

Exhibit B

MBR Train 5 Design-Build Proposal



Balfour Beatty
5000 E Spring Street, Suite 360
Long Beach, CA 90815
CA License No. 664318

October 28, 2024

44173008

Jeff Noelte
EAST Valley Water District
31111 Greenspot Road
Highland, CA 92346

Re: EVWD- Sterling Natural Resource Center

Subject: 60% ROM to Add a 5th Treatment Train to the MBR

Dear Mr. Nolte,

Balfour Beatty is pleased to provide a cost proposal for the addition of a 5th Membrane treatment train to MBR system at the Sterling Natural Resources Center(SNRC) . The Work shall be in conformance with the contract documents previously issued, and as described in the attached Basis of Design and associated basis of design concept drawings, quotations, risk register, project schedule, material take offs and vendor scopes of work, along with the project conditions outlined below.

Balfour Beatty is pleased to present the attached ROM estimate in the amount of \$8,207,836.00 for the additional cost associated with this 60% Design Scope of Work for the addition of the MBR Treatment Train 5 at the newly constructed Sterling Natural Resource Center, as requested by EVWD during the May 3rd onsite plant optimization meeting . (See attached calculations and the Arcadis Basis of Design Document).

This Cost Estimate is based on the following documents:

1. Arcadis Preliminary Basis of Design and Concept Drawings
2. Site Laydown drawing
3. Balfour Beatty's Quantity Take Offs
4. Subcontractor & Vendor Quotations
5. Project Schedule

Project Conditions/Stipulations:

1. Release of final retention for the Phase 1 SNRC work that was substantial completed on May 3rd, 2024 when the EVWD assumed beneficial use of the SNRC facility .
2. Warranties – the 1-year warranty period for Phase 1 SNRC work was achieved at substantial completed on May 3rd, 2024 when the EVWD assumed beneficial use of the SNRC facility. Warranties in place for the completed work are not extended because of this new work. Phase 1 warranties that were provided for certain equipment that extend beyond the 1-year period as outlined in the specifications are still in effect.
3. Final Acceptance of Phase 1 Construction Work.
4. Key Personnel must remain on the project for the duration –

- a. Jeff Nolte Director of Engineering & Operations- EVWD
 - b. Peter Tykeim- Design Manager- Arcadis
 - c. Pedro Anaya- Project Manager- Balfour Beatty
 - d. Ash Dhingra- Program Manager- AKD Consulting
5. Plant shutdowns will not be impeded by EVWD during Construction schedule
6. Pipe supports for Train 4 will be reused for Train 5 above ground piping
7. An adequate laydown area will be provided for temporary field office and yard, along with parking on-site for all project personnel, as depicted in the attached drawing by EVWD.
8. The district will provide and pay for all utilities during the construction period and temporary site office facilities.
9. 1" hypochlorite line heading to the WAS system tote to be moved in that location near injection point and hypochlorite will be manually added BY EVWD operations.
10. Bypass Pumping of process water by others.
11. Permits/Fees and Utilities connection and fees by others.
12. SCADA installation, integration, and programming will be provided Soffa Electric. The cost for this work is included in the cost proposal .
13. Based on Negotiation, Arcadis will ~~Delete~~ the 90% deliverable. Arcadis will produce a 60% design set and then collect comments before issuing a final signed and sealed set of design documents.
14. Concrete material and placement inspection will be provided and paid for by EVWD. Material information and inspection reports will be submitted to Arcadis for record purposes.
15. Balfour Beatty will not be responsible for cleanup and/or cost for any unauthorized or anticipated sewage discharge during construction.
16. Proposal Cost does not include additional work outside the outlined Scope of Work attached.
17. Proposal Cost does not include additional plant staff training and updates to the facility O&M
18. This cost estimate is based on 60% design, any design enhancements developed during final Approved for Construction will be addressed final GMP Cost proposal.

Design & Construction Management Assumptions

The following items are assumed:

- Arcadis' Design is limited to Civil, Structural, Process Mechanical, and Electrical disciplines. Other Design disciplines beyond what Arcadis has listed will be considered additional cost to the project.
- The Process Mechanical and Instrumentation & Controls equipment design responsibility for MBR T5 will be by Fibracast.
- It is assumed that there will be no Architectural (including HVAC, Fire and Plumbing) for this project.
- EVWD will be responsible for the sampling, quality control testing, geotechnical investigation, topographic, ground and utility location surveys.
- Sampling, surveys, and geotechnical investigations are excluded from the scope of work.
- Designer will review geotechnical recommendations provided by Others for structural design requirements.
- Designer shall reasonably rely on all materials and project data provided by BALFOUR and DISTRICT.
- Limited startup and commissioning assistance are included as part of the Engineering services during construction under this scope of work based on completion dates listed above. Supplemental startup and commissioning assistance may be provided under future contract amendments if needed.

- Permitting associated with the project will be performed by Others. Design Builder will not be responsible for permitting on the project. Design Builder will attend coordination meetings and make required revisions to the design that may be applicable to Designers scope of work based on permitting reviews comments provided by EVWD prior to issuance of Approved for Construction Drawings are issued.
- Designer will be available for permitting meetings and workshops with the permitting agencies to assist the team in the permitting process (Task MBR 5.10 - Permitting Coordination).
- Construction Inspections for concrete and reinforcement placement will be by Others. Material information and inspection reports will be submitted to Designer for record purposes.

This quotation is valid for 60 Days from the date of issuance.

Should you have any questions, please feel free to give me a call.

Sincerely,

Thomas Murray
Area Operations Manager

Cc: Project File
Ash Dhingra
Pedro Anaya

Attachments:

- Cost Estimate
- Arcadis Preliminary Basis of Design and Concept Drawings
- Site Laydown drawing
- Balfour Beatty's Quantity Take Offs
- Subcontractor & Vendor Quotations
- Project Schedule

Train 5

Cost Estimate

**With Elec. Sub(Southern) &
Soffa Elect.- SCADA**

www.balfourbeattyus.com

SNRC_COR60%_Train #5

Rev.5

10/25/2024

On behalf of Balfour Beatty , we are pleased to provide herein our proposal for the trackwork for the above project.

Bid	Description	Bid Qty	Units	Dir Cost	Ind Charge	Total Cost
100	DEMO - SITE SIDEWALK, CURB AND GUTTER, ASPHALT	1	LS	\$ -	\$ -	\$ -
110	DEMO SIDEWALK	560	SF	\$ 7,105.98	\$ -	\$ 7,105.98
120	DEMO CURB & GUTTER	56	LF	\$ 6,446.98	\$ -	\$ 6,446.98
130	DEMO ASPHALT	2,000	SF	\$ 13,845.97	\$ -	\$ 13,845.97
200	DEMO - BEAMS OF THE BRIDGE CRANE ONCE THE WALLS GE	12	CY	\$ 19,065.56	\$ -	\$ 19,065.56
300	DEMO/ RELOCATE - MECHANICAL	1	LS	\$ -	\$ -	\$ -
310	1" NAOC DEMO / RELOCATE	60	LF	\$ 5,197.71	\$ -	\$ 5,197.71
320	2" YARD SW DEMO / RELOCATE	10	LF	\$ 7,902.95	\$ -	\$ 7,902.95
330	TRAIN 4 HEADER SUPPORT RELOCATE	6	EA	\$ 25,527.90	\$ -	\$ 25,527.90
400	EXCAVATION - SHORING	1,120	SF	\$ 196,112.07	\$ -	\$ 196,112.07
500	EXCAVATION - 20' DEPTH	807	CY	\$ 84,528.90	\$ -	\$ 84,528.90
600	CONCRETE - REBAR AND MISC. METALS	1	LS	\$ -	\$ -	\$ -
610	REBAR	25,562	LBS	\$ 38,681.65	\$ -	\$ 38,681.65
620	MISC. METAL	1	LS	\$ -	\$ -	\$ -
621	DRILL N EPOXY REBAR	571	LF	\$ 27,010.98	\$ -	\$ 27,010.98
623	ANCHORS	136	EA	\$ 22,096.46	\$ -	\$ 22,096.46
624	NUTS AND WASHERS	272	EA	\$ 35,823.92	\$ -	\$ 35,823.92
625	WIRE MESH	135	SF	\$ 12,188.72	\$ -	\$ 12,188.72
626	MODIFICATION HAND RAIL	50	LF	\$ 2,761.49	\$ -	\$ 2,761.49
700	CONCRETE - WATERSTOP	412	LF	\$ 28,695.04	\$ -	\$ 28,695.04
800	CDNCRETE - CONCRETE HOLIDAY ROCK	232	CY	\$ 402,814.43	\$ -	\$ 402,814.43
900	STRUCTURAL BACKFILL - HOLIDAY ROCK	365	CY	\$ 99,894.00	\$ -	\$ 99,894.00
1000	COATING - CONCRETE WALLS, AND PIPING (PVC)	1	LS	\$ 121,221.44	\$ -	\$ 121,221.44
1100	COVERS - CST ALUMINUM COVERS	390	SF	\$ 95,264.51	\$ -	\$ 95,264.51
1200	COVERS - CST MODIFICATION TO EXISTING COVER FOR SL	22	SF	\$ 8,047.34	\$ -	\$ 8,047.34
1300	MECHANICAL - EQUIPMENT	8	EA	\$ -	\$ -	\$ -
1310	FIBRACAST EQUIPMENT PURCHASE	1	LS	\$ 1,305,571.47	\$ -	\$ 1,305,571.47
1320	INSTALL RAS PUMP	1	EA	\$ 4,625.42	\$ -	\$ 4,625.42
1330	INSTALL FILTRATE PUMP	1	EA	\$ 4,103.87	\$ -	\$ 4,103.87
1340	INSTALL CHANEL MEMBRANES	5	EA	\$ 18,501.68	\$ -	\$ 18,501.68
1342	INSTALL CHANEL BRACKETS	40	EA	\$ 45,856.36	\$ -	\$ 45,856.36
1343	INSTALL FIBRACAST HEADERS	2	EA	\$ 4,625.42	\$ -	\$ 4,625.42
1345	INSTALL CHANEL BOTTOM DUCTING	5	EA	\$ 24,713.28	\$ -	\$ 24,713.28
1350	INSTALL AIR SCOUR BLOWER	1	EA	\$ 4,223.87	\$ -	\$ 4,223.87
1370	INSTALL RAS SLIDE GATE 18"x12"	1	EA	\$ 32,197.67	\$ -	\$ 32,197.67
1380	INSTALL EFFLUENT SLIDE GATE 90"x32"	1	EA	\$ 56,258.19	\$ -	\$ 56,258.19
1400	ELECTRICAL - HELIX (VFD, WIRING, CONDUITS)- Southern	1	LS	\$ 785,869.39	\$ -	\$ 785,869.39
1500	ELECTRICAL - SCADA PROGRAMING - SOFA & Southern Cost includes SOFA - SCADA cost and Southern Cost for Coordination Study and Arch Flash	1	LS	\$ 137,514.72	\$ -	\$ 137,514.72
1600	MECHANICAL - SMALL BORE PIPE & SUPPORTS	1	LS	\$ -	\$ -	\$ -
1610	INSTRUMENTATION PIPE/SUPPORTS	4	EA	\$ 11,981.22	\$ -	\$ 11,981.22
1620	AIR PIPE/SUPPORTS	40	LF	\$ 19,113.41	\$ -	\$ 19,113.41
1630	TURBIDITY PIPING/SUPPORTS	50	LF	\$ 13,159.51	\$ -	\$ 13,159.51
1640	CHEMICAL PIPE/SUPPORTS	40	LF	\$ 20,424.25	\$ -	\$ 20,424.25
1650	SERVICE WATER PIPE/SUPPORTS	1	LS	\$ 51,353.24	\$ -	\$ 51,353.24
1700	MECHANICAL - FAB PIPE & SUPPORTS	1	LS	\$ -	\$ -	\$ -
1710	FABRICATED PIPE	1	LS	\$ 311,781.11	\$ -	\$ 311,781.11
1720	FABRICATED SUPPORTS	1	LS	\$ 126,792.20	\$ -	\$ 126,792.20
1800	SITE IMPROVEMENTS	1	LS	\$ -	\$ -	\$ -
1810	INSTALL NEW AGGREGATE BASE	25	TN	\$ 10,485.12	\$ -	\$ 10,485.12
1820	INSTALL SIDEWALK	560	SF	\$ 25,249.00	\$ -	\$ 25,249.00
1830	INSTALL CURB & GUTTER	56	LF	\$ 13,100.42	\$ -	\$ 13,100.42
1840	INSTALL NEW ASPHALT	2,000	SF	\$ 35,186.80	\$ -	\$ 35,186.80
1900	PROJECT DESIGN - ARCADIS	1	LS	\$ 555,760.00	\$ -	\$ 555,760.00
2000	SWPPP	1	LS	\$ -	\$ -	\$ -
2010	STORM WATER POLLUTION PREVENTION	1	LS	\$ 54,175.81	\$ -	\$ 54,175.81
2040	SWEEPING	1	LS	\$ 29,520.00	\$ -	\$ 29,520.00
800000	INDIRECT STAFFING	1	LS	\$ -	\$ 1,439,748.00	\$ 1,439,748.00
810000	STAFF & CRAFT EXPENSES	1	LS	\$ -	\$ 302,781.78	\$ 302,781.78
820000	OFFICE & ADMINISTRATIVE EXPENSES	1	LS	\$ -	\$ 171,104.31	\$ 171,104.31
830000	SAFETY, HEALTH, TRAINING & CONSUMABLES	1	LS	\$ -	\$ 63,501.37	\$ 63,501.37
840000	GENERAL PROJECT EXPENSES	1	LS	\$ -	\$ 48,495.75	\$ 48,495.75
850000	EQUIPMENT MOB & DE-MOB	1	LS	\$ -	\$ -	\$ -
860000	QUALITY CONTROL & SURVEY	1	LS	\$ -	\$ 8,800.00	\$ 8,800.00
870000	AGENCY FACILITIES	1	LS	\$ -	\$ -	\$ -
880000	DESIGN & ENGINEERING	1	LS	\$ -	\$ -	\$ -
890000	ESCALATIONS, ADJUSTMENTS & CONTINGENCY	1	LS	\$ -	\$ 209,933.18	\$ 209,933.18
900000	INSURANCE, LEGAL & JV FEES- Cost include Phase 1 bond close out and Insurance40% insurance cost increases	1	LS	\$ -	\$ 200,763.66	\$ 200,763.66
Total Cost - Sub Total				\$ 4,962,377.43	\$ 2,445,128.05	\$ 7,407,505
Mark Up				9.9%		\$ 734,668
Bond				0.89%		\$ 65,663
Total						\$ 8,207,836

Cost Report

Activity	Desc	Quantity	Unit	Unit	Perm	Constr	Equip	Sub-	
Resource		Pcs	Unit	Cost	Labor	Material	Matl/Exp	Ment	Contract
									Total

JOB NOTES

Estimate created on: 06/24/2020 by User#: 19 - John Douglas
Source estimate used: L:\HEAVYBID\DENVER\EST\ESTMAST

*****Estimate created on: 03/14/2022 by User#: 112 - John Douglas
Source used: Z:\BACKUPS\BB-DENVER\BBAD2021.zip (a backup) from 03/14/2022 5:24:30 PM

*****Estimate created on: 03/16/2022 by User#: 1 -
Source used: C:\USERS\FABIAN.SANCHEZ\DESKTOP\BBAD2021.zip (a backup) from 03/16/2022 2:05:24 PM

*****Estimate created on: 03/17/2022 by User#: 2 - John Douglas
Source estimate used: L:\HEAVYBID\EST\BBAD2021

*****Estimate created on: 06/06/2023 by User#: 19 - John Douglas
Source used: \\WG4QTS1\WG4Q-HOMES\JDOUGLAS.WG4Q\DESKTOP\MSTBBRAIL22-HCSS.zip (a backup) from 06/06/2023 3:27:18 PM

*****Estimate created on: 05/07/2024 by User#: 565 - Terry Lim
Source estimate used: L:\HEAVYBID\FIELD\EST\MSTBBRAIL22

PARENT ITEM = 100
Description = DEMO - SITE SIDEWALK, CURB AND GUTTER, A Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000 TL

Listing of Sub-Biditems of Parent Item 100:

BID ITEM = 110
Description = DEMO SIDEWALK Land Item Unit = SF SCHEDULE: 1 100 Takeoff Quan: 560.000 Engr Quan: 0.000 TL

2A302 Sawcut Concrete - Sub Quan: 560.00 SF Hrs/Shft: 8.00 Cal: 40A WC: STD

4SAWCUT	Saw Cutting	1.00	1.00 SHFT	2,500.000		2,500	2,500
\$2,500.00				[]		2,500	2,500
						4.46	4.46

2A305 Remove Minor Flatwork Quan: 15.00 CY Hrs/Shft: 8.00 Cal: 40A WC: STD

----- RC02 - Remove Flatwork -----

Remove Flatwork
Calculation Code RC02
Hrs/Day: 8.0
Old Yield: 12%

Description	SF	Thickness	CY	Cy/Hr	Days
Demo Sidewalk	560	4.00	8	2.0	0.5
----- End Calculation -----					

RC01	(Mod) REMOVE CURB & FLATWORK	8.00 CH	Eff: 100.00	Prod: 1.8750 UH	Lab Pcs: 4.00	Eqp Pcs: 3.00
8BH446	CAT 446 BACKHOE	1.00	8.00 HR	67.830	543	543
8MSWB	WATER BUFFALO TRAI	1.00	8.00 HR	5.248	42	42
8T250OP	FORD F250 OPEATOR 4-	1.00	9.00 HR	19.185	173	173
LAGEN	General Laborer	2.00	16.00 MH *	71.796	1,149	1,149
OPFORE	Operator Foreman	1.00	9.00 MH *	101.573	914	914
OPHOE	Rubber Tire Backhoe Opera	1.00	8.00 MH *	95.100	761	761
\$3,580.97	2.2000 MH/CY		33.00 MH	[108.675]	2,824	3,581
1.8750 Units/Hr *	15.0000 Un/Shift		0.4545 Unit/MH	188.25	50.49	238.73

2A314 Haul-Off Debris (S=xx-miles) Quan: 15.00 CY Hrs/Shft: 8.00 Cal: 40A WC: STD

Cost Report

Activity	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm	Constr	Equip	Sub-	Total
Resource							Material	Matl/Exp	Ment	Contract	
<hr/>											
BID ITEM	=	110		Land Item	SCHEDULE:	1	100				TL
Description =	DEMO SIDEWALK			Unit =	SF	Takeoff	Quan:	560.000	Engr	Quan:	0.000
----- TRK02 - Trucking by the Ton -----											
Trucking by the Ton											
Calculation Code	TRK02										
Material:	Misc. PCC & Base										
Tons:	30										
Days:	1.0										
Hrs/Day:	8.0										
Tn/Ld:	18.0										
Min/Hr:	55										
----- End Calculation -----											
8TED10WHL	=> OR MANNED 10-WH	1.00	4.00	HR	155.000				620		620
\$620.00					[]				620		620
									41.33		41.33
2A315	Dump Fees - Concrete & Misc. Base			Quan:	15.00	CY	Hrs/Shft:	8.00	Cal: 40A	WC: STD	
3TCD106	DUMP FEES - CONCRET	1.00	15.00	TON	7.000				105		105
3TCD118	DUMP FEES - MISC (TO	1.00	15.00	TON	20.000				300		300
\$405.00					[]				405		405
									27.00		27.00
<hr/>											
=>	Item Totals:	110	- DEMO SIDEWALK								
\$7,105.97	0.0589 MH/SF		33.00	MH	[2.911]	2,824		405	1,377	2,500	7,106
12.689	560 SF					5.04		0.72	2.46	4.46	12.69

BID ITEM = 120										
Description =	DEMO CURB & GUTTER			Land Item Unit =	SCHEDULE: 1 LF	100 Takeoff Quan:	56.000	Engr Quan:		TL 0.000
2A302 Sawcut Concrete - Sub										
				Quan:	56.00 LF	Hrs/Shft: 8.00	Cal: 40A WC: STD			
4SAWCUT	Saw Cutting	1.00	1.00 SHFT	2,500.000				2,500		2,500
\$2,500.00				[]				2,500		2,500
								44.64		44.64
2A303 Remove Curb & Gutter										
				Quan:	56.00 LF	Hrs/Shft: 8.00	Cal: 40A WC: STD			

----- RC01 - Remove Curb -----

Remove Curb
 Calculation Code RC01
 Hrs/Day: 8.0
 Old Yield: 0%

Description Lf Cy/Lf CY Cy/Hr Lf/Hr

Demo Curb & Gutter 56 0.0800 4 1.0 7

----- End Calculation -----

RC01	(Mod) REMOVE CURB & FLATWORK	8.00 CH	Eff	100.00	Prod:	56.0000 US	Lab Pcs:	4.00	Eqp Pcs:	3.00
8BH446	CAT 446 BACKHOE	1.00	8.00 HR		67.830			543		543
8MSWB	WATER BUFFALO TRAI	1.00	8.00 HR		5.248			42		42
8T250OP	FORD F250 OPEATOR 4-	1.00	9.00 HR		19.185			173		173
LAGEN	General Laborer	2.00	16.00 MH *		71.796	1,149				1,149
OPFORE	Operator Foreman	1.00	9.00 MH *		101.573	914				914

Cost Report

Activity	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm	Constr	Equip	Sub-	Total
Resource							Material	Matl/Exp	Ment	Contract	
<hr/>											
BID ITEM = 120				Land Item	SCHEDULE: 1	100					TL
Description = DEMO CURB & GUTTER				Unit =	LF	Takeoff	Quan:	56.000	Engr	Quan:	0.000
OPHOE	Rubber Tire Backhoe Opera	1.00	8.00	MH *	95.100	761					761
\$3,580.97	0.5892 MH/LF		33.00	MH	[29.109]	2,824			757		3,581
7.0000	Units/Hr	56.0000	Un/Shift	* 1.6970	Unit/MH	50.42			13.52		63.95
<hr/>											
2A314 Haul-Off Debris (S=xx-miles)				Quan:	4.00	CY	Hrs/Shft:	8.00	Cal: 40A	WC: STD	
----- TRK02 - Trucking by the Ton -----											
Trucking by the Ton											
Calculation Code		TRK02									
Material:		Conc.									
Tons:		16									
Days:		1.0									
Hrs/Day:		8.0									
Tn/Ld:		18.0									
Min/Hr:		55									
----- End Calculation -----											
8TED10WHL	=> OR MANNED 10-WH	1.00	2.00	HR	155.000				310		310
\$310.00					[]				310		310
									77.50		77.50
<hr/>											
2A315 Dump Fees - Concrete				Quan:	4.00	CY	Hrs/Shft:	8.00	Cal: 40A	WC: STD	
3TCD106	DUMP FEES - CONCRET	1.00	8.00	TON	7.000			56			56
\$56.00					[]			56			56
								14.00			14.00
<hr/>											
Item Totals:		120	- DEMO CURB & GUTTER								
\$6,446.97	0.5892 MH/LF		33.00	MH	[29.109]	2,824		56	1,067	2,500	6,447
115.124	56 LF					50.42		1.00	19.06	44.64	115.12

BID ITEM = 130				Land Item	SCHEDULE: 1		100			TL
Description =	DEMO ASPHALT			Unit =	SF	Takeoff Quan:	2,000.000	Engr Quan:	0.000	
2A402 Sawcut AC - Sub				Quan:	2,000.00 SF	Hrs/Shft:	8.00	Cal: 40A	WC: STD	
4SAWCUT	Saw Cutting	1.00	2.00 SHFT	2,500.000				5,000	5,000	
\$5,000.00				[]				5,000	5,000	
								2.50	2.50	
2A404 Muck & Load AC - Minor				Quan:	37.00 CY	Hrs/Shft:	8.00	Cal: 40A	WC: STD	
----- RA01 - Remove AC -----										
Remove AC										
Calculation Code	RA01									
Hrs/Day:	8.0									
Description	SF	Thickness	CY	Cy/Hr	Days	Calc				
Remove ASPH	2,000	6.00	37	2.0	2.3					
a	0	0.00	0	0.0	0.0					
----- End Calculation -----										
<u>RA02</u>	(Mod) REMOVE AC - MINOR			16.00 CH	Eff: 100.00	Prod:	2.3125 UH	Lab Pcs:	4.00	
								Eqp Pcs:	3.00	

Cost Report

Activity	Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm	Constr	Equip	Sub-	Total
BID ITEM	=	130			Land Item	SCHEDULE:	1	100				TL
Description =	DEMO ASPHALT				Unit =	SF	Takeoff	Quan:	2,000.000	Engr	Quan:	0.000
8BH446	CAT 446 BACKHOE	1.00	16.00	HR		67.830				1,085		1,085
8MSWB	WATER BUFFALO TRAI	1.00	16.00	HR		5.248				84		84
8T250OP	FORD F250 OPEATOR 4-	1.00	18.00	HR		19.185				345		345
LAGEN	General Laborer	2.00	32.00	MH *		71.795	2,297					2,297
OPFORE	Operator Foreman	1.00	18.00	MH *		101.573	1,828					1,828
OPHOE	Rubber Tire Baokhoe Opera	1.00	16.00	MH *		95.101	1,522					1,522
\$7,161.96	1.7837 MH/CY		66.00	MH		[88.115]	5,647			1,515		7,162
2.3125	Units/Hr *	18.5000	Un/Shift	0.5606	Unit/MH		152.63			40.93		193.57
2A314	Haul-Off Debris (S=xx-miles)				Quan:	37.00	CY	Hrs/Shft:	8.00	Cal:	40A	WC: STD
----- TRK02 - Trucking by the Ton -----												
Trucking by the Ton												
Calculation Code		TRK02										
Material:		ASPH & Base										
Tons:		74										
Days:		2.0										
Hrs/Day:		8.0										
Tn/Ld:		18.0										
Min/Hr:		55										
----- End Calculation -----												
8TED10WHL	=> OR MANNED 10-WH	1.00	8.00	HR		155.000				1,240		1,240
\$1,240.00						[]				1,240		1,240
										33.51		33.51
2A315	Dump Fees - Demo ASPHALT				Quan:	37.00	CY	Hrs/Shft:	8.00	Cal:	40A	WC: STD
----- DMP04 - Dump Fees (Conc) -----												
Dump Fees - Concrete												
Calculation Code		DMP04										
Hrs/Day:		10.0										
Description		Sf	Thick (in)	Yield	CY	Loads						
						CY/Load						
Remove ASPH		2,000	6.0	0%	37	8.0						
a		0	0.0	0%	0	0.0						
----- End Calculation -----												
3TCD109	DUMP FEES - AC (TON)	1.00	74.00	TON		6.000				444		444
\$444.00						[]				444		444
										12.00		12.00
=====												
Item Totals:		130	-	DEMO ASPHALT								
\$13,845.96	0.0330 MH/SF		66.00	MH		[1.63]	5,647		444	2,755	5,000	13,846
6.923	2000 SF						2.82		0.22	1.38	2.50	6.92
=====												
Total of Above Sub-Biditems												
=====												
Item Totals:		100	-	DEMO - SITE SIDEWALK, CURB AND GUTTER, A								
\$27,398.90	132.0000 MH/LS		132.00	MH		[6520.48]	11,295		905	5,199	10,000	27,399
27,398.900	1 LS						11,294.77		905.00	5,199.13	10,000.00	27,398.90

Cost Report

Activity Resource	Desc	Quantity Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
<hr/>										
BID ITEM = 200			Land Item	SCHEDULE: 1	100					TL
Description =	DEMO - BEAMS OF THE BRIDGE CRANE ONCE TH		Unit =	CY	Takeoff Quan:	12.000		Engr Quan:		12.000
2A302	Sawcut Concrete - Sub		Quan:	1.00 LS	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
4SAWCUT	Saw Cutting	1.00	2.00 SHFT	2,500.000				5,000		5,000
\$5,000.00				[]				5,000		5,000
								5,000.00		5,000.00
<hr/>										
2A213	Remove Minor Structure - Beams		Quan:	4.00 EA	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
S2 - 24" x 24" x 8 ft = 1.185 CY										
----- RM04 - Remove Foundations & Structures (Small and Medium) -----										
Remove Foundations & Structures										
Calculation Code			RM03							
Type:			Foundation or Structure							
Hrs/Day:			10.0							
<hr/>										
Description	Type			Ea	Cy	Cy/Ea	Production Hrs/Ea			
Demo Overhang Cat Walk and Curb	Overhang			1	4	3.6	8.0			
----- End Calculation -----										
RM03	(Mod) REMOVE SM FNDs & MINOR S	32.00 CH	Eff:	100.00	Prod:	1.0000 US	Lab Pcs:	4.00	Eqp Pcs:	2.00
8FL16T	FORKLIFT (15K) - TELEH	1.00 32.00 HR			63.685			2,038		2,038
8T250OP	FORD F250 OPEATOR 4-	1.00 36.00 HR			19.185			691		691
LAGEN	General Laborer	3.00 96.00 MH *			71.795	6,892				6,892
OPFORE	Operator Foreman	1.00 36.00 MH *			101.573	3,657				3,657
\$13,277.56		33.0000 MH/EA			132.00 MH	[1515.718]		2,729		13,278
0.1250 Units/Hr		1.0000 Un/Shift	*	0.0303 Unit/MH		2,637.25		682.15		3,319.39
2A222	Haul-Off Debris (S=xx-miles)		Quan:	24.00 TON	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
----- TRK02 - Trucking by the Ton -----										
Trucking by the Ton										
Calculation Code			TRK02							
Material:	Misc. Conc.									
Tons:	24									
Days:	1.0									
Hrs/Day:	8.0									
Tn/Ld:	18.0									
Min/Hr:	55									
----- End Calculation -----										
TRK02	(Mod) TRUCKING BY THE TON	8.00 CH	Eff:	100.00	Prod:	24.0000 US	Lab Pcs:	0.00	Eqp Pcs:	0.50
8TED10WHL	OR MANNED 10-WHEEL	0.50 4.00 HR			155.000			620		620
8TEDEDFULL	OR MANNED SEMI BELL	0.00 HR			140.000					
8TEDEDFULL	OR MANNED SEMI END	0.00 HR			140.000					
\$620.00					[]			620		620
3.0000 Units/Hr		24.0000 Un/Shift	*					25.83		25.83
2A224	Dump Fees - Concrete		Quan:	24.00 TN	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
3TCD106	DUMP FEES - CONCRET	1.00 24.00 TON			7.000			168		168
\$168.00					[]			168		168
								7.00		7.00
<hr/>										
Item Totals:	200		- DEMO - BEAMS OF THE BRIDGE CRANE ONCE TH							

Cost Report

Activity Resource	Desc	Quantity Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 200										
Description =	DEMO - BEAMS OF THE BRIDGE CRANE ONCE TH		Unit =	CY	Takeoff Quan:		12.000	Engr Quan:		TL 12.000
\$19,065.56	11.0000 MH/CY	132.00	MH	[505.239]	10,549		168	3,349	5,000	19,066
1,588.797	12 CY				879.08		14.00	279.05	416.67	1,588.80

PARENT ITEM = 300										
Description =	DEMO/ RELOCATE - MECHANICAL		Unit =	LS	Takeoff Quan:		1.000	Engr Quan:		VR 1.000
Listing of Sub-Biditems of Parent Item 300:										

BID ITEM = 310										
Description =	1" NAOCL DEMO / RELOCATE		Unit =	LF	Takeoff Quan:		60.000	Engr Quan:		VR 0.000
13AA001 Buy Materials - 1" CPVC PIPE										
			Quan:	60.00 LF	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
2VR1CPVC01	1" CPVC Pipe	1.00	80.00	LF	4.544	364				364
2VR1CPVC02	1" CPVC 90D Elbow	1.00	4.00	EA	7.912	32				32
2VR1CPVC03	1" CPVC Union	1.00	6.00	EA	21.910	131				131
2VR1CPVC04	1" CPVC Coupling Adapter	1.00	6.00	EA	7.600	46				46
\$572.29					[]	572				572
						9.54				9.54

13AA201 DEMO - 1" NAOCL										
			Quan:	60.00 LF	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
<u>VR02</u>	Install Equipment	4.00	CH	Eff: 100.00	Prod:	0.5000 S	Lab Pcs:	4.00	Eqp Pcs:	2.00
8FL16T	FORKLIFT (15K) - TELEH	1.00	4.00	HR	63.685			255		255
8T250LA	FORD F250 LABOR 4-MA	1.00	4.00	HR	19.185			77		77
LALAB4	Laborer Foreman	1.00	4.00	MH *	77.480	310				310
LAPIPE	Pipe Laborer	3.00	12.00	MH *	75.034	900				900
\$1,541.81	0.2666 MH/LF		16.00	MH	[11.651]	1,210		331		1,542
15.0000	Units/Hr	120.0000	Un/Shift	3.7500	Unit/MH	20.17		5.52		25.70

13AA203 INSTALL - 1" NAOCL PIPE										
			Quan:	60.00 LF	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
<u>VR02</u>	Install Equipment	8.00	CH	Eff: 100.00	Prod:	1.0000 S	Lab Pcs:	4.00	Eqp Pcs:	2.00
8FL16T	FORKLIFT (15K) - TELEH	1.00	8.00	HR	63.685			509		509
8T250LA	FORD F250 LABOR 4-MA	1.00	8.00	HR	19.185			153		153
LALAB4	Laborer Foreman	1.00	8.00	MH *	77.479	620				620
LAPIPE	Pipe Laborer	3.00	24.00	MH *	75.034	1,801				1,801
\$3,083.61	0.5333 MH/LF		32.00	MH	[23.301]	2,421		663		3,084
7.5000	Units/Hr	60.0000	Un/Shift	1.8750	Unit/MH	40.34		11.05		51.39

Item Totals: 310 - 1" NAOCL DEMO / RELOCATE										
\$5,197.71	0.8000 MH/LF		48.00	MH	[34.952]	3,631	572	994		5,198
86.629	60 LF					60.52	9.54	16.57		86.63

BID ITEM = 320										
Description =	2" YARD SW DEMO / RELOCATE		Unit =	LF	Takeoff Quan:		10.000	Engr Quan:		VR 0.000
13AA001 Buy Materials - 2" HDPE Pipe										
			Quan:	10.00 LF	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
2VR2HDPE01	2" HDPE DR11 PIPE	1.00	20.00	FT	2.500	50				50
2VR2HDPE02	2" ELECTROFUSION CO	1.00	5.00	EA	14.500	73				73
2VRVALCAN01	10" VALVE CAN	1.00	1.00	LS	500.000	500				500
3VRHDPERENT	Rent Electrofusion Machine	1.00	1.00	EA	1,000.000		1,000			1,000

**Unreviewed

Cost Report

Activity	Desc	Quantity	Unit	Unit	Labor	Perm	Constr	Equip	Sub-	Total
Resource		Pcs		Cost		Material	Mat/Exp	Ment	Contract	
<hr/>										
BID ITEM = 320				Land Item	SCHEDULE: 1	100				VR
Description =	2" YARD SW DEMO / RELOCATE			Unit =	LF	Takeoff Quan:	10.000	Engr Quan:		0.000
\$1,622.50				[]		623	1,000			1,623
						62.25	100.00			162.25
13AA101	Buy Materials - Temp Supports			Quan:	2.00 EA	Hrs/Shft:	8.00	Cal: 40A	WC: STD	
3VR2X4W01	Temp Wood Support	1.00	2.00 EA	5.770			12			12
3VRANCHOR01	3/8" Wedge Anchors	1.00	8.00 EA	5.814			47			47
3VRGS01	20g Galv Strap	1.00	1.00 EA	45.170			45			45
3VRHW01	1/4" Hardware	1.00	5.00 EA	2.000			10			10
\$113.22				[]			113			113
							56.61			56.61
13AA201	DEMO - 2" Yard SW Pipe			Quan:	10.00 LF	Hrs/Shft:	8.00	Cal: 40A	WC: STD	
VR02	Install Equipment		4.00 CH	Eff: 100.00	Prod:	0.5000 S	Lab Pcs:	4.00	Eqp Pcs:	2.00
8FL16T	FORKLIFT (15K) - TELEH	1.00	4.00 HR	63.685			255			255
8T250LA	FORD F250 LABOR 4-MA	1.00	4.00 HR	19.185			77			77
LALAB4	Laborer Foreman	1.00	4.00 MH *	77.480		310				310
LAPIPE	Pipe Laborer	3.00	12.00 MH *	75.034		900				900
\$1,541.81	1.6000 MH/LF		16.00 MH	[69.904]	1,210		331			1,542
2.5000 Units/Hr	20.0000 Un/Shift		0.6250 Unit/MH		121.03		33.15			154.18
13AA202	INSTALL - TEMP SUPPORTS			Quan:	2.00 EA	Hrs/Shft:	8.00	Cal: 40A	WC: STD	
VR02	Install Equipment		4.00 CH	Eff: 100.00	Prod:	0.5000 S	Lab Pcs:	4.00	Eqp Pcs:	2.00
8FL16T	FORKLIFT (15K) - TELEH	1.00	4.00 HR	63.685			255			255
8T250LA	FORD F250 LABOR 4-MA	1.00	4.00 HR	19.185			77			77
LALAB4	Laborer Foreman	1.00	4.00 MH *	77.480		310				310
LAPIPE	Pipe Laborer	3.00	12.00 MH *	75.034		900				900
\$1,541.81	8.0000 MH/EA		16.00 MH	[349.52]	1,210		331			1,542
0.5000 Units/Hr	4.0000 Un/Shift		0.1250 Unit/MH		605.17		165.74			770.91
13AA203	INSTALL - 2" Yard SW Pipe			Quan:	10.00 LF	Hrs/Shft:	8.00	Cal: 40A	WC: STD	
VR02	Install Equipment		8.00 CH	Eff: 100.00	Prod:	1.0000 S	Lab Pcs:	4.00	Eqp Pcs:	2.00
8FL16T	FORKLIFT (15K) - TELEH	1.00	8.00 HR	63.685			509			509
8T250LA	FORD F250 LABOR 4-MA	1.00	8.00 HR	19.185			153			153
LALAB4	Laborer Foreman	1.00	8.00 MH *	77.479		620				620
LAPIPE	Pipe Laborer	3.00	24.00 MH *	75.034		1,801				1,801
\$3,083.61	3.2000 MH/LF		32.00 MH	[139.808]	2,421		663			3,084
1.2500 Units/Hr	10.0000 Un/Shift		0.3125 Unit/MH		242.07		66.30			308.36
<hr/>										
====>	Item Totals:	320	- 2" YARD SW DEMO / RELOCATE							
\$7,902.95	6.4000 MH/LF		64.00 MH	[279.616]	4,841	623	1,113	1,326		7,903
790.295	10 LF				484.13	62.25	111.32	132.59		790.30
<hr/>										
BID ITEM = 330				Land Item	SCHEDULE: 1	100				VR
Description =	TRAIN 4 HEADER SUPPORT RELOCATE			Unit =	EA	Takeoff Quan:	6.000	Engr Quan:		0.000
13AA001	Buy Materials - Support Relocation new A			Quan:	48.00 EA	Hrs/Shft:	8.00	Cal: 40A	WC: STD	
2VR201	3/4" Epoxy Anchors	1.10	52.80 EA	21.500		1,135				1,135
2VR203	Non Shink Grout	1.00	6.00 EA	63.190		379				379
2VR204	Hilti 500RE Epoxy	1.00	8.00 EA	83.750		670				670
\$2,184.34				[]		2,184				2,184
						45.51				45.51

Cost Report

Activity Resource	Desc	Quantity Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
<hr/>										
BID ITEM = 330										
Description =	TRAIN 4 HEADER SUPPORT RELOCATE									
				Land Item Unit =	SCHEDULE: 1 100					VR
					EA Takeoff Quan:		6.000	Engr Quan:		0.000
<hr/>										
13AA101	Buy Materials - Temp Supports Dunnage			Quan:	6.00 EA	Hrs/Shft:	8.00	Cal: 40A	WC: STD	
3TCC105	DUNNAGE ALLOWANC	1.00	6.00 LS		500.000		3,000			3,000
3VRANCHOR01	3/8" Wedge Anchors	1.10	316.80 EA		5.814		1,842			1,842
\$4,841.88					[]		4,842			4,842
							806.98			806.98
<hr/>										
13AA201	REMOVE - EXISTING SUPPORTS			Quan:	6.00 EA	Hrs/Shft:	8.00	Cal: 40A	WC: STD	
VR02	Install Equipment		8.00 CH	Eff: 100.00	Prod: 1.0000 S		Lab Pcs: 4.00	Eqp Pcs: 2.00		
8FL16T	FORKLIFT (15K) - TELEH	1.00	8.00 HR		63.685		509			509
8T250LA	FORD F250 LABOR 4-MA	1.00	8.00 HR		19.185		153			153
LALAB4	Laborer Foreman	1.00	8.00 MH *		77.479	620				620
LAPIPE	Pipe Laborer	3.00	24.00 MH *		75.034	1,801				1,801
\$3,083.61		5.3333 MH/EA	32.00 MH	[233.013]	2,421		663			3,084
0.7500 Units/Hr		6.0000 Un/Shift	0.1875 Unit/MH		403.44		110.49			513.94
<hr/>										
13AA202	INSTALL - DUNNAGE			Quan:	6.00 EA	Hrs/Shft:	8.00	Cal: 40A	WC: STD	
VR02	Install Equipment		8.00 CH	Eff: 100.00	Prod: 1.0000 S		Lab Pcs: 4.00	Eqp Pcs: 2.00		
8FL16T	FORKLIFT (15K) - TELEH	1.00	8.00 HR		63.685		509			509
8T250LA	FORD F250 LABOR 4-MA	1.00	8.00 HR		19.185		153			153
LALAB4	Laborer Foreman	1.00	8.00 MH *		77.479	620				620
LAPIPE	Pipe Laborer	3.00	24.00 MH *		75.034	1,801				1,801
\$3,083.61		5.3333 MH/EA	32.00 MH	[233.013]	2,421		663			3,084
0.7500 Units/Hr		6.0000 Un/Shift	0.1875 Unit/MH		403.44		110.49			513.94
<hr/>										
13AA203	INSTALL - SUPPORTS			Quan:	6.00 EA	Hrs/Shft:	8.00	Cal: 40A	WC: STD	
VR02	Install Equipment		32.00 CH	Eff: 100.00	Prod: 4.0000 S		Lab Pcs: 4.00	Eqp Pcs: 2.00		
8FL16T	FORKLIFT (15K) - TELEH	1.00	32.00 HR		63.685		2,038			2,038
8T250LA	FORD F250 LABOR 4-MA	1.00	32.00 HR		19.185		614			614
LALAB4	Laborer Foreman	1.00	32.00 MH *		77.479	2,479				2,479
LAPIPE	Pipe Laborer	3.00	96.00 MH *		75.034	7,203				7,203
\$12,334.46		21.3333 MH/EA	128.00 MH	[932.053]	9,683		2,652			12,334
0.1875 Units/Hr		1.5000 Un/Shift	0.0469 Unit/MH		1,613.77		441.97			2,055.74
<hr/>										
Item Totals:	330	- TRAIN 4 HEADER SUPPORT RELOCATE								
\$25,527.90	32.0000 MH/EA	192.00 MH		[1398.08]	14,524	2,184	4,842	3,978		25,528
4,254.650	6 EA				2,420.65	364.06	806.98	662.96		4,254.65
<hr/>										
Total of Above Sub-Biditems										
<hr/>										
Item Totals:	300	- DEMO/ RELOCATE - MECHANICAL								
\$38,628.56	304.0000 MH/LS	304.00 MH		[13281.76]	22,996	3,379	5,955	6,298		38,629
38,628.560	1 LS				22,996.21	3,379.13	5,955.10	6,298.12		38,628.56
<hr/>										
<hr/>										
BID ITEM = 400				Land Item Unit =	SCHEDULE: 1 100					TL
Description =	EXCAVATION - SHORING				SF Takeoff Quan:		1,120.000	Engr Quan:		1,120.000
<hr/>										
7A102	Buy Materials			Quan:	1,120.00 SF	Hrs/Shft:	8.00	Cal: 40A	WC: STD	

Cost Report

Activity Resource	Desc	Quantity Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
BID ITEM = 400										
Description =	EXCAVATION - SHORING		Land Item Unit =	SCHEDULE: 1 SF Takeoff	100 Quan:		1,120.000		Engr Quan:	TL 1,120.000
----- TS01 - Tempory Shoring -----										
Temporary Shoring										
Calculation Code	TS01									
Beam Cut-Off Factor:	40.0	Ft/Ea								
Beam Waste Factor:	100.0%									
Sand:	150	#/CF								
H-Beams Description	Lf	Exposed Area Ave Height	Sf	Spacing O.C.	Beams Ea					
----- End Calculation -----										
2CA103	# 57 ROCK (FOB PLT)	1.20	57.60 TON		43.500	2,506				2,506
3TCG101	BL - H-BEAMS (Wx X xx)	1.05	44,352.00 LB		1.500		66,528			66,528
3TCG102	BL - DRIVING POINTS	1.00	2.00 EA		500.000		1,000			1,000
3TCG104	BL - STEEL PLATE LAGG	1.05	55,104.00 LB		1.300		71,635			71,635
4SHORING	Shoring Design - VAK	1.00	1.00 LS		10,000.000			10,000		10,000
\$151,668.80					[]	2,506	139,163	10,000		151,669
						2.24	124.25	8.93		135.42
7A103	Salvage Value			Quan:	1,120.00 SF	Hrs/Shft:	8.00	Cal:	40A WC: STD	
3TCG105	BL - BEAM SALVAGE	1.05	44,352.00 LB		-0.250		-11,089			-11,089
3TCG106	BL - PLATE SALVAGE	1.05	55,104.00 LB		-0.250		-13,777			-13,777
\$-24,864.00					[]		-24,865			-24,865
							-22.19			-22.19
7A105	Drill & Set Beams -Sub			Quan:	8.00 EA	Hrs/Shft:	8.00	Cal:	40A WC: STD	
Barney's Drilling										
\$ 78 per LF estimating quote from Barney's Drilling Hole P-025 MQ-25 Squadron Hanger										
4DRILLHOLES	Drill & Set Beams	1.00	8.00 EA		3,120.000			24,960		24,960
4DRILLHOLES2	Mobilization	1.00	1.00 EA		5,000.000			5,000		5,000
\$29,960.00					[]			29,960		29,960
								3,745.00		3,745.00
7A104	Unload & Stage Materials			Quan:	1,120.00 SF	Hrs/Shft:	8.00	Cal:	40A WC: STD	
----- US01 - Unload & Stage -----										
Unload & Stage										
Calculation Code	US01									
Hrs/Day (Available):	6.25									
Hrs/Day (Pay):	8.00									
Efficiency:	78.13%									
Description	Type	Loads	Hrs/Ld	Unload Days Calc	Use					
----- End Calculation -----										
<u>U1S01</u>	(Mod) UNLOAD & STAGE		8.00 CH	Eff	100.00	Prod:	1.0000 S	Lab Pcs:	3.00	Eqp Pcs: 4.00
8FL16T	FORKLIFT (15K) - TELEH	1.00	8.00 HR			63.685			509	509
8T250OP	FORD F250 OPEATOR 4-	1.00	9.00 HR			19.185			173	173
8TEDFLAT	OR MANNED FLATBED	2.00	16.00 HR			125.000			2,000	2,000
LAGEN	General Laborer	2.00	16.00 MH *			71.796	1,149			1,149
OPFORE	Operator Foreman	1.00	9.00 MH *			101.573	914			914
\$4,745.03	0.0223 MH/SF		25.00 MH		[1.064]	2,063		2,682		4,745
140.0000 Units/Hr	1,120.0000 Un/Shift		44.8000 Unit/MH			1.84		2.39		4.24

Cost Report

Activity	Desc	Quantity	Unit	Unit	Labor	Perm	Constr	Equip	Sub-	Total
Resource		Pcs		Cost		Material	Matl/Exp	Ment	Contract	
<hr/>										
BID ITEM = 400			Land Item	SCHEDULE: 1	100					TL
Description = EXCAVATION - SHORING			Unit = SF	Takeoff Quan:		1,120.000		Engr Quan:		1,120.000
<hr/>										
7A106	Install Plate 8' x 20x x 1"		Quan:	1,120.00 SF	Hrs/Shift:	8.00	Cal: 40A	WC: STD		
----- B&L01 - Install & Remove Lagging -----										
Install & Remove Lagging										
Calculation Code	B&L01									
Hrs/Day:	8.0									
Description	Wall	Shoring Wall	Depth	Sf	Excavation					
		Length			Cy/Lf					
Phase 1	1	56	20.0	1,120	0.0					
a	a	0	0.0	0	0.0					
----- End Calculation -----										
B&L01	INSTALL LAGGING	32.00 CH	Eff:	100.00	Prod:	35.0000 UH	Lab Pcs:	5.00	Eqp Pcs:	3.00
8EX320	CAT 320 EXCAVATOR	1.00	32.00 HR		89.808			2,874		2,874
8T250OP	FORD F250 OPEATOR 4-	1.00	36.00 HR		19.185			691		691
8T550FLAT	FORD F550 - FLATBED (2	1.00	32.00 HR		36.467			1,167		1,167
LAGEN	General Laborer	2.00	64.00 MH *		71.795	4,595				4,595
OP321	CAT321 Excavator Operato	1.00	32.00 MH *		94.698	3,030				3,030
OPFORE	Operator Foreman	1.00	36.00 MH *		101.573	3,657				3,657
TMFLAT	Flatrack Driver	1.00	32.00 MH *		54.217	1,735				1,735
\$17,748.26	0.1464 MH/SF	164.00 MH		[6.802]	13,017			4,731		17,748
35.0000 Units/Hr *	280.0000 Un/Shift	6.8293 Unit/MH			11.62			4.22		15.85
<hr/>										
7A108	Remove Plate & Beams		Quan:	1,120.00 SF	Hrs/Shift:	8.00	Cal: 40A	WC: STD		
B&L03	REMOVE BEAMS & LAGGING	16.00 CH	Eff:	100.00	Prod:	70.0000 UH	Lab Pcs:	5.00	Eqp Pcs:	2.00
8EX320	CAT 320 EXCAVATOR	1.00	16.00 HR		89.808			1,437		1,437
8T250OP	FORD F250 OPEATOR 4-	1.00	18.00 HR		19.185			345		345
LAGEN	General Laborer	3.00	48.00 MH *		71.796	3,446				3,446
OP321	CAT321 Excavator Operato	1.00	16.00 MH *		94.698	1,515				1,515
OPFORE	Operator Foreman	1.00	18.00 MH *		101.573	1,828				1,828
\$8,571.92	0.0732 MH/SF	82.00 MH		[3.485]	6,790			1,782		8,572
70.0000 Units/Hr *	560.0000 Un/Shift	13.6585 Unit/MH			6.06			1.59		7.65
<hr/>										
7A111	Install & Remove Fall Protection		Quan:	80.00 LF	Hrs/Shift:	8.00	Cal: 40A	WC: STD		
FP01	INSTALL & REMOVE FALL PROTEC	16.00 CH	Eff:	100.00	Prod:	5.0000 UH	Lab Pcs:	5.00	Eqp Pcs:	3.00
8BH416	CAT 416 BACKHOE	1.00	16.00 HR		52.398			838		838
8T250OP	FORD F250 OPEATOR 4-	1.00	18.00 HR		19.185			345		345
8T550FLAT	FORD F550 - FLATBED (2	1.00	16.00 HR		36.467			583		583
LAGEN	General Laborer	2.00	32.00 MH *		71.795	2,297				2,297
OPFORE	Operator Foreman	1.00	18.00 MH *		101.573	1,828				1,828
OPHOE	Rubber Tire Backhoe Opera	1.00	16.00 MH *		95.101	1,522				1,522
TMFLAT	Flatrack Driver	1.00	16.00 MH *		54.217	867				867
\$8,282.02	1.0250 MH/LF	82.00 MH		[47.677]	6,515			1,767		8,282
5.0000 Units/Hr *	40.0000 Un/Shift	0.9756 Unit/MH			81.44			22.09		103.53
<hr/>										
Item Totals:	400	- EXCAVATION - SHORING								
\$196,112.03	0.3151 MH/SF	353.00 MH		[14.756]	28,384	2,506	114,299	10,963	39,960	196,112
175.100	1120 SF				25.34	2.24	102.05	9.79	35.68	175.10
<hr/>										

