



Citywide On-Call Engineering Services for Transportation and Storm Drainage

Project No's. 7843, 7844, & 7845



**Smith
Engineering
Company**



Solutions for Today... Vision for Tomorrow

May 20, 2020

City of Albuquerque
Capital Implementation Program
One Civic Plaza, Room 7057
Albuquerque, New Mexico 87102

RE: Project No's. 7843, 7844 & 7845 | Citywide On-Call Engineering Services for Transportation and Storm Drainage

Dear Members of the Selection Committee,

Smith Engineering Company (Smith) appreciates this opportunity to submit our proposal for professional engineering services for the referenced projects. We have assembled a team with distinctive transportation, drainage analysis, and design experience and we have an exceptional record of performance. In addition, we have a respected structural engineering staff to complete structural designs. As the Project Manager, my experience combined with the other Smith Project Engineers result in many decades of engineering experience for projects located in the City of Albuquerque (COA) and other communities. Selecting Smith will bring an experienced and responsive engineering team to assist the City.

Our team members have provided on-call engineering services for many clients that include the COA, ABCWUA, NMDOT, AMAFCA, SSCAFCA, Sandia National Laboratories, Bernalillo County, Town of Bernalillo, and others.

We are pleased to submit this proposal that we believe will illustrate our technical ability, experience and our desire to work with the City. We look forward to your response after the committee proposal review.

Sincerely Yours,

A handwritten signature in black ink, appearing to read "G. Nemeth", is positioned above the printed name and title.

George Nemeth, PE
Vice President

Smith Engineering Company
georgen@smithengineering.pro

******Smith acknowledges receiving the pre-submittal meeting notes/presentation relating to this RFP******



Contents

I. General Information	1
II. Project Team Members	2
III. Respondent Experience.....	7
IV. Technical Approach.....	11
V. Cost Control	14
VI. Certifications	

PROJECT NO'S

7843, 7844, & 7845

I. General Information

1: Introduction to Smith Engineering Company

Smith is a privately-owned, regional engineering consulting firm, specializing in civil and structural projects in both the private and public sector from our offices in Las Cruces, Albuquerque and Roswell, New Mexico. Established in 1989, Smith has built a regional reputation for quality engineering in the Southwest. The expertise of our engineers, technicians, and support personnel cover many disciplines of civil and structural engineering.

Contact Info:

2201 San Pedro Drive, NE
Building 4, Suite 200
Albuquerque, New Mexico 87110
505-884-0700 | smithengineering.pro

Contact: George Nemeth, PE
georgen@smithengineering.pro



Firm Services

- Transportation Engineering
- Flood Control & Drainage Engineering
- Water & Wastewater Engineering
- Land & Site Development Engineering
- Structural Engineering
- Construction Services
- Materials Testing

Every community has unique needs. To tackle a community's infrastructure challenges, Smith's engineering approach is to develop solutions that reflect their individuality.

What sets us apart from the competition is the ability to listen to our clients' needs rather than telling them what to do. Smith values communication plans which keeps our clients well informed.

2: Number of Employees

Taking care of our employees has always been a priority. This is evident by being on the list of the *Albuquerque Journal's Top Work Places* for the past five years. This practice is consistently reflected in our quality of work.



Technical Discipline	Albuquerque	Las Cruces	Roswell	Total	NM PE Number
Civil Engineer	5	1	2	8	12284, 14232, 15792, 19482, 20287, 20435, 23566, 25766
Environmental Engineer	1			1	21990
Structural Engineer	1			1	24553
Engineer Associate	8			8	
Designer/CADD	3	3	1	7	
Field	6		1	7	
Field/Special Inspection			2	2	
Materials Testing			4	4	
Survey			2	2	
Administrative	2	2	3	7	
Project Specific Engineer	1	1	1	3	6290, 6420, 11704
Total	27	7	16	50	

3: Where the Services are to be Performed

Smith will be performing civil, drainage and structural services from our Albuquerque office and the Las Cruces office will provide roadway design support as needed. All of our subconsultants will provide services from their Albuquerque offices.

ABQ

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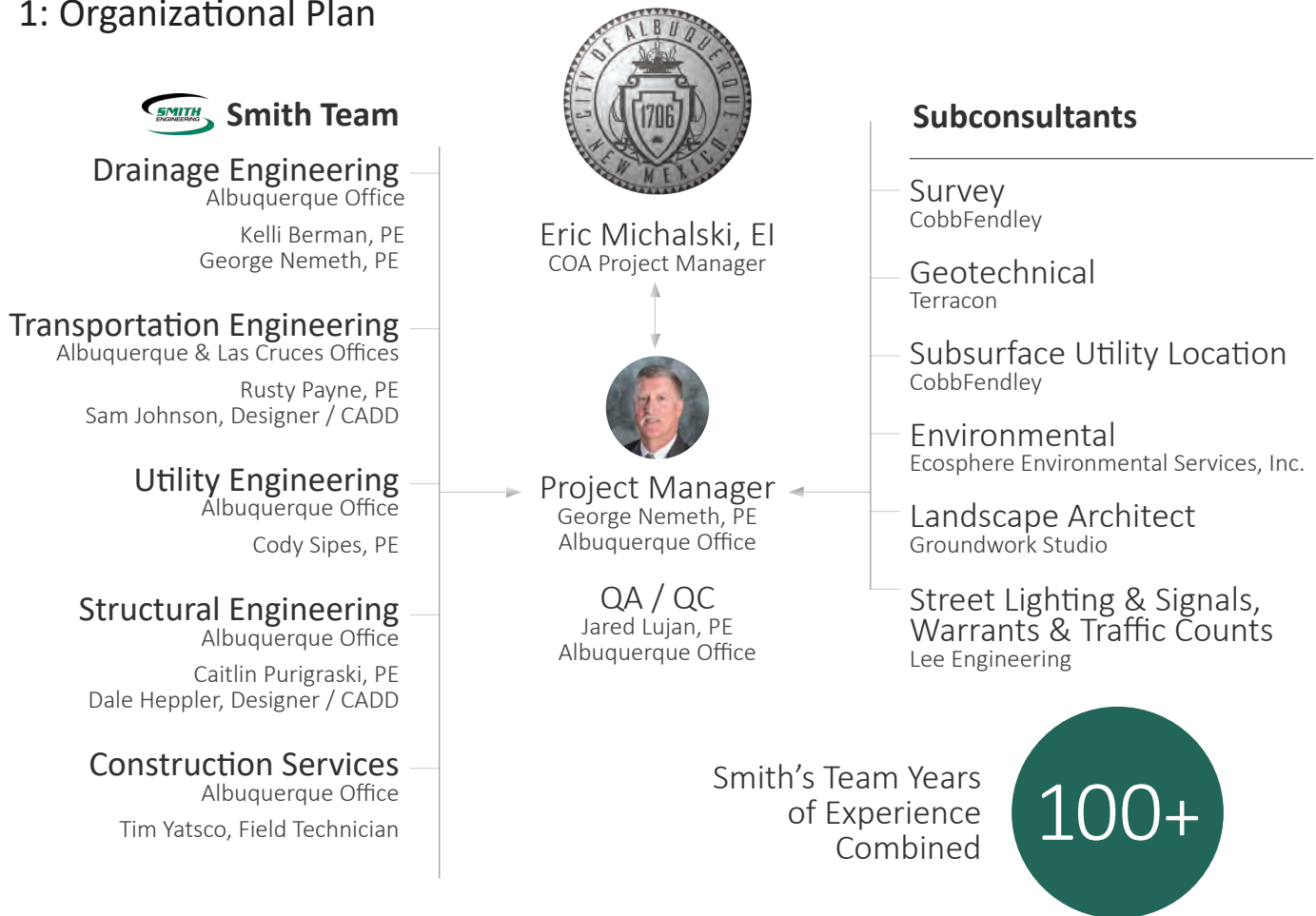
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II. Project Team Members

