January 14, 2016

**ADDENDUM NO. 5**

**SOLICITATION NO. 202583 – SUNSET ROAD: SILVERBELL ROAD TO INTERSTATE 10**

This Addendum addresses question raised from January 12th, thru January 13th, 5:00 pm. This Addendum shall be incorporated and made part of the Bid Documents as though included therein. **This addendum is 22 pages.**

**BID DATE:**

The bid date of January 19, 2016 at or before 2:00 p.m. local Tucson time remains unchanged.

**QUESTIONS/CLARIFICATIONS/REQUESTS FOR INFORMATION:**

Q) What is the correct bid items to use for TEP facilities?
A) The TEP work effort associated with this project is eliminated. Please see Attachment 1 (15 pages) for the pages impacted by the elimination of the TEP facilities.

Q) Contractor cannot find bid item or information for 4” ITS across bridge and supports.
A) 4” ITS across bridge is in Combination Pedestrian-Traffic Bridge Railing. See Sheet S23-Page 92. Attachment 2 (1 page)

Q) Plan Sheet 20 shows Gabion Baskets (Bid Item 9130005) with a staking table giving dimensions of the slopes and a bottom that varies. Gabions Baskets come in lengths such as 3’, 6’, and 9’ and do not fit the staking table for the slopes or the bottom of channel or the lengths given in the Gabion Check Dam Table. If the dimensions given are to be considered a minimum will the pay item include full payment for the CY of Gabions installed?
A) The “Staking Table” relates to the grading of the channel between gabion check dams. The “Gabion Check Dam Table” on the same Sheet RD12_Page20 show the gabion lengths, thickness and quantities that are in 3’ increments. Please see Attachment 5 (2 pages)

Q) Typically removal of asphalt paving by milling is a separate pay item. Is it to be paid for under the removal of structures and obstructions?
A) See Note 9 and Removal Items #8, Sheet PP07_Page 34 and . All removals shall be paid under Bid Item No. 2020001, Removal of Structures & Obstructions.

Q) Will the irrigation hangers be paid for under Items 9230060 / 9230080?
A) Hangers and brackets, including threaded inserts in bridge are included in bid item 8080001 “LANDSCAPE IRRIGATION SYSTEM.” Please refer to “SECTION 808-206.1(I) High Density Polyethylene Pipe and Fittings” on page SP-142 of the Special Provisions.

Q) If Bid Item #9260001 - Engineer’s Field Office is required for this project, What are your requirements for it?
A) Requirements for Bid Item #9260001 - Engineer’s Field Office is in Section 926, the Pima Association of Governments (PAG), Standard Specifications for Public Improvements, 2014 Edition. (http://apps.pagnet.org/standards specifications/)
Q) The plans that we have on sheet 71 of 203, S02, show the WAPA lines at an elevation of 2250.9’. Please confirm that the actual is the 2255.1 as listed in addendum #4.

A) Elevations shown on Sheet PP02_Page 29 are as surveyed on August 17, 2015. Lowest line surveyed is 2254.6. Sheet S07_Page 71 has been revised accordingly. Attachment 3 (1 page)

Q) Drilled shafts 1, 2 and 3 show a total length of 131.75’ each. However, when the tip elevation and top elevation are subtracted length is 116.75’. Please advise.

A) The length shown on the plans should be as stated, 116.75’. Attachment 4 (1 page)

All other requirements and terms of the Solicitation remain unchanged. Any bid that fails to acknowledge any addendum that directly affects cost, scope, or schedule will be rejected as non-responsive.

All questions shall be addressed in writing to Matt Sage, Commodity/Contracts Officer, email matthew.sage@pima.gov or fax number 520-724-4434. Please submit them no later than January 14, 2016. Questions submitted after this date may not be addressed.

/s/Matthew T. Sage
Matthew T. Sage – Commodity/Contracts Officer
SUNSET ROAD
SILVERBELL ROAD TO INTERSTATE 10

GENERAL DESCRIPTION OF PROJECT

CONSTRUCTION OF 0.64 MILES OF NEW ROADWAY INCLUDING BRIDGE OVER SANTA CRUZ RIVER, A NEW TRAFFIC SIGNALIZED INTERSECTION AT SILVERBELL AND SUNSET, A SHARED USE PATH ON THE SOUTH SIDE OF THE ROADWAY AND AN ASPHALTIC CONCRETE SIDEWALK ON THE NORTH SIDE OF THE ROADWAY.