BID ITEM = 500
Description = EXCAVATION - 20' DEPTH

Land Item SCHEDULE: 1 100
Unit = CY Takeoff Quan: 807.000 Engr Quan: 807.000 TL

Cost Report

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
<hr/>										
BID ITEM = 500										
Description =	EXCAVATION - 20' DEPTH			Land Item Unit =	SCHEDULE: 1 CY Takeoff	100 Quan:	807.000	Engr Quan:		TL 807.000
9A102	Buy Materials			Quan:	70.00 TON	Hrs/Shft:	8.00	Cal: 40A	WC: STD	
2CA201	CLASS-2 BASE COURSE	1.10	77.00 TON		43.500		3,350			3,350
\$3,349.50					[]		3,350			3,350
							47.85			47.85
3A403	Pothole - Hand			Quan:	5.00 EA	Hrs/Shft:	8.00	Cal: 40A	WC: STD	
<u>POT2</u>	POTHOLE UTILITIES - HAND		8.00 CH	Eff: 100.00	Prod:	1.0000 S	Lab Pcs:	5.00	Eqp Pcs:	3.00
8BH446	CAT 446 BACKHOE	1.00	8.00 HR		67.830			543		543
8T250OP	FORD F250 OPEATOR 4-	1.00	9.00 HR		19.185			173		173
8T550FLAT	FORD F550 - FLATBED (2	1.00	8.00 HR		36.467			292		292
LAGEN	General Laborer	2.00	16.00 MH *		71.796	1,149				1,149
OPFORE	Operator Foreman	1.00	9.00 MH *		101.573	914				914
OPHOE	Rubber Tire Backhoe Opera	1.00	8.00 MH *		95.100	761				761
TMFLAT	Flatrack Driver	1.00	8.00 MH *		54.216	434				434
\$4,264.45	8.2000 MH/EA		41.00 MH		[381.416]	3,257		1,007		4,264
0.6250 Units/Hr	5.0000 Un/Shift		0.1220 Unit/MH			651.48		201.41		852.89
3A408	Structural Excavation & Haul Off			Quan:	807.00 CY	Hrs/Shft:	8.00	Cal: 40A	WC: STD	
<u>M&L03</u>	(Mod) MUCK & LOAD (SMAL EXCAV	40.00 CH	Eff: 100.00	Prod:	20.1750 UH	Lab Pcs:	6.00	Eqp Pcs:	4.00	
8EX330	CAT 330 EXCAVATOR	1.00	40.00 HR		116.487			4,659		4,659
8LSKID	BOBCAT TRACK SKID S	1.00	40.00 HR		42.590			1,704		1,704
8MSWB	WATER BUFFALO TRAI	1.00	40.00 HR		5.248			210		210
8T250OP	FORD F250 OPEATOR 4-	1.00	45.00 HR		19.185			863		863
LAGEN	General Laborer	2.00	80.00 MH *		71.796	5,744				5,744
OP330	CAT330 Operator	1.00	40.00 MH *		95.101	3,804				3,804
OPFORE	Operator Foreman	1.00	45.00 MH *		101.573	4,571				4,571
OPGRADE	Grade Checker	1.00	40.00 MH *		95.101	3,804				3,804
OPSKIP	Skip Loader Operator	1.00	40.00 MH *		92.522	3,701				3,701
\$29,059.70	0.3035 MH/CY		245.00 MH		[15.432]	21,623		7,436		29,060
20.1750 Units/Hr	161.4000 Un/Shift		3.2939 Unit/MH			26.79		9.21		36.01
3A409	Haul to Spoil (On-Road Trucks, B=xxxx-mi			Quan:	809.00 CY	Hrs/Shft:	8.00	Cal: 40A	WC: STD	
----- TRK01 - Trucking by the Cubic Yard -----										
Trucking by the Cubic Yard										
Calculation Code TRK01										
Material: Dirt										
Cubic Yards: 809										
Days: 4.0										
Hrs/Day: 8.0										
Cy/Ld: 9.0										
Min/Hr: 54										
----- End Calculation -----										
<u>TRK01</u>	(Mod) TRUCKING BY THE CY		284.63 CH	Eff: 100.00	Prod:	2.8422 UH	Lab Pcs:	0.00	Eqp Pcs:	0.34
8TED10WHL	OR MANNED 10-WHEEL	0.34	96.78 HR		155.000			15,001		15,001
8TEDEDFULL	OR MANNED SEMI BELL		0.00 HR		140.000					
8TEDEDFULL	OR MANNED SEMI END		0.00 HR		140.000					
\$15,000.90					[]			15,001		15,001
2.8423 Units/Hr	22.7383 Un/Shift							18.54		18.54
3A410	Dump Fees - Dirt			Quan:	809.00 CY	Hrs/Shft:	8.00	Cal: 40A	WC: STD	
3TCD101	DUMP FEES - DIRT (CY)	1.00	809.00 CY		20.000		16,180			16,180

Cost Report

Activity	Desc	Quantity	Unit	Unit	Labor	Perm	Constr	Equip	Sub-	Total
Resource		Pcs		Cost		Material	Matl/Exp	Ment	Contract	

BID ITEM = 500 Land Item SCHEDULE: 1 100 TL
Description = EXCAVATION - 20' DEPTH Unit = CY Takeoff Quan: 807.000 Engr Quan: 807.000
\$16,180.00 [] 16,180 16,180
20.00 20.00

3A413A 8" Scar & Compact Quan: 1,092.00 SF Hrs/Shft: 8.00 Cal: 40A WC: STD

AB02 (Mod) KNOCKDOWN & COMPACT (M 8.00 CH Eff: 100.00 Prod: 1,092.0000 US Lab Pcs: 7.00 Eqp Pcs: 3.00
8CPRAM RAMMAX ROLLER (3,00 1.00 8.00 HR 19.215 154 154
8LSKID BOBCAT TRACK SKID S 1.00 8.00 HR 42.590 341 341
8T250OP FORD F250 OPEATOR 4- 1.00 9.00 HR 19.185 173 173
LAFINE Finegrade Laborer 1.00 8.00 MH * 72.468 580 580
LAGEN General Laborer 3.00 24.00 MH * 71.795 1,723 1,723
LAGUINEA Guinea Chaser 1.00 8.00 MH * 72.468 580 580
OPFORE Operator Foreman 1.00 9.00 MH * 101.573 914 914
OPSKIP Skip Loader Operator 1.00 8.00 MH * 92.520 740 740
\$5,203.99 0.0521 MH/SF 57.00 MH [2.376] 4,537 667 5,204
136.5000 Units/Hr 1,092.0000 Un/Shift * 19.1579 Unit/MH 4.15 0.61 4.77

3A413B Place 6" CL2 Base Quan: 70.00 TON Hrs/Shft: 8.00 Cal: 40A WC: STD

----- AB01 - Knockdown & Compact Base -----

Knockdown & Compact
Calculation Code AB01
Hrs/Day: 8.0
Unit Weight: 135 Lb/Cf

Description Sf Depth (In) Yield Ton Tn/Day
Train #5 1,092 6.0 5% 39 150
----- End Calculation -----

AB02 (Mod) KNOCKDOWN & COMPACT (M 8.00 CH Eff: 100.00 Prod: 70.0000 US Lab Pcs: 8.00 Eqp Pcs: 4.00
8BH446 CAT 446 BACKHOE 1.00 8.00 HR 67.830 543 543
8CPRAM RAMMAX ROLLER (3,00 1.00 8.00 HR 19.215 154 154
8LSKID BOBCAT TRACK SKID S 1.00 8.00 HR 42.590 341 341
8T250OP FORD F250 OPEATOR 4- 1.00 9.00 HR 19.185 173 173
LAFINE Finegrade Laborer 1.00 8.00 MH * 72.468 580 580
LAGEN General Laborer 3.00 24.00 MH * 71.795 1,723 1,723
LAGUINEA Guinea Chaser 1.00 8.00 MH * 72.468 580 580
OPFORE Operator Foreman 1.00 9.00 MH * 101.573 914 914
OPHOE Rubber Tire Backhoe Opera 1.00 8.00 MH * 95.100 761 761
OPSKIP Skip Loader Operator 1.00 8.00 MH * 92.520 740 740
\$6,507.43 0.9285 MH/TON 65.00 MH [43.339] 5,298 1,210 6,507
8.7500 Units/Hr 70.0000 Un/Shift * 1.0769 Unit/MH 75.68 17.28 92.96

3A414 Finish Base Quan: 1,092.00 SF Hrs/Shft: 8.00 Cal: 40A WC: STD

----- FG01 - Finegrade -----

Finegrade - Mainline Subgrade
Calculation Code FG01
Hrs/Day: 8.0
Tollerance: 0.05

Description	Ave Width	SF	Sf/Day	Days Calc	Use
Train # 5	20	1,092	1,000	1.1	1.0
a	0	0	0	0.0	0.0

Cost Report

Activity Resource	Desc	Quantity Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
BID ITEM = 500										
Description =	EXCAVATION - 20' DEPTH		Land Item Unit =	SCHEDULE: 1 100	Takeoff Quan:	807.000	Engr Quan:	807.000	TL	
----- End Calculation -----										
FG01	(Mod) FINEGRADE CREW (PROCUCTI	8.00	CH	Eff: 100.00	Prod: 1,092.0000	US	Lab Pcs:	5.00	Eqp Pcs:	4.00
8BH446	CAT 446 BACKHOE	1.00	8.00	HR	67.830			543		543
8CPRAM	RAMMAX ROLLER (3,00	1.00	8.00	HR	19.215			154		154
8LSKID	BOBCAT TRACK SKID S	1.00	8.00	HR	42.590			341		341
8T250OP	FORD F250 OPEATOR 4-	1.00	9.00	HR	19.185			173		173
LAGEN	General Laborer	1.00	8.00	MH *	71.796	574				574
OPFORE	Operator Foreman	1.00	9.00	MH *	101.573	914				914
OPGRDSET	Gradesetter	1.00	8.00	MH *	95.455	764				764
OPHOE	Rubber Tire Backhoe Opera	1.00	8.00	MH *	95.100	761				761
OPSKIP	Skip Loader Operator	1.00	8.00	MH *	92.520	740				740
\$4,962.87	0.0375 MH/SF		41.00	MH	[1.986]	3,753		1,210		4,963
136.5000	Units/Hr	1,092.0000	Un/Shift	* 26.6342	Unit/MH	3.44		1.11		4.54
Item Totals: 500 - EXCAVATION - 20' DEPTH										
\$84,528.84	0.5563 MH/CY		449.00	MH	[27.457]	38,469	3,350	16,180	26,531	84,529
104.745		807	CY			47.67	4.15	20.05	32.88	104.74

PARENT ITEM = 600
 Description = CONCRETE - REBAR AND MISC. METALS Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000 NR

Listing of Sub-Biditems of Parent Item 600:

BID ITEM = 610										
Description =	REBAR		Land Item Unit =	SCHEDULE: 1 100	Takeoff Quan:	25,562.000	Engr Quan:	0.000	NR	
100 Unload & Shake out Rebar										
Quan: 25,562.00 LBS Hrs/Shft: 8.00 Cal: 40A WC: STD										
CS13	(Mod) REBAR HOIST CREW	8.00	CH	Eff: 100.00	Prod: 798.8125	UM	Lab Pcs:	4.00	Eqp Pcs:	3.00
8FL16T	FORKLIFT (15K) - TELEH	1.00	8.00	HR	63.685			509		509
8T250C	FORD F250 CARPENTER	1.00	8.00	HR	19.185			153		153
8T250LA	FORD F250 LABOR 4-MA	1.00	8.00	HR	19.185			153		153
LAGEN	General Laborer	2.00	16.00	MH *	71.796	1,149				1,149
LALAB4	Laborer Foreman	1.00	8.00	MH *	77.479	620				620
OPLUBE	Lube Man	1.00	8.00	MH *	94.968	760				760
\$3,344.74	0.0012 MH/LBS		32.00	MH	[0.057]	2,528		816		3,345
3,195.2500	Units/Hr	25,562.0000	Un/Shift	798.8177	Unit/MH *	0.10		0.03		0.13
804 Furnish & Install Rebar - Sub Works										
Quan: 25,562.00 LBS Hrs/Shft: 8.00 Cal: 40A WC: STD										
4REBAR	Rebar - Sub	1.00	25,562.00	LB	1.382			35,337		35,337
\$35,336.91					[]			35,337		35,337
								1.38		1.38
Item Totals: 610 - REBAR										
\$38,681.65	0.0012 MH/LBS		32.00	MH	[0.057]	2,528		816	35,337	38,682
1.513		25562	LBS			0.10		0.03	1.38	1.51

PARENT ITEM = 620
 Description = MISC. METAL Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000 NR

Listing of Sub-Biditems of Parent Item 620:

Cost Report

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
<hr/>										
BID ITEM = 621										
Description =	DRILL N EPOXY REBAR			Land Item Unit =	SCHEDULE: 1 LF	100 Takeoff Quan:	571.000	Engr Quan:		NR 0.000
5B001	Buy Mateirals			Quan:	571.00 LF	Hrs/Shft: 8.00	Cal: 40A WC: STD			
2EPOXY-REBAR	Misc. Metal Epoxy	1.00	1.00 EA	1,881.000		1,881				1,881
2MMMISC	Misc. Metal Materails	1.00	571.00 LF	2.500		1,428				1,428
2REBAR1	FOB Drill & Grount	1.00	1.00 LS	3,613.751		3,614				3,614
\$6,922.25				[]		6,922				6,922
						12.12				12.12
5B111	Install Misc. Metal - Drill N Expocy Reb			Quan:	186.00 EA	Hrs/Shft: 8.00	Cal: 40A WC: STD			
MM1	(Mod) MISC METAL & SS CREW	46.50	CH Eff: 100.00	Prod:	1.0000 MU	Lab Pcs:	4.00	Eqp Pcs:	3.00	
8FL16T	FORKLIFT (15K) - TELEH	1.00	46.50 HR	63.685				2,961		2,961
8ML40	40' MANLIFT	1.00	46.50 HR	23.145				1,076		1,076
8T250C	FORD F250 CARPENTER	1.00	46.50 HR	19.185				892		892
CACARP	General Carpenter	3.00	139.50 MH *	80.584	11,241					11,241
CACARP4	Carpenter 4Man	1.00	46.50 MH *	84.250	3,918					3,918
\$20,088.69		1.0000 MH/EA	186.00 MH	[51.78]	15,159			4,930		20,089
4.0000 Units/Hr	32.0000 Un/Shift	1.0000 Unit/MH			81.50			26.50		108.00
<hr/>										
Item Totals:	621 - DRILL N EPOXY REBAR									
\$27,010.94	0.3257 MH/LF		186.00 MH	[16.867]	15,159	6,922		4,930		27,011
47.305	571 LF				26.55	12.12		8.63		47.30
<hr/>										
BID ITEM = 623										
Description =	ANCHORS			Land Item Unit =	SCHEDULE: 1 EA	100 Takeoff Quan:	136.000	Engr Quan:		NR 0.000
5B001	Buy Mateirals			Quan:	136.00 EA	Hrs/Shft: 8.00	Cal: 40A WC: STD			
2EPOXY-ANCH	Misc. Metal Epoxy	1.00	1.00 EA	1,881.000		1,881				1,881
2MM-ANCHOR	Misc. Metal - Anchor	1.10	149.60 EA	25.000		3,740				3,740
2MM-ANCHOR1	Misc. Anchor Pull Test	1.00	20.00 EA	50.000		1,000				1,000
\$6,621.00				[]		6,621				6,621
						48.68				48.68
5B111	Install Misc. Metal - Anchor Set			Quan:	136.00 EA	Hrs/Shft: 8.00	Cal: 40A WC: STD			
MM1	(Mod) MISC METAL & SS CREW	34.00	CH Eff: 100.00	Prod:	1.0000 MU	Lab Pcs:	4.00	Eqp Pcs:	4.00	
8FL16T	FORKLIFT (15K) - TELEH	1.00	34.00 HR	63.685				2,165		2,165
8ML40	40' MANLIFT	2.00	68.00 HR	23.145				1,574		1,574
8T250C	FORD F250 CARPENTER	1.00	34.00 HR	19.185				652		652
CACARP	General Carpenter	3.00	102.00 MH *	80.584	8,220					8,220
CACARP4	Carpenter 4Man	1.00	34.00 MH *	84.250	2,865					2,865
\$15,475.46		1.0000 MH/EA	136.00 MH	[51.78]	11,084			4,391		15,475
4.0000 Units/Hr	32.0000 Un/Shift	1.0000 Unit/MH			81.50			32.29		113.79
<hr/>										
Item Totals:	623 - ANCHORS									
\$22,096.46	1.0000 MH/EA		136.00 MH	[51.78]	11,084	6,621		4,391		22,096
162.474	136 EA				81.50	48.68		32.29		162.47
<hr/>										
BID ITEM = 624										
Description =	NUTS AND WASHERS			Land Item Unit =	SCHEDULE: 1 EA	100 Takeoff Quan:	272.000	Engr Quan:		NR 0.000

Cost Report

Activity	Desc	Quantity	Unit	Unit	Perm	Constr	Equip	Sub-	Total
Resource		Pcs		Cost	Labor	Material	Matl/Exp	Ment	Contract
<hr/>									
BID ITEM = 624				Land Item	SCHEDULE: 1	100			NR
Description = NUTS AND WASHERS				Unit =	EA	Takeoff Quan:	272.000	Engr Quan:	0.000
<hr/>									
5B001	Buy Mateirals - Nuts and Washers			Quan:	272.00 EA	Hrs/Shift: 8.00	Cal: 40A	WC: STD	
2EPOXY-BOLT	Misc. Metal Epoxy	1.00	1.00 EA	1,881.000		1,881			1,881
2MM-BOLT	Misc. Metal - Bolt	1.10	299.20 EA	10.000		2,992			2,992
\$4,873.00				[]		4,873			4,873
						17.92			17.92
<hr/>									
5B111	Install Misc. Metal - Drill , Epoxy & Nu			Quan:	272.00 EA	Hrs/Shift: 8.00	Cal: 40A	WC: STD	
MM1	(Mod) MISC METAL & SS CREW	68.00	CH	Eff: 100.00	Prod: 1.0000	MU	Lab Pcs: 4.00	Eqp Pcs: 4.00	
8FL16T	FORKLIFT (15K) - TELEH	1.00	68.00 HR	63.685			4,331		4,331
8ML40	40' MANLIFT	2.00	136.00 HR	23.145			3,148		3,148
8T250C	FORD F250 CARPENTER	1.00	68.00 HR	19.185			1,305		1,305
CACARP	General Carpenter	3.00	204.00 MH *	80.583	16,439				16,439
CACARP4	Carpenter 4Man	1.00	68.00 MH *	84.250	5,729				5,729
\$30,950.92	1.0000 MH/EA	272.00	MH	[51.78]	22,168		8,783		30,951
4.0000 Units/Hr	32.0000 Un/Shift	1.0000	Unit/MH		81.50		32.29		113.79
<hr/>									
Item Totals: 624 - NUTS AND WASHERS									
\$35,823.92	1.0000 MH/EA	272.00	MH	[51.78]	22,168	4,873	8,783		35,824
131.706	272 EA				81.50	17.92	32.29		131.71
<hr/>									
BID ITEM = 625				Land Item	SCHEDULE: 1	100			NR
Description = WIRE MESH				Unit =	SF	Takeoff Quan:	135.000	Engr Quan:	0.000
<hr/>									
5B001	Buy Mateirals			Quan:	135.00 SF	Hrs/Shift: 8.00	Cal: 40A	WC: STD	
2MMWIRE	Misc. Metal - Wire Mesh	1.20	162.00 SF	50.000		8,100			8,100
\$8,100.00				[]		8,100			8,100
						60.00			60.00
<hr/>									
5B110	Install Misc Metal - Wire Mesh			Quan:	135.00 SF	Hrs/Shift: 8.00	Cal: 40A	WC: STD	
MM1	(Mod) MISC METAL & SS CREW	10.00	CH	Eff: 100.00	Prod: 0.2963	MU	Lab Pcs: 4.00	Eqp Pcs: 2.00	
8FL16T	FORKLIFT (15K) - TELEH	1.00	10.00 HR	63.685			637		637
8T250C	FORD F250 CARPENTER	1.00	10.00 HR	19.185			192		192
CACARP	General Carpenter	3.00	30.00 MH *	80.584	2,418				2,418
CACARP4	Carpenter 4Man	1.00	10.00 MH *	84.251	843				843
\$4,088.72	0.2962 MH/SF	40.00	MH	[15.342]	3,260		829		4,089
13.5000 Units/Hr	108.0000 Un/Shift	3.3750	Unit/MH		24.15		6.14		30.29
<hr/>									
Item Totals: 625 - WIRE MESH									
\$12,188.72	0.2962 MH/SF	40.00	MH	[15.342]	3,260	8,100	829		12,189
90.287	135 SF				24.15	60.00	6.14		90.29
<hr/>									
BID ITEM = 626				Land Item	SCHEDULE: 1	100			NR
Description = MODIFICATION HAND RAIL				Unit =	LF	Takeoff Quan:	50.000	Engr Quan:	0.000
<hr/>									
5B110	Install Misc Metal - Modification Hand R			Quan:	50.00 LF	Hrs/Shift: 8.00	Cal: 40A	WC: STD	
MM1	(Mod) MISC METAL & SS CREW	8.00	CH	Eff: 100.00	Prod: 0.6400	MU	Lab Pcs: 4.00	Eqp Pcs: 1.00	
8T250C	FORD F250 CARPENTER	1.00	8.00 HR	19.185			153		153
CACARP	General Carpenter	3.00	24.00 MH *	80.583	1,934				1,934

Cost Report

Activity	Desc	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Mat/Exp	Equip Ment	Sub-Contract	Total
Resource		Pcs								
BID ITEM	= 626			Land Item	SCHEDULE: 1	100				NR
Description =	MODIFICATION HAND RAIL			Unit =	LF	Takeoff Quan:	50.000	Engr Quan:		0.000
CACARP4	Carpenter 4Man	1.00	8.00 MH *		84.251	674				674
\$2,761.49	0.6400 MH/LF		32.00 MH		[33.139]	2,608		153		2,761
6.2500 Units/Hr	50.0000 Un/Shift		1.5625 Unit/MH			52.16		3.07		55.23
Item Totals:	626		- MODIFICATION HAND RAIL							
\$2,761.49	0.6400 MH/LF		32.00 MH		[33.139]	2,608		153		2,761
55.230	50 LF					52.16		3.07		55.23

Total of Above Sub-Biditems

Item Totals: 620 - MISC. METAL										
\$99,881.53	666.0000 MH/LS		666.00 MH	[34485.49]	54,279	26,516	19,086		99,882	
99,881.530	1 LS				54,279.13	26,516.25	19,086.15		99,881.53	

Total of Above Sub-Biditems

Item Totals: 600 - CONCRETE - REBAR AND MISC. METALS										
\$138,563.18	698.0000 MH/LS		698.00 MH	[35933.49]	56,807	26,516	19,903		35,337	
138,563.180	1 LS				56,807.43	26,516.25	19,902.59		35,336.91	

BID ITEM = 700		Land Item		SCHEDULE: 1		100		NR	
Description = CONCRETE - WATERSTOP		Unit =		LF	Takeoff Quan:	412.000	Engr Quan:	412.000	
3B100A	Buy Materials	Quan:		412.00 LF	Hrs/Shft:	8.00	Cal: 40A	WC: STD	
2WS	Water Sop	1.10	453.20 LF	10.000	4,532				4,532
\$4,532.00				[]	4,532				4,532
					11.00				11.00
3B109	Install Water Stop @ Slab	Quan:		121.00 LF	Hrs/Shft:	8.00	Cal: 40A	WC: STD	
CS10	(Mod) WATER STOP CREW	8.00 CH	Eff: 100.00	Prod:	3.7813 UM	Lab Pcs:	4.00	Eqp Pcs:	1.00
8T250C	FORD F250 CARPENTER	1.00	8.00 HR	19.185			153		153
CACARP	General Carpenter	3.00	24.00 MH *	80.583	1,934				1,934
CACARP4	Carpenter 4Man	1.00	8.00 MH *	84.251	674				674
\$2,761.49	0.2644 MH/LF		32.00 MH	[13.694]	2,608		153		2,761
15.1250 Units/Hr	121.0000 Un/Shift		3.7813 Unit/MH *		21.55		1.27		22.82
3B109AA	Install Water Stop @ Slab - Retrofit	Quan:		148.00 LF	Hrs/Shft:	8.00	Cal: 40A	WC: STD	
CS10	(Mod) WATER STOP CREW	36.00 CH	Eff: 100.00	Prod:	1.0278 UM	Lab Pcs:	4.00	Eqp Pcs:	1.00
8T250C	FORD F250 CARPENTER	1.00	36.00 HR	19.185			691		691
CACARP	General Carpenter	3.00	108.00 MH *	80.584	8,703				8,703
CACARP4	Carpenter 4Man	1.00	36.00 MH *	84.250	3,033				3,033
\$12,426.69	0.9729 MH/LF		144.00 MH	[50.381]	11,736		691		12,427
4.1111 Units/Hr	32.8889 Un/Shift		1.0278 Unit/MH *		79.30		4.67		83.96

Cost Report

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
<hr/>										
BID ITEM	= 700									
Description =	CONCRETE - WATERSTOP									
			Land Item	SCHEDULE: 1	100					NR
			Unit =	LF	Takeoff Quan:	412.000		Engr Quan:		412.000
<hr/>										
3B120	Install Water Stop @ Wall		Quan:	37.00 LF	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
<u>CS10</u>	(Mod) WATER STOP CREW	2.00 CH	Eff: 100.00	Prod:	4.6250 UM	Lab Pcs:	4.00	Eqp Pcs:	1.00	
8T250C	FORD F250 CARPENTER	1.00	2.00 HR	19.185				38		38
CACARP	General Carpenter	3.00	6.00 MH *	80.585	484					484
CACARP4	Carpenter 4Man	1.00	2.00 MH *	84.250	169					169
\$690.38	0.2162 MH/LF		8.00 MH	[11.196]	652			38		690
18.5000	Units/Hr	148.0000	Un/Shift	4.6250	Unit/MH *	17.62		1.04		18.66
<hr/>										
3B120AA	Install Water Stop @ Wall - Retrofit		Quan:	57.00 LF	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
<u>CS10</u>	(Mod) WATER STOP CREW	12.00 CH	Eff: 100.00	Prod:	1.1875 UM	Lab Pcs:	4.00	Eqp Pcs:	1.00	
8T250C	FORD F250 CARPENTER	1.00	12.00 HR	19.185				230		230
CACARP	General Carpenter	3.00	36.00 MH *	80.584	2,901					2,901
CACARP4	Carpenter 4Man	1.00	12.00 MH *	84.251	1,011					1,011
\$4,142.24	0.8421 MH/LF		48.00 MH	[43.604]	3,912			230		4,142
4.7500	Units/Hr	38.0000	Un/Shift	1.1875	Unit/MH *	68.63		4.04		72.67
<hr/>										
3B130AA	Install Water Stop @ Deck - Retrofit		Quan:	49.00 LF	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
<u>CS10</u>	(Mod) WATER STOP CREW	12.00 CH	Eff: 100.00	Prod:	1.0208 UM	Lab Pcs:	4.00	Eqp Pcs:	1.00	
8T250C	FORD F250 CARPENTER	1.00	12.00 HR	19.185				230		230
CACARP	General Carpenter	3.00	36.00 MH *	80.584	2,901					2,901
CACARP4	Carpenter 4Man	1.00	12.00 MH *	84.251	1,011					1,011
\$4,142.24	0.9795 MH/LF		48.00 MH	[50.723]	3,912			230		4,142
4.0833	Units/Hr	32.6667	Un/Shift	1.0208	Unit/MH *	79.84		4.70		84.54
<hr/>										
====>	Item Totals:	700	- CONCRETE - WATERSTOP							
\$28,695.04	0.6796 MH/LF		280.00 MH	[35.19]	22,820	4,532		1,343		28,695
69.648	412 LF				55.39	11.00		3.26		69.65
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BID ITEM	= 800									
Description =	CONCRETE - CONCRETE HOLLIDAY ROCK									
			Land Item	SCHEDULE: 1	100					NR
			Unit =	CY	Takeoff Quan:	232.000		Engr Quan:		232.000
<hr/>										
3B100	Buy Mateirals - Conc.		Quan:	232.00 CY	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
<hr/>										
Environmental Fee = \$ 35 / Load										
Engery Fee = \$ 25/ Load										
Cerified Payroll Fee = \$ 200 / Load										
<hr/>										
Charge per Load = \$ 260 * \$ 260 / 10 cy per Load = \$ 26										
2CC104	5,000 PSI MIX	1.05	243.60 CY	204.000		49,694				49,694
2CC119	ENVIRONMENTAL FEE	1.05	24.00 LD	60.000		1,440				1,440
2CC120	SHORT LOAD CHARGE	1.05	24.00 CY	50.000		1,200				1,200
2CC124	CHILLED WATER TO 75	1.05	24.00 CY	30.000		720				720
2CC126	ICE	1.05	487.20 LB	0.750		365				365
2CC127	CERIFIED PAYROLL FEE	1.00	24.00 LD	200.000		4,800				4,800
2CC128	Engery Fee	1.05	24.00 LD	25.000		600				600
\$58,819.80				[]		58,820				58,820
						253.53				253.53
<hr/>										
3B100A	Buy Materials - From/ Scaffolding / Lumb		Quan:	232.00 CY	Hrs/Shft:	8.00	Cal: 40A	WC: STD		

1) Cure per Gal. = Wall From / 200 SF

Cost Report

Activity	Desc	Quantity	Unit	Unit Cost	Perm Labor	Constr Material	Equip Mat/Exp	Sub-Ment Contract	Total
BID ITEM = 800									
Description =	CONCRETE - CONCRETE HOLLIDAY ROCK		Unit =	CY	Takeoff	Quan:	232.000	Engr Quan:	232.000
2) Form Oil per Gal. =	Wall Form / 600 SF								
3) Plywood 4'x8'per EA =	Wall Form / 32 SF								
4) Symons Rent Form =	\$ 15 per SF								
5) Misc. = \$ 1.00 per SF	Inlcuded Blankets, Burlaps, Nails, Etc.								
6) 2x4x16 ft Lumber EA = (70% Edge Form X 3.25 FF) / 16 ft = 43 EA									
2x6x16 ft Lumber EA = (40% of Edge Form x 3.25 FF) / 16 ft = 34 EA									
4x6x16 ft Lumber EA = (40% of wall form x 3.25 FF) / 16 ft = 1,573 EA									
Misc. or 4x4x16 ft Lumber EA = (10% of Edge Form x 3.25 FF) / 16 ft									
3TCF101	Concrete Cure	1.05	16.26 GAL	6.000			98		98
3TCF102	Form Oil	1.05	5.41 GAL	6.000			33		33
3TCF115	Plywood 4x8 Sheet	1.05	101.85 EA	86.055			8,765		8,765
3TCF123	Misc. Suppies	1.00	3,098.00 SF	1.000			3,098		3,098
3TCF125	Water Cure Materails	1.05	1,922.67 SF	3.000			5,768		5,768
3TCF200	Rent From Wall	1.00	3,098.00 SF	15.000			46,470		46,470
3TCF201	Rent Form Liner	1.00	179.00 SF	20.000			3,580		3,580
3TCF246	2"x4"x16ft Form Lumber	1.05	45.15 EA	7.750			350		350
3TCF247	2"x6"x16ft Form Lumber	1.05	25.20 EA	13.000			328		328
3TCF249	4"x6"x16ft Form Lumber	1.05	3.77 EA	30.000			113		113
3TCF250	From Wall Repair & Damag	1.00	3,098.00 %	0.200			620		620
3TCF251	Rent Scaffolding	1.00	300.00 SF	37.000			11,100		11,100
\$80,321.02				[]			80,321		80,321
							346.21		346.21

3B100B	Build Footing Forms			Quan:	299.00 SF	Hrs/Shft:	8.00	Cal:	40A	WC:	STD
CS12	BUILD FROMS		8.00 CH	Eff:	100.00	Prod:	7.4750 UM	Lab Pcs:	5.00	Eqp Pcs:	1.00
8T250C	FORD F250 CARPENTER	1.00	8.00 HR			19.185			153		153
CACARP	General Carpenter	4.00	32.00 MH *			80.584	2,579				2,579
CACARP4	Carpenter 4Man	1.00	8.00 MH *			84.251	674				674
\$3,406.17	0.1337 MH/SF		40.00 MH		[6.907]	3,253			153		3,406
37.3750	Units/Hr	299.0000	Un/Shift	7.4750	Unit/MH *	10.88			0.51		11.39

3B100C			Build Wall Forms		Quan:	3,098.00 SF	Hrs/Shft:	8.00	Cal:	40A	WC:	STD
CS12	(Mod) BUILD FROMS		36.57 CH	Eff:	100.00	Prod:	12.1016 UM	Lab Pcs:	7.00	Eqp Pcs:	3.00	
8CRH075	RT CRANE (80T)	1.00	36.57 HR			204.160			7,466		7,466	
8FL16T	FORKLIFT (15K) - TELEH	1.00	36.57 HR			63.685			2,329		2,329	
8T250C	FORD F250 CARPENTER	1.00	36.57 HR			19.185			702		702	
CACARP	General Carpenter	4.00	146.29 MH *			80.583	11,789				11,789	
CACARP4	Carpenter 4Man	1.00	36.57 MH *			84.250	3,081				3,081	
OPHYD80	80 Tn Hydraulic Crane Ope	1.00	36.57 MH *			95.455	3,491				3,491	
OPLUBE	Lube Man	1.00	36.57 MH *			94.967	3,473				3,473	
\$32,329.97		0.0826 MH/SF	256.00 MH			[4.344]	21,833		10,497		32,330	
84.7142	Units/Hr	677.7140 Un/Shift	12.1016 Unit/MH *				7.05		3.39		10.44	

3B101	Layout Fine Grade			Quan:	735.00 SF	Hrs/Shft:	8.00	Cal:	40A	WC:	STD	
<u>CSI</u>	FINE GRADE / LAYOUT			8.00 CH	Eff:	100.00	Prod:	22.9688 UM	Lab Pcs:	4.00	Eqp Pcs:	1.00
8T250C	FORD F250 CARPENTER			1.00	8.00 HR		19.185			153		153
CACARP	General Carpenter			3.00	24.00 MH *		80.583	1,934				1,934
CACARP4	Carpenter 4Man			1.00	8.00 MH *		84.251	674				674
\$2,761.49	0.0435 MH/SF				32.00 MH		[2.254]	2,608		153		2,761
91.8750	Units/Hr	735.0000	Un/Shift		22.9688	Unit/MH *		3.55		0.21		3.76

Cost Report

Activity	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm	Constr	Equip	Sub-Contract	Total
Resource											
BID ITEM = 800				Land Item	SCHEDULE: 1	100					NR
Description =	CONCRETE - CONCRETE HOLLIDAY ROCK			Unit =	CY	Takeoff	Quan:	232.000	Engr	Quan:	232.000
3B102	F/S @ Slab			Quan:	299.00 SF	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
CS02	FORM/STRIP FTG		8.00 CH	Eff: 100.00	Prod:	6.2292 UM	Lab Pcs:	6.00	Eqp Pcs:	2.00	
8AC185	185 CFM AIR COMPRESS	1.00	8.00 HR		16.243			130		130	
8T250C	FORD F250 CARPENTER	1.00	8.00 HR		19.185			153		153	
CACARP	General Carpenter	4.00	32.00 MH *		80.584	2,579				2,579	
CACARP4	Carpenter 4Man	1.00	8.00 MH *		84.251	674				674	
LAGEN	General Laborer	1.00	8.00 MH *		71.796	574				574	
\$4,110.48	0.1605 MH/SF		48.00 MH		[7.992]	3,827		283		4,110	
37.3750	Units/Hr	299.0000	Un/Shift	6.2292	Unit/MH *	12.80		0.95		13.75	
3B103	F/S Construction Joint @ Slab			Quan:	121.00 SF	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
CS07	CONSTRUCTION JOINT		40.00 CH	Eff: 100.00	Prod:	2.0167 UM	Lab Pcs:	1.50	Eqp Pcs:	0.50	
8T250C	FORD F250 CARPENTER	0.50	20.00 HR		19.185			384		384	
CACARP	General Carpenter	1.00	40.00 MH *		80.584	3,223				3,223	
CACARP4	Carpenter 4Man	0.50	20.00 MH *		84.250	1,685				1,685	
\$5,292.05	0.4958 MH/SF		60.00 MH		[25.8]	4,908		384		5,292	
3.0250	Units/Hr	24.2000	Un/Shift	2.0167	Unit/MH *	40.56		3.17		43.74	
3B105	Pour Concrete Footing			Quan:	53.00 CY	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
CS04	CONCRETE POUR FOOTING		16.00 CH	Eff: 100.00	Prod:	0.4141 UM	Lab Pcs:	8.00	Eqp Pcs:	3.00	
8AC185	185 CFM AIR COMPRESS	1.00	16.00 HR		16.243			260		260	
8T250LA	FORD F250 LABOR 4-MA	1.00	16.00 HR		19.185			307		307	
8T250M	FORD F250 MASON 4-M	1.00	16.00 HR		19.185			307		307	
LAGEN	General Laborer	3.00	48.00 MH *		71.796	3,446				3,446	
LALAB4	Laborer Foreman	1.00	16.00 MH *		77.479	1,240				1,240	
MAMAS4	Mason 4Man	1.00	16.00 MH *		77.898	1,246				1,246	
MAMASON	Mason	3.00	48.00 MH *		74.231	3,563				3,563	
\$10,369.11	2.4150 MH/CY		128.00 MH		[99.505]	9,495		874		10,369	
3.3125	Units/Hr	26.5000	Un/Shift	0.4141	Unit/MH *	179.16		16.49		195.64	
3B105B	Concrete Pump FTG			Quan:	16.00 HR	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
8CO40MFULL	=> OR MANNED CONC	1.00	16.00 HR		360.000			5,760		5,760	
8COFEEFULL	=> OR MANNED CONC	1.00	16.00 HR		5.000			80		80	
\$5,840.00					[]			5,840		5,840	
5.2805	Units/Hr	42.2442	Un/Shift					365.00		365.00	
3B106	Cure Footing			Quan:	868.00 SF	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
CS05	CURE FOOTING		4.00 CH	Eff: 100.00	Prod:	72.3333 UM	Lab Pcs:	3.00	Eqp Pcs:	1.00	
8T250LA	FORD F250 LABOR 4-MA	1.00	4.00 HR		19.185			77		77	
LAGEN	General Laborer	2.00	8.00 MH *		71.796	574				574	
LALAB4	Laborer Foreman	1.00	4.00 MH *		77.480	310				310	
\$961.03	0.0138 MH/SF		12.00 MH		[0.582]	884		77		961	
217.0000	Units/Hr	1,736.0000	Un/Shift	72.3334	Unit/MH *	1.02		0.09		1.11	
3B107	Finish Slab			Quan:	612.00 SF	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
CS03	POINT & PATCH - FINISHER		4.00 CH	Eff: 100.00	Prod:	51.0000 UM	Lab Pcs:	3.00	Eqp Pcs:	1.00	
8T250M	FORD F250 MASON 4-M	1.00	4.00 HR		19.185			77		77	
MAMAS4	Mason 4Man	1.00	4.00 MH *		77.900	312				312	
MAMASON	Mason	2.00	8.00 MH *		74.231	594				594	
\$982.19	0.0196 MH/SF		12.00 MH		[0.803]	905		77		982	
153.0000	Units/Hr	1,224.0000	Un/Shift	51.0000	Unit/MH *	1.48		0.13		1.60	

Cost Report

Activity Resource	Desc	Quantity Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
<hr/>										
BID ITEM = 800				Land Item	SCHEDULE: 1	100				NR
Description =	CONCRETE - CONCRETE HOLLIDAY ROCK		Unit =	CY	Takeoff Quan:	232.000		Engr Quan:		232.000
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3B107A	Point & Patch @ Slab			Quan:	255.00 SF	Hrs/Shft: 8.00	Cal: 40A	WC: STD		
CS03	POINT & PATCH - FINISHER	4.00	CH	Eff: 100.00	Prod:	21.2500 UM	Lab Pcs:	3.00	Eqp Pcs:	1.00
8T250M	FORD F250 MASON 4-M	1.00	4.00	HR	19.185			77		77
MAMAS4	Mason 4Man	1.00	4.00	MH *	77.900	312				312
MAMASON	Mason	2.00	8.00	MH *	74.231	594				594
\$982.19	0.0470 MH/SF		12.00	MH	[1.927]	905		77		982
63.7500	Units/Hr	510.0000	Un/Shift	21.2500	Unit/MH *	3.55		0.30		3.85
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3B108	Sandblast Joint @ Slab			Quan:	121.00 SF	Hrs/Shft: 8.00	Cal: 40A	WC: STD		
CS06	SAND BLAST FTG	4.00	CH	Eff: 100.00	Prod:	10.0833 UM	Lab Pcs:	3.00	Eqp Pcs:	2.00
8AC185	185 CFM AIR COMPRESS	1.00	4.00	HR	16.243			65		65
8T250LA	FORD F250 LABOR 4-MA	1.00	4.00	HR	19.185			77		77
LAGEN	General Laborer	2.00	8.00	MH *	71.796	574				574
LALAB4	Laborer Foreman	1.00	4.00	MH *	77.480	310				310
\$1,026.00	0.0991 MH/SF		12.00	MH	[4.174]	884		142		1,026
30.2500	Units/Hr	242.0000	Un/Shift	10.0833	Unit/MH *	7.31		1.17		8.48
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3B112	F/S Construction Joint @ Wall			Quan:	92.00 SF	Hrs/Shft: 8.00	Cal: 40A	WC: STD		
CS07	CONSTRUCTION JOINT	32.00	CH	Eff: 100.00	Prod:	1.9167 UM	Lab Pcs:	1.50	Eqp Pcs:	0.50
8T250C	FORD F250 CARPENTER	0.50	16.00	HR	19.185			307		307
CACARP	General Carpenter	1.00	32.00	MH *	80.584	2,579				2,579
CACARP4	Carpenter 4Man	0.50	16.00	MH *	84.250	1,348				1,348
\$4,233.64	0.5217 MH/SF		48.00	MH	[27.146]	3,927		307		4,234
2.8750	Units/Hr	23.0000	Un/Shift	1.9167	Unit/MH *	42.68		3.34		46.02
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3B113	F/S @ Wall			Quan:	3,098.00 SF	Hrs/Shft: 8.00	Cal: 40A	WC: STD		
CS08	(Mod) FROM / STRIP WALL	128.00	CH	Eff: 100.00	Prod:	3.0254 UM	Lab Pcs:	8.00	Eqp Pcs:	3.00
8AC185	185 CFM AIR COMPRESS	1.00	128.00	HR	16.243			2,079		2,079
8CRH075	RT CRANE (80T)	1.00	128.00	HR	204.160			26,132		26,132
8T250C	FORD F250 CARPENTER	1.00	128.00	HR	19.185			2,456		2,456
CACARP	General Carpenter	4.00	512.00	MH *	80.584	41,259				41,259
CACARP4	Carpenter 4Man	1.00	128.00	MH *	84.250	10,784				10,784
LAGEN	General Laborer	1.00	128.00	MH *	71.795	9,190				9,190
OPHYD80	80 Tn Hydraulic Crane Ope	1.00	128.00	MH *	95.455	12,218				12,218
OPLUBE	Lube Man	1.00	128.00	MH *	94.966	12,156				12,156
\$116,273.86	0.3305 MH/SF		1,024.00	MH	[16.88]	85,607		30,667		116,274
24.2031	Units/Hr	193.6250	Un/Shift	3.0254	Unit/MH *	27.63		9.90		37.53
<hr/>										
3B114	F/S Block out & bulkhead Wall			Quan:	126.00 SF	Hrs/Shft: 8.00	Cal: 40A	WC: STD		
CS08	FROM / STRIP WALL	16.00	CH	Eff: 100.00	Prod:	1.3125 UM	Lab Pcs:	6.00	Eqp Pcs:	2.00
8AC185	185 CFM AIR COMPRESS	1.00	16.00	HR	16.243			260		260
8T250C	FORD F250 CARPENTER	1.00	16.00	HR	19.185			307		307
CACARP	General Carpenter	4.00	64.00	MH *	80.584	5,157				5,157
CACARP4	Carpenter 4Man	1.00	16.00	MH *	84.250	1,348				1,348
LAGEN	General Laborer	1.00	16.00	MH *	71.796	1,149				1,149
\$8,220.92	0.7619 MH/SF		96.00	MH	[37.929]	7,654		567		8,221
7.8750	Units/Hr	63.0000	Un/Shift	1.3125	Unit/MH *	60.75		4.50		65.25
<hr/>										
3B115	Pour Concrete Wall			Quan:	174.00 CY	Hrs/Shft: 8.00	Cal: 40A	WC: STD		
CS09	CONCRETE POUR WALL	40.00	CH	Eff: 100.00	Prod:	0.5438 UM	Lab Pcs:	8.00	Eqp Pcs:	2.00
8AC185	185 CFM AIR COMPRESS	1.00	40.00	HR	16.243			650		650
8T250LA	FORD F250 LABOR 4-MA	1.00	40.00	HR	19.185			767		767

Cost Report

Activity	Desc	Quantity	Unit	Unit	Perm	Constr	Equip	Sub-	Total
Resource		Pcs		Cost	Labor	Material	Matl/Exp	Ment	Contract
<hr/>									
BID ITEM = 800									
Description =	CONCRETE - CONCRETE HOLLIDAY ROCK		Unit =	CY	Takeoff	Quan:	232.000	Engr Quan:	232.000
CACARP	General Carpenter	2.00	80.00 MH *	80.584	6,447				6,447
LAGEN	General Laborer	3.00	120.00 MH *	71.796	8,615				8,615
LALAB4	Laborer Foreman	1.00	40.00 MH *	77.479	3,099				3,099
MAMASON	Mason	2.00	80.00 MH *	74.231	5,938				5,938
\$25,516.90	1.8390 MH/CY		320.00 MH	[80.177]	24,100			1,417	25,517
4.3500 Units/Hr	34.8000 Un/Shift		0.5438 Unit/MH *		138.50			8.14	146.65
3B115B	Concrete Pump Wall			Quan:	40.00 HR	Hrs/Shift:	8.00	Cal: 40A WC: STD	
8CO40MFULL	==> OR MANNED CONC	1.00	40.00 HR	360.000				14,400	14,400
8COFEEFULL	==> OR MANNED CONC	1.00	40.00 HR	5.000				200	200
\$14,600.00				[]				14,600	14,600
5.2770 Units/Hr	42.2164 Un/Shift							365.00	365.00
3B116	Cure @ Wall			Quan:	3,627.00 SF	Hrs/Shift:	8.00	Cal: 40A WC: STD	
CS05	CURE FOOTING		8.00 CH Eff: 100.00	Prod: 151.1250	UM	Lab Pcs: 3.00	Eqp Pcs: 1.00		
8T250LA	FORD F250 LABOR 4-MA	1.00	8.00 HR	19.185			153		153
LAGEN	General Laborer	2.00	16.00 MH *	71.796	1,149				1,149
LALAB4	Laborer Foreman	1.00	8.00 MH *	77.479	620				620
\$1,922.04	0.0066 MH/SF		24.00 MH	[0.279]	1,769			153	1,922
453.3750 Units/Hr	3,627.0000 Un/Shift		151.1252 Unit/MH *		0.49			0.04	0.53
3B117	Sack & Patch @ Wall			Quan:	3,324.00 SF	Hrs/Shift:	8.00	Cal: 40A WC: STD	
CS03	POINT & PATCH - FINISHER		12.00 CH Eff: 100.00	Prod: 92.3333	UM	Lab Pcs: 3.00	Eqp Pcs: 1.00		
8T250M	FORD F250 MASON 4-M	1.00	12.00 HR	19.185			230		230
MAMAS4	Mason 4Man	1.00	12.00 MH *	77.898	935				935
MAMASON	Mason	2.00	24.00 MH *	74.231	1,782				1,782
\$2,946.53	0.0108 MH/SF		36.00 MH	[0.444]	2,716			230	2,947
277.0000 Units/Hr	2,216.0000 Un/Shift		92.3334 Unit/MH *		0.82			0.07	0.89
3B118	Finish Top of Wall			Quan:	477.00 SF	Hrs/Shift:	8.00	Cal: 40A WC: STD	
CS03	POINT & PATCH - FINISHER		4.00 CH Eff: 100.00	Prod: 39.7500	UM	Lab Pcs: 3.00	Eqp Pcs: 1.00		
8T250M	FORD F250 MASON 4-M	1.00	4.00 HR	19.185			77		77
MAMAS4	Mason 4Man	1.00	4.00 MH *	77.900	312				312
MAMASON	Mason	2.00	8.00 MH *	74.231	594				594
\$982.19	0.0251 MH/SF		12.00 MH	[1.03]	905			77	982
119.2500 Units/Hr	954.0000 Un/Shift		39.7500 Unit/MH *		1.90			0.16	2.06
3B119	Sandsbalst Joint @ Wall			Quan:	321.00 SF	Hrs/Shift:	8.00	Cal: 40A WC: STD	
CS06	SAND BLAST FTG		4.00 CH Eff: 100.00	Prod: 26.7500	UM	Lab Pcs: 3.00	Eqp Pcs: 2.00		
8AC185	185 CFM AIR COMPRESS	1.00	4.00 HR	16.243			65		65
8T250LA	FORD F250 LABOR 4-MA	1.00	4.00 HR	19.185			77		77
LAGEN	General Laborer	2.00	8.00 MH *	71.796	574				574
LALAB4	Laborer Foreman	1.00	4.00 MH *	77.480	310				310
\$1,026.00	0.0373 MH/SF		12.00 MH	[1.573]	884			142	1,026
80.2500 Units/Hr	642.0000 Un/Shift		26.7500 Unit/MH *		2.75			0.44	3.20
3B130	F/S Deck Edge Form			Quan:	26.00 SF	Hrs/Shift:	8.00	Cal: 40A WC: STD	
CS08	FROM / STRIP WALL		4.00 CH Eff: 100.00	Prod: 1.0833	UM	Lab Pcs: 6.00	Eqp Pcs: 2.00		
8AC185	185 CFM AIR COMPRESS	1.00	4.00 HR	16.243			65		65
8T250C	FORD F250 CARPENTER	1.00	4.00 HR	19.185			77		77
CACARP	General Carpenter	4.00	16.00 MH *	80.583	1,289				1,289
CACARP4	Carpenter 4Man	1.00	4.00 MH *	84.250	337				337
LAGEN	General Laborer	1.00	4.00 MH *	71.795	287				287

