

# BOARD OF SUPERVISORS AGENDA ITEM REPORT CONTRACTS / AWARDS / GRANTS

Requested Board Meeting Date: 08/01/2017

\* = Mandatory, information must be provided

or Procurement Director Award

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

PCL Construction, Inc.

### \*Project Title/Description:

Construction Manager at Risk Services for Continental Ranch Regional Pump Station Upgrade Project (3CRS05)

#### \*Purpose:

Ratification of Amendment: Contract No. CT-WW-17-380, Amendment No. One (1). This amendment increases the award amount by \$4,202,228.00 from \$128,048.00 to \$4,330,276.00 and incorporates Guaranteed Maximum Price No. One (GMP-1). Administering Department: Regional Wastewater Reclamation

GMP-1 pertains to project phase 1 and provides for operation of temporary flow management equipment for the project, acquisition of equipment for permanent flow management facilities, construction of the permanent flow management facilities and for all other related construction activities for this phase. Due to limited subcontracting opportunities, no Small Business Enterprise (SBE) goal is established for GMP-1.

Immediate approval of the amendment by the Board of Supervisors Chair was requested by the Regional Wastewater Reclamation Department to allow for immediate implementation of GMP-1 so that acquisition of equipment and construction of the infrastructure may begin for permanent flow management at the Continental Ranch Regional Pump Station. This action was necessitated by the recent failure of multiple pumps at the pump station prior to its total rehabilitation under this contract.

#### \*Procurement Method:

Pursuant to Solicitation for Qualifications No. 247817, on June 20, 2017, the Board of Supervisors awarded a contract for pre-construction services for this project in the amount of \$128,048.00 for a contract term of 06/20/2017 to 06/19/2019.

Attachments: Contract Amendment No. One (1), Ratification Memorandum.

#### \*Program Goals/Predicted Outcomes:

Completion of the rehabilitation process, facilitated by the participation of the Construction Manager at Risk, in accordance/compliance with approved project plans and specifications, regulatory and industry codes, and department standards.

#### \*Public Benefit:

Upgraded Pump Station standards that will allow handling of additional flows at future build out conditions without additional funding requirements for pump station operations.

### \*Metrics Available to Measure Performance:

Performance will be measured with monthly or bi-weekly activity reports during construction, monthly updates to the Cost to Complete Forecast, and by using the contractor evaluation process as outlined in BOS Policy D29.1.F.III.F.

#### \*Retroactive:

No

TO: COB 7-27-17 () Vers: 3 093:41

Contract / Award Information		
Document Type:	Department Code:	Contract Number (i.e., 15-123):
Effective Date: Te	ermination Date:	Prior Contract Number (Synergen/CMS):
Expense Amount: \$*		Revenue Amount: \$
*Funding Source(s) required:		
Funding from General Fund?	OYes ONo If Yes \$	%
Contract is fully or partially funde	ed with Federal Funds?	🗌 Yes 🔲 No
*Is the Contract to a vendor or	r subrecipient?	· · · · · · · · · · · · · · · · · · ·
Were insurance or indemnity cla	auses modified?	🗌 Yes 🔲 No
lf Yes, attach Risk's approval		
Vendor is using a Social Securit	ty Number?	🗌 Yes 🔲 No
If Yes, attach the required form	per Administrative Procedure	22-73.
Amendment / Revised Award	Information	
Document Type: CT		Contract Number (i.e.,15-123): 17-380
		AMS Version No.: 3
Effective Date: 07/26/2017		New Termination Date:
		Prior Contract No. (Synergen/CMS):
Expense or CRevenue	●Increase ○Decrease	Amount This Amendment: \$ 4,202,228.00
Is there revenue included?	CYes  No If	Yes \$
*Funding Source(s) required:	Regional Wastewater Reclamati	on Department Obligations
: a		
Funding from General Fund?		Yes \$ %
	CYes ONO If	Yes \$ %
Funding from General Fund? Grant/Amendment Information	OYes     ● No     If       n     (for grants acceptance and	Yes \$ %
Funding from General Fund? Grant/Amendment Information Document Type:	○Yes       No       If <b>n</b> (for grants acceptance and         Department Code:	Yes \$% awards) O Award O Amendment Grant Number (i.e.,15-123):
Funding from General Fund? Grant/Amendment Information Document Type: Effective Date:	○Yes       No       If <b>n</b> (for grants acceptance and         Department Code:         Termination Date:	Yes \$% awards)
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Funding from General Fund?         Grant/Amendment Information         Document Type:         Effective Date:         Match Amount: \$	○Yes ● No       If ` <b>n</b> (for grants acceptance and         Department Code:         Termination Date:	Yes \$% awards)
Funding from General Fund? Grant/Amendment Information Document Type: Effective Date: Match Amount: \$ *All Funding Source(s) require *Match funding from General *Match funding from other so	○Yes ● No       If `` <u>n</u> (for grants acceptance and	Yes \$       %         awards)       O Award       O Amendment         Grant Number (i.e., 15-123):
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Funding from General Fund? Grant/Amendment Information Document Type: Effective Date: Match Amount: \$ *All Funding Source(s) require *Match funding from General *Match funding from other so *Funding Source: *If Federal funds are received Federal government or passe Contact: Keith E. Rogers Department: Procurement	Yes       No       If         n       (for grants acceptance and Department Code:	Yes \$       %         awards)       O Award       O Amendment         Grant Number (i.e., 15-123):



# MEMORANDUM

Date: July 26, 2017

**To**: Ms. Sharon Bronson, Chair, Pima County Board of Supervisors

From: Mary Jo Furphy, Procurement Director

**Re**: Contract No. CT-WW-17-380, Contract Amendment Ratification Request

Dear Ms. Bronson:

Contract No. CT-WW-17-380 was awarded to PCL Construction, Inc. by the Board of Supervisors on June 20, 2017 for Construction Manager at Risk (CMAR) preconstruction services for the Continental Ranch Regional Pump Station Rehabilitation Project (3CRS05). This contract is for the Regional Wastewater Reclamation Department (RWRD). The contract was awarded in the amount of \$128,048.00 for a term of 06/20/2017 to 06/19/2019. It was anticipated that construction of the project would be phased with at least two (2) Guaranteed Maximum Price (GMP) amendments.

In July of this year, during the pre-construction services activities, a failure of multiple pumps utilized at this pump station occurred, partially flooding the facility. This resulted in a declaration of emergency due to the threat to public health, welfare, property or safety. Since this pump station does not yet have its own dedicated flow management (bypass) equipment, flow management equipment was put into place to bypass the pump station. Since that solution is only an interim measure and very costly, it was determined that the best solution to protect the interests of the County and public is to accelerate construction activities under the CMAR contract.

GMP-1 of this contract in the amount of \$4,202,228.00 incorporates the emergency cleanup activities, the acquisition of permanent flow management equipment for this pump station, construction of the infrastructure to support the permanent flow management equipment, and the equipment's installation. Once the permanent flow management equipment is installed, accepted and operational, the flow management equipment temporarily put in place to manage the emergency will be removed, and activities to rehabilitate the remainder of the pump station may continue.

RWRD is requesting that the contract be amended to incorporate GMP-1 immediately under the authority of the Board of Supervisors' Chair with ratification of the amendment to follow at the August 1, 2017 Board of Supervisors Meeting.

Your signature below will indicate agreement with this request. For ratification, this award amendment will be processed for inclusion on the August 1, 2017 Agenda.

Sharon Bronson, Chair, Pima County Board of Supervisors

JUL 26 2017

Date

APPROVED:

Approval of this action is to mitigate any potential threat of discharge into the Santa Cruz River and acknowledges the direction to Procurement to accelerate construction activities under the CMAR contract with PCL Construction, Inc.

C. Pudielbaun

C.H. Huckelberry County Administrator

7/26/17

Date

ATTEST:

Nerk, Board of Supervisors Pima County, Arizona

PIMA COUNTY R RECLAMATION	REGIONAL WASTEWATER DEPARTMENT				
PROJECT:	Construction Manager At Risk S for Continental Ranch Regional Station Upgrade Project (3CRS0	Pump	CONTI NO. CT-WW- AMENDMENT NO.	17-	and the second second second second
CONTRACTOR:	PCL Construction, Inc. 1711 W Greentree Dr, Suite 201 Tempe, Arizona 85284	l		ppear lence	on all and this
CONTRACT NO.	: CT-WW-17-380				
	<b>O.:</b> One (1)				
-	nal Wastewater Reclamation Dep ations	partment		17 10 17 a	
	<b>//:</b> 06/20/2017 - 06/19/2019 <b>RIOR AMENDMEN</b> T: NA		L CONTRACT AMOUNT: MENDMENT(S):	\$ \$	128,048.00
	HIS AMENDMENT: 06/19/2019		THIS AMENDMENT:	φ \$	4,202,228.00
		REVISED	CONTRACT AMOUNT:	\$	4,330,276.00

#### CONSTRUCTION CONTRACT AMENDMENT

WHEREAS, COUNTY and CONTRACTOR have entered into the Contract for the project referenced above; and

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

WHEREAS, Guaranteed Maximum Price No. One (GMP-1) shall pertain to project Phase 1; and

WHEREAS, COUNTY and CONTRACTOR, pursuant to Article 2, have agreed to incorporate GMP-1 into the contract for Phase 1 construction activities, including operation of temporary flow management equipment for the project, acquisition of equipment for permanent flow management facilities, construction of the permanent flow management facilities and for all other related construction activities; and,

**WHEREAS**, 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; and,

**WHEREAS**, COUNTY and CONTRACTOR pursuant to Article 3 have agreed to increase the Contract amount as identified in GMP-1.

