

EC-20-197



CITY OF ALBUQUERQUE

Albuquerque, New Mexico

Office of the Mayor

Mayor Timothy M. Keller

INTER-OFFICE MEMORANDUM

October 15, 2020

TO: Pat Davis, President, City Council

FROM: Timothy M. Keller, Mayor 


SUBJECT: Approval of Parametrix, Inc. Other Government Contract

The Transit Department is in the process of constructing a new CNG Facility at the Daytona Maintenance Facility to replace a 20+ year old CNG Facility at the Yale Maintenance Facility. Transit wishes to enter into an Other Government agreement with Parametrix Inc. to evaluate the Daytona Maintenance Facility's Compressed Natural Gas Monitoring System, prepare construction bid documents, and perform construction phase engineering services that will enable the City to obtain the services of a qualified contractor to install a compliant Gas Monitoring System at the facility. The first phase of the project was \$99,799.29 and the second phase is \$41,731.33, for a total of \$141,530.62

The Transit Department will be utilizing the MRCOG On-Call Contractor most suited to the Daytona Maintenance Facility's Compressed Natural Gas Monitoring System project. The Transit Department has concluded that Parametrix is the firm that is most capable of handling projects that require transit planning, city planning, demographic, and public involvement skills.

In submitting this Request for Approval, I agree that I have reviewed and will comply with the rules of ethical conduct set out in Sections 3-3-1 et seq. and the Purchasing Ordinance at Sections 5-5-22 et seq.

Approved:



Sarita Nair
Chief Administrative Officer

10/23/20

Date

Approved as to Legal Form:

DocuSigned by:
Esteban A. Aguilar, Jr. 10/19/2020 | 9:16 AM MDT
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Esteban A. Aguilar, Jr.
City Attorney

Date

Recommended:

DocuSigned by:
Danny Holcomb
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10/19/2020 | 7:32 AM PDT

Danny Holcomb
Director

Date

Cover Analysis

1. What is it?

A contract with Parametix, Inc. for the purpose of the evaluation of the Daytona Maintenance Facility's Compressed Natural Gas Monitoring System, prepare construction bid documents and perform construction phase engineering services.

2. What will this piece of legislation do?

This legislation authorizes the Administration to sign a contract with Parametix, Inc. for evaluation and construction support services of the Daytona Maintenance Facility's Compressed Natural Gas Monitoring System.

3. Why is this project needed?

The new CNG Station at Transits Daytona Maintenance Facility needs a compliant Gas Monitoring System. This project will evaluate the system and prepare construction bid documents that will enable the City to obtain the services of a qualified contract for installation.

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

The first phase (evaluation) of this project was for \$99,799.29 and the second phase (construction engineering) is for \$41,731.33, for a total of \$141,530.62. The funding source is the Transit Grant Fund 665.

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

None

SCOPE OF WORK

Mid-Region Council of Governments

Daytona Maintenance Facility C/G Monitoring Improvements - Construction Eng.

PROJECT OVERVIEW

The City of Albuquerque (City) has requested that Parametrix provide a Scope of Work (SOW) to perform construction phase engineering services for the Daytona Maintenance Facility's Compressed Natural Gas Monitoring Improvements Project (Project). The following SOW details the specific roles and responsibilities of Parametrix for providing these services. Parametrix will provide these services under a not to exceed contract as detailed below.

Project Assumptions and Exclusions

- A fully compliant Gas Monitoring System is intended to be operational by April 2021.
- Jim Dong with STV Energy Services will provide support in this SOW.

PROJECT SCHEDULE

It is assumed that construction phase engineering services will be in effect during the construction and commissioning phases of the Project, which is expected to take no longer than six (6) months.