Cost Report

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 800										
Description =		CONCRETE - CONCRETE HOLLIDAY ROCK		Unit =	CY	Takeoff Quan:	232.000	Engr Quan:	232.000	NR
\$2,055.22	0.9230 MH/SF	24.00 MH	[45.952]	1,914				142		2,055
6.5000 Units/Hr	52.0000 Un/Shift	1.0833 Unit/MH *		73.60				5.45		79.05
3B131 Deck Bottom Surface										
		Quan: 44.00 SF		Hrs/Shift: 8.00	Cal: 40A	WC: STD				
<u>CS08</u>	(Mod) FROM / STRIP WALL	4.00 CH	Eff: 100.00	Prod: 1.5714 UM	Lab Pcs: 7.00	Eqp Pcs: 2.00				
8AC185	185 CFM AIR COMPRESS	1.00 4.00 HR		16.243		65		65		
8T250C	FORD F250 CARPENTER	1.00 4.00 HR		19.185		77		77		
CACARP	General Carpenter	4.00 16.00 MH *		80.583	1,289			1,289		
CACARP4	Carpenter 4Man	1.00 4.00 MH *		84.250	337			337		
LAGEN	General Laborer	1.00 4.00 MH *		71.795	287			287		
OPLUBE	Lube Man	1.00 4.00 MH *		94.965	380			380		
\$2,435.08	0.6363 MH/SF	28.00 MH	[32.129]	2,293				142		2,435
11.0000 Units/Hr	88.0000 Un/Shift	1.5714 Unit/MH *		52.12				3.22		55.34
3B134 F/S Block out & bulkhead										
		Quan: 7.00 SF		Hrs/Shift: 8.00	Cal: 40A	WC: STD				
<u>CS08</u>	FROM / STRIP WALL	4.00 CH	Eff: 100.00	Prod: 0.2917 UM	Lab Pcs: 6.00	Eqp Pcs: 2.00				
8AC185	185 CFM AIR COMPRESS	1.00 4.00 HR		16.243		65		65		
8T250C	FORD F250 CARPENTER	1.00 4.00 HR		19.185		77		77		
CACARP	General Carpenter	4.00 16.00 MH *		80.583	1,289			1,289		
CACARP4	Carpenter 4Man	1.00 4.00 MH *		84.250	337			337		
LAGEN	General Laborer	1.00 4.00 MH *		71.795	287			287		
\$2,055.22	3.4285 MH/SF	24.00 MH	[170.68]	1,914				142		2,055
1.7500 Units/Hr	14.0000 Un/Shift	0.2917 Unit/MH *		273.36				20.24		293.60
3B135 Pour Concrete Deck										
		Quan: 5.00 CY		Hrs/Shift: 8.00	Cal: 40A	WC: STD				
<u>CS20</u>	CONCRETE POUR DECK	8.00 CH	Eff: 100.00	Prod: 0.0625 UM	Lab Pcs: 10.00	Eqp Pcs: 3.00				
8AC185	185 CFM AIR COMPRESS	1.00 8.00 HR		16.243		130		130		
8T250LA	FORD F250 LABOR 4-MA	1.00 8.00 HR		19.185		153		153		
8T250M	FORD F250 MASON 4-M	1.00 8.00 HR		19.185		153		153		
CACARP	General Carpenter	2.00 16.00 MH *		80.583	1,289			1,289		
LAGEN	General Laborer	3.00 24.00 MH *		71.795	1,723			1,723		
LALAB4	Laborer Foreman	1.00 8.00 MH *		77.479	620			620		
MAMAS4	Mason 4Man	1.00 8.00 MH *		77.896	623			623		
MAMASON	Mason	3.00 24.00 MH *		74.231	1,782			1,782		
\$6,473.86	16.0000 MH/CY	80.00 MH	[690.672]	6,037				437		6,474
0.6250 Units/Hr	5.0000 Un/Shift	0.0625 Unit/MH *		1,207.39				87.38		1,294.77
3B135B Concrete Pump Deck										
		Quan: 8.00 HR		Hrs/Shift: 8.00	Cal: 40A	WC: STD				
8CO40MFULL	=> OR MANNED CONC	1.00 8.00 HR		360.000		2,880		2,880		
8COFEFULL	=> OR MANNED CONC	1.00 8.00 HR		5.000		40		40		
\$2,920.00			[]			2,920		2,920		
5.2980 Units/Hr	42.3841 Un/Shift					365.00		365.00		
3B136 Cure @ Deck										
		Quan: 218.00 SF		Hrs/Shift: 8.00	Cal: 40A	WC: STD				
<u>CS05</u>	CURE FOOTING	4.00 CH	Eff: 100.00	Prod: 18.1667 UM	Lab Pcs: 3.00	Eqp Pcs: 1.00				
8T250LA	FORD F250 LABOR 4-MA	1.00 4.00 HR		19.185		77		77		
LAGEN	General Laborer	2.00 8.00 MH *		71.796	574			574		
LALAB4	Laborer Foreman	1.00 4.00 MH *		77.480	310			310		
\$961.03	0.0550 MH/SF	12.00 MH	[2.317]	884				77		961
54.5000 Units/Hr	436.0000 Un/Shift	18.1667 Unit/MH *		4.06				0.35		4.41
3B137 Point & Patch @ Deck										
		Quan: 348.00 SF		Hrs/Shift: 8.00	Cal: 40A	WC: STD				
<u>CS03</u>	POINT & PATCH - FINISHER	4.00 CH	Eff: 100.00	Prod: 29.0000 UM	Lab Pcs: 3.00	Eqp Pcs: 1.00				

Cost Report

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
BID ITEM = 800										
Description =	CONCRETE - CONCRETE HOLLIDAY ROCK		Unit =	CY	Takeoff Quan:		232.000	Engr Quan:		NR 232.000
8T250M	FORD F250 MASON 4-M	1.00	4.00 HR	19.185				77		77
MAMAS4	Mason 4Man	1.00	4.00 MH *	77.900	312					312
MAMASON	Mason	2.00	8.00 MH *	74.231	594					594
\$982.19	0.0344 MH/SF		12.00 MH	[1.412]	905			77		982
87.0000	Units/Hr	696.0000	Un/Shift	29.0000	Unit/MH *	2.60		0.22		2.82
3B138 Finish Deck										
					Quan:	142.00 SF	Hrs/Shift:	8.00	Cal: 40A	WC: STD
CS03	POINT & PATCH - FINISHER		4.00 CH Eff: 100.00	Prod:	11.8333	UM	Lab Pcs:	3.00	Eqp Pcs:	1.00
8T250M	FORD F250 MASON 4-M	1.00	4.00 HR	19.185				77		77
MAMAS4	Mason 4Man	1.00	4.00 MH *	77.900	312					312
MAMASON	Mason	2.00	8.00 MH *	74.231	594					594
\$982.19	0.0845 MH/SF		12.00 MH	[3.461]	905			77		982
35.5000	Units/Hr	284.0000	Un/Shift	11.8333	Unit/MH *	6.38		0.54		6.92
3B139 Sandsblast Joint @ Deck										
					Quan:	117.00 SF	Hrs/Shift:	8.00	Cal: 40A	WC: STD
CS06	SAND BLAST FTG		4.00 CH Eff: 100.00	Prod:	9.7500	UM	Lab Pcs:	3.00	Eqp Pcs:	2.00
8AC185	185 CFM AIR COMPRESS	1.00	4.00 HR	16.243				65		65
8T250LA	FORD F250 LABOR 4-MA	1.00	4.00 HR	19.185				77		77
LAGEN	General Laborer	2.00	8.00 MH *	71.796	574					574
LALAB4	Laborer Foreman	1.00	4.00 MH *	77.480	310					310
\$1,026.00	0.1025 MH/SF		12.00 MH	[4.317]	884			142		1,026
29.2500	Units/Hr	234.0000	Un/Shift	9.7500	Unit/MH *	7.56		1.21		8.77
Item Totals: 800 - CONCRETE - CONCRETE HOLLIDAY ROCK										
\$402,814.37	10.2931 MH/CY		2,388.00 MH	[500.909]	192,803	58,820	80,321	70,871		402,814
1,736.269	232 CY				831.05	253.53	346.21	305.48		1,736.27

BID ITEM = 900 Land Item SCHEDULE: 1 100 TL
 Description = STRUCTURAL BACKFILL - HOLLIDAY ROCK Unit = CY Takeoff Quan: 365.000 Engr Quan: 365.000

3B100 Buy Mateirals Quan: 365.00 CY Hrs/Shift: 8.00 Cal: 40A WC: STD

Environmental Fee = \$ 35 / Load
 Engery Fee = \$ 25/ Load
 Cerified Payroll Fee = \$ 200 / Load

Charge per Load = \$ 260 * \$ 260 / 10 cy per Load = \$ 26

2CC113	2-SACK SLURRY	1.05	383.25 CY	176.000		67,452				67,452
2CC119	ENVIRONMENTAL FEE	1.05	39.00 LD	60.000		2,340				2,340
2CC120	SHORT LOAD CHARGE	1.05	39.00 CY	50.000		1,950				1,950
2CC127	CERIFIED PAYROLL FEE	1.00	39.00 LD	200.000		7,800				7,800
2CC128	Engery Fee	1.05	39.00 LD	25.000		975				975
\$80,517.00				[]		80,517				80,517
						220.59				220.59

3A415 Structure Backfill - 2 Sack Slurry Quan: 365.00 CY Hrs/Shift: 8.00 Cal: 40A WC: STD

M&L03	(Mod) MUCK & LOAD (SMAL EXCAV	24.00	CH Eff: 100.00	Prod:	15.2083	UH	Lab Pcs:	4.00	Eqp Pcs:	2.00
8BH446	CAT 446 BACKHOE	1.00	24.00 HR	67.830				1,628		1,628
8T250OP	FORD F250 OPEATOR 4-	1.00	27.00 HR	19.185				518		518
LAGEN	General Laborer	2.00	48.00 MH *	71.796	3,446					3,446
OPFORE	Operator Foreman	1.00	27.00 MH *	101.573	2,742					2,742
OPHOE	Rubber Tire Backhoe Opera	1.00	24.00 MH *	95.101	2,282					2,282
\$10,616.99	0.2712 MH/CY		99.00 MH	[13.398]	8,471			2,146		10,617
15.2083	Units/Hr	121.6667	Un/Shift	3.6869	Unit/MH	23.21		5.88		29.09

Activity	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Material	Constr Mat/Exp	Equip	Sub-Contract	Total
<hr/>											
BID ITEM = 900				Land Item	SCHEDULE: 1	100					TL
Description =	STRUCTURAL BACKFILL - HOLLIDAY ROCK			Unit =	CY	Takeoff	Quan:	365.000	Engr	Quan:	365.000
<hr/>											
3B105B	Concrete Pump - Slurry Backfill			Quan:	24.00 HR	Hrs/Shift:	8.00	Cal: 40A	WC: STD		
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Conc. Pumps = 10 hours per Each Structure											
8CO40MFULL	=> OR MANNED CONC	1.00	24.00	HR	360.000				8,640		8,640
8COFEEFULL	=> OR MANNED CONC	1.00	24.00	HR	5.000				120		120
\$8,760.00					[]				8,760		8,760
28.2353	Units/Hr	225.8824	Un/Shift						365.00		365.00
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=>	Item Totals:	900	-	STRUCTURAL BACKFILL - HOLLIDAY ROCK							
\$99,893.99	0.2712	MH/CY	99.00	MH	[13.398]	8,471	80,517		10,906		99,894
273.682		365	CY			23.21	220.59		29.88		273.68
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BID ITEM = 1000				Land Item	SCHEDULE: 1	100					TL
Description =	COATING - CONCRETE WALLS, AND PIPING (PV			Unit =	LS	Takeoff	Quan:	1.000	Engr	Quan:	1.000
<hr/>											
800	COATING & PAITING - Sub Work			Quan:	1.00 LS	Hrs/Shift:	8.00	Cal: 40A	WC: STD		
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4PAINT	Paiting & Coating Sub	1.00	1.00	LS	121,221.435				121,221		121,221
\$121,221.44					[]				121,221		121,221
									121,221.44		121,221.44
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BID ITEM = 1100				Land Item	SCHEDULE: 1	100					NR
Description =	COVERS - CST ALUMINUM COVERS			Unit =	SF	Takeoff	Quan:	390.000	Engr	Quan:	390.000
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5B001	Buy Mateirals			Quan:	390.00 SF	Hrs/Shift:	8.00	Cal: 40A	WC: STD		
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2MMALCOVERS	Misc. Metal Aluminum Cov	1.00	390.00	SF	191.000		74,490				74,490
\$74,490.00					[]		74,490				74,490
							191.00				191.00
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5B110	Install Misc Metal - Alum. Covers			Quan:	390.00 SF	Hrs/Shift:	8.00	Cal: 40A	WC: STD		
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MM1	(Mod) MISC METAL & SS CREW		48.00	CH	Eff: 100.00	Prod:	0.4923 MU	Lab Pcs:	4.00	Eqp Pcs:	2.00
8FL16T	FORKLIFT (15K) - TELEH	1.00	48.00	HR		63.685			3,057		3,057
8T250C	FORD F250 CARPENTER	1.00	48.00	HR		19.185			921		921
CACARP	General Carpenter	3.00	144.00	MH *		80.583	11,604				11,604
CACARP4	Carpenter 4Man	1.00	48.00	MH *		84.250	4,044				4,044
\$19,625.78	0.4923	MH/SF	192.00	MH	[25.492]	15,648			3,978		19,626
8.1250	Units/Hr	65.0000	Un/Shift	2.0313	Unit/MH	40.12			10.20		50.32
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5B200	Install Covers - Protection (BBII)			Quan:	390.00 SF	Hrs/Shift:	8.00	Cal: 40A	WC: STD		
<hr/>											
MM1	(Mod) MISC METAL & SS CREW		8.00	CH	Eff: 100.00	Prod:	48.7500 UH	Lab Pcs:	2.00	Eqp Pcs:	0.00
LAGEN	General Laborer	2.00	16.00	MH *		71.796	1,149				1,149
\$1,148.73	0.0410	MH/SF	16.00	MH	[1.663]	1,149					1,149
48.7500	Units/Hr	* 390.0000	Un/Shift	24.3750	Unit/MH	2.95					2.95
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=>	Item Totals:	1100	-	COVERS - CST ALUMINUM COVERS							
\$95,264.51	0.5333	MH/SF	208.00	MH	[27.155]	16,797	74,490		3,978		95,265
244.268		390	SF			43.07	191.00		10.20		244.27

Cost Report

Activity Resource	Desc	Quantity Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
BID ITEM = 1200			Land Item	SCHEDULE: 1 100						NR
Description =	COVERS - CST MODIFICATION TO EXISTING CO		Unit =	SF	Takeoff Quan:		22.000	Engr Quan:		22.000
5B001	Buy Mateirals			Quan:	22.00 SF	Hrs/Shft:	8.00	Cal: 40A	WC: STD	
2MMALCOVERS Misc. Metal Aluminum Cov	1.00	22.00	SF	191.000		4,202				4,202
\$4,202.00				[]		4,202				4,202
						191.00				191.00
5B110	Install Misc Metal - Alum. Covers			Quan:	22.00 SF	Hrs/Shft:	8.00	Cal: 40A	WC: STD	
<u>MM1</u>	(Mod) MISC METAL & SS CREW	8.00	CH	Eff: 100.00	Prod:	1.4545 MU	Lab Pcs:	4.00	Eqp Pcs:	2.00
8FL16T	FORKLIFT (15K) - TELEH	1.00	8.00	HR	63.685			509		509
8T250C	FORD F250 CARPENTER	1.00	8.00	HR	19.185			153		153
CACARP	General Carpenter	3.00	24.00	MH *	80.583	1,934				1,934
CACARP4	Carpenter 4Man	1.00	8.00	MH *	84.251	674				674
\$3,270.97	1.4545 MH/SF	32.00	MH	[75.316]	2,608			663		3,271
2.7500 Units/Hr	22.0000 Un/Shift	0.6875	Unit/MH		118.55			30.13		148.68
5B200	Install Covers - Protection (BBID)			Quan:	22.00 SF	Hrs/Shft:	8.00	Cal: 40A	WC: STD	
<u>MM1</u>	(Mod) MISC METAL & SS CREW	4.00	CH	Eff: 100.00	Prod:	5.5000 UH	Lab Pcs:	2.00	Eqp Pcs:	0.00
LAGEN	General Laborer	2.00	8.00	MH *	71.796	574				574
\$574.37	0.3636 MH/SF	8.00	MH	[14.742]	574					574
5.5000 Units/Hr *	44.0000 Un/Shift	2.7500	Unit/MH		26.11					26.11
Item Totals: 1200 - COVERS - CST MODIFICATION TO EXISTING CO										
\$8,047.34	1.8181 MH/SF	40.00	MH	[90.058]	3,182	4,202		663		8,047
365.788	22 SF				144.65	191.00		30.13		365.79

PARENT ITEM = 1300										VR
Description =	MECHANICAL - EQUIPMENT		Unit =	EA	Takeoff Quan:		8.000	Engr Quan:		8.000
Listing of Sub-Biditems of Parent Item 1300:										
BID ITEM = 1310			Land Item	SCHEDULE: 1 100						VR
Description =	FIBRACAST EQUIPMENT PURCHASE		Unit =	LS	Takeoff Quan:		1.000	Engr Quan:		0.000
13AA001	Buy Materials			Quan:	1.00 LS	Hrs/Shft:	8.00	Cal: 40A	WC: STD	
change price from fibraacast email dated 7/11/2024. 10% reduction in price.										
2VR13A1	Fibercast Package	1.00	1.00	LS	1,300,000.000	1,300,000				1,300,000
2VR13A2	Fibercast FOB	1.00	1.00	LS	0.009					
\$1,300,000.01				[]		1,300,000				1,300,000
						1,300,000.01				1,300,000.01
13AA010	Unload & Store Materials			Quan:	6.00 LD	Hrs/Shft:	8.00	Cal: 40A	WC: STD	
<u>VR01</u>	(Mod) Unload & Storage Materials	24.00	CH	Eff: 100.00	Prod:	2.0000 US	Lab Pcs:	2.00	Eqp Pcs:	2.00
8FL16T	FORKLIFT (15K) - TELEH	1.00	24.00	HR	63.685			1,528		1,528
8T250LA	FORD F250 LABOR 4-MA	1.00	24.00	HR	19.185			460		460
LAGEN	General Laborer	1.00	24.00	MH *	71.795	1,723				1,723
LALAB4	Laborer Foreman	1.00	24.00	MH *	77.479	1,859				1,859
\$5,571.46	8.0000 MH/LD	48.00	MH	[342.92]	3,583			1,989		5,571
0.2500 Units/Hr	2.0000 Un/Shift *	0.1250	Unit/MH		597.10			331.48		928.58
Item Totals: 1310 - FIBRACAST EQUIPMENT PURCHASE										
\$1,305,571.47	48.0000 MH/LS	48.00	MH	[2057.52]	3,583	1,300,000		1,989		1,305,571

**Unreviewed

Cost Report

Activity Resource	Desc	Quantity Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Mat/Exp	Equip Ment	Sub- Contract	Total
BID ITEM = 1310										
Description =	FIBRACAST EQUIPMENT PURCHASE									
1,305,571.470	1 LS				3,582.58	1,300,000.01		1,988.88		1,305,571.47

BID ITEM = 1320										
Description =	INSTALL RAS PUMP									
13AA100	Install Equipment									
VR02	Install Equipment	12.00	CH	Eff: 100.00	Prod: 1.5000	S	Lab Pcs: 4.00	Eqp Pcs: 2.00		
8FL16T	FORKLIFT (15K) - TELEH	1.00	12.00	HR	63.685			764		764
8T250LA	FORD F250 LABOR 4-MA	1.00	12.00	HR	19.185			230		230
LALAB4	Laborer Foreman	1.00	12.00	MH *	77.479	930				930
LAPIPE	Pipe Laborer	3.00	36.00	MH *	75.034	2,701				2,701
\$4,625.42	48.0000 MH/LS		48.00	MH	[2097.12]	3,631		994		4,625
0.0833 Units/Hr	0.6667 Un/Shift		0.0208	Unit/MH		3,630.98		994.44		4,625.42
====>	Item Totals:	1320	-	INSTALL RAS PUMP						
\$4,625.42	48.0000 MH/EA		48.00	MH	[2097.12]	3,631		994		4,625
4,625.420	1 EA					3,630.98		994.44		4,625.42

BID ITEM = 1330										
Description =	INSTALL FILTRATE PUMP									
13AA001	Buy Materials									
2VR13AA01	1" STAINLESS ANCHOR	1.00	6.00	LS	100.000	600				600
2VR203	Non Shink Grout	1.00	4.00	EA	63.190	253				253
2VR204	Hilti 500RE Epoxy	1.00	2.00	EA	83.750	168				168
\$1,020.26					[]	1,020				1,020
						1,020.26				1,020.26
13AA100	Install Equipment									
VR02	Install Equipment	8.00	CH	Eff: 100.00	Prod: 1.0000	S	Lab Pcs: 4.00	Eqp Pcs: 2.00		
8FL16T	FORKLIFT (15K) - TELEH	1.00	8.00	HR	63.685			509		509
8T250LA	FORD F250 LABOR 4-MA	1.00	8.00	HR	19.185			153		153
LALAB4	Laborer Foreman	1.00	8.00	MH *	77.479	620				620
LAPIPE	Pipe Laborer	3.00	24.00	MH *	75.034	1,801				1,801
\$3,083.61	32.0000 MH/LS		32.00	MH	[1398.08]	2,421		663		3,084
0.1250 Units/Hr	1.0000 Un/Shift		0.0313	Unit/MH		2,420.65		662.96		3,083.61
====>	Item Totals:	1330	-	INSTALL FILTRATE PUMP						
\$4,103.87	32.0000 MH/EA		32.00	MH	[1398.08]	2,421	1,020	663		4,104
4,103.870	1 EA					2,420.65	1,020.26	662.96		4,103.87

BID ITEM = 1340										
Description =	INSTALL CHANEL MEMBRANES									
13AA100	Install Equipment									
VR02	Install Equipment	40.00	CH	Eff: 100.00	Prod: 5.0000	S	Lab Pcs: 4.00	Eqp Pcs: 2.00		
8FL16T	FORKLIFT (15K) - TELEH	1.00	40.00	HR	63.685			2,547		2,547

**Unreviewed

Cost Report

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
<hr/>										
BID ITEM = 1340										
Description =	INSTALL CHANEL MEMBRANES		Land Item Unit =	SCHEDULE: 1 EA	100 Takeoff Quan:		5.000	Engr Quan:		VR 0.000
8T250LA	FORD F250 LABOR 4-MA	1.00	40.00 HR	19.185				767		767
LALAB4	Laborer Foreman	1.00	40.00 MH *	77.479	3,099					3,099
LAPIPE	Pipe Laborer	3.00	120.00 MH *	75.034	9,004					9,004
\$15,418.07	32.0000 MH/EA		160.00 MH	[1398.08]	12,103			3,315		15,418
0.1250 Units/Hr	1.0000 Un/Shift		0.0313 Unit/MH		2,420.65			662.96		3,083.61
<hr/>										
13AA120	TESTING ALLOWANCE FOR 1 MEMBRAIN REM		Quan:	1.00 LS	Hrs/Shift: 8.00	Cal: 40A	WC: STD			
<u>VR02</u>	Install Equipment		8.00 CH Eff: 100.00	Prod:	1.0000 S	Lab Pcs:	4.00	Eqp Pcs:	2.00	
8FL16T	FORKLIFT (15K) - TELEH	1.00	8.00 HR	63.685				509		509
8T250LA	FORD F250 LABOR 4-MA	1.00	8.00 HR	19.185				153		153
LALAB4	Laborer Foreman	1.00	8.00 MH *	77.479	620					620
LAPIPE	Pipe Laborer	3.00	24.00 MH *	75.034	1,801					1,801
\$3,083.61	32.0000 MH/LS		32.00 MH	[1398.08]	2,421			663		3,084
0.1250 Units/Hr	1.0000 Un/Shift		0.0313 Unit/MH		2,420.65			662.96		3,083.61
<hr/>										
====>	Item Totals: 1340 - INSTALL CHANEL MEMBRANES									
\$18,501.68	38.4000 MH/EA		192.00 MH	[1677.696]	14,524			3,978		18,502
3,700.336	5 EA				2,904.78			795.55		3,700.34
<hr/>										
BID ITEM = 1342										
Description =	INSTALL CHANEL BRAKETs		Land Item Unit =	SCHEDULE: 1 EA	100 Takeoff Quan:		40.000	Engr Quan:		VR 0.000
6AB502	Buy Materials		Quan:	1.00 LS	Hrs/Shift: 8.00	Cal: 40A	WC: STD			
2VR201	3/4" Epoxy Anchors	1.00	200.00 EA	21.500	4,300					**Unreviewed 4,300
2VR203	Non Shink Grout	1.00	10.00 EA	63.190	632					632
2VR204	Hilti 500RE Epoxy	1.00	10.00 EA	83.750	838					838
\$5,769.40				[]	5,769					5,769
					5,769.40					5,769.40
<hr/>										
13AA100	INSTALL CHANEL BRAKETs		Quan:	40.00 EA	Hrs/Shift: 8.00	Cal: 40A	WC: STD			
<u>VR02</u>	Install Equipment		104.00 CH Eff: 100.00	Prod:	13.0000 S	Lab Pcs:	4.00	Eqp Pcs:	2.00	
8FL16T	FORKLIFT (15K) - TELEH	1.00	104.00 HR	63.685				6,623		6,623
8T250LA	FORD F250 LABOR 4-MA	1.00	104.00 HR	19.185				1,995		1,995
LALAB4	Laborer Foreman	1.00	104.00 MH *	77.479	8,058					8,058
LAPIPE	Pipe Laborer	3.00	312.00 MH *	75.034	23,411					23,411
\$40,086.96	10.4000 MH/EA		416.00 MH	[454.376]	31,468			8,618		40,087
0.3846 Units/Hr	3.0769 Un/Shift		0.0962 Unit/MH		786.71			215.46		1,002.17
<hr/>										
====>	Item Totals: 1342 - INSTALL CHANEL BRAKETs									
\$45,856.36	10.4000 MH/EA		416.00 MH	[454.376]	31,468	5,769		8,618		45,856
1,146.409	40 EA				786.71	144.24		215.46		1,146.41
<hr/>										
BID ITEM = 1343										
Description =	INSTALL FIBRACAST HEADERS		Land Item Unit =	SCHEDULE: 1 EA	100 Takeoff Quan:		2.000	Engr Quan:		0.000
13AA100	INSTALL FIBRACAST HEADERS		Quan:	2.00 EA	Hrs/Shift: 8.00	Cal: 40A	WC: STD			
<u>VR02</u>	Install Equipment		12.00 CH Eff: 100.00	Prod:	1.5000 S	Lab Pcs:	4.00	Eqp Pcs:	2.00	**Unreviewed
8FL16T	FORKLIFT (15K) - TELEH	1.00	12.00 HR	63.685				764		764
8T250LA	FORD F250 LABOR 4-MA	1.00	12.00 HR	19.185				230		230
LALAB4	Laborer Foreman	1.00	12.00 MH *	77.479	930					930

Cost Report

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
BID ITEM = 1343										
Description =	INSTALL FIBRACAST HEADERS			Land Item Unit =	SCHEDULE: 1 EA Takeoff Quan:	100	2.000	Engr Quan:		0.000
LAPIPE	Pipe Laborer	3.00	36.00 MH *	75.034	2,701					2,701
\$4,625.42	24.0000 MH/EA		48.00 MH	[1048.56]	3,631			994		4,625
0.1667 Units/Hr	1.3333 Un/Shift		0.0417 Unit/MH		1,815.49			497.22		2,312.71
Item Totals: 1343 - INSTALL FIBRACAST HEADERS										
\$4,625.42	24.0000 MH/EA		48.00 MH	[1048.56]	3,631			994		4,625
2,312.710	2 EA				1,815.49			497.22		2,312.71
BID ITEM = 1345										
Description =	INSTALL CHANEL BOTTOM DUCTING			Land Item Unit =	SCHEDULE: 1 EA Takeoff Quan:	100	5.000	Engr Quan:		VR 0.000
6AB502	Buy Materials - Anchors			Quan:	72.00 EA Hrs/Shift:	8.00	Cal: 40A WC: STD			
2VR201	3/4" Epoxy Anchors	1.20	86.40 EA		21.500	1,858				**Unreviewed 1,858
2VR203	Non Shink Grout	1.20	4.20 EA		63.190	265				265
2VR204	Hilti 500RE Epoxy	1.20	12.00 EA		83.750	1,005				1,005
\$3,128.00					[]	3,128				3,128
						43.44				43.44
13AA100	INSTALL CHANEL BOTTOM DUCTING			Quan:	5.00 EA Hrs/Shift:	8.00	Cal: 40A WC: STD			
VR02	Install Equipment		56.00 CH Eff:	100.00	Prod:	7.0000 S	Lab Pcs:	4.00	Eqp Pcs:	2.00
8FL16T	FORKLIFT (15K) - TELEH	1.00	56.00 HR		63.685			3,566		3,566
8T250LA	FORD F250 LABOR 4-MA	1.00	56.00 HR		19.185			1,074		1,074
LALAB4	Laborer Foreman	1.00	56.00 MH *		77.479	4,339				4,339
LAPIPE	Pipe Laborer	3.00	168.00 MH *		75.034	12,606				12,606
\$21,585.28	44.8000 MH/EA		224.00 MH	[1957.312]	16,945			4,641		21,585
0.0893 Units/Hr	0.7143 Un/Shift		0.0223 Unit/MH		3,388.91			928.14		4,317.06
Item Totals: 1345 - INSTALL CHANEL BOTTOM DUCTING										
\$24,713.28	44.8000 MH/EA		224.00 MH	[1957.312]	16,945	3,128		4,641		24,713
4,942.656	5 EA				3,388.91	625.60		928.14		4,942.66
BID ITEM = 1350										
Description =	INSTALL AIR SCOUR BLOWER			Land Item Unit =	SCHEDULE: 1 EA Takeoff Quan:	100	1.000	Engr Quan:		VR 0.000
13AA001	Buy Materials - Anchors			Quan:	6.00 EA Hrs/Shift:	8.00	Cal: 40A WC: STD			
2VR13AA01	1" STAINLESS ANCHOR	1.20	7.20 LS		100.000	720				**Unreviewed 720
2VR203	Non Shink Grout	1.00	4.00 EA		63.190	253				253
2VR204	Hilti 500RE Epoxy	1.00	2.00 EA		83.750	168				168
\$1,140.26					[]	1,140				1,140
						190.04				190.04
13AA100	Install - Scour Blower			Quan:	1.00 EA Hrs/Shift:	8.00	Cal: 40A WC: STD			
VR02	Install Equipment		8.00 CH Eff:	100.00	Prod:	1.0000 S	Lab Pcs:	4.00	Eqp Pcs:	2.00
8FL16T	FORKLIFT (15K) - TELEH	1.00	8.00 HR		63.685			509		509
8T250LA	FORD F250 LABOR 4-MA	1.00	8.00 HR		19.185			153		153
LALAB4	Laborer Foreman	1.00	8.00 MH *		77.479	620				620
LAPIPE	Pipe Laborer	3.00	24.00 MH *		75.034	1,801				1,801
\$3,083.61	32.0000 MH/EA		32.00 MH	[1398.08]	2,421			663		3,084
0.1250 Units/Hr	1.0000 Un/Shift		0.0313 Unit/MH		2,420.65			662.96		3,083.61

Cost Report

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
BID ITEM = 1350										
Description =	INSTALL AIR SCOUR BLOWER		Land Item Unit =	SCHEDULE: 1 100	EA	Takeoff Quan:	1.000	Engr Quan:		VR 0.000
Item Totals: 1350 - INSTALL AIR SCOUR BLOWER										
\$4,223.87	32.0000 MH/EA		32.00 MH	[1398.08]	2,421	1,140		663		4,224
4,223.870	1 EA				2,420.65	1,140.26		662.96		4,223.87
BID ITEM = 1370										
Description =	INSTALL RAS SLIDE GATE 18"X12"		Land Item Unit =	SCHEDULE: 1 100	EA	Takeoff Quan:	1.000	Engr Quan:		VR 0.000
6AB502	Buy Materials - Gate 18"x12"		Quan:	1.00 LS	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
										**Unreviewed
2VR101	Ras Slide Gate With Actuat	1.00	1.00 EA	26,743.207		26,743				26,743
2VR101.1	Slide Gate Seal	1.00	1.00 EA	475.000		475				475
\$27,218.21				[]		27,218				27,218
						27,218.21				27,218.21
13AA001	Buy Materials - Anchor Bolts		Quan:	14.00 EA	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
										**Unreviewed
2VR201	3/4" Epoxy Anchors	1.10	2.20 EA	21.500		47				47
2VR202	1/2"	1.20	14.40 EA	10.500		151				151
2VR203	Non Shink Grout	1.00	2.00 EA	63.190		126				126
2VR204	Hilti 500RE Epoxy	1.00	2.00 EA	83.750		168				168
\$492.38				[]		492				492
						35.17				35.17
13AA010	Unload & Store Materials		Quan:	0.50 LD	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
<u>VR01</u>	(Mod) Unload & Storage Materials	2.00	CH Eff: 100.00	Prod: 2.0000	US	Lab Pcs: 2.00	Eqp Pcs: 2.00			
8FL16T	FORKLIFT (15K) - TELEH	1.00	2.00 HR	63.685			127			127
8T250LA	FORD F250 LABOR 4-MA	1.00	2.00 HR	19.185			38			38
LALAB4	General Laborer	1.00	2.00 MH *	71.795	144					144
LALAB4	Laborer Foreman	1.00	2.00 MH *	77.475	155					155
\$464.28	8.0000 MH/LD		4.00 MH	[342.92]	299		166			464
0.2500 Units/Hr	2.0000 Un/Shift	*	0.1250 Unit/MH		597.08		331.48			928.56
13AA100	Install - Template, Drill or Core, Epox		Quan:	1.00 EA	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
<u>VR02</u>	(Mod) Install Equipment	7.99	CH Eff: 100.00	Prod: 0.0417	UM	Lab Pcs: 3.00	Eqp Pcs: 2.00			
8FL16T	FORKLIFT (15K) - TELEH	1.00	7.99 HR	63.685			509			509
8T250LA	FORD F250 LABOR 4-MA	1.00	7.99 HR	19.185			153			153
LALAB4	Laborer Foreman	1.00	7.99 MH *	77.479	619					619
LAPIPE	Pipe Laborer	2.00	15.99 MH *	75.034	1,200					1,200
\$2,480.94	23.9800 MH/EA		23.98 MH	[1051.68]	1,819		662			2,481
0.1252 Units/Hr	1.0013 Un/Shift		0.0417 Unit/MH *		1,818.86		662.08			2,480.94
13AA120	Install - Form, Grout, Strip		Quan:	1.00 EA	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
<u>VR02</u>	Install Equipment	4.00	CH Eff: 100.00	Prod: 0.0625	UM	Lab Pcs: 4.00	Eqp Pcs: 2.00			
8FL16T	FORKLIFT (15K) - TELEH	1.00	4.00 HR	63.685			255			255
8T250LA	FORD F250 LABOR 4-MA	1.00	4.00 HR	19.185			77			77
LALAB4	Laborer Foreman	1.00	4.00 MH *	77.480	310					310
LAPIPE	Pipe Laborer	3.00	12.00 MH *	75.034	900					900
\$1,541.81	16.0000 MH/EA		16.00 MH	[699.04]	1,210		331			1,542
0.2500 Units/Hr	2.0000 Un/Shift		0.0625 Unit/MH *		1,210.33		331.48			1,541.81
Item Totals: 1370 - INSTALL RAS SLIDE GATE 18"X12"										
\$32,197.62	43.9800 MH/EA		43.98 MH	[1922.18]	3,328	27,711		1,159		32,198
32,197.620	1 EA				3,327.73	27,710.59		1,159.30		32,197.62

Activity	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Material	Constr Matl/Exp	Equip	Sub-Contract	Total
<hr/>											
BID ITEM = 1380				Land Item	SCHEDULE: 1	100					VR
Description =	INSTALL EFFLUENT SLIDE GATE 90"X32"			Unit =	EA	Takeoff	Quan:	1.000	Engr	Quan:	0.000
<hr/>											
13AA001	Buy Materials - Anchor Bolts			Quan:	28.00 EA	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
2VR201	3/4" Epoxy Anchors	1.20	28.80	EA	21.500		619				**Unreviewed
2VR202	1/2"	1.20	4.80	EA	10.500		50				619
2VR203	Non Shink Grout	1.00	2.00	EA	63.190		126				50
2VR204	Hilti 500RE Epoxy	1.00	2.00	EA	83.750		168				126
\$963.48					[]		963				168
							34.41				963
											34.41
<hr/>											
6AB502	Buy Materials - Gate 90"x32"			Quan:	1.00 LS	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
2VR100	Effluent Slide Gate With Ac	1.00	1.00	EA	43,821.812		43,822				**Unreviewed
2VR101.1	Slide Gate Seal	1.00	1.00	EA	475.000		475				43,822
\$44,296.81					[]		44,297				475
							44,296.81				44,297
											44,296.81
<hr/>											
13AA010	Unload & Store Materials			Quan:	0.50 LD	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
VR01	(Mod) Unload & Storage Materials		2.00	CH	Eff: 100.00	Prod:	2.0000 US	Lab Pcs:	2.00	Eqp Pcs:	2.00
8FL16T	FORKLIFT (15K) - TELEH	1.00	2.00	HR		63.685			127		127
8T250LA	FORD F250 LABOR 4-MA	1.00	2.00	HR		19.185			38		38
LALAB4	General Laborer	1.00	2.00	MH *		71.795	144				144
LALAB4	Laborer Foreman	1.00	2.00	MH *		77.475	155				155
\$464.28	8.0000 MH/LD		4.00	MH	[342.92]	299			166		464
0.2500	Units/Hr	2.0000	Un/Shift	*	0.1250	Unit/MH	597.08		331.48		928.56
<hr/>											
13AA100	Template, Drill or Core, Epoxy Anchor B			Quan:	1.00 EA	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
VR02	(Mod) Install Equipment		24.00	CH	Eff: 100.00	Prod:	3.0000 S	Lab Pcs:	3.00	Eqp Pcs:	2.00
8FL16T	FORKLIFT (15K) - TELEH	1.00	24.00	HR		63.685			1,528		1,528
8T250LA	FORD F250 LABOR 4-MA	1.00	24.00	HR		19.185			460		460
LALAB4	Laborer Foreman	1.00	24.00	MH *		77.479	1,859				1,859
LAPIPE	Pipe Laborer	2.00	48.00	MH *		75.034	3,602				3,602
\$7,450.01	72.0000 MH/EA		72.00	MH	[3157.68]	5,461			1,989		7,450
0.0417	Units/Hr	0.3333	Un/Shift		0.0139	Unit/MH	5,461.13		1,988.88		7,450.01
<hr/>											
13AA120	Install - Form, Grout, Strip			Quan:	1.00 EA	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
VR02	(Mod) Install Equipment		8.00	CH	Eff: 100.00	Prod:	0.0313 UM	Lab Pcs:	4.00	Eqp Pcs:	2.00
8FL16T	FORKLIFT (15K) - TELEH	1.00	8.00	HR		63.685			509		509
8T250LA	FORD F250 LABOR 4-MA	1.00	8.00	HR		19.185			153		153
LALAB4	Laborer Foreman	1.00	8.00	MH *		77.479	620				620
LAPIPE	Pipe Laborer	3.00	24.00	MH *		75.034	1,801				1,801
\$3,083.61	32.0000 MH/EA		32.00	MH	[1398.08]	2,421			663		3,084
0.1250	Units/Hr	1.0000	Un/Shift	*	0.0313	Unit/MH	2,420.65		662.96		3,083.61
<hr/>											
Item Totals:	1380	-	INSTALL EFFLUENT SLIDE GATE 90"X32"								
\$56,258.19	108.0000 MH/EA		108.00	MH	[4727.22]	8,180	45,260		2,818		56,258
56,258.190											

Cost Report

Activity Resource	Desc	Quantity Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
BID ITEM = 1400										
Description =	ELECTRICAL - (VFD, WIRING, CONDUITS)		Land Item Unit =	SCHEDULE: 1 LS	100					TL
				Takeoff Quan:		1.000		Engr Quan:		1.000
800	ELECTRICAL - Southern Contracting Sub W			Quan:	1.00 LS	Hrs/Shft: 8.00	Cal: 40A	WC: STD		
4ELEC1	Electrical	1.00	1.00 LS	568,367.346				568,367	568,367	568,367
\$568,367.35				[]				568,367.35	568,367.35	568,367.35
801	ELECTRICAL - VFD			Quan:	1.00 LS	Hrs/Shft: 8.00	Cal: 40A	WC: STD		
4ELEC4	Electical VFD	1.00	1.00 LS	217,502.040				217,502	217,502	217,502
\$217,502.04				[]				217,502	217,502	217,502
								217,502.04	217,502.04	217,502.04
<hr/>										
====>	Item Totals:	1400	- ELECTRICAL - (VFD, WIRING, CONDUITS)							
	\$785,869.39			[]				785,869	785,869	785,869
	785,869.390	1 LS						785,869.39	785,869.39	785,869.39

BID ITEM = 1500										
Description =	ELECTRICAL - SCADA PROGRAMING - SOFA		Land Item Unit =	SCHEDULE: 1 LS	100					TL
				Takeoff Quan:		1.000		Engr Quan:		1.000
800	ELECTRICAL - SCADA PROGRAMING - Sub Wor			Quan:	1.00 LS	Hrs/Shft: 8.00	Cal: 40A	WC: STD		
4SCADA1	Sys Engineer - Discovery &	1.00	1.00 LS	112,004.120				112,004	112,004	112,004
4SCADA2	Sys Engineer - Developmen	1.00	1.00 LS	0.100						
4SCADA3	SNR Eng- Depolymnt & St	1.00	1.00 LS	0.100						
4SCADA4	PRJ MGMT & Admins Fee	1.00	1.00 LS	0.100						
4SCADA5	SCADA MOB	1.00	1.00 LS	0.100						
\$112,004.52				[]				112,005	112,005	112,005
								112,004.52	112,004.52	112,004.52
801	ELECTRICAL - SCADA PROGRAMING - Southern			Quan:	1.00 LS	Hrs/Shft: 8.00	Cal: 40A	WC: STD		
4ELEC5	Electrical - Cord Study and	1.00	1.00 LS	25,510.204				25,510	25,510	25,510
\$25,510.20				[]				25,510	25,510	25,510
								25,510.20	25,510.20	25,510.20
<hr/>										
====>	Item Totals:	1500	- ELECTRICAL - SCADA PROGRAMING - SOFA							
	\$137,514.72			[]				137,515	137,515	137,515
	137,514.720	1 LS						137,514.72	137,514.72	137,514.72

PARENT ITEM = 1600										VR
Description =	MECHANICAL - SMALL BORE PIPE & SUPPORTS		Unit =	LS	Takeoff Quan:		1.000	Engr Quan:		1.000
Listing of Sub-Biditems of Parent Item 1600:										
BID ITEM = 1610										VR
Description =	INSTRUMENTATION PIPE/SUPPORTS		Land Item Unit =	SCHEDULE: 1 EA	100					VR
				Takeoff Quan:		4.000		Engr Quan:		0.000
16AA001	Buy Materials - Instrumentation Assembly			Quan:	4.00 EA	Hrs/Shft: 8.00	Cal: 40A	WC: STD		
2VRINS100	Instrument Assembly	1.20	4.80 EA	742.500		3,564				3,564
\$3,564.00				[]		3,564				3,564
						891.00				891.00

Cost Report

Activity Resource	Desc	Quantity Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 1610										
Description =	INSTRUMENTATION PIPE/SUPPORTS		Land Item Unit =	SCHEDULE: 1 EA	100 Takeoff Quan:		4.000	Engr Quan:		VR 0.000
16AA101	Install - Instrumet Assembly		Quan:	4.00 EA	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
<u>VR02</u>	Install Equipment	8.00	CH	Eff: 100.00	Prod: 1.0000	S	Lab Pcs: 4.00	Eqp Pcs: 2.00		
8FL16T	FORKLIFT (15K) - TELEH	1.00	8.00	HR	63.685		509			509
8T250LA	FORD F250 LABOR 4-MA	1.00	8.00	HR	19.185		153			153
LALAB4	Laborer Foreman	1.00	8.00	MH *	77.479	620				620
LAPIPE	Pipe Laborer	3.00	24.00	MH *	75.034	1,801				1,801
\$3,083.61	8.0000 MH/EA		32.00	MH	[349.52]	2,421		663		3,084
0.5000	Units/Hr	4.0000	Un/Shift	0.1250	Unit/MH	605.16		165.74		770.90
16AA002	Buy Materials - Electrical Instrument Fl		Quan:	3.00 EA	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
2VRINS101	Electrical Instrument Flange	1.00	3.00	EA	750.000		2,250			**Unreviewed 2,250
\$2,250.00					[]		2,250			2,250
						750.00				750.00
16AA102	Install - Electrical Instruments (Mechan		Quan:	3.00 EA	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
<u>VR02</u>	Install Equipment	8.00	CH	Eff: 100.00	Prod: 10.6667	MU	Lab Pcs: 4.00	Eqp Pcs: 2.00		
8FL16T	FORKLIFT (15K) - TELEH	1.00	8.00	HR	63.685		509			509
8T250LA	FORD F250 LABOR 4-MA	1.00	8.00	HR	19.185		153			153
LALAB4	Laborer Foreman	1.00	8.00	MH *	77.479	620				620
LAPIPE	Pipe Laborer	3.00	24.00	MH *	75.034	1,801				1,801
\$3,083.61	10.6666 MH/EA		32.00	MH	[466.027]	2,421		663		3,084
0.3750	Units/Hr	3.0000	Un/Shift	0.0938	Unit/MH	806.88		220.99		1,027.87
Item Totals: 1610 - INSTRUMENTATION PIPE/SUPPORTS										
\$11,981.22	16.0000 MH/EA		64.00	MH	[699.04]	4,841	5,814	1,326		11,981
2,995.305	4 EA					1,210.33	1,453.50	331.48		2,995.31

BID ITEM = 1620										
Description =	AIR PIPE/SUPPORTS		Land Item Unit =	SCHEDULE: 1 LF	100 Takeoff Quan:		40.000	Engr Quan:		VR 0.000
16AA002	Buy Materials - 1/2" SS Air Pipe		Quan:	50.00 FT	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
2VRSS101	1/2" 316L Pipe	1.25	62.50	FT	25.890	1,618				**Unreviewed 1,618
2VRSS102	1/2" 316L 90D Elbow	1.25	10.00	EA	12.230	122				122
2VRSS103	1/2" 316L 45D Elbow	1.25	5.00	EA	12.500	63				63
2VRSS104	1/2" 316L Tee	1.25	5.00	EA	15.650	78				78
2VRSS105	1/2" 316L Union	1.25	10.00	EA	40.500	405				405
2VRSS106	1/2" 316L Ball Valves	1.25	10.00	EA	81.500	815				815
2VRSS107	1/2" 316L Coupling	1.25	6.25	EA	21.500	134				134
2VRSS108	1/2" 316L Nipples	1.25	5.00	EA	10.000	50				50
2VRSS109	1/2" 316L Capps	1.25	5.00	EA	5.650	28				28
2VRSS110	1/2" 316L Adapters	1.25	10.00	EA	5.200	52				52
\$3,365.81					[]	3,366				3,366
						67.32				67.32
16AA003	Buy Materials - Strut Supports & Anchors		Quan:	5.00 EA	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
2VR201.1	3/8" 316L Wedge Anchors	1.00	20.00	EA	5.810	116				**Unreviewed 116
2VR203	Non Shink Grout	1.00	6.00	EA	63.190	379				379
2VRSTRUT101	Single Strut	1.00	32.00	FT	23.399	749				749
2VRSTRUT102	Strut Channel with Mountin	1.00	2.00	EA	54.555	109				109
2VRSTRUT103	Single Strut Floor Mount	1.00	2.00	EA	82.366	165				165

Cost Report

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Mat/Exp	Equip Ment	Sub- Contract	Total
BID ITEM = 1630										
Description =	TURBIDITY PIPING/SUPPORTS		Land Item Unit =	SCHEDULE: 1 100 LF	Takeoff Quan:		50.000	Engr Quan:		VR 0.000
2VR201.1	3/8" 316l Wedge Anchors	1.10	22.00 EA	5.810		128				128
2VR203	Non Shink Grout	1.00	6.00 EA	63.190		379				379
2VRSHIP100	Shipping to Job Site	1.00	1.00 LS	300.000		300				300
2VRSTRUT101	Single Strut	1.25	40.00 FT	23.399		936				936
2VRSTRUT102	Strut Channel with Mountin	1.00	2.00 EA	54.555		109				109
2VRSTRUT103	Single Strut Floor Mount	1.00	2.00 EA	82.366		165				165
2VRSTRUT104	Angle Brakets	1.00	12.00 EA	14.250		171				171
2VRSTRUT105	1/2" Pipe Clamp	1.00	4.00 EA	9.184		37				37
2VRSTRUT106	Strut Channel Nut 1/2-13	1.00	20.00 EA	2.585		52				52
2VRSTRUT107	Bolt 1/2-13	1.00	20.00 EA	3.463		69				69
2VRSTRUT108	Washer 1/2"	1.00	20.00 EA	0.620		12				12
2VRSTRUT109	Strut Plastic Safety Caps	1.00	10.00 EA	1.228		12				12
\$2,370.18				[]		2,370				2,370
						474.04				474.04
16AA002 Install Turbidity pipe with Supports										
			Quan:	50.00 LF	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
VR02	Install Equipment		16.00 CH	Eff: 100.00	Prod:	1.2800 MU	Lab Pcs:	4.00	Eqp Pcs:	2.00
8FL16T	FORKLIFT (15K) - TELEH	1.00	16.00 HR		63.685			1,019		1,019
8T250LA	FORD F250 LABOR 4-MA	1.00	16.00 HR		19.185			307		307
LALAB4	Laborer Foreman	1.00	16.00 MH *		77.479	1,240				1,240
LAPIPE	Pipe Laborer	3.00	48.00 MH *		75.034	3,602				3,602
\$6,167.22					[55.923]	4,841		1,326		6,167
3.1250 Units/Hr			25.0000 Un/Shift		0.7813 Unit/MH	96.83		26.52		123.34
Item Totals: 1630 - TURBIDITY PIPING/SUPPORTS										
\$13,159.51			1.2800 MH/LF		64.00 MH	[55.923]	4,841	6,992	1,326	13,160
263.190			50 LF				96.83	139.85	26.52	263.19

BID ITEM = 1640										
Description =	CHEMICAL PIPE/SUPPORTS		Land Item Unit =	SCHEDULE: 1 100 LF	Takeoff Quan:		40.000	Engr Quan:		VR 0.000
16AA001 Buy Materials - 3" CPVC										
			Quan:	40.00 LF	Hrs/Shft:	8.00	Cal: 40A	WC: STD		**Unreviewed
2VRCPVC3100	3"CPVC Sch 8 Pipe	1.50	60.00 FT		20.057	1,203				1,203
2VRCPVC3101	3"CPVC Sch 80 90D Elbow	1.00	6.00 EA		60.171	361				361
2VRCPVC3102	3"CPVC Sch 80 45D Elbow	1.00	2.00 EA		65.216	130				130
2VRCPVC3103	3"CPVC Sch 80 Coupling	1.00	2.00 EA		41.190	82				82
2VRCPVC3104	3"CPVC Sch 80 Reducing	1.00	12.00 EA		49.166	590				590
2VRCPVC3105	3"CPVC Sch 80 Union	1.00	2.00 EA		155.548	311				311
2VRCPVC3106	3"CPVC Sch 80 Tee	1.00	2.00 EA		78.250	157				157
2VRCPVC3107	3"CPVC Sch 80 Coupling F	1.00	4.00 EA		85.000	340				340
2VRSHIP100	Shipping to Job Site	1.00	1.00 LS		200.000	200				200
\$3,374.85					[]	3,375				3,375
						84.37				84.37
16AA003 Buy Materials - 1" CPVC										
			Quan:	40.00 FT	Hrs/Shft:	8.00	Cal: 40A	WC: STD		**Unreviewed
2VRCPVC1100	1"CPVC Sch 80Pipe	1.50	60.00 FT		4.544	273				273
2VRCPVC1101	1"CPVC Sch 80 90D Elbow	1.00	6.00 EA		7.912	47				47
2VRCPVC1102	1"CPVC Sch 80 45D Elbow	1.00	2.00 EA		10.980	22				22
2VRCPVC1103	1"CPVC Sch 80Coupling	1.00	2.00 EA		7.774	16				16
2VRCPVC1104	1"CPVC Sch 80 Union	1.00	2.00 EA		21.910	44				44
2VRCPVC1105	1"CPVC Sch 80 Tee	1.00	2.00 EA		11.430	23				23
2VRCPVC1106	1"CPVC Sch 80 Injection C	1.00	2.00 EA		350.000	700				700
2VRSHIP100	Shipping to Job Site	1.00	1.00 LS		200.000	200				200

