

Draft Environmental Assessment

Communication Tower
Jackson County Sheriff's Office
Edna, Texas
Homeland Security Grant Program
Project # 2010-SS-T0-0008 (11906)

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FEMA

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List of Acronyms and Abbreviations

AFR	American Flood Research, Inc.
APE	Area of Potential Effect
BMP	Best Management Practices
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
CZMP	State Coastal Zone Management Plans
DHS	Department of Homeland Security
EA	Environmental Assessment
EIS	Environmental Impact Statement
EO	Executive Order
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FCC	Federal Communications Commission
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FPPA	Farmland Protection Policy Act
FONSI	Finding of No Significant Impact
HSGP	Homeland Security Grant Program
MBTA	Migratory Bird Treaty Act
NAAQS	National Ambient Air Quality Standard
NAD83	North American Datum of 1983
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NO ₂	Nitrogen Dioxide
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
O ₃	Ozone
OSHA	Occupational Safety and Health Administration
Pb	Lead
PM ₁₀ and PM _{2.5}	Particulate matter
SHPO	State Historic Preservation Officer
SO ₂	Sulfur Dioxide
TCEQ	Texas Commission on Environmental Quality
THPO	Tribal Historic Preservation Officer
USGS	United States Geological Survey
USFWS	United States Department of the Interior, Fish and Wildlife Service
TPWD	Texas Parks and Wildlife Department
USACE	United States Army Corps of Engineers

USDA
WOUS

U.S. Department of Agriculture
Waters of the United States

1.0 INTRODUCTION

This Draft Environmental Assessment (EA) provides a review of the potential environmental impacts associated with grant funds issued by the Homeland Security Grant Program (HSGP). The HSGP is a primary funding mechanism to assist state, local, tribal, and nongovernmental agencies in developing sustaining national preparedness capabilities. As a condition of the HSGP, HSGP grantees must comply with all relevant federal legislation; including the National Environmental Policy Act (NEPA) therefore this project requires a site-specific EA.

The Department of Homeland Security (DHS)/Federal Emergency Management Agency (FEMA) has specified that Homeland Security Grant Program (HSGP)-funded projects must be used for projects that would improve communications in areas at high risk for natural disasters and in urban and metropolitan areas at high risk for threats of terrorism, and should include pre-positioning or securing of interoperable communications for immediate deployment during emergencies or major disasters. Investments that received HSGP funding range from large-scale infrastructure build-outs such as tower construction to governance-related initiatives, but not limited to multijurisdictional strategic planning.

NEPA requires that federal agencies evaluate the environmental consequences of proposed actions before deciding to fund an action. The intent of NEPA is to protect, restore, or enhance the environment through well-informed decision making. The President's Council on Environmental Quality (CEQ) has developed a series of regulations for implementing the NEPA. These regulations are included in Title 40 of the Code of Federal Regulations (CFR), Parts 1500–1508. An EA includes an evaluation of alternative means of addressing the purpose and need for federal action and a discussion of the potential environmental consequences of the proposed federal action. The EA provides the evidence and analysis to determine whether the proposed federal action will have a significant adverse effect on the human environment. An EA related to a FEMA program must be prepared according to the requirements of the Stafford Act and 44 CFR Part 10. This section of the Federal Code requires that FEMA take environmental considerations into account when authorizing funding or approving actions. This EA was conducted in accordance with both CEQ and FEMA regulations for NEPA. FEMA will use the findings in this EA to determine whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI)

2.0 Purpose and Need

The Jackson County Sheriff's Department's objective is to have complete coverage throughout the area. The current public safety telecommunications infrastructure is insufficient to meet this need. This lack of radio coverage adversely impacts ability to maintain radio communication, which is directly related to ability to provide emergency services and respond to emergency events. The specific need addressed in this proposal is to provide sufficient system capability to achieve radio coverage throughout Jackson County. The Purpose of the HSGP is to improve

interoperability and reliability in the nation's communications and information systems infrastructure by assisting public safety agencies in performing the following:

- Conducting Statewide or regional planning and coordination
- Supporting the design and engineering of interoperable emergency communications systems
- Supporting the acquisition or deployment of interoperable communications equipment or systems
- Establishing and implementing a strategic technology reserve to pre-position or secure interoperable communications in advance so they may be immediately deployed in an emergency or major disaster

3.0 ALTERNATIVES

NEPA requires the investigation and evaluation of reasonable project alternatives, including impacts to the natural and human environment as part of the planning process. This EA addresses two alternatives, the No Action alternative and the Proposed Action.

3.1 No Action Alternative

Under the No Action Alternative, Jackson County would continue to rely on existing communication infrastructure which does not provide sufficient coverage throughout the area or county. This would leave emergency response unchanged and results in a lower level of overall public safety than the Proposed Alternative as Jackson County and the surrounding counties emergency responders would remain at risk due to lack of radio coverage. Lack of adequate communication directly impacts command, control, rescue, event analysis, and other critical operations. The No Action Alternative would not address the needs for Jackson County and surrounding areas.

3.2 Proposed Action Alternative

The applicant is proposing to construct a 480-foot guyed communication tower at 28.89128 latitude and -96.59011 longitude located 8.5 miles southeast of Edna, TX along FM 3131 in Edna, Jackson County, Texas (Figure 1), and as shown on the USGS Manson, Texas 7.5 Minute Series Topographic Map dated 1995 (Figure 2). The proposed telecommunication compound will include: one 12-foot by 16-foot equipment shelter, a standalone emergency backup generator and associated propane tank, and control utility board as shown in Figure 3. The proposed Jackson Tower site will be a part of a trunking system associated with other towers in the neighboring counties of Lavaca, Victoria, Wharton and Matagorda.

The area surrounding the proposed undertaking is grassland located to the north, south and west and grassland followed by FM 3131 to the east. The proposed project will be located on property owned by the Lavaca-Navidad River Authority. An aerial photograph showing the site location is included (Figure 4) (Digital Globe 2008).

The proposed Jackson Tower site will allow for the following:

- Increased coverage area for emergency responders connected through the communications and information systems of neighboring counties
- New technology which will support frequencies which improve/expand voice and/or data coverage
- Improve communications among security/emergency organizations
- Enhance security and facility control
- Use cost-effective measures, via leasing agreements and systems sharing

3.3 Alternatives Considered But Not Carried Forward

Multiple alternatives were examined to determine the range of reasonable alternatives to implement the Proposed Action. No existing facility that would require minimum structural retrofitting of an existing tower and other equipment upgrades is available. The proposed site provides a technically appropriate area to locate this facility. Within this area, an extremely limited number of sites from which to choose were available to pursue.

Consideration of existing tower locations in the area and accounting for the future needs of Jackson County and surrounding areas did not meet the pre-screen requirements: increase coverage area for emergency responders, new technology which will support frequencies which improve/expand voice and/or data coverage, improve communications among security/emergency organizations, enhance security and facility control, and use cost-effective measures, via leasing agreements and systems sharing. Therefore, these alternatives will not be discussed any further in this EA.

4.0 AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS

Jackson County, Texas is located in a rural southeastern portion of the State of Texas. It is bordered on the north by Lavaca County, on the northeast/east by Wharton and Matagorda Counties and on the west by Victoria County. Lavaca Bay is located to the south of Jackson County. In 2009, the U.S. Census Bureau estimated Jackson County's population estimated to be 14,274 (Demographic Fact Finder 2011). The county has a land area of 829 square miles.

This section discusses the existing environmental conditions at the proposed site including descriptions of the physical, biological, and socioeconomic resources throughout the general area and the proposed action site. The characterization of existing conditions provides a baseline for assessing the potential environmental impacts from activities associated with the proposed action.

4.1 Physical Resources

4.1.1 Geology and Soils

The Proposed Action is located on the geologic formation identified as the Beaumont Formation consisting of non-stippled areas predominantly clay and mud of low permeability, high water holding capacity, high compressibility, poor drainage mostly clay, silt, sand, and gravel as shown in Figure 5 (Geologic Atlas of Texas, Beeville-Bay City Sheet, 1975, Revised 1987). The soil composition of the Jackson Tower site is listed as Laewest clay, 0 to 1 percent slopes, flats which are well drained as shown in Figure 6 (Natural Resource Conservation Service 2011).

The Farmland Protection Policy Act (FPPA) (P.L. 97-98, Sec. 1539-1549; 7 U.S.C. 4201, et seq.) is intended to minimize the impact federal programs have on unnecessary and irreversible conversion of farmland to nonagricultural uses. FPPA assures that federal programs are administered to be compatible with various programs to protect farmland. For the purpose of FPPA, farmland definition includes prime farmland, unique farmland, and land of statewide or local importance; it is important to note that these definitions include land such as forest land, pasture land, or other land that is not in current production.

According to the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), Laewest clay, 0 to 1 percent slopes soils located in the project area are classified as prime farmland. The proposed action will not adversely impact geology at the site. The soils will be impacted by the proposed tower construction. The minor construction activity will incorporate practices to minimize soil erosion during the construction/erection of the communication tower, including best management practices such as minimization of area of disturbance, silt fencing and/or straw bales, and proper staging of equipment. The site is currently a vacant parcel of grass land owned by the Lavaca-Navidad River Authority.

In accordance with the FPPA and implementing regulations in 7 CFR Part 658, the Proposed Action Alternative was reviewed for potential impacts on prime farmlands soils. USDA/NRCS Form AD-1006, Farmland Conversion Impact Rating, was used to document the process of evaluating the potential agricultural value of the project site. The agricultural value is given a score based on USDA criteria. This score assesses non-soil related criteria such as the potential for impact on the local agricultural economy if the land is converted to non-farm use. The score also evaluates the compatibility the non-soil related activities with existing agricultural use.

The score is used as an indicator to determine the potential impacts on farmland based on a 160 cumulative point threshold. The NRCS will identify measures or alternatives that would reduce or eliminate farmland impacts for projects that exceed the 160-point threshold. For projects that do not exceed this point threshold, the NRCS typically indicates that no further action is necessary.

The Farmland Conversion Impact Rating form was submitted to NRCS for their site assessment and scoring. However, the NRCS had not provided a response within 30 days of receipt of the Farmland Conversion Impact Rating form. Per 7 CFR Part 658.4 (a), FEMA is proceeding with the determination that the farmland soil conversion will be minimal and the Proposed Action will not adversely affect regional agricultural land use. A copy of the AD-1006 form is included in Appendix B.

Geology and soils will not be impacted by the No Action Alternative as no construction activities would occur.

4.1.2 Air Quality

Air quality is measured by the concentration of various pollutants in the atmosphere, usually expressed in units of parts per million (ppm) or micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). Acceptable levels for six criteria pollutants in ambient air have been established as National Ambient Air Quality Standards (NAAQS). These standards were set by the federal Environmental Protection Agency (EPA) for the maximum levels of air pollutants that can exist in the outdoor air without unacceptable effects on human health or the public welfare. The six criteria air pollutants include carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), sulfur dioxide (SO₂), particulate matter (PM₁₀ and PM_{2.5}), and lead (Pb). PM₁₀ and PM_{2.5} are acronyms for particulate matter consisting of particles smaller than 10 and 2.5 micrometers, respectively.

According to the Texas Commission on Environmental Quality (TCEQ), Jackson County is classified as in attainment and currently meets NAAQS for all six criteria pollutants (TCEQ 2008). The proposed project meets established NAAQS, air permits are not required for new construction or refitting construction for telecommunication towers that include the following activities: building a road, preparing land to erect a tower, temporary small-scale ground disturbance typically associated with new and refitting tower construction.

The proposed action will include short-term construction activities, including soil excavation and grading. These activities are likely to create fugitive dust; however best management practices (BMP) would be used to minimize dust. These BMPs include spraying water to minimize dust, limiting the area of uncovered soil to the minimum needed for each activity, siting of staging areas to minimize fugitive dust, using a temporary gravel cover, limiting the number and speed of vehicles on the site, and covering trucks hauling dirt. BMPs for construction vehicle and equipment emissions include limiting vehicle idling time, and conducting proper vehicle maintenance. The use of the emergency generator during power outages will not result in any major air quality issues as the generator will be powered by propane and will be used only for short periods of time. Once construction activities are completed, no anticipated source of air emissions will result from operation of the facility.

Air quality would not be impacted by the No Action Alternative as no construction activities would take place and no air emissions would occur.

4.2 Water Resources

The United States Army Corps of Engineers (USACE) is responsible for permitting and enforcement functions dealing with building into or discharging dredge or fill material into Waters of the United States (WOUS). USACE regulations for building or working in navigable WOUS are authorized by the Rivers and Harbors Act of 1899. These regulations go together with Section 404 of the Clean Water Act (CWA), which establishes the USACE permit program for discharging dredged or fill material into WOUS.

Field reconnaissance performed in July, 2011, did not observe defined surface drainage features, such as rivers, creeks, ponds, etc., on or immediately adjacent to the subject property.

