

January 21, 2021

Jose A Lopez, III, Purchasing Agent
Webb County Purchasing Department
1110 Washington, Ste 101
Laredo, Texas 78040

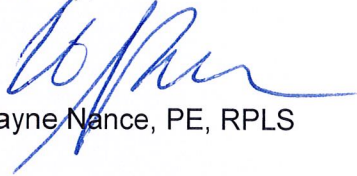
Ref: **RFQ 2021-002 – Rehabilitation of the Welch Road Bridge**
Letter of Transmittal and Statement of Qualifications

Mr. Lopez,

Porras Nance Engineering appreciates the opportunity to present the attached Statement of Qualifications for the above referenced project. All terms and conditions of this RFQ are understood and acknowledged by the undersigned.

We appreciate the opportunity to provide the County this proposal. We look forward to working with you on this project. If you have any questions, please contact me.

Sincerely,



Wayne Nance, PE, RPLS



Request for Qualifications (RFQ)

RFQ 2021-002

"Professional Engineering Services for the Rehabilitation of the Welch Road Bridge"

Due: January 21, 2021 at/or before 10am

Notice is hereby given that Webb County is seeking formal requests for qualifications (RFQ) for Civil Engineering Services from a licensed professional engineer to enter into one (1) project specific professional service agreement for the Rehabilitation of the Welch Road Bridge located 0.5 mile from the intersection of Welch Road and HWY 359, in Webb County, Texas. The Engineer shall provide engineering services required for the preparation of plans, specifications and estimates (PS&E) and related documents. These services may include, but are not limited to, preparing roadway and bridge design, hydrologic and hydraulic design, traffic control design, utility adjustment coordination, subsurface utility engineering, utility engineering, survey, geotechnical data collection, and if requested, provide design support and construction phase services necessary to support the design process. This solicitation will comply with the Texas Government Code, Section 2254, Sub-Chapter A (Professional Services) & B (Consulting Services).

The accompanying RFQ with its terms, conditions, attachments and all other forms in this RFQ package are due by or before 10 a.m. (Central Time) on, January 21, 2021. ***RFQ received after the due date and time will not be accepted.*** All RFQ meeting the required deadline will be read publicly at the following location in accordance with Webb County Purchasing Policies and Procedures:

Webb County Purchasing Department
1110 Washington St., Ste. 101
Laredo, Texas 78040

This RFQ solicitation can be viewed at the following online address. Interested Contractors may submit their proposals by registering on Webb County's eBid site and uploading their file to our "Response Attachments" tab. Should anyone need assistance please contact Mr. Juan Guerrero, Contract Administrator at (956) 523-4125.

<https://webbcountyebid.ionwave.net/Login.aspx>



Webb County reserves the right to reject any and all RFQ, to waive informalities in the RFQ process, or to terminate the RFQ process at any time, if deemed in the best interest for Webb County.

THIS FORM MUST BE INCLUDED WITH RFQ PACKAGE; PLEASE CHECK OFF EACH ITEM INCLUDED WITH RFQ PACKAGE AND SIGN BELOW TO COMPLETE SUBMITTAL OF EACH REQUIRED ITEM.

RFQ # 2021-002

“General Engineering Services for Rehabilitation of the Welch Road Bridge”

Statement of Qualifications

Proposers Information form

Conflict of Interest form (Form CIQ)

Certification regarding Debarment (Form H2048)

Certification regarding Federal lobbying (Form 2049)

Code of Ethics Affidavit

Proof of No Delinquent Tax Owed to Webb County



Signature of Authorized Official completing RFQ

1.18.21

Date



Proposer Information

Name of Company: Porras Nance Engineering

Address: 304 E. Calton

County and State Webb, Texas

Phone: 956-724-3097

Email Address: wayne@porrasnance.com

Signature of Person Authorized to Sign:

A handwritten signature in blue ink, appearing to read "Wayne Nance", is written over a horizontal line.

Signature

Wayne Nance

Print Name

President

Title

Indicate status as to "Partnership", "Corporation", "Land Owner", etc.

Sole Proprietorship

1.18.21

(Date)

Note:

All submissions relative to these RFQ shall become the property of Webb County and are nonreturnable.

If any further information is required, please call the Webb County Contract Administrator, Juan

Guerrero, at (956)523-4125.

CONFLICT OF INTEREST QUESTIONNAIRE
For vendor doing business with local governmental entity

FORM CIQ

This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.

This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).

By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. See Section 176.006(a-1), Local Government Code.

A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

OFFICE USE ONLY

Date Received

1 Name of vendor who has a business relationship with local governmental entity.

n/a

2 Check this box if you are filing an update to a previously filed questionnaire. (The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

3 Name of local government officer about whom the information is being disclosed.

n/a

Name of Officer

4 Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. Complete subparts A and B for each employment or business relationship described. Attach additional pages to this Form CIQ as necessary.

A. Is the local government officer or a family member of the officer receiving or likely to receive taxable income, other than investment income, from the vendor?

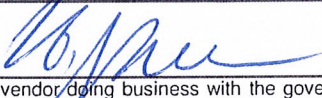
Yes No

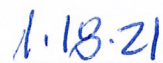
B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer or a family member of the officer AND the taxable income is not received from the local governmental entity?

