

March 10, 2016

FINDING OF NO SIGNIFICANT IMPACT

TO ALL INTERESTED AGENCIES AND PUBLIC GROUPS:

As required by the permanent rules of the Texas Water Development Board (TWDB), 31 Texas Administrative Code (TAC) §371.41, an environmental review consistent with the National Environmental Policy Act (NEPA), 42 U.S. Code §4321 et seq., has been performed on the project below. This project is proposed to be funded through the Drinking Water State Revolving Fund (DWSRF), which is administered by the TWDB.

Sol y Mar Water System, City of San Juan, Hidalgo County
Water System Improvements
TWDB Project Number 62629
Total DWSRF Loan Forgiveness: \$200,000

The Sol Y Mar Water System (Water System) proposes to abandon its water well that contains nitrates above the maximum contaminant limits and connect to the City of San Juan water system for potable water. The project will install approximately 1,335 linear feet of 8-inch water line and will allow the residents of Sol y Mar Subdivision to connect to the City of San Juan water system. In addition, the project includes installation of 29 service connections, 29 water meters and installation of two fire hydrants.

The total project cost associated with the proposed project, including planning, design and construction phases is estimated at \$200,000. The TWDB approved on November 20, 2014, loan forgiveness in the amount of \$200,000 from the DWSRF to Sol Y Mar Water System for the proposed project. These water system improvements will be installed on right-of-way granted by the Water System's owner.

An environmental review of the proposed project consistent with NEPA has been completed following the guidelines provided in 31 TAC Chapter 371, Subchapter E. This environmental review is documented by the enclosed Environmental Assessment (EA). The EA contains mitigation conditions that will be applied to the project and are structured so that no significant adverse environmental impacts will result from the proposed project. The Executive Administrator of the TWDB has made a preliminary decision not to require the preparation of an Environmental Impact Statement. In order to ensure that the proposed project will not have a significant impact on floodplains, cultural resources, threatened or endangered species, and protected migratory bird species, loan conditions have been developed which are described in detail in the attached EA. These conditions are listed below.

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In order to ensure compliance with the Federal Migratory Bird Treaty Act:

- If vegetation clearing is required, avoid the peak nesting season of March through August to avoid destruction of individuals, nests or eggs. If project activities must be conducted during this time, nesting surveys will be conducted by a qualified biologist prior to commencing work and if active nests are observed, a buffer of vegetation (≥ 50 -foot) will remain undisturbed around the nests until the young have fledged or the nest is abandoned. In addition, a Contractor Awareness Plan shall be developed to make construction workers aware of the potential of encountering migratory birds on the proposed project site and instructing them to avoid negatively impacting migratory birds.

Standard Emergency Conditions:

- Standard emergency discovery conditions for threatened and endangered species.
- Standard emergency discovery conditions for cultural resources.

Documentation supporting this decision is on file in the office of the Regional Water Planning and Development Division, TWDB, and is available for public scrutiny upon request. Comments supporting or disagreeing with this preliminary environmental determination may be submitted to the Director, Regional Water Planning and Development, Texas Water Development Board, P.O. Box 13231, Austin, Texas 78711-3231. After evaluating the comments received, the Executive Administrator will make a final determination. However, no action regarding the provision of federal financial assistance for the project will be taken for at least thirty (30) calendar days after release of this Finding of No Significant Impact.

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**Sol y Mar Water System, City of San Juan, Hidalgo County
Drinking Water State Revolving Fund Project No. 62629
Water System Improvements
Environmental Assessment**

INTRODUCTION/BACKGROUND¹

The Sol y Mar Water System (Water System) is proposing to install a new water source for its service area. The project will allow the residents of Sol y Mar Subdivision to connect to the City of San Juan's water system. The Water System intends to finance the project using \$200,000 in loan forgiveness from the Drinking Water State Revolving Fund (DWSRF) program, which is administered by the Texas Water Development Board. The Water System received a commitment for the DWSRF financing on November 20, 2014.