4.2.1 Surface Water Quality

The Clean Water Act (CWA), as amended, is the primary federal law in the United States regulating water pollution (P.L. 92-500, 33 U.S.C. §1251). The CWA regulates water quality of all discharges into “waters of the United States.” Both wetlands and “dry washes” (channels that carry intermittent or seasonal flow) are considered “waters of the United States.” Administered by EPA, the CWA protects and restores water quality using both water quality standards and technology-based effluent limitations. The EPA publishes surface water quality standards and toxic pollutant criteria at 40 Code of Federal Regulations (CFR) Part 131.

The CWA also established the National Pollution Discharge Elimination System (NPDES) permitting program (Section 402) to regulate and enforce discharges into WOUS. The NPDES permit program focuses on point-source outfalls associated with industrial wastewater and municipal sewage discharges. Congress has delegated to many states the responsibility to protect and manage water quality within their legal boundaries by establishing water quality standards and identifying waters not meeting these standards. States also manage the NPDES system.

According to the USGS Manson, Texas 7.5 Minute Series Topographic Map dated 1995 (Figure 2), and the EPA Region 6 Map of Sole Source Aquifers (USEPA Sole Source Aquifers 2011) (Figure 7), the construction area is located on undeveloped coastal prairie and not over any mapped designated sole source aquifer. The site is approximately 28 feet above mean sea level with no indications of wetlands or floodplains in the reviewed databases and maps. Annual rainfall in this area is approximately 42.17 inches per year.

The nearest water bodies are Lake Texana located approximately 1,600 feet east and Dry Creek located approximately 1,900 feet southwest of the site identified in the USGS Topographic Map (Figure 2) and the 2008 Digital Globe aerial photograph (Figure 4).

Under the Proposed Action, potential impacts to surface or groundwater resources would be minimal, considering the distance of the nearby water resources from the proposed site and the relatively limited size of the Jackson Tower footprint of less than 0.25 acres ground disturbance, construction activities are unlikely to result in a significant amount of erosion.

The proposed action will include short-term construction activities, including soil excavation and grading. The minor construction activity will incorporate best management practices to minimize water quality impacts during the construction/erection of the communication tower; such as minimization of area of disturbance, silt fencing and/or straw bales, and proper staging of equipment. Once construction activities are completed, no water quality impacts are anticipated from operation of the facility.

Water quality would not be impacted by the No Action Alternative as no construction activities would take place and no impacts to water quality would occur.

4.2.2 Wetlands

Under the Clean Water Act (40 CFR § 230.3), wetlands are defined as “those areas that are inundated or saturated by surface or ground water 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. Wetlands generally include swamps, marshes, bogs and similar areas.” Potential wetlands under the jurisdiction of the USACE include waterways, lakes, streams, and natural springs.

A review of the United States Department of the Interior, Fish and Wildlife Service (USFWS) National Wetlands Inventory map Manson, Texas, 1998, indicated that wetlands are not located on the site (Figure 8). Furthermore, at the time of the site reconnaissance, there was no obvious evidence of potential wetlands, hydric soils or hydrophytic vegetation at the site or along the proposed access. A review of the relevant soil survey map did not note hydric soils at the site. Based on the findings of this review, the proposed action will result in no effects to wetlands.

Wetlands would not be impacted by the No Action Alternative as no construction activities would take place and no impacts to wetlands would occur.

4.2.3 Floodplain

Floodplains provide numerous beneficial environmental functions including flood abatement, stream flow mediation, filtering, and water quality enhancement. Executive Order (EO) 11988, Floodplain Management, requires federal agencies to take action to minimize occupancy and modification of the floodplain. Specifically, EO 11988 prohibits federal agencies from funding construction in the 100-year floodplain (500-year floodplain for critical facilities) unless there are

no practicable alternatives. Flood Insurance Rate Maps (FIRMs) are used to identify the regulatory 100-year Floodplain for the National Flood Insurance Program.

Consistent with EO 11988, FIRMs were examined on-line during the preparation of this EA and according to the Flood Insurance Rate Map (FIRM) on-line database for unincorporated areas of Jackson County, Texas, Community Panel Number 4803790275B, and the proposed site location is located in Zone C, outside of the 100-year floodplain. Therefore, the development of the site is not anticipated to affect areas of the 100-year flood zone (Figure 9). Based on this information, the Proposed Action is not anticipated to affect areas of the 100-year floodplain, and there would be no impact to floodplains.

Under the No Action alternative, construction activities would not take place and there would be no potential impacts to floodplains.

4.3 Coastal Resources

The Coastal Zone Management Act of 1972 (CZMA) (16 U.S.C. §1451) provides states with the authority to determine whether activities of governmental agencies are consistent with federally approved State Coastal Zone Management Plans (CZMP). The intent of the CZMA is to prevent any additional loss of living marine resources, wildlife, and nutrient-enriched areas; alterations in ecological systems; and decreases in undeveloped areas available for public use.

The Proposed Action is located in a grassland area of Jackson County, Texas and is located within the boundary of The Texas Coastal Management Program (Figure 10). The nearest water bodies are Lake Texana located approximately 1,600 feet east and Dry Creek located approximately 1,900 feet southwest of the site identified in the USGS Topographic Map (Figure 2) and the 2006 Texas Natural Resources Information System Website aerial photograph (Figure 4).

The Texas Coastal Management Program Coastal Coordination Council was contacted via the Texas General Land Office regarding the Proposed Action. A response was received from the Texas Coastal Management Program Coastal Coordination Council on December 21, 2011 indicating that the Proposed Action will likely not have adverse impacts on coastal natural resource areas in the coastal zone (Appendix B). Based on the findings and correspondence, the proposed action will result in no effects to coastal management zones.

Under the No Action alternative, construction activities would not take place and there would be no potential impacts to coastal management zones.

4.4 Biological Resources

4.4.1 Threatened and Endangered Species and Critical Habitat

Under the Endangered Species Act (ESA) of 1973, federal agencies must review proposed actions to ensure they are not likely to jeopardize the continued existence of a listed species or destroy or adversely modify its critical habitat.

The U.S. Fish and Wildlife Service (USFWS) Division of Endangered Species County Website listed two species in Jackson County (USFWS 2011). The USFWS species listed for Jackson County are the West Indian Manatee (*Trichechus manatus*) listed as endangered and the whooping crane (*Grus americana*) listed as endangered/experimental population, non-essential. Habitats for these species were compared to the habitat observed at the proposed site, and none of the habitats were identified with a potential to be found on the site.

In a letter dated April 4, 2012, the USFWS concurred with FEMA's "may affect, but is not likely to adversely affect" determination regarding the whooping crane (Appendix B). As a result, the following conservation measures will be implemented to avoid or minimize impacts to the bald eagle and whooping crane:

- Construction for the proposed tower will take place outside the breeding season of the bald eagle.
- Construction for the proposed tower will be take place outside the whooping crane migratory season.
- Tower light systems will include minimum intensity, maximum off-phased white strobe lighting according to the FAA regulations.
- Guy wires will be marked with bird diverters to avoid or minimize potential bird strikes by migratory birds, whooping cranes or the bald eagle.

If project plans change or impacts do occur, all work is to stop and FEMA is to be contacted.

None of the characteristic habitats were identified on the tower site. No burrows, nests, or other signs of threatened and endangered species habitat were readily observable at the time of the reconnaissance. Furthermore, guy wires will be marked with bird diverters to help minimize possibility of species being impacted by unmarked guy wires. For these reasons, it is anticipated that the proposed tower construction may affect, but is not likely to adversely affect listed or proposed protected species or critical habitats.

The Texas Parks and Wildlife Department (TPWD) was contacted on September 2, 2011 with information regarding the proposed project including site maps, site photographs, species list and the site location designated on the relevant USGS 7.5 minute topographic map. A response was received from the TPWD dated October 6, 2011 stated that the proposed tower is not located in a TPWD Wildlife Management Area or State Park. The response also provided recommendations to assist the project sponsor in minimizing impacts to wildlife resources. The TPWD response is provided (Appendix B).

Migratory Birds

The Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. §703) was first enacted to implement the 1916 convention between the United States and Great Britain for the protection of birds migrating between the U.S. and Canada, offering much-needed protection to many bird species during a time when commercial trade in birds and their feathers was popular. The statute makes it unlawful to pursue, hunt, take, capture, kill or sell birds listed in the statute as "migratory birds", and does not discriminate between live or dead birds and also grants full protection to any bird parts including feathers, eggs and nests. The MBTA is the primary law that affirms or implements the nation's commitment to four international conventions (with Canada, Japan, Mexico, and Russia) for the protection of a shared migratory bird resource. Each convention protects selected species of birds that are common to both countries (e.g., they occur in both countries at some point during their annual life cycle). The potential impact to property owners can exist when migratory birds seek respite within trees or on buildings considered private property.

USFWS's Division of Migratory Bird Management established several initiatives in the past decade to research collisions of birds with communication towers. In 1999, USFWS established the Communication Tower Working Group, composed of government, industry, and academic groups to study and determine tower construction approaches that prevent bird strikes.

Jackson County is located within a portion of the Central Flyway for migratory birds (USFWS 2011). Fall and spring migrants use the region for temporary stops during travel between the northern and southern hemispheres. Best management practices should be implemented for avoiding harassment and harm to migratory birds during construction activities. Impacts on migratory birds could be expected as a result of collision with operating towers, antennae, and other tall structures, particularly during periods of low visibility and as a result of tower lighting that might be distracting to some species. The probability of collision is difficult to determine programmatically due to the range of variables that affect the potential for collision and the lack of conclusive data on the causes of collision. The following 12 guidelines of the USFWS *Service Guidelines for Recommendations on Communications Tower Sites, Construction, Operation, and Decommissioning* were evaluated with regards to the proposed project.

1. Any company/applicant/licensee proposing to construction a new communications tower is strongly encouraged to collocate the communications equipment on an existing communication tower or other structure (e.g., billboard, water tower, or building mount). Depending on tower load factors, from 6 to 10 providers may collocate on an existing tower.

Response: The proposed site is located in a rural area. An existing tower or other structure is not located on or near the proposed project area. Therefore a collocation alternative has been dropped from consideration.

2. If collocation is not feasible and a new tower or towers are to be constructed, communications service providers are strongly encouraged to construct towers no more than 199 feet above ground level (AGL), using construction techniques which do not require guy wires (e.g., use a lattice structure, monopole, etc). Such towers should be unlighted if Federal Aviation Administration (FAA) regulations permit.

Response: The proposed tower height of 480-feet is requested in order fill a gap in the coverage in the area and to minimize the number of additional towers in the area. The alternative of multiple shorter towers could potentially increase the cumulative effects to soil, vegetation, wetlands, wildlife habitat, threatened and endangered species and/or migratory birds. A shorter tower was considered, but after further research it was determined that this alternative would not meet and/or overlap the coverage with the trunking system potentially associated with other towers in the neighboring counties of Lavaca, Wharton, Matagorda and Victoria. For these reasons, a shorter tower alternative has been dropped from consideration.

3. If constructing multiple towers, providers should consider the cumulative impacts of all of those towers to migratory birds and threatened and endangered species as well as the impacts of each individual tower.

Response: The construction of a 480-foot communications tower may alleviate the need for future development of additional towers for the area that are of a lower height. The alternative of constructing multiple shorter towers could potentially increase the cumulative effects to soil, vegetation, wetlands, wildlife habitat, and threatened and endangered species, as well as migratory birds.

4. If at all possible, new towers should be sited within existing “antenna farms” (clusters of towers). Towers should not be sited in or near wetlands, other known bird concentration areas (e.g., state or federal refuges, staging areas, rookeries), in known migratory or daily movement flyways, or in habitat of threatened or endangered species. Tower should not be sited in areas with a high incidence of fog, mist, and low ceilings.

Response: The proposed tower is located approximately 8.5 miles southeast of Edna, Texas along FM 3131 in Jackson County, Texas. There are no clusters of towers located within an approximate 10 to 20 mile radius of the proposed site.

5. If taller (>199feet AGL) towers requiring lights for aviation safety must be constructed, the minimum amount of pilot warning and obstruction avoidance lighting required by the FAA should be used. Unless otherwise required by the FAA, only white (preferable) or red strobe lights should be used at night, and these should be the minimum number, minimum intensity, and minimum number of flashes per minute (longest duration between flashes) allowable by the FAA. The use of solid red or pulsating red warning lights at night should be avoided. Current research indicates that solid or pulsating (beacon) red lights attract night-

migrating birds at a much higher rate than white strobe lights. Red strobe lights have not yet been studied.

Response: Based upon the proposed tower height of 480-feet, it is recommended that the Jackson County Sheriff's Department use light systems with minimum intensity, maximum off-phased white strobe lighting according to FAA regulations.

