

City of Rose Hill Acres

Statement of Qualifications for
Professional Engineering Services
Proposed Contract Funding for the CDBG Disaster
Recovery Fund Through GLO Community
Development & Revitalization

May 30, 2019

TABLE OF CONTENTS

Cover Letter.....	2
Firm Profile	3
Experience and Qualifications.....	4
Project Experience	4
Summary and Additional Projects.....	23
Federal Funding Experience.....	25
Clients in General Region.....	27
Projects Completed on Schedule	27
Manage Project in Budgetary Constraints	27
Work Product is of High Quality	27
References	28
Project Understanding and Scope	29
Capacity to Perform	30
Project Team Overview.....	30
Quality Assurance/Quality Control	34
Affirmative Action Statement.....	34
Statements of Conflicts.....	34
Services	35
Resumes.....	37
Certificate of Insurance	51
System for Award Management.....	52

May 30, 2019

Karen Granato, Town Secretary
City of Rose Hill Acres
100 Jordan Road
Rose Hill Acres, Texas 77657

Re: Statement of Qualifications for Professional Engineering Services
Proposed Contract Funding through the General Land Office (GLO) Community Development and
Revitalization CDBG – Disaster Recovery Program

Dear Ms. Granato:

Schaumburg & Polk, Inc. (SPI) has been serving Southeast Texas communities from our corporate headquarters in Beaumont for over eighty years. We assisted our clients with disaster recovery funded projects after Hurricane Rita, Hurricane Ike, and now Harvey. We want your community to trust SPI with the engineering services related to your recovery. We are working within this program with several of your neighboring communities, including the City of Taylor Landing, City of Vidor, City of Lumberton, City of Pinehurst, City of West Orange, the City of Port Neches, the City of Groves, and the City of Orange, as well as communities in the Houston area such as Austin County. We understand this assignment will include working with the City to identify the proposed project and assist with the development of the grant applications. We will also provide the initial engineering support for environmental reviews, preliminary engineering investigations, surveying, cost estimates, and scheduling. We will provide all necessary engineering services related to the final design, bidding and award support, and engineering services related to the construction phase. We understand our services include coordination with other service providers such as the Grant Administrator and environmental, as well as the GLO. SPI meets the appropriate state licensing requirements to practice Engineering in Texas. SPI has not had a record of sub-standard work within the last five years. SPI has not engaged in any unethical practices within the last five years. Our knowledge of the funding opportunities, our success teaming with our clients, and our extensive engineering experience showcased in this SOQ will show that SPI is the most qualified firm for your potential projects.

We have the unparalleled experience of over eighty years in this industry and have included a list of our clients who can verify our work performance. The team we have assembled has a proven record of success with disaster recovery projects, and we are available to begin work immediately.

We are committed to serving the City and would appreciate your selection of Schaumburg & Polk, Inc. for this important project.

Sincerely,

Steve J. Jordan, P.E.
Vice President

Firm Name

Schaumburg & Polk, Inc.

Contact

Mark Mann, P.E.
Project Manager
mmann@spi-eng.com

Address

8865 College Street
Beaumont, Texas 77707

Phone

409-866-0341

Fax

409-866-0337

**Number of Years
in Business**

82 years

Number of Employees

52 Employees

Firm Registration Number

Texas F-000520

Types of Service Offered

SPI provides engineering services including, but not limited to: roadway planning design and construction administration; street and drainage improvements; water production, treatment and distribution; wastewater collection, transportation and treatment; permitting and regulatory compliance. As a full-service engineering firm, SPI's project services can include planning studies, project development, preliminary and final design, bidding, construction administration and construction representation services.

Currently, the firm employs approximately 52 persons, including project managers, engineers, design technicians, field construction representatives, clerical, and other support personnel. The firm has 12 Professional Engineers, with a combined experience of over 260 man-years.

History

SPI was founded by George J. Schaumburg, P.E. in 1937 and has been providing uninterrupted engineering services since 1947. In May 1973, the firm was reorganized under the name Schaumburg & Polk, Inc. With offices in Port Arthur, Beaumont, Houston, Terrell and Tyler, the firm provides professional engineering, program management and construction management services throughout the State of Texas. Principals of the firm include Professional Engineers Jeffrey G. Beaver, Allen R. Ross, and Ricky Bourque. Our dedicated staff provides specialized expertise and integrated services for the public and private sector, for both large and small projects. Our projects range from transportation, drainage facilities, water resources, wastewater facilities, to land development, and regulatory issues.

Office Locations

With offices located in Port Arthur, Beaumont, Houston, Terrell, and Tyler, SPI operates on the fundamentals that professional service and client satisfaction are the keys to building a successful consulting organization. We are dedicated to being responsive to client needs and to providing the skills, resources, and experience necessary to ensure the successful and cost-effective completion of each project.

ENGINEERING A
BETTER FUTURE

EXPERIENCE AND QUALIFICATIONS



DR-4332 CDBG-DR

SPI was involved and engaged with our clients and potential funding agencies in the earliest possible stages of the Harvey recovery process. We assisted with project development, cost estimates, exhibits, and any engineering related task necessary to help our clients obtain the funding they need to recover. Many of our clients have taken advantage of the ability to request an extension to the required application deadline for the CDBG-DR funding, however, we are continuing to assemble the needed information related to their allocation. The following clients have selected SPI and we are working to complete their application process.

City of Taylor Landing - Water System improvements, Streets - \$1.17 million

City of Vidor – Street and drainage projects - \$5.65 million

City of West Orange – Streets and Drainage - \$7.34 million

City of Pinehurst – Streets and Drainage - \$6.89 million

City of Port Neches – Water System Improvements - \$2.97 million

City of Groves – Wastewater System Improvements - \$4.1 million

City of Lumberton - Drainage Projects - \$2.5 million

Austin County – Road, Bridge, and Drainage - \$3.8 million

City of Orange – Wastewater and Facilities - \$7.92 million

DR – 4332 Texas Division of Emergency Management (TDEM) Hazard Mitigation Grant Program (HMGP) Experience

SPI is working hard for its clients to remain at the forefront of available funding options for DR-4332. SPI personnel are involved in Southeast Texas as well as in the Houston area. We have attended workshops and the Texas Emergency Management Conference in San Antonio where we are making contacts to better position our clients and provide more relevant information as the disaster recovery funding gets disseminated.

City of West Orange

SPI was selected by the City of West Orange for all pre-award and post-award engineering services related to DR-4332. SPI assisted the City, in coordination with the City's selected public assistance firm, on the application phase for submission to TDEM. The City is pursuing funding for a City-wide drainage project. The project will consist of

EXPERIENCE AND QUALIFICATIONS

a City-wide drainage study to identify and prioritize ditch widening and deepening, increased culvert sizes, and improved outfalls.

Michael Stelly (409)883-3468

City of Pinehurst

SPI was selected by the City of Pinehurst for all pre-award and post-award engineering services related to DR-4332. SPI assisted the City in developing engineering related application phase information for submission to TDEM. The City is pursuing projects related to City-wide drainage and wastewater system hardening at the wastewater treatment facility and at several lift stations. The drainage project will require an initial city-wide study of the ditch and culvert systems. The study will identify required capacity improvements for ditches and culverts throughout the City. The wastewater treatment facility and lift stations will involve raising electrical components to prevent future inundation.

Robbie Hood (409)886-3873

City of Vidor

SPI was selected by the City of Vidor for all pre-award and post-award engineering services related to DR-4332. SPI is assisting the City, in coordination with the City's grant administrator/public assistance firm, on the application phase for TDEM. SPI assisted the City in developing and prioritizing the projects for submission to TDEM. The City is pursuing projects related to hardening an existing bridge, replacing a culvert crossing with an bridge elevated out of the flood potential, detention pond on a major creek, improved drainage with detention and road improvements, and a major drainage study with improvements to a major thoroughfare. SPI has assisted with scoping and cost estimating for all the projects.

Mike Kunst (409)767-5473

City of Kirbyville

SPI was selected by the City of Kirbyville to provide all engineering services related to DR-4332. The City is pursuing funding through the Hazard Mitigation Grant Program (HMGP) for a significant drainage project related to Pin Oak Creek which drains the entire southern portion of the City, as well as wastewater projects related to the collection system.

Hon. Frank George, Mayor (409)423-6191

CDBG-DR EXPERIENCE

The Office of Rural Community Affairs (ORCA), the predecessor to the current Texas Department of Rural Affairs (TDRA), was charged with the administration of the Disaster Recovery Funds associated with Hurricane Rita. Four communities selected Schaumburg & Polk, Inc. to perform the engineering services under that program, including the cities of Silsbee, Nederland, Pinehurst, and Lumberton.

The Hurricane Ike disaster brought about a different methodology from the Texas Department of Rural Affairs (TDRA), including the appointment of HNTB as the Program Management Consultant. Schaumburg & Polk, Inc. responded immediately by submitting our Statement of Qualifications and becoming an approved Engineering Service Provider at the earliest possible time. We stayed in communication with our clients, as well as with many who were not yet our clients, so they would be aware of the Disaster Recovery Program and what steps would need to be undertaken in order to participate in the Program. SPI staff has attended many meetings in Austin, public hearings in several cities, and participated in weekly webinars until TDRA ended them in November of 2009 in order to stay current on the evolving program. As a result of our diligence, Schaumburg & Polk, Inc. was one of the top firms participating in this program. All of our projects were for Non-Housing funds.

The following five projects highlight our extensive experience:

1. City of Anahuac – The Belton Lane Drainage Project involved the complete replacement of all utilities within the right-of-way of Belton Lane. Approximately 4,750 linear feet of full roadway replacement, six and eight inch water lines including services, six and eight inch sanitary sewer lines including services, storm sewer ranging in size from fifteen inch diameter culverts to ten by ten foot boxes, pavement markings, roadway signs, all geotechnical investigation, stormwater pollution prevention plan, and traffic control plan were included. This project also included coordination with overhead utilities and underground gas lines. Perennial Environmental provided the USACE permitting services. Public Management, Inc. provided the Grant Administration.

2. Liberty County – Re-building/re-routing of Nueces Road (CR 2231). This project involved the relocation of the County Road away from the Trinity River in order to prevent further erosion and inundation. The project

EXPERIENCE AND QUALIFICATIONS

included complete rebuilding of the roadway and all associated drainage. Perennial Environmental provided the USACE permitting and the grant administrator is Public Management, Inc.

3. Orange County – New Community Shelter. Schaumburg & Polk, Inc., provided the program management and site/civil work for a new, \$10.6 million disaster shelter. SPI provided all site work design including water, sewer, drainage, and paving. SPI also coordinated the work of the project architect, structural engineer, and environmental service provider. One unique aspect of this project is that Orange County provided partial funding of the project. Grant administration provided by David J. Waxman, Inc.

4. City of Lumberton – Remove and replace two main drainage structures at street crossings. These two drainage structures failed to adequately convey flows. Project included removing and replacing the entire street section, including 5 X 7 and 6 X 7 box culverts, headwalls, slope stability, complete pavement replacement, traffic control plan, replace sanitary sewer and service connections, replace ten inch water main, and storm water pollution prevention plan in two separate locations. Grant administration provided by David J. Waxman, Inc.

5. City of Lumberton - Lumberton Drainage Project. The Project, which was three fold, consisted of: 1) acquisition and construction of two detention ponds, approximately forty-four acres total, 2) acquisition and clearing of 21,200 linear feet of drainage easements along existing outfall channels, 3) and a Comprehensive Drainage Study (CDS). Design and construction is complete. Grant administration was provided by David J. Waxman, Inc.

In addition to the above highlighted projects, the following is a listing of our other CDBG-DR projects. Each entity had multiple projects.

1. City of Alto – Emergency Power Generator, transfer switches at four sites, Grant Administrator: GrantWorks, Environmental: Gary Traylor & Associates

2. City of Anahuac - Elevated Water Tank includes the replacement of a 150,000 gallon elevated water storage tank. Grant Administrator: Public Management, Environmental: Community Development Resources

3. Cherokee County – 10 Emergency Power Generators for several Water Supply Corporations, Volunteer Fire Departments, and community Shelters. Grant Administrator: Gary Traylor and Associates, Environmental:

Tim Glendening & Associates.

4. City of Cuney – Emergency Generator. Grant Administrator: Gary Traylor & Associates, Environmental: Talon/LPE

5. City of Devers – Grinder Pump Replacement. Grant Administrator: Public Management, Environmental: TLC Engineering Co.

6. City of Jacksonville – Two Emergency Power Generators. Grant Administrator: Gary Traylor & Associates, Environmental: Gary Traylor & Associates

7. City of Liberty – Six Emergency Generators, SCADA, Power Pole Replacement. Grant Administrator: Public Management, Environmental: Gary Traylor & Associates.

8. Liberty County – Eight Emergency Generators, Water system improvements, Community Shelter, nearly 40 miles of Drainage channels. Grant Administrator: Public Management, Environmental: HoweCo.

9. Madison County – New water service to an area in the southeastern part of the County. Grant Administrator: Grantworks

10. City of Lumberton – Two Emergency Generators, culvert crossings. Grant Administrator: David J. Waxman, Environmental: Tim Glendening & Associates

11. Montgomery County – Drainage improvements to nearly 70,000 linear feet of ditch and culverts. Grant Administrator: Self-Administered.

12. Nacogdoches County – Shelter improvements and emergency generators. Grant Administrator: David J. Waxman, Inc.

13. City of Nederland – Street improvements, sanitary sewer rehabilitation, generators. Grant Administrator: Self-Administered

14. Orange County – Multiple culvert crossings, seventeen miles of road resurfacing. Grant Administrator: David J. Waxman.

15. City of Orange – Seven miles of street improvements. Grant Administrator: Self-Administered.

16. City of Pinehurst – Lift Station Controls. Grant Administrator: David J. Waxman, Environmental: Langford Community Management

17. City of Rusk – Emergency Generator. Grant Administrator: Gary Traylor & Associates, Environmental:

Community Development Resources

18. Sabine County – New surface water plant. Grant Administrator: David J. Waxman.

19. Walker County – Emergency generators for three large water suppliers throughout the County. Grant Administrator: Gary R. Traylor & Associates

20. City of West Orange – Two Emergency Power Generators, Street Resurfacing, culvert crossings. Grant Administrator: Gary R. Traylor & Associates. Environmental: Future Link Technologies.

These communities entrusted Schaumburg & Polk, Inc. with the Engineering Services associated with nearly \$60 million in Disaster Recovery Projects.

These projects were distributed to those teams and project managers throughout our three branches who could most effectively and expeditiously deliver the desired results. We assembled a team of Sub-Consultants in support of these projects. The Sub-Consultants were approved by TDRA via our Historically Under-Utilized Business (HUB) Sub-Consulting Plan (HSP).

FEMA Public Assistance Projects

FEMA 2018 Streets and Drainage

City of Vidor

SPI was selected for six FEMA PA projects through DR-4332. The projects include road and ditch repairs on Elgie Road from Tannahill to Pine Street, Elgie Street from Maple Street to the end of Elgie, road repairs in two locations on Concord Street, road repairs on Oakland and Lakeside. Mike Kunst (409)767-5473

FEMA 2016 Street Rehabilitation

City of Terrell

This project consisted of cement treating the existing base (9,004 square yards), priming, and overlaying with 2 inches of hot-mix asphalt (285 tons) on portions of fifteen streets in the City of Terrell. Construction was completed September 2016 at a cost of \$455,670.

Steve Rogers, P.E. (972)551-6607

FEMA 2017 Streets Rehabilitation

City of TerrellCDB

The project consisted of the rehabilitation of 25 streets in the City of Terrell. Rehabilitation consisted of cement treating the existing base, cleaning and reshaping the ditches, installing 4,070 square yards of new base, and

applying prime coat and 2,800 tons of hot-mix asphalt surfacing. The project was fast-tracked in an attempt to be completed before spring wet-weather season arrived. Construction was completed April 2017 at a cost of \$527,016.

Steve Rogers, P.E. (972)551-6607

FEMA CR 305 Reconstruction

City of Terrell

This project consisted of the rehabilitation of 5,915 linear feet of County Road 305 in the City of Terrell. Work consisted of clearing trees and brush from the right of way, cutting and restoring the ditches on both sides of the road, scarifying, reshaping, and re-compacting the road bed, and installing new rock base. The project also includes installation of 258 feet of 18 inch cross-drain and driveway culvert pipe with safety end treatment and applying prime coat and hot-mix asphalt surfacing for 4,365 linear feet of the roadway surface. The quantities for the rehabilitation of County Road 305 amount to 9,858 square yards of rehabilitated streets. Construction was completed September 2017 at a cost of \$352,733.