Cost Report

Activity	Desc	Quantity	Unit	Unit	Perm	Constr	Equip	Sub-	Total
Resource		Pcs		Cost	Labor	Material	Matl/Exp	Ment	Contract
<hr/>									
BID ITEM	= 1640			Land Item	SCHEDULE:	1	100		VR
Description =	CHEMICAL PIPE/SUPPORTS			Unit =	LF	Takeoff	Quan:	40.000	Engr Quan:
\$1,324.36					[]		1,324		1,324
							33.11		33.11
16AA004	Buy Materials - Supports			Quan:	5.00 EA	Hrs/Shft:	8.00	Cal: 40A	WC: STD
									**Unreviewed
2VR201.1	3/8" 316l Wedge Anchors	1.25	25.00 EA		5.810		145		145
2VR203	Non Shink Grout	1.00	6.00 EA		63.190		379		379
2VRSHIP100	Shipping to Job Site	1.00	1.00 LS		200.000		200		200
2VRSTRUT101	Single Strut	2.00	40.00 FT		23.399		936		936
2VRSTRUT102	Strut Channel with Mountin	1.00	2.00 EA		54.555		109		109
2VRSTRUT103	Single Strut Floor Mount	1.00	2.00 EA		82.366		165		165
2VRSTRUT104	Angle Brakets	1.00	12.00 EA		14.250		171		171
2VRSTRUT106	Strut Channel Nut 1/2-13	1.00	40.00 EA		2.585		103		103
2VRSTRUT107	Bolt 1/2-13	1.00	40.00 EA		3.463		139		139
2VRSTRUT108	Washer 1/2"	1.00	40.00 EA		0.620		25		25
2VRSTRUT109	Strut Plastic Safety Caps	1.00	20.00 EA		1.228		25		25
2VRSTRUT110	Double Strut	1.00	12.00 FT		38.538		462		462
2VRSTRUT111	Double Strut Floor Mount	1.00	2.00 EA		77.393		155		155
2VRSTRUT112	1" Pipe Clamp	1.00	4.00 EA		11.266		45		45
2VRSTRUT113	3" Pipe Clamp	1.00	39.38 EA		8.423		332		332
\$3,390.58					[]		3,391		3,391
							678.12		678.12
16AA002	Installation of Double Containment Chemi			Quan:	40.00 LF	Hrs/Shft:	8.00	Cal: 40A	WC: STD
<u>VR02</u>	Install Equipment		32.00 CH	Eff: 100.00	Prod:	3.2000 MU	Lab Pcs:	4.00	Eqp Pcs: 2.00
8FL16T	FORKLIFT (15K) - TELEH	1.00	32.00 HR		63.685			2,038	2,038
8T250LA	FORD F250 LABOR 4-MA	1.00	32.00 HR		19.185			614	614
LALAB4	Laborer Foreman	1.00	32.00 MH *		77.479	2,479			2,479
LAPIPE	Pipe Laborer	3.00	96.00 MH *		75.034	7,203			7,203
\$12,334.46			128.00 MH	[139.808]	9,683		2,652		12,334
1.2500	Units/Hr	10.0000	Unit/Shift		242.07		66.30		308.36
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Item Totals:	1640								
\$20,424.25	3.2000 MH/LF		128.00 MH	[139.808]	9,683	8,090		2,652	20,424
510.606	40 LF				242.07	202.24		66.30	510.61
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BID ITEM	= 1650			Land Item	SCHEDULE:	1	100		VR
Description =	SERVICE WATER PIPE/SUPPORTS			Unit =	LS	Takeoff	Quan:	1.000	Engr Quan:
									0.000
16AA006	Buy Materials - 6" DI A53 Pipe			Quan:	40.00 LF	Hrs/Shft:	8.00	Cal: 40A	WC: STD
									**Unreviewed
2VRDIGRV6100	6"DI Grov Class 53 Pipe	1.50	60.00 FT		161.266		9,676		9,676
2VRDIGRV6101	6"DI Grov Class 53 Victolic	1.00	15.00 EA		639.979		9,600		9,600
2VRDIGRV6102	6"DI Grov Class 53 90D El	1.00	4.00 EA		670.110		2,680		2,680
2VRDIGRV6103	6"DI Grov Class 53 Tee	1.00	1.00 EA		865.180		865		865
2VRDIGRV6104	6"DI Grov Class 53 Flange	1.00	2.00 EA		597.001		1,194		1,194
2VRDIGRV6105	6" DI Grov Class 53 Saddle	1.00	1.00 EA		369.734		370		370
2VRSHIP100	Shipping to Job Site	1.00	1.00 LS		500.000		500		500
2VRVALVE6100	Motor Control Valve flange	1.00	1.00 EA		2,000.000		2,000		2,000
\$26,885.04					[]		26,885		26,885
							672.13		672.13
16AA008	Instal - 6" Service (Pipe and Supports			Quan:	40.00 LF	Hrs/Shft:	8.00	Cal: 40A	WC: STD
<u>VR02</u>	Install Equipment		32.00 CH	Eff: 100.00	Prod:	3.2000 MU	Lab Pcs:	4.00	Eqp Pcs: 2.00

Cost Report

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
BID ITEM = 1650										
Description =	SERVICE WATER PIPE/SUPPORTS		Land Item Unit =	SCHEDULE: 1 100						VR
				LS	Takeoff Quan:		1.000	Engr Quan:		0.000
8FL16T	FORKLIFT (15K) - TELEH	1.00	32.00 HR	63.685				2,038		2,038
8T250LA	FORD F250 LABOR 4-MA	1.00	32.00 HR	19.185				614		614
LALAB4	Laborer Foreman	1.00	32.00 MH *	77.479	2,479					2,479
LAPIPE	Pipe Laborer	3.00	96.00 MH *	75.034	7,203					7,203
\$12,334.46		3.2000 MH/LF	128.00 MH	[139.808]	9,683			2,652		12,334
1.2500 Units/Hr		10.0000 Un/Shift	0.3125 Unit/MH		242.07			66.30		308.36
16AA005 Buy Materials - 2" PVC Small Bore Pipe										
			Quan:	20.00 LF	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
2VR316L2105	2"Stainless Union	1.00	2.00 EA	446.180		892			**Unreviewed	892
2VRCPVC2100	2"PVC SCH80 Pipe	2.00	40.00 FT	10.667		427				427
2VRCPVC2101	2"PVC SCH80Pipe Nipple	1.00	2.00 EA	45.597		91				91
2VRCPVC2102	2"PVC SCH80 90D Elbows	1.00	6.00 EA	23.074		138				138
2VRCPVC2103	2"PVC SCH80 45D Elbows	1.00	1.00 EA	24.839		25				25
2VRCPVC2104	2"PVC SCH80 Coupling	1.00	4.00 EA	17.039		68				68
2VRCPVC2105	2"PVC SCH80 Union	1.00	5.00 EA	74.944		375				375
2VRSHIP100	Shipping to Job Site	1.00	1.00 LS	200.000		200				200
\$2,216.41				[]		2,216				2,216
						110.82				110.82
16AA002 Instal - 2" Service Water (Pipe and Supp										
			Quan:	20.00 LF	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
VR02	Install Equipment		8.00 CH Eff: 100.00	Prod: 1.0000 S	Lab Pcs: 4.00	Eqp Pcs: 2.00				
8FL16T	FORKLIFT (15K) - TELEH	1.00	8.00 HR	63.685		509				509
8T250LA	FORD F250 LABOR 4-MA	1.00	8.00 HR	19.185		153				153
LALAB4	Laborer Foreman	1.00	8.00 MH *	77.479	620					620
LAPIPE	Pipe Laborer	3.00	24.00 MH *	75.034	1,801					1,801
\$3,083.61		1.6000 MH/LF	32.00 MH	[69.904]	2,421			663		3,084
2.5000 Units/Hr		20.0000 Un/Shift	0.6250 Unit/MH		121.03			33.15		154.18
16AA007 Buy Materials - Pipe Supports										
			Quan:	6.00 EA	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
2VR201.1	3/8" 316l Wedge Anchors	1.00	20.00 EA	5.810		116			**Unreviewed	116
2VR203	Non Shink Grout	1.00	6.00 EA	63.190		379				379
2VRSHIP100	Shipping to Job Site	1.00	1.00 LS	500.000		500				500
2VRSTRUT101	Single Strut	1.00	10.00 FT	23.399		234				234
2VRSTRUT102	Strut Channel with Mountin	1.00	4.00 EA	54.555		218				218
2VRSTRUT103	Single Strut Floor Mount	1.00	1.00 EA	82.366		82				82
2VRSTRUT104	Angle Brakets	1.00	14.00 EA	14.250		200				200
2VRSTRUT106	Strut Channel Nut 1/2-13	1.00	60.00 EA	2.585		155				155
2VRSTRUT107	Bolt 1/2-13	1.00	60.00 EA	3.463		208				208
2VRSTRUT108	Washer 1/2"	1.00	60.00 EA	0.620		37				37
2VRSTRUT109	Strut Plastic Safety Caps	1.00	30.00 EA	1.228		37				37
2VRSTRUT110	Double Strut	1.00	30.00 FT	38.538	1,156					1,156
2VRSTRUT111	Double Strut Floor Mount	1.00	4.00 EA	77.393		310				310
2VRSTRUT113	3" Pipe Clamp	1.00	14.00 EA	8.423		118				118
\$3,750.11				[]		3,750				3,750
						625.02				625.02
16AA003 Instal - of 2" HDPE Service Water with h										
			Quan:	1.00 LS	Hrs/Shft:	8.00	Cal: 40A	WC: STD		
VR02	Install Equipment		8.00 CH Eff: 100.00	Prod: 1.0000 S	Lab Pcs: 4.00	Eqp Pcs: 2.00				
8FL16T	FORKLIFT (15K) - TELEH	1.00	8.00 HR	63.685		509				509
8T250LA	FORD F250 LABOR 4-MA	1.00	8.00 HR	19.185		153				153
LALAB4	Laborer Foreman	1.00	8.00 MH *	77.479	620					620
LAPIPE	Pipe Laborer	3.00	24.00 MH *	75.034	1,801					1,801
\$3,083.61		32.0000 MH/LS	32.00 MH	[1398.08]	2,421			663		3,084
0.1250 Units/Hr		1.0000 Un/Shift	0.0313 Unit/MH		2,420.65			662.96		3,083.61

Cost Report

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
BID ITEM = 1650										
Description = SERVICE WATER PIPE/SUPPORTS			Land Item Unit =	SCHEDULE: 1 100						VR
				LS	Takeoff Quan:		1.000	Engr Quan:		0.000
====> Item Totals: 1650 - SERVICE WATER PIPE/SUPPORTS										
\$51,353.24	192.0000 MH/LS		192.00 MH	[8388.48]	14,524	32,852		3,978		51,353
51,353.240			1 LS		14,523.92	32,851.56		3,977.76		51,353.24

Total of Above Sub-Biditems

====> Item Totals: 1600 - MECHANICAL - SMALL BORE PIPE & SUPPORTS										
\$116,031.63	592.0000 MH/LS		592.00 MH	[25864.48]	44,782	58,985		12,265		116,032
116,031.630			1 LS		44,782.06	58,984.81		12,264.76		116,031.63

PARENT ITEM = 1700										
Description = MECHANICAL - FAB PIPE & SUPPORTS			Unit =	LS	Takeoff Quan:		1.000	Engr Quan:		VR
										1.000

Listing of Sub-Biditems of Parent Item 1700:

BID ITEM = 1710										
Description = FABRICATED PIPE			Land Item Unit =	SCHEDULE: 1 100						VR
				LS	Takeoff Quan:		1.000	Engr Quan:		0.000
17AA001	Buy Materials - SAC Pipe		Quan:	1.00 LS	Hrs/Shft: 8.00	Cal: 40A WC: STD				
2VR17AA1	SAC Pipe & Fittings	1.00	1.00 LS	234,000.000	234,000					**Unreviewed
\$234,000.00				[]	234,000					234,000
					234,000.00					234,000.00

17AA001.1	Buy Materials - Gaskets, Bolts, Coupling		Quan:	1.00 LS	Hrs/Shft: 8.00	Cal: 40A WC: STD				
2VR17A10	24" BNG SET	1.00	2.00 EA	1,229.112	2,458					**Unreviewed
2VR17A11	24" STRAUB COUPLING	1.00	2.00 EA	4,254.030	8,508					8,508
2VR17A3	3" BNG SET WITH CAP B	1.00	20.00 EA	62.928	1,259					1,259
2VR17A4	8" BNG SET WITH CAO	1.00	10.00 EA	194.114	1,941					1,941
2VR17A5	12" BNG SET WITH CAP	1.00	4.00 EA	351.885	1,408					1,408
2VR17A6	12" BNG SET	1.00	3.00 EA	351.885	1,056					1,056
2VR17A7	14" BNG SET	1.00	2.00 EA	493.641	987					987
2VR17A8	16" BNG SET WITH CAP	1.00	8.00 EA	655.103	5,241					5,241
2VR17A9	16" BNG SET	1.00	11.00 EA	655.103	7,206					7,206
\$30,063.45				[]	30,063					30,063
					30,063.45					30,063.45

17AA010	Unload & Store Materials		Quan:	5.00 LD	Hrs/Shft: 8.00	Cal: 40A WC: STD				
VR01	(Mod) Unload & Storage Materials	16.00	CH	Eff: 100.00	Prod: 2.5000 US	Lab Pcs: 2.00	Eqp Pcs: 2.00			
8FL16T	FORKLIFT (15K) - TELEH	1.00	16.00 HR	63.685		1,019				1,019
8T250LA	FORD F250 LABOR 4-MA	1.00	16.00 HR	19.185		307				307
LAGEN	General Laborer	1.00	16.00 MH *	71.796	1,149					1,149
LALAB4	Laborer Foreman	1.00	16.00 MH *	77.479	1,240					1,240
\$3,714.31	6.4000 MH/LD		32.00 MH	[274.336]	2,388		1,326			3,714
0.3125	Units/Hr	2.5000	Un/Shift *	0.1563	Unit/MH	477.68	265.18			742.86

17AA020	INSTALL FABRICATED PIPE		Quan:	1.00 LS	Hrs/Shft: 8.00	Cal: 40A WC: STD				
VR02	Install Equipment	72.00	CH	Eff: 100.00	Prod: 9.0000 S	Lab Pcs: 4.00	Eqp Pcs: 2.00			
8FL16T	FORKLIFT (15K) - TELEH	1.00	72.00 HR	63.685		4,585				4,585

Cost Report

Activity	Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Labor	Perm	Material	Constr	Matl/Exp	Equip	Sub-Contract	Total			
BID ITEM = 1710						Land Item	SCHEDULE: 1		100		VR						
Description = FABRICATED PIPE						Unit =	LS	Takeoff Quan:		1.000		Engr Quan:		0.000			
8T250LA		FORD F250 LABOR 4-MA	1.00	72.00	HR	19.185						1,381		1,381			
LALAB4		Laborer Foreman	1.00	72.00	MH *	77.479	5,578							5,578			
LAPIPE		Pipe Laborer	3.00	216.00	MH *	75.034	16,207							16,207			
\$27,752.51		288.0000 MH/LS		288.00	MH	[12582.72]	21,786					5,967		27,753			
0.0139 Units/Hr		0.1111 Un/Shift		0.0035	Unit/MH		21,785.87					5,966.64		27,752.51			
17AA020.1 INSTALL RAS Pump Can						Quan:	1.00 LS	Hrs/Shft:	8.00	Cal:	40A	WC:	STD				
VR02						Install Equipment	24.00	CH	Eff:	100.00	Prod:	3.0000 S	Lab Pcs:	4.00	Eqp Pcs:	2.00	**Unreviewed
8FL16T		FORKLIFT (15K) - TELEH	1.00	24.00	HR	63.685						1,528		1,528			
8T250LA		FORD F250 LABOR 4-MA	1.00	24.00	HR	19.185						460		460			
LALAB4		Laborer Foreman	1.00	24.00	MH *	77.479	1,859							1,859			
LAPIPE		Pipe Laborer	3.00	72.00	MH *	75.034	5,402							5,402			
\$9,250.84		96.0000 MH/LS		96.00	MH	[4194.24]	7,262					1,989		9,251			
0.0417 Units/Hr		0.3333 Un/Shift		0.0104	Unit/MH		7,261.96					1,988.88		9,250.84			
17AA800 Welder - Sub Work						Quan:	5.00 SHT	Hrs/Shft:	8.00	Cal:	40A	WC:	STD				
4VRWELDER						Pipe Welder Sub	1.00	5.00	DAY		1,400.000			7,000	7,000	**Unreviewed	
\$7,000.00											[]			7,000	7,000		
														1,400.00	1,400.00		
Item Totals: 1710 - FABRICATED PIPE																	
\$311,781.11		416.0000 MH/LS		416.00	MH	[18148.64]	31,436	264,063				9,281	7,000	311,781			
311,781.110		1 LS					31,436.22	264,063.45				9,281.44	7,000.00	311,781.11			

BID ITEM = 1720		Land Item		SCHEDULE: 1		100		VR			
Description = FABRICATED SUPPORTS		Unit =		LS	Takeoff	Quan:	1.000	Engr	Quan:	0.000	
17AA001.1	Buy Materials - Achors, Epoxy, Grout			Quan:	1.00	LS	Hrs/Shft:	8.00	Cal: 40A	WC: STD	
										**Unreviewed	
2VR201	3/4" Epoxy Anchors	1.00	72.00 EA		21.500		1,548			1,548	
2VR203	Non Shink Grout	1.00	10.00 EA		63.190		632			632	
2VR204	Hilti 500RE Epoxy	1.00	14.00 EA		83.750		1,173			1,173	
\$3,352.40					[]		3,352			3,352	
							3,352.40			3,352.40	
17AA001	Buy Materials - SAC Supports			Quan:	1.00	LS	Hrs/Shft:	8.00	Cal: 40A	WC: STD	
										**Unreviewed	
2VR17B1	SAC SUPPORT PACKAG	1.00	1.00 LS		96,000.009		96,000			96,000	
2VR17B2	SAC FOB	1.00	1.00 LS		2,000.000		2,000			2,000	
\$98,000.01					[]		98,000			98,000	
							98,000.01			98,000.01	
17AA020	Install Supports			Quan:	1.00	LS	Hrs/Shft:	8.00	Cal: 40A	WC: STD	
VR02	Install Equipment		56.00 CH	Eff:	100.00	Prod:	7.0000 S	Lab Pcs:	4.00	Eqp Pcs:	2.00
8FL16T	FORKLIFT (15K) - TELEH	1.00	56.00 HR			63.685			3,566		3,566
8T250LA	FORD F250 LABOR 4-MA	1.00	56.00 HR			19.185			1,074		1,074
LALAB4	Laborer Foreman	1.00	56.00 MH *			77.479	4,339				4,339
LAPIPE	Pipe Laborer	3.00	168.00 MH *			75.034	12,606				12,606
\$21,585.28	224.0000 MH/LS		224.00 MH		[9786.56]	16,945			4,641		21,585
0.0179	Units/Hr	0.1429	Un/Shift	0.0045	Unit/MH	16,944.56			4,640.72		21,585.28
17AA040	Existing Anchor Bolt Rehb - 50%			Quan:	24.00	EA	Hrs/Shft:	8.00	Cal: 40A	WC: STD	

Cost Report

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
BID ITEM = 1720										
Description = FABRICATED SUPPORTS				Land Item Unit =	SCHEDULE: 1	100				VR
					LS	Takeoff Quan:	1.000	Engr Quan:		0.000
VR02	Install Equipment		6.00 CH	Eff: 100.00	Prod:	0.7500 S	Lab Pcs:	4.00	Eqp Pcs:	2.00
8FL16T	FORKLIFT (15K) - TELEH	1.00	6.00 HR		63.685			382		382
8T250LA	FORD F250 LABOR 4-MA	1.00	6.00 HR		19.185			115		115
LALAB4	Laborer Foreman	1.00	6.00 MH *		77.477	465				465
LAPIPE	Pipe Laborer	3.00	18.00 MH *		75.034	1,351				1,351
\$2,312.70		1.0000 MH/EA	24.00 MH	[43.69]		1,815		497		2,313
4.0000	Units/Hr	32.0000 Un/Shift	1.0000 Unit/MH			75.65		20.72		96.36
17AA050 Existing Grout Pad										
				Quan:	6.00 EA	Hrs/Shft:	8.00	Cal: 40A	WC: STD	
VR02	Install Equipment		4.00 CH	Eff: 100.00	Prod:	0.5000 S	Lab Pcs:	4.00	Eqp Pcs:	2.00
8FL16T	FORKLIFT (15K) - TELEH	1.00	4.00 HR		63.685			255		255
8T250LA	FORD F250 LABOR 4-MA	1.00	4.00 HR		19.185			77		77
LALAB4	Laborer Foreman	1.00	4.00 MH *		77.480	310				310
LAPIPE	Pipe Laborer	3.00	12.00 MH *		75.034	900				900
\$1,541.81		2.6666 MH/EA	16.00 MH	[116.507]		1,210		331		1,542
1.5000	Units/Hr	12.0000 Un/Shift	0.3750 Unit/MH			201.72		55.25		256.97
Item Totals: 1720 - FABRICATED SUPPORTS										
\$126,792.20		264.0000 MH/LS	264.00 MH	[11534.16]		19,970	101,352	5,469		126,792
126,792.200		1 LS				19,970.37	101,352.41	5,469.42		126,792.20

Total of Above Sub-Biditems

Item Totals: 1700 - MECHANICAL - FAB PIPE & SUPPORTS										
\$438,573.31		680.0000 MH/LS	680.00 MH	[29682.8]		51,407	365,416	14,751	7,000	438,573
438,573.310		1 LS				51,406.59	365,415.86	14,750.86	7,000.00	438,573.31

PARENT ITEM = 1800										
Description = SITE IMPROVEMENTS				Unit =	LS	Takeoff Quan:	1.000	Engr Quan:		TL

Listing of Sub-Biditems of Parent Item 1800:

BID ITEM = 1810										
Description = INSALL NEW AGGREBASE				Land Item Unit =	SCHEDULE: 1	100				TL
					TN	Takeoff Quan:	25.000	Engr Quan:		0.000

9A102	Buy Materials			Quan:	25.00 TON	Hrs/Shft:	8.00	Cal: 40A	WC: STD	
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----- AB02 - Buy Aggregates -----

Buy Aggregates
 Calculation Code AB02
 Hrs/Day: 8.0
 Unit Weight: 135 Lb/Cf

Description	Sf	Depth (In)	Yield	Ton	Notes
Concrete Sidewalk	560	6.0	5%	20	
----- End Calculation -----					
2CA201	CLASS-2 BASE COURSE	1.05	26.25	TON	
\$1,141.88					
				43.500	
				[]	
				1,142	
				1,142	

Activity	Desc	Quantity	Unit	Unit	Perm	Constr	Equip	Sub-		
Resource		Pcs		Cost	Labor	Material	Matl/Exp	Ment	Contract	Total

Item Totals:		1810	- INSALL NEW AGGREBASE				
\$10,485.10	3.9200 MH/TN	98.00 MH	{ 181.654 }	7,925	1,142	1,418	10,485
419.404	25 TN			317.00	45.68	56.73	419.40

Cost Report

Activity	Resource	Desc	Pes	Quantity	Unit	Unit Cost	Labor	Perm	Constr	Equip	Sub-Contract	Total
<hr/>												
BID ITEM	=	1820			Land Item	SCHEDULE:	1	100				TL
Description =		INSTALL SIDEWALK			Unit =	SF	Takeoff	Quan:	560.000	Engr	Quan:	0.000
8A204		Finegrade SW - Minor			Quan:	560.00 SF	Hrs/Shift:	8.00	Cal: 40A	WC: STD		
----- FW02 - Cut Flatwork Grade - Minor -----												
Cut Flatwork Grade - Minor												
Calculation Code		FW02										
Hrs/Day:		8.0										
<hr/>												
Description		Handicap Ramps			Driveways							
		Ea	Sf	Sf/Ea	Hrs/Ea	Ea						
Concrete Sidewalk		0	0	0	0	1						
a		0	0	0	0	0						
----- End Calculation -----												
FLT02	(Mod)	CUT FLATWORK GRADE - MIN	8.00	CH	Eff:	100.00	Prod:	560.0000	US	Lab Pcs:	6.00	Eqp Pcs: 4.00
8CPRAM	RAMMAX ROLLER (3,00	1.00	8.00	HR		19.215				154		154
8LSKID	BOBCAT TRACK SKID S	1.00	8.00	HR		42.590				341		341
8MSWB	WATER BUFFALO TRAI	1.00	8.00	HR		5.248				42		42
8T250OP	FORD F250 OPEATOR 4-	1.00	9.00	HR		19.185				173		173
LAFINE	Finegrade Laborer	2.00	16.00	MH *		72.468	1,159					1,159
LAGEN	General Laborer	1.00	8.00	MH *		71.796	574					574
LAGUINEA	Guinea Chaser	1.00	8.00	MH *		72.468	580					580
OPFORE	Operator Foreman	1.00	9.00	MH *		101.573	914					914
OPSKIP	Skip Loader Operator	1.00	8.00	MH *		92.520	740					740
\$4,676.99	0.0875 MH/SF		49.00	MH	[4.063]	3,968				709		4,677
70.0000	Units/Hr	560.0000	Un/Shift	*	11.4286	Unit/MH	7.09			1.27		8.35
8A208A		Concrete Sidewalk - Sub Work			Quan:	556.00 SF	Hrs/Shift:	8.00	Cal: 40A	WC: STD		
4FLATWORK5	C-120_Concrete Sidwalk	1.00	556.00	SF		37.000				20,572		20,572
\$20,572.00						[]				20,572		20,572
										37.00		37.00
<hr/>												
Item Totals:	1820	-	INSTALL SIDEWALK									
\$25,248.99	0.0875 MH/SF		49.00	MH	[4.063]	3,968				709	20,572	25,249
45.087	560 SF					7.09				1.27	36.74	45.09
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BID ITEM = 1830		Land Item	SCHEDULE: 1		100					TL
Description =	INSTALL CURB & GUTTER	Unit =	LF	Takeoff Quan:	56.000	Engr Quan:				0.000
<hr/>										
8A104	Cut Curb Grade - Minor Work	Quan:	56.00 LF	Hrs/Shift:	8.00	Cal: 40A	WC: STD			
<hr/>										
----- CRB01 -Cut Curb Grade -----										
<hr/>										
Cut -or- Backfill Curb Grade										
Calculation Code		FG01								
Hrs/Day:		8.0								
<hr/>										
Description		Lf	Lf/Day	Days	Calc	Use	Notes			
Curb & Gutter		56	250	0.2	1.0					
a		0	0	0.0	0.0					
<hr/>										
----- End Calculation -----										
<hr/>										
CRB02	(Mod) CUT CURB GRADE - MINOR W	8.00	CH	Eff:	100.00	Prod:	56.0000 US	Lab Pcs:	6.50	Eqp Pcs: 4.00

Activity	Desc	Quantity	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM	= 1830									
Description =	INSTALL CURB & GUTTER		Unit =	LF	Takeoff	Quan:	56.000	Engr	Quan:	0.000
8CPRAM	RAMMAX ROLLER (3,00	1.00	8.00 HR	19.215				154		154
8LSKID	BOBCAT TRACK SKID S	1.00	8.00 HR	42.590				341		341
8MSWB	WATER BUFFALO TRAI	1.00	8.00 HR	5.248				42		42
8T250OP	FORD F250 OPEATOR 4-	1.00	9.00 HR	19.185				173		173
LAFINE	Finegrade Laborer	2.00	16.00 MH *	72.468	1,159					1,159
LAGEN	General Laborer	1.50	12.00 MH *	71.795	862					862
LAGUINEA	Guinea Chaser	1.00	8.00 MH *	72.468	580					580
OPFORE	Operator Foreman	1.00	9.00 MH *	101.573	914					914
OPSKIP	Skip Loader Operator	1.00	8.00 MH *	92.520	740					740
\$4,964.16	0.9464 MH/LF		53.00 MH	[43.522]	4,255			709		4,964
7.0000 Units/Hr	56.0000 Un/Shift	*	1.0566 Unit/MH		75.98			12.66		88.65

8A109A	Curb & Gutter - Sub Work			Quan:	56.00 LF	Hrs/Shft:	8.00	Cal:	40A	WC: STD		
4FLATWORK2	C-128_Curb & Gutter	1.00	56.00 LF		105.000						5,880	5,880
\$5,880.00					[]						5,880	5,880
											105.00	105.00

8A111	Backfill Curb - Minor	Quan:	56.00 LF	Hrs/Shift:	8.00	Cal:	40A	WC:	STD
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Backfill Curb
Calculation Code CRB05

Description	Production Work		Minor Work		Days						
	Lf	Lf/Day	Lf	Lf/Day							
Curb & Gutter	0	0	56	100	0.0						
----- End Calculation -----											
<u>CRB05</u>	(Mod) BACKFILL CURB - MINOR		4.00 CH	Eff: 100.00	Prod: 112.0000	US	Lab Pcs:	6.00	Eqp Pcs:	3.00	
8LSKID	BOBCAT TRACK SKID S	1.00	4.00 HR		42.590			170		170	
8MSWB	WATER BUFFALO TRAI	1.00	4.00 HR		5.248			21		21	
8T250OP	FORD F250 OPEATOR 4-	1.00	4.50 HR		19.185			86		86	
LAGEN	General Laborer	3.00	12.00 MH *		71.795	862				862	
LAGUINEA	Guinea Chaser	1.00	4.00 MH *		72.468	290				290	
OPFORE	Operator Foreman	1.00	4.50 MH *		101.571	457				457	
OPSKIP	Skip Loader Operator	1.00	4.00 MH *		92.523	370				370	
\$2,256.24	0.4375 MH/LF		24.50 MH	[20.235]	1,979			278		2,256	
14.0000 Units/Hr	112.0000 Un/Shift	*	2.2857 Unit/MH		35.33			4.96		40.29	
<hr/>											
====> Item Totals:	1830	- INSTALL CURB & GUTTER									
\$13,100.40	1.3839 MH/LF		77.50 MH	[63.757]	6,234			987	5,880	13,100	
233.936	56 LF				111.32			17.62	105.00	233.94	

BID ITEM	=	1840	Land Item	SCHEDULE:	I	100	TL
Description =		INSTALL NEW ASPHALT	Unit =	SF	Takeoff Quan:	2,000.000	Engr Quan: 0.000
810		INSTALL NEW ASPH	Quan:	2,000.00 SF	Hrs/Shft:	8.00 Cal: 40A WC: STD	
4ASPH	ASPH Sub	1.00	2,000.00 SF	17.593		35,187	35,187
\$35,186.80				[]		35,187	35,187
						17.59	17.59

Activity	Desc	Quantity	Unit	Unit Cost	Perm Labor	Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM	= 1840		Land Item	SCHEDULE:	1	100				TL
Description =	INSTALL NEW ASPHALT		Unit =	SF	Takeoff Quan:	2,000.000		Engr Quan:		0.000
Total of Above Sub-Biditems										

<u>SWP03</u>	INATALL MISC SWPPP DEVICES	8.00 CH	Eff:	100.00	Prod:	0.6250 UH	Lab Pcs:	6.00	Eqp Pcs:	3.00
8LSKID	BOBCAT TRACK SKID S 1.00	8.00 HR			42.590			341		341
8T250LA	FORD F250 LABOR 4-MA 1.00	9.00 HR			19.185			173		173
8T550FLAT	FORD F550 - FLATBED (2 1.00	8.00 HR			36.467			292		292
LAGEN	General Laborer 3.00	24.00 MH *			71.795	1,723				1,723

Cost Report

Activity Resource	Desc	Quantity Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
BID ITEM = 2010										
Description =	STORM WATER POLLUTION PRVENTION		Land Item Unit =	SCHEDULE: 1 LS	100 Takeoff Quan:		1.000	Engr Quan:		TL 0.000
LALAB4	Laborer Foreman	1.00	9.00 MH *	80.384	723					723
OPSKIP	Skip Loader Operator	1.00	8.00 MH *	92.520	740					740
TMFLAT	Flatrack Driver	1.00	8.00 MH *	54.216	434					434
\$4,425.55	9.8000 MH/EA		49.00 MH	[420.216]	3,620			805		4,426
0.6250 Units/Hr *	5.0000 Un/Shift		0.1020 Unit/MH		724.09			161.02		885.11
10AA315 Maintain SWPPP										
19-MON @ 4-WEEKS @ 2-HRS/DAY = 152-HRS										
ADD 44 RAIN EVENTS * 4HRS = 88-HRS										
SWP06	(Mod) MAINTAIN SWPPP - WEEKDAY	120.00	CH	Eff: 100.00	Prod: 6.3158 HU	Lab Pcs: 2.00		Eqp Pcs: 1.00		
8T550FLAT	FORD F550 - FLATBED (2	1.00	120.00 HR		36.467			4,376		4,376
LAGEN	General Laborer	2.00	240.00 MH *		71.795	17,231				17,231
\$21,606.94	12.6315 MH/MON		240.00 MH	[512.084]	17,231			4,376		21,607
0.1583 Units/Hr	1.2667 Un/Shift		0.0792 Unit/MH		906.89			230.32		1,137.21
10AA316 Remove SWPPP										
Quan: 2.00 DAY Hrs/Shift: 8.00 Cal: 40A WC: STD										
SWP07	(Mod) REMOVE SWPPP DEVICES	8.00	CH	Eff: 100.00	Prod: 1.0000 S	Lab Pcs: 4.00		Eqp Pcs: 3.00		
8BH446	CAT 446 BACKHOE	1.00	8.00 HR		67.830			543		543
8T250LA	FORD F250 LABOR 4-MA	1.00	9.00 HR		19.185			173		173
8TEDEDFULL	OR MANNED SEMI END	1.00	8.00 HR		140.000			1,120		1,120
LAGEN	General Laborer	2.00	16.00 MH *		71.796	1,149				1,149
LALAB4	Laborer Foreman	1.00	9.00 MH *		80.384	723				723
OPHOE	Rubber Tire Backhoe Opera	1.00	8.00 MH *		95.100	761				761
\$4,468.29	16.5000 MH/DAY		33.00 MH	[758.34]	2,633			1,835		4,468
0.2500 Units/Hr	2.0000 Un/Shift		0.0606 Unit/MH		1,316.50			917.65		2,234.15
Item Totals: 2010 - STORM WATER POLLUTION PRVENTION										
\$54,175.78	322.0000 MH/LS		322.00 MH	[13347.36]	23,484		23,675	7,016		54,176
54,175.780	1 LS				23,484.33		23,675.00	7,016.45		54,175.78

BID ITEM = 2040										
Description =	SWEEPING		Land Item Unit =	SCHEDULE: 1 LS	100 Takeoff Quan:		1.000	Engr Quan:		TL 0.000
10AA117 Sweeping										
Quan: 5.00 DAY Hrs/Shift: 8.00 Cal: 40A WC: STD										
----- TC067 - Sweeping -----										
Sweeping										
Calculation Code	TC07									
Daily Closure (am):	8.0	Hrs/Shift								
Nightly Closure:	0.0	Hrs/Shift								
Freeway Closure:	0.0	Hrs/Shift								
Misc Closure	1.0	Hrs/Shift								
Description	Weekdays Days	Hrs/Day	Weekends Days	Hrs/Day						
----- End Calculation -----										
TC06	(Mod) SWEEPING		144.00 CH	Eff: 100.00	Prod: 18.0000 S	Lab Pcs: 0.00		Eqp Pcs: 1.00		
8MSSWPFULL	OR MANNED SWEEPER	1.00	144.00 HR		205.000			29,520		29,520
\$29,520.00					[]			29,520		29,520
0.0347 Units/Hr	0.2778 Un/Shift							5,904.00		5,904.00
Item Totals: 2040 - SWEEPING										
\$29,520.00					[]			29,520		29,520

Cost Report

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Perm Labor	Constr Material	Equip Matl/Exp	Sub- Ment	Contract	Total
<hr/>										
BID ITEM = 2040										
Description =	SWEEPING			Land Item Unit =	SCHEDULE: 1 LS	100 Takeoff Quan:	1.000	Engr Quan:		TL 0.000
29,520.000		1 LS					29,520.00			29,520.00

Total of Above Sub-Biditems

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====> Item Totals:	2000	- SWPPP								
\$83,695.78	322.0000 MH/LS		322.00 MH	[13347.36]	23,484	23,675	36,536			83,696
83,695.780	1 LS				23,484.33	23,675.00	36,536.45			83,695.78

BID ITEM = 800000										
Description =	INDIRECT STAFFING			Land Item Unit =	SCHEDULE: 1 LS	100 Takeoff Quan:	1.000	Engr Quan:		1.000

----- SALARY MANPOWER SCHEDULE -----

Balfour Beatty Infrastructure

SALARY MANPOWER SCHEDULE

Name: COR 60%
Date: June 5, 2024
Project: SNRC
Agency: EVWD
Version: 1.0

----- End Assembly -----

800001	MANAGEMENT				Quan:	22.00 MM	Hrs/Shft:	8.00	Cal:	40A	WC: NONE	
3MISCLS	Misc. Lumsum Labor	1.00	1.00 MO	5,373.000					5,373			**Unreviewed 5,373
XA005	=> PROJECT EXECUTIV	1.00	0.00 MO	22,000.000								
XA010	=> PROJECT DIRECTO	1.00	1.00 MO	20,000.000		27,000						27,000
XA015	=> ASSISTANT PROJEC	1.00	0.00 MO	18,000.000								
XA020	=> PROJECT MANAGE	1.00	18.00 MO	17,500.000		425,250						425,250
XA025	=> ASSISTANT PROJEC	1.00	0.00 MO	16,500.000								
XA030	=> SEGMENT MANAGE	1.00	0.00 MO	14,000.000								
XA035	=> SEGMENT MANAGE	1.00	0.00 MO	14,000.000								
XA040	=> SEGMENT MANAGE	1.00	0.00 MO	14,000.000								
XA100	=> CONSTRUCTION M	1.00	0.00 MO	13,000.000								
XA105	=> CONSTRUCTION M	1.00	0.00 MO	13,000.000								
XA110	=> CONSTRUCTION M	1.00	0.00 MO	13,000.000								
XA115	=> STRUCTURES MAN	1.00	0.00 MO	12,500.000								
XA120	=> WALL MANAGER	1.00	0.00 MO	12,500.000								
XA125	=> EARTHWORK MAN	1.00	0.00 MO	12,500.000								
XA130	=> DRAINAGE MANAG	1.00	0.00 MO	12,500.000								
XA135	=> UTILITIES MANAGE	1.00	0.00 MO	12,500.000								
XA140	=> MOT MANAGER	1.00	0.00 MO	12,500.000								
XA145	=> SYSTEMS SAFETY	1.00	0.00 MO	15,000.000								
XA150	=> SYSTEMS SAFETY	1.00	0.00 MO	40,000.000								
XA155	=> TRACK WORK MAN	1.00	0.00 MO	12,500.000								
XA160	=> SIGNALS/COMM M	1.00	0.00 MO	12,500.000								
XA165	=> OCS MANAGER	1.00	0.00 MO	12,500.000								
XA170	=> TRACTION POWER	1.00	0.00 MO	12,500.000								
XA175	=> LOGISTICS MANAG	1.00	0.00 MO	12,500.000								
XA180	=> SURVEY MANAGER	1.00	0.00 MO	12,500.000								
XA200	=> DESIGN/BUILD MA	1.00	0.00 MO	12,500.000								

Cost Report

Activity Resource	Desc	Quantity Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
<hr/>										
BID ITEM = 800000										
Description =	INDIRECT STAFFING			Land Item Unit =	SCHEDULE: LS	1 Takeoff Quan:	100	1.000	Engr Quan:	1.000
XA205	=> DOCUMENT CONTR	1.00	0.00 MO	10,000.000						
XA210	=> QUALITY CONTROL	1.00	0.00 MO	16,000.000						
XA215	=> QC MANAGER - CO	1.00	0.00 MO	20,000.000						
XA220	=> SAFETY DIRECTOR/	1.00	0.00 MO	15,000.000						
XA225	=> SCHEDULE MANAG	1.00	2.00 MO	12,500.000	33,750					33,750
XA230	=> SCHEDULE MANAG	1.00	0.00 MO	18,500.000						
XA235	=> EQUIPMENT MANA	1.00	0.00 MO	15,000.000						
XA300	=> PROJECT CONTROL	1.00	0.00 MO	14,000.000						
XA305	=> BUSINESS MANAGE	1.00	0.00 MO	14,000.000						
XA310	=> CHANGE MANAGER	1.00	0.00 MO	12,000.000						
XA315	=> DBE MANAGER	1.00	0.00 MO	9,000.000						
XA320	=> DBE MANAGER - C	1.00	0.00 MO	13,000.000						
XA325	=> PR MANAGER	1.00	0.00 MO	8,000.000						
XA330	=> PR MANAGER - CO	1.00	0.00 MO	12,000.000						
XA335	=> HR MANAGER 1	1.00	0.00 MO	8,000.000						
\$491,373.00				[]	486,000		5,373			491,373
					22,090.91		244.23			22,335.14
800003	SUPERINTENDENTS			Quan:	26.00 MM	Hrs/Shft:	8.00	Cal: 40A	WC: NONE	
										**Unreviewed
XB005	=> GENERAL SUPERIN	1.00	16.00 MO	10,000.000	216,000					216,000
XB010	=> SEGMENT SUPERIN	1.00	0.00 MO	9,000.000						
XB015	=> SEGMENT SUPERIN	1.00	0.00 MO	9,000.000						
XB020	=> SEGMENT SUPERIN	1.00	0.00 MO	9,000.000						
XB100	=> STRUCTURES SUPE	1.00	0.00 MO	8,500.000						
XB105	=> STRUCTURES SUPE	1.00	0.00 MO	8,500.000						
XB110	=> STRUCTURES SUPE	1.00	0.00 MO	8,500.000						
XB115	=> WALL SUPERINTEN	1.00	0.00 MO	8,500.000						
XB120	=> WALL SUPERINTEN	1.00	0.00 MO	8,500.000						
XB125	=> WALL SUPERINTEN	1.00	0.00 MO	8,500.000						
XB130	=> EARTHWORK SUPE	1.00	0.00 MO	8,500.000						
XB135	=> EARTHWORK SUPE	1.00	0.00 MO	8,500.000						
XB140	=> EARTHWORK SUPE	1.00	0.00 MO	8,500.000						
XB145	=> DRAINAGE SUPERI	1.00	0.00 MO	8,500.000						
XB150	=> DRAINAGE SUPERI	1.00	0.00 MO	8,500.000						
XB155	=> DRAINAGE SUPERI	1.00	0.00 MO	8,500.000						
XB160	=> UTILITIES SUPERIN	1.00	10.00 MO	8,500.000	114,750					114,750
XB165	=> UTILITIES SUPERIN	1.00	0.00 MO	8,500.000						
XB170	=> UTILITIES SUPERIN	1.00	0.00 MO	8,500.000						
XB175	=> PAVING SUPERINTE	1.00	0.00 MO	8,500.000						
XB180	=> PAVING SUPERINTE	1.00	0.00 MO	8,500.000						
XB195	=> MOT SUPERINTEND	1.00	0.00 MO	8,500.000						
XB200	=> MOT SUPERINTEND	1.00	0.00 MO	8,500.000						
XB205	=> MOT SUPERINTEND	1.00	0.00 MO	8,500.000						
XB210	=> SOE SUPERINTEND	1.00	0.00 MO	8,500.000						
XB215	=> TRACK SUPERINTE	1.00	0.00 MO	10,000.000						
XB220	=> TRACK SUPERINTE	1.00	0.00 MO	10,000.000						
XB225	=> SIGNAL/COMM SUP	1.00	0.00 MO	10,000.000						
XB230	=> SIGNAL/COMM SUP	1.00	0.00 MO	10,000.000						
XB235	=> OCS SUPERINTEND	1.00	0.00 MO	9,200.000						
XB240	=> OCS SUPERINTEND	1.00	0.00 MO	9,200.000						
XB245	=> TP SUPERINTENDE	1.00	0.00 MO	9,200.000						
XB250	=> TP SUPERINTENDE	1.00	0.00 MO	9,200.000						
XB255	=> LOGISTICS SUPERIN	1.00	0.00 MO	8,500.000						
XB260	=> LOGISTICS SUPERIN	1.00	0.00 MO	8,500.000						
XB265	=> LOGISTICS SUPERIN	1.00	0.00 MO	8,500.000						
XB270	=> PLANT SUPERINTE	1.00	0.00 MO	8,500.000						
XB275	=> PLANT SUPERINTE	1.00	0.00 MO	8,500.000						

Cost Report

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Perm Labor	Constr Material	Equip Matl/Exp	Sub- Ment Contract	Total
BID ITEM = 800000									
Description =	INDIRECT STAFFING			Land Item Unit =	SCHEDULE: 1	100			
					Takeoff Quan:	1.000	Engr Quan:	1.000	
XB280	=> SWPP SUPERINTEN	1.00	0.00 MO	8,500.000					
XB285	=> SWPP SUPERINTEN	1.00	0.00 MO	8,500.000					
XB290	=> TRUCKING SUPERI	1.00	0.00 MO	8,500.000					
XB295	=> TRACK COORINAT	1.00	0.00 MO	15,000.000					
\$330,750.00				[]	330,750				330,750
					12,721.15				12,721.15
800005 ENGINEERS									
				Quan:	16.00 MM	Hrs/Shft: 8.00	Cal: 40A	WC: NONE	
XC005	=> PROJECT ENGINEER	1.00	16.00 MO	9,000.000	194,400				**Unreviewed
XC010	=> PROJECT ENGINEER	1.00	0.00 MO	9,000.000					194,400
XC015	=> PROJECT ENGINEER	1.00	0.00 MO	9,000.000					
XC100	=> STRUCTURES ENGI	1.00	0.00 MO	8,500.000					
XC105	=> STRUCTURES ENGI	1.00	0.00 MO	8,500.000					
XC110	=> STRUCTURES ENGI	1.00	0.00 MO	8,500.000					
XC115	=> WALL ENGINEER 1	1.00	0.00 MO	8,500.000					
XC120	=> WALL ENGINEER 2	1.00	0.00 MO	8,500.000					
XC125	=> WALL ENGINEER 3	1.00	0.00 MO	8,500.000					
XC130	=> EARTHWORK ENGI	1.00	0.00 MO	8,500.000					
XC135	=> EARTHWORK ENGI	1.00	0.00 MO	8,500.000					
XC140	=> EARTHWORK ENGI	1.00	0.00 MO	8,500.000					
XC145	=> DRAINAGE ENGINE	1.00	0.00 MO	8,500.000					
XC150	=> DRAINAGE ENGINE	1.00	0.00 MO	8,500.000					
XC155	=> DRAINAGE ENGINE	1.00	0.00 MO	8,500.000					
XC160	=> UTILITIES ENGINEE	1.00	0.00 MO	8,500.000					
XC165	=> UTILITIES ENGINEE	1.00	0.00 MO	8,500.000					
XC170	=> UTILITIES ENGINEE	1.00	0.00 MO	8,500.000					
XC175	=> PAVING ENGINEER	1.00	0.00 MO	8,500.000					
XC180	=> PAVING ENGINEER	1.00	0.00 MO	8,500.000					
XC195	=> MOT ENGINEER 1	1.00	0.00 MO	8,500.000					
XC200	=> MOT ENGINEER 2	1.00	0.00 MO	8,500.000					
XC205	=> MOT ENGINEER 3	1.00	0.00 MO	8,500.000					
XC210	=> SOE ENGINEER	1.00	0.00 MO	8,500.000					
XC215	=> TRACK ENGINEER 1	1.00	0.00 MO	10,000.000					
XC220	=> TRACK ENGINEER 2	1.00	0.00 MO	10,000.000					
XC225	=> SIGNAL/COMM ENG	1.00	0.00 MO	10,000.000					
XC230	=> SIGNAL/COMM ENG	1.00	0.00 MO	10,000.000					
XC235	=> OCS ENGINEER 1	1.00	0.00 MO	9,200.000					
XC240	=> OCS ENGINEER 2	1.00	0.00 MO	9,200.000					
XC250	=> TP ENGINEER 1	1.00	0.00 MO	9,200.000					
XC255	=> TP ENGINEER 2	1.00	0.00 MO	9,200.000					
XC260	=> TP ENGINEER 3	1.00	0.00 MO	9,200.000					
XC265	=> LOGISTICS ENGINE	1.00	0.00 MO	8,500.000					
XC270	=> LOGISTICS ENGINE	1.00	0.00 MO	8,500.000					
XC275	=> LOGISTICS ENGINE	1.00	0.00 MO	8,500.000					
XC280	=> PLANT ENGINEER 1	1.00	0.00 MO	8,500.000					
XC285	=> PLANT ENGINEER 2	1.00	0.00 MO	8,500.000					
XC290	=> SWPP ENGINEER 1	1.00	0.00 MO	8,500.000					
XC295	=> SWPP ENGINEER 2	1.00	0.00 MO	8,500.000					
XC300	=> SWPP ENGINEER 3	1.00	0.00 MO	8,500.000					
XC305	=> TRUCKING ENGINE	1.00	0.00 MO	8,500.000					
XC310	=> TRUCKING ENGINE	1.00	0.00 MO	8,500.000					
XC315	=> TRUCKING ENGINE	1.00	0.00 MO	8,500.000					
XC335	=> PERMITS ENGINEER	1.00	0.00 MO	6,500.000					
XC340	=> PERMITS ENGINEER	1.00	0.00 MO	6,500.000					
XC345	=> PERMITS ENGINEER	1.00	0.00 MO	6,500.000					
XC350	=> SCHEDULING ENGI	1.00	0.00 MO	7,000.000					
XC355	=> SCHEDULING ENGI	1.00	0.00 MO	7,000.000					

Cost Report

Activity	Desc	Quantity	Unit	Unit	Labor	Perm	Constr	Equip	Sub-	Total
Resource		Pcs		Cost		Material	Matl/Exp	Ment	Contract	
<hr/>										
BID ITEM = 800000										
Description =	INDIRECT STAFFING									
				Land Item	SCHEDULE: 1	100				
				Unit =	LS	Takeoff Quan:	1.000	Engr Quan:	1.000	
XC360	=> SCHEDULING ENGI	1.00	0.00 MO	7,000.000						
XC365	=> COST ENGINEER 1	1.00	0.00 MO	6,500.000						
XC370	=> COST ENGINEER 2	1.00	0.00 MO	6,500.000						
XC375	=> COST ENGINEER 3	1.00	0.00 MO	6,500.000						
XC425	=> OFFICE ENGINEER 1	1.00	0.00 MO	8,000.000						
XC430	=> OFFICE ENGINEER 2	1.00	0.00 MO	8,000.000						
XC435	=> OFFICE ENGINEER 3	1.00	0.00 MO	8,000.000						
XC440	=> OFFICE ENGINEER 4	1.00	0.00 MO	8,000.000						
XC445	=> OFFICE ENGINEER 5	1.00	0.00 MO	8,000.000						
XC450	=> OFFICE ENGINEER 6	1.00	0.00 MO	8,000.000						
XC455	=> AUTOCAD ENGINEE	1.00	0.00 MO	6,000.000						
XC460	=> AUTOCAD ENGINEE	1.00	0.00 MO	6,000.000						
XC465	=> COOP/INTERN 1	1.00	0.00 MO	4,500.000						
XC470	=> COOP/INTERN 2	1.00	0.00 MO	4,500.000						
XC475	=> COOP/INTERN 3	1.00	0.00 MO	4,500.000						
\$194,400.00				[]	194,400					194,400
					12,150.00					12,150.00
800009	DOCUMENT CONTROL			Quan:	13.00 MM	Hrs/Shft:	8.00	Cal: 40A	WC: NONE	
										**Unreviewed
XC410	=> DOCUMENT CONTR	1.00	13.00 MO	6,500.000	114,075					114,075
XC415	=> DOCUMENT CONTR	1.00	0.00 MO	6,500.000						
XC420	=> DOCUMENT CONTR	1.00	0.00 MO	6,500.000						
XD290	=> DOCUMENT CONTR	1.00	0.00 MO	4,000.000						
XD295	=> DOCUMENT CONTR	1.00	0.00 MO	4,000.000						
XD300	=> DOCUMENT CONTR	1.00	0.00 MO	4,000.000						
XD305	=> DOCUMENT CONTR	1.00	0.00 MO	4,000.000						
XD310	=> DOCUMENT CONTR	1.00	0.00 MO	6,000.000						
XD315	=> DOCUMENT CONTR	1.00	0.00 MO	6,000.000						
XD320	=> DOCUMENT CONTR	1.00	0.00 MO	6,000.000						
XD325	=> DOCUMENT CONTR	1.00	0.00 MO	6,000.000						
\$114,075.00				[]	114,075					114,075
					8,775.00					8,775.00
800011	ADMINISTRATION			Quan:	18.00 MM	Hrs/Shft:	8.00	Cal: 40A	WC: NONE	
										**Unreviewed
XD005	=> OFFICE MANAGER 1	1.00	18.00 MO	8,000.000	194,400					194,400
XD010	=> OFFICE MANAGER 2	1.00	0.00 MO	8,000.000						
XD020	=> OFFICE MANAGER 3	1.00	0.00 MO	8,000.000						
XD030	=> CONTRACTS MANA	1.00	0.00 MO	9,000.000						
XD035	=> HR ASSISTANT MA	1.00	0.00 MO	7,500.000						
XD040	=> HR ASSISTANT MA	1.00	0.00 MO	7,500.000						
XD045	=> LABOR RELATIONS	1.00	0.00 MO	7,500.000						
XD100	=> CONTRACT ADMINI	1.00	0.00 MO	7,500.000						
XD105	=> CONTRACT ADMINI	1.00	0.00 MO	7,500.000						
XD110	=> CONTRACT ADMINI	1.00	0.00 MO	7,500.000						
XD115	=> PROJECT ACCOUNT	1.00	0.00 MO	9,000.000						
XD120	=> IT TECH 1	1.00	0.00 MO	6,000.000						
XD125	=> IT TECH 2	1.00	0.00 MO	6,000.000						
XD130	=> IT TECH 3	1.00	0.00 MO	6,000.000						
XD135	=> IT TECH 1 - CONSUL	1.00	0.00 MO	9,000.000						
XD145	=> IT TECH 2 - CONSUL	1.00	0.00 MO	9,000.000						
XD150	=> IT TECH 3 - CONSUL	1.00	0.00 MO	9,000.000						
XD155	=> PAYROLL CLERK 1	1.00	0.00 MO	4,000.000						
XD160	=> PAYROLL CLERK 2	1.00	0.00 MO	4,000.000						
XD165	=> PAYROLL CLERK 3	1.00	0.00 MO	4,000.000						
XD170	=> PAYROLL CLERK 1 -	1.00	0.00 MO	6,000.000						
XD175	=> PAYROLL CLERK 2 -	1.00	0.00 MO	6,000.000						