TASK 01 – PROJECT MANAGEMENT

Subtask 01.01 – Project Management and QA/QC

Parametrix's administrative staff will provide overview and guidance for the project to ensure that the project remains on schedule and within budget and is completed consistent with the original scope for the entire project duration. This subtask will also be used for Quality Control (QC) which is comprised of a technical review of deliverables and Quality Assurance (QA) which is the confirmation and documentation that QC of deliverables has been appropriately performed. This will be performed during development of all deliverables throughout the project. Subconsultant, STV Energy Services, specifically Professional Engineer Jim Dong who has specific knowledge of past improvements at the Daytona Facility, will help provide QC services.

Approach

The specific activities included under this subtask shall include the following:

- Project administration and management of budget, contract, billing memos, and schedule; as well as coordinating individual tasks and maintaining project records.
- Billings Effort: This activity is for project accounting and project coordination services that are not included as part of the Parametrix-audited overhead rate applied to this project.

SCOPE OF WORK (continued)

- QC of deliverables and project approaches in addition to ongoing QA. Parametrix will hire Jim Dong of STV Energy Services to provide QC oversight of submittals and RFIs as needed.

Deliverables

Deliverables shall consist of the following:

- Monthly effort tracking, project progress reports, and generation of invoices
- Quality Control and Assurance documentation available upon request

Assumptions

The following assumptions apply to this Subtask:

- This assumes a project management duration of up to 6 months

TASK 02 – CONSTRUCTION ENGINEERING

Subtask 2.01 - Submittal Reviews

Review submittals and prepare written responses to the City through email. Review testing results.

Deliverables

- Written comments/responses submitted by email on contractor submittals.

Assumptions

- Review submittals and resubmittals including all disciplines. This assumes approximately 2 hours per submittal.

Subtask 2.02 – Coordination and Responses to RFI/RFC

Provide interpretation and clarification of design during construction through formal responses to requests for information/clarification (RFI/RFC) from the contractor. Prepare written responses to RFIs/RFCs to the City by email. Provide verbal and email responses to questions from the City.

Deliverables

- Written RFI/RFC responses.
- Email responses to the City's emailed questions.

Assumptions

- Includes an assumed effort for general coordination and telephone or email responses over the course of construction with the City project manager.
- RFI/RFCs and their responses will not be received or made directly from or to the contractor or from the City construction manager but done through the City project manager.

SCOPE OF WORK (continued)

- Assumes an RFI takes a combined effort of 4 hours across all disciplines to resolve.

Subtask 2.03 – Field Reviews

Attend and participate in field walkthroughs at project milestones, which may include pre-construction, conduit layout, open loop testing, and closed loop and operational testing. Due to COVIC-19 travel restrictions, walkthroughs will be conducted by a Parametrix employee with a video camera, which will be reviewed remotely by other staff.

Deliverables

- Field review notes in email format

TASK 03 – ADDITIONAL SERVICES

Additional design or construction phase engineering services will be provided on an as-needed basis, as authorized by the City.

COST ESTIMATE

We propose to perform the above referenced tasks on a not-to-exceed budget of \$41,731.33. We are available to discuss this SOW and budget at your convenience.

Fee Estimate for Daytona Maintenance Facility C/G Monitoring Improvements - Construction Engineering

	Labor Dollars	Hours	Position and Rate					
			205.53	180.04	214.35	83.81	127.95	116.55
			Senior Consultant	Senior Engineer	Senior Electrical Engineer	Designer I	Electrical Designer II	Project Coordinator
Task 1 - Project Management and QA/QC								
<i>Project Management</i>	\$ 1,288.31	8	4					4
<i>QA/QC</i>	\$ 822.10	4	4					
Task 2 - Construction Engineering								
<i>Subtask 2.01 - Submittal Reviews</i>	\$ 5,144.40	24			24			
<i>Subtask 2.02 - Coordination and Responses to RFI/RFC</i>	\$ 3,155.12	16		8	8			
<i>Subtask 2.03 - Field Reviews</i>	\$ 12,646.43	84		4	40	40		
Task 3 - Additional Services								
<i>Additional Design and Construction Phase Engineering on an as-needed basis</i>	\$ 10,066.54	58	2	8	24		24	
Labor Subtotal	\$ 33,122.91	194	10	20	96		24	4
New Mexico Gross Receipts Tax (7.875%)	\$ 2,608.43							
Subconsultant STV Energy Services (Tax included)	\$ 6,000.00							
Total	\$ 41,731.33							