Steve Rogers, P.E. (972)551-6607

FEMA Replacement of Culvert Wingwall, Fritz Swanson Road at Peavine Creek

City of Kilgore

This project was for replacement of a culvert wingwall at Fritz-Swanson Road and Peavine Creek. It included the replacement of an existing wingwall with a new sheet pile wingwall, flexible pavement repair, flowable backfill, and embankment. Alternate bids were included in construction, to include a concrete wingwall, metal beam guard rail, stone riprap, downstream anchor terminal and guard rail end. Construction was completed two months ahead of schedule in February 2017 at a cost of \$125,375.

Clay Evers, P.E. (903)984-5081

FEMA Replacement of Pedestrian Bridges, Meadowbrook Country Club and Turkey Creek

City of Kilgore

This FEMA-funded project was for the replacement of two 6' wide pedestrian bridges at Meadowbrook Country Club and Turkey Creek. Construction included the replacement of existing abutments, wingwalls, concrete sidewalk approaches and other miscellaneous items of construction. The pedestrian bridges are 100' and 110' in length, with wooden decking on steel truss framing with steel handrails. Construction was completed on July 2017 at a

cost of \$257,400.

Clay Evers, P.E. (903)984-5081

FEMA Parkview/Lantrip Retaining Wall Replacement

City of Kilgore

This project consisted of demolishing and disposing of existing concrete retaining wall, sawcut and remove 2' width of concrete bottom, installation of 70 LF of 7' tall concrete retaining wall per TxDOT standards, and other miscellaneous improvements. This project has been awarded for a construction cost of \$64,951.

Clay Evers, P.E. (903)984-5081

City Park Erosion Control Program

City of Longview, Texas

SPI designed erosion control/channel stabilization structural measures at three city parks in Longview. Akins Park (Oakland Creek) required 2000 SF of concrete bagwall, bank stabilization, and over 7200 SF V-Max3 C350 Permanent Turf Reinforcement Mat to stabilize erosive channel banks 8'-10' high. Hinsley Park (unknown tributary) required 715 SF of concrete bagwall 6'-8' high. Timpson Park (Wade Creek) required 4800 SF of concrete bagwall 8'-10' high and 420 LF RCP enclosed storm sewer to enclose a deep concave channel that was highly eroded.

Additional Relevant Experience

Streets Rehabilitation Program

City of Nederland, Texas

Evaluate rehabilitation methods, prepare plans and specifications and assist during the construction phase for street repair programs. Project experience includes the following.

- 2009 Beauxart Garden Road: 47 foot wide concrete roadway for residential/industrial road providing access to adjacent landowners to Interstate 10. Designed vertical and horizontal alignment. Coordinated project with TxDOT. Provided management and construction administration throughout project.
- 2009 Concrete Rehabilitation: 3,500 square yards of rehabilitation to existing concrete streets.
- 2010 Asphalt Rehabilitation: 19,500 square yards of rehabilitation to existing asphalt streets.
- 2011 Asphalt Rehabilitation: 14,600 square yards of rehabilitation to existing asphalt streets.
- 2013 Streets Rehabilitation Evaluation: Assignment included evaluation of methodologies for rehabilitation of ten streets, resulting in analyses used for subsequent three years of rehabilitation projects.
- 2013 Streets Rehabilitation: Included approximately 55,000 square yards of rehabilitation of both concrete and asphalt streets.
- 2014 Streets Rehabilitation: 6,500 square yards of flexible pavement rehabilitation.
- 2015 Streets Rehabilitation: Included approximately 22,000 square yards of both concrete and asphalt streets.
- 2016 Streets Rehabilitations: 13th Street, 17th Street, and Nederland Avenue Rehab.
- 2017 Streets Rehabilitation: Included Holmes Road, 20th Street, and Atlanta Avenue.
- 2018 Streets Rehabilitation Program – SPI was selected to continue the City's annual program. This project is completed
- Nederland Avenue Study and Rehabilitation – SPI was selected to perform analysis and provide alternatives for the City to consider for the rehabilitation of the City's important commercial thoroughfare. Considerations included construction phasing to ease problems during construction, effect on utilities,

EXPERIENCE AND QUALIFICATIONS

and drainage. Ultimately, the City elected to utilize a hot mix overlay including consideration for drainage (inlets requiring reconstruction, coordination with new drainage system on 12th Street, mitigation of ponding in driveways); pavement overlay details (information on existing pavement, new pavement sections, transition to intersections/drives, transition with TxDOT at Twin City); traffic control (directing traffic on Nederland Avenue during construction, cross street closures, requirements during construction operations) and communication requirements.

Details of design for the annual streets programs included identifying areas of base repairs, correction to drainage problems that affect longevity of pavement, guard rail replacement, re-striping, traffic control and scheduling of construction during periods to minimize disruption to school traffic.

On-Call Engineering Services

City of Lumberton, Texas

In 2016, the City of Lumberton selected SPI to provide engineering services on an as-needed basis. Since that time, SPI has acted on the City's behalf at numerous meetings with commercial developers, residential developers, and funding agencies related to disasters. SPI assisted the City in developing an application, through Hardin County, for FEMA HMGP funding through the Texas Division of Emergency Management (TDEM).

Comprehensive Drainage

City of Lumberton, Texas

In April 2008, SPI was selected by the City of Lumberton to provide engineering services necessary for the City's DR Round II/Critical Infrastructure Project. The project, which is three fold, consists of: 1) construction of two detention ponds, 2) acquisition of 21,200 linear feet of drainage easements along existing outfall channels, and 3) a Comprehensive Drainage Study (CDS).

Utilizing HEC-RAS and HEC-HMS, the two detention ponds were designed to enhance the natural drainage patterns and improve hydraulic characteristics within two of the six drainage basins found within the City. The CDS will address current and future drainage needs for the City by taking into consideration existing and potential drainage issues. The CDS continues to be a tool for City Leaders to determine capital project expenditures for immediate and future improvements.

East Chance and Old Trahan Crossing Replacements

City of Lumberton, Texas

Replacement of culvert crossings in two locations including five by seven and six by seven box culverts, headwalls, channel restoration, utility relocations, and roadway replacement.

Master Drainage Plan

City of Sealy, Texas

Schaumburg & Polk, Inc. was contracted by the City of Sealy to prepare a Master Drainage Plan (MDP) and 10-year Capital Improvements Plan (CIP) for Drainage, and to perform a study to determine the maximum allowable impact fees associated with that Plan. The study area for the MDP is separated into two sections: the Little Bernard Tributary Watershed, and the Allen's Creek Watershed. The Master Drainage Plan was developed in two (2) separate documents; the first document prepared for the City represents the Master Drainage Plan for the Little Bernard Tributary Watershed, and the second document prepared represents the Master Drainage Plan for the Allen's Creek Watershed.

Little Bernard Master Drainage Plan - The objectives of this study were to identify probable growth of the City over the next 10 years, identify drainage facilities needed to support that growth, and to calculate the maximum allowable impact fees that may be assessed to new development for these facilities. The study also evaluated projected ultimate development conditions in the development conditions in the development of the proposed facilities to ensure that the proposed infrastructure is capable of serving the entire project area and does not prohibit any development activity by not providing for full drainage of the project area.

Allen's Creek Master Drainage Plan - The objective of this study was to evaluate the projected ultimate development conditions for the City of Sealy, and to identify the drainage facilities needed to support anticipated growth. The main purpose for this document is to serve as a planning tool for the City in several aspects:

1. To serve as a guide for developing and implementing shorter and nearer term drainage capital improvement plans
2. To provide the City the authority to require right-of-way through the development process
3. To aid in planning for major drainage crossings as

new roadways are constructed or existing roadways are improved

4. To work in parallel with the City's other ordinances and regulations, such as Chapter 27, "Drainage Criteria."

The resulting plan will consist of features that are large in scale. The intent and expectation is not to implement and construct these projects immediately or all at one time. Development will have a significant impact on how the plan is implemented, and can even take on much of the responsibility for the construction of portions of the ultimate channels described in this report. Furthermore, while the plan features will facilitate new development, the implementation of the plan is not a prerequisite for development activity.

TDRA Disaster Recovery Project – County Bridge Replacements Orange County, Texas

The project provided for the replacement of twelve bridge class culverts and one bridge in Orange County, Texas. The services provided for this project included surveying, hydrologic analysis, hydraulic evaluation, structural design, and construction administration. Road locations included Evergreen, Pine Bluff, Bessie Heights, Thomas, Allie Payne, Greenbriar, and Yaupon. The project included design in environmentally sensitive areas and working with the Owner to identify temporary construction by-pass routed on private property during construction. The project was funded through the Disaster Recovery projects program administered through the Texas General Land Office.

Delaware Street Reconstruction from Dowlen to Concord

City of Beaumont, Texas

SPI was contracted by the City of Beaumont to design the reconstruction of Delaware Street from Dowlen Road to Concord Road, for an approximate length of 2.75 miles. The existing roadway section varies along the segment, ranging from a two-lane asphalt roadway with open ditches to a four-lane divided concrete roadway with storm sewers. The existing roadway is in fair to poor condition, and much of it is destined to be disturbed by the construction of a 36-inch water line, which SPI designed previously, along most of the segment. The water line and full roadway reconstruction will be combined into one construction package. The roadway will be reconstructed with curbs and storm sewers for the entire length, with sections ranging from a two-lane road with a continuous center

turn lane to a four-lane divided roadway. The project has numerous components, including:

- Street alignment/grading recommendations and design
- Design of new sidewalks with minimal impacts to existing landscaping and other obstructions
- Design of storm sewer systems to replace and/or complement the existing inadequate systems
- Relocation of existing City utilities
- Analysis and addition of street light standards, conduit and pullboxes
- Modification of traffic signal systems to accommodate roadway expansion
- Coordination with private utility companies for adjustments
- Coordination with BNSF Railway for permitting of an expanded railroad crossing
- Coordination with the Texas Department of Transportation for connections to TxDOT facilities
- Right-of-way map preparation

The Delaware Street project is being designed using the conventional process of preliminary engineering report preparation, final design with drawings and specifications, bidding assistance, and construction phase services. The project plans and specifications are currently at the 95 percent completion level, and has an estimated construction cost of \$18 million.

Grande Blvd. Extension, Phase 1, 2A & 2B (Spring Creek Drive to SH 110)

City of Tyler, Texas

SPI developed route studies and schematics, hydraulic studies, utility relocations, property acquisitions, public involvement, storm sewer design and PS&E for this new location urban roadway in Tyler. The three phase project required a CLOMR from FEMA and related hydraulic studies, an individual 404 permit from the USACE, and over \$7 million of utility relocation. SPI was responsible for coordinating with the utility companies to get the utilities moved out of the new right of way. This 5-mile section of 4-lane roadway with raised median is in a densely developed area including residential and commercial development. The project included the acquisition of over 100 right-of-way parcels, drainage and slope easements. Twin 225' span bridges (75-75-75) were designed over W. Mud Creek (Q100=13,500 cfs). The project includes over

EXPERIENCE AND QUALIFICATIONS

half a million cubic yards roadway and channel excavation, 155,000 SY concrete pavement, 25,000 LF enclosed storm sewer and 1500 LF channel stabilization. SPI has provided full-time construction representative services for all phases of this project which include material tracking, administration of pay applications and change orders, weekly construction meetings, and acting as a liaison to utility companies, property owners and TxDOT.

The first phase of the project was completed April 2006 at a cost of just over \$6.3 million. Phases 2A and 2B of this project (Sutherland Dr. to SH 110) have been recently completed. Phase 2A opened for traffic September 2009, and 2B opened to traffic January 2010. The final construction costs for these two phases are \$30 million. Total project cost for all phases, including right-of-way acquisition and utility relocation, is \$60 Million.

North Park Drive and Russell Palmer **Montgomery County, Texas**

SPI designed the \$600,000 paving improvements for the intersection of North Park Drive and Russell Palmer, located in Montgomery County, Texas. The scope of these improvements included addition of two new u-turn and left-turn lanes, complete reconstruction of the existing pavement, and the removal and placement of the existing drainage system. Also included in the scope was complete removal of the existing signal system and installation of new signal heads, poles, and controller cabinet. SPI not only designed this project, but also provided construction phase technical support services for the project.

County Road 126 Improvements **Liberty County, Texas**

SPI was contacted by Ayuda Management Corporation to participate in a design-build project for the reconstruction of County Road 126 in Liberty County. The 1.9-mile roadway segment is located entirely within a USEPA-designated Superfund site, so strict environmental requirements applied to the project. The USEPA and the U.S. Army Corps of Engineers, in addition to Liberty County, participated in review and approval of the drawings and specifications.

The project consisted of the reconstruction and widening of County Road 126 using in-place recycled asphalt with added base, lime, and asphalt overlay. The 20-foot unmaintained roadway is being widened to 24 feet, and ditches and driveway culverts are to be relocated and relayed as applicable. Engineering efforts also included

traffic control, storm water pollution prevention and signage.

County Road 417 Improvements **Liberty County, Texas**

Project consisted of the rehabilitation of County Road 417. Designed horizontal and vertical alignments, subgrade for heavy haul road. Design consisted of lime stabilizing for existing roadway to a depth of 12 inches, placing 8" compacted limestone and 4" of HMA.

Airline Drive Improvements, West Road to **Aldine-Bender Road**

Great Greenspoint Redevelopment Authority

Airline Drive is a major thoroughfare in north Houston fronted by three schools, a library, and numerous commercial establishments. The purpose of this project is primarily to improve safety and aesthetics for the many pedestrian users of the roadway. Approximately \$4 million of the \$6 million construction budget is expected to be used for landscape improvements, bus shelter enhancements, public art and pedestrian elements such as enhanced sidewalks and pedestrian lighting. The remaining budget will fund select pavement replacements and traffic signal upgrades.

SPI is the prime consultant for this project, and is responsible for management of a landscape architect and other subconsultants, coordination with all public and private entities and stakeholders, and preparation of reports and construction documents. The project is currently in preliminary design, with a preliminary engineering report scheduled for submission in March 2010.

Deerwood Drainage Improvements **Montgomery County, Texas**

The Deerwood area, located east of Conroe, experienced severe flooding problems. SPI was selected to provide an overall drainage study of the area, including the outfalls. SPI performed a topographic survey along all roadside ditches, including invert elevations and sizes of the various driveway and crossing culverts. The resulting construction project included re-shaping and re-sloping over 62,200 linear feet of roadside and outfall ditches and replacement of over 6,800 linear feet of culvert pipes ranging in size from 18 to 36 inch. The project also included a number of public hearings to allow the residents to visit with the engineers about the proposed project.

EXPERIENCE AND QUALIFICATIONS

Channel Improvements

Liberty County, Texas

Designed improvements for Reese Bayou, Cherry Creek, Batiste Creek, and Long Island Creek for a total of 138,400 linear feet of channel improvements

Ditch and Channel Improvements, Precinct 1

Liberty County, Texas

66,500 linear feet of ditch and channel improvements in approximately twelve locations throughout the southern portion of Liberty County.

Belton Lane Drainage

City of Anahuac, Texas

Drainage improvements included box culverts ranging in size from three to ten feet, including outfall into Trinity Bay. Project required relocation of all utilities and roadway replacement as well as various ditch and culvert improvements in the adjacent roadways.

TDRA Disaster Recovery Project – East Town Streets Improvements

City of Orange, Texas

As a result of damage caused by Hurricane Ike, the City of Orange selected several streets for rehabilitation. SPI performed an initial evaluation to determine the most effective method of correction to each individual street. The City was kept apprised of the evaluation as the project proceeded. SPI designed the rehabilitation of existing concrete streets by hot mix asphalt overlay of approximately 7 miles of curb and gutter streets in downtown Orange. The project also included removal and repair of concrete panel sections and road base repairs as necessary.

Hedwig Village E/W Mobility Project

City of Hedwig Village, Texas

SPI serves as the Program Manager for this METRO Funded \$7.5 million mobility and drainage enhancement program for the City of Hedwig Village's northeast business district. SPI provides management for all phases of the program which included planning, conceptual design, funding acquisition, preliminary design, survey, utility & agency coordination, final roadway and drainage design, and construction management.

The program improvements were constructed in four separate bid packages (referred to as Phases 1-4).