Cost Report

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
BID ITEM = 800000										
Description =	INDIRECT STAFFING			Land Item Unit =	SCHEDULE: 1 LS	100 Takeoff Quan:	1.000	Engr Quan:		1.000
XD180	=> PAYROLL CLERK 3 -	1.00	0.00 MO		6,000.000					
XD185	=> AP CLERK 1	1.00	0.00 MO		4,000.000					
XD190	=> AP CLERK 2	1.00	0.00 MO		4,000.000					
XD195	=> AP CLERK 3	1.00	0.00 MO		4,000.000					
XD200	=> AP CLERK 1 - CONS	1.00	0.00 MO		6,000.000					
XD205	=> AP CLERK 2 - CONS	1.00	0.00 MO		6,000.000					
XD210	=> AP CLERK 3 - CONS	1.00	0.00 MO		6,000.000					
XD220	=> PURCHASING COOR	1.00	0.00 MO		6,000.000					
XD225	=> PURCHASING COOR	1.00	0.00 MO		6,000.000					
XD230	=> ADMINISTRATIVE A	1.00	0.00 MO		4,000.000					
XD235	=> ADMINISTRATIVE A	1.00	0.00 MO		4,000.000					
XD240	=> ADMINISTRATIVE A	1.00	0.00 MO		4,000.000					
XD245	=> OFFICE CLERK 1	1.00	0.00 MO		4,000.000					
XD250	=> OFFICE CLERK 2	1.00	0.00 MO		4,000.000					
XD255	=> OFFICE CLERK 3	1.00	0.00 MO		4,000.000					
XD260	=> OFFICE CLERK 1 - C	1.00	0.00 MO		6,000.000					
XD265	=> OFFICE CLERK 2 - C	1.00	0.00 MO		6,000.000					
XD270	=> OFFICE CLERK 3 - C	1.00	0.00 MO		6,000.000					
XD275	=> RECEPTIONIST 1	1.00	0.00 MO		3,800.000					
XD280	=> RECEPTIONIST 2	1.00	0.00 MO		3,800.000					
XD285	=> RECEPTIONIST 3	1.00	0.00 MO		3,800.000					
\$194,400.00					[] 194,400					194,400
					10,800.00					10,800.00
800013 SAFETY										
				Quan:	10.00 MM	Hrs/Shft:	8.00	Cal: 40A	WC: NONE	
XF005	=> SAFETY ENGINEER	1.00	10.00 MO		8,500.000	114,750				**Unreviewed
XF010	=> SAFETY ENGINEER	1.00	0.00 MO		8,500.000					114,750
XF015	=> SAFETY ENGINEER	1.00	0.00 MO		8,500.000					
XF020	=> SAFETY ENGINEER	1.00	0.00 MO		7,500.000					
XF025	=> SAFETY ENGINEER	1.00	0.00 MO		7,500.000					
XF030	=> SAFETY ENGINEER	1.00	0.00 MO		7,500.000					
XF035	=> SAFETY ENGINEER	1.00	0.00 MO		10,500.000					
XF040	=> SAFETY ENGINEER	1.00	0.00 MO		10,500.000					
XF045	=> SAFETY ENGINEER	1.00	0.00 MO		10,500.000					
XF050	=> SAFETY ENGINEER	1.00	0.00 MO		10,500.000					
XF055	=> SAFETY ENGINEER	1.00	0.00 MO		10,500.000					
XF060	=> SAFETY ENGINEER	1.00	0.00 MO		7,500.000					
XF065	=> SAFETY CLERK 1	1.00	0.00 MO		4,500.000					
XF070	=> SAFETY CLERK 2	1.00	0.00 MO		4,500.000					
XF075	=> SAFETY CLERK 3	1.00	0.00 MO		4,500.000					
XF080	=> SAFETY CLERK 1 -	1.00	0.00 MO		6,000.000					
XF085	=> SAFETY CLERK 2 -	1.00	0.00 MO		6,000.000					
XF090	=> SAFETY CLERK 3 -	1.00	0.00 MO		6,000.000					
\$114,750.00					[] 114,750					114,750
					11,475.00					11,475.00
Item Totals: 800000 - INDIRECT STAFFING										
\$1,439,748.00					[] 1,434,375		5,373			1,439,748
1,439,748.000		1 LS			1,434,375.00		5,373.00			1,439,748.00

BID ITEM = 810000										
Description =	STAFF & CRAFT EXPENSES			Land Item Unit =	SCHEDULE: 1 LS	100 Takeoff Quan:	1.000	Engr Quan:		1.000
810001 INDIRECT- PROJECT VEHICLES										
				Quan:	18,096.00 HR	Hrs/Shft:	8.00	WC: NONE		**Unreviewed

Cost Report

Activity Resource	Desc	Quantity Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
<hr/>										
BID ITEM = 810000										
Description =	STAFF & CRAFT EXPENSES									
----- Vehicles - Salary - Copy -----										
Company Vehicles	%	MO	Mo	Hr/Mo	Hrs					
Salary Pickups	100%		104	174	18,096					
Spares	0%			0	0					
Pool Vehicles		0	0	0	0					
Manager Vehicles	0%			0	0					
Total					18,096					
----- End Calculation -----										
8T150	==> FORD F150	1.00	17,588.64	HR	16.322			287,082		287,082
8TEXPLOR	==> FORD EXPLORER	1.00	0.00	HR	19.731					
\$287,081.77					[]			287,082		287,082
								15.86		15.86
810011	INDIRECT - TRAVEL EXPENSES (JOB & MGT)	Quan:	16.00 MO	Hrs/Shift:	8.00			WC: NONE		
----- Indirect Travel Expenseses - Management -----										
Flights:	\$500									
Hotel:	\$150									
Per Diem:	\$75									
Vehicle:	\$35									
Travel Costs										
Personnel	Ea	Trips/Year	Each	Cost	Total					
----- End Calculation -----										
3INDTRVFLIGH	TRAVEL - FLIGHT	1.00	5.00	EA	500.000		2,500			2,500
3INDTRVHOTEL	TRAVEL - HOTEL	1.00	10.00	DAY	150.000		1,500			1,500
3INDTRVPER	TRAVEL - PER DIEM	1.00	10.00	DAY	75.000		750			750
3INDTRVVEH	TRAVEL - VEHICLE	1.00	10.00	DAY	35.000		350			350
\$5,100.00					[]		5,100			5,100
							318.75			318.75
810013	INDIRECT - TOLLS, PARKING, ETC.	Quan:	16.00 MO	Hrs/Shift:	8.00			WC: NONE		
----- Tolls, Parking & Rail Passes -----										
Tolls per Mo:	\$125									
Parking per Mo:	\$200									
Rail Pass per Mo:	\$140									
Tolls										
Personnel	Ea	%	Months	Ea	Unit \$					
Managers	0	0%	0	0	\$125					
Superintendents	0	0%	0	0	\$125					
----- End Calculation -----										
3INDTOLL	TOLL - COSTS	1.00	16.00	MO	125.000		2,000			2,000
3INDTOLL PAR	TOLL - PARKING	1.00	0.00	MO	1.000					
3INDTOLLRAIL	TOLL - RAIL PASS	1.00	0.00	MO	1.000					
\$2,000.00					[]		2,000			2,000
							125.00			125.00

**Unreviewed

**Unreviewed

BID ITEM = 820000 Description = OFFICE & ADMINISTRATIVE EXPENSES		Land Item Unit =	SCHEDULE: 1 LS	Takeoff	Quan: 100 1.000	Engr Quan: 1.000
820003	OFFICE - TRAILERS	Quan:	17.00 MO	Hrs/Shift:	8.00	WC: NONE
----- Trailer Complex -----						**Unreviewed
Trailer Size	Length Ft 60	Width Ft 24	1,440	Sf		
Location	Offices Ea	Sf/Ea	Cubes Ea	SF Sf/Ea	Total	
Hub Office	5	150	5	100	1,250	
Segment Office 1	0	200	0	150	0	
Segment Office 2	0	200	0	150	0	
----- End Calculation -----						
3INDTRAILBUY	TRAILER - BUY	1.00	0.00	EA	70,000.000	
3INDTRAILDEL	TRAILER - DELIVER & S	1.00	0.00	EA	3,000.000	
3INDTRAILDWN	TRAILER - TEAR DOWN	1.00	0.00	EA	2,000.000	
3INDTRAILPAT	TRAILER - PATIOS, WAL	1.00	0.00	EA	2,000.000	
3INDTRAILSAL	TRAILER - SALVAGE	1.00	0.20	%	0.000	
3INDTRLDAM	TRAILER - DAMAGE	1.00	0.20	%	27,200.000	5,440
3INDTRLDEL	TRAILER - DELIVER & S	1.00	1.00	EA	3,000.000	3,000
3INDTRLDWN	TRAILER - TEAR DOWN	1.00	1.00	EA	2,500.000	2,500
3INDTRLLEASE	TRAILER - LEASE	1.00	16.80	MO	1,500.000	25,200
3INDTRLPAT	TRAILER - PATIOS, WAL	1.00	1.00	EA	2,000.000	2,000
\$38,140.00				[]	38,140	38,140
					2,243.53	2,243.53
820007	ESTABLISH & REMOVE OFFICE SITES	Quan:	1.00 LS	Hrs/Shift:	10.00	Cal: 50A WC: NONE
----- Establish & Remove Offices, Yards & Laydown Areas -----						**Unreviewed

Cost Report

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
BID ITEM = 820000										
Description =	OFFICE & ADMINISTRATIVE EXPENSES		Land Item Unit =	SCHEDULE: 1 LS	100	Takeoff Quan:	1.000	Engr Quan:		1.000
Dump Fees/Load	\$250									
Hours/Day	10									
Location	Acre	Crew-Days Establish	Remove	Trash Loads	Hrs/Ld					
Hub Office a	1 0	1 0	1 0	1 0	5 0					
----- End Calculation -----										
3INDDUMP	DUMP FEES - MISC	1.00	1.00 LD	250.000			250			250
8BH416	=> CAT 416 BACKHOE	1.00	20.00 HR	52.398				1,048		1,048
8T250OP	=> FORD F250 OPEATO	1.00	20.00 HR	19.185				384		384
8TEDEFULL	=> OR MANNED SEMI	1.00	5.00 HR	140.000				700		700
LACONC	=> Concrete Laborer	1.00	20.00 MH *	73.821	1,476					1,476
LAGEN	=> General Laborer	1.00	20.00 MH *	73.821	1,476					1,476
LAPIPE	=> Pipe Laborer	1.00	20.00 MH *	77.192	1,544					1,544
\$6,878.31	60.0000 MH/LS		60.00 MH	[2733.94]	4,497		250	2,132		6,878
0.5000 Units/Hr	5.0000 Un/Shift		0.0167 Unit/MH		4,496.65		250.00	2,131.66		6,878.31

820009 OFFICE FURNITURE & EQUIPMENT **Quan: 1.00 EAS Hrs/Shft: 8.00 WC: NONE** ****Unreviewed**

----- Furniture -----

Office Equipment	Personnel	Unit	\$	Totals	Notes
Furniture - Office	2		\$3,500	\$5,250	
Furniture - Cubicle	1		\$2,500	\$2,500	
Furniture - Conference Room	1		\$5,000	\$2,500	
Furniture - Training Room	0		\$7,500	\$-	
White Boards - Offices	5		\$60	\$300	
White Boards - Conference	1		\$150	\$150	
----- End Calculation -----					
3INDFURNITUR	INDIRECT - OFFICE FUR	1.00	1.00 LS	10,700.000	
\$10,700.00				[]	
					10,700
					10,700
					10,700.00
					10,700.00

820011 OFFICE EXPENSES (CONSUMIBLES) **Quan: 17.00 SMO Hrs/Shft: 8.00 WC: NONE** ****Unreviewed**

3CONCUME	Office Consumables	1.00	17.00 SMO	200.000	3,400	3,400
\$3,400.00				[]	3,400	200.00
					200.00	200.00

820013 CELL PHONES & RADIOS **Quan: 108.00 SMO Hrs/Shft: 8.00 WC: NONE** ****Unreviewed**

----- Phones - Cell Phones & Radios -----

Phones	Purchase Ea	\$	Total	Monthly Months	Mo/Ea
Salary Personnel	5	\$1,000	\$5,000	17	85
Foreman	2	\$250	\$500	16	32
Cell Phone Allowance - Craft Personnel	6	\$-	\$0	16	96
a	0	\$-	\$0	0	0
a	0	\$-	\$0	0	0

Cost Report

Activity Resource	Desc	Quantity Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
BID ITEM = 820000										
Description =	OFFICE & ADMINISTRATIVE EXPENSES		Unit =	LS	Takeoff	Quan:	1.000	Engr	Quan:	1.000
----- End Calculation -----										
3INDPHONES	INDIRECT - CELL PHON	1.00	1.00 LS	18,160.000			18,160			18,160
\$18,160.00				[]			18,160			18,160
							168.15			168.15
820015 COPIERS & PRINTERS										
			Quan:	1.00	SMO	Hrs/Shft:	8.00	WC:	NONE	**Unreviewed
----- Copiers & Printers -----										
Copiers & Printers										
	Hub Office	Mo/Ea	\$	Secondary Offices	Mo/Ea					
	Ea			Ea						
Large Copier Rental	1	17	\$500	0	0					
Large Copier Toner	1	17	\$250	0	0					
Small Copier Rental	0	0	\$250	0	0					
Small Copier Toner	0	0	\$125	0	0					
----- End Calculation -----										
3INDCOPIERS	INDIRECT - COPIERS	1.00	1.00 LS	14,790.000			14,790			14,790
\$14,790.00				[]			14,790			14,790
							14,790.00			14,790.00
820017 IT - COMPUTERS										
			Quan:	1.00	EA	Hrs/Shft:	8.00	WC:	NONE	**Unreviewed
----- Computers -----										
Computer Equipment										
	Each/Mo	Unit	\$	Totals	Notes					
Computer - Laptop	4		\$3,000	\$12,000						
Computer - Desktop	0		\$2,500	\$-						
Computer - D/B	0		\$4,500	\$-						
Computer - Server	1		\$7,500	\$7,500						
Computer - Ipad (Salary)	2		\$750	\$1,500						
Computer - Ipad (Craft)	1		\$750	\$750						
----- End Calculation -----										
3INDCOMPUTE	INDIRECT - COMPUTER	1.00	1.00 LS	26,100.000			26,100			26,100
\$26,100.00				[]			26,100			26,100
							26,100.00			26,100.00
820019 IT - SOFTWARE										
			Quan:	1.00	EA	Hrs/Shft:	8.00	WC:	NONE	**Unreviewed
----- Software -----										
Software										
	Each/Mo	Unit	\$	Mo	Year	Totals				
P6	1		\$8,500			\$8,500				
BlueBeams	5		\$500			\$2,500				
AutoCad	1		\$2,000			\$2,000				
HeavyBid	1		\$750	2	1.0	\$1,500				
HeavyJob	1		\$175	12	1.4	\$2,940				
Microsoft Suite	5		\$300	12	1.0	\$18,000				
----- End Calculation -----										
3INDSOFTWARE	INDIRECT - SOFTWARE	1.00	1.00 LS	43,040.000			43,040			43,040
\$43,040.00				[]			43,040			43,040
							43,040.00			43,040.00

Cost Report

BID ITEM	=	830000		Land Item	SCHEDULE:	1	100		
Description =		SAFETY, HEALTH, TRAINING & CONSUMABLES		Unit =	LS	Takeoff Quan:	1.000	Engr Quan:	1.000
830001		SMALL TOOLS		Quan:	8,300.00 MH	Hrs/Shft:	8.00	WC: NONE	
									**Unreviewed
----- ST01 - Small Tools -----									
Small Tools Calculation									
Calculation Code		ST01							
Small Tools									
Description	Man-Hours	Rate	Notes						

Cost Report

Activity Resource	Desc	Quantity Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
BID ITEM = 830000										
Description =	SAFETY, HEALTH, TRAINING & CONSUMABLES		Land Item Unit =	SCHEDULE: 1 100	LS	Takeoff Quan:	1.000	Engr Quan:		1.000
Site Work & Eathwork	1,300	\$2.50								
----- End Calculation -----										
3INDSMALLTOOINDIRECT - SMALL TOO	1.00	8,300.00 MH *		4.193			34,799			34,799
\$34,799.41				[]			34,799			34,799
							4.19			4.19
830003	SAFETY - SUPPLIES, TRAINING & INCENTIVES	Quan:	1.00 MH	Hrs/Shft:	8.00	WC: NONE				
3*TH	Total Labor Hours	1.00	8,304.53 LBHR	2.000			16,609			**Unreviewed 16,609
\$16,609.07				[]			16,609			16,609
							16,609.07			16,609.07
830005	SAFETY WEEK	Quan:	8,300.00 MH	Hrs/Shft:	10.00	Cal: 50A WC: STD				**Unreviewed
----- Safety Week -----										
Hours/Day for Safety Week: 8.0										
Description	Man-Hrs	Worked Hrs/Day	Man-Days	Days/Month	Man-Years					
Laborer	800	8.0	100	1	8.3					
a	0	8.0	0	1	0.0					
a	0	8.0	0	1	0.0					
----- End Calculation -----										
CACARP	=> General Carpenter	1.00	0.00 MH		51.030					
ELLINE	=> Lineman Journeyman	1.00	0.00 MH		0.000					
ELWIRE	=> Wireman Journeyman	1.00	0.00 MH		52.150					
LAGEN	=> General Laborer	1.00	133.33 MH *		76.486	10,198				10,198
MAMASON	=> Mason	1.00	0.00 MH		39.950					
OPI4G	=> CAT14G Series Operat	1.00	0.00 MH		54.960					
TMWATER	=> Water Truck Driver	1.00	0.00 MH		34.620					
\$10,197.86	0.0160 MH/MH		133.33 MH	[0.716]	10,198					10,198
			62.2516 Unit/MH		1.23					1.23
830009	DRUG TESTING & PHYSICALS	Quan:	8,300.00 MH	Hrs/Shft:	10.00	Cal: 50A WC: STD				**Unreviewed
----- Drug Testing & Physicals -----										
Drug Testing	Man-Hrs	Hrs/Day Worked	Man-Days	Days/Year	Men/Year					
Laborer	5,300	8.0	663	264	3					
Operator	400	8.0	50	264	0					
Carpenters	2,300	8.0	288	264	1					
Masons	300	8.0	38	264	0					
----- End Calculation -----										
3INDDRUG	DRUG TESTING	1.00	7.85 EA		80.000		629			629
3INDPHYSICAL	PHYSICAL	1.00	0.00 EA		450.000					
CACARP	=> General Carpenter	1.00	4.35 MH *		86.605	377				377
ELLINE	=> Lineman Journeyman	1.00	0.00 MH		60.190					
ELWIRE	=> Wireman Journeyman	1.00	0.00 MH		52.150					
LAGEN	=> General Laborer	1.00	10.03 MH *		76.544	768				768
MAMASON	=> Mason	1.00	0.56 MH *		80.000	45				45
OPI4G	=> CAT14G Series Operat	1.00	0.75 MH *		102.640	77				77
TMWATER	=> Water Truck Driver	1.00	0.00 MH		34.620					

Cost Report

Activity Resource	Desc	Quantity Pcs	Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
<hr/>										
BID ITEM = 830000			Land Item	SCHEDULE: 1	100					
Description =	SAFETY, HEALTH, TRAINING & CONSUMABLES		Unit =	LS	Takeoff Quan:		1.000	Engr Quan:		1.000
\$1,895.03	0.0018 MH/MH	15.69 MH	[0.092]	1,266		629				1,895
		528.9998 Unit/MH		0.15		0.08				0.23
<hr/>										
====> Item Totals:	830000	- SAFETY, HEALTH, TRAINING & CONSUMABLES								
\$63,501.37	149.0200 MH/LS	149.02 MH	[6708.79]	11,464		52,037				63,501
63,501.370	1 LS			11,464.11		52,037.26				63,501.37
<hr/>										

BID ITEM = 840000			Land Item	SCHEDULE: 1	100					
Description =	GENERAL PROJECT EXPENSES		Unit =	LS	Takeoff Quan:		1.000	Engr Quan:		1.000
840003	SITE TOILETS		Quan:	1.00 MH	Hrs/Shft:	8.00	WC: NONE			**Unreviewed
----- Toilets -----										

Monthly Rate: \$300

Site Toilets					
Location	Ea	Mo	Ea-Mo	\$/Ea/Mo	Totals
Jobsite	1	17	17	\$300	\$5,100
Project Trailer	1	17	17	\$300	\$5,100
a	0	0	0	\$300	\$-
a	0	0	0	\$300	\$-

----- End Calculation -----

3INDTOILETS	INDIRECT - TOILETS	1.00	34.00 MO	300.000	10,200	10,200
\$10,200.00				[]	10,200	10,200
					10,200.00	10,200.00

840005	DRINKING WATER & ICE		Quan:	8,300.00 MH	Hrs/Shft:	8.00	WC: NONE			**Unreviewed
----- Drinking Water & Ice -----										

Ice & Water	Ice Machine & Maintenance					Drinking Water & Coffee
Location	Each	Buy \$	Months	Total		Each
Hub Office	1	\$1,500		\$1,500		
North Office	0	\$5,000		\$-		
Warehouse	0	\$2,500		\$-		
Maintain Machines	0	\$50	46	\$-		

----- End Calculation -----

3INDWATERICE	INDIRECTS - DRINKING	1.00	1.00 LS	12,545.750	12,546	12,546
\$12,545.75				[]	12,546	12,546
					1.51	1.51

840009	DUMPSTERS AND TRASH		Quan:	8,300.00 MH	Hrs/Shft:	8.00	WC: NONE			**Unreviewed
----- Trash -----										

Trash Removal	Large Dumpster				
Location	Each	Mo	Ea-Mo	\$/mo	Total
40 YD - Dumpster	1	14	14	\$1,500	\$21,000
3 YD - Dumpster	1	17	17	\$300	\$5,100

Risk Register

Risk Register - DRAFT Risks

BB Group - US Civils - Southwest - Water -> 46526a77-403f-4 / SWRC_Add Train #5

Reporting Month: June 2024 Currency: USD

Ref	Register Breakdown	IDENTIFY				ASSESS (Current)							RESPOND			MONITOR					
		Risk Category	Risk Event	Risk Owner	Consequence(s)	Criticality	Delivery	INES	Frequency	Most Likely Cost	Probability %	Risk Rating	Risk Share	Calc. Risk Cost	Assessment Rationale	Risk Response	Planned Action(s)	Action Owner	Action Due Date	Last Update Comment	Last Date Modified
1		On-Time Delivery and Availability of Materials - (Supply Chain Issues)		Victor Rojas	Schedule delays to the project results in extended time and resources	Early submittal approval and early procurement of the materials. Since this project is an addition to the project we just completed, materials are reviewed and submitted earlier than the previous projects. Health and safety concerns are addressed early. Top submittal review should be accelerated	3	0	2	1,500,000	5	100	100	75,000	Delay in Fibercast, electrical procurement and piping to prevent contingency for potential delays.	Accept				If submittals and procurement are completed early, then lead times for delivery should not be an issue	06/06/24
						World conflicts or tariffs that cause material shortages															
2		Location of existing house wire close to shoring for installations		Tom Murray	Liability for the damage	Owner will need to indemnify from costs to repair but we may need to be involved if liability	3	0	2	50,000	15	M	100	7,500	Differing site conditions & physical conditions + 3rd Party Damage of house + Contingency					This should be a shared risk with the owner. need to add monies in contingency if cost are incurred	28/06/24
3		Emergency Bypass due to shutdown / Tie Ins		Victor Rojas	Alignment issues or damage to existing system during Tie-In	Proper scheduling and coordination with plant operation should eliminate any issues. Also work will be conducted during low flows and this off peak hour work will be budgeted in the estimate	2	2	1	20,000	20	100	100	4,000	+ Contingency + Shared risk with "the owner"	Manage				If work is schedule properly risk can be reduced. This would be a shared risk with the owner and cost can be added to Contingency	06/06/24
4		A process Liability existing plant		Victor Rojas			2	2	2				100								06/06/24
5		Foreign or Domestic Cyber Attack		Victor Rojas	Disruption of Operations or Damage to Equipment, Delay on Schedule		2	1	1	100,000	10	100	100	10,000	Remove damage equipment, extra labor hours for assisting plant operation start up	Manage Further	Assess Risk	Tom Murray	06/06/24		06/06/24
6		Excessive sludge buildup		Victor Rojas	Added Labor Hours and possible delay in schedule		1	1	1	30,000	25	100	100	7,500	Extra labor hours for Clean up	Manage	Assess Further	Tom Murray	06/06/24		06/06/24
7		Storm Events		Victor Rojas	Delays in schedule and Productivity, Delays in shutdowns		1	1	1	100,000	25	100	100	25,000	Delays and additional storm control Materials and Rehab	Manage Further	Assess Further	Tom Murray	06/06/24		06/06/24
8		Plant Permit Approvals		Victor Rojas	Delay in demobilization, additional construction needed for permit		1	1	1	100,000	25	100	100	25,000	Delay in demobilization, additional construction needed for permit	Manage Further	Assess further	Tom Murray	06/06/24		06/06/24
9		Unsuspected Plant operation delays		Victor Rojas	delay on plant startup		1	1	1	50,000	25	100	100	12,500		Manage Further	Assess Further	Tom Murray	06/06/24		06/06/24
Totals in USD										1,950,000				166,500							

Train 5

Basis of Design

ATTACHMENT A

Balfour Beatty Infrastructure, INC.

**East Valley Water District
Sterling Natural Resources Center
Membrane BioReactor Train 5 Expansion
Project Number: XXXXXXXX**

SCOPE TO SUPPLY PROFESSIONAL ENGINEERING AND CONSULTING SERVICES

Project Overview

East Valley Water District (EVWD, hereafter referred to as the DISTRICT) operates an advanced wastewater treatment plant known as the Sterling Natural Resource Center (SNRC), to provide treatment of wastewater primarily produced in and collected from the City of Highland, California. The SNRC is located at 25376 5th Street, San Bernardino, California 92410. The SNRC currently treats approximately 6 to 8 million gallons per day (MGD) of flow and is permitted to treat 8.0 MGD annual average daily flow.

The SNRC includes Membrane Bioreactors (MBR) for filtration. The MBR facility includes four trains with provisions for a fifth train. The DISTRICT desires to expand the MBR facility to include the fifth train to increase the redundancy of the MBR facility. The first four trains were manufactured and supplied by Fibracast. It is assumed that Fibracast will manufacture and supply the fifth train and will work with the project team to deliver this Scope of Work.

The Scope of Work for the Membrane BioReactor Train 5 Expansion (MBR T5 Expansion) has been prepared assuming that the project will be completed via the Progressive Design Build delivery method and a contract between Balfour Beatty Infrastructure Inc (BALFOUR) and Arcadis US Inc. (ARCADIS) will be executed with contract terms and conditions as defined by the original contract dated November 15, 2018, without modification. Further, this scope of work has been developed considering that all applicable terms and conditions from the Master Design-Build Agreement between the DISTRICT and BALFOUR dated November 2, 2018 remain in effect as may be modified given the scope, schedule, and cost applicable to this MBR T5 Expansion project.

Generally, the ARCADIS Scope of Work is for the design and construction administration of the MBR T5 Expansion and is detailed below. ARCADIS will be responsible for the Civil, Structural, Electrical designs excluding SCADA controls, programing and related services, and Fibracast will be responsible for the MBR T5 Process Mechanical and Instrumentation and Controls equipment design and construction start up and commissioning. ARCADIS will assist with SCADA coordination, permitting coordination,

and early equipment procurement specifications as may be required and requested by BALFOUR. It is not anticipated that ARCADIS will have any subconsultants under this Scope of Work.

Project Duration

The duration for the MBR T5 Expansion Design and Construction Administration Services scope of work is limited to the dates between the start and completion dates. The start date for Design Services is October 14, 2024, and will be completed no later than February 11, 2025. The Construction Administration Services provided by ARCADIS will begin concurrent with Balfour's construction activities, which may begin prior to completion of the Design Services. Construction Services will be completed no later than October 31, 2025.

Assumptions

The following items are assumed:

- ARCADIS Design is limited to Civil, Structural, Process Mechanical, and Electrical disciplines.
- The Process Mechanical and Instrumentation & Controls equipment design responsibility for MBR T5 will be by Fibracast.
- It is assumed that there will be no Architectural (including HVAC, Fire and Plumbing) for this project.
- BALFOUR will be responsible for the sampling, quality control testing, geotechnical investigation, topographic, ground and utility location surveys.
- Sampling, surveys, and geotechnical investigations are excluded from the Arcadis scope of work.
- ARCADIS will review geotechnical recommendations provided by Others for structural design requirements.
- ARCADIS shall reasonably rely on all materials and project data provided by BALFOUR and DISTRICT.
- Limited startup and commissioning assistance are included as part of the Engineering services during construction under this scope of work based on completion dates listed above. Supplemental startup and commissioning assistance may be provided under future contract amendments if needed.
- Permitting associated with the project will be performed by Others. ARCADIS will not be responsible for permitting on the project. ARCADIS will attend coordination meetings and make required revisions to the design as may be applicable to ARCADIS scope of work based on permitting reviews comments.
- ARCADIS will be available for permitting meetings and workshops with the permitting agencies to assist the team in the permitting process (Task MBR 5.10 - Permitting Coordination).
- Construction Inspections for concrete and reinforcement placement will be by Others. Material information and inspection reports will be submitted to ARCADIS for record purposes

SCOPE OF SERVICES

DESIGN PHASE SERVICES

GENERAL: ARCADIS will conduct upto two technical work group meetings to facilitate advancement of the project design, to allow for DISTRICT input and decisions and to provide for innovation, value engineering and constructability review. Arcadis will provide 60 percent complete design deliverables that will serve as the basis for development of a contract GMP, project schedule and project risk/contingency register by BALFOUR.

The scope detailed below is intended to provide the advancement of the design necessary to develop a contractual GMP and to provide the DISTRICT documentation of what has been priced into the GMP and will be included in the design. The design deliverables are not intended to be final or represent a certain percentage of design completeness.

Task MBR 5.1 – Update Basis of Design Report:

ARCADIS will use the latest version of the Basis of Design that was developed under the Sterling Natural Resource Center (SNRC) project (dated: September 2023) as a base document. The document will be updated only as it is impacted by MBR T5 Expansion project. A draft update will be developed to allow the design to be completed (Final Drawings and Specifications). The Basis of Design Report will be finalized upon approval of all submittals required for the completion of the construction.

Task MBR 5.2 – Update Hydraulic Profile and Process Flow Diagram:

ARCADIS will use the latest version of the Hydraulic Profile (Sheet G-000-14, issued December 2023, dated October 2022) and the Process Flow Diagram (Sheet G-000-12, issued December 2023, dated October 2022) as a base document. The Hydraulic Profile will be updated based on operational conditions from the Influent Pump Station through the MBR System. A draft update will be developed to allow the design to be completed (Final drawings developed). The Hydraulic Profile will be finalized upon completion of the structural construction to allow for finalized elevations to be included in the Hydraulic Profile.

Task MBR 5.3 – Design Coordination Meetings (60%, Final):

The Work associated with the MBR T5 Expansion will occur over the duration outlined (start date and end date listed under Project Duration above). ARCADIS will attend up to six project meetings held on a regular basis as needed by the PROJECT TEAM through the duration of the Project. Meeting minutes will be provided by Others. ARCADIS will review draft meeting minutes and action item lists and will provide feedback to BALFOUR at BALFOUR's discretion.

Subtask MBR 5.3.1 – Technical Work Group / Design Review Workshops:

Project workshops will be conducted by ARCADIS and BALFOUR with the DISTRICT to present the state of the Design at the 60% design deliverable for each of the design discipline packages (Civil, Structural, Process Mechanical, Electrical) to

verify direction and obtain approval from the DISTRICT. The workshops will utilize an open discussion format that encourages communication by the full PROJECT TEAM.

ARCADIS will actively participate in the Workshops, including attendance of technical experts as needed. A total of 6 technical work group (TWG) meetings, each 2 hours in duration are included in the Scope of Work

Task MBR 5.4 – Develop Civil Site Design (60%, Final):

ARCADIS will develop the Civil / Site design required for the MBR T5 Expansion, mainly the roadway immediately east of the MBR facility and the washdown area south of the MBR facility. The Civil design will consist of 60%, and Final submittal packages, including detailed Drawings and Specifications required to complete the Work. The design will take into consideration site access, plant roads, yard piping, grading and paving plans and demo plans. This task will also address site integration with the existing facilities. It is assumed that previously used geotechnical reports will be utilized for guidance for structural excavation/backfill, grading, and bases.

ARCADIS will develop the site drainage plan impacted by the MBR T5 Expansion, including roadway immediately east of the MBR facility that will be impacted by the construction activities. No additional site drainage will be updated/reviewed under this scope of work.

Task MBR 5.5 – Develop Structural Design (60%, Final):

ARCADIS will develop the Structural design required for the MBR T5 Expansion, mainly the MBR Train No. 5. The Structural design will consist of 60%, and Final submittal packages, including detailed Drawings and Specifications required to complete the Work. The design will address integration into existing structures and facilities, including the required dimensioned layouts, sections and elevations, slab thicknesses and rebar design, and tie-in details to adjoin the new train into the existing facility.

Design will include miscellaneous metals to be shown on the Drawings including covers, gates, weirs, plates, etc. with material type callouts.

Task MBR 5.6 – Develop Process Mechanical Design (60%, Final):

ARCADIS will work closely with Fibracast to present the Process Mechanical design required for the MBR T5 Expansion, mainly the MBR Train No. 5. The Process Mechanical design will consist of 60%, and Final submittal packages, including detailed Drawings and Specifications required to complete the Work. The design will address integration into existing structures and facilities, including piping layout drawings and the required tie-in details to adjoin the new train into the existing facility.

ARCADIS takes no responsibility for the Fibracast process/equipment. ARCADIS will be responsible for the development of the Technical Specifications for the MBR System, which will be issued to Fibracast for use in design of the MBR Train No. 5. ARCADIS

will work closely with Fibracast to incorporate the equipment required by Fibracast to guarantee the flows and fluxes presented in the Technical Specifications.

Task MBR 5.7 – Develop Electrical, and Instrumentation and Controls Design (60%, Final):

ARCADIS will develop the Electrical and Instrumentation & Controls designs required for the MBR T5 Expansion, mainly to provide power and controls for MBR Train No. 5. The Electrical design will consist of 60%, and Final submittal packages, including detailed Drawings and Specifications required to complete the Work. The Instrumentation & Controls design will consist of 60%, and Final submittal packages, including detailed Drawings and Specifications required to complete the Work. The design will address integration into existing structures and facilities, including update to single line diagrams, power requirements, and the required tie-in details to adjoin the new train into the existing facility.

ARCADIS takes no responsibility for the Fibracast process/equipment. ARCADIS will be responsible for the development of the Technical Specifications for the MBR System, which will be issued to Fibracast for use in design of the MBR Train No. 5. ARCADIS will work closely with Fibracast to incorporate the process instrumentation and controls equipment/systems required by Fibracast to guarantee the flows and fluxes presented in the Technical Specifications. It is anticipated that Fibracast will supply process and instrumentation drawings for the project, which will be incorporated into the overall project.

Design will include electrical duct bank layouts and cable/wire callouts, update to the electrical equipment list, update to the instrumentation equipment list and PLC wiring diagrams.

Task MBR 5.8 – Perform Power System Study:

ARCADIS will perform a Power System Study, which will assess the plant's current electrical power consumption and the impacts of the additional equipment required by the MBR T5 Expansion. A final report will be provided presenting the evaluation of the existing system and the impacts of the MBR T5 Expansion.

Task MBR 5.9 – SCADA Coordination:

ARCADIS will assist BALFOUR in the development and review of the programming updates required for the SCADA system to integrate the MBR T5 Expansion. ARCADIS will not be programming under this scope of work. ARCADIS is not responsible for the direct control of the MBR system but will review controls descriptions provided by Fibracast. ARCADIS will assist in the integration of the MBR Train No. 5 into the overall programming of the SNRC Facility. ARCADIS will support construction and programming of the SCADA system by reviewing HMI screens and providing clarification to the ARCADIS developed control descriptions.

Task MBR 5.10 – Permitting Coordination:

ARCADIS will assist BALFOUR and coordinate with the DISTRICT as the DISTRICT interacts with the regulatory agencies involved in the approval of the MBR T5 Expansion scope of work. ARCADIS will review documents and correspondence with the regulatory agencies and provide feedback to BALFOUR. Arcadis assumes that the permit interactions needed will be limited to the Division of Drinking Water's (DDW) Waste Discharge Requirements (WDR) permit.

The scope excludes:

- Permits and permitting agencies not listed above are not included in this Scope of Work,
- Fees associated with permits required for the Project,
- Sampling or analysis of samples taken during validation and commissioning testing.

CONSTRUCTION PHASE PROJECT ADMINISTRATION SERVICES

GENERAL: ARCADIS will provide Construction Administration Services in the form of office engineering and site inspections as outlined below.

Task MBR 5.11 – Submittal Review/Processing:

Subtask MBR 5.11.1 – Submittal Review:

ARCADIS will review Shop Drawings, samples, test results, and other data which suppliers and manufacturers are required to submit to BALFOUR per the Contract Documents and as provided/directed by the DISTRICT. ARCADIS' review will only be for conformance with the design concept of the Project and compliance with the information given in the Contract Documents. Such review or other action shall not extend to means, methods, sequences, techniques, or procedures of construction, or to safety precautions and programs incident thereto.

The level of effort associated with this task is based on no more than 20 unique Shop Drawing submittals. Submittal review efforts are based upon a maximum of two (2) reviews per submittal and assume that no more than 50-percent of the total number of submittals will require two (2) reviews. Scope of Work assumes all submittals will be approved after the second submittal and no submittals will require a third review. Partial submittals shall be counted as the first submittal of a work element.

The Scope of Work excludes review of Operation and Maintenance Manuals, or Lesson Plans/Training. If Operations and Maintenance Manuals or Lesson Plans (including equipment/systems training) are required by the DISTRICT, it is assumed that Others will be responsible for those items.

Subtask MBR 5.11.2 – Request for Information Review:

ARCADIS will respond to clarify and/or interpret technical, design related questions developed by BALFOUR raised during construction regarding interpretation and

clarification of the contractual administrative and technical requirements of the Contract Documents. Request for Information (RFI) shall be issued to BALFOUR for use and distribution as needed. The level of effort for this task is based upon receiving a total of 10 RFIs.

Subtask MBR 5.11.3 – Design Change Notifications:

ARCADIS will provide services in connection with Design Change Notifications (DCN) to evaluate and reflect recommended changes requested by ARCADIS or the DISTRICT, or for evaluating substitutions proposed by BALFOUR. The DCN will include revising Drawings and Specifications occasioned thereby, and resulting from significant delays, changes or price increases occurring as a direct or indirect result of material or equipment shortages. As needed, ARCADIS will prepare drawings, details and specifications to describe the DCN. The level of effort for this task is based upon the development of up to 2 DCNs.

Task MBR 5.12 – Construction Inspection (C/S, PM, E, I&C):

ARCADIS will provide coordination functions during the construction phase as needed including, but not limited to, inspections, and site visits. ARCADIS inspection will be limited to the following engineering disciplines:

- Civil/Site,
- Process Mechanical,
- Electrical,
- Instrumentation and Controls.

Subtask MBR 5.12.1 – Inspections: Arcadis will assist with materials and installation inspection services as directed by BALFOUR. Arcadis will verify that tests, equipment, and systems start-up and operating and maintenance instructions are conducted as required by the Contract Documents, Manufacturer's recommendations and in the presence of the required personnel. ARCADIS will review inspection reports and testing activities describing the tests and inspections made by others.

Subtask MBR 5.12.2 – Site Visits: ARCADIS will visit the site occasionally for physical observation of the progress of construction. Through occasional on-site observations of the work in progress and field checks of materials and equipment, ARCADIS will provide observation of the progress and quality of the executed work and to determine in general if the work is proceeding in accordance with the design intent.

ARCADIS will act as directed by and under the supervision of BALFOUR and will confer with the PROJECT TEAM as the need arises. Written communication to the DISTRICT will only occur through the facilitation of BALFOUR. ARCADIS will report to BALFOUR whenever it is believed that work is unsatisfactory, faulty or defective or does not conform to the Contract Documents, or does not meet the requirements of inspections, tests or approval required to be made, or has been damaged; and advise BALFOUR when it is believed work should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.

ARCADIS will be available to accompany visiting inspectors representing public or other agencies having jurisdiction over the Project and report the outcome of these visits/inspections to the PROJECT TEAM.

The level of effort for this task is based on a maximum of one (1) site visit every week for a maximum of 4 hours per visit through the duration of the Construction Services through the completion date (dates listed above in the Project Overview).

ARCADIS will not:

- Authorize deviations from the Contract Documents or approve substitute materials or equipment which may impact cost, time or design intent without approval from BALFOUR.
- Undertake the responsibilities of the DISTRICT, BALFOUR, or Subcontractors.
- Be held responsible for the BALFOUR's failure to perform the work in accordance with the Contract Documents.
- Advise on or issue directions relative to the means, methods, techniques, sequences, or procedures of construction.
- Advise on or issue directions as to safety precautions and programs in connection with the work.

Task MBR 5.13 – Punch List / Substantial Completion:

ARCADIS will assist BALFOUR in the completion of the Substantial Completion Inspection following notice from BALFOUR that the work is substantially complete in accordance with the Contract Documents. ARCADIS will perform a walk-through of the facility and will coordinate with BALFOUR on the assembly of a punch list that requires completion or correction. After BALFOUR has completed the work associated with the punch list and upon request by BALFOUR, the PROJECT TEAM will conduct a Final Completion Inspection.

ARCADIS will participate in the Final Completion Inspection and will provide comments to BALFOUR to incorporate into the project record. ARCADIS will focus final completion inspections ensuring that the substantial completion punch list items have been completed to the standard required by the Contract Documents. ARCADIS will review the Work and determine that BALFOUR has fulfilled all obligations thereunder so that ARCADIS may give written notice to the DISTRICT that the work is acceptable subject to conditions expressed therein. ARCADIS will provide final completion inspection comments to BALFOUR.

ARCADIS will not be responsible for the acts or omissions of BALFOUR or of BALFOUR's Subcontractor's, agents or employees or other persons (except ARCADIS' own employees and agents) at the site or otherwise performing BALFOUR's work.

Warranty inspections are *not* included in this Scope of Work.

Task MBR 5.14 – Start-Up Support:

ARCADIS will provide startup and commissioning support. The level of effort for this task shall be limited to a maximum of four (4) site visits and a total of 168 hours of start up support.

Subtask MBR 5.14.1 – Start-Up: Start-up activities shall be performed under the control of a certified wastewater treatment plant operator provided by the DISTRICT per the anticipated stipulations of the permits provided by the agencies having jurisdiction. The DISTRICT will be required to sign and deliver the summary reports, testing results, and letters of the validation and commissioning tests as required.

ARCADIS will assist BALFOUR and the DISTRICT during the startup and testing of MBR T5. The assistance provided shall be limited to observation of the proceedings. ARCADIS will witness the equipment testing and performance testing; review the Supplier/Manufacturer's start-up planning, systems start-up, operation and troubleshooting. Written communication in the form of emails will be provided to BALFOUR on an as needed basis to support BALFOUR's efforts documenting start-up activities.

Subtask MBR 5.14.2 – Commissioning:

ARCADIS will assist the DISTRICT with commissioning of the facilities. The commissioning process will include the Supplier/Manufacturer's planned, systematic approach to verify that facility systems operate as intended and there is an orderly transition from construction through start-up to routine operation. ARCADIS will monitor BALFOUR's transition and support the DISTRICTS operations to ensure a properly operating and performing system at the completion of the commissioning process.

ARCADIS will assist BALFOUR develop the overall systems commissioning plan in accordance with the Contract Documents and how they integrate into the overall facility (SNRC). The overall systems commissioning plan will incorporate the commissioning plans for each of the sub-process areas into a comprehensive plan to allow for integration into the full facility.

Task MBR 5.15 – Record Drawings:

ARCADIS will coordinate with BALFOUR to obtain the certified, red-lined construction documents. ARCADIS will make the revisions to the project documents, incorporating changes made through the progress of the work, and will prepare as-built drawings using the information provided by BALFOUR. The updated Documents will be provided electronically to BALFOUR. Drawings will be located, modified and housed on the ARCADIS BIM site. Written notification in the form of an email will be provided to BALFOUR upon completion of the record documents. The record documents will be provided electronically to BALFOUR for issuance to the DISTRICT.

ARCADIS will not be responsible for, nor provide hard/physical documents at the completion of the project. ARCADIS will provide ONLY electronic Record Documents (files) to BALFOUR posted at the location of BALFOUR's choosing.

**EAST VALLEY WATER DISTRICT
STERLING NATURAL RESOURCE CENTER
MBR TRAIN 5 REQUIREMENTS SUMMARY**

Below is a general summary of work required to accommodate an additional MBR train. The summary will be updated as additional requirements are identified and determined.

- **Process Mechanical:**
 - MBR train 5 equipment (cassettes, header piping, valving, etc.) Assuming that this would be supplied by Fibracast.
 - MBR train 5 influent gate (see structural notes below, work within active channel will be required to keep mixed liquor flowing into the active MBRs and the WAS PS)
 - Filtrate Pump 5: space provided for pump; short term system shutdown required to complete tie-in of Filtrate Pump 5 to the common filtrate header. Each train has a dedicated filtrate flow meter. The common filtrate flow meter would be removed. Also include a "pipe loop" (inverted p-trap) in the common filtrate header at the elbow where the filtrate goes below ground to the UV system. The filtrate piping would need to be dismantled and bolted back together to allow for filtrate pump No. 5 (MOPO will be required).
 - RAS Pump 5: will be located on the west side of MBR train 5, not the east side like the other 4, based on the location of the future connection. Short term system shutdown required to complete tie-in of RAS Pump 5 to the common RAS header.
 - Membrane Blower 5: Short term system shutdown required to install the additional "cross-over" valve on the existing MBR air header.
 - Service water connection required.
 - Chemical cleaning services will be required (Hypo, Citric)
- **Structural:**
 - Filtrate pump pit sized for 5th filtrate pump. Just need a new equipment pad.
 - The structural sheets detail how to construct the east wall of MBR train 5, which was deemed future construction, such that this work does not compromise the support piers for the bridge crane.
 - Existing Structure Modifications:
 - Saw cut and remove cantilevered platform located east of MBR train 4.
 - Saw cut west wall of MBR train 5 to create cassette support pockets.
 - Saw cut common wall to create MBR influent opening at bottom for MBR train 5. This will likely require bulkheading and isolating the MBR influent channel, which needs to remain in service for the first four trains.
 - Membrane Blower 5: equipment pad already constructed to accommodate the 5th blower.
- **Electrical**
 - Provide VFD for the 5th RAS pump and associated concrete equipment pad.
 - Provide VFD for the 5th Air Scour Blower.
 - Provide VFD for the 5th Permeate pump.
 - Provide feeder circuit breakers (480VAC and 120VAC).
 - Provide pedestals / racks for field located equipment.
 - Provide disconnect switches (480VAC and 120VAC, fused with fuses where required).

- Provide all other necessary electrical, instrumentation and controls work associated with the mechanical list of work.
- Provide local control stations.
- Provide necessary conduit, fittings, conduit bodies, pull boxes, etc. Use existing designated empty conduit where possible.
- Provide necessary cables (480VAC, 480VAC VFD cable, 120VAC, 24VDC, analog, CAT6, etc., with testing, terminations, labelling, documentation, etc.).
- Provide supplemental grounding / bonding.
- Instrumentation
 - Provide all necessary field instrumentation for process control / monitoring / equipment protection.
 - Provide necessary hardwired modifications to PLC-1 cabinet.
 - Provide necessary hardwired modifications to PLC-MBR cabinet.
 - Provide necessary software modifications to PLC-1 (monitoring, control, standby power sequencing, etc.).
 - Provide necessary software modifications to the Plant SCADA system.
 - Provide necessary software modifications to PLC-MBR (monitoring, control, standby power sequencing, etc.).
 - Provide testing (FAT and SAT), tuning, calibrating, troubleshooting, commissioning, certification of proper installation, etc. of all associated electrical and instrumentation equipment (new and existing) as required.
- General
 - Provide shop drawings / submittals and O&M Manuals for all proposed equipment, materials, etc.
 - Provide construction sequence / schedule of shutdowns / coordination with plant operations for process equipment shutdowns (flow limitations).
 - Include temporary power design / temporary distribution equipment to maintain full plant operations, if necessary, as determined by the Owner during electrical equipment shutdowns to perform necessary work.
 - Provide construction photographs.
 - Provide as-built documentation.
 - Work shall be in conformance with the contract documents previously issued.

GENERAL SHEET NOTES

1. MBR LEVEL AND FILTRATE PUMP STATION LEVEL: ALL CONDUITS SHALL BE INSTALLED TO MAINTAIN FLOOR CONDUIT STURDIPS SHALL BE CONTINUOUS WITHOUT FITTINGS OR COUPLINGS



LEAD ENTITY:
ARCADIS U.S., INC.

Balfour Beatty

CONSULTANTS



SEALED: 02/09/2019

STERLING NATURAL
RESOURCE CENTER



**East Valley
Water District**
31111 GREENSPOT ROAD
HIGHLAND, CALIFORNIA 92346

ARCADIS PROJ. NO. 00040819-0018

NO.	DATE	DESIGNED FOR	BY

COPYRIGHT: ARCADIS U.S., INC.
2019

DATE: 06/26/2019

PROJECT NO.: 00040819-0018

FILE NAME: E-CARTILLO

DESIGNED BY: C. LANCEL

DRAWN BY: J. BOWEN

CHECKED BY: J. BOWEN

SHEET TITLE

MBR FACILITY

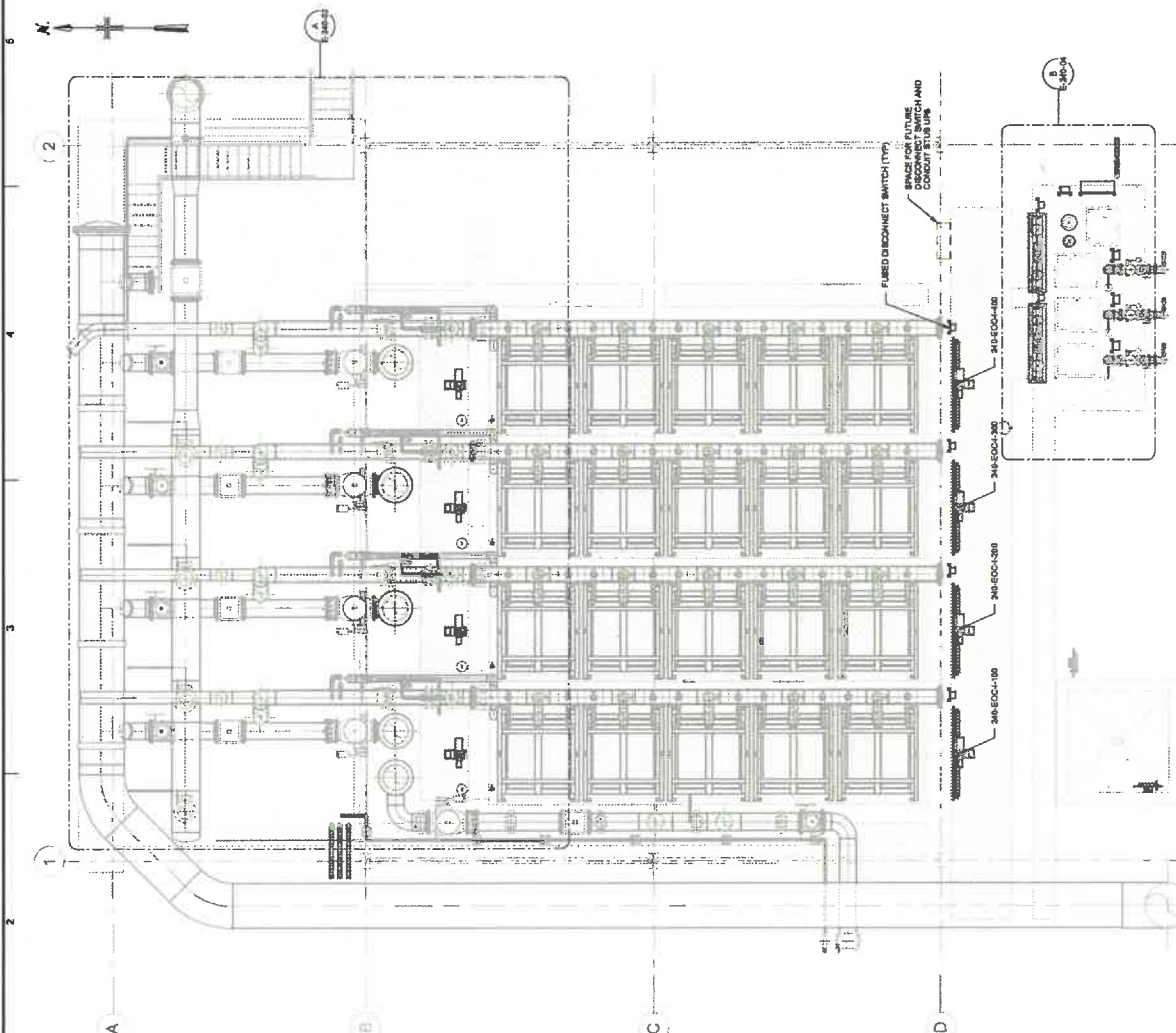
POWER PLAN I

SCALE

3/16" = 1'-0"

E-240-01

SHEET
OF



POWER PLAN
SCALE: 3/16" = 1'-0"

APPROVED DRAWINGS IN PROCORE
(use this set for limited reference ONLY)

CON BULTANTIS

8EAL8



SEALED: 08/08/2019

STERLING NATURAL
RESOURCE CENTER



East Valley

Water District

33111 GREENSPOT ROAD
HIGHLAND, CALIFORNIA 92346

CANCER PROT. NO. 00040619 JUNE

NO.	DATE	ISSUED FOR	BY
-----	------	------------	----

COPYRIGHT: ARCADES U.S., INC.

