



BOARD OF SUPERVISORS AGENDA ITEM REPORT

CONTRACTS / AWARDS / GRANTS

☐ Award ☒ Contract ☐ Grant

Requested Board Meeting Date: 07/06/21

* = Mandatory, information must be provided

or Procurement Director Award

***Contractor/Vendor Name/Grantor (DBA):**

Borderland Construction Company, Inc.

***Project Title/Description:**

Construction Manager at Risk Services: South Houghton Road Widening (4SHRWD)

***Purpose:**

Amendment: Contract No. CT-TR-21-228, Amendment No. Three (3). This amendment is for Guaranteed Maximum Price (GMP) 2 for the construction phase of the contract, increases the amount of the contract by \$25,350,788.40 through the incorporation of an accepted GMP 2, schedule, scope of work, and SBE Goal of 5% for a cumulative not-to-exceed amount of \$29,129,660.69, and extends the term of the contract to 06/30/23. Administering Department: Transportation.

On 03/16/21, the Board of Supervisors/Directors authorized the Procurement Director to execute all modifications, including one or more Guaranteed Maximum Price (GMP) packages, provided that the cumulative total of all GMPs and Pre-Construction Services does not exceed \$26,250,000.00, and the contract expiration date does not exceed December 29, 2023, which allows for all contract close-out activities and final submittals. Unforeseen site conditions will require modifications to the Regional Flood Control District channels scope of work and the installation of a new water line at the direction of Tucson Water resulting in subsequent GMP packages in the estimated amount of \$17,000,000.00. Board of Supervisors/Directors to authorize the Procurement Director to execute all modifications including these subsequent GMP packages, provided that the cumulative total of all GMPs and Pre-Construction Services does not exceed \$46,250,000.00, and the contract expiration date does not exceed December 29, 2023.

***Procurement Method:**

Pursuant to Solicitation for Qualifications No. SFQ-PO-2100001, on 12/01/20, the Board of Supervisors awarded a contract for Pre-Construction Services in the amount of \$254,599.73 for a contract term of 12/01/20 to 12/01/21.

Amendment No. One (1) was approved by the Board of Supervisors, on 03/16/21, to add PCRFCF Channel Scope of Work, Task VI - PCRFCF PS&E Review/Coordination and Task VII - PCRFCF GMP Preparation, and reallocate funds among major tasks.

Amendment No. Two (2) was approved by the Procurement Director on 05/19/21 to incorporate GMP 1 for the construction phase and increase the amount of the contract by \$3,524,272.56.

Attachment: Amendment No. Three (3).

***Program Goals/Predicted Outcomes:**

Replace the existing 2 and 3 lane South Houghton Road with an all-weather 4-lane divided roadway from I-10 south to the Andrada Polytechnic High School.

***Public Benefit:**

This program will improve safety, reduce congestion around the Fairgrounds, and provide all-weather access to the Fairgrounds and two High Schools along Houghton Rd.

***Metrics Available to Measure Performance:**

Performance will be measured using the contractor evaluation process as outlined in BOS Policy D29.1.E.

***Retroactive:**

No.

Vers.: q

TO: COB 6-30-21 (1)
pgs. 26

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ASB

Contract / Award Information

Document Type: _____ Department Code: _____ Contract Number (i.e., 15-123): _____
 Commencement Date: _____ Termination Date: _____ Prior Contract Number (Synergen/CMS): _____
☐ Expense Amount: \$* _____ ☐ Revenue Amount: \$ _____

***Funding Source(s) required:**

Funding from General Fund? ☐ Yes ☒ No If Yes \$ _____ % _____

Contract is fully or partially funded with Federal Funds? ☐ Yes ☐ No

If Yes, is the Contract to a vendor or subrecipient?

Were insurance or indemnity clauses modified? ☐ Yes ☐ No

If Yes, attach Risk's approval.

Vendor is using a Social Security Number? ☐ Yes ☐ No

If Yes, attach the required form per Administrative Procedure 22-10.

Amendment / Revised Award Information

Document Type: CT Department Code: TR Contract Number (i.e., 15-123): 21-228
 Amendment No.: Three (3) AMS Version No.: ~~Seven (7)~~ 9 jc
 Commencement Date: 07/06/21 New Termination Date: 06/30/23
 Prior Contract No. (Synergen/CMS): _____
☒ Expense or ☐ Revenue ☒ Increase ☐ Decrease Amount This Amendment: \$ 25,350,788.40

Is there revenue included? ☐ Yes ☒ No If Yes \$ _____

***Funding Source(s) required:** Southeast Area Impact Fees (86.6%); Flood Control Non-Bond Projects (13.4%)

Funding from General Fund? ☐ Yes ☒ No If Yes \$ _____ % _____

Grant/Amendment Information (for grants acceptance and awards) ☐ Award ☐ Amendment

Document Type: _____ Department Code: _____ Grant Number (i.e., 15-123): _____
 Commencement Date: _____ Termination Date: _____ Amendment Number: _____
☐ Match Amount: \$ _____ ☐ Revenue Amount: \$ _____

***All Funding Source(s) required:**

*Match funding from General Fund? ☐ Yes ☐ No If Yes \$ _____ % _____

*Match funding from other sources? ☐ Yes ☐ No If Yes \$ _____ % _____

***Funding Source:**

*If Federal funds are received, is funding coming directly from the Federal government or passed through other organization(s)? _____

Contact: Matthew Sage, CPPB **Matthew Sage** Digitally signed by Matthew Sage Date: 2021.06.22 09:50:16 -07'00' **Scott Loomis** Digitally signed by Scott Loomis Date: 2021.06.22 10:00:51 -07'00'

Department: Procurement Terri Spencer Digitally signed by Terri Spencer Date: 2021.06.22 10:37:37 -07'00' Telephone: (520) 724-8586

Department Director Signature/Date: **Ana M. Olivares** Digitally signed by Ana M. Olivares Date: 2021.06.23 13:16:36 -07'00'

Deputy County Administrator Signature/Date:  6/24/2021

County Administrator Signature/Date:  6/24/21
 (Required for Board Agenda/Addendum Items)

PIMA COUNTY DEPARTMENT OF TRANSPORTATION

PROJECT: CONSTRUCTION MANAGER AT RISK SERVICES: SOUTH HOUGHTON ROAD
WIDENING (4SHRWD)

CONTRACTOR: Borderland Construction Company, Inc.
P.O. Box 27406
Tucson, Arizona 85726

CONTRACT NO.: CT-TR-21-228

AMENDMENT NO.: Three (3)

FUNDING: Southeast Area Impact Fees (86.6%); Flood Control Non-Bond Projects (13.4%)

CONTRACT TERM: 12/01/20 - 12/01/21	ORIGINAL CONTRACT AMOUNT:	\$	254,599.73
TERMINATION PRIOR AMENDMENT: 12/01/21	PRIOR AMENDMENT(S):	\$	3,524,272.56
TERMINATION THIS AMENDMENT: 06/30/23	AMOUNT THIS AMENDMENT:	\$	25,350,788.40
	REVISED CONTRACT AMOUNT:	\$	29,129,660.69

CONSTRUCTION CONTRACT AMENDMENT

WHEREAS, at its regularly scheduled meeting on December 01, 2020, the Board of Supervisors approved the award of a Construction Manager at Risk Contract by COUNTY to CONTRACTOR for the above-named Project; and

WHEREAS, construction of the project was anticipated to be conducted in multiple phases; and

WHEREAS, COUNTY and CONTRACTOR have completed a majority of pre-construction services; and

WHEREAS, CONTRACTOR submitted a Guaranteed Maximum Price (GMP) 1 that was acceptable to COUNTY for the construction phase of the project; and

WHEREAS, COUNTY and CONTRACTOR have mutually agreed upon an acceptable GMP 2, to include the schedule, scope of work, and SBE Goal; and

WHEREAS, Solicitation for Qualifications No. SFQ-PO-2100001, upon which the procurement for this contract was based, provided that COUNTY would establish the goal for Small Enterprise (SBE) utilization for the construction phase under this contract, in conjunction with the establishment of each GMP; and

WHEREAS, COUNTY and CONTRACTOR have reviewed all required documentation regarding available subcontracting opportunities, the certified SBE's who are ready, willing, able, and qualified to perform the construction, and have agreed to the establishment of an SBE Goal of 5% for GMP 2 of this project; and

WHEREAS, COUNTY and CONTRACTOR now agree to incorporate GMP 2, SBE Goal, and contractual provisions, conditions, terms, agreements and related documents required for the construction phase of the Project into the Contract; and

WHEREAS, COUNTY and CONTRACTOR, pursuant to Article 1, have agreed to extend the term of the contract; and

WHEREAS, COUNTY and CONTRACTOR, pursuant to Article 2, have agreed to incorporate GMP 2 into the Contract; and

WHEREAS, COUNTY and CONTRACTOR, pursuant to Article 3, have agreed to increase the Contract amount as identified in GMP 2; and

WHEREAS, COUNTY's acceptance of GMP 2 is subject to the understanding of the Parties that all other elements of future GMPs, if any, are and remain negotiable.

NOW, THEREFORE, the Parties hereto agree to the following:

CHANGE: **ARTICLE 1 – Term**, as follows:

FROM: "This Contract, as approved by the Board of Supervisors, ... terminates on December 1, 2021, unless sooner terminated or further extended for Project completion. COUNTY may, with written notice to CMAR, extend this Contract for such additional period or periods as may be required for Project completion."

TO: "This Contract, as approved by the Board of Supervisors, ... terminates on **June 30, 2023**, unless sooner terminated or further extended for Project completion. COUNTY may, with written notice to CMAR, extend this Contract for such additional period or periods as may be required for Project completion."

CMAR is expected to obtain substantial completion of the Project by December 31, 2022."

CHANGE: **ARTICLE 2 – SCOPE OF WORK**

Add the following paragraphs:

"K. The Parties agree to proceed with the Construction Services for GMP 2. The Construction Provisions, Scope of Work, and GMP 2 for Construction are hereby included in Appendix "F-1" to the Contract."

"L. The SBE Goal for GMP 2 is 5% of the total cost of construction."

CHANGE: **ARTICLE 3 – PRE-CONSTRUCTION SERVICES FEE AND GUARANTEED MAXIMUM PRICE**, paragraph A and B respectively, as follows:

FROM: "COUNTY will pay CMAR a Pre-Construction Services Fee for Pre-Construction Services. The CMAR's Construction Services Fee, plus the cost of the Work (direct construction cost) including CMAR contingency, bonds, insurance and taxes (indirect construction costs) will comprise the GMP(s) to be established in compliance with Appendix "B" Supplemental Provisions – Construction Costing (10 pages), Appendix "C" General Conditions (48 pages), Appendix "E" – Small Business Enterprise Requirements (2 pages), and Appendix "F" – GMP 1 (12 pages). Unless otherwise agreed, CMAR's GMP will include all required sales, use, franchise and other taxes in effect on the date of COUNTY approval of the GMP, as well as all applicable bond and insurance costs."