6. Tower designs using guy wires for support which are proposed to be located in known raptor or waterbird concentration areas or daily movement routes, or in major diurnal migratory bird movement routes or stopover site, should have daytime visual markers on the wires to prevent collisions by these diurnally moving species. (For guidance on markers, see *Avian Power Line Interaction Committee (APLIC). 1994. Mitigating Bird Collisions with Power Lines: The State of the Art in 1994. Edison Electric Institute, Washington, D.C., 78 pp*, and *Avian Power Line Interaction Committee (APLIC). 1996. Suggested Practices for Raptor Protection on Power Lines. Edison Electric Institute/Raptor Research Foundation, Washington, D.C., 128 pp*. Copies can be obtained via the Internet at <http://www.eei.org/resources/pubcat/envir/>, or by calling 1-800-334-5453.

Response: According Jackson County Sheriff's Department, the proposed tower will contain three guyed wires instead of the typical six guyed wires used to support towers of this height. The decrease in the number of guyed wires should aid in decreasing and/or preventing bird strikes. Furthermore, the Jackson County Sheriff's Department will incorporate and install bird diverters on guyed wires to minimize or prevent collisions during periods of high bird activity.

7. Towers and appendant facilities should be sited, designed and constructed so as to avoid or minimize habitat loss within and adjacent to the tower "footprint". However, a larger tower footprint is preferable to the use of guy wires in construction. Road access and fencing should be minimized to reduce or prevent habitat fragmentation and disturbance, and to reduce above ground obstacles to birds in flight.

Response: According to the Jackson County Sheriff's Department, the prefabricated equipment shelter will be placed within the footprint of the proposed tower adjacent to the base. Furthermore, due to decrease in guyed wire supports to be used for the tower, the footprint will be reduced by fifty percent. It is recommended that construction materials, equipment and staging areas be located/stored within the proposed project footprint in order to avoid and/or minimize impacts to undisturbed native vegetation.

8. If significant numbers of breeding, feeding, or roosting birds are known to habitually use the proposed tower construction area, relocation to an alternate site is recommended. If this is not an option, seasonal restrictions on construction may be advisable in order to avoid disturbance during periods of high bird activity.

Response: Relocation to an alternate site is not a viable option for the proposed project. The location of the proposed project is the most viable location for overlapping the coverage with the trunking system associated with other towers in the nearby area and neighboring counties. It is recommended that potential project disturbances, including noise, be minimized and, if possible, be scheduled to occur outside of periods of high bird activity. Furthermore the following conservation measures will be taken: Construction for the proposed tower will take place outside the breeding season of the bald eagle. Construction for the proposed tower will be take place outside the whooping crane migratory season. Tower light systems will include minimum intensity, maximum off-phased white strobe lighting according to the FAA regulations. Guy wires will be marked with bird diverters to avoid or minimize potential bird strikes by migratory birds, whooping cranes or the bald eagle.

9. In order to reduce the number of towers needed in the future, providers should be encouraged to design new towers structurally and electrically to accommodate the applicant/licensee's antennas and comparable antennas for at least two addition users (minimum of three users for each tower structure), unless this design would require the addition of lights or guy wires to an otherwise unlighted and/or un-guyed tower.

Response: According to the Jackson County Sheriff's Department, the proposed tower will likely accommodate comparable antennas for additional users. The tower will be primarily utilized by security and emergency service entities.

10. Security lighting for on-ground facilities and equipment should be down-shielded to keep light within the boundaries of the site.

Response: The newly fabricated equipment shelter to be located within the site boundary near the base of the proposed tower will contain down-shielded lighting in an attempt to keep light within the site boundary.

11. If a tower is constructed or proposed for construction, Service personnel or researchers from the Communication Tower Working Group should be allowed access to the site to evaluate bird use, conduct dead-bird searches, to place net catchments below the towers but above the ground, and to place radar, Global Positioning System, infrared, thermal imagery, and acoustical monitoring equipment as necessary to assess and verify bird movements and to gain information on the impacts of various tower sizes, configurations, and lighting systems.

Response: It is recommended that Service personnel or researchers from The Communication Tower Working Group coordinate with the property owner, tower owner and local security and emergency service entities prior to accessing the proposed site.

12. Towers no longer in use or determined to be obsolete should be removed within 12 months of cessation of use.

Response: The proposed project is for a new 480-foot tower. The site does not contain any prior tower structures or equipment.

Adverse impacts on birds resulting from collision generally occur during low visibility conditions at lighted towers supported by guy wires and present greater collision risk than freestanding towers or buildings. Visibility for the Jackson County area, on average, is 10 miles or greater. It is not anticipated that the Proposed Action will have adverse impacts on migratory birds.

Under the No Action alternative, construction activities would not take place and there would be no potential impacts to listed or proposed protected species or critical habitats.

4.5 Cultural and Historic Resources

4.5.1 Historic Properties

Historic and cultural resources are sites, structures, buildings, districts, or objects, associated with important historic events or people, demonstrating design or construction associated with a historically significant movement, or with the potential to yield historic or prehistoric data, that are considered important to a culture, a subculture, or a community for scientific, traditional, religious, or any other reason (Texas Historical Commission Sites Atlas 2011) (Figure 11). Typically, historic and cultural resources are subdivided into the following categories:

- **Archaeological resources.** This includes prehistoric or historic sites where human activity has left physical evidence of that activity but few aboveground structures remain standing.
- **Architectural resources.** This includes buildings or other structures or groups of structures that are of historic or aesthetic significance.
- **Native resources.** These include resources of traditional, cultural, or religious significance to a Native American Tribe, Native Hawaiian, or Native Alaskan organization.

There are multiple federal regulations that protect historic and cultural resources. The National Historic Preservation Act of 1966 (NHPA) (P.L. 89–665, 16 U.S.C. §470) directs the federal government to consider the effects of its actions on historic and cultural resources under Section 106 through a four-step compliance process. It is noteworthy, however, that the law does not necessarily mandate preservation but does mandate a carefully considered decision making process. The four steps of the Section 106 compliance process are the following:

1. **Establish whether the Proposed Action constitutes an undertaking.** Per 36 CFR 800.16, an undertaking is an action funded in whole or in part under the direct or indirect jurisdiction of a federal agency. If the Proposed Action is an undertaking, the appropriate State Historic Preservation Office (SHPO) or Tribal Historic Preservation Office (THPO) and other consulting parties (stakeholders) are identified.
2. **Identify National Register-listed or eligible properties.** Eligible historic properties in the geographic area of the Proposed Action are identified and evaluated for significance, including properties potentially eligible or listed with the National Register of Historic Places (NRHP) that may be affected by the Proposed Action.
3. **Assess affects of Proposed Action on eligible historic properties.** If the assessment determines no historic properties or no adverse effect to eligible historic properties, the SHPO/THPO and other consulting parties are informed, and the compliance process stops at this step. If the assessment determines actual or potential adverse effect to eligible historic properties, the SHPO/THPO and other consulting parties are notified through a letter and supporting documentation.
4. **Resolve adverse effects to eligible historic properties through consultation with the SHPO/THPO and Advisory Council on Historic Preservation (ACHP), as necessary.**

The project is located on a parcel of grassland, at 28 feet elevation, in the coastal plains region of Jackson County with no structures located in the area. Historic, cultural, or tribal resources were not identified within a 1.5-mile area of potential effect of the Proposed Action based on a review of information available from NRHP, the Texas SHPO, and the Texas Archaeological Site Files. The Texas Historic Commission – Site Atlas is shown in Figure 11.

A review of the National Register Information Systems website indicated that there are five resources listed in the National Register of Historic Places (NRHP) within a three quarter mile radius (for towers 201-400 feet in height). These resources did not have National Register designation.

Consultation with the Texas SHPO was conducted to determine whether the construction of the Jackson Tower and installation of associated antennae, microwave links, and infrastructure may generate any short-term or long-term indirect impacts to historic and cultural resources and within the viewshed of any historic and cultural resources. Information available on the Texas SHPO website indicated no state-surveyed historic places were located within the area of potential effect (APE). A public notice was listed in the “Jackson County Herald-Tribune” on August 17, 2011 to allow for public comments on the effect of the proposed project on historic properties within the viewshed of the proposed tower (Appendix B). No comments pertaining to the public notice were received.

Federal Communications Commission (FCC) Form 620 with attachments was submitted to the SHPO on August 15, 2011.

A stamped response dated August 30, 2011, from the SHPO indicated no historic properties affected project may proceed (Appendix B). In the event that archeological deposits, including any Native American pottery, stone tools, bones, or human remains, are uncovered, the project shall be halted and the applicant shall stop all work immediately in the vicinity of the discovery and take reasonable measures to avoid or minimize harm to the finds. All archeological findings will be secured and access to the sensitive area restricted. The applicant will inform FEMA immediately and FEMA will consult with the SHPO or THPO and Tribes and work in sensitive areas cannot resume until consultation is completed and appropriate measures have been taken to ensure that the project is in compliance with the National Historic Preservation Act.

In the event that archeological deposits, including any Native American pottery, stone tools, bones, or human remains, are uncovered, the project shall be halted and the applicant shall stop all work immediately in the vicinity of the discovery and take reasonable measures to avoid or minimize harm to the finds. All archeological findings will be secured and access to the sensitive area restricted. The applicant will inform FEMA immediately and FEMA will consult with the SHPO or THPO and Tribes and work in sensitive areas cannot resume until consultation is completed and appropriate measures have been taken to ensure that the project is in compliance with the National Historic Preservation Act.

Under the No Action alternative, construction activities would not take place and there would be no potential impacts to cultural and historic resources.

4.5.2 Tribal Coordination

Section 106 of the NHPA also requires coordination with federally-recognized Indian tribes who may have potential cultural interests in the project area, and acknowledges that tribes may have interests in geographic locations other than their seat of government. The FCC has established a Tower Construction Notification System (TCNS) that allows for federally recognized Tribes and Native Hawaiian Organizations (NHO) to respond to grantees via email.

The following groups were contacted: the Comanche Nation, Wichita and Affiliated Tribes, Tonkawa Tribe, and the Mescalero Apache Tribe. The Comanche Nation responded through the TCNS requesting information about the proposed site to include photographs of the proposed site taken from all 4 directions, a written legal description of the proposed site, and any existing reports or surveys relating to the proposed site. Terracon sent the requested information to the Comanche Nation on August 25, 2011. The Comanche Nation responded on August 30, 2011 stating that the Comanche Nation site files have identified no current listings identified for the proposed site. The Wichita and Affiliated Tribes responded through the TCNS stating that if the applicant/tower builder does not receive a response from the Wichita and Affiliated Tribes after 30 days after notification through the TCNS, the Wichita and Affiliated Tribes has no interest in participating in pre-construction review for the site. The Tonkawa Tribe responded through the TCNS on August 8, 2011 stating that the Tonkawa Tribe has no known burial sites of the Tonkawa Indians for this site. The Mescalero Apache Tribe responded

through the TCNS requesting a copy of Form 620 for their review. Terracon sent the requested information to the Mescalero Apache Tribe on August 25, 2011. The Mescalero Apache Tribe responded through the TCNS on October 26, 2011 stating “After review of this communications project, it has been determined that the Mescalero Apache Tribe has no immediate concerns within the project area, and that the project will cause no adverse effects to cultural resources or areas of interest to the Mescalero Apache Tribe. All of the groups indicated by letter, email or by telephone contact that they had no interest in the proposed project (Appendix B).

In the event that archeological deposits, including any Native American pottery, stone tools, bones, or human remains, are uncovered, the project shall be halted and the applicant shall stop all work immediately in the vicinity of the discovery and take reasonable measures to avoid or minimize harm to the finds. All archeological findings will be secured and access to the sensitive area restricted. The applicant will inform FEMA immediately and FEMA will consult with the SHPO or THPO and Tribes and work in sensitive areas cannot resume until consultation is completed and appropriate measures have been taken to ensure that the project is in compliance with the National Historic Preservation Act.

Under the No Action alternative, construction activities would not take place and there would be no potential impacts to tribal resources

4.6 Socioeconomic Resources

Jackson County, Texas is located in a rural southeastern portion of the State of Texas. It is bordered on the north by Lavaca County, on the northeast/east by Wharton and Matagorda Counties and on the west by Victoria County. Lavaca Bay is located to the south of Jackson County. In 2009, the U.S. Census Bureau estimated Jackson County’s population estimated to be 14,274 (Demographic Fact Finder 2011). The county has a land area of 829 square miles.

4.6.1 Environmental Justice

Executive Order 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations) requires that federal agencies focus on achieving environmental justice by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States.

The proposed action will result in significant upgrades to and enhancements of the interoperable communication capability within Jackson County and will address radio coverage issues throughout the county, thus benefitting the entire population. The proposed site is located 8.5 miles southeast of Edna, TX along FM 3131 in Edna, Jackson County, Texas (Figure 1). The area surrounding the proposed undertaking is grass land located to the north, south and west and grassland followed by FM 3131 to the east. The proposed project will be located on property owned by the Lavaca-Navidad River Authority. Based on the site location no

displacement or impacts to residences, businesses, minority populations and low-income populations would be affected.

