

CITY OF ALBUQUERQUE

Albuquerque, New Mexico Office of the Mayor

Timothy M. Keller, Mayor

INTER-OFFICE MEMORANDUM

DATE: August 4, 2020

TO: Patrick Davis, President, City Council

FROM: Timothy M. Keller, Mayor

SUBJECT: Mayor's Recommendation of Parametrix for Engineering Consultants for Unser Blvd. Widening – Kimmick Dr. to Paradise Blvd.

The Selection Advisory Committee (SAC) met via email on August 4, 2020 to consider the following project:

Project: Project No: 7050.07; Engineering Consultants for Unser Blvd. Widening – Kimmick Dr. to Paradise Blvd.

Agency: Department of Municipal Development

Three proposals were received in response to the Request for Proposals.

Project Description: The scope of the project includes the design and construction of roadway improvements to widen Unser Boulevard from Kimmick Drive to Paradise Boulevard, which includes construction of two additional driving lanes, medians, bicycle and multi-use trail facilities, landscaping infrastructure, lighting and other improvements as needed. The project may require a design analysis report (DAR), traffic study, traffic engineering, geotechnical reporting, pavement evaluation, NMDOT level utility coordination, storm drainage analysis, subsurface utility engineering (SUE), public involvement, right-of-way acquisition services including NMDOT right-of-way survey/mapping, legals and exhibits, NEPA documentation, bidding and construction phase services, construction management, and material testing to include quality control and quality assurance. This project will be funded through both federal and local funding and will be administered through the NMDOT. (Approximately 2.7 miles)

The Committee made the following recommendation of the three highest ranked respondents:

| Parametrix | T.Y. Lin International | WSP |
|------------|------------------------|-----|
|------------|------------------------|-----|

The Cover Analysis, Score-Sheet Compilation and Minutes of the SAC Meeting are attached.

Therefore, in accordance with Section 14-7-2-1 et seq, ROA 1994, the following is my consultant selection recommendation concerning the procurement of professional services for the above listed project:

Parametrix

Mayor's Recommendation of Parametrix for Project No: 7050.07; Engineering Consultants for Unser Blvd. Widening – Kimmick Dr. to Paradise Blvd.

This recommendation is being forwarded for Council consideration and action.

Date

Approved:

DS

El

Approved as to Legal Form:

-DocuSigned by:

Esteban Aguilar

8/13/2020 | 3:41 PM MDT

Esteban A. Aguilar, Jr. City Attorney

Date

Recommended:

Patrick Montoya

Sarita Nair, JD, MCRP

Chief Administrative Officer

8/13/2020 | 10:36 AM PDT

Patrick Montoya, Director Date Department of Municipal Development

MIM

Attachments:

Cover Analysis Composite SAC Evaluation Form Minutes of the SAC Meeting

Cover Analysis

1. What is it?

A request for Professional Engineering Services.

2. What will this piece of legislation do?

This will provide for the design of the roadway widening of Unser Boulevard from Kimmick Drive to Paradise Boulevard.

3. Why is this project needed?

The project will address excessive traffic congestion presently experienced along the corridor by providing additional travel lanes and intersection improvements. The project is also expected to help address anticipated growth of traffic volumes projected by MRCOG.

4. How much will it cost and what is the funding source?

Construction is anticipated to cost approximately \$29,000,000.00. The funding source is identified as Federal Grant A300304.

5. Is there a revenue source associated with this contract? If so, what level of income is projected?

There is not a revenue source associated with this Agreement.

6. What will happen if the project is not approved?

If this project is not approved, traffic congestion along the corridor will continue to increase and roadway conditions will further deteriorate as City development fills in the adjoining area.

7. Is this service already provided by another entity?

No other entity provides these services for the City of Albuquerque.

Composite Selection Advisory Committee Evaluation Form

Project No: 7050.07; Engineering Consultants for Unser Blvd. Widening - Kimmick Dr. to Paradise Blvd.

DATE: 8/4/2020

| Evaluation Criteria | Maximum | Firm Name | Firm Name | Firm Name |
|---|---------|------------|-----------|------------------------|
| | Points | Parametrix | WSP | T.Y. Lin International |
| General Information Provide Name and Address of Respondent and, if firm, when firm was established. Provide number of employees, technical discipline and registration. Indicate where the services are to be performed. | 25 | 24 | 25 | 25 |
| I. Project Team Members | | | | |
| Provide organization plan for management of the project. | | | | |
| 2. Identify all consultants to be used on the project. | | | | |
| Provide qualifications of project team members shown in organization plan, including registration and membership in professional organizations. Provide any unique knowledge of key team members relevant to the project. | 125 | 111 | 112 | 109 |
| II. Respondent Experience | | | | |
| Describe previous projects of a similar nature, including client contact (with phone numbers), year services provided, construction cost (if applicable), and a narrative description of how they relate to this project. Provide examples of the Project Manager's City experience within the past five (5) years that serve to demonstrate the | 150 | 130 | 129 | 127 |
| the Project Manager's knowledge of City procedures. | | | | |
| V. Technical Approach 1. Describe respondent's understanding of the project scope. 2. Describe how respondent plans to perform the services required by the project scope. | 100 | 89 | 88 | 84 |
| Describe specialized problem solving required in any phase of the project. | | | | |
| V. Cost Control | | | | |
| Describe cost control and cost estimating techniques to be used for this project. | | | | |
| Provide comparisons of bid award amount to final cost estimate for projects designed by the respondent during the past two (2) years. The consultant may provide | 75 | 66 | 65 | 65 |
| justification for any discrepancies that may exist with | | | | |
| this information. | | | | |
| Quality and Content of Proposal Evaluator's rating of overall quality of proposal. | 25 | 24.5 | 24.5 | 24.5 |
| Total Possible Points | 500 | 500 | 500 | 500 |
| Total Points (Before Point Deductions) | | 444.5 | | |
| Minus High and Low Scores Total | | 177.5 | 178 | 172 |
| Total Points (Minus High and Low Scores) | | 267 | 265.5 | 262.5 |
| Minus Point Deductions (If Applicable) | | 0 | 0 | (|
| Sub-Total (All Applicable Deductions Applied) | | 267 | 265.5 | 262.5 |
| Plus Tie Breaker Points (If Applicable) | | 0 | 0 | (|
| SAC TOTAL SCORES | | 267 | 265.5 | 262.5 |
| | | - | - | - |
| Plus Interview Scores | | 0 | 0 | [C |
| FINAL SCORES | | 267 | 265.5 | 262.5 |

Minutes of the Meeting of the Selection Advisory Committee August 4, 2020

via Email

Engineering Consultants for Unser Blvd. Widening – Kimmick Dr. to Paradise Blvd.

Project No: 7050.07

Present:

Jill Cuppernell, Project Manager, Department of Municipal Development Paula Dodge-Kwan, PE, Department of Municipal Development Savannah Torres, PE, Department of Municipal Development Tim Brown, PE, Department of Municipal Development Debbie Bauman, Department of Municipal Development

Staff:

Myrna Marquez, Administrator, Selection Advisory Committee

Three proposals were received in response to the Request for Proposals.

Project Description:

The scope of the project includes the design and construction of roadway improvements to widen Unser Boulevard from Kimmick Drive to Paradise Boulevard, which includes construction of two additional driving lanes, medians, bicycle and multi-use trail facilities, landscaping infrastructure, lighting and other improvements as needed. The project may require a design analysis report (DAR), traffic study, traffic engineering, geotechnical reporting, pavement evaluation, NMDOT level utility coordination, storm drainage analysis, subsurface utility engineering (SUE), public involvement, right-of-way acquisition services including NMDOT right-of-way survey/mapping, legals and exhibits, NEPA documentation, bidding and construction phase services, construction management, and material testing to include quality control and quality assurance. This project will be funded through both federal and local funding and will be administered through the NMDOT. (Approximately 2.7 miles)

Approximate Construction Cost\$ 29,000,000.00

The Administrator contacted the SAC Committee and RFP respondents on July 31, 2020 and advised them that this meeting would take place via email. She reminded the SAC Committee to have their scores and comments emailed to her by 11:00am on August 4, 2020.