The Phase 1 project included the reconstruction of

Gaylord Drive from Corbindale Road to Brogden Road. Approximately ½ mile of roadway was reconstructed, including 33-foot concrete curb-and-gutter pavement, concrete sidewalks and ramps and new storm sewers. The construction cost for the project was \$1.2 million.

Phase 2 included reconstruction of Campbell Road, Corbindale Road and Gaylord between Campbell and Corbindale. This project included replacement of the concrete paving and storm sewers on each street, as well as installation of sidewalks and a reconfiguration of median openings to provide better traffic channelization. Additionally, SPI coordinated with the Texas Department of Transportation to allow the City to install dual 7'X6' box culverts in place of the large TxDOT-owned drainage ditch median in Campbell Road. This provided for a large median which the City has since extensively landscaped and installed a City of Hedwig Village monument sign. Construction was completed in April of 2009, with a total construction cost of approximately \$840,000.

The Phase 3 project included reconstructing Clifford Road and Corbindale Road between Gaylord Drive and the IH-10 frontage road. The 33-foot concrete curb-and-gutter pavement was reconstructed on Clifford Road, as was the 44-foot concrete pavement on Corbindale, complete with a new storm sewers and inlets. An 8-inch sanitary sewer was also replaced on Clifford Road. The construction cost for the project was \$426,000, and was completed in July of 2009.

The Phase 4 project included reconstruction of Brogden Road from Beinhorn Road to Gaylord Drive. This project included converting the roadway from an open-ditch asphalt roadway to a depressed concrete curb-and-gutter section. Over ¼-mile of 28-foot concrete pavement and a 5-foot sidewalk was successfully constructed within a fairly narrow right-of-way. Curb inlets and a large 42-inch storm sewer were designed to replace the insufficient area inlets and small culverts. Construction was completed in November of 2009, and the total construction cost was approximately \$920,000.

Throughout the planning, design and construction phases, SPI was responsible for coordination with all participating agencies and stakeholders such as Spring Branch Independent School District, The Texas Department of Transportation, the Memorial Villages Water Authority, the Memorial Villages Fire Department, the Hedwig Village Police Department, the private utility companies, and the local businesses and residents.

EXPERIENCE AND QUALIFICATIONS

Dugan Paving and Drainage

City of Conroe, Texas

SPI was contracted by the City of Conroe to design paving and drainage improvements for the Dugan subdivision. The subdivision contains narrow asphalt streets with open-ditch drainage, and has experienced frequent flooding during rain events. SPI has been tasked with preparing drawings, specifications and a construction cost estimate to widen the streets to a standard width and improve the drainage such that flooding will be minimized. The project is particularly challenging because many of the streets have very narrow rights-of-way (some as little as 30 feet), and creating solutions in such a narrow right-of-way with obstructions (trees, porches, etc.) requires attention to numerous specific locations. The total project length is approximately 10,000 linear feet. This project will be constructed directly by the owner.

Early in the project, SPI staff spent several hours at the site during a heavy rain in order to understand the current drainage patterns and system deficiencies. The visit proved very worthwhile, as drainage problems became clear and SPI was put in a position to commit careful focus to those problems. During the design, the SPI project manager has met with City of Conroe staff to ensure that SPI was addressing the issues and producing the product that the City expected. Specific project issues have been discussed and the team has worked well together to explore alternatives, hear recommendations and settle on solutions. The project manager has also submitted weekly e-mail status reports to the City so that City staff are aware of progress and schedule. Point of contact for all projects and to be able to establish priorities on relocations. SPI has coordinated extensively with electric, communication, and oil and gas companies to resolve impacts to both overhead and underground facilities, with great success.

The Fort Bend County Judge stated that he wanted the 2007 Bond Program completed within five years, which would constitute a significant improvement over previous bond programs. Three years into the program, five projects are in construction, and two of the five projects are very near completion. The projects in construction include the three projects that were considered the highest priority to the Precinct 3 Commissioner. The remaining projects are in various stages of design.

Fort Bend Mobility

Fort Bend County, Texas

In May 2007, Fort Bend County voters approved a \$250 million bond program to improve roadways and drainage throughout the county. SPI was selected to serve as bond project manager for 13 projects, primarily in Precinct 3, with a total construction value of approximately \$75 million. SPI's responsibilities in this role included design consultant negotiations, review of preliminary and final designs, invoice reviews, coordination with County elected officials and staff, coordination with other agencies and utility companies, coordination with right-of-way acquisition firms, schedule and budget monitoring, maintenance of a program website, and limited construction management.

Coordination efforts proved to be a significant effort for this program. In addition to County officials and agencies, SPI coordinated with public agencies including the Cities of Sugar Land and Stafford (negotiations and preparations of interlocal agreements), the Texas Department of Transportation (construction of facilities within TxDOT right-of-way), Katy Independent School District (construction impacts to schools), and numerous municipal utility and drainage districts (construction impacts to facilities). SPI also took on the task of all coordination related to utility relocations in order to provide a consistent correction of slope stability failures, relocation of channel bottom to provide design slope, cut and fill of slopes, and addition of erosion protection measures.

Spring Branch Creek (W140) Stabilization

Harris County Flood Control District

Project manager of a five firm team to evaluate best method of stabilization for an approximate 800 feet stretch of ditch. Team services included fluvial geomorphology, geotechnical, hydrology and hydraulics, structural and surveying. Design included assessment of erosion on existing structures, reconstruction of stream alignment with pools and riffles to minimize erosion, drilled pier walls, erosion protection, and slope stability evaluation.

DRA Disaster Recovery Project – Streets Rehabilitation

City of West Orange, Texas

As a result of damage caused by Hurricane Ike, the City of West Orange selected twenty-seven streets located throughout the City for rehabilitation. SPI performed an initial evaluation to determine the most effective method of correction to each individual street. The City was kept

EXPERIENCE AND QUALIFICATIONS

apprised of the evaluation as the project proceeded. Upon evaluation and confirmation by the City, SPI selected three types of pavement rehabilitation to be utilized. Type 1 streets received only an HMAC overlay, Type 2 streets were scarified and reshaped followed by an HMAC overlay, and Type 3 streets required milling of the existing ACP surface and replacement with new HMAC. Additionally, some areas required concrete base failure repairs prior to the Type 3 rehabilitation, and some of the Type 2 streets required additional reconstruction. SPI worked closely with the City, grant administrator, environmental service provider, TDRA, and HNTB throughout the project. Construction was completed and As-Built drawings were submitted to the City and TDRA in October, 2011.

Culvert Replacements

City of West Orange, Texas

Replacement of culvert crossings in three locations including five, six, and seven foot box culverts, headwalls, channel restoration, and roadway replacement.

Wastewater/Water Experience

The following exemplifies the depth of wastewater and water projects performed by the current SPI staff, including those performed under grant programs. The projects include new and rehabilitation of collection/distribution lines, treatment plants and pump stations. Projects include assisting the clients in evaluating needs for wastewater and water system improvements based on regulatory compliance and physical performance.

Elevated Storage Tanks

The Following is a summary of our team's recent elevated storage tank experience.

City of Nederland

- Inspection of all elevated tanks
- South 5th Street, 400,000 gallon pedestal tank rehabilitation

City of Mont Belvieu

- Perry Avenue 750,000 gallon composite tank, new construction
- FM 565 (Ave A Replacement) 500,000 gallon composite tank, new construction
- Cherry Point 300,000 gallon pedestal rehabilitation
- All tanks cleaning, rehab, currently in construction phase
- Annual inspection of all tanks

City of Orange

- Richard Drive 500,000 gallon composite tank, new construction
- Annual inspection of all tanks

City of Beaumont

- Dishman Road, 2,000,000 gallon composite tank, new construction
- West Tank, 1,000,000 gallon legged tank rehabilitation
- Prison Tank, 3000,000 gallon legged tank rehabilitation
- Annual tank inspection of all elevated tanks

Orange County WCID #2

- Austin Avenue, 100,000 gallon legged tank rehabilitation (ongoing)
- Annual tank inspection of all tanks

Walker County SUD

- Guerrant Road, 150,000 gallon legged tank, new construction

EXPERIENCE AND QUALIFICATIONS

- Pine Prairie, 250,000 gallon legged tank, new construction

City of Port Arthur

- Annual tank inspection of all elevated tanks

G-M WSC

- Proposed elevated tank, new construction in design phase

City of Kirbyville

- Proposed elevated tank, new construction in design phase

City of Groves

- Inspection of elevated tanks
- Cleveland Avenue, 300,000 gallon legged tank rehabilitation

Various Wastewater System Improvements

City of West Orange, Texas

SPI has been providing engineering services for the City for many years.

CDBG DRP Round 1 – Disaster Recovery Project Streets – Rehabilitation of twenty-seven streets located throughout the City by various methods.

CDBG DRP Round 2.2 – Disaster Recovery Projects Culvert Replacements – Replacement of culvert crossings at three locations includes drainage enhancements for major drainage crossings. Project included complete rebuilding of streets. Challenges included one crossing at an angle across an intersection.

CDBG DRP Round 2.2 – Disaster Recovery Project Condemned Structure Demolition – Project included coordination of environmental hazard testing and demolition of twelve condemned structures throughout the City.

2012 CDBG – Sanitary Sewer Project for the Orange County WCID#2 – Rehabilitation of 4,670 linear feet of sanitary sewer by pipebursting including six, eight, and ten inch lines. Also included removal and replacement or new installation of 14 manholes.

2009 CDBG – Sanitary Sewer Project for the Orange County WCID#2 - Replacement of 13,200 linear feet of service lines at 175 residences, including cleanouts.

2006 CDBG – Sanitary Sewer Project for the Orange County WCID#2– Rehabilitation of 1032 linear feet of six-inch lines, manholes, services, and rehabilitation of three lift stations.

2002 CDBG – Sanitary Sewer Project for the Orange County WCID#2– Rehabilitation of 4687 linear feet of 6, 8, and 10 inch lines, manholes, services, and street rehabilitation.

1999 CDBG – Sanitary Sewer Project for the Orange County WCID#2– Rehabilitation of 5248 linear feet of 6,8, and 10 inch lines, manholes, services, and a lift station.

1997 CDBG – Sanitary Sewer Project for the Orange County WCID#2 – Rehabilitation of 2796 linear feet of 6,8,10, and 12 inch lines, manholes, and a lift station.

1994 CDBG – Sanitary Sewer Improvements Project for the Orange County WCID#2

Water System Improvements

City of Orange, Texas

SPI prepared a Water System Study and provided water modeling for the existing City of Orange distribution system. The goal was to resolve low water pressure in the northern annexed area and determine the optimum site for a new elevated water tank and future production site. SPI prepared opinions of costs for the proposed improvements for the City to secure Bond Funding. Projects included the rehabilitation of two welded steel ground storage tanks with 1.5 MG and 2.0 MG capacities at the existing Link Street Water Plant including replacement of existing roofs with Geodesic Dome Roofs for both tanks and complete paint system rehabilitation. SPI designed a new 1500 gpm groundwater production well site which included a new ground storage tank, high service pumps, buildings, disinfection facilities, all new electrical and SCADA controls, as well as the new composite 500,000 gallon elevated storage tank. Previously, SPI provided the engineering service for the construction of water and sanitary sewer improvements to provide service for new annexation areas. The improvements include design and construction of a new lift station and force main; 18,000-lf of 6" waterlines with fire protection; 9,500-lf of 6" to 10" sewer lines; and connecting the existing water and sewer systems to the city's infrastructure.

Water System Improvements (Including CDBG) Riverside Special Utility District (formerly WSC)

SPI provided engineering services for a new water plant, including a new ground storage tank, rehabilitation and activation of a hydropneumatic tank, new control building with high service pumps, controls, and chlorination facilities. The project was funded with TxCDBG. SPI also

EXPERIENCE AND QUALIFICATIONS

completed a comprehensive water system study, including capacity inventory and hydraulic analysis to develop a long term capital improvements plans as well as to assist with operational issues. Results of the Study included recommendations for remaining funds from an existing TWDB loan. SPI provided preliminary design and surveying for approximately 33,800 linear feet of various sized water line improvements.

GLO Disaster Recovery Project – Water System Improvements (CDBG-DR)

Madison County, Texas

SPI is providing the Engineering services for the extension of water service to approximately 22 residents along FM 247 in south Madison County. Water will be provided from the existing Falba Water System via the extension of approximately 16,200 linear feet of six inch water line as well as improvements to the existing Falba water plant to accommodate the new services.

Well #4 Replacement

City of Madisonville

During a routine investigation of the City's Well #4, a television inspection revealed significant deterioration of the screen. Representing nearly forty percent of the City's water supply and in danger of complete failure, the City decided to move forward with drilling a replacement well on the same site. SPI was selected to provide the engineering services. The City utilized emergency procurement to mobilize a well driller and SPI made a request for emergency construction approval to the TCEQ state and regional office. Approval to construct was received within three days. The final well was completed to 1,230 feet with sixteen inch casing and ten inch screen producing 1,200 gpm via a 150 horsepower vertical turbine pump. During test pumping, the City was concerned about the local drainage, therefore the discharge was directed via temporary piping approximately 1,500 feet away into a local lake. Other issues included new sanitary control easements and chemical feed due to iron, manganese, and corrosive water. Approval to use the well was received approximately one week after submission of completion data. The loss of the well could have been devastating moving into the hottest part of the summer, however, the City only had to enter Stage 1 of their Drought Contingency Plan for approximately one week before the new well was placed on line.

Lift Station #8 Replacement

City of Madisonville

The City's Lift Station #8 collects and delivers all wastewater flows from all of the entities located on the east side of Interstate 45 within the City limits. This includes Buccees convenience store, which is a major contributor. The lift station had not had a rehabilitation or upgrade since its original construction. With dilapidated piping, only one pump was operable and it runs nearly continuously in order to keep up with flows. SPI was selected to replace the station. Initially, SPI assisted the City in exploring options for funding through the Texas Water Development Board, however, the City ultimately decided on in-house funding due to the need for an expedited schedule. SPI's design included a new wet well, pumps, electrical, and all related appurtenances to be installed immediately adjacent to the existing station. With Buccees expanding twice since its start, and potential for additional commercial development imminent, it was important to include options for expansion in the design. The design included a wet well with additional capacity to allow for future growth, and space to install a third pump as that growth occurred.

GLO Disaster Recovery Project – County Road Improvements

Orange County, Texas

As a result of damage caused by Hurricane Ike, Orange County identified numerous streets located throughout the County for rehabilitation. SPI evaluated and determined the most effective method of correction to each individual street. Rehabilitation consisted of scarifying, shaping and compacting existing street, adding 4 inches of compacted limestone and two-course surface treatment. Design included consideration that the County would perform the construction with its own forces. The project consisted of approximately 45 county roads and 17.8 miles (93,600 LF) of road improvements.

CDBG Wastewater System Improvements

City of Pine Forest, Texas

2013 CDBG - SPI served as the Engineer for the design and construction administration of the installation of first time sanitary sewer service for thirteen residences. Service include an individual grinder unit installed on the homeowners property, connecting the homeowners system, removing and de-commissioning the existing septic systems, and connection to the existing sanitary sewer collection system owned and operated by Orange County WCID #1. Project required coordination with the

homeowner, the City, and OCWCID #1.

Various Wastewater System Improvements

City of Pinehurst, Texas

CDBG DRP – Disaster Recovery Project Bridge Replacement – Replaced an existing timber bridge with box culverts. CDBG DRP – Disaster Recovery Projects Sanitary Sewer Lift Station Improvements – Raising and rehabilitation of three system lift stations.

2014 Whippoorwill Street Gravity Sewer Rehabilitation and Street Rehabilitation – Project included rehabilitation of 2,818 linear feet of six and eight inch gravity sewers by trenchless technology, removal and replacement of manholes and services to the right of way line, and full width pavement rehabilitation.

2011 CDBG – Sanitary Sewer Project, Gravity Sewer Rehabilitation– Rehabilitation of 2265 linear feet of 6, 8, and 10 inch lines, manholes, services, and street rehabilitation.

2006 CDBG – Wastewater Treatment Facility Improvements, Grit Removal

2004 CDBG – Water System Improvements – Rehabilitation of Water Wells #1 and #2

2003 CDBG – Wastewater Treatment Facility Improvements, Polymer Filter Beds

2002 CDBG – Sanitary Sewer Project, Generator

2001 TWDB, CDBG, WQEL – Flow Equalization Basin, Lift Station Modifications

1999 CDBG – Wastewater Treatment Facility Improvements, Sludge Drying Beds

Annual Smoke Testing and SSES – SPI has assisted the City with a Sanitary Sewer Overflow Initiative (SSOI) which included a four year smoke testing program followed by flow monitoring and hydraulic analysis of the collection system. Other projects completed for the City have included a new elevated water storage tank and various water system improvements.