Smith's ability to successfully address the concerns outlined in this RFP will be accomplished by a specially selected team as shown in the following organization chart. This chart illustrates lines of authority and communication for our project team. George Nemeth, PE, will be the project manager for this contract. He will be the primary point of contact for the City and will coordinate project tasks among the Smith team and subconsultants. He will also be in charge of preparing the construction contract documents and providing bid and construction phase services.

1: Organizational Plan



2: Subconsultants

Terracon

Geotechnical:
Terracon Consultants, Inc.

4905 Hawkins, NE, Albuquerque, NM 87109
505-797-4287 | Contact: Mike Anderson, PE

Summary Description: Terracon is a dynamic consulting firm providing geotechnical, environmental, and construction materials testing services to clients at local, regional, and national levels. Terracon is an employee-owned company with more than 95 offices in 33 states. Each Terracon office, with access to the extensive geological experience and expertise of engineers, geologists, and soils technicians throughout their company, can provide an economical pavement design. Terracon has successfully completed geotechnical engineering services for numerous pavement designs as well as subsurface investigations and analysis for roadway projects in New Mexico. Terracon is local and is highly experienced and qualified for this project.





SUL and Survey: CobbFendley

6102 Jefferson NE, Suite B, Albuquerque, NM 87109
505-508-0786 | Contact: Sean Wolfe

Summary Description: CobbFendley provides professional SUL and land surveying services and has grown into a top-ranking firm that offers a range of integrated services that support value and quality-based solutions for their clients. CobbFendley offers regional presence throughout New Mexico, Texas, and Utah. Their project management approach emphasizes effective communication with a commitment to quality, integrity and engineering excellence. CobbFendley's work has expanded to include fundamental and specialized services needed to complete the most innovative infrastructure projects. CobbFendley was chosen for this project because of their extensive portfolio of successful work.



Environmental:

Ecosphere Environmental Services

320 Osuna Rd NE C1, Albuquerque, NM 87107
505-954-1570 | Contact: Heather Parmeter

Summary Description: Ecosphere Environmental Services, Inc. (Ecosphere) is a full-service environmental consulting firm Founded in 1982 in Farmington, New Mexico. They have made Clean Water Act permitting, Endangered Species Act compliance, and National Environmental Policy Act documentation core business practices, establishing a successful record for preparing high-quality reports for local, state, and federal agencies. Their core Albuquerque team has decades of combined environmental compliance experience in metro area transportation and drainage/stormwater management projects, and is highly responsive to client needs.



Landscape Architecture: Groundwork Studio

One Park Square | 6501 Americas Pkwy NE, Suite 350
Albuquerque, NM 87107
505-212-9126 | Contact: Will Moses, PLA, ASLA

Summary Description: Groundwork Studio's goal is to take landscape architecture to its full potential in terms of site design coordination, improving overall project synthesis, ecological resilience, functionality, and site specific experience. They specialize in civic, recreational, and educational environments, facilitating understanding of interconnections through safe, accessible, and interactive design. Their services include site planning, landscape integration, recreational facility master planning, regionally appropriate planting, soil building, and irrigation design. Amy Bell, founding principal landscape architect is also an ISA Certified Arborist, and ISA Tree Risk Assessment Qualified, and is the current New Mexico Mainstreet Revitalization Specialist. Managing principal Will Moses is a lifelong resident of New Mexico with a background in historic preservation and regionally appropriate design. Groundwork Studio was chosen to conduct all services described above.



Traffic Lighting & Signals, Warrants & Traffic Counts: Lee Engineering

8220 San Pedro Drive NE, Ste 150,
Albuquerque, NM 87113
505-338-0988 | Contact: Paul Barricklow, PE, PTOE

Summary Description: Lee Engineering (Lee) is a specialized Traffic Engineering and Transportation Planning firm dedicated to providing exceptional services to both public and private sector clients for over 30 years. Their team of highly skilled professionals have focused their careers in traffic and transportation engineering through hands-on experience and concentrated education. Their passion for improving the way people, goods, and services move throughout our communities is apparent in each of their projects. The team of professionals at Lee offer tailored solutions to any roadway projects under this contract.

3: Qualifications of Smith Team Members



Education:

M.S. in Civil Engineering, UNM

George Nemeth, PE 12284, ASCE Member | Project Manager

Mr. Nemeth has over 30 years of experience in civil engineering projects including grading and drainage design, highway drainage analysis and design, and analysis and design of hydraulic structures, flood control channels, detention/retention ponds and water and sanitary sewer pipeline designs. His experience also includes establishing project scope and budget; supervising and coordinating design team members; coordinating with clients, subconsultants, reviewing agencies, and contractors; and overall technical responsibility for complete projects.



Education:

M.S. in Civil Engineering
Texas Tech

Jared Lujan, PE 20435, ASCE Member | QA/QC

Mr. Lujan, with 11 years of experience, is one of Smith's lead civil project engineers. He has experience in hydrologic and hydraulic analysis, and the design and management of storm sewer, sanitary sewer, waterline design and rehabilitation, pumps, treatment facilities, and cost estimating projects. He has extensive experience in Construction Phase Services including time spent as a Resident Project Representative. Mr. Lujan has worked with communities in NM, AZ, and CO.



Education:

B.S. Env. Engineering, NAU

Kelli Berman, PE 25766, NMFMA Member | Drainage Engineering

Mrs. Berman has more than 7 years of experience in drainage and flood control projects. Her experience includes Drainage Management Plans, hydrologic/hydraulic modeling and drainage design. Along with this experience, She has been involved in developing Environmental Assessment and Impact Statement reports and roadway improvement projects. She is familiar with AutoCAD Civil3D, Arc Geographic Information System (ArcGIS); Hydrologic Engineering Center Hydrologic Modeling System (HEC HMS), HEC Geospatial Hydrologic Modeling Extension (GEO HMS), HEC River Analysis System (HEC RAS), Watershed Modeling System (WMS), and CulvertMaster.



