

**ADDENDUM NO. 2**  
**to the**  
**CONTRACT DOCUMENTS for**  
**South Sewer Interceptor CIPP Project**  
**South Valley Water Reclamation Facility**

**May 10, 2021**

1. CONTRACT DOCUMENTS – SECTION 00 41 00 – BID FORM

Remove Section 00 41 00 – Bid Form (Addendum No. 1) in its entirety and replace it with the attached Section 00 41 00 – Bid Form (Addendum No. 2).

Clarification: Chemical Grout Setup and Additional Chemical Grout bid items added. Bid Item No. A14 changed to lump sum cost. Estimated quantities for Bid Item Nos. A22 and A23 adjusted for rehabilitation of gate structure in Headworks Building.

2. CONTRACT DOCUMENTS – SECTION 01 20 00 – MEASUREMENT AND PAYMENT

Remove Section 01 20 00 – Measurement and Payment (Addendum No. 1) in its entirety and replace it with the attached Section 01 20 00 – Measurement and Payment (Addendum No. 2).

Clarification: Chemical Grout Setup and Additional Chemical Grout bid items added. Bid Item No. A14 changed to lump sum cost. Added screen channel stop log work to Bid Item No. A2.

3. CONTRACT DOCUMENTS – SECTION 33 01 30.72 – Cured-in-Place Pipe Lining

Remove paragraph 3.8.A in its entirety and replace with the following:

- A. The Contractor shall prepare two physical samples for all pipes being CIPP lined and provide them to the Engineer/Owner for testing in accordance with Article 3.9 herein. Plate samples may be used.

Clarification: Two physical samples are required to be provided to Engineer/Owner for every pipe being CIPP lined.

4. CONTRACT DOCUMENTS – SECTION 33 01 30.82 – Polymeric Rehabilitation of Buried Concrete Structures

Remove paragraph 1.1 in its entirety and replace with the following:

1.1 SCOPE OF WORK

- A. The work covered by this Section includes furnishing all labor, competent certified technicians, equipment, tools, accessories, and materials required for the application of a 250-mil polymer liner rehabilitation product to the concrete

manholes, junction structures, 90-inch influent pipe, and gate structure in Headworks Building as shown on the Contract Drawings.

- B. In general, the manholes are 60-inch precast concrete with varying degrees of infiltration, surface defects and corrosion from sewer gases. The manholes also have varying configurations and are classified as Type A, Type B, or Type C as shown on the Contract Drawings. The North and South Junction structures, the 90-inch influent pipe, and the gate structure in the Headworks Building have varying dimensions and surface defects as shown on the Contract Drawings.
- C. Contractor may refer to Appendix A for videos and photos of existing concrete structures.

Clarification: Gate structure in the Headworks Building shall be rehabilitated with a spray-on liner.

## 5. APPENDIX

Add the attached Pre-bid Meeting Minutes dated May 5, 2021 to the Appendix.

## 6. APPENDIX

Add the attached Temporary Construction Easement between Jordan Valley Water Conservancy District and South Valley Water Reclamation Facility to the Appendix.

Contractor shall follow and adhere to all the terms and requirements within the easement document.

## 7. SUBMITTED QUESTIONS AND ANSWERS:

- 1. Q: Would Quadex's GeoKrete geopolymer be acceptable to Owner/Engineer as an "approved equal" liner to be installed in the 90-inch influent pipe on Drawing No. C-09?

A: No since it contains cementitious materials in the geopolymer. Liners comprised of any amount of cementitious materials will not be acceptable for the project.

- 2. Q: Would the Owner/Engineer consider a Bid Date extension (2 weeks) due to the overall complexity of the project - size and scope?

A: No. The Bid Date will remain as 10:00 am (MST) on Tuesday, May 18, 2021 as shown in Section 00 11 16 – Invitation to Bid.

- 3. Q: Would the Owner consider allowing the Contractor to dispose of their manhole and pipeline cleaning water and debris at their WWTP?

A: The Contractor may dispose the debris contents of one vacuum truck per day (up to a 2,500-gallon debris tank) of decanted material at the Owner's WWTP dump station. Coordinate disposal with Owner prior to disposing of material. Owner will remove and dispose of material within the dump station once a day.

Contractor may use area within the limits of disturbance/easement on Owner's WWTP between the existing gate near Sta. 105+00 and the existing road near Sta. 113+00 as shown on Drawing No. C-08 for handling debris removed from the pipeline and manholes. All debris shall be contained while decanting and drying. No dumping of decant water or debris material directly on the ground will be acceptable. Coordinate use of area with Owner prior to installing equipment. Contractor shall be responsible for all handling and processing of decant water and debris material. Contractor shall also be responsible for the loading of material into Owner's trucks. Owner will only allow up to 5,000 lbs. of debris material to be loaded into their trucks per day. Coordinate loading of trucks with Owner prior to work.

4. Q: Where are the stop logs located within the screen channel in the headworks building and what are they comprised of and are they removable?

A: See attached Drawing Nos. 1S-2, 1S-4, and ES-7 from Owner's Project 4A for location of existing stop logs in the screen channel. The aluminum plate knock-out wall shown on Drawing Nos. RD-13 and RD-14 is no longer there. The top of the stop logs is approximately 31 inches below the top of the covered deck. The stop logs are comprised of 6.5" x 6.5" stainless steel tubing with lifting eyes and are removable. There are 4x4 wood posts jammed in vertically keeping pressure on the stop logs at each end. Coordinate removal and replacement of stop logs to accommodate the sewer bypass flows with Owner prior to work.

5. Q: What Bid Item should be used for the knock-out wall removal?

A: Include these costs in Bid Item No. A2 labelled "Sewer Bypass Pumping". See Question No. 4 of the addendum for more information about the knock-out wall.

6. Q: Are the existing concrete collars around the manhole frames and covers to be replaced with new?

A: This question will be addressed in a future addendum.

7. Q: Where does the application of the spray-on liner end on the western end of the 90-inch influent pipe, at the end of the pipe itself or is the gate structure it connects to included?

A: The spray-on liner shall be applied to both the 90-inch influent pipe, as well as the gate structure it is connected to [see Drawing No. RD-08 and attached Drawing No. RD-07 (Addendum No. 2)]. Also see Item No. 4 of this addendum.

8. Q: What type of temporary patch is to be used for locations where the sewer bypass lines are buried across the Jordan River Parkway Trail?

A: Contractor shall install and compact UTBC for temporary patches across the trail. When the Contractor has completed the work in an area where there is a temporary patch, the Contractor shall then remove the temporary patch and install and compact a permanent asphalt patch per Detail C/2007 on Drawing No. GC-02.

9. Q: Would it be possible to cut out and completely remove the 12-inch ductile iron pipe located within MH #38985 on Drawing No. C-05 and have it connected only to it and plug its existing connection to MH #3019?

A: No. The 12-inch ductile iron pipe shall remain in place. Restore if disturbed.

10. Q: Are there as-builts available for the South Confluence (Diversion) Structure?

A: Yes. Please see Sheet 25 of 37 (Drawing No. RD-02) of the construction drawings.

11. Q: Would the Owner/Engineer consider having Bid Item No. A14 – Manhole Dismantling/Repair for CIPP Installation a lump sum instead of per each?

A: Yes, having this Bid Item as a lump sum item is acceptable. See attached Sections – 00 41 00 Bid Form (Addendum No. 2) and 01 20 00 – Measurement and Payment (Addendum No. 2).

12. Q: Would the Owner/Engineer consider using Geneva Pipe's Perfect Pipe and Manholes as an "approved equal" to the specified FRPM (Hobas) Pipe and polymer concrete manholes?

A: No. The Contractor shall install the specified FRPM (Hobas) Pipe and polymer concrete manholes as shown on Drawing No. C-10.

13. Q: Is video available for existing pipe to be rehabilitated? If so, please provide direction or link to information.

A: Yes. As mentioned in Section 00 11 16 – Invitation to Bid, the link to the pipe and manhole inspection data is located in Appendix A. Below is the link found in Appendix A. Also see paragraph 9 on the attached minutes from the mandatory Pre-bid Meeting dated May 5, 2021.

<https://app.box.com/s/9b9ryzv3k7v481ctrsw4waz5rgecwzbz0>

THIS ADDENDUM IS HEREBY ATTACHED TO AND MADE A PART OF THE CONTRACT DOCUMENTS. EACH BIDDER SHALL ACKNOWLEDGE RECEIPT AND ACCEPTANCE OF ALL CONDITIONS CONTAINED HEREIN BY ENTERING THE ADDENDUM NUMBER AND DATE IN THE SPACE PROVIDED ON PAGE 00 41 00-1 (BID FORM) (ADDENDUM NO. 2) OF THE BIDDING DOCUMENTS.



Brent Packer, P.E.  
Bowen Collins & Associates

**SECTION 00 41 00**  
**BID FORM (ADDENDUM NO. 2)**

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**SOUTH SEWER INTERCEPTOR CIPP PROJECT**  
**MARCH 2021**

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## ARTICLE 1 – BID RECIPIENT

1.01 This Bid is submitted to:

***South Valley Water Reclamation Facility***

***Taigon Worthen, PE***

***Facility Engineer***

***7495 South 1300 West***

***West Jordan, UT 84084***

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

## ARTICLE 2 – BIDDER'S ACKNOWLEDGEMENTS

2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

## ARTICLE 3 – BIDDER'S REPRESENTATIONS

3.01 In submitting this Bid, Bidder represents that:

A. Bidder has examined and carefully studied the Bidding Documents, and any data and reference items identified in the Bidding Documents, and hereby acknowledges receipt of the following Addenda:

<u>Addendum No.</u>	<u>Addendum Date</u>
_____	_____
_____	_____
_____	_____
_____	_____

B. Bidder has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfied itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.

C. Bidder is familiar with and has satisfied itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work.

D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental

Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.

- E. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and any Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs.
- F. Bidder agrees, based on the information and observations referred to in the preceding paragraph, that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents and confirms that the written resolution thereof by Engineer is acceptable to Bidder.
- I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work.
- J. The submission of this Bid constitutes an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, and that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

#### **ARTICLE 4 – BIDDER'S CERTIFICATION**

4.01 Bidder certifies that:

- A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
- D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:
  - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process;
  - 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices

at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;

3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and
4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

## ARTICLE 5 – BASIS OF BID

5.01 Bidder will complete the Work in accordance with the Contract Documents for the following price(s):

### SCHEDULE A - BASE BID

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
A1	Mobilization/Demobilization (5%)	Lump Sum (LS)	1	\$	\$
A2	Sewer Bypass Pumping	LS	1	\$	\$
A3	Additional Hydraulic Cleaning*	Linear Foot (LF)	2,000	\$	\$
A4	Heavy Cleaning*	Hour (HR)	8	\$	\$
A5	Pre-Liner (48-inch)*	LF	1,000	\$	\$
A6	Pre-Liner (54-inch)*	LF	1,000	\$	\$
A7	Pre-Liner (60-inch)*	LF	1,000	\$	\$
A8	Internal Joint Seal (48-inch)*	Each (EA)	5	\$	\$
A9	Internal Joint Seal (54-inch)*	EA	5	\$	\$
A10	Internal Joint Seal (60-inch)*	EA	5	\$	\$
A11	Styrene Emitting Cured-in-Place Lining (48-inch)	LF	9,030	\$	\$
A12	Styrene Emitting Cured-in-Place Lining (54-inch)	LF	8,630	\$	\$
A13	Styrene Emitting Cured-in-Place Lining (60-inch)	LF	2,120	\$	\$
A14	Manhole Dismantling/Repair for CIPP Installation	LS	1	\$	\$
A15	Cleaning, Blasting, Surface Preparation, Debris Removal	Square Feet (SF)	3,600	\$	\$
A16	Removal/Disposal of Grit Material from Confluence Structures and 90-inch Influent Pipe	Cubic Yard (CY)	5	\$	\$



Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
A17	Thin Repair (Up to 1.5 inches in Depth) Avg. 1-inch Depth	SF	1,430	\$	\$
A18	Moderate Repair (1.5 inches to 3 inches in Depth) Avg. 2.5 Inches	SF	1,100	\$	\$
A19	Anti-Corrosion Rebar Coating for Exposed Rebar	LF	1,100	\$	\$
A20	Leaking Crack – Waterproof Injection Grout	LF	150	\$	\$
A21	Polymeric Rehab (90-inch Influent Pipe)	SF	4,700	\$	\$
A22	Polymeric Rehab of Concrete Walls, Bench, and Flow Channels	SF	5,635	\$	\$
A23	Polymeric Rehab of Overhead Concrete	SF	1,115	\$	\$
A24	Polymeric Rehab (60-inch Square Manholes – Type A)	Vertical Feet (VF)	80	\$	\$
A25	Polymeric Rehab (60-inch Round Manholes – Types B and C)	VF	435	\$	\$
A26	Remove and Replace Pipe (48-inch)	LF	60	\$	\$
A27	Remove and Replace Pipe (60-inch)	LF	40	\$	\$
A28	8-foot Polymer Concrete Sewer Manhole	EA	1	\$	\$
A29	10-foot Polymer Concrete Sewer Manhole	EA	1	\$	\$
A30	Jordan River Trail Restoration	LS	1	\$	\$
A31	Unimproved Surface Restoration	LS	1	\$	\$
A32	Dirt Road Restoration	LS	1	\$	\$
A33	Gravel Road Restoration	LS	1	\$	\$
A34	Asphalt Restoration	LS	1	\$	\$
A35	Landscape Restoration	LS	1	\$	\$
A36	Corn Field Restoration	LS	1	\$	\$
A37	Alfalfa Field Restoration	LS	1	\$	\$
A38	Temporary Haul Road	LS	1	\$	\$
A39	Chemical Grouting Setup*	EA	20	\$	\$
A40	Chemical Grout*	Gallons	250	\$	\$
<b>Schedule A Total</b>					\$

The Contractor shall provide bid additive alternate costs to supply and install non-styrene emitting cured-in-place liners. These bid items are outlined in the following Schedule B. The Owner reserves

the right to select the successful bidder based on the total bid price of Bid Schedule A only or the total bid price of Bid Schedule A plus Bid Schedule B.

### **SCHEDULE B – ADDITIVE ALTERNATE BID**

Note: Bid Schedule B items may be used based on cure water sample test results performed by the Owner as described in Section 33 01 30.72 – CIPP Lining, paragraphs 3.4.L, 3.4.M, and 3.4.N.

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Estimated Quantity</b>	<b>Bid Unit Price</b>	<b>Bid Price</b>
B1	Mobilization/Demobilization (Non-Styrene Emitting CIPP) (max \$100,000)*	LS	1	\$	\$
B11	Non-Styrene Emitting Cured-in-Place Lining (48-inch)*	LF	2,660	\$	\$
Deduct A11	Deduct Styrene Emitting Cured-in-Place Lining (48-inch)*	LF	2,660	(\$ )	(\$ )
B12	Non-Styrene Emitting Cured-in-Place Lining (54-inch)*	LF	565	\$	\$
Deduct A12	Deduct Styrene Emitting Cured-in-Place Lining (54-inch)*	LF	565	(\$ )	(\$ )
B13	Non-Styrene Emitting Cured-in-Place Lining (60-inch)*	LF	2,120	\$	\$
Deduct A13	Deduct Styrene Emitting Cured-in-Place Lining (60-inch)*	LF	2,120	(\$ )	(\$ )
<b>Schedule B Total</b>					\$

<b>Schedule A + Schedule B Total</b>	\$
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Bidder acknowledges that (1) each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, (2) estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, (3) items listed with one asterisk "\*" require Engineer/Owner approval prior to installation or use, and (4) final payment for all unit price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

### **ARTICLE 6 – TIME OF COMPLETION**

6.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.

### **ARTICLE 7 – ATTACHMENTS TO THIS BID**

7.01 The following documents are submitted with and made a condition of this Bid:

- A. Section 00 41 00 – Bid Form
- B. Section 00 43 13 – Bid Bond

- C. Section 00 43 50 – Project Organization Description
- D. Section 00 43 70 – Proposed Subcontractors and Major Materials Suppliers
- E. Section 00 43 83 – Preliminary Construction Schedule
- F. Section 00 45 10 – Contractor’s Current Business License Information
- G. Section 00 45 13 – Bidder’s Qualifications
- H. Section 00 45 15 – Resumes of Key Personnel

## ARTICLE 8 – DEFINED TERMS

8.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

## ARTICLE 9 – BID SUBMITTAL

BIDDER: *(Indicate correct name of bidding entity)*

By:

*[Signature]*

*[Printed name]*

*(If Bidder is a corporation, a limited liability company, a partnership, or a joint venture, attach evidence of authority to sign.)*

Attest:

*[Signature]*

*[Printed name]*

Title:

Submittal Date:

Address for giving notices:

Telephone Number:

Fax Number:

Contact Name and e-mail address:

Bidder's License No.:

*(where applicable)*

END OF SECTION

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**SECTION 01 20 00**  
**MEASUREMENT AND PAYMENT (ADDENDUM NO. 2)**

**1.1 DESCRIPTION**

- A. This Section defines the manner in which the Lump Sum Prices, Unit Prices, and the Allowances listed in the Bid Schedule will be used to determine measurement and payment for all Work and describes the required procedures for monthly progress payments to the Contractor.
- B. Make selections below based on the type of construction schedule being used. The Bar Chart Schedule is defined in Section 01 32 20 and the CPM Schedule is defined in Section 01 32 21.
- C. Bid amounts will include all plant, equipment, tools materials, labor, service, and all other items required to complete the Work included in the Agreement unless specifically excluded by this section. Work required for which no separate Bid item is identified will be considered as a subsidiary obligation of the Contractor, and the cost therefore shall be included in the most applicable Bid item. Refer to Section 01 32 20 - Bar Chart Schedule for resource loading and progress payments. Compensation for partial completion of the Work will be determined by use of the Construction Schedule. Bid amounts for each item will be the basis for development of budget values for activities included in the Construction Schedule and in the Schedule of Values. Adjustments to Allowance Bid Item amounts will be applied to the Contract Price when Work is completed, and actual Allowance item amounts are known.
- D. Payment for all items in the Bid Schedule will include full compensation for furnishing all tools, equipment, supplies, and manufactured articles, and for all labor, operations, and incidentals appurtenant to the items of Work being described, as necessary to complete the various items of the Work in accordance with the requirements of the Contract Documents, including all appurtenances thereto, and including but not limited to all costs of permits and cost of compliance with the regulations of public agencies having jurisdiction, including Safety and Health Requirements of the Division of Industrial Safety and the Occupational Safety and Health Administration of the U.S. Department of Labor (OSHA).
- E. All costs shall be included in the prices named in the Bid Schedule for the various items of Work. Except as otherwise provided herein, no separate payment will be made for any item that is not specifically set forth in the Bid Schedule.
- F. When included, all estimated quantities stipulated in the Bid or other Contract Documents are approximate and are to be used only as a basis for estimating the probable cost of the Work and for the purpose of comparing the Bids submitted for the Work. The actual amounts of Work done and materials furnished under unit price items may differ from the estimated quantities. The basis of payment for work and materials will be the actual amount of work done and materials furnished. Contractor agrees that it will make no claim for damages, anticipated profits, or otherwise on account of any difference between the amounts of work actually performed and materials actually furnished and the estimated amounts thereof.
- G. The unit or lump sum item of work, which involves excavation or trenching shall include all costs for such work. No direct payment will be made for excavation or trenching. All excavation and trenching will be unclassified as to materials which may be encountered; in

addition, trenches will be unclassified as to depth. No additional payment will be made for rock or caliche excavation, nor for blasting which the Contractor determines is required for rock or caliche excavations.

- H. Monthly pay requests are due on the 30th of each month, and while pay requests will be accepted prior to this date, pay request processing will not begin until this date for purposes of meeting the Owner's pay request processing obligations. Failure to submit a pay request by this day may be cause for the rejection of the pay request. If rejected, Contractor may have to resubmit the pay request the next month. Should the submittal date fall on a holiday or weekend day during the month, then consider the next working day as the due date.
- I. Note that the information provided in this Section is intended for use as a general description of the breakdown of work to be included in the Bid Schedule. The following descriptions are NOT intended to represent a complete listing of all Work required by the Contract Documents. It is the Bidder's responsibility to make sure that costs for all Work required in the plans and specifications is accounted for in the appropriate Bid Items, whether or not specifically described in this Measurement and Payment section. The Owner is not responsible for Contractor's failure to properly coordinate with Subcontractors and Suppliers regarding the breakdown of Work in these Contract Documents.

## 1.2 MEASUREMENT AND PAYMENT

- A. The actual Bid Items to be included in the Contract are to be enumerated here. Add and delete paragraphs for Allowance Bid Items, Lump Sum Bid Items, and Unit Price Bid Items in the paragraphs below in accordance with the Bid Schedule for the Project.
- B. Lump Sum Bid Items
  - A. All Work Required by the Contract Documents
    - a. Payment for Work under this Bid item will be based on the breakdown of costs for each scheduled activity in the Construction Schedule and the percentage of completion for each activity in accordance with the Contract Documents.
- C. Enumerate Unit Price Bid items by adding paragraphs as needed below. If there are none, delete the paragraph.
- D. Unit Price Bid Items
  - A. All Work Required by the Contract Documents Unit Price Items
    - a. Measurement and calculation of quantities for payment to be as indicated in this section.
    - b. Unit prices or lump sum amounts to include full compensation for furnishing all labor, materials, products, tools, equipment, transportation, services, and incidentals; erection, application or installation of an item of the Work; overhead and profit, and doing all work shown on the Drawings, defined in the Specifications, and/or stipulated herein.

- c. Payment covers the cost of incidental work, including but not limited to: Construction Quality Control program; Quality Assurance Testing, safety procedure plan; all equipment, labor, and materials required to safely complete the work per all local, state and federal requirements; maintaining construction schedule; submittals; permits and associated fees, bonds and others costs; traffic control; silt fencing; stabilized construction entrances; irrigation, surface water and drainage management; temporary access and deliveries to local businesses affected by work; coordination with property owners, businesses, contractors, and government agencies; protection and support of existing surface and subsurface features except as identified as bid items; providing assistance to other utility companies in locating and relocating service laterals and mains, as needed; protection, restoration and replacement of asphalt and/or gravel surfaces per the requirements of the property owner or municipal agency; restoration of existing manholes used to facilitate the work; restoration of work area to pre-construction conditions or better; seeding; wetland, upland and creek protection and restoration; replacement and restoration of existing utilities (mains and services) and other items damaged by the CONTRACTOR's operations; removal and replacement of landscape materials and irrigation systems equal to or better than existing if damaged by the CONTRACTOR's operations; removal and replacement of landscape materials and irrigation systems equal to or better than existing if damaged by the CONTRACTOR's operations; and all other necessary work, to install the Work complete in place.

