



ADDENDUM NUMBER ONE
to the
PROJECT SPECIFICATIONS and CONTRACT DOCUMENTS
for the
Storage Tank Maintenance Program –
Phase 1 South Tank Rehabilitation Project

DATE OF ADDENDUM: February 22, 2016

TO ALL BIDDERS BIDDING ON THE ABOVE PROJECT:

The following addendum shall be made part of the Contract Documents. All other provisions of the Contract Documents remain unchanged. The Bidder shall acknowledge receipt of this Addendum on Page 14 of the Proposal and by signing below and returning this form with the bid package. The contents of this Addendum shall be given full consideration in the preparation of the Bid.

CHANGES TO PROJECT SPECIFICATIONS AND CONTRACT DOCUMENTS:

Notice Inviting Bids:

Replace: All references to the Bid Opening Date of Thursday, February 25, 2016 at 2:00 PM and replace with the revised Bid Opening Date of **Thursday, March 3, 2016 at 2:00 PM.**

Bid Schedule:

Delete: Original Bid Schedule

Add: Revised Bid Schedule (Attached)

Proposal:

Delete: The project shall be completed within sixty (60) calendar days after the starting date set forth in the NOTICE TO PROCEED.

Add: The project shall be completed within seventy-five (75) calendar days after the starting date set forth in the NOTICE TO PROCEED.

Construction Contract, Article III Time of Completion:

Delete: The Contractor hereby agrees to commence work on or before the tenth (10th) day after written notice to do so, and to fully complete the same within sixty (60) calendar days after the date of the written notice to commence work, subject to such extensions of time as are provided by the General Conditions.

Add: The Contractor hereby agrees to commence work on or before the tenth (10th) day after written notice to do so, and to fully complete the same within seventy-five (75) calendar days after the date of the written notice to commence work, subject to such extensions of time as are provided by the General Conditions.

General Conditions, Scope of Work:

Time of Completion- Section B

Modify: All Project Milestone dates are modified as “To Be Determined (TBD)”.

CHANGES TO SPECIAL PROVISIONS:

Add: During printing of the hard copy of the specifications, Page 28 of the Special Provisions was inadvertently excluded. Page 28 is attached to this Addendum or can be obtained online at <http://www.prescott-az.gov/business/bids/>.

501 Interior Surface Preparation:

Surface Preparation, General-

Delete: Section A in its entirety.

Add: Replace Section A with the following:

- A. The latest revision of the following surface preparation specifications of the Concrete Potable Water Tanks/Structures shall form a part of this specification. (Note: An element of surface area is defines as any square inch of surface area.)

Once the reservoir is drained of water and sufficiently dry to work in, the contractor shall thoroughly inspect the tank to determine its general condition, soundness, presence of contaminants, presence of any moisture vapor or liquid emissions and the best methods to use in preparation of the surface to meet requirements of the lining system manufacturer. Any variation or unusual conditions shall immediately be brought to the attention of the owner. The Contractor shall clean the interior of the tank to SSPC-SP13 standard, repair all surface irregularities (bugholes, spalls, cracks, deteriorated joints, etc.) prior to application of the primer or base coat. The concrete surface shall be within the range required by the coating manufacturer, but shall be generally within the range of CSP 3 to 5.

Modify: Section D is modified to allow dry blast cleaning, however the amount of dust coming out of the tank shall be kept to a minimum and the contractor shall provide adequate ventilation or breathing apparatus for workmen ensuring compliance with all OSHA regulations.

502 Concrete Repairs- Interior Coating:

Interior Coating-

A. General

Delete: Section A in its entirety.

Add: Replace Section A with the following:

- A. Once all concrete crack repairs, concrete repairs, joint repairs and all preparatory work is completed, all concrete surfaces of the interior of the reservoir, including the floor, walls,

columns, ceiling, vent and access hatch areas shall be coated with a prime coat compatible with the coating manufacturer's interior potable water tank coating system. . After proper cure cycle of the prime coat the interior surfaces shall be coated with Sherwin Williams SherFlex spray, Castagra Products Ecodur 201, Ecodur 201S or International Paint Polibrid 705 applied to a total minimum thickness of 80 mils DFT.

D. Surface Preparation Standards-

Modify: All reference to steel tank preparation shall be disregarded. Surface preparation shall be per SSPC-SP13.

H. Disinfection of Tank and Appurtenant Pipelines-

Delete: Section F in its entirety.

Add: Replace Section F with the following:

- F. Water for testing and disinfection shall be furnished by the City, at no charge to the Contractor for the first fill. Should any tests fail requiring draining of the tank for repairs, subsequent filling shall be charged to the contractor.

I. Payment-

Delete: Section I in its entirety.

