

March 15, 2016

TO: ALL POTENTIALLY INTERESTED PARTIES:

RE: City of Los Fresnos (CWSRF Project No. 73687) – Collection System Rehabilitation and Extension

The attached document is being provided for your information. This is not a permit application. No action is required from your agency.

The attached document is an environmental determination issued by the Texas Water Development Board (TWDB) for a proposed project to be funded through the TWDB. Pursuant to the environmental assessment requirements of 31 Texas Administrative Code (TAC) §375.61 of the TWDB rules, the Executive Administrator of the TWDB has determined that the proposed action described in the attached documents is consistent with the National Environmental Policy Act. Coordination with the appropriate regulatory agencies and a public hearing were part of this determination.

Documentation supporting this decision is on file in the offices of the TWDB, and is available for public review upon request. 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. Comments supporting or disagreeing with this preliminary environmental determination may be submitted to the Director, Regional Water Planning and Development, Texas Water Development Board (TWDB), P.O. Box 13231, Austin, Texas 78711-3231.

March 15, 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) §375.61, 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 Clean Water State Revolving Fund (CWSRF) Equivalency Program, which is administered by the TWDB.

City of Los Fresnos, Cameron County
Collection System Rehabilitation and Extension
CWSRF Project No. 73687
Total CWSRF Loan Amount: \$820,000 (L1000293)
Total CWSRF Loan Forgiveness: \$344,980 (LF1000294)

The City of Los Fresnos (City), is proposing to: (1) rehabilitate existing lift stations; (2) purchase standby generators and automatic transfer switches; (3) replace approximately 7,763 linear feet of deteriorated clay pipes throughout the City using the pipe bursting method; (4) install approximately 12,992 linear feet of 10-inch polyvinyl chloride (PVC) Force Main and approximately 4,500 linear feet of 8-inch PVC Standard Dimension Ratio (SDR) 26 Gravity Line in an un-served area east of Farm to Market 1847; and (5) install approximately 1,866 linear feet of 8-inch PVC SDR 26 Gravity Line in an un-served area west of Farm-to-Market 1847. The installation of new sanitary sewer lines will allow the City to provide approximately 91 new sanitary sewer service connections. The proposed project would serve the City's projected population of 8,200 within 20 years. Total project cost for planning and design phases is estimated at \$1,164,980, all of which is expected to be financed by the CWSRF loan.

An environmental review of the proposed project consistent with NEPA has been completed following the guidelines provided in 31 TAC Code Chapter 375, Subchapter E. This environmental review is documented by the enclosed Environmental Assessment (EA). The EA contains mitigative 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 include the following:

- As per agreement with the Texas Parks and Wildlife Department (TPWD Project No. 35737) and in order to ensure compliance with the Migratory Bird Treaty Act, vegetation clearing and construction activities will be scheduled outside of the March 15 – September 15 migratory bird nesting season. If vegetation clearing must be scheduled to occur during the nesting season, a bird nest survey will be performed by a qualified biologist. If active nests are observed during surveys, contractors should leave a vegetation buffer of 150-feet until young have fledged or the nest is abandoned.
- Standard emergency condition for the discovery of cultural resources; and,
- Standard emergency condition for the discovery of threatened and endangered species.

Documentation supporting this decision is on file in the office of the Regional Water Planning and Development Division, TWDB, and is available for public review 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.

**City of Los Fresnos, Cameron County
Clean Water State Revolving Fund Project #73687
Collection System Rehabilitation and Extension
Environmental Assessment**

BACKGROUND

The City of Los Fresnos (City), is proposing to: (1) rehabilitate existing lift stations; (2) purchase standby generators and automatic transfer switches; (3) replace approximately 7,763 linear feet of deteriorated clay pipes throughout the City using the pipe bursting method; (4) install approximately 12,992 linear feet of 10-inch polyvinyl chloride (PVC) Force Main and approximately 4,500 linear feet of 8-inch PVC Standard Dimension Ratio (SDR) 26 Gravity Line in an un-served area east of Farm-to-Market 1847; and (5) install approximately 1,866 linear feet of 8-inch PVC SDR 26 Gravity Line in an un-served area west of Farm-to-Market 1847. The installation of new sanitary sewer lines will allow the City to provide approximately 91 new sanitary sewer service connections. The proposed project is within the City's Certificate of Convenience and Necessity (CCN). A portion of the project will be constructed in an undeveloped parcel located along the east and west area of Farm-to-Market 1847. The current population of the City is 5,391 persons. In 20 years, the City anticipates that the population will increase to 8,193 persons. The proposed project will have the capacity to serve the entire population increase.

According to the most current project schedule, the City anticipates the completion of construction by March 2017. The City is planning to finance the proposed project using funds from an \$820,000 loan and \$344,980 in loan forgiveness from the Clean Water State Revolving Fund (CWSRF) program, which is administered by the Texas Water Development Board (TWDB). The City received a commitment for the CWSRF loan from the TWDB on September 4, 2014. The loan closed on February 18, 2015.

The information provided in this Environmental Assessment may be found in the Environmental Information Document submitted to the TWDB by the City on November 5, 2015¹.

Purpose and Need

The purpose of the proposed project is to address issues at the existing lift stations, reduce infiltration and inflow (I/I), and provide first-time sanitary sewer service to an unserved portion of the City.

The City's lift stations are dilapidated and need to be rehabilitated. During an evaluation performed by Guzman & Muñoz Engineering and Surveying, Inc., strong odors were

¹ City of Los Fresnos (November 2015). *Environmental Information Document for the Collection System Rehabilitation & Extension Project* (Prepared by Guzman & Munoz Engineering and Surveying Inc.). Received by TWDB November 4, 2015. The EID is complete with the supplementary materials submitted to the TWDB on December 31, 2015; January 21, 2016; January 22, 2016; and January 27, 2016.

emanating from the lift station wet wells due to poor or failing enclosures, submersible pump failures, rusted or dilapidated pipe manifolds, and failing valves. Upgrades to the existing lift stations consist of replacing existing above and below ground structures due to rust and oxidation.

The City is also experiencing I/I. The current wastewater system within the City consists of clay lines and old, dilapidated manholes that frequently fail during times of high intensity rainfall. Most of the older manholes do not have technologies such as rain guards to prevent infiltration.

Subdivisions located within the City's CCN to the east and west of Farm-to-Market 1847 are currently using on-site septic systems. Many of these systems are old and have not been properly maintained. Leaking septic systems may introduce a number of contaminants to nearby water sources. The proposed project would provide the subdivisions with first-time sewer service and reduce potential contamination of nearby water resources.

EVALUATION OF ALTERNATIVES

In addition to the proposed project, the City evaluated a no-action alternative. The no-action alternative was evaluated for potential direct, secondary, and cumulative impacts on the existing environment.

The no-action alternative would result in future development experiencing extreme challenges due to limited services. The existing clay lines would continue to seep wastewater into the ground, leading to contamination of groundwater. In addition, the no-action alternative would not address issues with manholes throughout the city and could result in the buildup of hydrogen sulfide due to anaerobic digestion. Health effects of hydrogen sulfide include eye irritation, sore throat and cough, shortness of breath, and fluid in the lungs. Inhaling hydrogen sulfide on a long-term basis may result in fatigue, loss of appetite, headaches, irritability, poor memory, and dizziness.