Various Improvements

Orange County WCID#2

SPI prepared the construction plans and specifications for the rehabilitation of an existing 100,000 gallon elevated water storage tank, rehabilitation of existing 250,000 gallon elevated water storage tank, construction of a new 700 GPM groundwater well, and construction of a new 250,000 gallon elevated water storage tank.

Pendleton Harbor Waterline (TDA CDBG Drought Recovery Funds)

Sabine County, Texas; G-M Water Supply Corporation
SPI worked with Sabine County, G-M WSC and Pendleton Harbor to provide a new 6" waterline along SH 21 to extend potable water service to Pendleton Harbor's existing water system due to drought related issues with the existing water plant intake. The new waterline required a 1900 linear foot directional drill under a portion of Toledo Bend at Carrice Creek area, as well as permitting through the Texas Department of Transportation to install the waterline in TxDOT ROW.

GLO Disaster Recovery Project – Generators (CDBG-DR)

Walker County, Texas

SPI provided the Engineering services for generators for various water suppliers within Walker County. SPI assisted in the application and prioritization process, design phase, construction phase for the following generators: Water Plant No. 1, Watson Lake Water Supply Corporation, Well Site No. 13, Riverside Water Supply Corporation, Falba Plant Site, Walker County Special Utility District, and the Fairgrounds Plant, Walker County Special Utility District. The generators range in size and were diesel or natural gas fueled. Projects also include automatic transfer switches.

Multiple Projects (Including 2 CDBG)

Walker County Special Utility District

SPI was first retained by the Walker County Rural Water Supply Corporation (WCRWSC) in 1999 to perform a study on the Crabbs Prairie Service Area in response to some distribution system pressure issues. Over the next several years, SPI provided engineering services related to a Water Quality Study, other Service Area Studies, and were selected to provide the Engineering services for a Community Development Block Grant project to provide first time water service to a rural area. SPI has continued to provide Engineering services to the WCRWSC since that time. From providing all engineering services related to a \$4.8 million System Improvements Project to a ten minute phone call question about an individual service, SPI has been available to the District as-needed. In 2004, the WCRWSC underwent the conversion to become Walker County Special Utility District.

The initial Water Service Area Studies provided a foundation for analysis of the capital needs for the District over a design period. The District's Board of Directors

EXPERIENCE AND QUALIFICATIONS

periodically request updates as to the Capital Improvement Plan for a forward look into potential funding sources, whether it is potential grants, loans, or in-house funds. This information is utilized to examine the District's rate structure to make sure revenues are adequate to provide for future needs.

SPI has assisted the District in securing or applying for several different sources of funds. The District has funded projects through its own resources (reserve funds), Community Development Block Grants (sponsored by Walker County), Disaster Recovery Funds, Texas Department of Transportation Utility Relocation Funds, Texas Water Development Board Rural Water Assistance Fund, and United States Department of Agriculture-Rural Development funds.

Projects completed or in the design phase include five groundwater well projects, two elevated storage tanks, new ground storage tank, new hydropneumatic tank, ten high service pumps, two emergency generator projects, various planning studies, and over twenty-seven miles of transmission and distribution lines.

Surface Water Treatment Plant (Partial CDBGDR Grant)

G-M Water Supply Corporation

SPI was selected by the G-M Water Supply Corporation to provide engineering design services for a new potable water treatment plant using membrane filtration technology as the primary treatment unit. SPI coordinated a pilot study and environmental agency reviews for the necessary approvals and permits for design and construction. SPI prepared the Preliminary Engineering Feasibility Report; Environmental Discussion for the project; and coordinated with the WSC Legal and Fiscal representatives. Initially funded through the Texas Water Development Board, additional funds became available via the Disaster Recovery Program of the Texas General Land Office, allowing the project to expand to a 1.0 million gallon per day plant. SPI provided additional engineering support in order to get the additional funding. SPI provided preliminary design, bidding, and construction phase services.

Wastewater System Improvements

City of Liberty, Texas

This project, funded by a Tier III \$8.1 million loan through the Texas Water Development Board's Clean Water State Revolving Fund Program and a 2007 Texas Community

Development Block Grant, and consisted of three parts: Wastewater Treatment Facility Improvements, Sanitary Sewer Evaluation Study, and Sanitary Sewer Collection System Improvements.

The City of Liberty WWTP was originally constructed in 1977 as a package plant designed with an average daily flow of 2.5 MGD and peak flow rate of 7.5 MGD. SPI assisted the City in acquiring a Loan from the Texas Water Development Board for WWTP improvements and collection system improvements. The existing plant required upgrades and renovations to bring the plant into compliance to meet new TCEQ Chapter 217 Regulations. The project consisted of installing five new influent lift station pumps in the existing wet wells, installing a new influent force main to reroute flow and allow the plant to meet ammonia discharge limits, cleaning and repairs to the existing clarifier units to regain treatment capacity, replacement of all single drop course bubble diffuser heads; rehabilitation of existing blower units, construction of a new belt press dewatering structure, belt press and pump equipment; polymer feed system, installation of new chlorine and dechlorination equipment, rehabilitation of existing MCC and installation of new MCC components for the electrical power supply required for the upgrades. SPI prepared the permit amendment for these improvements.

A Modified Sanitary Sewer Evaluation Study (SSES) was performed on the City of Liberty's wastewater collection system. The purpose of the study was to provide the City with all the necessary information to implement both short- and long- term plans for addressing the needs of the wastewater collection system infrastructure. The scope of services for this study included physical inspection of manholes and smoke testing of the entire area served by the City's sanitary sewer service area, as well as flow monitoring and hydraulic analysis of the main trunk lines of the system. The City's wastewater collection system consists of approximately 343,000 linear feet of collection lines, 765 manholes, and 26 lift stations. These facilities serve a population of about 8,033 within the city limits. The City has contractual agreements with the City of Ames and the City of Hardin to accept and treat the wastewater from these two municipalities. The results of the study were prioritized to identify improvements needed within the current SRF program, as well as additional phases of improvements for the City's consideration of a capital improvements plan.

As a result of the SSES the City elected to perform major rehabilitation on the two primary lift stations which deliver

EXPERIENCE AND QUALIFICATIONS

flows to the wastewater treatment plant, replace the force mains associated with each, and rehabilitate approximately 7,965 linear feet of gravity sewer line. The Washington Lift Station serves nearly two-thirds of the City. The existing pumps and wet well were found to be inadequate in size and capacity. The system partially relied on a badly corroded corrugated steel pipe gravity overflow system to deliver flows to the treatment plant. This project eliminated that system and all flows pumped from the new lift station to the treatment plant. Similarly, the Wallisville lift station was unable to keep up with high flows, resulting in overflow violations in the upstream gravity system.

Water System Improvements

City of Mont Belvieu

2014 Water System Improvements. Hydraulic analysis of the distribution system was performed to size improvements necessary to provide flows to the western portion of town. Only a limited number of smaller diameter mains are currently available to deliver flows to the residential, commercial, heavy industrial, and high growth sections of town. Hydraulic analysis revealed the need for four large diameter trunk lines to deliver flows from the existing wells located on the eastern side of town. Project included replacing the existing Avenue A elevated storage tank with a larger replacement elevated storage tank accounting for high demand from the industrial sector of town and rehabilitation of the existing Cherry Point elevated storage tank. Sizing of the new elevated storage tank included consideration of the City's ISO Public Protection Classification Report. Construction is also complete on a sixteen inch water line installed along FM 565 from Eagle Drive to SH 146.

Voter Approved Bond Issue Project. Design of improvements to the City's water system as approved by a voter bond issue. Improvements included a 750 gpm groundwater well, 750,000 gallon composite elevated storage tank, and production facility including a generator and chlorination facilities. This project included coordination with a groundwater geologist in order to determine the availability of groundwater at adequate quantity and quality at the proposed site. Issues included: Lack of other wells in close proximity, therefore it was difficult to estimate depth and quality of water, proximity of salt dome necessitated an aquifer flow study to determine the effect of the salt dome.

Langston Pump Station Project. The southwest quadrant of the City of Mont Belvieu, along FM 146, contains

a considerable amount of the City's industrial and commercial businesses. Upon evaluation by City Staff, it was determined the water system in this area needed improvement to increase fire protection capabilities. A booster station with storage facilities was proposed. The City Engineer designed the facility, however, requested the services of SPI for review purposes and to provide all electrical design for the facility. Facility consisted of pressure monitoring, SCADA system, booster pumps, ground storage, and pump house.

TCDP Potable Water Improvements Phase 1 and 2 (Grant)

City of Blooming Grove, Texas

SPI designed waterline upgrades which include over 14,000 LF of 6" C-900 DR 18 PVC water line, associated fire hydrants, 6" gate valves, service connections, wet bore, and cased dry bore & jack. The project is phased improvements to provide TCEQ mandated system upgrades as well as improved fire service throughout the City. This project required significant surface repairs to streets and interaction with residents as flowerbeds, mailboxes, etc. were disturbed by line and service installation. Phase 2 of this project is completed. Total construction is approximately \$600,000.

Wastewater System Improvements

City of Kirbyville, Texas

2013 CDBG - SPI served as the Engineer for the design and construction administration of the installation of approximately 1,812 linear feet of various size gravity sewer lines, a duplex grinder lift station and force main, service connections, and manholes. The project provided rehabilitation of a problematic area of the City and eliminated several individual grinder units at residences.

2014 CWSRF - SPI assisted the City in the application process for funding of a comprehensive sanitary sewer rehabilitation project in conformance with an Agreed Order. The City was selected to receive the funding and SPI was selected to provide all engineering services related to the project.

Wastewater System Improvements

City of Kirbyville, Texas

2013 CDBG - SPI served as the Engineer for the design and construction administration of the installation of approximately 1,812 linear feet of various size gravity sewer lines, a duplex grinder lift station and force main, service connections, and manholes. The project provided

EXPERIENCE AND QUALIFICATIONS

rehabilitation of a problematic area of the City and eliminated several individual grinder units at residences.

2014 CWSRF – SPI assisted the City in the application process for funding of a comprehensive sanitary sewer rehabilitation project in conformance with an Agreed Order. The City was selected to receive the funding and SPI was selected to provide all engineering services related to the project. This project included a sanitary sewer evaluation study (SSES) which resulted in recommendations for significant collection system rehabilitation. Design and bidding phases have been completed and we are currently waiting on the notice to proceed from the TWDB. Total project funding is \$2.7 million of which the City received \$1.35 million in loan forgiveness funds.

2018 DWSRF - SPI has assisted the City through the application process for funding for much needed water system improvements. The project will include a comprehensive water system study, replacement of the existing elevated storage tank, new high service pumps, and various distribution system improvements. The City received very favorable funding terms and is expected to close this summer.

Wastewater System Improvements **City of Nacogdoches, Texas**

2013 CDBG Collection System Improvements – Project involved the rehabilitation of 3478 linear feet of sanitary sewer by trenchless technology and open cut methods, including replace of manholes, service lines, and surface restoration.

2007 CDBG Collection System Improvements - Project involved the rehabilitation of 2148 linear feet of sanitary sewer by trenchless technology and open cut methods, including replace of manholes, service lines, and surface restoration.

2003 CDBG Collection System Improvements - Project involved the rehabilitation of 5983 linear feet of sanitary sewer by trenchless technology and open cut methods, including replace of manholes, service lines, and surface restoration.

Collection System (TWDB CWSRF) - This project consists of the improvements to sanitary sewer lines, lift stations, and lift station force mains within the collection system. Approximately 62,400 linear feet of wastewater line, consisting of 35 different line segments are being rehabilitated. Improvements were made to 10 sanitary sewer lift stations by replacing pumps and piping,

modifying wet wells, and improving control systems, and replacement of 4 existing force mains. The existing collection system has several areas that have Inflow/ Infiltration problems due to the age of the lines, as well as the need for increased capacity in several line segments for future growth. The lift stations in the system are approximately 20 years old or older, and were in need of upgrades to replace worn equipment, and provide reliable operating facilities. The lift stations are also at or near their intended design capacities due to their age, and need to be sized for future growth.

Treatment - SPI determined the wastewater treatment plant should be able to process 32 million gallons per day of wastewater during wet weather conditions. Currently the plant can treat 28 million gallons per day. The current projects make the modifications necessary at the wastewater treatment plant to increase wet weather capacity.

Sanitary Sewer Treatment and Collection System Improvements

Orange County Water Control and Improvement District No. 2

SPI served as the Engineer for construction administration and design of sanitary sewer system improvements, including construction of a new wastewater treatment plant with an orbital aeration unit, two clarifiers, equalization basin for extraneous sanitary sewer flow, upgrade of existing sludge recirculation facility, chlorine disinfection system, aerobic digesters, and sludge drying beds. Collection system improvements included four new lift stations and associated force mains, new gravity sewer interceptors, and rehabilitation of existing sanitary sewer interceptors.

New Water Plant, Distribution System Improvements

Bolivar Peninsula SUD/Lower Neches Valley Authority

A new source of drinking water was needed to replace poor quality groundwater and improvements to transmission and distribution facilities were needed to meet growth and development. The initial phase was completed for the Lower Neches Valley Authority who owns and operates the surface water plant and transmission lines to the Bolivar Peninsula. The initial phase included a 5.0 mgd surface water treatment plant. Unique features of the system include the ability to operate the plant in a daily on-off mode, ratio of seasonal low to high average daily flows of 8:1, and ability for expansion to 10 mgd capacity.

EXPERIENCE AND QUALIFICATIONS

The project included 32 miles of transmission line from the plant in Winnie to the point of delivery in High Island. The water plant and line system, placed into operation in October 2004, have the following features:

- 12.5 MG on-site earthen reservoir
- Two 2.5 MGD solids contact clarifiers
- Four Simu-Wash Filter Units
- Raw Water, Transfer & Backwash Pump Stations
- Two 1 MG Ground Storage Tanks
- High Service Pump Station
- Solids Holding Basin
- 32-miles of 20" Water Transmission, including directional drill installation up to 1,500 feet in length.
- Lab/Office Building

SPI, after the initial phase, was retained by Bolivar Peninsula Special Utility District to recommend improvements required for compliance with Texas Commission on Environmental Quality regulations and to meet current and future customer needs. Existing computer models of the water system were updated for recent growth experience and anticipated developments. SPI assisted Bolivar Peninsula Special Utility District in securing two loans from the Texas Water Development Board for \$7.5 million in construction improvements. The proposed improvements include 18 miles of water distribution lines (8 to 20 inches in diameter), 500,000-gallon composite elevated storage tank near Port Bolivar and improvement of two pump stations. Unique challenges during the project included the following:

- Value evaluation to construct in highway right-of-way versus purchase and construction in new easements.
- Development of operation plan to use new and old distribution lines to allow new elevated tank to supplement an existing elevated tank that was inadequate for the connections served. Eliminated the need to immediately spend additional funds to satisfy regulatory compliance.
- Environmental studies included wetland determination and archaeological services for construction in a new easement.
- Disruption to construction resulting from Hurricane Ike.

The second phase of the project was completed in late 2009. Both phases were funded with Texas Water Development Board Drinking Water SRF funds.

Water System Improvements

Woden Water Supply Corporation

SPI provided a hydraulic analysis of the entire distribution system. The study addressed a Notice of Violation letter received by the WSC from TCEQ. The Study included modeling with PIPE2000 and assessment of the supply, storage, and pressure maintenance facilities for TCEQ regulatory compliance through a 20-year design phase while allowing for the projected population growth in the area. Woden WSC began addressing the needs with improvements to the Kingtown Plant, which included a new ground storage tank, pressure vessel, high service pumps, and control building. Services also included coordinating with TCEQ for a sanitary control easement exception and a notice of the use of polyphosphates letter to TCEQ.

Water System Improvements

Angelina Water Supply Corporation

SPI conducted an engineering evaluation using Pipe2000 software to address existing localized low-pressure problems within the service area and determine needed improvements necessary for compliance with state requirements. SPI prepared engineering plans for two 150,000 gallon elevated water storage tanks, a potable water line replacements, rehabilitation of an existing water well, and installation of a Supervisory Control and Data Acquisition (SCADA) system for plant communications.