Purpose and Need

Sol Y Mar Water System is under enforcement by the Texas Commission on Environmental Quality (TCEQ) and the Environmental Protection Agency (EPA) for nitrates in its water well that exceed maximum contaminant limits. In addition to the high level of nitrates, the 30-years-old water well has an inadequate storage capacity and lacks water pressure distribution control. The system serves approximately 103 low and very low income residents and is not a reliable drinking water source.

The purpose of the project is to address TCEQ and EPA violations and deficiencies in the existing facilities and install a new water source for the service area by connecting the mobile homes to the City of San Juan's water system.

PROJECT DESCRIPTION

The proposed project is located at Sol Y Mar Subdivision, City of San Juan, in South Central Hidalgo County, Texas. The proposed project will install approximately 1,335 linear feet of 8-inch water line in existing rights-of-way and connect to the City of San Juan's water distribution system. In addition, the project includes installation of 29 service connections, 29 water meters, and installation of two fire hydrants. The project involves abandoning the existing non-compliant water well to provide Sol y Mar residents with a TCEQ compliant water source with improved water pressure.

The total project cost associated with the proposed project, including planning, design and construction phases is estimated at \$200,000. The TWDB approved on November 20, 2014, loan forgiveness in the amount of \$200,000 from the DWSRF to Sol Y Mar Water System for the project.

¹ Sol y Mar Water Supply (November 2015). *Environmental Information Document: For the Water Supply Improvements* (Prepared by Melden and Hunt, Inc.). Received by TWDB November 30, 2015. The EID is complete with the supplementary materials submitted to the TWDB on January 29, 2016.

EVALUATION OF ALTERNATIVES

In addition to the proposed project, the Water System evaluated a new water treatment system for the area, purchasing bottled water as drinking water source, and the no action alternative.

One alternative would be to bring the existing water system into compliance with TCEQ water quality regulations. This alternative requires changing the existing pump located at the well, installing reverse osmosis/nitrate removal system, and installing a new chlorination system. This alternative was rejected because it presents an unaffordable cost for Sol y Mar residents.

A second alternative would be to purchase bottled water. This alternative was analyzed for water consumption needs only. This alternative was eliminated from consideration because the estimated water need represented a very high cost per month per resident.

Under the no action alternative, the Water System would be unable to address TCEQ concerns relating to contaminant levels of nitrate, storage capacity, and water pressure distribution issues. In addition, the existing facilities would continue to be a threat to the health of Sol y Mar residents.

The recommended alternative to connect to the City of San Juan water system was chosen because it is the most cost-effective, will comply with TCEQ water quality standards, and represents a reliable drinking water source.

ENVIRONMENTAL SETTING

Location and Landforms

The proposed water lines will be installed on existing rights-of-way. No acquisition of easements or additional property is anticipated for the project.

Climate

The climate in the San Juan area is temperate tropical with a mean annual temperature of 75 degrees Fahrenheit. Summers are hot and humid with occasional heavy rains late in the season. Winters are temperate with occasional freezes. Mean annual precipitation is 27.0 inches, with peaks in September and secondary peaks in May and June.² Prevailing winds are from the south and southeast.³

² National Weather Center. 2012. *Climate data for San Juan, Texas*. <http://nws.noaa.gov>

³ Texas Commission on Environmental Quality. 1992. *Wind Rose for Brownsville, Texas*.

The U.S. Environmental Protection Agency (EPA) has established primary and secondary standards known as the National Ambient Air Quality Standards (NAAQS) for six criteria pollutants: carbon monoxide, ozone, nitrogen dioxide, lead, particulate matter 10 and 2.5 micrometers or less in diameter, and sulfur dioxide. Hidalgo County is currently in attainment in respect to all NAAQSs (40 Code of Federal Regulations [CFR] 81.344).

