disturbed grasslands.

The proposed new LRTSHQ would accommodate up to 200 agents. The LRTSHQ would consist of an approximately 87,000 square feet (sq. ft.) main administrative building and additional support space. The support space would include a 32,000 sq. ft. training building, a 74,000 sq. ft. maintenance building and warehouse composed of a 20-bay vehicle maintenance facility, a 10,000 sq. ft. forensic lab building, a canine facility with 20 kennels, an equestrian facility for 16 horses, a heliport, a communication tower, an on-site fuel island (diesel and unleaded), an emergency generator, a 1-bay vehicle wash facility, an impound lot, and 22,300 sq. ft. of enclosed parking to accommodate 771 vehicles.

CBP is gathering data and input from state and local governmental agencies, departments, and bureaus that may be affected by, or that would otherwise have an interest in, this proposed action. Since your agency or organization may have particular knowledge and expertise regarding potential environmental impacts from CBP's proposed action, your input is sought regarding the likely or anticipated environmental effects of this proposed action. Your response

should include any state and local restrictions, permitting or other requirements with which CBP would have to comply during project siting, construction, and operation.

CBP will provide a copy of the Draft EA for review and comment when the Draft EA is available.

Your prompt attention to this request is appreciated. If you have any questions, please contact Mr. John Petrilla at (949) 643-6385 or via email at BPAMNEPA@cbp.dhs.gov and reference "*Proposed New Laredo Sector HQ"* in the subject line. Thank you in advance for your assistance.

Sincerely,

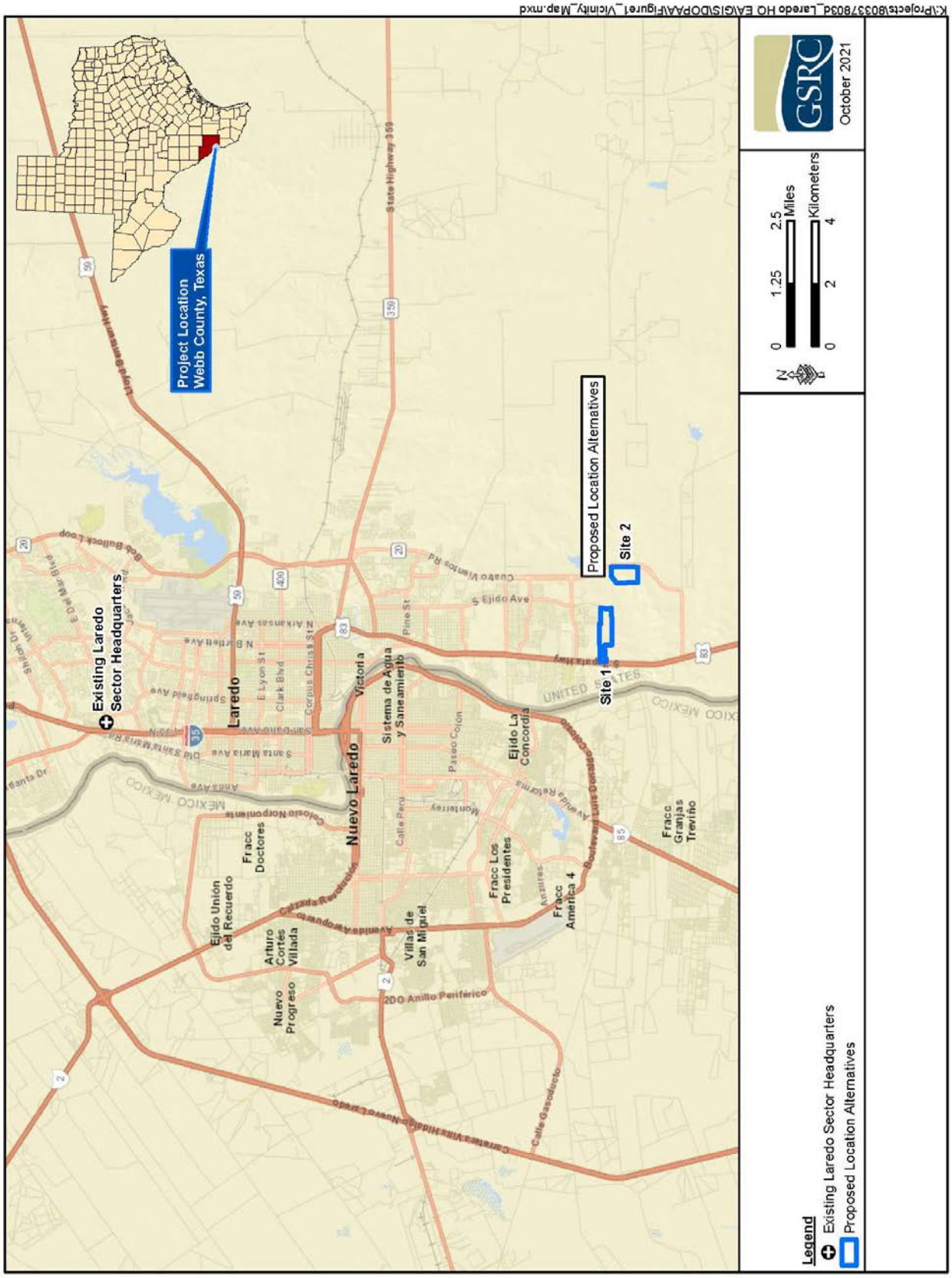
JOHN P PETRILLA

Digitally signed by JOHN P PETRILLA
Date: 2021.11.08 16:42:36 -08'00'

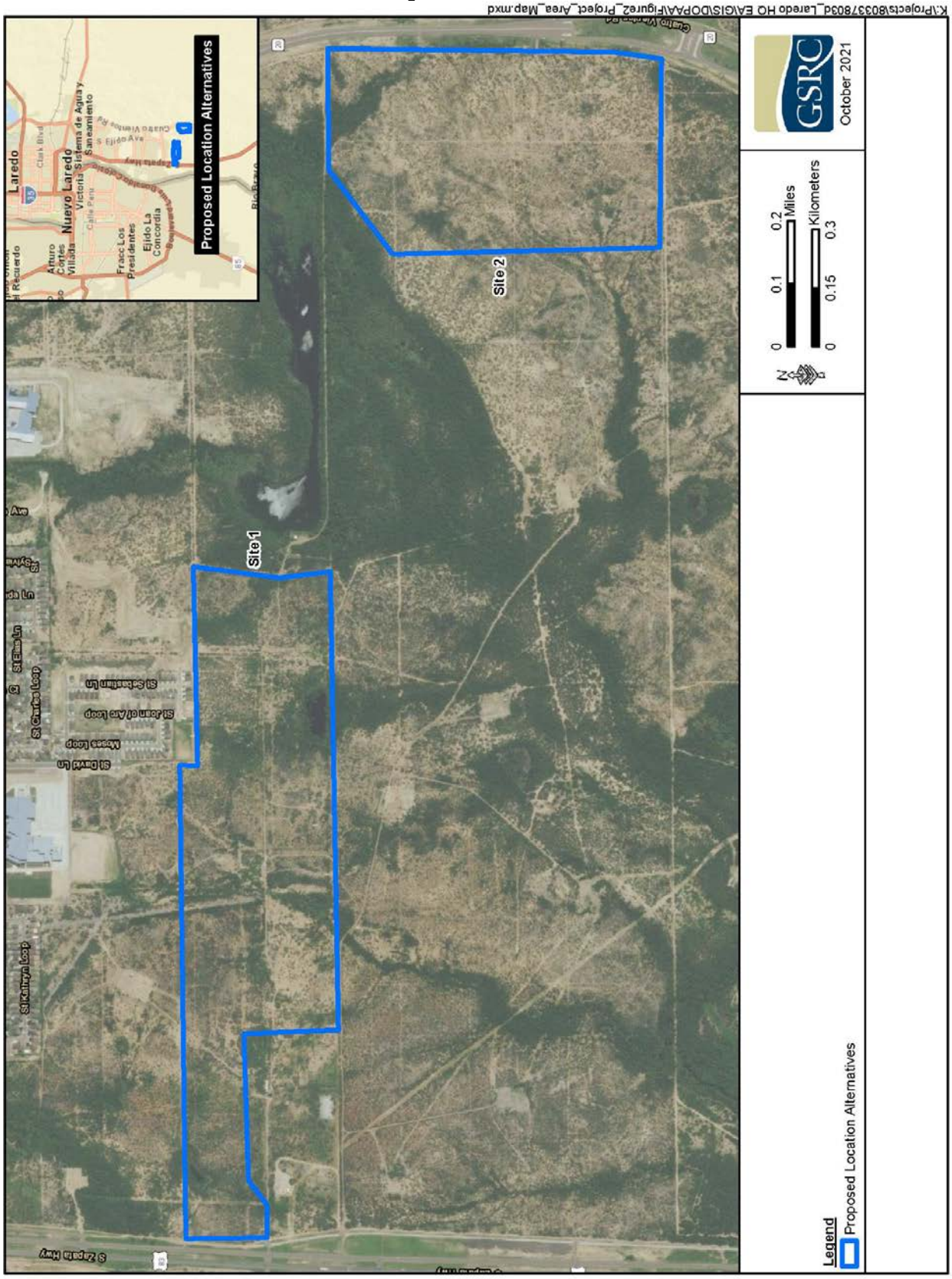
John Petrilla
Acting Environmental Branch Chief
Border Patrol & Air and Marine PMO
U.S. Customs and Border Protection

Enclosure(s)

Enclosure 1. Vicinity Map



Enclosure 2: Location Alternatives Map



DISTRIBUTION LIST FOR THE TRIBAL CONSULTATION LETTERS FOR THE CULTURAL RESOURCES SURVEY OF TWO PARCELS TOTALING 230 ACRES FOR THE PROPOSED LAREDO SECTOR HEADQUARTERS, U.S. CUSTOMS AND BORDER PROTECTION, WEBB COUNTY, TEXAS

Chairman Bobby Komardley
Apache Tribe of Oklahoma
PO Box 1330
Anadarko, OK 73005

Chairman William Nelson
Comanche Nation, Oklahoma
PO Box 908
Lawton, OK 73502

President Russell Martin
Tonkawa Tribe of Indians of Oklahoma
1 Rush Buffalo Road
Tonkawa, OK 74653

President Eddie Martinez
Mescalero Apache Tribe of the Mescalero Reservation, New Mexico
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Mescalero, NM 88340-0227

President Terri Parton
Wichita and Affiliated Tribes (Wichita, Keechi, Waco & Tawakonie), Oklahoma
PO Box 729
Anadarko, OK 73005

1300 Pennsylvania Avenue NW
Washington, DC 20229

U.S. Customs and Border Protection

April 4, 2022

Chairman Bobby Komardley
Apache Tribe of Oklahoma
PO Box 1330
Anadarko, OK 73005

Subject: Tribal Consultation on the Cultural Resources Survey of Two Parcels Totaling 230 Acres for the Proposed Laredo Sector Headquarters, U.S. Customs and Border Protection, Webb County, Texas

Dear Chairman Komardley:

Pursuant to Section 106 of the National Historic Preservation Act (NHPA) (54 U.S.C. 306108) and its implementing regulations, 36 Code of Federal Regulations (CFR) Part 800, the U.S. Customs and Border Protection (CBP) is transmitting this letter and enclosures to initiate consultation and identify historic properties for the above referenced project. CBP is proposing the construction, operation, and maintenance of a new Laredo Sector Headquarters (LRTSHQ) in the City of Laredo, Webb County, Texas.