Yes No

5 Describe each employment or business relationship that the vendor named in Section 1 maintains with a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership interest of one percent or more.

6 Check this box if the vendor has given the local government officer or a family member of the officer one or more gifts as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.003(a-1).

7 
Signature of vendor doing business with the governmental entity


Date

CONFLICT OF INTEREST QUESTIONNAIRE

For vendor doing business with local governmental entity

A complete copy of Chapter 176 of the Local Government Code may be found at <http://www.statutes.legis.state.tx.us/Docs/LG/htm/LG.176.htm>. For easy reference, below are some of the sections cited on this form.

Local Government Code § 176.001(1-a): "Business relationship" means a connection between two or more parties based on commercial activity of one of the parties. The term does not include a connection based on:

- (A) a transaction that is subject to rate or fee regulation by a federal, state, or local governmental entity or an agency of a federal, state, or local governmental entity;
- (B) a transaction conducted at a price and subject to terms available to the public; or
- (C) a purchase or lease of goods or services from a person that is chartered by a state or federal agency and that is subject to regular examination by, and reporting to, that agency.

Local Government Code § 176.003(a)(2)(A) and (B):

(a) A local government officer shall file a conflicts disclosure statement with respect to a vendor if:

(2) the vendor:

(A) has an employment or other business relationship with the local government officer or a family member of the officer that results in the officer or family member receiving taxable income, other than investment income, that exceeds \$2,500 during the 12-month period preceding the date that the officer becomes aware that

(i) a contract between the local governmental entity and vendor has been executed;

or

(ii) the local governmental entity is considering entering into a contract with the vendor;

(B) has given to the local government officer or a family member of the officer one or more gifts that have an aggregate value of more than \$100 in the 12-month period preceding the date the officer becomes aware that:

(i) a contract between the local governmental entity and vendor has been executed; or

(ii) the local governmental entity is considering entering into a contract with the vendor.

Local Government Code § 176.006(a) and (a-1)

(a) A vendor shall file a completed conflict of interest questionnaire if the vendor has a business relationship with a local governmental entity and:

(1) has an employment or other business relationship with a local government officer of that local governmental entity, or a family member of the officer, described by Section 176.003(a)(2)(A);

(2) has given a local government officer of that local governmental entity, or a family member of the officer, one or more gifts with the aggregate value specified by Section 176.003(a)(2)(B), excluding any gift described by Section 176.003(a-1); or

(3) has a family relationship with a local government officer of that local governmental entity.

(a-1) The completed conflict of interest questionnaire must be filed with the appropriate records administrator not later than the seventh business day after the later of:

(1) the date that the vendor:

(A) begins discussions or negotiations to enter into a contract with the local governmental entity; or

(B) submits to the local governmental entity an application, response to a request for proposals or bids, correspondence, or another writing related to a potential contract with the local governmental entity; or

(2) the date the vendor becomes aware:

(A) of an employment or other business relationship with a local government officer, or a family member of the officer, described by Subsection (a);

(B) that the vendor has given one or more gifts described by Subsection (a); or

(C) of a family relationship with a local government officer.

CERTIFICATION
REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY
EXCLUSION FOR COVERED CONTRACTS

PART A.

Federal Executive Orders 12549 and 12689 require the Texas Department of Agriculture (TDA) to screen each covered potential contractor to determine whether each has a right to obtain a contract in accordance with federal regulations on debarment, suspension, ineligibility, and voluntary exclusion. Each covered contractor must also screen each of its covered subcontractors.

In this certification "contractor" refers to both contractor and subcontractor; "contract" refers to both contract and subcontract.

By signing and submitting this certification the potential contractor accepts the following terms:

1. The certification herein below is a material representation of fact upon which reliance was placed when this contract was entered into. If it is later determined that the potential contractor knowingly rendered an erroneous certification, in addition to other remedies available to the federal government, the Department of Health and Human Services, United States Department of Agriculture or other federal department or agency, or the TDA may pursue available remedies, including suspension and/or debarment.
2. The potential contractor will provide immediate written notice to the person to which this certification is submitted if at any time the potential contractor learns that the certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
3. The words "covered contract", "debarred", "suspended", "ineligible", "participant", "person", "principal", "proposal", and "voluntarily excluded", as used in this certification have meanings based upon materials in the Definitions and Coverage sections of federal rules implementing Executive Order 12549. Usage is as defined in the attachment.
4. The potential contractor agrees by submitting this certification that, should the proposed covered contract be entered into, it will not knowingly enter into any subcontract with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the Department of Health and Human Services, United States Department of Agriculture or other federal department or agency, and/or the TDA, as applicable.

Do you have or do you anticipate having subcontractors under this proposed contract?