Add: Replace Section I with the following:

- I. Payment for the Interior Coating shall be based on unit bid price per square foot of surface primed and coated. Payment shall include all preparatory work, prime coat, and finish coat and all other labor, materials, tools, equipment, or incidentals necessary to provide a finished product as specified. Payment shall include all final clean up, testing and disinfection.

Modify: Pay Item 502.6 Interior Coating (SF)

Special Provisions:

Add: Addition of the following section to the Special Provisions.

505-9 WATERTIGHTNESS TEST FOR HYDRAULIC STRUCTUES

A. GENERAL

Furnish all labor, materials and incidentals required and perform tightness testing of the water storage tank until structure meets requirements as specified herein.

Submit results of each watertightness test of the tank. Submittal format shall be similar to the shown on form 505-9 attached at the end of this section. Coordinate timing and procedures for obtaining testing of water and structure testing with owner a minimum of ten (10) working days in advance of the actual testing.

Water source and disposal: Water for testing shall be taken from the water distribution system. All labor, equipment and materials in excess of that required to fill the tank from the existing piping and valving shall be supplied by the contractor. The City shall perform actual valve operation, in consultation with the contractor regarding filling rates.

Water for disinfection in accordance with the disinfection special provision may be used for testing.

Test water may be returned to the water distribution system if the chlorine residual is between 0.5 mg/l and 1.5 mg/l free chlorine.

Sequence: The Contractor shall complete interior repairs and coating of the tank, followed by cleaning and disinfection. Water tightness test shall be performed following disinfection.

B. EXECUTION

Testing of the water storage tank shall conform to the following standard: Tightness Testing of Environmental Engineering Concrete Structures, ACI 350.1 and as specified herein.

C. EXAMINATION

Inspect structure and coating to be tested for potential leakage paths and properly repair such paths. All repairs and repair methods shall be acceptable to the Engineer and the City.

D. PREPARATION

Thoroughly clean structure to be tested without dirt, mud and construction debris prior to initiating filling for watertightness test. Floor and sumps shall be flushed with water to provide a clean surface, ready for testing.

Inlet and outlet pipes not required to be operational for tests may be temporarily sealed or bulkheaded prior to testing. Confirm adequacy of seals around valves and reset or seal as required. Estimates of valve leakage will not be allowed as adjustments to measured tank or structure leakage.

E. TESTING PROCEDURES

Conditions of testing: Do not begin filling of tank until all coating elements have been properly cured in accordance with manufacturers requirements and tank has been disinfected per specifications.

Rate of filling shall be established by consultation of the Contractor with the City.

Fill tank to maximum operating level and maintain water at that level for at least 24 hours prior to beginning the water tightness test.

Testing procedure: Duration of test for coating watertightness verification shall not be less than two (2) days.

Loss of volume measurements shall be taken at twelve (12) hour intervals, or as close as practical. Loss of volume is usually determined by measuring drop in water surface elevation and computing change in volume of contained water.

Record water temperature eighteen inches (18") below water surface when taking first and last sets of measurements. Use an evaporation pan inside the reservoir to record

evaporation rates for calculating the net change in water volume from level measurements.

Reports: Submit watertightness test results on form 505-9, or similar.

F. ACCEPTANCE

Following conditions shall be considered as not meeting criteria for acceptance regardless of actual loss of water volumes from tank:

Ground water leakage into structure through floors, walls, wall/floor, or wall/roof joints.

Structure which exhibits flowing or seeping water from joints, cracks or from beneath foundation.

Watertightness shall be considered acceptable when water volume loss does not exceed 300 gallons in 48 hours.

G. REPAIRS AND RETESTING

Tanks failing watertightness and not exhibiting visible leakage may be retested after additional stabilization period of seven (7) days. Tank failing second test shall be repaired prior to further testing.

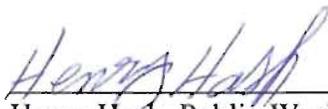
Repairs shall be in accordance with coating manufacturers' recommendations and shall be accomplished at no additional cost to the City.

H. MEASUREMENT AND PAYMENT

No separate measurement or payment shall be made for Watertightness Testing for Hydraulic Structures. This work shall be included in the bid price for water tank interior coating.