Education:

B.S. Civil Engineering, NMSU

Cody Sipes, PE 19482, ASCE Member | Utility Engineering

Mr. Sipes has 15 years of experience in civil engineering and project management. This experience includes grading and drainage design, the design of pump stations and water treatment facilities, water transmission and distribution systems, wastewater collection systems, water storage facilities, water source development projects and planning reports. Project design responsibilities include hydrology calculations for runoff determinations, hydraulic design for water systems and sewer collection systems, corridor modeling for roadway improvements, HEC-RAS modeling for flood control structures, and AutoCAD Civil 3D grading for site development. He has completed over a dozen water system preliminary engineering reports, technical memos, and drainage studies for communities throughout New Mexico. He understands the requirements of the various funding agencies and their grant programs. He has worked with multiple regulatory agencies to ensure that projects are completed from their initial planning stages.



Education:

B.S. Civil Engineering, NMSU

Rusty Payne, PE 23566 | Transportation Engineering

Mr. Payne graduated from New Mexico State University in June, 2006 with a degree in Engineering Technology. He worked as an intern that spring on construction observation at the Las Cruces Water & Wastewater Treatment Plant Renovation. Since joining Smith, Mr. Payne has worked on subdivision, street, sanitary sewer, and water design projects. His experience includes municipal/urban streets and roadways, water distribution and transmission lines, water well and storage facilities, sanitary sewer collector lines, lift stations, and construction services. His experience relevant to this contract includes: US 285/Richey Ave. (Artesia, NM), 13th St. Phases I and II (Artesia, NM), Dal Paso Blvd. Reconstruction (Hobbs, NM), NM 273, Roadrunner Parkway Extension (Las Cruces, NM), and ADA/Sidewalk Improvements for Alamogordo, NM.





Education:
M.S. Structural Engineering, UNM

Caitlin Purigraski, PE 24553, ACEC, ASCE, NMSPE Member Structural Engineering

Ms. Purigraski has more than six years of experience in structural design and analysis of reinforced concrete, prestressed concrete, masonry, aluminum, cold-form steel, and wood. Her background includes finite element analysis and modeling, parametric modeling, using STAAD Pro, Revit, AutoCAD. She has working Code Knowledge of ASCE 7, ACI 318, PCI, AISC, AISI cold-formed steel, ADM, NDS, IBC. Before joining Smith, Ms. Purigraski was a product development engineer at a solar racking manufacturer where she worked on component enhancements and the creation of a new product line. She oversaw the creation of fabrication drawings, coordinated with vendors, designed components to applicable standards, created test plans, ran tests, and created test reports. She built software applications that took preliminary site/product information to completion.



Education:
B.S. Engineering Technology, NMSU

Tim Yatsco | Construction Services Team Leader

Mr. Yatsco has 27 years of experience in observation, inspection, and materials testing for water, sewer, storm drain, streets and roads, gas, electrical, and other dry utilities. He has extensive knowledge in managing construction projects from development to completion. He also developed the Electronic Daily Field Reporting format for the company. Mr. Yatsco's experience includes verification of pay applications and quantities, coordination of Weekly Progress Meetings. He is knowledgeable in construction specifications for NMSHTD, AASHTO, City of Santa Fe, Santa Fe County, City of Albuquerque, NMDOT, City of Rio Rancho, City of Aztec, AWWA, APWA, and others.

4: Unique Knowledge of Key Team Members

The following page outlines unique, relevant experience and skills of the proposed key team members for this contract.

George Nemeth, PE



Unique Knowledge - Mr. Nemeth has been working on projects within the City of Albuquerque for more than 25 years. Over this time he has taken projects through the many City processes including DRB, DRC and EPC, as well as Hydrology review and approval. Most recently, he gained DRC approval for the KAFB Conveyance Line project. It included open trench and horizontal direction drilling (HDD) for a KAFB non-potable water transmission line in Ridgecrest Drive SE between San Pedro and Louisiana. This project required coordination with both the COA and KAFB. Mr. Nemeth is also the current project manager for the COA Hydraulics and Drainage On-call Engineering contract administered by COA DMD.

Relevant experience & skills Include: Current PM for COA on-call contract. Recent approvals gained from DRC. Over 25 years working within the COA and with COA staff.

Rusty Payne, PE



Unique Knowledge - Mr. Payne has completed multiple urban transportation projects with NMDOT and municipalities throughout New Mexico. The most recent collaborative project was NMDOT's NM 273 roadway reconstruction in Sunland Park, NM. Smith has managed multiple on-call service contracts including traffic study contracts for municipalities like Artesia, Rio Rancho, Silver City, Doña Ana County, Sandia National Laboratories, and the Pueblo of Isleta.

Relevant Experience and Skills Include:

Alignment studies, traffic analysis, drainage studies, intersection analysis, surveying and right-of-way mapping, public involvement programs, agency coordination, preliminary and final design plan preparation, construction cost estimating and bidding services.

Kelli Berman, PE



Unique Knowledge - Mrs. Berman specializes in the field of hydrology and hydraulics. She has developed numerous complex numerical hydrologic and hydraulic models in Albuquerque and throughout the state of NM. She will provide the City with the cutting-edge H&H tools such as dynamic wave hydraulic numerical models to simulate storm drains in the flat downtown and valley areas, 2D surface water modeling to map complex surface flow conditions and floodplains, and geospatial analysis required for constructing hydrologic models.

Relevant Experience and Skills Include: Detailed hydrologic modeling, and complex hydrologic/hydraulic modeling with SWMM (ponds, storm drains, weirs, pump stations), open channel hydraulic analysis with HEC-RAS.

Cody Sipes, PE



Unique Knowledge - Mr. Sipes has 13 years of experience providing consultant engineering services to municipalities throughout the State of New Mexico. He is the Engineer of Record on street and drainage projects for the City of Socorro including the Fairgrounds Detention Pond, Highlands Detention Pond, Cuba Road Area Street and Drainage Improvements, and A Street, B Street and Park Street roadway and drainage improvements. These projects combined provided over 40 acre-feet of storm water detention, several thousand feet of roadway and storm drain improvements, and concrete lined channels with capacities that exceed 250 cfs. He is currently the project manager for several ABCWUA utility projects that are in various stages of completion.

Relevant Experience and Skills Include: Mr. Sipes has utilized several software programs to complete hydrologic and hydraulic modeling, and is proficient in Autodesk Civil 3D for roadway, drainage and utility design.

Tim Yatsco



Unique Knowledge - Mr. Yatsco has 26 years in the construction observation field. He created the Daily Field Report format and the current Company wide use of "Raken", a construction observation reporting software. Mr. Yatsco can provide that "missing link"...as a competent and true construction/communication liaison. He is experienced in "Real Time Construction Reporting".

Relevant Experience and Skills Include:

Mr. Yatsco was lead observer for AMAFCA Area Wide Rehab., numerous sub-divisions and the ABCWUA Small Diameter Rehab. Projects (Sewer and Water). All field observation documentation will be conducted with the assistance of the "Raken" software. This will produce a PDF that will be automatically distributed by email to the City when signed by the field technician, this eliminates reporting lag time.