E. Bid Schedule to be as follows:

1. MOBILIZATION / DEMOBILIZATION (BID ITEM NO. A1)

- A. Description: This item includes all materials, equipment, and labor necessary to mobilize and demobilize during the installation of the Cured-in-place and manhole liners.
- B. Measurement and Basis of Payment: Measured and paid for based on lump sum.
- C. Payment Covers: Payment shall not exceed five percent (5%) of the total base bid price. Payment shall be complete compensation for all labor, tools, materials, and equipment required to complete this item, including, but not limited to:
  - 1) Mobilization
  - 2) Demobilization
  - 3) Videotaping site conditions pre- and post-construction in accordance with Section 01 71 30 - Site Conditions Surveys of the Contract Documents
  - 4) Temporary facilities
  - 5) Obtaining bonds, insurance and permits per the Contract Documents
  - 6) Snow and ice removal

- 7) Coordination with SVWRF regarding project impact on the treatment facility
- 8) Providing lighting during evening work
- 9) Clean-up work
- 10) Complying with all SWPPP requirements
- 11) Resetting any disturbed property corners or street monuments
- 12) Administrative items
- 13) Potholing ahead of construction and restoration of all potholes per contract requirements.
- 14) Project signs
- 15) Surface grading and restoration of staging area(s) and ditches to preconstruction conditions.
- 16) Silt fencing in accordance with the Contract Documents
- 17) All other appurtenances and work required to mobilize and demobilize.
- 18) Coordination with the Owner's Public Relations firm
- 19) Obtaining and submitting property restoration release forms
- 20) All other appurtenances and work required to mobilize and to demobilize

2. MOBILIZATION/DEMobilIZATION (NON-STYRENE EMITTING CIPP) (BID ITEM NO. B1)

- A. Description: This item includes all materials, equipment, and labor necessary to mobilize and demobilize during the installation of the Non-styrene emitting Cured-in-place liner.
- B. Measurement and Basis of Payment: Measured and paid for based on lump sum.
- C. Authorization of Payment: Payment for Bid Item No. A1 will only be made if the non-styrene emitting CIPP lining option is authorized by the Owner. At which point, the Contractor will receive an additional 31 calendar days of contract time and additional lump sum payment for the use of the non-styrene emitting CIPP lining execution.
- D. Payment Covers: Payment shall not exceed \$100,000. Payment shall be compensation for all delays, coordination, travel, canceled orders, reshelving fees, labor, tools, materials, and equipment required to complete this item, including, but not limited to all the items in Bid Item No.1.

3. SEWER BYPASS PUMPING (BID ITEM NO. A2)

- A. Description: This item includes all materials, equipment, and labor necessary to maintain existing wastewater flows during the rehabilitation of the sewer segments and manholes identified in the Drawings. The Contractor shall prepare and submit a sewer bypass plan to Engineer for approval by SVWRF prior to beginning construction.



- B. Materials and Construction Requirements – All work under this item shall conform to the Construction Plans.
- C. Measurement and Basis of Payment: Measured and paid for based on lump sum. Progress payments shall be made equal to the percentage of completion of lining for the segments of sewer identified in the Drawings.
- D. Payment Covers: Payment shall be complete compensation for all labor, tools, materials, and equipment required to complete this item, including, but not limited to:
  - 1) Coordination with SVWRF and owners of connecting sewer pipelines.
  - 2) Preparation of an acceptable sewer bypass plan.
  - 3) Maintaining wastewater flows, including temporary routing or pumping of sewage at multiple locations as necessary to maintain uninterrupted sanitary sewer service during the construction of the sewer trunk line and connecting piping, removal or abandonment of the existing system.
  - 4) Removal and replacement of stop logs in Headworks Building's screen channel.
  - 5) Furnish pumps, piping, sewer plugs, and hoses.
  - 6) Furnish gasoline/diesel fuel.
  - 7) Furnish ramps, bridges, jersey barriers, sign notifications, traffic lights, and/or reflective barricades as needed.
  - 8) Providing 24/7 personnel observing and maintaining any sewer bypass pumping system used during construction.
  - 9) Providing protection to bypass pumping lines used during construction including traffic maintenance, signs, and barriers
  - 10) Removal and disposal of the temporary service after completion of the work.
  - 11) All other appurtenances and work required to provide temporary sewer bypass service to the sewer segments and manholes being rehabilitated.

4. ADDITIONAL HYDRAULIC CLEANING (BID ITEM NO. A3)

- A. Description: This item includes all materials, equipment, and labor necessary to perform additional hydraulic cleaning of the sanitary sewer.
- B. Measurement and Basis of Payment: Measured and paid for based on linear foot.
- C. Payment Covers: Payment shall be complete compensation for all labor, tools, materials, and equipment required to complete this item. Payment will only be made if the light cleaning was insufficient as described in Section 33 01 30.51.

5. HEAVY CLEANING (BID ITEM NO. A4)

- A. Description: This item includes all materials, equipment, and labor necessary to perform heavy cleaning of the sanitary sewer.
  - B. Measurement and Basis of Payment: Measured and paid for based on hours needed to clean the pipe.
  - C. Payment Covers: Payment shall be complete compensation for all labor, tools, materials, and equipment required to complete this item. Payment will only be made if the light and additional cleaning was insufficient as described in Section 33 01 30.51 and shall be pre-approved by the Engineer.
6. PRE-LINER (BID ITEM NOS. A5, A6, AND A7)
- A. Description: This item includes all materials, equipment, and labor necessary to install a pre-liner.
  - B. Measurement and Basis of Payment: Measured and paid based on linear foot, regardless of depth.
  - C. Payment Covers: Payment shall be complete compensation for all labor, tools, materials, and equipment required to complete this item. Payment will only be made if a pre-liner for infiltration control is approved by the Engineer.
7. INTERNAL JOINT SEAL (BID ITEM NOS. A8, A9, AND A10)
- A. Description: This item includes all materials, equipment, and labor necessary to install an internal joint seal.
  - B. Measurement and Basis of Payment: Measured and paid based on each internal joint seal satisfactorily installed.
  - C. Payment Covers: Payment shall be complete compensation for all labor, tools, materials, and equipment required to complete this item. Payment will only be made if a joint seal for infiltration control is approved by the Engineer.
8. STYRENE EMITTING CURED-IN-PLACE LINING (BID ITEM NOS. A11, A12, AND A13)
- A. Description: This item includes all materials, equipment, and labor necessary to furnish and install the CIPP lining of indicated length and diameter and the cost of incidental work.
  - B. Measurement and Basis of Payment: Measured and paid based on linear foot, regardless of depth.
  - C. Payment Covers: Payment shall be complete compensation for all labor, tools, materials, and equipment required to complete this item, including, but not limited to:
    - 1) Pre- and post-CCTV

- 2) Light sewer cleaning
- 3) Blocking or plugging of incoming lines,
- 4) Traffic control
- 5) Coordination with the Owner's Public Relations firm
- 6) Install and curing the CIPP liner
- 7) End seals
- 8) Providing cured CIPP samples for testing
- 9) Coordination with SVWRF regarding project impact on the treatment facility
- 10) Restoring existing utilities impacted by sewer construction including, but not limited to: water lines, gas lines, irrigation pipe, storm drains, storm drain manholes and catch basins, power lines, secondary water lines, fiber optic lines, telephone lines, cable TV, etc.
- 11) Restoring surface improvements impacted by sewer construction including but not limited to: pavement, wetlands, uplands, concrete curb and gutter, sidewalks, landscaping, trees, fences, signs, etc.
- 12) All other appurtenances and work required to install the CIPP liners.

D. Full Payment for CIPP lining is based on furnishing a liner with a 50-year service life with a factor of safety of 2.0 as calculated by the submitted calculations. When post-installation thickness measurements and/or physical property testing is performed, installed liners which both meet and exceed, and do not meet the calculated thicknesses or physical properties used in said calculations, acceptance and payment will be made in the following manner:

- a. Full Payment: If the thickness, flexural modulus of elasticity, and flexural strength of installed liner are all equal to or greater than the assumed and calculated values, full payment will be made.

**Example Scenario:**

- *Average Measured Flexural Strength = 120% of assumed value*
- *Average Measured Flexural Modulus = 120% of assumed value*
- *Average Measured Thickness = 100% of calculated thickness*
- *Full Payment would be made.*

- b. Full Payment: If any of the thickness, flexural modulus of elasticity, or flexural strength of installed liner are less than the calculated values, but other measured parameters still provide a 50-year service life with a factor of safety of 2.0, full payment will be made.

**Example Scenario:**

- *Average Measured Flexural Strength = 120% of assumed value*
- *Average Measured Flexural Modulus = 120% of assumed value*
- *Average Measured Thickness = 95% of calculated thickness*
- *Contractor resubmits P.E. stamped calculations showing that with the higher measured flexural modulus and strength, a 50-year service life with a factor of safety above 2.0 is still provided even with the lower measured thickness.*
- *Full Payment would be made.*

- c. Rejected: If any point of the thickness is less than 87.5% of calculated values, or if the average thickness is less than 85% of the calculated

values, or the average flexural strength or flexural modulus is less than 85% of the assumed values, or the revised calculated factor of safety is less than 1.5, no payment will be made.

**Example Scenario:**

- *Average Measured Flexural Strength = 120% of assumed value*
  - *Average Measured Flexural Modulus = 84% of assumed value, or*
  - *Thickness Measurement No. 3 out of 8 = 86% of calculated thickness,*
  - *No Payment would be made.*
- d. Reduced Payment: If any of the thickness, flexural modulus of elasticity, or flexural strength of installed liner are less than the assumed or calculated values but still above the minimum percentages listed above, and the installed liner still can provide a 50-year service life with a factor of safety above 1.5, reduced payment will be made as follows:
- *Factor of Safety = 1.9 – 1.99, Payment would be 90% of Full Payment*
  - *Factor of Safety = 1.8 – 1.89, Payment would be 80% of Full Payment*
  - *Factor of Safety = 1.7 – 1.79, Payment would be 70% of Full Payment*
  - *Factor of Safety = 1.6 – 1.69, Payment would be 60% of Full Payment*
  - *Factor of Safety = 1.5 – 1.59, Payment would be 50% of Full Payment*
  - *Factor of Safety < 1.5, No Payment would be made.*
  - *If Contractor does not wish to resubmit the P.E. stamped calculations of the factor of safety, Payment would be 50% of Full Payment.*

**Example Scenario:**

- *Average Measured Flexural Modulus = 105% of assumed value*
- *Average Measured Thickness = 90% of calculated thickness*
- *Contractor resubmits P.E. stamped calculations showing that with the higher measured flexural modulus and strength, a 50-year service life with a recalculated factor of safety of 1.86 is provided with the lower measured thickness.*
- *80% of Full Payment would be made.*

9. NON-STYRENE EMITTING CURED-IN-PLACE LINING (BID ITEM NOS. B11, B12, AND B13)

- A. Description: This item includes all materials, equipment, and labor necessary to furnish and install the CIPP lining of indicated length and diameter and the cost of incidental work.
- B. Measurement and Basis of Payment: Measured and paid based on linear foot, regardless of depth.
- C. Payment Covers: Payment shall be complete compensation for all labor, tools, materials, and equipment required to complete this item, including, but not limited to:

- 1) Pre- and post-CCTV

- 2) Light sewer cleaning
- 3) Blocking or plugging of incoming lines,
- 4) Traffic control
- 5) Coordination with the Owner's Public Relations firm
- 6) Install and curing the CIPP liner
- 7) End seals
- 8) Providing cured CIPP samples for testing
- 9) Coordination with SVWRF regarding project impact on the treatment facility
- 10) Restoring existing utilities impacted by sewer construction including, but not limited to: water lines, gas lines, irrigation pipe, storm drains, storm drain manholes and catch basins, power lines, secondary water lines, fiber optic lines, telephone lines, cable TV, etc.
- 11) Restoring surface improvements impacted by sewer construction including but not limited to: pavement, wetlands, uplands, concrete curb and gutter, sidewalks, landscaping, trees, fences, signs, etc.
- 12) All other appurtenances and work required to install the CIPP liners.

D. Full Payment for CIPP lining is based on furnishing a liner with a 50-year service life with a factor of safety of 2.0 as calculated by the submitted calculations. When post-installation thickness measurements and/or physical property testing is performed, installed liners which both meet and exceed, and do not meet the calculated thicknesses or physical properties used in said calculations, acceptance and payment will be made in the following manner:

- a. Full Payment: If the thickness, flexural modulus of elasticity, and flexural strength of installed liner are all equal to or greater than the assumed and calculated values, full payment will be made.

