

June 27, 2023

File: 2042584400

Attention: Sharon Gilman
Associate Cochise County Administrator
Cochise County Procurement Department
1415 Melody Lane, Building C
Bisbee, AZ 85603

Luis Pedroza
Management Services Director & City Treasurer
City of Douglas
425 10th Street
Douglas, AZ 85607

Dear Sharon and Luis,

Reference: Scope of Work - Preliminary Engineering in Support of the 60% Detailed Design - Not Funded by the North American Development Bank

This Scope of Work, Preliminary Engineering in Support of the 60% Detailed Design - Not Funded by the North American Development Bank revised document dated June 27, 2023, supersedes, and reflects City/County comments and directions to the March 24, 2023, document. These were provided in a City /County Spreadsheet received by Stantec April 11, 2023. A complementary document 'Preliminary Engineering in Support of the 60% Detailed Design - Funded by the North American Development Bank' is provided to the City and County separate to this document.

This letter includes a spreadsheet summarizing the Scope of Work 'Preliminary Engineering in Support of the 60% Detailed Design - Not Funded by the North American Development Bank' SOW Tasks, the proposed SOW schedule, and the SOW fees to each corresponding Task. Attached to this letter is the Stantec 'Attachment A SOW'. The Attachment A includes the fee spreadsheet.

The Stantec Estimated Most Probable Construction and Total Project Cost Fee as detailed in Stantec December 11, 2020, report for the County and the City entitled 'Proposed Douglas Port of Entry Water and Wastewater Feasibility Report' (2020 Report) identified the estimated most probable construction cost of \$21,150,000 and the estimated most probable total project delivery cost of \$27,495,000.

The water supply to the West Douglas Expansion water service area includes the new West Groundwater Well, the new elevated West Storage Tank, and a water main with fire hydrants and connections. It is located along James Ranch Road (JRR) between the West Douglas Expansion (WDE) area and State Route 80 (SR 80), along SR 80 between the elevated storage tank and the intersection of James Ranch Road and SR 80 and includes service to Cochise College and possibly the US Customs and Border Patrol complex.

The estimated length of water main pipe in the 60% detailed design of 12-inch and 16-inch diameter pipe is 20,000 feet. The work includes a 550,000-gallon storage tank and an approximately 1,000 gallons per minute groundwater well and water treatment. The work includes APS power, local SCADA system with ability to connect in the future to the improved City's SCADA system and water service connections.

Wastewater collection and treatment includes a wastewater collection system along James Ranch Road between the West Douglas Expansion area and SR 80 and along SR 80 from Cochise College to a point of connection to the City collection system for treatment at the City Wastewater Treatment



Plant. The project includes possible service to the US Customs and Border Patrol complex at West Puzzi Road and James Ranch Road, as well as homes on septic tanks in the Old Hospital Area. The estimated length of pipe is 36,500 feet.

The wastewater collection system includes two wastewater lift stations: (about 75 gpm and 400 gpm at ultimate build out). The wastewater collection infrastructure includes APS power to the lift stations, /local SCADA system to connect to the future improved City SCADA system, and wastewater sewer connections to serve the County-identified lands adjacent to the collection system.

The Broadband (conduit only) will be parallel to the water and wastewater infrastructure. The fiber optic cable and connections are not part of this design.

It is noted the 2020 Feasibility Report costing did not include water, broadband or wastewater service to Cochise College. For purposes of the 30% and 60% Detailed Design the estimated additional length of water pipe to serve Cochise College is 5,800-feet with six fire hydrants, the additional length of wastewater collection pipe is 10,720-feet with twenty manholes and additional length of broadband conduit is 10,720-feet.

The following is noted:

1. The project delivery schedule has been changed to July 1, 2023, project start and July 1, 2024, project completion from March 1, 2023, project start and February 28, 2024, project completion in the December 22, 2022 submittal. This includes Preliminary Engineering in Support of the 60% Detailed Design- Funded by the North American Development Bank'. There is a second proposal submitted to the City for Preliminary Engineering in Support of the 60% Detailed Design - Funded by the North American Development Bank by others.

The schedule for Preliminary Engineering in Support of the 60% Detailed Design includes the schedules for Preliminary Engineering in Support of the 60% Detailed Design - Funded by the North American Development Bank and Not Funded by the NADB. A project schedule will be prepared in MS Project on award of the two SOW and in close consultation with the City and County.

This schedule assumes that the project teams, including the City and the County, provide the information and direction in an expedited fashion. The project schedule relies on receipt of information, decisions and direction from West Douglas Expansion project teams including GSA, ADOT, APS and Southwest Gas.

2. The Stantec Fee in this package is based on the contracted City of Tucson/Stantec rate schedule for March 8, 2023, to March 7, 2024.

It is noted that this work will be followed by the 90% Detailed Design (not part of this scope of work) to complete the project design, including plans and specifications, subject to review comments by the permitting and funding agencies and location requirements. The 100% Detailed Design (not part of this scope of work) is the release of the final detailed design package for permitting and the construction bidding process as an outcome of the 90% Detailed Design.



Figure 1 Project Task and Fee Summary Preliminary Engineering in Support of the 60% Detailed Design - Not Funded by the North American Development Bank

Task	July		August		September		October		November		December		January		February		March		April		May		June		July		Task Engineering Cost (Stantec Labor, Stantec Expenses, Stantec Subconsultant Costs)	
	*																											
Project Execution (50% Preliminary Planning and 50% Detailed Design)																												
Task 221.01: Alignment Planning Input and Development Meetings (Preliminary Engineering in Support of 60% Detailed Design)																												\$28,803.94
Task 221.02: Stakeholder Alignment Development (Preliminary Engineering in Support of 60% Detailed Design)																												\$13,915.95
Task 221.05: Design Liaison w/ Delivery Team to Coordinate Alignment (Preliminary Engineering in Support of 60% Detailed Preliminary Engineering in Support of 60% Detailed Design)																												\$7,816.32
Task 222.03: Alignment of the Cochise College Drinking Water Well into the City Water System																												\$36,262.65
Task 222.06: Location of Wastewater Flushing System Stations (Preliminary Engineering in Support of 60% Detailed Preliminary Engineering in Support of 60% Detailed Design)																												\$11,395.81
Task 223.01: Alignment in ADOT James Ranch Connector Road ROW (Preliminary Engineering in Support of 60% Detailed Design)																												\$84,086.72
Task 223.03: Establish Existing and Future Wastewater Flows and Pipe Capacity Between POE and WWTP (Preliminary Engineering in Support of 60% Detailed Design)																												\$35,973.80
Task 223.05: Location and Size of City Services Along the Alignment (Preliminary Engineering in Support of 60% Detailed Design)																												\$31,474.72
Task 224.01: 60% Broadband (Preliminary Engineering in Support of 60% Detailed Preliminary Engineering in Support of 60% Detailed Design)																												\$42,747.00
																										TOTAL COST:		\$292,476.91

* Notice to Proceed by City

The fee development includes estimates of Stantec labor hours over the project by Tasks. It is detailed in the Fee Spreadsheet in **Appendix A** of Attachment A. A summary is provided in **Figure 1** Project Task and Fee Summary Preliminary Engineering in Support of the 60% Detailed Design - Not Funded by the North American Development Bank.