Geology and Soils

Topography within the proposed project area is relatively flat with elevations ranging from 100 to 110 feet above sea level.⁴ Hidalgo County is within the Coastal Plain of Texas and is underlain by sediments deposited during two Pleistocene fluvial and deltaic episodes.⁵

The surface geology of the proposed project area is defined as Pleistocene Beaumont formation consisting of mostly clay, silt, sand and gravel. This formation in the proposed project area reflects interdistributary muds, abandoned channel-fill, fluvial overbank muds and floodplain deposits consisting of mud veneer over meanderbelt sand that is covered by grass. Structurally, the proposed project area is located within the Rio Grande Embayment. Surface faulting is related to the seaward progression of sediments over an unstable clay substrate. These surface faults are known as growth faults or gravity faults and generally parallel the coastline. A review of a geologic map of the San Juan area indicated no surface faults apparent in the proposed project area.⁵

Soil types located within the proposed project area consist of Hidalgo sandy clay loam, Hidalgo-Urban land complex, Raymondville clay loam, Raymondville-Urban land complex and Urban land. Generally, these soils are deep, well to moderately well drained, calcareous soils with 0 to 1 percent slopes.⁶

A desktop review in the Natural Resources Conservation Services' Web Soil Survey found that soils in the specific project location are designated as Prime Farmland; however, there will be no conversion of farmland because all project components will be on within previously disturbed rights-of-way.

Drainage, Wetlands, and Floodplain

The City of San Juan and Hidalgo County are participants in the National Flood Insurance Program (NFIP) and have both adopted flood damage prevention ordinances.

⁴ U.S. Geological Survey. 1983. Pharr, Texas 7.5-minute Quadrangle. Denver, Colorado.

⁵ Bureau of Economic Geology. 1980. *Environmental Geologic Atlas of the Texas Coastal Zone, McAllen-Brownsville Area*. University of Texas at Austin. Austin, Texas.

⁶ U.S. Department of Agriculture. 1977. *Soil Survey of Hidalgo County, Texas*. Soil Conservation Service. May 1977.

A review of the Federal Emergency Management Agency (FEMA) Community-Panel Number 4803340425 C found that the proposed project location is located outside of any flood zone. The water lines will be installed in Zone B. Zone B are areas located outside of the 100-year floodplain zone.

According to USFWS National Wetlands Inventory (NWI) maps, wetlands are not present within the proposed project area. Since the proposed water line work is not located within wetland resource areas, no impacts to wetlands would occur as the result of the construction of the proposed project components.

Flora and Fauna

The proposed project area is located within the Subtropical Zone sub-region of the South Texas Brush Country ecological region.

Because of the urban environment of the proposed project area, wildlife anticipated is typical of that found within the City of San Juan. Mammals such as rats, mice, opossum, ground squirrels, and various reptiles and amphibians may be present. Resident and migratory bird species, particularly passerine species (perching birds), can be expected in the vicinity.

While there are no known habitats of threatened or endangered species in the project area, databases of sensitive species maintained by the USFWS and TPWD were reviewed, to verify any state and/or federally listed threatened or endangered species that occur or have historically occurred in Hidalgo County. Some of these listed species are migrants or wintering residents only, or may be historic or considered extirpated. The results of the evaluation indicated that there would be “No Effect” on federally-listed species, and “No Impact” on State-listed species due to a lack of preferred habitat in the proposed project area. Attached is a table that lists the federal and state listed endangered, threatened, or rare species in Hidalgo County.

Historic Background

A review of the Texas Historic Sites Atlas, maintained by the Texas Historical Commission was performed for the specific project area. No cultural resources were identified; therefore, the project as proposed is not likely to affect any cultural resources.

Population and Income^{7,8}

As of 2010, the City of San Juan had a population of 33,856 according to the U.S. Census Bureau. The population of San Juan increased by approximately 28.8% between 2000

⁷ US Census Bureau: 2010 Census

⁸ US Census Bureau: 2006-2010 American Community Survey Estimates

and 2010. According to the TWDB's *2011 Regional Water Plan Population Projections for 2000 – 2060: Region M – Rio Grande*, the City is projected to grow to 70,892 residents in the planning year of 2030.⁹ The per capita income for San Juan is \$10,832 and the per capita income for Hidalgo County is \$13,480.