Other on-call services such as funding application assistance, permitting, or assistance with record documentation and database entry can be provided by our team. We have extensive knowledge of funding program requirements and have successfully secured funding for our clients from the sources listed below.



NM Department of Finance, Community Development Block

Grant (CDBG) Program

- ✓ Planning Grants
- ✓ Project Grants



NM Environment Department

- ✓ Bridge Loans
- ✓ Clean Water State Revolving Fund (CWSRF)
- ✓ Rural Infrastructure Program (RIP)
- ✓ State Appropriations (SAP)
- ✓ Drinking Water State Revolving Fund
- ✓ Legislative Appropriations



NM Finance Authority

- ✓ Colonias Infrastructure Program
- ✓ Local Government Planning Fund
- ✓ Public Project Revolving Fund
- ✓ Water Trust Board



USDA, Rural Development Program

- ✓ Colonias Program
- ✓ Community Program



U.S. Department of Commerce, EDA

- ✓ Public Works Investment Program



U.S. Department of the Interior, Bureau of Reclamation

- ✓ Title XVI Water Conservation Program- Grant



U.S. Environmental Protection Agency, Region 6

- ✓ Environmental Justice Program
- ✓ Periodic Grant Opportunities

III. Respondent Experience

Smith Engineering has a vast portfolio of projects with scopes that are equal to those listed in the RFP. Our team's project experience consists of designing roadways, replacing or upgrading existing utilities, improving drainage design, and conducting alignment studies. Each project brings new challenges and our team is ready to tackle those challenges head on in a manner that respects budgetary requirements. This benefits the City with limited delays in projects and a final product that meets the needs of the citizens.

Project Name	Design & Alignment	Traffic Control	Urban Roadway	Drainage	Pedestrian Facilities (ADA)	Access Control	Signals	Coordination	Utilities	Traffic Counts
Artesia- 13th Street Reconstruction Phase I & II	X	X	X	X	X	X	X	X	X	X
Hobbs- Dal Paso Street Reconstruction		X	X		X	X		X	X	
Rio Rancho- Northern Blvd. Widening		X	X	X	X	X		X	X	
Albuquerque- Alameda Blvd. Widening		X	X	X	X	X		X	X	
Bernalillo County- NM45 / NM314 Roadside Safety Audit	X	X	X					X	X	X
Ruidoso- NM 532 Alignment Study	X	X		X						X
Las Cruces- US 70 Cable Barrier		X								
Roswell- US 70 Road Improvements	X	X	X	X	X	X	X	X	X	X
Roswell- US 380 Road Reconstruction	X	X	X	X	X	X	X	X	X	X
Santa Fe- Rodeo / Richards Intersection and Signalization	X	X	X		X	X	X	X		X
Las Cruces- Main St. Reconstruction (Current)	X	X	X	X	X	X	X	X	X	X
Sunland Park- NM 273 Reconstruction (Current)	X	X	X	X	X	X	X	X	X	X

1: Previous Projects of a Similar Nature

PROJECT 1

Marble-Arno Pond Feasibility Study | Client: City of Albuquerque

The City of Albuquerque (COA) hired Smith to evaluate the feasibility of the Marble-Arno Detention Pond, which was proposed as one of several facility improvements in the Mid-Valley Drainage Management Plan (MVDMP) prepared by Smith in 2012. Following completion of the MVDMP, it was determined that a significant amount of additional stormwater flows will enter the Mid-Valley drainage basin from the South Broadway area. Additionally, due to changes in development plans for the downtown area, the COA recently determined that another pond proposed in the MVDMP is no longer possible. As a result of the increased conveyance and storage requirements, evaluation of major storm drain improvements and re-configuration of the original Marble-Arno Pond were required. Smith provided four design options for the Marble-Arno Pond, including detailed grading plans, and modeled detailed storm drain networks to convey the additional flows from the South Broadway area. Smith also provided conceptual level construction cost estimates and a suggested project phasing. During the feasibility study, every effort was made to maximize the existing storm drain facilities and to design the Marble-Arno Pond as a gravity facility to avoid a pump station, in order to provide cost savings to the City from a long-term operations and maintenance standpoint.



Project Costs at Project Completion:

Under Construction

Years Services Provided:

2019 - 2020

Specific Responsibilities:

Cody Sipe: Hydraulic Analyses, Final Design, Cost Estimating; Rusty Payne: QA/QC

Owner's Name and Address:

John Mackenzie | City of Albuquerque | 505-768-2778

How Project Relates to this RFP:

Hydraulics. Design. Cost Estimating. Studies.

PROJECT 2

Street Maintenance Program | Client: City of Alamogordo

The project included mill/inlay plans for Washington Avenue (10th Street to Indian Wells Road), Catalina Lane (Florida Avenue to Hawaii Avenue), and Ridgecrest Drive (10th Street to Scenic Drive). ADA ramp improvement plans were completed for each intersection found to be subsufficient by the City during scope development. Water services along Washington Avenue were shown for replacement and new water stubouts/connections were shown at intersecting streets. A striping plan and rundowns along Washington Avenue was also developed.



Project Costs at Project Completion:

Under Construction

Years Services Provided:

2019 - 2020

Specific Responsibilities:

Rusty Payne: Roadway Design, Cost Estimating

Owner's Name and Address:

Bob Johnson, Project Manager | 575-439-4337

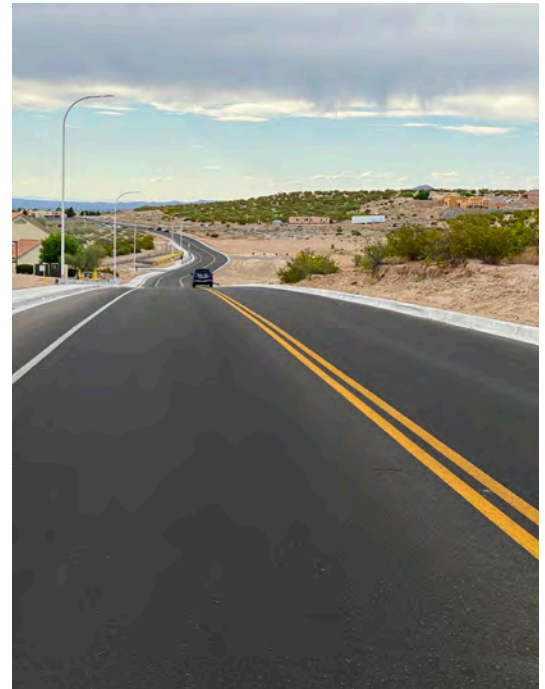
How Project Relates to this RFP:

Roadway Design. Cost Estimating.