**Example Scenario:**

- *Average Measured Flexural Strength = 120% of assumed value*
- *Average Measured Flexural Modulus = 120% of assumed value*
- *Average Measured Thickness = 100% of calculated thickness*
- *Full Payment would be made.*

- b. Full Payment: If any of the thickness, flexural modulus of elasticity, or flexural strength of installed liner are less than the calculated values, but other measured parameters still provide a 50-year service life with a factor of safety of 2.0, full payment will be made.

**Example Scenario:**

- *Average Measured Flexural Strength = 120% of assumed value*
- *Average Measured Flexural Modulus = 120% of assumed value*
- *Average Measured Thickness = 95% of calculated thickness*
- *Contractor resubmits P.E. stamped calculations showing that with the higher measured flexural modulus and strength, a 50-year service life with a factor of safety above 2.0 is still provided even with the lower measured thickness.*
- *Full Payment would be made.*

- c. Rejected: If any point of the thickness is less than 87.5% of calculated values, or if the average thickness is less than 85% of the calculated

values, or the average flexural strength or flexural modulus is less than 85% of the assumed values, or the revised calculated factor of safety is less than 1.5, no payment will be made.

**Example Scenario:**

- *Average Measured Flexural Strength = 120% of assumed value*
  - *Average Measured Flexural Modulus = 84% of assumed value, or*
  - *Thickness Measurement No. 3 out of 8 = 86% of calculated thickness,*
  - *No Payment would be made.*
- d. Reduced Payment: If any of the thickness, flexural modulus of elasticity, or flexural strength of installed liner are less than the assumed or calculated values but still above the minimum percentages listed above, and the installed liner still can provide a 50-year service life with a factor of safety above 1.5, reduced payment will be made as follows:
- *Factor of Safety = 1.9 – 1.99, Payment would be 90% of Full Payment*
  - *Factor of Safety = 1.8 – 1.89, Payment would be 80% of Full Payment*
  - *Factor of Safety = 1.7 – 1.79, Payment would be 70% of Full Payment*
  - *Factor of Safety = 1.6 – 1.69, Payment would be 60% of Full Payment*
  - *Factor of Safety = 1.5 – 1.59, Payment would be 50% of Full Payment*
  - *Factor of Safety < 1.5, No Payment would be made.*
  - *If Contractor does not wish to resubmit the P.E. stamped calculations of the factor of safety, Payment would be 50% of Full Payment.*

**Example Scenario:**

- *Average Measured Flexural Modulus = 105% of assumed value*
- *Average Measured Thickness = 90% of calculated thickness*
- *Contractor resubmits P.E. stamped calculations showing that with the higher measured flexural modulus and strength, a 50-year service life with a recalculated factor of safety of 1.86 is provided with the lower measured thickness.*
- *80% of Full Payment would be made.*

D. Payment will only be made if these items are approved by the Engineer.

10. MANHOLE DISMANTLING/REPAIR FOR CIPP INSTALLATION (BID ITEM NO. A14)

- A. Description: This item includes all materials, equipment, and labor necessary to dismantle and subsequently repair manholes in order to install the CIPP liner.
- B. Measurement and Basis of Payment: Measured and paid for based on lump sum.
- C. Payment Covers: Payment shall be complete compensation for all labor, tools, materials, and equipment required to complete this item, including, but not limited to:

- 1) Coordination with SVWRF on locating buried manholes,
- 2) Excavation, removal of cone or lid, concrete collar, chimney, and metal castings,
- 3) Confined space entry,
- 4) Removal of pipe material such that CIPP lining can be completed,
- 5) Blocking or plugging of incoming lines,
- 6) Traffic control
- 7) Removal and replacement of existing manhole covers.
- 8) Reconstruction of the manhole cone or lid, concrete collar, chimney, and metal castings,
- 9) Restoring existing utilities impacted by sewer construction including, but not limited to: water lines, gas lines, irrigation pipe, storm drains, storm drain manholes and catch basins, power lines, secondary water lines, fiber optic lines, telephone lines, cable TV, etc.
- 10) Restoring surface improvements impacted by sewer construction including but not limited to: pavement, wetlands, uplands, concrete curb and gutter, sidewalks, landscaping, trees, fences, signs, etc.
- 11) All other appurtenances and work required to dismantle and subsequently repair manholes.

11. CLEANING, BLASTING, SURFACE PREPARATION, DEBRIS REMOVAL (BID ITEM NO. A15)

- A. Description: This item includes all materials, equipment, labor, and incidentals necessary for cleaning, blasting, surface preparation, and debris removal at the North and South Confluent Structures as it relates to thin concrete surface repair, moderate concrete repair and polymeric rehab as indicated on the Construction Plans.
- B. Measurement and Basis for Payment: Measured and paid on a square foot basis regardless of depth. Measurement of the actual quantity of surface preparation area shall be made by Owner. Contractor may, at his/her expense, verify quantities.
- C. Payment Covers: Payment shall be complete compensation for all labor, tools, materials, and equipment required to complete this item.

12. REMOVAL/DISPOSAL OF GRIT MATERIAL FROM CONFLUENCE STRUCTURES AND 90-INCH INFLUENT PIPE (BID ITEM NO. A16)

- A. Description: This item includes all materials, equipment, labor, and incidentals necessary for removal and disposal of grit material from the confluent structures and 90-inch influent pipe.
- B. Measurement and Basis of Payment: Measured and paid on a cubic yard basis. Measurement of the actual quantity of removal and disposal of grit material shall be made by Owner. Contractor may, at his/her expense, verify quantities.

- C. Payment Covers: Payment shall be complete compensation for all labor, tools, materials, and equipment required to complete this item.
13. THIN REPAIR (UP TO 1.5 INCHES IN DEPTH) AVG. 1-INCH DEPTH (BID ITEM NO. A17)
- A. Description: This item includes all materials, equipment, labor, and incidentals relating to thin concrete surface repair (up to 1.5" in depth) to the interior of the North and South Confluent Structures as indicated on the Construction Plans.
- B. Measurement and Basis of Payment: Measured and paid on a square foot basis. Measurement of the actual quantity of repair shall be made by Owner. Contractor may, at his/her expense, verify quantities.
- C. Payment Covers: The unit price per square foot of thin concrete repair will be full compensation for providing all concrete surface repairs up to 1.5 inches thick as ordered and not specifically included under other items or contracts. This includes, but not limited to:
- 1) Repairing surface spalls and delaminated areas by removing deteriorated concrete,
  - 2) Cleaning and preparing the substrate,
  - 3) Placing new repair mortar as specified.
14. MODERATE REPAIR (1.5 INCHES TO 3 INCHES IN DEPTH) AVG. 2.5 INCHES (BID ITEM NO. A18)
- A. Description: This item includes all materials, equipment, labor, and incidentals relating to moderate concrete repair (1.5" to 3" in depth) to the interior of the North and South Confluent Structures as indicated on the Construction Plans.
- B. Measurement and Basis of Payment: Measured and paid on a square foot basis. Measurement of the actual quantity of repair shall be made by Owner. Contractor may, at his/her expense, verify quantities.
- C. Payment Covers: The unit price per square foot of moderate concrete repair will be full compensation for providing all concrete surface repairs 1.5 inches up to and including 3 inches thick as ordered and not specifically included under other items or contracts. This includes, but not limited to:
1. Repairing surface spalls and delaminated areas by removing deteriorated concrete,
  2. Cleaning and preparing the substrate,
  3. Placing new repair mortar as specified.
15. ANTI-CORROSION REBAR COATING FOR EXPOSED REBAR (BID ITEM NO. A19)



- A. Description: This item includes all materials, equipment, labor, and incidentals necessary to furnish and install anti-corrosion rebar coating for exposed rebar on the interior of the North and South Confluent Structures based on surface preparation for moderate concrete repair.
- B. Measurement and Basis of Payment: Measured and paid based on linear foot. Measurement of the actual quantity of coating shall be made by Owner. Contractor may, at his/her expense, verify quantities.
- C. Payment Covers: The unit price per linear foot of anti-corrosion rebar coating will be full compensation for providing the cleaning and coating of existing rebar exposed following surface preparation work as ordered and not specifically included under other items or contracts.

16. LEAKING CRACK – WATERPROOF INJECTION GROUT (BID ITEM NO. A20)

- A. Description: This item includes all materials, equipment, labor, and incidentals necessary to furnish and install waterproof injection grout. Repair leaking cracks by cleaning and pressure-injecting waterproof injection grout into the prepared cracks, as specified for all existing, leaking cracks 1/2-inch wide and smaller. See Structural Repair Details sheet GS-01.
- B. Measurement and Basis of Payment: Measured and paid based on linear foot, regardless of depth. Measurement of the actual quantity of leaking cracks shall be made by Owner. Contractor may, at his/her expense, verify quantities.
- C. Payment Covers: The unit price per linear foot for leaking cracks will be full compensation for providing all leaking crack repairs as ordered and not specifically included under other items or contracts.

17. POLYMERIC REHAB (90-INCH INFLUENT PIPE) (BID ITEM NO. A21)

- A. Description: This item includes all materials, equipment, labor, and incidentals necessary to furnish and install the polymeric manhole rehabilitation liner as indicated at the locations shown on the Construction Plans.
- B. Measurement and Basis of Payment: Measured and paid on a square foot basis regardless of depth.
- C. Payment Covers: Payment shall be complete compensation for all labor, tools, materials, and equipment required to complete this item, including, but not limited to:
  - 1) Permit Required Confined Space Entry,
  - 2) Traffic control,
  - 3) Surface preparation,
  - 4) Patching of holes or voids,

- 5) Infiltration control (chemical grouting),
- 6) Installation of the polymer concrete rehabilitation product,
- 7) Adhesion and spark testing and subsequent repairs,
- 8) Restoring surface improvements impacted by construction including but not limited to: wetlands, uplands, concrete curb and gutter, sidewalks, landscaping, trees, fences, signs, etc.
- 9) All other appurtenances and work required to rehabilitate the concrete surfaces.

18. POLYMERIC REHAB OF CONCRETE WALLS, BENCH, AND FLOW CHANNELS (BID ITEM NO. A22)

- A. Description: This item includes all materials, equipment, labor, and incidentals necessary to furnish and install the polymeric manhole rehabilitation liner as indicated at the locations shown on the Construction Plans.
- B. Measurement and Basis of Payment: Measured and paid on a square foot basis regardless of depth.
- C. Payment Covers: Payment shall be complete compensation for all labor, tools, materials, and equipment required to complete this item, including, but not limited to:
  - 1) Permit Required Confined Space Entry,
  - 2) Traffic control,
  - 3) Surface preparation,
  - 4) Patching of holes or voids,
  - 5) Infiltration control (chemical grouting),
  - 6) Installation of the polymer concrete rehabilitation product,
  - 7) Adhesion and spark testing and subsequent repairs,
  - 8) Restoring surface improvements impacted by construction including but not limited to: wetlands, uplands, concrete curb and gutter, sidewalks, landscaping, trees, fences, signs, etc.
  - 9) All other appurtenances and work required to rehabilitate the concrete surfaces.

19. POLYMERIC REHAB OF OVERHEAD CONCRETE (BID ITEM NO. A23)

- A. Description: This item includes all materials, equipment, labor, and incidentals necessary to furnish and install the polymeric manhole rehabilitation liner as indicated at the locations shown on the Construction Plans.
- B. Measurement and Basis of Payment: Measured and paid on a square foot basis regardless of depth.