Under the No Action Alternative, Jackson County would continue to rely on existing communication infrastructure which does not provide sufficient coverage throughout the area. This would leave emergency response unchanged and results in a lower level of overall public safety than the Proposed Alternative as Jackson County emergency responders would remain at risk due to lack of radio coverage. Lack of adequate communication directly impacts command, control, rescue, event analysis, and other critical operations.

4.6.2 Noise

Noise is generally referred to as unwanted sound which interferes with work, rest, communication, recreations, or sleep. During construction activities at the proposed Action area, there would be a temporary increase in localized noise. Construction activities for new infrastructure may result in short-term, negligible adverse impacts. Noise from the construction activities will vary depending on the distance from the source of the noise. The noise levels generated by construction equipment would vary substantially depending on the type of equipment used, operations schedule, and condition of the project area. In addition to daily variations in construction activities, major construction for new infrastructure would be accomplished in several different stages, with each stage having a specific equipment mix for the work to be accomplished. The use of heavy equipment during construction activities may result in short-term minor adverse impacts on the noise environment, especially if noise-sensitive populations are adjacent to a proposed site. Typically, construction-related noise generation would last only for the duration of construction activities and occur during normal working hours (i.e., 7:00 a.m. to 5:00 p.m.), when noise is tolerated better because of the masking effect of background noise, with equipment being shut off when not in use. Evening noise levels would likely drop to ambient noise levels of the project area.

It is anticipated that noise impacts from the Proposed Action construction activities would be temporary and would not exceed typical noise levels. Based on the Environmental Protection Agency (EPA) data, noise levels (dBA) at a distance of 50 feet from the source would be no greater than 85 dBA for no more than four to six continuous hours per day over a 10 to 35 day period (EPA 1974). To reduce noise levels during construction, construction activities would occur during normal working hours (i.e., 7:00 a.m. to 5:00 p.m.). Construction-related noise impacts from the Jackson Tower project would not be significant. Normal daily operation of the facility, once constructed, will not generate appreciable noise. Due to the site location, the periodic operation of the emergency generator will result in minimal noise levels and then for only for periods of short duration.

Under the No Action alternative, construction activities would not take place and there would be no potential impacts to noise.

4.6.3 Traffic/Transportation Network

Construction-related activities, heavy equipment and materials that may be needed for site access and site preparation would not pose a significant impact to the transportation network or cause a significant increase in traffic for the area. Construction of the Proposed Action may require numerous truck trips to haul materials to the project site. The number of construction-related trips and the frequency and duration of impacts would be dependent on the location, nature, and scale of the project. Since the Jackson Tower site is a 480-foot guyed tower, the surface impact less than 0.25 acres in size of grassland; a significant amount of construction related traffic is not required to complete the project.

Potential impacts to transportation and traffic are expected to be low, provided appropriate planning and implementation actions are taken. Existing roads would be used to the maximum extent possible. There would be no significant impact to transportation networks or traffic from construction-related activities. Once operational, only 1 to 2 vehicles or light trucks will access the facility per day and this is not anticipated to have an adverse impact on transportation and traffic in the vicinity of the site.

Under the No Action alternative, construction activities would not take place and there would be no potential impacts to traffic or transportation networks.

4.6.4 Utilities

The Jackson Tower project activities would require additional short-term electric and communication services from available utility networks. The Proposed Action will utilize the existing electrical power lines located approximately 450 feet southwest of the site. Construction-related impacts are not expected to lead to major shortages in supply, nor are they expected to require major changes to the system. Impacts to utilities would not be significant.

During construction-related activities, precautions would be taken to avoid damage to existing utility lines. All potential modifications to utility services would be evaluated. Coordination with potentially affected local and regional utility service providers would occur to avoid unnecessary damage or interruption of service. There would be no significant impact to utility services from construction-related activities with the Jackson Tower site. Once operational, only minor electric and communication needs are anticipated at the facility and this is not anticipated to have an adverse impact on utility service in the vicinity of the site.

Under the No Action alternative, construction activities would not take place and there would be no potential impacts to utilities.

4.6.5 Public Health and Safety

Under the Proposed Action, there would be a slight increase in workplace safety hazards during the construction phase of the Jackson Tower site because of the nature of construction work and the increased intensity of work at the proposed site. Construction and ground-disturbing activities would take place for approximately one week and would include slight grading and digging with the use of a bulldozer, using a pier drill rig for the tower foundation and equipment building footings, and the use of a mobile crane for erecting the tower. The impact of this increase would not be significant. Work areas surrounding construction activities would be fenced, access would be restricted to authorized personnel and appropriate signs would be posted to further minimize safety risks. In addition, implementation of worker safety rules, derived from Occupational Safety and Health Administration (OSHA) safety and health standards, will establish a uniform set of safety practices and procedures to protect workers. Construction-related impacts to human health and safety impacts would not be significant. No public access will be provided to the facility once operational and only authorized personnel, with proper equipment and proper safety training will be allowed onto the facility for the day-to-day operations and maintenance.

Implementation of the Proposed Action will ultimately result in an increase in public safety as a result of increased access to emergency services and improved response times and response coordination among the various emergency services in Jackson County and the surrounding counties.

Under the No Action alternative, construction activities would not take place and there would be no potential impacts to public health and safety.

4.7 Summary Table

Affected Environment/ Resource Area	Impacts	Mitigation/BMPs
Geology and Soils	No impacts to underlying geology are anticipated. Soils will be impacted by the proposed tower construction.	The minor construction activity will incorporate practices to minimize soil erosion during the construction/erection of the communication tower, including best management practices such as minimization of area of disturbance, silt fencing and/or straw bales, and proper staging of equipment.

Affected Environment/ Resource Area	Impacts	Mitigation/BMPs
Air Quality	Air quality impacts during construction would originate from emission of construction vehicles, equipment, and fugitive dust stirred up during ground disturbing activities. Both would be short-term, temporary and of limited duration. No impacts anticipated. The use of the emergency generator during power outages will not result in any major air quality issues as the generator will be powered by propane and will be used only for short periods of time.	Construction contractors will use best management practices (BMP). These BMPs include spraying water to minimize dust, limiting the area of uncovered soil to the minimum needed for each activity, siting of staging areas to minimize fugitive dust, using a temporary gravel cover, limiting the number and speed of vehicles on the site, and covering trucks hauling dirt. BMPs for construction vehicle and equipment emissions include limiting vehicle idling time, and conducting proper vehicle maintenance.
Surface Water Quality	No impacts to surface water and groundwater are anticipated.	None
Wetlands	No impacts to wetlands are anticipated	None
Floodplain	No impacts to the floodplain are anticipated.	None
Coastal Resources	No impacts to coastal management zones are anticipated.	None
Threatened and Endangered Species and Critical Habitat	Potential impacts to the whooping crane. However, the USFWS has concurred that the project "May affect, but is not likely to adversely affect" based on the proposed conservation measures.	The following conservation measures proposed to avoid or minimize impacts to the whooping crane: Construction for the proposed tower will be take place outside the whooping crane migratory season. Tower light systems will include minimum intensity, maximum off-phased white strobe lighting according to the FAA regulations. Guy wires (three wires instead of six wires) will be marked with bird diverters to avoid or minimize potential bird strikes by migratory birds.
Historic Properties	No Impacts per SHPO concurrence dated August 30, 2011	None

Affected Environment/ Resource Area	Impacts	Mitigation/BMPs
Tribal Coordination	No impacts to tribal lands are anticipated.	None
Environmental Justice	Beneficial impact to all populations in the community	None
Noise	Temporary short-term construction-related noise The periodic operation of the emergency generator will result in minimal noise levels and then for only for periods of short duration.	To reduce noise levels during construction, construction activities would occur during normal working hours (i.e., 7:00 a.m. to 5:00 p.m.).
Traffic/Transportation Network	No impacts are anticipated.	None
Utilities	No impacts are anticipated.	None
Public Health and Safety	Construction activities during the construction phase of the proposed site could present safety risks to those performing the activities. No long-term negative safety impacts are anticipated.	Qualified construction personnel trained in the proper use of the appropriate equipment and safety precautions will be performing construction activities. Activities will be conducted in a safe manner and in accordance with standards specified in OSHA regulations.

5.0 CUMULATIVE IMPACTS

Cumulative impacts represent the impact on either the natural or human environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or nonfederal) or persons undertake such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

The Proposed Action would not have a significant impact on any resource area for those projects falling within the resource parameters described in the EA. The Proposed Action would have beneficial impact on human health and safety, because it would enable countywide improvements to public safety interoperable communications.

Under the No Action Alternative, no interoperable communications capability would occur. Existing interruption in public safety interoperable communications would persist, resulting in an adverse impact to human health and safety.

6.0 PUBLIC INVOLVEMENT

The availability of this EA will be advertised by public notice in the local weekly newspaper, Victoria Advocate. Copies of the EA will be available at the Jackson County Courthouse. The public comment period will extend for a period of fifteen (15) days. The EA can also be viewed and downloaded from FEMA's website at <http://www.fema.gov/plan/ehp/envdocuments/ea-region6.shtm>. If no substantive comments are received, the EA will become final and the initial public notice will also serve as the final public notice. The EA will then be archived on FEMA's website at <http://www.fema.gov/library/>.

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8.0 LIST OF PREPARERS

Julio A. Aguilar, Environmental Scientist, Terracon Consulting Engineers and Scientists