Description of the Undertaking:

The proposed LRTSHQ would accommodate up to 350 personnel to meet current and future increased labor demands and the objectives of U.S. Border Patrol (USBP) IN THE Laredo Sector's Area of Responsibility (AOR). Additionally, the site would have the capability to house the vehicles, animals, equipment, and other materials necessary to meet CBP mission requirements. The proposed LRTSHQ design and construction would result in the LRTSHQ meeting USBP facilities guidelines and security standards.

Determination and Documentation of the Area of Potential Effect:

Construction of the new LRTSHQ in the City of Laredo, Webb County, Texas would take place on one of two alternative parcels of land. Two locations, Site 1 and Site 2, are proposed for the construction, operation, and maintenance were surveyed within Webb County. The Site 1 alternative is a 130-acre parcel of land at the southern end of Laredo off of Highway 83. The Site 2 alternative is a 100-acre parcel of land, which is located at the southern end of Laredo with frontage along Loop 20. Both parcels of land are owned by private entities. An intensive archeological pedestrian survey supplemented with the excavation of shovel test pits (STPs) was conducted across the APEs on both parcels. This investigation constitutes CBP's good faith effort to take into account any adverse effects that may occur as a result of the proposed undertaking in compliance with Section 106 of the NHPA (Public Law 89-665; 54 U.S.C. 300101 et seq).

We would like to invite you to be a consulting party in this review to help identify historic properties in the project area that may have religious and cultural significance to your tribe, and if such properties exist, to help assess how the project might affect them. If the project might have an adverse effect, we would like to discuss possible ways to avoid, minimize or mitigate potential adverse effects.

Identification and Evaluation of Historic Properties:

Prior to initiation of fieldwork, an archival records check was performed using the *Texas Archeological Sites Atlas* maintained by the Texas Historical Commission (THC). All previously conducted archeological investigations, archeological sites, National Register of Historic Places (NRHP)-listed properties, Recorded Texas Historic Landmarks (RTHLs), Official Texas Historical Markers (OTHMs), and Historic Texas Cemeteries (HTCs) within a 1-mile search radius were reviewed. This information was used to identify any resources that may be affected by the proposed project. In addition, the information also provided insight into the types of resources that may be encountered during the surveys. Twelve archeological investigations were on record with the *Texas Archeological Sites Atlas* within a 1.61-kilometer (km) (1-mile) radius of the two proposed survey areas. The predominance of this research has been contracted survey work focused on compliance with Section 106 of the NHPA. Eight of the 12 investigations overlap with the current survey areas. Six of those are associated with a single roadway project. These investigations include Atlas numbers 8400001489, 8400008520, 8400009606, 8500011453, 8500011871, 8500013508, 8500014152, and 8500017233. There are 14 previously recorded archeological sites and one historical cemetery located within a 1.61-km (1-mile) radius of the two proposed survey areas. No NRHP-listed properties or districts, OTHMs, or RTHLs, are located within the 1-mile search radius of the APE. One of the archeological sites, 41WB624, is shown as overlapping with the Site 2 APE. Site 41WB624 was relocated during the current survey and an extension of the site was recorded across the Site 2 APE.

The investigation of the Site 1 alternative included a pedestrian survey utilizing transects spaced 30 meters (100 feet) apart and the excavation of 73 shovel test pits (STPs) across the APE. Four (T17-1 to T17-4) of the 73 transect STPs excavated within Site 1 APE were positive for cultural material. This resulted in the recording of six new archeological sites (16WB945, 16WB946, 16WB947, 16WB948, 16WB949, and 16WB950), and one isolated occurrence (IO) within the Site 1 APE. None of the of the newly recorded archeological sites or IO that were recorded within the Site 1 Alternative are recommended eligible for the NRHP under any criteria.

The investigation of the Site 2 alternative included a pedestrian survey utilizing transects spaced 30 meters (100 feet) apart and the excavation of 67 STPs across the Site 2 APE, respectively. Six (T21-6, T22-5, T24-3, T24-4, T24-5, and T24-6) of the 67 transect STPs excavated within the Site 2 APE were positive for cultural material. This resulted in the expansion and updating of one archeological site (41WB624) within the Site 2 APE. The eligibility of the extension of site 41WB624 that was recorded across the Site 2 APE could not be determined from the data collected during the intensive archeological survey. The extension of site 16WB624 is recommended for additional archeological investigations to determine its eligibility for the

NRHP. Until the additional archeological investigations can be conducted and the eligibility of the site extension of 16WB624 can be determined, it is recommended that the site be considered to have an undetermined eligibility for the NRHP. It is recommended that the extension of site 41WB624 within the Site 2 APE should be treated as if it was eligible for the NRHP and be avoided by construction and other ground disturbing activities until the additional archeological investigations can be conducted and the site's eligibility for the NRHP is determined.

Determination of Effects on Historic Properties:

Site 1
Based on the results of the archeological survey, it is anticipated that the proposed project will have no effect on historic properties pursuant to Section 800.4(d)(1) from the development of the Site 1 alternative. As a result, no further work is recommended for that alternative. Copies of the cultural resources technical report for your review are available on request.

Site 2
Based on the results of the current investigation, CBP has determined that a potentially significant extension of the previously recorded archeological site 41WB624 would be impacted by the development of the Site 2 alternative. Site 2 is recommended for avoidance for construction activities until additional archeological investigations can be conducted and the eligibility of the extension of site 41WB624 can be determined. If the extension of site 41WB624 is determined to be eligible for the NRHP, additional mitigation measures would need to be developed to address the adverse effects to that potential historic property if the Site 2 APE is chosen for development.

In accordance with Section 106 of the National Historic Preservation Act, CBP has also notified the State Historic Preservation Officer of its determination as well as other tribal governments of its determination. In accordance with Section 106 of the NHPA, CBP notified the following tribal governments of its determination.

- Apache Tribe of Oklahoma
- Mescalero Apache Tribe of the Mescalero Reservation, New Mexico
- Tonkawa Tribe of Indians of Oklahoma
- Comanche Nation, Oklahoma
- Wichita and Affiliated Tribes (Wichita, Keechi, Waco & Tawakonie), Oklahoma

Your prompt attention to the request is greatly appreciated. If CBP has not received a response from your office within 30 days of your receipt of this determination letter, CBP will consider its responsibilities under Section 106 to have been fulfilled.

If you have any questions, please contact me at (949) 643-6385 or via email at BPAMNEPA@cbp.dhs.gov and reference "*Proposed Laredo Sector HQ Border Patrol Station* in the subject line. Thank you in advance for your assistance.

Sincerely,

JOHN P PETRILLA
Digitally signed by JOHN P PETRILLA
Date: 2022.04.04 15:45:10 -07'00'

John Petrilla
Acting Environmental Branch Chief
Border Patrol & Air and Marine PMO
U.S. Customs and Border Protection

Enclosures: Draft Report:
Cultural Resources Survey of Two Parcels Totaling 230 Acres for the Proposed Laredo Sector Headquarters, U.S. Customs and Border Protection, Webb County, Texas

Commenter	Location	Comment	Response
THC	Page 47	It would be helpful if the original positive shovel tests were indicated on Figure 19.	Placed the original positive STPs on the map in red for both Figures 19 and 25 so they are more visible. See pages 47 and 88.
THC	Page 88	Caption for Figure 25 has incorrect site number.	Figure 25 confirmed to have the correct site number 41WB950. See page 88.
THC	General	Although features were not recorded at most of these sites, please mention whether or not any burned rock was observed outside of feature contexts.	Added statements about the presence of thermally altered rock outside of the features contexts of 41WB624 and the absence of thermally altered rock at the other newly recorded sites. See pages 62, 66, 75, 80, 85, and 91.
THC	General	Please confirm that a site revisit form has been submitted for 41WB624.	A site revisit form was submitted for 41WB624. Added a statement to the methodology that specific states that new site forms were completed for the newly recorded sites and a site revisit form was completed for the previously recorded site 41WB624. See page 24.

John Lindemuth

From: noreply@thc.state.tx.us
Sent: Thursday, December 30, 2021 10:07 AM
To: John Lindemuth; reviews@thc.state.tx.us
Subject: Section 106 Submission

Re: Project Review under Section 106 of the National Historic Preservation Act
THC Tracking #202204060
Date: 12/30/2021
New Laredo Sector Headquarters
U.S. Highway 83, Loop 20
Laredo, TX

Description: Archaeological survey of two alternative parcels totaling 230 acres for a new proposed Laredo Sector Headquarters

Dear johnl@gsrcorp.com:

Thank you for your submittal regarding the above-referenced project. This response represents the comments of the State Historic Preservation Officer, the Executive Director of the Texas Historical Commission (THC), pursuant to review under Section 106 of the National Historic Preservation Act.