The Engineering total fee (Stantec Labor, Subconsultants, and Stantec Expenses) for the Preliminary Engineering in Support of the 60% Detailed Design – Not Funded by the North American Development Bank’ scope of work is \$292,476.91.

The Stantec total labor fee **‘Preliminary Engineering in Support of the 60% Detailed Design – Not Funded by the North American Development Bank’** is \$278,726.91. The total fee includes project delivery and work by subconsultants in the total amount of \$13,750 which includes Western Environmental Equipment Company. The work will be time and materials not to exceed.

The ‘Revised Fee Estimate Summary’ is based on the Rate Table from the Stantec Contract Amendment with the City of Tucson ‘On Call Civil Engineering Services’ effective March 8, 2023, to March 7, 2024. The Contract Number is 181820-02. **It accompanies as Appendix B in Attachment A.**

We are excited to continue our collaboration with the City and County on this important project. We would recommend a meeting with you to review the proposal and discuss any questions or directions you might have.

Regards,
Stantec Consulting Services Inc.

Ruiz, Colleen

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ATTACHMENT A
Professional Services Agreement Scope of Work
COCHISE COUNTY AND CITY OF DOUGLAS
60% WATER, WASTEWATER, AND BROADBAND CONDUIT DESIGN
FOR WEST DOUGLAS EXPANSION
Preliminary Engineering in Support of the 60% Detailed Design - Not Funded by the
North American Development Bank
June 27, 2023

INTRODUCTION

Note: Attachment A was originally prepared and submitted to the City of Douglas and Cochise County on December 22, 2022. This revised Attachment A dated June 27, 2023, reflects City comments and directions received from the City/County to the December 22, 2022, and March 23, 2023, submittals, the City/County review spreadsheet provided to Stantec on April 11, 2023, and the direction received from the City/North American Development Bank (NADB) on May 5, 2023. The focus is addressing existing environmental issues associated with the Cochise College, Old Hospital Road residential area, existing residential/commercial along Highway 80 and the Douglas US Customs and Border Patrol Complex.

This proposal is for Engineering Services to advance the water, wastewater, and broadband conduit infrastructure along SR 80 from 30% Detailed Design to 60% Detailed Design. Specifically, this proposal is 'Preliminary Engineering in Support of the 60% Detailed Design – Not Funded by the North American Development Bank'. The Tasks from the March 23, 2023, Stantec Proposal included in this proposal are 221.01, 221.02, 221.05, 222.03, 222.06, 223.01, 223.03, 223.05 and 224.01.

It is noted that there is a separate 'Preliminary Engineering in Support of the 60% Detailed Design - Funded by the North American Development Bank'. The Tasks from the March 23, 2023, Stantec Proposal included in that proposal are 222.01, 222.04, 222.07, 223.02, 225.01, and 225.04.

There will be a third proposal for 'Detailed Design Engineering'.

The 30% Design Plan Set, and Basis of Design Report package was submitted to Cochise County and the City of Douglas as a draft on August 31, 2022. The final package reflecting Cochise County and City of Douglas direction was submitted on October 21, 2022.

The project concept was developed in the 'Proposed Douglas Port of Entry Water and Wastewater Feasibility Report' (2020 Report) prepared by Stantec and submitted to Cochise County (County) and the City of Douglas (City) on December 11, 2020. This Scope of Work will be accomplished per the terms and agreements that governed the 2020 Report.



The GSA schedule indicates the West Douglas Expansion (WDE) 'Master Planning, Programming, Bridging Documents' effort to begin in August 2022 and conclude in November 2023. The ADOT schedule indicates the 'POE Connector Road DCR and NEPA' effort will begin in January 2023 and conclude in January 2025. The 30% Water, Wastewater, and Broadband Conduit detailed design is based on James Ranch Road connecting SR 80 to the WDE area.

This Proposal for Engineering Services includes several Tasks summarized as follows:

1. Task 221.01: Alignment Planning Input and Development Meetings
2. Task 221.02: Stakeholder Alignment Development
3. Task 221.05: Design Liaison w/ Delivery Team to Coordinate Alignment
4. Task 222.03: Alignment of the Cochise College Drinking Water Well into the City Water System
5. Task 222.06: Location of Wastewater Flushing System Stations
6. Task 223.01: Alignment in ADOT James Ranch Connector Road ROW
7. Task 223.03: Establish Existing and Future Wastewater Flows and Pipe Capacity Between POE and WWTP
8. Task 223.05: Location and Size of City Services Along the Alignment
9. Task 224.01: 60% Broadband





1 DESIGN STANDARDS

The following standards will be applicable to this project:

1. Arizona Administrative Code, Title 18, Chapter 9
2. Cochise County Subdivision Regulations, 2019 Edition
3. Cochise County Road Design and Construction Standards and Specifications for Public Improvements
4. Cochise County Comprehensive Plan, 2015
5. Federal GSA Standards as applicable for the Port of Entry
6. MAG Specifications and Details

2 PROJECT ADMINISTRATION

The following information is a general description of the engineering services required to prepare and deliver the 60% design. It is assumed that this Scope of Work will be delivered between July 1, 2023, and July 1, 2024. The services listed include, but are not limited to, the following Tasks 221 through Tasks 224 as described in detail in the following sections.

TASK 221.01: ALIGNMENT PLANNING INPUT AND DEVELOPMENT MEETINGS

Stantec will conduct project meetings to discuss the progress, direction, and technical aspects of the project. It is assumed that the City Engineer, City Planner, Water System Manager, Wastewater System Manager, County Engineer, and County Planner will attend the meetings and be actively involved in task development, decision making and information sharing where required to support project Task development.

Meetings included in this scope of work include:

1. One (1) Kickoff Meeting (July 2023). As requested by the City it be done virtually and not in person. Three (3) Stantec Team members. The meeting duration will not exceed two (2) hours. The agenda and meeting materials will be provided one week before the meeting date to allow for detailed preparation by attendees.
2. Twelve (12) monthly City/Stantec TEAMS Virtual Project meetings of one (1) hour duration from July 1st, 2023, to July 1st, 2024. The meetings would be to seek City direction on design features, progress updates, address any project issues, and establish the development of the 60% Design.





Two (2) Stantec Team members (Project Manager, Junior Engineer to prepare agenda, meeting minutes, Action Item List and Deliverable List) will participate in these meetings. The agenda and meeting materials will be provided one week before the meeting date to allow for detailed preparation by attendees.