Government Contributors

Kevin Jaynes, CHMM, Regional Environmental Officer, FEMA Region 6

Alan Hermely, Environmental Specialist, FEMA Region 6

FIGURES

Figure 1: Vicinity Map

Figure 2: Topographic Map

Figure 3: Proposed Site Plan

Figure 4: Aerial Map

Figure 5: Geologic Map

Figure 6: Soils Map

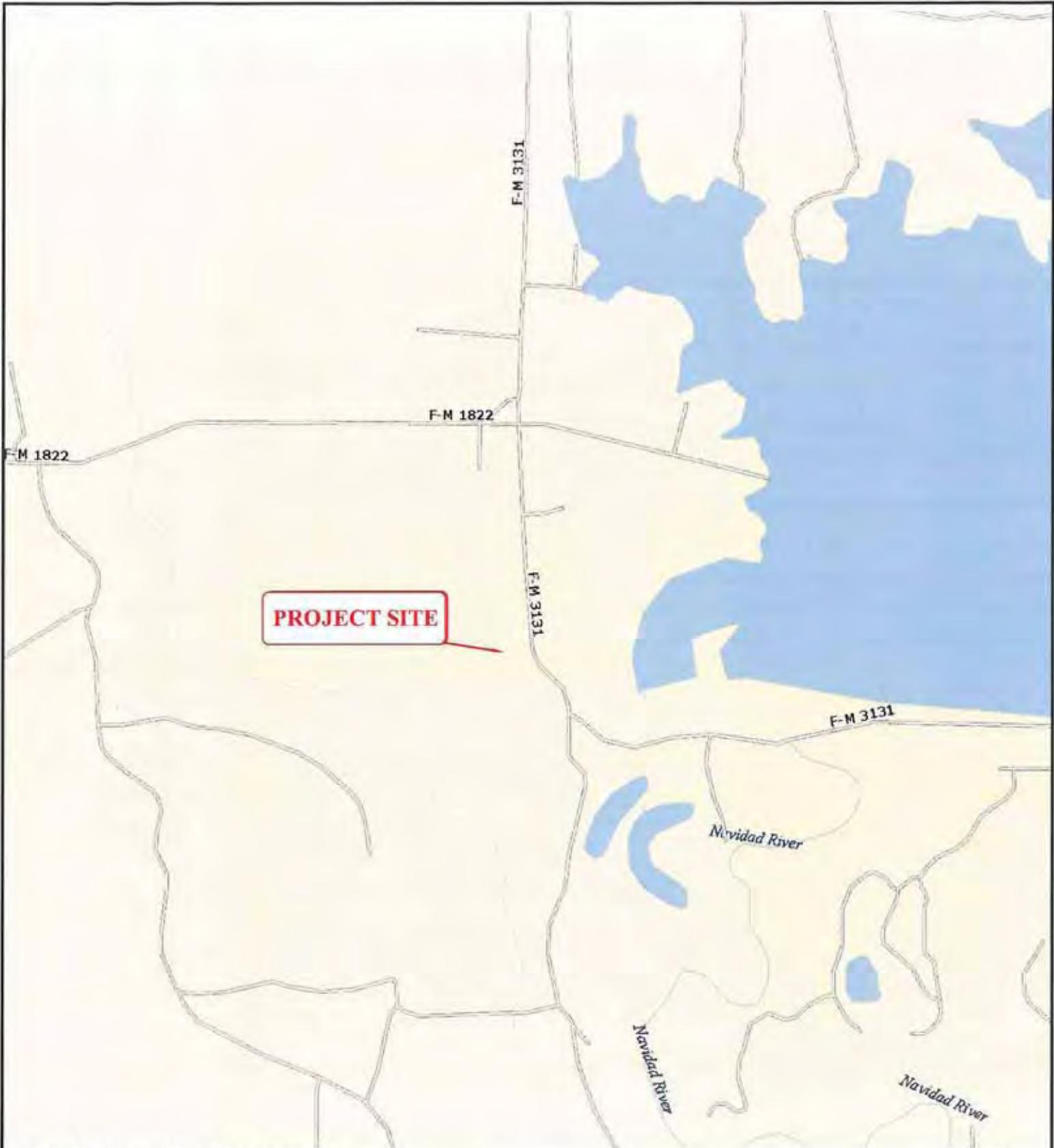
Figure 7: Sole Source Aquifer Map

Figure 8: Wetland Map

Figure 9: Floodplain Map

Figure 10: Texas Coastal Management Program Map

Figure 11: Historic Sites Map



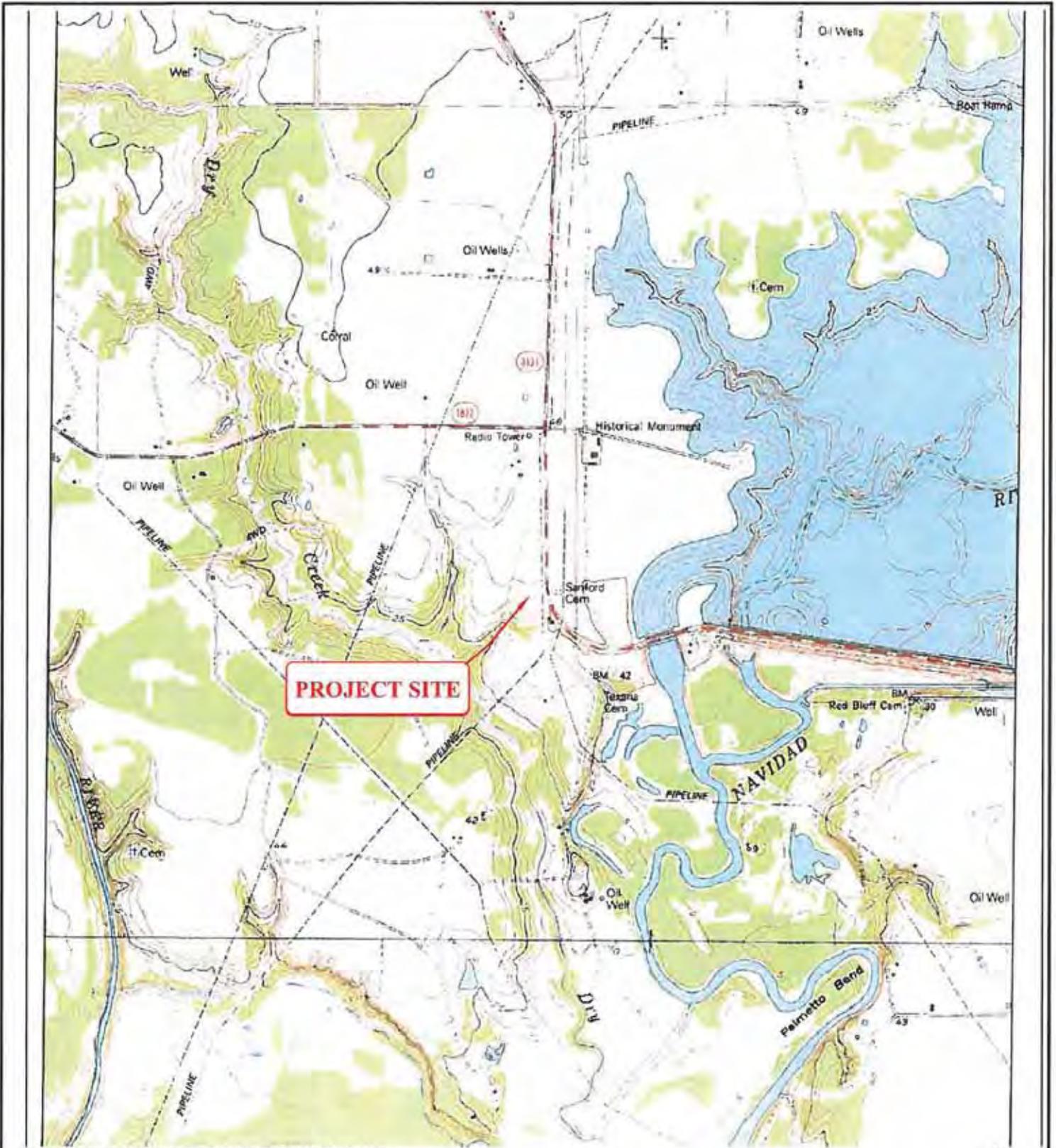
SOURCE: Delorme Street Atlas USA 2011

DIAGRAM IS FOR GENERAL LOCATION ONLY,
AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

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<p>VICINITY MAP</p> <p>JACKSON TOWER SITE</p> <p>8.5 MILES SOUTHEAST OF EDNA, TX ALONG FM 3131</p> <p>EDNA, JACKSON COUNTY, TEXAS</p>
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<p>Fig. No.</p> <p>1</p>



SOURCE: U.S.G.S. 7.5 MINUTE TOPOGRAPHIC QUADRANGLE MAP OF MANSON, TEXAS.

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

	<p>1995 TOPOGRAPHIC MAP</p> <p>JACKSON TOWER SITE 8.5 MILES SOUTHEAST OF EDNA, TX ALONG FM 3131 EDNA, JACKSON COUNTY, TEXAS</p>	<p>Fig. No.</p> <p>2</p>
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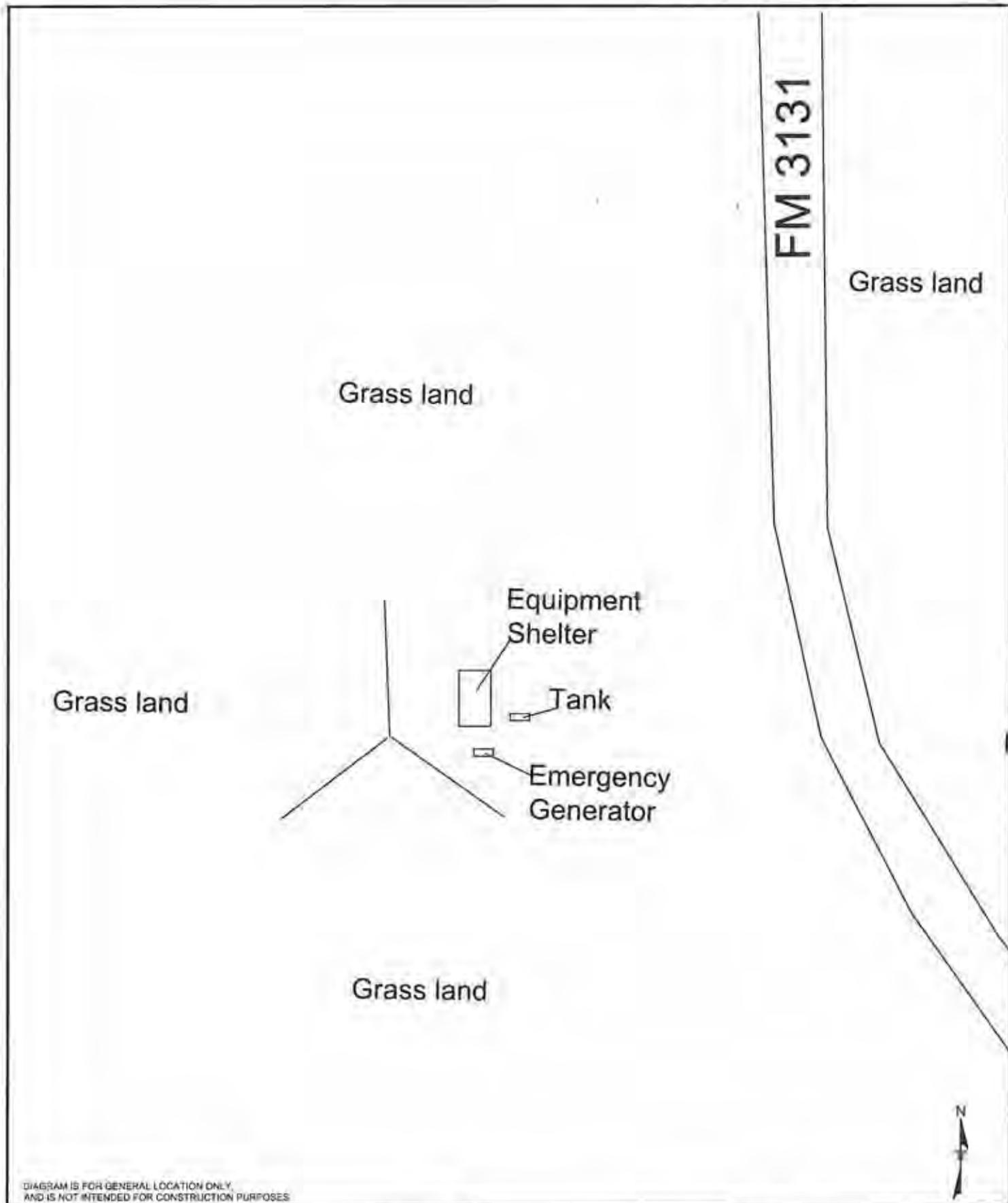


DIAGRAM IS FOR GENERAL LOCATION ONLY,
AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

	<p>Proposed Site Diagram</p> <p>JACKSON TOWER SITE 8.5 MILES SOUTHEAST OF EDNA, TX ALONG FM 3131 EDNA, JACKSON COUNTY, TEXAS</p>	<p>Fig. No.</p> <p>3</p>
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SOURCE: DIGITAL GLOBE

DIAGRAM IS FOR GENERAL LOCATION ONLY,
AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

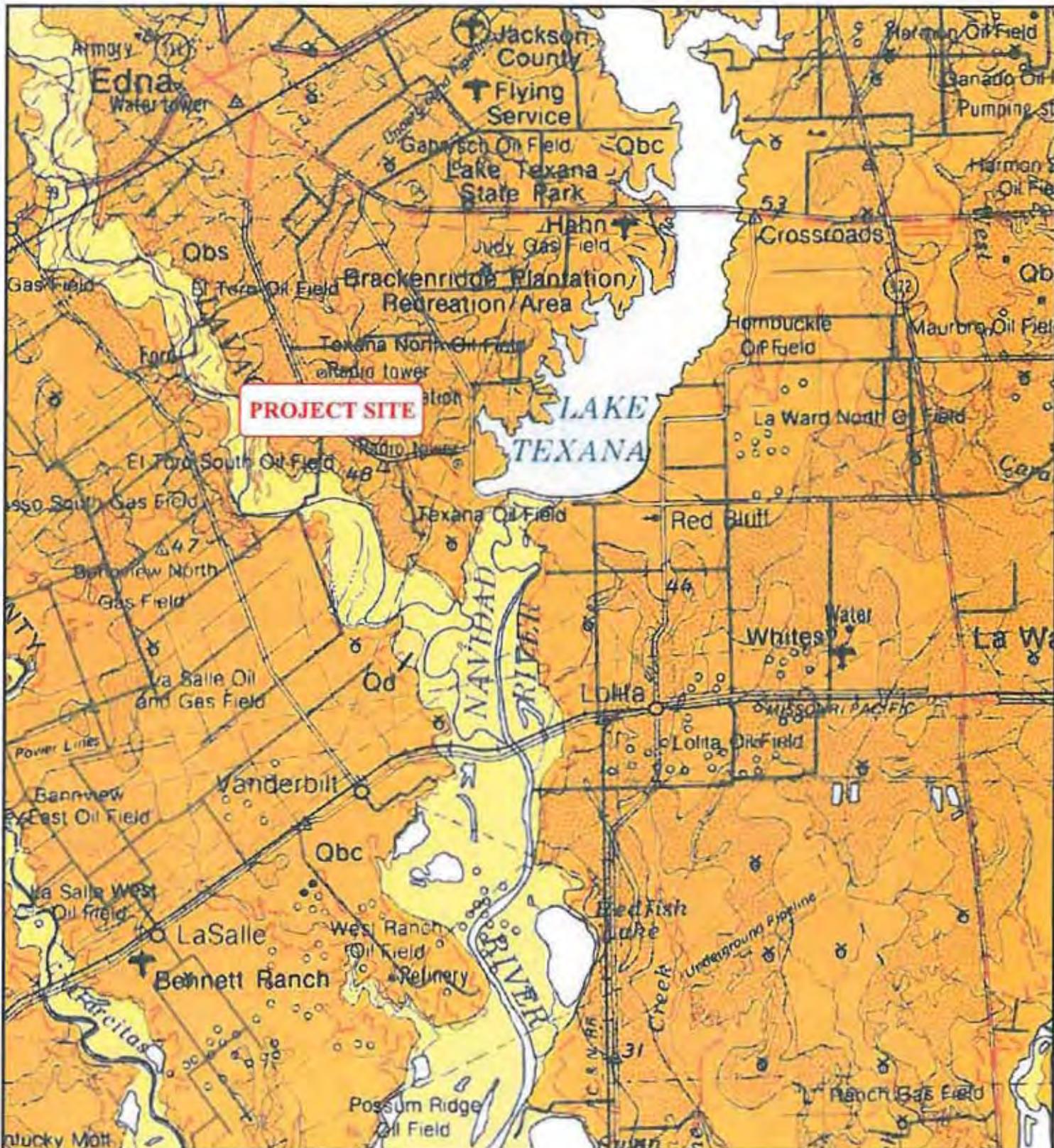


2008 AERIAL PHOTOGRAPH

Fig. No.