Yes

No

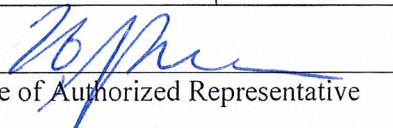
5. The potential contractor further agrees by submitting this certification that it will include this certification titled "Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion for Covered Contracts" without modification, in all covered subcontracts and in solicitations for all covered subcontracts.
6. A contractor may rely upon a certification of a potential subcontractor that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered contract, unless it knows that the certification is erroneous. A contractor must, at a minimum, obtain certifications from its covered subcontractors upon each subcontract's initiation and upon each renewal.
7. Nothing contained in all the foregoing will be construed to require establishment of a system of records in order to render in good faith the certification required by this certification document. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
8. Except for contracts authorized under paragraph 4 of these terms, if a contractor in a covered contract knowingly enters into a covered subcontract with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the federal government, Department of Health and Human Services, United States Department of Agriculture, or other federal department or agency, as applicable, and/or the TDA may pursue available remedies, including suspension and/or debarment.

PART B. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION FOR COVERED CONTRACTS

Indicate in the appropriate box which statement applies to the covered potential contractor:

- The potential contractor certifies, by submission of this certification, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this contract by any federal department or agency or by the State of Texas.
- The potential contractor is unable to certify to one or more of the terms in this certification. In this instance, the potential contractor must attach an explanation for each of the above terms to which he is unable to make certification. Attach the explanation(s) to this certification.

Name of Contractor	Vendor ID No. or Social Security No.	Program No.
Porras Nance Engineering	74-3081249	


Signature of Authorized Representative

Wayne Nance, President

1-18-21
Date

Printed/Typed Name and Title of
Authorized Representative

CERTIFICATION REGARDING FEDERAL LOBBYING
(Certification for Contracts, Grants, Loans, and Cooperative Agreements)

PART A. PREAMBLE

Federal legislation, Section 319 of Public Law 101-121 generally prohibits entities from using federally appropriated funds to lobby the executive or legislative branches of the federal government. Section 319 specifically requires disclosure of certain lobbying activities. A federal government-wide rule, "New Restrictions on Lobbying", published in the Federal Register, February 26, 1990, requires certification and disclosure in specific instances.

PART B. CERTIFICATION

This certification applies only to the instant federal action for which the certification is being obtained and is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$100,000 for each such failure.

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No federally appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, or the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.

2. If any funds other than federally appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with these federally funded contract, subcontract, subgrant, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions. (If needed, contact the Texas Department of Agriculture to obtain a copy of Standard Form-LLL.)

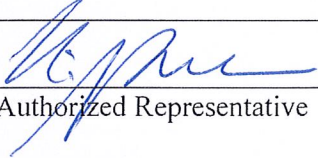
3. The undersigned shall require that the language of this certification be included in the award documents for all covered subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all covered subrecipients will certify and disclose accordingly.

Do you have or do you anticipate having covered subawards under this transaction?

- Yes
 No

Name of Contractor/Potential Contractor	Vendor ID No. or Social Security No.	Program No.
Porras Nance Engineering	74-3081249	

Name of Authorized Representative	Title
Wayne Nance	President



Signature – Authorized Representative

1-18-21

Date

**WEBB COUNTY PURCHASING DEPT.
QUALIFIED PARTICIPATING VENDOR CODE OF ETHICS
AFFIDAVIT FORM**

STATE OF TEXAS *

KNOW ALL MEN BY THESE PRESENTS:

COUNTY OF WEBB *

BEFORE ME the undersigned Notary Public, appeared Thelma Porras Nance, the herein-named "Affiant", who is a resident of Webb County, State of Texas and upon his/her respective oath, either individually and/or behalf of their respective company/entity, do hereby state that I have personal knowledge of the following facts, statements, matters, and/or other matters set forth herein are true and correct to the best of my knowledge.

I personally, and/or in my respective authority/capacity on behalf of my company/entity do hereby confirm that I have reviewed and agree to fully comply with all the terms, duties, ethical policy obligations and/or conditions as required to be a qualified participating vendor with Webb County, Texas as set forth in the Webb County Purchasing Code of Ethics Policy posted at the following address: <http://www.webbcountytx.gov/PurchasingAgent/PurchasingEthicsPolicy.pdf>

I personally, and/or in my respective authority/capacity on behalf of my company/entity do hereby further acknowledge, agree and understand that as a participating vendor with Webb County, Texas on any active solicitation/proposal/qualification that I and/or my company/entity failure to comply with the Code of Ethics policy may result in my and/or my company/entity disqualification, debarment or make void my contract awarded to me, my company/entity by Webb County. I agree to communicate with the Purchasing Agent or his designees should I have questions or concerns regarding this policy to ensure full compliance by contacting the Webb County Purchasing Dept. via telephone at (956) 523-4125 or e-mail to the Webb County Purchasing Agent to joel@webbcountytx.gov.

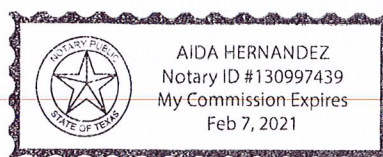
Executed and dated this 2nd day of September, 2020.