The no-action alternative was compared to the preferred alternative. Relative impacts on Land Use, Prime and Important Farmland, Water Resources, Vegetation and Habitat, Cultural Resources, Air Quality, and Environmental Justice were examined. When compared to the preferred alternative, it was determined that the direct impacts of the no-action alternative on land use, prime and important farmland, floodways or floodplains, wetlands, trust resources, wildlife, native vegetation, endangered species habitat, cultural resources or historic properties, and low-income or minority populations would be the same as the direct impacts of the preferred alternative. It was determined that the direct impacts of the no-action alternative on surface water quality, ground water quality and quantity, and air quality would be greater than the direct impacts of the preferred alternative.

The no-action alternative would have negative impacts on the environment due to wastewater seepage. Infiltration of wastewater would reach the water table and contaminate the water supply. Strong odors would continue to be emitted from the dilapidated lift stations. The no-action alternative could have significant impacts on the functionality of the entire wastewater system and may lead to increased costs for replacement in the future. Therefore, the no-action alternative was not chosen as a viable option.

The preferred alternative would eliminate infiltration of wastewater to the nearby groundwater sources, would reduce strong odors emanating from the dilapidated lift stations, and would keep lift stations operational during times of high intensity rainfall. Additionally, the preferred alternative would provide first-time sanitary sewer service to un-served areas currently using on-site septic systems.

ENVIRONMENTAL SETTINGS, IMPACTS AND MITIGATION

Existing Conditions

The proposed project is within the City's CCN (CCN 20792). Rehabilitation of lift stations and sanitary sewer lines will be in the same or approximate locations as the existing lines. The project will require the acquisition and conversion of additional easements or rights-of-ways for the construction of sanitary sewer lines within unserved portions of the City.

Direct impacts of the project on land use include minor disturbance of vegetation during the installation of the sanitary sewer line and lift station. Mitigation measures for the proposed project are discussed in **Standard Mitigation, Precautionary Measures and Best Management Practices**.

Geology and Soils

The proposed project is located in the Gulf Coast Plains. The geologic formations found within the project area include Muddy floodplain alluvium (Qam) and Silty and sandy floodplain alluvium (Qas). Qam consists of floodplain deposits of the lower Rio Grande; mostly mud. Qas consists of floodplain deposits of the lower Rio Grande; mostly silt and sand. Faults are not present within the project's area of interest. Additionally, the project is not located in a karst or pseudo-karst zone. The City does not anticipate that the proposed project will have significant direct impacts on the geology within the proposed project area. Therefore, mitigation measures have not been proposed.

Soils in the proposed project area consist of the following soil series: Benito Clay (BE); Benito-Urban land complex (BU); Cameron silty clay (CE); Harlingen clay (HA); Harlingen clay, saline (HC); Harlingen-Urban land complex (HE); Laredo silty clay loam (LAA); Laredo-urban land complex (LG); Olmito silty clay (OM); Olmito Urban land

complex (ON); and Tiocano clay, 0 to 1 percent slopes, occasionally ponded (TC). These soil types do not present any construction constraints to the project. The proposed project will address soil contamination.

The proposed project area contains soils classified as Prime and Important Farmland. Soils series found within the area that are rated as prime farmland include CE, LAA, and OM. Guzman & Muñoz Engineering and Surveying, Inc., on behalf of the City, coordinated with the United States Department of Agriculture (USDA), Natural Resource Conservation Service (NRCS). According to the USDA, NRCS, proposed lift station is exempt because it does not contain Important Farmland Soils. Pipelines are not a conversion of Important Farmlands and can still be used after construction. Therefore, mitigation measures have not been proposed for the preferred alternative. A summary of this coordination is provided in **Cross-Cutter Compliance and Agency Coordination**.

Water Resources

The proposed project area is located in the Nueces-Rio Grande Coastal River Basin. The Gulf Coast aquifer is located in the greater project area. The Gulf Coast aquifer is not a sole source aquifer for the region. Surface waters located adjacent to the project area include the Resaca de los Cuates and Agua Negra. The City does not anticipate that the proposed project will directly impact surface water or groundwater resources. Therefore, mitigation measures have not been proposed for the preferred alternative.

Topography and Floodplains

Elevation across the proposed project area ranges from 20 to 30 feet above mean sea level (MSL). The topography within the project area is primarily flat with few breaks in elevation.

A portion of the proposed project is located in the 100-year floodplain. The communities in which the project will be constructed participate in the National Flood Insurance Program. The communities located within Cameron County include Bayview, Brownsville, Combes, Harlingen, Jarrell, La Feria, Laguna Vista, Los Fresnos, Palm Valley, Port Isabel, Primera, Rancho Viejo, Rio Hondo, San Benito, Santa Rosa, and South Padre Island.

The City does not anticipate that floodplains or floodways will be directly impacted by the proposed project. Therefore, mitigation measures have not been proposed for the preferred action alternative.

Wetlands, Streams and Waters of the United States

One ephemeral stream, the Resaca de los Cuates, and one wetland, the Agua Negra, was identified within the proposed project area. In addition, there are several irrigation canals

in the project area. The City coordinated with the United States Army Corps of Engineers (USACE) regarding a portion of the pipeline that will cross the Resaca de los Cuates. The City is proposing to use directional boring to install the wastewater pipeline. According to their coordination, no impacts to waters of the U.S. will occur as a result of the proposed project. The proposed project will not require any permits from the USACE. A summary of this coordination is given in **Cross-Cutter Compliance and Agency Coordination**. Therefore, mitigation measures have not been proposed for the preferred action alternative.

Biological Elements

The proposed project is located in the Southern Texas Plains ecoregion. A biological survey has not been performed within the proposed project area. No parks, recreational areas, forest preserves, grassland preserves, wildlife refuges, wild or scenic rivers, karst faunal regions or zones, or nature preserves are located in or near the project area. The vegetation and wildlife, including aquatic species present in the proposed project area include but are not limited to: Bass (*Micropterus* sp.), Crappie (*Pomoxis* sp.), Catfish (*Siluriformes* sp.), Rio Grande Perch (*Herichthys cyanoguttatus*), Carp (*Cyprinus* sp.), Gar (*Atractosteus* sp.), Roosevelt Weed (*Baccharis neglecta*), Butterflybush (*Buddleja sessiflora*), Twisted Acacia (*Acacia schaffneri*), Catclaw Acacia (*Acacia wrightii*).

A review of the Texas Parks and Wildlife Department Annotated County list of Rare Species and the United States Fish and Wildlife Service Species by County Report was conducted. Table 1 includes state or federally listed threatened and endangered species and species of greatest conservation need found within Cameron County.