The SAC Committee thanked the consultants who submitted a proposal and noted that the proposals were some of the best they'd seen; they commented on the quality and level of effort which was made clear in the understanding of the project as well as the finer details of the proposals. The Committee appreciated the time and effort set forth in creating these proposals.

The Administrator collected the Committee members' scores. Upon receipt of all the score sheet, the Administrator deleted the high scores and low scores and then totaled the proposal scores. Because this project is federally funded, point deductions were not applied. The Committee and respondents were advised of the final scores and the Administrator asked the Committee if there was a motion for interviews; no motion was made. The Administrator verified the scores prior to submitting the Committee's recommendation to the Mayor.

Final scores reported via the email meeting were as follows:

| Parametrix | 267 |
|------------------------|-------|
| T.Y. Lin International | 262.5 |
| WSP | 265.5 |

The Administrator informed the Committee of the following ranking of the top three firms based on their scores and subject to verification of Total Final Points:

| Parametrix | 267 |
|------------------------|-------|
| T.Y. Lin International | 262.5 |
| WSP | 265.5 |

There being no further business before the Committee, the Administrator adjourned the email meeting by emailing everyone the final scores on August 4, 2020 at 12:25p.m.

<u>Myrua Márquez</u>

Myrna Marquez, Administrator Selection Advisory Committee

cc: City Clerk



ENGINEERING CONSULTANTS FOR

UNSER BOULEVARD WIDENING

KIMMICK DRIVE TO PARADISE BOULEVARD

PROJECT NO. 7050.07 | JULY 23, 2020



Parametrix

July 23, 2020

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

Delivered via email to myrnamarquez@cabq.gov

RE: Proposal for Unser Boulevard Widening - Kimmick Drive to Paradise Boulevard, Project No. 7050.07

Dear Members of the Selection Advisory Committee:

Our team is excited about the opportunity to work with the City of Albuquerque (City) on the Unser Boulevard project to meet current and future traffic demands, pedestrian and bicycle needs, and associated utility infrastructure needs. The Parametrix team is comprised of professionals with specialized knowledge to complete this project with the City's goals in mind. Our team includes Horrocks Engineers, Terracon, Lee Engineering, WH Pacific, Consensus Planning, and AeroTech Mapping. Our team offers the following unique expertise that can be applied to the contract:

- Understanding of the Environmental Process The Unser Boulevard project will require the preparation of a Design Analysis Report/Phase I-A/B document and an environmental document that meets City, state, and federal requirements. Parametrix has prepared these types of documents for dozens of local-government projects, including the recent Atrisco Vista Phase I-A/B and Design project.
- Experience Working with the City Our team's extensive current and past City project experience provides us with an in-depth understanding of City staff, processes, and procedures.
- Experience with Trail and Complete Streets Design We have helped small and large communities with projects ranging from missing sidewalk links to comprehensive non-motorized system plans. From planning and predesign to environmental permitting and final construction, we bring together multidisciplinary teams to build public support, meet regulatory requirements, and design creative and exceptional projects.

• Familiarity of the Project Area - Parametrix has done several city and county projects near the project area. These include our planning, environmental, and design work for Bernalillo County on Atrisco Vista Boulevard just west of Unser Boulevard, our prior planning work for the Unser Boulevard and Paseo del Norte Intersection, our work on Paradise Boulevard to the east, and our planning work on the Coors Corridor Plan several years ago.

Our team has performed professional engineering services for the City, Bernalillo County, the NMDOT, and other entities for many years. We have reviewed the Standard Agreement and agree to the terms, conditions, and insurance requirements described in the Agreement. We are proud of our team's long history of providing innovative solutions and quality services to the City and we look forward to continuing that relationship. Thank you for reviewing our qualifications and considering the Parametrix team.

Sincerely, **Parametrix**

Chris Baca, PE Vice President

inspired people, inspired solutions, making a difference,



| SECTION I | |
|---|--------|
| General Information | |
| l. Name, Address, Telephone Number, and Year of Establishment 2. Number of Employees, Technical Discipline, Registration, and Registration Numbers 3. Where the Services will be Performed | |
| BECTION II Project Team Members | |
| l. Organization Plan for Management of the Contract 2. Consultants to be Used on the Contract 3. Qualifications of the Project Team Members 4. Unique Knowledge of Key Team Members Relevant to the Contract | |
| SECTION III Respondent Experience | |
| l. Previous Projects of a Similar Nature 2. Examples of Project Manager's City Experience within the Past Five Years that Demonstrates Knowledge of City Procedures | |
| SECTION IV Technical Approach | - |
| l. Understanding of the Project Scope 2. Plan to Perform Services Requested by the Project Scope 3. Quality Control Process 4. Specialized Problem Solving | 1 1 |
| SECTION V Cost Control | 15 |
| l. Cost Control and Cost Estimating Techniques 2. Comparison of Bid Award Amount to Final Cost Estimate | 1 |
| SECTION VI Certifications | C- |



KIMMICK DRIVE TO PARADISE BOULEVARD | PROJECT NO. 7050.07

SECTION I General Information

1. Name, Address, Telephone Number, and Year of Establishment

Parametrix is a 100-percent employee-owned firm dedicated to providing high-quality, client-oriented engineering, planning, and environmental consulting services to a diverse range of clients and industries. Established in 1969, Parametrix currently has 13 offices across six western states and approximately 550 employees. The Albuquerque office of Parametrix was established in 2001, and is located at 9600 San Mateo Boulevard NE, Albuquerque, New Mexico 87113. Our phone number is 505.821.4700.



2. Number of Employees, Technical Discipline, Registration, and Registration Numbers

The New Mexico staff consists of 26 transportation engineers and planners, surveyors, environmental specialists, and administrative staff. The engineering and planning side of our office includes



transportation engineers, structural engineers, drainage engineers, surveyors, and transportation planners with experience in all modes of transportation, including streets, highways, bicycle/trail facilities, transit, and rail. Our environmental staff includes National Environmental Policy Act (NEPA) specialists, archaeologists, biologists, architectural historians, and ethnographers. In addition to our technical expertise, several of our engineers and planners are especially adept in working with the public, stakeholder groups, and elected officials. This experience often makes the difference in project success when projects extend from the technical arena to the public and political arena. In addition, our mix of engineers, planners, environmental staff, and public involvement specialists working together creates an atmosphere of collaboration that results in better project plans and designs and

that meet the needs of the City of Albuquerque (City), as well as those of local elected officials, property owners, and the general public. The registered professional engineer who will be in direct responsible charge of the work for this contract is **Chris Baca**, **PE** (NMPE #12133). Our registered professional surveyor is Randy Hewitt, PS (NMPS #14730).

3. Where the Services will be Performed

Services provided for this contract will be primarily performed from the Parametrix Albuquerque office. Subconsultants Horrocks Engineers, Terracon, Lee Engineering, WH Pacific, Consensus Planning, and AeroTech Mapping will also provide services from their Albuquerque offices.

Parametrix has extensive experience working with the City. This includes several city-wide on-call and stand-alone engineering services contracts, such as Silver Avenue, Montaño Intermodal Center, Coors Corridor Update, Zuni Road Improvements, Paradise Boulevard Roadway Improvements, and Irving Boulevard. This experience provides us with a solid understanding of City staff, processes, and procedures.



