

CITY OF ALBUQUERQUE PROPOSAL

Engineering Consultants for De Vargas Rd. Widening
from 114th St. to 98th St.

Project No: 4259.92

May 6, 2020

HUITT-ZOLIARS

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May 6, 2020

Selection Advisory Committee Office:
Capital Implementation Program (CIP) Division Office
One Civic Plaza
7th Floor, Room 7057
Albuquerque/Bernalillo County Government Center
Albuquerque, New Mexico 87102

RE: Engineering Consultants for De Vargas Rd. Widening from 114th St. to 98th Street

Dear Selection Committee Members:

Our Huitt Zollars, Inc. team is excited to present our expertise in the design and management of urban arterial roadways to the City of Albuquerque. Through the leadership of our Project Manager, Robert Demeule, PE we will work with you to successfully implement this project. Rob is a well seasoned, and dedicated project manager who excels managing projects for many of our local municipal clients including the City of Rio Rancho, AMAFCA, and Bernalillo County. The following proposal highlights our design considerations and project specific issues that we intend to resolve if selected as the engineering firm. The team's qualifications are presented in more detail throughout the proposal and are summarized below.

Rob will be supported by a Project Team with the knowledge and abilities to optimally complete this project. Our team is composed of professionals that have worked on, and successfully completed recent City projects including Unser and Southern Boulevard Improvements. As such our firm is most familiar with the City's review and approval process, as well as the City's current design standards. The team is dedicated to providing the City with the following:


- Quality engineering and construction services that are cost effective
- Timely completion of all tasks related to the project
- Sustainable and innovative design solutions

The subconsultants included on the team have been carefully selected to provide the best quality services for the project. The subconsultants include Lee Engineering for traffic engineering, CobbFendley for SUE, Rocky Mountain Ecology for environmental assessment, and Geo-Test, Inc. for geotechnical engineering.

In preparation for this proposal, the team has evaluated existing conditions such as the roadway section and geometry, existing pavement conditions, traffic counts, drainage infrastructure, and pedestrian/bicycle facilities to determine a course of action that meets that City's objectives. The City's goals for the project are paramount to the team and we intend to evaluate options as necessary. Our vision for this project is demonstrated by our understanding of the existing issues and development of recommendations within this proposal.

We appreciate your time and effort in reviewing the proposal and look forward to working with the City of Albuquerque and all City Departments. If you have any questions or need any additional information please contact me 883-8114 (office) or 263-1630 (cellular).

Sincerely,
Huitt-Zollars, Inc.



Kim R. Kemper, PE
Senior Vice President

May 6, 2020

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I. GENERAL INFORMATION

FIRM INFORMATION

Huitt-Zollars understands that performance is the key to success and our clients find that our adherence to high standards of performance and responsiveness sets us apart from the competition. Our performance and success are measurable – more than 80 percent of our annual fees come from repeat clientele, proof that our philosophy is working. Huitt-Zollars offers you our mission statement that guides our interactions with clients:

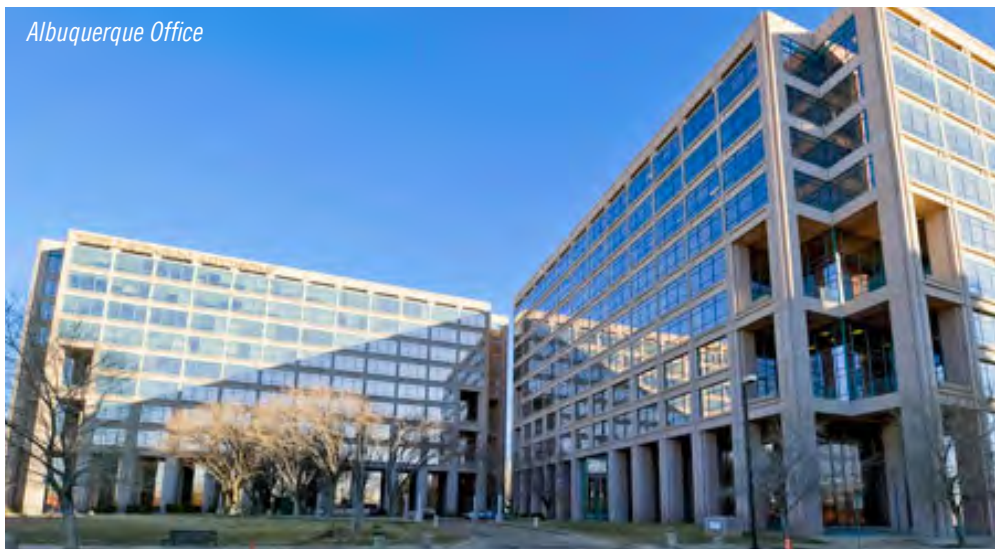
*“Our **commitment** is to understand the needs of our clients and to meet those needs by delivering professional services with the highest level of **quality and integrity.**”*

Huitt-Zollars, Inc. is a full-service architectural and engineering firm providing design services to public and private clients throughout New Mexico and the southwest. **The company was founded in Dallas, TX in 1975 and has been in business locally in Albuquerque and Rio Rancho since March 1997.** Huitt-Zollars has a staff of 34 New Mexico personnel, and nearly 500 professional, technical, and support personnel corporate-wide, with diversified skills capable of handling highly complex multi-discipline assignments. Huitt-Zollars is ranked among the nation's top design firms by *Architectural Record* and *Engineering News-Record*.

The strength of Huitt-Zollars lies in our people and in their ability to provide expertise in all disciplines required for a project. Our full-service capability affords coordination beyond the typical prime/consultant organization since in-house lines of communication are firmly established and easy to maintain. This arrangement provides a single focus for the project, resulting in smoother progression, efficient designs that balance function, economics, sustainability, and aesthetics. Huitt-Zollars can take a project from start to finish, from initial study through the design process to construction management.

The public sector percentage of the Huitt-Zollars offices in Albuquerque and Rio Rancho is approximately 80 percent. Huitt-Zollars' Quality Management system earned the Piñon Recognition Award by Quality New Mexico for excellence in customer service and understanding. Dedication to these quality objectives has been documented by our adoption of ISO 9001-2015 quality management principles and proven by our active participation in a year-long state-administered program that led to ISO 9001-2015 (Quality Management Systems).

Albuquerque Office



RESPONDENT CONTACT

6501 Americas Pkwy NE, Suite 830
Albuquerque, NM 87110
PH: 505.883.8114 | FX: 505.883.5022

Rob Demeule, PE, Project Manager
rdemeule@huitt-zollars.com
www.huitt-zollars.com

NEW MEXICO EMPLOYEES BY DISCIPLINE

4	Architects
3	Architect Interns
7	Civil Engineers
9	Designers, BIM / CADD Techs
4	Surveyors
2	Construction Managers
1	I.T. Computer Support
4	Administrative
34	Total New Mexico Personnel

HUITT-ZOLLARS DISCIPLINE & REGISTRATION

Banks, Kevin	PE #15328
Brauer, James	PE #15639
*Demeule, Robert	PE #16014
Eddings, Scott	PE #12856
Gallegos, Joseph	RA #3977
Jarrard, John	RA #1658
*Kemper, Kim	PE #10542
McDonald, Larry	RA #4238
*Stelzer, Kim	PLS #7482
Villa, Nina	PE #25970
*Vote, John Wesley (Wes)	PE #16920
Zelaya, Jose	RA #4370

**Proposal Team Member*



Rio Rancho Office

STAFF DISCIPLINES / REGISTRATION

Huitt-Zollars offers services in architecture, civil engineering, construction management, and surveying. Kim Kemper, PE will serve as our Principal-in-Charge. Kim is a Senior Vice President of the firm and the Albuquerque Office Manager. Rob Demeule, PE, Vice President will serve as our Project Manager. Kim and Rob are both authorized to sign agreements with the City of Albuquerque for this contract.

Our Federal Tax ID Number is 75 1500178 and our New Mexico CRS Number is 02-279106-000.

LOCATION OF SERVICES TO BE PERFORMED

All work performed on this contract will be provided by local personnel. Services will be performed in the Huitt-Zollars office at 6501 Americas Parkway NE, Suite 830, Albuquerque, New Mexico and work performed by our sub-consultants will be performed in their respective local Albuquerque offices. We do not anticipate any travel expenses as part of this project. Our local engineers will perform field reconnaissance, attend meetings, and perform site visits and inspections on this project.

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II. PROJECT TEAM MEMBERS

LEGEND

HZ - Huitt-Zollars, Inc.

CF - CobbFendley

RME - Rocky Mountain Ecology

GT - Geotest

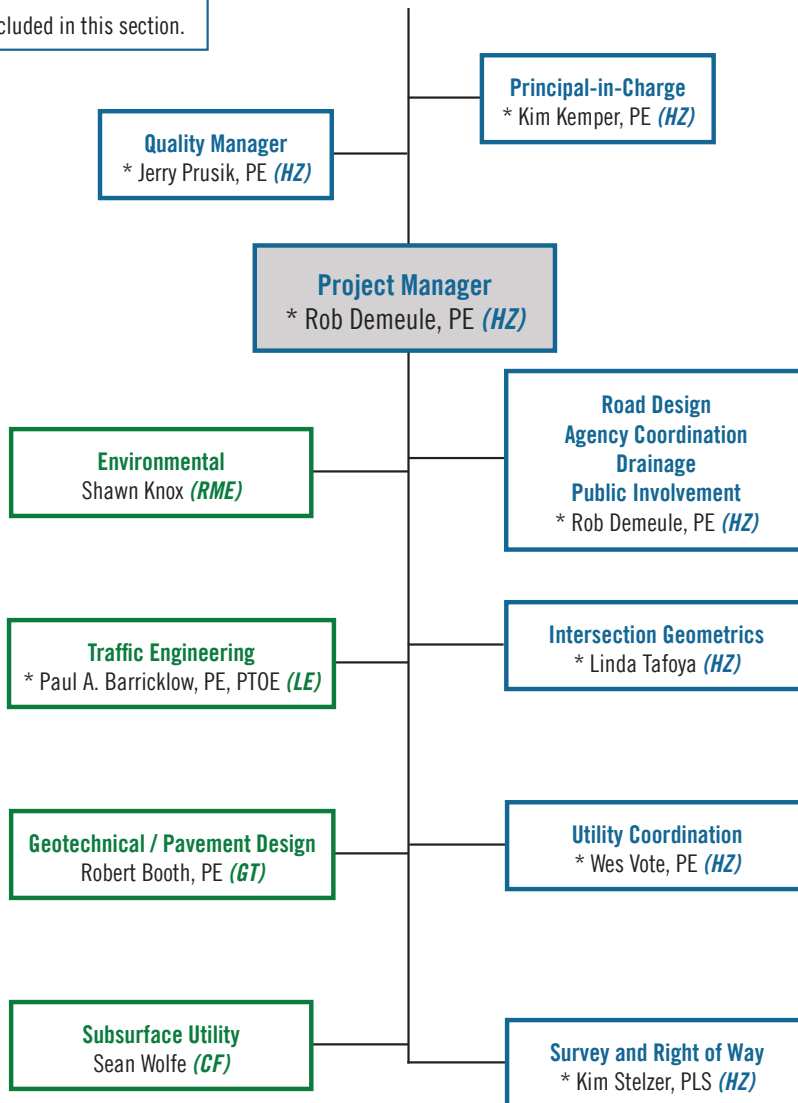
MRWM - MRWM Landscape Architects

LE - Lee Engineering, LLC

* Resume included in this section.