- C. Payment Covers: Payment shall be complete compensation for all labor, tools, materials, and equipment required to complete this item, including, but not limited to:

- 1) Permit Required Confined Space Entry,
- 2) Traffic control,
- 3) Surface preparation,
- 4) Patching of holes or voids,
- 5) Infiltration control (chemical grouting),
- 6) Installation of the polymer concrete rehabilitation product,
- 7) Adhesion and spark testing and subsequent repairs,
- 8) Restoring surface improvements impacted by construction including but not limited to: wetlands, uplands, concrete curb and gutter, sidewalks, landscaping, trees, fences, signs, etc.
- 9) All other appurtenances and work required to rehabilitate the concrete surfaces.

20. POLYMERIC REHAB (60-INCH SQUARE MANHOLES – TYPE A) (BID ITEM NO. A24)

- A. Description: This item includes all materials, equipment, labor, and incidentals necessary to furnish and install the polymeric manhole rehabilitation liner as indicated at the locations shown on the Construction Plans.
- B. Measurement and Basis of Payment: Measured and paid on a vertical foot basis regardless of depth.
- C. Payment Covers: Payment shall be complete compensation for all labor, tools, materials, and equipment required to complete this item, including, but not limited to:

- 1) Permit Required Confined Space Entry,
- 2) Traffic control,
- 3) Surface preparation,
- 4) Patching of holes or voids,
- 5) Infiltration control (chemical grouting),
- 6) Installation of the polymer concrete rehabilitation product,
- 7) Adhesion and spark testing and subsequent repairs,
- 8) Restoring surface improvements impacted by construction including but not limited to: wetlands, uplands, concrete curb and gutter, sidewalks, landscaping, trees, fences, signs, etc.
- 9) All other appurtenances and work required to rehabilitate the concrete surfaces.

21. POLYMERIC REHAB (60-INCH ROUND MANHOLES – TYPES B AND C) (BID ITEM NO. A25)

- A. Description: This item includes all materials, equipment, labor, and incidentals necessary to furnish and install the polymeric manhole

rehabilitation liner as indicated at the locations shown on the Construction Plans.

- B. Measurement and Basis of Payment: Measured and paid on a vertical foot basis regardless of depth.
- C. Payment Covers: Payment shall be complete compensation for all labor, tools, materials, and equipment required to complete this item, including, but not limited to:
  - 1) Permit Required Confined Space Entry,
  - 2) Traffic control,
  - 3) Surface preparation,
  - 4) Patching of holes or voids,
  - 5) Infiltration control (chemical grouting),
  - 6) Installation of the polymer concrete rehabilitation product,
  - 7) Adhesion and spark testing and subsequent repairs,
  - 8) Restoring surface improvements impacted by construction including but not limited to: wetlands, uplands, concrete curb and gutter, sidewalks, landscaping, trees, fences, signs, etc.
  - 9) All other appurtenances and work required to rehabilitate the concrete surfaces.

22. REMOVE AND REPLACE PIPE (BID ITEM NOS. A26 AND A27)

- A. Description: This item includes all materials, equipment, labor, and incidentals necessary to remove existing pipe and to furnish and install new pipe as indicated at the locations shown on the Construction Plans.
- B. Measurement: Measured and paid for based on the actual length of pipe installed. Measurement will be made along the centerline of the pipe, in place, prior to covering or backfilling.
- C. Payment Covers: Payment shall be complete compensation for all labor, tools, materials, and equipment required to complete this item, including, but not limited to:
  - 2) Excavation
  - 3) Dewatering
  - 4) Disposal of native material not suitable for trench backfill
  - 5) Removal and disposal of existing pipe
  - 6) Furnish and install filter fabric
  - 7) Furnish, place, and compact imported pipe bedding and zone materials
  - 8) Furnish and install utility warning tape
  - 9) Furnish, install, test, and inspect new pipe and fittings
  - 10) Connection to confluence structure including collar and grout
  - 11) Furnish, place, and compact trench backfill (imported trench backfill)
  - 12) Sewer pipe repair or replacement if damaged by Contractor

- 13) Restore existing utilities impacted by sewer construction including, but not limited to water lines, gas lines, irrigation pipe, storm drains, French drains, storm drain manholes and catch basins, power lines, secondary water lines, fiber optic lines, telephone lines, cable TV, etc.
- 14) And all other appurtenances and work required to install new pipe.

23. POLYMER CONCRETE SEWER MANHOLE (BID ITEM NOS. A28 AND A29)

- A. Description: This item includes all materials, equipment, labor, and incidentals necessary to install new polymer concrete sewer manholes as indicated at the locations shown on the Construction Plans.
- B. Measurement: Measured and paid for based on the size and actual number of manholes installed.
- C. Payment Covers: Payment shall be complete compensation for all labor, tools, materials, and equipment required to complete this item, including, but not limited to:
  - 1) Excavation
  - 2) Dewatering
  - 3) Removal and disposal of existing sewer manhole
  - 4) Disposal of native material not suitable for backfill
  - 5) Furnish and install polymer manhole base, extended slab, flow channels, boot connectors, pre-cast manhole sections, cast iron frame, cover, and concrete collars
  - 6) Internal piping, fittings, and pipe supports
  - 7) Connect exterior piping including couplings, etc.
  - 8) Furnish, place, and compact trench backfill (imported trench backfill)
  - 9) Furnish and install filter fabric
  - 10) Inspect and test manhole
  - 11) Restore existing utilities impacted by construction including, but not limited to: water lines, gas lines, irrigation pipe, storm drains, storm drain manholes and catch basins, power poles, power lines, secondary water lines, fiber optic lines, telephone lines, cable TV, etc.
  - 12) And all other appurtenances and work required to install new manhole.

24. JORDAN RIVER TRAIL RESTORATION (BID ITEM NO. A30)

- A. Description: This item includes all materials, equipment, labor, and incidentals necessary to restore the Jordan River Trail as indicated at the locations shown on the Construction Plans.
- B. Measurement: Measured and paid for based on lump sum.
- C. Payment Covers: Payment shall be complete compensation for all labor, tools, materials, and equipment required to complete this item, including, but not limited to:

- 1) Coordination with City
- 2) Asphalt cutting, removal, and disposal
- 3) Excavation
- 4) Furnish and install biobarrier as needed
- 5) Furnish and place vegetation killer
- 6) Furnish, place, grade, and compact imported road base and granular borrow materials
- 7) Furnish, place, grade, and compact asphalt
- 8) And all other appurtenances and work required to restore trail.

25. UNIMPROVED SURFACE RESTORATION (BID ITEM NO. A31)

- A. Description: This item includes all materials, equipment, labor, and incidentals necessary to restore unimproved surfaces as indicated at the locations shown on the Construction Plans.
- B. Measurement: Measured and paid for based on lump sum.
- C. Payment Covers: Payment shall be complete compensation for all labor, tools, materials, and equipment required to complete this item, including, but not limited to:
  - 1) Coordinate with property owners.
  - 2) Strip, remove, stockpile, import and replace topsoil in accordance with specifications and details.
  - 3) Grade and restore ground surface to match original or better conditions.
  - 4) Restore unimproved surface areas, including but not limited to, Topsoil, seed, grass, bushes, trees, fences, sprinklers, landscape rocks, vegetation, culverts, etc. in accordance with specifications and details.
  - 5) Weed control, fertilizer, and other maintenance in accordance with specifications.
  - 6) Irrigate unimproved surface areas in accordance with specifications.
  - 7) All other appurtenances and work required to restore unimproved surfaces.

26. DIRT ROAD RESTORATION (BID ITEM NO. A32)

- A. Description: This item includes all materials, equipment, labor, and incidentals necessary to restore dirt roads as indicated at the locations shown on the Construction Plans.
- B. Measurement: Measured and paid for based on lump sum.
- C. Payment Covers: Payment shall be complete compensation for all labor, tools, materials, and equipment required to complete this item, including, but not limited to:

- 1) Coordinate with property owners.
- 2) Prepare subbase in accordance with the Contract Documents
- 3) Furnish, place, and compact suitable material for dirt road as determined by the property owner.
- 4) All other appurtenances and work required to restore dirt road

27. GRAVEL ROAD RESTORATION (BID ITEM NO. A33)

- A. Description: This item includes all materials, equipment, labor, and incidentals necessary to restore gravel roads as indicated at the locations shown on the Construction Plans.
- B. Measurement: Measured and paid for based on lump sum.
- C. Payment Covers: Payment shall be complete compensation for all labor, tools, materials, and equipment required to complete this item, including, but not limited to:
  - 1) Coordinate with property owners.
  - 2) Prepare subbase in accordance with the Contract Documents
  - 3) Furnish, place, and compact road base.
  - 4) Furnish and place gravel.
  - 5) All other appurtenances and work required to restore gravel road

28. ASPHALT RESTORATION (BID ITEM NO. A34)

- A. Description: This item includes all materials, equipment, labor, and incidentals necessary to restore asphalt roads as indicated at the locations shown on the Construction Plans.
- B. Measurement: Measured and paid for based on lump sum.
- C. Payment Covers: Payment shall be complete compensation for all labor, tools, materials, and equipment required to complete this item, including, but not limited to:
  - 1) Coordination with property owner
  - 2) Saw-cutting
  - 3) Prepare subbase in accordance with the Contract Documents
  - 4) Furnish, place, compact, and test of aggregate base course (untreated road base) and asphalt
  - 5) Furnish and install tack coat in accordance with Contract Documents.
  - 6) Adjust all existing and new utility rims to match new asphalt elevation
  - 7) Replace paint striping matching or exceeding original conditions
  - 8) Replace survey monuments in accordance with County requirements
  - 9) All other appurtenances and work required to restore asphalt and road base.

29. LANDSCAPE RESTORATION (BID ITEM NO. A35)

- A. Description: This item includes all materials, equipment, and labor necessary to restore existing landscape areas at the locations shown on the Construction Plans and the cost of incidental work.
- B. Measurement and Basis of Payment: Measured and paid for based on lump sum.
- C. Payment Covers: Payment shall be complete compensation for all labor, tools, materials, and equipment required to complete this item, including, but not limited to:
  - 1) Coordination with property owners.
  - 2) Strip, remove, stockpile, and replace existing topsoil and other excavated materials with imported topsoil and backfill materials in accordance with the Contract Documents.
  - 3) Grade and restore ground surface to match original or better conditions.
  - 4) Restore landscaping areas, including but not limited to topsoil, grass, concrete curbing, gravel, trees, fences, sprinklers, landscape rocks, bark, vegetation, etc. in accordance with the Contract Documents.
  - 5) Weed control, fertilizer, and other maintenance in accordance with Contract Documents.
  - 6) Irrigate landscaping areas in accordance with the Contract Documents.
  - 7) All other appurtenances and work required to restore landscaping areas.

30. FIELD RESTORATION (BID ITEM NO. A36)

- A. Description: This item includes all materials, equipment, and labor necessary to restore existing field areas at the locations shown on the Construction Plans and the cost of incidental work.
- B. Measurement: Measured and paid for based on lump sum.
- C. Payment Covers: Payment shall be complete compensation for all labor, tools, materials, and equipment required to complete this item, including, but not limited to:
  - 1) Coordination with property owners.
  - 2) Strip, remove, stockpile, and replace existing topsoil and other excavated materials.
  - 3) Grade and restore ground surface to match original or better conditions including fences, ditches, etc.
  - 4) All other appurtenances and work required to restore field areas.

31. TEMPORARY HAUL ROAD (BID ITEM NO. A38)



- A. Description: This item includes all materials, equipment, and labor necessary to install and remove temporary haul road(s) at the locations determined by the Contractor and the cost of incidental work.
- B. Measurement: Measured and paid for based on lump sum.
- C. Payment Covers: Payment shall be complete compensation for all labor, tools, materials, and equipment required to complete this item, including, but not limited to:
  - 1) Clear, grub, excavate, and dewater.
  - 2) Prepare subbase in accordance with the Contract Documents.
  - 3) Furnish and install geogrid and geotextile fabric as needed.
  - 4) Furnish, place and compact untreated road base and/or crushed rock as needed.
  - 5) Remove and dispose of temporary haul road(s) after project is complete.
  - 6) Restore surface impacted by the temporary haul road to original or better conditions, including vegetation, fencing, etc.
  - 7) All other appurtenances and work required to construct and remove temporary haul road(s).