JACKSON TOWER SITE
8.5 MILES SOUTHEAST OF EDNA, TX ALONG FM 3131
EDNA, JACKSON COUNTY, TEXAS

4



SOURCE: THE UNIVERSITY OF TEXAS AT AUSTIN
 BUREAU OF ECONOMIC GEOLOGY, GEOLOGIC ATLAS OF
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DIAGRAM IS FOR GENERAL LOCATION ONLY,
 AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

GEOLOGIC MAP
JACKSON TOWER SITE
 8.5 MILES SOUTHEAST OF EDNA, TX ALONG FM 3131
 EDNA, JACKSON COUNTY, TEXAS

Fig. No.

5



SOURCE: USDA NATURAL RESOURCE CONSERVATION SERVICE WEB SOIL SURVEY.

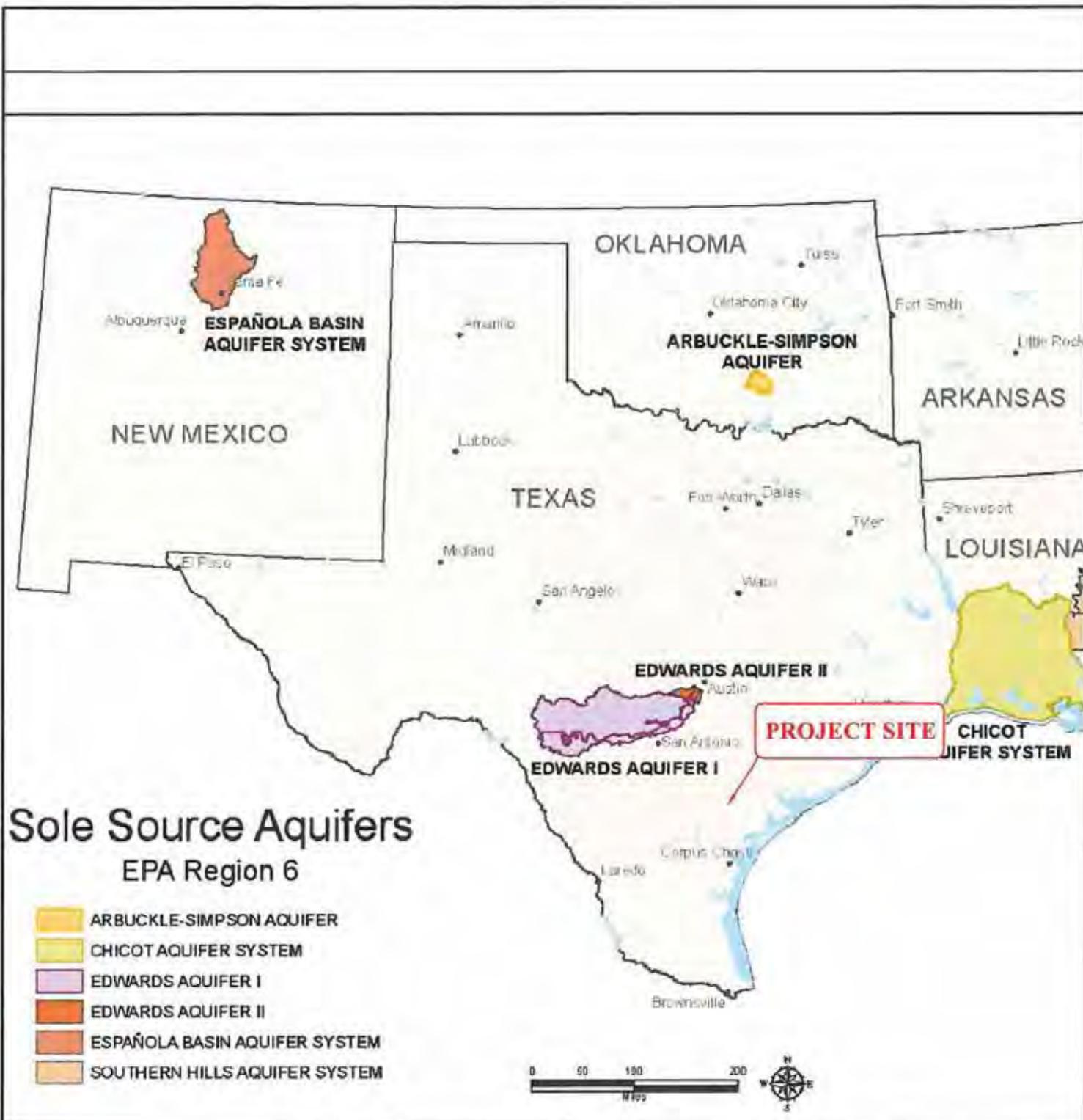
DIAGRAM IS FOR GENERAL LOCATION ONLY,
AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES



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SOILS MAP JACKSON TOWER SITE 8.5 MILES SOUTHEAST OF EDNA, TX ALONG FM 3131 EDNA, JACKSON COUNTY, TEXAS

Fig. No. 6



SOURCE: U.S. ENVIRONMENTAL PROTECTION AGENCY

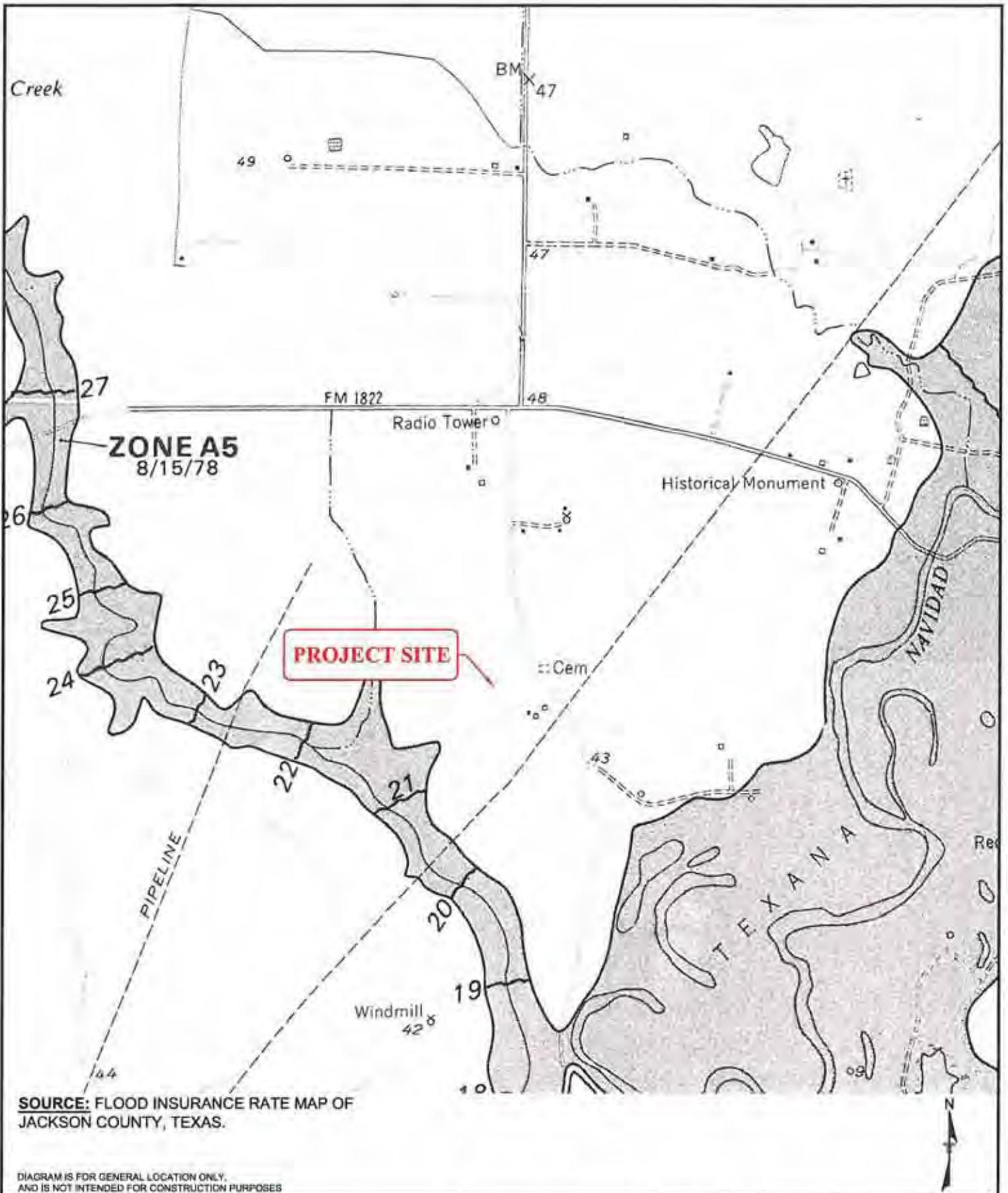
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SOLE SOURCE AQUIFER MAP
 JACKSON TOWER SITE
 8.5 MILES SOUTHEAST OF EDNA, TX ALONG FM 3131
 EDNA, JACKSON COUNTY, TEXAS

Fig. No.

7



Project Mgr:	JAA	Project No.	901
Drawn By:	LS(90)	Scale:	NOT TO SCALE
Checked By:	JAA	File No.	901
Approved By:	JAA	Date:	8-26-99

Terracon
245 Consulting Engineers and Scientists
6911 BLANCO ROAD SAN ANTONIO, TX 78216
PH. (210) 641-2112 FAX. (210) 641-2124

FLOOD INSURANCE RATE MAP-FEMA
JACKSON TOWER SITE
 8.5 MILES SOUTHEAST OF EDNA, TX ALONG FM 3131
 EDNA, JACKSON COUNTY, TEXAS

Fig. No.
9

Texas
Coastal
Management
Program

PROJECT SITE



SOURCE: TEXAS GENERAL LAND OFFICE COASTAL MANAGEMENT PROGRAM

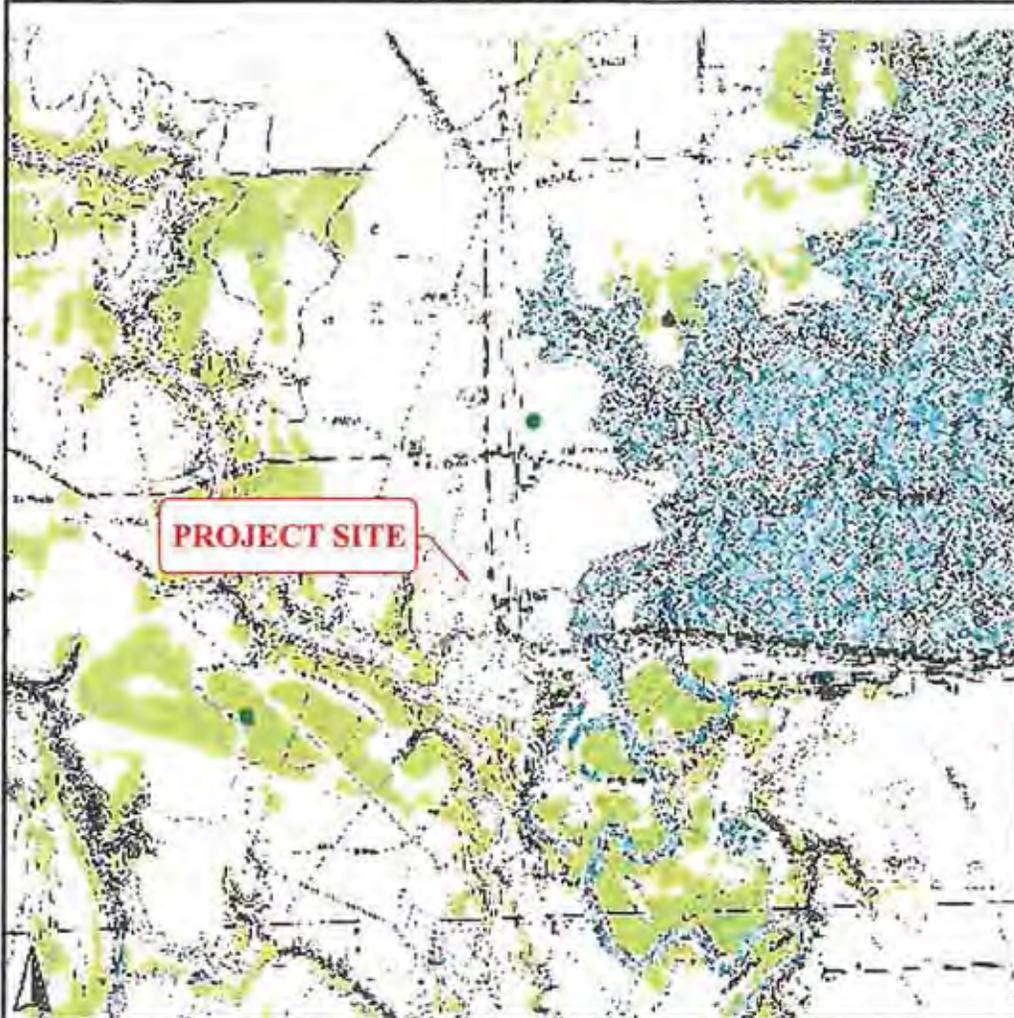
DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES



TEXAS COASTAL MANAGEMENT PROGRAM
JACKSON TOWER SITE
 8.5 MILES SOUTHEAST OF EDNA, TX ALONG FM 3131
 EDNA, JACKSON COUNTY, TEXAS

Fig. No.
10

Edna-Texas Historic Sites Atlas Map



x

Legend

- Highlighted Feature
- Neighborhood Survey
- Historical Marker
- ★ National Register Property
- National Register District
- Cemetery
- Museum
- Counties
- USGS Quads

Edna-Texas Historic Sites Atlas Copyright (C) 1995-2011 THIC

0 1:68m

SOURCE: TEXAS HISTORICAL COMMISSION ATLAS.