**City Project Manager
Municipal Development**
Gary Sandoval



ORGANIZATION PLAN

Huitt-Zollars has assembled a highly-qualified team structured to efficiently apply their skills during the execution of work; and to establish a clear hierarchy of functions and our responsibilities to meet specific project requirements. The team has the qualifications, credentials, and experience to provide the services requested by the City of Albuquerque for the De Vargas Road Widening Project. The Organization Chart to the left illustrates the role of each team member and the lines of communication under the direction of the Project Manager, Rob Demeule, PE. Supplemental resumes follow on the subsequent pages. Below is information about the subconsultants.

SUBCONSULTANTS

Lee Engineering - Traffic Engineering

Lee Engineering, LLC (LEE) is a civil engineering firm dedicated to providing quality traffic engineering and transportation planning services to federal, state and local agencies, private clients, and other design professionals for over 20 years. LEE has built a reputation on their ability to integrate traffic engineering and transportation planning expertise with technical know-how to produce powerful, customized decision making tools.

Rocky Mountain Ecology - Environmental

Rocky Mountain Ecology (RME) is a woman-owned, small business that specializes in environmental documentation, natural, and cultural resource surveys throughout the Southwest. RME staff has more than 60 years of combined experience performing natural resource management activities. Their primary goal is to service private, state and federal and tribal entities engaged in natural and cultural resource compliance and management activities.

Geo-Test - Geotechnical/Pavement Design

Geo-Test, Inc. has provided consulting services in materials engineering and testing, and geotechnical engineering investigations, throughout New Mexico and the Southwest for 27 years. Fully staffed and equipped offices and laboratories are located conveniently in Albuquerque, Santa Fe, and Las Cruces, New Mexico. Geo-Test, Inc. is qualified to perform many tasks associated with construction, environmental and geotechnical projects, such as earth embankment dams, commercial and industrial structures, highways, and bridges. Geo-Test's focus is on providing practical, cost effective, site specific solutions to their design and construction challenges. Geo-Test, Inc. provides integrated engineering and construction services supported by in-house drilling and laboratory capabilities.

CobbFendley - Subsurface Utility

Since 1997, CobbFendley has provided SUE services for leading private and public sector clients including Departments of Transportation (DOTs), toll road authorities, utility companies and various municipalities. The firm has provided SUE services on more than 800 projects, working with clients and design consultant teams to assess and implement SUE strategies that eliminate utility conflicts and reduce costly construction delays. To accommodate project and schedule requirements, CobbFendley has ten (10) Professional Engineers with experience in SUE and utility coordination and eight (8) SUE crews.

Robert Demeule, PE Project Manager / Road Design / Agency Coordination / Drainage / Public Involvement



- ♦ Education: BS, Civil Engineering - University of New Mexico
- ♦ Experience: 22 years
- ♦ Registration: Professional Engineer - New Mexico #16014

Robert Demeule, a civil engineer with 22 years of engineering experience, has an extensive history with drainage, roads, and public works projects. He has managed all aspects of civil projects from conception through final acceptance from both sides of the table. Demeule recently spent four years as an Estimator / Project Manager for the largest heavy civil contractor in New Mexico. During this experience Demeule oversaw construction of dozens of large scale civil construction projects and has gained an invaluable knowledge into contractor practices and construction means and methods. As an expert in roadway and drainage projects, he will lead the design team from preliminary engineering through to final design, as well as oversee the subconsultants.

Unique Knowledge

- ♦ Knowledge in not only the design of roadway projects, but the actual construction through his previous work at a local contractor firm. This knowledge ensures Rob's designs are efficiently constructed.

Project Experience:

Gibson/Louisiana Dam and Road Improvements | Albuquerque, NM
 Southern Boulevard Reconstruction (7174.91) | Albuquerque, NM
 Industrial Parkway Roadway and Utility Improvements | Rio Rancho, NM
 On-Call Drainage Engineering (MS4 Services) | New Mexico Department of Transportation
 On-Call Engineering Services AMAFCA | Various Locations, NM
 On-Call Engineering Drainage and SWPPP Services for AMREP Southwest Development | Rio Rancho, NM
 Vicente Canyon Concrete Box Culvert | Sandoval County, NM
 NM 585 Widening, New Mexico Department of Transportation | Taos, NM
 Sandoval County Bridge Rehabilitation | Cuba, NM
 Idalia Rd Const. Management Svcs | Rio Rancho, NM
 US 550 & NW Loop Rd. Intersection | Rio Rancho, NM

Kim Kemper, PE Principal-in-Charge



- ♦ Education: BS, Civil Engineering - New Mexico State University
- ♦ Experience: 35 years
- ♦ Registration: Professional Engineer - New Mexico #10542

Kim Kemper has more than 35 years of experience in the planning, development, design and quality control for civil, transportation, and utility projects throughout New Mexico. He has served as the Principal-in-Charge, Project Manager, or Project Engineer on more than 200 infrastructure projects in the Albuquerque area. In addition, Kemper possesses a New Mexico GB98 General Contractors License. This affords him a unique understanding of construction methods and procedures. Using this experience and knowledge in the design process provides a "built-in" constructability review. As an Officer of Huitt-Zollars and the Principal-in-Charge for this project, Kemper ensures that our staff has the necessary resources to serve you in a timely and effective manner.

Project Experience:

Kemper has served as the PIC for all COA projects completed by Huitt-Zollars since 1999.
 Unser Boulevard Reconstruction (4383.91) | Albuquerque, NM
 Southern Boulevard Reconstruction (7174.91) | Albuquerque, NM
 On-Call Engineering Services, Small Bikeways (7625.91) | Albuquerque, NM
 ABQ Ride Central and Unser Transit Center Expansion | Albuquerque, NM
 Double Eagle II Airport | Albuquerque, NM
 Oakland Avenue Sidewalk/Drainage Improvements | Albuquerque, NM
 Seven Bar Park and Ride | Albuquerque, NM
 Rapid Ride Bus Shelters | Albuquerque, NM

Jerry Prusik, PE**Unique Knowledge**

- ◆ 40 years roadway design experience.
- ◆ Performs routine quality audits of each office within the firm.

Quality Manager

- ◆ Education: BS, Civil Engineering Technology - Metropolitan State University of Denver
- ◆ Experience: 39 years
- ◆ Registration: Professional Engineer - New Mexico #15881

Gerald "Jerry" Prusik has 39 years of transportation and municipal experience working in both the public and private sector. His experience includes roadway, municipal utilities, local and interstate roadways, and mountainous design experience. His work has included preparation of NEPA environmental documents, concept development, planning, cost estimating, preliminary and final design, contract documents, construction observation / administration / management, and public / agency coordination. Prusik has extensive experience with numerous roadway projects.

Project Experience:

128th Avenue and Colorado Boulevard Intersection Improvements | Thornton, CO
 Lowell Boulevard Improvements | Adams County, CO
 Tower Road Widening | Commerce City, CO
 Long Road Reconstruction | Greenwood Village, CO
 Plum Creek Parkway Bridge Widening | Golden, CO
 NM 585 Widening | Taos, NM

Wes Vote, PE**Unique Knowledge**

- ◆ Understanding of the water and SAS within the area.
- ◆ Established relationship with the Water Authority.

Utility Coordination

- ◆ Education: BS, Civil Engineering - University of New Mexico
- ◆ Experience: 20 years
- ◆ Registration: Professional Engineer - New Mexico #16920

Wes Vote has more than 20 years of civil engineering experience focusing on water and wastewater infrastructure, planning, and design with extensive experience in designing utility improvements associated with roadway reconstruction projects. He is also experienced in the design of wastewater collection systems and odor control including gravity sewer mains, lift stations, force mains, vacuum transmission systems, and low-pressure transmission systems. Vote is very knowledgeable in computer modeling of both water and wastewater systems, including the analysis of multiple lift stations discharging to a common force main. He is also experienced in the design and conveyance of water systems including water distribution/transmission lines, booster stations, and pressure reducing stations.

Project Experience:

Coors Area Combination Vacuum/Gravity Lift Station and Collection System | Albuquerque, NM
 Meadowlark Lane Reconstruction | Rio Rancho, NM
 Southside Effluent Reuse for Albuquerque Bernalillo County Water Utility Authority | Albuquerque, NM
 Vista Ronda Water System Improvements | Santa Fe, NM
 Zaragoza Road Reconstruction | Rio Rancho, NM

Kim Stelzer, PLS**Unique Knowledge**

- ◆ Expert in COA platting process.
- ◆ Expert on ROW exhibits for COA transportation projects.

Survey and Right of Way

- ◆ Education: AS, Land Surveying - Madison Area Technical College
- ◆ Experience: 44 years
- ◆ Registration: Professional Land Surveyor - New Mexico #7482

Kim Stelzer has 44 years of survey experience with 25 years of Project Management. His experience encompasses managing a branch office for a Subsurface Utility Engineering Company, as well as Managing Survey Groups for three top 100 Engineering Firms. Stelzer has experience establishing project scopes, budgets and schedules, as well as the QA/QC of all project fieldwork and deliverables. Stelzer has facilitated multiple meetings with the City Surveyor on large complex boundary surveys. Additionally, as the Survey Project Manager for the Unser Reconstruction design team, he established the survey budget, survey control network, and the ground control survey.

PROJECT EXPERIENCE:

Unser Boulevard Reconstruction (4383.91) | Albuquerque, NM
 Southern Boulevard Reconstruction (7174.91) | Albuquerque, NM
 Meadowlark Lane Reconstruction | Rio Rancho, NM
 Zaragoza Road Reconstruction | Rio Rancho, NM
 Tower Rd. Widening | Commerce City, CO

Linda Tafoya**Intersection Geometrics**

Linda Tafoya has more than 26 years of experience which includes civil engineering design for municipal roadway improvement projects. Tafoya is an expert in AutoCad Civil 3D and has developed the firm's modeling of production standards. She is very familiar with City design criteria, standard details, specifications, and the DPM.