### 32. CHEMICAL GROUTING SETUP (BID ITEM NO. A39)

- A. Description: This item includes all materials, equipment, and labor necessary to setup the chemical grouting equipment for infiltration control and an initial five gallons of chemical grout.
- B. Measurement and Basis of Payment: Measured and paid based on each setup. A minimum distance of 12-inch is required between each setup.
- C. Payment Covers: Payment shall be complete compensation for all labor, tools, materials, and equipment required to complete this item. Payment will only be made if chemical grouting for infiltration control is approved by the Engineer.

### 33. CHEMICAL GROUT (BID ITEM NO. A40)

- A. Description: This item includes all materials, equipment, and labor necessary for each gallon of chemical grout in addition to the initial five gallons (see Bid Item No. A39).
- B. Measurement and Basis of Payment: Measured and based on each gallon until the infiltration is sufficiently controlled to perform the cured-in-place lining.
- C. Payment Covers: Payment shall be complete compensation for all labor, tools, materials, and equipment required to complete this item. Payment will only

be made if chemical grouting for infiltration control is approved by the Engineer.

### 1.3 GENERAL PROGRESS PAYMENT REQUIREMENTS

- A. A Payment for Work performed shall be in accordance with installed quantities as assessed in comparison to the Schedule of Values and the Construction Schedule. The Engineer will verify measurements and quantities. Each activity necessary to manage and complete the Work is identified on the Contract schedules. Each activity will be assigned its respective value, a portion of the Contract Price, as shown on the Schedule of Values (Roll-up), and detailed cost loaded activity schedule.
- B. Payment for all lump sum costs and services incurred on this Agreement shall be based on the earned value of Work accomplished during the reporting period. Earned value is determined by the completion percentage of each activity as determined by the Schedule of Values and the Construction Schedule applied to the total value of the activity. No construction activity shall be deemed 100 percent complete until the Contractor has completed the physical check out and inspection of the completed Work and has submitted the signed inspection form to the Engineer.
- C. Earned value is derived from the current status of the Contractor Construction Schedule as determined by the monthly schedule status submittals. Each schedule status submittal is reviewed and approved by the Engineer prior to the Contractor obtaining approval for the Summary of Earned Values or quantities installed and the Application for Payment.

### 1.4 APPLICATION FOR PAYMENT

- A. Submit application for payment on the Owner's form and be certified by signature of an Authorized Officer of the Contractor.
- B. The Application for Payment shall contain all necessary references and attachments that substantiate the invoice for progress payment (e.g., certified payrolls, labor reports, progress schedule data, and Summary of Earned Values). It shall substantiate the invoice for progress payment and shall be preceded or accompanied by the schedule and status data as a condition of payment, in accordance with the Construction Schedule and the Schedule of Values.

### 1.5 REVIEWS/APPLICATION FOR PAYMENT

- A. Review meetings between the Contractor and the Engineer will be held weekly and within 7 Days prior to the payment application date designated by the Engineer. Three Days prior to the last review meeting of the month, submit an updated schedule and a signed application for payment showing a Summary of Earned Values for the reporting and payment period so that the Engineer can compare earned values to available status data. Make any adjustments to the Master Record Documents, updated schedule, and payment applications required by the Engineer. Upon completion of the adjustments, the Engineer will sign the payment request and forward it to the Owner. The Engineer will determine payment amounts if agreement with the Contractor is not reached.

## 1.6 PAYMENT FOR SUPPLIES AND MATERIALS

- A. Payment based on the actual cost of supplies, materials and equipment on hand shall be made by the Owner with or without a paid invoice. "Actual cost" of materials shall be the invoice amount, whether paid or not, and shall not include any costs associated with installation, testing, etc. The Contractor shall be entitled to payment of the actual cost of supplies, materials, and equipment only if it (1) presents an invoice to the Owner with the application for payment and (2) states in the application for payment that the materials have been delivered and stored in the time and manner specified in the contract between the Contractor and his Supplier or Subcontractor. If Contractor fails to comply with those conditions, the Owner may withhold payment in accordance with the provisions. The Owner expressly reserves the right to withhold retention until Contractor presents to the Owner a paid invoice, or some other proof of payment satisfactory to the Owner, for the Owner's use in verifying the accuracy of the actual cost of the supplies, materials or equipment. If the amount paid does not match the actual cost, the Owner will adjust the amount of retention accordingly. Payment for supplies, materials or equipment on hand does not alter the responsibility of the Contractor for all supplies, materials, and equipment until Final Acceptance of the Work.

END OF SECTION



## PRE-BID CONFERENCE MINUTES

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**Project:** South Sewer Interceptor CIPP Project

**Owner:** South Valley Water Reclamation Facility (SVWRF)

**Engineer:** Bowen Collins & Associates / Hazen and Sawyer

**Date:** May 5, 2021

**Time:** 2:00 pm (MST)

**Location:** SVWRF Office

1. Welcome
  - a. Taigon Worthen with SVWRF welcomed everyone in attendance. Brent Packer (BC&A) and Steven Meyer (BC&A) conducted the meeting.
2. Attendees List is attached to the meeting minutes.
3. Introductions
  - a. Taigon introduced himself as the Facility Engineer of SVWRF (Owner of the project), as well as Brent Packer and Steven Meyer as the project engineers. Brent Packer introduced Sean O'Rourke (Hazen and Sawyer) as BC&A's project subconsultant and Cedar Daniels (BC&A) as the project's construction manager and SVWRF's onsite construction representative.
4. Project Overview:
  - a. Project Location:
    - i. Between 9000 South and SVWRF WWTP (~7500 South) along the west side of the Jordan River in West Jordan City, Utah.
  - b. Project Summary:
    - i. The Work of this Contract consists of the rehabilitation of approximately 19,900 linear feet of 48-inch to 90-inch reinforced concrete pipe (RCP), the rehabilitation of 54 sewer manholes and 2 confluence structures, the installation of 2 polymer concrete manholes and approximately 100 linear feet of 48-inch to 60-inch FRMP pipe, sewer bypass pumping, and associated work in accordance with the Contract Documents.

Refer to Section 00 41 00 – Bid Form (Addendum No. 1) for complete list of bid items.

  - c. Site Access (see Drawing Nos. G-06 and G-07)
    - i. No crossing of Bingham Creek (see Drawing No. C-06)
    - ii. Access may be obtained via 9000 South, Jordan Valley Water Conservancy District (JVWCD) property via 1300 West, 7800 South, and SVWRF's property via 1300 West.

## PRE-BID CONFERENCE AGENDA (continued)

- iii. Access into Gardner Village's property from 7800 South is prohibited. Access into their property will be via SVWRF's property.
  - iv. Contractor to coordinate with West Jordan City and Utah Power & Light Company aka Rocky Mountain Power to get horses off their property where the proposed staging area is located on Drawing No. C-03. These entities are currently leasing their property to somebody else to owns the horses.
  - v. SVWRF has access (keys) to all gates along the project site corridor with the exception for those on JVWCD's property and those two gates next to the previously mentioned horse property (see Item 4.c.iv.) and the Jordan River Trail Extension (see Drawing No. C-03). Contractor shall coordinate with JVWCD on obtaining access through the gates on their property.
- d. Sewer Bypass Pumping (see Drawing No. G-06 and Project Note 16 on Drawing No. G-04).
- i. Sewer flows entering the south confluence structure may be diverted to the existing 48-inch or 54-inch trunk lines controlled by gates. Operation of gates shall be performed by SVWRF.
  - ii. Other sewer connections that require bypass pumping (see Drawing No. G-06).
  - iii. Optional bypass route at SVWRF's headworks building is shown on Drawing Nos. RD-09 to RD-14.
- e. Surface Restoration Types (see Legend on Civil Drawings)
- i. Pre-construction survey/video [is required](#) (clearly documented)
    - A. Means and methods of performing this survey is up to the Contractor. However, there needs to be enough detail of all surface features within the project site to verify pre-existing conditions.
  - ii. Property Restoration Release Forms (see Project Note 18 on Drawing No. G-04 and Appendix B).
    - A. Contractor shall work with SVWRF's Public Involvement Manager (Jacques & Associates) to acquire a release form from each and every property owner along the project site corridor. Jacques & Associates will be the one who contacts and works directly with the property owners to obtain the release forms. The purpose of the form in gain acceptance from the property owner that those portions of their property that were disturbed during construction have been restored to match original or better conditions.
  - iii. Contractor is responsible to determine mean & methods to get access to manholes throughout the project. Contractor is also responsible to restore disturbed areas to original or better conditions.
- f. Protecting Trunk Sewer Lines and South Valley Water Reclamation Facility (see Section 33 01 30.51 – Sewer Cleaning)
- i. No loose debris or cleaning water shall be allowed to pass downstream of the segment(s) where work is being performed.
  - ii. All debris (including fines) [and cleaning water](#) removed during cleaning efforts shall be collected and properly disposed of. Contractor is responsible for finding an appropriate location for disposal.
  - iii. Three sources for water:
    - A. Greg Davenport, 801-569-5077 (West Jordan City)
    - B. Shane Swenson, 801-565-4300 (Jordan Valley Water Conservancy District)
    - C. Taigon Worthen, 801-566-7711 (South Valley Water Reclamation Facility)

## PRE-BID CONFERENCE AGENDA (continued)

1. Contractor will be required to rent a meter to use water from West Jordan City and JVWCD. SVWRF will not require the use of a meter.
  2. Water on SVWRF's property is not potable water. It is reuse water produced by their WWTP. Contractor may use this water if desired.
- g. Traffic Control Plan (see General Note 2 on Drawing No. G-04).
- i. Jordan River Parkway Trail Detour Plan (see Project Note 35 on Drawing No. G-04).
- A. Trail to remain open to the public at all times during construction (provide detours as needed). Protect and accommodate trail users.
- h. Public Involvement Manager (see Section 33 01 30.72 – CIPP Lining)
- i. Contractor to assist SVWRF's public involvement firm (Jacques & Associates) with information for "door hanger" flyer and other coordination with the public.
- i. CIPP Topics (see Section 33 01 30.72 – CIPP Lining):
- i. Styrene and hot curing water risk at treatment plant
    - A. Start on south end of Project.
    - B. Testing of cure water to be performed by SVWRF.
    - C. Styrene free bid alternate [see Schedule B in Bid Form (Addendum No. 1)]
  - ii. Water or UV cure methods (no Steam).
  - iii. Two-year warranty
  - iv. Cleaning to occur during sewer bypass.
  - v. End Seals Required (LMK only as specified).
  - vi. Provide two liner samples per pipe segment, one for testing and one for a hold.
    - A. SVWRF to provide CIPP Liner Testing by a Third Party (see Project Note 15 on Drawing No. G-04)
  - vii. Structural Requirements (see paragraph 2.2)
  - viii. Criteria of Acceptance for CIPP Liners
    - A. Quality Product
    - B. Liners installed from end of host pipe to end of host pipe (no retractions allowed)
    - C. CCTV Video Clarity
      1. Document and note all lining features per NASSCO PACP coding
- j. Manhole and Other Structure Rehabilitation Topics (see Section 33 01 30.82 – Polymeric Rehabilitation of Buried Concrete Structures):
- i. One-year warranty
  - ii. Cleaning to occur during sewer bypass
  - iii. Polymer Liner Products (see paragraph 2.2)
  - iv. Structural Repairs (see Drawing No. GS-01)
  - v. Coordinate with SVWRF on locating buried manholes.
  - vi. Inspection and Testing Criteria (see paragraph 3.8)
    - A. Contractor is responsible for all testing.
    - B. Contractor shall perform all testing with SVWRF's representative in attendance.
- k. New Construction (see Drawing No. C-10)
- i. Polymer Concrete Manholes (see Section 33 05 20 – Polymer Concrete Manholes)
  - ii. 48-inch and 60-inch FRPM Pipe (see Section 33 41 04 – FRPM or GRP Pipe)
  - iii. Connection to North Confluence Structure (see Detail C/2011 on Drawing No. GC-04)
  - iv. SVWRF to provide compaction testing by a Third Party (see Project Note 15 on Drawing No. G-04)