3. Sixteen (16) meetings with the ADOT Connector Road Project team (June 30, 2023 – February 2024) to present design considerations, review, discuss issues and reach agreement on the detailed water, wastewater and broadband conduit design within the ADOT Connector Road project development. It is assumed that the meeting will be twice (2) a month for eight (8) months and that each meeting will not exceed one (1) hour. Two (2) Stantec project members (Project Manager and Junior Engineer to prepare agendas, meeting minutes, Action Item and Deliverables follow up) will participate in these meetings. The agenda and meeting materials will be provided one week before the meeting date to allow for detailed preparation by attendees. The meetings fall under Task 223.01.
4. One (1) meeting to review and finalize the Draft 60% Plans at Douglas, AZ three (3) Stantec team project member including a junior engineer to prepare agendas, meeting minutes, Action Item and Deliverables follow up. For this meeting, Stantec discipline leaders with professional responsibility for E, I&C, Mechanical, Structural, Civil will attend during their part of the agenda.) will participate virtually on TEAMS The agenda and meeting materials will be provided one week before the meeting date to allow for detailed preparation by attendees.
5. Ten (10) TEAMS virtual meetings to review project 60% detailed design technical memoranda (reference in table below), specifications, and design plans (July 2023 – June 2024). The agenda and meeting materials will be provided one week before the meeting date to allow for detailed preparation by attendees. The meeting duration will not exceed one (1) hour. Two (2) Stantec project members (Project Manager and Junior Engineer to prepare agendas, meeting minutes, Action Item and Deliverables follow up) will participate in these meetings.



Task Number	Technical Memorandum
221.01	Alignment Planning Input and Development Meetings
221.02	Stakeholder Alignment Development
221.05	Design Liaison w/ Delivery Team to Coordinate Alignment
222.06	Location of Wastewater Flushing System Stations
223.01	Alignment in ADOT James Ranch Connector Road ROW
223.03	Establish Existing and Future Wastewater Flows and Pipe Capacity Between POE and WWTP
223.05	Location and Size of City Services Along the Alignment
224.01	60% Broadband

This would include the one (1) Task 222.01 meeting with ADOT, one (1) Virtual TEAMS meeting with ADEQ (Task 223.04) and Task 222.03 with the Cochise College, the City, and the County. There are thirteen (13) technical memorandums in this Scope of Work. It is assumed that some of the review meetings will have more than one technical memorandum to review.

Public meetings are not included in this Project Scope of Work.

Project documentation will consist of preparing and distributing meeting agendas, minutes, and monthly reports. Meeting minutes will summarize key discussions, comments, decisions, and any action items required. The monthly project reports will summarize work progress, project issues, and schedule status. All meeting dates will be established at the Project Kickoff Meeting.

Deliverables:

- Meeting Agendas and Materials
- Meeting Minutes
- Updated Project Schedule



- Graphics, figures, plans, notes, and details necessary for meeting discussion

TASK 221.02: STAKEHOLDER ALIGNMENT DEVELOPMENT

Design development accomplished by working with:

1. Cochise County, City of Douglas Engineering, and City of Douglas Public Works staff to ensure 60% design goals are met and share progress and findings.
2. GSA to determine West Douglas Expansion requirements at the 60% design related to City supplied infrastructure for fire suppression, domestic water demand, wastewater flows, broadband conduit, and driveway width/alignment.
3. ADOT regarding the 60% design of the water, wastewater, broadband conduit locations, and right of way and permitting conditions along James Ranch Road and the future intersection of James Ranch Road and SR 80.
4. ADEQ on the development of the detailed design drawings.
5. Service providers to the City and County infrastructure including APS and Southwest Gas.

Assumptions:

- This process will require approximately twelve (12) months of design development.
- City of Douglas and Cochise County representatives will provide feedback.

TASK 221.05: DESIGN LIAISON W/ DELIVERY TEAM TO COORDINATE ALIGNMENT

The City coordinates the project Technical Committee. The committee meets monthly to share project information specific to members' roles and is expected to continue through project completion. Stantec would provide ongoing support to the City and County by active involvement on the committee for the 60% water, wastewater, and broadband conduit detailed design, permitting, and delivery during the duration of the design.

Deliverables:

- One (1) Stantec personnel will prepare for, attend, and follow-up on twelve (12) monthly City Project Technical Committee Meetings.





TASK 222.03: ALIGNMENT OF THE COCHISE COLLEGE DRINKING WATER WELL INTO THE CITY WATER SYSTEM

The 30% Design includes a proposed groundwater well and elevated storage tank (West High Zone Site) to provide drinking water and fire suppression/peak hour storage to the water system to the Cochise College, US Customs and Border Patrol and existing homes and commercial areas. Cochise College raised the possibility of transferring the College's existing drinking water well to the City. This would be an alternative to the development of a new City well for water supply to the water system.

Stantec will:

1. Work with Cochise College/City/County to undertake a detailed survey and locate by survey and develop a detailed summary of the existing well that includes pumping rate, water quality, well depth and static water level, existing treatment, pumping equipment, mechanical, electrical and information and controls (I&C), any historic well issues, ADEQ permitting status, current operation and maintenance budget and any capital improvement plans. This will include one (1) meeting with the College, City and County.
2. Survey to develop the technical details of connecting the well to the proposed elevated storage tank (pipe connection between the well and the storage tank, instrumentation and controls, power, etc.) for the water system including the right of way for connecting power, road access and piping.
3. Document how the well system would align with the water system water supply goals and in the longer term the possible connection to the City water distribution system.
4. Prepare an Engineers Most Probable Cost Estimate.
5. Prepare a memorandum on providing the detailed survey and possible integration of the well as a water supply for the water system. Brief and assist the City, County, and Cochise College in consideration of the approach. Preparation of legal documents, conditions of transfer, execution of the contract and so on are not part of this scope of work.

Deliverable:

- A memorandum of detailed survey results (**Review Possible Incorporation of the Cochise College Drinking Water Well**) and that summarizes the survey and the review of the existing well, integration of the well into the water system, potential high-level details of and capital, operation, and maintenance costing.

TASK 222.06: LOCATION OF WASTEWATER FLUSHING SYSTEM STATIONS

In the 30% Design, the WDE wastewater service area average day flows at the five milestones (2028, 2033, 2053, 2078 and full build out) were estimated. The estimations were based on an assumed rate of land development and wastewater flows and were reviewed with planners from the City and County. The total land area within the service area is 2,986 acres. The pipe diameters are sized to accommodate the





estimated wastewater flows in 2078. The existing wastewater flow at the startup of the WDE is only from the WDE and Cochise College.

The wastewater flow was estimated to increase with time after the WDE startup in 2028 but in the initial years will be below the velocity needed to transport wastewater solids. Consequently, the solids will settle. Until the WDE wastewater service area wastewater flow reaches an adequate flow velocity, the City will need to periodically flush the wastewater collection pipes.

Stantec will:

1. Work with the City and prepare a plan to periodically flush wastewater pipes that would remain in place until the wastewater velocity in the WDE Wastewater Service Area is adequate to reduce solids from settling.
2. Working with the pipe flow modeling in the 30% design, estimate the temporary flow rate needed to create a minimum flushing velocity in the wastewater collection pipes along James Ranch Road and SR 80.
3. The water flushing locations will be identified on the 60% detailed design drawings and the pipe flushing design features will be developed.

