

Council Meeting of November 4, 2015

Agenda Item No. 5a

## REQUEST FOR COUNCIL ACTION

**SUBJECT:** Secondary Water Pipe on 7000 South

**SUMMARY:** Approval of Amendment No. 4 to the Professional Service Agreement with Stanley Consultants, Inc. for the 7000 S Phase 1 design contract. This amendment is for a secondary water pipeline design along 7000 South from the South Valley Water Reclamation Facility to Bangerter Highway not to exceed \$141,568.00.

**FISCAL AND/OR**

**ASSET IMPACT:** An additional \$141,568.00 will be required from Water Fund Reserves.

**STAFF RECOMMENDATION:**

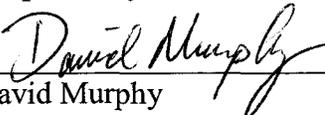
Staff recommends the additional design scope and fee based upon project needs as reflected within this report.

**MOTION RECOMMENDED:**

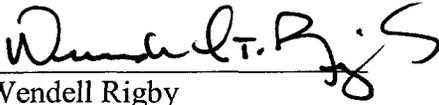
"I move to adopt Resolution No. 15-200 authorizing the Mayor to execute Amendment No. 4 to the Professional Service Agreement with Stanley Consultants, Inc. for a secondary water pipeline design along 7000 South from the South Valley Water Reclamation Facility to Bangerter Highway not to exceed \$141,568.00.

Roll Call vote required

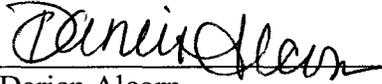
**Prepared by:**

  
David Murphy  
Engineering Manager for CIP

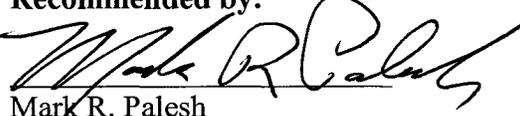
**Recommended by:**

  
Wendell Rigby  
Public Works Director

**Recommended by:**

  
Darien Alcorn  
Acting City Attorney

**Recommended by:**

  
Mark R. Palesh  
City Manager

## **BACKGROUND DISCUSSION:**

### **History**

The City has considered various ways to bring source water from the east side of the City to the West side where it is needed during the summer months for outside watering. There is source water in the form of reclaimed water from the South Valley Water Reclamation Facility (SVWRF) that can produce tertiary level treated water meeting State outdoor use standards. This water can then be pumped to the west side of the City if the current Secondary Water Master Plan is followed. This requires adding a pipeline along 7000 South in the current storm drain, sewer, and culinary water utility project.

Stanley Consultant was hired this last spring to provide the required engineering work to place these new service lines and rehabilitate existing systems. A portion of the pipe was envisioned for the project. This amendment covers areas of design effort that were not included in the original design scope:

1. The area from the SVWRF to 7000 South, and
2. The area from 3200 West to the west side of Bangerter Highway

The first area is needed to link up with the treatment building located on the SVWRF site. The second area is needed to be able to interface with UDOT on the bridge design that is already under way, and to get the City secondary pipeline built in coordination with the bridge project at the Bangerter Highway crossing. Staff recommends approval of this contract amendment.

**THE CITY OF WEST JORDAN, UTAH**  
A Municipal Corporation

RESOLUTION NO. 15-200

A RESOLUTION AUTHORIZING THE MAYOR TO EXECUTE AMENDMENT NO. 4 TO THE  
PROFESSIONAL SERVICES AGREEMENT BETWEEN  
THE CITY AND STANLEY CONSULTANTS, INC. FOR THE  
7000 SOUTH SECONDARY WATER PIPELINE DESIGN

**WHEREAS**, the City Council of the City of West Jordan has reviewed Amendment No. 4 to the Professional Services Agreement between the City of West Jordan and Stanley Consultants, Inc. (a copy of which is attached) to provide secondary water pipeline design services from South Valley Water Reclamation Facility (SVWRF) to Bangerter Highway, in an amount not to exceed \$141,568.00 and

**WHEREAS**, the City Council of the City of West Jordan desires to approve Amendment No. 4 to the Professional Services Agreement with Stanley Consultants, Inc. for additional engineering services to provide secondary water pipeline design services from South Valley Water Reclamation Facility (SVWRF) to Bangerter Highway, in an amount not to exceed \$141,568.00.