- END -

City of Prescott, Public Works Department


Henry Hash, Public Works Director

2-22-16

Acknowledgement: *(must be signed and turned in with the bid documents)*

Company Name

Signature of Company Official

Date

Bidding Schedule

Storage Tank Maintenance Program - Phase I South Tank Rehabilitation					
Item	Description	Quantity	Unit	Unit Cost	Amount
109.10	Mobilization	1	LS		
109.11	Contract Allowance	1	LS	\$80,000.00	\$80,000.00
501	Interior Surface Preparation	1	LS		
502.1a	Crack Repair - ≤ 1,000 LF	1,000	LF		
502.1b	Crack Repair - 1,001 LF to 2,000 LF	1,000	LF		
502.1c	Crack Repair - 2,001 LF to 3,000 LF	1,000	LF		
502.1d	Crack Repair - Greater Than 3,000 LF	1,000	LF		
502.2a	Concrete Repair Type 1 - ≤ 100 SF	100	SF		
502.2b	Concrete Repair Type 1 - 101 SF to 200 SF	100	SF		
502.2c	Concrete Repair Type 1 - 201 SF to 300 SF	100	SF		
502.2d	Concrete Repair Type 1 - Greater Than 300 SF	100	SF		
502.2e	Concrete Repair Type 2 - ≤ 100 SF	100	SF		
502.2f	Concrete Repair Type 2 - 101 SF to 200 SF	100	SF		
502.2g	Concrete Repair Type 2 - 201 SF to 300 SF	100	SF		
502.2h	Concrete Repair Type 2 - Greater Than 300 SF	100	SF		
502.2i	Concrete Repair Type 3 - ≤ 100 SF	100	SF		
502.2j	Concrete Repair Type 3 - 101 SF to 200 SF	100	SF		
502.2k	Concrete Repair Type 3 - 201 SF to 300 SF	100	SF		
502.2l	Concrete Repair Type 3 - Greater Than 300 SF	100	SF		
502.3	Inside Wall Construction Joints Repairs	300	LF		
502.4	Inside Wall - Floor Joint Repair	680	LF		
502.5	Inside Wall - Roof Joint Repair	680	LF		
502.6a	Interior Coating - Walls and Floor	49,000	SF		
502.6b	Interior Coating - Columns and Ceiling	48,000	SF		
	Total Bid Amount				

TOTAL BID

Dollars

(Written Words)

Signature of Company Official

Title

Company Name

Phone Number

Address

Fax Number

City/State

Zip Code

FORM 505-9

WATERTIGHTNESS TEST REPORT

PROJECT _____

SUBMITTED BY _____

WITNESSED BY _____

STRUCTURE* _____

REVIEWED BY _____

TEST DATES _____

Allowable loss of water volume _____ percent in 24 hrs.

Measured loss of water volume _____ percent in 24 hrs.

TEST READINGS

Water temperature at start _____ degrees F

Water temperature at end _____ degrees F

	<u>Date</u>	<u>Time</u>	<u>Location</u> <u>1</u>	<u>Location</u> <u>2</u>	<u>Location</u> <u>3</u>	<u>Location</u> <u>4</u>	<u>Initials</u>
1.	_____	_____	_____	_____	_____	_____	_____
2.	_____	_____	_____	_____	_____	_____	_____
3.	_____	_____	_____	_____	_____	_____	_____
4.	_____	_____	_____	_____	_____	_____	_____
5.	_____	_____	_____	_____	_____	_____	_____

Change in level _____

Average change in level _____

Correction for precipitation/evaporation 0

Corrected change in level = CL = _____

$(CL) \times (\text{surface area}) \times (100) = \text{measured percent water loss in 24 hrs.}$
 $(\text{initial water volume}) \times (\text{number of test days})$

Notes and field observations**

1. If dehumidification equipment is used, cleaned areas may have first coat applied at last shift of the week, provided dehumidification equipment has run continually during the complete week, and surface meets all requirements of the specification.
- K. Because of the presence of moisture and possible contaminants in the atmosphere, care shall be taken to ensure previously coated or painted surfaces are protected or re-cleaned prior to application of subsequent coat(s). Methods of protection and re-cleaning shall be approved by the Engineer.
1. Project is subject to intermittent shutdown if, in the opinion of the Engineer, cleaning, coating and painting operations are creating a localized condition detrimental to ongoing activities, personnel or adjacent property.
 2. In the event of emergency shutdown by the Engineer/Inspector, Contractor shall immediately correct deficiencies. All additional costs created by shutdown shall be borne by Contractor.
- L. The Contractor shall provide, at his own expense, all necessary power for his operations under the contract.

I. PAYMENT:

Payment for the Interior Coating shall be based on unit bid price per square foot of surface primed and coated. Payment shall include all preparatory work, prime coat, and finish coat and all other labor, materials, tools, equipment, or incidentals necessary to provide a finished product as specified. Payment shall include all final clean up and disinfection.

To encumber funds, should it be determined that the columns and ceiling require coating, the bid schedule is broken down as follows:

Pay Item 502.6a Interior Coating – Walls and Floor (SF)

Pay Item 502.6b Interior Coating – Columns and Ceiling (SF)

It shall be understood that Pay Item 502.6b is a provisionary item and will only be paid if it is decided by the City to have the columns and ceiling coated.