Deliverable:

- A memorandum (Wastewater System Flushing) identifying the need for and detailing the wastewater collection pipe flushing program. The design features will be included in the 60% design.

TASK 223.01: ALIGNMENT IN ADOT JAMES RANCH CONNECTOR ROAD ROW

Note: ADOT has the responsibility to develop the WDE connector road to SR 80. It is assumed that James Ranch Road is the selected Connector Road to the WDE from SR 80 based on the email from the Cochise County November 21, 2022, where it was noted that ‘... In the meeting with the GSA design team this past week, it was agreed the James Ranch Rd would be the primary ingress/egress route for the new Port, and it would occur at the northeast corner of the port boundary.’ This Task is specific to the James Ranch Road alignment only.

The estimated truck movement 24 hours per day 365 days per year north and south through the WDE area using the expected four lane WDE Connector Road will be very significant in the next 20-30 years. (Trucks per minute) The City water, wastewater and broadband infrastructure must recognize the City operation and maintenance needs within the 60% design to avoid conflict with WDE vehicle movement.

Ultimately the City will require a permit from ADOT to locate the City utilities in the James Ranch Road R/W.

This Task is to work with ADOT, the City, and the County during the ADOT WDE Highway Connector Road development to define, develop and agree on 60% detailed design, delivery, and operation and





maintenance approaches to the location of the City wastewater collection system and service connections, the water supply system and service connections and the broadband conduit and service connections as well as the West Wastewater Lift Station (West WW LS). ADOT has identified a twenty-four-month (24) duration to complete this effort with an anticipated start in January 2023 and completion in January 2025.

The 30% water, wastewater and broadband conduit plan and profiles were based on the James Ranch Road alignment between the WDE and SR 80. An assumed James Ranch Road cross-section was developed and detailed in the 30% Design. In the 30% design the City water, wastewater and broadband conduit was located along the WDE Highway Connector James Ranch Road between SR 80 and the WDE. The approach to coordinate the 60% project design, delivery, construction, commissioning and startup of the City infrastructure and the ADOT infrastructure within the same general space will need to be developed in the 60% detailed design. This would include a draft memorandum of understanding of the operation and maintenance of the City infrastructure after the Highway Connector Road is put into operation as follows:

1. Land Development Servicing. Future land development type and boundaries on both sides of James Ranch Road between the WDE and SR 80 was developed by the City and County and illustrated in the Stantec Basis of Design Report. The distance is over 1.5 miles. An approach to road access from private properties to James Ranch Road and location of water, wastewater, and broadband service connections will need to be developed.
2. Assuming the WDE Highway Connector Road is 1.5 miles and if there are water, wastewater and broadband conduit connections every 300 feet there could be up to 30 water, 30 wastewater, 30 broadband service connections from each side of James Ranch Road to the north south infrastructure or 180 connections, The 30% design did not show any connections. The approach to locating and constructing these connections will be defined by the City and County. 60% Detailed Design of Water, Wastewater and Broadband Conduit within the future ADOT James Ranch Road Right of way. Stantec will work with ADOT/City/County to identify and agree on the 60% design criteria including cover over the pipes, roadway cross section, pipe wall materials and installation specifications, utility separation, centerline and City water, wastewater and broadband standard service connection details, The 60% design will include the West Wastewater Lift Station design details, manhole and fire hydrant locations. The 60% water system infrastructure details will be identified and located including the water service connections and operational features such as meter maintenance and reading, water quality sampling locations, water main flushing through fire hydrants and specialized infrastructure and the details of the City connection to the WDE. The 60% wastewater collection system operation infrastructures will be located and identified including pipe flushing, pipe inspection and cleaning, manhole access for operation and maintenance and access to the broadband conduit for installation of service connections.

Other than the water, wastewater and broadband as described in this Task, it should be noted that this Scope of Work does not include power, telephone, or any other utilities that may be required to be brought to the GSA facilities.





SR 80 and James Ranch Road Intersection and impact on City/County infrastructure 60% design. The 30% detailed design assumed a level grade intersection with traffic lights. The ADOT intersection planning may impact the 60% water, wastewater, and broadband conduit design. This scope of work assumes the SR 80 and James Ranch Road Intersection will be level grade intersection controlled with traffic lights.

Under Task 222.07 Stantec will not manage potholing of the Southwest Gas Inter-state high-pressure gas lines crossing of James Ranch Road.

ADOT will have to address major drainage crossings at three locations along James Ranch Road. This may impact the vertical location of the 60% design of the water, wastewater, and broadband conduit.

(The expectation is that at the 90% Detailed design phase submit the City infrastructure in the James Ranch Road WDE between the WDE and SR 80. the design drawings to ADOT for consideration for permitting at the 100% design phase.

3. Document with the City an understanding and document in memorandum of the long-term asset management, operation and maintenance needs and incorporate into the 60% Detailed design the identified City infrastructure in the ADOT Highway Connector Road R/W to serve the WDE Water Service Area between the WDE and SR 80. Include in the 60% detailed design. any needed infrastructure or centerline location outside the truck movement lanes
4. Work with the City and ADOT to develop an approach (permitting, scheduling, construction contracting, costing, startup, and commissioning) for construction of the City infrastructure within the same general space that the ADOT Highway Connector Road infrastructure delivery will occur. Possible approaches include:
 - a. Possible Joint project IGA to construct the infrastructure jointly.
 - b. ADOT permit for City to construct the water, wastewater, and broadband.
5. Work with the City and County Fire, Water, Wastewater, Planning Departments to locate the locations of the future City water and wastewater service connections, manholes and fire hydrants in the 60% design. This would include identification of City watermain and wastewater operation and maintenance programs and installation of any additional service connections with future development on both sides of the proposed Highway Connector Road under the Connector Road for the service connections to avoid cutting through the newly placed pavement.
6. Provide the 60% detailed design plans to ADOT for review and comment. Work with the City and County to address ADOT review comments.





Deliverables:

- Memorandum on the long-term City operation and maintenance roles and responsibilities of City infrastructure in the Connector Road and SR80 right-of-way.
- Memorandum on City roles and responsibilities for project construction and delivery within the same space that ADOT will be working.

TASK 223.03: ESTABLISH EXISTING AND FUTURE WASTEWATER FLOWS AND PIPE CAPACITY BETWEEN POE AND WWTP

The 30% Design estimated the hydraulic capacity of the existing City wastewater collection pipe between the City's MH 20 and the WWTP. The City provided an estimate of the existing flow in that pipe from the tributary Bisbee-Douglas International Airport (BDIA) Wastewater Service Area that includes the Pirtleville neighborhood but not the future flows.

The City does not have design information for the pipeline. The future wastewater flow needs to be reviewed to estimate the future pipeline conveyance capacity. The BDIA Wastewater Service area estimated future flows would be provided by the City. This information will also be needed for Task 223.04.