200,000 Gallon Ground Storage Tank & 8" Water Line (Grant)

City of Rusk

SPI designed this project based on recommendations from a Water System Model and Report conducted by SPI for the City of Rusk and was funded by a TCDP grant. This project included the installation of a 200,000-gallon bolted ground storage tank with grade ring foundation and all controls and connections. It also included 5,432 LF of 8" PVC waterline, service line connections, and fire hydrant. Construction was complete summer of 2008 at a cost of \$251,252.

SCADA System

City of Jacksonville, Texas

A SCADA system was implemented to monitor two elevated tanks, raw water site and four groundwater plants with monitoring from the central control room of the surface water treatment plant. A generator study was performed for the installation of an automatic generator for the raw water site location.

TWDB Water System Improvements

Evadale WCID#1

Evadale WCID#1 selected SPI to provide the Engineering services on a Water system project funded by a loan through the Texas Water Development Board. The project consists of various water distribution system improvements, replacement of all system water meters with Radio Read water meters, and replacement of the well pumps in three of the Districts' Water Wells.

Various Water Lines

City of Lufkin, Texas

Waterline Replacement Project 6, Lufkin, Texas. Preparation of plans and specifications to replace approximately 14,700-lf of existing 16" potable waterlines and installation of approximately 1,700-lf of new 6" waterlines. Designed installation of proposed waterlines along a new route and prepared all TxDOT and railroad installation permits.

Water Line Replacement Project 11, Lufkin, Texas. Design and installation of 6,000-lf of 16" potable waterlines and 13,300-lf of 8" waterlines to replace 50+ year old distribution lines that were subject to frequent line breaks. Responsibilities included design of the waterline installation; choosing the proposed routes for the new lines through existing easements, TxDOT ROW, and City ROW; periodic construction inspection; and preparation of all TxDOT and Railroad installation permits.

Water Line Replacement Project 12 and 13, Lufkin, Texas. Design and installation of approximately 30,000 linear feet of 12", 8" and 6" PVC waterline. One hundred percent of this project was designed and constructed using directional drill installation methods.

New Water Well

City of Berryville, Texas

SPI designed a new public water supply well. The well was constructed of 8-5/8" steel casing at a depth of 580' and included a 4" riser and a 25hp pump. The well is scheduled to produce approximately 210 gpm. The project includes a new chlorination system and controls. The well discharges into an existing ground storage tank and relieves existing production deficiencies within the City's water system. Construction of this project was completed in July of 2009 at a cost of \$323,000. TCEQ interim approval was granted within one week of well completion in order to allow relief from severe water shortages within the City.

Summary and Additional Projects

City of Pinehurst

- Wastewater treatment facility – grit removal unit, polymer filter beds, generator, flow eq basin,
- Water system improvements – rehabilitation of water wells No. 1 and No. 2
- Sanitary sewer system rehabilitation, multiple years

Orange County WCID No. 2

- Over 15 years of numerous Wastewater System Improvements
- Sanitary Sewer System Rehabilitation – Year 1994, 1997, 1999, 2002, 2006, 2009, 2011
- 250,000 Gallon elevated storage tank
- 700 GPM potable water well

Walker County Special Utility District

- Created computer model for entire distribution system
- Rehabilitation and upgrade of existing wells
- Construction of new wells
- Two new elevated storage tanks
- 26 miles of distribution system improvements

Bolivar Peninsula Special Utility District

- Evaluation of water system utilizing computer modeling to determine how best to accomplish \$7.5 million in required improvements that include:
 - 18 Miles of water distribution lines
 - 400,000 Gallon elevated storage tank
- Improvement of two pump stations
- Review subdivision plans
- Post Hurricane damage assessment
- Three line improvement projects
- Regional Wastewater Study
- New Warehouse

Angelina Water Supply Corporation

- Evaluation of water system utilizing computer modeling to determine low pressure problem areas
- Construction of two 150,000 Gallon elevated storage tanks and water production facilities
- Waterline Replacement in existing distribution system
- Rehabilitation of existing potable water well

South Newton Water Supply Corporation

- Construction of eight miles of potable water line
- Construction of new 400 GPM water well
- Installation of SCADA Control System for water plant communication for existing and proposed facilities

G-M Water Supply Corporation

- Design of proposed 1.0 MGD surface water plant, intake structure, transmission line on Toledo Bend Reservoir
- Improvements to existing TEBO water well site including new ground storage tank, pressure tank, and pump improvements
- First time water service for Hideaway Loop and Powell Lane areas

City of Beaumont

- 60 MGD Constructed Wetland Treatment Facility
- Treatment Facility Improvements to clarifiers and thickeners
- 23rd Street interceptor rehabilitation force main/lift station
- Calder interceptor rehabilitation
- North Trunk Line rehabilitation
- Dowlen Road sanitary sewer rehabilitation
- Prison force main sewer improvements
- East Lucas interceptor rehabilitation
- Folsom interceptor rehabilitation

City of Nacogdoches

- Wastewater Collection System – Sanitary Sewer Replacement Phase III - 10.65 million dollars CWSRF
- Fore Street & Ridgewood Easement Sanitary Sewer Replacement
- Wastewater Collection System Improvements – Emergency Creek Crossing
- Banita Creek Crossing & Park Street Creek Crossing
- Belt Press – Wastewater Treatment Plant Improvements
- Master Plan – Wastewater Treatment Plant Improvements, Collection Lines and Lift Station Improvements
- Completion of a three year sanitary sewer rehabilitation program
- SSOI Compliance
- Sanitary Sewer Evaluation

City of Nederland

- Major renovation to existing wastewater plant to upgrade plant to 5.25 mgd average and 24 mgd peak flow. Project was completed under four separate construction contracts to work toward completion of regulatory deadline. \$6 million
- Sanitary Sewer Evaluation Survey of 431,000 feet of sanitary sewer. Performed hydraulic modeling of major

EXPERIENCE AND WORK PERFORMANCE

trunk lines and combined with other information to develop a five-year rehabilitation program.

- Developed plans and specifications and provided construction services for a five year sanitary sewer rehabilitation involving rehabilitation on 43,000 feet of sanitary sewer ranging in diameters from 8-inch to 24-inch. Work completed within enforcement deadline. \$4 million

City of Groves

- Construction of a New 5.25 MGD Wastewater Treatment Plant. \$5.5 million within regulatory compliance deadline.
- Construction of a New 6.00 MGD Surface Water Treatment Plant. \$6.5 million
- Sanitary Sewer Evaluation of 216,000 feet of sanitary sewer, including manhole inspection, smoke testing and hydraulic modeling with recommendations for rehabilitation.

City of Anahuac

- Peak Flow Diversion Lift Station & Flow Equalization Basin
- Wastewater Collection System Improvements
- Wastewater Collection System & Water Distribution System Improvements

City of Alto

- SH 21 Sewer Improvements
- 2001 TCDP Grant for construction of a 75,000 Gallon Elevated Storage Tank
- Improvements to the City's Wastewater Treatment Facility

Additional Grant Projects

- City of Pinehurst, 10 CDBG projects over 20+ years
- City of West Orange, 10 CDBG projects over 20+ years
- City of Lumberton, 4 CDBG projects
- City of Pine Forest, CDBG Wastewater
- City of Como, 2000 STEP Water Improvements
- City of Lone Oak, 2002 STEP Water Improvements
- City of New London, 2009 CDBG Sewer Improvements
- City of Coffee City, 2009 CDBG New Community Center
- City of Reklaw, 2009 CDBG Water Improvements
- City of Blooming Grove, 2005 TCDP Water Improvements
- City of Blooming Grove, 2009 CDBG WWTP Improvements
- City of Kirbyville, CDBG Wastewater
- City of Liberty, CDBG Wastewater

- City of Nacogdoches 3 CDBG wastewater projects
- City of Campbell, 2008 CDBG Wastewater Improvements
- City of Blooming Grove, 2008 CDBG Water System Improvements
- City of Terrell, 2005 CDBG First Time Sewer Improvements
- Texas Parks & Wildlife Department, Tyler SP, Water & Wastewater System Renovations
- Texas Parks & Wildlife Department, Tyler SP, Renovate Water & Sewer System
- Texas Parks & Wildlife Department, Daingerfield State Park 2009 Sewer Improvements
- City of Center, 2005 TCDP Sewer Improvements
- City of Terrell, Texas, 2005 TCDP Sewer Improvements
- City of Center, Texas, 2005 TCDP Sewer Improvements
- City of Kemp, 2005 TCDP Sewer Improvements
- City of Alto, 2007 TCDP Sanitary Sewer System Improvements
- City of Alto, 2005 TCDP Water System Improvements
- City of Kemp, 2006 USDA New .350 MGD Wastewater Treatment Plant
- City of Kemp, 2003 TCDP Sewer System Improvements
- City of Berryville, 2008 TCDP Water System Improvements

Federal Funding Experience

SPI has extensive experience with all types of funding programs and their requirements. We have assisted our clients with loans and/or grants from funding sources, such as:

- Texas General Land Office (GLO) – Disaster Recovery Fund Grants
- Texas Department of Agriculture (TDA) - Texas CDB Grants
- Texas Department of Agriculture (TDA) - STEP Grants
- TWDB - Clean Water State Revolving Fund (SRF - Wastewater)
- TWDB - Drinking Water State Revolving Fund (SRF- Drinking Water)
- TWDB - Water Quality Enhancement Account (WQEA - Wastewater)
- TWDB - Water Supply Account (WSA - Drinking Water)
- TWDB – Rural Water Assistance Fund (RWAFF – Drinking Water)
- TWDB – Economically Distressed Areas Program (EDAP)
- Federal - U.S.D.A Rural Development Corporation
- Open Market - Local Bank

A sample of these projects includes:

Angelina Water Supply Corporation

Water System Improvements

Walker County Special Utility District

New Water Well, Elevated Tank, Distribution System
First Time Water Service Distribution System
Water Well and Production Facility
2007 Capital Improvements Project

City of Anahuac

Peak Flow Diversion Lift Station & Flow Equalization Basin
Wastewater Collection System Improvements
Wastewater Collection System & Water Distribution System Improvements

City of Beaumont

Constructed Wetland Treatment Facility
Treatment Facility Improvements Clarifiers/Thickeners
23rd Street Interceptor Rehab Force Main / Lift Station
Calder Interceptor Rehab
North Trunk Line Rehab
Dowlen Road Sanitary Sewer Rehab
Prison Force Main Sewer Improvements
East Lucas Interceptor Rehab
Folsom Interceptor

City of Groves

Construction of a New Wastewater Treatment Plant

Lower Neches Valley Authority

West Regional Water Treatment Facility

Bolivar Peninsula Special Utility District

Water System Improvements

TWDB RWAFF

\$1.7 Million

RUS/CDBG/TWDB RWAFF

\$4.8 Million
\$350,000
\$500,000
\$500,000

TWDB CW SRF/TCDBG

\$490,000
\$350,000
\$300,000

TWDB CW SRF

\$9 Million
\$1.2 Million
\$1.5 Million
\$1.1 Million
\$370,000
\$2.5 Million
\$1.2 Million
\$2 Million
\$900,000

TWDB CW SRF

\$13 Million

TWDB DW SRF

\$15 Million

TWDB DW SRF

\$7.5 Million

Jefferson County

Water and Sanitary Sewer Systems Improvements
Hamshire Community WSC

City of Nederland

Sludge Dewatering
Wagner Addition
Demolition
Lift Station
Wastewater Plant
Sanitary Sewer – Year 1
Sanitary Sewer – Year 2
Sanitary Sewer – Year 3

City of Nacogdoches

Wastewater System Rehabilitation Phase III
Fore Street & Ridgewood Easement Sanitary Sewer Replacement
Wastewater System Improvements Emergency Creek Crossing
Banita Creek Crossing & Park Street Creek Crossing
Belt Press Wastewater Treatment Plant Improvements

Orange County WCID No. 2

Over 15 years of numerous Wastewater System Improvements
Sanitary Sewer System Rehabilitation – Year 1997
Sanitary Sewer System Rehabilitation – Year 2002

City of Pinehurst

Proposed Peak Flow Equalization Basin
Polymer Filter Bed & Plant Rehabilitation
Sludge Drying Bed Canopy

City of Port Lavaca

Wastewater Treatment Facility Improvements
Sanitary Sewer System Improvements Lynn's Bayou
Transfer Lift Station & Force Main

STEP

\$ 350,000

TWDB CWSRF

\$570,000
\$800,000
\$32,600
\$1.3 Million
\$6 Million
\$350,000
\$920,000
\$1.1 Million

TWDB CW SRF/TCDBG

\$4 Million
\$290,000
\$200,000
\$177,709
\$340,000

TWDB CW SRF /TCDBG

\$240,000

TCDBG/TWDB WQEL TCDP

\$239,470
\$357,100
\$95,000

TWDB CW SRF

\$2.7 Million
\$69,000
\$670,000

EXPERIENCE AND WORK PERFORMANCE

Clients in General Region

SPI has performed engineering services for City of Lumberton, City of Nederland, City of Port Neches, City of Groves, City of Port Arthur, City of Beaumont, City of West Orange, City of Pinehurst, City of Orange, and City of Vidor.

Projects Completed on Schedule

Disaster Recovery Programs typically have a very rigid schedule for completion of the project. SPI works with the client and grant administrator to define schedule for data collection, land acquisition, environmental review, plan development, bidding and construction. SPI has successfully worked to have all CDBG projects completed on schedule, which is critical in scoring for successive grant opportunities.

Manage Project in Budgetary Constraints

The key to staying within budget constraints is to have the initially selected project be within the project construction budget. If, after design completion, the opinion of probable construction cost for the project is higher than the budget, then the project elements should be prioritized and separated into base bid and alternate(s) bid items in the final bid package, to allow the award to be made.

Work Product is of High Quality

The quality of the work product is maintained by commitment to the following:

Communication

SPI understands the importance of establishing the line of communication based on the client's organization and management. It is preferable to stream communications through one contact to avoid confusion between and within the client's organization. Typically, the communication is with the manager of the organization and with staff as directed or with previous knowledge of the client's main contact.

Incorporating experience and knowledge of the Owner's staff

SPI will work with the Owner to identify items of importance and will incorporate milestones for review of the project before proceeding with details of plans and specifications. We know the successful completion of the project requires open and honest communication to bring together the experience and knowledge of the Owner, suppliers and manufacturers, contractor, financing agency, and our staff.

Technically competent

The experience of SPI and the individuals assigned to the project will provide the technical competency required to meet the needs of the Owner.

Quality of the Constructed Product

The above three elements are key in developing a quality constructed product. The element of communication must extend to bidders in the bid phase and the selected contractor during construction.

Timely service

Timeliness of service is an important aspect of a project. Timeliness of service for major projects is best achieved by determining the major milestones and scheduling the tasks required to meet the milestones.