PROJECT NUMBER

4RTSUN

PIMA COUNTY BOARD OF SUPERVISORS

SHARON BRONSON, CHAIR, DISTRICT 3

ALLY MILLER, DISTRICT 1
RAY CARROLL, DISTRICT 4

RAMON VALADEZ, DISTRICT 2
RICHARD ELIAS, DISTRICT 5

THIS PROJECT IS LOCATED WITHIN SUPERVISOR DISTRICT 1

INDEX TO PLAN SHEETS

NOT TO SCALE

Location Map

NOT TO SCALE

Sections 8, 17, 19
T-13-S, R-13-E
G & S R & M
Pima County, Arizona

UPC-2014-060

Pima County Department of Transportation
201 N. Stone Ave. 4th floor Tucson, Arizona 85701
Phone Number: 724-6410

Pima County, Arizona

SANTA CRUZ RIVER BRIDGE SHEETS

SUNSET ROAD - SILVERBELL ROAD TO INTERSTATE 10 - PROJECT NO. 4RTSUN

Sheet No. C501 of C507 Page No. 1 of 203

Addendum 5, Attach 1 (15 Pages)
<table>
<thead>
<tr>
<th>Item</th>
<th>Station Offset</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stop Bar at Shoulder</td>
<td>68 + 07.9</td>
</tr>
<tr>
<td>Stop Bar at Shoulder</td>
<td>68 + 07.9</td>
</tr>
<tr>
<td>Stop Bar at Shoulder</td>
<td>68 + 07.9</td>
</tr>
<tr>
<td>Stop Bar at Shoulder</td>
<td>68 + 07.9</td>
</tr>
</tbody>
</table>

NOTES:
1. Pulse Loop Detectors must be centered in traffic lane.
2. Pulse Loop Detector stationing based on Silverbell Road Posted Speed = 45 MPH and Sunset Rd. Posted Speed = 35 MPH.
CABINET AND POLE SCHEDULE

<table>
<thead>
<tr>
<th>CABINET</th>
<th>TYPE</th>
<th>CONTROLLER</th>
<th>AUX. CONTROLLER</th>
</tr>
</thead>
<tbody>
<tr>
<td>MYERS 150 AMP METERED SERVICE</td>
<td></td>
<td></td>
<td>SINGLE POLE BREAKERS,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(1) 30 AMP — SIGNAL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>120V</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(2) 50 AMP — LIGHTING</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(3) 20 AMP — IGNITION</td>
</tr>
</tbody>
</table>

1. NUMBERS: 3-85 W/A, OR ALPHABETIC WAHER MOUNTED LOOP DETECTORS.
2. INSTALLATION REDUCING CONNECTIONS, 3 POLE STREET LIGHTING CONSTRUCTION, 15 AMP CIRCUIT BREAKERS, 3 CHANNEL AMPLIFIER, AND DSP Discriminator.
3. INSTALL PHOTOCELL ON LUMINAIRE.
4. INSTALL LUMINAIRE.
5. INSTALL METER ON LUMINAIRE.

NOTES:
1. Astor-Brisi mounting assemblies shall be Perko Astor Bro's part number AS-6087, or equivalent.
2. All luminaires shall have protectors, As per manufacturer's installation instructions, except for the luminaires with photo-protectors.
3. Push button also travels above finish grade, except for the luminaires with photo-protectors.
4. Push button also travels above finish grade, except for the luminaires with photo-protectors.

Scale: N/A Sheet 1503 of 1504 Page 62 of 203
### APPROXIMATE QUANTITIES

<table>
<thead>
<tr>
<th>ITEM*</th>
<th>ITEM DESCRIPTION</th>
<th>UNIT</th>
<th>ABUT.1</th>
<th>ABUT.2</th>
<th>Pier 1</th>
<th>Pier 2</th>
<th>Pier 3</th>
<th>Pier 4</th>
<th>Pier 5</th>
<th>SUPERSTRUCTURE</th>
<th>TOTALS</th>
<th>AS-BUILT</th>
</tr>
</thead>
<tbody>
<tr>
<td>6010002</td>
<td>Structural Concrete (Class X 4 ft. x 3,500 psi)</td>
<td>CY</td>
<td>302</td>
<td>205</td>
<td>Class</td>
<td>101</td>
<td>104</td>
<td>117</td>
<td>108</td>
<td>99</td>
<td>507</td>
<td>529</td>
</tr>
<tr>
<td>6010004</td>
<td>Structural Concrete (Class X 4 ft. x 4,500 psi)</td>
<td>CY</td>
<td>195</td>
<td>195</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,702</td>
<td>1,702</td>
</tr>
<tr>
<td>6010006</td>
<td>Concrete Bridge Parapet</td>
<td>LF</td>
<td>202</td>
<td>202</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>404</td>
<td>404</td>
</tr>
<tr>
<td>6011132</td>
<td>Corb, Pedestrian Traffic Bridge Railing (ISO 1, 024)</td>
<td>LF</td>
<td>96</td>
<td>96</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>192</td>
<td>192</td>
</tr>
<tr>
<td>6011140</td>
<td>F-Shape Concrete Barrier and Transition (34&quot;)</td>
<td>LF</td>
<td>755</td>
<td>755</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>755</td>
<td>755</td>
</tr>
</tbody>
</table>