## PRE-BID CONFERENCE AGENDA (continued)

5. Addendum No. 1 (dated April 27, 2021)
6. Bid Items Requiring Approval from SVWRF and Engineer prior to use or installation [see (asterisks “\*”) in Section 00 41 00 – Bid Form (Addendum No. 1)]
  - a. Asterisk “\*” means the bid item may not be used on the project. If it does need to be used on the project, the Contractor then will be required to notify and get approval from SVWRF and their representative before it’s used.
7. Construction Work Schedule (see Project Note 1 on Drawing No. G-04):
  - a. M-F 7:00 am to 10:00 pm (MST)
    - i. Notify West Jordan City if work is to occur outside this timeframe (i.e., nights, weekends, and/or holidays). Contractor is required to obtain relief of the City’s noise ordinance five calendar days prior to work per Project Note 1 on Drawing No. G-04. This notification shall be done through SVWRF’s inspector.
      - A. Notification shall be made five calendar days prior to work.
  - b. Gardner Village (see Drawing No. C-07): No work to be performed on their property between October 1 and December 31, 2021
  - c. JVVCD (see Drawing Nos. G-07, C-04, and C-05): Contractor shall coordinate access through their property. They have an asphalt restoration project scheduled through their property during Summer 2021.
  - d. Alfalfa and Crop Fields (see Section 00 52 13 – Agreement): Crop Seasons between May 1<sup>st</sup> and September 30<sup>th</sup>.
    - i. Alfalfa Field has three growing seasons and the Corn Field has one growing season.
8. Contract times and liquidated damages (see Section 00 52 13 – Agreement)
  - a. Work Period: 365 Calendar Days (after date of Notice to Proceed)
  - b. Substantial Completion for all Work: 365 Calendar Days (after date of Notice to Proceed)
  - c. Final Completion: 30 Calendar Days (after Substantial Completion Date)
  - d. Liquidated Damages:
    - i. \$1,000 per day after Substantial Completion Date
    - ii. \$500 per day after Final Completion Date
    - iii. Up to \$12,000 for crop damages in alfalfa field (see Drawing No. C-05)
    - iv. \$1,800 per acre for crop damages in corn field (see Drawing No. C-06)
9. Pipe Inspection Data (see Appendix No. 1)
  - a. Not part of Contract Documents. For Contractor’s reference only.
  - b. See box.com link for access to information.
  - c. Need GraniteNet Software to access the .mp4 and .gnet CCTV files.
    - i. There are free limited use versions available online for viewing the CCTV videos such as <https://granite-xp.software.informer.com/>.
10. Permit(s) / Plan(s) to be obtained by the Contractor (refer to Section 01 41 26 - Permits of the Contract Documents):
  - a. Salt Lake Valley Health Department Fugitive Dust Control Plan.
  - b. Utah OSHA Construction Permit
  - c. UDEQ Groundwater Discharge Permit

## PRE-BID CONFERENCE AGENDA (continued)

- d. UDEQ General Storm Water Permit for Construction Activities.
  - e. UTA Right-of-Way Entry Agreement and Access Permit (7800 South)
  - f. For West Jordan City:
    - i. Land Disturbance Permit
    - ii. Encroachment Permit
    - iii. SWPPP
    - iv. Traffic Control Plan (see General Note 2 on Drawing No. G-04)
    - v. Jordan River Parkway Trail Detour Plan (see Project Note 35 on Drawing No. G-04)
11. Sealed Bids due: 10:00 a.m. (MST) on Tuesday, May 18, 2021 at SVWRF's office.
- a. No electronic bids will be accepted.
  - b. Potential Bidders will not be required to be in attendance. Therefore, the bid opening will be shown via a video conference. SVWRF will provide a meeting invitation with the details pertaining to the video conference to those in attendance at today's mandatory pre-bid meeting.
12. Tentative schedule for award: Thursday, May 20, 2021.
13. All questions about the Project must be submitted in writing via email to the Engineer, Brent Packer ([bpacker@bowencollins.com](mailto:bpacker@bowencollins.com)). It was stated in the meeting that questions submitted after 5:00 pm (MST) on Tuesday, May 11, 2021 may not be answered, however, to be consistent with what is listed on the SciQuest website, questions submitted after 4:00 pm (MST) on Wednesday, May 12, 2021 may not be answered.
14. Reminder: Site Walkthrough after Pre-bid Meeting
15. Questions and Answers:
- a. Q: Is structure wall patching as shown on Drawing No. GS-01 required for the manholes to be rehabilitated?  
  
A: Yes per Section 33 01 30.82 – Polymeric Rehabilitation of Buried Concrete Structures.
  - b. Q: Will sliplining the trunk line with HOBAS pipe be acceptable to the Owner/Engineer?  
  
A: No. SVWRF wants to maintain as much capacity in the trunk line as possible.
  - c. Q: What is the Engineer's estimate?  
  
A: Between \$12 and \$15 million.
  - d. Q: What noise mitigation requirements are there for the project?  
  
A: See Sections 01 33 20 – Submittal Procedures, paragraph 1.4.A.7 and 01 57 19 – Temporary Environmental Controls, paragraph 1.7.
  - e. Q: Are there any minority related requirements for the project?  
  
A: No.



## Mandatory Pre-bid Conference Attendees List

South Sewer Interceptor CIPP Project  
 South Valley Water Reclamation Facility

 Date May 5, 2021

 Time 2:00 pm

Name	Company	Phone/Cell	E-mail
Stana Mager	BC&A	801-828-8189	smager@bowencollins.com
Brent Packer	BC&A	801-495-2224	bpacker@bowencollins.com
RAY PATINO	MICHEL'S CORP.	920-952-0761	RPATINO@MICHEL'S.US
JASON WALBORN	GRANITE INLINER	714-287-4431	Jason.Walborn@gcinc.com
Raymond Will	MICHEL'S CORP	920-539-9325	RWILL@MICHEL'S.US
Kyle Frandsen	Xylem	801-598-3765	Kyle.Frandsen@xylem.com
Tyler Cady	Whitaker Const.	435-740-1363	tyler.cady@Whitcon.com
Jeff Trujillo	SPINELLO CO	973-651-1809	JTrujillo@SpinelloWest.com
Todd Chalk	SAK Construction	916-872-7645	tchalk@sakcon.com
Jules Ballard	InsituForm	303-601-4579	jballard@region.com
Roby Flaht	multiple pump services	530-917-4486	ROBY@MPS PUMP.COM
Ram Vilhal	Lanzo	(954) 979-0802	estimating@lanzo.org
John Plyer	C.H. Nix	801 391 0236	jplyer@chnix.com
Casey Helget	C&L Water Solutions	801-791-2074	Casey.helget@clwsi.com
Rachelle Piggins	CL Water Solutions	385-288-1807	rachelle.piggins@clwsi.com
Justin Peterson	Cardinal Coatings	801-895-2895	Justin@cardinalCoatings.com
DAVID DEACHIN	PRO-PIPE	801 309-5078	DAVID.DEACHIN@PRO-PIPE.COM
Kasey Schultthies	Pro-Pipe	801-200-7559	KSchultthies@pro-pipe.com

## Mandatory Pre-bid Conference Attendees List (Continued)

South Sewer Interceptor CIPP Project  
South Valley Water Reclamation Facility

Date May 5, 2021

Time 2:00 pm

Name	Company	Phone/Cell	E-mail
Tommy Petanovich	SAK Construction	916.872.7423	tompa@sakcon.com
Adam Hall	Aims Companies	408.594.6300	ahall@aimscompanies.com
Jordan Wager	Rain For Rent	385-489-4550	jwager@rainforrent.com
Colter Smith	Rain For Rent	801.844.6135	coltj.smith@rainforrent.com
LANE KEITH	LT UNDERGROUND	401.696.6967	LT@LTUNDERGROUND.COM
MIKE ROCCO	AUI	505.975.6999	ROCCO@AUINC.NET
Mitchell Johnson	Cliff Johnson Excavating	801-266-6965	dig@cljcorp.com
BRANDON O'KEEFE	Insiteform	303-859-3296	bokeefe@ageson.com
Will Sinkin	SUNBELT RENTALS	801-228-8469	will.sinkin@sunbeltrentals.com
Taigon Workmen	SVWRP		tworkmen@svwater.com

WHEN RECORDED MAIL TO:

Jordan Valley Water  
Conservancy District  
Attn: Property Manager  
8215 South 1300 West  
West Jordan, UT 84088

WITH A COPY TO:

South Valley Water  
Reclamation Facility  
Attn: Taigon Worthen  
7495 South 1300 West  
West Jordan, UT 84084

[PARCEL ID #21-35-301-016  
21-35-327-011]

TEMPORARY CONSTRUCTION EASEMENT

This Agreement is made as of the \_\_\_\_ day of \_\_\_\_\_, 2021 (the “Effective Date”), between the Jordan Valley Water Conservancy District, a Utah local district (“Grantor”), and South Valley Water Reclamation Facility, an agency created by interlocal agreement serving local districts and cities (“Grantee”).

RECITALS:

- A. Grantee is authorized by law to obtain temporary easements for construction purposes;
- B. Grantee intends to rehabilitate two (2) sewer trunk pipelines with cured-in-place pipe, as part of Grantee’s South Sewer Interceptor CIPP Project (collectively referred to as “Pipelines”) within property owned by PacifiCorp, an

Oregon corporation, doing business in the State of Utah as Rocky Mountain Power, successor in interest to Utah Power & Light Company ("RMP"), which is situated at approximately 898 West 9000 South, West Jordan, Utah, Salt Lake County; and,

C. Grantee requires access within parcels adjacent to and contiguous with RMP's lands, which are situated on Grantor's property at approximately 8215 South 1300 West, West Jordan, Utah, Salt Lake County, to install Pipelines; and,

D. Grantee desires to obtain from Grantor and Grantor is willing to grant to Grantee a Temporary Construction Easement ("Easement"), consistent with the terms set forth in this Agreement.

#### TERMS:

The parties agree as follows:

1. Grantor hereby grants to Grantee, and to Grantee's contractor(s) and consultant(s), an Easement in, on, over, across, and through the lands of Grantor for (i) vehicular and pedestrian access, ingress, and egress to and from adjacent property ("Access Area"); and (ii) storage of construction equipment and materials, and for construction staging (collectively referred to as the "Staging Area"). The Access Area is described in attached Exhibit 1; the Staging Area is described in attached Exhibit 2.

2. Grantee shall: (i) provide Grantor with a pre-construction video which documents all existing surface features within and along the Easement; (ii) implement Best Management Practices (BMPs), to include sweeping the roadways within and along the Easement daily; (iii) have an inspector on-site daily to document any

disturbances within and along the Easement, and to verify that Grantee, its contractor(s) and consultant(s) perform these requirements; (iv) be limited to up to twenty (20) vehicle trips per day through Grantor's property, to include pickup trucks and box-sized trucks; (v) be limited to up to two (2) vehicles trips per day through Grantor's property, for diesel trucks and trailers to deliver cured-in-place liners.

3. The term of the Easement shall begin on the Effective Date and it shall expire without further notice or condition upon the first to occur of the following: (i) completion of Grantee's construction project for its Pipelines; or (ii) June 30, 2022.