NOW, THEREFORE, it is agreed as follows:

#### CHANGE: ARTICLE 3 – PRE-CONSTRUCTION SERVICES FEE AND GUARANTEED MAXIMUM PRICE

#### Insert after Paragraph B:

Guaranteed Maximum Price-1 (GMP–1) for acquisition of equipment and all construction activities as identified in APPENDIX "F" is Four Million, Two Hundred and Two Thousand, Two Hundred Twenty-Eight Dollars and No Cents (\$4,202,228.00). COUNTY reserves the right to negotiate the construction fee, overhead rate, and all other elements of future GMPs, if any.

#### ADD: AS APPENDIX "F"

APPENDIX "F": Construction Manager at Risk (CMAR) Services for Continental Ranch Regional Pump Station Rehabilitation (3CRS05) GMP-1, proposal dated July 25, 2017 (38 pages, attached).

This Amendment shall be effective on July 26, 2017.

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:

haron NONSON

CONTRACTOR:

Signature

Chair, Board of Supervisors

JUL 26 2017

Date

Name and Title (Please Print)

Date

ATTEST:

Clerk of the Board

APPROVED AS TO FORM: Deputy County Attorney

TOBIN ROSEN

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Printed Name

-7/20

Date

This Amendment shall be effective on July 26, 2017.

All other provisions of the Contract, not specifically changed by this amendment, shall remain in effect and be Dinding upon the parties.

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

APPROVED: mon ronson

CONTRACTO Signatur

Chair, Board of Supervisors

JUL 26 2017

Date

iswn yw Britton Secretary / Treamerer

RICHARD HEWITT RUSHDAIZED SIGNER OPERATIONS MANAGER

Name and Title (Please Print)

7-27-2017

Date

ATTEST:

Clerk of the Board

APPROVED AS TO FORM:

**Deputy County Attomey TOBIN ROSEN** 

Printed Name

7/26 17 Date

APPENDIX "F": Construction Manager at Risk (CMAR) Services for Continental Ranch Regional Fump Station Rehabilitation (3CRS05) GMP-1, proposal dated July 25, 2017 (38 pages)

Continental Ranch Regional Pump Station Upgrades Project -3CRS05 GMP 1 Summary



	CO	NSTRUCTION
CONSTRUCTION COSTS- GMP 1		AMOUNT
Cost of Construction	\$	2,879,547
CMAR Contingency	\$	200,000
SUBTOTAL DIRECT CONSTRUCTION COSTS	\$	3,079,547
INDIRECT CONSTRUCTION COSTS		
General Conditions	\$	239,719
Overhead (6.21%)	\$	223,908
Insurance	\$	38,421
Payment & Performance Bonds	\$	24,013
SUBTOTAL DIRECT CONSTRUCTION COSTS + GC's, OH, Insurance, Bonds	\$	3,605,608
Construction Fee (8%)	\$	288,449
SUBTOTAL DIRECT CONSTRUCTION COSTS + GC's, OH, Insurance, Bonds, F	ee \$	3,894,057
AZ Gross Receipts Tax (MRRA)	\$	108,171
GMP 1 TOTAL	\$	4,002,228
OTHER PROJECT COSTS		
County Contingency	\$	200,000.00
TOTAL CONTRACT	\$	4,202,228

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		Date	July 25, 2017
		Time	3:56:41 PM
<u>ea</u>		BE Number	BE170920
		Opportunity No	52170920
		Owner File No	
		Estimator	
		Lacingtor	
	PCL Construction, Inc.		
	Water Infrastructure Group		
	Conceptual Estimate Report		
Project	Continental Ranch Regional Pump Station Upgrade Project (3CRS05)	Bid Closing	
Location	Marana		
Owner	Pima County Wastewater Management Dept.	Project Start	July 24, 2017
Designer	Westland Resouces, Inc.	Project Completion	December 29, 2017



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BE Number BE170920 Opportunity No Owner File No

#### PCL Construction, Inc. Water Infrastructure Group General Estimate Summary

Summary Page 1 of 2 Jul 25, 2017 3:56:41 PM

Project Continental Ranch Regional Pump Station Upgrade Project (3CRS05) Location Marana

Name Description	Quantity UOM	Hours	Labor Rate	Total	Hours	Equipmer Unit	it Total	Servi Tools / Unit	Supplies Total	Unit	erial Total	Unit	ontract Total	u Unit	otal Cost Total
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C 3 Concrete	1 15	1,550	38.93	60,364	619		18,848		14,432	_	24,491		44,625		16
oc 5 Metals	1 LS	131	37.99	4,990	24		2,114				24,810		43,816		
oc 9 Coatings	1 LS												98,623		
DC 11 Equipment	1 ال	168	37. <del>9</del> 1	6,368	30		2,643		450		339,751		-		34
DC 15 Mechanical	1 [5	804	35.87	28,843	265		10,108		560		556,591				5
DC 16 Electrical	1 LS	96	39.42	3,784	72		3,109				935		246,795		2
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INDIRECT CONSTRUCTION COSTS 5E 17 General Conditions 5E 7 Overhead 5E 9 Insurance 5E 8 Payment and Performance Bonds	1 LS 1 LS 1 LS 1 LS	2,340	79.13  	185,168 	1,038 		14,651		39,900 		223,908				2:
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PCL
BE Number

BE170920

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PCL Construction, Inc. Water Infrastructure Group General Estimate Summary Summary Page 2 of 2 Jul 25, 2017 3:56:41 PM

Opportunity No Owner File No Project Continental Ranch Regional Pump Station Upgrade Project (3CR505) Jocation Marana

Location Sheet	Marana				Labor			Equipmer	nt de la	Ser	rices / Supplies	Mat	erial	Sub	ontract	To	otal Cost
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Project Continental Ranch Regional Pump Station Upgrade Project Location Marana

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PCL Construction, Inc. Water Infrastructure Group Item Analysis Sheet

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	1 LS 1 EA 1 EA 0 f Prc 1 LS 8 HR 8 HR 8 HR 0 HR 10 HR 10 HR 10 TN 15 TN	1 LS 1 EA 0 f Project 1 LS 8 HR 1.000 8 HR 1.000 Entrance 20 HR 1.000 10 HR 1.000 10 TN 15 TN	1 LS 1 EA 1 EA 0f Prcject 1 LS 8 HR 1.000 1.000 8 HR 1.000 1.000 Entrance 20 HR 1.000	1 LS	1 LS	1 LS       1.00 LS         1 EA           1 EA           of Project       1.00 LS         1 LS           0 F Project       1.00 LS         1 LS           8 HR       1.000       1.000       24 LT 28.83         8 HR       1.000       1.000       20 LT 28.83         90 HR       1.000       1.000       20 PT 42.85         90 HR       1.000       1.000       20 PT 42.85         90 HR       1.000       1.000       20 PT 42.85         90 TN            90 TN            91 TN            92 TN	1 LS       1.00 LS         1 EA           1 EA           0 f Project       1.00 LS         1 LS           1 LS           8 HR       1.000       1.000       24 LS 28.83         8 HR       1.000       1.000       24 LS 28.83         9 HR       1.000       1.000       20 LS 28.83         9 HR       1.000       1.000       20 LS 28.83         90 HR       1.000       1.000       20 P32         10 TN           15 TN           15 TN	1 LS       1.00 LS	1 LS       1.00 LS	1 LS       1.00 LS       -       -       350.00       350         1 EA       -       -       -       -       -       625.00       625         of Project       1.00 LS       -       -       -       625.00       625         1 LS       -       -       -       -       -       -       625.00       625         8 HR       1.000       1.000       24       10.00       28.83       692       -       -       -         8 HR       1.000       1.000       20       10.00       8       10.00	1 LS       1.00 LS       -       -       -       350.00       350       -         1 EA       -       -       -       -       -       625.00       625       -         1 EA       -       -       -       -       -       625.00       625       -         of Project       1.00 LS       -       -       -       -       -       -       -         1 LS       -       -       -       -       -       -       -       -       -         8 HR       1.000       1.000       24       102 28.83       592       -       -       -       -       -         8 HR       1.000       1.000       20       102 28.83       577       -	1 LS       1.00 LS       -       -       350.00       350       -       -         1 EA       -       -       -       -       -       625.00       625       -       -         1 EA       -       -       -       -       -       625.00       625       -       -         of Project       1.00 LS       -       -       -       -       -       -       500         8 HR       1.000       1.000       24 <sup>LED</sup> 28.83       692       -       -       -       -       -       -       -       500         8 HR       1.000       1.000       20 <sup>LED</sup> 28.83       692       - <t< td=""><td>1 LS       1.00 LS      </td><td>1 LS       1.00 LS       -       -       350.00       350       -</td><td>1 LS       1.00 IS       -       -       350.00       350       -       -       350.00         1 EA       -       -       -       -       625.00       625       -       -       625.00         1 EA       -       -       -       -       625.00       625       -       -       625.00         of Project       1.00 LS       -       -       -       -       -       625.00       625       -       -       -       625.00         8 HR       1.000       1.000       24 <sup>LT3</sup>       28.83       692       -       -       -       -       -       -       66.50         8 HR       1.000       1.000       26 <sup>LT3</sup>       28.83       692       -       -       -       -       -       -       -       -       -       -       -       -       -       -       66.50       -       &lt;</td></t<>	1 LS       1.00 LS	1 LS       1.00 LS       -       -       350.00       350       -	1 LS       1.00 IS       -       -       350.00       350       -       -       350.00         1 EA       -       -       -       -       625.00       625       -       -       625.00         1 EA       -       -       -       -       625.00       625       -       -       625.00         of Project       1.00 LS       -       -       -       -       -       625.00       625       -       -       -       625.00         8 HR       1.000       1.000       24 <sup>LT3</sup> 28.83       692       -       -       -       -       -       -       66.50         8 HR       1.000       1.000       26 <sup>LT3</sup> 28.83       692       -       -       -       -       -       -       -       -       -       -       -       -       -       -       66.50       -       <													

PCL Construction, Inc.