The review staff, led by Tiffany Osburn and Caitlin Brashear, has completed its review and has made the following determinations based on the information submitted for review:

Archeology Comments

- THC/SHPO concurs with information provided.
- This draft report is acceptable. Please submit a final report: one restricted version with any site location information (if applicable), and one public version with all site location information redacted. To facilitate review and make project information and final reports available through the Texas Archeological Sites Atlas, we appreciate submitting abstracts online at https://xapps.thc.state.tx.us/106Review/Abstract/Create and emailing survey area shapefiles to archeological_projects@thc.texas.gov if this has not already occurred. Please note that these steps are required for projects conducted under a Texas Antiquities Permit.

We have the following comments: Appreciate the detailed reporting of the desktop background review of site conditions and previously recorded site information as well as the detailed and rigorous survey and reporting work conducted. We concur that site 41WB624 would require additional investigation to confirm it's eligibility for listing on the National Register and, therefore, remains undetermined. 41WB624 must either be avoided by all project impacts or additional testing must be undertaken. Sites 41WB945, 41WB948, and 41WB949 are considered ineligible

and no further work is required. Site 41WB946, 41WB947, and 41WB950 are considered ineligible only within the current APE, the uninvestigated portions of these sites remain undetermined. Although several of these sites contained surface components with diagnostic material, it appears that their data potential has been exhausted by this survey and site recording effort. Minor comments to be addressed during final report production: It would be helpful if the original positive shovel tests were indicated on Figure 19. Caption for Figure 25 has incorrect site number. In addition, although features were not recorded at most of these sites, please mention whether or not any burned rock was observed outside of feature contexts. Please confirm that a site revisit form has been submitted for 41WB624.

We look forward to further consultation with your office and hope to maintain a partnership that will foster effective historic preservation. Thank you for your cooperation in this review process, and for your efforts to preserve the irreplaceable heritage of Texas. If the project changes, or if new historic properties are found, please contact the review staff. If you have any questions concerning our review or if we can be of further assistance, please email the following reviewers: tiffany.osburn@thc.texas.gov, caitlin.brashear@thc.texas.gov.

This response has been sent through the electronic THC review and compliance system (eTRAC). Submitting your project via eTRAC eliminates mailing delays and allows you to check the status of the review, receive an electronic response, and generate reports on your submissions. For more information, visit http://thc.texas.gov/etrac-system.

Sincerely,

for Mark Wolfe, State Historic Preservation Officer Executive Director, Texas Historical Commission

Please do not respond to this email.

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Arch "Beaver" Aplin, III
Chairman
Lake Jackson

Dick Scott
Vice-Chairman
Wimberley

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Oliver J. Bell
Cleveland

Paul L. Foster
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Anna B. Galo
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Jeffery D. Hildebrand
Houston

Robert L. "Bobby" Patton, Jr.
Fort Worth

Travis B. "Blake" Rowling
Dallas

Lee M. Bass
Chairman-Emeritus
Fort Worth

T. Dan Friedkin
Chairman-Emeritus
Houston

Carter P. Smith
Executive Director

December 13, 2021

John Petrilla
Acting Environmental Branch Chief
U.S. Customs and Border Protection
1300 Pennsylvania Avenue NW
Washington, DC 20229

RE: Proposed Construction and Operation of a new U.S. Border Patrol Sector Headquarters, Laredo, Webb County, Texas.

Dear Mr. Petrilla:

This letter is in response to your request for information to assist the U.S. Customs and Border Protection (CBP) prepare a Draft Environmental Assessment (EA) for the proposed project referenced above.

Project Description

The CBP proposes to construct and operate a new U.S. Border Patrol (USBP) Sector Headquarters in Laredo, Texas (LRTSHQ) to facilitate safety and operational effectiveness of the agency. The proposed LRTSHQ would be constructed on one of two alternative locations located south of Laredo, Webb County, Texas. The two alternative sites include a 130-acre site located along U.S. Highway 83 (US) and a 100-acre parcel along US 20-Loop.

In order to accommodate up to 200 agents, the new LRTSHQ would consist of an approximately 87,000 square foot (SF) administrative building, a 32,000 SF training building, 74,000 SF maintenance building and warehouses composed of a 20-bay vehicle maintenance facility, a 10,000 SF forensic lab, a canine facility with 20 kennels, an equestrian facility for 16 horses, a heliport, a communication tower, an on-site fuel island, an emergency generator, a one-bay vehicle wash facility, an impound lot, and 22,300 SF of enclosed parking to accommodate 771 vehicles.

You have requested information regarding potential environmental impacts that may occur as a result of CBP's Proposed Action. As the state agency with primary responsibility for protecting the state's fish and wildlife resources and in accordance with the authority granted by Parks and Wildlife Code §12.0011, Texas Parks and Wildlife Department (TPWD) provides the following recommendations and informational comments to minimize potential adverse impacts to the state's fish and wildlife resources, including rare, threatened, and endangered species in the construction and operation of the proposed project. TPWD's comments are intended to assist in your planning efforts and to minimize effects of this project on fish and wildlife resources.

General Construction Recommendations

TPWD provides the following general construction recommendations to assist in project planning.

Recommendation: In general, TPWD recommends the judicious use and placement of sediment control fence to exclude wildlife from areas to be disturbed, particularly areas that would be trenched or excavated (e.g., for building foundations, installation of utilities, etc.). In many cases, sediment control fence placement for the purposes of controlling erosion and protecting water quality can be modified minimally to also provide the benefit of excluding wildlife access to construction areas. The exclusion fence should be buried at least six inches and be at least 24 inches high. The exclusion fence should be maintained for the life of the project and only removed after the construction is completed and the disturbed sites have been revegetated, if applicable.

Construction personnel should be encouraged to examine the inside of the exclusion area daily to determine if any wildlife species have been trapped inside the area of impact and provide safe egress opportunities prior to initiation of construction activities. TPWD recommends that any open trenches or excavation areas be covered overnight and/or inspected every morning to ensure no wildlife species have been trapped in trenches. For open trenches and excavated areas, escape ramps fashioned from soil or boards should be installed at an angle of less than 45 degrees (1:1) in excavated areas that will allow trapped wildlife to climb out on their own.

Recommendation: In general, TPWD recommends establishing and enforcing low speed limits (<20 MPH) within construction areas in order to minimize the potential of vehicle collisions with reptiles and other wildlife.

Recommendation: For soil stabilization and/or revegetation of disturbed areas within proposed project areas, TPWD recommends erosion and seed /mulch stabilization materials that avoid entanglement hazards to snakes and other wildlife species. Because the mesh found in many erosion control blankets or mats pose an entanglement hazard to wildlife, TPWD recommends the use of no-till drilling, hydromulching and/or hydroseeding due to a reduced risk to wildlife. If erosion control blankets or mats would be used, the product should contain no netting or contain loosely woven, natural fiber netting in which the mesh design allows the threads to move, therefore allowing expansion of the mesh openings. Plastic mesh matting and hydromulch containing microplastics should be avoided.

Presumably, lighting would be as a component of the project. As a result of light pollution, “sky glow” can have negative impacts on wildlife and ecosystems by disrupting natural day and night cycles inherent in managing behaviors such as migration, reproduction, nourishment, sleep, and protection from predators.

Recommendation: As protection measures for wildlife, TPWD recommends utilizing the minimum amount of permanent night-time lighting needed for safety and security. TPWD recommends minimizing the project's contribution toward skyglow by focusing light downward, with full cutoff luminaries to avoid light emitting above the horizontal, and to use dark-sky friendly lighting that is on only when needed, down-shielded, as bright as needed, and minimizes blue light emissions. Appropriate lighting technologies, beneficial management practices, and other dark sky resources can be found at the International Dark-Sky Association and McDonald Observatory websites.

Impacts to Vegetation and Wildlife Habitat

The information provided did not include details regarding vegetation removal and plans for revegetation/reclamation of the site. Therefore, TPWD provides the following recommendations to assist in project planning.

Recommendation: Material and equipment staging areas should be located in previously disturbed areas that do not require vegetation clearing. TPWD recommends minimizing clearing of native vegetation, particularly mature native trees, shrubs, and riparian vegetation, to the greatest extent practicable. TPWD recommends in-kind on-site replacement/restoration of native vegetation wherever practicable. Colonization by invasive species, particularly invasive grasses and weeds, should be actively prevented. Vegetation management should include removing invasive species early on while allowing the existing native plants to revegetate the disturbed areas. TPWD recommends referring to the Lady Bird Johnson Wildflower Center Native Plant Database (available online) for regionally adapted native species that would be appropriate for landscaping and revegetation.

Federal Regulations

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) prohibits taking, attempting to take, capturing, killing, selling, purchasing, possessing, transporting, and importing of migratory birds, their eggs, parts, or nests, except when specifically authorized by the Department of the Interior. This protection applies to most native bird species, including ground nesting species. The U.S. Fish and Wildlife Service (USFWS) Migratory Bird Office can be contacted at (505) 248-7882 for more information on potential impacts to migratory birds.

As proposed, the LRTSHQ would include a communications tower. The anticipated height of the tower was not provided. Typically, structures less than 199-feet in height do not require Federal Aviation Administration (FAA) pilot warning and obstruction avoidance lighting.

Studies have shown that nocturnal migrating birds are attracted to solid red beacon lights. In 2012, the Federal Aviation Administration (FAA) published a report

documenting that extinguishing nighttime steady-burning lights on communication towers would still maintain safety for aviators. A link to this report and other resources can be found on the American Bird Conservancy website. The 2014 Federal Communications Commission (FCC) publication (revised in 2015) on *Opportunities to Reduce Bird Collisions with Communications Towers While Reducing Tower Lighting Costs* outlines the FCC and FAA guidance for ensuring that tower lighting is bird-safe while also reducing construction and maintenance costs to tower owners. The publication is available on the USFWS Migratory Bird Program website. Additional information is available in the 2021 *U.S. Fish and Wildlife Service Recommended Best Practices for Communication Tower Design, Siting, Construction, Operation, Maintenance, and Decommissioning*, available online.