SECTION II Project Team Members

1. Organization Plan for Management of the Contract

Management of the contract will include Parametrix as the prime consultant supported by the six subconsultants discussed in Section II.2. Parametrix will be responsible for the overall contract, will provide project management, and will serve as the interface between the consultant team and the City. Parametrix will also be the technical lead for concept development, roadway design and lighting analysis, public involvement, environmental, and survey/ right-of-way (ROW). Activities performed by

subconsultants will include subsurface utility engineering (SUE), construction management, materials testing/geotechnical engineering/ services/investigations, traffic engineering and modeling, storm drain design, photogrammetry, and landscape design. The staff for each major activity, their role on the team, and the structure and proposed relationships of the project team are shown in Figure 1.

2. Consultants to be Used on the Contract

Parametrix has partnered with six other firms to provide support in specialty fields. Our proposed subconsultants and their roles are:

• Horrocks Engineers - SUE, utility coordination, and construction management

- Terracon Geotechnical services and pavement design
- Lee Engineering Traffic engineering and modeling, ITS design
- WH Pacific Storm drain design
- Consensus Planning Landscape design
- AeroTech Mapping Photogrammetry

3. Qualifications of the Project Team Members

All of the individuals in our proposal have experience working with the City on prior projects including Silver Avenue, Montaño Intermodal Center, Coors Corridor Update, Zuni Road Improvements, Paradise Boulevard Roadway Improvements project, and Irving Boulevard. The qualifications of our key staff are outlined in the following pages.

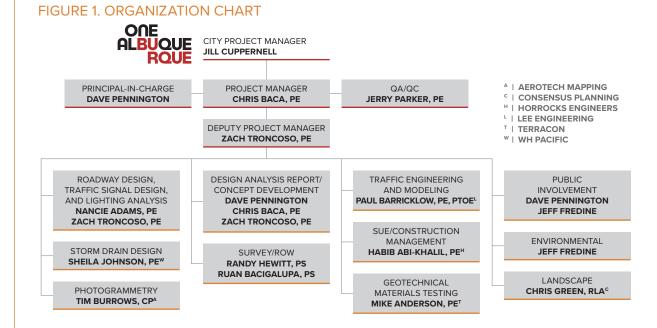
CHRIS BACA, PE



NMPE #12133 PROJECT MANAGER

Chris will serve as the project manager and main point of contact for this contract. He brings 30 years of experience in developing and

processing projects for the City that require coordination with the NMDOT and its processes for state and federal funding. Examples of Chris' experience with City projects include managing and/or directing several city-wide on-call engineering services contracts, Paradise Boulevard Roadway Improvements project, and the Montaño Transit Center. Chris has a BS in Civil Engineering from UNM. He is active in ACEC and is a member of ITE.



Parametrix 2



ZACH TRONCOSO, PE



NMPE #25312 DEPUTY PROJECT MANAGER

In addition to serving as deputy project manager, Zach will provide roadway design and concept development services.

Zach is the project manager on the firm's current and previous city-wide on-call engineering services contracts. In this role, he has worked closely with the City's project manager and has been responsible for scoping, managing, and delivering tasks. He has a BS in Civil Engineering from UNM.

DAVE PENNINGTON



PRINCIPAL-IN-CHARGE Dave will serve as principal-in-charge and will provide support for concept development and public involvement services. He has 32 years of experience and has worked on

dozens of projects for the City. Examples of his City project experience includes his work with elected officials, neighborhoods, and DMD staff for the Rio Grande Boulevard/Candelaria Road roundabout reassessment and the 12th Street/Menaul project. Dave has a BS in Biology from UNM and has completed graduate work in Community and Regional Planning and Environmental Management from UNM.

JERRY PARKER, PE



NMPE #14373 QUALITY ASSURANCE/ QUALITY CONTROL Jerry will provide

quality assurance/ quality control (QA/ QC) services. Jerry has 34 years of

experience in planning, design, and construction administration of roadways, streets, trails, utilities, and other related civil infrastructure projects. Jerry's recent and relevant City experience includes his role as project manager and lead engineer for Irving Boulevard Improvements, Phases 1 and 2; and the University Boulevard/Tijeras Arroyo Drainage Evaluation. Jerry has a BS in Civil Engineering from UNM and is an officer and active member in ASCE.

NANCIE ADAMS, PE



NMPE #14494 ROADWAY DESIGN AND LIGHTING ANALYSIS

Nancie will provide roadway design and lighting analysis services. She has 25 years of experience

and has designed numerous projects of similar scope; she was project manager for the Golf Course Road widening project for Bernalillo County and worked on the City's Paradise Boulevard and Irving Boulevard reconstruction projects. Nancie has a BS in Civil Engineering from UCLA.

RANDY HEWITT, PS



NMPS #14730 SURVEY/ROW

Randy will provide survey and mapping services for the project. He has 28 years of survey and mapping experience and has provided

survey needs for hundreds of projects for the City and NMDOT. His experience combines aspects of both field and office surveying procedures, which enables him to maintain complete oversight of surveying projects under his direction. Randy has a Certificate in Civil and Surveying Technology from Albuquerque T-VI and a BA in Geography from UNM.

RUAN BACIGALUPA, PS



NMPS #11462 SURVEY/ROW

Ruan will be responsible for researching property boundaries and, if needed, preparing ROW map updates for the contract.

Ruan has 39 years of experience and has prepared hundreds of ROW maps for the City, Bernalillo County, and NMDOT. Examples of his experience on City projects include Unser



Boulevard Improvements – San Ygnacio Road to Dennis Chavez Boulevard and Paradise Boulevard Roadway Improvements. Ruan has a certificate in Civil & Map Drafting Technology from Albuquerque T-VI.

JEFF FREDINE



PUBLIC INVOLVEMENT AND ENVIRONMENTAL

Jeff will be responsible for coordinating public involvement efforts, preparing environmental documents, and obtaining environmental certifications for this

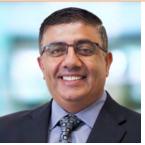
contract. Jeff has 25 years of experience in all local, state, and federal environmental and cultural resource laws, including NEPA. Examples of his project experience in the city and surrounding area include coordination of a virtual public meeting for the NM 109 Jarales Road project for NMDOT and the environmental clearance for the Alameda Drain Trail. Jeff has an MA in Anthropology from NMSU.

SUBCONSULTANTS

We have enlisted the support of six firms to meet the needs of this contract. Parametrix has worked with all these firms for many years; we trust their work quality and ability to meet schedules.

Horrocks Engineers will provide a full range of SUE, utility coordination, and construction management services to accurately identify, designate, and locate utilities.

HABIB ABI-KHALIL, PE



engineering experience. While serving as the Acting District Five Engineer for NMDOT, he was responsible for

NMPF #13475

Habib has 28 years

of transportation

managing and providing leadership for roadway construction and maintenance, engineering and technical support, traffic operations, safety operations, administration operations, and quality management. Habib has a BS in Civil Engineering from UNM.

Terracon will provide geotechnical investigations, field and laboratory testing and analysis, and trail and roadway pavement design.

MIKE ANDERSON, PE



NMPE #12132

Mike will oversee geotechnical engineering work. His group has extensive experience providing geotechnical investigations and analysis to the City.

Their experience includes on-site observation and monitoring, construction quality control and quality assurance programs, field and laboratory testing and analysis, construction material selection, compatibility and acceptability, pavement materials engineering, and construction management. Mike has a BS in Geological Engineering from Colorado School of Mines.

Lee Engineering will provide traffic engineering services, modeling, and ITS design services.