Common Name	Scientific Name	State Status	Federal Status
Amphibians			
Black-spotted newt	<i>Notophthalmus meridionalis</i>	T	
Mexican treefrog	<i>Smilisca baudinii</i>	T	
Sheep frog	<i>Hypopachus variolosus</i>	T	
South Texas siren (large form)	<i>Siren</i> sp.	T	
White-lipped frog	<i>Leptodactylus fragilis</i>	T	
Birds			
American Peregrine Falcon	<i>Falco peregrinus anatum</i>		DL
Artic Peregrine Falcon	<i>Falco peregrinus tundrius</i>		DL
Audubon's Oriole	<i>Icterus graduacauda audubonii</i>		DL
*Brown Pelican	<i>Pelecanus occidentalis</i>		DL
Brownsville Common Yellowthroat	<i>Geothlypis trichas insperata</i>		
Cactus Ferruginous Pygmy-Owl	<i>Glaucidium brasilianum cactorum</i>		T
Common Black-Hawk	<i>Buteogallus anthracinus</i>		T
Eskimo Curlew	<i>Numenius borealis</i>	LE	E

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Gray Hawk	<i>Asturina nitida</i>		T
Interior Least Tern	<i>Sterna antillarum athalassos</i>	LE	E
*Northern Aplomado Falcon	<i>Falco femoralis septentrionalis</i>	LE	E
Northern Beardless-Tyrannulet	<i>Camptostoma imberbe</i>		T
Peregrine Falcon	<i>Falco peregrinus</i>	DL	T
*Piping Plover	<i>Charadrius melodus</i>	LT	T
*Red Knot	<i>Calidris canutus rufa</i>	T	
*Red-crowned parrot	<i>Amazona viridigenalis</i>		C
Reddish Egret	<i>Egretta rufescens</i>		T
Rose-throated Becard	<i>Pachyramphus aglaiae</i>		T
Sennett's Hooded Oriole	<i>Icterus cucullatus sennetti</i>		
Snowy Plover	<i>Charadrius alexandrines</i>		
Sooty Tern	<i>Sterna fuscata</i>		T
*Sprague's Pipit	<i>Anthus spragueii</i>	C	
Texas Botteri's Sparrow	<i>Aimophila botterii texana</i>		T
Tropical Parula	<i>Parula pitiayumi</i>		T
Western Burrowing Owl	<i>Athene cunicularia hypugaea</i>		
Western Snowy Plover	<i>Charadrius alexandrines nivosus</i>		
White-faced Ibis	<i>Plegadis chihi</i>		T
White-tailed Hawk	<i>Buteo albicaudatus</i>		T
Wood Stork	<i>Mycteria Americana</i>		T
Zone-tailed Hawk	<i>Buteo albonotatus</i>		T
Fishes			
American eel	<i>Anguilla rostrate</i>		
Mexican goby	<i>Ctenogobius claytonii</i>		T
Opossum pipefish	<i>Microphis brachyurus</i>		T
Rio Grande shiner	<i>Notropis jemezianus</i>		
Rio Grande silvery minnow	<i>Hybognathus amarus</i>	LE	E
River goby	<i>Awaous banana</i>		T
Smalltooth sawfish	<i>Pristis pectinata</i>	LE	E
Insects			
A Royal moth	<i>Sphingicampa blanchardia</i>		
Manfreda giant-skipper	<i>Stallingsia maculosus</i>		
Smyth's tiger beetle	<i>Cicindela chlorocephala smythi</i>		
Subtropical blue-black tiger beetle	<i>Cicindela nigrocoerulea subtropica</i>		
Tamaulipan agapema	<i>Agapema galbina</i>		
Mammals			
Coues' rice rat	<i>Oryzomys couesi</i>		T
Jaguar	<i>Panthera onca</i>	LE	E
*Jaguarundi	<i>Herpailurus yaguarondi</i>	LE	E
Mexican long-tongued bat	<i>Choeronycteris Mexicana</i>		
*Ocelot	<i>Leopardus pardalis</i>	LE	E
Plains spotted skunk	<i>Spilogale putorius interrupta</i>		
Southern yellow bat	<i>Lasiurus ega</i>		T

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*West Indian manatee	<i>Trichechus manatus</i>	LE	E
White-nosed coati	<i>Masua narica</i>		T
Mollusks			
False spiked mussel	<i>Quadrula mitchelli</i>		T
Salina mucket	<i>Potamilus metnecktayi</i>		T
Texas hornshell	<i>Popenaias popeii</i>	C	T
Reptiles			
*Atlantic hawksbill sea turtle	<i>Eretmochelys imbricata</i>	LE	E
Black-striped snake	<i>Coniophanes imperialis</i>		T
*Green sea turtle	<i>Chelonia mydas</i>	LT	T
Keeled earless lizard	<i>Holybrookia propinqua</i>		
*Kemp's Ridley sea turtle	<i>Lepidochelys kempii</i>	LE	E
*Leatherback sea turtle	<i>Dermochelys coriacea</i>	LE	E
*Loggerhead sea turtle	<i>Caretta caretta</i>	LT	T
Northern cat-eye snake	<i>Leptodeira septentrionalis septentrionalis</i>		T
Speckled racer	<i>Drymobius margaritiferus</i>		T
Texas horned lizard	<i>Phrynosoma cornutum</i>		T
Texas indigo snake	<i>Drymarchon melanurus erebennus</i>		T
Texas scarlet snake	<i>Cemophora coccinea lineri</i>		T
Texas tortoise	<i>Gopherus berlandieri</i>		T
Plants			
Bailey's ballmoss	<i>Tillandsia baileyi</i>		
Buckley's spiderwort	<i>Tradescantia buckleyi</i>		
Green Island echeandia	<i>Echeandia texensis</i>		
Lila de los llanos	<i>Echeandia chandleri</i>		
Mexican mud-plantain	<i>Heteranthera Mexicana</i>		
Plains gumweed	<i>Grindelia oolepis</i>		
Runyon's cory cactus	<i>Coryphantha macromeris var runyonii</i>		
Runyon's water-willow	<i>Justica runyonii</i>		
Shiners' rocket	<i>Thelypodopsis</i>		
*South Texas ambrosia	<i>Ambrosia cheiranthifolia</i>	LE	E
Star cactus	<i>Astrophytum asterias</i>	LE	E
*Texas ayenia	<i>Ayenia limitaris</i>	LE	E
Key:	DL – Delisted		
LE - State Listed Endangered	E – Federally Listed Endangered		
LT – State Listed Threatened	T – Federally Listed Endangered		
C – Candidate Species	* USFWS Species by County Report		

Guzman & Munoz Engineering and Surveying, Inc. evaluated the project for possible impacts to threatened and endangered species and habitat. Threatened or endangered species or habitat has not been identified within the proposed project area. The City has proposed to repair failing sanitary sewer lines throughout the service area utilizing the pipe-bursting method. Minor impacts to vegetation may occur during construction of the

lift station and wastewater line. However, Best Management Practices (BMPs) will be used to restore disturbed areas. Mitigation measures for the disturbance of vegetation have been proposed for the proposed action alternative and are discussed later in this section.

Cultural Resources

The Applicant has notified the State Historic Preservation Officer (SHPO) at the Texas Historical Commission (THC) that they intend to use the National Environmental Policy Act (NEPA) process to comply with Section 106 of the National Historic Preservation Act. A summary of this coordination is provided in **Cross-Cutter Compliance and Agency Coordination**. One historic property, the Los Cuates Cemetery, is listed within the City's limits. The proposed project does not intersect this historic property.

An archeological survey has not been conducted within the proposed project area. According to coordination with the SHPO, the proposed project does not have the potential to significantly affect cultural resources or historic properties. Based on the coordination with the SHPO at the THC, the City has concluded that historic properties will not be impacted as a result of the proposed project. Therefore, mitigation measures have not been proposed for the preferred action alternative.

Hazardous Materials

A Phase I Environmental Site Assessment (ESA) was not conducted within the proposed project area. Preliminary desktop analysis performed by Guzman & Muñoz Engineering and Surveying, Inc. revealed that a superfund site is not located in the project area or in an area associated with the proposed work. TWDB does not fund the testing, remediation, removal, disposal, or related work for contaminated or potentially contaminated materials. Mitigation measures have not been proposed for the preferred action alternative.

Social Implications and 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.

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Land acquisition for the project will not require the use of eminent domain. Additionally, people or businesses will not be relocated as a result of the proposed project. The proposed project will result in an increase in the resident’s monthly service rates. The current average user rate is \$20.07. The City anticipates that the monthly user rate will increase by \$3.34. The project will not require an increase in taxes to finance the debt.