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BE Number BE170920 Opportunity No

Owner File No

Project Continental Ranch Regional Pump Station Upgrade Project Location Marana PCL Construction, Inc. Water Infrastructure Group Item Analysis Sheet

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DC 1 Division 1						1.00	) LS							Ргор	prietary and C	Confidenti
vo, Description	Quantity LIOM	Units Per Hours	ManHrs Per Unit	Hours	Labor \$ / hr	Total	Equip \$/hr	ment. Total	Serv Tools/! \$/ItemUnit	Aces/ Supplies Total	Perm. M \$/ItemUnit	laterial Total	SubCo \$/ItemUnit	ntract . Total	Total Unit	Cost Total
Project Dust Control				ł	.00 LS	AND STREET								<b>MARKE</b>		
Tank Tri Water 500 Gal	5 MO	1.000	1.000				598.82	2,994							598.82	2,9
NESHAP Permit	1 LS									600						
Demo Inspection	1 لـS					<u>.</u>				1,000						1,0
SWPPP and Dust Control	1 LS			72	34.28	2,468	5.02	4,479		2,575		1,475				10,9
<b>Femporary Utilities</b>	1 LS															
Setup Site Office Three offices	1 LS															
Mobilize Site Offices	1 EA										1,500.00	1,500			1,500.00	1,5
Office Furniture/Materials	1 EA										5,000.00	5,000			5,000.00	5,0
2 Setup Office	1 EA	0.063	16.000	32	<sup>LG3</sup> 28.83	923								Sala Cashan	922.66	9
Setup Site Office	1 LS			32	28.83	923	<u> </u>				建設書	6,500				7,4
Temporary Contractors Tool Connex/Trade Shack	1 LS															
Setup Connex/Trade Shack (	Onsite)				.00 LS											
Set Up Connex-Labor	16 HR	1.000	1.000	16	<sup>wks</sup> 37.48	600									37.48	
Set Up Connex-Material	2 EA						<u></u>		500.00	1,000				Cont. Cont. and	500.00	1,0
Water Coolers	4 EA								50.00	200		L			50.00	
4 Drinking Water & Ice	5 MO	<del></del>							50.00	1,000					200.00	1,0
Temporary Contractors Tool Connex/	1 I.S			16	37.48	600	<u>.</u>			2,200						2,80
QC Testing	1 LS														1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
QC Testing	1 LS					- 100 - <del></del>				10,000		Lunio				10,0
QC Testing	<u>1 LS</u>									10,000	- 1999					
#10140-00714-0071						-49.6169.516.751		antipercel (31.3)	á	1.51545.552.6339153		problems and		14426423822	1	diameter in

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BE Number BE170920

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Continental Ranch Regional Pump Station Upgrade Project
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PCL Construction, Inc. Water Infrastructure Group Item Analysis Sheet

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			<b>SET POL</b>		Labor		Eouir	oment.	Servi	ces/ upplies	Perm. M	aberial	SubCo	ntract	Total I	Cost
io, Description Q	vantity UOM		ManHis Per Unit	Hours	\$ / hr	Total	\$/hr	Total	\$/ItemUnit		\$/ItemUnit	Total	\$/ItemUnit	Total	Unit	Total
emporary Electrical Power connection	1 LS															
Contr. Field Office Utilites Set Up Electrical Power	کا 1				1.00 LS		<u></u>							8,000		8,0
Temporary Electrical Power Connectio	1 LS	aridaanii Hoolaalii	and Contactor Statistics								antes de <del>con</del>			8,000		8,00
emporary Site Services	1 LS															
Site Services; Constr. Operati	ions				1.00 LS											
Garbage Pickup; Onsite Rollaway	5 MO				-				800.00	4,000					800.00	4,0
Janitorial Services at Site Trailers	5 MO		<u></u> -				······		300.00	1,500					300.00	1,5
remporary Site Services	15				i History					5,500						5,5
Temporary Utilities	1.15			4	31.72	1;522				17,700		6,500		8,000		33,
Construction Facilities	1 LS															
Temporary Construction Equipment; Onsite	1 LS															
Construction Support Equipment	t				1.00 LS											
	6,178 MH				-				0.700000	4,324			<del></del>		0.700000	4,3
Safety Supplies 14	5,078 EA				-		<u></u>				0.014000	2,031			0.014000	2,0
Femporary Construction Equipment;	1 I.S									4,324		2,031				6,3

1	100		100		
1.6	27.97			104	•
-82	2012	1.00	-512	100	0
		1.1	1.1	-	1
17	- 199	2.2		-	r
~	100		1.00	~	

\\PCLINC.Network.ads\Civil Southwest\District Office\District Shared\ESTIMATING\8ID5-CURRENT\Sp

Water Infrastructure Group Detail Page 5 of 29 BE170970 BE Number Opportunity No **Item Analysis Sheet** Owner File No Continental Ranch Regional Pump Station Upgrade Project Project Marana Location 1.00 LS DC 1 **Division 1** Proprietary and Confidential Perm. Material SubContract Labor Equipment: Services/ Teols/Supplies Total Cost Units Per Hours ManHrs Per Unit No. Description Quantity UOM Total Total \$/ItemUnit Total Unit \$/hr \$ / hr Total \$/ItemUnit \$/ItemUnit Total Total Hours **Construction Facilities** 1 I.S 4,324 6,355 2,031 Testing, Training and Facility Start-1 LS Up Leak test 1 LS 24 LGS 28.83 Leak test Labor 24 HR 1,000 1.000 692 28.83 692 ---2 ا 500 500 Testing STS ---Leak test 1 LS 24 28:83 692 500 1,192 Start-Up Testing/Commissioning 1 LS 14 Day 70 LGS 28.83 70 HR 1.000 1.000 2,018 28.83 2,018 Startup Labor 100 2,500 Testing STS کا 1 ----2,500 . 4,518 Start-Up Testing/Commissioning 1 LS 70 28.83 2,018 2,500 Testing, Training and Facility Start 94 28.83 2,710 3,000 5,710 1 LS First Aid and Safety STS 100 % **Division 1** LS

DC 1

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PCL Construction, Inc.

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BE Number

PCL Construction, Inc. Water Infrastructure Group **Item Analysis Sheet** 

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DC 1 Division 1		1993 1993 - 1995 1993 - 1995				1,0	0 LS							Proj	prietary and C	onfidentia
Vo. Description	Quantity UOM	Units Per	ManHis		Labor		Equip	ment 🖉 🗧	Serv Tools/	rices/ Supplies	Perm. M	lateria)	SubCo	ntract	Total	Cost
No. Description	Quantity DOM	Hours	Per Unit	Hours	\$7 hr	Total	\$/hr	Total	\$/ItemUnit	Total	\$/ItemUnit	Total	\$/ItemUnit	Total	Unit	Total
Medical/Drug Testing	5 EA								75.00	375					75.00	37
Training & Orientation	5 EA								35.00	175					35.00	17
F.A. & Safety Supplies	6,178 MH								0.120000	741					0.120000	74
Fire Protection	6,178 MH			-					0.070000	432					0.070000	4
Safety Supplies	145,078 EA										0.014000	2,031			0.014000	2,03
Safety Equipment									1						1	
Air Monitors	5 MO	1.000	1.000				160.25	801							160.25	80
Rescue Tripod w/yo yo	5 MO	1.000	1.000				160.25	801							160.25	80
Yo Yo Winch	5 MO	1.000	1.000				67.57	338					—		67.57	33
					1				1						1	
First Aid and Safety STS	100 %						0:7477	1,940		1,724	20.31	2,031			56.95	5,69
Surveying	1 LS													9946.) 105019		
Field Engineering (Onsite)					5.00 MO											
Total Station/Survey Equipment	5 MO	1.000	1.000		-		1,605.64	8,028			·····				1,605.64	8,02
Survey Requirements	'			1	2.00 HR	<b>DOLEN</b>										
Licensed Surveyor	24 HR		l								160.00	3,840			160.00	3,84
Licensed Surveyor, As-Built Drawings	8 HR										160.00	1,280			160.00	21-2-2-100-000-001
					-							CCP 202				
Surveying	1 LS						9.28	8,028				5,120				13,14
Hourly Worker Housing	1 LS															
Per Contract																
2 Hotels	110 DY				-   -				в5.00	18,700					170.00	18,70
5 Subsistence (Hourly Workers)	110 DY								20.00	11,000					100.00	11,00
Hourly Worker Housing	1 IS	344-01 <u>844</u>						1260 <u>-</u>		29,700						29,7(
ny teo ar amang ng teo an 10 kaling 1999 yang pang pang ng kitanan dari ka sa ang manang minang kaling kaling n T	and a contract of the second second second	energing of the second s			and the second design											