Stantec will:

1. The City will provide information on the existing and estimated future flows from the BDIA Wastewater Service Area in the pipe between the City MH 20 and WWTP. The Basis of Design Report had documented the City estimated existing wastewater flows. There was a City reference to future development in 'North Douglas' that could contribute to wastewater flow into MH 20.
2. To supplement and confirm the City estimated existing flow estimates, Stantec will work with the City to undertake a 14-day flow measurement study of the BDIA Wastewater Service Area flow into either MH 19 or MH 20. The 14-day period flow measurement period to be selected by the City should be during the period of anticipated highest estimated wastewater flow period identified by the City.
3. The flow measurement will include a Teledyne Isco Laser Flow Meter installed in either City MH 19 or MH 20, programming, calibration, and data reporting for the site, Mehall Contracting Line Air Entry with crew of three and temporary installation/removal of the equipment. (Stantec SOW includes a proposal in **Appendix C** from Western Environmental Equipment Company to undertake the metering program). Develop a permanent concept flow metering facility at MH 20 (the point of connection of the WDE wastewater service area to the City wastewater collection system) to include flow measurement and instrumentation for data collection. This will provide the City with future tools to monitor, analyze and plan for the WDE wastewater service area flows to the WWTP after startup of the WDE wastewater service area in 2028.





4. Calculate the pipe flow capacity between MH 20 and the WWTP inlet structure based on the existing pipe diameter and pipe slopes from information provided by the City.
5. Estimated the expected future wastewater flows (POW Wastewater Service Area, BDIA Wastewater Service Area) downstream of MH 20 and compare with the estimated pipe capacity.

Deliverable:

- A Memorandum (Wastewater Flows and Pipe Capacity Between WDE and WWTP) documenting the City identified future flows at either MH 19 or MH 20 from BDIA Wastewater Service Areas and estimated future flows with time from the WDE service area supplemented by flow metering data and a determination of the pipeline flow capacity.

TASK 223.05: LOCATION AND SIZE OF CITY SERVICES ALONG THE ALIGNMENT

Stantec estimated the flows to size the water and wastewater pipes in the 30% BODR. These flows have been used to size the storage reservoir and the West WW LS. Stantec will review the design criteria established by the GSA in their current 'POE Master Planning, Programming, Bridging Documents' effort. The GSA schedule currently shows the POE Master Planning, Programming, Bridging Documents starting in August 2022 and concluding by November 2023.

Stantec will:

1. Review the GSA Water / Wastewater / Broadband Conduit full build out design criteria for the WDE (Peak day water demand, fire demand, water system pressure at the WDE north boundary for peak day, peak hour and peak day plus fire flow, average day/peak hour wastewater flow, broadband).
2. If necessary, adjust the water demand and wastewater flow calculations presented in the Basis of Design Report based on identified GSA requested servicing need.
3. The City pipeline from the storage tank to the WDE will be the end of the City water main. In close collaboration with the City, document a strategy to proactively manage the water quality and watermain maintenance program on an international highway and by so doing identify and incorporate any water system design needs at the 60% detailed design. For example, a chlorine analyzing station at the termination of the transmission pipe at the south end of James Ranch Road, flow metering facility to GSA, a large pipe flushing system, fire hydrant and flow metering maintenance and so on.
4. The connection of the WDE water, wastewater and broadband to the City systems will be at the north property line of the WDE. Working with the GSA, develop design details for the City water, wastewater and broadband conduit connections, locations, and elevations at north boundary of the WDE including mechanical, electrical and I&C features.
5. Update 30% design, drawings, and specifications to reflect connection equipment (flow meters, valves, instruments).





Deliverable:

- A Memorandum (GSA Water, Wastewater, Broadband Conduit Servicing and Design Criteria) that documents the GSA design criteria with a comparison to the assumed BODR design criteria. This memorandum will also document any changes to the 30% design that are required to align with the GSA criteria in the 60% detailed design. The connection details to the City water, wastewater and broadband system will be summarized in this memorandum. The design connection details will be included in the 60% Design Drawings and technical specifications.

TASK 224.01: 60% BROADBAND

The 30% design included the broadband conduit along SR 80 from Cochise College to the intersection of SR 80 and U.S. 191, and along the WDE James Ranch Connector Highway Road from SR 80 to the WDE. It did not include connections, fiber installation, or connection to an existing fiber optic system at the west boundary area of the City. It is assumed that the City will own the installed broadband conduit. The broadband needs for interested parties were not known at the 30% design level, so some assumptions were made that now need to be solidified. The City will need to develop a strategy to identify the installation (by others, not part of this Scope of Work).

The location of broadband conduit will be illustrated on the wastewater plan and profile drawings. The plans will consist of broadband conduit and handholes. Conduit shall run no further than 1,200 feet without the installation of a handhole or vault. The type of handhole will be determined at the 60% design detailed design. The fiber optic cable systems will not be a part of this work.

Stantec will:

1. Work with GSA, ADOT, the City and County to determine each party's broadband needs.
2. Use that data to verify or modify the number and type of broadband conduit required.
3. Assist the City and County to locate broadband service connections.
4. Advance design plans to 60% including the general location handholes. The handhole size will be finalized in the 90% design in design development with the manufacturer.

Deliverable:

- Memorandum detailing GSA, ADOT, the City and County broadband needs and how those were determined. This memorandum will also identify the installation of fiber in the conduit by others.
- 60% broadband conduit design plans.





3 SCHEDULE, FEE, AND EXPENSES

Task 301: DRAFT DELIVERY SCHEDULE

The Draft Delivery Schedule accompanies as Figure 1. It is assumed that the Notice to Proceed will be issued at the latest by July 1st, 2023, with a completion date by July 1st, 2024. The completion date includes work under the ‘Preliminary Engineering in Support of the 60% Detailed Design - Funded by the North American Development Bank’ and the ‘Preliminary Engineering in Support of the 60% Detailed Design - Not Funded by the North American Development Bank’. This schedule assumes that the project teams including the City and the County provide the information and direction in an expedited fashion. The project schedule relies on receipt of information, decisions and direction from Douglas WDE project teams including GSA, ADOT, APS, Southwest Gas and so on.

This proposal is for ‘Preliminary Engineering in Support of the 60% Detailed Design – Not Funded by the North American Development Bank’ to advance the Douglas Port of Entry Water, Wastewater, and Broadband Conduit Infrastructure along SR 80 from 30% Detailed Design to 60% detailed design. The 30% design and Basis of Design Report was submitted to Cochise County and the City of Douglas as a draft on August 31, 2022, and was submitted final on October 21, 2022.

As noted in this Scope of Work, task development depends to a large extent on the assistance of a number of Douglas WDE Project teams including the GSA, AOOT Connector Road development, Southwest Gas, APS and ADOT along SR 80. As noted in this Scope of Work Task Development there is substantial and timely support effort required from the City and Cochise County.