TO: "COUNTY will pay CMAR a Pre-Construction Services Fee for Pre-Construction Services. The CMAR's Construction Services Fee, plus the cost of the Work (direct construction cost) including CMAR contingency, bonds, insurance and taxes (indirect construction costs) will comprise the GMP(s) to be established in compliance with Appendix "B" Supplemental Provisions – Construction Costing (10 pages), Appendix "C" General Conditions (48 pages), Appendix "E" – Small Business Enterprise Requirements (2 pages), Appendix "F" – GMP 1 (12 pages), and **Appendix "F-1" – GMP 2 (21 pages)**. Unless otherwise agreed, CMAR's GMP will include all required sales, use, franchise and other taxes in effect on the date of COUNTY approval of the GMP, as well as all applicable bond and insurance costs."

FROM: "Total payment for this Contract will not exceed Three Million Seven Hundred Seventy Eight Thousand Eight Hundred Seventy-Two Dollars and Twenty-Nine Cents (\$3,778,872.29). This includes the Pre-Construction Services Fee which will not exceed Two Hundred Fifty-Four Thousand Five Hundred Ninety-Nine Dollars and Seventy-Three Cents (\$254,599.73), in accordance with the Pre-Construction Services Fee Proposal incorporated herein as Appendix "D" – Pre-construction Services Fee Proposal (14 pages) and Appendix "D-1" – Pre-construction Services Fee Proposal (6 pages) and CMAR GMP 1 Fee, which includes the Cost of the Work (direct construction cost), CMAR contingency, bonds, insurance, and taxes (indirect construction costs) which comprises GMP 1, in the amount of Three Million Five Hundred Twenty-Four Thousand Two Hundred Seventy-Two Dollars and Fifty-Six Cents (\$3,524,272.56) inclusive of Sixty-Nine Thousand One Hundred Three Dollars and Thirty-Eight Cents (\$69,103.38) for COUNTY (Owner) contingency, is hereby included in Appendix "F". COUNTY's acceptance of GMP 1 is subject to the understanding of the Parties that all other elements of future GMPs, if any, are and remain negotiable."

TO: "Total payment for this Contract will not exceed **Twenty-Nine Million One Hundred Twenty-Nine Thousand Sixty Dollars and Sixty-Nine Cents (\$29,129,060.69)**. This includes the Pre-Construction Services Fee which will not exceed Two Hundred Fifty-Four Thousand Five Hundred Ninety-Nine Dollars and Seventy-Three Cents (\$254,599.73), in accordance with the Pre-Construction Services Fee Proposal incorporated herein as Appendix "D" - Pre-construction Services Fee Proposal (14 pages) and Appendix "D-1" - Pre-construction Services Fee Proposal (6 pages), CMAR GMP 1 Fee, which includes the Cost of the Work (direct construction cost), CMAR contingency, bonds, insurance, and taxes (indirect construction costs) which comprises GMP 1, in the amount of Three Million Five Hundred Twenty-Four Thousand Two Hundred Seventy-Two Dollars and Fifty-Six Cents (\$3,524,272.56) inclusive of Sixty-Nine Thousand One Hundred Three Dollars and Thirty-Eight Cents (\$69,103.38) for COUNTY (Owner) contingency, is hereby included in Appendix "F", and **CMAR GMP 2 Fee, which includes the Cost of the Work (direct construction cost), CMAR contingency, bonds, insurance, and taxes (indirect construction costs) which comprises GMP 2, in the amount of Twenty-Five Million Three Hundred Fifty Thousand Seven Hundred Eighty-Eight Dollars and Forty Cents (\$25,350,788.40) inclusive of Four Hundred Ninety-Seven Thousand Seventy-Four Dollars and Twenty-Eight Cents (497,074.28) for COUNTY (Owner) contingency, is hereby included in Appendix "F-1". COUNTY's acceptance of GMP 2 is subject to the understanding of the Parties that all other elements of future GMPs, if any, are and remain negotiable.**"

ADD: Appendix "F-1" - GMP 2 (21 pages)

All other provisions of the Contract, not specifically changed by this Amendment, shall remain in effect and be binding upon the Parties.

IN WITNESS WHEREOF, the Parties have affixed their signatures to this Amendment on the dates written below.

APPROVED:

Chair, Board of Supervisors

Date

REGIONAL FLOOD CONTROL DISTRICT:

Chair, Board of Directors

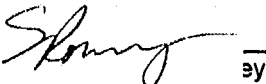
Date

ATTEST:

Clerk of the Board

Date

APPROVED AS TO FORM:

 _____
ay

Stacey Roseberry

Name (Please Print)

6/25/2021

Date

CMAR:



Signature

Joel Harris, Vice President

Name and Title (Please Print)

06-28-21

Date

Borderland

CONSTRUCTION MANAGER AT-RISK (CMAR) - CONSTRUCTION SERVICES

GMP#2 - SUMMARY

Pima County Department of Transportation

South Houghton Road Widening

PCDOT Project Number: 4SHRWD

GMP#2 - ROADWAY WIDENING & DRAINAGE IMPROVEMENTS

(BASED ON STAGE III PLANS/CONCEPTS)

Updated: June 16, 2021

CONSTRUCTION	AMOUNT
CONSTRUCTION COSTS:	
I. Cost of Construction	\$ 19,354,834.46
II. CMAR Contingency	\$ 580,645.03
SUBTOTAL (Direct Construction Cost)	\$ 19,935,479.49
INDIRECT CONSTRUCTION COSTS:	
III. General Conditions	\$ 612,440.00
IV. Overhead	\$ 1,919,175.68
V. General Liability Insurance	\$ 67,846.13
VI. Payment and Performance Bonds	\$ 150,794.23
SUBTOTAL (Direct Cons. Cost + Gen Cond + Overhead + Insurance + Bonds)	\$ 22,685,735.53
VII. Construction Fee	\$ 1,123,354.76
SUBTOTAL (Direct Cons. Cost + Gen Cond + Overhead + Insurance + Bonds + Fee)	\$ 23,809,090.29
VIII. Arizona Gross Receipts Tax	\$ 1,044,623.83
GUARANTEED MAXIMUM PRICE (GMP)	\$ 24,853,714.12
OTHER PROJECT COSTS:	
IX. Owner's Contingency	\$ 497,074.28
TOTAL CONTRACT COST	\$ 25,350,788.40

For supporting documentation - see also:

Attachment #1 - Schedule of Values

Attachment #2 - Scope of Work

Attachment #3 - Clarifications, Assumptions, and Exclusions to the scope of work

Attachment #4 - Anticipated Construction Schedule

Attachment #5 - Cash-flow Forecast

Attachment #6 - Anticipated Subcontractors and SBE Participation

Attachment #7 - Sales Tax Ratio Calculator

Attachment #8 - TUCSON WATER Schedule of Values



CONSTRUCTION MANAGER AT-RISK (CMAR) - CONSTRUCTION SERVICES

ATTACHMENT #1 - SCHEDULE OF VALUES

GMP#2 - ROADWAY WIDENING & DRAINAGE IMPROVEMENTS

Updated: June 16, 2021

Line No.	Item No.	Item Description	Unit	Quantity	Unit Cost	Extended Amount
1		I. COST OF CONSTRUCTION - LINE ITEMS				
2	1060000	Contractor Quality Control	LS	1	\$ 289,740.00	\$ 289,740.00
3	1090010	Fuel Adjustment Allowance	DLR	35,000	\$ 1.00	\$ 35,000.00
4	2010001	Clearing and Grubbing	ACRE	47	\$ 1,412.65	\$ 66,394.55
5	2010001A	Clearing And Grubbing (Fairgrounds North Channel For Borrow)	ACRE	32	\$ 1,526.48	\$ 48,847.36
6	2010010	Clearing and Grubbing (Noxious and Invasive Species Control Allowance)	DLR	30,000	\$ 1.00	\$ 30,000.00
7	2020001	Removal of Structures & Obstructions	LS	1	\$ 77,640.85	\$ 77,640.85
8	2020029	Removal of Bituminous Pavement	SY	78,012	\$ 0.84	\$ 65,530.08
9	2030300	Roadway Excavation	CY	29,479	\$ 7.66	\$ 225,809.14
10	2030401	Drainage Excavation	CY	48,814	\$ 5.27	\$ 257,249.78
11	2030500	Excavation (Overexcavation and Removal)	CY	4,000	\$ 6.34	\$ 25,360.00
12	2030901	Borrow (Haul/Place from Fairgrounds North Channel)	CY	123,785	\$ 12.09	\$ 1,496,560.65
13	3020001	Cement Treated Subgrade (9" Depth At 7% Cement Content)	SY	123,774	\$ 7.42	\$ 918,403.08
14	3030003	Aggregate Base	CY	18,632	\$ 44.51	\$ 829,310.32
15	4040111	Tack Coat	TON	32	\$ 1,308.22	\$ 41,863.04
16	4060001	Asphaltic Concrete (No. 1)	TON	20,230	\$ 70.33	\$ 1,422,775.90
17	4060003	Asphaltic Concrete (No. 3)	TON	1,835	\$ 82.55	\$ 151,479.25
18	4060004	Asphaltic Concrete No. 2 (Terminal Mix)	TON	13,427	\$ 91.38	\$ 1,226,959.26
19	4060510	Bituminous Material Price Adjustment Allowance	DLR	50,000	\$ 1.00	\$ 50,000.00
20	5011012	Pipe, Reinforced Concrete, Class III, 18"	LF	691	\$ 138.91	\$ 95,986.81
21	5011023	Pipe, Reinforced Concrete, Class III, 24"	LF	1,103	\$ 143.23	\$ 157,982.69
22	5011033	Pipe, Reinforced Concrete, Class III, 30"	LF	755	\$ 155.80	\$ 117,629.00
23	5011048	Pipe, Reinforced Concrete, Class III, 42"	LF	615	\$ 258.39	\$ 158,909.85
24	5011053	Pipe, Reinforced Concrete, Class III, 48"	LF	604	\$ 289.30	\$ 174,737.20
25	5011063	Pipe, Reinforced Concrete, Class III, 60"	LF	306	\$ 386.85	\$ 118,376.10
26	5011243	Pipe, Reinforced Concrete, Class HE III, 24" x 38"	LF	670	\$ 252.39	\$ 169,101.30
27	5014124	Concrete End Section, 24" (ADOT C-13.20)	EACH	1	\$ 1,152.24	\$ 1,152.24
28	5030093	Sidewalk Scupper (Type 3)	LF	4	\$ 1,540.88	\$ 6,163.52
29	5030705	Catch Basin, Type 1, Double, D=8' or Less	EACH	2	\$ 9,700.02	\$ 19,400.04
30	5030710	Catch Basin, Type 3, Sump Only, D=8' or Less	EACH	4	\$ 8,247.19	\$ 32,988.76
31	5030712	Catch Basin, Type 3, One 4' Wing, D=8' or Less	EACH	6	\$ 8,755.53	\$ 52,533.18
32	5030714	Catch Basin, Type 3, One 8' Wing, D=8' or Less	EACH	2	\$ 10,268.28	\$ 20,536.56