NOW, THEREFORE, IT IS RESOLVED BY THE CITY COUNCIL OF WEST JORDAN, UTAH, THAT:

Section 1. After approval as to legal form, the Mayor is hereby authorized and directed to approve Amendment No. 4 to the Professional Services Agreement with Stanley Consultants, Inc. to provide secondary water pipeline design services from South Valley Water Reclamation Facility (SVWRF) to Bangerter Highway, in an amount not to exceed \$141,568.00.

Section 2. This Resolution shall take effect immediately upon passage.

Adopted by the City Council of West Jordan, Utah this 4<sup>th</sup> day of November 2015.

\_\_\_\_\_  
Kim V. Rolfe  
Mayor

ATTEST:

\_\_\_\_\_  
MELANIE S. BRIGGS  
City Recorder

Voting by the City Council	"AYE"	"NAY"
Jeff Haaga	_____	_____
Judy Hansen	_____	_____
Chris McConnehey	_____	_____
Chad Nichols	_____	_____
Sophie Rice	_____	_____
Ben Southworth	_____	_____
Mayor Kim V. Rolfe	_____	_____

**AMENDMENT NO. 4**

**City of West Jordan  
7000 South Utility Design  
From  
The Jordan River to Constitution Park**

THIS AMENDMENT, made and entered into this 4<sup>th</sup> day of November 2015 by and between the CITY OF WEST JORDAN, a municipal corporation (hereinafter referred to as "City"), Stanley Consultants, Inc. (hereinafter referred to as "Consultant").

The City and Consultant agree as to amend the following sections of the original Professional Services Agreement to provide for secondary water pipeline design as part of the 7000 South Utility Design project.

2. **DESCRIPTION OF SERVICES**

The services to be performed by Consultant are as follows:

Provide additional engineering services for secondary water pipeline design for Phase 1 of the 7000 South project as described in the attached Consultant's proposal dated October 1, 2015.

3. **COMPENSATION AND PAYMENT**

The total compensation payable to Consultant by City for the services described in Paragraph 2 shall not exceed the sum of **\$141,568.00** for Amendment No. 4 bringing the total not-to exceed fee to \$681,490.00 for services under this contract.

In concurrence and witness whereof, this Agreement has been executed by the parties effective on the date and year first above written.

CITY OF WEST JORDAN

\_\_\_\_\_  
Kim V. Rolfe, Mayor

APPROVED AS TO ADMINISTRATION:

\_\_\_\_\_  
Melanie Briggs, City Recorder

CONSULTANT

Mark I. Freeman  
Stanley Consultants, Inc.

STATE OF Utah )  
COUNTY OF Salt Lake ) :SS

On this 21<sup>st</sup> day of October, 2015 personally appeared before me, \_\_\_\_\_

Mark I. Freeman, who being by me duly sworn did say that he is the Vice President  
of Stanley Consultants, a C

Corporation, and that the foregoing instrument was signed in behalf of said corporation by authority of its Board of Directors, and he acknowledged to me that said corporation executed the same.

Angela M. Richey  
NOTARY PUBLIC



My Commission Expires:

Residing in Taylorville County, Salt Lake



October 1, 2015

Mr. Dave Murphy, PE  
City of West Jordan  
8000 South Redwood Road  
West Jordan, UT 84088

Subject: Proposal for Professional Engineering Services  
Secondary Water Transmission Pipeline  
Segments A, D and E

Dear Mr. Murphy:

Thank you for the invitation to submit a proposal to provide professional services on behalf of the referenced project. The proposal includes the following detailed Scope of Services and fee estimate.

### **Project Background**

The City of West Jordan has requested Stanley Consultants provide the following scope and fee for additional design services for a secondary water transmission pipeline along 7000 S. from the South Valley Water Reclamation Facility to 3600 W., west of Bangerter Highway.