BE170920

# Opportunity No Owner File No

SE Number Opportunity No Owner File No Project Ocation	BE170920 Continental Ra Marana Division 1	inch Regiona	il Pump St	ation Upg	ırade Proj	ect		Wate	r Infrast	uction, ructure G I <b>ysis</b>	гоир	t							ul 21, 21 4:34:30
					Units Per	ManHrs		Labor ,		Equipr	nent	Serv Tools/S	ces/ upplies	e Perm. M	aberial .	SubCo	Propi	rietary and ( Total	Cost
lo, Descripti	on		Quan	uty uom	Hours	Per Unit	Hours	\$/hr	Total	\$7.hr	Total	\$/ItemUnit		\$/ItemUnit	Total	\$/ItemUnit	Total	Unit	Tota
ivision 1	100 m			115			310	32.71	10,142	3.54	15,574		76,623		20,157		8,000		130,4
TIMOLOGINUTION	VII 15							- <b>-</b>				-							

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BE Number BE170920 Opportunity No Owner File No

 Owner File No
 Continental Ranch Regional Pump Station Upgrade Project

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 Marana

PCL Construction, Inc. Water Infrastructure Group Item Analysis Sheet

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TEMP Temporary Bypass Scope		en de ca Referi	nin stein e Gelectrich	hunderen Kaldena		1.0	DLS							Ргор	rietary and Co	onfidentia
No: Description	Quantity UOM	Units Per Hours	ManHirs Per Unit	Hours	Labor \$ / hr	Total	Equip \$ /.hr	nent Total	Serv Tools/S \$/ItemUnit	ices/ Jupplies Total	Perm. M \$/ItemUnit	的自由的意思已经	SubCo \$/ItemUnit	ntract Total	Total ( Unit	Cost Total
Fomporany Bunass Scop		911-0212 220629	100900000000000000000000000000000000000	-9656-2403-348	THERE A MELANERSKI			<u>1000 600 85</u>	of Charles and And		MARING CONTRACTOR				CREASE TO A CORRECT OF	Shink Sanda
Temporary Bypass Scop	c			1												
Cemporary Bypass Scope	1 LS															
B&F						國語語										
Bypass Equipment Rental	1 LS		·											5,765		5,7
Setup/ Installation of FMP Pump Station	1 LS				—						—			5,738		5,7
Remove Bypass Pumps, Pipe, Fitting	1 LS		—		—			1.00						3,825	—	3,8
Flow Management Plan Submittal	1 LS		—		—				—		—			1,250		1,2
System Pump, Pipe, Plugs, Manifold, Fittings and Valve Rental (2 Primary & 1 Backup)	5 140 DY											1.10 or	1,431.00	200,340	1,431.00	200,3
Tool Truck, spill kit, compressor & Light Plant @ suction manhole	140 DY							-					150.00	Transfer S	150.00	21,0
Fuel per 24 Hour Day (362 Gal/ Day)	50,680 DY							10.460		-			3.75	190,050	3.75	190,0
Daily Monitoring Labor costs for Bypass System	140 DY												2,362.00	330,680	2,362.00	330,6
Traffic Control	5 MO												1,725.00	8,625	1,725.00	8,6
Asphalt/ Concrete Restoration	1 LS													3,500		3,5
Adds per John's Request																
Additional Redundency Requirements Setup	2ـا 1													5,000		5,0
Additonal Discharge Piping	140 DY					-							130.00	18,200	130.00	18,2
Bond	793,973 \$		_								0.015000	11,910			0.015000	11,9
Temporary Bypass Scope	115									Marka Marka	and a state	11,910		793.973		805,8
n an	nandi Xdi X I Hali (1953)		NANGHIGTER AN ANN				an states and states in the					0.000		<u>, , , , , , , , , , , , , , , , , , , </u>	AND CONTRACTOR OF	
Temporary Bypass Scope	2ا 1											11,910		793,973		805,8
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BE170920 BE Number Opportunity No Owner File No

Continental Ranch Regional Pump Station Upgrade Project Marana Project Location

PCL Construction, Inc. Water Infrastructure Group **Item Analysis Sheet** 

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DC 2 Site Work		s of the second				1.0	0 LS							Ргорг	etary and Confiden
No. Description	Quantity UOM	Units Per Hours	ManHrs Per Unit	Hours	Labor \$/hr	Total	Equip \$ / hr	oment Total	Serv Tools/S \$/ItemUnit	ices/ Supples Total	Perm. M \$/ItemUnit	aterial Total	SubCo \$/ItemUnit	ntract Total	Total Cost Unit: Tota
Site Work		2020-0-0-002		591,0013-3			anat di Sana		30 <u>222</u> 232 24					a pertis	
KE&G Scope	1 LS														
Demo Wall and Footings	1 15									的社会问题					11-18時度 11-18日
Demo Wall/ Footing	1 LS				-									11,300	
Demo Gate	2ـا 1				- 1			3236						670	
Demo Cap 22" Sewer	2ا 1					-								4,900	4,9
Demo Recirc Tank / Piping	2ا 1				- 1									7,800	- 7,8
Demo Bollards	2ا 1				- 1	-								200	
Excavate/Install Shoring	2ـا 1									Lange -				152,500	152,
Backfill- wet well and FMP SOG	1 LS					-								69,390	69,3
Subgrade Prep - Wet well/ FMP SOG	1 LS													9,009	— 9,0
Relocate Utilities	1 ل				-	- 1943								5,000	5,0
Demo Wood Planter	1 لع													252	
Bonds	2ا 1													2,610	- 2,0
Demo Wall and Footings	1LS													263,631	263,6
											0440000000000000		Si sekon energia de seguere		Sectorization and sectors
KE&G Scope	1 LS	2013 S.H.		-		S CONTRACTOR			1920-192 <u>80</u>		A DESCRIPTION OF A DESC			263,631	263)
Underground Utilities	339 LF					Service Service									
Pipe Zone Material - PAG Sand	220 TN							St. 85910			12.00	2,640			12.00 2,0
Pipe Rigging STS	1 LS									2,000	*****	2,010	1		- 2,
ripe kiggnig 515								の日本語の							
20" Force Main	339 LF														
T STANDARD-UNITZÄITE-MITTÄINT			1	1	DC	1	Site Wo	1	<u> </u>	1			1		1.00



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Project Continental Ranch Regional Pump Station Upgrade Project Location Marana PCL Construction, Inc. Water Infrastructure Group Item Analysis Sheet

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DC 2 Site Work						1.0	0 LS							Ргор	rietary and C	onfidentia
	Quantity: UOM	Units Per	ManHirs		Labor		Equip	nent.	Serv Toals/S	ices/ Supplies	Perm. M	laterial	SubCo	ntract	Total	Cost
No. Description	Quantity: DOM	Hours	Per Unit	Hours	\$ / hr 🍃	Total	<b>\$/</b> hr	Total	\$/ItemUnit	Total	\$/ItemUnit	Total	\$/ItemUnit	Total	Unit	Total
Dig / Lay / Bury	222.45		0.350		<sup>₽11</sup> 50.46										47.64	
Foreman	339 LF	4.000	0.250		MX5 35.99	4,276	····								12.61	4,2
2 Yard Pipe Crew	339 LF	4.000	0.250			6,101								and the second	18.00	6,10
Bckho 321DL 1.83cy -O	339 LF	4.000	0.250		OP2 42.85	3,631	11.13	3,774							21.84	7,40
Ldr 966G RT w/GP-4.5cy -0	339 LF	4.000	0.250	85	<sup>OP2</sup> 42.85	3,631	16.88	5,723							27.59	9,35
Trench Compactor 24"-33"-O	339 LF	4.000	0.250				4.37	1,483							4.37	1,48
Trench Box	3 WK										850.00	2,550	·····		850.00	2,55
Valve adjustments	5 EA				MY5											
2 Yard Pipe Crew (LFM+PLL+2LG5)	5 EA	0.500	2.000		<sup>MX5</sup> 35.99										143.97	
Bckho 321DL 1.83cy -0	5 EA	0.500	2.000		<sup>OP2</sup> 42.85	The second se									174.76	
Bckho-Ldr Ct 420C 1.0cy	5 EA	0.500	2.000		<sup>OP2</sup> 42.85	428				•••••				ALC: CONTRACTOR	129.15	
Trench Compactor 24"-33"	5 EA	0.500	2.000	10	<sup>OP2</sup> 42.85	428	34.99	175				Contraction of the			120.69	60
Concrete	2 CY										101.00	202		And Addition	101.00	20
Valve adjustments	5 EA	0,100	10.000	50	40.10	2,005	27,92	838		(1997) <del></del>	40.40	202	A CONTRACTOR		608.96	3,04
Test	1 EA														ł	
2 Yard Pipe Crew (LFM+PLL+2LG5)	1 EA	0.125	8.000	16	<sup>™xs</sup> 35.99	576						and a second			575.87	5
Comp 185 CFM Diesel	1 EA	0.125	8.000				125.83	126							125.83	1.
Test	1 EA	0.063	16.000	<u>16</u>	35.99	576	15.73	126							701.70	70
20" Force Main	339 LF	0.692	1.445	490	41.29	20,221	35,23	11,943			8.12	2,752			103.00	34,91
										ner geleg Desserop						
Underground Utilities	339 LF	0.692	1,445	490	41.29	20,221	40.87	11,943		2,000	15.91	5,392			116.68	39,5
Precast	1 LS															
Purchase Precast Materials				:	1.00 LS											
Wet Well Vault	1 LS				ļ <del></del>			Rest of the				39,274				39,2
Dry Pit Vault	1 LS											19,800			-	19,8