TP Nance
Signature of Affiant

Thelma Porras Nance, Porras Nance Engineering
Printed Name of Affiant/Company/Entity

SWORN to and subscribed before me, this 2nd day September, 2020

Aida Hg
NOTARY PUBLIC, STATE OF TEXAS



PROOF OF NO DELINQUENT TAXES OWED TO WEBB COUNTY

Name Thelma Porras Nance owes no delinquent property taxes to Webb County.

Porras Nance Engineering owes no property taxes as a business in Webb County.
(Business Name)

Thelma Porras Nance owes no property taxes as a resident of Webb County.
(Business Owner)

TP Nance

Person who can attest to the above information

*** SIGNED NOTORIZED DOCUMENT AND PROOF OF NO DELINQUENT TAXES TO WEBB COUNTY.**

The State of Texas
County of Webb

Before me, a Notary Public, on this day personally appeared Thelma Porras Nance, know to me (or proved to me on the oath of _____) to be the person whose name is subscribed to the forgoing instrument and acknowledged to me that he executed the same for the purpose and consideration therein expressed.

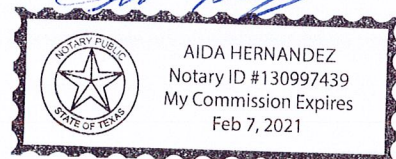
Given under my hand and seal of office this 2nd day of September 2020.

Notary Public, State of Texas

Aida Hernandez

(Print name of Notary Public here)

My commission expires the 2 day of February 2021.





PROJECT ORGANIZATION

Name & Business Address of the Lead Engineering Firm

Porras Nance Engineering

304 East Calton Road
Laredo, Texas 78041
(956) 724-3097

<http://www.porrasnance.com>

Responsible Principal – Thelma Porras Nance, P.E., CFM

Company Profile

Porras Nance Engineering founded as Porras Engineering Co. in 1981, is a Laredo based civil engineering and surveying firm with over twenty-five years of experience in providing engineering and surveying expertise in the design and preparation of plans, specifications, and estimates for all types of projects. Porras Nance Engineering is designated as a Small, Minority, Woman Business Enterprise (S/M/WBE), a Disadvantaged Business Enterprise (DBE) and certified as a Historically Underutilized Business (HUB) by the State of Texas.

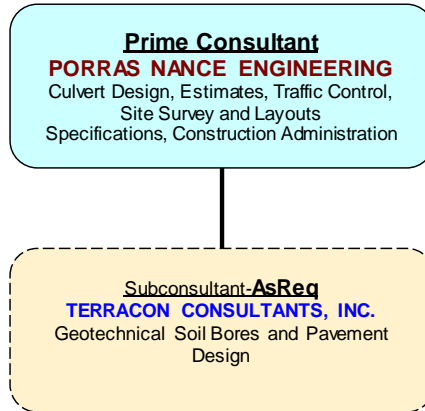
Porras Nance Engineering has eight (8) employees, including four (4) engineers licensed in the State of Texas, one of which is a Registered Professional Land Surveyor, two (2) computer technicians (CAD) operators, and a survey crew. Porras Nance Engineering now offers a wide variety of experience in engineering projects over an entire range of services such as engineering, surveying, planning, studies, preparation of plans and specifications, coordination with utilities, preparation of bid packages, bid tabulations, construction staking, construction observation, review of lab reports, field alteration requests, contractor estimates for payment, recapitulations, as built drawings, estimating, comprehensive engineering services, and construction management.

Porras Nance Engineering specializes in all aspects of drainage design, analysis, including culvert and roadway design, and construction administration of those facilities. We have interacted extensively with all government agencies associated with water and wastewater projects, from the local to federal level. We have personal, working relationships with staff at Texas Commission on Environmental Quality (TCEQ), Texas Department of Agriculture with TxDCBG Contract Funding, Texas Water Development Board (TWBD), FEMA, US Corps of Engineers, as well as the various Departments within the City of Laredo and Webb County.