We have delineated the pipeline alignment into 5 segments, labeled A through E. Segment B is a part of the 7000 S. Final Utility Design – Phase 1 project, and Segment C is included with Phase 2 of the same project. Segment B is part of our most recent Agreement amendment. Segment C is included in the proposal we previously submitted for Phase 2 Design services, but not yet awarded.

This letter proposal provides the additional scope to include Segments A, D and E. Segment A is the portion connecting the South Valley Water Reclamation Facility's treated effluent pump station, to a connection point near 7000 S. west of the Jordan River. Segment D extends west from 3200 W. to approximately 3500 West on 7000 S., and then Segment E is the portion extending through the 7000 S. and Bangerter Highway intersection, terminating at approximately 3600 W.

The scope and fee included herein is **only for those services which are in addition to** the design proposals prepare and submitted to the City of West Jordan, dated July 21, 2015.

### **Scope of Services**

#### Preliminary and Final Design Services

1. Project Management: Stanley Consultants's Project Manager will provide overall direction and control for the project. The tasks within this activity will include managing the project tasks, schedule, and budget; bi-weekly project team meetings, prepare and submit monthly invoices, administration of project cost and schedule control, and maintaining project records.

This document was sent electronically.

October 1, 2015

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2. Project Kick Off Meeting: Our key team members will meet with City personnel to establish roles and responsibilities, review the scope, schedule, and deliverables, as well as project goals. We will address known issues and concerns at the commencement phase; discuss the communication plan; identify data requirements; and establish a process for responding to new and undefined challenges and issues that arise during the project.  
*Deliverable: Meeting notes distributed electronically.*
3. Prepare Project Work Plan: Our work plan will outline the role of each team member and document the progress through each phase and task. We will prepare the work plan and use it as a tool so that the team is united and remains connected to the scope and budget throughout the entire project.
4. Monthly Client Review Meetings: Once per month at a time designated by the City, key members of the design team will meet with the City staff to review and demonstrate progress, seek input, review completed work, and address questions and issues that have surfaced since the previous meeting. This scope of services and associated fee assumes four monthly client review meetings will be held at the City office.  
*Deliverable: Meeting notes distributed electronically.*
5. Survey (topographic and utility mapping): Stanley Consultants will supplement existing topographic mapping of the 7000 South corridor right-of-way within the project limits. Topographic mapping will include obtaining invert data for storm, sanitary manholes, irrigation structures, water manholes, and other surface features identified from the preliminary design analysis and Phase 1 efforts within the right-of-way. Survey will require traffic control by a subconsultant. This scope of services and fee assumes survey mapping will be conducted at night during off peak traffic hours. Additionally, topographic features will be mapped at the following locations:
  - a. A corridor west of the Jordan River between South Valley Water Reclamation Facility and 7000 S.; see Figure 2.
  - b. 7000 South west from 3200 W. to 3600 W., on the west side of Bangerter Highway; see Figure 1.*Deliverable: Topographic and utility mapping data will be added to the existing Base Map. The base map will be shared electronically.*
6. Finalize Base Mapping: Stanley Consultants will update the project utility and topographic base map prepared during the preliminary design phase with the data collected in Task 5. The base map will be prepared using AutoCAD Civil 3D using Stanley Consultants CADD standards. The base map will include a surface model and data base of all utilities that have been located. The utility data base will include vertical and horizontal alignment information of each utility along with type, size, and material. The base map will be suitable for the development of plan and profile construction drawings. The base map and utility data base will have the ability to be dynamically linked so that utilities will appear in the profiles. The base map will also include aerial imagery of the project area and the location of the right-of-way. Roadway names and stationing along roadway centerline will be included in the base map.  
*Deliverable: CADD Base Map (AutoCAD Civil 3D) with utility data base, and aerial imagery.*
7. Utility Investigation: Stanley Consultants will work with our specialty subconsultant (Cardno) to provide locating services as required to achieve the vertical resolution necessary for a final design of utilities in the 7000 South corridor. This scope and fee assumes that up to 12 additional utility investigation boreholes will be completed. Decision on which utilities to be located will be made

with City staff input. Utility locating information will be included in the design and a report will be submitted summarizing the results of the utility locating.