DATE: 04/02/2019

PROJECT NO.

DESIGNED BY:
E. CASTILLO

CHECKED BY: J. SOKOL

[illegible]

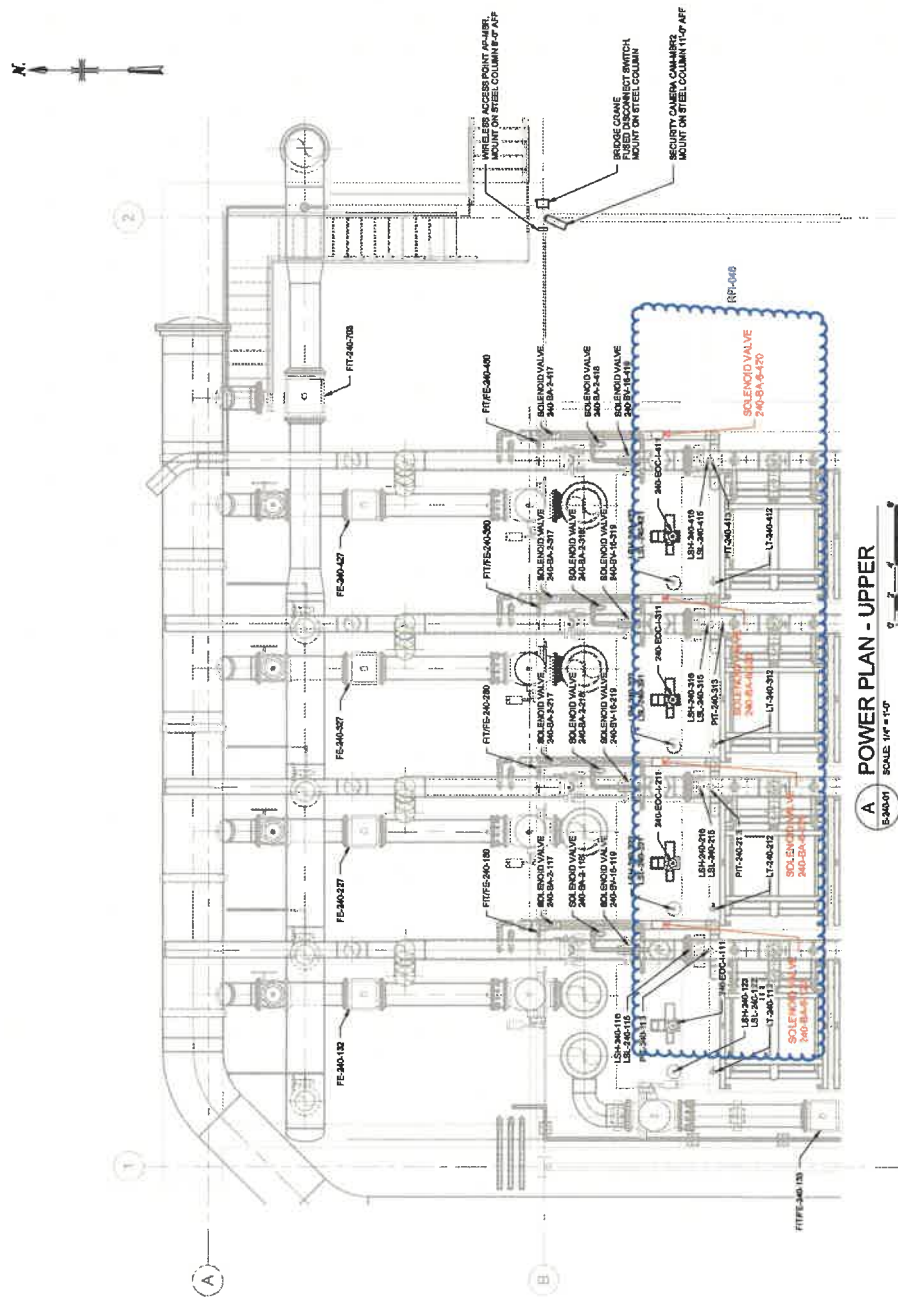
POWER PLAN II

TABLE 1

 $1.86^{\circ} = 1^{\circ} 52'$

F-240-02

OF
SHEET



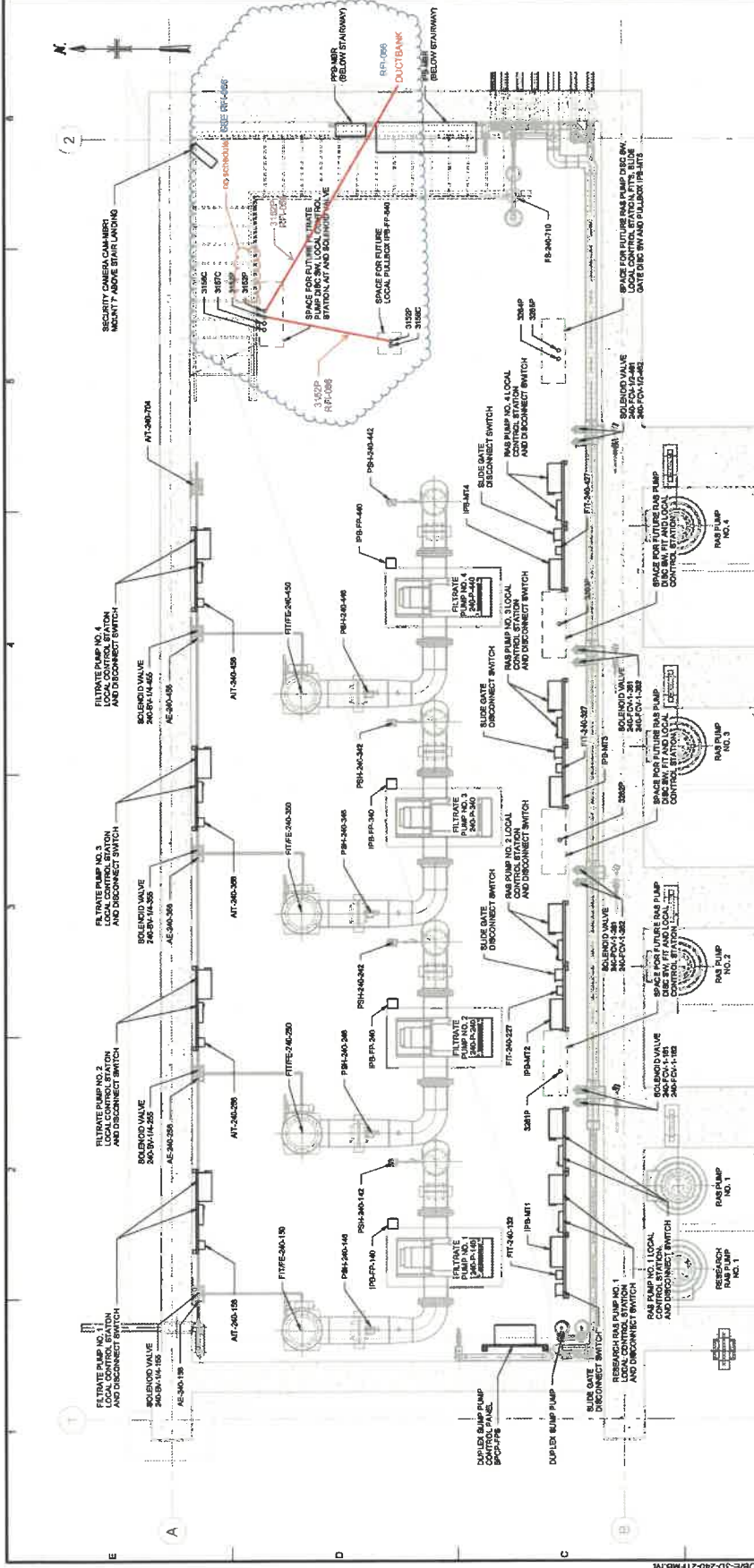
A POWER PLAN - UPPER

SCALE 1/4" = 1'-0"

APPROVED DRAWINGS IN PROCORE
(use this set for limited reference ONLY)



NO.	DATE	REVISION FOR	BY

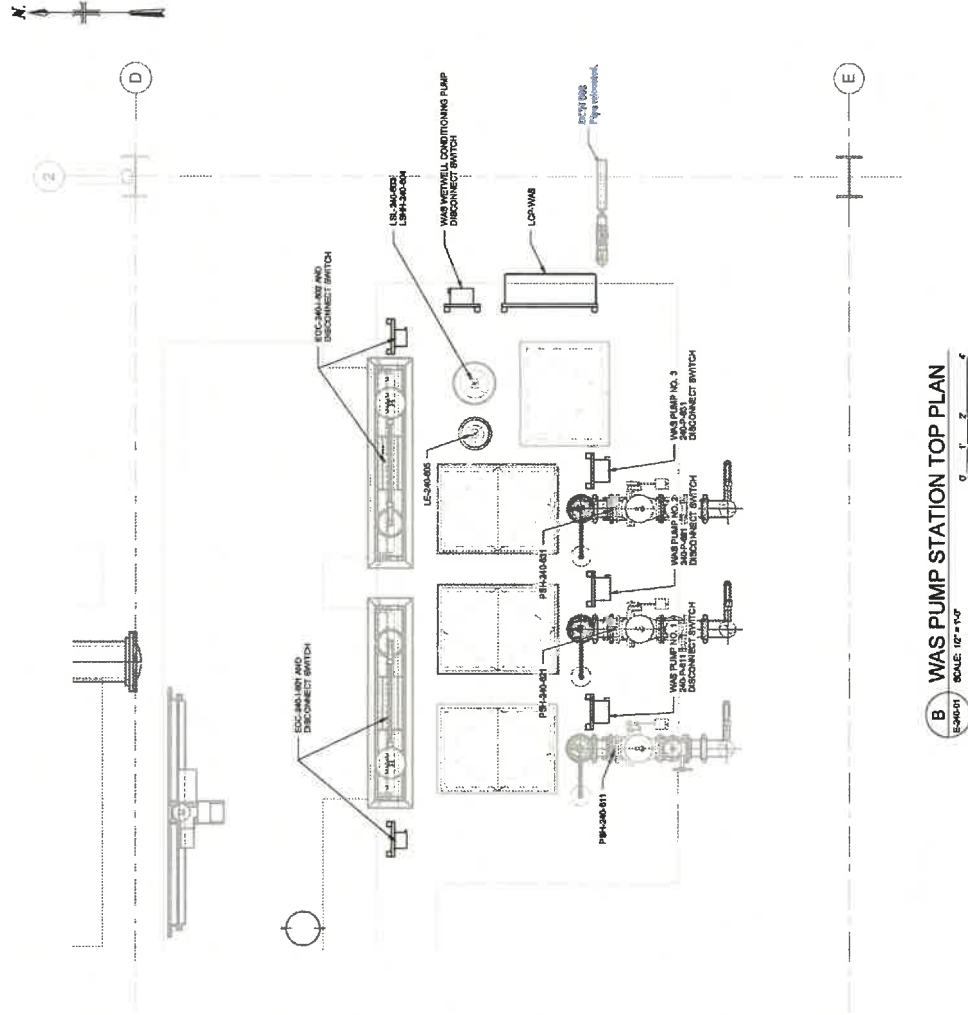


A POWER PLAN - LOWER
E-240-01 SCALE 3/8" = 1'-0"

APPROVED DRAWINGS IN PROCORE
(use this set for limited reference ONLY)



NO.	DATE	DESIGNED FOR	BY



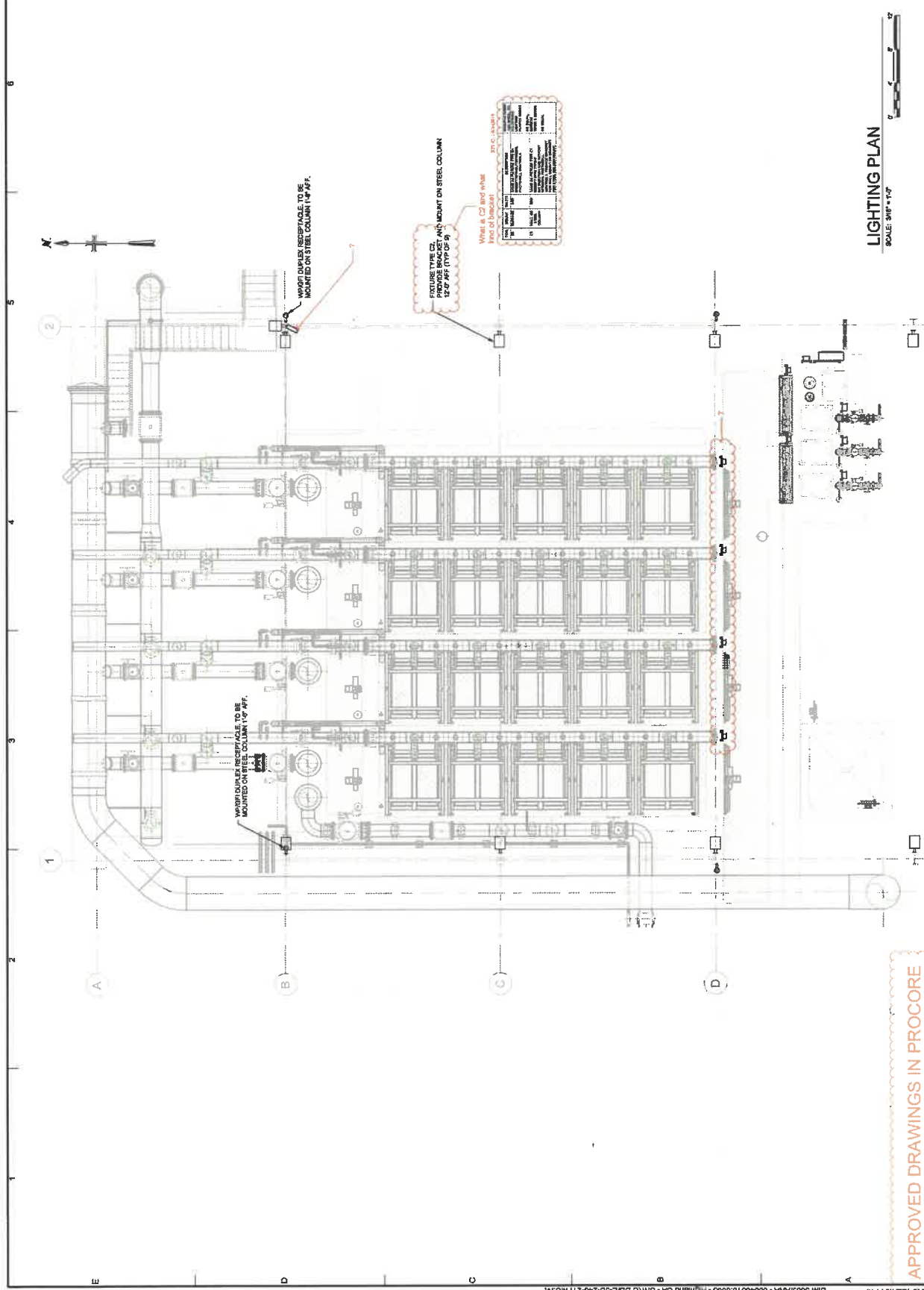
B WAS PUMP STATION TOP PLAN

SCALE: 1/2" = 1'-0"

APPROVED DRAWINGS IN PROCORE
(use this set for limited reference ONLY)

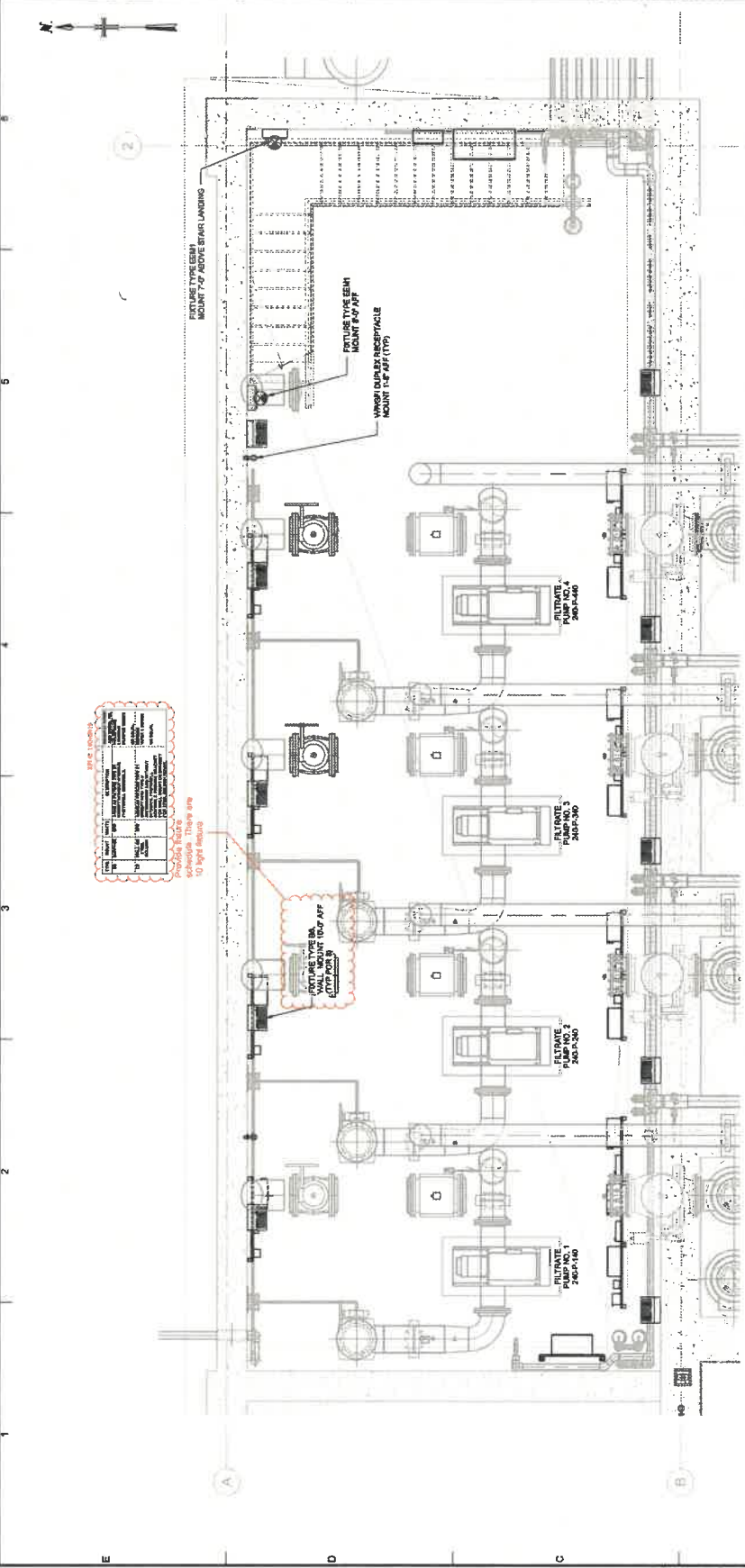


NO.	DATE	REVISION FOR	BY



LIGHTING PLAN
SCALE: 3/16" = 1'-0"

APPROVED DRAWINGS IN PROCORE
(use this set for limited reference ONLY)



LIGHTING PLAN - LOWER
SCALE: 3/8" = 1'-0"

APPROVED DRAWINGS IN PROCORE
(use this set for limited reference ONLY)



LOCAL OFFICE:
ARCADIS U.S., INC.

Balfour Beatty

CONSULTANTS

SCALE



SEALED: 08/09/2019

STERLING NATURAL
RESOURCE CENTER



**East Valley
Water District**
31111 GREENSPOT ROAD
HIGHLAND, CALIFORNIA 92346

ARCADIS PROJ. NO. 0000019.0008

NO. DATE BASED FOR BY

COPYRIGHT: ARCADIS U.S., INC.
2019

DATE: 08/09/2019

PROJECT NO.: 0000019.0008

FILE NAME: E. CASTLE

DESIGNED BY: C. LANGE

DRAWN BY: J. BOKOL

CHECKED BY:

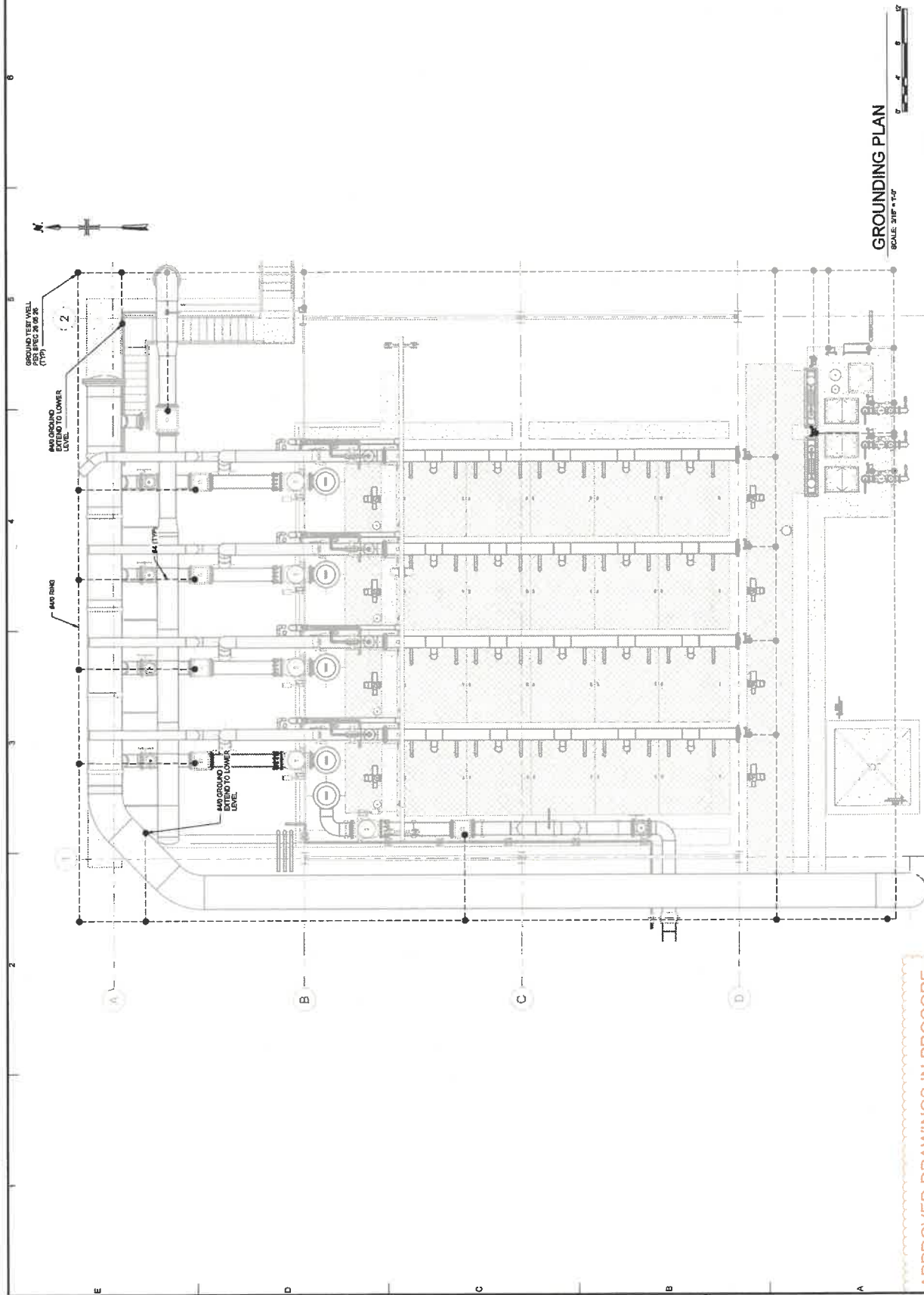
SHEET TITLE

MBR FACILITY

GROUNDING PLAN I

SCALE: 3/16" = 1'-0"

E-240-07
SHEET OF



APPROVED DRAWINGS IN PROCORE
(use this set for limited reference ONLY)

SHEET KEYNOTES

1. STUB-UP, COIL AND PROTECT
GROUNDING CONDUCTOR.



LEGAL ENTITY:
ARCADIS U.S. INC.

Balfour Beatty

CONSULTANT

SEALS



SEALED: 08/09/2019

STERLING NATURAL
RESOURCE CENTER



East Valley
Water District
31111 GREENSPOT ROAD
HIGHLAND, CALIFORNIA 92348

ARCADIS PROJECT NO.: 0000019-0008

NO.	DATE	ISSUED FOR	BY

CAD PROJECT: ARCADIS U.S. INC.

2019

DATE: 08/09/2019

PROJECT NO.: 0000019-0008

FILE NAME: E-CASTULO

DESIGNED BY: CLANZEL

DRAWN BY: J. BOWEN

CHECKED BY: J. BOWEN

SHEET TITLE

MR FACILITY

GROUNDING PLAN II

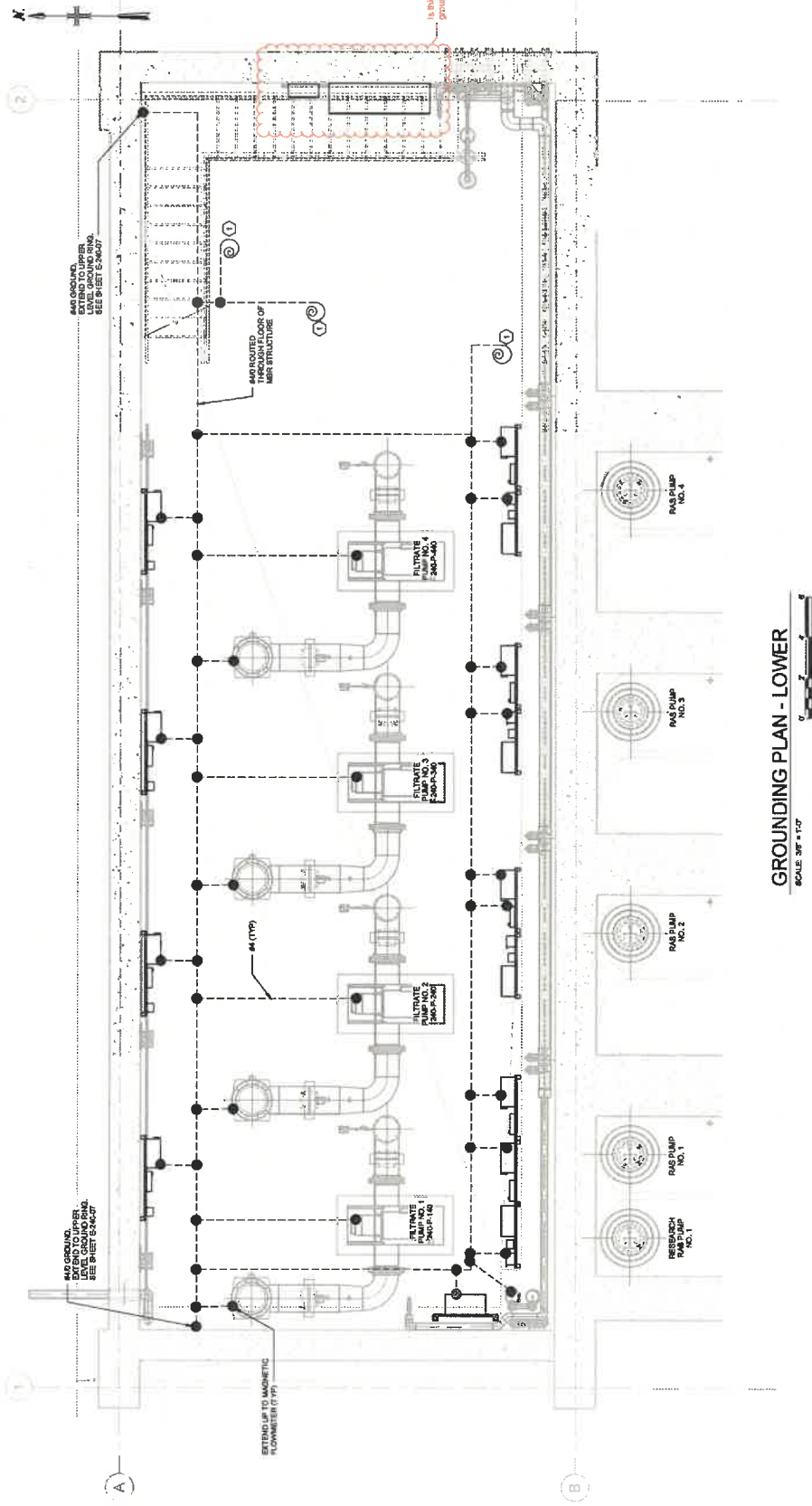
SCALE

3/4" = 1'-0"

E-240-08

SHEET

OF



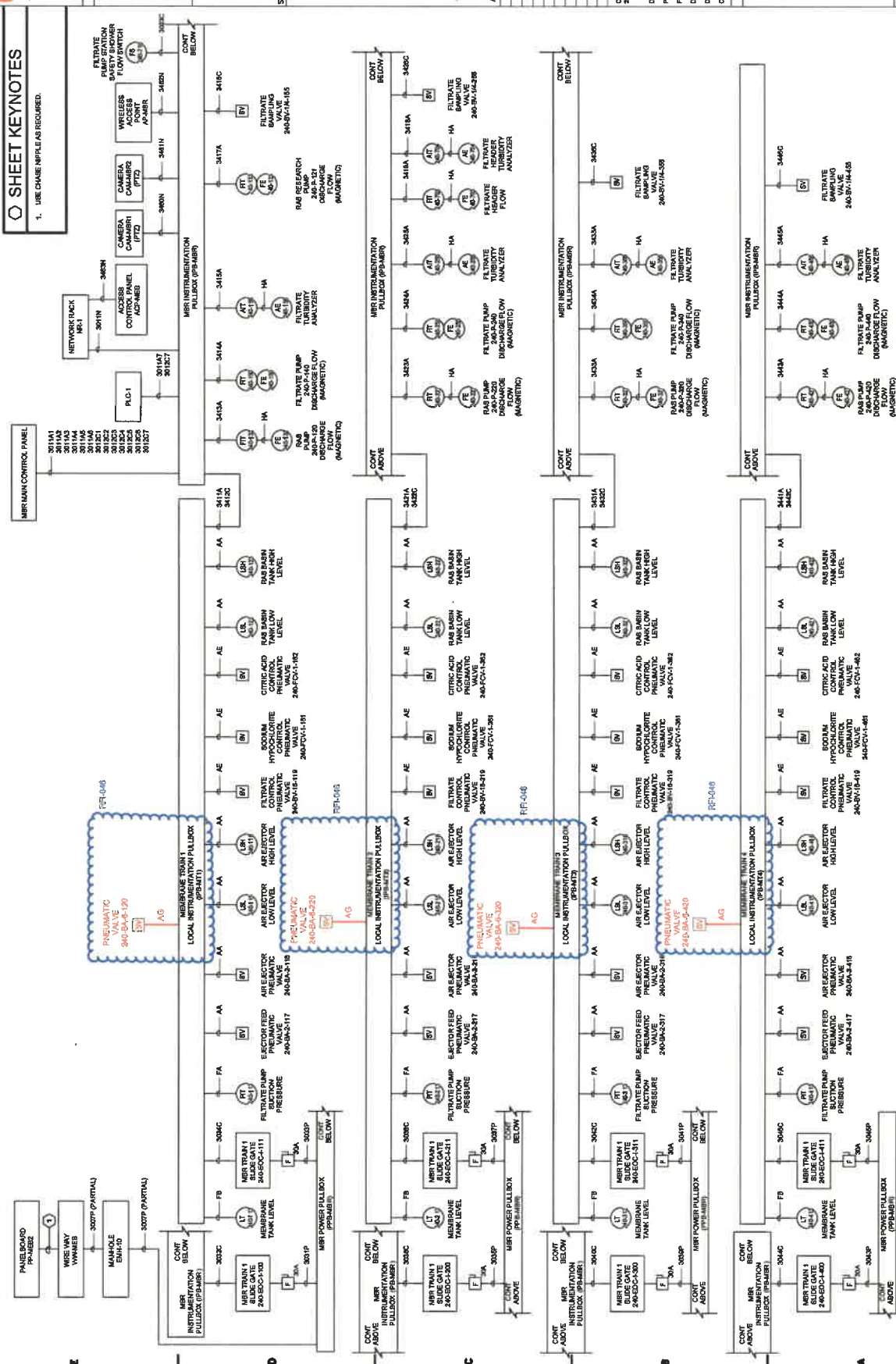
GROUNDING PLAN - LOWER

SCALE: 3/4" = 1'-0"

APPROVED DRAWINGS IN PROCORE
(use this set for limited references ONLY)

— 1 —

1. USE CHASE NIPPLE AS REQUIRED.



APPROVED DRAWINGS IN PROCORE
(use this set for limited reference ONLY)

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DATE: 06/06/2019

EX 0 NAME:	E-90-19
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FILE NAME	DATE
10-10-11	10-10-11

RECEIVED BY: E. GARDNER

C. LANZEL

SHEET TITLE

WISCONSIN

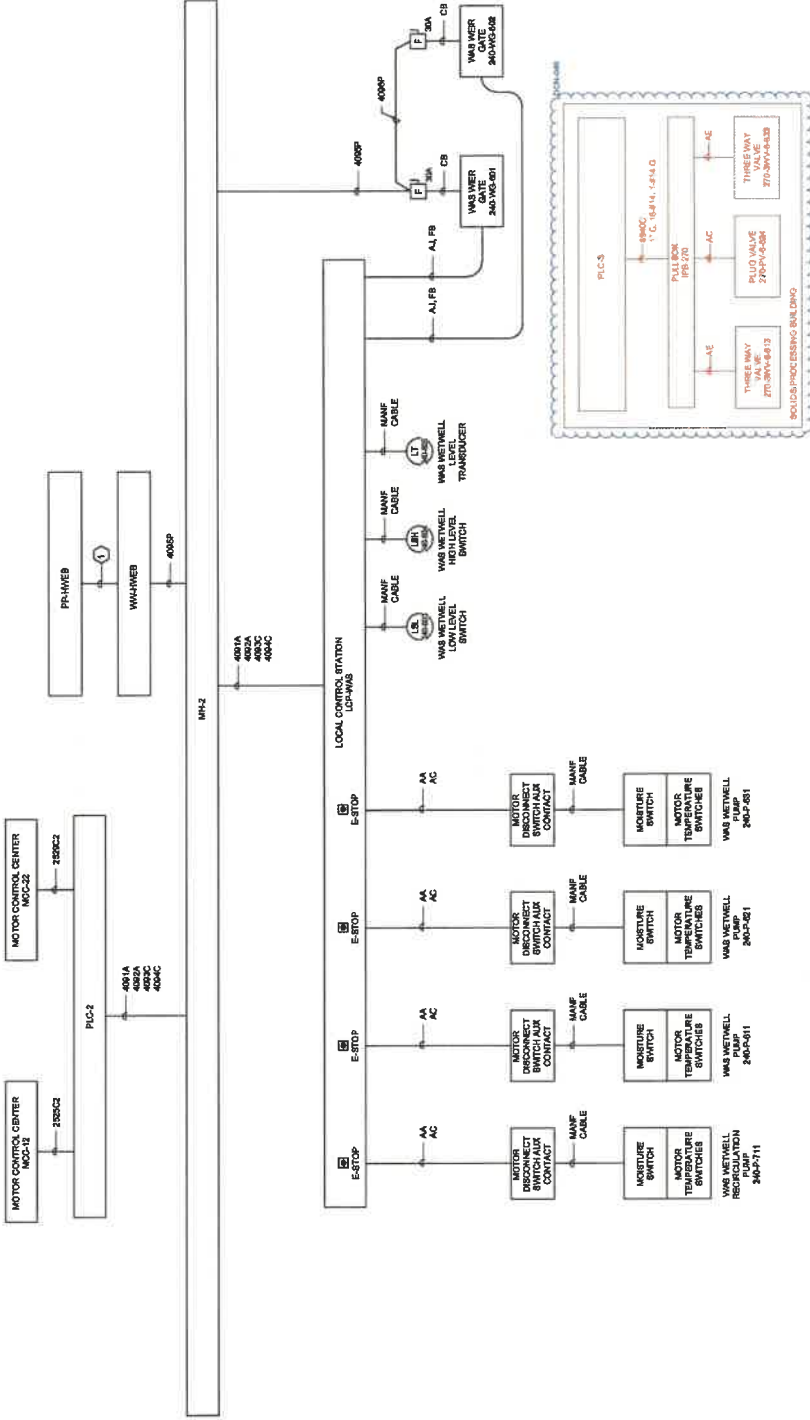
BLOCK DIAGRAM

SCALE:

SCALE: NOT TO SCALE

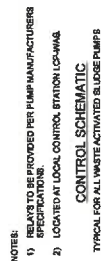
F-240-11

Figure 1



WAS PUMP STATION BLOCK DIAGRAM

APPROVED DRAWINGS IN PROCORE
(use this set for limited reference ONLY)



APPROVED DRAWINGS IN PROCORE
(use this set for limited reference ONLY)



61022/60780=USNO

STERLING NATURAL
RESOURCE CENTER

**East Valley
Water District**
3111 GREENSPOT ROAD
HIGHLAND, CALIFORNIA 92341

ON TUESDAY MAY 28TH
000000000000000000

[illegible]

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2010
GOVERNMENT, REVENUE AND FINANCE

100

DATE: 08/09/2018

PROJECT NO.: 00040819.0008

FILE NAME: E-240-14

FILE NUMBER
E CASTILLO

DESIGNED BY. E. CASTILLO
DRAWN BY. C. LAMOTTE

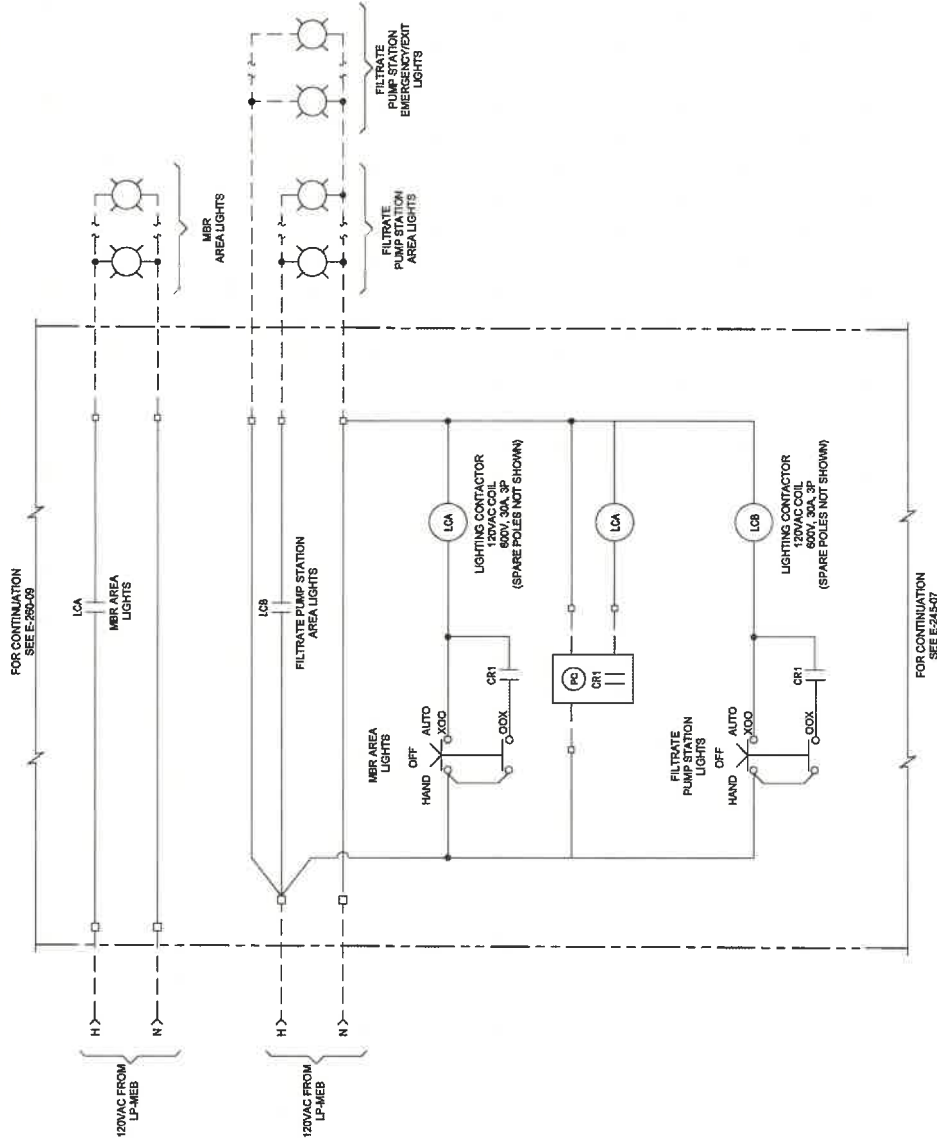
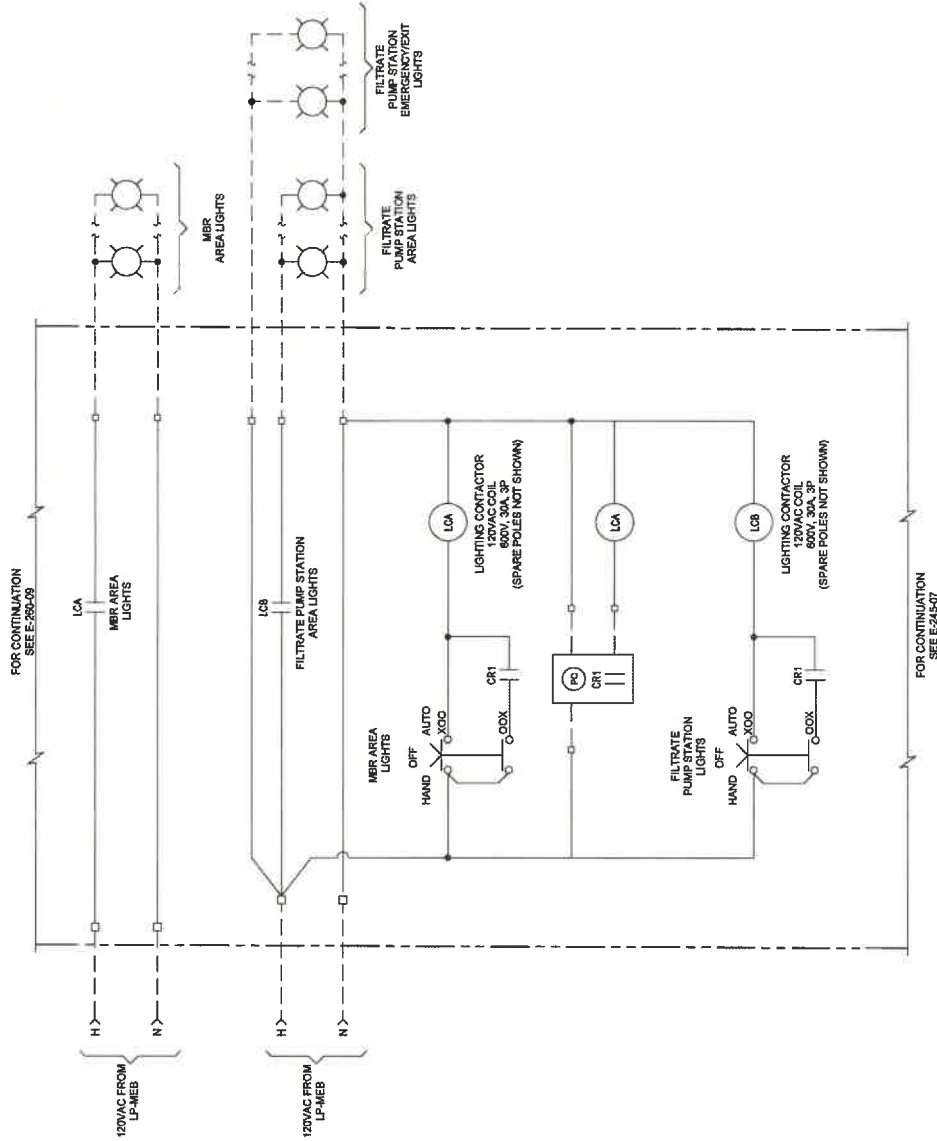
DRAWN BY: C. LANGE

CONTROL SCHEMATICS I

SCALE:	NO SCALE
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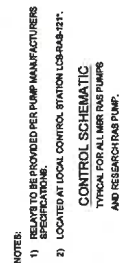
E-240-14

SHEET **OF** **XXX**



(CONT.) MAIN ELECTRICAL BUILDING LIGHTING RELAY PANEL LRP-MEB
CONTROL SCHEMATIC

APPROVED DRAWINGS IN PROCORE
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SIGNED: 08/09/2019

STERLING NATURAL
RESOURCE CENTER

**East Valley
Water District**
3111 GREENSPOT ROAD
HIGHLAND, CALIFORNIA 92341

ARCADE19 PRCTL NO. 00040819.0008

NO	DATE	ISSUED FOR	BY
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DATE: 08/06/2019

PRODUCT NO.	E-260-1A
SERIAL NO.	

ATTENTION	CLERK
CLERK	CLERK

CHECKED BY: J. BOND

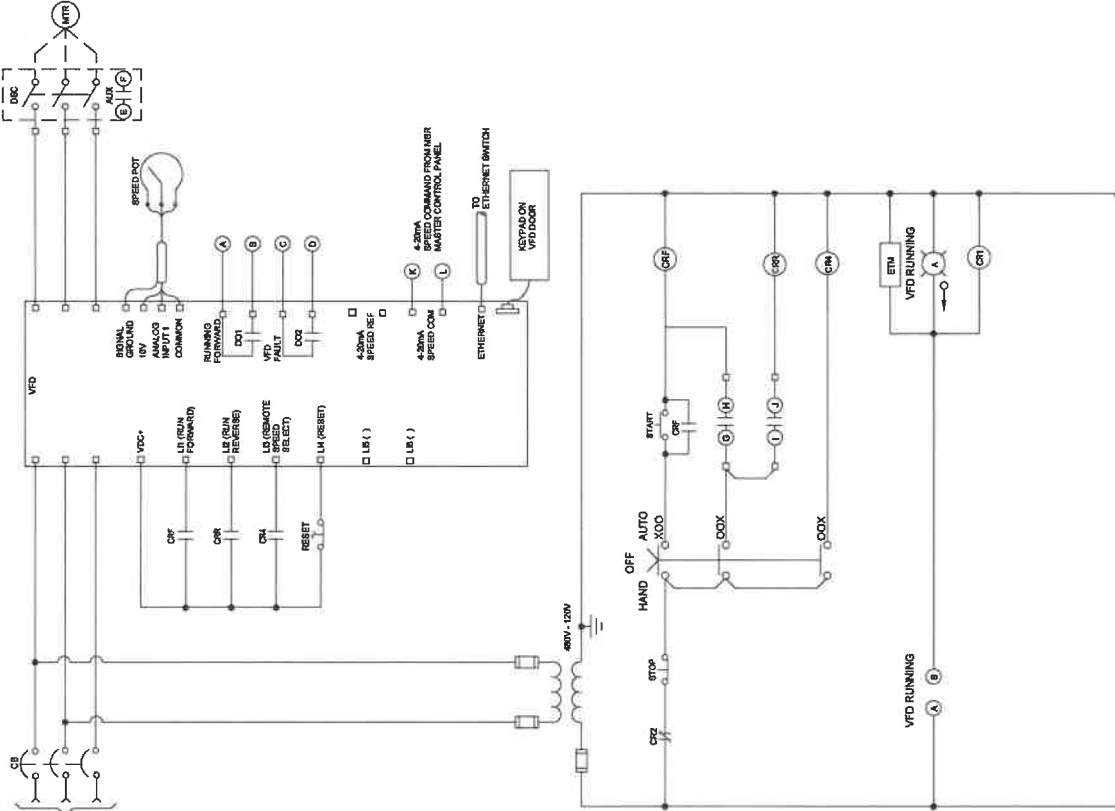
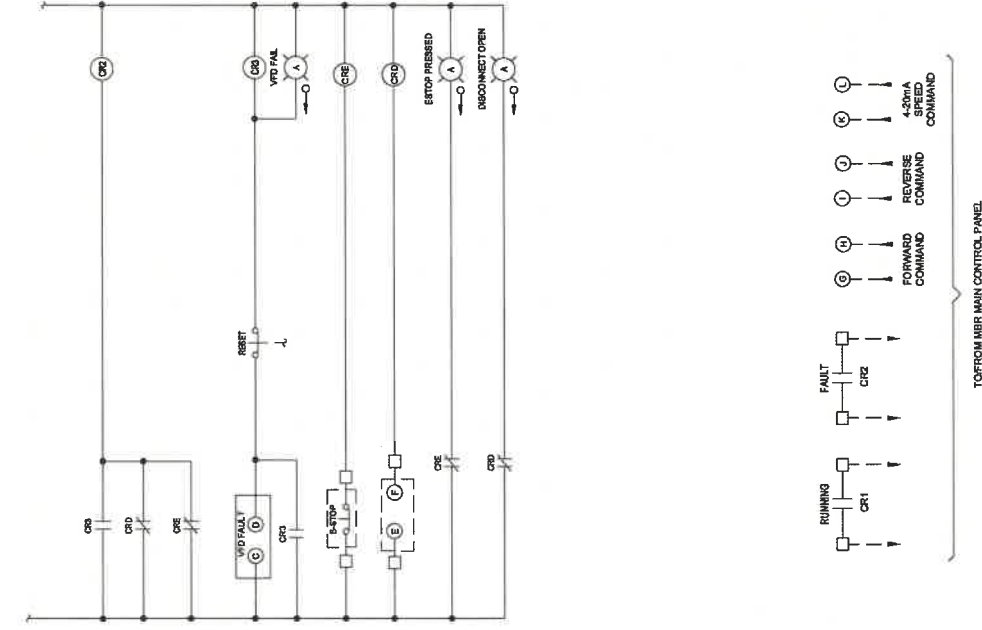
MBR FACILITY

CONTROL SCHEMATICS

8SCALE:

SCALE: NO SCALE

SHEET OF BOX
E-240-16



CONTROL SCHEMATIC
TYPICAL FOR ALL MSR FILTRATE PUMPS.