CONSTRUCTION MANAGER AT-RISK (CMAR) - CONSTRUCTION SERVICES

ATTACHMENT #1 - SCHEDULE OF VALUES

GMP#2 - ROADWAY WIDENING & DRAINAGE IMPROVEMENTS

Updated: June 16, 2021

Line No.	Item No.	Item Description	Unit	Quantity	Unit Cost	Extended Amount
33	5030716	Catch Basin, Type 3, One 12' Wing, D=8' or Less	EACH	1	\$ 11,685.62	\$ 11,685.62
34	5030718	Catch Basin, Type 3, One 16' Wing, D=8' or Less	EACH	1	\$ 11,685.62	\$ 11,685.62
35	5030734	Catch Basin, Type 4, Off Road, 1-grate, D=8' or Less	EACH	2	\$ 6,644.89	\$ 13,289.78
36	5101124	Potable Water Pipe, DI, 24" (CL 200) (Phase 1)	LF	4,125	\$ 85.39	\$ 352,233.75
37	5150005	Utility Potholing, Depth <12'	EACH	20	\$ 503.88	\$ 10,077.60
38	5150007	Utility Potholing, Depth ≥12'	EACH	5	\$ 953.75	\$ 4,768.75
39	6010101	Box Culvert 1 (2 - 8'x4') (Pre-Cast Installation Only)	LF	133	\$ 553.89	\$ 73,667.37
40	6010102	Box Culvert 2 (3 - 8'x4')	LF	174	\$ 1,714.81	\$ 298,376.94
41	6010103	Box Culvert 3 (1 - 8'x5') (Pre-Cast Installation Only)	LF	136	\$ 464.54	\$ 63,177.44
42	6010104	Box Culvert 4 (3 - 8'x5')	LF	138	\$ 1,736.77	\$ 239,674.26
43	6010105	Box Culvert 5 (1 - 10'x5') (Pre-Cast Installation Only)	LF	126	\$ 478.21	\$ 60,254.46
44	6010106	Box Culvert 6 (3 - 10'x5')	LF	124	\$ 2,180.27	\$ 270,353.48
45	6010107	Box Culvert 7 (1 - 10'x5') (Pre-Cast Installation Only)	LF	123	\$ 519.09	\$ 63,848.07
46	6010108	Box Culvert 8 (3 - 10'x5')	LF	123	\$ 2,140.21	\$ 263,245.83
47	6010109	Box Culvert 9 (4 - 10'x5')	LF	124	\$ 2,636.20	\$ 326,888.80
48	6010110	Box Culvert 10 (2 - 10'x5') (Pre-Cast Installation Only)	LF	123	\$ 776.39	\$ 95,495.97
49	6010110B	Box Culvert 10B (2 - 6'x4') (Pre-Cast Installation Only)	LF	123	\$ 683.19	\$ 84,032.37
50	6010111	Box Culvert 11 (4 - 10'x5')	LF	133	\$ 2,550.55	\$ 339,223.15
51	6010112	Box Culvert 12 (3 - 10'x5')	LF	123	\$ 2,154.88	\$ 265,050.24
52	6010113	Box Culvert 13 (2 - 10'x5') (Pre-Cast Installation Only)	LF	124	\$ 728.00	\$ 90,272.00
53	6010114	Box Culvert 14 (2 - 10'x5') (Pre-Cast Installation Only)	LF	131	\$ 626.27	\$ 82,041.37
54	6010115	Box Culvert 15 (2 - 8'x5') (Pre-Cast Installation Only)	LF	147	\$ 543.75	\$ 79,931.25
55	6016087	Pipe Culvert Headwall	EACH	16	\$ 14,883.16	\$ 238,130.56
56	6070010	Sign Post (Perforated) (Single)	LF	1,158	\$ 7.45	\$ 8,627.10
57	6070110	Foundation for Sign Post (Perforated)	EACH	138	\$ 175.00	\$ 24,150.00
58	6080020	Sign Panel (Traffic Control) (Permanent) (Diamond Grade)	SF	806	\$ 18.75	\$ 15,112.50
59	6080081	Flat Sheet Aluminum w/Direct Apply or Silk-Screen Characters	SF	40	\$ 18.75	\$ 750.00
60	7010001	Maintenance and Protection of Traffic	LS	1	\$ 187,898.80	\$ 187,898.80

Borderland

CONSTRUCTION MANAGER AT-RISK (CMAR) - CONSTRUCTION SERVICES

ATTACHMENT #1 - SCHEDULE OF VALUES

GMP#2 - ROADWAY WIDENING & DRAINAGE IMPROVEMENTS

Updated: June 16, 2021

Line No.	Item No.	Item Description	Unit	Quantity	Unit Cost	Extended Amount
61	7010007	Construction Area Elements	DLR	1,000,000	\$ 1.00	\$ 1,000,000.00
62	7010100	Provide Detours	LS	1	\$ 49,240.92	\$ 49,240.92
63	7040005	Pavement Marking (White Extruded Thermoplastic) (0.090")	LF	88,954	\$ 0.41	\$ 36,471.14
64	7040006	Pavement Marking (Yellow Extruded Thermoplastic) (0.090")	LF	44,014	\$ 0.41	\$ 18,045.74
65	7050030	Pavement Marking, Preformed, Type I, Single Arrow	EACH	60	\$ 127.97	\$ 7,678.20
66	7050050	Pavement Marking, Preformed, Type I, Merge Arrow	EACH	5	\$ 547.70	\$ 2,738.50
67	7050060	Pavement Marking, Preformed, Type I, Legend, ONLY	EACH	25	\$ 209.87	\$ 5,246.75
68	7060020	Pavement Marker, Reflective, (Type C, Clear, Red)	EACH	1,103	\$ 2.56	\$ 2,823.68
69	7060030	Pavement Marker, Reflective, (Type G, Clear, One-Way)	EACH	65	\$ 2.56	\$ 166.40
70	7060035	Pavement Marker, Reflective, (Type H, Yellow, One-Way)	EACH	156	\$ 2.56	\$ 399.36
71	7080001	Painted Pavement Marking	LF	132,968	\$ 0.13	\$ 17,285.84
72	7080010	Painted Symbol or Legend	EACH	90	\$ 40.95	\$ 3,685.50
73	7310030	Pole (Type G)	EACH	3	\$ 3,440.33	\$ 10,320.99
74	7310045	Pole (Type Q)	EACH	1	\$ 7,730.00	\$ 7,730.00
75	7310050	Pole (Type R)	EACH	2	\$ 9,601.50	\$ 19,203.00
76	7310078	Pole (Type 1 Street Light) (Single Mast Arm)	EACH	6	\$ 2,953.00	\$ 17,718.00
77	7310215	Pole Foundation (Type G)	EACH	3	\$ 691.33	\$ 2,073.99
78	7310230	Pole Foundation (Type Q)	EACH	1	\$ 2,520.00	\$ 2,520.00
79	7310235	Pole Foundation (Type R)	EACH	2	\$ 2,562.50	\$ 5,125.00
80	7310247	Pole Foundation (Type 1 Street Light)	EACH	6	\$ 761.67	\$ 4,570.02
81	7310252	Pole Foundation (Fairgrounds Light Pole)	EACH	2	\$ 969.00	\$ 1,938.00
82	7310350	Control Cabinet Foundation	EACH	1	\$ 788.00	\$ 788.00
83	7310375	Service Pedestal Cabinet Foundation	EACH	3	\$ 752.33	\$ 2,256.99
84	7310420	Mast Arm (40 ft.) (Tapered)	EACH	1	\$ 5,879.00	\$ 5,879.00
85	7310425	Mast Arm (45 ft.) (Tapered)	EACH	1	\$ 6,201.00	\$ 6,201.00
86	7310430	Mast Arm (50 ft.) (Tapered)	EACH	1	\$ 7,860.00	\$ 7,860.00
87	7310505	Mast Arm (6 ft.) (Tapered) (Luminaire)	EACH	3	\$ 967.67	\$ 2,903.01
88	7310535	Mast Arm (20 ft.) (Tapered) (Luminaire)	EACH	9	\$ 1,487.22	\$ 13,384.98
89	7310600	Relocate Street Light	EACH	2	\$ 1,102.50	\$ 2,205.00
90	7320015	Electrical Conduit (1 1/2") (PVC)	LF	125	\$ 11.86	\$ 1,482.50
91	7320020	Electrical Conduit (2") (PVC)	LF	685	\$ 12.86	\$ 8,809.10
92	7320025	Electrical Conduit (2 1/2") (PVC)	LF	426	\$ 16.51	\$ 7,033.26