Project Experience:

Unser Boulevard Reconstruction (4383.91) | Albuquerque, NM
 Gunnison Place Roadway Extension (8007.22) | Albuquerque, NM
 Winrock Town Center Phase A (4553.84) | Albuquerque, NM
 Idalia Road Improvements | Rio Rancho, NM
 Wellspring and Unser Traffic Signals | Rio Rancho, NM
 Western Boulevard and Wellspring Traffic Signs | Rio Rancho, NM
 NM 528 Roadway Improvements | Rio Rancho, NM
 Southern Boulevard Reconstruction | Albuquerque, NM
 NM 585 Widening | Taos, NM

**Paul A. Barricklow, PE, PTOE****Traffic Engineering**

- ◆ Education: MBA, University of TX San Antonio, BS, Civil Engineering - University of TX San Antonio
- ◆ Experience: 20 Years
- ◆ Registration: Professional Engineer - New Mexico #17744; Texas #95585 / Professional Traffic Operations Engineer #1885

Paul Barricklow's atypical combination of management and engineering education combined with his hands-on experience make him uniquely qualified for complex traffic engineering and transportation planning projects. As the founding member of Lee Engineering's Albuquerque office, Barricklow has served New Mexico communities for 13 years. His areas of expertise include traffic operations studies, signal design, signal timing, safe routes to school studies, ITS design, and advanced traffic modeling.

While managing the Traffic Signal Systems Expansion Projects for over a decade, Barricklow facilitated unique traffic engineering initiatives to include Automated Traffic Signal Performance Measure (ATSPM) implementations on Coors Boulevard and Central Boulevard, and has also supported greater roadway efforts throughout the City, while partnered with other firms, to include University Bikeways, Osuna Road Expansions, and Westside Boulevard. Within each of these projects, Barricklow participated in the public involvement process, coordinated with DRC, and completed construction phases service support.

Project Experience:

Downtown Speed Zone Signal Timing | City of Albuquerque, NM
 Coors Boulevard ATSPMs | City of Albuquerque, NM
 Central Avenue ATSPMs | City of Albuquerque, NM
 Zuni Road Improvements | City of Albuquerque, NM

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III. RESPONDENT EXPERIENCE

UNSER BOULEVARD IMPROVEMENTS: I-40 TO CENTRAL

Albuquerque, NM

The Unser Blvd Improvements project included design and construction of the ultimate six lane section of the Unser Blvd corridor between I-40 and Central Ave and the intersection of Unser Blvd and Central Ave. The required infrastructure design included roadway widening improvements, storm drain improvements, bicycle lanes, pedestrian movement improvements, ITS modifications, road alignment, drainage study, and traffic signal modifications.

Unser Boulevard reduces from three through lanes to two at the Los Volcanes intersection. The Los Volcanes intersection required minimum improvements to the north, while the south side required a major makeover to include the desired vehicle and bike lane additions. Median reductions began at this location and continued south through the Central intersection. Outside curb and gutter remained throughout the project limits with exceptions at Sarracino, where a new right turn bay was designed, and at the approach to Central, where the addition of a second left turn lane and through lane was required. The addition of the northbound approach to Central included the addition of a second left turn lane and through lane as well. The modification of this median included the relocation of landscaping features. Right-of-way acquisition was required for this project to accommodate the full-width design sections. Detailed design components of this project included PCC intersection design, special storm drain inlet structure design, and detailed curb ramp geometry. This plan set was called “the best local-lead plans” ever reviewed by NMDOT staff.

Low Bid: \$5,874,502

Completion Date: 2018

Contact: City of Albuquerque, John MacKenzie, 505.768.3965

Roadway Classification: Regional Principal Arterial

Relevance: Right-of-Way Acquisition, Water Authority Improvements, Roadway Improvements along Established Corridor, Public Involvement

Team Member Involvement: Linda Tafoya - Civil Designer, Kim Kemper - Principal



SOUTHERN BOULEVARD RE-CONSTRUCTION

Albuquerque, NM

The purpose of the project was to eliminate cut-through traffic traveling to and from Kirtland AFB, Sandia National Laboratories, and the research park located at the end of Eubank Boulevard. The project improves motoring safety along the Southern Boulevard corridor between Juan Tabo and Eubank by addressing speeding, illegal u-turns, heavy congestion during peak periods, and parking in the median.

The project realigns the intersection of Juan Tabo Boulevard and Southern Boulevard, already mentioned above, and mitigating cut-through traffic. Additionally, the project reconstructed the eastbound Southern Boulevard lanes between Juan Tabo Boulevard and Eubank Boulevard which is approximately 1.02 miles (the eastbound lanes are to be shifted north and the median is to be reduced to 34 feet). The project included three signalized intersections along Southern Boulevard: Eubank, Elizabeth, and Juan Tabo and continuous roadway lighting. The project also included depressing the medians plus adding curb openings to provide adequate capacity to effectively store the 100-year six-hour design storm event from the contributing roadway. This design saved the City more than \$60,000 by reducing the amount and size of required storm drain by impounding the stormwater within the medians.

Cost: \$3,028,138

Completion Date: 2013

Contact: City of Albuquerque, Richard Costales, PE, 505.842.9287 - ABCWUA

Roadway Classification: Major Collector

Relevance: Developed Alternate Roadway Typical Section, Public Involvement

Team Member Involvement: Robert Demeule - Civil, Linda Tafoya - Civil Design, Kim Kemper - Principal



GUNNISON PLACE ROADWAY EXTENSION

Albuquerque, NM

Huitt-Zollars provided engineering, survey services, and construction phase services under the on-call task order contract for the extension of Gunnison Place, NW. This task order was necessary for the City of Albuquerque as a result of the inability to secure right-of-way dedication on previous alignments. This effort included preparation of 60%, 95%, and 100% construction plans for the extension of Gunnison Place NW from Tierra Oeste Unit 3 to Ladera Drive. Parcels associated with this project are Tract H-1 Tierra Oeste Unit 3 and Parcel A Tierra Oeste Unit. The plan set submittal included Cover Sheet, General Notes and Sheet Key, Existing Survey / Location and Control Information with R/W linework, Roadway Plan and Profile, Roadway Details, Utility Plan and Profile, Grading Plan for Pond, Utility Details, and Engineer's Opinion of Cost. Our survey team installed centerline monument and our construction phase services included participating in the preconstruction meeting, reviewing and commenting on material submittals, responding to contractor RFIs, providing three site visits during construction, participating in final inspection, and preparing record drawings based on contractor provided mark-ups.

Cost: \$350,288

Completion Date: 2017

Contact: City of Albuquerque, John MacKenzie, 505.768.3965

Roadway Classification: Major Local

Relevance: Right-of-Way Acquisition, AMAFCA coordination

Team Member Involvement: Linda Tafoya - Civil Design, Kim Kemper - Principal



WINROCK TOWN CENTER PHASE A - PUBLIC INFRASTRUCTURE

Albuquerque, NM

Huitt-Zollars is providing the civil engineering and architectural services for the 1,000,000-square-foot renovation and redevelopment of Winrock Center in uptown Albuquerque. Phase A completed the southwest 1/3 of the site and includes a parking structure addition, department stores, and required public infrastructure. The project will provide a new "main street" concept for the regional center, with the construction of two boulevards flanked with retail development. The new boulevards link with the surrounding Uptown development to provide both vehicular and pedestrian access into and around the center.

Phase A Public Infrastructure included design and construction of approximately 6,500 feet of major local roadways. Five intersections were developed or improved which include connections to Louisiana Boulevard and Uptown Loop Road. Pedestrians are key to the significant redevelopment and design variances were approved by the City DRB to calm traffic and promote walkability. Enhancements and attention to detail were included at the "back-of-house" as shown. New landscaped plazas were also constructed to encourage outdoor activities and provide a green space for open-air dining, cultural activities, recreation, etc., keeping with the "active lifestyle" theme of the project. The Winrock Center redevelopment required a comprehensive design solution, which included transportation/traffic analysis and design; utility upgrades including all water mains and service, wastewater collection mains and storm water; drainage studies; environmental assessment; and architectural compatibility. Public and neighborhood meetings were conducted throughout the design process to ensure public concerns were addressed and acceptance of the project was obtained by all stakeholders.



Phase A, Cost: \$5,161,374

Completion Date: 2016

Contact: Winrock Partners, LLC, Gary Goodman, 505.881.0100

Roadway Classification: Major Local

Relevance: Alternate Roadway Typical Section, Water Utility Authority Improvements, AMAFCA coordination, Public Involvement

Team Member Involvement: Kim Stelzer - Survey, Linda Tafoya - Civil Design, Kim Kemper - Principal

LOUISIANA-GIBSON REGIONAL DRAINAGE FACILITY AT KIRTLAND AFB

Albuquerque, NM

Huitt-Zollars was selected by the Albuquerque Metropolitan Arroyo Flood Control Authority (AMAFCA) to design a regional storm-drainage detention facility at the Kirtland Air Force Base (KAFB) property, adjacent of the intersection of Louisiana and Gibson. During the design process the Air Force requested assistance from AMAFCA and from Huitt-Zollars to redesign the Gibson Gate roadway entrance into KAFB in a fast-track environment due to security threats. Completion of the design and bidding had to be done in time to construct the new security gate approach at the same time as the flood control project.

Huitt-Zollars assisted the Air Force and AMAFCA in creating a team-driven design environment to expedite the entrance gate and approach roadway design. The roadway design needed to allow the stormwater facility design to remain intact and had to be completed in a manner that also allowed the use of federal dollars to be utilized in a local agency lead contract, without the typical long-lead federal project timeframe.

This has resulted in the formation of a new partnership, a successfully constructed, fast-tracked federal project responding to a security threat, and a huge success story of teaming between federal and local agency design and construction.

Cost: \$2,199,561

Completion Date: 2019

Contact: AMAFCA, Brad Bingham, 505.884.2215

Classification: Water and Storm Water & Roadway

Relevance: Roadway, Stormwater, Public Involvement

Team Member Involvement: Rob Demeule - Project Manager



IDALIA ROAD RECONSTRUCTION

Rio Rancho, NM

The purpose of the project was a total reconstruction of Idalia Road from Iris Road to NM 528. The existing 3" pavement was one lane each way with a double yellow centerline stripe. The reconstruction includes sidewalk, bike lanes, curb and gutter, medians, left turn bays, and new signalization. The new roadway remains within the current 80' wide right-of-way and not expanded to the City's typical 86' collector road width. This is due to the fact that existing housing exists on the edge of the current right-of-way. The design services for the roadway included the full Local Government Lead Process: Phase 1A/1B, Phase 1C, Phase 1D and Phase II services. Huitt-Zollars also helped the City through the right-of-way purchase process from ROW maps to title reports and appraisals.