Task 302: FEE

The ‘Preliminary Engineering in Support of the 60% Detailed Design – Not Funded by the North American Development Bank’ fee development includes Stantec labor hours over the project by Tasks and Sub Tasks. It is detailed in the Fee Spreadsheet in **Appendix A**. A summary is provided in **Table 1** 60% Scope of Work ‘Preliminary Engineering in Support of the 60% Detailed Design - Not Funded by the North American Development Bank’.

The Stantec Contract Amendment – ‘Revised Fee Estimate Summary’ with City of Tucson ‘On Call Civil Engineering Services’ effective March 8, 2023, through to March 7, 2024, was used in the development of this fee. The Contract Number is 181820-02. It accompanies as **Appendix B**. The City of Tucson and Stantec will contract for a new rate sheet for the period after March 7, 2024.

The estimated Stantec Fee for ‘Preliminary Engineering in Support of the 60% Detailed Design - Not Funded by the North American Development Bank’ is \$292,476.91. It includes Stantec labor, Stantec Expenses, and sub consultants.

The fee includes Stantec expenses associated with project delivery and work by one subconsultant as follows. The SOW and fee for each sub consultant is based on the assumed level of effort at the time of the





development of this SOW. The subconsultant effort and fee will be reviewed with each sub consultant if the Stantec/sub consultants SOW changes.

The detailed SOW for each sub consultant accompanies as **Appendix C**.

1. Western Environmental Equipment Company: Task 223.03: Establish Existing and Future Wastewater Flows and Pipe Capacity Between WDE and WWTP.





Table 1: 60% Scope of Work for 'Preliminary Engineering in Support of the 60% Detailed Design - Not Funded by the North American Development Bank'



PRELIMINARY ENGINEERING IN SUPPORT OF THE 60% DETAILED DESIGN - NOT FUNDED BY THE NORTH AMERICAN DEVELOPMENT BANK

Project Summary	
Fixed Fee	
Time & Material	
Total	

Labour	Expense	Subs	Total
\$0.00	\$0.00	\$0.00	\$0.00
\$278,726.91	\$0.00	\$13,750.00	\$292,476.91
\$278,726.91	\$0.00	\$13,750.00	\$292,476.91

Task Code	Task Name
221	
221.01	Alignment Planning Input and Development Meetings
221.02	Stakeholder Alignment Development
221.05	Design Liaison w/ Delivery Team to Coordinate Alignment
222	
222.03	Alignment of the Cochise College Drinking Water Well into the City Water System
222.06	Location of Wastewater Flushing System Stations
223	
223.01	Alignment in ADOT James Ranch Connector Road ROW
223.03	Establish Existing and Future Wastewater Flows and Pipe Capacity Between POE and WWTP
223.05	Location and Size of City Services Along the Alignment
224	
224.01	60% Broadband

Labour	Expense	Subs	Total
\$50,536.21	\$0.00	\$0.00	\$50,536.21
\$28,803.94	\$0.00	\$0.00	\$28,803.94
\$13,915.95	\$0.00	\$0.00	\$13,915.95
\$7,816.32	\$0.00	\$0.00	\$7,816.32
\$47,658.46	\$0.00	\$0.00	\$47,658.46
\$36,262.65	\$0.00	\$0.00	\$36,262.65
\$11,395.81	\$0.00	\$0.00	\$11,395.81
\$137,785.24	\$0.00	\$13,750.00	\$151,535.24
\$84,086.72	\$0.00	\$0.00	\$84,086.72
\$22,223.80	\$0.00	\$13,750.00	\$35,973.80
\$31,474.72	\$0.00	\$0.00	\$31,474.72
\$42,747.00	\$0.00	\$0.00	\$42,747.00
\$42,747.00	\$0.00	\$0.00	\$42,747.00



Task 303: Reimbursable Expenses Allowance Preliminary Engineering in Support of the 60% Detailed Design – Not Funded by the North American Development Bank

The City shall reimburse Engineer (Stantec) for direct costs identified in this scope of work. Reimbursable expenses will be paid by Stantec and reimbursed at-cost by the City. The following tasks are anticipated to require reimbursable expenses.

TASK 303.01: PRINTING, PLOTTING AND GRAPHICS REPRODUCTION (DETAILED DESIGN)

The City shall reimburse Stantec for direct costs associated with printing, plotting and graphics reproduction. Printing, plotting and graphics costs shall include production of submittals and internal printing costs.

TASK 303.02: TRAVEL

The City shall reimburse Stantec for direct costs associated with travel, including mileage, parking, and meals, should a meeting time require the staff to be away from the office. Stantec has identified 60% Design travel.

Per Diem Rates for General Arizona have been established by the U.S. General Services Administration (GSA). The FY 2023 (October 2022 - September 2023) Standard Rate for Meals includes a \$13 allowance for breakfast, a \$15 allowance for lunch, and a \$26 allowance for dinner (these reimbursement rates include any taxes and tips). The U.S. GSA reimbursement rates are revised annually; the U.S. GSA meal rate at the time when the meal expense is incurred will represent the authorized allowance for reimbursement. Reimbursement will not require a receipt.

Assumptions and Exclusions

Assumptions

This proposal was based on the following assumptions related to the proposed project:

- The acquisition of lands for the East and West Wastewater Lift Stations and the Groundwater Well/Storage Tank is the responsibility of the City including the purchase agreements, purchase costs, legal sale and filing documentation and so on.
- Stantec is not responsible and cannot be held accountable for the accuracy of As-Builts or Record Drawings provided by the Agencies or utility providers. Stantec has no means of determining whether subsurface features were constructed per the construction / improvement drawings and does not claim to do so. Pot holing of utilities should be performed by others if there are concerns or uncertainties regarding the subsurface utilities.





- This proposal assumes that all data prepared by others and provided to Stantec will be made available in a digital format, compatible with our systems. It is also understood that the information and technical data provided and prepared by others, on the Client's behalf or Property Owner's behalf, may be used by Stantec in performing its services and is entitled to rely upon the accuracy and completeness thereof.
- Mapping will be based on available local agency vertical datum and an assumed horizontal datum, unless specifically requested otherwise.
- Stantec assumes that there is enough available record information to determine the location of the boundaries and encumbrances of the subject properties. Additional work resulting from patent or latent boundary ambiguities, or a lack of available records may constitute an additional work effort that is not covered within this Scope of Services.
- We will rely on an independent certification from the geotechnical firm to verify construction materials testing has met the requirements on the plans and specifications.

EXCLUSIONS

Items not specifically identified in the scope of service sections of this proposal are to be excluded from this work effort and would be considered additional services. Such services would include, but are not limited to, the following:

- Public meetings or public consultation processes or events.
- Preparation of legal documents, conditions of transfer, execution of the contract and so on, should the City/County reach an agreement with Cochise College to transfer ownership of the Cochise College drinking water well to the City/County for in the WDE Water Service Area.
- Final Detailed Engineering Services and Construction Support Services.
- Agency Submittal Fees.
- Changes to any designs resulting from a revision to or re-definition of City/Cochise County policies.