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BE170920 BE Number

Opportunity No Owner File No Project Location Continental Ranch Regional Pump Station Upgrade Project Marana

PCL Construction, Inc. Water Infrastructure Group **Item Analysis Sheet** 

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DC 2 Site Work						1.0	) LS							Ргор	rietary and C	Confidentia
No. Description	Quantity UOM	Units Per Hours	ManHrs Per Unit	Hours	Labor \$/hr	Total	Equip \$ / hr	ment Total	Sen Tools/! \$/ItemUnit	/ices/ Supplies Total	Perm. N \$/ItemUnit	和中国的政治	SubCo \$/ItemUnit	Competition as	Total Unit	Cost Total
Valve Vault	ی 1	TRANSPORT STREET	aning secondary				and Catholic			Sept. Convers		13,500	<ul> <li>COLUMNERSON SECTION</li> </ul>			13,50
Misc Core Drilling	1 لع							·····				1,500				1,50
Set Valve Vaults/Cover					.00 EA											
Set Valve Vaults	3 EA	0.063	16.000	192	™×5 35.99	6,910				사망함(14)				-	2,303.50	
240 Ton Hydraulic Crane OPERATED	24 HR								499.55	11,989					499.55	1.
Crane Mobilizations	2 EA								3,000.00	6,000					3,000.00	6,00
Grout STS	2ا 1									500						50
Grout Precast Penetrations	6 EA	0.063	16.000	96	<sup>™x₅</sup> 35.99	3,455						Charles		10.07	575.87	3,45
Precast	1 15			288	35.99	10.366	<u>(ja kurista</u>			18,489		74,074				102,92
an na 271 an 271 an 271 an 281 an		of some substances	103-905-946-20-945				112424010001200120120		STONE CONTRACT			1999		AND REAL PROPERTY OF	and the statement	
											· ·					1202
ite Work	1LS			778	39.33	30,586	40.87	11,943		20,489		79,466		263,631		406,11
		04464766	NORTHERN HE	ud filteritet er		59 philes philos	-Solid the plant	ಂಭವನ್ನಷ್ಟುವು	STATES OF ANDER		n (esterioritation) -	Skielen o	, enneritenten en e	internation (19	-Sitteriffitian	Revealant
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BE Number Opportunity No Owner File No Project	BE170920 Continental Ranch Regiona Marana	al Pump Station Upg	irade Proj	ject		Wate	Constr er Infrast n Ana		Эгоир	et							e 12 of 29 Il 21, 2017 I:34:30 PM
ocation DC 3	Concrete						1.00	) LS							Ргорі	rietary and Co	onfidential
No: Descripti	on	Quantity UDM	Units Per Hours	ManHrs Per Unit	Hours	Labor \$ / hr	Total	Equip \$ / hr	iment Total	Serv Tools/5 \$/ItemUnit	ices/ Supplies Total	Perm. Mat \$/ItemUnit	<b>用出行的运动的</b> 计计	SubCont \$/ItemUnit	bract Total	Total ( Unit	Cost Total
Concret concrete	е	228 CY			ALLEY CONTRACT												
Four Boki	ep htities hdation Prep ho-Ldr Ct 420C 1.0cy hch Compactor 24"-33"	3,488 SF			3,488	.00 .00 SF .00 SF .00 SF .00 TN		250. 250. 250.	.000		LG3 OP2 OP2	13.	00		Sidney and Difference	ckho-Ldr 'rench Co	
Sub Grade P	ana ang 🗩 panahananan panaha panaha ata panaha ata panahanan panahan panahan sa	3,488 SF					20124										
Concrete For Fab Formwor Fab SOG & Ft	k	3,409 SF 1,679 SF 324 SF															
Fab SOG F 3/4" Finfor Dimen. Lur	m Plywood nber (2x4-2x10)	324 SF 356.40 SF 712.80 BF	8.000	0.125	32/ 41 	.00 <sup>MXI</sup> 37.00 —-	1,499			1.05 0.600000						4.63 1.05 0.600000	1,49 37 42
Form Hard		324 SF 324 SF	8.000	0.125		 37.00	1,499			2.78	97 899					0.300000	2,39
Fab Wall For		1,355 SF															
Ren Retaining \	t all inside forms an tal Wall Forms Nall b Out Rental Forms	d half of the o 1,355 SFM 2 LDS	utside —	forms 	1,35					3.50	4,743		3,000			3.50 1,500.00	4,74 3,00

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E Number BE170920 poortunity No							ructure (	•	<b>.</b>						Detail Page	e 13 of 2 il 21, 203
wner File-No					Item	n Ana	iysis	Shee	τ							:34:30 P
roject Continental Ranch Regional F ocation Marana	ump Station Upg	jrade Proj	ect													
DC 3 Concrete						1.00	) LS							Ргор	rietary and Co	onfidenti
	0	Units Per	ManHrs		Labor		Equip	ment	Serv Tools/S	ices/ Jupplies	Perm. M	aterial	SubCo	nbact	Total (	Cost
io, Description	Quantity UOM		Per Unit	Hours	\$/hr	Total	\$ / hr 🔄	Total	\$/ItemUnit	Total	\$/ItemUnit	Total	\$/ItemUnit	Total	Unit	Total
Load/Unload Rental Forms	16 HR	1.000	1.000	16	<sup>MX1</sup> 37.00	592									37.00	5
	1 355 55	10.000	0.050	75	MX1 37.00										7.00	
Assemble/ Disassemble Form Sys - Vault Form Hardware	1,355 SF 1,355 SF	18.000	0.056		37.00	2,785		ni, mu	0.300000	407				hadeni ki sa Jashu Mara mulaya	2.06 0.300000	2,7 4
Scaffold Planks	84 LF							AND COMPANY AND STOCKED	5.00	420					5.00	4
							••••••	19613								
ייין איז		Concernence	20202020202020	TERMINAN	2013/02/00/02/22/84				CONTRACTOR AND		and the second second		THE OWNER AND THE OWNER		11110723201070519775209	
Fab Wall Forms	1,355 SF	14.845	0.067	91	37.00	3,377			4.11	5,569	2.21	3,000	REPARTMENTS	Section of	8.82	
ab Formwork	1.679 SF	12.741	0.078	132	37.00	4,876			3.85	6,468	1.79	3,000			8.54	14,3
<b>BO KOMMOR</b>	1,019-01	#12,7 <del>1</del> 1		192	57.00-	ar <del>1</del> ,070	THE REAL PROPERTY INCOME.	Angener Bonder serense			***** <b>1.7</b> 2				10. <b>01</b>	בקדב:
rect and Strip Formwork	3,409 SF															
Totals Formwork	•			3,409	.00 sf											
?Form Oil	3,409 SF								0.030000	102					0.030000	
Erect and Strip Supplies	3,409 SF						·····-		0.250000	852					0.250000	1
				3,409	.00											
50G	409 SF	2.000	0.500	205	<sup>™×1</sup> 37.00	7,567									18.50	7,5
Equipment Slabs	164 SF	1.000	1.000		<sup>MX1</sup> 37.00	6,068	·						—		37.00	6,0
Walls < 15 Foot	2,710 SF	8.000	0.125		<sup>MX1</sup> 37.00	12,535		taxis () Ny Ferder							4.63	12,5
Blockouts	96 SF	1.000	1.000		<sup>MX1</sup> 37.00	3,552								in the second	37.00	3,5
CJ's	30 SF	1.500	0.667	20	<sup>MX1</sup> 37.00	740									. 24.67	
						建築業										
Handrail Lumber 4 Bf per	lf			184	.00 lf											101
Dimen, Lumber (2x4-2x10)	736 BF								0.600000	442					0.600000	
4 Handrails	184 LF	20.000	0.050	18	<sup>MX1</sup> 37.00	681						-			3.70	155157
Bulkhead Mtls: Misc				3(	0.00											
3/4" Finform Plywood	30 SF	_							1.05	32					1.05	
Dimen. Lumber (2x4-2x10)	132 BF								0.600000	79					0.600000	
													1		I	

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nocation Marana DC 3 Concrete						1.00	) LS							Ргор	rietary and Co	onfidentia
No. Description	Quantity LIOM	Units Per Hours	ManHrs Per Unit	Hours	Labor \$/hr	Total	Equi \$ / hr	iment Total	Serv Tools/ \$/ItemUnit	rices/ Supplies Total	Perm. M \$/ItemUnit	laterial Total	SubCo \$/ItemUnit	nbact Total	Total ( Unit: (	Cost Total
Blockouts		Distant States of the	IN AREASIN	2000pticlasconstropedere	.00 SF	an 1 Marine and			6 77 <b>100 102 102</b>				Canal South			
NOTE: Check Formula "He	ow many reuses"															
3/4" Finform Plywood	96 SF								- 1.05	101		<u> </u>		한물리	1.05	1
Dimen. Lumber (2x4-2x10)	211.20 BF								0.600000						0.600000	1
The Add of Web as whet if the Add and t	a para di sua di su	nolisiamentorisetta		Non-Columbia	i datat takakatat dike	and femalestings	initiatu turtututu		a verse Pareticiation		(minimized and a state of a		-upustos pedieko kapal		-dataten napizana	
rect and Strip Formwork	3,409 SF	4.050	0,247	842	37.00	31,143			0,508753	1,734	-				9.64	-32,87
	2 400 CT	0.000	0.000		07.00					0.000	0.000000	2000		No. 10 Percenter		
Concrete Formwork	3,409 SF	3,502	0,286	973	37.00	36,019				8,202	0.880023	3,000			13,85	. 47,22
3300 Cast In Place Concrete	238 CY															
	200 01							1211日1日								
oncrete Materials	249.90 CY															
TOTAL CONCRETE				236	.00 Cy											
CONC BASE BID					.00											
Conc.3000 Psi	238 CY										86.00			- 313	86.00	20,4
Conc.3000 Psi Waste 5%	11.90 CY					1000					86.00	1,023			86.00	1,0
Super Plastizer	238 CY		·····		<u></u> -				- 5.00	1,190					5.00	1,1
Fiber Mesh	1 LS							Service Control		1,000				and the second second		1,0
Conc. Placing Supplies	238 CY								0.350000	83					0.350000	
conc. Theory Supplies									0.00000						0.0000	
Concrete Materials	249,90 CY	20024							9.10	2,273	86.00	21,491			95,10	23,76
Concrete Placement	238 CY															
Total Concrete CY				23	8.00											
					]							12 State				
				23												
SOG	178 CY	1.500	0.667	119		4,345			B			L			24.41	
Walls	50 CY	1.500	0.667	33	<sup>MK7</sup> 36.62	1,221		-	162 72			Wall in the			24.41	1,2

PCL Construction, Inc.