PAUL BARRICKLOW, PE, PTOE



NMPE #17744 PTOE #1885

Paul has over 18 years of experience in traffic engineering and transportation planning. His atypical combination of management and

engineering education combined with his handson experience make him uniquely qualified for complex traffic engineering and transportation planning projects. Paul has an MBA and BS in Civil Engineering from the University of Texas.

WH Pacific will provide storm drain design services.

SHEILA JOHNSON, PE

NMPE #19758



one- and two-dimensional modeling techniques, analysis and design of culverts and channels,



storm sewer systems, stormwater management and best management practice facilities, MS4 permitting, and 401/404 permit coordination.

Consensus Planning will provide landscaping design.

CHRIS GREEN, RLA



NMPE #234

Chris has over 30 years of experience in all phases of the landscape and site design process. His project experience includes streetscape development, commercial and retail projects,

and the design of over 50 park or recreational complexes. He has practiced sustainable site and landscape design for many years and is a Leadership in Energy and Environmental Design Accredited Professional.

AeroTech Mapping will provide photogrammetry for the project.

TIM BURROWS, CP



ASPRS CERTIFIED PHOTOGRAMMETRIST #1597

Tim has 16 years of experience in the photogrammetric industry. He is proficient in an assortment of software packages

that include ESRI ArcGIS/Info, Intergraph's Microstation Suite, Autodesk products, and

the Leica Socet Set Softcopy Systems and Summit Evolution Softcopy system. Tim has extensive knowledge of the photogrammetric process, which plays an important role in his understanding and implementation of successful QA/QC procedures.

4. Unique Knowledge of Key Team Members Relevant to the Contract

The Parametrix team offers the following unique knowledge that can be applied to the contract:

Understanding of the Environmental

Process – As a federally-funded action, the Unser Boulevard project will require the preparation of a Design Analysis Report (DAR)/ Phase I-A/B document and an environmental document that meet City, state, and federal requirements. Parametrix has prepared these types of documents for dozens of "local-government" projects. Because our planning and environmental staff are within our company and local office, the coordination between these staff and the engineering team is seamless and efficient.

- Experience Working with the City Parametrix and our subconsultants have extensive experience working with the City. Our current and past projects, such as the Paradise Boulevard Roadway Improvements project, Silver Avenue, Montaño Intermodal Center, Coors Corridor Update, Zuni Road Improvements, Irving Boulevard, and dozens of tasks under citywide on-call contracts provide us with an understanding of City staff, processes, and procedures.
- Experience with Trail and Complete Streets Design – Parametrix has extensive past

experience in complete streets design projects, and we are familiar with the stateof-the-practice guidelines for complete streets presented in the National Association of City Transportation Officials Urban Street Design Guide and Urban Bikeway Design Guide. We have helped small and large communities with projects ranging from missing sidewalk links to comprehensive non-motorized system plans. From planning and pre-design to environmental permitting and final construction, we bring together multidisciplinary teams to build public support, meet regulatory requirements, and design creative and exceptional projects.

 Familiarity of the Project Area – Parametrix has done several city and county projects near the project area. This includes our planning, environmental, and design work for Bernalillo County on Atrisco Vista Boulevard just west of Unser Boulevard; our prior planning work for the Unser Boulevard and Paseo del Norte intersection; our work on Paradise Boulevard to the east; and our planning work on the Coors Corridor Plan several years ago.

SECTION III Respondent Experience

1. Previous Projects of a Similar Nature

Parametrix has extensive familiarity and experience with preparing City projects, including the Paradise Boulevard, Rio Grande Boulevard Feasibility Review and Design, Louisiana Hawk Signal Design, and Zuni Road Improvement projects. These projects included the redesign of existing routes with the accommodation of bicycle routes and amenities. Public involvement and coordination was also an important element of these projects.

Examples of our project experience relevant to this contract are described below.

US 550 - NM 313 TO NM 528 NMDOT



Parametrix prepared the preliminary design, final design, and environmental documentation for the segment of US 550 between NM 528 and NM 313 — a total project length of 1.75 miles. Parametrix also developed and implemented the public engagement plan for the project. The primary objectives of the project were to increase capacity, improve safety, and provide improvements for pedestrians and bicyclists. The design included a six-lane facility with raised medians to limit left-turn access, bicycle lanes, and continuous sidewalks.

- Priscilla Benevides, NMDOT
- 505.250.8760
- 2017 to Present

\$23.8M

This project demonstrates our team's ability to work with a diverse set of stakeholders with competing interests and needs. This project also has similar elements coordination with NMDOT, bicycle/ pedestrian improvements, traffic engineering services, and traffic flow modeling.

PARADISE BOULEVARD IMPROVEMENTS CITY OF ALBUQUERQUE



This project on Paradise Boulevard extends west from Eagle Ranch Road to Golf Course Road in northwest Albuquerque. The project included widening the road to add additional lanes where necessary in order to provide continuous lanes throughout the corridor. As part of the analysis of the existing conditions of the corridor, a drainage memo, traffic study, ADA assessment, and lighting study were completed.

- Bridgette Garrett, City of Albuquerque
- 505.768.3679
- 🛗 2015 to Present
- 🌮 \$2.5M
- The project demonstrates our team's experience working with the City DRC process, Public ROW Accessibility Guidelines compliance, and drainage requirements.

RIO GRANDE BOULEVARD FEASIBILITY REVIEW AND DESIGN





Parametrix is conducting a combination study and providing design along Rio Grande Boulevard from I-40 to Central Avenue. The work involves





KIMMICK DRIVE TO PARADISE BOULEVARD | PROJECT NO. 7050.07

upgrading pedestrian and bicycle infrastructure, implementing complete streets aspects along Rio Grande Boulevard, and analyzing and developing a concept plan for a roundabout at the intersection of Rio Grande Boulevard and Mountain Road.

- 👃 🛛 Jill Cuppernell, City of Albuquerque
- **505.768.3502**
- in progress
- This project is representative of our collaboration and use of InfraWorks.

ATRISCO VISTA PHASE I-A/B AND DESIGN BERNALILLO COUNTY

Parametrix is assisting Bernalillo County with planning, environmental, and design services for Atrisco Vista Boulevard north of Double Eagle II Airport. Our work includes a DAR/Phase I-A/B Study to examine the reconstruction and extension of Atrisco Vista Boulevard from Double Eagle II (DE II) Airport north to Southern Boulevard. This effort was completed in 2019 and resulted in a recommended alignment and conceptual design plans. We are currently working with the County on an environmental document, preliminary, and final design for the reconstruction of the existing roadway from DE Il north to Paseo del Norte. This 2.1-mile project has similar technical issues and coordination needs as the Unser Boulevard gap project and is being designed consistent with City standards.

 Richard Meadows, Bernalillo County (Study Phase)
 Leila Momenzadeh, Bernalillo County (Design Phase)

- 505.848.1598 (Richard) 505.224.2124 (Leila)
- 🛗 2018 to Present
- \$22.9M (Engineer's Preliminary Estimate)

This project includes the same planning, environmental, and design phases as Unser Boulevard, is similar in length, and involves very similar technical and coordination issues.

2. Examples of Project Manager's City Experience within the Past Five Years that Demonstrates Knowledge of City Procedures

Chris Baca has significant experience working with the City over the past 30+ years. His most recent experience includes Irving Boulevard, City Wide On-Call Engineering Services, Louisiana Boulevard Hawk Signal, Zuni Road Improvement projects, Coors Corridor Plan Update, and the Balloon Fiesta Park – I-25 Access Project (involves coordination with NMDOT and FHWA).