CONSTRUCTION MANAGER AT-RISK (CMAR) - CONSTRUCTION SERVICES

ATTACHMENT #1 - SCHEDULE OF VALUES

GMP#2 - ROADWAY WIDENING & DRAINAGE IMPROVEMENTS

Updated: June 16, 2021

Line No.	Item No.	Item Description	Unit	Quantity	Unit Cost	Extended Amount
93	7320030	Electrical Conduit (3") (PVC)	LF	1,140	\$ 16.77	\$ 19,117.80
94	7320040	Electrical Conduit (4") (PVC)	LF	520	\$ 30.04	\$ 15,620.80
95	7320041	Electrical Conduit (4") (PVC) (Second in Trench)	LF	520	\$ 19.80	\$ 10,296.00
96	7320049	Electrical Conduit (PVC) (4") (Third In Trench)	LF	35	\$ 19.20	\$ 672.00
97	7320126	Electrical Conduit (2 1/2")(RGS) (TEP Pole Sweep)	EACH	2	\$ 339.00	\$ 678.00
98	7320400	Pull Box (No. 3 1/2)	EACH	14	\$ 446.25	\$ 6,247.50
99	7320420	Pull Box (No. 7)	EACH	5	\$ 795.90	\$ 3,979.50
100	7320421	Pull Box (No. 7) (with Extension)	EACH	1	\$ 880.00	\$ 880.00
101	7320470	Junction Box (Special, TEP)	EACH	1	\$ 1,012.50	\$ 1,012.50
102	7320600	Conductors (Traffic Signals and Integral Street Lighting)	LS	1	\$ 26,620.00	\$ 26,620.00
103	7320616	Conductor (No. 6) (Insulated)	LF	8	\$ 20.00	\$ 160.00
104	7320618	Conductor (No. 8) (Insulated)	LF	712	\$ 1.68	\$ 1,196.16
105	7320620	Conductor (No. 10) (Insulated)	LF	1,964	\$ 1.22	\$ 2,396.08
106	7320660	Conductor (3 Cable Photocell)	LF	80	\$ 5.19	\$ 415.20
107	7320670	Conductor (#3/0 Phase)	LF	24	\$ 18.92	\$ 454.08
108	7320690	Ground Rod (3/4" Dia. X 10')	EACH	6	\$ 91.00	\$ 546.00
109	7320800	Service Pedestal Cabinet	EACH	3	\$ 2,807.67	\$ 8,423.01
110	7320820	Battery Back Up Power System	EACH	1	\$ 9,060.45	\$ 9,060.45
111	7320888	Electrical Service Installation Fees Allowance	DLR	21,000	\$ 1.00	\$ 21,000.00
112	7320890	Electrical Service Installation	LS	1	\$ 13,797.00	\$ 13,797.00
113	7330045	Traffic Signal Face (Type F)	EACH	9	\$ 547.56	\$ 4,928.04
114	7330050	Traffic Signal Face (Type Q)	EACH	4	\$ 921.25	\$ 3,685.00
115	7330200	Traffic Signal Face (Pedestrian) (Man/Hand)	EACH	2	\$ 480.00	\$ 960.00
116	7330320	Traffic Signal Mounting Assembly (Type V)	EACH	5	\$ 615.20	\$ 3,076.00
117	7330350	Traffic Signal Mounting Assembly (Type XI)	EACH	2	\$ 283.00	\$ 566.00
118	7330355	Traffic Signal Mounting Assembly (Type A.B./O-3)	EACH	6	\$ 446.17	\$ 2,677.02
119	7330360	Traffic Signal Mounting Assembly (Type A.B./O-5)	EACH	2	\$ 523.00	\$ 1,046.00
120	7330500	Pre-Empt Beacon	EACH	3	\$ 882.00	\$ 2,646.00
121	7330510	Pre-Empt Sensor	EACH	3	\$ 882.00	\$ 2,646.00
122	7340040	Traffic Signal Controller Assembly (Type IV)	EACH	1	\$ 38,113.00	\$ 38,113.00
123	7350000	Video Detection System	EACH	1	\$ 31,486.00	\$ 31,486.00
124	7350100	Loop Detector (6' x 6')	EACH	5	\$ 901.00	\$ 4,505.00
125	7350405	Pedestrian Push Button (Vibrotactile)	EACH	2	\$ 2,754.00	\$ 5,508.00



CONSTRUCTION MANAGER AT-RISK (CMAR) - CONSTRUCTION SERVICES

ATTACHMENT #1 - SCHEDULE OF VALUES

GMP#2 - ROADWAY WIDENING & DRAINAGE IMPROVEMENTS

Updated: June 16, 2021

Line No.	Item No.	Item Description	Unit	Quantity	Unit Cost	Extended Amount
126	7360050	Luminaire (Horizontal Mount) (LED)	EACH	12	\$ 548.42	\$ 6,581.04
127	7360190	Photo Electric Control	EACH	2	\$ 35.75	\$ 71.50
128	7360310	Load Center Cabinet (Type 1)	EACH	1	\$ 10,589.00	\$ 10,589.00
129	7370200	Remove and Salvage or Reinstall Electrical Equipment	LS	1	\$ 3,429.00	\$ 3,429.00
130	8020010	Water Harvesting Basin Grading	EACH	77	\$ 407.31	\$ 31,362.87
131	8030020	Decomposed Granite	SY	14,940	\$ 3.86	\$ 57,668.40
132	8030030	Rock Mulch (Type 1) (Headwall Erosion Protection)	CY	177	\$ 172.28	\$ 30,493.56
133	8030031	Rock Mulch (Landscape, 2"-4")	SY	4,370	\$ 9.26	\$ 40,466.20
134	8030035	Desert Cobble A	SY	20,182	\$ 6.84	\$ 138,044.88
135	8030074	Decorative Boulders (2' x 2' x 2')	EACH	54	\$ 111.11	\$ 5,999.94
136	8030075	Decorative Boulders (3' x 3' x 3')	EACH	101	\$ 215.05	\$ 21,720.05
137	8050004	Seeding (Class II)	ACRE	43	\$ 3,388.36	\$ 145,699.48
138	8050009	Seeding (Class II) (2nd Application)	ACRE	10	\$ 3,436.50	\$ 34,365.00
139	8061295	Cactus (Echinocereus) (Agency Provided)	EACH	13	\$ 32.13	\$ 417.69
140	8061297	Cactus (Barrels) (Agency Provided)	EACH	303	\$ 24.18	\$ 7,326.54
141	8061298	Shrub (Five Gallon)	EACH	711	\$ 37.61	\$ 26,740.71
142	8061429	Yucca (3'-5')	EACH	104	\$ 40.63	\$ 4,225.52
143	8061430	Yucca (Agency Provided)	EACH	10	\$ 69.44	\$ 694.40
144	8061602	Saguaro Cactus (1'-3')	EACH	30	\$ 235.07	\$ 7,052.10
145	8061603	Saguaro Cactus (4'-7')	EACH	46	\$ 573.80	\$ 26,394.80
146	8061607	Saguaro (under 14') (Agency Provided)	EACH	19	\$ 78.09	\$ 1,483.71
147	8061610	Cactus (Mamalaria) (Agency Provided)	EACH	42	\$ 11.52	\$ 483.84
148	8061611	Cactus (One Gallon)	EACH	390	\$ 25.70	\$ 10,023.00
149	8061612	Barrel Cactus	EACH	18	\$ 82.83	\$ 1,490.94
150	8061613	Cactus - Prickly Pear	EACH	212	\$ 28.41	\$ 6,022.92
151	8061654	Ocotillo (Agency Provided)	EACH	107	\$ 30.09	\$ 3,219.63
152	8061656	Ocotillo (6'-8')	EACH	140	\$ 76.59	\$ 10,722.60
153	8061700	Landscape Pruning	HR	40	\$ 100.00	\$ 4,000.00
154	8100001	AZPDES/NPDES (Original)	LS	1	\$ 76,718.71	\$ 76,718.71
155	8100012	AZPDES/NPDES Allowance (Modified)	DLR	60,000	\$ 1.00	\$ 60,000.00
156	9010001	Mobilization	LS	1	\$ 52,248.17	\$ 52,248.17
157	9020004	Chain Link Fence, Type 1 (72")	LF	5,052	\$ 20.00	\$ 101,040.00
158	9020240	Chain Link Single Gate	EACH	10	\$ 1,080.00	\$ 10,800.00
159	9020241	Chain Link Double Gate	EACH	3	\$ 1,380.00	\$ 4,140.00
160	9020500	Temporary Fence (Fairgrounds/Dragstrip)	LF	4,800	\$ 1.75	\$ 8,400.00
161	9030010	Barbed Wire Fence, Type 1	LF	7,963	\$ 5.80	\$ 46,185.40
162	9030101	Fence Gate, Type 1, Single	EACH	11	\$ 780.00	\$ 8,580.00



CONSTRUCTION MANAGER AT-RISK (CMAR) - CONSTRUCTION SERVICES

ATTACHMENT #1 - SCHEDULE OF VALUES

GMP#2 - ROADWAY WIDENING & DRAINAGE IMPROVEMENTS

Updated: June 16, 2021

Line No.	Item No.	Item Description	Unit	Quantity	Unit Cost	Extended Amount
163	9050001	Guard Rail, W-Beam, Single Face	LF	1,200	\$ 44.67	\$ 53,604.00
164	9050036	Guard Rail, Anchor Assembly	EACH	7	\$ 725.86	\$ 5,081.02
165	9050038	Guard Rail, End Anchorage, Type B	EACH	2	\$ 3,350.11	\$ 6,700.22
166	9050041	Guard Rail End Terminal Assembly	EACH	2	\$ 5,583.52	\$ 11,167.04
167	9080001	Concrete Curb (Std. Dtl. 209) (Type 1)	LF	28,580	\$ 20.15	\$ 575,887.00
168	9080006	Concrete Wedge Curb (Std. Dtl. 209)	LF	550	\$ 22.95	\$ 12,622.50
169	9080287	Curb Access Ramp (Special)	EACH	22	\$ 4,186.85	\$ 92,110.70
170	9080402	Concrete Header	LF	1,520	\$ 28.54	\$ 43,380.80
171	9080503	Concrete Ford Wall (1' x 3')	LF	2,431	\$ 49.30	\$ 119,848.30
172	9080504	Concrete Ford Wall (1' x 4')	LF	228	\$ 74.32	\$ 16,944.96
173	9080506	Concrete Ford Wall (1' x 6')	LF	916	\$ 105.10	\$ 96,271.60
174	9090021	Survey Monument, Frame and Cover	EACH	6	\$ 529.07	\$ 3,174.42
175	9120002	Shotcrete (6")	SY	25,195	\$ 91.54	\$ 2,306,350.30
176	9130001	Riprap (Dumped)	CY	2,040	\$ 129.98	\$ 265,159.20
177	9130002	Riprap (Wire-Tied)	CY	1,671	\$ 195.89	\$ 327,332.19
178	9130005	Riprap (Gabions)	CY	135	\$ 360.48	\$ 48,664.80
179	9130007	Riprap (Hand Placed)	SY	917	\$ 52.26	\$ 47,922.42
180	9160001	Embankment Curb	LF	525	\$ 11.96	\$ 6,279.00
181	9170021	Inlet (C-4.10) (Single)	EACH	2	\$ 2,262.44	\$ 4,524.88
182	9170022	Inlet (C-4.10) (Double)	EACH	1	\$ 2,453.11	\$ 2,453.11
183	9250001	Construction Survey and Layout	LS	1	\$ 239,790.00	\$ 239,790.00
184	9260001	Engineer's Field Office	LS	1	\$ 63,168.00	\$ 63,168.00
185	9300108	Miscellaneous Work (Fairground Sign Relocate)	LS	1	\$ 30,000.00	\$ 30,000.00
186	9300114	Miscellaneous Work 4 (Fairground Entrance Gate/Lighting Salvage)	LS	1	\$ 1,848.00	\$ 1,848.00
187	9300115	Miscellaneous Work 5 (Southwest Gas Removals)	LF	9,600	\$ 7.81	\$ 74,976.00
188	9300116	Miscellaneous Work 6 (Lumen Removals)	LF	9,140	\$ 11.82	\$ 108,034.80
189	9300128	Miscellaneous Work 18 (TEP Channel Relocation Sta 199+70)	LS	1	\$ 29,517.20	\$ 29,517.20
190	9300129	Miscellaneous Work 19 (TEP Dawn Channel Relocation)	LS	1	\$ 29,403.98	\$ 29,403.98
191	9300156	Miscellaneous Work (New TEP Service For Brekke Traffic Signal)	LS	1	\$ 13,575.35	\$ 13,575.35
192	9300157	Miscellaneous Work (Relocate Service Fairgrounds Lighting) (Sta.190+50)	LS	1	\$ 13,021.02	\$ 13,021.02