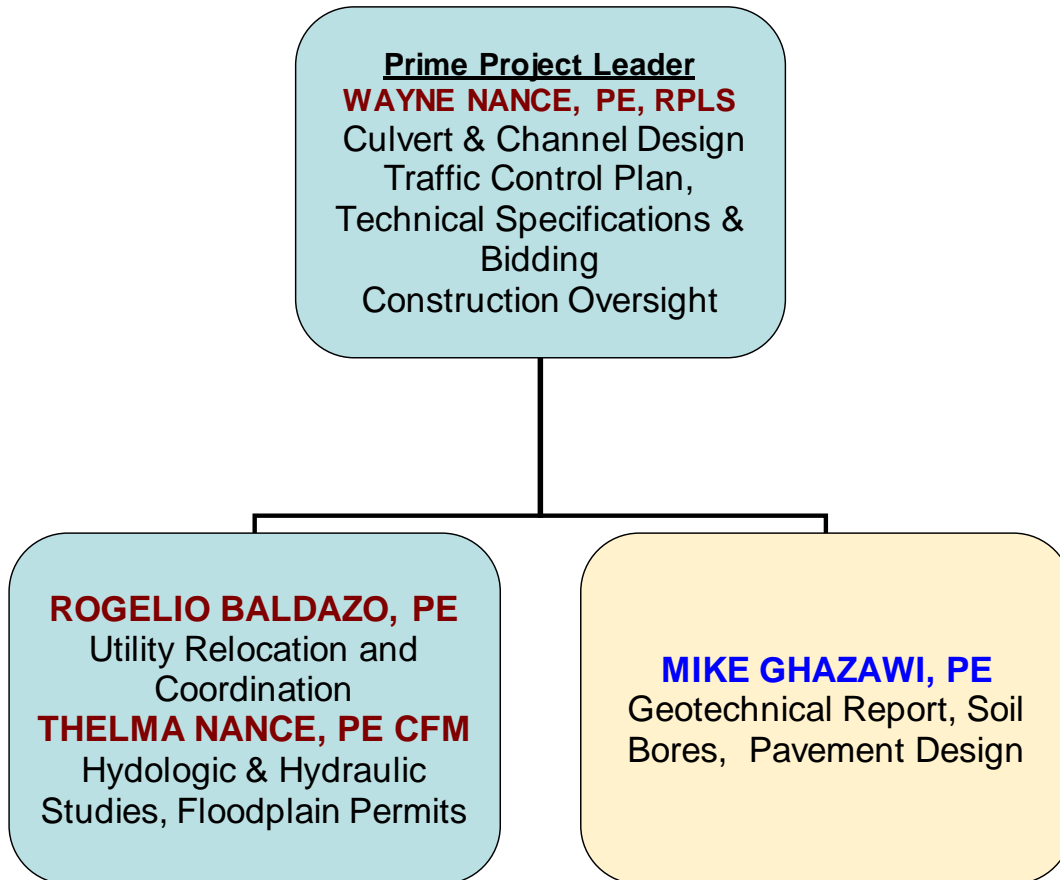


PROJECT ORGANIZATION CHART

CONSULTANTS & SUBCONSULTANTS



KEY PERSONNEL & SUPPORT STAFF





EXPERIENCE & REFERENCES

PRINCIPAL IN CHARGE & PROJECT SURVEYOR/ENGINEER

WAYNE NANCE, P.E., R.P.L.S.

EDUCATION: B.S. Civil Engineering, Texas A&M University, 1995

REGISTRATION: Licensed Professional Engineer, Texas No. 87006
Registered Professional Land Surveyor, Texas No. 6235

EXPERIENCE: Wayne Nance has been the project engineer for many public entities and municipalities throughout South Texas. Wayne specializes in all aspects of drainage design, analysis, and construction including roadways, culverts, and underground storm sewer systems. His comprehensive understanding of these systems and related TCEQ and County criteria make him the ideal project engineer for this project.

RECENT PROJECT EXPERIENCE

Client: WEBB COUNTY ENGINEERING & UTILITY DEPARTMENTS



Las Lomas Culvert & Roadway Improvements – Surveys, Plans, Specifications and Construction Oversight were prepared for Webb County to construct two (2) bridge class culverts and 2,600 feet of new roadway in the Las Lomas Colonia in Eastern Webb County. The project was constructed by Webb County Road and Bridge force and US Army crews. This project is nearly complete.

La Presa Water Dispenser – Surveys, Plans, Specifications and Construction Oversight were prepared for Webb County to construct a public water dispenser with 2-43,000 gallon tanks, pump skids, pressure tank and piping. Completed Jan 2021, \$800,000.

Mirando City Elevated Storage Tank – Surveys, Plans, Specifications and Construction Oversight were prepared for Webb County to construct a 60,000 gallon, welded steel, elevated storage tank in the Mirando City. The design included a hydraulic analysis of the existing supply wells and transmission main to verify the system could deliver flow to the increased tank height. The project was funded with TxCDBG grants which required associated specifications and requirements. Construction completed 2018, \$424,100.





Rio Bravo & El Cenizo Hydraulic Model – Developed a WaterCAD hydraulic model of the Rio Bravo and El Cenizo water system from existing base maps, as-built plans, pump records and County personnel interviews and site visits with associated report summarizing our findings, recommendations and system maps. Completed April 2018.

El Cenizo Control Valve – Surveys, Plans, and Specifications were prepared to construct a motor operated valve to control levels in the El Cenizo Elevated Storage Tanks. Construction pending. Construction cost: \$120,500.

Rio Bravo & El Cenizo GPS Surveys – Currently GPS field surveys of the Rio Bravo and El Cenizo water and sanitary sewer systems with subsequent mapping and analysis.

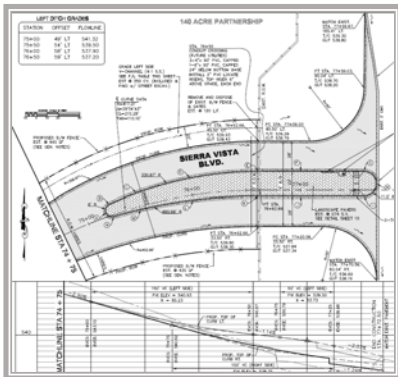
Reference Contact: Tomas Sanchez, Utilities Director - (956) 523-5590.