References

City of Groves
D.E. Sosa, City Manager
3947 Lincoln Avenue
Groves, Texas 77619
409.962.4471 p
409.963.3388 f

City of Port Neches
Taylor Shelton, P.E., Public
Works Director
1005 Merriman Street
Port Neches, TX 77651
409.727.2181 p
409.727.8677 f

City of Pinehurst
Robbie Hood, City
Administrator
2493 Martin Luther King, Jr.
Orange, Texas 77630
409.886.2221 p

City of West Orange
Michael Stelly, Public Works
Director
2700 Western Avenue
West Orange, Texas 77630
409.883.3468 p

G-M Water Supply Corporation
Jerry Pickard, General Manager
Post Office Box 727
405 Hwy 87N
Hemphill, Texas 75948
409.787.2755 p

City of Mont Belvieu
Ricardo Villagrand, P.E., City
Engineer
Post Office Box 1048
11607 Eagle Drive
Mont Belvieu, Texas 77580
281.576.2213 p
281.385.0121 f

City of Beaumont
Amalia Villarreal, P.E.
P.O. Box 3827
1350 Langham Road
Beaumont, Texas 77707
409.866.0023 p
409.860.4672 f

City of Lufkin
Keith Wright, City Manager
Post Office Drawer 190
300 East Shepherd
Lufkin, Texas 75901
936.634.8881 p
936.639.9843 f

Bolivar Peninsula Special Utility
District
Jo Ball, General Manager
Post Office Box 1398
1840 Highway 87
Crystal Beach, Texas 77650
409.684.3515 p
409.684.2922 f

Sabine River Authority
Bill Hughes, P.E.
Post Office Box 579
Orange, Texas 77630
409.746.2192 p
409.746.6780 f

Evadale Water Control
Improvement District No. 1
Patsy Mahan, General Manager
Post Office Box 149
Evadale, Texas 77615
409.276.2030 p
409.276.1667 f

Woden Water Supply
Corporation
Jimmie Langston, General
Manager
Post Office Box 48
Woden, Texas 75978
936.715.0307 p
936.715.9699 f

City of Rusk
Mike Murray, City Manager
903.683-2213 p

City of New London
Vicki Gerhardt, City Secretary
903.895.4466 p

City of Reklaw
Judy Ritter, City Secretary
936.639.4368 p

City of Blooming Grove
Beth Nemeth, City Secretary
903.685.2711 p

City of Berryville
Roy Brown, Mayor
903.876.3763 p

Afton Grove WSC
Kent Westbrook
903.721.1784 p

City of Jacksonville
Will Cole, Director of Public
Works
903.541.2807 p

Stryker Lake WSC
Nicki Greenwood, Manager
903.726.3933 p

City of Nacogdoches
Steve Bartlett, P.E.
936.559.2522 p

Project Understanding and Scope

The City of Rose Hill Acres intends to make necessary repairs from the damage incurred from Hurricane Harvey as well as pursue mitigation efforts to keep the same damage from occurring again. It is our understanding the City intends to pursue funding through the Texas General Land Office Community Development and Revitalization Community Development Block Grant Disaster Recovery Program (CDBG-DR). SPI is very experienced in the preliminary evaluations and scope development necessary for the application phases for funding sources. Schaumburg & Polk, Inc provided the engineering services related to many previous disaster related projects, therefore we are very familiar with the process and have proven we can work closely with the City, the Funding Agency, and the City's selected Grant Administrator to provide a successful project.

The following is a brief description of the project related engineering service tasks which could reasonably be expected under an agency funded project, as outlined in the Request for Qualifications:

Pre-Award

SPI will work with the City to develop the scope for a project for application to the funding source. We will work with the City and the selected grant administrator to determine the required qualifications for projects and which project has the best chance of scoring well. We understand the schedules related to the application phase and will work diligently to meet our deadline so the grant administrator and the City can meet theirs. Our experience with the disaster recovery includes water, wastewater, streets, and drainage; therefore we are familiar with many potential options. We will assemble the Project Budget and a project exhibit for the City's review. We will attend Council Meetings as necessary. Upon approval, we will submit these items to the Grant administrator for inclusion in the final application. We will also respond to questions from the funding agency as they apply to the engineering portion if they arise during the application review phase.

Post Award

Once GLO makes its award to the City, SPI will attend preliminary conferences with the City regarding the requirements of the project as needed. The purpose of an initial meeting is to establish lines of communication and the Owner's objective for the project and the project schedule. SPI will update cost estimates and schedules for

discussion at a project initiation meeting.

During the preliminary phase, topographic design surveys of the improvement locations, utilities, or other field data required for proper design of the project will be performed. Consultation and advice as to the necessity of the City obtaining other services such as soil borings, soil tests, or other subsurface explorations; laboratory testing and inspecting of samples or materials; and other special consultations will also be provided. We will recommend value engineering options, if available, that may improve efficiency, expedite the schedule, or reduce project costs. SPI will review any tests required and act as the Owner's representative in connection with any such services. We will provide support for property acquisition as needed. SPI will provide the necessary engineering related information for the environmental review.

There are a number of Specialized Services which may be required as part of a potential project. Geotechnical Engineer, Environmental Services, including cultural resources, and boundary surveying are services which may be required. SPI has a great deal of experience coordinating with the work of these specialties.

The project will be designed by the Engineer in accordance with the requirements of the funding agency and relevant regulatory agencies. Plans and specifications will be submitted to stakeholder agencies as required. We will furnish to the Owner, where applicable, engineering data necessary for application of routine permits required by local, State, and Federal authorities. We will present detailed construction contract drawings and specifications for approval by the Owner. We will provide updated cost estimates once final design is complete.

SPI will provide bid packages necessary to bid the work as organized and developed in design of the project. We will prepare the advertisement for bids and instructions to bidders for the bid package in accordance with funding agency requirements. We will also conduct a pre-bid conference. We will conduct a bid opening and prepare bid tabulations for the bids received. We will prepare and submit our recommendation for award to the Owner. We will prepare and assist in reviewing contract documents for execution by the contractor. We will conduct the pre-construction conference and issue a notice to proceed. The preparation of bid documents and the bidding process will be closely coordinated with the Owner's Grant Consultant in order to satisfy any requirements of the funding agency.

The firm will make periodic visits to the site (as

distinguished from the continuous services of a Resident Project Representative) to observe the progress and quality of the work, issue to contractors all instructions requested by the Owner; and prepare, process, and submit routine change orders, if required. We will review submittal information furnished by contractors for compliance with the design concept and with the information given in contract documents. We will review the Contractor's applications for payment, and determine the amount due to the Contractor. Our recommendation for progress payment will signify that the work has progressed to the point indicated and that, to the best of our knowledge, the quality of work is in accordance with the plans, specifications and contract documents. We will require that a retainage, the percentage determined based on the requirements of the funding agency, be withheld from all payments on construction contracts until final acceptance. If desired, the services of a full-time Project Representative can be provided.

SPI will conduct, in company with the Owner's representatives, a final inspection of the project; revise the contract drawings to show the work as actually constructed, and furnish record drawings in digital format. Should any deficiencies be noted, we will advise the contractor of the items to be corrected.

Capacity to Perform

SPI has the utmost confidence in its staff to produce a professional, well-designed product for our clients. Managing a project by and with the schedule is part of our project management culture. The project manager will develop, update/maintain, and critique its schedule to ensure applicability and its use as a management tool.

Ongoing schedule utilization allows us to manage proactively. Schedules are updated as activities are further defined and information develops. On-board project reviews, concurrent activities, and reorganizing activities are examples of effective ways to deliver projects in the anticipated time.

We understand any funding program has a defined time frame for completion. The team members listed have a great deal of experience and each member recognizes the importance of accomplishing the goal of a quality project within the schedule. Further, the experience of the selected team understands the importance of communication as it relates to a funding source and project of this magnitude. These team members have the capacity to accomplish these goals for the City.

Project Team Overview

SPI proposes to use the following project design team:

Project Manager:	Mark Mann, P.E.
Design Engineer:	Troy Whitehead, P.E.
	Deborah Meroniuc, P.E.
	Nestor Barroeta
	Alvin Trahan, E.I.T.
	Kate Osborn, E.I.T.
	Elise Dillow, E.I.T.
Project Technicians:	Paul Wilson
	Tim Wisener
Construction Representatives:	Pete Treadway
Project Principal	Jeff Beaver P.E.
QA/QC:	Steve Jordan, P.E.

CAPACITY TO PERFORM



Mark Mann, P.E.
Project Manager

- Texas Registered Professional Engineer #91891
- B.S. Civil Engineering – Lamar University, Beaumont, TX
- 21 years of experience in design, construction management and inspection of water and wastewater treatment plants, drainage, roadway improvements, utility projects, waerline and sewer line design, and other municipal projects.



Troy Whitehead, P.E.
Project Engineer

- Texas Registered Professional Engineer #102472
- B.S. Civil Engineering – Lamar University, Beaumont, TX
- 28 years of experience in design, construction management and inspection of water and wastewater treatment plants, drainage, utility projects, and other municipal projects.



Nestor Barroeta
Project Engineer

- B.S. Civil Engineering – Lamar University, Beaumont, TX
- Masters of Engineering (Structural Engineering) – Lamar University, Beaumont, TX
- 28 years of experience in civil engineering for all facets of municipal infrastructure including water, wastewater, transportation, structural engineering, and bridge inspections.

CAPACITY TO PERFORM



Deborah Meroniuc, P.E.
Project Engineer

- Registered Professional Engineer, Texas
- B.S. Civil Engineering - University of Houston, TX
- 11 years of experience in design, construction management and inspection of water and wastewater treatment plants, drainage, utility projects, and other municipal projects.



Kate Osborn, E.I.T.
Project Engineer

- Texas Certified Engineer In-Training #51729
- B.S. Civil Engineering – Lamar University, Beaumont, TX
- 5 years of experience in in water and wastewater treatment facilities and utilities, drainage, roadway design and other municipal projects.

Alvin Trahan, E.I.T.
Project Engineer

- Louisiana Certified Engineer In-Training #33314
- B.S. Civil Engineering – McNeese State University, Lake Charles, LA
- 2 years of experience in drainage, utilities, roadway design and other municipal projects.

CAPACITY TO PERFORM



Elise Dillow, E.I.T.
Project Engineer

- Texas Certified Engineer In-Training #55384
- B.S. Civil Engineering,
University of Texas at Tyler, 2015
- 5 years of experience in in water and wastewater treatment facilities and utilities, drainage, roadway design and other municipal projects.



Steve Jordan, P.E.
QA/QC

- Texas Registered Professional Engineer #87766
- B.S. Civil Engineering – Lamar University, Beaumont, Texas
- 24 years of experience in design, construction management and inspection of water and wastewater treatment plants, drainage, utility projects, and other municipal projects.



Jeff Beaver, P.E.
Project Principal

- Texas Registered Professional Engineer #60676
- B.S. Civil Engineering – Lamar University, Beaumont, Texas
- 39 years experience and expertise in the design and preparation of plans and specifications, and construction of all types of municipal engineering including transportation, sanitary sewage, waterworks, solid waste disposal, and land development projects.

Quality Assurance / Quality Control

SPI has developed and adopted a Quality Assurance and Quality Control (QA/QC) plan which is utilized on all of our projects. Our QA/QC plan includes the following elements:

- Design standards to which adherence is mandatory.
- Design criteria specific to the individual project.
- Procedures for preparing and checking individual plans, specifications, estimates, calculations, and other submittal items.
- Procedures for preparing and checking unique or specialized designs.
- Procedures for coordinating work performed by different persons for related tasks, to ensure that conflicts, omissions, or errors do not occur between drawings or between drawings and other design documents.
- Early identification for coordination and submittal of permits from permitting agencies, utility companies, and railroad companies.
- Level, frequency, and identification of reviewers (client, internal, TCEQ, funding agency) for project design.
- Level and frequency of audit and oversight design reviews to be performed by a qualified senior technical staff of SPI.
- Procedures for reviewing and checking design drawings and documents required during construction.
- Documentation and submission procedures to ensure that the established design QA/QC procedures have been followed.

The premise of SPI's QA/QC program is that all work is checked by another qualified individual who was not involved in the preparation of the work. This checking process is documented, and is the heart of our Quality Control process. Prior to any client submittals, a senior staff member from SPI who is not involved in the project conducts a Quality Assurance audit to ensure that the proper level of quality control has been completed.

Affirmative Action Statement

SPI has a diverse workforce and a history of affirmative action through utilization of Women Business Enterprise and Minority Business Enterprise firms as partners and subcontractors.

SPI has an established Affirmative Action Plan in accordance with the intent of the rules regulations and guidelines of the various federal, state, and local laws and agencies having oversight in the equal opportunity area. The Affirmative Action Plan established by SPI provides for full implementation of SPI's policy on Equal Employment Opportunity. It is the goal of the written plan to provide equal opportunity for any individual regardless of race, color, religion, sex, national origin, marital status, as the terms, conditions, and benefits of employment.

The legal basis of the plan is Title VII of the Civil Rights Act of 1964 (As Amended by the Equal Opportunity Act of 1972).

We will be happy to provide a detailed company personnel profile and underutilized business reference list at your request.

Statement of Conflict

We know of no current or potential conflicts of interest involving SPI or its key employees regarding the City of Rose Hill Acres and the proposed projects.

Water/Wastewater



SPI has designed many of the original municipal wastewater collection and treatment facilities in East Texas. We have also successfully completed many ground water production, ground and surface water treatment, storage, and distribution projects which meet our clients' specific needs. Successful water/wastewater projects are achieved through innovative technology, cost effective design, and great communication with our clients.

Drainage



SPI uses state-of-the-art modeling software to perform computations of stormwater runoff for the existing condition drainage and to develop needs for a "proposed" drainage system. Analysis of open and closed drainage systems and identification of problem areas and development of a CIP program.

Program Management



SPI has defined successful Program Management as completing projects on schedule and within budget. SPI's approach to program management consists of early definition of goals, preparation of a work plan that includes schedule and budget, and clearly establishing lines of communication. SPI Program Management focuses on critical issues, starting with planning and programming, continuing through design management, moving into right-of-way acquisition and utility coordination, through construction. Finally, SPI understands that schedules are "lost" a day at a time; our monitoring program will prevent that from occurring.

Transportation



From concept to completion, SPI can provide program management, planning, engineering design, and construction management for transportation projects. Our services include preliminary planning, environmental studies, project development and design of urban streets and rural highways, bridges, construction management and program management.

Land & Site Development



SPI has planned and designed improvements to develop thousands of acres of Texas land. SPI offers a comprehensive range of infrastructure design and permitting services for residential, commercial, multi-use and industrial clients. We listen to our clients and understand the importance of tailoring their needs to the characteristics of the land.

Construction Management



SPI clients are being challenged to complete construction programs with insufficient staff resources in addition to ever more complex projects. SPI's professional construction managers provide the necessary support to clients such as functioning as advisors on the owner's behalf and representing their interest and concerns exclusively. We can oversee our clients' projects as an extension to their staff, or we can provide construction consulting support during the implementation of innovative project delivery systems.

Tank Inspection/Rehabilitation



SPI offers engineering services to perform the annual inspections of water storage tanks required by the Texas Commission on Environmental Quality (TCEQ). The scope of services provides an exterior inspection of each tank including coating system, foundation, access ladders, hatches, roof vents, tank structure, obstruction light, and overflow piping; provide an interior inspection from the roof hatch of each tank of the water quality and coating system; and prepare and submit an inspection report.



- 21 years with SPI
- 21 years experience
- Texas Registered Professional Engineer #91891
- B.S. Civil Engineering, Lamar University, 1998

Mark Mann, P.E.

Project Manager

Mr. Mark Mann, P.E. has over 20 years of experience in bridge inspection, water and wastewater treatment facilities and utilities, roadway design and drainage. He has experience in the conceptual and preliminary engineering phases, selection of treatment equipment, design of treatment structures and metal buildings and construction administration of projects. The following is a sample of Mr. Mann's experience:

G-M Water Supply Corporation – Project Manager for a new 1.0 MGD potable water treatment plant using membrane filtration technology as the primary treatment unit. Project included all site work, buildings, treatment facilities, chemical processes, storage facilities, pump stations, and raw water intake from Toledo Bend Reservoir. This project was funded by a TWDB loan and GLO Ike 2.2 Recovery Grant Funds.

Sanitary Sewer Lines Rehabilitation, Nederland, Texas, for the City of Nederland – Design Engineer for the design of 1,600-lf of replacement lines for existing 24" diameter sanitary sewer trunk line and 1,000-lf of 8" sanitary sewer umbrella system to service existing customers. This project also consisted of repaving 1,600-lf of an existing asphalt road after completion of the sewer line construction.

Interceptor Rehabilitation, Beaumont, Texas, for the City of Beaumont – Design Engineer for the design of the rehabilitation of 21,000-lf of existing 15" to 30" sanitary sewer interceptor along East Lucas Road by slip-lining and pipe-bursting. This project encompassed physical inspection of manholes; rerouting a section of 27" line; design of an 8" sanitary sewer umbrella gravity system; sizing and construction of a new 800-gpm submersible lift station, wet well, and pumps; and preparation of plans and specifications.

Water and Sanitary Sewer Improvements, Orange, Texas, for the City of Orange – Design Engineer/Project Manager for construction of water and sanitary sewer improvements to provide service for new annexation areas. The improvements include design and construction of a new lift station and force main; 18,000-lf of 6" waterlines with fire protection; 9,500-lf of 6" to 10" sewerlines; and connecting the existing water and sewer systems to the city's infrastructure.

Lift Station Rehabilitation, West Orange, Texas, for the Orange County Water Control and Improvement District No. 2 – Design Engineer for the design and construction administration for rehabilitation of the wastewater lift- stations and force mains. Improvements include the design of a new South Street lift station with new concrete wet well increasing capacity to 1,000-gpm and a new 1,000-lf of 10" force main.