The proposed project was evaluated for impacts to environmental justice. EJView is a mapping tool, designed by the EPA, which allows users to create maps and generate reports on factors that may affect public and environmental health. Data include population, percentage of minority residents, per capita income, etc. for comparison with data for the county and state. 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 2015 U.S. Census, a four-person family with an annual income at or below \$24,250.

The EJ Analysis was performed on August 4, 2015 for the project area. The results are indicated below with data from the U.S. Census for the State, Cameron County, and the City included for comparison.

Area	Population (2013)	% Minority (2010)	% Below Poverty Level / Median Household Income (2009-2013)
State of Texas	26,505,637	56%	17.6% / \$51,900
Cameron County	418,217	89.9%	34.8% / \$33,179
Project Area (1 mile buffer)	13,375	87 %	37.5% / \$42,750

According to the EJView Analysis, the average annual per capita income of the project area from 2009-2013 was \$42,750. According to the U.S. Census data for 2009-2013, the average per capita income for the county was \$33,179. The State-wide average was \$51,900. The project area has a proportion of the population, greater than the city, county or state average, who are members of a racial/ethnic minority category or who have less income than or equal to the state’s official poverty level. However, the difference between these proportions between the County and project area is small. These results show that there is not a measurable effect on low-income populations within relatively close proximity to the proposed project. 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 project. Therefore, mitigation measures have not proposed for the preferred action alternative.

Secondary and Cumulative Impacts

Long-term adverse impacts to air quality, geology, soils, water resources, floodplains, waters of the U.S., wildlife habitat, threatened and endangered species, cultural resources, and low-income and minority communities are not anticipated. Potential adverse impacts to air quality, water resources, and wildlife habitat would only occur during the construction of the project. Appropriate mitigation measures have been proposed for these resources and are described in Standard Mitigation, Precautionary Measures and Best Management Practices.

The proposed project may lead to growth within the City's CCN limits due to the installation of sanitary sewer lines in un-served areas. The subdivisions scheduled to receive the installation of sanitary sewer lines are currently utilizing on-site wastewater disposal systems. Leakages from on-site septic systems may introduce bacteria, viruses, household chemicals and other contaminants into the groundwater. The proposed project would reduce the likelihood of these contaminants being introduced into groundwater resources in the future. The proposed improvements to the existing sanitary sewer lines would reduce or eliminate seepage from the existing sanitary sewer line into groundwater resources.

Standard Mitigation, Precautionary Measures and Best Management Practices

A Storm Water Pollution Prevention Plan (SWPPP), accident prevention plan, and traffic control plan will be required to be submitted by the Contractor prior to mobilization onto the project site. The City will take reasonable precautions to prevent noise during construction and will consider various options such as mufflers on engines and limitations on hours of construction. No increase in noise levels will occur during operation. In construction areas where the installation of underground water lines will occur, the ground surface will be restored to preconstruction contours after construction is completed. The clearing of vegetation adjacent or near construction areas is not expected to occur and would be negligible. During the operation of the project, there would be no long-term adverse impacts to air quality. The City would perform proper and efficient measures wherever and as often as necessary to prevent dust that may originate from grounds maintenance or generated during construction from damaging crops, lands, and dwellings, or cause nuisance to area residence.

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 Chapter 375, Subchapter E, in order to ensure compliance with CWSRF Program requirements and federal and state regulations, including the federal cross-cutting environmental authorities from the EPA listed below.

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- (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.

Texas Historical Commission

The Texas Historical Commission provided a review response dated August 13, 2015 indicating a concurrence with the assessment that the project, as proposed, will not likely affect any cultural resources. The proposed project is in compliance with Section 106 of the National Historic Preservation Act as well as the Antiquities Code of Texas.

The CWSRF loan is conditioned to read that if archeological sites are discovered during construction, work will cease immediately in that area and the City 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.

United States Army Corps of Engineers

The 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.

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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-015-00586) dated January 26, 2016 indicates that the proposed project is not subject to USACE jurisdiction under Section 404 of the Clean Water Act, because the proposed horizontal directional drilling (HDD) bore of the wastewater pipe under the Resaca will avoid any impact to the jurisdictional water. As such, a Department of the Army permit is not required.

Texas Parks and Wildlife Department

The TPWD Wildlife Habitat Assessment Program reviewed the proposed project and provided a response dated November 23, 2015. The TPWD response (TPWD Project Number #35737) provided the following recommendations:

- Although most of the project is located in or adjacent to easements or rights-of-way (ROWS), in some of the less densely developed areas, brush may have established along the fence lines (e.g. along SH 100) or encroached into the ROW and may provide suitable nesting habitat for birds. If clearing woody vegetation is necessary to install the new pipelines or create access for machinery or heavy equipment, then TPWD recommends scheduling any necessary vegetation clearing or disturbance outside of the March 15 – September 15 migratory bird nesting season in order to fully comply with the Migratory Bird Treaty Act. Contractors should be made aware of the potential of encountering migratory birds (either nesting or wintering) in the proposed project site and be instructed to avoid negatively impacting them. If vegetation clearing must be scheduled to occur during the nesting season, TPWD recommends that nest surveys be performed by a qualified biologist and if active nests are observed during surveys, leaving a vegetation buffer of 150-feet until the young have fledged or the nest is abandoned.
- TPWD recommends any trenches created during installation of the new pipelines should not be left open overnight in order to prevent wildlife from potentially being trapped. If excavated holes or trenches must be left unfilled at the end of the work day, they should either be covered or have escape ramps placed in them (fashioned from boards or soil). Also any holes or trenches that are left open overnight should be inspected the following morning for wildlife that may have been trapped. If any state-listed species are trapped in trenches, they should be removed by personnel permitted by TPWD to handle state-listed species. If Texas tortoises or Texas horned lizards are observed in the immediate project area, an exclusion fence should be constructed (e.g. metal flashing, drift fence material or silt fence material). The exclusion fence which is an effective BMP for linear projects, should be buried at least six-inches deep and be 24-inches high.

Additional information regarding BMPs which may be implemented to avoid and/or minimize potential impacts to Texas tortoises (and other reptiles) are available on the TPWD Wildlife Habitat Assessment website. If a tortoise is located in the project corridor, it should be relocated as far from the proposed activity as possible within its 5 to 10 acre range.

- Contractors should be made aware that reptiles, including the reticulate collared lizard, Texas horned lizard, Texas indigo snake and the Texas tortoise, become more active during the spring and may be more susceptible to being negatively impacted. If possible, TPWD recommends scheduling construction activities involving grading or bulldozing to occur outside peak times of reptile activity (April through July) to avoid and/or minimize potential impacts to these species. Also, completing major ground disturbing activities before October when reptiles become inactive and could be utilizing burrows in areas subject to disturbance would minimize potential negative impacts. Reduced speed limits should be established and enforced in areas in which state-listed reptiles could occur.
- Because snakes are generally perceived as a threat and killed when encountered during vegetation clearing, TPWD recommends project plans include comments to inform contractors of the potential for state-listed snakes to occur in the project area. Contractors should be advised to avoid impacts to snakes as long as the safety of workers and preservation of a natural resource, attempting to catch, relocate and/or kill venomous snakes is discouraged by TPWD. If encountered, snakes should be permitted to safely leave project areas on their own. TPWD encourages construction sites to have a “no kill” policy in regard to wildlife encounters.
- TPWD recommends utilizing properly installed and maintained control/sedimentation BMPs near aquatic areas during construction to avoid potential impacts to water quality. Additionally, TPWD recommends locating equipment and material staging areas away from aquatic sites in order to avoid potential hazardous spills or leaks (e.g. oil, fuel) from affecting aquatic resources. Either affixing the force main pipeline that crosses Resaca de Los Cuates to the existing bridge or installing via HDD would best to avoid and/or minimize potential impacts to species associated with aquatic habitats.