SECTION IV Technical Approach

1. Understanding of the Project Scope

Unser Boulevard is classified as a regional principal arterial and a limited access roadway. While there are multiple aspects to the project, we understand the primary focus of this project is to widen Unser Boulevard to meet current and future traffic demands, pedestrian and bicycle needs, and associated utility infrastructure needs. **All of the plans developed on this project will be compliant with the Complete** **Streets Ordinance O-2019-022.** There are three main project focuses for this project:

- 1. The development and analysis of design alternatives and preparation of a DAR
- 2. Preparation of an environmental document that meets the requirements of NEPA and FHWA
- 3. Development of Final Design plans for construction. In addition, the project may also require ROW acquisition services and construction-phase services



Beginning of project looking south.

Unser Boulevard is a four-lane roadway north and south of the project limits and a two-lane roadway in between. Upgrading the two-lane portion has been hindered for many years by technical challenges and a lack of funding. Now that funding is available, it will be important to find solutions to the major technical challenges. Some of these key challenges include:

 Overcoming constructability and cost constraints of the shallow bedrock through this portion of the roadway



- Understanding how future improvements to the Unser Boulevard and Paseo del Norte intersection may affect ROW needs
- Developing a ROW plan that takes advantage of previously purchased parcels
- A design that maintains existing traffic flow during construction
- The design of a complete streets roadway along Unser Boulevard that will accommodate traffic, pedestrians, and bicycles
- Access and connections to the existing Unser Boulevard

The above challenges and other critical steps in achieving the project objectives are discussed in the following sections and depicted in Figure 2.

2. Plan to Perform Services Requested by the Project Scope

Achieving the project objectives will involve multiple steps. Parametrix is experienced with providing all the elements that are needed to complete this project. Our team has performed these and similar services for the City, Bernalillo County, the NMDOT, and other entities for many years. Based on this experience, we have identified several issues that will drive the success of the Unser Boulevard project. We have grouped these into several key activities: A) Early Collaboration and Stakeholder Coordination, B) Field Investigations, C) **DAR, Environmental Document, and Public** Involvement, and D) ROW and Design, **Utility Coordination, and Construction** Management. Further discussion and our approach to these key activities are provided in the following sections.

A. EARLY COLLABORATION AND STAKEHOLDER COORDINATION

We believe that establishing a solid start to the project is one of the most important steps for successful completion. It is important to have all the stakeholder and key project discussions up front. This will help guide the project and will also help to minimize any late project additions and/or requirements. Our approach to accomplish this is to hold early collaboration and coordination meetings with DMD and the project stakeholders as follows:

CITY OF ALBUQUERQUE-DMD/PROJECT COLLABORATION

We view this project as a partnership between our team and the DMD to develop the best possible solutions and project alternatives to meet the needs of the public and our transportation system. As part of the coordination/collaboration effort we propose to hold a project kick off meeting with DMD to review the project. We will use InfraWorks design software as an active project alternative development tool to help facilitate this first meeting. This initial review will have base aerial photography with development and programming information that is available for zoning, storm drainage, utilities, and transit as well as geotechnical and other information available. We will review and modify typical section options actively with the DMD. The results of this meeting will help prepare the base documents to be used with the early agency/ stakeholder coordination described below, the collection of additional field information, and the preparation of the DAR.

AGENCY/STAKEHOLDER COORDINATION

Early coordination with all of the agency and stakeholder needs and criteria that influence the Unser Boulevard project will be critical to the success of the project. We propose holding an initial workshop (depending on COVID restrictions – this can be held either in person or virtually) to layout all of the critical items on the project and review them with the key individuals and decision makers. This will include discussions and review of information regarding transportation/ roadway (transit, vehicular, pedestrian, bicycle), storm water [Albuquerque Metropolitan Arrovo Flood Control] (AMAFCA), utilities (public and private – Albuquerque Water Utility Authority, Public Service Company of New Mexico, Gas Company, etc.), ROW, current City Paseo del Norte project, geotechnical, agency coordination (NMDOT/FHWA) and others as determined.

The outcome of this early coordination will be a management document that will be used to guide the project team while completing field investigations, design analysis and final project design.

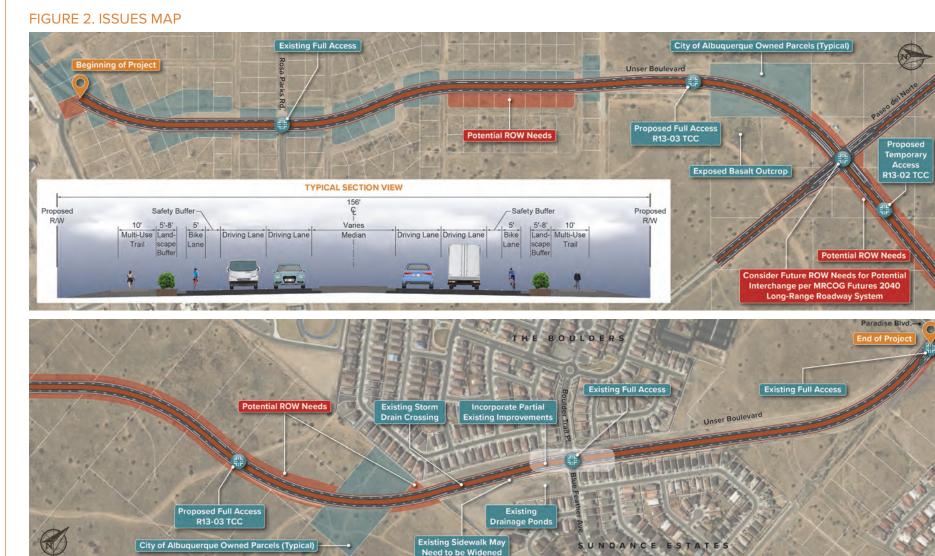
B. FIELD INVESTIGATIONS

SURVEY/SUE/PHOTOGRAMMETRY

Obtaining the base data to develop project alternatives and options and ultimately prepare design plans is a key effort. The SUE work will include Quality Level D, C, and B work. This includes record drawing requests, field survey of above ground features (excluding overhead lines), and horizontal designating of all found utilities within the project boundary.



KIMMICK DRIVE TO PARADISE BOULEVARD | PROJECT NO. 7050.07





We are proposing a hybrid photogrammetry/ lidar process to develop the base mapping and Digital Terrain Model (DTM) for the project. We will conduct a location survey to conventionally pick up key corridor details and set control panels. We will then have AeroTech Mapping prepare the base mapping/DTM using a hybrid of aerial photography, aerial lidar, and photogrammetric services. This will allow for a more accurate ground surface than conventional photogrammetry and still provide the base aerial photography and the digital identification of improvements within the corridor.

GEOTECHNICAL

The geotechnical conditions within the project area will greatly influence roadway design, drainage design, ROW needs, and utility design.

Terracon, our geotechnical subconsultant, will provide geotechnical investigations and engineering services and will prepare a Pavement and Subgrade Data Report for the corridor. They will also provide pavement recommendations based on their report findings.



Basalt outcrops, which are indicative of underlying shallow bedrock, are present throughout the project area.

The project area crosses a space with shallow bedrock. Depending on its depth and thickness, the presence of basalt can substantially increase construction complexity and cost. Numerous basalt outcrops are immediately adjacent to the alignment of Unser Boulevard.

Previous work performed by Terracon near Universe Boulevard found an average depth of about four to five feet and about six to eight feet in other areas in the project area. The presence of underlying basalt will affect both the complexity and cost of design and construction, especially for water and storm drain utilities. For this reason, it will be critical to obtain thorough data for the extent, depth, and condition of bedrock along the alignment. We will consider several methods of obtaining accurate data, including:

- The use of shear wave velocity profile testing to map the upper surface of bedrock and to assess if it can be excavated. The accuracy of this method will need to be assessed because voids and fracturing that are common in basalt can reduce the accuracy of shear wave velocity testing.
- Ground penetrating radar is also an option, however, this method of analysis is typically restricted to about six to eight feet below existing site grade. This depth may be adequate for the utility needs of this corridor.
- Auger borings could also be used. This approach would consist of a series of borings to a prescribed depth or point of refusal to establish an approximate top of bedrock surface for the entire ROW area or just for the alignment of utility excavations and foundations for signal mastarms. This is a low-tech and quick method that produces accurate results.