Client: CITY OF LAREDO – ENGINEERING DEPARTMENT

Project Title: India Avenue Roadway Improvements – Reconstruct approximately 2,200’ of local roadway streets, install 2,000’ new RCP drains and inlets, replace 2,750’ of 8” and 16” PVC water main, 1,800’ 8” sewer mains with associated sidewalk and driveway reconstruction and pedestrian ramp installations. Construction complete October 2010. Construction cost ~ \$1.0 million.

Project Title: Cuatro Vientos City Street Connectors & ROW Dedication

Project Scope: Topographic and boundary surveys were prepared for two (2) right-of-way acquisitions involved with extending Sierra Vista and Pita Mangana city streets after completion of the Cuatro Viento thoroughfare. Plats, parcel maps, metes and bounds descriptions were prepared for each tract as well as field monumentation. PNE prepared the roadway, drainage, signing and striping plans for both roadways, which required TxDOT plan review, approval and permitting. Construction oversight was provided on this 3 month, fast-track project to expedite City access to Cuatro Vientos Roadway. Construction complete May 2011. Construction cost ~ \$440,000 .



Contact: Ramon Chavez, P.E., City Engineer, (956) 791-7346



PRINCIPAL & PROJECT ENGINEER

THELMA PORRAS NANCE, P.E., CFM

EDUCATION: B.S. Civil Engineering, Texas A&M University, 1993

REGISTRATION: Licensed Professional Engineer, Texas No. 87839
Certified Floodplain Manager, No. 2096-11N

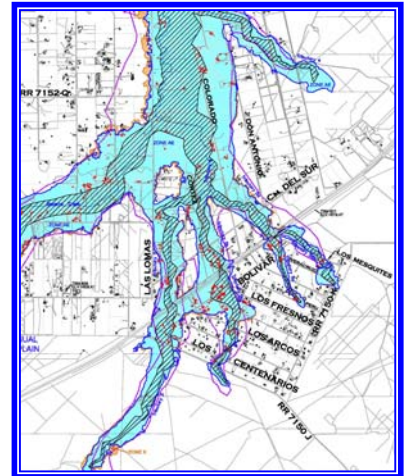
EXPERIENCE: Thelma Porras Nance has been involved in the design of many drainage and environmental projects. She specializes in hydrologic and hydraulic modeling of flood plains, storm water detention facilities, sedimentation/infiltration basins, channel improvements, and related drainage design. Her experience includes street, water and sanitary sewer design, storm sewer designs, grading plans, subdivision plats, and floodplain studies. She is fluent in the environmental permitting process required by FEMA and U.S. Army Corp of Engineers, which may be required by this project.

RECENT PROJECT EXPERIENCE:

Client: **WEBB COUNTY ENGINEERING & PLANNING DEPARTMENTS**

Project Title: **Las Lomas, US 59 Colonias Hydrologic & Hydraulic Study**

Project Scope: A comprehensive hydrologic and hydraulic (H&H) study with master plan report was completed for this Colonia east of Laredo to delineate the 1% chance (100-year) floodplain boundary, associated base flood elevations (BFE) and floodways along the tributaries of Becerra and Salado Creeks. A detailed hydrologic model of the 20 mi² contributing drainage area was performed using HEC HMS software. The hydraulic analysis was performed using HEC-RAS software in strict accordance with the FEMA guidelines and technical criteria. The study was formally submitted to FEMA as a LOMR and incorporated into their FIRMs. A master drainage plan was submitted that identified recommend culvert and roadway improvements with associated maps and estimated construction costs. Completed in April 2018.



Project Title: **Rancho Penitas West Hydrologic & Hydraulic Study**

Project Scope: A comprehensive H&H study with master plan report was completed for this Colonia northwest of Laredo to delineate the 1% chance floodplain boundary and associated BFEs along the tributaries of Santa Isabel Creek that traverse Penitas. A detailed hydrologic model of the 9 mi² drainage area was performed using HEC HMS software. The hydraulic analysis was performed using HEC-RAS software. The study was formally submitted to FEMA as a LOMR and incorporated into their FIRMs. A master drainage plan was submitted that identified engineering options for maintaining and improving existing and future, post-development runoff within flood zones with associated maps and estimated construction costs. Completed in December 2008. **Client Contact – County Floodplain Administrator, Rhonda Tiffin – (956) 523-4100**



PROJECT ENGINEER

ROGELIO BALDAZO P.E.

EDUCATION: B.S. Civil Engineering, Autonomus University of Nuevo Leon, 1994

REGISTRATION: Licensed Professional Engineer, Texas No. 92652

EXPERIENCE: Rogelio Baldazo is a project manager for the development of residential, commercial and industrial subdivision projects, as well as city projects, that include water mains, sanitary sewers, lift stations, street, and storm sewer designs. He has substantial experience in water and sewer design and construction. Rogelio's experience with the local utilities over the last twenty years makes him familiar with regional standards and preferences that will minimize County time and effort during the design and construction period of future projects with the Utilities Department. He was responsible for the following related projects:

RECENT PROJECT EXPERIENCE:

Client: **CITY OF LAREDO WATER UTILITIES DEPARTMENT**

Project Title: **Various Distribution and Transmission Main Improvements**

Project Scope: Rogelio provided in depth design assistance and preparation of plans and specifications for the following, previously described projects:

*TxDOT Water & Wastewater Utilities Relocation
24" Transmission Water Main*

Project Title: **Various Subdivisions within Laredo**

Project Scope: The following is an incomplete list of subdivisions and other private developments that Roger managed from their preliminary stages to construction completion. Each subdivision involved engineering design of water and sewer mains varying from 8" to 16" in diameter, which were developed in accordance with the Utility Department's standards and preferences:

- Eleden Subdivision Units I, II, III, VII, VIII, X, XV & XVII
- Sante Fe Subdivision Units IV, V, VI, VII, VII, IX, X, XI, XII, XIII
- James Haynes Industrial Park Units I –IV
- Santa Rita Subdivision Units X, XI & XIII
- Sierra Vista Subdivision Units Multiple Phases
- College Heights Subdivision Unit I - IV
- Cuatro Vientos Subdivision, Multiple Phases
- Las Misiones Subdivision Unit I - IX

Roger's extensive background with the water and sewer systems in the Laredo area gives him an advantageous familiarity with the area's utility system, which ultimately benefits the County's Utility Department. Roger is also familiar with many personnel at TxDOT, which make him the ideal liaison for permits and coordination with the Department.



EXECUTIVE SUMMARY: APPROACH & METHODOLOGY

The proposed project involves developing construction plans to repair and/or replace an existing culvert crossing on Welch Road in the San Carlos Subdivision (colonia) in eastern Webb County. ***Porras Nance Engineering is experienced in the engineering design, analysis, and construction oversight of roadway and drainage projects including culverts and related traffic control during construction.*** We are qualified to provide all engineering and survey services required to complete the project locally and ahead of schedule in accordance with the County’s expectations.

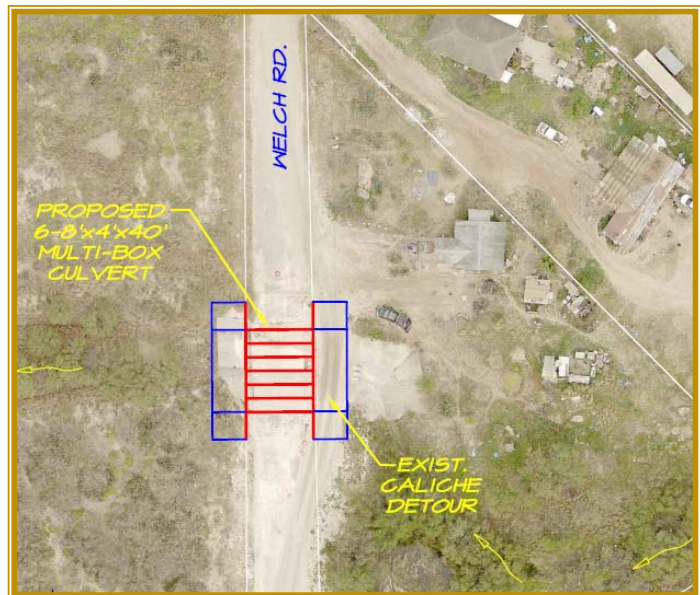
Project Scope



We understand that this project involves repairing a section of Welch Road that has failed at an existing low water crossing culvert. A caliche roadway with a corrugated pipe culvert was recently constructed to temporarily detour traffic around that failed section of roadway. This repair lies at a horizontal deflection point in the existing drainage channel that subjects it to further erosion and potential wash-out. Welch Road lies with a relatively narrow right-of-way that varies from 30’ to 45’.

Proposed Culvert Repair

The project site is not within the existing FEMA floodzone, but the drainage area that discharges to the crossing is approximately 1,000 acres. Based on a recently site visit, it appears that existing grades in the culvert area should allow a 4’ tall box culvert. We estimate that a 6-8’x4’ multi-box culvert should be adequate to convey the design storm without roadway overflow. Related upstream and downstream concrete aprons should be installed to minimize erosion especially at the creek deflection point directly upstream from the culvert.



Channel grading may be required if for several hundred feet in each direction to establish positive drainage. If required, related easement surveys and descriptions will be necessary for County acquisition.



Existing Utility Conflicts

Existing 10" and 12" sanitary sewers converge at the culvert site and flow to the west down the existing creek. The proposed culvert must be designed to accommodate the horizontal and vertical position of these sewers to avoid conflicts and maintain necessary separation and cover requirements.

Traffic Control and Traffic Safety

There are several homes at the northern terminus of Welch Road that must maintain access their homes during construction. The proposed construction plans must include a detailed traffic control plan and necessary detours to accommodate local traffic safely around the construction zone until project completion.

The culvert wingwalls may require guard rails for traffic safety at the culvert drop offs. These rails must be designed with adequate approach lengths and associated terminal sections in accordance with roadway standards. PNE is familiar with these criteria and the appropriate application of each.