APPENDIX



Appendix A: Detailed Fee Spreadsheet - 'Preliminary Engineering in Support of the 60% Detailed Design- Not Funded by the North American Development Bank'





	Senior A/E	Senior A/E Senior Project / Design Engineer	Principal	A/E	Prof Level III
Name	Peterson, Mark	Bryck, Jack	Ruiz, Colleen	Albor Castillo, Omar	Crouthamel, Todd
Project Billing Rate	\$217.12	\$217.12	\$294.46	\$167.97	\$178.56
Total Units (T&M)	322.00	340.00	4.00	152.00	95.00
Fee (T&M)	\$69,912.64	\$73,820.80	\$1,177.84	\$25,531.44	\$16,963.20

Task Code	Task Name	Units				
221						
221.01	Alignment Planning Input and Development Meetings	30.00	30.00		4.00	4.00
221.02	Stakeholder Alignment Development	30.00				
221.05	Design Liaison w/ Delivery Team to Coordinate Alignment	18.00	18.00			
222						
222.03	Alignment of the Cochise College Drinking Water Well into the City Water System	16.00	36.00	4.00		20.00
222.06	Location of Wastewater Flushing System Stations		8.00			25.00
223						
223.01	Alignment in ADOT James Ranch Connector Road ROW	162.00	158.00		48.00	
223.03	Establish Existing and Future Wastewater Flows and Pipe Capacity Between POE and WWTP		40.00			30.00
223.05	Location and Size of City Services Along the Alignment	16.00	40.00		40.00	16.00
224						
224.01	60% Broadband	50.00	10.00		60.00	



	<i>Designer</i>	<i>Prof Level III</i>	<i>Prof Level III</i>	<i>Senior A/E</i>	<i>Prfo Level IV I&C Learn Design Engin</i>
Name	Flores, Cassandra	Hamblin, Elizabeth	Michel, Randy	Brady, Gary	Muthart, Johnathan
Project Billing Rate	\$136.37	\$178.56	\$178.56	\$217.12	\$217.12
Total Units (T&M)	281.00	48.00	26.00	4.00	4.00
Fee (T&M)	\$38,319.97	\$8,570.88	\$4,642.56	\$868.48	\$868.48

Task Code	Task Name					
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221

221.01	Alignment Planning Input and Development Meetings	60.00				4.00
221.02	Stakeholder Alignment Development	15.00	30.00			
221.05	Design Liaison w/ Delivery Team to Coordinate Alignment					

222

222.03	Alignment of the Cochise College Drinking Water Well into the City Water System	33.00	8.00	16.00	4.00	
222.06	Location of Wastewater Flushing System Stations	25.00		10.00		

223

223.01	Alignment in ADOT James Ranch Connector Road ROW	48.00				
223.03	Establish Existing and Future Wastewater Flows and Pipe Capacity Between POE and WWTP	60.00				
223.05	Location and Size of City Services Along the Alignment	40.00				

224

224.01	60% Broadband		10.00			
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	<i>Senior Engineer</i>	<i>Prof Level IV Electrical Lead Design Engineer</i>	<i>Prof Level III Broadband</i>	<i>Senior A/E Senior Structural Engineer QA/QC</i>	<i>Senior A/E Writewater Draw Hydrology QA/QC</i>	<i>Prof Level IV Writewater Draw Hydrology Senior Engineer</i>
Name	Wong, Bruce	Langstaff, Russell	Zahawi, Benan	Kern, Edward	Whitten, Zach	
Project Billing Rate	\$217.12	\$178.56	\$217.12	\$217.12	\$217.12	
Total Units (T&M)	8.00	124.00	8.00	4.00	4.00	
Fee (T&M)	\$1,736.96	\$22,141.44	\$1,736.96	\$868.48	\$868.48	

Task Code	Task Name					
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221

221.01	Alignment Planning Input and Development Meetings	4.00		4.00		4.00
221.02	Stakeholder Alignment Development					
221.05	Design Liaison w/ Delivery Team to Coordinate Alignment					

222

222.03	Alignment of the Cochise College Drinking Water Well into the City Water System	4.00		4.00	4.00	
222.06	Location of Wastewater Flushing System Stations					

223

223.01	Alignment in ADOT James Ranch Connector Road ROW					
223.03	Establish Existing and Future Wastewater Flows and Pipe Capacity Between POE and WWTP					
223.05	Location and Size of City Services Along the Alignment		24.00			

224

224.01	60% Broadband		100.00			
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Civil Engineer	Prof Level IV GW Well Hydrogeologist	Clerical/Admin Project Manager Assistant	Western Environmental Equipment Company
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Name	Graves, Dustin	Ream, Daisy	
Project Billing Rate	\$217.12	\$91.15	\$1.10
Total Units (T&M)	35.00	34.00	12,500.00
Fee (T&M)	\$7,599.20	\$3,099.10	\$13,750.00

Project Summary		Hours
Fixed Fee		0.00
Time & Material		1,493.00
Total		1,493.00

Task Code	Task Name			
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Task Type	Hours
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221

Time & Material 285.00

221.01	Alignment Planning Input and Development Meetings		30.00	
221.02	Stakeholder Alignment Development			
221.05	Design Liaison w/ Delivery Team to Coordinate Alignment			

Time & Material	174.00
Time & Material	75.00
Time & Material	36.00

222

Time & Material 256.00

222.03	Alignment of the Cochise College Drinking Water Well into the City Water System	35.00	4.00	
222.06	Location of Wastewater Flushing System Stations			

Time & Material	188.00
Time & Material	68.00

223

Time & Material 722.00

223.01	Alignment in ADOT James Ranch Connector Road ROW			
223.03	Establish Existing and Future Wastewater Flows and Pipe Capacity Between POE and WWTP			12,500.00
223.05	Location and Size of City Services Along the Alignment			

Time & Material	416.00
Time & Material	130.00
Time & Material	176.00

224

Time & Material 230.00

224.01	60% Broadband			
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Time & Material	230.00
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Name	Labour	Expense	Subs	Total
Project Billing Rate	\$0.00	\$0.00	\$0.00	\$0.00
Total Units (T&M)	\$278,726.91	\$0.00	\$13,750.00	\$292,476.91
Fee (T&M)	\$278,726.91	\$0.00	\$13,750.00	\$292,476.91