Cost: \$11,500,000

Completion Date: 2015

Contact: City of Rio Rancho, Jamie Marrufo, 505.891.5043

Roadway Classification: Minor Arterial

Relevance: Roadway, Pedestrian & Bicycle Improvements, Public Involvement, Right-of-Way Acquisition

Team Member Involvement: Kim Kemper - Project Manager, Linda Tafoya - Civil Design, Kim Stelzer - Survey



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IV. TECHNICAL APPROACH

1. UNDERSTANDING THE PROJECT SCOPE

PROJECT PURPOSE:

The purpose of the project is to improve De Vargas Rd. from 114th Street to 98th Street (Snow Vista Blvd.) to the ultimate and consistent four-lane section, including ADA compliant sidewalk and curb ramps, multi-use trail, bike lanes, storm drain improvements, bridge widening, street lighting, traffic operations analysis, and utility relocation.

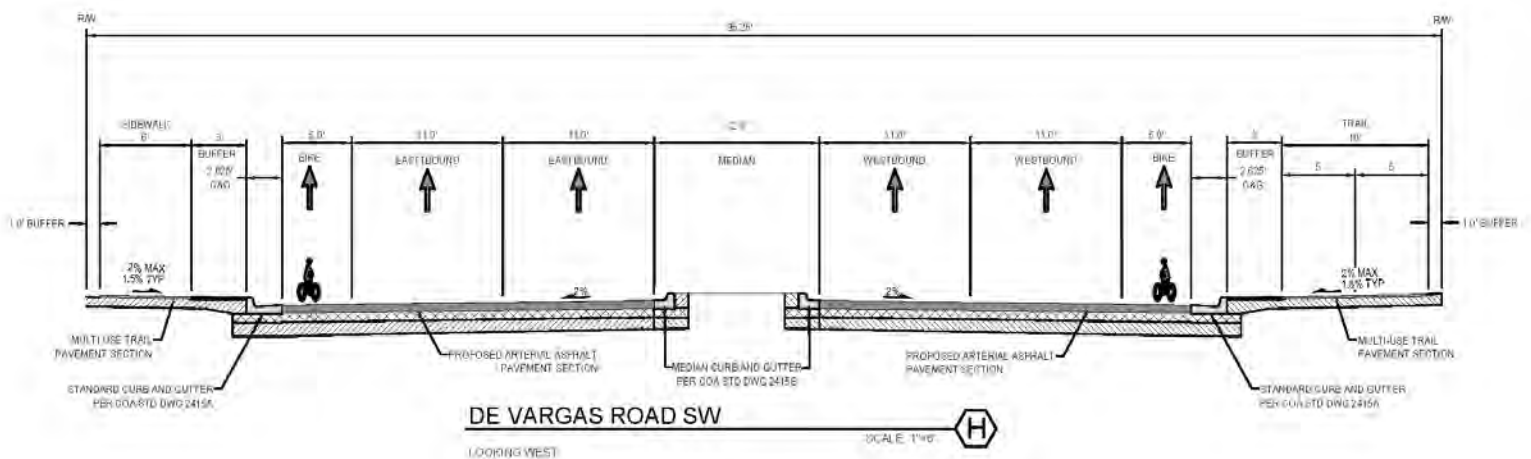
The project will begin with a Design Analysis Report (DAR) to determine the best typical section, alignment, and other improvements for De Vargas Rd. The major analysis items include: geotechnical characteristics and existing pavement conditions, drainage characteristics and needs for the design of the storm drain system, street lighting and how to balance the roadway needs with the residential areas, utility relocations and coordination including the PNM power poles along the south side of the roadway, and ROW needs analysis to determine the best course of action of acquiring the needed ROW. Each of these items will have an impact on the construction cost of the project as well as the public involvement/stakeholder support.

PROJECT DESCRIPTION:

The project will likely require full width reconstruction of the entire 0.93-mile corridor; although there are sections of existing pavement that may be rehabilitated instead of being reconstructed. The intersection and each approach at De Vargas and 98th Street will be evaluated for limits of construction necessary for the project. ROW will present a challenge throughout the corridor in order to construct a full arterial 4-lane section. Future connectivity at the future De Vargas' intersection with 118th Street (west of project EOP) should be considered as the 4-lane section will eventually connect. In the interim condition, De Vargas, will continue to intersect with 114th Street and taper down to one lane westbound to connect to northbound 114th Street at the western End of Project (EOP). Improved traffic flow and connectivity from De Vargas onto 114th Street will alleviate congestion from the neighborhoods to the north and south using De Vargas to 98th Street, by providing a shorter and more direct route to Central Avenue via 114th St. SW.

PROPOSED TYPICAL SECTION

(In all Following Exhibits – Existing Striping is Shown in **BLUE** Linework and Proposed Striping and Lanes Are Shown in **MAGENTA**)



EXISTING CONDITIONS/ISSUES WITH SUGGESTED CORRECTIVE DESIGN FEATURES:

114th Street to Osprey Drive

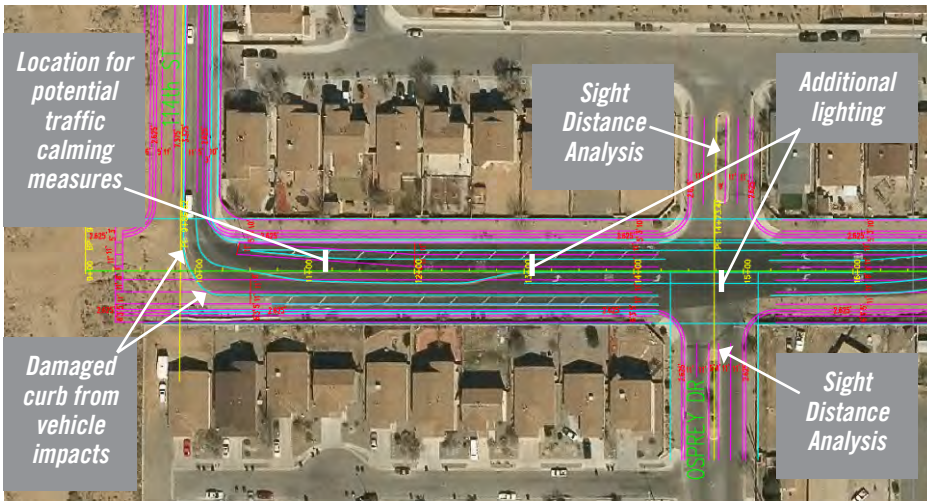
At the project's BOP, 114th St. SW (114th), we observed the presence of damaged curb, numerous Type III barricades, bollard posts and temporary concrete wall barrier, suggesting the need to protect the residential properties at the intersection. During our field visit, the interaction of traffic at the intersection was also observed, and the design and incorporation of a full T intersection at De Vargas and 114th will allow for appropriate sight distance and roadway width for the users traversing the interim L shaped intersection. While this may not be needed with the widened and improved T intersection, potential traffic calming devices and calming geometry, such as signing/stripping, temporary asphalt curb to narrow lanes, etc., will be reviewed to reduce speeds in any interim condition. While not a traffic calming measure, the intersection should be reviewed for a potential all-way stop condition depending on traffic volumes.



The existing approximately 95-ft ROW width (wall to wall) appears adequate to accommodate the proposed four-lane section, and the existing approximately 62-ft pavement width appears to be in good condition. For this section and the remainder of the project limits, the geotechnical investigation will review the pavement and determine if it should be reconstructed or if it can be rehabilitated. To accommodate the proposed fully developed section, the north curb line will need to be removed and replaced further north (+/- 2-ft to 4-ft). The existing pedestrian facilities include a multi-use trail on the north side. We propose to rebuild the trail parallel to the new curb instead of a meandering trail as it currently exists. The southern curb & gutter would remain in place and allow for construction of a 6-ft sidewalk to complete the pedestrian facilities.

With the improvements for this section and the remainder of the project, the landscaping would need to be removed and replaced, and relocate/replace street lighting. The intersection of 114th and De Vargas may require some additional lighting. We observed existing storm drain inlets just west of Osprey Drive that would be adjusted as needed, as well as any other underground utilities.

In addition, a careful review of the sight distance needs at the intersection of De Vargas and Osprey Drive will be completed as the curb lines on both sides will get closer to the side street. This could negatively affect the available sight distance for users leaving Osprey Drive.



Osprey Drive to Cockatiel Drive

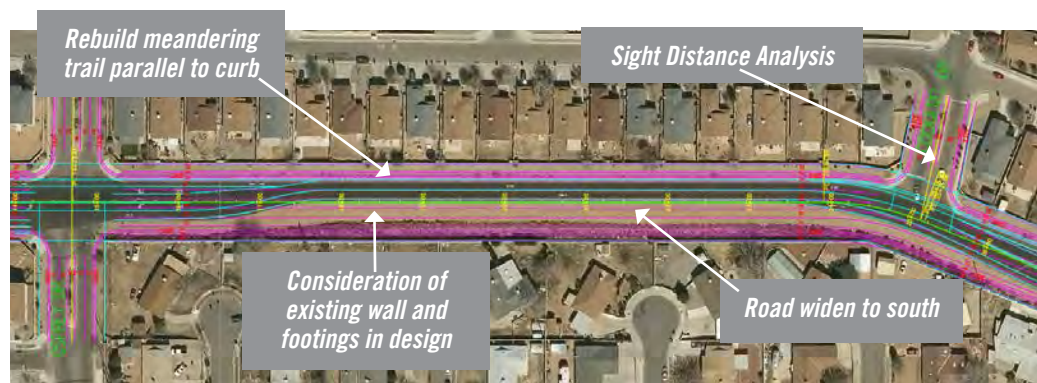
East of Osprey Drive, the existing asphalt width narrows to only two 11-ft wide driving lanes with natural ground to the south. The existing ROW width appears to be approximately 98-ft wide (wall to wall) and able to accommodate the new roadway section. Since there appears to be a few more feet of available width in this section, our design will endeavor to salvage the existing north curb and gutter (depending on the final location within the typical section, the curb may need to be relocated to the north) and widen to the south. The existing pedestrian facilities include the meandering multi-use trail on the north, and the proposed would include a rebuilt multi-use trail with new 6-ft sidewalk on the south side.



The existing roadway asphalt appears to be older than other sections and may need to be reconstructed depending on geotechnical investigation. If appropriate, a mill and inlay rehabilitation would be completed along with the new pavement for the widening.