### PER UTILITY QUANTITIES

<table>
<thead>
<tr>
<th>ITEM*</th>
<th>ITEM DESCRIPTION</th>
<th>UNIT</th>
<th>ABUT.1</th>
<th>ABUT.2</th>
<th>Pier 1</th>
<th>Pier 2</th>
<th>Pier 3</th>
<th>Pier 4</th>
<th>Pier 5</th>
<th>SUPERSTRUCTURE</th>
<th>TOTALS</th>
<th>AS-BUILT</th>
</tr>
</thead>
<tbody>
<tr>
<td>9210040</td>
<td>Utility Hanger Insert*+++</td>
<td>EA</td>
<td>40</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>9210041</td>
<td>Utility Hanger Insert*++</td>
<td>EA</td>
<td>40</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>9210042</td>
<td>Utility Block Out*++</td>
<td>EA</td>
<td>12</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>9210043</td>
<td>Utility Block Out*+++</td>
<td>EA</td>
<td>12</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>9210044</td>
<td>Utility Block Out*+</td>
<td>EA</td>
<td>12</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20</td>
<td>20</td>
</tr>
</tbody>
</table>

### Notes
1. The cost of excavations and structure backfill is incidental to other items of work.
2. *The cost of expansion sleeves and fittings shall be included in the price per linear foot of conduit.
UNISTRUT LOCATIONS - PARTIAL PLAN VIEW

Notes:
1. Utility Hanger located typically per span between girder lines G9, G8, G7 and G2, G3.
2. Coordinate Utility Hanger placement with deck reinforcing.

UNISTRUT LOCATIONS - PARTIAL PLAN VIEW

Notes:
1. Utility Hanger located typically per span between girder lines G9, G8, G7 and G2, G3.
2. Coordinate Utility Hanger placement with deck reinforcing.

UNISTRUT LOCATIONS - PARTIAL PLAN VIEW

Notes:
1. Utility Hanger located typically per span between girder lines G9, G8, G7 and G2, G3.
2. Coordinate Utility Hanger placement with deck reinforcing.

UNISTRUT LOCATIONS - PARTIAL PLAN VIEW

Notes:
1. Utility Hanger located typically per span between girder lines G9, G8, G7 and G2, G3.
2. Coordinate Utility Hanger placement with deck reinforcing.
For blockout detail, see section.

Approach Slab

Expanded Polystyrene & 1/2" Hardboard, see section.

6" cont., 6"aba, 6" total, 5)

Expansion Restrainer

SECTION AT ABUT. DIAPHRAGM

Notes:
1. Class 5 concrete may be used for the Abutment Diaphragms and Intermediate Diaphragms.
2. Provide a similar opening between Girders ③ & ④ for future Comcast utility. & of opening shall be 3'-6" from girder ③.

ELEVATION - INTERMEDIATE DIAPHRAGM

For blockout detail, see section.

ELEVATION - INT. DIAPHRAGM

Concert pipe opening not shown, see Note 2.

SECTION

Scale: As Noted
Sheet 526 of 543
Page 95 of 263
Notes:
1. Class S concrete may be used for Pier 1 & 5 Diaphragm.
2. Min lap length of bar splices shall be #1 bars 21/2".
UTILITY HANGER DETAIL

Hanger & Hanger Insert Notes:
1. Contractor shall provide & Install Unistrut Hanger Inserts.
2. Contractor shall coordinate with utility companies for exact location of all hanger inserts before placement of bridge deck.
3. Where utility is to be placed in the future, provide plug or sealed for protection.
4. For Century Link, Comcast & TEP Utilities, provide P3259 Unistrut hanger inserts not more than 10' away from face of abutment & pier diaphragm & 20' feet maximum spacing in area of the interrupted bars. Min. of 1 bar req'd at ea. edge & ea. face.
5. Provide for conduit expansion couplings at each abutment & piers 1, 3 & 5.
6. Provide for additional expansion couplings along the bridge length as recommended by the pipe manufacturer.

Additional Notes:
- Provide P3259 Unistrut hanger inserts before placement of bridge deck.
- Utility run shall be placed 2'6" away from inserts closest to pier diaphragm & 20-feet maximum spacing in area of the interrupted bars. Min. of 1 bar req'd at ea. edge & ea. face.
- Min. of 1 bar req'd at ea. edge & ea. face.
- Min. of 1 bar req'd at ea. edge & ea. face.
- Min. of 1 bar req'd at ea. edge & ea. face.
- Min. of 1 bar req'd at ea. edge & ea. face.
- Min. of 1 bar req'd at ea. edge & ea. face.