POTENTIAL IMPACTS AND MITIGATIVE MEASURES

Standard Mitigation and Precautionary Measures

Potential construction-related impacts to the daily activities of the community are amenable to standard mitigation and precautionary measures. The project will not involve the use of herbicides, defoliants or blasting. It is possible that some disruption and disturbance to individuals and households will occur during construction.

The volume of construction-related traffic is expected to be minor and should not cause a significant disruption of existing traffic patterns or increase in traffic hazards. Appropriate measures, such as use of barricades, drums, flags, alternate routes and other traffic control measures would be used to protect the public from construction hazards. All safety precautions would be performed according to the Uniform Traffic Control guidelines for construction operations.

Potential noise levels during project development will be those commonly associated with operation of heavy equipment. Installation of water lines will create minimal noise from trucks and equipment. To minimize the potential impacts of construction noise to surrounding areas, the contractor should limit the excavation associated with construction and utility installation, to daylight hours when occasional loud noises are more tolerable. Night work is not anticipated for the proposed project. If certain construction operations produce excessive temporary noise levels, impairing the normal activities of individuals in the area, the contractor will be directed to take reasonable action to minimize construction noise through abatement measures such as work hour controls and maintenance of muffler systems.

Standard dust and siltation/erosion control measures will be utilized. Periodic wetting of the construction areas in the event of extremely dry conditions will control dust. No permanent alteration to landforms, streams, or natural drainage patterns is anticipated.

Cross-Cutter Compliance and Agency Coordination

The proposed project has been reviewed for potential impacts to the quality of the human environment following the procedures provided in 31 Texas Administrative Code §371.41, in order to ensure compliance with DWSRF program requirements and federal

⁹ Texas Water Development Board. 2011. *2011 Rio Grande (M) Regional Water Plan*. Austin, Texas.

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and state regulations, including the federal cross-cutting environmental authorities from the EPA listed below.

- (1) National Environmental Policy Act of 1969, PL 91-190;
- (2) Archeological and Historic Preservation Act of 1974, PL 93-291;
- (3) Clean Air Act, 42 USC 7506(c);
- (4) Coastal Barrier Resources Act, 16 USC 3501 et seq;
- (5) Coastal Zone Management Act of 1972, PL 92-583, as amended;
- (6) Endangered Species Act, 16 USC 1531, et seq;
- (7) Executive Order 11593, Protection and Enhancement of the Cultural Environment;
- (8) Executive Order 11988, Floodplain Management;
- (9) Executive Order 11990, Protection of Wetlands;
- (10) Farmland Protection Policy Act, 7 USC 4201 et seq;
- (11) Fish and Wildlife Coordination Act, PL 85-624, as amended;
- (12) National Historic Preservation Act of 1966, PL 89-665, as amended;
- (13) Safe Drinking Water Act, §1424(e), PL 92-523, as amended;
- (14) Wild and Scenic Rivers Act, PL 90-542, as amended;
- (15) The Wilderness Act, 16 USC 1131 et seq.;
- (16) Environmental Justice, Executive Order 12898;
- (17) Flood Insurance Reform Act of 2004, Public Law 108-264;
- (18) National Flood Insurance Reform Act of 1994, Public Law 103-325;
- (19) Flood Disaster Protection Act of 1973, as amended, Public Law 93-234; and;
- (20) Clean Water Act, PL 92-500, as amended.

This environmental review included coordination with various state and federal regulatory agencies and other interested parties including a 30-day public review period of the planning documents. The following section provides a summary of that coordination and provides a discussion of any concerns, recommendations, or conditions pertaining to methods for avoidance, minimization or mitigation of potential impacts.

U.S. Army Corps of Engineers

The U.S. Army Corps of Engineers (USACE) was given the opportunity to review the project in accordance with Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899. Under Section 404 the USACE regulates the discharge of dredged and fill material in waters of the United States, including wetlands. USACE responsibility under Section 10 regards regulation of any work in, or affecting, navigable waters of the United States. A review response from the USACE (Project Number SWG-2015-00723), dated January 28, 2016, indicates that the proposed project site does not contain Waters of the United States. Therefore, the project does not require a USACE permit.