SCOPE OF WORK

Mid-Region Council of Governments Daytona Maintenance Facility C/G Monitoring Improvements

PROJECT OVERVIEW

The City of Albuquerque (City) has requested that Parametrix provide an evaluation of the Daytona Maintenance Facility's Compressed Natural Gas Monitoring System, and prepare construction bid documents that will enable the City to obtain the services of a qualified contractor to install a compliant Gas Monitoring System at the facility. The following Scope of Work (SOW) details the specific roles and responsibilities of Parametrix for the project. Parametrix will provide services under a not to exceed contract as detailed below.

Project Assumptions and Exclusions

- If operational testing of the existing equipment is required, the City will provide O&M staff knowledgeable with the operation and/or installation of the Gas Monitoring System
- The Daytona Maintenance Facility has two areas where design of a Gas Monitoring System has been performed. These two areas are known as Phase III and Phase IV. It is assumed that Phase III does not have a system installed, whereas Phase IV has a system installed but has not been fully functional recently.
- The City can provide as-built drawings of the existing system in Phase IV in either CAD or PDF format.
- The City can provide as-built facility plan drawings of the existing structural, electrical, and HVAC systems in the AutoCAD (.dwg) format.
- A fully compliant Gas Monitoring System is intended to be operational by April 2021; this is contingent on prompt deliverable reviews and many other factors outside of Parametrix's control. Following Notice to Proceed Parametrix will work with the City to develop a schedule to meet this goal and intends to turn around evaluation and design deliverables within the first two-to-three months. However, this cannot be guaranteed.
- This SOW does not include construction management (CM) services or startup assistance of newly installed system components after construction.

PROJECT SCHEDULE

It is assumed the deliverables listed in this SOW will be completed within sixteen (16) to nineteen (19) weeks after the initial site evaluation is performed, not including review times.

TASK 01 – PROJECT MANAGEMENT

Subtask 01.01 – Project Management and QA/QC

Parametrix's management staff will provide overview and guidance for the project to ensure that the project remains on schedule and within budget and is completed consistent with the original scope for the entire project duration. This subtask will also be used for Quality Control (QC) which is comprised of a technical review of deliverables and Quality Assurance (QA) which is the confirmation and documentation that QC of deliverables has been appropriately performed. This will be performed during development of all deliverables throughout the

SCOPE OF WORK (continued)

project. Quality Control and Assurance will be performed by staff not associated with the technical design of the project to look for discrepancies in the way the project is designed and administered. Subconsultant, STV Energy Services, specifically Professional Engineer Jim Dong who has specific knowledge of past improvements at the Daytona Facility, will provide the QC of all major deliverables.

Approach

The specific activities included under this subtask shall include the following:

- Project administration and management of budget, contract, billing memos, and schedule; as well as coordinating individual tasks and maintaining project records.
- Billings Effort: This activity is for project accounting and project coordination services that are not included as part of the Parametrix-audited overhead rate applied to this project.
- QC of deliverables and project approaches in addition to ongoing QA. Parametrix will hire Jim Dong of STV Energy Services to provide QC oversight of draft bid documents.

Deliverables

Deliverables shall consist of the following:

- Monthly effort tracking, project progress reports, and generation of invoices
- Quality Control and Assurance documentation available upon request.

Assumptions

The following assumptions apply to this Subtask:

- This assumes a project management duration of up to 6 months.

TASK 02 – SITE EVALUATION

Subtask 02.01 – Facility Site Survey (“Phase III” and “Phase IV”) and AHJ Meeting

Gather information on-site to gain a better understanding of what is needed to achieve the objective of the overall project, the existing conditions, and requirements of the Authority Having Jurisdiction.