Sanitary Sewer Interceptor Rehabilitation, Beaumont, Texas, for the City of Beaumont – Design Engineer for the design and construction administration for rehabilitation of 27" and 30" sanitary sewer interceptor along Dowlen Road. Physically inspected all manholes along the line to be rehabilitated;

used slip-lining to rehabilitate 16,900-lf of 27" and 30" concrete trunk lines; and prepared plans and specifications used in bidding and construction of the project.

Lift Station Design, Nederland, Texas, for the City of Nederland – Design Engineer for the design of submersible pumps for a proposed influent lift-station being constructed in an existing wastewater treatment plant. The design used high and low-flow sets of pumps with an interior baffle wall system to distribute the influent to the appropriate pumps.

Water and Sewerline Relocation, Pinehurst, Texas, for the City of Pinehurst – Design Engineer for the design of water and sewerline relocation along Strickland Drive (Business 90). 2,000-lf of water and sewerline crossings were designed to allow for widening of the road by TxDOT.

Sabine County - Pendleton Harbor Waterline – Project Manager for a new 6" waterline along SH 21 to extend G-M Water Supply Corporation's potable water service to Pendleton Harbor's existing water system due to drought related issues with the existing water plant intake. The new waterline required a 1900 linear foot directional drill under a portion of Toledo Bend at Carrice Creek area, as well as permitting through the Texas Department of Transportation to install the waterline in TxDOT ROW.

Lower Neches Valley Authority - West Regional Water Treatment Plant, Winnie, Texas – Design Engineer for the 5.0 mgd potable water treatment plant to supply potable water to the Bolivar Special Utility District. 32,000 LF of 20" transmission lines, structures, and piping were designed to supply water to the Bolivar Peninsula.

Potable Water Transmission Lines, Bolivar Peninsula Special Utility District - Design Engineer for the construction of 94,950-lf of potable water transmission lines to replace existing lines. Improvements include modification of two existing high service water pumping stations and construction of a new 500,000-gallon elevated water tank to meet current and future water demands.

Water Line Replacement Project 11, City of Lufkin, Texas - Design Engineer/Project Engineer for the design and installation of 6,000-lf of 16" potable waterlines and 13,300-lf of 8" waterlines to replace 50+ year old distribution lines that were subject to frequent line breaks. Responsibilities included design of the waterline installation; choosing the proposed routes for the new lines through existing easements, TxDOT ROW, and City ROW; periodic construction inspection; and preparation of all TxDOT and Railroad installation permits.

Water Line Replacement Project 12 & 13, City of Lufkin, Texas - Design Engineer/Project Manager for the design and installation of 21,000 lf of 12", 5,500 lf of 8", and 2,200 lf of 6" waterlines to replace 50+ year old distribution lines that were subject to frequent line breaks. Project location was within the Crown Colony residential area and was designed for all waterlines to be installed by directional drill of PVC to minimize surface restoration. Responsibilities included design of the waterline installation; choosing the proposed routes for the new lines through existing easements, TxDOT ROW, and City ROW; periodic construction inspection; and preparation of all installation permits.



- 25 years with SPI
- 28 years experience
- Texas Registered Professional Engineer #102472
- B.S. Civil Engineering, Lamar University, 2004

Troy Whitehead, P.E.

Project Engineer

Mr. Whitehead has design experience with water and wastewater utilities, roadway design, site planning and land development. He has experience coordinating directly with governing entities such as TxDOT, TCEQ, TWDB and private firms including railroad, energy and pipeline companies. He has been involved in planning, design and construction administration activities. The following list is a sample of Mr. Whitehead's experience:

Lumberton Comprehensive Drainage Study – Design Engineer for the project consisting of evaluating existing drainage outfalls for the City of Lumberton,, Texas. Generate profiles, cross-section and evaluated survey topography for hydraulic modeling. Determined pre- and post land use. Study resulted in the construction of two detention ponds totaling 185 acre-foot of storage and major crossing improvements.

Orange County Disaster Recovery Projects - Project manager for various disaster recovery projects funded through Texas GLO CDBG-DR as a result of Hurricane Ike. Projects included are Orange County Emergency Shelter, Orange County Bridge Replacement, and County Road Improvements. Responsibilities included the coordination with funding agency, grant administrator, county personnel, architects, environmental service providers and engineering sub-consultants.

Nacogdoches Drainage Study – Design Engineer for the project consisting of evaluating existing drainage for conveyance for Bonita Creek and Lanana Creek watersheds in Nacogdoches, Texas. Generate profiles, cross-section and evaluated survey topography for hydraulic modeling. Determined pre- and post land use.

Evadale Water Control and Improvement District No. 1 - Engineer of Record, including design, implementation and construction administration on 3,700 lineal feet of line replacement to correct low pressures and coordination of AMR system transition.

City of Beaumont MLK Waterline Replacement – Design Engineer/Project Manager for 5,200 lineal feet of 12-inch waterline. Provide design and construction administration services. Portions of the project were constructed in limited right-of-way along MLK Drive. The project included coordination to locate the line through adjacent railroad and pipeline corridor with 14 pipelines.

Calder Avenue Drainage Project, Phase I, II and III – Project Engineer for the relocation of existing water distribution lines and wastewater collection system lines to facilitate the installation of 2 – 10' X 14' box culverts and concrete pavement installed along under Calder Avenue from Elizabeth Street at the Neches River, crossing Interstate 10 to Phelan Boulevard. Total project length approximately 18,600 lineal feet.

City of Nederland, 2009 Rehabilitation Project – Project Manager providing design and construction administration services for approximately 73,000 feet of

wastewater collection system rehabilitation, manhole replacement and service connections.

Land Development – Project Engineer for numerous development projects from residential, commercial, light and heavy industrial. Responsibilities for development projects include. Establish master planning for streets and infrastructure. Design of streets, water distribution system, wastewater collection system, storm drainage in accordance with local and state regulation including pre- and post development run-off and detention/retention pond analysis. Perform cost analysis while implementing value engineering principles. Provide project management and construction administration from conception to final completion of construction.

Lou Ann Gomez Eco Trail – Design Engineer for 450 foot long, 8 foot wide timber walkway with timber walkway with timber piles. Using dead loads and live loads determined sizes of supports and maintaining compliance with the American Disability Standards.

Beauxart Garden Road, Nederland, Texas - Project Engineer for project consisting of 47 foot concrete roadway for residential/industrial road providing access to adjacent landowners to Interstate 10. Designed vertical and horizontal alignment. Coordinated project with TxDOT. Provided management and construction administration throughout project.

County Road 417, Liberty County, Texas – Project Engineer for project consisting of the rehabilitation of CR417. Designed horizontal and vertical alignments, subgrade for heavy haul road. Design consisted of lime stabilizing for existing roadway to a depth of 12 inches, placing 8" compacted limestone and 4" of HMAC. Performed project management duties and construction administration throughout project.

West Greenwood, Chambers County, Texas – Project Engineer for project consisting of 32 foot wide 5,265 feet long heavy haul concrete street to serve barge facility on Cedar Bayou in Baytown, Texas. Designed roadway drainage. Traffic was maintained throughout project. Performed project management duties and construction administration throughout project.

Lakeway Drive, Beaumont, Texas – Project Engineer for project consisting of 37 foot wide industrial road providing access to adjacent landowners to Interstate 10. Designed vertical and horizontal alignment. Coordinated project with TxDOT. Provided management and construction administration throughout project.

Tolivar Road/Keith Road Drainage Study – Design Engineer for the evaluation of 1040 acre runoff area. Design consist of an outfall ditch and road crossing consisting of 3 – 10' X 10' reinforced box culverts.

Highway 96/Highway 105 – Design Engineer for drainage calculations and structure placement in connection highway expansion project.



- 4 years with SPI
- 11 years experience
- Texas Licensed Professional Engineer
- B.S. Civil Engineering, University of Houston, 2007

Deborah Meroniuc, P.E.

Project Engineer

Ms. Meroniuc is a Professional Engineer with nine years of engineering experience in a variety of transportation projects. Responsibilities and tasks involved producing construction plans, specifications, and estimates for several projects, which included roadway design elements, and drainage design and analysis.

San Jacinto River Authority 2016 Water Transmission System, Conroe, Texas - Project Engineer. SPI was selected to perform all design services for the C-2 segment of the SJRA's 2016 transmission system, which is part of the Montgomery County area Groundwater Reduction Plan being administered by SJRA. SPI's segment consists of approximately 35,000 linear feet of water line, ranging in diameter from 12 inches to 42 inches. Project components include preliminary and final design, construction phase services, topographic survey, right-of-way mapping for approximately 100 easements, geotechnical investigations, coordination with numerous agencies having jurisdiction, coordination with property owners, and coordination with major utility owners (Entergy and Copano Pipeline, among others). Responsible for producing construction plans, performing quantities take-offs and producing the project manual).

Old Colony Road Sanitary Sewer, City of Huntsville – This project consisted of the design of approximately 20,000 linear feet of gravity sanitary sewer ranging in diameter from eight inches to 18 inches. Portions of the sewer were constructed in developed areas, whereas one portion was routed through the national forest, requiring significant coordination and permitting with the U.S. Forest Service. The project also included the decommissioning of three existing lift stations. Ms. Meroniuc served as a project engineer on this project, and oversaw the production of construction plans.

Gosling Road, Harris County, Texas – Harris County selected SPI for the final design and construction phase services for this 7,900-foot stretch of roadway that was expanded into a four-lane boulevard. Ms. Meroniuc served as the lead design engineer for the project, personally designing roadway grading, drainage and traffic control. She also oversaw subconsultants for survey, traffic signal design and landscape architecture. Finally, Ms. Meroniuc is serving as the point person during the construction phase. The construction cost of this project is \$8 million, and construction is approximately 25 percent complete.

Jackrabbit Road, Harris County, Texas – SPI designed a roadway improvement for Jackrabbit Road in order to improve the mobility in the vicinity of a school. The project consisted of the partial realignment of the roadway to accommodate the addition of right-turn lanes and left-turn lanes into the school. Drainage modifications were also required. Ms. Meroniuc served as a project engineer, and designed the roadway alignment and traffic control.



- 28 years with SPI
- 28 years experience
- B.S Civil Engineering,
Lamar, University, 1987
- Masters of Engineering,
Lamar University, 1990

Nestor Barroeta

Project Engineer

Mr. Nestor Barroeta has 28 years experience and expertise in water and wastewater; transportation projects; structural engineering; and bridge inspections. The following is a sample of Mr. Barroeta's experience:

Wastewater Collection System Improvements, City of Pinehurst, Texas (TCDP 711370) - Project Engineer for the rehabilitation of about 1,800 linear feet of gravity sanitary sewer collection lines utilizing trenchless technology (pipe bursting), associated manholes and services, and rehabilitation of asphalt street. Project consisted of rehabilitating system segments as part of the District's Sanitary Sewer Overflow Initiative (SSOI) agreement with TCEQ.

Polymer Filter Bed Plant Rehabilitation, City of Pinehurst, Texas - Project Engineer for the design and construction administration of a new polymer assisted filter bed system used to dewater the treated sludge for the City's existing wastewater treatment plant. Design and sizing of a sludge metering pump station; rehabilitation of existing steel package treatment structures including replacement of all air diffusers and air header piping; modification of the interior partition walls; modifications to the sludge recirculation pump station; design of concrete pad for a sludge disposal roll-off box and preparation of plans and specifications were all performed for this project.

Grit Removal Unit, City of Pinehurst, Texas - Project Engineer for the design, preparation of plans and specification and construction administration for the installation of a grit removal structure. This project included the foundation design for the grit removal unit, and structural design of the foundation and steel support structure for the new manual bar screen.

Sanitary Sewer Rehabilitation Projects, City of Pinehurst, Texas - Project Manager for design and construction administration of Texas Community Development Project (TCDP) Block Grant projects. The sanitary sewer rehabilitation projects included removal and replacement of sanitary sewer lines ranging in size from 4" to 12". These projects also included rehabilitation by pipe bursting.

Walter Umphrey State Park, Jefferson County, Texas - Project engineer for design and construction administration of repairs to Walter Umphrey State Park due to Hurricane Rita damages. Both the North and South boat ramps require reconstruction and repairs including reconstruction of concrete boat ramp and approach; reconstruction of three docks; and other miscellaneous repairs. The park also requires reconstruction and repairs including repair of bulkhead; stabilization of sidewalks; repair/reset of benches; pier repairs; inspection of electrical installations; and other miscellaneous facility repairs. As part of the project, the Sabine Pass boat ramp will also have three docks reconstructed.

Sanitary Sewer Dowlen Road Interceptor Rehabilitation, City of Beaumont, Texas - Project engineer for the design and construction administration for

rehabilitation of 27" and 30" sanitary sewer interceptor along Dowlen Road. Physically inspected all manholes along the line to be rehabilitated; used slip-lining to rehabilitate 16,900 LF of 27" and 30" concrete trunk lines; and prepared plans and specifications used in bidding and construction of the project.

TEBO Water Plan Improvements – G-M WSC – Project Engineer for the design, bidding, and construction administration for a new groundwater storage tank, hydropneumatic tank and two high service booster pumps and associated electrical controls.

Water System Improvements, West Orange, Texas – Project Engineer for design and construction administration of water system improvements. This project included rehabilitation of an existing 100,000 gallon elevated water storage tank, rehabilitation of existing 250,000 gallon elevated water storage tank, a new 700 GPM groundwater well, and a new 250,000 gallon elevated water storage tank.

Sanitary Sewer Rehabilitation Projects, West Orange, Texas - Project Manager for design and construction administration of Texas Community Development Project (TCDP) Block Grant projects (1989-present). Two of the projects included lift station rehabilitations. The sanitary sewer rehabilitation projects included: removed/replaced lines ranging in size from 4" to 12". These projects also included pipe bursting and aerial creek crossings.

Water System Improvements, Beaumont, Texas – Project Engineer for ongoing water system improvements including a new 2 million gallon elevated water storage tank, a new cross-town 36" diameter dedicated transmission line, and additional pumping capacity at the surface water treatment plant.

Lynn's Bayou Wastewater Treatment Facility, City of Port Lavaca, Texas - Design Engineer for structural concrete design for the construction of two new 70' diameter clarifiers, new recirculation station, and modifications to the existing package plant and influent lift station. Also performed construction administration and periodic field observation of this project.

Wastewater Treatment Facility Improvements, City of Nacogdoches, Texas - Design Engineer for wastewater treatment facility improvements, which included structural concrete design of the sanitary treatment units, including modifications to the existing aerobic digester, new clarifier, effluent structure modifications, new recirculation pump station, new belt press foundation, and miscellaneous junction boxes. In addition to the treatment units, provided design of the sludge thickener building foundation.

TxDOT Bridge Inspection, State-wide - Served in the capacity of Inspector, Team Leader, Assistant Project Manager and Project Manager from 1989 thru 2003. During this period Mr. Barroeta was responsible for the structural analysis, and inspection of over 6,700 bridges.

Alvin Trahan, E.I.T

Project Engineer

Mr. Alvin Trahan, E.I. has 2 years of experience in drainage, utilities, and roadway design. He has experience from project conception through project completion. The following representative projects demonstrate Mr. Trahan's experience:

Waterline Improvements, City of Kibyville - Design Engineer for 12,000 feet of new potable water distribution lines. This project included modeling and calibrating the existing system to determine deficiencies and selection of new waterline infrastructure to comply with TCEQ regulations.

Drainage Capital Improvement Project (2018 & 2019 Phase I), Calcasieu Parish - Design Engineer for roadside drainage improvements. This project consisted of producing construction plans, utility coordination, producing vicinity and typical signing maps, compiling summary of quantities, and final plan set production. These construction plans consisted of roadside drainage improvements for various road segments in Calcasieu Parish, Louisiana that are maintained by the Public Works Department. The extent of drainage improvements was determined by conducting a drainage study for the affected area using the appropriate peak runoff method and selecting suitable improvements to meet minimum design standards. These improvements included replacing inadequately sized culverts, regrading ditches, adding new drainage structures to redirect flows, and providing erosion protection.

Regional Watershed Planning and Strategic Analysis, Calcasieu Parish - Deputy Project Manager to manage work for a comprehensive study of gravity drainage infrastructure throughout Calcasieu parish. This study sought to produce hydraulic and hydrologic models, identify deficient areas, and propose solutions for the areas of concern.