Texas Parks and Wildlife Department

The Texas Parks and Wildlife Department (TPWD) Wildlife Habitat Assessment Program reviewed the proposed project and provided a response dated November 10,

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2015. The TPWD response stated that based on the project description, Wildlife Habitat Assessment Program does not anticipate significant adverse impacts to rare, threatened or endangered species, or other fish and wildlife resources.

U.S. Fish and Wildlife Service and Texas Parks and Wildlife Department

The United States Fish and Wildlife Service (USFWS) was given the opportunity to review the proposed project for compliance with the Endangered Species Act. The USFWS provided a response letter (consultation number 02ETTX0-2016-0171) dated November 23, 2015. The response stated that the Migratory Bird Treaty Act (MBTA) implements various treaties and conventions for the protection of migratory birds. USFWS recommended for activities requiring vegetation removal or disturbance avoid the peak nesting season of March through August to avoid destruction of individuals, nests or eggs. If project activities must be conducted during this time, USFWS recommended surveying for nest prior to commencing work and if an active nest is found, and if possible, a buffer of vegetation (≥ 50 ft) remain around the nest until young have fledged or the nest is abandoned.

In order to insure compliance with the MBTA, the above has been included in the DWSRF loan conditions for the project.

Texas Historical Commission

The Texas Historical Commission provided a review response dated October 13, 2015 indicating that a survey is not required and that the project may proceed. The proposed project is in compliance with Section 106 of the National Historic Preservation Act as well as the Antiquities Code of Texas.

The DWSRF loan is conditioned to read that if archeological sites are discovered during construction, work will cease immediately in that area and the Water System will notify the THC and the TWDB of the discovery. The THC and the TWDB will then proceed in accordance with the regulations of the Advisory Council on Historic Preservation (36 CFR Part 800) prior to taking any action which would affect the cultural resources.

Texas Commission on Environmental Quality

In a response dated February 23, 2016, the Texas Commission on Environmental Quality (TCEQ) stated that a review of the project for general conformity impact in accordance with 40 CFR Part 93, indicates that proposed action is located in Hidalgo County, which is currently unclassified or in attainment of the National Ambient Air Quality Standards for all six criteria air pollutants. Therefore, general conformity rules do not apply. TCEQ also indicated that any debris or waste disposal should be at an appropriately authorized disposal facility. Based on this review, the project is in conformance with the State Implementation Plan (SIP) and the Clean Air Act, as amended.

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Texas Department of Transportation

The Texas Department of Transportation (TxDOT) was given the opportunity to review the proposed project. In their response letter TxDOT stated that after considering the project location and the Environmental Information Document provided, the project carries minimal environmental impact and does not require a TxDOT Utility Installation Review (UIR).

Bureau of Reclamation and Bureau of Land Management

The Bureau of Reclamation and Bureau of Land Management were given the opportunity to review the proposed project. No formal responses were received.

Tribal Historic Preservation Officer

The Water System requested a review of the proposed project. In a response dated October 1, 2015, the Comanche Nation stated that based on the information provided and a search within the Comanche Nation Site Files, there are no properties affected by the proposed project.

Environmental Justice

In accordance with Executive Order 12898 pertaining to Environmental Justice (EJ), potential environmental impacts to low-income and minority communities have been assessed. The U.S. Environmental Protection Agency (EPA) defines environmental justice as conveyed by the Executive Order as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. The goal of fair treatment is not to shift risks among populations, but to identify potential disproportionately high and adverse human health and environmental effects on minority populations and low-income populations and to identify alternatives to mitigate those impacts.