Recommendation: If it is necessary to include lighting on the communication tower, TPWD recommends the proposed structures avoid the use of steady-burning obstruction lights whenever possible and use the minimum lighting requirements allowable by the FAA. A tower lighting system that consists of minimum intensity, maximum off-phased white strobe lights is recommended.

TPWD also recommends using structures that would be self-supporting; *i.e.*, not requiring guy wires. Many birds hunt and forage along cleared roadway right-of-way (ROW), over pastures/cropland, and near clearings in woodlands, often using man-made structures as perches and/or roosting sites. Additionally, many hawks migrate and/or reside in the general area, therefore, towers could pose a potential risk to species such white-tailed hawks, Harris's hawk, gray hawk, red-tailed hawk, and crested caracara that may collide with tall structures. While navigating or hunting, these species may not detect the presence of the tower and collide with it. Eliminating guy wires reduces potential negative impacts to birds.

State Regulations

Parks and Wildlife Code – Chapter 64, Birds

State law prohibits any take or possession of nongame birds, including their eggs and nests. Laws and regulations pertaining to state-protection of nongame birds are contained in Chapter 64 of the Texas Parks and Wildlife (TPW) Code; specifically, Section 64.002 provides that no person may catch, kill, injure, pursue, or possess a bird that is not a game bird. TPW Code Section 64.003, regarding destroying nests or eggs, provides that, no person may destroy or take the nests, eggs, or young and any wild game bird, wild bird, or wild fowl. TPW Code Chapter 64 does not allow for incidental take.

Although not documented in the Texas Natural Diversity Database (TXNDD), many bird species which are not listed as *threatened* or *endangered* are protected by Chapter 64 of the TPW Code and are known to be year-round or seasonal residents or seasonal migrants through the proposed project area.

Biologically, the Southern Texas Plains, in which the project is located, is a highly productive area in south Texas and provides a range of habitats including large tracts

of undeveloped land, grasslands, pastures, brush, riparian woodlands, freshwater habitats, and managed lands. The diversity of habitats in the general area is suitable to support a diversity of wildlife species. In particular, the range of habitats provides areas of cover, feeding, nesting and loafing for many species of birds including grassland birds, Neo-tropical migrants, and raptors. Breeding bird surveys have detected more than 150 bird species in the Laredo area. Additionally, the project area is in the middle of the Central Migratory Flyway through which millions of birds pass during spring and fall migration.

As proposed, an entire tract of either 100 or 130 acres, depending on the site selected, would be cleared and developed into the LRTSHQ.

Recommendation: TPWD recommends that all vegetation clearing or soil excavation within the project site be scheduled to occur outside of the March 15 through September 15 migratory bird nesting season. Contractors should be made aware of the potential of encountering migratory birds (either nesting or wintering) in the proposed project site and be instructed to avoid negatively impacting them.

If vegetation clearing must be scheduled to occur during the nesting season, TPWD recommends the vegetation to be impacted should be surveyed for active nests by a qualified biologist. Nest surveys should be conducted no more than five days prior to scheduled clearing to ensure recently constructed nests are identified. If active nests are observed during surveys, TPWD recommends a 150-foot buffer of vegetation remain around the nests until the young have fledged or the nest is abandoned.

Parks and Wildlife Code, Section 68.015

TPW Code regulates state-listed threatened and endangered animal species. The capture, trap, take, or killing of state-listed threatened and endangered animal species is unlawful unless expressly authorized under a permit issued by the USFWS or TPWD. A copy of *TPWD Guidelines for Protection of State-Listed Species*, which includes a list of penalties for take of species, can be found on the TPWD Wildlife Habitat Assessment Program website. State-listed species may only be handled by persons with appropriate authorization from the TPWD Wildlife Permits Office. For more information regarding Wildlife Permits, please contact the Wildlife Permits Office at (512) 389-4647

The potential occurrence of state-listed species in the project area is primarily dependent upon the availability of suitable habitat. Direct impacts to high quality or suitable habitat therefore are directly proportional to the magnitude and potential to directly impact state-listed species. State-listed reptiles that are typically slow moving or unable to move due to cool temperatures are especially susceptible to being directly impacted during site clearing and construction of the facility.

Recommendation: TPWD recommends reviewing the most current TPWD annotated county lists of rare species for Webb County, as state-listed species could

be present depending upon habitat availability. These lists are available online at the TPWD Wildlife Diversity website. Environmental documents prepared for the project should include an inventory of existing natural resources within the proposed project aras. Specific evaluations should be designed to predict project impacts upon these natural resources including potential impacts to state-listed species.

The following state-listed species have the potential to occur within the study area if suitable habitat is available:

Black bear (*Ursus americanus*)
Texas horned lizard (*Phrynosoma cornutum*)
Texas tortoise (*Gopherus berlandieri*)

Black bear

Historically, black bears occurred in the mountainous Trans-Pecos region of west Texas. However, over the past 15 years, black bear populations have increased and expanded into the western portions of the Edwards Plateau and South Texas Plains where they occur in more open grassland areas. Black bears are typically shy and elusive. They use travel corridors to move between feeding areas and bedding areas.

Recommendation: To avoid attracting black bears to work areas, garbage containers, particularly if they contain food waste, should have lids that can be secured. If a black bear is observed within the project area, TPWD requests that the observation be reported to TPWD mammologist Jonah Evans at (830) 331-8739. For more information, please see the black bear fact sheet available on the TPWD website.

Texas horned lizard

Suitable habitat for the Texas horned lizard may be present within the project area. The Texas horned lizard can be found in open, arid, and semi-arid regions with sparse vegetation, including grass, cactus, scattered brush or scrubby trees.

If present in the project area, the Texas horned lizard could be impacted by ground disturbing activities, including site clearing. A useful indication that the Texas horned lizard may occupy the area is the presence of Harvester ant (*Pogonomyrmex* sp.) nests as they are the primary food source of horned lizards. Texas horned lizards are active above ground when temperatures exceed 75 degrees Fahrenheit. During warmer seasons, they may be able to avoid slow (< 15 miles per hour) moving equipment. Texas horned lizards may hibernate on-site in loose soils a few inches below ground during the cooler months from September/October to March /April. Construction in these areas could harm hibernating lizards. If horned lizards (nesting, gravid females, newborn young, lethargic from cool temperatures or hibernation) cannot move away from noise and approaching construction equipment, they could be negatively affected by construction activities.

Recommendation: TPWD recommends that a pre-construction survey be conducted to determine if horned lizards are present within the project area. As stated above, a useful indicator of potential occupancy is the presence of Harvester ants. Surveys should be conducted during warmer months of the year when horned lizards are active.

TPWD recommends avoiding disturbance of the Texas horned lizard and colonies of the Harvester ant during clearing and construction. TPWD recommends a permitted biological monitor be present during construction to attempt to capture and relocate Texas horned lizards if found. If the presence of a biological monitor is not feasible, state-listed species observed during construction should be allowed to safely leave the site on their own

Texas tortoise

The Texas tortoise has a home range of approximately five to ten acres. Based on TPWD staff's familiarity of the project area, suitable habitat for the Texas tortoise may be present within and adjacent to the proposed LRTSHQ location. Additionally, research grade observations of the Texas tortoise in the project area have been documented in the iNaturalist TPWD-sponsored Herps of Texas project. This species is often found near or at the base of prickly pear cactus and occasionally seeks shade by crawling under parked vehicles at construction sites.

Recommendation: TPWD recommends that contractors be made aware of the potential for the state-listed Texas tortoise to occur in the area or wander into the area and avoid contacting them if encountered. Additionally, TPWD recommends that before driving vehicles that have been parked at project sites, contractors should check underneath the vehicles to ensure no tortoises are present.

If a tortoise is located at the project site, it should be relocated only if it is found in an area in which imminent danger is present. Individuals that must be relocated should be transported to the closest suitable habitat outside of the proposed disturbance area but preferably within its 5 to 10 acre range. After tortoises are removed from the immediate project area, TPWD recommends constructing an exclusion fence as described above under *General Construction Recommendations*. In addition to tortoises, exclusion fences are effective in preventing other reptile species from entering a construction area. Additional information regarding Texas tortoise BMPs are described in the *Texas Tortoise Best Management Practices* available on TPWD's Wildlife Habitat Assessment Program website.

If possible, TPWD recommends completing major ground disturbing activities before October when reptiles become inactive and could be utilizing burrows in areas subject to disturbance. Reduced speed limits should also be established and enforced in areas in which state-listed reptiles could occur.

Species of Greatest Conservation Need

In addition to state- and federally-protected species, TPWD tracks species considered to be Species of Greatest Conservation Need (SGCN) that, due to limited distributions and/or declining populations, face threat of extirpation or extinction but currently lack the legal protection given to threatened or endangered species. Special landscape features, natural communities, and SGCNs are rare resources for which TPWD actively promotes conservation, and TPWD considers it important to evaluate and, if necessary, minimize impacts to such resources to reduce the likelihood of endangerment and preclude the need to list SGCN as threatened or endangered in the future. These species and communities are tracked in the TXNDD. The most current and accurate TXNDD data can be requested from the TXNDD website.

Please note that the absence of TXNDD information in an area does not imply that a species is absent from that area. Given the small proportion of public versus private land in Texas, the TXNDD does not include a representative inventory of rare resources in the state. Although it is based on the best data available to TPWD regarding rare species, the data from the TXNDD do not provide a definitive statement as to the presence, absence, or condition of special species, natural communities, or other significant features within your project area. These data are not inclusive and **cannot be used as presence/absence data**. This information cannot be substituted for on-the-ground surveys.

Determining the actual presence of a species in an area depends on many variables including daily and seasonal activity cycles, environmental activity cues, preferred habitat, transiency and population density (both wildlife and human). The absence of a species can only be determined with repeated negative observations and consideration of all the variable factors contributing to the lack of detectable presence.