C. DAR, ENVIRONMENTAL DOCUMENT, AND PUBLIC INVOLVEMENT

DAR (ALTERNATIVES DEVELOPMENT)

The preparation of the DAR will be a key document that will report the alternative development process, summarize the project coordination/discussions, and will facilitate the approval process through the NMDOT for the use of federal funding. Some of the key elements that will be included in the document include the following:

 Typical Section and Alignment – we will develop typical sections to widen the existing two-lane roadway to a four-lane complete street with a multi-use trail for bikes, pedestrians, and buffers. The typical sections and alignment alternatives will need consideration and accommodate the areas that are already partially built out in order to make the best use of existing infrastructure.



Existing infrastructure to be utilized in the design process.



 Traffic – Unser Boulevard is a heavily traveled principal arterial that serves as a primary route for traffic in the westside of Albuquerque.

To assess this, we will conduct traffic operations analyses of the study corridor to identify traffic issues and support intersection and roadway design. Analysis will be conducted on the six full-access intersection locations in the study area plus the Rainbow Boulevard intersection south of the study area because of its influence on corridor traffic operations. Lee Engineering will utilize the Synchro traffic analysis software to determine intersection level of service and critical queue lengths. Results will help accurately inform the relevant intersection control type as well as lane configurations and appropriate queue storage.



Existing Unser/Paseo Del Norte Intersection.

• **ITS** – Communications are crucial infrastructure vital to a modern traffic and transportation network. On the westside of Albuquerque, fiber optic "trunks" and backbone communications run along Montaño Boulevard and Coors Boulevard. Major branches include Unser Boulevard from I-40 to north of Montaño and separately north of Irving Boulevard to McMahon Boulevard. Through the Unser reconstruction project, an opportunity exists to fill in a significant portion of the westside communications gap and provide traffic management coverage to the fastest growing section of the westside.

- Landscape Our team has considerable experience in weaving sustainable design solutions into our designs – from project inception to final construction. Elements that will be reviewed include water harvesting/light induced degradation, habitat enhancement, and sustainable materials.
- Drainage Drainage conditions for Unser Boulevard, within the project limits, have been analyzed under various reports, but much of the project is covered by AMAFCA's Upper Piedras Marcadas Watershed Drainage and Water Quality Management Plan (UPMDMP), dated April 2017. While currently the area is mostly undeveloped, it is ultimately planned to have residential and commercial development throughout. The City wishes to plan for the development proactively so the drainage systems are in place when they are needed. The overall drainage intent is a combination of storm drain and ponds to capture, contain and detain the runoff, based on the recommendations of UPMDMP and other local plans. One challenge to any excavation in the area is the existence of shallow basalt rock outcroppings found sporadically through the project area. Strategies to minimize this risk include shallow storm drains and using surface drainage where possible. For ponds, an

important factor will be the balance between larger shallow ponding areas versus smaller surface area.

- **Constructability** Due to the absence of alternate routes, constructability is a key element in the development of the alternatives for the project. It is important that the final alternative meet the purpose and need of the corridor, but we also need to make sure that the ability to effectively construct the improvements and maintain traffic flow and access is maximized. Parametrix proposes sequencing the project in two major phases: 1 - Maintain traffic on the existing two lanes of Unser Boulevard while constructing the one half of the median and additional two lanes. 2 -Move the traffic to the two newly constructed lanes and construct the remainder of the main line improvements.
- Bicycles and Pedestrians The MRCOG Long Range Bikeway System and the City Bikeways Trails and Facility Plan identify Unser Boulevard from Rainbow Boulevard to Paradise Boulevard as providing both future bike lanes and a bike trial alongside the roadway. These elements will be included in all of the project design alternatives.
- **Pavement** Our team will evaluate the existing pavement to determine its condition and anticipated remaining life. If it is determined that the existing pavement can be reused, Parametrix will adjust the design and construction phasing accordingly to preserve the existing roadway and median.
- **Cost** The current funding for the project is \$29M. As part of the design development process, we will be considering cost and



identifying options to get the most benefit from the available funding. We will prepare preliminary cost estimates for the various alternatives to aid in the decision-making process. This information will be presented to DMD as part of the alternatives development process and summarized in the DAR for review and final alternative selection.

ENVIRONMENTAL DOCUMENT



An example of the environmental landscape in the area.

Because federal funding will be used, the environmental investigations and documentation will need to adhere to the NMDOT and FHWA's procedures. FHWA typically requests that this type of project be processed using a categorical exclusion supported by environmental investigations to address specific issues of potential effect. Given the character of the corridor consists of a mixture of developed and undeveloped properties, the key investigations will likely include cultural resources, natural resources, noise, and neighborhood impacts. Parametrix will conduct cultural and natural resource investigations to comply with the NMDOT and FHWA expectations and will coordinate with the Volcano Cliffs and Paradise Hills Civic neighborhoods.

Based on cultural resource surveys conducted near the area, it is likely that some archaeological sites will be documented within the corridor. Early identification of these resources will increase the design team's ability to avoid impacting the sites and streamline the clearance process. Similarly, stretches of the project area are relatively undeveloped and general wildlife habitat considerations for nesting birds and other species should be considered, although concerns with endangered species area not anticipated. Expected neighborhood concerns include increased traffic and noise. These concerns will be addressed through early and proactive coordination with the neighborhood associations. Finally, widening the roadway will require a noise impact assessment consistent with FHWA's procedures. Parametrix has conducted other noise studies along Unser Boulevard and has the noise modeling expertise to assess impacts and evaluate the need for mitigation.

PUBLIC INVOLVEMENT

Our public involvement approach will include a combination of public meetings, meetings with neighborhood associations, and meetings with individuals, as requested.

We will provide briefing packets to Councilor Borrego and the state senators and representatives whose jurisdictions encompass the project area. Parametrix uses a variety of tools to effectively communicate with the public including presentations, handouts, displays, and social media. We are also adept at conducting virtual public meetings to engage the public even if public health guidelines prevent inperson meetings. We recently held a very successful public meeting in Santo Domingo Pueblo for a NMDOT project by using Access Live and other online tools to share information and respond to questions and comments in real-time. We have several other virtual public meetings scheduled in the next two months for projects in various locations across New Mexico.



Parametrix uses a variety of methods to communicate with the public. This example is a project summary we prepared for Atrisco Vista Boulevard to share information with elected officials and neighborhoods.



D. ROW AND DESIGN, UTILITY COORDINATION, AND CONSTRUCTION MANAGEMENT

ROW

We understand the plans for Unser Boulevard call for 156 feet to accommodate a Complete Streets design that includes four travel lanes, bike and pedestrian elements, transit, and landscape buffers. The existing ROW along Unser Boulevard varies from a minimum of 80 feet to 156 feet or more; therefore, ROW acquisition will be an important part of the DAR and design.

Additional ROW will be needed in two areas:

- The area from Paseo del Norte north to the southern boundaries of the Boulders and Sundance Estates subdivision (about 0.7 miles) where only 80 feet of dedicated ROW is available.
- 2. The short segment (about 300 feet) immediately south of Paradise Boulevard where 130 feet of dedicated ROW exists.

While the prevailing ROW needs are for 156 feet, the DAR should consider if additional width is needed at the intersection of Unser Boulevard and Paseo del Norte. MRCOG's Long-Range Roadway System identified this intersection as a potential future interchange.