PROJECT 3

Roadrunner Pkwy Extension | Client: City of Las Cruces

The City of Las Cruces (CLC) contracted Smith to design the western half of Roadrunner Parkway (Minor Arterial) from US 70 to Settlers Pass. Roadrunner Parkway connects on the southern end to an NMDOT administered highway, continues north across an undeveloped area, crosses the Sandhill Arroyo, and ties into Settlers Pass on the northern end. The Sandhill Arroyo has FEMA designated Zone AE floodplains. Smith completed a hydrologic and hydraulic study of the Sandhill Arroyo and areas contributing directly to Roadrunner Parkway. An existing and proposed conditions hydrologic models were built in the US Army Corps of Engineers HEC-HMS. Drainage improvements consisted of multi-plate metal arch pipe culverts for crossing the Sandhill Arroyo, storm drain pipes (18"-48" RCP Class III) and inlets within the new roadway, headwalls and wingwalls, riprap rundowns, gabion baskets, and vertical risers. The roadway design included coordination with the NMDOT, streetside lighting design, traffic control plans, signage and striping plans, erosion and sediment control plans, utility relocation plans, Right-of-Way acquisition, and new ADA compliant ramps.



Project Costs at Project Completion:

Design: \$ 342,942 Bid: \$ 2,413,240

Years Services Provided:

2016 - 2019

Specific Responsibilities:

Rusty Payne: Roadway & Utility Design

Owner's Name and Address:

Tony Trevino, PE, CFM | 575-528-3168

How Project Relates to this RFP:

Roadway and Structural Design. Cost Estimating.
Drainage Analysis/Design. Utility Lines.

PROJECT 4

West Loop Road | Client: County of Eddy

Eddy County selected Smith to provide technical design and engineering services for the construction of the 7.5 mile road in Carlsbad, New Mexico. Smith assisted with the development of a plan to tie into the existing city streets, and create a bypass route around the City of Carlsbad. Smith provided several cost effective solutions to comply with strict budgets while still maintaining an efficient and practical design for the public. Most of the project consists of designing road sections over undeveloped land which includes three major watercourses. The design process was completed with detailed roadway cross sections/profiles, low-flow crossings and other drainage solutions, geotechnical analysis, Right-of-Way permits, coordination with utility companies and analysis of natural base materials.



Project Costs at Project Completion:

Design: \$ 1,351,228.36 Construction: [Shelved]

Years Services Provided:

2014-2016

Specific Responsibilities:

Rusty Payne: Roadway / Intersection Design

Owner's Name and Address:

Ray Romero | 575-887-9511

How Project Relates to this RFP:

Roadway and Signal Design. Structural Design.
Traffic Engineering. Drainage Studies.
Cost Estimating. Utility Lines.

PROJECT 5

Dal Paso Street Reconstruction | Client: City of Hobbs

This project consisted of mill and overlay, removal of median islands within the southern limits of the project, ADA sidewalk and ramp improvements, new traffic signals at the Michigan/Dal Paso and Bender/Dal Paso intersections, reconstruction of the free-right turn lane from Bender Boulevard headed south onto Dal Paso Street, and intermittent water and storm drainage improvements. Grades along the eastern and western sides of Dal Paso were modified to create positive drainage patterns and eliminate ponding areas. In conjunction with pavement overlay, adjusting valve boxes, manholes, and irrigation systems were required. The project also included traffic control and permanent striping efforts; permanent signage was handled under an existing City project.



Project Costs at Project Completion:

Construction: \$3.5 Million

Years Services Provided:

2013 - 2014

Specific Responsibilities:

Rusty Payne: Roadway / Intersection Design, Drainage and Traffic Signals

Owner's Name and Address:

Todd Randall | 575-397-9237

How Project Relates to this RFP:

Roadway and Signal Design. Traffic Engineering.
Drainage Studies.

PROJECT 6

Bryn Mawr Storm Drain Improvements | Client: City of Albuquerque

This project replaced approximately 800 LF of open channel with a concrete box culvert to provide an all-weather crossing on Bryn Mawr Drive. Smith prepared a design analysis report for this project, provided the design, and is providing construction phase services. The project included hydraulic design of the concrete box culvert and a unique water quality inlet structure, re-grading of affected properties, and waterline relocation.



Project Costs at Project Completion:

Construction: \$999,147

Years Services Provided:

2012-2017

Specific Responsibilities:

George Nemeth: Construction Phase Services

Owner's Name and Address:

Moby Mirza | 505-768-2767

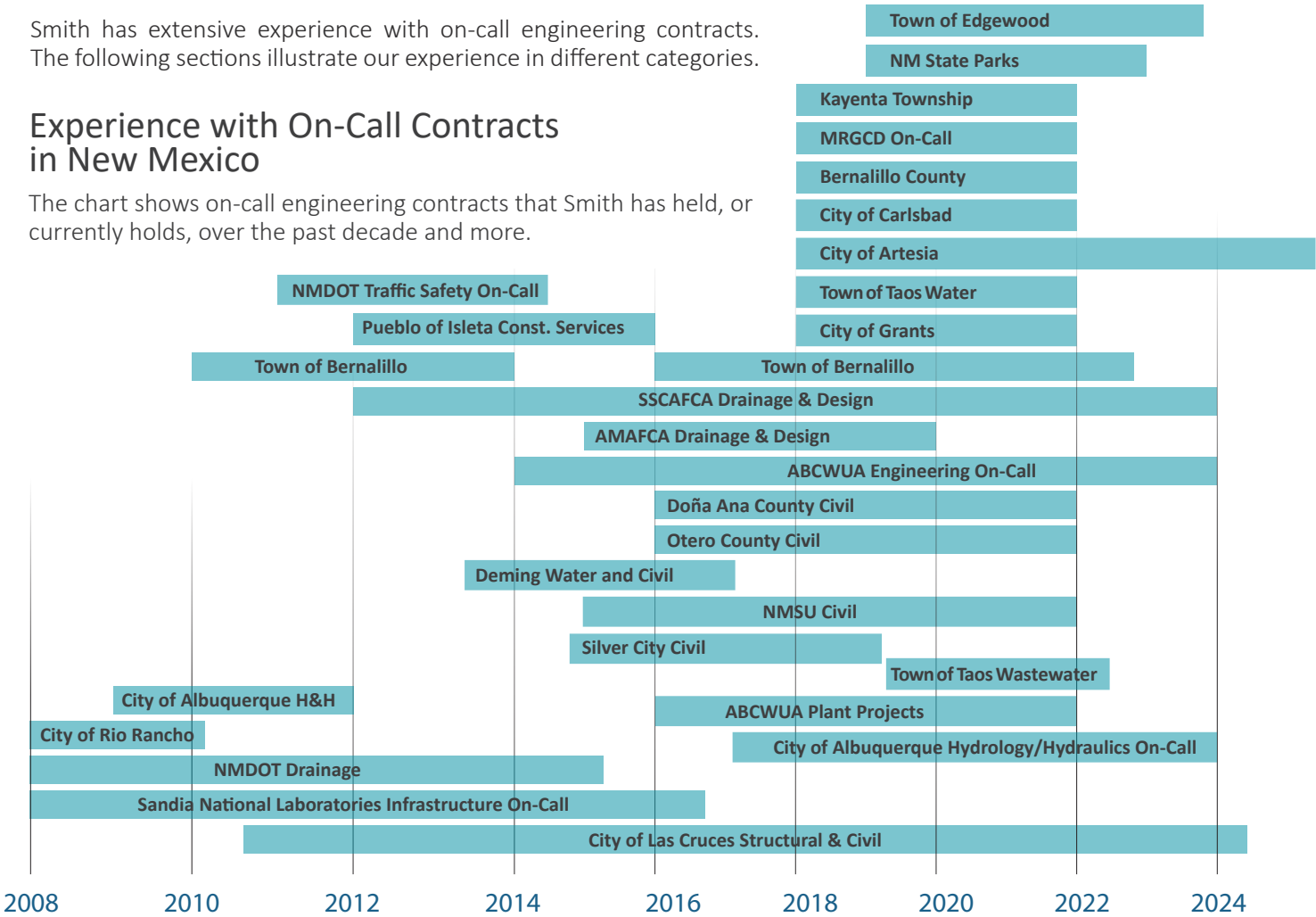
How Project Relates to this RFP:

Hydrology/Hydraulics. Storm Water Quality.
Design Analysis Report. Construction Phase Services.

Smith has extensive experience with on-call engineering contracts. The following sections illustrate our experience in different categories.

Experience with On-Call Contracts in New Mexico

The chart shows on-call engineering contracts that Smith has held, or currently holds, over the past decade and more.



2: Project Manager’s City Experience



Mr. Nemeth has been providing services for the City of Albuquerque for more than 25 years. He has provided these services within the requirements of the City of Albuquerque DPM, standard drawings, and specifications and has been through the EPC, DRB, DRC and the Hydrology design review and approval process. The following is a representative list that indicates Mr. Nemeth’s continuous involvement with the City of Albuquerque design and review departments over the last 5 years:

- DRC approval was received on May 2017 for a pipeline project in Ridgcrest Drive.
- In 2016, he received approval for a commercial lot Grading & Drainage Plan at 10116 Cochiti Road SE.
- In 2015, he was part of a team that met with the PRT. The task involved meeting with the PRT, developing grading & drainage plans and applying for a Grading Permit. Unfortunately, the project was stopped.
- Mr. Nemeth was the Smith project manager for the construction phase of the City’s Bryn Mawr Storm Drain Improvements project. The project was completed in April 2017.
- Mr. Nemeth is the current project manager for a COA On-Call H&H contract (2017-2020). He has completed 16 of the 17 task orders so far over the past 3 years. He is also the Project Manager for the new 2020 City of Albuquerque H&H On-Call.

Mr. Nemeth and all the other project team members have recent experience directly with the City or indirectly through other projects within the City limits as described throughout this proposal. Smith projects are managed with an emphasis on communication to not only share design knowledge, but to incorporate our experience working with the City.

IV. Technical Approach

On-call engineering projects generally, but not always, consist of small design tasks requiring a fast response time. Smith's proposed Project Team will be available for each task assigned for this contract. By having a dedicated team, we can guarantee continuity and create documents that meet the COA criteria quickly and efficiently.

1: Understanding What the City is Requesting

Smith understands that the City is seeking services for the following:



Design and Study Phase Services

- Roadway Evaluations
- As-built Search/Review
- Bicycle Facility Implementation
- Drainage Evaluations
- Hydraulic/Hydrologic Analysis
- Signal, Timing Plans and Warrant Analysis
- Traffic, Pedestrian and Bicycle Counts
- Environmental Investigation/Geology
- Surveying, including plat applications
- Monumentation
- Utility Investigations (SUE)
- Public Meetings
- DRC Submittals
- ROW Services, Title and Exhibits
- Street and Landscape Design

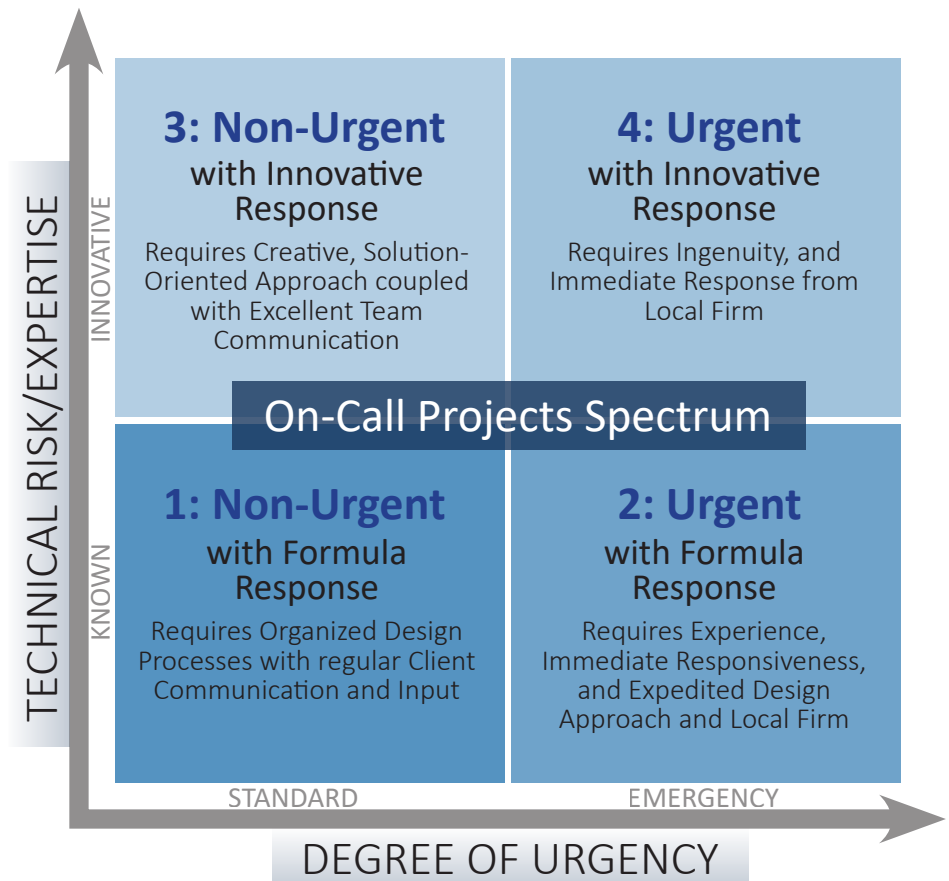
Federal Funding / Certifications

- Environmental Certifications
- Utility Certification
- Railroad Certification
- Right-of-Way Certification
- Intelligent Transportation System Certification

Bidding and Construction Phase Services

- Plan Sets
- Specifications
- Estimates
- Construction Contract Documents
- Construction Meetings
- RFI Review
- Record Drawing Preparation and Review
- Construction Management / Inspection Services

2: How Smith Engineering Will Perform the Services



The On-Call Projects Spectrum figure includes four quadrants that summarize the differing nature of various On-Call Projects. Some projects are the product of carefully planned facility improvements, and involve unit processes or upgrades that we can implement on a scheduled basis, as shown in Quadrants 1 and 3. Conversely, other projects result from equipment or facility failures, and we often characterize them as emergencies or imminent threats. These projects require a different design approach, and a more intense level of communication and support. Quadrants 2 and 4 illustrate this.