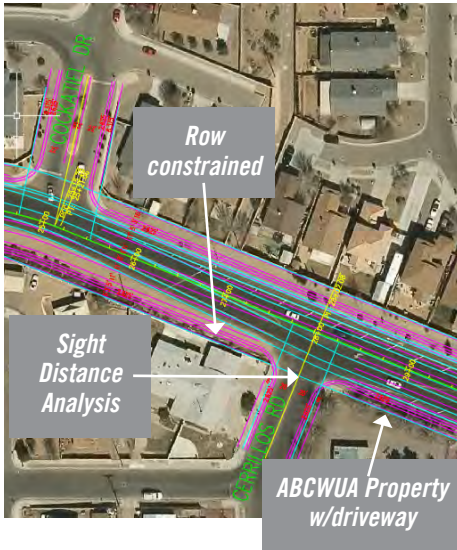
Street lighting at intersections and intermittently will be needed for this approximate 1,000-ft section of the project. Utilities appear to be underground with communication infrastructure along the south side. Relocations/adjustments for utilities is likely with widening and earthwork. With the widening, the full storm drain infrastructure will be installed including storm drain inlets to contain runoff within the roadway ROW.

A careful sight distance analysis should be performed at the intersection of Cockatiel and De Vargas, as any need for relocation of the existing property walls would likely require ROW acquisition. The existing property walls, since they are on the outside of the horizontal curve, appear to be constructed with adequate sight distance. Because this section has existing property walls on either side, it will be key to implement a roadway typical section that not only "fits" within the available width but also minimizes any effect on the wall footings and other appurtenances.



Cockatiel Drive to Cerrillos Road

Within this section, the existing ROW width appears to be approximately 96-ft; although records research on the City of Albuquerque GIS viewer shows a possible ROW narrowing to approximately 82-ft. This section of De Vargas can likely be reconstructed much as the section to the west (Osprey Drive to Cockatiel Drive) with similar issues and solutions.



The asphalt in this section appears to be comprised of some older and some newer placed sections, and may need to be reconstructed/rehab similar to the above section.

This section has the first occurrence of overhead utility that may be in conflict with roadway widening and improvements. Guy wires are in place within the ROW on both the north side and south side for the overhead line crossing. Coordination with PNM will be required on this overhead line for any relocations/adjustments.

Street lighting at intersections will be added, and the existing street light midway will be reviewed for replacement. Other utilities appear to be underground with communication infrastructure along the south side. Relocations/adjustments for utilities is likely with widening and earthwork. With the widening, the full storm drain infrastructure will be installed including storm drain inlets to contain runoff within the roadway ROW.

The sight distance analysis will include the intersection of Cerrillos and De Vargas, as the existing wall at the southwest corner may be in a challenging location. Should adjustment or relocation be needed this would likely require ROW acquisition.



Cerrillos Road to Del Mastro Drive

The existing ROW width in this section varies between approximately 93-ft to 98-ft wide. The narrower 93-ft width is along the Albuquerque Bernalillo County Water Utility Authority (ABCWUA) Pump Station just east of Cerrillos. The 98-ft width (wall to wall) appears adequate to accommodate the proposed four-lane section. The approximately 65-ft width of asphalt appears aged and possibly deficient, with transverse cracking at +/- 10-ft intervals (suggesting possible construction without aggregate base course). This width of asphalt may be wide enough to accommodate the proposed fully developed section, but may only allow for the 3-ft sidewalk on the south side without relocation of the PNM poles. Therefore, relocation of the north curb line, similar to the previous sections, may be the best option to gain all the required improvements; along with reconstruction of the multi-use trail.

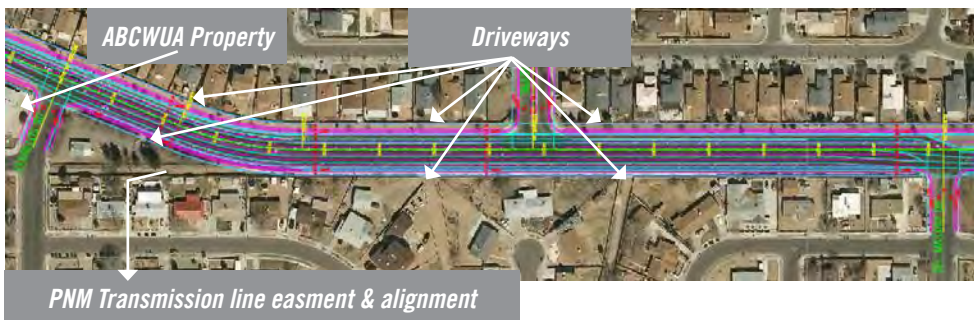
Based on the likely inadequate ROW width along the property at the southeast corner of the De Vargas and Cerrillos intersection, early coordination with the (ABCWUA) will be beneficial as the DAR and preliminary design are in progress. The pump station may not be in use, as the property was locked up.

Approximately 420-ft east of Cerrillos Road along the south edge of De Vargas ROW, a PNM transmission line adjoins the roadway and continues at the south edge of the ROW all the way to 98th Street. The existing narrow sidewalk on the south side of the ROW was likely constructed at 3' width due to the location of the overhead utility poles. As the existing overhead transmission poles begin in this section and take up precious space, we will review potential for narrowing median/left turn lane to remove the need for a take and/or so that the appropriate improvements can be implemented such as a full 6-ft wide sidewalk with a buffer.

Street lighting will be designed at intersections and with intermediate street lights for this approximately 1,650-ft section of the project.

During our field review, we did not observe any storm drain inlets in this section. Should storm drain inlets and other storm drain infrastructure be needed, it will be designed and installed to capture the runoff and contain it within the roadway ROW.

Three existing driveways are located along this section of De Vargas. Each will need to be reviewed and determined if they can remain and be reconstructed. The first driveway, 185 LF east of Cerrillos Road, is an existing drive pad access to the ABCWUA facility at the SE corner of that intersection. Should ROW need to be acquired along the ABCWUA property, the driveway will be part of the discussions. The second and third driveways are located approximately 150-ft east and west of Timarron Drive. Each appears to be utility easements that also act as alleyways for the residential properties along this section.



Del Mastro Drive to the AMAFCA Amole Arroyo Channel/Trail

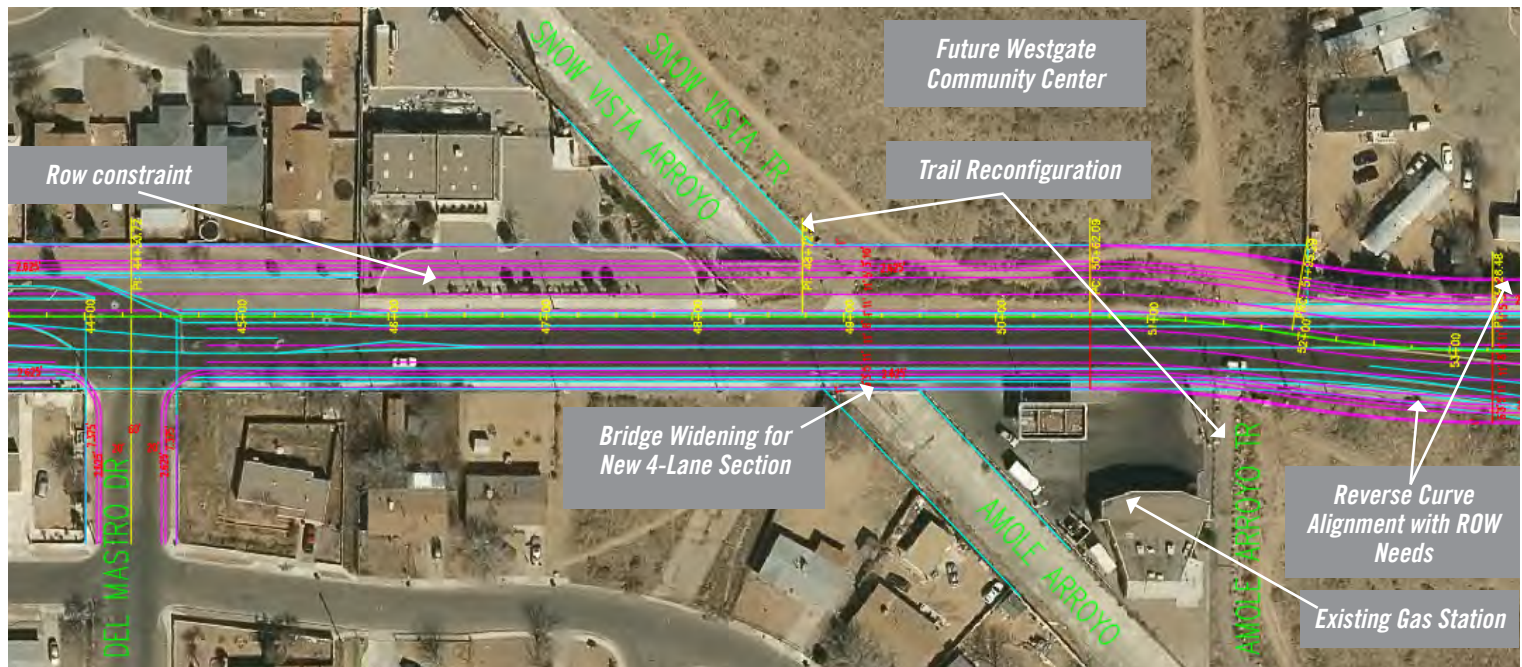
The existing ROW width in this section poses significant ROW acquisition needs for the project. It is evident from City GIS records and from the shift in existing pavement, that the ROW narrows significantly from an approximate 96' width down to an approximately 60' width, all within a single block (east of Del Mastro Drive). The development on the north side, between the east end of the residential development and the Amole Channel, was constructed prior to 2002 and it appears that the ROW needed for De Vargas was not dedicated. An approximately ROW take of 30-ft along the frontage of the property will be needed for the roadway widening.

The existing 60-ft to 40-ft width of asphalt in this section appears to be recently rehabilitated, and in good condition. Overhead utility infrastructure continues along the south side of the roadway ROW (possibly in an easement). Street lighting will be designed at intersections and with intermediate street lights as needed. This section has existing storm drain inlets approximately 150-ft east of Del Mastro. They appear to be triple inlet type. The storm drain infrastructure will be designed and installed to capture the runoff and contain it within the roadway ROW.

The existing PNM power poles continue along the south side of De Vargas. There are five existing driveways along this section of De Vargas that will need to be reviewed. They include the two for the development on the north side (see the following narrative), as well as a paved "roadway" that lines up with Mimbres Street from the south, and the two for the gas station just east of the Amole Arroyo on the south side of De Vargas. The Mimbres Street driveway is located just west of the Amole Channel, and has a stop sign in place.

Major ROW Acquisition and Reconfiguration of Site –The ROW acquisition needed at the development (currently a landscape maintenance firm) at the Amole Channel will change the layout of the parking lots for the development but access can still be provided. The parking lot to the east of the building won't be able to access the three parking spaces along the south side of the building, but a new configuration can be achieved to provide the appropriate access. Further review will be needed to determine if the two access points are still needed, and analysis to ensure that appropriate fire department access is designed with the change in configuration to the development. A meeting with the Planning Department would be beneficial to determine the parameters early on in the development of the project. Our experience in the development of properties in Albuquerque will be key to solving this piece of the puzzle.