The CWSRF loan is conditioned to read that if threatened or endangered species happen to be encountered during construction, work will cease immediately and the City will notify TWDB staff, TPWD, and the USFWS. Subsequent to notification, mitigation measures will be taken in accordance with the Endangered Species Act of 1973, as amended.

The CWSRF loan is also conditioned to read: As per agreement with the Texas Parks and Wildlife Department (TPWD Project No. 35737) and in order to ensure compliance with

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the Migratory Bird Treaty Act, vegetation clearing and construction activities will be scheduled outside of the March 15 – September 15 migratory bird nesting season. If vegetation clearing must be scheduled to occur during the nesting season, a bird nest survey will be performed by a qualified biologist. If active nests are observed during surveys, contractors should leave a vegetation buffer of 150-feet until young have fledged or the nest is abandoned.

Based on the TPWD response, and the special condition included in the CWSRF loan, consultation with USFWS was not required.

United States Department of Agriculture, Natural Resource Conservation Service

The United States Department of Agriculture (USDA), Natural Resource Conservation Service (NRCS) was given the opportunity to review the proposed project. The USDA, NRCS received the review request on December 29, 2015 and provided a response on January 7, 2016. The proposed lift station is exempt because it does not contain Important Farmland Soils. Pipelines are not a conversion of Important Farmlands and the site can still be used after construction.

Federal Emergency Management Agency

The Federal Emergency Management Agency (FEMA) Mitigation Division was given the opportunity to review the project. FEMA provided a response to the request on August 13, 2015 requesting that the community's floodplain administrator be contacted for the review and possible permit requirements for this project. FEMA also requested that the project be in compliance with Executive Order (EO) 11988 and EO 11990.

The State National Flood Insurance Program was given an opportunity to review the project. No formal response was received from the NFIP.

Due to prohibitions in the TWDB State Revolving Funds Floodplain Policy, the TWDB will not provide financial assistance for any project element that is proposed to be constructed in a floodplain when that project element is eligible for flood insurance and the applicant's community is sanctioned by the FEMA in its administration of the NFIP, pursuant to the requirements of the Flood Disaster Protection Act of 1973, Public Law 93-234.

The Local Floodplain Administrator was given an opportunity to review the proposed project. A response from the Local Floodplain Administrator was received on January 20, 2016. According to their review, it was determined that the proposed project will not have adverse impacts on the floodplain.

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Bureau of Land Management

The Bureau of Land Management Hazardous Materials Coordinator was given the opportunity to review the proposed project. The Bureau of Land Management received the review request on July 23, 2015 and provided a response on August 4, 2015. No adverse comments were received.

Intergovernmental Review

The City Mayor, Palo Naruacz, was given the opportunity to review the proposed project. The review request was delivered by certified mail on November 12, 2015. No formal response was received.

County of Cameron Department of Transportation

The County of Cameron Department of Transportation (CCDT) was given the opportunity to review the proposed project. The County of Cameron Department of Transportation provided a response to the review request on August 13, 2015. According to their records, there are no potential CCDT projects by Cameron County. The project will require a Utility Permit and a Site Development Permit may be required. All work conducted on County Roads will need to be repaired to existing condition or better.

National Park Service

The National Park Service was given the opportunity to review the project. The National Park Service provided a response to the review request on August 27, 2015. The Big Bend National Park and Rio Grande Wild and Scenic River did not have any comments for the proposed project.

U.S. Environmental Protection Agency

The Environmental Protection Agency (EPA) was given the opportunity to review the project. The EPA received the review request on July 24, 2015. Based on the information provided, the EPA concluded that the project does not lie within the boundaries of a designated sole source aquifer and is thus not eligible for review under the Sole Source Aquifer program.

Texas General Land Office

The Texas General Land Office (GLO) Coastal Resources Program was given the opportunity to review the project. The (GLO) provided a response to the review request on August 17, 2015. Based on the information provided to the Texas Coastal Management Program (TCMP), the GLO determined that the proposed project will likely not have adverse impacts on coastal natural resource areas (CNRAs), as described in the

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TCMP, in the coastal zone. However, siting and construction should avoid and minimize impacts to CNRAs.

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 during the planning included a public hearing held on October 13, 2015, which was advertised in the Los Fresnos News, a newspaper of general circulation in the area. The notice was published on September 9, 2015, and contained information regarding availability of planning documents, including the EID, for public review at the City Hall located at 200 N. Brazil Street, Los Fresnos, Texas between the hours of 8:30 a.m. and 5:00 p.m. for 30 days following the notice of the public hearing. State and federal agencies were sent written notice of the public hearing and the availability of the document for review.

The public hearing was held at 6:00 pm on October 13, 2015 at the City Hall located at 200 N. Brazil Street. No adverse comments were voiced at the public meeting or received during the 30-day public comment period.