4. Before the expiration of the Easement, Grantee, at its sole expense, shall refill all excavations made by Grantee, grade and replace soil, re-sod the area, replace and/or repair asphalt pavement, replace and/or repair irrigation systems, and otherwise restore the Easement as near as reasonably possible to its pre-construction condition.

5. Grantor shall have and maintain the right to occupy and to use the Easement, consistent with the terms of this Agreement.

6. Grantee shall not grant additional easements, licenses, or right-of-ways within the Easement without the prior written consent of Grantor.

7. Within thirty (30) days from the date Grantor executes this Agreement, Grantee shall pay the sum of Forty Thousand and 00/100 Dollars (\$40,000.00) to Grantor as consideration for this Agreement.

8. Grantee shall not assign this Agreement, any of its rights under this Agreement, and the Easement granted it by this Agreement without the prior written consent of Grantor.

9. This Agreement may be amended only by written instrument executed by all parties.

10. All of the grants, covenants, terms, provisions, and conditions in this Agreement shall run with the land and shall be binding upon and inure to the benefit of the successors and permitted assigns of the parties.

11. This Agreement, including exhibits, constitutes the entire agreement of the parties and supersedes all prior understandings, representations, or agreements of the parties regarding the subject matter in this document.

12. Each individual executing this Agreement does hereby represent and warrant that he or she has been duly authorized to sign this Agreement in the capacity and for the entities identified.

13. The parties shall perform those acts and/or sign all documents required by this Agreement and which may be reasonably necessary to effectuate the terms of this Agreement.

14. Any party may record this Agreement.

[SIGNATURE PAGE FOLLOWS]

“Grantor”:

Jordan Valley Water Conservancy District

Dated: \_\_\_\_\_

By: \_\_\_\_\_  
Barton A. Forsyth  
Its General Manager/CEO

“Grantee”:

South Valley Water Reclamation Facility

Dated: \_\_\_\_\_

By: \_\_\_\_\_

Its: \_\_\_\_\_

STATE OF UTAH                    )  
   :ss.  
COUNTY OF SALT LAKE )

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 2021, by Barton A. Forsyth as General Manager/CEO of the Jordan Valley Water Conservancy District.

\_\_\_\_\_  
Notary Public

STATE OF UTAH                    )  
   :ss.  
COUNTY OF SALT LAKE )

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 2021, by \_\_\_\_\_ as \_\_\_\_\_ of the South Valley Water Reclamation Facility.

\_\_\_\_\_  
Notary Public



## EXHIBIT 1

### DESCRIPTION OF THE ACCESS AREA

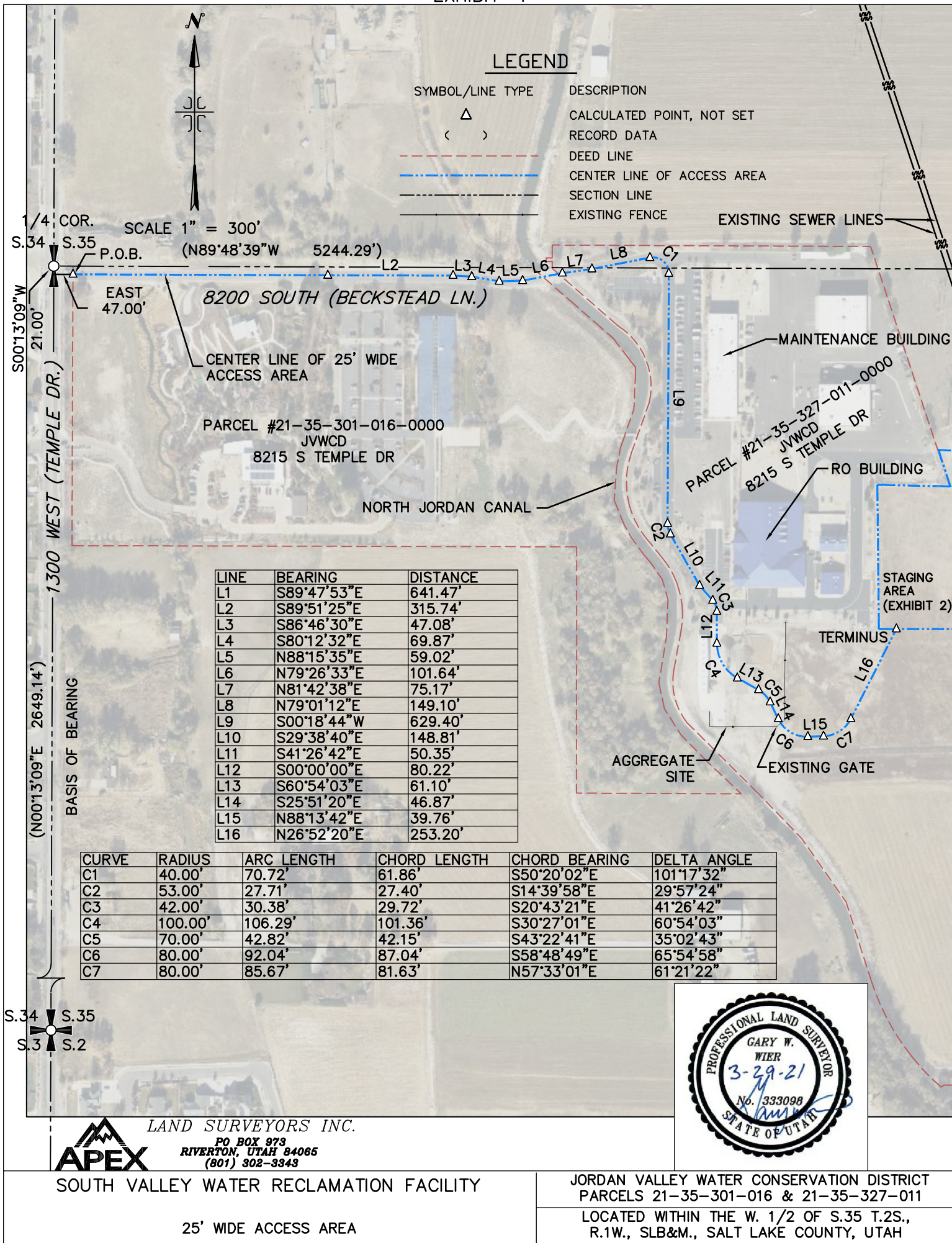
A 25' WIDE STRIP OF LAND FOR ACCESS, THE CENTER LINE OF WHICH IS MORE PARTICULARLY DESCRIBED AS;

COMMENCING AT THE WEST QUARTER CORNER OF SECTION 35, TOWNSHIP 2 SOUTH, RANGE 1 WEST, SALT LAKE BASE AND MERIDIAN, THENCE S00°13'09"W 21.00 FEET ALONG THE SECTION LINE (THE BASIS OF BEARING) AND EAST 47.00 FEET TO THE GRANTORS WEST PROPERTY LINE AND THE POINT OF BEGINNING;

THENCE S89°47'53"E 641.47 FEET; THENCE S89°51'25"E 315.74 FEET; THENCE S86°46'30"E 47.08 FEET; THENCE S80°12'32"E 69.87 FEET; THENCE N88°15'35"E 59.02 FEET; THENCE N79°26'33"E 101.64 FEET; THENCE N81°42'38"E 75.17 FEET; THENCE N79°01'12"E 149.10 FEET TO A POINT OF CURVATURE OF A 40.00 FOOT RADIUS CURVE TO THE RIGHT; THENCE SOUTHEASTERLY 70.72 FEET ALONG THE ARC OF SAID CURVE, HAVING A CENTRAL ANGLE OF 101°17'32" AND BEING SUBTENDED BY A CHORD THAT BEARS S50°20'02"E 61.86 FEET; THENCE S00°18'44"W 629.40 FEET TO A POINT OF CURVATURE OF A 53.00 FOOT RADIUS CURVE TO THE LEFT; THENCE SOUTHEASTERLY 27.71 FEET ALONG THE ARC OF SAID CURVE, HAVING A CENTRAL ANGLE OF 29°57'24" AND BEING SUBTENDED BY A CHORD THAT BEARS S14°39'58"E 27.40 FEET; THENCE S29°38'40"E 148.81 FEET; THENCE S41°26'42"E 50.35 FEET TO A POINT OF CURVATURE OF A 42.00 FOOT RADIUS CURVE TO THE RIGHT; THENCE SOUTHEASTERLY 30.38 FEET ALONG THE ARC OF SAID CURVE, HAVING A CENTRAL ANGLE OF 41°26'42" AND BEING SUBTENDED BY A CHORD THAT BEARS S20°43'21"E 29.72 FEET; THENCE SOUTH 80.22 FEET TO A POINT OF CURVATURE OF A 100.00 FOOT RADIUS CURVE TO THE LEFT; THENCE SOUTHEASTERLY 106.29 FEET ALONG THE ARC OF SAID CURVE, HAVING A CENTRAL ANGLE OF 60°54'03" AND BEING SUBTENDED BY A CHORD THAT BEARS S30°27'01"E 101.36 FEET; THENCE S60°54'03"E 61.10 FEET TO A POINT OF CURVATURE OF A 70.00 FOOT RADIUS CURVE TO THE RIGHT; THENCE SOUTHEASTERLY 42.82 FEET ALONG THE ARC OF SAID CURVE, HAVING A CENTRAL ANGLE OF 35°02'43" AND BEING SUBTENDED BY A CHORD THAT BEARS S43°22'41"E 42.15 FEET; THENCE S25°51'20"E 46.87 FEET TO A POINT OF CURVATURE OF A 80.00 FOOT RADIUS CURVE TO THE LEFT; THENCE SOUTHEASTERLY 92.04 FEET ALONG THE ARC OF SAID CURVE, HAVING A CENTRAL ANGLE OF 65°54'58" AND BEING SUBTENDED BY A CHORD THAT BEARS S58°48'49"E 87.04

FEET; THENCE N88°13'42"E 39.76 FEET TO A POINT OF CURVATURE OF A 80.00 FOOT RADIUS CURVE TO THE LEFT; THENCE NORTHEASTERLY 85.67 FEET ALONG THE ARC OF SAID CURVE, HAVING A CENTRAL ANGLE OF 61°21'22" AND BEING SUBTENDED BY A CHORD THAT BEARS N57°33'01"E 81.63 FEET; THENCE N26°52'20"E 253.20 FEET TO A POINT ON THE BOUNDARY OF A TEMPORARY STAGING AREA AND THE TERMINUS OF SAID STRIP EASEMENT, AND FROM WHICH THE POINT OF BEGINNING BEARS N66°42'23"W 2256.95 FEET. CONTAINS 80,610 SQ. FT. OR 1.85 ACRES.

SIDE LINES OF SAID ACCESS AREA SHALL BE EXTENDED AND/OR SHORTENED TO CONFORM WITH GRANTOR'S WEST PROPERTY LINE AND THE STAGING AREA.



## EXHIBIT 2

### DESCRIPTION OF THE STAGING AREA

A STAGING AREA MORE PARTICULARLY DESCRIBED AS;

COMMENCING AT THE WEST QUARTER CORNER OF SECTION 35, TOWNSHIP 2 SOUTH, RANGE 1 WEST, SALT LAKE BASE AND MERIDIAN, THENCE S00°13'09"W 913.50 FEET ALONG THE SECTION LINE (THE BASIS OF BEARING) AND EAST 2080.71 FEET TO THE POINT OF BEGINNING;

THENCE N00°35'40"W 362.85 FEET; THENCE S88°45'35"E 183.88 FEET; THENCE N18°08'42"W 96.23 FEET; THENCE S88°32'26"E 93.97 FEET; THENCE S18°16'05"E 250.35 FEET; THENCE N89°46'30"W 94.94 FEET; THENCE S18°16'07"E 221.71 FEET; THENCE WEST 297.09 FEET TO THE POINT OF BEGINNING. CONTAINS 108,885 SQ. FT. OR 2.50 ACRES.