NEPAssist (<http://www.nepassist.net/>) is a Geographic Information System (GIS) application, devised by the EPA to facilitate the collection and coordination of information relevant to the environmental review process mandated by the NEPA. NEPAssist includes an 'Environmental Justice Analysis' tool that provides user-defined, site-specific U.S. Census demographic data compiled on U.S. Census Bureau, American Community Survey (ACS) for 2006 – 2010. Data include population, percentage of minority residents, per capita income, etc. for comparison with data for the county and state. However, the data no longer includes median household income or percent of households living below the poverty level, therefore direct comparisons are not possible. Comparisons are described below.

The U.S. Census Bureau characterizes 'Hispanic Origin' as a minority group, but not a separate race. Racial groups include: White, African-American, Asian/Pacific Islander, American Indian, Other Race, and Multiracial. The calculation for 'Percent Minority'

includes all minority groups and races except non-Hispanic, white persons. The terms ‘Living Below the Poverty Level’ is equivalent to the term ‘Economically Stressed’ and includes, according to the 2014 U.S. Census, a four-person family with an annual income at or below \$23,850.

The EJ Analysis was performed on February 19, 2016 for the project area. The results are indicated below with data from the U.S. Census for the State and Hidalgo County, included for comparison.

Area	Population (2010)	% Minority (2007-2011)	% Below Poverty Level / Median Household Income (2007-2011)
State	25,146,104	54.7%	17.2% / \$52,576
County	774,773	92.2%	33.5% / \$34,952
Project Area (0.5 mile buffer)	2,244	95%	*see below

According to the EJ Analysis, the annual per capita income of the project area (a 0.5 mile buffer around the proposed footprint) from 2008-2012 was \$16,371*. According to the U.S. Census data for 2010-2014, the per capita income for the county was \$14,525. The State-wide average was \$26,513. These results show that there is a measurable effect on low-income populations within relatively close proximity to the proposed project elements. However, these levels are similar to the county, and the proposed work does not pose a disproportionate risk for impacts to low-income or minority residents. The entire population of this project area would be the recipients of benefits derived from the proposed improvements, primarily through improved quantity and reliability of drinking water supplied to residents throughout the service area. Because the project will not result in the relocation of households or significant changes in land uses or land values and because the project area income and demography are consistent with this portion of the region, the project will not disproportionately impact low-income populations.

DOCUMENTATION, COORDINATION, AND PUBLIC PARTICIPATION

The proposed project is consistent with local, regional, and statewide planning. Coordination with the appropriate governmental agencies has been made and no adverse comments have been received.

Public participation conducted included a public hearing held on November 17, 2015, which was advertised in the *The Edinburg Review/Valley Town Crier*, a newspaper of general circulation in the service area. The notice was published on October 14, 2015 and contained information regarding availability of planning documents, including the EID, for public review at Sol y Mar Water System 813 E. Ridge Road, San Juan, Texas during normal business hours. Spanish translation services were made available to the public at the meeting. State and federal agencies were sent written notice of the hearing and the availability of the document for review.

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The public hearing was held at 6:00 P.M. on November 17, 2015, at the Sol y Mar Water System 813 E. Ridge Road, San Juan, Texas. No adverse comments were voiced at the public hearing or received during the 30-day public review period.

RECOMMENDATION

Based upon a detailed review of the Drinking Water State Revolving Fund planning information, the Environmental Information Document, this Environmental Assessment, and other documentation, the water lines installation and system improvements proposed by the Water System are considered to be environmentally sound with the following conditions.

In order to ensure compliance with the Federal Migratory Bird Treaty Act:

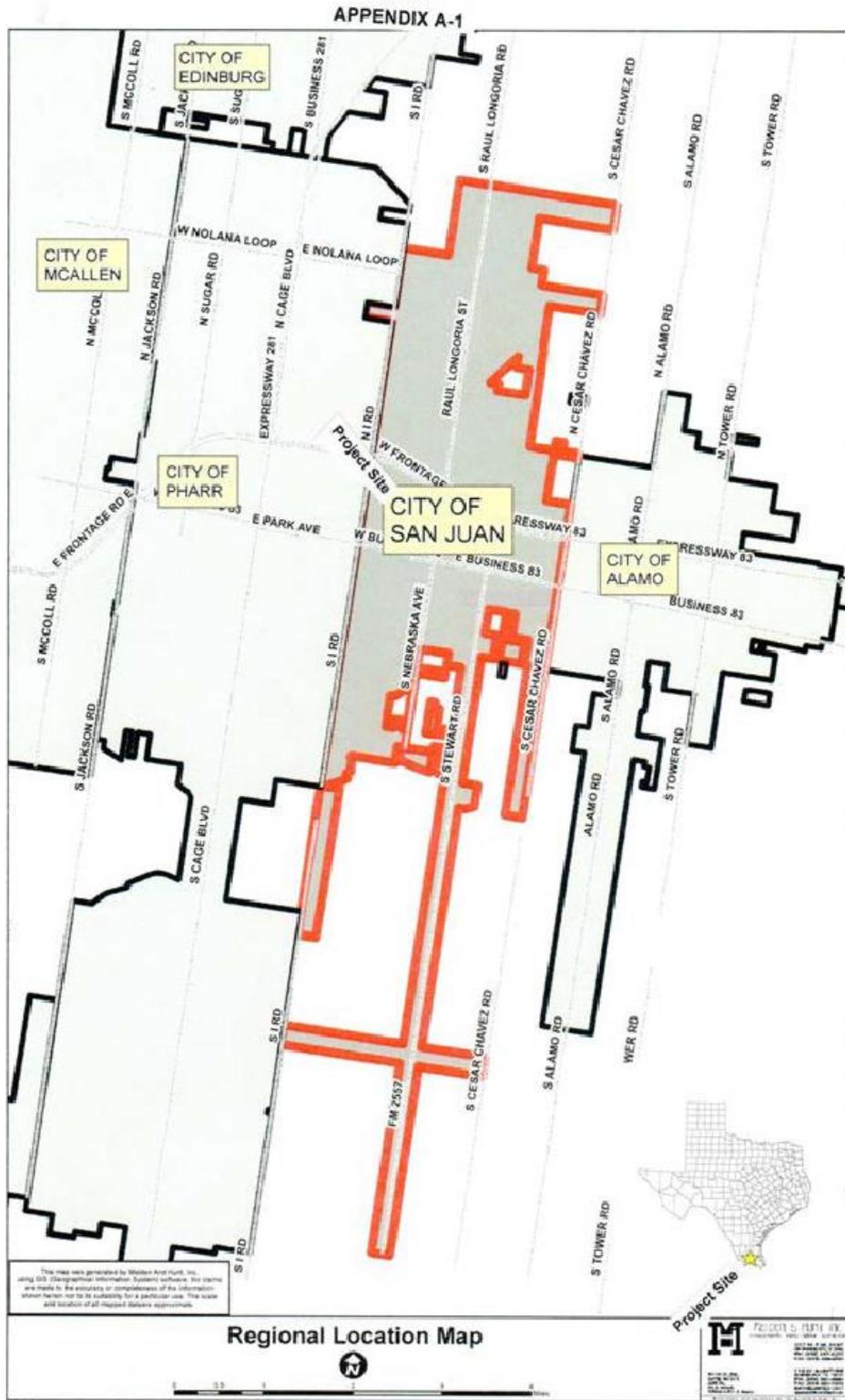
- If vegetation clearing is required, avoid the peak nesting season of March through August to avoid destruction of individuals, nests or eggs. If project activities must be conducted during this time, nesting surveys will be conducted by a qualified biologist prior to commencing work and if active nests are observed, a buffer of vegetation (≥ 50 -foot) will remain undisturbed around the nests until the young have fledged or the nest is abandoned. In addition, a Contractor Awareness Plan shall be developed to make construction workers aware of the potential of encountering migratory birds on the proposed project site and instructing them to avoid negatively impacting migratory birds.

Standard Emergency Conditions:

- Standard emergency discovery conditions for threatened and endangered species.
- Standard emergency discovery conditions for cultural resources.

Therefore, it is recommended that a Finding of No Significant Impact be issued.

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APPENDIX A-2