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BE Number BE170920

BE Number Opportunity No Owner File No

Project Continental Ranch Regional Pump Station Upgrade Project Location Marana PCL Construction, Inc. Water Infrastructure Group Item Analysis Sheet

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DC 3 Concrete						1.00	) LS	Proprietary and Confidential												
No. Description	Quantity UOM	Units Per Hours	ManHrs Per Unit	Hours	Labor	Total	Equip	ment Total	Sen Tools/! \$/ItemUnit	ices/ Supplies Total	Perm. N	and the second state	SubCo \$/ItemUnit	the state of the second se	Total Unit	Cost Total				
Equipment Pads	10 CY	0,250	4.000	and the second second	\$/hr <sup>MX7</sup> 36.62	1,465	\$/hr	्रचामया	synemunic 		\$/ItemUnit				146.47	1,46				
Equipment Fee	10 01											<b>.</b>	1							
Crane & Bucket Concrete Pump (SOG & Walls)				( 238	.00 CY															
120 Ft Boom Pump (36m)	18.31 HR			236	.00 CY				130.00	2,380					130.00	2,38				
Conc Pump Charge 92 to 120 ft Boom	238 CY								2.00	476					2.00	47				
Concrete Placement	tel Halandeler sonat	CALENCE PROVIDENCE	Kongelaterunen		uniter set statistic			Terrestate point			idadamas adagate	-				and the second				
concrete Placement	<u>238</u> CY	1.240	0.807	192	· 36.62	7,031			12.00	2,856	an a		- 63960 - <del></del>		41.54	9,887				
03300 Cast In Place Concrete	238 CY	1.240	0.807	192	36.62	7,031		300 C.		5,129	90.30	21,491		STREE	141.39	33,651				
03251 Concrete Joints	238 CY																			
Concrete Joint Qty				895																
Joint Prep	895 SF	15.000	0.067	60	<sup>MX7</sup> 36.62	2,185								durin Colora Colorador Antipal colorador	2.44	2,185				
Comp 185 CFM Diesel	895 SF	15.000	0.067		—		1.05	938							1.05	938				
Greencut Supplies	895 SF				—				0.150000				-1		0.150000	134				
Sawcut CJ	16 HR	1.000	1.000	16	<sup>MX7</sup> 36.62	586								del del del del	36.62	580				
Waterstop Qty				121	.00															
Install Waterstops	120 LF	5.000	0.200	24	<sup>MX1</sup> 37.00	888									7.40	88				
03251 Concrete Joints	238 CY	2.388	0.419	100	36.71	3,659	15,73	938		134		Ref.			19,88	4,732				
Conc Finishing	2,710 SF																			
				0 71	00.77															
Quantities Point and Patch Finish	2,710 SF	40.000	0.025		.00 SF <sup>WK3</sup> 37.48	2,539									0.937073	2,53				
Finishing Supplies P/P	2,710 SF								D.030000	81			<u>í</u>	Weight And	0.030000					
Scissor Lift - 32' Electric	1 WK	1.000	1.000				241.17	241					-		241.17	24				
Conc Finishing	2.710 SF	40.000	0.025	68	37,48	2,539	6.03	241	]	81					1.06	2,862				
				ALLENON AND		960 <b>5 1 1 1 1 1 1</b>	Satur Hall State of California	15 ATRACTOR DE	- THE REPORT OF THE PARTY OF TH		- FAILAGE #1002 #5-00	a dittastanta ante	a waterstationation	a characteritette dec	CONTRACTOR OF CONTRACTOR	No.				

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BE Number BE170920

Opportunity No Owner File No

Project Continental Ranch Regional Pump Station Upgrade Project Location Marana PCL Construction, Inc. Water Infrastructure Group Item Analysis Sheet

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	Quantity UOM	Units Per	ManHrs		Labor		Equip	ment	Sen Tools/!	ices/ Supplies	Perm. M	Aaterial	SubCo	ntract	Total	Cost
No: Description	Quantity DOM	Hours	Per Unit	Hours	\$ / hr	Total	\$/ hr	Total	\$/ItemUnit	Total	\$/ItemUnit	Total	\$/ItemUnit	Total	Unit	Total
Curing	238 CY															
Curing	8,852 SF															
Quantities																
Curing Labor	8,852 SF	200.000	0.005	8,852 44	.00 SF <sup>MX7</sup> 36.62	1,621									0.183090	1,62
Cure Supplies	8,852 SF	200.000			50.02	1021			0.100000	885					0.100000	1,02
	0,002.01	•••••	••••••				•••••		0.100000						0.100000	
Curing	8,852 SF	200.000	0.005	- 44	36.62	1,621			0.100000	885					0,283090	2,506
Curing	238 CY	5.377	0.186	44	36.62	1,621.				885					10,53	2,500
		J.J.J.A.		1000.17	20.02	1,021	CHINE SET STREET	AND A STOLEN OF	and the second s		ANE FURTH	And the second sec	THE OWNER OF		222010100: 	2,300
03200 Conc Reinforcement	29.75 TN															
Rebar Sub: Supply & Install	29.75 TN															
Rule of Thumb 250 Lbs per C	Υ			59,500	.00 Lbs											
Rebar Subcontractor																
Concrete Rebar= \$1500 per TM	1			44,62	.00 USD											
Concrete Rebar	2ـا 1													44,625		44,62
		Leasanna ann an a	MARTICREAR	0.0000000000000000	12 months and the second second	I LENGTON CRIMERIA	THE PROPERTY OF NO.						OK CONTRACTOR		Provide Provident	THE REAL PROPERTY OF
Rebar Sub: Supply & Install	29.75 TN						- 1						1,500.00	44,625	1,500.00	44,625
03200 Conc Reinforcement	29.75 TN									Natabase dati Abase database			1,500.00	44,625	1,500.00	44,62
Concrete Equipment	1 LS															
Crane Ruff Ter 40 Ton	1 MO	1.000	1.000	173	<sup>OP3</sup> 54.78	9,496	10,886.21		•••••				ļ <del></del>		20,381.87	20,38
Comp 185 CFM Diesel	1 MO	1.000	1.000		ļ <del></del>	L	2,721.06								2,721.06	sound strengthered
Forklift, RT 8000# Reach	1 MO	1.000	1.000	<del></del>	ļ <del></del>		4,061.05	4,061	ļ	0.000	·		ļ=		4,061.05	4,06
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1	1000	<b>Contract</b>	1000	~
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BE170920 BE Number Opportunity No Owner File No

Project

Continental Ranch Regional Pump Station Upgrade Project

PCL Construction, Inc. Water Infrastructure Group **Item Analysis Sheet** 

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o. Description	Quantity UCM	Units Per	ManHrs		Labor		Equip	strend and the Gallouth with		ices/ Supplies	HAR STORAGE ST	latenal	SubCor	CONSCIENCTION OF	2020/01/01/22/22/2016/	Cost
		Hours	Per Unit	Hours	-\$/hr:	Total	\$ / hr	Total	\$/ItemUnit	AUNIA CONTRACTO	\$/ItemUnit	Total	\$/ItemUnit	Total	Unit	Total
Concrete Equipment				173	54.78	9;496	34.04	17,668			L.			And States and		27,16
CONCRETE	228 CY	0.147	6,800	1,550	38,93	60,364	30,47	18,848		14,432	107,42	24,491	195,72	44,625	713.87	162,7
oncrete	1LS			1,550	38.93	60,364	30,47	18,848		14,432		24,491		44,625		162,70
							1									

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Water Infrastructure Group BE170920 Detail Page 18 of 29 BF Number Opportunity No Jul 21, 2017 **Item Analysis Sheet** Owner File No 4:34:30 PM Continental Ranch Regional Pump Station Upgrade Project Project Marana Location 1.00 LS DC 5 Metals Proprietary and Confidential Perm. Material SubContract Labor Equipment Services/ Total Cost Units Per Hours ManHrs Per Unit Tools/Supplies No. Description Quantity UOM \$/ItemUnit Total Hours \$ / hr Total \$ / hr Total \$/ItemUnit Total \$/ItemUnit Total Unit Total Metals Metals Bid Package 1 LS Covered Work Area (Shade Structure) 1 LS 43,816 43,816 2ا 1 7,500 Stair Landing ----7,500 ---------------1,060 Handrail 106 LF ----10.00 10.00 1,060 .... -Fiberglass Ladder/Platform 1 LS ----8,000 8,000 dir. 2 Fiberglass Ladder 3 EA .... -------2,000.00 6,000 2,000.00 6,000 Supply Manhole Cover 2ا 1 750 ---.... -----750 ..... Valve Vault Hatch 1 ال ---1,500 1,500 Metals Bid Package عا 1 10 R - 1 随机能带 24,810 43,816 調度 68,626 Install Metals 1 LS 35 34.24 Install Handrail 106 LF 3.000 0.333 1,210 11.41 1,210 .... 2,465 3 Install Misc Metals 1.000 1.000 72 <sup>nx8</sup> 34.24 102.72 2,465 24 HR -----PT 24 <sup>DP3</sup> 54.78 2,114 Crane Ruff Ter 60 Ton 24 HR 1.000 1.000 88.09 1,315 142.87 3,429 ---Install Metals 1 I.S 131 37.99 88.09 2,114 1943 影响 4,990 7,104 Metals 1 בו 131 37.99 4,990 88.09 2,114 24,810 43,816 75,730 DC 9 Coatings เร 1.00 \\PCLINC.Network.ads\Gwil Southwest\District Office\District Shared\ESTIMATING\8LDS-CURRENT\Special Projects\Continental Ranch CMAR\Q

PCL Construction, Inc.