Girder

P1000, pipe clamps, threaded rods & ancillary to pier diaphragms.

SECTION AT UTILITY LINES

Utility Opening

HDPE to Steel Adapter (By Others for Conduct & Century Line)

ELEVATION FOR SINGLE BLOCK-OUT

ELEVATION FOR DOUBLE BLOCK-OUT

PVC Sleeve

HDPE Conduit or Pipe (By Others for Conduct & Century Line)

Approach Slab

Utility Slab

HDPE to Steel Adapter (By others for Conduct & Century Line)

T & B Each Face.

Each Corner.

T & B Each Face.

Each Corner.

10" Sleeve

Notes:
1. All areas of add'l bars at ea. edge of block-out in ea. direction shall match 1/2 the cross-sectional area of the interrupted bars. Min. of 1 bar req'd at ea. edge & ea. face.
2. Min. of 1 vert. bar shall match shape & dimensions of cut vert. bars such as X.
3. Min. of 1 vert. bar shall match shape & dimensions of cut vert. bars such as X.
4. The polystyrene on rubberized mastic shall be incidental to the installation of the rigid conduit.
5. Polyethylene or rubberized mastic shall be used at all end diaphragms & at the abutment backwalls.
6. Provide for additional expansion couplings along the bridge length as recommended by the pipe manufacturer.
7. Polyethylene or rubberized mastic shall be incidental to the installation of the rigid conduit.
DRILLED SHAFT SCHEDULE

<table>
<thead>
<tr>
<th>Work</th>
<th>Drilled Shaft Diameter (in.)</th>
<th>Drilled Shaft Length (ft.)</th>
<th>Too Elev. (ft.)</th>
<th>Tip Elev. (ft.)</th>
<th>Factor Load</th>
<th>Resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>D51</td>
<td>6&quot;</td>
<td>99.675</td>
<td>2208.75</td>
<td>2208.75</td>
<td>3100</td>
<td>3250</td>
</tr>
<tr>
<td>D57</td>
<td>6&quot;</td>
<td>99.675</td>
<td>2208.75</td>
<td>2208.75</td>
<td>3100</td>
<td>3250</td>
</tr>
<tr>
<td>D53</td>
<td>8&quot;</td>
<td>99.675</td>
<td>2208.75</td>
<td>2208.75</td>
<td>3100</td>
<td>3250</td>
</tr>
<tr>
<td>D54</td>
<td>6&quot;</td>
<td>99.675</td>
<td>2208.75</td>
<td>2208.75</td>
<td>3100</td>
<td>3250</td>
</tr>
<tr>
<td>D55</td>
<td>6&quot;</td>
<td>99.675</td>
<td>2208.75</td>
<td>2208.75</td>
<td>3100</td>
<td>3250</td>
</tr>
<tr>
<td>D58</td>
<td>6&quot;</td>
<td>99.675</td>
<td>2208.75</td>
<td>2208.75</td>
<td>3100</td>
<td>3250</td>
</tr>
<tr>
<td>D59</td>
<td>6&quot;</td>
<td>99.675</td>
<td>2208.75</td>
<td>2208.75</td>
<td>3100</td>
<td>3250</td>
</tr>
<tr>
<td>D510</td>
<td>6&quot;</td>
<td>99.675</td>
<td>2208.75</td>
<td>2208.75</td>
<td>3100</td>
<td>3250</td>
</tr>
<tr>
<td>D511</td>
<td>6&quot;</td>
<td>99.675</td>
<td>2208.75</td>
<td>2208.75</td>
<td>3100</td>
<td>3250</td>
</tr>
<tr>
<td>D512</td>
<td>6&quot;</td>
<td>99.675</td>
<td>2208.75</td>
<td>2208.75</td>
<td>3100</td>
<td>3250</td>
</tr>
</tbody>
</table>

FOCUSION PLAN

*See Special Provisions
when working in vicinity
of overhead lines

**THE LOCATION OF ALL UTILITIES IS
APPROXIMATE ONLY. LOCATIONS SHOWN
REFLECT THE FINDINGS OF THE LATEST
AVAILABLE MAPPING.**

**TEMPORARY SHORING NOTES**

The Contractor shall be responsible for providing temporary shoring as required, to protect utilities, for protection of workers, or as otherwise needed to accomplish the work. Shoring shall conform to the design and construction specifications noted in the General Notes. Contractor to submit a plan outlining construction procedures, and shoring requirements and design to the Engineer for review and approval prior to proceeding with the work. See Standard Specifications and Special Provisions for additional information.