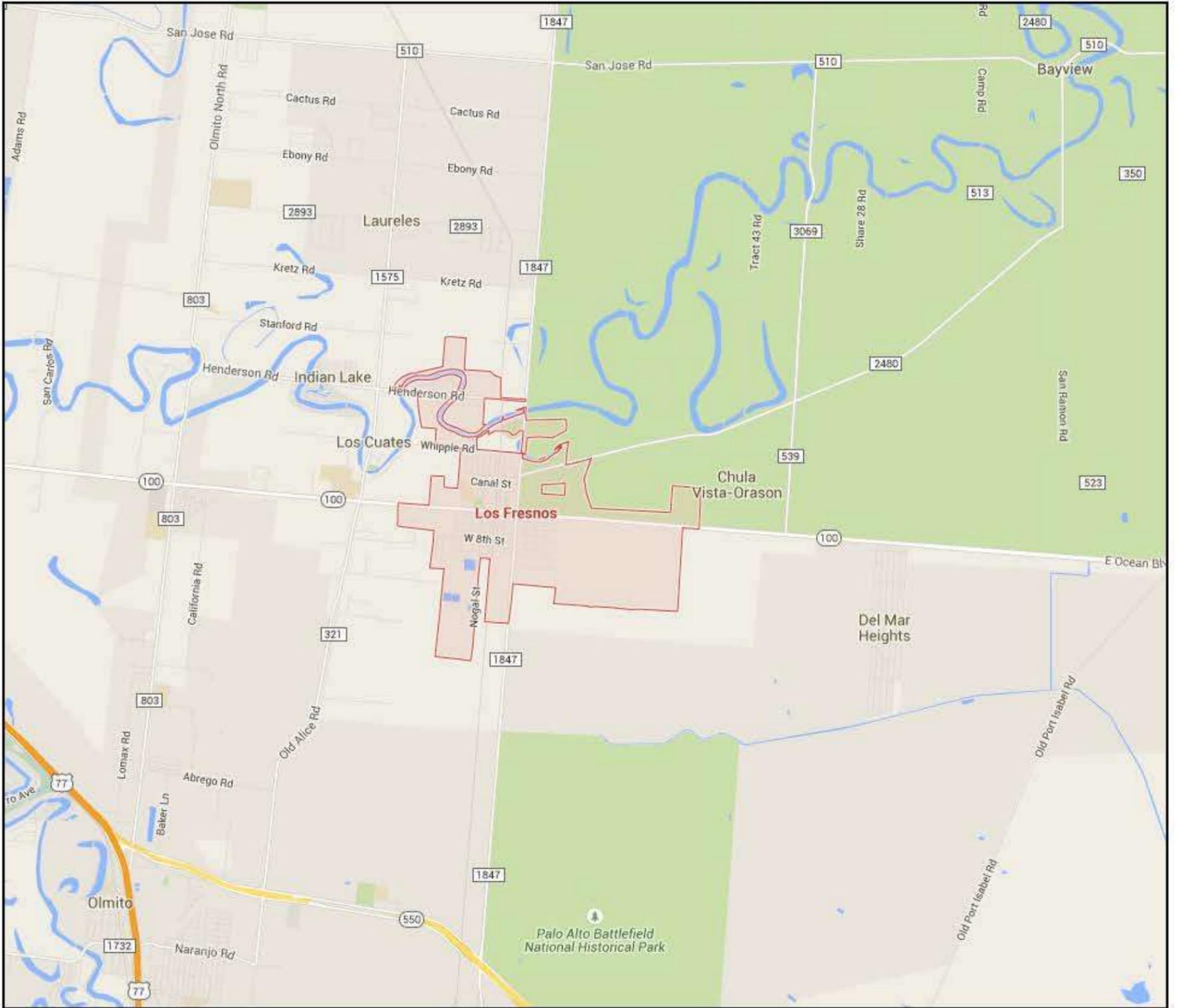
RECOMMENDATION

Based upon a detailed review of the CWSRF planning information, the EID, this EA, and other documentation, the wastewater system improvement project proposed by the City is considered to be environmentally sound with the following conditions:

- As per agreement with the Texas Parks and Wildlife Department (TPWD Project No. 35737) and in order to ensure compliance with the Migratory Bird Treaty Act, vegetation clearing and construction activities will be scheduled outside of the March 15 – September 15 migratory bird nesting season. If vegetation clearing must be scheduled to occur during the nesting season, a bird nest survey will be performed by a qualified biologist. If active nests are observed during surveys, contractors should leave a vegetation buffer of 150-feet until young have fledged or the nest is abandoned.
- Standard emergency condition for the discovery of cultural resources; and,
- Standard emergency condition for the discovery of threatened and endangered species.

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

REGIONAL LOCATION MAP OF LOS FRESNOS



LEGEND

City Limits

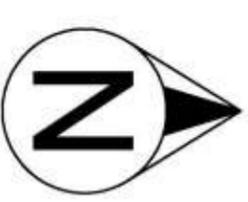
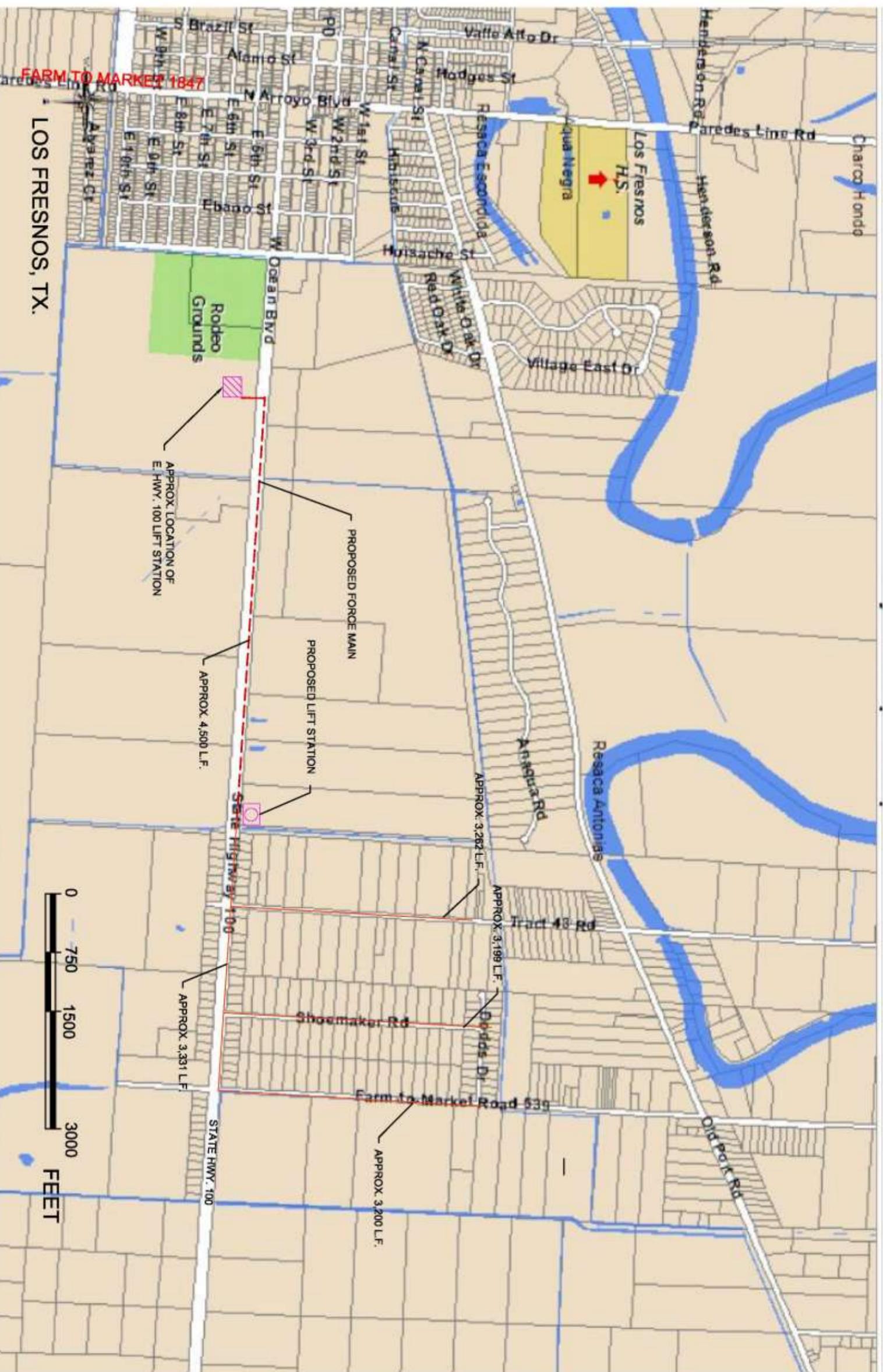
LOS FRESNOS, TX. 2015

GM **GUZMAN & MUÑOZ**
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TBPLS Firm Registration No. 10067700 Job No. P-465-07

UNSERVICED AREA EAST OF FARM TO MARKET 1847 (ARROYO BLVD.) CHULA VISTA AREA PROJECT FOOTPRINT MAP



LEGEND

- PROPOSED 8-INCH PVC SDR 26 GRAVITY LINE
- - - PROPOSED 10-INCH PVC FORCE MAIN
- EXISTING LIFT STATION
- PROPOSED LIFT STATION