BE Number Opportunity No BE170920

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PCL Construction, Inc. Water Infrastructure Group Item Analysis Sheet

Detail Page 19 of 29 Jul 21, 2017 4:34:30 PM

DC 9 Coatings						1.0	) LS							Prop	prietary and C	Confidentia
No. Description	Quantity_LIOM	Units Per Hours	ManHrs Per Unit	Hours	Labor \$7 hr	Total	Equip \$ / hr	ment Total	Ser Tools/ \$/ItemUnit	rices/ Supplies Total	Perm. \$/IbemUn	Material t Total	SubCr \$/ItemUnit	ntract Total	Total Unit	Cost Total
Coatings	a 2004 - Clark Andrew Constant and Andrew Street	1010101-00000	102112121212121212	Carlon Provide			37470414444064345		Chiling and Children Bart	and place same in the	a anti-second estimates					
AO Painting	2 ا													98,623		98,62
Coatings	21 1													98,623		98,62
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naous-Dise2016-Africuty \\PCLINC.Network.ads\Civil Southwest\District Office\District :		Energial Brad-	)	1	DC	) 11	Equipm	ent		 	1 809.000	L Liney day	1	<b> </b> 	 1,	.00



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PCL Construction, Inc. Water Infrastructure Group **Item Analysis Sheet**  6

Detail Page 20 of 29 Jul 21, 2017 4:34:30 PM

BE Number Opportunity No Owner File No Project Location Continental Ranch Regional Pump Station Upgrade Project Marana

DC 11 Equipment						1.00	21	S Proprietary and Confidentia											
		Units Per	ManHrs		Labor		Equip	ment	Serv Tools/	lces/ Supplies	Perm. N	laterial.	SubCo	ibract 👘	Total	Cost			
No. Description	Quantity UOM	Hours	Per Unit	Hours	\$ / hr	Total	\$/hr	Total	\$/ItemUnit	Total	\$/ItemUnit	Total	\$/ItemUnit	Total	Unit	Total			
Equipment																			
Flow Management System Pumps	1 L <b>S</b>														[	1			
3 EA Pioneer, Diesel Driven	CADD1000171	71 71-	3 510																
Purchase Pumps	1 LS			·								337,941			_	337,94			
Anchor Bolts	12 EA										15.00	180			15.00	- 18			
Ероху	2 GAL							······			50.00	100			50.00	10			
Non Shrink Grout	1 CF										30.00	30			30.00				
Misc Install STS	ی 1											1,500				1,50			
Install Equipment:	3 EA	0.033	30.000	00	<sup>MXB</sup> 34.24										1 0 7 10	3.00			
Install Pump Installation STS	3 EA 3 EA	0.033	50.000	90	54.24	3,082		Add The Patients	150.00	450					1,027.18 150.00	numeric and the second			
Grout Bases		0.063	16.000	48	<sup>™X8</sup> 34.24	1,643			130.00	1.11					547.83	1,64			
Crane Ruff Ter 60 Ton	3 EA 3 EA	0.100	10.000	טר חר	<sup>OP3</sup> 54.78	1,643	880.87	2,643							1,428.70	hanne gefren selde berre			
			10,000				000.07		+						1,120.70				
			100000000000000000000000000000000000000		THE HEAD MEDICAL COM-				COLUMN STOCK				127 Marcal and American						
Flow Management System Pumps	1 IS			168	37.91	6,368	88.09	2,643		450		339,751				349,21			
Equipment	1 LS			168	37.91		88.09	(Charles)		450		330 751			<b>NEEDE</b>	349,21			
cquipment	10			TOC	37.91	6,368	88.09	2,643		430	- Statiogr	339,751	SPECIAL SPECIES			349,21			
			ļ									}							
a Transies-unozone-water.er \\PCLINC.Network.ads\Eivil Southwest\District Office\District Shared\ESTIMA			<u>.</u>		DC		Mechan	ical	1 	• 96804400	•	• 90000000			• •	.00 L			

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BE Number BE170920 Opportunity No

 Owner File No
 Continental Ranch Regional Pump Station Upgrade Project

 Location
 Marana

1.00 LS DC 15 Mechanical Proprietary and Confidential SubContract Labor Equipment Services/ Tools/Supplies Perm. Material Total Cost Units Per Hours ManHis Per Unit No. Description Quantity UOM Hours \$/hr Total \$/hr Total \$/ItemUnit Total \$/ItemUnit Total \$/ItemUnit Total Unit Total Mechanical Purchase Pipe Materials (Exposed) 1 LS Permanent Pipe Materials 1 LS Pipe Materials Including Underground Purchase Pipe Materials 551,591 551,591 1 ل 5,000.00 Carbon Vent .00 LS Trench Drains .00 LS 2,500.00 36" Plug .00 LS 3,500.00 5,000 Anchor Bolts/Epoxy 1 LS 5,000 Permanent Pipe Materials 1 LS 556,591 1969 (<u>211</u> 200 556,591 Temporary Pipe Materials 1 LS STS - Installation (Exposed) 1 LS 500 500 ----Non-Shrink Grout 3 CF 20.00 60 20.00 60 1 LS 560 560 Temporary Pipe Materials Purchase Pipe Materials (Exposed) 1 LS 560 556,591 557,151 Install Piping (Exposed) 1 LS Direct Manhours 1 LS 676 MX8 34.24 23,146 676 HR 1.000 1.000 34.24 23,146 Process Pipe Crew DC 15 1.00 LS Mechanical \PCLINC.Network.ads\Civil Southwest\District Office\District Shared\ESTIMATING\BIDS-CURRENT\Special Proj Intal Ranch CMAR\C

PCL Construction, Inc. Water Infrastructure Group Item Analysis Sheet

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BE170920 BE Number Opportunity No Owner File No

Project Location Continental Ranch Regional Pump Station Upgrade Project Marana PCL Construction, Inc. Water Infrastructure Group

# **Item Analysis Sheet**

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BE170920

Project Continental Ranch Regional Pump Station Upgrade Project Marena

PCL Construction, Inc. Water Infrastructure Group **Item Analysis Sheet** 

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Project Continental Ranch Regional Pump Station Upgrade Project Location Marana PCL Construction, Inc. Water Infrastructure Group Item Analysis Sheet

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Continental Ranch Regional Pump Station Upgrade Project Marana Project

PCL Construction, Inc. Water Infrastructure Group **Item Analysis Sheet** 100 00 P/6

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### Pima County Water Reclamation Department Continental Ranch Regional Pump Station Upgrade Design GMP 1 – Assumption List