DIAGRAM IS FOR GENERAL LOCATION ONLY,
AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES



HISTORIC SITES MAP
 JACKSON TOWER SITE
 8.5 MILES SOUTHEAST OF EDNA, TX ALONG FM 3131
 EDNA, JACKSON COUNTY, TEXAS

Fig. No.

11

APPENDIX A
Site Photographs



Photo #1 View of the site facing north.



Photo #2 View of the site facing east and properties east of the site.



Photo #3 View of the site facing south.



Photo #4 View of the site facing west.



Photo #5 View from the center of the site facing north.



Photo #6 View from the center of the site facing south.



Photo #7 View from the center of the site facing west

APPENDIX B
Agency Correspondence

NRCS Farmland Conversion Form

Responses Dated December 21, 2011 Texas Coastal Management Program of the Texas
General Land Office

Response Dated April 4, 2012 from USFWS

Responses Dated October 6, 2011 from TPWD

Response Dated August 30, 2011 from Texas SHPO

Publisher's Affidavit Dated December 6, 2011 from Jackson County Herald-Tribune

Letter Dated August 30, 2011 from Comanche Nation Historic Preservation Office

E-mail Dated October 26, 2011 from Mescalero Apache Tribe

E-mail Dated August 8, 2011 from Tonkawa Tribe

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request 5/7/12			
Name Of Project Communication Tower Jackson Co. Sheriff Office		Federal Agency Involved FEMA			
Proposed Land Use Construction of 480-foot communication tower		County And State Jackson County, Texas			
PART II (To be completed by NRCS)		Date Request Received By NRCS			
Does the site contain prime, unique, statewide or local important farmland? (If no, the FPPA does not apply -- do not complete additional parts of this form).		Yes <input type="checkbox"/>	No <input type="checkbox"/>	Acres Irrigated	Average Farm Size
Major Crop(s)	Farmable Land In Govt. Jurisdiction Acres: %	Amount Of Farmland As Defined in FPPA Acres: %			
Name Of Land Evaluation System Used	Name Of Local Site Assessment System	Date Land Evaluation Returned By NRCS			
PART III (To be completed by Federal Agency)		Alternative Site Rating			
		Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly		2.0			
B. Total Acres To Be Converted Indirectly		0.0			
C. Total Acres In Site		2.0	0.0	0.0	0.0
PART IV (To be completed by NRCS) Land Evaluation Information					
A. Total Acres Prime And Unique Farmland					
B. Total Acres Statewide And Local Important Farmland					
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted					
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value					
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value Of Farmland To Be Converted (Scale of 0 to 100 Points)		0	0	0	0
PART VI (To be completed by Federal Agency) Site Assessment Criteria (These criteria are explained in 7 CFR 658.5(b))		Maximum Points			
1. Area In Nonurban Use		15	13		
2. Perimeter In Nonurban Use		10	10		
3. Percent Of Site Being Farmed		20	0		
4. Protection Provided By State And Local Government		20	0		
5. Distance From Urban Builtup Area		15	15		
6. Distance To Urban Support Services		15	0		
7. Size Of Present Farm Unit Compared To Average		10	0		
8. Creation Of Nonfarmable Farmland		10	10		
9. Availability Of Farm Support Services		5	5		
10. On-Farm Investments		20	0		
11. Effects Of Conversion On Farm Support Services		10	0		
12. Compatibility With Existing Agricultural Use		10	0		
TOTAL SITE ASSESSMENT POINTS		160	53	0	0
PART VII (To be completed by Federal Agency)					
Relative Value Of Farmland (From Part V)		100	0	0	0
Total Site Assessment (From Part VI above or a local site assessment)		160	53	0	0
TOTAL POINTS (Total of above 2 lines)		260	53	0	0
Site Selected:		Date Of Selection		Was A Local Site Assessment Used? Yes <input type="checkbox"/> No <input type="checkbox"/>	
Reason For Selection:					

TEXAS



GENERAL LAND OFFICE

JERRY PATTERSON, COMMISSIONER

December 21, 2011

Mr. Julio Aguilar
Terracon Consultants, Inc.
Environmental Scientist
6911 Blanco Road
San Antonio, TX 78216

Re: Jackson County Sheriff's Department – Proposed Telecommunications Tower

Dear Mr. Aguilar:

Based on information provided to the Texas Coastal Management Program on the above project, it has been determined that it will likely not have adverse impacts on coastal natural resource areas (CNRAs) in the coastal zone. However, siting and construction should avoid and minimize impacts to CNRAs. If a U. S. Army Corps of Engineers permit is required, it will be subject to consistency review under the Texas Coastal Management Program.

If you have any questions or concerns, please contact me at (512) 475-1552 or at andrea.finch@glo.texas.gov

Sincerely,

A handwritten signature in cursive script that reads "Andrea Finch".

Andrea Finch
Consistency Review Coordinator
Texas General Land Office

Stephen F. Austin Building • 1700 North Congress Avenue • Austin, Texas 78701-1495

Post Office Box 12873 • Austin, Texas 78711-2873

512-463-5001 • 800-998-4GLO

www.glo.state.tx.us



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
c/o TAMU-CC, Campus Box 338
6300 Ocean Drive
Corpus Christi, Texas 78412

April 4, 2012

Alan T. Hermely, CFM
Environmental Specialist
DHS/FEMA Region VI
Denton, TX 76209

Consultation No. 02ETCC00-2012-I-0026

Dear Mr. Hermely:

This responds to your March 22, 2012, email requesting U.S. Fish and Wildlife Service (USFWS) concur with the Federal Emergency Management Agency's (FEMA) "may affect, but is not likely to adversely affect" determination on the federally listed as endangered whooping crane (*Grus americana*). FEMA proposes to fund construction of a 480-foot guyed telecommunications tower for the Jackson County Sheriff's Office. The project is located 8.5 miles southeast of Edna, TX along FM 3131, Edna, Jackson County, Texas.

The proposed guyed tower is within the whooping crane migration route and FEMA has proposed the following conservation measures to avoid and/or minimize impacts to the bald eagle (*Haliaeetus leucocephalus*) and whooping crane. The bald eagle is delisted, however, is still protected under the Bald and Golden Eagle Protection Act. FEMA will stipulate in the funding conditions and supporting NEPA documentation that:

- 1) Construction of the proposed tower will take place outside the breeding season of the bald eagle.
- 2) Construction for the proposed tower will take place outside the whooping crane migratory season.
- 3) Tower light systems will include minimum intensity, maximum off-phased white strobe lighting according to the FAA regulations.
- 4) Guy wires will be marked with bird diverters to avoid or minimize potential bird strikes by migratory birds, whooping cranes, or the bald eagle.

Because FEMA will implement the above conservation measures, the Service believes impacts are discountable and insignificant therefore, concurs with your "may affect, but is not likely to

effect" determination. If project plans change or impact do occur, please contact Mary Orms at 361 994-9005, ext. 246 or by email at mary_orms@fws.gov.

Sincerely,

A handwritten signature in blue ink that reads "Mary Orms". The signature is written in a cursive style.

for Allan M. Strand
Field Supervisor



Life's better outside.

October 6, 2011

Julio Aguilar
Terracon Consultants, Inc.
6911 Blanco Road
San Antonio, Texas 78216

Commissioners

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Chairman
San Antonio

T. Dan Friedkin
Vice-Chairman
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Dan Allen Hughes, Jr.
Beeville

Margaret Martin
Boerne

S. Reed Morian
Houston

Dick Scott
Wimberley

Lee M. Bass
Chairman-Emeritus
Fort Worth

RE: Proposed construction of a 480 foot-guyed telecommunications tower and associated equipment, Jackson County.

Dear Mr. Aguilar:

This letter is in response to your request for review of the proposed telecommunications tower site reference identification: **Edna --Jackson County, TX**. Texas Parks and Wildlife Department (TPWD) staff reviewed the site of the proposed tower and it is not located within a TPWD Wildlife Management Area or State Park. The following recommendations are provided to assist the project sponsor in minimizing impacts to wildlife resources.

Please be aware that a written response to a TPWD recommendation or informational comment received by a state governmental agency on or after September 1, 2009 may be required by state law. For further guidance, see the Texas Parks and Wildlife Code, Section 12.0011 which can be found online at <http://www.statutes.legis.state.tx.us/Docs/PW/htm/PW.12.htm#12.0011>. For tracking purposes, please refer to TPWD project number 16546 in any return correspondence.

Co-location

Recommendation: TPWD recommends that communication equipment be located on existing towers or other suitable structures to avoid constructing new towers. When a new tower is constructed, staff recommends that the new tower be designed to house more than one provider.

Co-location design type would reduce future impacts in the area. Depending on tower load factors, 6-10 providers may co-locate on an existing tower. New towers should be designed structurally and electrically to accommodate the applicant's antennas and number of towers needed in the future.

Migratory Birds

Recommendation: If possible, new towers should be located within existing "antenna farms," preferably in areas not used by migratory birds or listed species. When possible avoid lighting towers in order to minimize the cumulative impacts to migratory birds. Communication towers have the potential to adversely impact bird species. Current research indicated that night-migrating birds are attracted to solid or pulsating red warning lights.

Julio Aguilar
October 6, 2011
Page 2 of 4

For more information regarding the use of lighting at this facility, please refer the attachment entitled *Guidelines Recommended by the U.S. Fish and Wildlife Service for Communications Tower Siting, Construction, Operation, and Decommissioning*.

Construction activities should occur outside the March – August migratory bird nesting season of each year the project is authorized and lasting for the life of the project.

Construction activities include (but are not limited to) removal of nests or nest structures, tree felling as well as vegetation clearing, trampling or maintenance. Additional information regarding the Migratory Bird Treaty Act may be obtained from the U.S. Fish and Wildlife Service (FWS) Southwest Regional Office (Region 2) at (505) 248-6879.

Rare and Protected Species

Parks and Wildlife Code

Texas has listed additional animal species not protected by the Endangered Species Act as “State-Threatened” (ST). Any take (incidental or otherwise) of ST animals is prohibited. However, state law only protects the species, and not its habitat. The ST species may only be handled/relocated by permitted individuals authorized by TPWD. There are penalties and restitution values associated with unauthorized take of state-listed species. ***Protection of State-Listed Species - Texas Parks and Wildlife Department Guidelines*** is attached.

Determining the actual presence of a species in a given 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 be demonstrated only with great difficulty and then only with repeated negative observations, taking into account all the variable factors contributing to the lack of detectable presence.

The Texas Natural Diversity Database (TXNDD) is intended to assist users in avoiding harm to rare species or significant ecological features. 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. Absence of information in the database does not imply that a species is absent from that area. 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 presences, 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**. They represent species that could potentially be in your project area. This information cannot be substituted for on-the-ground surveys. The TXNDD is updated continuously based on new, updated and undigitized records; for questions regarding a record, please contact txndd@tpwd.state.tx.us.

Bald Eagle

The Bald Eagle is known to nest and winter in the area of the proposed tower. Please note that, although the Bald Eagle is no longer federally listed threatened, this species remains state-listed threatened and receives protection under the U.S. Bald and Golden Eagle Protection Act. Under this act eagles are protected from disturbance which is defined as: *"To agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior."*

In addition to immediate impacts, this definition also covers impacts that result from human-caused alterations initiated around a previously used nest site during a time when eagles are not present, if upon the eagles return, such alterations agitate or bother an eagle to a degree that injures an eagle or substantially interferes with normal breeding, feeding, or sheltering habits and causes, or is likely to cause, a loss of productivity or nest abandonment.