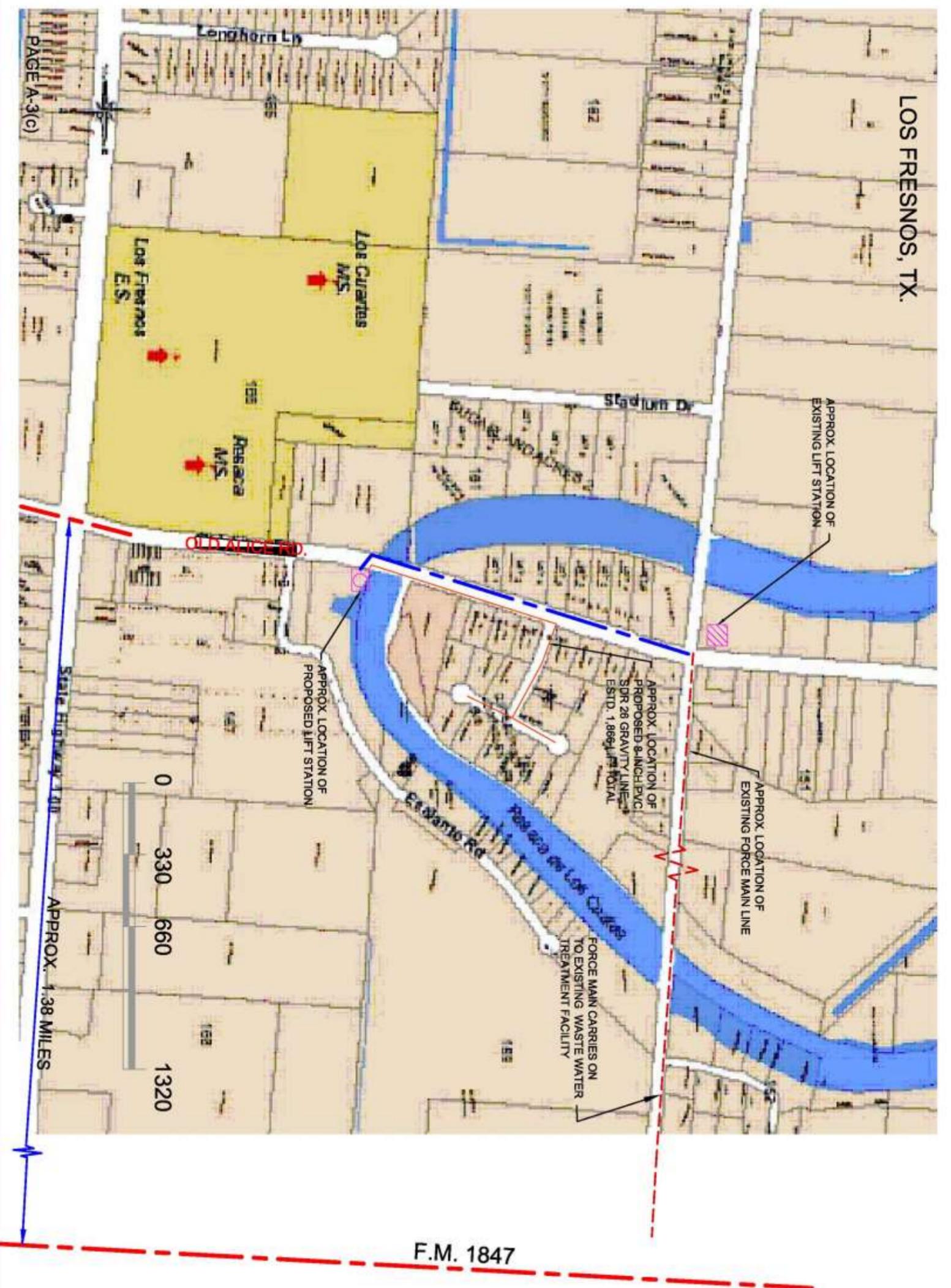
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TBPLS Firm Registration No. 10087700 Job No.

UNSERVICED AREA WEST OFFARM TO MARKET 1847 (ARROYO BLVD.) LOS CUATES

PROJECT FOOTPRINT MAP



LEGEND

- PROPOSED 8-INCH PVC SDR 26 GRAVITY LINE
- EXISTING 10-INCH PVC FORCE MAIN
- PROPOSED 10-INCH PVC FORCE MAIN
- EXISTING LIFT STATION
- PROPOSED LIFT STATION

CITY OF LOS FRESNOS EXISTING WASTEWATER COLLECTION SYSTEM



PROJECT FOOTPRINT MAP



LEGEND

-  6" VITRIFIED CLAY PIPE (VCP)
-  8" VITRIFIED CLAY PIPE (VCP)
-  10" VITRIFIED CLAY PIPE (VCP)
-  UNKNOWN DIA. VCP
-  EXISTING LIFT STATION
-  EXISTING MANHOLE

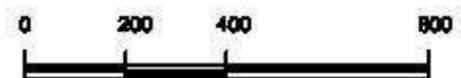
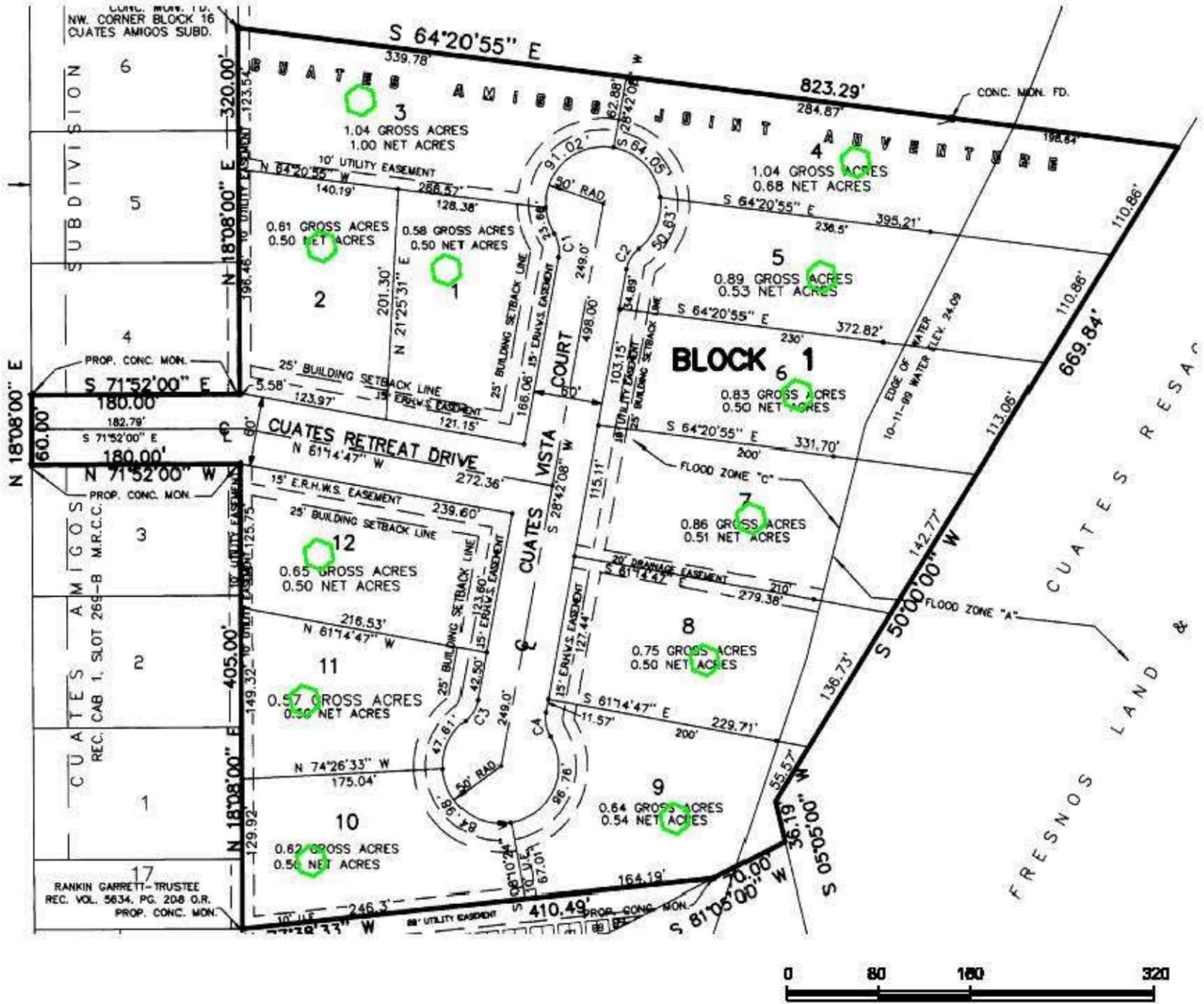