In addition to the urgency of a given project, there are also varying degrees of technical expertise and risk that are required. For example, we consider the design of a road intersection a relatively straightforward process, a "known entity", and we could represent it in either Quadrant 1 or Quadrant 2. Alternatively, a particular traffic safety problem may not have an off-the-shelf solution, but instead requires a more creative thought process that includes brainstorming and collaboration with industry experts, vendors, contractors, engineers, and operators. Quadrant 3 or Quadrant 4 represents these "custom" solutions.

Quadrant 1 (Non-Urgent / Known)

Our work process for every project, including all projects described in the scope of work, consists of the following items:

- **Conduct a kick-off meeting** where the project team will meet to discuss scope, schedule, budget and the approach to the project. We also define the City's expectations that determine the success of the project.
- **Team meetings:** These will occur throughout the project to assess project progress, identify upcoming deliverables, identify problems, and develop solutions to overcome the obstacles to completion of the project.
- **Prepare the work plan:** This effort results in the work plan that defines the project specifics related to team members, deliverables, schedule, and budget.
- **Design:** This is the process of producing the technical deliverables and will include meetings with team members and client representatives to obtain input to the project for technical issues.
- **Progress meetings:** These will occur throughout the project at regular intervals or more frequently as required. These meetings allow the team to know the status of the project and to discuss issues such as schedule, budget and technical items.
- **Final design package delivery:** This includes delivery of the final design product to the City including plans, specifications, cost estimates, SWPPPs and other design items for the bidding process.
- **Bidding and Construction Services:** If requested, our team will provide bidding and construction services at the level requested by the City ranging from minimal involvement to full construction services.

Quadrant 3 (Non-Urgent / Innovative)

For projects that require a higher degree of initial design, innovation, and creative input (Quadrant 3), the Smith Team would prepare (in addition to the items for Quadrant 1) a Feasibility Study/Technical Evaluation prior to producing a 30% design. This Feasibility Study/Technical Evaluation would provide detailed evaluation of multiple technology options that may be applicable for a given design project. Using input and feedback from the City, and a detailed evaluation of advantages and disadvantages, we will provide a design solution.

Quadrants 2 and 4 (Urgent Projects)

For urgent or emergency on-call projects that fall within Quadrant 2 or 4 a very different technical approach is required. For these projects, the Smith Team will use the following approach:

1. **Immediate Meeting** – This initial meeting will communicate the critical needs, challenges, and expectations. On the same day, Smith will deliver a loosely defined project scope and design direction to the City. The required project deliverables will be determined (reports, drawings, calculations, etc.), and a fast-track project schedule will be defined.
2. **Design Meeting** – This meeting, which may take place at the site, will include sharing of additional project information, costs, and schedule updates.
3. **Design Deliverables** – To save time, report deliverables will be prepared in a Technical Memorandum format. We will provide Preliminary Design plans (80%) and Specifications in a standard format for immediate bidding or in an abbreviated format for use by the City emergency contractors.
4. **Construction Oversight Services** – The Smith Team has field engineers and technicians available to perform construction oversight throughout the construction time frame. This service is important for emergency projects. We are local and provide these services with proficiency.

Quality Control Procedures

Mr. Lujan will apply the following Quality Control Procedures to assure accuracy and adequacy of each work product (computations, analyses, models, reports and plans).

- Communication is most important. Mr. Lujan will regularly consult Mr. Nemeth (Project Manager) to ensure that constant, clear, well documented communication continues throughout the project (meeting minutes, emails, plan set reviews with team members and the COA).
- For each task within each project, review data/references, calculations, analyses and design models prior to team members writing reports or preparing plans. A fresh look (review) by Mr. Lujan is critical (before proceeding to the next task), as he will not be involved in the day to day analyses and designs.
- Each review will be documented with Smith Checklists, dated and signed by Mr. Lujan.
- Weekly Design/Plan Set review meetings – Mr. Lujan will promote weekly team meetings to ensure all team members are on track in the correct analysis and design direction.
- Mr. Lujan will review all subconsultant submittals to resolve with the subconsultant any questions or issues prior to adoption of their results or recommendations.

Benefits of Choosing Smith Engineering

Smith has experience. Smith has the talent and familiarity with the City to perform the services. More importantly, Smith knows how to manage projects, limit setbacks, and carefully communicate with our clients. That's what sets us apart from the competition. Fulfilling our mission, "Solutions for Today, Vision for Tomorrow," we engineer for the future while maintaining a budget. Our long list of quality clients have been pleased with Smith's efforts and we have been privileged with repeat work.

Communication and Public Involvement

Smith personnel have extensive experience in including the community and appropriate stakeholders in the projects that impact their City. In a City the size of Albuquerque, it is very critical to include the citizens input and keep project updates transparent to avoid miscommunication and project headaches. Examples are the NMDOT NM 273 (Sunland Park), NM 26 (Hatch) roadway improvements where Smith conducted numerous public meetings and several face-to-face interviews of home and businesses owners. Law enforcement and the fire marshall were also interviewed to gain their insight. The public's input was incorporated into the project design and solutions were integrated that otherwise wouldn't have been a part of the design such as curb returns, driveway size, Right-of-Way issues, and street lighting.

Specialized Problem Solving

We have the experience combined with expertise to develop specialized/detailed/complex hydrologic and hydraulic models. Examples include the Mid-Valley DMP (dynamic very large SWMM models) and the Dona Ana DMP (HEC-RAS 2D surface water models). Smith won an ACEC award for this project. Our team has specialized traffic related experience such as designing flat angle parking on Main Street in Artesia as a compromise to parallel parking required by NMDOT and regular angle parking desired by the local businesses. Additionally, on an Artesia roundabout project, the team provided median parking to increase the on-street parking in the downtown area.



Familiarity with the City of Albuquerque and other Standard Guidelines

The Smith team has followed the Standard Guidelines in many past projects with the City of Albuquerque. Some that we predict may be required for this contract are:

- COA Standard Specifications and Drawings
- Public Right-of-Way Accessibility Guidelines
- COA DPM
- MUTCD
- AASHTO
- ADA (PROWAG)
- Highway Capacity Manual
- NMDOT Standards
- COA DRC
- NACTO

V. Cost Control

1. Cost Control and Cost Estimating Techniques

Cost Control of the Design Process

Smith keeps the budget paramount when identifying and selecting best-fit engineering solutions.