Based on the location of the proposed project, suitable habitat for the following SGCN species may occur in the project area. The following beneficial management practices (BMPs) are provided to assist in project planning to avoid/minimize potential impacts.

SGCN Reptiles

Reticulate collared lizard (*Crotaphytus reticulatus*)
Tamaulipan spot tailed earless lizard (*Holbrookia subcaudalis*)
Texas indigo snake (*Drymarchon melanurus erebennus*)
Western box turtle (ornate box turtle) (*Terrapene ornata*)

Reticulate collared lizard

Reticulate collared lizards are large lizards known to bask on elevated dirt mounds such as those along the edges of unimproved roads throughout south Texas. They generally occur in areas void of vegetation (i.e., bare rock, gravel) and in typical shrubland/chaparral habitat. Also, both reticulate collard lizards and Texas horned

lizards are especially active during the spring (April-May) mating season and are more likely to be negatively impacted by construction activities during this period.

Recommendation: When approached, reticulate collared lizards will typically flee to the base of a shrub and remain motionless. Contractors should be made aware of the potential to encounter reticulate collared lizards in the project area. If encountered, contractors should allow the lizards to escape; contractors should also be instructed to avoid negatively impacting any lizards encountered.

Tamaulipan spot tailed earless lizard

The spot-tailed earless lizard (STEL) (*Holbrookia lacerata*) occurs in central and southern Texas. It has been determined that these are distinct and separate populations; therefore, the STEL had been split into two subspecies, the plateau STEL and the Tamaulipan STEL (*Holbrookia subcaudalis*). Habitat for this species includes moderately open prairie-brushlands, particularly flat areas free of vegetation or other obstructions. They also occur in old and new fields, graded roadways, disturbed areas and in areas of active agriculture including row crops.

Recommendation: TPWD recommends implementing the following BMPs to avoid and/or minimize potential impacts to the Tamaulipan STEL. TPWD notes that implementing the following BMPs could also help minimize impacts to a variety of native wildlife species that may inhabit the project area. • A major threat to the Tamaulipan STEL is road traffic, as this species has exhibited behavior indicating that they prefer roads and tend to cross roads often, potentially for thermoregulation. TPWD recommends reducing the amount of roads, both temporary and permanent, planned to be constructed for the proposed project. TPWD also recommends reducing speed limits in the project area to at least 15 mph (or slower) to help prevent vehicle-induced mortality of this species. • This species prefers a mixture of bare ground and sparse vegetation, including disturbed areas. TPWD recommends avoiding impacts to suitable habitat for this species. Areas disturbed by project-related construction activities within suitable habitat for the Tamaulipan STEL should be revegetated with site-specific native, patchy vegetation rather than sod-forming grasses. • This species utilizes burrows for shelter. TPWD recommends identifying locations of burrows on the project site and avoiding impacts to burrows if feasible. • TPWD recommends providing contractor training for the identification, behavior, and habitat requirements of the Tamaulipan STEL. It is important for construction personnel to be able to identify this species and to be on the lookout for them during construction and to avoid impacting them if encountered on-site.

Texas indigo snake

The Texas indigo snake is the largest nonvenomous snake in North America and is typically associated with aquatic habitats including drainage ditches, ponds and wetlands, and manmade ponds. Due to its high metabolism, this species has a large

home range in which it searches for prey and may be encountered away from aquatic habitats, its preferred habitat.

Recommendation: Because all snakes are generally perceived as a threat and killed when encountered during vegetation clearing, TPWD recommends project plans include comments to inform contractors of the potential for SGCN snake species to occur in the project area. The Texas indigo snake is non-venomous and contractors should be advised to avoid impacts to this species and other snakes as long as the safety of the workers is not compromised. For the safety of workers and preservation of a natural resource, attempting to catch, relocate and/or kill non-venomous or venomous snakes is discouraged by TPWD. If encountered, snakes should be permitted to safely leave project areas on their own. TPWD encourages construction sites to have a "no kill" policy in regard to wildlife encounters.

Western (ornate) box turtle (*Terrapene ornata*)

The ornate or western box turtle is an emydid turtle that occurs throughout Texas, typically in open habitats such as pastures, prairie, savannahs and open woodlands. Adults have a home-range size of approximately 6-14 acres. The ornate box turtle is omnivorous although the bulk of the diet consists of insects. Ornate box turtles will also eat carrion and small amounts of plant matter. Ornate box turtles are active spring through fall with courtship and mating occurring primarily in the spring. This species is threatened by habitat loss and fragmentation, vehicle strikes on roads, and collection for the pet trade and food markets.

Recommendation: TPWD recommends a biological monitor be present during construction to attempt to relocate SGCN turtles or other reptile species if found. If the presence of a biological monitor during construction is not feasible, state-listed threatened species and SGCN species observed during construction should be allowed to safely leave the site or be relocated by a permitted individual to a nearby area with similar habitat that would not be disturbed during construction. TPWD recommends that any translocations of reptiles be the minimum distance possible no greater than one mile, preferably within 100-200 yards from the initial encounter location.

Recommendation: As indicated above, reptiles are susceptible to becoming entrapped in trenches or other excavations in a project area. Regarding potential wildlife entrapment in trenches and the use of an exclusion fence, please see recommendations under the *General Construction Recommendations* above.

SGCN Plants

Prostrate milkweed (*Asclepias prostrata*)

The TXNDD contains records of recent observations of the prostrate milkweed within the general area of both proposed alternative project locations. This species occurs in grassland or openings in shrublands on fine sandy loams.

Recommendation: TPWD recommends that areas proposed for disturbance be surveyed for the above-listed rare plant species where suitable habitat is present. On-the-ground surveys should be performed by a qualified biologist familiar with the identification of this species. Surveys should be conducted when the species is most detectable and identifiable (usually during their respective flowering periods), and disturbance of these species should be avoided during construction to the extent feasible. If these plants are found in the path of construction, this office should be contacted for further coordination and possible salvage of plants and/or seeds for seed banking. Plants not in the direct path of construction should be protected by markers or fencing and by instructing construction crews to avoid any harm.

TPWD looks forward to receiving the completed Draft EA for this project. Please contact me at (361) 825-3240 or **russell.hooten@tpwd.texas.gov** if we may be of further assistance.

Sincerely,

Russell Hooten

Russell Hooten
Wildlife Habitat Assessment Program
Wildlife Division
/rh 47756

cc: Katrina Rehrer, Gulf South Research Corporation

United States Department of the Interior
FISH AND WILDLIFE SERVICE
Texas Coastal Ecological Services Field Office
3325 Green Jay Road
Alamo, Texas 78516
Main: (956) 784-7560 Fax: (956) 787-8338

In Reply Refer To:
02ETTX00-2022-TA-0633

November 18, 2021

Mr. John Petrilla
Acting Environmental Branch Chief
Border Patrol & Air and Marine PMO
U.S. Customs and Border Protection
1300 Pennsylvania Avenue NW
Washington, DC 20229

Dear Mr. Petrilla:

We received your November 9, 2021, letter regarding effects of proposed facility on federally listed species in Webb County, Texas. This action was also evaluated for impacts to wetlands and other federal trust fish and wildlife resources.

United States (U.S.) Customs and Border Protection (CBP) is preparing an Environmental Assessment (EA) to address the potential effects, beneficial and adverse, resulting from the proposed construction and operation of a new U.S. Border Patrol (USBP) Sector Headquarters in Laredo, Texas (LRTSHQ). CBP is analyzing two location alternatives for the proposed LRTSHQ facility in Laredo, Texas. The proposed location alternatives are undeveloped parcels that are owned by private landowners. Site 1 is a 130-acre parcel of land located along Highway 83 South and Site 2 is a 100-acre parcel along the Highway 20 loop. Both of the proposed locations are primarily composed of undeveloped Tamaulipan shrubland and disturbed grasslands.

Federally Listed Species
The U.S. Fish and Wildlife Service (Service) works with others to conserve, protect, and enhance fish, wildlife, plants, and their habitats, including listed species. Federally-listed species in Webb County, Texas where the proposed action will occur include the Texas hornshell (*Popenaias popeii*), Red Knot (*Calidris canutas rufa*), and Ashy dogweed (*Thymophylla tephroleuca*). The Service recommends plant surveys to be conducted for both proposed sites for Ashy dogweed.

The Department of the Interior is reconsidering the interpretation of the Migratory Bird Treaty Act (MBTA) to develop common sense standards to protect migratory birds and provide certainty to industry. Currently, the MBTA only applies to intentional take of migratory birds. Please check https://www.fws.gov/regulations/mbta/ for more information. The United States Fish and Wildlife Service (Service) strongly encourage applicants to coordinate MBTA concerns. General avoidance measures for migratory birds could include conducting surveys prior to any mechanical clearing of brush and trees between March 15 and September 15. Surveys should include searches for birds, nests, and eggs. The Service recommends leaving a buffer of vegetation (≥100 feet (30.5 meters) around songbird nests detected until young have fledged or the nest is abandoned. Surveys should be conducted within a responsible time frame prior to construction to ensure valid results. Other species such as water birds or raptors require larger buffer distances of 500 feet or more.

The construction of overhead power lines creates threats of avian collision and electrocution. The Service recommends the installation of underground rather than overhead power lines whenever possible. For new overhead lines or retrofitting of old lines, the Service recommends that project developers implement, to the maximum extent practicable, the Avian Power Line Interaction Committee guidelines found at http://www.aplic.org/.

Wetlands and Wildlife Habitat

Wetlands and riparian zones provide valuable fish and wildlife habitat as well as contribute to flood control, water quality enhancement, and groundwater recharge. Wetland and riparian vegetation provides food and cover for wildlife, stabilizes banks and decreases soil erosion. These areas are inherently dynamic and very sensitive to changes caused by such activities as overgrazing, logging, major construction, or earth disturbance.

Executive Order 11990 asserts that each agency shall provide leadership and take action to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial value of wetlands in carrying out the agency's responsibilities. Construction activities near riparian zones should be carefully designed to minimize impacts. If vegetation clearing is needed in these riparian areas, they should be re-vegetated with native wetland and riparian vegetation to prevent erosion or loss of habitat. The Service recommends minimizing the area of soil scarification and initiating incremental re-establishment of herbaceous vegetation at the proposed work sites. Denuded and/or disturbed areas should be re-vegetated with a mixture of native legumes and grasses.