Unser Boulevard Is a regional principal arterial; therefore, preserving the ability to expand its capacity in the future will be important. Moreover, the property surrounding the intersection at Paseo del Norte is planned for a regional town center which will consist of largescale retail, office, and light industrial uses. If ROW is not set aside now, the ability to expand capacity of the intersection will be lost.



Unser Boulevard Paseo del Norte potential future interchange concept.

The DAR can include concept layouts of a future interchange (or other high-capacity intersection design) to assess how much additional ROW could be needed. As part of a previous effort, Parametrix developed a single point urban interchange concept for this location and could quickly integrate it into the overall roadway plans as a potential future improvement. We are also experienced in the design of continuous flow intersections (CFI) and our design of a CFI is currently under construction at US 550 and NM 528. CFIs are often used in urban areas with a need for greater capacity which may not be suitable for an interchange. CFIs also have a much smaller footprint than interchanges.

Because federal funding is proposed for the Unser Boulevard project, FHWA will require ROW maps to be processed through the NMDOT. If the NMDOT requires ROW mapping, they will likely want the entire corridor mapped even if there is already sufficient ROW dedicated for portions of the route, especially because some of the ROW is composed of entire subdivision lots owned by the City. Parametrix is very experienced in the NMDOT's process and will help facilitate this for the City.

DESIGN, UTILITY COORDINATION, AND CONSTRUCTION MANAGEMENT SERVICES

Using the recommended alternative from the DAR, we will prepare the construction plans for the project. Development of the plans will be compliant with the City's process.

The project plans will be developed and taken through the City's design reviews and will include 30%, 60%, 90%, and 100% (final signature plans for the City). The plans will include all the required design components to accommodate vehicular, bicycle, and pedestrian traffic through the project. In order to comply with NMDOT/federal requirements, we will work with the DMD project manager and the NMDOT local governments liaison lead to hold the appropriate interagency reviews.

Design will comply with current master plans, the City Development Process Manual Executive Committee, the Albuquerque Integrated Development Ordinance, and the Complete Streets Ordinance. The roadway design for the typical sections and alignment will consider and accommodate the areas that are already partially built out in order to make the best use of existing infrastructure. The identified subsurface information will be used to adjust both the horizontal and vertical alignments to minimize impacts and construction costs as well as incorporate utility plans and crossings. The overall drainage intent is a combination of storm drain and ponds to capture, contain and detain the runoff, based on the recommendations of UPMDMP and other local plans.

As our team develops each of the various submittals, we will continuously evaluate the project elements and identify cost effective



solutions and modifications in collaboration with DMD personnel. Cost estimates will be updated at each project milestone and reviewed with the DMD to help keep the project design scope within the project construction budget.

Through the design development process, we will provide utility coordination services. These services include coordinating and facilitating meetings with utility owners during the plan development of the project. We will work with utility owners to identify potential utility conflicts and coordinate the design as much as practicable to avoid unexpected utility issues and minimize relocations. We will work closely with design and utility owners in determining potential utility conflicts, unexpected utility conflicts, and also eliminate unnecessary utility relocations.

Our team also includes members that can provide construction phase services should they be required. Of critical importance on federally-funded projects is the appropriate documentation required for reimbursement. Horrocks and Parametrix have previously partnered to provide these services.

3. Quality Control Process

Our approach to quality control is consistent whether the project is large and complex or small and straightforward, whether it is a design project or a study, and whether the work is conducted by Parametrix staff or our subconsultants. Parametrix has developed an internal quality control process that covers all aspects of our project delivery and operations. Our quality reviews are continuous throughout the project. Critical steps include having the project manager review and sign off on all assumptions, calculations, and plans and having independent quality assurance reviews for accuracy and completeness performed and documented at the interim and final project stages.

Our process utilizes Bluebeam software in order to track comments, responses to comments, and complete the quality control verification. This helps to make sure the entire quality control process is documented.

FIGURE 3. SCHEDULE

| TACK | | | 2020 | | | | 2021 | | | | | | | 2022 | | | | | | | | | | | |
|---|---|---|------|---|---|---|------|---|---|---|---|---|---|------|---|---|---|---|---|---|---|---|---|---|---|
| TASK | S | 0 | N | D | J | F | М | Α | Μ | J | J | Α | S | 0 | Ν | D | J | F | М | Α | М | J | J | Α | S |
| Notice to Proceed | | | | | | | | | | | | | | | | | | | | | | | | | |
| Survey, Field Work, Traffic Data | | | | | | | | | | | | | | | | | | | | | | | | | |
| Initial Collaboration Meeting | | | | | | | | | | | | | | | | | | | | | | | | | |
| Initial Stakeholder Meeting | | | | | | | | | | | | | | | | | | | | | | | | | |
| DAR | | | | | | | | | | | | | | | | | | | | | | | | | |
| Environmental Investigation and Documentation | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30% Design | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30% Design Review | | | | | | | | | | | | | | | | | | | | | | | | | |
| 60% Design | | | | | | | | | | | | | | | | | | | | | | | | | |
| 60% Design Review | | | | | | | | | | | | | | | | | | | | | | | | | |
| 90% Design | | | | | | | | | | | | | | | | | | | | | | | | | |
| 90% Design Review | | | | | | | | | | | | | | | | | | | | | | | | | |
| Final Signature Session (Fall 2020) | | | | | | | | | | | | | | | | | | | | | | | | | |
| ROW Maps and Acquisition | | | | | | | | | | | | | | | | | | | | | | | | | |
| Public/Stakeholder Coordination | | | | | | | | | | | | | | | | | | | | | | | | | |
| Quality Control | | | | | | | | | | | | | | | | | | | | | | | | | |



4. Specialized Problem Solving

Parametrix has worked with the DMD for many years and has assisted City project managers with many challenging projects. These challenges have included technical matters and challenges involving contentious and/or politically-sensitive projects. Parametrix has the expertise, skills, and diplomacy to help identify and achieve solutions that meet the needs of the City and stakeholder groups.

For technically challenging projects, we work with City engineers and planners to identify and discuss issues and potential solutions. This collaborative approach facilitates an understanding of perspectives and needs and enables quicker resolution so schedule delays are avoided. Our recent work for the Louisiana Boulevard and Natalie Street Hawk Signal project is an example of this collaboration.

As discussed in our technical approach, we use InfraWorks design software as a tool to facilitate conceptual design of projects, better convey technical design drawings, and to help stakeholders visualize and better understand what is being proposed. We are proposing to use auger borings in areas where storm drainage and underground utilities are necessary. As described previously, this approach would consist of a series of borings to a prescribed depth or point of refusal to establish an approximate top of bedrock surface along the potential alignment of the storm drain or utility and depths for signal mastarm foundations. This is a low-tech and quick method that produces accurate results. From this information we can adjust alignments and better identify construction needs and specifications.

SECTION V Cost Control

1. Cost Control and Cost Estimating Techniques

An effective cost control plan begins during the planning stages of the project development process and continues through final design and implementation. Parametrix focuses on three main aspects of cost control:

 Cost Control of the Design Process – Cost control is accomplished by comparing work completed to project costs on a regular basis. For each project, the project manager conveys the project budget to the task leaders and discusses the project expectations. Monthly, the project manager reviews the project scope and hours with the task leaders to make sure the project is staying on task and within budget. If the hours spent exceed the percent complete for a task, the project manager is immediately alerted of the disparity and can make adjustments as needed, preventing cost overruns.