APPROVED DRAWINGS IN PROCORE
(use this set for limited reference ONLY)

E-240-17
SHEET OF 1000



SIGNED: 06/09/2019
STERLING NATURAL
RESOURCE CENTER



**East Valley
Water District**
3111 GREENBOLT ROAD
HIGHLAND, CALIFORNIA 92346

ARCHITECT PROJECT NO.: 0004818.0008

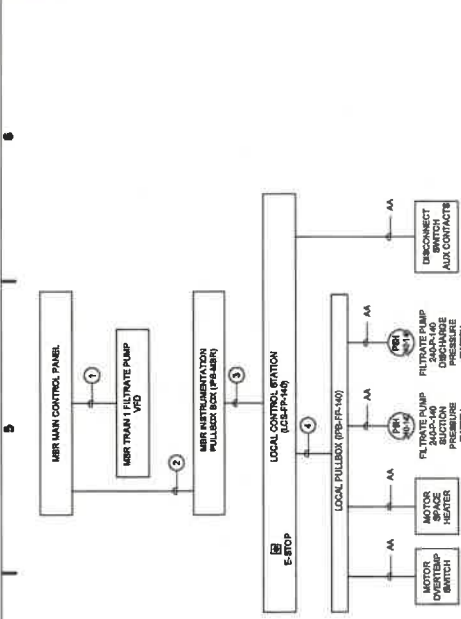
NO.	DATE	REVISION FOR	BY

COPYRIGHT: ARCADIS U.S., INC.
2018
DATE: 06/09/2019
PROJECT NO.: 0004818.0008
FILE NAME: E-240-09
DESIGNED BY: E. CASTILLO
DRAWN BY: J. LAMIEL
CHECKED BY: J. LAMIEL
SHEET TITLE: MBR FACILITY

BLOCK DIAGRAM I

SCALE: NOT TO SCALE

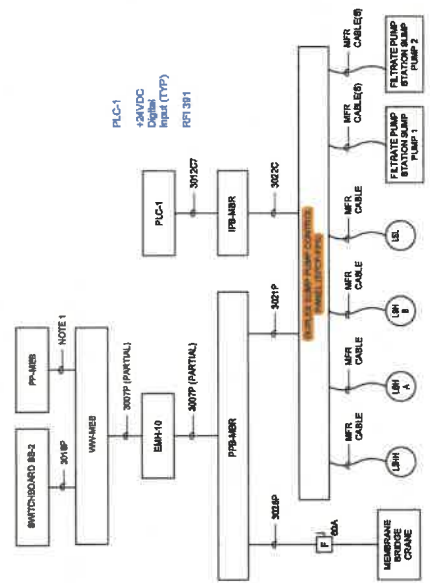
SHEET E-240-09
OF 001



CONDUIT NUMBERS

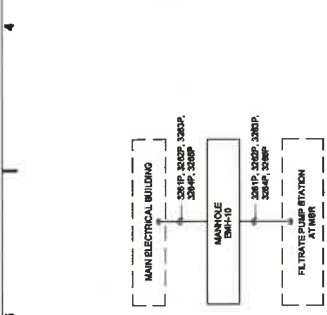
CONDUIT NO.	MBR TRAIN NO. 1	MBR TRAIN NO. 2	MBR TRAIN NO. 3	MBR TRAIN NO. 4	MBR TRAIN NO. 5
1	3116A, 3118C	3116A, 3118C	3116A, 3118C	3116A, 3118C	3116A, 3118C
2	3012C (PARTIAL)	3012C (PARTIAL)	3012C (PARTIAL)	3012C (PARTIAL)	3012C (PARTIAL)
3	3117C	3117C	3117C	3117C	3117C
4	3118C	3118C	3118C	3118C	3118C

MBR FILTRATE PUMP BLOCK DIAGRAM
TYPICAL FOR ALL FILTRATE PUMPS

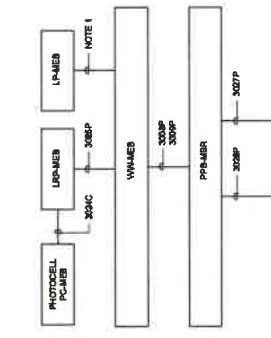


MBR BRIDGE CRANE AND
FILTRATE PUMP STATION SUMP PUMPS
BLOCK DIAGRAM

NOTES:
1. USE CHASE IMPLE AS REQUIRED

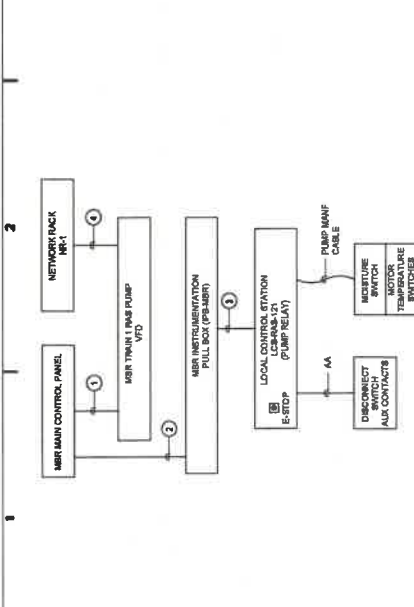


FUTURE MBR
RAS RESEARCH PUMPS 2, 3, 4, 5 AND RAS PUMP 5
BLOCK DIAGRAM



MBR AND FILTRATE PUMP STATION
LIGHTING AND RECEPTACLES
BLOCK DIAGRAM

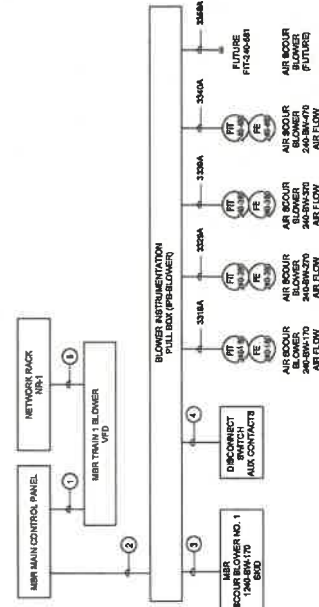
NOTES:
1. USE CHASE IMPLE AS REQUIRED
2. SEE LIGHTING PLANS FOR QUANTITIES
3. INSTALL PHOTOCELL ON NORTH EXTERIOR WALL OF MAIN ELECTRICAL BLDG. 1 FEET ABOVE FINISHED GRADE



CONDUIT NUMBERS

CONDUIT NO.	MBR RAS PUMP	MBR RAS PUMP	MBR RAS PUMP	MBR RAS PUMP	MBR RAS PUMP
1	3116A, 3118C	3116A, 3118C	3116A, 3118C	3116A, 3118C	3116A, 3118C
2	3012C (PARTIAL)	3012C (PARTIAL)	3012C (PARTIAL)	3012C (PARTIAL)	3012C (PARTIAL)
3	3117C	3117C	3117C	3117C	3117C
4	3118C	3118C	3118C	3118C	3118C

MBR RAS PUMP BLOCK DIAGRAM
TYPICAL FOR ALL RAS PUMPS



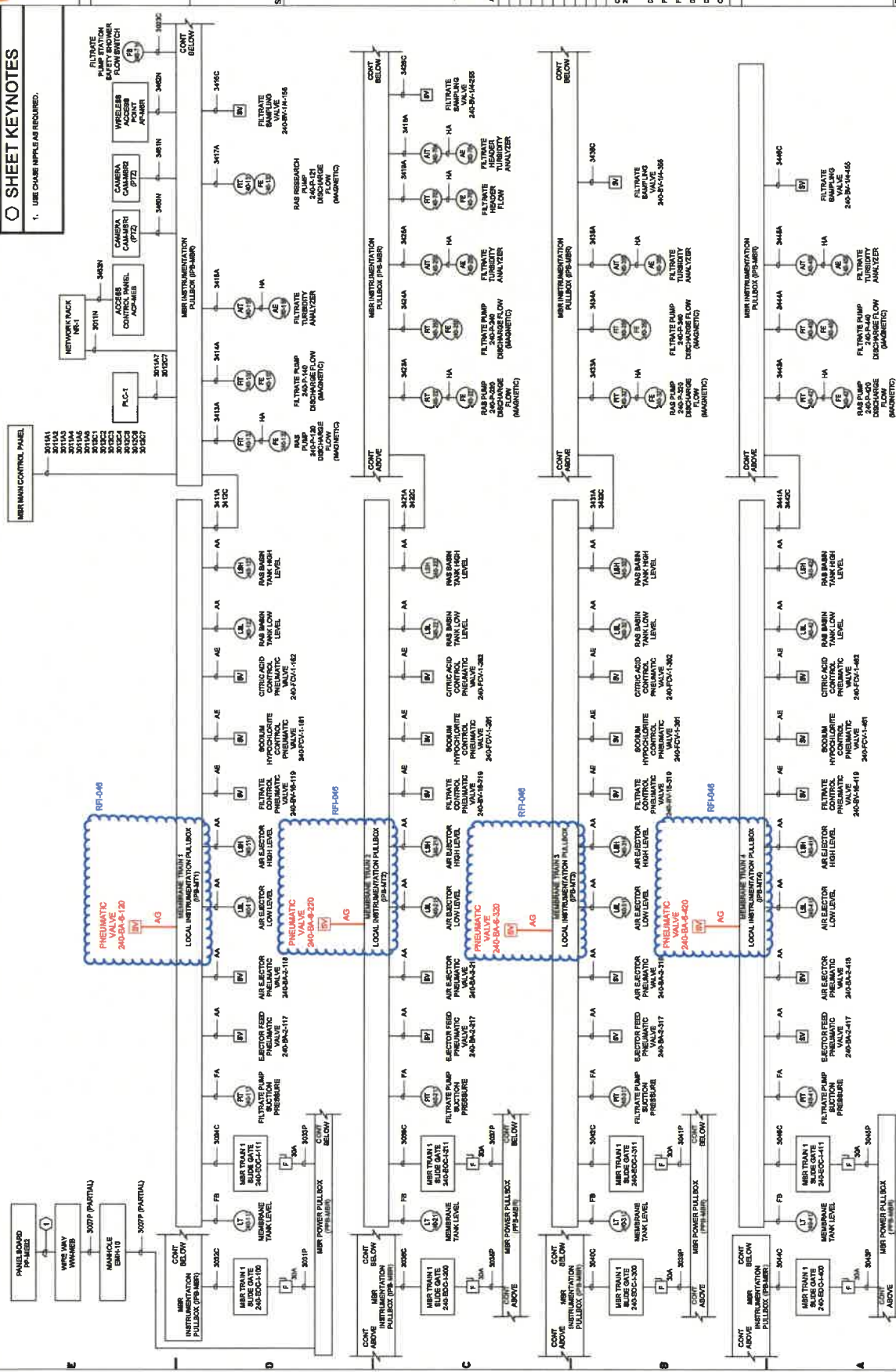
CONDUIT NUMBERS

CONDUIT NO.	MBR AIR SCOUR BLOWER	MBR AIR SCOUR BLOWER	MBR AIR SCOUR BLOWER	MBR AIR SCOUR BLOWER	MBR AIR SCOUR BLOWER
1	3116A, 3118C	3116A, 3118C	3116A, 3118C	3116A, 3118C	3116A, 3118C
2	3012C (PARTIAL)	3012C (PARTIAL)	3012C (PARTIAL)	3012C (PARTIAL)	3012C (PARTIAL)
3	3117C	3117C	3117C	3117C	3117C
4	3118C	3118C	3118C	3118C	3118C

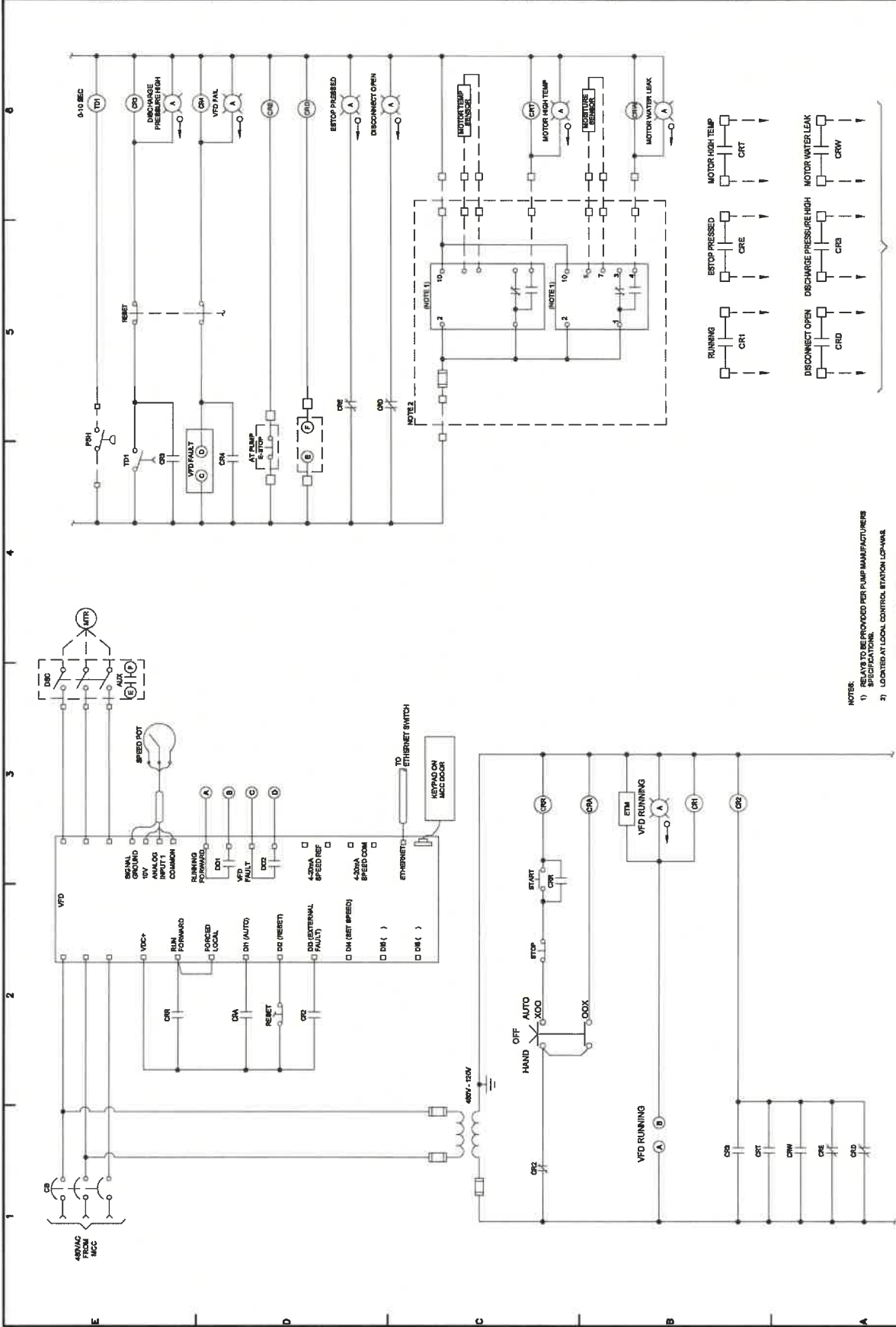
MBR AIR SCOUR BLOWER BLOCK DIAGRAM
TYPICAL FOR ALL AIR SCOUR BLOWERS

APPROVED DRAWINGS IN PROCORE
(use this set for limited reference ONLY)

SHEET KEYNOTES
1. USE CHASE IMPLIES AS REQUIRED.



APPROVED DRAWINGS IN PROCORE
(use this set for limited reference ONLY)



NOTES:
1) RELAYS TO BE PROVIDED PER PUMP MANUFACTURER'S SPECIFICATIONS.
2) LOCATED AT LOCAL CONTROL STATION LCP-WAL

CONTROL SCHEMATIC
TYPICAL FOR ALL WASTE-ACTIVATED SLUDGE PUMPS

APPROVED DRAWINGS IN PROCORE
(use this set for limited reference ONLY)

8

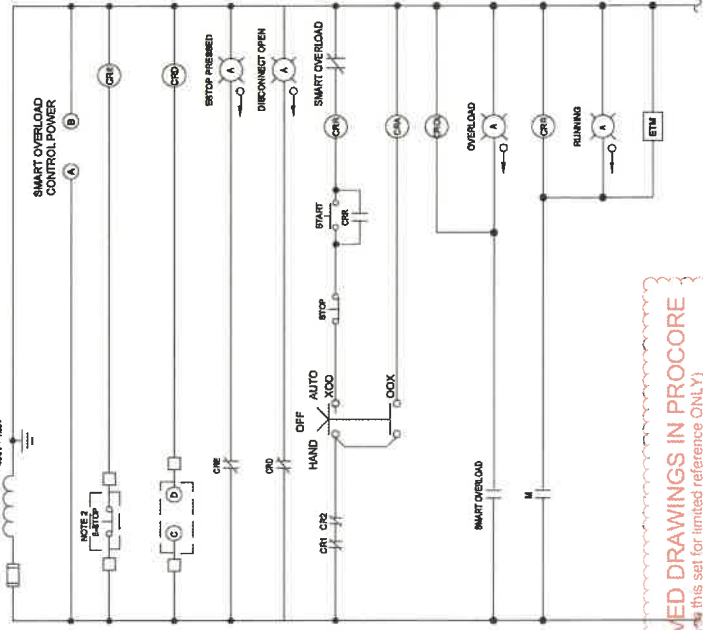
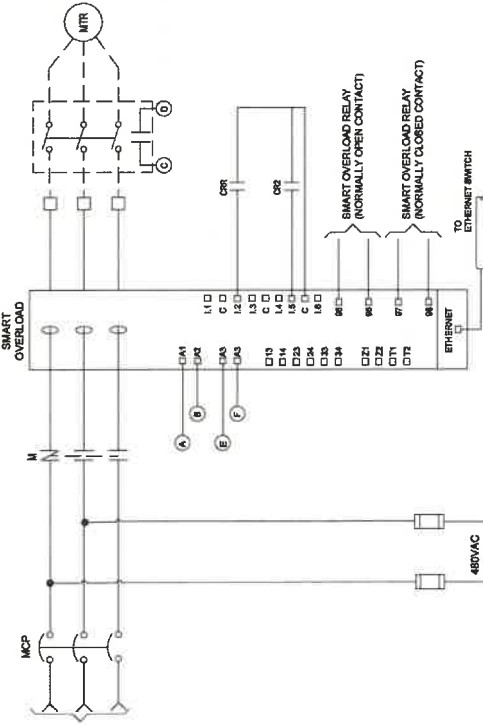
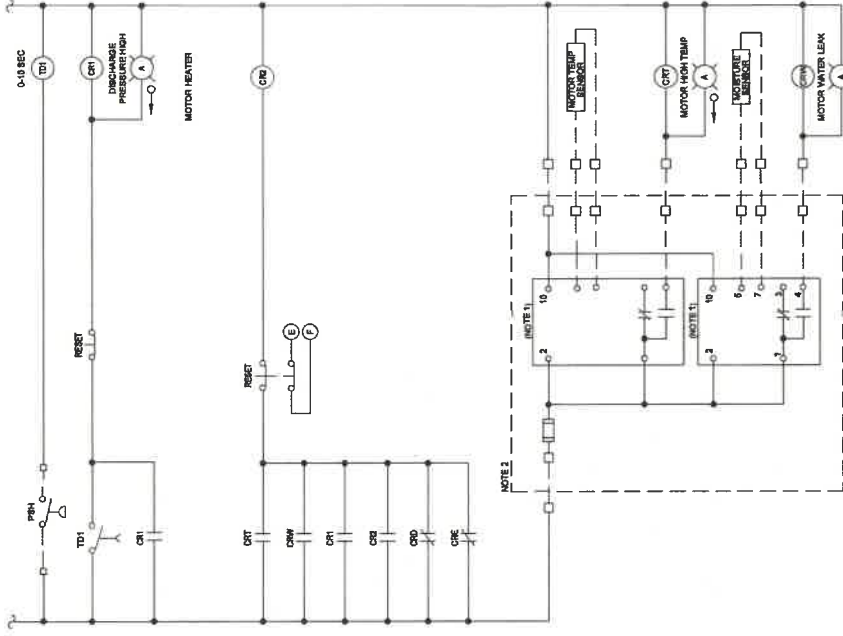
5

4

3

2

1



NOTES:
1) RELAYS TO BE PROVIDED PER PUMP MANUFACTURER'S SPECIFICATIONS.
2) LOCATED AT LOCAL CONTROL STATION LCP-008.
CONTROL SCHEMATIC
WASTE-ACTIVATED BLUDDIE RECIRCULATION PUMP

APPROVED DRAWINGS IN PROGRESS
(only this set for limited reference ONLY)

CONSUME TANTUM



STERLING NATURAL
RESOURCE CENTER



**East Valley
Water District**
31111 GREENSPOT ROAD
HIGHLAND, CALIFORNIA 92341

ARCADIS PROJ. NO. 00040819.0008

NO.	DATE	ISSUED FOR	BY
-----	------	------------	----

COMPONENT: ABCART 11.8, INC.

010
010

DATE: 09.09.2018

PROJECT NO.: 00040819.2008

FILE NAME: E-340-14

DESIGNED BY: E. CASTILLO

C. LANZEL

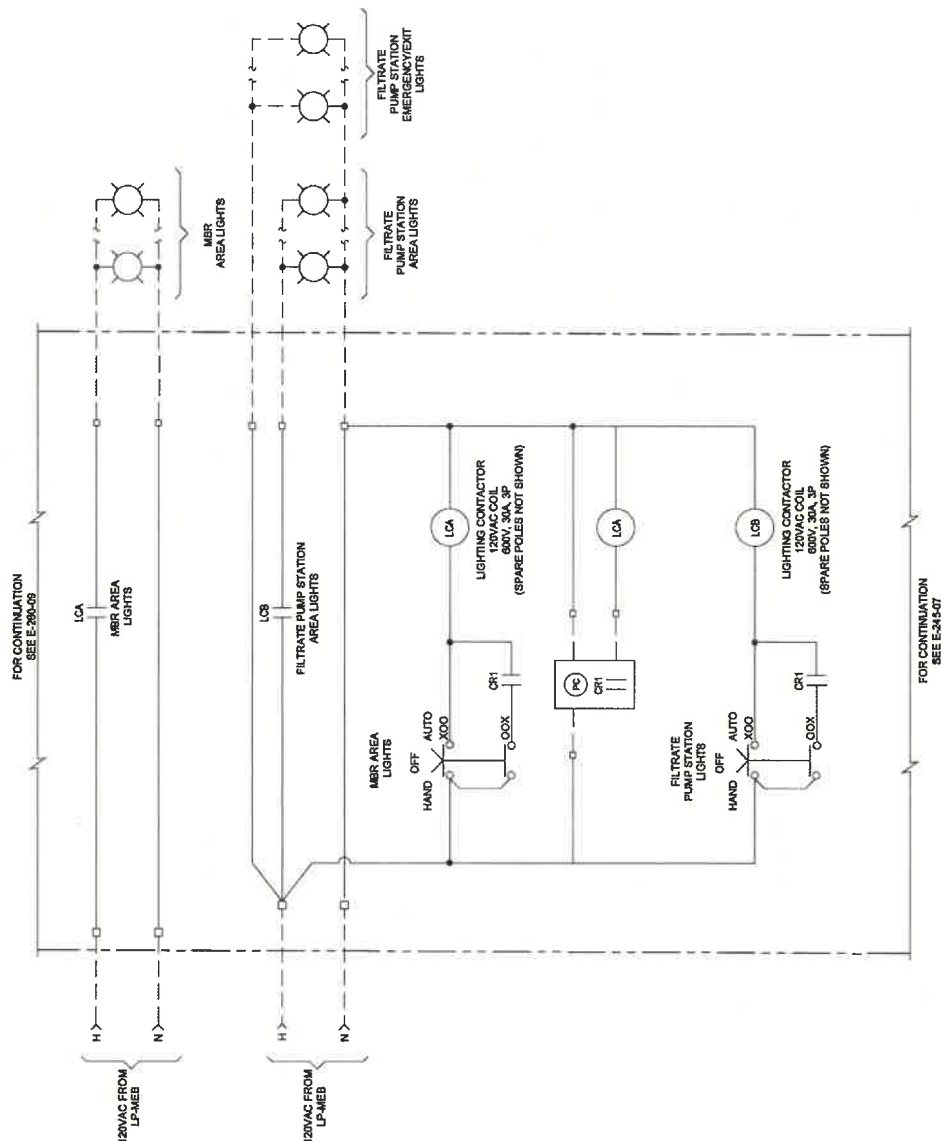
MBR FACILITY

CONTROL SCHEMATICS I

NO SCALE

E-240-14

133
40
X70X



(CONT.) MAIN ELECTRICAL BUILDING LIGHTING RELAY PANEL LRP-MEB
CONTROL SCHEMATIC

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SIGNED: 08/09/2019
STERLING NATURAL
RESOURCE CENTER



East Valley
Water District
31111 GREENSPOT ROAD
HIGHLAND, CALIFORNIA 92348
ARCADIS PROJ. NO. 0004919.0008

NO.	DATE	BASED FOR	BY

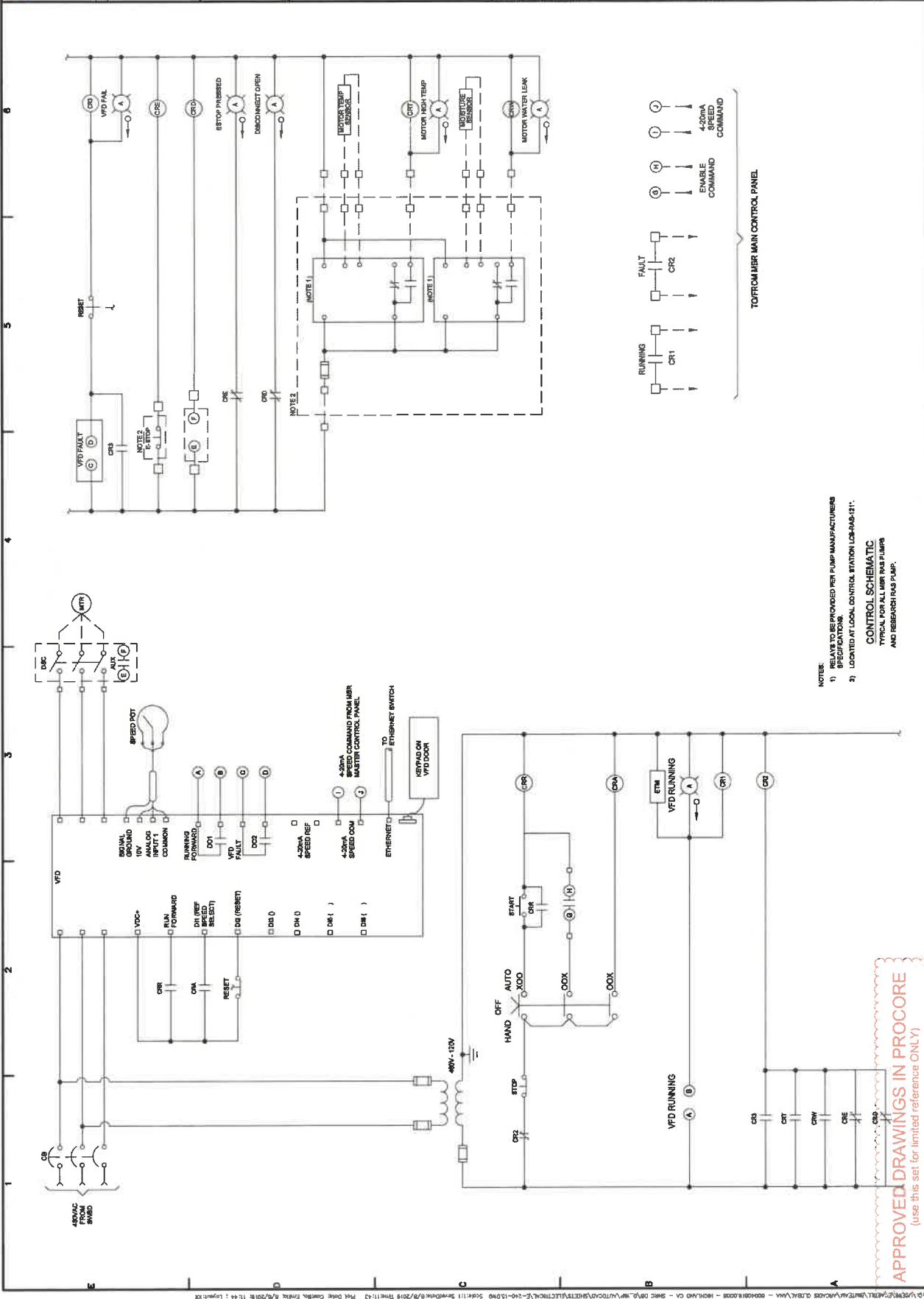
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2018

DATE: 08/09/2019
PROJECT NO.: 0004919.0008
FILE NAME: E-240-15
DESIGNED BY: T. KELLEY
DRAWN BY: C. LANDEL
CHECKED BY: J. BORDOL
SHEET TITLE: MTR FACILITY

CONTROL SCHEMATICS
II

SCALE
NO SCALE

SHEET
E-240-15
OF 204



NOTES:
1) RELATIVE TO BE PROVIDED PER PUMP MANUFACTURER'S SPECIFICATIONS.
2) LOCATED AT LOCAL CONTROL STATION LCR-HAS-121".
CONTROL SCHEMATIC
TYPICAL FOR ALL MTR PUMPS
AND RESEARCH BAS PUMP.

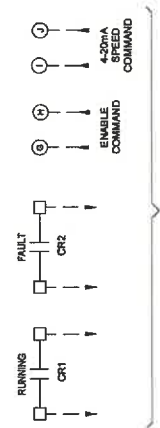
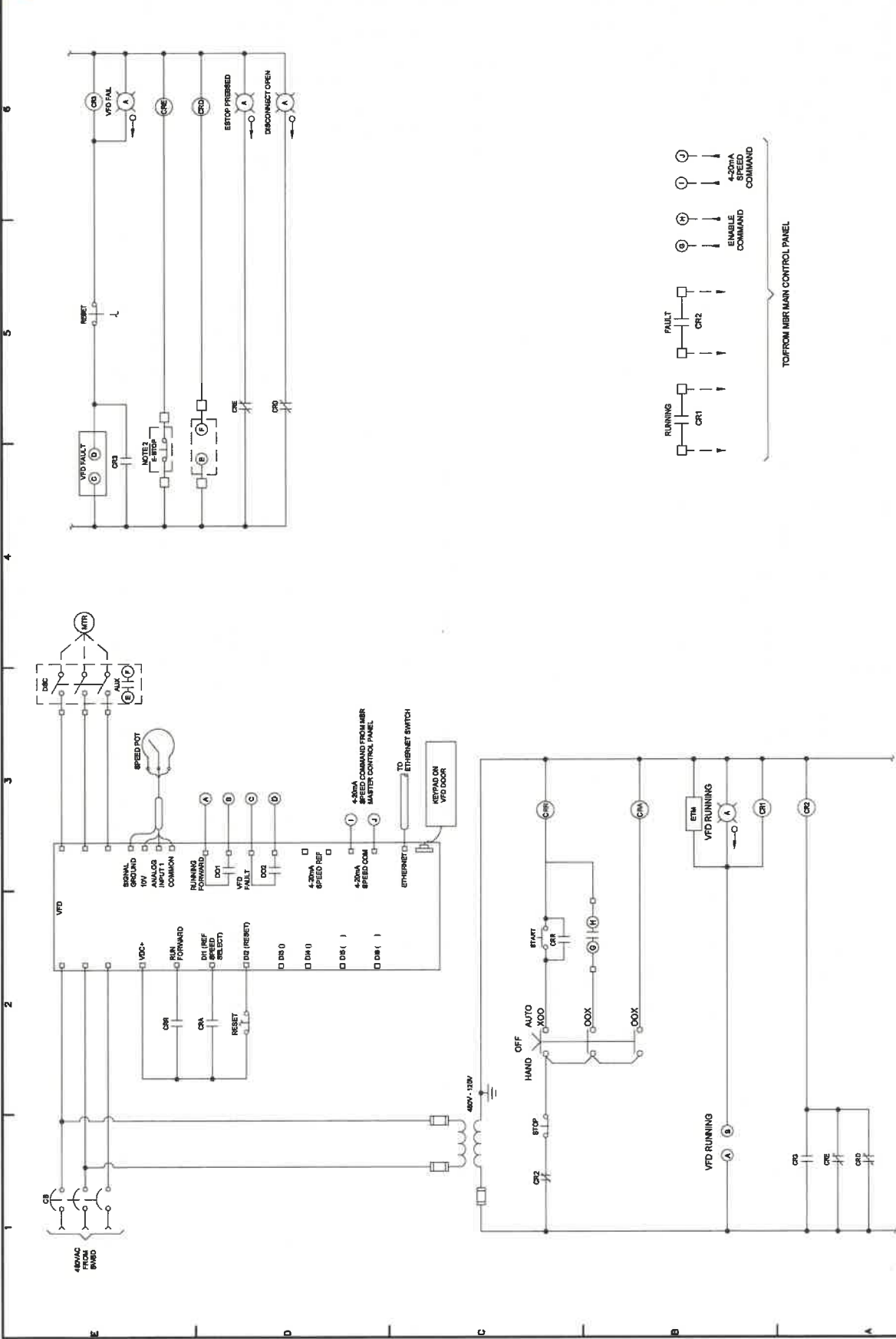
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NO.	DATE	REVISION FOR	BY



CONTROL SCHEMATIC
TYPICAL FOR ALL MFR BLOWERS

APPROVED DRAWINGS IN PROCORE
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EAST VALLEY WATER DISTRICT

STERLING NATURAL RESOURCE CENTER

CONDUIT	SIZE	FILL	FROM	TO	REMARKS
3001P	1"	2-#10, 1-#10 G	MBR MAIN CONTROL PANEL	WW-MEB	CONTINUE CABLES TO LP-MEB
		2-#12, 1-#12 G			CONTINUE CABLES TO LP-MEBU
3002N	3/4"	1 ETHERNET CABLE	MBR MAIN CONTROL PANEL	NR-1	
-					
3007P	2"	3-#8, 1-#10 G	PPB-MBR	WW-MEB	BRIDGE CRANE SEE 3028P
		3-#10, 1-#10 G DCN-017	PPB-MBR	WW-MEB	DUPLEX SUMP PUMP CONTROL PANEL SPCP-FPS SEE 3021P
		3-#10, 1-#10 G	PPB-MBR	WW-MEB	MBR 1 INLET GATE 240-EOC-I-100 MBR 1 OUTLET GATE 240-EOC-I-111 SPLICE CONDUCTORS IN PPB-MBR SEE 3031P, 3033P
		3-#10, 1-#10 G	PPB-MBR	WW-MEB	MBR 1 INLET GATE 240-EOC-I-200 MBR 1 OUTLET GATE 240-EOC-I-211 SPLICE CONDUCTORS IN PPB-MBR SEE 3035P, 3037P
		3-#10, 1-#10 G	PPB-MBR	WW-MEB	MBR 1 INLET GATE 240-EOC-I-300 MBR 1 OUTLET GATE 240-EOC-I-311 SPLICE CONDUCTORS IN PPB-MBR SEE 3039P, 3041P
		3-#10, 1-#10 G	PPB-MBR	WW-MEB	MBR 1 INLET GATE 240-EOC-I-400 MBR 1 OUTLET GATE 240-EOC-I-411 SPLICE CONDUCTORS IN PPB-MBR SEE 3043P, 3045P
3008P	2"	5-#10, 1-#10 G 4-#10, 1-#10 G	PPB-MBR	WW-MEB	MBR LIGHTS, PERMEATE PS LIGHTS MBR RECEPPTS, PERMEATE PS RECEPPTS
3009P	2"	PULL STRING	PPB-MBR	WW-MEB	
-					
3011A1	2"	12-#16 STP	MBR MAIN CONTROL PANEL	IPB-MBR	MBR TRAIN 1 SIGNALS
PACKAGE 3011A2 AREA 240 MBR	2"	10-#16 STP	MBR MAIN CONTROL PANEL	IPB-MBR	MBR TRAIN 2 SIGNALS

APPROVED

DRAWINGS IN PROCORE

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E-240-MBR-26 90 00-3

0040819.0008

August 2019

CONDUIT	SIZE	FILL	FROM	TO	REMARKS
3011A3	2"	10-#16 STP	MBR MAIN CONTROL PANEL	IPB-MBR	MBR TRAIN 3 SIGNALS
3011A4	2"	10-#16 STP	MBR MAIN CONTROL PANEL	IPB-MBR	MBR TRAIN 4 SIGNALS
3011A5	2"	PULL STRING	MBR MAIN CONTROL PANEL	IPB-MBR	
3011A6	2"	PULL STRING	MBR MAIN CONTROL PANEL	IPB-MBR	
3011A7	2"	2-#16 STP 3-#16 STP	PLC-1	IPB-MBR	FILTRATE HEADER FIT SEE 3419A FILTRATE HEADER AIT SEE 3418A CONTINUES TO CAM-MBR1, CAM-MBR2, AP-
3011N	2"	5 ETHERNET CABLES	NR-1	IPB-MBR	
3012C1	2"	98-#14, 1-#14 GND 98-#14	MBR MAIN CONTROL PANEL	IPB-MBR	MBR TRAIN 1 SIGNALS
3012C2	2"	76-#14, 1-#14 GND 84-#14	MBR MAIN CONTROL PANEL	IPB-MBR	MBR TRAIN 2 SIGNALS
3012C3	2"	76-#14, 1-#14 GND 84-#14	MBR MAIN CONTROL PANEL	IPB-MBR	MBR TRAIN 3 SIGNALS
3012C4	2"	76-#14, 1-#14 GND 84-#14	MBR MAIN CONTROL PANEL	IPB-MBR	MBR TRAIN 4 SIGNALS
3012C5	2"	PULL STRING	MBR MAIN CONTROL PANEL	IPB-MBR	
3012C6	2"	PULL STRING	MBR MAIN CONTROL PANEL	IPB-MBR	
3012C7	2"	10-#14, 1-#14 2-#14, 1-#14	PLC-1	IPB-MBR	SUMP PUMP CONTROL PANEL SHOWER FS-240-710
-					
3016P	1"	3-#8, 1-#10 G	SB-2	WW-MEB	MBR BRIDGE CRANE SEE 3007P
3021P	3/4"	3-#10, 1-#10 G 2-#6, 1-#10 G	SPCP-FPS	PPB-MBR	SEE 3007P
3022C	3/4"	10-#14, 1-#14	SPCP-FPS	IPB-MBR	SEE 3012C7
3023C	3/4"	2-#14, 1-#14	FS-240-710 SAFETY SHOWER	IPB-MBR	SEE 3012C7

PACKAGE 41

AREA 240 MBR

APPROVED DRAWINGS IN PROCORE
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E-240-MBR-26 90 00-4

0040819.0008

August 2019

EAST VALLEY WATER DISTRICT

STERLING NATURAL RESOURCE CENTER

CONDUIT	SIZE	FILL	FROM	TO	STERLING NATURAL RESOURCE CENTER REMARKS
3024C	3/4"	3-#14, 1-#14	LRP-MEB	PHOTOCELL PC-MEB	LOCATE PHOTOCELL ON EAST SIDE OF MEB
3025P	3/4"	5-#10, 1-#10 G	LRP-MEB	WW-MEB	CONTROLLED LIGHTING CIRCUITS FOR MBR AREA. SEE 3008P
3026P	3/4"	2-#10, 1-#10 G 2-#10	MBR AREA LIGHTS AND RECEPTACLES	PPB-MBR	SEE 3008P
3027P	3/4"	3-#10, 1-#10 G 2-#10	PERMEATE PUMP STATION LIGHTS AND RECEPTACLES	PPB-MBR	SEE 3008P
3028P	3/4"	3-#8, 1-#10 G	BRIDGE CRANE AT MBR	PPB-MBR	SEE 3007P
-					
3031P	3/4"	3-#10, 1-#10 G	MBR 1 INLET GATE 240-EOC-I-100	PPB-MBR	SEE 3007P
3032C	3/4"	9-#14, 1-#14 G	MBR 1 INLET GATE 240-EOC-I-100	IPB-MBR	SEE 3012C1
3033P	3/4"	3-#10, 1-#10 G	MBR 1 OUTLET GATE 240-EOC-I-111	PPB-MBR	SEE 3007P
3034C	3/4"	9-#14, 1-#14 G	MBR 1 OUTLET GATE 240-EOC-I-111	IPB-MT1	SEE 3412C
3035P	3/4"	3-#10, 1-#10 G	MBR 2 INLET GATE 240-EOC-I-200	PPB-MBR	SEE 3007P
3036C	3/4"	9-#14, 1-#14 G	MBR 2 INLET GATE 240-EOC-I-200	IPB-MBR	SEE 3012C2
3037P	3/4"	3-#10, 1-#10 G	MBR 2 OUTLET GATE 240-EOC-I-211	PPB-MBR	SEE 3007P
3038C	3/4"	9-#14, 1-#14 G	MBR 2 OUTLET GATE 240-EOC-I-211	IPB-MT2	SEE 3422C
3039P	3/4"	3-#10, 1-#10 G	MBR 3 INLET GATE 240-EOC-I-300	PPB-MBR	SEE 3007P
3040C	3/4"	9-#14, 1-#14 G	MBR 3 INLET GATE 240-EOC-I-300	IPB-MBR	SEE 3012C3
3041P	3/4"	3-#10, 1-#10 G	MBR 3 OUTLET GATE 240-EOC-I-311	PPB-MBR	SEE 3007P

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CONDUIT	SIZE	FILL	FROM	TO	REMARKS
3042C	3/4"	9-#14, 1-#14 G	MBR 3 OUTLET GATE 240-EOC-I-311	IPB-MT3	SEE 3432C
3043P	3/4"	3-#10, 1-#10 G	MBR 4 INLET GATE 240-EOC-I-400	PPB-MBR	SEE 3007P
3044C	3/4"	9-#14, 1-#14 G	MBR 4 INLET GATE 240-EOC-I-400	IPB-MBR	SEE 3012C4
3045P	3/4"	3-#10, 1-#10 G	MBR 4 OUTLET GATE 240-EOC-I-411	PPB-MBR	SEE 3007P
3046C	3/4"	9-#14, 1-#14 G	MBR 4 OUTLET GATE 240-EOC-I-411	IPB-MT4	SEE 3442C
3047P	3/4"	PULLSTRING	FUTURE MBR 5 INLET GATE 240-EOC-I-500	PPB-MBR	STUB UP AND CAP
3048C	3/4"	PULLSTRING	FUTURE MBR 5 INLET GATE 240-EOC-I-500	IPB-MBR	STUB UP AND CAP
3049P	3/4"	PULLSTRING	FUTURE MBR 5 OUTLET GATE 240-EOC-I-511	PPB-MBR	STUB UP AND CAP
3050C	3/4"	PULLSTRING	FUTURE MBR 5 OUTLET GATE 240-EOC-I-511	STUB UP NEAR FUTURE IPB-MT5	STUB UP AND CAP
-					
3111P	2"	3-#4/0, 1-#4 G	SB-1	VFD-FP1	
3112P	2-1/2"	1-#1/0 VFD CABLE	MBR 1 FILTRATE PUMP	VFD-FP1	
-					
3114N	4"	PULL STRING	MBR MAIN CONTROL PANEL	VFD-FP4	
3115A	1"	2-#16 STP	MBR MAIN CONTROL PANEL	VFD-FP1	
3116C	1"	20-#14, 1-#14 G	MBR MAIN CONTROL PANEL	VFD-FP1	(INCLUDES SIGNALS FROM FIELD TO VFD)
3117C	3/4"	10-#14, 1-#14 G	MBR FILTRATE PUMP 1 LCS-FP-140	IPB-MBR	
3118C	1"	8-#14, 1-#14 G	MBR FILTRATE PUMP 1 IPB-FP-140	MBR FILTRATE PUMP 1 LCS-FP-140	

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EAST VALLEY WATER DISTRICT

STERLING NATURAL RESOURCE CENTER

CONDUIT	SIZE	FILL	FROM	TO	REMARKS
-					
3121P	2"	3-#4/0, 1-#4 G	SB-2	VFD-FP2	
3122P	2-1/2"	1-#1/0 VFD CABLE	MBR 2 FILTRATE PUMP	VFD-FP2	
-					
3124N	1/4"	PULL STRING	MBR MAIN CONTROL PANEL	VFD-FP2	
3125A	1"	2-#16 STP	MBR MAIN CONTROL PANEL	VFD-FP2	
3126C	1"	20-#14, 1-#14 G	MBR MAIN CONTROL PANEL	VFD-FP2	
3127C	3/4"	10-#14, 1-#14 G	MBR FILTRATE PUMP 2 LCS-FP-240	IPB-MBR	
3118C	1"	8-#14, 1-#14 G	MBR FILTRATE PUMP 2 IPB-FP-240	MBR FILTRATE PUMP 2 LCS-FP-240	
-					
3131P	2"	3-#4/0, 1-#4 G	SB-1	VFD-FP3	
3132P	2-1/2"	1-#1/0 VFD CABLE	MBR 3 FILTRATE PUMP	VFD-FP3	
-					
3134N	1/4"	PULL STRING	MBR MAIN CONTROL PANEL	VFD-FP3	
3135A	1"	2-#16 STP	MBR MAIN CONTROL PANEL	VFD-FP3	
3136C	1"	20-#14, 1-#14 G	MBR MAIN CONTROL PANEL	VFD-FP3	
3137C	3/4"	10-#14, 1-#14 G	MBR FILTRATE PUMP 3 LCS-FP-340	IPB-MBR	
3118C	1"	8-#14, 1-#14 G	MBR FILTRATE PUMP 3 IPB-FP-340	MBR FILTRATE PUMP 3 LCS-FP-340	
-					
3141P	2"	3-#4/0, 1-#4 G	SB-2	VFD-FP4	

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AREA 240 MBR

APPROVED DRAWINGS IN PROCORE
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CONDUIT	SIZE	FILL	FROM	TO	STERLING NATURAL RESOURCE CENTER REMARKS
3142P	2-1/2"	1-#1/0 VFD CABLE	MBR 4 FILTRATE PUMP	VFD-FP4	
-					
3144N	1"	PULL STRING	MBR MAIN CONTROL PANEL	VFD-FP4	
3145A	1"	2-#16 STP	MBR MAIN CONTROL PANEL	VFD-FP4	
3146C	1"	20-#14, 1-#14 G	MBR MAIN CONTROL PANEL	VFD-FP4	
3147C	3/4"	10-#14, 1-#14 G	MBR FILTRATE PUMP 4 LCS-FP-440	IPB-MBR	
3118C	1"	8-#14, 1-#14 G	MBR FILTRATE PUMP 4 IPB-FP-440	MBR FILTRATE PUMP 4 LCS-FP-440	
-					
3151P	2"	PULL STRING	SB-1	VFD-FP5 (FUTURE)	
3152P	2-1/2"	PULL STRING	MBR 5 FILTRATE PUMP (FUTURE)	VFD-FP5 (FUTURE)	Is this to be stub up and cap?
3152P	2-1/2"	Pullstring			Is this to be stubup and cap
3154N	1"	PULL STRING	MBR MAIN CONTROL PANEL	VFD-FP5 (FUTURE)	
3155A	1"	PULL STRING	MBR MAIN CONTROL PANEL	VFD-FP5 (FUTURE)	
3156C	1"	PULL STRING	MBR MAIN CONTROL PANEL	VFD-FP5 (FUTURE)	
3157C	3/4"	PULL STRING	MBR FILTRATE PUMP 5 LCS-FP-540 (FUTURE)	IPB-MBR	
3158C	1"	PULL STRING	MBR FILTRATE PUMP 5 IPB-FP-540 (FUTURE)	MBR FILTRATE PUMP 5 LCS-FP-540 (FUTURE)	STUB UP AND CAP
-					
3211P	2-1/2"	3-#4/0, 1-#4 G	SB-1	VFD-MRASP1	
3212P	2-1/2"	1-#1/0 VFD CABLE	MBR 1 RAS PUMP	VFD-MRASP1	
3213N	3/4"	1 ETHERNET CABLE	NR-1	VFD-MRASP1	

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EAST VALLEY WATER DISTRICT

CONDUIT	SIZE	FILL	FROM	TO	STERLING NATURAL RESOURCE CENTER REMARKS
3214N	1/2"	PULL STRING	MBR-MAIN-CONTROL-PANEL	VFD-MRAS-P1	
3215A	1"	2-#16 STP	MBR MAIN CONTROL PANEL	VFD-MRAS-P1	
3216C	1"	20-#14, 1-#14 G	MBR MAIN CONTROL PANEL	VFD-MRAS-P1	
3217C	3/4"	14-#14, 1-#14 G	RAS PUMP N0.1 (240-P-120) LCS-RAS-120	IPB-MBR	
-					
3221P	2-1/2"	3-#4/0, 1-#4 G	SB-2	VFD-MRAS-P2	
3222P	2-1/2"	1-#1/0 VFD CABLE	MBR 2 RAS PUMP	VFD-MRAS-P2	
3223N	3/4"	1 ETHERNET CABLE	NR-1	VFD-MRAS-P2	
3224N	1/2"	PULL STRING	MBR-MAIN-CONTROL-PANEL	VFD-MRAS-P2	
3225A	1"	2-#16 STP	MBR MAIN CONTROL PANEL	VFD-MRAS-P2	
3226C	1"	20-#14, 1-#14 G	MBR MAIN CONTROL PANEL	VFD-MRAS-P2	
3227C	3/4"	14-#14, 1-#14 G	RAS PUMP N0.2 (240-P-220) LCS-RAS-220	IPB-MBR	
-					
3231P	2-1/2"	3-#4/0, 1-#4 G	SB-1	VFD-MRAS-P3	
3232P	2-1/2"	1-#1/0 VFD CABLE	MBR 3 RAS PUMP	VFD-MRAS-P3	
3233N	3/4"	1 ETHERNET CABLE	NR-1	VFD-MRAS-P3	
3234N	1/2"	PULL STRING	MBR-MAIN-CONTROL-PANEL	VFD-MRAS-P3	
3235A	1"	2-#16 STP	MBR MAIN CONTROL PANEL	VFD-MRAS-P3	
3236C	1"	20-#14, 1-#14 G	MBR MAIN CONTROL PANEL	VFD-MRAS-P3	
3237C	3/4"	14-#14, 1-#14 G	RAS PUMP N0.3 (240-P-320) LCS-RAS-320	IPB-MBR	

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CONDUIT	SIZE	FILL	FROM	TO	STERLING NATURAL RESOURCE CENTER REMARKS
-					
3241P	2-1/2"	3-#4/0, 1-#4 G	SB-2	VFD-MRASP4	
3242P	2-1/2"	1-#1/0 VFD CABLE	MBR 4 RAS PUMP	VFD-MRASP4	
3243N	3/4"	1 ETHERNET CABLE	NR-1	VFD-MRASP4	
3244N	1"	PULL STRING	MBR-MAIN CONTROL PANEL	VFD-MRASP4	
3245A	1"	2-#16 STP	MBR MAIN CONTROL PANEL	VFD-MRASP4	
3246C	1"	20-#14, 1-#14 G	MBR MAIN CONTROL PANEL	VFD-MRASP4	
3247C	3/4"	14-#14, 1-#14 G	RAS PUMP NO.4 (240-P-420) LCS-RAS-420	IPB-MBR	
-					
3251P	2-1/2"	3-#4/0, 1-#4 G	SB-1	VFD-MRASRP1	
3252P	2-1/2"	1-#1/0 VFD CABLE	MBR RAS RESEARCH PUMP 1	VFD-MRASRP1	
3253N	3/4"	1 ETHERNET CABLE	NR-1	VFD-MRASRP1	
3254N	1"	PULL STRING	MBR-MAIN CONTROL PANEL	VFD-MRASRP1	
3255A	1"	2-#16 STP	MBR MAIN CONTROL PANEL	VFD-MRASRP1	
3256C	1"	20-#14, 1-#14 G	MBR MAIN CONTROL PANEL	VFD-MRASRP1	
3257C	3/4"	14-#14, 1-#14 G	RAS RESEARCH PUMP NO.1 (240-P-121) LCS-RAS-121	IPB-MBR	
-					
3261P	2-1/2"	PULL STRING	STUB UP IN FILTRATE PUMP STATION AT MBR AREA	STUB UP IN MEB	FUTURE RAS RESEARCH PUMP 2 FOR MBR TRAIN 2
3262P	2-1/2"	PULL STRING	STUB UP IN FILTRATE PUMP STATION AT MBR AREA	STUB UP IN MEB	FUTURE RAS RESEARCH PUMP 3 FOR MBR TRAIN 3
3263P	2-1/2"	PULL STRING	STUB UP IN FILTRATE PUMP STATION AT MBR AREA	STUB UP IN MEB	FUTURE RAS RESEARCH PUMP 4 FOR MBR TRAIN 4