Species commonly used for soil stabilization are listed in the Texas Department of Agriculture's (TDA) Native Tree and Plant Directory, available from TDA at P.O. Box 12847, Austin, Texas 78711. The Service also urges taking precautions to ensure sediment loading does not occur to any receiving streams in the proposed project area. To prevent and/or minimize soil erosion and compaction associated with construction activities, avoid any unnecessary clearing of vegetation, and follow established rights-of-way whenever possible. All machinery and petroleum products should be stored outside the floodplain and/or wetland area during construction to prevent possible contamination of water and soils.

Wetlands and riparian areas are high priority fish and wildlife habitat, serving as important sources of food, cover, and shelter for numerous species of resident and migratory wildlife. Waterfowl and other migratory birds use wetlands and riparian corridors as stopover, feeding, and nesting areas. The Service strongly recommends that the selected project site not impact wetlands and riparian areas, and be located as far as practical from these areas. Migratory birds tend to concentrate in or near wetlands and riparian areas and use these areas as migratory flyways or corridors. After every effort has been made to avoid impacting wetlands, you anticipate unavoidable wetland impacts will occur; you should contact the appropriate U.S. Army Corps of Engineers (Corps) office to determine if a permit is necessary prior to commencement of construction activities. If your project will involve filling, dredging, or trenching of a wetland or riparian area it may require a Clean Water Act Section 404 permit from the Corps. For permitting requirements please contact the U.S. Army Corps of Engineers, District Engineer, 1100 Commerce Street, Dallas, Texas 75242, (469) 487-7007.

Beneficial Landscaping

In accordance with Executive Order 13112 on Invasive Species and the Executive Memorandum on Beneficial Landscaping (42 C.F.R. 26961), where possible, any landscaping associated with project plans should be limited to seeding and replanting with native species. A mixture of grasses and forbs appropriate to address potential erosion problems and long-term cover should be planted when seed is reasonably available. Although Bermuda grass is listed in seed mixtures, this species and other introduced species should be avoided as much as possible. The Service also recommends the use of native trees, shrubs, and herbaceous species that are adaptable, drought tolerant and conserve water.

State Listed Species

The State of Texas protects certain species. Please contact the Texas Parks and Wildlife Department (Endangered Resources Branch), 4200 Smith School Road, Austin, Texas 78744 (telephone 512/389-8021) for information concerning fish, wildlife, and plants of State concern or visit their website at: http://www.tpwd.state.tx.us/huntwild/wild/wildlife_diversity/texas_rare_species/listed_species/.

Once the Service receives the draft EA for review, the Service will provide more detailed site specific comments and recommendations. We appreciate the opportunity to provide pre-planning information. If we can be of further assistance, please contact Ernesto Reyes at (956) 784-7560.

Sincerely,

Charles Ardizzone
Field Supervisor

cc: Assistant Field Supervisor, U.S. Fish and Wildlife Service, Corpus Christi, TX

United States Department of the Interior
FISH AND WILDLIFE SERVICE
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In Reply Refer To:
02ETTX00-2022-I-1113

January 7, 2022

Mr. John Petrilla
Acting Environmental Branch Chief
Border Patrol & Air and Marine PMO
U.S. Customs and Border Protection
1300 Pennsylvania Avenue NW
Washington, DC 20229

Dear Mr. Petrilla:

We received your December 14, 2021, letter regarding effects of proposed facility on federally listed species in Webb County, Texas. This action was also evaluated for impacts to wetlands and other federal trust fish and wildlife resources.

United States (U.S.) Customs and Border Protection (CBP) is preparing an Environmental Assessment (EA) to address the potential effects, beneficial and adverse, resulting from the proposed construction and operation of a new U.S. Border Patrol Sector Headquarters in Laredo, Texas (LRTSHQ). CBP is analyzing two location alternatives for the proposed LRTSHQ facility in Laredo, Texas. The proposed location alternatives are undeveloped parcels that are owned by private landowners. Site 1 is a 130-acre parcel of land located along Highway 83 South and Site 2 is a 100-acre parcel along the Highway 20 loop. Both of the proposed locations are primarily composed of undeveloped Tamaulipan shrubland and disturbed grasslands.

To avoid or minimize impacts to birds protected by the Migratory Bird Treaty Act, the U.S. Fish and Wildlife Service (Service) recommends conducting bird surveys no more than five days prior to ground disturbing activities or mechanical clearing of brush and trees between March 15 and September 15. Surveys should include searches for birds, nests, and eggs. The Service recommends leaving a buffer of vegetation (≥100 feet (30.5 meters) around songbird nests detected until young have fledged or the nest is abandoned. Surveys should be conducted within a responsible time frame prior to construction to ensure valid results. Other species such as water birds or raptors require larger buffer distances of 500 feet or more.

The construction of overhead power lines creates threats of avian collision and electrocution. The Service recommends the installation of underground rather than overhead power lines whenever possible. For new overhead lines or retrofitting of old lines, the Service recommends that project developers implement, to the maximum extent practicable, the Avian Power Line Interaction Committee guidelines found at http://www.aplic.org/.

Wetlands and Wildlife Habitat

Wetlands and riparian areas are high priority fish and wildlife habitat, serving as important sources of food, cover, and shelter for numerous species of resident and migratory wildlife. Wetlands and riparian zones also contribute to flood control, water quality enhancement, and groundwater recharge. Wetland and riparian vegetation, stabilizes banks and decreases soil erosion. These areas are inherently dynamic and very sensitive to changes caused by activities such as overgrazing, logging, major construction, or earth disturbance. Waterfowl and other migratory birds use wetlands and riparian flyways or corridors as stopover, feeding, and nesting areas. The Service strongly recommends that the selected project site not impact wetlands and riparian areas, and be located as far as practical from these areas

If after every effort has been made to avoid wetland impacts, you still anticipate unavoidable wetland impacts, then you should contact the appropriate U.S. Army Corps of Engineers (Corps) office to determine if a permit is necessary prior to commencement of construction activities. If your project will involve filling, dredging, or trenching of a wetland or riparian area it may require a Clean Water Act Section 404 permit from the Corps. For permitting requirements contact the U.S. Army Corps of Engineers, District Engineer, 1100 Commerce Street, Dallas, Texas 75242, (469) 487-7007.

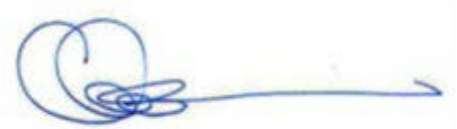
Executive Order 11990 asserts that each agency shall provide leadership and take action to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial value of wetlands in carrying out the agency's responsibilities. Construction activities near riparian zones should be carefully designed to minimize impacts. If vegetation clearing is needed in these riparian areas, they should be re-vegetated with native wetland and riparian vegetation to prevent erosion or loss of habitat. The Service recommends minimizing the area of soil scarification and initiating incremental re-establishment of herbaceous vegetation at the proposed work sites. Denuded and/or disturbed areas should be re-vegetated with a mixture of native legumes and grasses.

Species commonly used for soil stabilization are listed in the Texas Department of Agriculture's (TDA) Native Tree and Plant Directory, available from TDA at P.O. Box 12847, Austin, Texas 78711. The Service also urges taking precautions to ensure sediment loading does not occur to any receiving streams in the proposed project area. To prevent and/or minimize soil erosion and compaction associated with construction activities, avoid any unnecessary clearing of vegetation, and follow established rights-of-way whenever possible. All machinery and petroleum products should be stored outside the floodplain and/or wetland area during construction to prevent possible contamination of water and soils.

Beneficial Landscaping
In accordance with Executive Order 13112 on Invasive Species and the Executive Memorandum on Beneficial Landscaping (42 C.F.R. 26961), where possible, any landscaping associated with project plans should be limited to seeding and replanting with native species. A mixture of grasses and forbs appropriate to address potential erosion problems and long-term cover should be planted when seed is reasonably available. Although Bermuda grass is listed in seed mixtures, this species and other introduced species should be avoided as much as possible. The Service also recommends the use of native trees, shrubs, and herbaceous species that are adaptable, drought tolerant and conserve water.

CBP made a “may affect but not likely to adversely affect” determination for: the ocelot (*Leopardus (=Felis) pardalis*), Gulf Coast jaguarundi (*Herpailurus (=Felis) yagouaroundi cacomitli*) and Ashy dogweed (*Thymophylla tephroleuca*). Based on information provided, the Service concurs with your determination. Additionally, CBP made a “no effect” determination for the piping plover (*Charadrius melodus*), red knot (*Calidris canutus rufa*), and Texas hornshell (*Popenaias popeii*). The Service does not provide concurrence for "no effect" determinations, but by making a determination we believe CBP has complied with Section 7(a)(2) of the Endangered Species Act of 1973, as amended. We appreciate the opportunity to provide pre-planning information. If we can be of further assistance, please contact Ernesto Reyes at (361) 533-6057.