Approach

The specific activities included under this subtask shall include the following:

- Take photographs of the areas where system components (e.g. gas sensors, calibration stations, annunciation stations, electrical panels) could be installed.
- Have discussions with City staff and the Authority Having Jurisdiction (AHJ) regarding requirements that may supersede or exceed national code.
- Verify physical location of gas sensors, calibration stations, annunciation stations, and the main control panel match the as-built drawings.
- Visually (remotely) check penetrations between monitored and non-monitored areas to ensure proper sealing mechanisms are in place.

SCOPE OF WORK (continued)

Deliverables

Deliverables shall consist of the following:

- Meeting minutes summarizing the discussions with the City staff and the AHJ. City staff and AHJ shall provide review and confirmation of meeting minutes.

Assumptions

The following assumptions apply to this Subtask.

- This City will coordinate with the AHJ for the site visit and meeting detailed above.
- The activities listed above are expected to take no longer than five (5) working days, virtual site visit will be conducted over no more than two (2) days.

Subtask 02.02 – “Phase IV” Evaluation and Basis of Design Summary

Approach

The specific activities included under this subtask shall include the following:

- Development of PowerPoint presentation slides that cover a brief condition assessment, narrative on the general functionality of the system, as well as a summary of components that can potentially be salvaged. A table and short summary detailing the Basis of Design (BOD) approach for the major project elements will also be presented.
- Review as-built information on existing gas detections systems installed at other City facilities.
- Discussions with the City (up to two teleconference meetings) to discuss potential alternatives for the new system and select an appropriate path forward.
- Evaluate information gathered during the site visit and preparation of a few select recommendations and alternatives. Discussions with potential equipment manufacturers.

Deliverables

Deliverables shall consist of the following:

- Presentation slides from the predesign review meetings with the City in PowerPoint and PDF format.
- Meeting minutes from the predesign review meetings with the City. City staff shall provide review and confirmation of meeting minutes.

Assumptions

The following assumptions apply to this Subtask.

- Parametrix will not perform troubleshooting or repair of the existing systems.
- The preparation of these documents is expected to take no longer than thirty (30) working days.
- The City will provide appropriately qualified staff to access and work on or interact with energized equipment.

SCOPE OF WORK (continued)

- The existing components will not be reused in any significant manner. Existing components may be identified for salvage and for reuse of the existing conduit.
- This City will coordinate with the AHJ for the site visit and meeting detailed above.
- The City shall provide as-built information on the building electrical system, the overhead door controls, and the HVAC system.

TASK 03 –DESIGN

Subtask 03.01 – Design Drawings and Specifications

Using the information gathered in the previous task and relevant code and industry requirements and standards, Parametrix will design a CNG monitoring system for the Daytona Maintenance Facility. Parametrix will also use the services of Jim Dong with STV Energy Services to assist in the design effort; providing 3rd party input on design considerations and insight into the approaches used on the prior gas detection system, designed and partially installed at the Daytona Facility.

Approach

The specific activities included under this subtask shall include the following:

- Produce design drawings that reflect on the following design basis criteria:
 - Parts of the Phase IV system will be salvaged and necessary new parts.
 - Phase III monitoring system components will be new
 - A new central control panel will be installed to handle both Phase III and Phase IV monitoring.
- Up to ten (10) drawings will be provided, and tentatively include:
 - Coversheet, Drawing Index, Project Summary
 - Legends and Abbreviations
 - System schematic
 - North Plan View
 - South Plan View
 - Large Scale Views 1 of 2
 - Large Scale Views 2 of 2
 - Equipment Schedules
 - Installation Details
- Up to six (6) technical specifications will be provided in CSI, 6 Digit format. These tentatively include:
 - Electrical General Conditions
 - Electrical Cable and Raceways
 - Gas Detection System
 - Control Panels
 - Two Miscellaneous (contingency items, construction sequencing, submittals, etc.)
- Level 3 Engineer’s Opinion of Probable Construction Cost (EOPCC) based on the chosen design basis.