Borderland

CONSTRUCTION MANAGER AT-RISK (CMAR) - CONSTRUCTION SERVICES

ATTACHMENT #1 - SCHEDULE OF VALUES

GMP#2 - ROADWAY WIDENING & DRAINAGE IMPROVEMENTS

Updated: June 16, 2021

Line No.	Item No.	Item Description	Unit	Quantity	Unit Cost	Extended Amount
193	9300158	Miscellaneous Work (New TEP Service For Dawn Lighting)	LS	1	\$ 8,798.04	\$ 8,798.04
194	9310006	Decorative Concrete Median Treatment (Exposed Aggregate)	SF	3,886	\$ 14.71	\$ 57,163.06
195	9310007	Decorative Concrete Median Treatment (Broom Finish)	SF	8,205	\$ 9.47	\$ 77,701.35
196	9330008	Handrail (Std. Dtl. 105) (Standard Lower Rail Location)	LF	2,528	\$ 32.00	\$ 80,896.00
197						
198		COST OF CONSTRUCTION - LINE ITEMS SUBTOTAL				\$ 19,354,834.46
199	299.100	II. CMAR CONTINGENCY (UNFORESEEN CONDITIONS) (3% of LINE ITEMS SUBTOTAL)	LS	1	\$ 580,645.03	\$ 580,645.03
200		SUBTOTAL A. (DIRECT CONSTRUCTION COSTS)				\$ 19,935,479.49
201		INDIRECT CONSTRUCTION COSTS				
202	300.000	III. GENERAL CONDITIONS				
203	300.001	PROJECT ENGINEER	WK	102	\$ 2,304.00	\$ 235,008.00
204	300.002	SUPERINTENDENT	WK	68	\$ 2,979.00	\$ 202,572.00
205	300.003	GRADE FOREMAN	WK	40	\$ 2,304.00	\$ 92,160.00
206	300.004	PERMITS (AIR QUALITY)	EACH	1	\$ 4,000.00	\$ 4,000.00
207	300.005	PERMITS (NOI)	EACH	1	\$ 800.00	\$ 800.00
208	300.006	SMALL TOOLS/GPS	LS	1	\$ 40,000.00	\$ 40,000.00
209	300.007	CLEANUP	LS	1	\$ 5,000.00	\$ 5,000.00
210	300.008	TEMPORARY FENCE	LF	2,000	\$ 1.25	\$ 2,500.00
211	300.009	ROLLING PATTERNS	LS	1	\$ 2,500.00	\$ 2,500.00
212	300.010	PORTABLE RESTROOMS	MO	18	\$ 500.00	\$ 9,000.00
213	300.011	TRASH DUMPSTER	MO	18	\$ 750.00	\$ 13,500.00
214	300.012	STORAGE CONTAINER	MO	18	\$ 300.00	\$ 5,400.00
215	300.100	SUBTOTAL B. (III. GENERAL CONDITIONS)				\$ 612,440.00
216		SUBTOTAL C. (DIRECT COSTS + GENERAL CONDITIONS)				\$ 20,547,919.49
217	400.100	IV. CMAR OVERHEAD (9.34% of Subtotal C)	LS	1	\$ 1,919,175.68	\$ 1,919,175.68
218		SUBTOTAL D. (DIRECT COSTS + GENERAL CONDITIONS + OVERHEAD)				\$ 22,467,095.17
219	700.100	VII. CONSTRUCTION FEE (5% of Subtotal D)	LS	1	\$ 1,123,354.76	\$ 1,123,354.76
220	500.100	V. GENERAL LIABILITY INSURANCE (0.2876% of Subtotal D + VII)	LS	1	\$ 67,846.13	\$ 67,846.13
221	600.100	VI. PAYMENT & PERFORMANCE BONDS	LS	1	\$ 150,794.23	\$ 150,794.23
222		SUBTOTAL E. (SUBTOTAL D + VII + V + VI)				\$ 23,809,090.29



CONSTRUCTION MANAGER AT-RISK (CMAR) - CONSTRUCTION SERVICES

ATTACHMENT #1 - SCHEDULE OF VALUES

GMP#2 - ROADWAY WIDENING & DRAINAGE IMPROVEMENTS

Updated: June 16, 2021

Line No.	Item No.	Item Description	Unit	Quantity	Unit Cost	Extended Amount
223	800.001	VIII.a. CITY OF TUCSON SALES TAX* (8.7% at 65% of 25% Subtotal E)	LS	1	\$ 336,601.01	\$ 336,601.01
224	800.002	VIII.b. PIMA COUNTY SALES TAX* (6.1% at 65% of 75% Subtotal E)	LS	1	\$ 708,022.82	\$ 708,022.82
225	800.100	VIII. SALES TAX SUBTOTAL (VIII.a. + VIII.b.)				\$ 1,044,623.83
226		GUARANTEED MAXIMUM PRICE (GMP)				\$ 24,853,714.12
227	900.001	IX. OWNER'S CONTINGENCY (UNFORESEEN CONDITIONS) (2% of GMP)	LS	1	\$ 497,074.28	\$ 497,074.28
228	900.100	SUBTOTAL F. (OWNER'S CONTINGENCY)				\$ 497,074.28
229		TOTAL CONTRACT COST				\$ 25,350,788.40

*See "ATTACHMENT 7" for Sales Tax Ratio Calculator

Borderland

CONSTRUCTION MANAGER AT-RISK (CMAR) - CONSTRUCTION SERVICES

ATTACHMENT #2 - SCOPE OF WORK

GMP#2 - ROADWAY WIDENING & DRAINAGE IMPROVEMENTS

Updated: June 16, 2021

BRIEF DESCRIPTION OF WORK:			
SOUTH HOUGHTON ROAD - WIDENING SOUTH OF I-10: CONSTRUCTION BEGINS AT PANTANO/ANDRADA POLYTECHNIC HIGH SCHOOL AND ENDS AT THE I-10 TRAFFIC INTERCHANGE. THE 3.0 MILE IMPROVEMENT PROJECT INCLUDES A FOUR-LANE DIVIDED ROADWAY, MULTI-USE LANES, CROSS DRAINAGE STRUCTURES, A TRAFFIC SIGNAL, RECONSTRUCTION OF SIDESTREET INTERSECTIONS AND TURNOUTS, NATIVE RE-VEGETATION LANDSCAPING, SIGNING, AND PAVEMENT MAKINGS			
LIST OF PLANS & SPECIFICATIONS USED FOR COST MODEL			
	Document:	Prepared By:	Date:
1	South Houghton Road Widening South of I-10 Stage III - NOT FOR CONSTRUCTION - PLANS	PSOMAS	04/16/21
2	South Houghton Road Widening South of I-10 Stage III - NOT FOR CONSTRUCTION - CROSS SECTIONS	PSOMAS	04/16/21
3	South Houghton Road Widening DRAFT (for Review) Special Provisions	PSOMAS	05/25/21
4	DRAFT Geotechnical Engineering Report South Houghton Road Widening	Terracon	05/05/21
5	DRAFT Pavement Engineering Design Report South Houghton Road Widening	Terracon	05/07/21
6	Standard Specifications for Public Improvements Volume 1	Pima Association of Governments (PAG)	2015
7	Standard Specifications for Public Improvements Volume 2 (Standard Details)	Pima Association of Governments (PAG)	2015
8	SOUTH HOUGHTON ROAD 24" TRANSMISSION MAIN WATER MODIFICATION PLANS (PRELIMINARY)	PSOMAS	05/20/21
9	**REMOVALS ONLY** FN: SOUTH HOUGHTON ROAD 4" H.P. STEEL & 2"PE8000 MAIN RELOCATION TUCSON, AZ (WR NO. 4173497, 4215574)	Southwest Gas Corporation	03/29/21
10	**REMOVALS ONLY** Lumen (Century Link) Relocation Redlines (on Psomas Plan&Profile Sheets)	Lumen	04/13/21



CONSTRUCTION MANAGER AT-RISK (CMAR) - CONSTRUCTION SERVICES
ATTACHMENT #3 - CLARIFICATIONS, ASSUMPTIONS, EXCLUSIONS

GMP#2 - ROADWAY WIDENING & DRAINAGE IMPROVEMENTS

Updated: June 16, 2021

CLARIFICATIONS, ASSUMPTIONS, AND EXCLUSIONS TO THE SCOPE OF WORK:	
1	Clarification - A previous GMP#1 includes a portion of early work and long lead procurement items that are <u>NOT</u> included in this GMP#2. The intent of the GMP#1 was to facilitate third-party utility relocations, establish a construction water source, and procure long lead Pre-Cast RCBC and Pipeline materials to facilitate an overall roadway construction start date of July 2021. This GMP#2 includes all other roadway widening scoping elements.
2	Clarification - GMP#2 has been prepared in general conformance with the PC contract formatting requirements. Separate GMP exhibits have been included for potential third party cost reimbursement negotiations/agreements.
3	Clarification - It is understood that the final design reviews/updates/revisions were ongoing while this GMP#2 was prepared and that future signed/sealed/approved plans and special provisions will be provided for construction. GMP#2 accounts for the scope of work anticipated as part of the Stage III documents with reasonable contingencies set aside for minor scope revisions that develop prior to the issuance of Notice-to-Proceed. As needed, Borderland will work closely with PCDOT to reconcile any line item scope revisions and/or quantity differences, while maintaining the overall GMP#2 amount.
4	Clarification - It is understood that separate/future GMP packages will be required for the installation of Phase 2 of Tucson Water's 24" Transmission Main and for the completion of the PCRFCD channels project.
5	Clarification: Initial roadway construction phasing is anticipated as three parts: Phase 1 includes preparation work such as mobilization, clearing/grubbing, survey, temp traffic control/detours. Phase 2 includes the construction of the future southbound lanes, outlet channels, and drainage structure outlets. Phase 3 includes the future northbound lanes, drainage structure inlets, and upstream collector channels.
6	Clarification - Item 1060000: Contractor Quality Control is based on our estimate of testing required for project completion (based on past project experience). Our line item direct cost includes: 4,686 Technician Hours, 1,083 Trip Charges, 96 Proctors, 1,528 Concrete Cylinders, 96 Sieve/PI, 150 CTS Plugs, 36 AC Tests, 8 CTS Mix Designs, 72 QC Reports.
7	Clarification - Item 2010001: Clearing and grubbing includes the roadway widening/drainage improvement footprint excluding the clearing and grubbing acreage accounted for in GMP#1. Total project clearing and grubbing acreage can be obtained by adding the acreage in GMP#1 to the acreage in GMP#2.
8	Clarification - Item 2010001A: This item includes clearing and grubbing in the area of PCRFCD's future North Channel at the PC Fairgrounds. The clearing effort will allow for the future North Channel footprint to be used as the borrow source for roadway embankment.