Sincerely,



Charles Ardizzone
Field Supervisor

cc: Assistant Field Supervisor, U.S. Fish and Wildlife Service, Corpus Christi, TX

APPENDIX B
STATE-LISTED SPECIES FOR WEBB COUNTY, TEXAS

Taxon	SName	CName	USESA	SPROT	Endemic	GRank	SRank	SGCN	Description
Amphibians	Siren sp. 1	South Texas siren (Large Form)		T	N	GNRQ	S1	Y	Aquatic: Mainly found in bodies of quiet water, permanent or temporary, with or without submergent vegetation. Wet or sometimes wet areas, such as arroyos, canals, ditches, or even shallow depressions; aestivates in the ground during dry periods, but does require some moisture to remain.
Birds	Egretta rufescens	reddish egret		T	N	G4	S2B	Y	Resident of the Texas Gulf Coast; brackish marshes and shallow salt ponds and tidal flats; nests on ground or in trees or bushes, on dry coastal islands in brushy thickets of yucca and prickly pear
Birds	Plegadis chihi	white-faced ibis		T	N	G5	S4B	Y	Prefers freshwater marshes, sloughs, and irrigated rice fields, but will attend brackish and saltwater habitats; currently confined to near-coastal rookeries in so-called hog-wallow prairies. Nests in marshes, in low trees, on the ground in bulrushes or reeds, or on floating mats.
Birds	Mycteria americana	wood stork		T	N	G4	SHB,S2N	Y	Prefers to nest in large tracts of baldcypress (Taxodium distichum) or red mangrove (Rhizophora mangle); forages in prairie ponds, flooded pastures or fields, ditches, and other shallow standing water, including salt-water; usually roosts communally in tall snags, sometimes in association with other wading birds (i.e. active heronries); breeds in Mexico and birds move into Gulf States in search of mud flats and other wetlands, even those associated with forested areas; formerly nested in Texas, but no breeding records since 1960
Birds	Buteo plagiatus	gray hawk		T	N	GNR	S2B	Y	Locally and irregularly along U.S.-Mexico border; mature riparian woodlands and nearby semiarid mesquite and scrub grasslands; breeding range formerly extended north to southernmost Rio Grande floodplain of Texas
Birds	Charadrius montanus	mountain plover			N	G3	S2	Y	Breeding: nests on high plains or shortgrass prairie, on ground in shallow depression; nonbreeding: shortgrass plains and bare, dirt (plowed) fields; primarily insectivorous
Birds	Leucophaeus pipixcan	Franklin's gull			N	G5	S2N	Y	This species is only a spring and fall migrant throughout Texas. It does not breed in or near Texas. Winter records are unusual consisting of one or a few individuals at a given site (especially along the Gulf coastline). During migration, these gulls fly during daylight hours but often come down to wetlands, lake shore, or islands to roost for the night.
Birds	Sternula antillarum athalassos	interior least tern			N	G4T3Q	S1B	N	Sand beaches, flats, bays, inlets, lagoons, islands. Subspecies is listed only when inland (more than 50 miles from a coastline); nests along sand and gravel bars within braided streams, rivers; also know to nest on man-made structures (inland beaches, wastewater treatment plants, gravel mines, etc); eats small fish and crustaceans, when breeding forages within a few hundred feet of colony
Birds	Athene cunicularia hypugaea	western burrowing owl			N	G4T4	S2	Y	Open grasslands, especially prairie, plains, and savanna, sometimes in open areas such as vacant lots near human habitation or airports; nests and roosts in abandoned burrows
Birds	Calamospiza melanocorys	Lark Bunting			N	G5	S4B	Y	Overall, it's a generalist in most short grassland settings including ones with some brushy component plus certain agricultural lands that include grain sorghum. Short grasses include sideoats and blue gramas, sand dropseed, prairie junegrass (Koeleria), buffalograss also with patches of bluestem and other mid-grass species. This bunting will frequent smaller patches of grasses or disturbed patches of grasses including rural yards. It also uses weedy fields surrounding playas. This species avoids urban areas and cotton fields.
Fish	Notropis braytoni	Tamaulipas shiner		T	N	G4	S1S2	Y	Restricted to the Rio Grande basin in Texas including the lower Pecos River. Typically found in large rivers and creeks associated with a variety of flowng-water habitats such as runs and riffles over gravel, cobble, and sand.
Fish	Notropis jemezanus	Rio Grande shiner		T	N	G3	S1	Y	Rio Grande drainage. Occurs over substrate of rubble, gravel and sand, often overlain with silt
Fish	Macrhybopsis aestivalis	speckled chub		T	N	G3G4	S1S2	Y	Found throughout the Rio Grande and lower Pecos River but occurs most frequently between the RÃo Conchos confluence and the Pecos River. Flowing water over coarse sand and fine gravel substrates in streams; typically found in raceways and runs.

Taxon	SName	CName	USESA	SPROT	Endemic	GRank	SRank	SGCN	Description
Fish	Etheostoma grahami	Rio Grande darter		T	N	G2G3	S2	Y	Essentially restricted to the mainstream and spring-fed tributaries of the Rio Grande and the lower Pecos River downstream to the Devils River and Dolan, San Felipe and Sycamore creeks. Gravel and rubble riffles
Mammals	Myotis velifer	cave myotis bat			N	G4G5	S2S3	Y	Colonial and cave-dwelling; also roosts in rock crevices, old buildings, carports, under bridges, and even in abandoned Cliff Swallow (Hirundo pyrrhonota) nests; roosts in clusters of up to thousands of individuals; hibernates in limestone caves of Edwards Plateau and gypsum cave of Panhandle during winter; opportunistic insectivore.
Mammals	Perimyotis subflavus	tricolored bat			N	G2G3	S2	Y	Forest, woodland and riparian areas are important. Caves are very important to this species.
Mammals	Lasiurus borealis	eastern red bat			N	G3G4	S4	Y	Red bats are migratory bats that are common across Texas. They are most common in the eastern and central parts of the state, due to their requirement of forests for foliage roosting. West Texas specimens are associated with forested areas (cottonwoods). Also common along the coastline. These bats are highly mobile, seasonally migratory, and practice a type of wandering migration". Associations with specific habitat is difficult unless specific migratory stopover sites or wintering grounds are found. Likely associated with any forested area in East
Mammals	Lasiurus cinereus	hoary bat			N	G3G4	S4	Y	Hoary bats are highly migratory, high-flying bats that have been noted throughout the state. Females are known to migrate to Mexico in the winter, males tend to remain further north and may stay in Texas year-round. Commonly associated with forests (foliage roosting species) but are found in unforested parts of the state and lowland deserts. Tend to be captured over water and large, open flyways.
Mammals	Lasiurus ega	southern yellow bat			N	G5	S3S4	Y	Relict palm grove is only known Texas habitat. Neotropical species roosting in palms, forages over water; insectivorous; breeding in late winter. Roosts in dead palm fronds in ornamental palms in urban areas.
Mammals	Geomys personatus davisi	Davis pocket gopher			Y	G4T2	S2	Y	Burrows in sandy soils in southern Texas
Mammals	Geomys streckeri	Strecker's pocket gopher			Y	G1Q	S1	Y	Underground burrows of deep, sandy soils; feed mostly on vegetation; reproductive data not well known, but likely breed year round, with no more than two litters per year
Mammals	Ursus americanus	black bear		T	N	G5	S3	Y	Generalist. Historically found throughout Texas. In Chisos, prefers higher elevations where pinyon-oaks predominate; also occasionally sighted in desert scrub of Trans-Pecos (Black Gap Wildlife Management Area) and Edwards Plateau in juniper-oak habitat. For ssp. luteolus, bottomland hardwoods, floodplain forests, upland hardwoods with mixed pine; marsh. Bottomland hardwoods and large tracts of inaccessible forested areas.
Mammals	Nasua narica	white-nosed coati		T	N	G5	S1	Y	Woodlands, riparian corridors and canyons.Most individuals in Texas probably transients from Mexico; diurnal and crepuscular; very sociable; forages on ground and in trees; omnivorous; may be susceptible to hunting, trapping, and pet trade
Mammals	Mustela frenata	long-tailed weasel			N	G5	S5	Y	Includes brushlands, fence rows, upland woods and bottomland hardwoods, forest edges & rocky desert scrub. Usually live close to water.
Mammals	Spilogale putorius	eastern spotted skunk			N	G4	S1S3	Y	Generalist; open fields prairies, croplands, fence rows, farmyards, forest edges & woodlands. Prefer wooded, brushy areas & tallgrass prairies. S.p. ssp. interrupta found in wooded areas and tallgrass prairies, preferring rocky canyons and outcrops when such sites are available.
Mammals	Spilogale gracilis	western spotted skunk			N	G5	S5	Y	Brushy canyons, rocky outcrops (rimrock) on hillsides and walls of canyons. In semi-arid brushlands in U.S., in wet tropical forests in Mexico. When inactive or bearing young, occupies den in rocks, burrow, hollow log, brush pile, or under building.
Mammals	Conepatus leuconotus	western hog-nosed skunk			N	G4	S4	Y	Habitats include woodlands, grasslands & deserts, to 7200 feet, most common in rugged, rocky canyon country; little is known about the habitat of the ssp. telmalestes
Mammals	Puma concolor	mountain lion			N	G5	S2S3	Y	Generalist; found in a wide range of habitats statewide. Found most frequently in rugged mountains & riparian zones.