County Force Construction

The County may elect to construct some or all of the proposed improvements with its Road and Bridge Crew for cost saving and/or to take advantage of federal and state (TxDOT) reimbursement programs. If elected, we will assist the County in developing quantities for direct purchase from material suppliers and provide construction staking and cut sheets to meet their preference as we have done on similar projects in the past.

Available Topographic Data – Site Familiarity

The City's existing drainage, water and sewer systems are available in a GIS mapping format. We will cross-check these maps for accuracy with as-built plans and other mapping data provided by the City and County. WCAD released recent (2018) aerial photographs and contours of most areas of the City that can be used to develop relatively detailed preliminary plans while field surveys are being collected. *Our familiarity with available resources will save the County considerable time and effort during the preliminary design and feasibility stage.*

Survey and Right-of-Way

A field survey will be conducted by our experienced, in-house survey crew and will be tied to the State's coordinate system (4205 South Zone, Grid, NAD 83, NAVD 88) using applicable GPS survey techniques. **We have established control and benchmarks in the area from previous projects.** Above ground topographical features in proposed main areas will be identified in the survey, including survey monuments, utility valves, services, manholes, and utility location markings, which will be requested prior to the survey. Our survey will include collection of flowline measurements from existing sanitary



and storm sewers to establish these profile depths. Water and gas main depths will be estimated by measuring valve stem depths.

Preliminary & Final Design Plans

Once this data has been collected, we will prepare a preliminary design with plans of adequate scale and detail to determine project feasibility and potential conflicts. Itemized construction cost estimates based on the preliminary design will be presented. Preliminary plans will be presented to the County and City in timely manner to expedite potential conflict resolution.

Once authorized to proceed with final design plans, we will incorporate County comments into the plans and provide sufficient detail, notes, and technical specifications to present bidders a clear understanding of the project scope, which will encourage responsible bids with minimal potential for unforeseen construction change orders.

Construction Bidding

The project may also be constructed through an Invitation for Bid (ITB) process. If so, the County will provide our office with all contract and bidding documents which will be edited to meet project specific goals. PNE will provide bidding assistance and construction administrative service to ensure the plans are correctly installed. As-built drawings will be submitted to the County at project completion.

Porras Nance Engineering will prepare the bid package, bid tab, construction staking; make periodic inspection during construction; prepare reports; evaluate lab results, shop drawings, and field alteration requests, contractor estimates for payment; prepare the recapitulation of over/under runs; and prepare the as built drawings at completion of construction.

Construction Cost Estimates

Itemized construction cost estimates will be calculated based on the preferred design plans. These quantities will be assigned values using the latest available unit bid prices from TxDOT, various city bid tabulations, and the private development bids from the Laredo area. These sources have proven to be sufficiently accurate to determine overall project/alternate feasibility.

Public Involvement

We will be available at the County's discretion to make public presentations during the design and construction process to inform the public of the current project scope and direction. We will provide color schematics, renditions, or layouts of the proposed improvements as needed and provide technical feedback and support at public meetings.



Local Investment

It is important to note that only minimal portions of this project's engineering services will be subcontracted to out-of-town firms. We are fully qualified to provide nearly all engineering services required for this project. The only services that will be subcontracted are project specific, specialty engineering services, such as electrical and geotechnical. Our personnel will be available to meet with Utility Staff for site visits, meetings, or otherwise as needed with minimal notice.

AVAILABILITY – Porras Nance Engineering will be available to begin surveying services immediately upon authorization. Our current workload is below capacity. We will be fully capable of meeting the County's schedule and deadlines for this project.

FAMILIARITY WITH GEOGRAPHIC AREA OF PROJECT – Porras Nance Engineering has over 30 year of professional engineering services in Webb County. We are familiar with the project area and local preferences, which will save the County time and effort.

CURRENT COUNTY CONTRACTS – Porras Nance Engineering's has only two existing contracts with the County Utilities Department (GIS Utility Surveys and La Presa Water Dispenser). Both are nearly complete. We expect to ready to begin this project immediately.

CONTRACT PERFORMANCE – Porras Nance Engineering does NOT have any contracts that have been canceled or terminated for unsatisfactory performance in any respect nor is involved in any legal proceedings involving unresolved municipal clients.



LOCAL REFERENCES

OWNER/CLIENT CONTACT INFORMATION	
Webb County Planning Department 1110 Washington St., Suite 302 Laredo, Texas 78040 Contact: Rhonda Tiffin, CFM, Director (956) 523-4100	City of Laredo, Water Utilities Department 5816 Daugherty Laredo, Texas 78041 Contact: Riazul Mia, PE, Director (956) 721-2000
Webb County Engineering Department 1620 Santa Ursula, 2nd Floor Laredo, Texas 78040 Contact: Luis Perez Garcia, PE, County Eng (956) 523-4055	City of Laredo, Environmental Department 619 Reynolds Laredo, Texas 78040 Contact: John Porter, Interim Director (956) 794-1650
City of Laredo, Engineering Department 1110 Houston St. Laredo, Texas 78040 Contact: Ramon Chavez, PE, City Engineer (956) 791-7346	Texas Department of Transportation 1817 Bob Bullock Loop Laredo, Texas 78043 Contact: Carlos Rodriguez, PE (956) 712-7701