CONSTRUCTION MANAGER AT-RISK (CMAR) - CONSTRUCTION SERVICES

ATTACHMENT #3 - CLARIFICATIONS, ASSUMPTIONS, EXCLUSIONS

GMP#2 - ROADWAY WIDENING & DRAINAGE IMPROVEMENTS

Updated: June 16, 2021

CLARIFICATIONS, ASSUMPTIONS, AND EXCLUSIONS TO THE SCOPE OF WORK:	
9	<p>Clarification - Item 2030500: Just prior to the GMP#2 submittal, Psomas notified Borderland of potential unsuitable native material near the south end of the project. Solutions for this unsuitable material will be evaluated in coordination with Psomas and PCDOT, but for the purpose of GMP#2 we have assumed a 4,000 CY over-excavation and replacement of the native soils. This will be confirmed and/or approved amongst the team prior to Borderland taking any action on this item.</p>
10	<p>Clarification - Item 2030901: Our borrow item includes the assumption that 122,247 CY of suitable native material will be available primarily from the PCRFC D northern channel (if the northern channel cannot provide the full quantity, the central channel will need to be used to supplement the new roadway embankment). The borrow unit cost includes excavating material from the channel, loading the material into off-road haul trucks, and hauling/placing in the new roadway embankment locations.</p>
11	<p>Clarification - Item 3020001: The DRAFT Pavement Engineering Design Report prepared by Terracon provides a variety of alternatives (depth and cement percentage) for the cement treated subgrade (CTS). For the purpose of GMP#2, Borderland has assumed a 9" depth and 7% cement content for the entire roadway subgrade (to establish a GMP line item budget). Our intent is to selectively place suitable native borrow (from the PCRFC D channel sites) in the upper three feet of roadway embankment. Once in place, we will test the in-place subgrade to confirm and/or reconcile both the CTS depth and cement % in coordination with PCDOT, Psomas, and Terracon with the intent to optimize the CTS approach (from a cost and schedule perspective).</p>
12	<p>Clarification - Item 5101124: This Tucson Water pipeline item is for the INSTALLATION ONLY of 4,125± LF 24" waterline segments that are driving the overall project critical path (i.e. the new 24" waterline dip sections under new Houghton Road drainage structures). The previous GMP#1 included the procurement of 24" CLASS 200 DUCTILE IRON PIPE (based on initial coordination with Psomas/Tucson Water based on a conceptual feasibility study). The intent is to install the pipeline segments on behalf of Tucson Water and to not cause delays to the new cross-drainage structures that are the critical path for the roadway widening project. Future GMP line items will provide unit costs for installation of the remaining/non-critical 11,375± LF of 24" pipeline.</p>
13	<p>Clarification - Items 6010101, 6010103, 6010105, 6010107, 6010110, 6010110B, 6010113, 6010114, 6010115: These Pre-Cast RCBC INSTALLATION ONLY items are based on the Borderland Value Engineering proposal to substitute the single and double barrel RCBC structures (shown in the Stage II plans) to Pre-Cast concrete structures instead of Cast-in-Place RCBCs. The previous GMP#1 included the procurement of these Pre-Cast RCBC structures. The intent was to use Pre-Cast RCBCs in order to advance the new cross-drainage structure installations (critical path elements for the roadway widening project) in order to meet the overall project completion date required by PCDOT.</p>

Borderland

CONSTRUCTION MANAGER AT-RISK (CMAR) - CONSTRUCTION SERVICES ATTACHMENT #3 - CLARIFICATIONS, ASSUMPTIONS, EXCLUSIONS

GMP#2 - ROADWAY WIDENING & DRAINAGE IMPROVEMENTS

Updated: June 16, 2021

CLARIFICATIONS, ASSUMPTIONS, AND EXCLUSIONS TO THE SCOPE OF WORK:	
14	Clarification - Item 9120002: Due to the large quantity, the included unit cost is for gray shotcrete WITHOUT COLORING as a cost-savings alternative. Borderland is in the process of working with our specialty subcontractor to identify options for the inclusion of an integral color in the shotcrete mix, or the option for a topical stain after installation. Prior to installation, color options will be presented to PCDOT for review/approval and any unit cost revisions can be accounted for within contingencies and/or future GMP packages.
15	Clarification - Borderland has identified a 3% CMAR contingency and 2% Owner's Contingency to cover unforeseen risk/unknown scoping elements. If needed, the use of contingency items will require evaluation and approval from PC (and the design team) to define the scale and applicability of contingency billings
16	Clarification - Sales Tax rates vary between City of Tucson and Pima County. Attachment #7 includes our calculation of a sales tax ratio based on % length of project located in each jurisdiction.
17	Clarification - This GMP#2 (and subcontractor selection) has been prepared based on a Pima County SBE goal of 5.0%. Any changes to the SBE goal may impact cost, schedule, and/or quality of work.
18	Clarification - Per 06/15/21 email from PCDOT, we understand that the County would like to proceed with reducing the MUP from 12' to 10' and reducing the roadway shoulders from 6' to 5' on each side of the road. This reduces the path width by 2' and the roadway pavement width by 2' (which is not currently reflected in the design plans). As such, we have revised the quantities associated with Items 2030901, 3020001, 3030003, 4060001, 4060003, and 4060004 (per the 06/11/21 ROM analysis). These revised quantities will ultimately need to be confirmed with PCDOT/Psomas and may require a future reconciliation of the line item unit pricing/extended amounts.
19	Clarification - Item 300.004 and 300.005: GMP#2 includes the anticipated costs for permits that may require renewal over the approximate 18-month duration of the project. The previous GMP#1 covers the first 12 month period beginning in June 2021.
20	Clarification - Based on the preliminary nature of the design plans, ongoing utility coordination, and outstanding final ROW/Easement/Permitting acquisitions, we have prepared an anticipated construction schedule included in Attachment #4. The anticipated construction schedule is intended to confirm the overall project duration (i.e. substantial completion date), major phasing/sequencing, and the primary work packages included in Schedule of Value unit pricing. The framework provided in Attachment #4 will be used to develop a more detailed preliminary construction schedule that will be presented for PCDOT's review and concurrence as part of a pre-construction meeting (and upon confirmation of final/approved plans/permits/ROW acquisitions). The future preliminary construction schedule will be used to identify roll-up sub-tasks to the primary work packages and critical path dependencies identified in Attachment #4.

Borderland

CONSTRUCTION MANAGER AT-RISK (CMAR) - CONSTRUCTION SERVICES ATTACHMENT #3 - CLARIFICATIONS, ASSUMPTIONS, EXCLUSIONS

GMP#2 - ROADWAY WIDENING & DRAINAGE IMPROVEMENTS

Updated: June 16, 2021

CLARIFICATIONS, ASSUMPTIONS, AND EXCLUSIONS TO THE SCOPE OF WORK:	
21	Clarification - The anticipated schedule provided in Attachment #4 includes accommodation for (33) working day weather delays over the 18 month duration of the project.
22	Clarification - The anticipated schedule provided in Attachment #4 assumes a Construction Notice-to-Proceed by July 15, 2021 and provides a Substantial Completion date of December 31, 2022 (as required by PCDOT).
23	- not used -
24	Assumption - In order to meet the provided schedule for construction, it is assumed that the Pima County Regional Flood Control District (PCRFCD) channel project design will be far enough along to start excavation of the North Channel simultaneously with the South Houghton Road widening project. The new PCRFCD channels are critical to start the project for two reasons: 1. Needed to convey existing storm drain flows through the construction zone and 2. Borrow source for the new roadway embankment. It is assumed the new channel configurations will be identified and available by July 21, 2021. While this new channel system is assumed to be available as a roadway borrow source, we have only included the specific quantities required for the new roadway embankment - the corresponding GMP#2 unit price includes excavating, loading, hauling, and placing of channel material into the new roadway embankment. Any changes in the availability and/or quantities associated with the channel borrow sources may require reevaluation of the GMP#2 borrow unit price. In addition, a separate/future GMP package will need to be prepared for the remaining PCRFCD channel scope of work.
25	Assumption - In order to meet the provided schedule for construction, it is assumed that Southwest Gas will have relocated their existing facilities and/or resolved conflicts with the new drainage structures by July 21, 2021. The first major roadway work package includes the installation of new drainage structures near the PC Fairgrounds, which currently cannot be installed efficiently due to the conflict with Southwest Gas facilities.
26	Assumption - Prior to clearing and grubbing, it is assumed that the Pima County Nursery staff (and/or their cooperative partners) will have salvaged viable native plants from the project limits. It is assumed the plants salvaged from the project will be available for future planting along the South Houghton Road widening project as part of a future coordination effort. No costs for removing/salvaging native plants is included in this GMP#2.
27	Assumption - It is assumed that direct access will be obtained/provided between the new PCRFCD channels and Houghton Road during the borrow haul - this will require off-road trucks/equipment traveling from the channel area to Houghton Road (north of the existing dragstrip). If an alternate haul route will be required, the cost for hauling/trucking borrow to the project will increase.
28	- not used -
29	Exclusion - This GMP#2 specifically excludes all work associated with the PCRFCD channels (other than the borrow quantity specifically required for the roadway embankment)



CONSTRUCTION MANAGER AT-RISK (CMAR) - CONSTRUCTION SERVICES
ATTACHMENT #3 - CLARIFICATIONS, ASSUMPTIONS, EXCLUSIONS

GMP#2 - ROADWAY WIDENING & DRAINAGE IMPROVEMENTS

Updated: June 16, 2021

CLARIFICATIONS, ASSUMPTIONS, AND EXCLUSIONS TO THE SCOPE OF WORK:	
30	Exclusion: This GMP specifically excludes preservation fencing since the item was previously included in GMP#1.
31	Exclusion: This GMP specifically excludes a construction water source since the item was previously included in GMP#1.
32	Exclusion - No budget has been included to address USACE 404 permitting fees. It is understood any/all 404 permitting costs will be handled outside the construction contract.
33	Exclusion - No budget has been included to address PCRFCF Riparian Area mitigation fees. It is understood any/all in-lieu fees or other mitigation costs will be handled outside the construction contract.