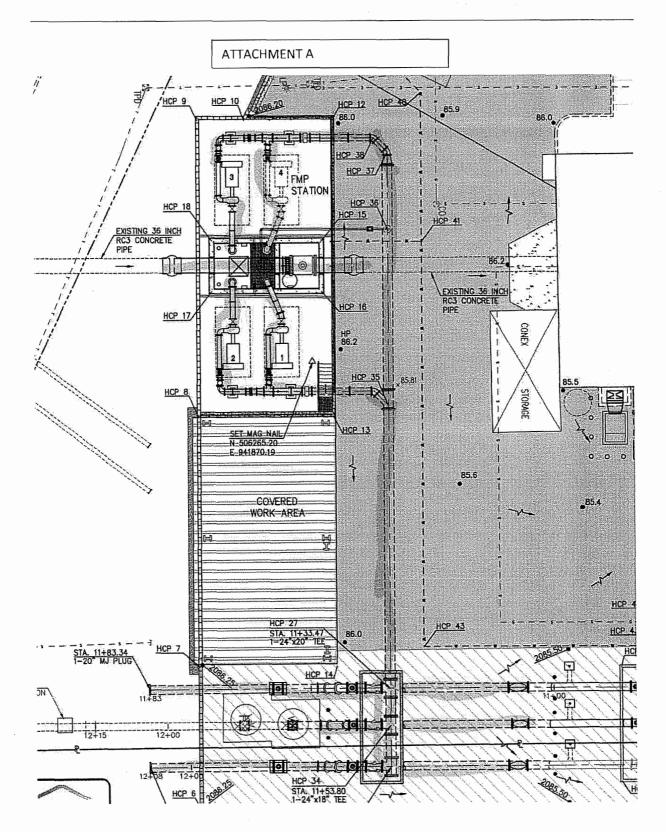
- The GMP is based on the following documents: Westland Resources 100% Submittal Drawings Dated February 28<sup>th</sup> Westland Resources 100% Special Provisions Dated March 2017 Conformatech Geotechnical Evaluation Dated October 15, 2014 Addendums 1-9
- 2. Scope of Work Includes the following
  - Demolition of the CMU Site Wall Complete
  - Excavation/Backfill of the FMP Station
  - Precast Wet/Dry Wells for the FMP Station
  - Precast Valve Vault
  - Misc Hatches, Ladders, Stairways, and Handrail Associated with the FMP Pump Station
  - Covered Work Area Concrete and Shade Structure
  - Concrete Coating of the Interior Wet Well
  - Underground and Mechanical Piping per Attachment A
  - Procurement and Installation of the FMP Pumps
  - Electrical Scope from Ludvik Electric per Attachment B
- 3. Pima County Regional Wastewater Reclamation Department Engineering Design Standards and Specifications have not been referenced for this project.
- 4. With the exception of a SWPPP and Pima County Dust control permits all other permit costs will be drawn from the contractor's contingency.
- 5. The GMP excludes that initial installation of the bypass and running of bypass pumps that has been performed prior to the PCL construction NTP.
- 6. The GMP includes temporary chain link fence and a swing gate around the south and east sides of the site. No additional security measures are included in our GMP.
- 7. The GMP assumes that onsite trailers may be placed on the northeast of the site outside of the existing wall but inside the property line.
- 8. The GMP excludes all paving replacement, this scope will be included in GMP 2.
- 9. The GMP excludes all masonry work, this scope will be included in GMP 2
- 10. The GMP excludes all work in the existing pump station building, this scope will be included in GMP 2.
- 11. The GMP assumes a small tools billable rate of 5% of total hourly labor.
- 12. The GMP assumes that 80 Mils of Durashied 310 JARS Kits will be an acceptable product to repair the T-Lock at the 36" influent pipe joints.
- 13. The GMP assumes that the excavation of the FMP pump station may be sloped back at 2:1 this will limit access on the south side of the existing pump station.
- 14. The GMP excludes all costs associated with mitigating archeological areas.
- 15. The GMP does not include costs for the remediation of hazardous waste materials.
- 16. The GMP assumes that all construction electrical consumption costs will be paid by the Pima County at no cost to the project.
- 17. The GMP includes valve vaults with the following dimensions:

10' x 12' x 18' for the Wet Well 8' x 10' x 18' for the Dry Pit/Valve Vault This will require review by Westland

- 18. Due to the emergency procurement requirements and minimal time to develop this GMP we have developed a contractor's contingency that will be utilized to cover any omissions in the above described scope and additional temporary bypass pumping if required.
- 19. Due to emergency procurement of this GMP, a SBE outreach was not possible for this portion of the project. \$98,623 of our proposal is SBE this amount will be reduced if Conshield additive is utilized in lieu of concrete sewer coatings.
- 20. This GMP assumes that the warranty period for this project will begin after the successful commissioning of the diesel drive bypass pumps.
- 21. This GMP assumes a total hourly burden of 26.50% will be acceptable for insurance, holiday/vacation, and 401K. This is lower then the total allowable hourly burdens of 32% in section B-10 of Article 2 – Cost of Work, but may exceed each the individual insurance percentage maximum.
- 22. The GMP assumes that General Liability rate of .85% will be acceptable for this project as the contract requires a 2 year warranty and a premium rate above .5% will be incurred.
- 23. The GMP assumes that temporary living allowances will be allowed for staff and hourly workers as necessary to complete this project due to the need to complete this project immediately.
- 24. The GMP assumes that this project is governed by MRRA statutes and that a form Arizona 5000 form will be provided by the County.
- 25. Please note that we are currently evaluating the schedule with our subcontractors and suppliers and the durations included in the GMP are estimates only at this time.

APPENDIX "F": Construction Manager at Risk (CMAR) Services for Continental Ranch Regional Pump Station Rehabilitation (3CRS05) GMP-1, ATTACHMENT A

> Pima County Water Reclamation Department Continental Ranch Regional Pump Station Upgrade Design GMP 1 – Assumption List



APPENDIX "F": Construction Manager at Risk (CMAR) Services for Continental Ranch Regional Pump Station Rehabilitation (3CRS05) GMP-1, ATTACHMENT B

July 20, 2017

Page 1 of 2

# Reference: PCRWRD Continental Ranch Flow Management Emergency Procurement

#### Subject: ELECTRICAL BID/SCOPE

We submit our proposal for the emergency procurement portion of the Electrical and Instrumentation work of Special Provisions Revision 2 dated 3-1-17 as shown on the Electrical Drawings 100% Submittal Set dated 2-28-17, including Addenda No. 1 (dated 7-5-16) thru No. 8 (dated 8-24-16) and as follows:

We submit our proposal to provide Continental Ranch Flow Management Emergency Procurement as follows:

Electrical and Instrumentation Bid Amount \$246,795.00

The following items are included for the "Flow Management Emergency Procurement" portion of the PCRWRD Continental Ranch Regional Pump Station Upgrades Project.

- a. 225A 480V Feeder Breaker to be installed in the existing space in the existing "MCC-1".
- b. 225A 480V NEMA 1 Power Panel "HV"
- c. 100A 480V NEMA 3R Power Panel "HV1"
- d. 30kVA 480:120/208V NEMA 3R Mini Power Center "LV2"
- e. 100A 120/240V NEMA 1 Power Panel "UPS"
- f. 10kVA 480:120/240V Indoor Dry Transformer for UPS System
- g. Two 40A 2-Pole NEMA 1 Enclosed Circuit Breakers "Transformer Output" and "UPS Output".
- h. UPS External Bypass Switch
- i. UPS Enclosure with Power Modules, Batteries, Charger, WEB/SNMP Card, Relay Interface Card, External Battery Enclosure, Battery Connection, Connectors and Cabling.
- j. Plant SCADA Panel with PLC, HMI, Ethernet Switch, I/O, TVSS and NEMA 12 Enclosure.
- k. SCADA and PCL Programming and Software for the FMP Station, UPS System and Items related to the "Flow Management Emergency Procurement" Scope of Work.
- I. Two 16" Magnetic Flow Meters with integral Transmitter "Bypass Flow Meter No. 1" and "Bypass Flow Meter No. 2".
- m. Two Pressure Gauges with Diaphragm Seals (located at Bypass No. 1 and Bypass No. 2)
- n. Two 20A Single Pole Explosion Proof Switches (Flow Meter No. 1 and Flow Meter No. 2)
- o. Twelve "Type 1" canopy mounted Fixtures at the Work Area location
- p. One "Type 3" wall mounted Fixture at the FMP Station location
- q. Three Fixture Switches, Nine GFCI Receptacles, Device Boxes and Device Covers.
- r. Three NEMA 3R Junction Boxes located at the Shade Canopy for the FMP Pump Station Diesel Pumps and Flow Meters signal, control and communication connection.
- s. Conduit, Fittings, Hangers, Supports, Conductors, Cables, Terminations, etc. related to the items above.



1020 E. University Drive, Phoenix, AZ 85034-6512 • Telephone (602) 777-5000 • Fax (602) 258-0782

APPENDIX "F": Construction Manager at Risk (CMAR) Services for Continental Ranch Regional Pump Station Rehabilitation (3CRS05) GMP-1, ATTACHMENT B

#### Ludvik Electrical Budget Scope/Estimate

PCRWRD Continental Ranch Flow Management Emergency Procurement July 20, 2017 Page 2 of 2

#### **EXCLUSIONS:**

- 1. Taxes, permits, utility company costs and fees.
- 2. Temporary lighting and power. To be provided on a T&M basis if required.
- 3. Removal of refuse from site. We will deposit refuse in your dumpster.
- 4. Cutting and patching of concrete and asphalt.
- 5. Grouting and all formed concrete (i.e. pads, bases, curbs, etc.).
- 6. Process and mechanical connections, piping, tubing, fittings, valves, spools, etc.
- Surveying, trench plating, dust control, construction water, compaction testing, de-watering and shoring.
- 8. Excavation, sand, and backfill for underground raceways. There is an estimated **155** L.F. of trench consisting of **35** yards of excavation, **18** tons of sand to be provided.

#### CLARIFICATIONS:

- Electrical and instrumentation items specified under other sections, identified to be furnished by other sections, or understood to be provided by others are not included. The following items are typical of these:
  - a. 10 20 10 Sound Attenuated Skid Mounted, Diesel Engine-Driven Back-Up Pumps Engine Controller, Engine Control Panel, Oil Pressure Switch, Thermal Switch, Battery Charger, Block Heater, Light Fixture, Contacts for SCADA integration, Submersible Level Transducer assembly with 7-Pin Connector, Float Switches, Cable, Hangers, Supports and a Remote Monitoring System with Auto Dialer System. Packaged unit, skid mounted and furnished complete.
- 2. Landscaping, painting, bollards and toilet facilities are not included.
- 3. Pricing is based on normal shipping and normal work hours.

This proposal is submitted for a mutually agreeable subcontract and schedule. It is valid for award within 45 calendar days. Please contact us at 602-777-5000 with any questions or for additional information.

#### Sincerely, LUDVIK ELECTRIC CO.

Jeffrey A. Lipsky Estimator



1020 E. University Drive, Phoenix, AZ 85034-6512 • Telephone (602) 777-5000 • Fax (602) 258-0782