Amole Arroyo Bridge and Trails – With the likely widening of the Amole Arroyo bridge needed for this project, the trail connection from the Amole Arroyo Trail (Snow Vista Trail) on the north to the De Vargas Road multi-use trail will need to be reconfigured. The Amole Arroyo Trail from the south connects to De Vargas approximately 250-ft to the east of the arroyo. As part of the DAR, we will complete a comprehensive review of this trail connection, any potential realignments to improve the connection to De Vargas, and the potential use of prefabricated pedestrian bridges on either side of De Vargas to avoid rebuilding/widening the existing bridge. Currently, the trail crossing is not signed or marked and because it is a mid-block crossing it may require some additional consideration. A raised median with enhanced signing and striping could be implemented, or with the widening of the bridge a below-grade crossing (may not have the clearance under the arroyo) could be reviewed for implementation. Coordination with AMAFCA will need to take place early to determine the limits of reconstruction needed, maintenance issues/solutions, and access during construction to not only the trail but to the channel as well.

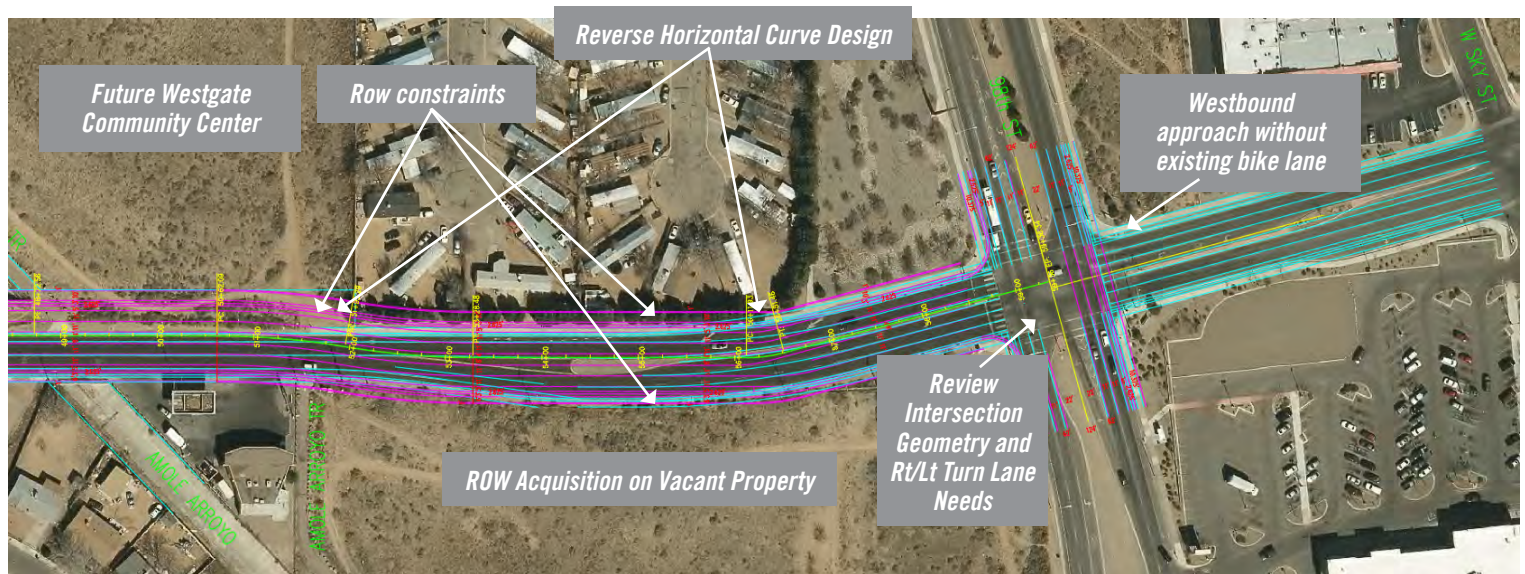


Amole Arroyo to 98th Street

As the project approaches 98th Street, the final section appears to have an approximately 96-ft wide ROW. The asphalt appears to be recently rehabilitated, and in good condition. The existing roadway would need to be widened in the section to allow for the bicycle lanes, while the existing sidewalk on the north side could be widened to the north to achieve the multi-use trail while maintaining the existing evergreen tree buffer in place at the residential area just west of 98th Street. Street lighting for this approximately 1,050-ft section of the project will need to be implemented as well.

During our preliminary layout of the proposed four-lane roadway section, a horizontal reverse curve will need to be used to align the section from the west. Because of the proximity of the gas station and its pumps on the south side/just east of the Amole Channel, it may be best to have the reverse curve start further to the east. Assuming the appropriate ROW width has been dedicated for the site of the future Westgate Community Center (slated for completion 05/2021), ROW impacts would be only to the residential area between the Amole Channel and 98th Street on the north side and the undeveloped property on the south side.

As De Vargas approaches 98th Street, a review of each leg of the intersection will be completed for the DAR including: length of left turn bays, need for right turn bays, a review of the ada ramps for compliance. Further direction from the City will identify if any improvements are to be made to the other legs of the intersection. 98th Street includes four driving lanes with bicycle lanes, while Sage Street (east leg) includes four driving lanes with a bicycle lane for eastbound but no bicycle lane for westbound. Each ADA ramp and pedestrian push button station will be reviewed for compliance and should they need to be reconstructed, they will be designed and included in this project. It is likely that the existing mastarm at the northwest corner will need to be relocated with the widening, while the existing mastarm at the southwest corner should be far enough south to accommodate the widening. The remaining signal infrastructure will be reviewed and adjusted as needed for the improvements, including mastarm lighting.



2. PLAN TO PERFORM THE SERVICES REQUIRED BY THE PROJECT SCOPE

OVERALL APPROACH – INCORPORATING SOLUTIONS INTO A STREAMLINED PROCESS

We will initiate the project with a detailed Work Plan which includes the project's complete budget, project schedule, quality plan, submittal milestones, agency coordination checklists, design review checklists, and design spatial orientation. The following components will be included:

- » *Prepare an inventory of existing and future issues relative to traffic, pedestrians, bicycles, transit (if needed), storm drainage, water and sanitary sewer, dry utilities, and existing ROW.*
- » *Prepare an inventory of existing environmental issues, if needed.*
- » *Research records and create an inventory of adjoining plats.*
- » *Prepare the project's constraints map.*
- » *Walk the project corridor with the City's Project Manager and discuss the project's critical issues which include eliminating cut-through traffic, intersection geometrics, utilizing existing infrastructure, right-of-way constraints, and project funding.*

Base Mapping and Studies:

Compile existing mapping from MRCOG, Bernalillo County, NMDOT and other sources. Perform field surveys and office data reduction to create the project's Base Map. Preparation of four studies is anticipated for the project includes a drainage study, an intersection analysis study, an environmental study, and a geotechnical study.

Design Analysis Report (DAR) and Conceptual Engineering (30%)

Prepare DAR with options for typical roadway section that address the City's requirements, evaluate options, and select final options to move on to conceptual engineering. Prepare preliminary drainage report.

Prepare planning level right-of-way constraints map with land owner information. Right-of-way acquisition appears to be required for full width construction. Construction easements may be required throughout the project limits in order to build the pedestrian improvements. The 30% submittal which shall include:

- » *Plan and Profile Sheets and Typical Sections*
- » *Drainage Plans*
- » *Storm Drain Plan and Profile Sheets*
- » *Intersection Layouts*
- » *Signal Modifications*
- » *Construction and Right-of-Way Estimates*
- » *30% Design Analysis Report*

This submittal provides the Project Team opportunities to explore creative cost effective solutions. These solutions shall be discussed and evaluated at regular meetings with the City's Project Manager. Solutions worth pursuing shall be evaluated in Agency coordination meetings including COA DMD, COA Transit, ABCWUA, COA Planning, COA CIP, and NMDOT.

Public Involvement and Coordination

Public Involvement is an important component of the final design process. Our primary goals will include:

- » *Soliciting information from the public in order to get a holistic understanding of the corridor and current impacts on local citizens; and*
- » *Engaging the public in the development of solutions that address present and anticipated conditions along the corridor. Our team will offer multiple means of input for the public to elicit as wide a spectrum of perspectives as possible.*

Infrastructure Design of De Vargas Road Improvements (60%, 90%, Final)

The 60 percent, 90 percent and final submittals will be developed in a timely manner in order to have appropriate checks and QA/QC reviews and submittal updates. Additionally we integrate Value Engineering throughout the project. Based on our experience, key elements for Value Engineering on this project include:

- » *Drainage System Improvements*
- » *Permanent Intersection Controls*
- » *Illumination*
- » *Pavement Design*
- » *Traffic Signal Interconnect and ITS Design*

Bidding Phase and Construction Phase

Prepare bidding documents and bid analysis. Assist the City as needed with construction phase services (weekly meetings, RFIs, submittals, field visits, inspection (if needed), change order/pay app review, and close out).

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V. COST CONTROL



COST CONTROL OF DESIGN PROCESS

The most effective method to achieve cost control in the design process is to develop a detailed work plan and schedule upon initiation of the project, then monitor progress against budget and work plan milestones on a weekly basis. This work plan defines key work activities, discusses technical means and methods that will be employed, assigns responsibilities, defines deliverables, and establishes man-hour requirements for each activity, as well as quantities and quality of end products. The Project Manager then develops a schedule using Microsoft Project, where key activities can be networked and loaded with personnel resources. Resources are scheduled with other projects in mind, and budgets are established by task or activity. Working with the City staff, we can readjust the task budgets while maintaining the bottom line. If at any time the project becomes out of scope or budget growth is anticipated, the City will be informed immediately and solutions will be developed to maintain the project within budget.

COST CONTROL OF CONSTRUCTION COST

At the very beginning of the job we will prepare an independent estimate of probable construction cost based on estimated quantities and current unit cost data; this base line cost estimate will be updated throughout the life of the project. We will provide the City a monthly progress report discussing progress achieved during the month, work expected to be performed in the upcoming month, an analysis of actual versus expected progress, as well as identifying issues which could cause delays to the on-time completion of work. Included with the progress report will be a cost control report that will track design costs and construction cost estimates. We will identify significant changes impacting the cost of construction to the City whenever they occur throughout the design process. Updated construction cost estimates will be compared to the City's budget and will be discussed with the City staff on a regular basis. We will incorporate construction techniques into the design process through constructability reviews. All elements of the design are reviewed for cost saving potentials to include reducing the construction schedule.