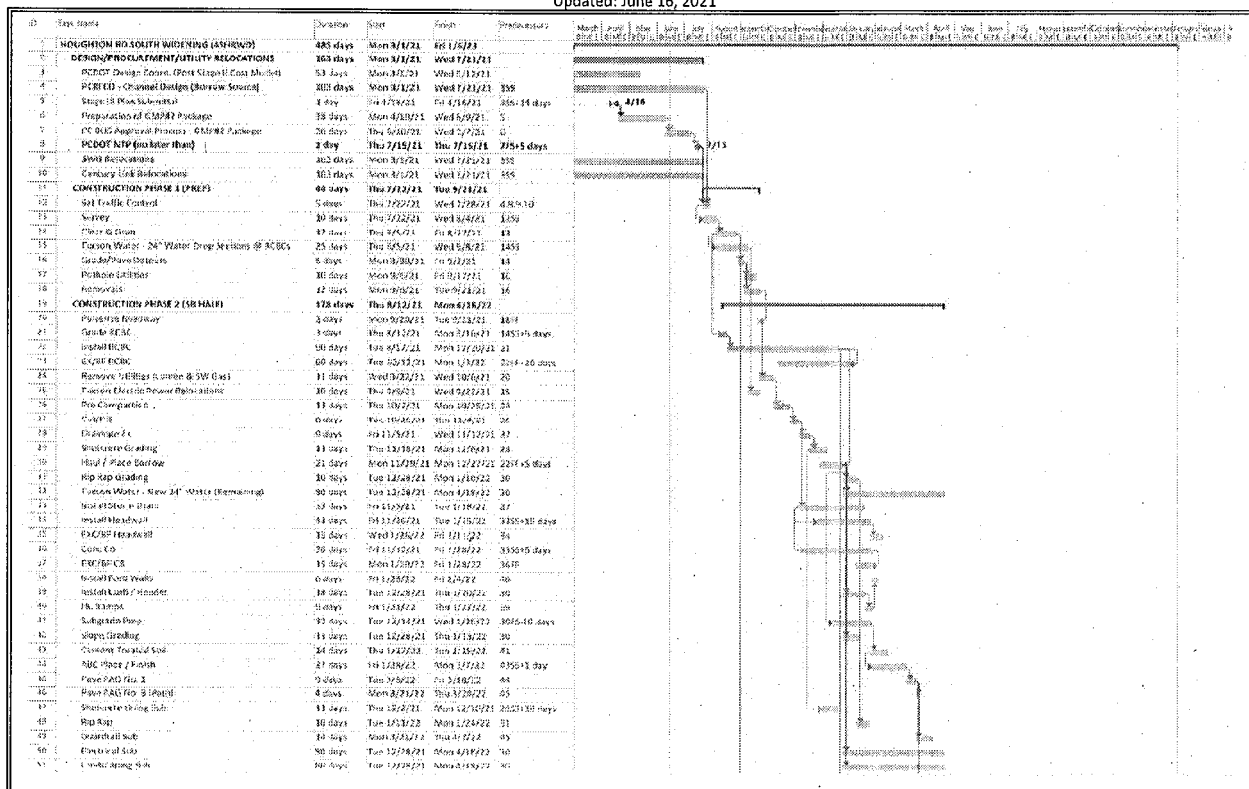
Borderland

CONSTRUCTION MANAGER AT-RISK (CMAR) - CONSTRUCTION SERVICES

ATTACHMENT #4 - ANTICIPATED CONSTRUCTION SCHEDULE

GMP#2 - ROADWAY WIDENING & DRAINAGE IMPROVEMENTS

Updated: June 16, 2021



CONSTRUCTION MANAGER AT-RISK (CMAR) - CONSTRUCTION SERVICES
ATTACHMENT #4 - ANTICIPATED CONSTRUCTION SCHEDULE
GMP#2 - ROADWAY WIDENING & DRAINAGE IMPROVEMENTS

Updated: June 16, 2021

ID	Task Name	Duration	Start	Finish	Predecessors
00	Strip Trench Paving	5 days	Mon 6/14/22	Thu 6/17/22	48
01	Reinforce Sub	15 days	Fri 6/18/22	Mon 6/28/22	22
02	Gravel Sub	20 days	Mon 6/20/22	Thu 6/30/22	24
03	CONSTRUCTION PHASE 3 (PAVING)	1 day	Mon 6/28/22	Tue 6/29/22	50
04	RTT Sub	Mon 6/28/22	Tue 6/29/22		
05	Soil Traffic Control (RTT)	5 days	Mon 6/28/22	Fri 6/30/22	52
06	Seam	10 days	Mon 6/28/22	Thu 6/30/22	51/55
07	Clear & Grub	5 days	Mon 6/28/22	Thu 6/30/22	56
08	RTT/RTT	5 days	Mon 6/28/22	Mon 6/28/22	55/55
09	Reinforce Roadway	5 days	Tue 6/29/22	Tue 6/29/22	60
10	Reinforce Curb & Sid	12 days	Wed 6/29/22	Wed 6/30/22	61
11	Gravel RTT	1 day	Tue 6/29/22	Tue 6/29/22	60
12	CONCRETE RTT	10 days	Fri 6/30/22	Thu 7/1/22	63
13	Install Joint Strip (RTT/RTT)	20 days	Fri 6/30/22	Mon 7/4/22	54/55-10 days
14	RTT Joint Strips	10 days	Fri 6/30/22	Thu 7/1/22	64
15	RTT Joint Strips	5 days	Mon 7/4/22	Mon 7/4/22	65/65-10 days
16	RTT Compaction	12 days	Fri 6/30/22	Fri 6/30/22	62
17	Cut & Fill	22 days	Mon 7/4/22	Tue 7/5/22	66
18	Drainage Box	0 days	Mon 7/4/22	Mon 7/4/22	60
19	Gravel Sub	12 days	Tue 7/5/22	Mon 7/5/22	60
20	Reinforce Roadway	24 days	Fri 7/1/22	Fri 7/1/22	60/65-10 days
21	Top Layer Gravel	20 days	Mon 7/4/22	Fri 7/1/22	72
22	Reinforce Roadway	24 days	Mon 7/4/22	Mon 7/4/22	72/65-10 days
23	Reinforce Roadway	24 days	Mon 7/4/22	Mon 7/4/22	72/65-10 days
24	CONCRETE Roadway	10 days	Fri 7/1/22	Fri 7/1/22	71
25	Reinforce Roadway	5 days	Mon 7/4/22	Fri 7/1/22	73
26	Reinforce Roadway	10 days	Mon 7/4/22	Mon 7/4/22	73
27	RTT/RTT	5 days	Fri 7/1/22	Mon 7/4/22	70
28	Reinforce Roadway	10 days	Mon 7/4/22	Tue 7/5/22	72/73-10 days
29	Top Layer Gravel	12 days	Mon 7/4/22	Tue 7/5/22	72
30	CONCRETE Roadway	10 days	Mon 7/4/22	Mon 7/4/22	72/73-10 days
31	Reinforce Roadway	10 days	Mon 7/4/22	Mon 7/4/22	72/73-10 days
32	CONCRETE Roadway	10 days	Mon 7/4/22	Mon 7/4/22	72/73-10 days
33	Reinforce Roadway	10 days	Mon 7/4/22	Mon 7/4/22	72/73-10 days
34	Reinforce Roadway	10 days	Mon 7/4/22	Mon 7/4/22	72/73-10 days
35	Reinforce Roadway	10 days	Mon 7/4/22	Mon 7/4/22	72/73-10 days
36	Reinforce Roadway	10 days	Mon 7/4/22	Mon 7/4/22	72/73-10 days
37	Reinforce Roadway	10 days	Mon 7/4/22	Mon 7/4/22	72/73-10 days
38	Reinforce Roadway	10 days	Mon 7/4/22	Mon 7/4/22	72/73-10 days
39	Reinforce Roadway	10 days	Mon 7/4/22	Mon 7/4/22	72/73-10 days
40	Reinforce Roadway	10 days	Mon 7/4/22	Mon 7/4/22	72/73-10 days
41	Reinforce Roadway	10 days	Mon 7/4/22	Mon 7/4/22	72/73-10 days
42	Reinforce Roadway	10 days	Mon 7/4/22	Mon 7/4/22	72/73-10 days
43	Reinforce Roadway	10 days	Mon 7/4/22	Mon 7/4/22	72/73-10 days
44	Reinforce Roadway	10 days	Mon 7/4/22	Mon 7/4/22	72/73-10 days
45	Reinforce Roadway	10 days	Mon 7/4/22	Mon 7/4/22	72/73-10 days
46	Reinforce Roadway	10 days	Mon 7/4/22	Mon 7/4/22	72/73-10 days
47	Reinforce Roadway	10 days	Mon 7/4/22	Mon 7/4/22	72/73-10 days
48	Reinforce Roadway	10 days	Mon 7/4/22	Mon 7/4/22	72/73-10 days
49	Reinforce Roadway	10 days	Mon 7/4/22	Mon 7/4/22	72/73-10 days
50	Reinforce Roadway	10 days	Mon 7/4/22	Mon 7/4/22	72/73-10 days
51	Reinforce Roadway	10 days	Mon 7/4/22	Mon 7/4/22	72/73-10 days
52	Reinforce Roadway	10 days	Mon 7/4/22	Mon 7/4/22	72/73-10 days

Borderland

CONSTRUCTION MANAGER AT-RISK (CMAR) - CONSTRUCTION SERVICES

ATTACHMENT #5 - CASH-FLOW FORECAST

GMP#2 - ROADWAY WIDENING & DRAINAGE IMPROVEMENTS

Updated: June 16, 2021

Estimated Monthly Cash-Flow Forecast* (\$,000s)																					
Major Tasks/ Work Areas	Fiscal Year:		FY21-22 Work												FY22-23 Work						
	Work Performed:	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23
	To be Invoiced:	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	
Misc. (Survey, QC, Office, MOT, SWPPP)		101	122	122	122	122	122	122	122	122	122	122	122	122	122	122	119	24		0	
Phase 1																					
Clear & Grub	15	121																			
Removals/Detours		19	33																		
Tucson Water - 24" Trans. Main (Phase 1)		176	176																		
Phase 2																					
Drainage Structures (Outlets)		323	323	323	624	840	799	492													
Earthwork (Cut/Fill/Borrow)			51	125	669	493															
SB Electrical/Lighting		103	103	103			59	59	59	59											
SB Curb/CTS/ABC/Paving						217	447	437	931	10											
SB Landscaping/Railing/Fencing/Guardrail		60	60	60			117	117	133	133											
Phase 3																					
Clear & Grub											10										
Removals/Detours											91										
Drainage Structures (Inlets)											270	270	434	803	556	453	460	369	3		
Earthwork (Cut/Fill/Borrow)												137	6	262	262						
NB Electrical/Lighting															11	39	39	39	28		
NB Curb/CTS/ABC/Paving																1019	1936	438	74		
NB Landscaping/Railing/Fencing/Guardrail																105	181	62	62		
Cost of Construction Subtotal	116	924	868	733	1414	1671	1544	1226	1245	695	528	562	1186	950	1738	2738	1026	190	0		
CMAR Contingency	3	28	26	22	42	50	46	37	37	21	16	17	36	29	52	82	31	6	0		
Cost + Contingency Subtotal	119	952	894	755	1457	1721	1590	1263	1283	716	544	579	1222	979	1790	2820	1057	196	0		
Other indirect costs (GC's, fees, taxes, etc.)	29	235	221	186	359	425	392	312	316	177	134	143	301	241	442	696	261	48	0		
Monthly Subtotals	148	1187	1115	941	1816	2146	1982	1575	1599	893	678	721	1523	1220	2232	3515	1318	244	0		
FY Subtotals							\$14,801,259.38									\$10,052,454.74					
Project Total***												\$24,853,714.12									
*Estimated amounts reflect anticipated installations/work completed by months end																					
**Forecast assumes NTP for construction on/before July 15, 2021																					
***Forecast Total does NOT include unencumbered Owners Contingency of: \$497,074.28																					