EXHIBIT SHOWING EXISTING SUBDIVISION WITH ON-SITE SEWAGE FACILITIES APPROXIMATE LOCATIONS



SEWAGE FACILITIES DESCRIPTION

SEWAGE FROM CUATES AMIGOS JOINT VENTURE TO BE TREATED BY ON-SITE SEWAGE FACILITIES (OSSF) CONSISTING OF A STANDARD DESIGN DUAL COMPARTMENT SEPTIC TANK AND A DRAINFIELD ON EACH LOT.

EACH LOT IN THE EXISTING SUBDIVISION IS AT LEAST 1/2 ACRE IN SIZE. THE NATURAL RESOURCE CONSERVATION SERVICE SOIL SURVEY BOOK INDICATED A SANDY LOAM AND SILTY CLAY, AND AT LEAST THREE TEST BORINGS WERE MADE ACROSS THE SUBDIVISION. THE SOIL IN A SANDY CLAY LOAM EXTENDING MORE THAN 36" BELOW THE BOTTOM OF ANY PROPOSED EXCAVATIONS.

NOTE:

CUATES AMIGOS SUBDIVISION IS AN EXISTING SUBDIVISION THAT CAN BE FOUND IN CABINET 1, SLOT 1876-B AND 1877-A OF THE CAMERON COUNTY MAP RECORDS.

CUATES AMIGOS JOINT VENTURE

BEING A 10.5 ACRE SUBDIVISION COMPRISED OF 4.83 ACRES OUT OF LOT 17 AND ALL OF LOT 18 (5.67 AC) OUT OF THE CUATES AMIGOS SUBDIVISION, AS RECORDED IN CAB. 1, SLOT 2698, MAP RECORDS OF CAMERON COUNTY, TEXAS.

LEGEND

APPROXIMATE LOCATION OF OSSF (ON-SITE SEWAGE FACILITIES-SEPTIC TANK)



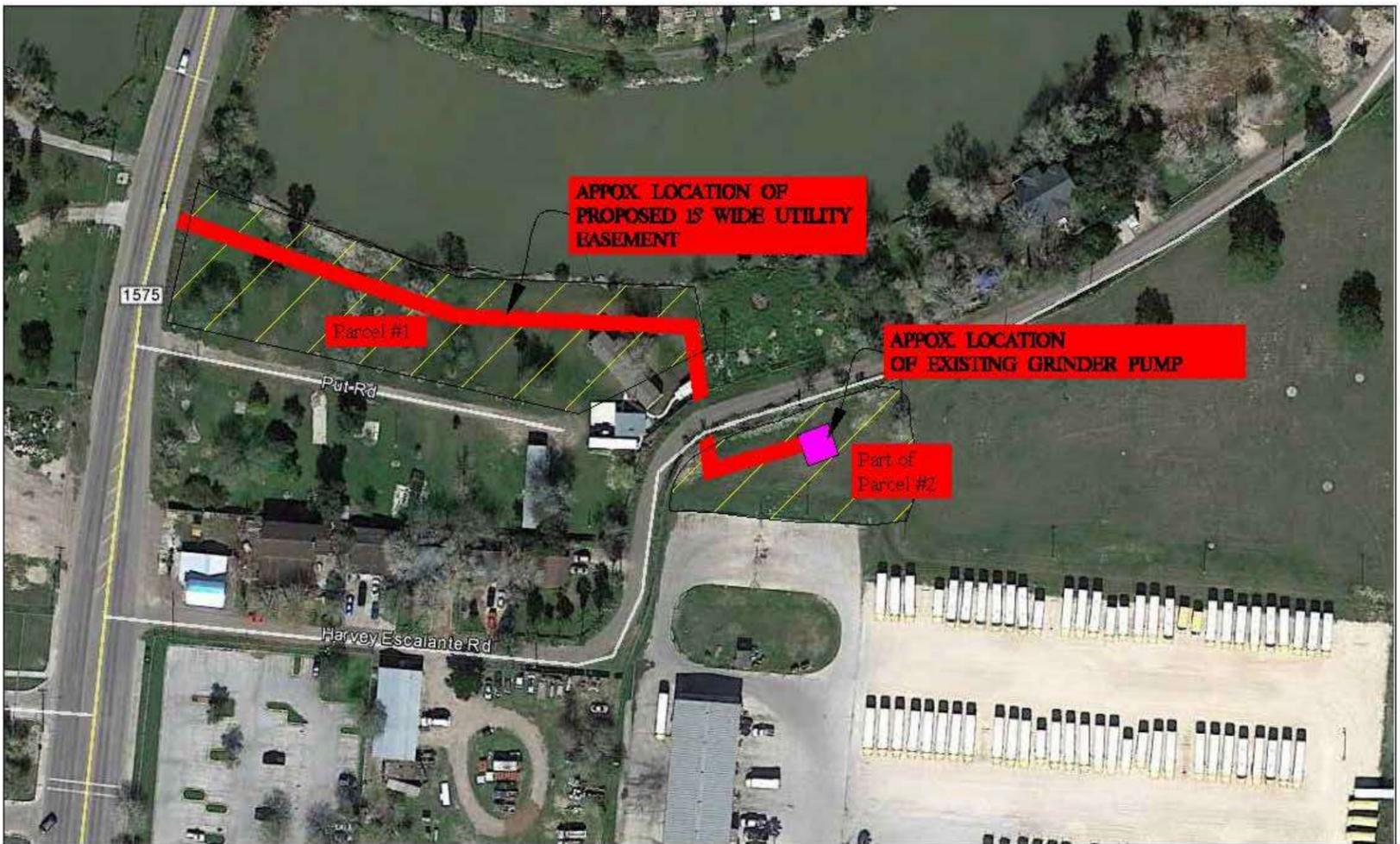
APPOX. LOCATION
PROPOSED 40' x 40'
EASEMENT FOR
PROPOSED NEW LIFT
STATION

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 □ 2020 E. Expressway 85 Mercedes, Texas 78370 Phone: (954) 343-4437 Fax: (954) 343-4434
 □ 1100 Jaramila Ave., Suite 107 McAllen, Texas 78501 Phone: (954) 482-3812 Fax: (954) 482-3813

Texas Registered Engineering Firm F-8017

EXHIBIT A



APPOX. LOCATION OF
PROPOSED 15' WIDE UTILITY
EASEMENT

Parcel #1

APPOX. LOCATION
OF EXISTING GRINDER PUMP

Part of
Parcel #2

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EXHIBIT B