Task Code	Task Name	Labour	Expense	Subs	Total
221		\$50,536.21	\$0.00	\$0.00	\$50,536.21
221.01	Alignment Planning Input and Development Meetings	\$28,803.94	\$0.00	\$0.00	\$28,803.94
221.02	Stakeholder Alignment Development	\$13,915.95	\$0.00	\$0.00	\$13,915.95
221.05	Design Liaison w/ Delivery Team to Coordinate Alignment	\$7,816.32	\$0.00	\$0.00	\$7,816.32
222		\$47,658.46	\$0.00	\$0.00	\$47,658.46
222.03	Alignment of the Cochise College Drinking Water Well into the City Water System	\$36,262.65	\$0.00	\$0.00	\$36,262.65
222.06	Location of Wastewater Flushing System Stations	\$11,395.81	\$0.00	\$0.00	\$11,395.81
223		\$137,785.24	\$0.00	\$13,750.00	\$151,535.24
223.01	Alignment in ADOT James Ranch Connector Road ROW	\$84,086.72	\$0.00	\$0.00	\$84,086.72
223.03	Establish Existing and Future Wastewater Flows and Pipe Capacity Between POE and WWTP	\$22,223.80	\$0.00	\$13,750.00	\$35,973.80
223.05	Location and Size of City Services Along the Alignment	\$31,474.72	\$0.00	\$0.00	\$31,474.72
224		\$42,747.00	\$0.00	\$0.00	\$42,747.00
224.01	60% Broadband	\$42,747.00	\$0.00	\$0.00	\$42,747.00



**Appendix B: City of Tucson/Stantec On-Call Rate Sheet
March 2023 to March 2024**



CONTRACT ADDENDUM

CITY OF TUCSON BUSINESS SERVICES DEPARTMENT
255 W. ALAMEDA, 6TH FLOOR, TUCSON, AZ 85701
P.O. BOX 27210, TUCSON, AZ 85726
PHONE: (520) 837-4118 / FAX: (520) 791-4735
Sandra.alcorn@tucsonaz.gov
ISSUE DATE: April 7, 2023

CONTRACT # 181820-02
CONTRACT ADDENDUM NUMBER: FOUR (4)
PAGE 1 of 1
SA
CONTRACT OFFICER: Sandra Alcorn

ON-CALL CIVIL ENGINEERING

THIS CONTRACT IS AMENDED AS FOLLOWS:

ITEM 1: CONTRACT RENEWAL

Pursuant to the contract, Special Terms and Conditions, Number 4, Contract Term and Renewal the City is hereby exercising its option to extend the contract for the period of **March 8, 2023 through March 7, 2024.**

ITEM 2: RATE ADJUSTMENT

In accordance with Contract Special Terms and Conditions, Section 5, Rate Adjustment, the City hereby accepts the proposed price adjustment per the attached updated fee summary.

*****END OF ADDENDUM ITEMS*****

ALL OTHER PROVISIONS OF THE CONTRACT SHALL REMAIN IN THEIR ENTIRETY.

CONTRACTOR:

CONTRACTOR HEREBY ACKNOWLEDGES RECEIPT OF
AND UNDERSTANDING OF THE ABOVE ADDENDUM



Digitally signed by Vandenberg,
Katy
Date: 2023.04.10 09:14:09 -06'00'

Signature of person authorized to sign Date

Katy Vandenberg, Principal

Name and Title (typed or printed legibly)

Stantec Consulting Services Inc.

Company Name

410 17th Street, Suite 1400

Address

katy.vandenberg@stantec.com

Email Address

Denver CO 80202

City State Zip

Contact information for Sales/Account
Representative for daily business operations:

Kiersten Wangsvick, Principal

Name and Title (typed or printed legibly)

520-247-1701

Phone Number

Kiersten.Wangsvick@stantec.com

Email Address

CITY OF TUCSON:

THE ABOVE REFERENCED CONTRACT ADDENDUM

IS HEREBY EXECUTED THIS 12th DAY

OF April, 2023, AT TUCSON, ARIZONA.

Dan Longanecker for

Director of Business Services and not personally

FEE ESTIMATE SUMMARY

DATE: March 22, 2023

PROJECT: On Call Civil Engineering Services

PREPARED BY: Elizabeth Hamblin/Kiersten Wangsvick CONTRACT NUMBER 18120-02

EFFECTIVE DATE March 8, 2023 PRIME CONTRACTOR Stantec

CONTRACT TIME Two Years CONTRACT TYPE Lump Sum per Task Order

ITEM NO.	FIRM	Discipline	A B C D			
			Direct Labor Rate	Overhead <u>165.25</u> %	Profit <u>10</u> %	Billing Rate
1	Stantec	Principal	\$100.92	\$166.77	\$26.77	\$294.46
2	Stantec	Project Manager	\$64.24	\$106.16	\$17.04	\$187.44
3	Stantec	Senior A/E	\$74.41	\$122.97	\$19.74	\$217.12
4	Stantec	A/E	\$57.57	\$95.13	\$15.27	\$167.97
5	Stantec	Designer	\$46.74	\$77.24	\$12.40	\$136.37
6	Stantec	CADD	\$34.39	\$56.83	\$9.12	\$100.34
7	Stantec	Prof Level IV	\$74.41	\$122.97	\$19.74	\$217.12
8	Stantec	Prof Level III	\$61.20	\$101.13	\$16.23	\$178.56
9	Stantec	Prof Level II	\$38.37	\$63.40	\$10.18	\$111.94
10	Stantec	Prof Level I	\$32.88	\$54.34	\$8.72	\$95.95
11	Stantec	Clerical/Admin	\$31.24	\$51.62	\$8.29	\$91.15
12	Stantec	Survey Crew- 3 Man				\$390.00
13	Stantec	Survey Crew- 2 Man				\$290.00

Formulas

(A) Direct Labor Rate

(B) Overhead @ 165.25 % X (A)

(C) Profit @ 10 % X (A + B)

(D) Billing Rate (A+B+C)



Appendix C: Western Environmental Equipment Company Proposal

1. Task 223.03: Establish Existing and Future Wastewater Flows and Pipe Capacity Between POE and WWTP





Western Environmental Equipment Company
14455 N. 79th Street, Suite A
Scottsdale, AZ 85260

-Manufacturers' Representatives for the Water and Wastewater Industries

Quotation # 7742
Tuesday, October 25, 2022

Cassandra Flores
Stantec - Douglas Flow Study

Item	Qty	Description (Part Number)	Unit Price	Ext. Price
1)	1	2 WEEK LEASE of Teledyne Isco Laser Flow Meter: - 2160 flow module, battery module and laser sensor - 2103Ci Modem with antenna - Cargo Bar - Spreader Bar - Batteries (4 Per Unit)	\$1,650.00	\$1,650.00
2)	1	WEECI programming, calibration, and data reporting for the site. (Assumes no permits are required)	\$2,500.00	\$2,500.00
3)	1	Mehall Contracting Line Air Entry with crew of 3, temporary installation/removal of 1 location.	\$8,400.00	\$8,400.00
		Sub-Total		\$12,550.00
		Freight		N/A
		Total		\$12,500.00

*WEECI Laser to be used.

Delivery: 2-3 weeks after receipt of purchase order. Please note that the above total does not include any applicable taxes.

Terms: Net 30 days. Note: Orders paid for with a credit card are subject to a 2.9% processing fee.

Please make purchase orders out to:

Western Environmental Equipment Co.
14455 N 79th St., Suite A
Scottsdale, AZ 85260

Validity: 30 Days