CONSTRUCTION MANAGER AT-RISK (CMAR) - CONSTRUCTION SERVICES
ATTACHMENT #6 - ANTICIPATED SUBCONTRACTORS AND SBE

GMP#2 - ROADWAY WIDENING & DRAINAGE IMPROVEMENTS

Updated: June 16, 2021

LIST OF ANTICIPATED SUBCONTRACTORS (STAGE III PLANS)						
	Anticipated Subcontractor/ Company	Scope of Work:	Selection Based on:	Anticipated Subcontractor Participation		
				SBE Status? (YES/No)	Anticipated Subcontract Value (\$)	Anticipated Participation (%)
1	Rockridge Construction	Bank Protection and Ford Walls	Qualifications and Price	YES	\$ 2,812,545.28	11.32%
2	Asphalt Busters	Cement Treated Subgrade and Pulverizing/Milling	Qualifications and Price	No	\$ 806,103.96	3.24%
3	Tyler Reinforcing	Rebar	Qualifications and Price	No	\$ 506,754.00	2.04%
4	Santa Rita Landscaping	Landscaping	Qualifications and Price	No	\$ 436,054.30	1.75%
5	P.A.C.E. Electrical Construction	Electrical and Traffic Signals	Qualifications and Price	YES	\$ 375,934.52	1.51%
6	Speedie & Associates	Quality Control	Qualifications and Price	No	\$ 289,740.00	1.17%
7	Canyon Fence	Handrail/Fence	Qualifications and Price	No	\$ 260,041.00	1.05%
8	Psomas	Construction Survey	Qualifications and Price	No	\$ 239,790.00	0.96%
9	Desert Seeders	Hydroseeding	Qualifications and Price	No	\$ 145,570.00	0.59%
10	Franklin Striping	Striping	Qualifications and Price	No	\$ 94,883.04	0.38%
11	Border Traffic Safety	MOT/ Traffic Control	Qualifications and Price	YES	\$ 86,500.00	0.35%
12	Hunter Guardrail	Guardrail	Qualifications and Price	No	\$ 76,550.00	0.31%
13	Border Traffic Safety	Signage	Qualifications and Price	YES	\$ 48,639.60	0.20%
Anticipated Subcontractor Total Value (M, L, E)					\$ 6,179,105.70	24.86%
Anticipated Self-Performance Total Value (M, L, E)					\$18,674,608.42	75.14%

ANTICIPATED SBE GOAL SUMMARY		
GUARANTEED MAXIMUM PRICE (GMP) #2 AMOUNT	=	\$24,853,714.12
PIMA COUNTY SBE PARTICIPATION GOAL - GMP#2 (%)	=	5.00%
PIMA COUNTY SBE PARTICIPATION GOAL - GMP#2 (\$)	=	\$1,242,685.71
Anticipated SBE Participation Total (sum of SBE subcontract amounts from table above)	=	\$3,323,619.40
Anticipated SBE Participation Total (%)	=	13.37%
SBE Participation Goal Anticipated to be Met (Yes/No)	=	YES

Borderland

CONSTRUCTION MANAGER AT-RISK (CMAR) - CONSTRUCTION SERVICES

ATTACHMENT #7 - SALES TAX RATIO CALCULATOR

GMP#2 - ROADWAY WIDENING & DRAINAGE IMPROVEMENTS

Updated: June 16, 2021

PROJECT SEGMENT	BEGIN STA. (±)	END STA. (±)	APPROXIMATE LENGTH (LF)	JURISDICTION	NOTES
1	99+25	123+20	2,395	CITY OF TUCSON	Southern Project Limits to 1/4 mile north of High Schools
2	123+20	243+25	12,005	UNINCORPORATED PIMA COUNTY	1/4 mile north of High Schools to 1/2 mile north of Brekke Rd
3	243+25	258+45	1,520	CITY OF TUCSON	1/2 mile north of Brekke Rd to I-10 connection/Northern Project Limits
TOTAL APPROX. PROJECT LENGTH			15,920	3.02 ± (Miles) Total Project Length	

JURISDICTION	APPROXIMATE LENGTH (LF)	JURISDICTION % OF TOTAL PROJECT LENGTH	PROJECT SPECIFIC TAX RATIO* (% of TOTAL LENGTH, ROUNDED)
CITY OF TUCSON	3,915	24.59%	25.00%
UNINCORPORATED PIMA COUNTY	12,005	75.41%	75.00%
TOTALS	15,920	100.00%	100.00%

*USE ROUNDED PERCENTAGES TO CALCULATE SALES TAX

JURISDICTION	A. % of Total Construction	B. JURISDICTIONAL TAX RATES (%)	C. *PROJECT SPECIFIC TAX RATIO (BASED ON PROJECT LENGTH)	PROJECT SPECIFIC TAX RATES (A. x B. x C.)
CITY OF TUCSON	65%	8.70%	25.00%	1.41375%
UNINCORPORATED PIMA COUNTY		6.10%	75.00%	2.97375%

Borderland

CONSTRUCTION MANAGER AT-RISK (CMAR) - CONSTRUCTION SERVICES ATTACHMENT #8 - TUCSON WATER SCHEDULE OF VALUES

GMP#2 - ROADWAY WIDENING & DRAINAGE IMPROVEMENTS

Updated: June 16, 2021

Line No.	Item No.	Item Description	Unit	Quantity	Unit Cost	Extended Amount
1		I. COST OF CONSTRUCTION - LINE ITEMS				
2	5101124	Potable Water Pipe, DI, 24" (CL 200) (Phase 1)	LF	4,125	\$ 85.39	\$ 352,233.75
3						\$ -
4		COST OF CONSTRUCTION - LINE ITEMS SUBTOTAL				\$ 352,233.75
5	299.100	II. CMAR CONTINGENCY (UNFORESEEN CONDITIONS) (3% of LINE ITEMS SUBTOTAL)	LS	1	\$ 10,567.01	\$ 10,567.01
6		SUBTOTAL A. (DIRECT CONSTRUCTION COSTS)				\$ 362,800.76
7		INDIRECT CONSTRUCTION COSTS				
8	300.100	III. GENERAL CONDITIONS				
9		N/A - Assume all work occurs simultaneously with PCDOT Project	-	0	\$ -	\$ -
10		SUBTOTAL B. (III. GENERAL CONDITIONS)				\$ -
11		SUBTOTAL C. (DIRECT COSTS + GENERAL CONDITIONS)				\$ 362,800.76
12	400.100	IV. CMAR OVERHEAD (9.34% of Subtotal C)	LS	1	\$ 33,885.59	\$ 33,885.59
13		SUBTOTAL D. (DIRECT COSTS + GENERAL CONDITIONS + OVERHEAD)				\$ 396,686.35
14	700.100	VII. CONSTRUCTION FEE (5% of Subtotal D)	LS	1	\$ 19,834.32	\$ 19,834.32
15	500.100	V. GENERAL LIABILITY INSURANCE (0.2876% of Subtotal D + VII)	LS	1	\$ 1,197.91	\$ 1,197.91
16	600.100	VI. PAYMENT & PERFORMANCE BONDS	LS	1	\$ 2,662.47	\$ 2,662.47
17		SUBTOTAL E. (SUBTOTAL D + VII + V + VI)				\$ 420,381.05
18	800.001	VIII.a. CITY OF TUCSON SALES TAX* (8.7% at 65% of 25% Subtotal E)	LS	1	\$ 5,943.14	\$ 5,943.14
19	800.002	VIII.b. PIMA COUNTY SALES TAX* (6.1% at 65% of 75% Subtotal E)	LS	1	\$ 12,501.08	\$ 12,501.08
20	800.100	VIII. SALES TAX SUBTOTAL (VIII.a. + VIII.b.)				\$ 18,444.22
21		GUARANTEED MAXIMUM PRICE (GMP)				\$ 438,825.27
22	900.001	IX. OWNER'S CONTINGENCY (2% of GMP)	LS	1	\$ 8,776.51	\$ 8,776.51
23	900.100	SUBTOTAL F. (OWNER'S CONTINGENCY)				\$ 8,776.51
24		TOTAL CONTRACT COST				\$ 447,601.78

*See "ATTACHMENT 7" for Sales Tax Ratio Calculator

End of Appendix F-1

RIDER

Travelers Casualty and Surety Company of America Hartford, CT 06183

To be attached to and form a part of:

Bond No. 107347459

Type of Bond: Performance and Payment

Executed by Borderland Construction Company, Inc., as Principal, and by
Travelers Casualty and Surety Company of America, as Surety, in favor of Pima County
and dated May 10, 2021.

In consideration of the premium charged for the attached bond, it is hereby agreed to change:

the bond amount per GMP 2 in the amount of \$25,350,788.40

From: Three Million Five Hundred Twenty Four Thousand Two Hundred Seventy Two and 56/100 Dollars (\$3,524,272.56)

To: Twenty Eight Million Eight Hundred Seventy Five Thousand Sixty and 96/100 Dollars (\$28,875,060.96)

This rider is effective June 23, 2021.

This rider is executed upon the express condition that the surety's liability under said bond shall not be cumulative and shall in no event exceed the amount specifically set forth in said bond or any existing certificate changing the amount of said bond. The referenced bond shall be subject to all its agreements, limitations and conditions except as herein expressly modified.

Signed this 23rd day of June, 2021.

Borderland Construction Company, Inc.
(Principal)

By: 

Travelers Casualty and Surety Company of America

By: 

Debbie Clayton

, Attorney-in-Fact

*Rider Accepted By:

Pima County

(Obligee)

By: 



**Travelers Casualty and Surety Company of America
Travelers Casualty and Surety Company
St. Paul Fire and Marine Insurance Company**

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company are corporations duly organized under the laws of the State of Connecticut (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint **DEBBIE CLAYTON** of **TEMPE**

Arizona, their true and lawful Attorney-in-Fact to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed, and their corporate seals to be hereto affixed, this **3rd** day of **February**, **2017**.



State of Connecticut

City of Hartford ss.

By:

Robert L. Raney, Senior Vice President

On this the **3rd** day of **February**, **2017**, before me personally appeared **Robert L. Raney**, who acknowledged himself to be the Senior Vice President of Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

In Witness Whereof, I hereunto set my hand and official seal.

My Commission expires the **30th** day of **June**, **2021**



Marie C. Tetreault, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, **Kevin E. Hughes**, the undersigned, Assistant Secretary of Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which remains in full force and effect.

Dated this **23rd** day of **June**, **2021**



Kevin E. Hughes, Assistant Secretary

**To verify the authenticity of this Power of Attorney, please call us at 1-800-421-3880.
Please refer to the above-named Attorney-in-Fact and the details of the bond to which the power is attached.**