8. Coordination with UDOT: Stanley Consultants will meet with UDOT Project Managers and the design build team as necessary to negotiate and develop a 60% design documents for the design build package of documents for the 7000 S. and Bangerter Highway intersection. Stanley Consultants will meet UDOT stakeholders to establish the secondary water transmission pipeline in the overall design build plan for the intersection at 7000 S. and Bangerter Highway. We will utilize our design build expert to facilitate the process with UDOT stakeholders.
9. Coordination with South Valley Water Reclamation (SVWR): Stanley Consultants will meet SVWR to determine desirable connection points to their pump station. We will also review with SVWR potential utility conflicts and concerns they may have with pipeline alignments on the wastewater treatment plant facility and environs, to avoid any disruption during construction.
10. Other Third Party Coordination: Stanley Consultants will coordinate with third party stakeholders within the project area. Third party stakeholders include Rocky Mountain Power, Salt Lake County Flood Control, Jordan Valley Water Conservancy District, Questar Gas, and telecommunications utility providers.
11. Easement Research and Easement Document Preparation: Stanley Consultants will research required easements for Segment A of the secondary water transmission pipeline. As the City provides guidance and accepts alignments, Stanley Consultants will prepare the draft easement documents. Easement documents will be prepared and submitted to the City for review and execution.  
*Deliverable: Final easement documents for execution by the City.*
12. Permitting: Stanley Consultants will prepare final permitting packages. Application packages will be provided to the City for submittal to the appropriate approval agencies. Permit packages will be prepared to include any changes to the preliminary design and/or address any review comments received from approval agencies. Permits may include Salt Lake County Flood Control, the Utah Division of Water Rights and Army Corps of Engineers. All permitting fees to be paid by the City.  
*Deliverable: Permit packages for submittal by the City.*
13. 60% Design Documents of Secondary Water Transmission Pipeline – Segment A: Stanley Consultants will prepare design documents for the proposed secondary water transmission pipeline in Segment A. The secondary water transmission pipeline is to be a 24-inch diameter HDPE pipe. The pipeline will begin at the pump station at South Valley Water Reclamation, and continue north to 7000 S. adjacent to the Jordan River.  
*Deliverable: 60% drawings and details, technical specification table of contents, and engineer's estimate of probable construction costs (20% contingency).*
14. 60% Design Documents of Secondary Water Transmission Pipeline – Segment D: Stanley Consultants will prepare 60% design documents for the proposed secondary water transmission pipeline in Segment D. The secondary water transmission pipeline is to be a 24-inch diameter HDPE pipe. 60% design documents will include drawings, specifications, and engineer's estimate of probable construction costs. A 60% design review meeting will be held at the City's office to review the drawings and receive review comments from the City.  
*Deliverable: 60% drawings and details, technical specification table of contents, and engineer's estimate of probable construction costs (20% contingency).*
15. 60% Design Documents of Secondary Water Transmission Pipeline – Segment E: Stanley Consultants will prepare 60% design documents for the proposed secondary water transmission

pipeline in Segment E. 60% design documents will include drawings, specifications, and engineer's estimate of probable construction costs. The secondary water transmission pipeline is to be a 24-inch diameter HDPE pipe. A 60% design review meeting will be held at the City's office to review the drawings and receive review comments from the City. Work on this segment **will not continue past the 60% level**, as it is anticipated that these documents will be incorporated into the design-build scoping documents for the interchange project at 7000 S. and Bangerter Highway. Once UDOT has accepted these documents as part of the integrated project, we will be complete with this Segment of the project.