COST ESTIMATING TECHNIQUES

Accurate cost estimating is essential to evaluating alternatives and establishing construction cost budgets. We have customized AutoCad Civil 3D to generate quantities associated with City of Albuquerque unit prices. We maintain a database of unit costs that include low-bidder cost on similar project types, and bid unit prices on projects that we have designed. We use this database and published City Unit Prices and other published data to establish project unit prices. In establishing these unit costs, we will also consider local contractor workload, availability of local materials, skilled labor requirements, and site constraints. This approach will allow us to track cost in a similar format in which the bid form will be prepared. We work closely with local contractors and have a keen understanding of how they approach and manage risk. This enables us to provide the most reasonable opinions of construction cost to our clients.

COST ESTIMATE COMPARED TO BID AWARDS

The chart below is presented to illustrate our past experience with control of construction costs on various projects within the past two years.

Name Of Project	Month/Year of Bid	No. Of Bids	Final Cost Estimate	Low Bid Amount
Louisiana-Gibson Regional Drainage Facility at Kirtland Air Force Base	July 2018	4	\$2,516,400	\$2,199,561
Meadowlark Road and Waterline Reconstruction	November 2018	4	\$2,300,000	\$2,100,000
Salce Basin	May 2019	2	\$1,900,000	\$2,200,000
Lift Station 27 and Force Main, and Lift Station 16 Upgrades	May 2019	3	\$5,828,314.89	\$5,047,558.98
WWTP #2 UV Disinfection System Replacement	October 2019	3	\$1,779,626.40	\$1,659,408.70

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APPENDIX: FORMS

Agreement and Insurance Certification

We have reviewed the standard agreement for Engineering or Architectural or Landscape Architectural Services that are required for the project listed below, and hereby certify that we will, if selected for the project, enter into this standard agreement for this project and meet all insurance requirements listed therein.

This Certification is intended for the use of the City of Albuquerque only, in conjunction with the award of the Engineering or Architectural or Landscape Architectural Services Agreement for Project:

Project Name Engineering Consultants for De Vargas Rd. Widening from 114th to 98th Street

Project Number 4259.92

Date May 6, 2020 Firm Name Huitt-Zollars, Inc.

Signature 

Title Senior Vice President

STATE OF NEW MEXICO)

) ss

COUNTY OF BERNALILLO)

The above Certification was subscribed before me, the undersigned authority, by:

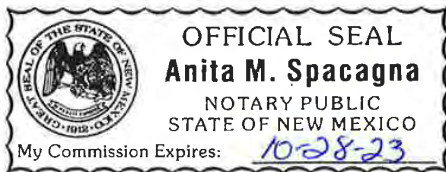
Kim R. Kemper, Senior Vice President

who swore upon oath that this Certification was signed of free act and deed, on this

6 th day of May, 20 20


(Notary Public)

My commission expires: October 28, 2023





CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

8/29/2019

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 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 MHBT, a Marsh & McLennan Agency, LLC company 8144 Walnut Hill Lane, 16th Fl Dallas TX 75231		CONTACT NAME: Stacy Brimer PHONE (A/C, No, Ext): 972-770-1689 E-MAIL ADDRESS: stacy_brimer@mhbt.com		FAX (A/C, No): 972-376-8108
		INSURER(S) AFFORDING COVERAGE		NAIC #
		INSURER A : Hartford Casualty Insurance Company		29424
		INSURER B : Federal Insurance Company		20281
		INSURER C : Hartford Underwriters Insurance Company		30104
		INSURER D :		
		INSURER E :		
		INSURER F :		

COVERAGES **CERTIFICATE NUMBER:** 1457846565 **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.

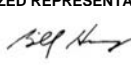
INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input checked="" type="checkbox"/> LOC OTHER:			46UUNIQ7596	9/1/2019	9/1/2020	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 300,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 \$
A	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS <input checked="" type="checkbox"/> Coll \$1,000 <input checked="" type="checkbox"/> Comp \$1,000			46UENIQ7978	9/1/2019	9/1/2020	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 checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input checked="" type="checkbox"/> RETENTION \$ 10,000			46XHUIQ6629	9/1/2019	9/1/2020	EACH OCCURRENCE \$ 10,000,000 AGGREGATE \$ 10,000,000 \$
C	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	46WEAO4105	9/1/2019	9/1/2020	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
A B A	Hired Car Physical Dam: \$50,000 Employee Theft Valuable Papers			46UENIQ7978 82241508 46UUNIQ7596	9/1/2019 9/1/2019 9/1/2019	9/1/2020 9/1/2020 9/1/2020	Hired PD Comp/Coll Employee Theft Valuable Papers Ded \$1,000/\$1,000 Limit: \$1,000,000 Limit: \$25,000

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

Additional Insured form #HG0001 edition 09/16 applies to the General Liability policy.
 Waiver of subrogation form #HG0001 edition 09/16 applies to the General Liability policy.
 Primary & Non-Contributory General Liability form #HG0001 edition 09/16.

Additional Insured form #HA9916 edition 03/12 applies to the Automobile Liability policy.
 Waiver of subrogation form #HA9916 edition 03/12 applies to the Automobile Liability policy.
 Primary & Non-Contributory Auto Liability form #HA9916 edition 03/12.

See Attached...

CERTIFICATE HOLDER Master Certificate	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 
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ACORD 25 (2014/01)

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CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

1/21/2020

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 Risk Strategies 12801 North Central Expy. Suite 1710 Dallas, TX 75243	CONTACT NAME: Joe Bryant	
	PHONE (A/C, No. Ext): (214) 503-1212 FAX (A/C, No): (214) 503-8899	
	E-MAIL ADDRESS: certificatedallas@risk-strategies.com	
	INSURER(S) AFFORDING COVERAGE	NAIC #
	INSURER A : Berkley Insurance Company	32603
	INSURER B :	
	INSURER C :	
	INSURER D :	
	INSURER E :	
	INSURER F :	

COVERAGES**CERTIFICATE NUMBER:** 53702375**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
	COMMERCIAL GENERAL LIABILITY						
	<input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR						EACH OCCURRENCE \$
							DAMAGE TO RENTED PREMISES (Ea occurrence) \$
							MED EXP (Any one person) \$
							PERSONAL & ADV INJURY \$
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE \$
	<input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC						PRODUCTS - COMP/OP AGG \$
	OTHER:						\$
	AUTOMOBILE LIABILITY						
	<input type="checkbox"/> ANY AUTO						COMBINED SINGLE LIMIT (Ea accident) \$
	<input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS						BODILY INJURY (Per person) \$
	<input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY						BODILY INJURY (Per accident) \$
							PROPERTY DAMAGE (Per accident) \$
							\$
	UMBRELLA LIAB <input type="checkbox"/> OCCUR						EACH OCCURRENCE \$
	EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE						AGGREGATE \$
	DED <input type="checkbox"/> RETENTION \$						\$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY <input type="checkbox"/> Y / N						PER STATUTE <input type="checkbox"/> OTH-ER <input type="checkbox"/>
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) <input type="checkbox"/> N / A						E.L. EACH ACCIDENT \$
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE \$
							E.L. DISEASE - POLICY LIMIT \$
A	Professional Liability Pollution Liability		✓	AEC-9034415-04	1/23/2020	1/23/2021	Per Claim \$1,000,000 Annual Aggregate \$2,000,000

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

The claims made professional liability coverage is the total aggregate limit for all claims presented within the annual policy period and is subject to a deductible. Thirty (30) day notice of cancellation in favor of the certificate holder on all policies.

CERTIFICATE HOLDER**CANCELLATION**

Master Certificate

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

Joe Bryant

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ACORD 25 (2016/03)

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Pay Equity Reporting Form PE10-249, Version 03-2018

Company name:	Huitt-Zollars, Inc.
Mailing address line 1:	6501 Americas Parkway NE
Mailing address line 2:	Suite 830
City, state, zip code:	Albuquerque, NM 87110
Phone:	505.883.8114
E-mail address:	krkemper@huitt-zollars.com
FEIN number:	75-1500178
EAN number:	02-279106-000
SUPPLIER ID:	0

Job Category	No. Females	No. Males	Gap (Absolute %)
1.1 Exec/Senior Level Officials/Mgrs	0	4	N/A
1.2 First/Mid Level Officials/Mgrs	0	0	N/A
2 - Professionals	4	13	18.71%
3 - Technicians	3	6	9.48%
4 - Sales Workers	0	0	N/A
5 - Office and Admin. Support	4	0	N/A
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	6
Total # Female Only Job Categories	1
Total # Male Only Job Categories	1
Total # Females (all categories)	11
Total # Full Time Females	11
Total # Part Time Females	0
Total # Males (all categories)	23
Total # Full Time Males	23
Total # Part Time Males	0
Total # Employees	34
Female % Workforce	32.35%
Male % Workforce	67.65%
Calculated Weighted Average Gap	15.52%

Submit only this form

Must be signed by the principal executive of the company:

RFP#: 4259.92

Signature certifies that all employees working in New Mexico are included, the data is for the current calendar year, and any challenges to your information may require you to get third party verification at your own expense.

Kim R. Kemper, Senior Vice President

Name and title, printed



Signature

May 6, 2020

Date submitted

HUITT-ZOLLARS

6501 Americas Parkway NE, Suite 830

Albuquerque, NM 87110

P: 505.883.8114

F: 505.883.5022

www.huitt-zollars.com

**A full-service design firm transforming how we
live, work, and connect with our world through**

ADVANCEDDESIGNSM

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I. GENERAL INFORMATION

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II. PROJECT TEAM MEMBERS

LEGEND

HZ - Huitt-Zollars, Inc.