- Cost Control of the Estimated Construction Cost – The effective control of construction costs for any project requires that several factors be addressed and understood early in the project development process. First, project objectives and priorities must be clear to all team members. Second, the issues and factors that may affect project design and implementation must be recognized by all design team members. Finally, the budget allocated to the project must be known.
- Cost Estimating Techniques Cost estimates developed by Parametrix are typically developed from several sources. As a starting point, the City's most current bid prices from projects recently awarded are used. We may also look to the NMDOT unit prices or at the bid prices for recently let Bernalillo County or NMDOT projects in the Albuquerque area as additional sources of information. We have found that this provides us with a more accurate reflection of actual bids by contractors for unit prices that frequently fluctuate.

2. Comparison of Bid Award Amount to Final Cost Estimate

The adjacent table provides comparisons of bid award amounts to final cost estimates for projects designed by Parametrix during the past three years.

FIGURE 4. COMPARISON OF BID AWARD AMOUNT TO FINAL COST ESTIMATE

| NAME OF PROJECT | BID-MONTH/ YEAR | NUMBER OF BIDS | FINAL COST ESTIMATE | BID AWARD AMOUNT |
|---|--------------------|-------------------|------------------------|---------------------|
| Alameda Drain Trail Phase 2 Design | December 2019 | 5 | \$2,619,561 | \$2,410,723 |
| US 550 Roadway Construction | June 2019 | 3 | \$26,757,291 | \$23,826,023 |
| Paradise Boulevard Improvements, Golf Course Road to Eagle Ranch | December 2018 | 5 | \$2,490,245 | \$2,475,491 |
| Alameda Drain Trail Phase I Design | January 2018 | 4 | \$1,787,982 | \$1,436,305 |
| US 54 | November 2016 | 3 | \$7,122,930 | \$6,946,118 |

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

| Company name: | Parametrix | | | |
|---|--------------|-------------|---|---|
| Mailing address line 1: | 1019 39th Av | e SE, Suite | 100 | |
| Mailing address line 2: | 0 | | | |
| City, state, zip code: | Puyallup, WA | 98374 | | |
| Phone: | 253.604.6600 | | | |
| E-mail address: | 0 | | | |
| FEIN number: | 91-0914810 | | | |
| EAN number: | 0 | | | |
| SUPPLIER ID: | 0 | | | |
| Job Category | No. Females | No. Males | Gap (Absolute % | |
| 1.1 Exec/Senior Level Officials/Mgrs | 0 | 2 | N/A | |
| 1.2 First/Mid Level Officials/Mgrs | 0 | 3 | N/A | |
| 2 - Professionals | 10 | 16 | 18.60% | |
| 3 - Technicians | 0 | 3 | N/A | |
| 4 - Sales Workers | 0 | 0 | N/A | |
| 5 - Office and Admin. Support | 1 | 1 | 36.29% | |
| 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 | | | Submit only this form |
| Total # Male Only Job Categories | 3 | | | • |
| Total # Females (all categories) | 11 | | | |
| Total # Full Time Females | 6 | | | |
| Total # Part Time Females | 5 | | | |
| Total # Males (all categories) | 25 | | | |
| Total # Full Time Males | 12 | | | |
| Total # Part Time Males | 13 | | | |
| Total # Employees | 36 | | | |
| Female % Workforce | 30.56% | | | |
| Male % Workforce | 69.44% | | | |
| Calculated Weighted Average Gap | 19.87% | | | |
| Must be signed by the principal executive of Signature certifies that all employees workir any challenges to your information may rec | in New Mexi | co are incl | RFP#: uded, the data is y verification at | s for the current calendar year, and your own expense. |
| leff Peacock, President and Chief Executive Of | ficer | bel | 1 a | 1/11/2020 |

| Name and title, printed | () Signature | Date submitted |
|---|--------------|----------------|
| Jeff Peacock, President and Chief Executive Officer | Allend | 1/14/2020 |



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 7/16/2020

| CER BEL | S CERTIFICATE IS ISSUED AS A I TIFICATE DOES NOT AFFIRMATI OW. THIS CERTIFICATE OF INS RESENTATIVE OR PRODUCER, AN | VEL` URA | Y OR NCE | NEGATIVELY AMEND, DOES NOT CONSTITUT | EXTE | ND OR ALTI | ER THE CO | VERAGE AFFORDED B | Y THE | POLICIES |
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| | netrix, Inc. 39th Ave. SE Suite 100 | | | | INSURE | R c : America | n Casualty Co | ompany of Reading PA | | 20427 |
| | lup, WA 98374 | | | | INSURE | RD:XL Spec | ialty Insuranc | e Co. | | 37885 |
| | 604-6600 | | | | INSURE | RE: Valley Fo | orge Insuranc | e Company | | 20508 |
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| INSR LTR | TYPE OF INSURANCE | | SUBR WVD | POLICY NUMBER | | POLICY EFF | POLICY EXP (MM/DD/YYYY) | LIMITS | s | |
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| X | | | | | | | | | \$ 1,000, | |
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| X | AUTOS ONLY X NON-OWNED AUTOS ONLY | | | | | | | PROPERTY DAMAGE (Per accident) | \$ | |
| | | | | | | | | | \$ | |
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| | EXCESS LIAB CLAIMS-MADE | | | | | | | AGGREGATE | \$ 15,000 | 0,000 |
| | DED X RETENTION \$ 0 | | | | | | | | \$ | |
| | ORKERS COMPENSATION | | Y | 6050531383 | | 11/1/2019 | 11/1/2020 | X PER OTH- STATUTE ER | | |
| AN | ID EMPLOYERS' LIABILITY IYPROPRIETOR/PARTNER/EXECUTIVE | | | 6050531402 | | 11/1/2019 | 11/1/2020 | E.L. EACH ACCIDENT | \$ 1,000, | 000 |
| OF | FICER/MEMBER EXCLUDED? | N/A | | | | | | E.L. DISEASE - EA EMPLOYEE | | |
| lf v | res, describe under SCRIPTION OF OPERATIONS below | | | | | | | | \$ 1,000, | |
| D Pr | ofessional Liability | | Y | DPR9949704 | | 11/1/2019 | 11/1/2020 | Per Claim | \$1,000 |),000 |
| CI | aims Made Illution Liability Included | | | | | | | Annual Aggregate Retroactive Date: | \$1,000 01/01/ |),000 1969 |
| DESCRI | PTION OF OPERATIONS / LOCATIONS / VEHICL | ES (A | CORD | 101. Additional Remarks Schedul | le, mav h | e attached if more | e space is require | ed) | | |
| Umbre | ella Liability policy is a follow-form to u | Inder | lvina | General Liability/Auto Liab | ilitv/Em | plovers Liabil | litv. | | | |
| Projec | t Number/Name: #7050.07 / Enginee | ering | Cons | ultants for Unser Blvd. Wid | lening - | Kimmick Dr. | to Paradise E | Blvd | | |
| | Albuquerque is named as Additional | | red o | n General Liability and Aut | o Liabil | ity, per policv | forms, with re | espect to the operations of | f the Na | med Insured |
| as req | uired by written contract or agreemen | t. | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| CERT | IFICATE HOLDER | | | | CANC | ELLATION | 30 Days Notio | ce of Cancellation | | |
| | | | | | | | | | | |
| | City of Albuquerque Selection Advisory Commit | tee (| Offic | e, CIP Division | THE | EXPIRATION | N DATE THE | ESCRIBED POLICIES BE CA EREOF, NOTICE WILL B Y PROVISIONS. | | |
| | Attn: Myrna Marquez | | | | | | | | | |
| | One Civic Plaza, 7th Floor, Albuguergue/Bernalillo Cou | Roc | m 7 | U5/ promont Contor | AUTHO | | NTATIVE | | | |
| | Albuquerque/Bernaillio Cot Albuquerque NM 87102 | шцу | 9006 | | Sel | in all | 5 | | | ſ |
| | | | | | 0000 | | - | | | |
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