*Deliverable: 60% drawings and details, technical specification table of contents, and engineer's estimate of probable construction costs (20% contingency).*

16. 95% Design Documents of Secondary Water Transmission Pipeline – Segment A: Stanley Consultants will prepare 95% design documents of the proposed secondary water transmission pipeline in Segment A. The 95% design will incorporate review comments received from the 60% design submittal. 95% design documents will include drawings, specifications, and engineer's estimate of probable construction costs. A 95% design review meeting will be held at the City's office to review the drawings and receive review comments from the City.  
*Deliverable: 95% drawings and details, technical specifications, and engineer's estimate of probable construction costs (15% contingency).*
17. 95% Design Documents of Secondary Water Transmission Pipeline – Segment D: Stanley Consultants will prepare 95% design documents of the proposed secondary water transmission pipeline in Segment D. The 95% design will incorporate review comments received from the 60% design submittal. 95% design documents will include drawings, specifications, and engineer's estimate of probable construction costs. A 95% design review meeting will be held at the City's office to review the drawings and receive review comments from the City.  
*Deliverable: 95% drawings and details, technical specifications, and engineer's estimate of probable construction costs (15% contingency).*
18. Final Design Documents of Secondary Water Transmission Pipeline – Segment A: Stanley Consultants will prepare final design documents suitable for bidding of the proposed secondary water transmission pipeline. The final design documents will incorporate comments received from the 95% design submittal. Final design documents will include drawings, specifications, and engineer's estimate of probable cost of construction. Specifications will include a bid schedule and a measurement and payment sections.  
*Deliverable: Bidding documents including final drawings and details, technical specifications, and engineer's estimate of probable construction costs (10% contingency).*
19. Final Design Documents of Secondary Water Transmission Pipeline – Segment D: Stanley Consultants will prepare final design documents suitable for bidding of the proposed secondary water transmission pipeline. The final design documents will incorporate comments received from the 95% design submittal. Final design documents will include drawings, specifications, and engineer's estimate of probable cost of construction. Specifications will include a bid schedule and a measurement and payment sections.  
*Deliverable: Bidding documents including final drawings and details, technical specifications, and engineer's estimate of probable construction costs (10% contingency).*
20. Bidding Services: Stanley Consultants will assist the City through the bidding process by producing bidding documents, conducting a pre-bid meeting with contractors, answering questions and creating bid tabulation from the bid opening. Stanley Consultants will review all

October 1, 2015

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bids for completeness and recommend an award to the contractor with the lowest, responsive bid.  
*Deliverable: Bid tabulation and recommendation of award.*

**Deliverables**

- Kick off meeting notes distributed electronically
- Project meeting notes and updates, distributed electronically
- Topographic and utility mapping data will be included in the base map. The base map will be shared electronically.
- Utility locating findings
- Permit packages for submittal by the City
- Draft Easement documents
- CADD base map (AutoCAD Civil 3D) with utility data base, roadway alignments, and aerial imagery.
- 60% Design Submittal documents
- 95% Design Submittal documents
- Final Design documents
- Bid tabulation and recommendation letter

Services not included in this Scope of Services:

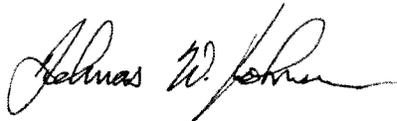
1. Improvements to existing ADA facilities to conform to ADA requirements. All ADA ramps impacted by the project are to be replaced in kind.
2. Subsurface investigations (i.e. geotechnical investigations, etc.).
3. Pavement design or analysis.
4. Traffic modeling.
5. Development of plan set using UDOT standards.

**Professional Services Fee and Schedule**

We propose to perform the Scope of Work for a not-to-exceed time and materials fee of **\$141,568.00**. Refer to the attached fee estimate spreadsheet for more detailed information. We are available to begin work upon receipt of a notice to proceed.

Stanley Consultants can begin work on this project immediately upon receipt of notice to proceed. The design portion is estimated to take 150 days to complete and the bidding services approximately 30 days. Thank you for your consideration.