CF - CobbFendley

RME - Rocky Mountain Ecology

GT - Geotest

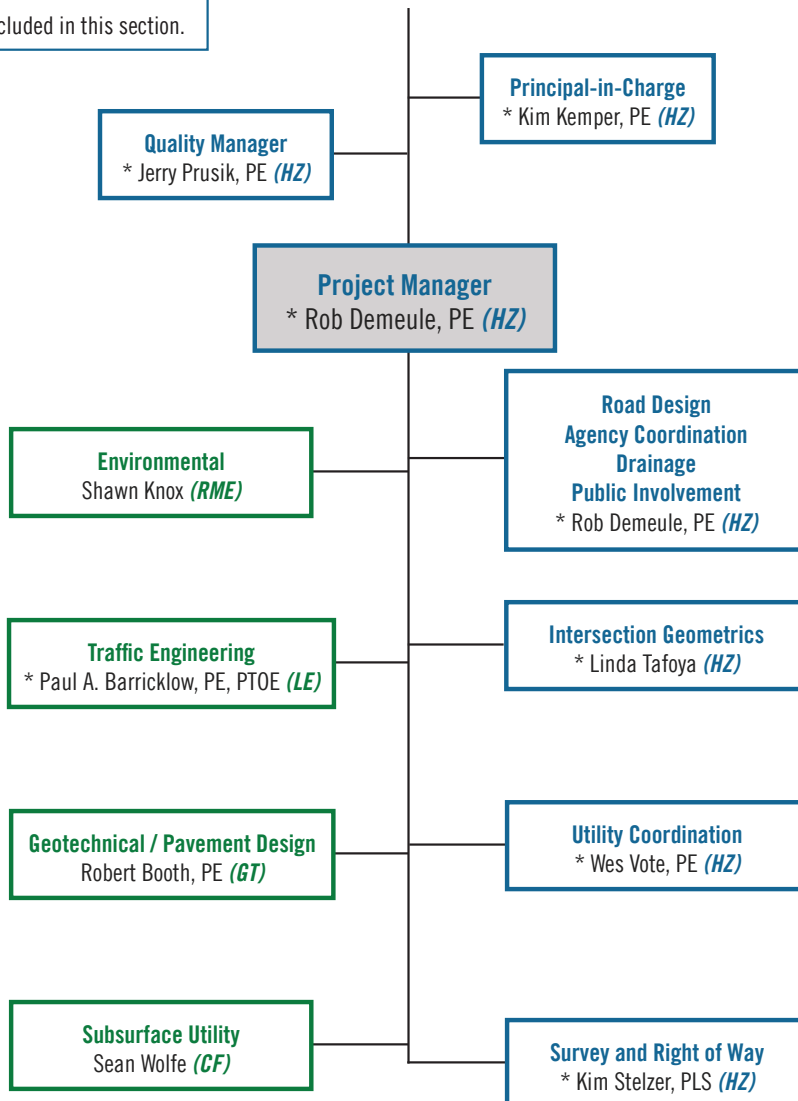
MRWM - MRWM Landscape Architects

LE - Lee Engineering, LLC

* Resume included in this section.



**City Project Manager
Municipal Development**
Gary Sandoval



ORGANIZATION PLAN

Huitt-Zollars has assembled a highly-qualified team structured to efficiently apply their skills during the execution of work; and to establish a clear hierarchy of functions and our responsibilities to meet specific project requirements. The team has the qualifications, credentials, and experience to provide the services requested by the City of Albuquerque for the De Vargas Road Widening Project. The Organization Chart to the left illustrates the role of each team member and the lines of communication under the direction of the Project Manager, Rob Demeule, PE. Supplemental resumes follow on the subsequent pages. Below is information about the subconsultants.

SUBCONSULTANTS

Lee Engineering - Traffic Engineering

Lee Engineering, LLC (LEE) is a civil engineering firm dedicated to providing quality traffic engineering and transportation planning services to federal, state and local agencies, private clients, and other design professionals for over 20 years. LEE has built a reputation on their ability to integrate traffic engineering and transportation planning expertise with technical know-how to produce powerful, customized decision making tools.

Rocky Mountain Ecology - Environmental

Rocky Mountain Ecology (RME) is a woman-owned, small business that specializes in environmental documentation, natural, and cultural resource surveys throughout the Southwest. RME staff has more than 60 years of combined experience performing natural resource management activities. Their primary goal is to service private, state and federal and tribal entities engaged in natural and cultural resource compliance and management activities.

Geo-Test - Geotechnical/Pavement Design

Geo-Test, Inc. has provided consulting services in materials engineering and testing, and geotechnical engineering investigations, throughout New Mexico and the Southwest for 27 years. Fully staffed and equipped offices and laboratories are located conveniently in Albuquerque, Santa Fe, and Las Cruces, New Mexico. Geo-Test, Inc. is qualified to perform many tasks associated with construction, environmental and geotechnical projects, such as earth embankment dams, commercial and industrial structures, highways, and bridges. Geo-Test's focus is on providing practical, cost effective, site specific solutions to their design and construction challenges. Geo-Test, Inc. provides integrated engineering and construction services supported by in-house drilling and laboratory capabilities.

CobbFendley - Subsurface Utility

Since 1997, CobbFendley has provided SUE services for leading private and public sector clients including Departments of Transportation (DOTs), toll road authorities, utility companies and various municipalities. The firm has provided SUE services on more than 800 projects, working with clients and design consultant teams to assess and implement SUE strategies that eliminate utility conflicts and reduce costly construction delays. To accommodate project and schedule requirements, CobbFendley has ten (10) Professional Engineers with experience in SUE and utility coordination and eight (8) SUE crews.

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III. RESPONDENT EXPERIENCE

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IV. TECHNICAL APPROACH

2. PLAN TO PERFORM THE SERVICES REQUIRED BY THE PROJECT SCOPE

OVERALL APPROACH – INCORPORATING SOLUTIONS INTO A STREAMLINED PROCESS

We will initiate the project with a detailed Work Plan which includes the project's complete budget, project schedule, quality plan, submittal milestones, agency coordination checklists, design review checklists, and design spatial orientation. The following components will be included:

- » *Prepare an inventory of existing and future issues relative to traffic, pedestrians, bicycles, transit (if needed), storm drainage, water and sanitary sewer, dry utilities, and existing ROW.*
- » *Prepare an inventory of existing environmental issues, if needed.*
- » *Research records and create an inventory of adjoining plats.*
- » *Prepare the project's constraints map.*
- » *Walk the project corridor with the City's Project Manager and discuss the project's critical issues which include eliminating cut-through traffic, intersection geometrics, utilizing existing infrastructure, right-of-way constraints, and project funding.*

Base Mapping and Studies:

Compile existing mapping from MRCOG, Bernalillo County, NMDOT and other sources. Perform field surveys and office data reduction to create the project's Base Map. Preparation of four studies is anticipated for the project includes a drainage study, an intersection analysis study, an environmental study, and a geotechnical study.

Design Analysis Report (DAR) and Conceptual Engineering (30%)

Prepare DAR with options for typical roadway section that address the City's requirements, evaluate options, and select final options to move on to conceptual engineering. Prepare preliminary drainage report.

Prepare planning level right-of-way constraints map with land owner information. Right-of-way acquisition appears to be required for full width construction. Construction easements may be required throughout the project limits in order to build the pedestrian improvements. The 30% submittal which shall include:

- » *Plan and Profile Sheets and Typical Sections*
- » *Drainage Plans*
- » *Storm Drain Plan and Profile Sheets*
- » *Intersection Layouts*
- » *Signal Modifications*
- » *Construction and Right-of-Way Estimates*
- » *30% Design Analysis Report*

This submittal provides the Project Team opportunities to explore creative cost effective solutions. These solutions shall be discussed and evaluated at regular meetings with the City's Project Manager. Solutions worth pursuing shall be evaluated in Agency coordination meetings including COA DMD, COA Transit, ABCWUA, COA Planning, COA CIP, and NMDOT.

Public Involvement and Coordination

Public Involvement is an important component of the final design process. Our primary goals will include:

- » *Soliciting information from the public in order to get a holistic understanding of the corridor and current impacts on local citizens; and*
- » *Engaging the public in the development of solutions that address present and anticipated conditions along the corridor. Our team will offer multiple means of input for the public to elicit as wide a spectrum of perspectives as possible.*

Infrastructure Design of De Vargas Road Improvements (60%, 90%, Final)

The 60 percent, 90 percent and final submittals will be developed in a timely manner in order to have appropriate checks and QA/QC reviews and submittal updates. Additionally we integrate Value Engineering throughout the project. Based on our experience, key elements for Value Engineering on this project include:

- » *Drainage System Improvements*
- » *Permanent Intersection Controls*
- » *Illumination*
- » *Pavement Design*
- » *Traffic Signal Interconnect and ITS Design*

Bidding Phase and Construction Phase

Prepare bidding documents and bid analysis. Assist the City as needed with construction phase services (weekly meetings, RFIs, submittals, field visits, inspection (if needed), change order/pay app review, and close out).

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V. COST CONTROL



COST CONTROL OF DESIGN PROCESS

The most effective method to achieve cost control in the design process is to develop a detailed work plan and schedule upon initiation of the project, then monitor progress against budget and work plan milestones on a weekly basis. This work plan defines key work activities, discusses technical means and methods that will be employed, assigns responsibilities, defines deliverables, and establishes man-hour requirements for each activity, as well as quantities and quality of end products. The Project Manager then develops a schedule using Microsoft Project, where key activities can be networked and loaded with personnel resources. Resources are scheduled with other projects in mind, and budgets are established by task or activity. Working with the City staff, we can readjust the task budgets while maintaining the bottom line. If at any time the project becomes out of scope or budget growth is anticipated, the City will be informed immediately and solutions will be developed to maintain the project within budget.

COST CONTROL OF CONSTRUCTION COST

At the very beginning of the job we will prepare an independent estimate of probable construction cost based on estimated quantities and current unit cost data; this base line cost estimate will be updated throughout the life of the project. We will provide the City a monthly progress report discussing progress achieved during the month, work expected to be performed in the upcoming month, an analysis of actual versus expected progress, as well as identifying issues which could cause delays to the on-time completion of work. Included with the progress report will be a cost control report that will track design costs and construction cost estimates. We will identify significant changes impacting the cost of construction to the City whenever they occur throughout the design process. Updated construction cost estimates will be compared to the City's budget and will be discussed with the City staff on a regular basis. We will incorporate construction techniques into the design process through constructability reviews. All elements of the design are reviewed for cost saving potentials to include reducing the construction schedule.

COST ESTIMATING TECHNIQUES

Accurate cost estimating is essential to evaluating alternatives and establishing construction cost budgets. We have customized AutoCad Civil 3D to generate quantities associated with City of Albuquerque unit prices. We maintain a database of unit costs that include low-bidder cost on similar project types, and bid unit prices on projects that we have designed. We use this database and published City Unit Prices and other published data to establish project unit prices. In establishing these unit costs, we will also consider local contractor workload, availability of local materials, skilled labor requirements, and site constraints. This approach will allow us to track cost in a similar format in which the bid form will be prepared. We work closely with local contractors and have a keen understanding of how they approach and manage risk. This enables us to provide the most reasonable opinions of construction cost to our clients.

COST ESTIMATE COMPARED TO BID AWARDS

The chart below is presented to illustrate our past experience with control of construction costs on various projects within the past two years.

Name Of Project	Month/Year of Bid	No. Of Bids	Final Cost Estimate	Low Bid Amount
Louisiana-Gibson Regional Drainage Facility at Kirtland Air Force Base	July 2018	4	\$2,516,400	\$2,199,561
Meadowlark Road and Waterline Reconstruction	November 2018	4	\$2,300,000	\$2,100,000
Salce Basin	May 2019	2	\$1,900,000	\$2,200,000
Lift Station 27 and Force Main, and Lift Station 16 Upgrades	May 2019	3	\$5,828,314.89	\$5,047,558.98
WWTP #2 UV Disinfection System Replacement	October 2019	3	\$1,779,626.40	\$1,659,408.70

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APPENDIX: FORMS