Our “Vision” accounting software will be utilized weekly to review our costs to date (labor, subconsultants and direct), and to ensure our expenses are correlating with the contract scope and fee at each milestone.

Corrective Actions – If the design budget is exceeded, Mr. Nemeth will determine if Smith has exceeded the estimated scope effort and should therefore absorb the overrun, or determine if the COA has revised the scope which caused the overrun. In the latter case, he will inform and coordinate with the COA Project Manager. If a lower fee is expended than contracted, Mr. Nemeth will discuss and coordinate with COA to consider additional design features or design refinements that may be added to the project scope.

We will begin each task with a scoping meeting. Once work begins, we will take the following steps to control project design costs:

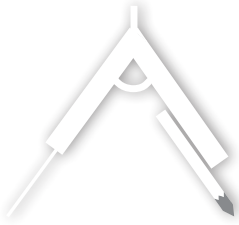
- Set up the project with short, periodic milestones. Check progress weekly against the milestones to make sure we are staying on schedule, on budget, and on task.
- Conduct site visits and attend regular team meetings during the design to refine our solution.
- Conduct quality assurance/quality control reviews at milestones to make sure our work is correct and that we are staying focused on the objectives.
- Attend meetings with the City’s project representatives to clarify the project needs, as required.

Construction Cost Control

We recognize the importance of establishing and designing within a construction budget. The procedures we follow to ensure a project will both be bid and built within the construction budget include:

- Provide an economical project design that complies with required standards.
- Complete a constructability review with construction managers during design.
- Prepare and provide accurate and complete quantity take-offs and construction cost estimates.
- Prepare engineer’s estimate of probable cost (EOPC) at the 30%, 60% and 90% design and provide to the COA. If the EOPC exceeds the project budget, corrective action includes, design review and revision with the COA. If EOPC is less than the project budget, consider adding design features and/or amenities.
- Conduct site visits and investigate alternatives that might decrease construction costs.

Cost Estimating Techniques



The project team will use the COA “Estimated Unit Prices for Contract Items” as a baseline for generating estimates for this contract. We will supplement this database with information obtained from the following to determine the most realistic cost of an item in the current local economic and bidding climate:

- Bid tabulations from recently bid projects of a similar nature.
- NMDOT and ABCWUA cost databases.
- RS Means.
- Telephone calls to suppliers.

2. Comparisons of Bid Award Amount to Final Cost Estimates

The following chart illustrates Smith Engineering’s ability to meet project budgets. In all cases, we have performed the design within the client’s budget even if the client requested additional work during the design phase. Smith’s success is due to repeat business from our clients. The projects shown are for clients to whom we have provided services for years. They have been more than satisfied with our previous work and have chosen Smith for additional contracts since the publication of this table. This is a true measure of quality and client satisfaction.

Project Name	Bid Opening Date	No. of Bids	Final Cost Estimate	Bid Award Amount
City of Alamogordo - Street Maintenance Program	October, 2019	2	\$ 1,458,000	\$ 844,595
City of Las Cruces - Roadrunner Pkwy. Extension	January, 2018	4	\$ 2,751,778	\$ 2,413,240
SSCAFCA - Lomitas Negras Phase 2	December, 2018	4	\$3,967,740	\$ 3,006,844
ABCWUA - Parkland 20” Steel Waterline Replacement	July, 2017	3	\$1,743,445	\$1,432,762
ABCWUA - San Diego & Barstow Water and Sewer Ext.	April, 2019	4	\$853,030	\$748,310
AMAFCA - Miscellaneous Projects, 2018	September, 2018	3	\$363,718	\$242,843

Certifications

- Smith Engineering's Certificate of Liability Insurance (In lieu of the COA Agreement and Insurance Certification)
- Pay Equity Reporting Form



SMITENG-01

EHUGHES

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

5/5/2020

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 rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Professional Liability Insurers, Inc. 6101 Moon Street Suite 1000 Albuquerque, NM 87111	CONTACT NAME: RJ Dean & Associates	
	PHONE (A/C, No, Ext): (505) 822-8114	FAX (A/C, No): (505) 822-0341
	E-MAIL ADDRESS: ehughes@cressinsurance.com	
	INSURER(S) AFFORDING COVERAGE	
	INSURER A : Travelers P&C of America	
INSURED Smith Engineering Company 201 N. Church Street Ste 200A Las Cruces, NM 88001	NAIC #	
	INSURER B : CNA	
	INSURER C : AXA Insurance Company	
	INSURER D :	
	INSURER E :	
INSURER F :		

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 INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC OTHER:			6806H185874	10/1/2019	10/1/2020	EACH OCCURRENCE \$ 2,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 1,000,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 2,000,000 GENERAL AGGREGATE \$ 4,000,000 PRODUCTS-COMP/OP AGG \$ 4,000,000
A	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO OWNED AUTOS ONLY <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS ONLY			BA5312L799	10/1/2019	10/1/2020	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> EXCESS LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTION \$ 10,000			CUP3793T063	10/1/2019	10/1/2020	EACH OCCURRENCE \$ 3,000,000 AGGREGATE \$ 3,000,000
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N	N/A	6025591459	5/1/2020	5/1/2021	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
C	Professional Liab			DPR9949564	10/1/2019	10/1/2020	Ea Claim 2,000,000
C	Professional Liab			DPR9949564	10/1/2019	10/1/2020	Aggregate 2,000,000

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

CERTIFICATE HOLDER

CANCELLATION

Proposal Purposes

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

Pay Equity Reporting Form PE10-249

Company name:

Mailing address line 1:

Mailing address line 2:

City, state, zip code:

Phone:

E-mail address:

FEIN number:

EAN number:

SHARE vendor number

Reporting calendar year:

Smith Engineering Company
2201 San Pedro Drive NE
Building 4, Suite 200
Albuquerque, NM 87110
505-884-0700
0
85-0377824
339824
0
2019

Job Category	No. Females	No. Males	Gap (Absolute %)
1 - Officers and Managers	8	14	7.26%
2 - Professionals	5	8	4.52%
3 - Technicians	1	20	4.25%
4 - Sales Workers	0	0	N/A
5 - Office and Admin. Support	8	2	24.86%
6 - Craft Workers (Skilled)	0	0	N/A
7 - Operatives (Semi-Skilled)	0	0	N/A
8 - Laborers (Unskilled)	0	0	N/A
9 - Service Workers	0	0	N/A

Total # Job Categories With No Employees	5
Total # Female Only Job Categories	0
Total # Male Only Job Categories	0
Total # Females (all categories)	22
Total # Full Time Females	11
Total # Part Time Females	11
Total # Males (all categories)	44
Total # Full Time Males	34
Total # Part Time Males	10
Total # Employees	66
Female % Workforce	33.33%
Male % Workforce	66.67%

Document must be signed by the principal executive of the company:

ITB #:

RFP#

PO#

Rebecca C. Fink, CEO/President

Name and title, printed

Signature

Date

Rebecca C. Fink 2-13-20