Respectfully submitted,  
**Stanley Consultants, Inc.**



Delmas W. Johnson, PE  
Senior Project Manager

Attachments: Hours and Fee Breakdown by Task

Exhibits 1 and 2

Client: City of West Jordan  
Secondary Water Transmission Pipeline Design

South Valley Water Reclamation Facility to 3600 W. 7000 S.  
Segments A, D and E

Activity - Task Description	PRINCIPAL Mark Freeman \$180	PROJECT MANAGER Debra Johnson \$158	UTILITY ENGINEER LEAD Greg Thomas \$140	THIRD PARTY UTILITY COORDINATOR David Osborne \$124	PROJECT ENGINEER Jeff Wright \$124	ROW Rob Beier \$128	DESIGN BUILD COORDINATION EXPERT Vance Hanson \$100	JUNIOR ENGINEER Amanda Varland \$78	JUNIOR ENGINEER Connor Dunkel \$60	CONSTRUCTABILITY AND COST ESTIMATOR Jason Harris \$180	SURVEY MANAGER Craig Yates \$188	FIELD SURVEY Ryan Harbit \$80	CAD DESIGNER Isaac Lopez \$60	TOTAL HOURS	LOADED LABOR TOTALS Labor
<b>Preliminary and Final Design</b>															
Project Management		30												30	\$4,740.00
Project Kickoff Meeting	1	2	2		2			2						9	\$1,180.00
Prepare Project Work Plan	2	2	2		2									8	\$844.00
Monthly Client Review Meetings	1	12	16		16			8						53	\$6,924.00
Survey (topographic and utility mapping) of Segments A, D and E		2	4								12	60		78	\$8,268.00
Utility Investigation of Segments A, D and E		8	12						20					40	\$4,544.00
Coordination with South Valley Water Reclamation - Segment A		12	12											24	\$3,576.00
Coordination with UDOT - 7000 S. and Bangerter Interchange DB - Segment E		12	16	16			16							60	\$9,640.00
Other Third Party Coordination		12	20	16	24									72	\$10,136.00
Finalize Base Mapping		4	8					40						52	\$4,872.00
Easement Research and Prepare Easement Documents		4				60					4			68	\$9,756.00
Permitting		4	12	12	20									56	\$7,040.00
Design of Secondary Water Transmission Pipeline - 60% Documents - Segment A		8	20		20				40	2				110	\$11,124.00
Design of Secondary Water Transmission Pipeline - 60% Documents - Segment D		8	18		20				40	2				108	\$10,844.00
Design of Secondary Water Transmission Pipeline - 60% Documents - Segment E		8	16		20			40		2				106	\$10,484.00
Design of Secondary Water Transmission Pipeline - 95% Documents - Segment A		6	16		8			40		2				92	\$8,680.00
Design of Secondary Water Transmission Pipeline - 95% Documents - Segment D		6	16		8					2				90	\$8,560.00
Design of Secondary Water Transmission Pipeline - 100% Documents - Segment A		4	12		8					2				36	\$3,904.00
Design of Secondary Water Transmission Pipeline - 100% Documents - Segment D		4	4		8									12	\$2,784.00
Bidding Services		8	8		8									14	\$2,068.00
<b>Total Hours</b>	<b>2</b>	<b>154</b>	<b>214</b>	<b>44</b>	<b>156</b>	<b>60</b>	<b>16</b>	<b>130</b>	<b>100</b>	<b>10</b>	<b>16</b>	<b>60</b>	<b>150</b>	<b>1112</b>	
<b>Total Loaded Labor</b>	<b>\$360.00</b>	<b>\$24,332.00</b>	<b>\$29,960.00</b>	<b>\$6,776.00</b>	<b>\$19,344.00</b>	<b>\$7,560.00</b>	<b>\$3,040.00</b>	<b>\$10,140.00</b>	<b>\$8,000.00</b>	<b>\$1,900.00</b>	<b>\$2,656.00</b>	<b>\$5,400.00</b>	<b>\$7,500.00</b>		<b>\$126,968.00</b>

- Assumptions:  
1. Up to 12 investigative utility boreholes by Cardno  
2. Potholing within Bangerter Highway provided by others.

DIRECT CHARGES	
Traffic Control (Utah Barricade)	\$2,000.00
Utility Locating (Cardno)	\$12,000.00
Message Copies	\$350.00
UDOT ROW Encroachment Permit	\$250.00
UDOT ROW Encroachment Permit	\$0.00
<b>SUB-TOTAL DIRECT CHARGES</b>	<b>\$14,600.00</b>
<b>GRAND TOTAL</b>	<b>\$141,568.00</b>

FIGURE 2  
WEST JORDAN  
SECONDARY WATERLINE





FIGURE 1  
WEST JORDAN  
SECONDARY WATERLINE