Taxon	SName	CName	USESA	SPROT	Endemic	GRank	SRank	SGCN	Description
Mammals	Leopardus pardalis	ocelot	LE	E	N	G4	S1	Y	Restricted to mesquite-thorn scrub and live-oak mottes; avoids open areas. Dense mixed brush below four feet; thorny shrublands; dense chaparral thickets; breeds and raises young June-November.
Reptiles	Pseudemys gorzugi	Rio Grande river cooter			N	G3G4	S2	Y	Aquatic: Habitat includes rivers and their more permanent spring-fed tributary streams, beaver ponds, and stock tanks (Garrett and Barker 1987). Occupied waters may have a muddy, sandy, or rocky bottom, and may or may not contain aquatic vegetation (Degenhardt et al. 1996).
Reptiles	Terrapene ornata	western box turtle			N	G5	S3	Y	Terrestrial: Ornate or western box trutles inhabit prairie grassland, pasture, fields, sandhills, and open woodland. They are essentially terrestrial but sometimes enter slow, shallow streams and creek pools. For shelter, they burrow into soil (e.g., under plants such as yucca) (Converse et al. 2002) or enter burrows made by other species.
Reptiles	Gopherus berlandieri	Texas tortoise		T	N	G4	S2	Y	Terrestrial: Open scrub woods, arid brush, lomas, grass-cactus association; often in areas with sandy well-drained soils. When inactive occupies shallow depressions dug at base of bush or cactus; sometimes in underground burrow or under object. Eggs are laid in nests dug in soil near or under bushes.
Reptiles	Crotaphytus reticulatus	reticulate collared lizard			N	G3	S4	Y	Teresstrial: Requires open brush-grasslands; thorn-scrub vegetation, usually on well-drained rolling terrain of shallow gravel, caliche, or sandy soils; often on scattered flat rocks below escarpments or isolated rock outcrops among scattered clumps of prickly pear and mesquite
Reptiles	Holbrookia subcaudalis	Tamaulipan spot-tailed earless lizard			N	GNR	S2	Y	Terrestrial: Habitats include moderately open prairie-brushland regions, particularly fairly flat areas free of vegetation or other obstructions (e.g., open meadows, old and new fields, graded roadways, cleared and disturbed areas, prairie savanna, and active agriculture including row crops); also, oak-juniper woodlands and mesquite-prickly pear associations (Axtell 1968, Bartlett and Bartlett 1999).
Reptiles	Phrynosoma cornutum	Texas horned lizard		T	N	G4G5	S3	Y	Terrestrial: Open habitats with sparse vegetation, including grass, prairie, cactus, scattered brush or scrubby trees; soil may vary in texture from sandy to rocky; burrows into soil, enters rodent burrows, or hides under rock when inactive. Occurs to 6000 feet, but largely limited below the pinyon-juniper zone on mountains in the Big Bend area.
Reptiles	Phrynosoma modestum	Roundtail Horned Lizard			N	G5	S5	Y	This species seems to prefer rocky or gravelly substrates in open areas that are sparsely vegetated.
Reptiles	Drymarchon melanurus erebennus	Texas indigo snake			N	G5T4	S4	Y	Terrestrial: Thornbush-chaparral woodland of south Texas, in particular dense riparian corridors.Can do well in suburban and irrigated croplands. Requires moist microhabitats, such as rodent burrows, for shelter.
Reptiles	Heterodon kennerlyi	mexican hog-nosed snake				G4	SNR	N	Habitat description is not available at this time.
Reptiles	Heterodon nasicus	western hognose snake			N	G5	S4	Y	Terrestrial: Shortgrass or mixed grass prairie, with gravel or sandy soils. Often found associated with draws, floodplains, and more mesic habitats within the arid landscape. Frequently occurs in shrub encroached grasslands.
Reptiles	Leptodeira septentrionalis septentrionalis	northern cat-eyed snake		T	N	G5	S3	Y	Terrestrial: Thorn scrub and decidious woodland; dense thickets bordering ponds and streams.
Reptiles	Sistrurus tergeminus	western massasauga			N	G3G4	S3	Y	Terrestrial: Shortgrass or mixed grass prairie, with gravel or sandy soils. Often found associated with draws, floodplains, and more mesic habitats within the arid landscape. Frequently occurs in shrub encroached grasslands.
Insects	Cicindela obsoleta neojuvenilis	neojuvenile tiger beetle				G5T1	SH	Y	Bare or sparsely vegetated, dry, hard-packed soil; typically in previously disturbed areas; peak adult activity in Jul
Insects	Latineosus cibola	No accepted common name				G1G2	SNR	Y	This species was recently described from Texas in only two localities (a creek and a water treatment plant on a major river) in Val Verde and Webb Cos. (Sun and McCafferty, 2008).
Insects	Bombus pensylvanicus	American bumblebee				G3G4	SNR	Y	Habitat description is not available at this time.
Arachnids	Diplocentrus diablo	No accepted common name			N	GNR	S2	Y	Like all species of Diplocentrus, D. diablo is an obligate burrower but may be found under large surface objects in rocky areas of the Rio Grande Valley (Stockwell & Nilsson 1987).

Taxon	SName	CName	USESA	SPROT	Endemic	GRank	SRank	SGCN	Description
Mollusks	Popenaias popeii	Texas Hornshell	LE	E	N	G1	S1	Y	Occurs in small streams to large rivers in slow to moderate current, often residing in rock crevices, travertine shelves, and under large boulders, where small-grained material, such as clay, silt, or sand gathers. Can also occur in riffles that are clean swept of soft silt; not known from reservoirs (Carman 2007; Inoue et al. 2014; Randklev et al. 2017b; Randklev et al. forthcoming). [Mussels of Texas 2019]
Mollusks	Potamilus metnecktayi	Salina Mucket		T	N	G1	S1	Y	Occurs in medium to large rivers, where it may be found in substrates composed of various combinations of mud, sand, gravel, and cobble, as well as under rocks. It occurs in areas with slow to moderate current, most often in stable littoral habitats dominated by boulder or bedrock habitat; not known from reservoirs (Randklev et al. 2017b; Randklev et al. forthcoming). [Mussels of Texas 2019]
Mollusks	Truncilla cognata	Mexican Fawnsfoot		T	N	G1	S1	Y	Occurs in large rivers but may also be found in medium-sized streams. Is commonly found in habitats with some flowing water, often in protected near shore areas such as banks and backwaters but also at the head of riffles; the latter more often supporting both sub-adults and adults. Typically occurs in substrates of mixed sand and gravel as well as soft unconsolidated sediments. Considered intolerant of reservoirs (Randklev et al. 2017b; Randklev et al. forthcoming). [Mussels of Texas 2019]
Plants	Yeatesia platystegia	Texas shrimp-plant			N	G3G4	S3S4	Y	Occurs very sparingly in a variety of shrublands and canyon woodlands at widely scattered locations; Perennial; Flowering/Fruiting April-Dec
Plants	Matelea brevicoronata	shortcrown milkvine			Y	G3	S3	Y	Primarily in grasslands on tight sandy or silty substrates; Perennial; Flowering March-Sept; Fruiting May-Sept
Plants	Matelea sagittifolia	arrowleaf milkvine			N	G3	S3	Y	Most consistently encountered in thornscrub in South Texas; Perennial; Flowering March-July; Fruiting April-July and Dec?
Plants	Thymophylla tephroleuca	ashy dogweed	LE	E	Y	G2	S2	Y	Grasslands with scattered shrubs; most sites on sands or sandy loams on level or very gently rolling topography over Eocene strata of the Laredo Formation; flowering March-May depending to some extent on rainfall
Plants	Coryphantha nickelsiae	Nickels' cory cactus			N	G2	SH	Y	Limestone outcrops and nearby alluvial or gravelly soils on hills or plains in grasslands or shrublands at low elevations; known sites in Mexico have been described as Chihuahuan Desert scrub; flowering August through September
Plants	Echinocereus reichenbachii var. fitchii	Fitch's hedgehog cactus			N	G5T3	S3	Y	Grasslands, thorn shrublands, and mesquite-acacia woodlands on sandy, possibly somewhat saline, soils on the coastal prairie. Within these communities, the plants may be most frequently found in open areas that are somewhat sparsely covered with brush of a low stature. Frequently grows at the ecotone where these upland areas meet lower areas dominated by halophytic grasses and forbs; Perennial
Plants	Echinocereus papillosus	yellow-flowered alicoche			N	G3	S3	Y	Under shrubs or in open areas on various substrates; Perennial; Flowering Jan-April.
Plants	Paronychia maccartii	McCart's whitlow-wort			Y	GH	SH	Y	Known only from the type specimen, habitat poorly understood; substrate for type location described as very hard-packed red sand, possibly the Cuevita-Randado Complex, probably occurring in thorn shrubland plant community; based on type specimens presence of flowers and collection date, flowers in March, possibly also in other months and in response to rainfall
Plants	Atriplex klebergorum	Kleberg saltbush			Y	G2	S2	Y	Usually occurs in sparsely vegetated saline areas, including flats and draws; in light sandy or clayey loam soils with other halophytes; occasionally observed on scraped oil pad sites; observed flowering in late August-early September, but may vary with rainfall, fruits are usually present in fall; because of its annual nature, populations fluctuate widely from year to year
Plants	Polanisia erosa ssp. breviglandulosa	South Texas yellow clammyweed			Y	G5T3T4	S3S4	Y	Sand plains of south Texas (Iltis 1958). Flowering early spring-mid fall.
Plants	Lenophyllum texanum	Texas stonecrop			N	G3	S3	Y	Found in shrublands on clay dunes (lomas) at the mouth of the Rio Grande and on xeric calcareous rock outcrops at scattered inland sites; Perennial; Flowering/Fruiting Nov-Feb

Taxon	SName	CName	USESA	SPROT	Endemic	GRank	SRank	SGCN	Description
Plants	Phyllanthus abnormis var. riograndensis	sand sheet leaf-flower			Y	G5T3	S3	Y	Semi-desert scrub of deep South Texas; Annual; Flowering Feb-July; Fruiting Oct-March
Plants	Frankenia johnstonii	Johnston's frankenia			N	G3	S3	Y	Dwarf shrublands on strongly saline, highly alkaline, calcareous or gypseous, clayey to sandy soils of valley flats or rocky slopes; mapped soils at many sites are of the Catarina and/or Maverick Series, other mapped soils include Copita, Brennan, Zapata, and Montell series; most sites are underlain by Eocene sandstones and clays of the Jackson Group or the Yegua and Laredo formations; a few are underlain by El Pico clay or the Catahoula and Frio formations shrublands; flowering throughout the growing season depending upon rainfall
Plants	Gilia ludens	South Texas gilia			Y	G3	S3	Y	Occurs in open areas in shrublands on shallow sandy loam over rock outcrops; Perennial; Flowering Dec-April; Fruiting March
Plants	Prunus minutiflora	Texas almond			Y	G3G4	S3S4	Y	Wide-ranging but scarce, in a variety of grassland and shrubland situations, mostly on calcareous soils underlain by limestone but occasionally in sandier neutral soils underlain by granite; Perennial; Flowering Feb-May and Oct; Fruiting Feb-Sept
Plants	Houstonia croftiae	Croft's bluet			Y	G3	S3	Y	Occurs in sparsely vegetated areas in grasslands or among shrubs (Carr 2015).
Plants	Manfreda sileri	Siler's huaco			N	G3	S3	Y	Rare in a variety of grasslands and shrublands on dry sites; Perennial; Flowering April-July; Fruiting June-July
Plants	Tradescantia buckleyi	Buckley's spiderwort			N	G3	S3	Y	Occurs on sandy loam or clay soils in grasslands or shrublands underlain by the Beaumount Formation.