This subtask shall not include production of conduit and cable schedules. Conduit and cable identification will be shown through “home runs” on plan drawings.

SCOPE OF WORK (continued)

Deliverables

- A draft set (~90%) of design plans for review by the City in PDF format sent to the City via email or FTP.
- A draft set (~90%) of specifications for review by the City in PDF format sent to the City via email or FTP.
- A draft (~90%) EOPCC.

Assumptions

The following assumptions apply to this Subtask.

- The preparation of draft documents is expected to take no longer than thirty (30) working days.
- City review and provision of comments on the draft documents are expected to take no longer than ten (10) working days.

TASK 04 – CONSTRUCTION DOCUMENTS

Subtask 04.01 – Finalize and Issue Construction Bid Documents

Generate a set of construction documents for the City to issue for bid. The documents will reflect the design chosen by the City in the previous Task.

Approach

The specific activities included under this subtask shall include the following:

- Correspondence with City officials to finalize the design basis.
- Create final design drawings, construction specifications, and an engineer's opinion of probable cost based on the chosen design basis.

Deliverables

- Electronic copy of responses to City comments on draft (~90%) documents.
- Electronic copy of final construction documents in PDF format sent to the City via email or FTP.

Assumptions

The following assumptions apply to this Subtask.

- The City will provide Division 0 and Division 1 specifications, with up to 20 hours of input from Parametrix and Jim Dong on the Scope of Work, Bid Items and Schedule of Payment, and Construction Sequencing.

The preparation of final documents is expected to take no longer than thirty (30) working days.

COST ESTIMATE

We propose to perform the above referenced tasks on a lump sum, not-to-exceed budget of \$99,799.29. We are available to discuss this SOW and budget at your convenience.

Fee Estimate for Daytona Maintenance Facility C/G Monitoring Improvements

	Labor Dollars	Hours	Position and Rate							
			205.53	180.04	214.35	145.26	83.81	127.95	116.55	111.32
			Senior Consultant	Senior Engineer	Senior Electrical Engineer	Electrical Designer IV	Designer I	Electrical Designer II	Project Coordinator	Publications Supervisor
Task 1 - Project Management and QA/QC										
<i>Project Management</i>	\$ 3,398.73	20	12						8	
<i>QA/QC</i>	\$ 2,466.31	12	12							
Task 2 - Site Evaluation										
<i>Subtask 2.01 - Facility Site Survey ("Phase III" and "Phase IV") and AHJ Meeting</i>	\$ 4,496.03	32		8	8		16			
<i>Subtask 2.02 - "Phase IV" Evaluation and Basis of Design Summary</i>	\$ 4,254.98	28		6	8		6	4		4
Task 3 - Design Drawings and Specifications										
<i>Subtask 3.01 - Design Drawings and Specifications</i>										
<i>Drawings</i>	\$ 27,455.64	165		9	68			88		
<i>Specifications</i>	\$ 13,434.41	67		6	54					7
<i>Misc. review and discussions w/ City</i>	\$ 6,239.64	32	8	16	8					
<i>Engineer's Opinion of Probable Cost</i>	\$ 3,914.96	26			2	24				
Task 4 - Construction Documents										
<i>Subtask 4.01 - Generate and Issue Construction Bid Documents</i>										
<i>Divisions 0 and 1 Bid document review/input</i>	\$ 3,789.01	20	2	14	4					
<i>90% review comments response list</i>	\$ 3,530.87	18	6	8	4					
<i>Prepare/compile final bid documents</i>	\$ 8,343.81	56		4	12			36		4
Labor Subtotal	\$ 81,324.39	476	40	71	168	24	22	128	8	15
Expenses (7 trips to Daytona)	\$ 65.45									
New Mexico Gross Receipts Tax (7.875%)	\$ 6,409.45									
Subconsultant STV Energy Services (Tax included)	\$ 12,000.00									
Total	\$ 99,799.29									