Guidelines for minimizing disturbance to both nesting and wintering Bald Eagles can be found at http://www.tpwd.state.tx.us/publications/pwdpubs/media/pwd_bk_w7000_0013_bald_eagle_mgmt.pdf.

TPWD County Lists

The TPWD county lists for rare species may be obtained from the following link: <http://gis.tpwd.state.tx.us/TpwEndangeredSpecies/DesktopDefault.aspx>. These lists provide information regarding rare species that have potential to occur within each county. Rare species could potentially be impacted if suitable habitat is present at or near the project site.

Recommendation: TPWD recommends using the county lists of rare species, the portions of the proposed project with potential to support rare species should be field surveyed to determine the extent and quality of the suspect habitat and potential impacts.

Recommendation: If rare species or their habitat would be impacted by the proposed project, TPWD recommends that the applicant should coordinate with TPWD and the USFWS, as appropriate, to determine avoidance, minimization, and mitigation strategies.

Recommendation: TPWD recommends that construction crews should be informed of the rare species that have potential to occur in the project county and should avoid disturbance to sensitive species if encountered during construction.

Julio Aguilar
October 6, 2011
Page 4 of 4

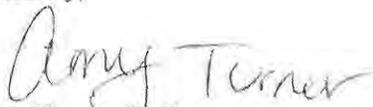
Only personnel with a TPWD scientific collection permit are allowed to handle and move state listed species. For further information on the required permit please contact Chris Maldonado at (512) 389-4647.

Comment. Further consultation with TPWD would be warranted upon detection of a Texas listed rare, threatened, or endangered species within or near the proposed project at any time prior to or during construction.

TPWD strives to respond to requests for project review within the 45 day comment period. Responses may be delayed due to workload and lack of staff. Failure to meet the 45 day review timeframe does not constitute a concurrence from TPWD that the proposed project will not adversely impact fish and wildlife resources.

TPWD advises review and implementation of these recommendations. If you have any questions, please contact me at (361) 576-0022.

Sincerely,



Amy Turner, Ph.D.
Wildlife Habitat Assessment Program
Wildlife Division

/ajh:16546

Attachment

Guidelines Recommended by the U.S. Fish and Wildlife Service (FWS) For Communications Tower Siting, Construction, Operation, and Decommissioning

1. Collocation of the communications equipment on an existing communication tower or other structure (e.g., billboard, water tower, or building mount) is strongly recommended. Depending on tower load factors, from 6 to 10 providers may collocate on an existing tower.
2. If collocation is not feasible and a new tower or towers are to be constructed, it is strongly recommended that the new towers are not more than 199 feet above ground level (AGL) and that construction techniques do not require guy wires (e.g., use a lattice structure, monopole, etc.). Such towers should be unlighted if Federal Aviation Administration (FAA) regulations permit.
3. If constructing multiple towers, the cumulative impacts of all the towers to migratory birds and threatened and endangered species, as well as the impacts of each individual tower, should be considered.
4. If at all possible, new towers should be sited within existing "antenna farms" (clusters of towers). Towers should not be sited in or near wetlands, other known bird concentration areas (e.g., state or Federal refuges, staging areas, rookeries), in known migratory or daily movement flyways, or in habitat of threatened or endangered species. Towers should not be sited in areas with a high incidence of fog, mist, and low ceilings.
5. If taller (>199 feet AGL) towers requiring lights for aviation safety must be constructed, the minimum amount of pilot warning and obstruction avoidance lighting required by the FAA should be used. Unless otherwise required by the FAA, only white (preferable) or red strobe lights should be used at night, and these should be the minimum number, minimum intensity, and minimum number of flashes per minute (longest duration between flashes) allowable by the FAA. The use of solid red or pulsating red warning lights at night should be avoided. Current research indicates that solid or pulsating (beacon) red lights attract night-migrating birds at a much higher rate than white strobe lights. Red strobe lights have not yet been studied.
6. Tower designs using guy wires for support, which are proposed to be located in known raptor or waterbird concentration areas, daily movement routes, major diurnal migratory bird movement routes or stopover sites, should have daytime visual markers on the wires to prevent collisions by these diurnally moving species. (For guidance on markers, see *Avian Power Line Interaction Committee (APLIC). 1994. Mitigating Bird Collisions with Power Lines: The State of the Art in 1994. Edison Electric Institute, Washington, D.C., 78 pp.* and *Avian Power Line Interaction Committee (APLIC). 1996. Suggested Practices for Raptor Protection on Power Lines. Edison Electric Institute/Raptor Research Foundation, Washington, D.C., 128 pp.* Copies can be obtained via the Internet at <http://www.eei.org/resources/pubcat/enviro/> or by calling 1-800/334-5453).
7. Towers and appendant facilities should be sited, designed and constructed so as to avoid or minimize habitat loss within and adjacent to the tower "footprint". However, a larger tower footprint is preferable to the use of guy wires in construction. Road access and fencing should be

August 15, 2011

Texas Historical Commission
105 West 16th Street
Austin, Texas 78701



AUG 19 2011

History Programs Division

Terracon

Consulting Engineers & Scientists

Terracon Consultants, Inc.
6911 Blanco Road
San Antonio, Texas 78216-6164
Phone 210.641.2112
Fax 210.558.7894
www.terracon.com

Attn: Mark Wolfe

Cultural Resources Review/Section 106 Review
Proposed Telecommunications Tower
Applicant Name: Jackson County Sheriff's Office
Site Name: Edna, TX
8.5 Miles Southeast of Edna, TX along FM 3131
Edna, Jackson County, Texas
Terracon Project No. 90117245

NO HISTORIC
PROPERTIES AFFECTED
PROJECT MAY PROCEED
by [Signature]
for Mark Wolfe
State Historic Preservation Officer
Date 30 August 2011

Dear Mr. Wolfe:

On behalf of Jackson County Sheriff's Office, Terracon Consultants, Inc. (Terracon) is requesting a review of potential impacts to historic properties that may result from the proposed construction of a 480-foot guyed telecommunications tower at the above referenced location. Federal Communications Commission's (FCC) regulations require that Jackson County Sheriff's Office consider the effects of the proposed tower on historic properties. Your response is sought in compliance with Section 106 of the National Historic Preservation Act (NHPA). Enclosed is the NT Submission Packet – FCC Form 620 and appropriate attachments.

Terracon is submitting this letter, on behalf of Jackson County Sheriff's Office, to seek a letter of no effect and to comply with Federal Communications Commission (FCC) requirements as identified in 47CFR Ch. I §1.1307. Your comments are also being requested pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's regulation for compliance with Section 106, codified at 36 CFR Part 800. This letter is being submitted in compliance with Section 191.0525 of the Antiquities Code of Texas, because the project sponsor is the Jackson County Sheriff's Office and the land owner is the Lavaca Navidad River Authority. Your confirmation on this matter would be greatly appreciated.

Please feel free to contact our office if you have any questions concerning this letter.

Sincerely,

Terracon

[Signature]
Julio A. Aguirre
Environmental Scientist

Attachments: NT Submission Packet – FCC Form 620 and appropriate attachments

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PUBLISHER'S AFFIDAVIT

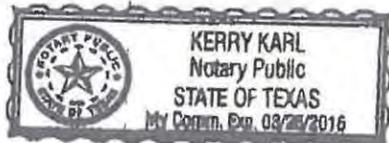
STATE OF TEXAS
COUNTY OF JACKSON

Personally appeared before the undersigned, a notary public within and for said County and State, Chris Lundstrom, Managing Editor of THE JACKSON COUNTY HERALD-TRIBUNE a newspaper having general circulation in Jackson County, Texas, who, being duly sworn, states on oath that the foregoing attached notice was published in said newspaper on the following date(s), to wit:

8/17/11

Chris Lundstrom
Chris Lundstrom, Managing Editor

Subscribed and sworn to me before this 6 day of Dec, 2011
to certify which witness my hand and seal of office.



Kerry Karl

Comanche Nation Office of Historic Preservation



Julio Aguilar
Terracon
6911 Blanco Rd
San Antonio, TX 78216-6164

August 30, 2011

Re: TCNS # 78349 (Site: Edna, TX Tower)

Dear Mr. Aguilar:

In response to your request, the above referenced project has been reviewed by staff of this office. Based on the information provided and a search within the Comanche Nation Site Files, we have determined that there are *no properties* affected by this undertaking.

If you require additional information or are in need of further assistance, please contact this office at (580) 595-9960 or 9618.

This review is performed in order to locate, record, and preserve the Comanche Nation and State's prehistoric and historic cultural heritage, in cooperation with the State Historic Preservation Office.

Sincerely,

A handwritten signature in cursive script that reads "Kelly Glancy".

Kelly Glancy, HPO Assistant
Tribal Historic Preservation Office
Comanche Nation

Reply to Proposed Tower Structure (Notification ID 78349) - Email ID #2905964.txt
From: towernotifyinfo@fcc.gov
Sent: Wednesday, October 26, 2011 4:43 PM
To: Aguilar, Julio A
Cc: tcns.fccarchive@fcc.gov; holly@mathpo.org
Subject: Reply to Proposed Tower Structure (Notification ID: 78349) - Email ID #2905964

Dear Terracon Consultants Inc,

Thank you for using the Federal Communications Commission's (FCC) Tower Construction Notification System (TCNS). The purpose of this email is to inform you that an authorized user of the TCNS has replied to a proposed tower construction notification that you had submitted through the TCNS.

The following message has been sent to you from Tribal Historic Preservation Officer Holly B Houghten of the Mescalero Apache Tribe in reference to Notification ID #78349:

After review of this communications project, it has been determined that the Mescalero Apache Tribe has no immediate concerns within the project area, and that the project will cause no adverse effects to cultural resources or areas of interest to the Mescalero Apache Tribe. If, however, the Applicant discovers archeological remains or resources during construction, the Applicant should stop construction and notify the appropriate Federal Agency and Tribe(s).

For your convenience, the information you submitted for this notification is detailed below.

Notification Received: 07/22/2011
Notification ID: 78349
Tower Owner Individual or Entity Name: Jackson County, TX
Consultant Name: Terracon Consultants Inc
Street Address: 115 W Main Street, Suite 209B
City: Edna
State: TEXAS
Zip Code: 77957
Phone: 210-641-2112
Email: jaaguilar@terracon.com

Structure Type: GTOWER - Guyed Tower
Latitude: 28 deg 53 min 28.6 sec N
Longitude: 96 deg 35 min 24.4 sec W
Location Description: 8.5 Miles SE of Edna, TX along FM 3131
City: Edna
State: TEXAS
County: JACKSON
Ground Elevation: 8.5 meters
Support Structure: 146.3 meters above ground level
Overall Structure: 146.3 meters above ground level
Overall Height AMSL: 154.8 meters above mean sea level

Reply to Proposed Tower Structure (Notification ID 78349) - Email ID #2855921.txt
From: towernotifyinfo@fcc.gov
Sent: Monday, August 08, 2011 9:04 AM
To: Aguilar, Julio A
Cc: tcns.fccarchive@fcc.gov; jwaffle@tonkawatribe.com
Subject: Reply to Proposed Tower Structure (Notification ID: 78349) - Email ID #2855921

Dear Terracon Consultants Inc,

Thank you for using the Federal Communications Commission's (FCC) Tower Construction Notification System (TCNS). The purpose of this email is to inform you that an authorized user of the TCNS has replied to a proposed tower construction notification that you had submitted through the TCNS.

The following message has been sent to you from Tribal Administrator Joshua Waffle of the Tonkawa Tribe in reference to Notification ID #78349:

The following site(s) have been reviewed and to date (Monday, August 08, 2011) with current resources, the Tonkawa Tribe has no known burial sites of the Tonkawa Indians. If any remains or artifacts are discovered please contact the appropriate Agencies and our Tribal Facilities immediately. If the Tonkawa Tribes databases change in regards to the statement in this letter, a Tribal Representative will contact you.

Respectfully,
Joshua Waffle
Tribal Administrator Tonkawa Tribe
Ph 580 628 2561 124
Fx 580 628 2279
C1 580 491 1209
jwaffle@tonkawatribe.com

For your convenience, the information you submitted for this notification is detailed below.

Notification Received: 07/22/2011
Notification ID: 78349
Tower Owner Individual or Entity Name: Jackson County, TX
Consultant Name: Terracon Consultants Inc
Street Address: 115 W Main Street, Suite 209B
City: Edna
State: TEXAS
Zip Code: 77957
Phone: 210-641-2112
Email: jaaguilar@terracon.com

Structure Type: GTOWER - Guyed Tower
Latitude: 28 deg 53 min 28.6 sec N
Longitude: 96 deg 35 min 24.4 sec W
Location Description: 8.5 Miles SE of Edna, TX along FM 3131
City: Edna
State: TEXAS
County: JACKSON
Ground Elevation: 8.5 meters
Support Structure: 146.3 meters above ground level
Overall Structure: 146.3 meters above ground level
Overall Height AMSL: 154.8 meters above mean sea level