- 2 years experience
- Louisiana Certifies Engineer In-Training #33314
- B.S. Civil Engineering, McNeese State University, 2017



- 5 years with SPI
- 5 years experience
- Texas Certified Engineer In-Training #51729
- B.S. Civil Engineering, Lamar University, 2014

Kate Osborn, E.I.T.

Project Engineer

Ms. Kate Osborn, E.I.T. has 5 years of experience in water and wastewater treatment facilities and utilities, drainage, and roadway design. She has experience in the conceptual and preliminary engineering phases, selection of treatment structures and buildings, and construction administration of projects. The following is a sample of Ms. Osborn's experience:

Sanitary Sewer Evaluation Study, City of Kirbyville - Design Engineer for a comprehensive Inflow and Infiltration Mitigation Study performed as part of a TWDB Clean Water SRF project. The preliminary engineering phase included evaluation of system condition and capacity through inspection, smoke testing, and flow modeling of the entire system, approximately 140,000 linear feet. The City was provided with updated sanitary sewer system maps, a list of I/I sources rated by severity to allow for prioritization of repairs, and a modeled flow report that allowed the District to pinpoint hydraulic capacity restrictions. The prioritized project areas are currently undergoing environmental clearance. The design and construction phases of the project are expected to be completed throughout the next twelve to eighteen months.

Sanitary Sewer Evaluation Study, Orange County Water Control and Improvement District #2 - Design Engineer for a comprehensive Inflow and Infiltration Mitigation Study performed under a TCEQ Sanitary Sewer Overflow Initiative. This project included evaluation of system condition and capacity through inspection, smoke testing, and flow modeling of the entire system, a total of approximately 145,000 linear feet. This project provided the District with updated sanitary sewer system maps, a list of I/I sources rated by severity to allow for prioritization of repairs, and a modeled flow report that allowed the District to pinpoint hydraulic capacity restrictions.

Industrial Wastewater Pretreatment Program Evaluation and Update, City of Nacogdoches - Design Engineer for the evaluation and update of the City's industrial pretreatment program, including analysis of discharge testing data from multiple industries, non-industrial flows, and the City's wastewater treatment plant flows, evaluation of compliance with numerous regulatory requirements, and determination of industrial discharge limits for numerous pollutants of concern to be incorporated into City ordinances.

Water and Wastewater Improvements, City of Orange - Design Engineer for water and wastewater improvement projects. Wastewater improvements to the 7 MGD plant include a new grit removal system, rehabilitation of pump stations and dewatering equipment, and a new UV disinfection system. Water improvements include design of a new 1500 GPM groundwater production plant complete with elevated storage, ground storage, disinfection, chemical treatment, high service pump station, and 12" water main, and rehabilitation of two existing ground storage tanks at an existing well site.

Wastewater Treatment Plant Improvements, City of Beaumont - Design Engineer for multiple projects at the 50 MGD wastewater treatment plant,

including clarifier rehabilitation, slide gate replacement, solids management evaluation, and drying bed and dewatering equipment improvements.

New Groundwater Production Well, Warren Water Supply Corporation – Design Engineer for a new 500 GPM potable water well. This project includes selection of pumping equipment and design of plant piping to connect the new well to the existing treatment facilities. This project also includes corrosivity testing of the new water source in order to comply with new TCEQ policies.

Sanitary Sewer Collection System Improvements, City of Nederland – Design Engineer for the rehabilitation of 5,870 linear feet of existing sanitary sewer main line from 16" to 24" in diameter with minimal surface disturbance. This line serves approximately 470 acres of the City.



- 4 years with SPI
- 4 years experience
- B.S. Civil Engineering,
University of Texas at Tyler,
2015

Elise Dillow, EIT

Project Engineer

Elise Dillow is in her fourth year at SPI, and is on the verge of earning her professional engineering license. Since starting at SPI, she has worked on roadway/utility design, site development and sidewalk projects, as well as program management assistance. Her responsibilities include producing construction plans, determining quantities/cost estimates, and extensive pipeline and utility coordination.

2007, 2013 and 2017 Mobility Bond Programs, Fort Bend County - SPI has been selected to oversee design of approximately 35 bond projects in Fort Bend County with a total estimated construction cost of over \$150 million in three bond programs. Ms. Dillow has been the primary point of contact for coordination with pipeline and dry utility companies whose facilities could be impacted by the projects. Specific responsibilities have included desktop and field research to confirm the presence of facilities, initial contact, routine coordination during design (obtaining depth information, transmitting plans, etc.), obtaining letters of no objection when adjustments were not required, management of agreement preparation when County-funded adjustments were required, and communication of right-of-way acquisition and clearing schedules to expedite any required adjustments. Ms. Dillow has amassed a contact list of approximately 75 pipeline and dry utility contacts in Fort Bend County.

City of Houston Safe Sidewalk Program - SPI was selected to construct 47,000 linear feet of new five-foot sidewalks along various streets throughout the Houston area. Ms. Dillow was responsible for site investigations for each street, determining sidewalk routes, producing the preliminary engineering report, and producing final construction plans, specifications and a cost estimate. She also coordinated with dry utility companies to facilitate adjustments to existing utilities in the right-of-way that conflicted with the project.

SH 75 Sidewalks, City of Conroe - SPI was selected to construct approximately 7,000 linear feet of sidewalk along both sides of a State Highway. Due to budget constraints, the drawings were prepared on an aerial photography base. Ms. Dillow was responsible for site investigations to confirm existing conditions, locating existing utilities and any other potential conflicts, measuring existing driveway slopes and determining sidewalk routes in various locations.

M.P. Clark Road, City of Conroe - SPI was selected to design an expansion/new location thoroughfare approximately 8,600 linear feet in length for Conroe, Texas. Adjustments to an existing water line were required as part of the project, and Ms. Dillow designed the proposed adjustments. She also coordinated with several underground dry utility companies to facilitate adjustments that were required for the project. Finally, Ms. Dillow assisted in the production of roadway plan and profile drawings, drainage plan and profile drawings, details and notes.



- 24 years with SPI
- 24 years experience
- Texas Registered Professional Engineer #87766
- B.S. Civil Engineering, Lamar University, 1995

Steve Jordan, P.E.

QA/QC

Stephen J. Jordan, P.E. has experience in civil engineering for all facets of municipal infrastructure. Mr. Jordan's expertise includes the planning and design of water and wastewater utilities. He provides for complete evaluation of water systems including modeling of the system to identify areas of hydraulic concern. The following is a sample of Mr. Jordan's experience:

Texas Department of Rural Affairs Disaster Recovery Fund Projects, Various Entities - SPI Projects Coordinator for the implementation and Initiation of Hurricane Recovery projects via the TDRA CDBG-DR funds. Acts as the primary firm contact for TDRA and HNTB, attends all mandatory service provider workshops/meetings, coordinated the HUB Subcontracting Plan and all subcontractor contracts, and is experienced in using the DashPort project reporting site. Assists SPI Project Managers as a facilitator with TDRA and HNTB. Prepared Budget Justifications, schedules, and descriptions for proposed projects for many of the projects. SPI is working on a total of 47 projects for 13 entities for total of over \$31 million in Round 1 DR Projects and \$24 million in Round 2.

Huntwood Water Plant Improvements, Riverside SUD, through Walker County CDBG – Project Manager for the design and construction of a new ground storage tank, rehabilitation and activation of a hydropneumatic tank, new control building with high service pumps, controls, and chlorination facilities.

Water System Bond Improvements, Mont Belvieu, Texas for the City of Mont Belvieu - Project Manager for the design of improvements to the City's water system funded by a voter approved bond issue. Improvements included a 750 GPM groundwater well, 750,000 gallon composite elevated storage tank, and production facility including a generator and chlorination facilities. This project included coordination with a groundwater geologist in order to determine the availability of groundwater at adequate quantity and quality at the proposed site.

Golden Pass Liquefied Natural Gas Terminal, Sabine Pass, Texas - Project Manager for the design of two stormwater discharge outfalls and a firewater intake structure. Both aspects of the project included hydraulic and structural design. This project involved interaction of units with the influence of the Ship Channel. Under subcontract to the General (EPC) Contractor.

Wastewater System Improvements, Liberty, Texas for the City of Liberty (CDBG 729441) - Project Manager for \$8.1 million Texas Water Development Board Clean Water State Revolving Fund loan project including CDBG funds. Project includes improvements to the City's Wastewater Treatment Plant, a Sanitary Sewer Evaluation Survey of the collection system incorporating the use of ArcGIS, and subsequent improvements to the collection system including gravity line replacements and lift station improvements.

Water System Improvements, for the Walker County Special Utility District

- Project Manager for the \$4.3 million water improvement project with funding through the USDA Rural Development loans and approximately \$600,000 in grant funds. Project includes one new groundwater well, one replacement well, a groundwater production facility, a 250,000 gallon elevated water storage tank, and about twelve miles of water lines.

Water System Study for the Walker County Special Utility District - Project Manager for the hydraulic analysis of the entire distribution system. The studies included modeling with PIPE2000 and assessment of the supply, storage, and pressure maintenance facilities for TCEQ regulatory compliance through a 20-year design phase while allowing for the projected population growth in the area. This study combined with the Water Quality Evaluation of the Hwy 30 area resulted in the establishment of a Capital Improvements Program. Utilized ArcGIS in exhibiting the results.

Falba Community Water System, for the Walker County Special Utility District(CDBG 722809) - Project Manager for a Community Development Block Grant (CDBG) project to provide first-time water service to about fifty residents in northern Walker County. The project included about 32,000-LF of water distribution lines and development of a 14-inch diameter, 2,500-FT deep well with a 2-mgd capacity. Design and permitting requirements were met while plans for transporting the water to other parts of the service area were designed. During testing, the well produced water at 110-degrees. The well currently serves the Falba community with high quality drinking water at 70-degrees.

Sanitary Sewer Evaluation Survey, City of Nacogdoches – Project engineer for performance of a complete study of the city's wastewater collection system as part of a comprehensive Wastewater Master Plan. Project included hydraulic modeling of over 422,000 LF of gravity collection system, analysis and projection of growth patterns over a 30-year period, and recommendations for needed improvements over the study period for the city of maintain a proactive approach to continued growth and service to its customers. The Master Plan resulted in collection system rehabilitation and the rehabilitation or replacement of 10-lift stations. loads determined sizes of supports and maintaining compliance with the American Disability Standards.



- 39 years with SPI
- 39 years experience
- Texas Registered Professional Engineer #60676
- B.S. Civil Engineering, Lamar University, 1982

Jeff Beaver, P.E.

Project Principal

Mr. Jeffrey G. Beaver, P.E. has been with SPI since 1980, and has been personally involved in the design, preparation of plans and specifications, and construction of all types of municipal engineering projects. The following list of projects provides a sample of Mr. Beaver's experience.

Master Plan for the City of Beaumont – Project Manager for preparation of a Master Plan for the City of Beaumont. Preparation of the plan includes collection and review of historical data; use of existing water and sanitary sewer maps along with GIS information to develop electronic maps of the city's water distribution system and sanitary sewer collection system including all valves, hydrants, manholes, pipe sizes and types, and other available information; establishment of design flow rates; establish and evaluate potential growth areas within the City; establish type and sizes of major facilities needed to serve potential growth areas; and analyze future water production and wastewater treatment plant needs.

Walter Umphrey State Park, Jefferson County, Texas – Project Manager for design and construction administration of repairs to Walter Umphrey State Park due to Hurricane Rita damages. Both the North and South boat ramps required construction and repairs including reconstruction of concrete boat ramp and approach; reconstruction of three docks; and other miscellaneous repairs. The park also required reconstruction and repairs including repair of bulkhead; stabilization of sidewalks; repair/reset of benches; pier repairs; inspection of electrical installations; and other miscellaneous facility repairs. As part of the project at the Sabine Pass boat ramp there also had to be three docks reconstructed.

Sanitary Sewer System Improvements, Beaumont, Texas – Project Manager/Project Engineer for design and construction administration of sanitary sewer system improvements. The treatment plant expansion included an influent storm water lift station; effluent pump station; new chlorine disinfection facility; and rehabilitation of the chlorine contact basin. Anaerobic sludge digesters were rehabilitated, while tunneling through downtown Beaumont was required to construct new sanitary sewer interceptors. A new sanitary sewer was also installed inside of an existing brick egg-shaped combined sewer line to provide successful completion of the project.

Annexation Plan, Orange, Texas – Project Manager for preparation of an Annexation Plan for the City of Orange, Texas. The annexation plan provided for the annexation of 1,850 acres on the north side of Orange, Texas which included water and sanitary sewer improvements. Improvements to the water system included 18,300 LF of new 6" waterlines; 25 newly installed fire hydrants; and connection of the new and old systems. Sanitary sewer improvements included 2,300 LF of 6" sewer lines; 2,400 LF of 8" sewer lines; 4,350 LF of 10" sewer lines; a new lift station; and 1,600 LF of 6" force mains. The project also included some street and drainage repair and improvements at a total cost of \$1.9 million.

CERTIFICATE OF INSURANCE

Client#: 161799 SCHAUPOI
ACORD **CERTIFICATE OF LIABILITY INSURANCE** DATE (MM/DD/YYYY)
6/12/2018


THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer any rights to the certificate holder in lieu of such endorsement(s).

PRODUCER USI Southwest 9811 Katy Freeway, Suite 500 Houston, TX 77024 713 490-4600	CONTACT NAME: Zachary Vacek	
	PHONE (A/C, No, Ext): 713 490-4566	FAX (A/C, No): 713-490-4700
E-MAIL ADDRESS: zachary.vacek@usi.com		
INSURED Schaumburg & Polk Inc. 8865 College Street Beaumont, TX 77707-2898	INSURER(S) AFFORDING COVERAGE	
	INSURER A : XL Specialty Insurance Company	
	INSURER B :	
	INSURER C :	
	INSURER D :	
	INSURER E :	
INSURER F :		
		NAIC # 37885

COVERAGES		CERTIFICATE NUMBER:		REVISION NUMBER:		
THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.						
INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:					EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMP/OP AGG \$ \$
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO OWNED AUTOS ONLY <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS NON-OWNED AUTOS ONLY					COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	UMBRELLA LIAB <input type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input type="checkbox"/> RETENTION \$					EACH OCCURRENCE \$ AGGREGATE \$ \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below					PER STATUTE <input type="checkbox"/> OTH-ER <input type="checkbox"/> E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
A	Professional Liability		DPR9927145	06/10/2018	06/10/2019	\$2,000,000 per claim \$2,000,000 annl aggr.

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER Schaumburg & Polk, Inc., Consulting Engineers 8865 College Street Beaumont, TX 77707	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE 
--	---

SYSTEM FOR AWARD MANAGEMENT

SAM Search Results
List of records matching your search for :

Search Term : schauburg & Polk*
Record Status: Active

ENTITY	Schaumburg & Polk, Inc.	Status: Active
DUNS: 067252163	+4:	CAGE Code: 84TF0 DoDAAC:
Expiration Date: 07/09/2019	Has Active Exclusion?: No	Debt Subject to Offset?: No
Address: 8865 College St Ste 100		
City: Beaumont	State/Province: TEXAS	
ZIP Code: 77707-2846	Country: UNITED STATES	

SYSTEM FOR AWARD MANAGEMENT

SAM Search Results
List of records matching your search for :

Search Term : jeffrey g beaver*
Record Status: Active

No Search Results

SYSTEM FOR AWARD MANAGEMENT

SAM Search Results
List of records matching your search for :

Search Term : allen r ross*
Record Status: Active

No Search Results

SYSTEM FOR AWARD MANAGEMENT

SAM Search Results
List of records matching your search for :

Search Term : ricky j bourque*
Record Status: Active

No Search Results



“ SPI assisted us with navigating multiple funding sources for loans and grant money, as well as all Federal and State Agency coordination for all project review and approval processes. SPI provided quality work in a responsive manner from project conception through the completion of construction. We would highly recommend SPI. ”

Jerry Pickard - General Manager, G-M Water Supply Corporation

LOCATIONS

BEAUMONT

8865 College St, Suite 100
Beaumont, TX 77707
T: 409.866.0341

PORT ARTHUR

Plaza Square, Suite 208
Port Arthur, Texas 77645
T: 409.866.0341

HOUSTON

11767 Katy Fwy, Suite 900
Houston, TX 77079
T: 281.920.0487

TERRELL

108 Ida St, Suite 300
Terrell, TX 75160
T: 972.563.0205

TYLER

320 S. Broadway Ave, Suite 200
Tyler, TX 75702
T: 903.595.3913