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CONDUIT	SIZE	FILL	FROM	TO	STERLING NATURAL RESOURCE CENTER REMARKS
3264P	2-1/2"	PULL STRING	STUB UP IN FILTRATE PUMP STATION AT MBR AREA	STUB UP IN MEB	FUTURE RAS RESEARCH PUMP 5 FOR FUTURE MBR TRAIN 5
3265P	2-1/2"	PULL STRING	STUB UP IN FILTRATE PUMP STATION AT MBR AREA	STUB UP IN MEB	FUTURE RAS PUMP 5 FOR FUTURE MBR TRAIN 5
-					
3311P1	2"	3-#3/0, 1-#3 G	SB-1	VFD-MB1	
3311P2	2"	3-#3/0, 1-#3 G	SB-1	VFD-MB1	
3312P	4"	1-#350KCMIL VFD CABLE	MBR AIR SCOUR BLOWER 1	VFD-MB1	
3313N	3/4"	1 ETHERNET CABLE	NR-1	VFD-MB1	
3314N	1"	PULL-STRING	VFD-MB1	MBR-MAIN-CONTROL-PANEL	
3315A	1"	2-#16 STP	VFD-MB1	MBR MAIN CONTROL PANEL	
3316C	1"	20-#14, 1-#14 G	VFD-MB1	MBR MAIN CONTROL PANEL	
3317C	3/4"	12-#14, 1-#14 G	MBR AIR SCOUR BLOWER 1 240-BW-170 SKID	IPB-BLOWER	SEE 4008C2
3318C	3/4"	2-#14, 1-#14 G	MBR AIR SCOUR BLOWER 1 240-BW-170 SKID DISC SWITCH	IPB-BLOWER	SEE 4008C2
3319A	3/4"	2-#16 STP	FIT-240-180	IPB-BLOWER	SEE 4009A2
-					
3321P1	2"	3-#3/0, 1-#3 G	SB-2	VFD-MB2	
3321P2	2"	3-#3/0, 1-#3 G	SB-2	VFD-MB2	
3322P	4"	1-#350KCMIL VFD CABLE	MBR AIR SCOUR BLOWER 2	VFD-MB2	
3323N	3/4"	1 ETHERNET CABLE	NR-1	VFD-MB2	
3324N	1"	PULL-STRING	MBR-MAIN-CONTROL-PANEL	VFD-MB2	
3325A	1"	2-#16 STP	MBR MAIN CONTROL PANEL	VFD-MB2	

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STERLING NATURAL RESOURCE CENTER

CONDUIT	SIZE	FILL	FROM	TO	REMARKS
3326C	1"	20-#14, 1-#14 G	MBR MAIN CONTROL PANEL	VFD-MB2	
3327C	3/4"	12-#14, 1-#14 G	MBR AIR SCOUR BLOWER 2 240-BW-270 SKID	IPB-BLOWER	SEE 4008C2
3328C	3/4"	2-#14, 1-#14 G	MBR AIR SCOUR BLOWER 2 240-BW-270 SKID DISC SWITCH	IPB-BLOWER	SEE 4008C2
3329A	3/4"	2-#16 STP	FIT-240-280	IPB-BLOWER	SEE 4009A2
-					
3331P1	2"	3-#3/0, 1-#3 G	SB-1	VFD-MB3	
3331P2	2"	3-#3/0, 1-#3 G	SB-1	VFD-MB3	
3332P	4"	1-#350KCMIL VFD CABLE	MBR AIR SCOUR BLOWER 3	VFD-MB3	
3333N	3/4"	1 ETHERNET CABLE	NR-1	VFD-MB3	
3334N	1"	PULL-STRING	MBR-MAIN-CONTROL-PANEL	VFD-MB3	
3335A	1"	2-#16 STP	MBR MAIN CONTROL PANEL	VFD-MB3	
3336C	1"	20-#14, 1-#14 G	MBR MAIN CONTROL PANEL	VFD-MB3	
3337C	3/4"	12-#14, 1-#14 G	MBR AIR SCOUR BLOWER 3 240-BW-370 SKID	IPB-BLOWER	SEE 4008C2
3338C	3/4"	2-#14, 1-#14 G	MBR AIR SCOUR BLOWER 3 240-BW-370 SKID DISC SWITCH	IPB-BLOWER	SEE 4008C2
3339A	3/4"	2-#16 STP	FIT-240-380	IPB-BLOWER	SEE 4009A2
-					
3341P1	2"	3-#3/0, 1-#3 G	SB-2	VFD-MB4	
3341P2	2"	3-#3/0, 1-#3 G	SB-2	VFD-MB4	
3342P	4"	1-#350KCMIL VFD CABLE	MBR AIR SCOUR BLOWER 4	VFD-MB4	
3343N	3/4"	1 ETHERNET CABLE	NR-1	VFD-MB4	

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STERLING NATURAL RESOURCE CENTER

CONDUIT	SIZE	FILL	FROM	TO	REMARKS
3344N	1"	PULL STRING	MBR MAIN CONTROL PANEL	VFD-MB4	
3345A	1"	2-#16 STP	MBR MAIN CONTROL PANEL	VFD-MB4	
3346C	1"	20-#14, 1-#14 G	MBR MAIN CONTROL PANEL	VFD-MB4	
3347C	3/4"	12-#14, 1-#14 G	MBR AIR SCOUR BLOWER 4 240-BW-470 SKID	IPB-BLOWER	SEE 4008C2
3348C	3/4"	2-#14, 1-#14 G	MBR AIR SCOUR BLOWER 4 240-BW-470 SKID DISC SWITCH	IPB-BLOWER	SEE 4008C2
3349A	3/4"	2-#16 STP	FIT-240-480	IPB-BLOWER	SEE 4009A2
-					
3351P1	2"	PULL STRING	SB-1	STUB UP AT FUTURE VFD-MB5	
3351P2	2"	PULL STRING	SB-1	STUB UP AT FUTURE VFD-MB5	
3352P	4"	PULL STRING	STUB UP AT FUTURE MBR AIR SCOUR BLOWER 5	STUB UP AT FUTURE VFD-MB5	
3353N	3/4"	1 ETHERNET CABLE	NR-1	STUB UP AT FUTURE VFD-MB5	
3354N	1"	PULL STRING	MBR MAIN CONTROL PANEL	STUB UP AT FUTURE VFD-MB5	
3355A	1"	PULL STRING	MBR MAIN CONTROL PANEL	STUB UP AT FUTURE VFD-MB5	
3356C	1"	PULL STRING	MBR MAIN CONTROL PANEL	STUB UP AT FUTURE VFD-MB5	
3357C	3/4"	PULL STRING	MBR AIR SCOUR BLOWER 5 240-BW-470 SKID (FUTURE)	IPB-BLOWER	SEE 4008C2
3358C	3/4"	PULL STRING	MBR AIR SCOUR BLOWER 5 SKID DISC SWITCH (FUTURE)	IPB-BLOWER	SEE 4008C2
3359A	3/4"	PULL STRING	MBR AIR SCOUR BLOWER 5 FLOWMETER (FUTURE)	IPB-BLOWER	SEE 4009A2
-					
3411A	1-1/2"	3-#16 STP	MBR TRAIN 1 LOCAL IPB-MT1	IPB-MBR	SEE 3011A1
3412C	1-1/2"	57-#14, 1-#14 G 45-#14	MBR TRAIN 1 LOCAL IPB-MT1	IPB-MBR	SEE 3012C1

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CONDUIT	SIZE	FILL	FROM	TO	REMARKS
3413A	3/4"	2-#16 STP	RAS PUMP 240-P-120 FIT-240-132	IPB-MBR	SEE 3011A1
3414A	3/4"	2-#16 STP	FILTRATE PUMP 240-P-140 FIT-240-150	IPB-MBR	SEE 3011A1
3415A	3/4"	3-#16 STP	FILTRATE PUMP 240-P-140 AIT-240-156	IPB-MBR	SEE 3011A1
3416C	3/4"	6-#14, 1-#14 G	FILTRATE SAMPLING VALVE 240-BV-1/4-155	IPB-MBR	SEE 3012C1
3417A	3/4"	2-#16 STP	RAS RESEARCH PUMP 240-P-121 FIT-240-133	IPB-MBR	SEE 3011A1
3418A	3/4"	3-#16 STP	FILTRATE HEADER TURBIDITY ANALYZER AIT-240-704	IPB-MBR	SEE 3011A7
3419A	3/4"	2-#16 STP	FILTRATE HEADER FLOWMETER FIT-240-703	IPB-MBR	SEE 3011A7
-					
3421A	1-1/2"	3-#16 STP	MBR TRAIN 2 LOCAL IPB-MT2	IPB-MBR	SEE 3011A2
3422C	1-1/2"	3-#14, 1-#14 G 37-#14, 45-#14	MBR TRAIN 2 LOCAL IPB-MT2	IPB-MBR	SEE 3012C2 RFI-046
3423A	3/4"	2-#16 STP	RAS PUMP 240-P-120 FIT-240-227	IPB-MBR	SEE 3011A2
3424A	3/4"	2-#16 STP	FILTRATE PUMP 240-P-240 FIT-240-250	IPB-MBR	SEE 3011A2
3425A	3/4"	3-#16 STP	FILTRATE PUMP 240-P-140 AIT-240-256	IPB-MBR	SEE 3011A2
3426C	3/4"	6-#14, 1-#14 G	FILTRATE SAMPLING VALVE 240-BV-1/4-255	IPB-MBR	SEE 3012C2
-					
3431A	1-1/2"	3-#16 STP	MBR TRAIN 3 LOCAL IPB-MT3	IPB-MBR	SEE 3011A3
3432C	1-1/2"	3-#14, 1-#14 G 37-#14, 45-#14	MBR TRAIN 3 LOCAL IPB-MT3	IPB-MBR	SEE 3012C3 RFI-046
3433A	3/4"	2-#16 STP	RAS PUMP 240-P-120 FIT-240-327	IPB-MBR	SEE 3011A3
3434A	3/4"	2-#16 STP	FILTRATE PUMP 240-P-340 FIT-240-350	IPB-MBR	SEE 3011A3
3435A	3/4"	3-#16 STP	FILTRATE PUMP 240-P-340 AIT-240-356	IPB-MBR	SEE 3011A3

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STERLING NATURAL RESOURCE CENTER

CONDUIT	SIZE	FILL	FROM	TO	REMARKS
3436C	3/4"	6-#14, 1-#14 G	FILTRATE SAMPLING VALVE 240-BV-1/4-355	IPB-MBR	SEE 3012C3
-					
3441A	1-1/2"	3-#16 STP	MBR TRAIN 4 LOCAL IPB-MT4	IPB-MBR	SEE 3011A4
3442C	1-1/2"	3-#14, 1-#14 G	MBR TRAIN 4 LOCAL IPB-MT4	IPB-MBR	SEE 3012C4
3443A	3/4"	2-#16 STP	FIT-240-427	IPB-MBR	SEE 3011A4
3444A	3/4"	2-#16 STP	FILTRATE PUMP 240-P-440 FIT-240-450	IPB-MBR	SEE 3011A4
3445A	3/4"	3-#16 STP	FILTRATE PUMP 240-P-440 AIT-240-456	IPB-MBR	SEE 3011A4
3446C	3/4"	6-#14, 1-#14 G	FILTRATE SAMPLING VALVE 240-BV-1/4-455	IPB-MBR	SEE 3012C4
-					
3460N	3/4"	2 ETHERNET CABLE	CAMERA CAM-MBR1	IPB-MBR	SEE 3011N
3461N	3/4"	2 ETHERNET CABLE	CAMERA CAM-MBR2	IPB-MBR	SEE 3011N
3462N	3/4"	1 ETHERNET CABLE	WIRELESS ACCESS POINT AP-MBR	IPB-MBR	SEE 3011N
3463N	1-1/2"	4 ETHERNET CABLES	NETWORK RACK NR-1	ACCESS CONTORL PANEL ACP-MEB	
-					
4008A2	2"	8-#16STP	IPB-BLOWER	MBR MAIN CONTROL PANEL	MBR BLOWER FITS
4009C2	2"	56-#14, 1-#14 G	IPB-BLOWER	MBR MAIN CONTROL PANEL	MBR BLOWER FIELD SIGNALS
4051P	1-1/2"	1-#8 VFD CABLE	MCC-12 (VFD-WASP1)	WAS PUMP 1	
-					
4061P	1-1/2"	1-#8 VFD CABLE	MCC-22 (VFD-WASP2)	WAS PUMP 2	
-					

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0040819.0008

August 2019

CONDUIT	SIZE	FILL	FROM	TO	REMARKS
4071P	1-1/2"	1-#8 VFD CABLE	MCC-12 (VFD-WASP3)	WAS PUMP 3	
-					
4081P	1-1/2"	3-#8, 1-#10 G	MCC-12	WAS RECIRCULATION PUMP	
-					
4091A	2"	7-#16 STP	LCP-WAS	PLC-2	LT, GATES
4092A	2"	PULL STRING	LCP-WAS	PLC-2	
4093C	2"	68-#14, 1-#14 G	LCP-WAS	PLC-2	PUMPS, GATES
4094C	2"	PULL STRING	LCP-WAS	PLC-2	
4095P	1-1/2"	3-#10, 1-#10 G	240-WG-601	WW-HWEB	CONTINUE CABLES TO PP-HWEB
4096P	1"	3-#10, 1-#10 G	240-WG-602	240-WG-601	
-					

PACKAGE 41

AREA 240 MBR

APPROVED DRAWINGS IN PROCORE
(use this set for limited reference ONLY)

E-240-MBR-26 90 00-16

0040819.0008

August 2019

1	08/05/19	IFC	MRM
NO.	DATE	ISSUED FOR	BY

COPYRIGHT: AFRICA'S U.S., INC.

DATE: 08-08-2018

PROJECT NO.: D0040519.0008

THE UNIVERSITY OF CHICAGO

DRAWN BY: A. SHINDE

CHECKED BY: A. HARMAN

1988 FACILITY

PJ & N

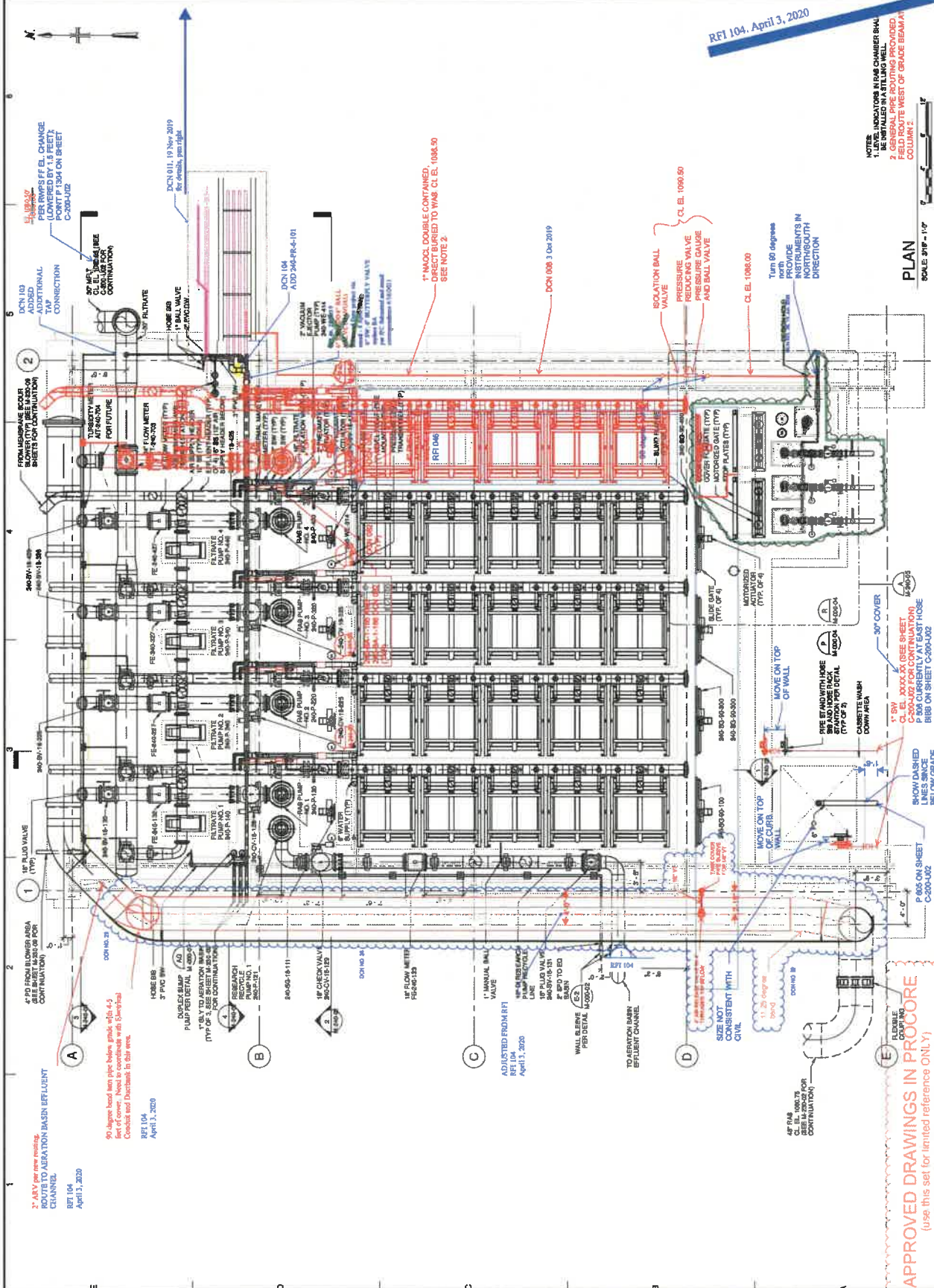
NOTES:
1. LEVEL INDICATORS IN GAS CHAMBER SHALL BE INSTALLED IN A STILLING WELL.
2. GENERAL PIPE ROUTING PROVIDED.
FIELD ROUTE WEST OF GRADE BEAM AT

三

2017 MAY 2 MON

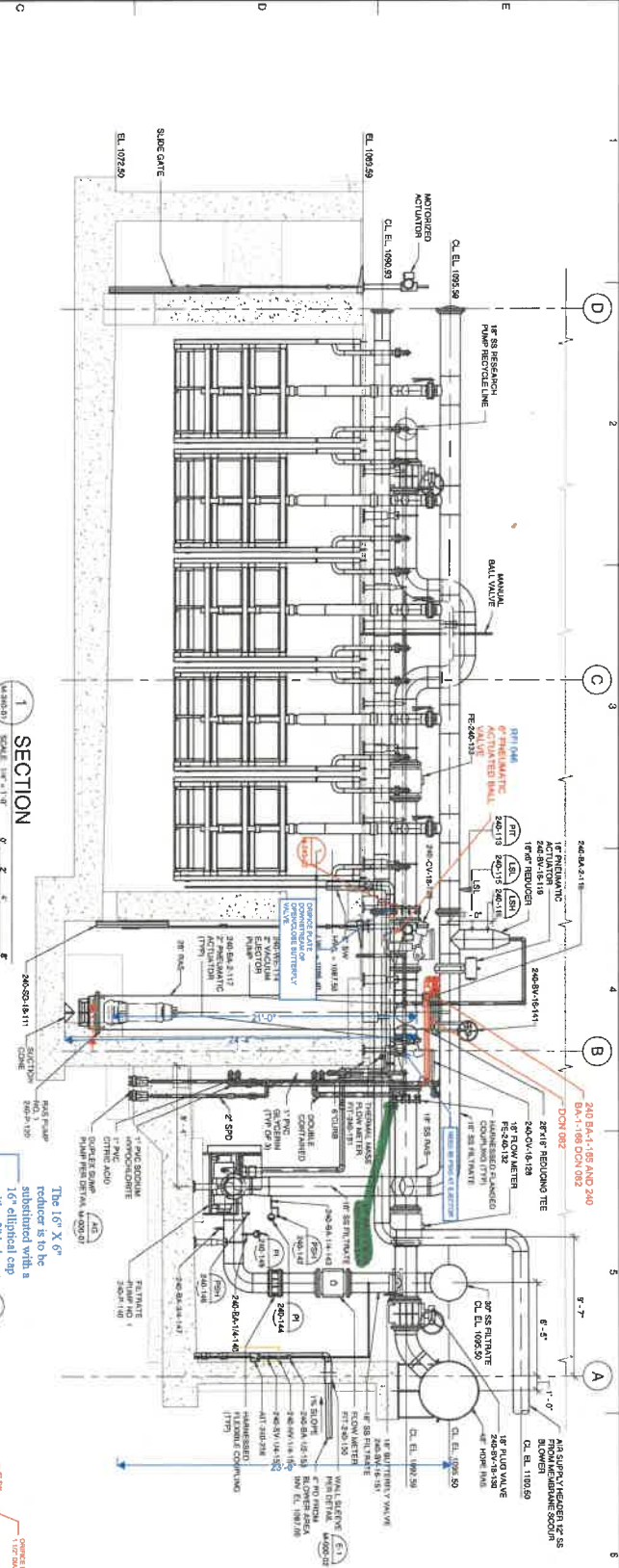
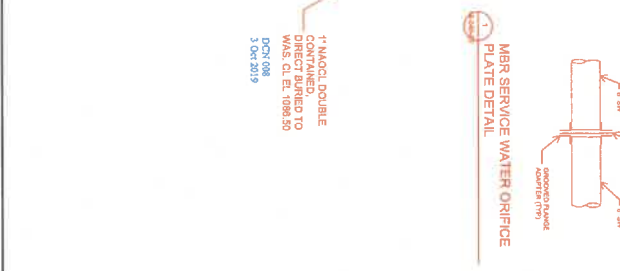
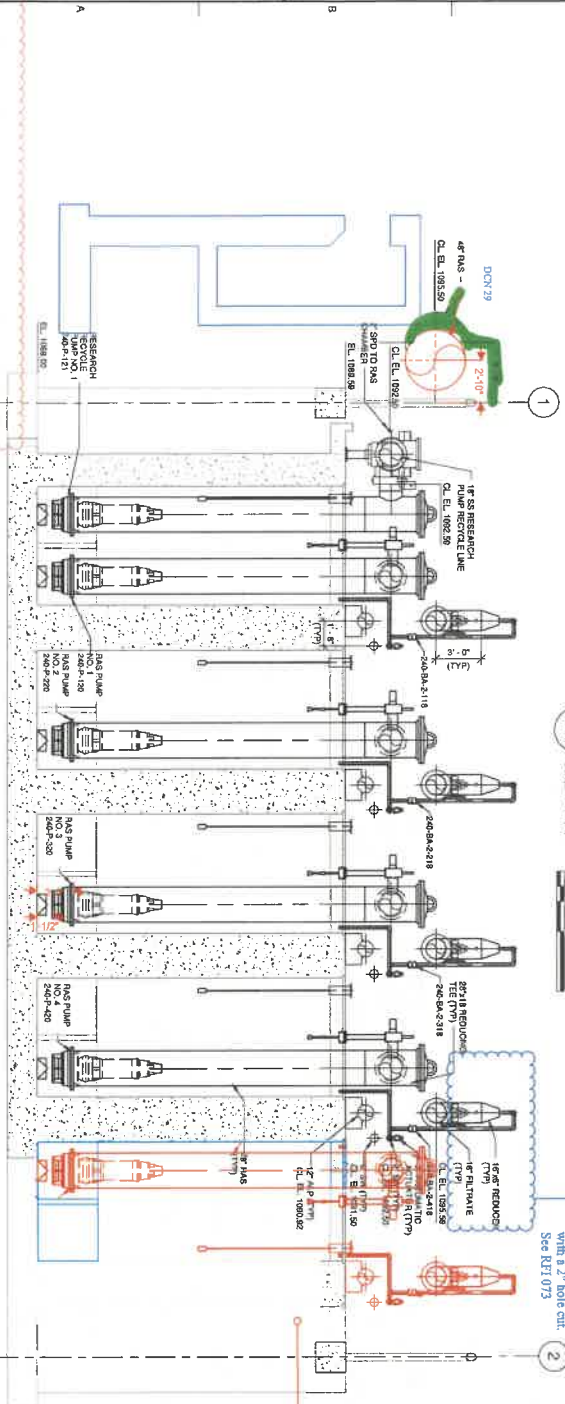
30" COVER

APPROVED DRAWINGS IN PROCORE
(use this set for limited reference ONLY)



APPROVED DRAWINGS IN PROCORE
(use this set for limited reference only.)

2 SECTION
SCALE: 1/4" = 1'-0"



ARCADIS
SUSTAINMENT
ARCHITECTS, INC.
Battier Beauty

SEALS
SEALED 08/02/2019
STERLING NATURAL
RESOURCE CENTER

East Valley
Water District
31111 GREENSPOT ROAD
HIGHLAND, CALIFORNIA 92346
ARCADIS PROJECT NO. 00040819.0008

NO.	DATE	BY	CHKD.	APP'D.
1	08/02/19	JFC	MEM	
		IBERDOLAR		

2019
COPYRIGHT: ARCADIS U.S., INC.

DATE: 08/02/2019
PROJECT NO.: 00040819.0008
FILE NAME:
DESIGNED BY: K. HANNAH
DRAWN BY: B. SCHNEIDER
CHECKED BY: A. HANNAH
SHEET TITLE: MBR FACILITY
SECTIONS: I

SCALE: 1/4" = 1'-0"

SHEET: M-240-02
OF: 02



SEALED: 08/22/2019
STERLING NATURAL
RESOURCE CENTER



**East Valley
Water District**
4411 GREENBROOK
HIGHLAND, CALIFORNIA 92346
ARCADIS PROJ. NO. 00040619.0008

NO.	DATE	ISSUED FOR	BY
1	08/06/19	IFC	MBW

DATE:	08/06/19
PROJECT NO.:	00040619.0008
FILE NAME:	00040619.0008
DESIGNED BY:	K. HANNAH
DRAWN BY:	R. SCHRO
CHECKED BY:	A. HANNAH
SHEET TITLE:	MEM FACILITY

SECTIONS II

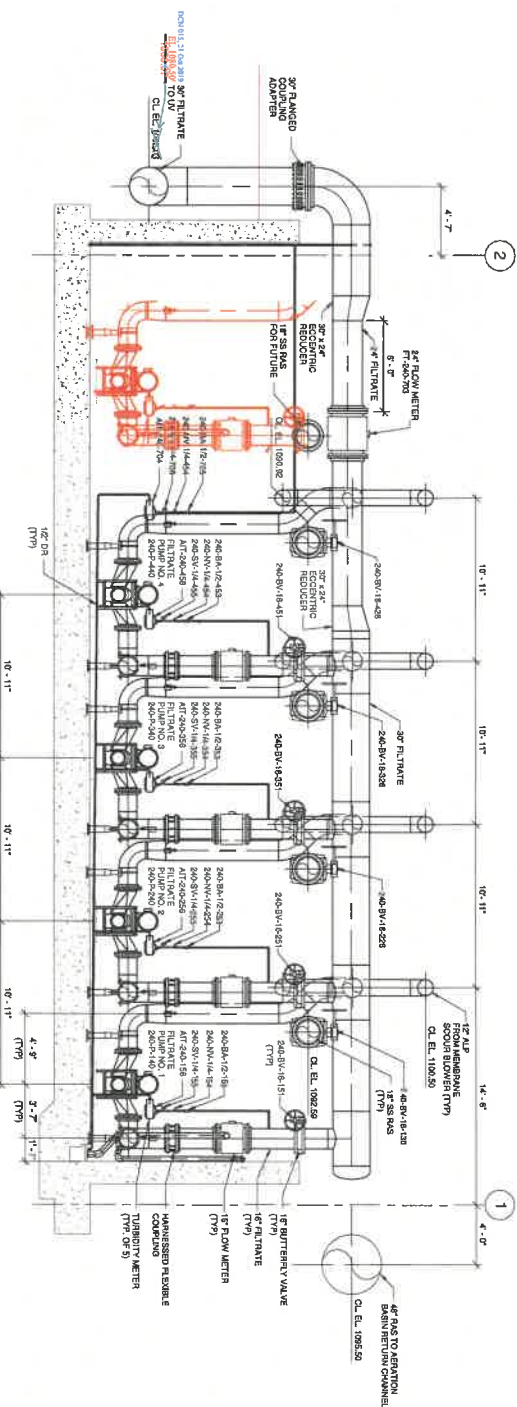
NOTES:
1. SEATING

SCALE:

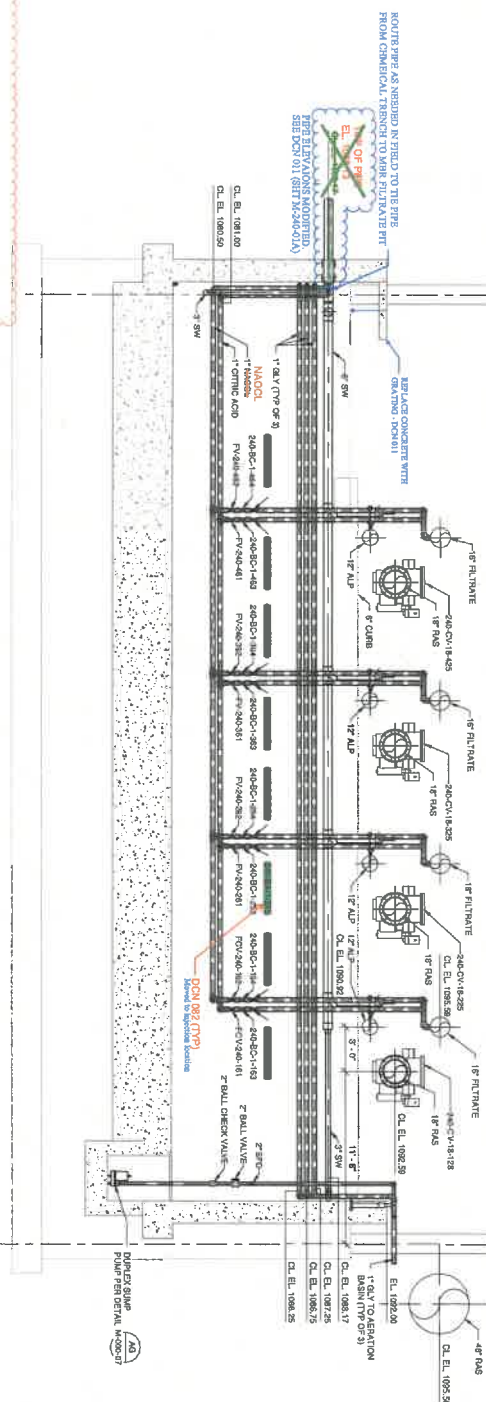
M-240-03

SHEET

OF



3 SECTION
SCALE: 1/4" = 1'-0"



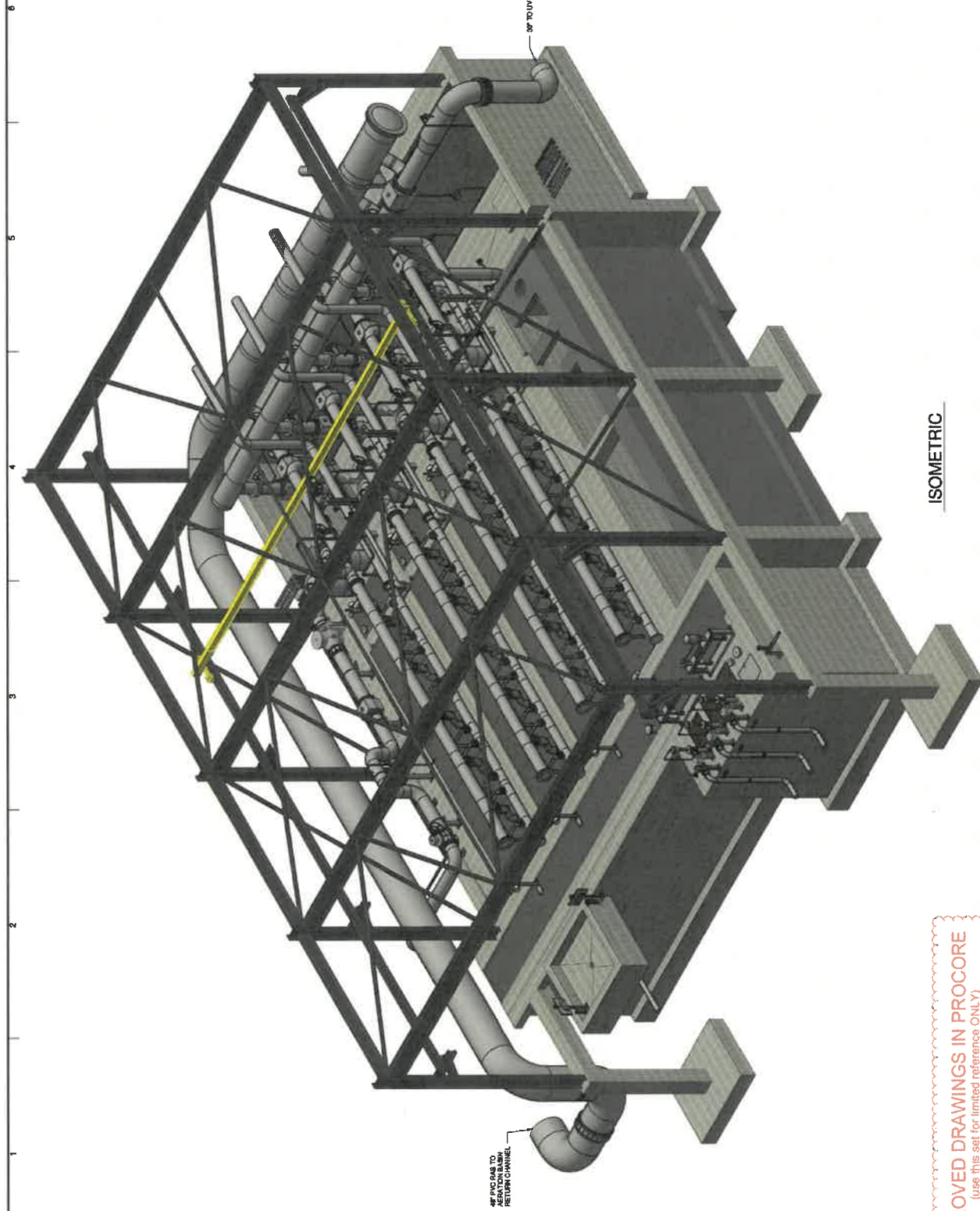
4 SECTION
SCALE: 1/4" = 1'-0"



APPROVED DRAWINGS IN PROCORE
(use this set for limited reference ONLY)



NO.	DATE	IFC	ISSUED FOR	MPR	BY
1	08/08/19				



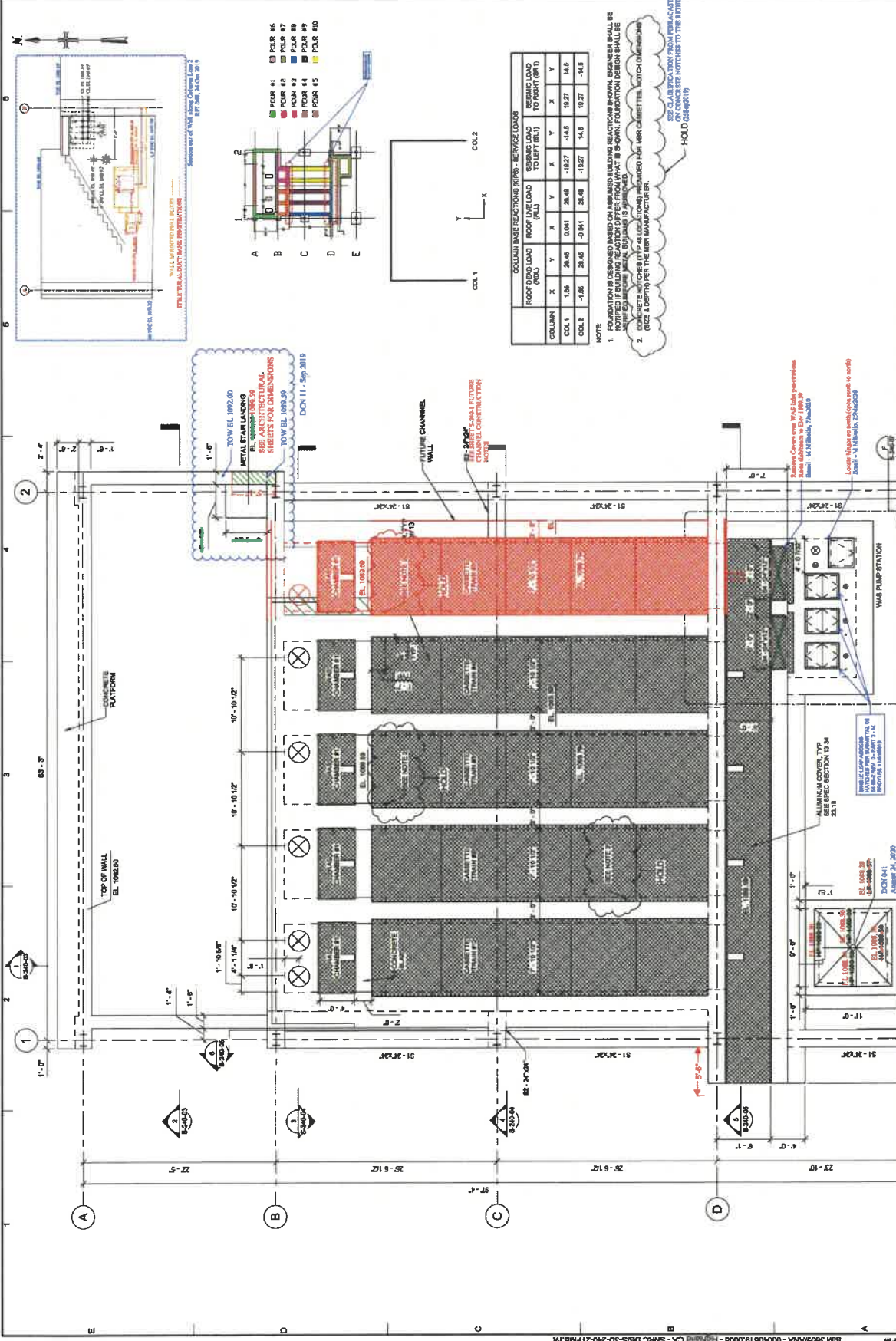




NO.	DATE	REVISION	BY
1	07/21/19	DESIGN HOLD	KVB
2		ISSUED FOR	BT

PROJECT NO.: 00040819.0008
DATE: 07/21/2019
FILE NAME:
DESIGNED BY: K.V. BACKENH
DRAWN BY: J. PRABHAKAR
CHECKED BY: K. PATEL
SHEET TITLE:
MRF FACILITY
TOP LEVEL PLAN

As Noted
S-240-02
SHEET OF



TOP LEVEL PLAN
SCALE: 1/8" = 1'-0"
DIMENSION ADD
BY: BT - 07/21/2019

APPROVED DRAWINGS IN PROGRESS
(use this set for limited reference ONLY)



STERLING NATURAL
RESOURCE CENTER



**East Valley
Water District**
31111 GREENSPOT ROAD
HIGHLAND, CALIFORNIA 92346

ARCADIS PROJ. NO.: 00040819.0008

NO.	DATE	ISSUED FOR	BY

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2019

DATE:	07/21/2019
PROJECT NO.:	00040819.0008
FILE NAME:	
DESIGNED BY:	K.V. SANDISH
DRAWN BY:	J. PRADHANT
CHECKED BY:	K. PATEL

SHEET TITLE

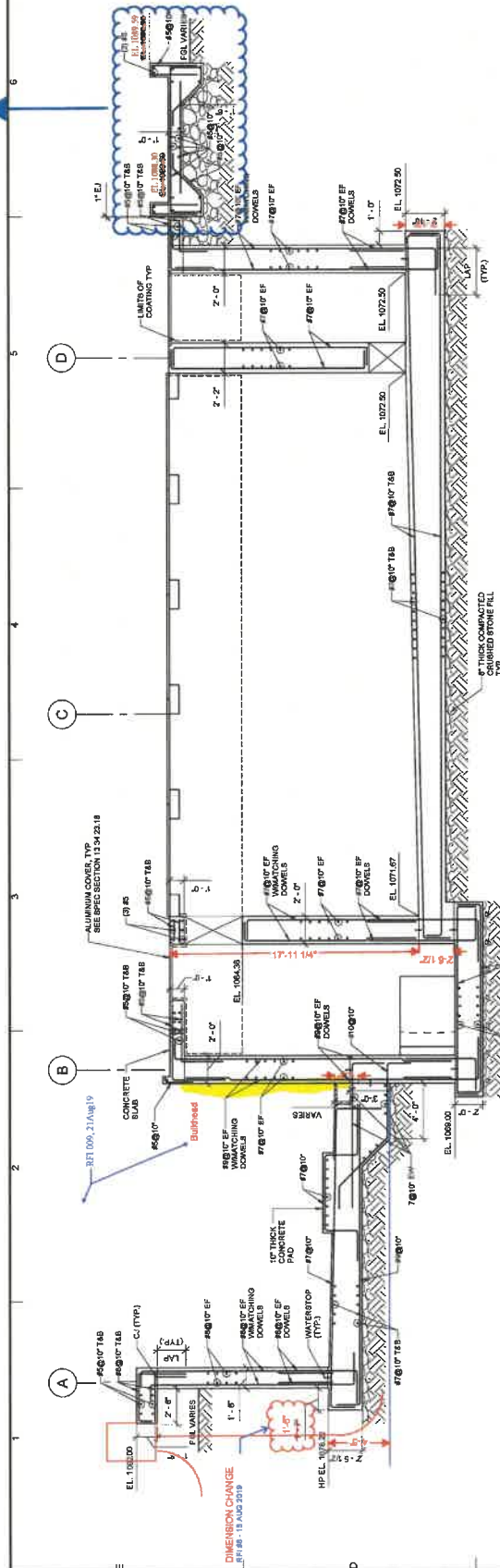
MBR FACILITY

SECTIONS I

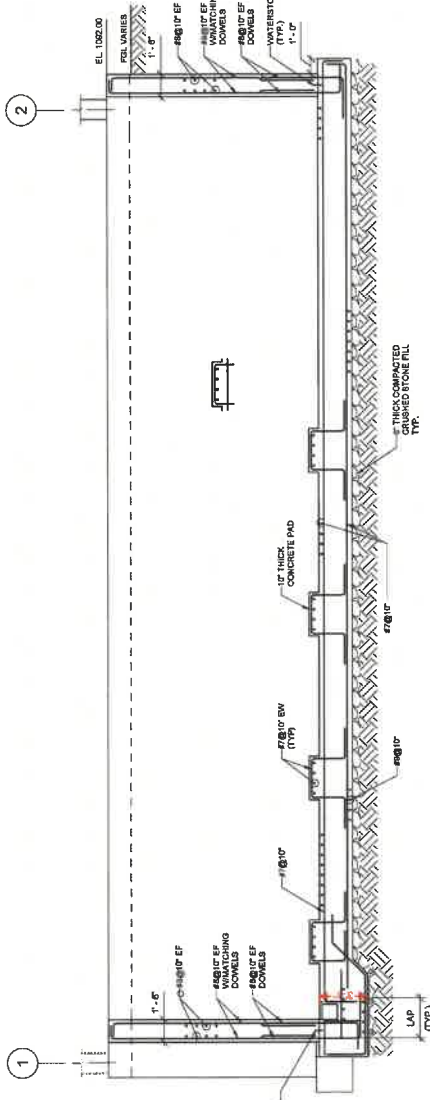
SCALE: 1/4" = 1'-0"

S-240-03

SHEET _____ OF _____



1 SECTION
SCALE: 1/4" = 1'-0"



2 SECTION
SCALE: 1/4" = 1'-0"

APPROVED DRAWINGS IN PROCORE
(use this set for limited reference ONLY)

SEE DWG S-240-01 FOR NOTES.
PROTECTIVE COATING TO EXTEND FROM
100' AND UPWARDS. TERMINATE ALL
REINFORCEMENT AT FACTORY
RECOMMENDATIONS.



APPROVED DRAWINGS IN PROCORE
(use this set for limited reference ONLY)

[illegible]

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1981

DATE: 07/11/2019

PROJECT NO.: 0000019.0008

DESIGNED BY: K.V. SANDOZM

	Mean	SD	N
Age	67.08	9.00	100
Gender			
Male	50.00	10.00	50
Female	50.00	10.00	50
Education			
High school or less	10.00	10.00	10
Some college	20.00	10.00	20
Bachelor's degree	30.00	10.00	30
Marital status			
Married	40.00	10.00	40
Single	10.00	10.00	10
Divorced	10.00	10.00	10
Widowed	10.00	10.00	10
Health status			
Excellent	10.00	10.00	10
Good	20.00	10.00	20
Fair	30.00	10.00	30
Poor	40.00	10.00	40
Income			
Less than \$10,000	10.00	10.00	10
\$10,000-\$20,000	20.00	10.00	20
More than \$20,000	30.00	10.00	30

SHEET TITLE

SECTION III

2010

OF
TWO



NOTE

1. SEE DWG S-340-01 FOR NOTES.
2. FOAM CONTROL GEOFOAM IS WITH DENSITY NOT LESS THAN 0.01 PCF TO BE USED WHEREVER NECESSARY.
3. PROTECTIVE COATING TO EXTEND FROM 1004.4 AND UPWARDS, TERMINATE ALL COATING PER MANUFACTURER RECOMMENDATIONS.

APPROVED DRAWINGS IN PROCORE
(use this set for limited reference ONLY)



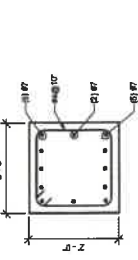
6

4

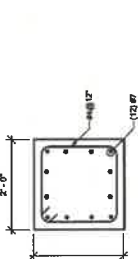
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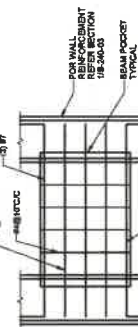
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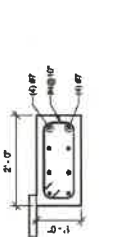
A S1 DETAIL (TYP.)
SCALE: 3/4" = 1'-0"
0 1' 2'



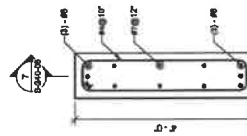
B COLUMN DETAIL - C1
SCALE: 3/4" = 1'-0"
0 1' 2'



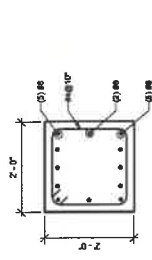
7 SECTION
SCALE: 3/4" = 1'-0"
0 1' 2'



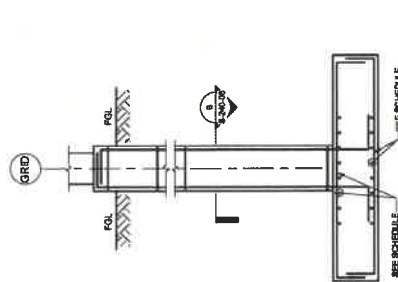
E S4 DETAIL
SCALE: 3/4" = 1'-0"
0 1' 2'



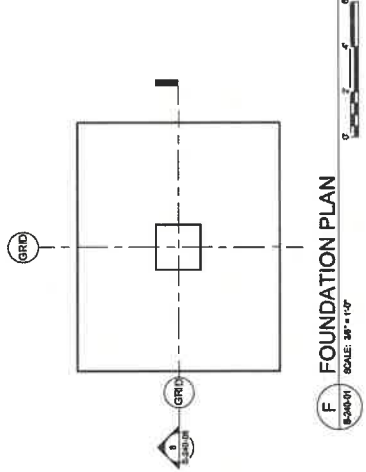
D S3 DETAIL
SCALE: 3/4" = 1'-0"
0 1' 2'



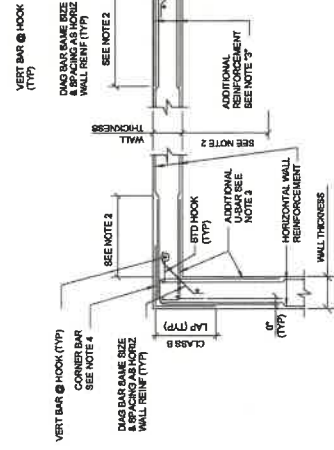
C S2 DETAIL (TYP.)
SCALE: 3/4" = 1'-0"
0 1' 2'



8 SECTION
SCALE: 3/4" = 1'-0"
0 1' 2'



F FOUNDATION PLAN
SCALE: 3/4" = 1'-0"
0 1' 2'



**TYPICAL REINFORCEMENT DETAIL
AT WALL INTERSECTIONS**

- NOTES:
1. PROVIDE ADDITIONAL REINFORCEMENT AT ALL WALL CORNERS AND INTERSECTIONS. REINFORCEMENT SHALL BE 4 #10 BARS AT CORNERS AND 4 #10 BARS AT INTERSECTIONS. REINFORCEMENT SHALL BE 4 #10 BARS AT CORNERS AND 4 #10 BARS AT INTERSECTIONS. REINFORCEMENT SHALL BE 4 #10 BARS AT CORNERS AND 4 #10 BARS AT INTERSECTIONS.
 2. DIMENSION TO BE 0.25 TIMES THE CLEAR SPAN DISTANCE.
 3. ADDITIONAL REINFORCEMENT TO MATCH SIZE AND SPACING OF WALL REINFORCEMENT SHALL BE PROVIDED AT ALL WALL CORNERS AND INTERSECTIONS.
 4. PROVIDE CORNER BAR REINFORCEMENT AT ALL WALL CORNERS AND INTERSECTIONS. REINFORCEMENT SHALL BE 4 #10 BARS AT CORNERS AND 4 #10 BARS AT INTERSECTIONS. REINFORCEMENT SHALL BE 4 #10 BARS AT CORNERS AND 4 #10 BARS AT INTERSECTIONS.
 5. WHERE LAPPING OF ADDITIONAL REINFORCEMENT FROM EXISTING WALL REINFORCEMENT IS REQUIRED, THE LAPPING SHALL BE COMBINED.
 6. TYPICAL WALL INTERSECTION DETAILS ARE SHOWN AT 90 DEGREES, BUT ARE APPLICABLE FROM 60 TO 120 DEGREES.

APPROVED FOR CONSTRUCTION
(use this stamp for reinforcement details only)



NOTE: SEE DWG B-240-01 FOR NOTES.

SNRC FIELD OFFICE

SITE PLAN



Quantity Take Offs

Slab/Footing	QTY	UNIT
Fine Grade	735	SF
F/S Slab	299	SF
Blockout	0	SF
F/S CJ	121	SF
Waterstop	148	LF
Waterstop Retrofit	66	LF
Pour	53	CY
Finish Footing	612	SF
Cure Slab	868	SF
Point and Patch	255	SF
Sandblast Joint	121	SF
Wall	QTY	UNIT
F/S Bulkhead	0	SF
F/S Blockout	126	SF
F/S Wall	3,098	SF
F/S CJ	92	SF
Waterstop	37	LF
Waterstop Retrofit	57	LF
Pour	174	CY
Finish Top of Wall	477	SF
Cure Wall	3,627	SF
Sack and Patch	3,324	SF
Sandblast Joint	321	SF
Deck	QTY	UNIT
F/S Deck Edge Form	26	SF
Deck Bottom Surface	44	SF
Blockout	7	SF
F/S CJ	0	SF
Waterstop Retrofit	49	LF
Pour	5	CY
Finish Deck	142	SF
Cure Deck	218	SF
Point and Patch	348	SF
Sandblast Joint	117	SF
Deck Shoring	813	CF
CST Aluminum Covers	QTY	UNIT
New Covers over channel Train 5	350	SF
New Covers over RAS Chamber Train 5	40	SF
Modify and New Cover for WAS Gate over MBR Influent Channel	22	SF
Miscellaneous Material	QTY	UNIT
Drill N Epoxy Rebar #4	41	EA
	311	LF
Drill N Epoxy Rebar #7	120	EA
	235	LF

Drill N Epoxy Rebar #8	25	EA	
	25	LF	
Form Liner	179	SF	
SS 316 1/2" adhesive anchors 5" long	136	EA	
	57	LF	
SS 316 1/2" nuts and washers (2 per Anchor)	272	EA	
6x6 W1.4 x W1.4 wire mesh	135	SF	
		box of	
		16.91 fl oz	1,881 \$
		tubes (20	each box
Epoxy Hilti-RE 500 V3	3	ea)	
Demo Concrete	QTY	UNIT	
Saw Cut Total	66	LF	
Demo Concrete Total	12	CY	

1" NAOCL Demo / Relocate

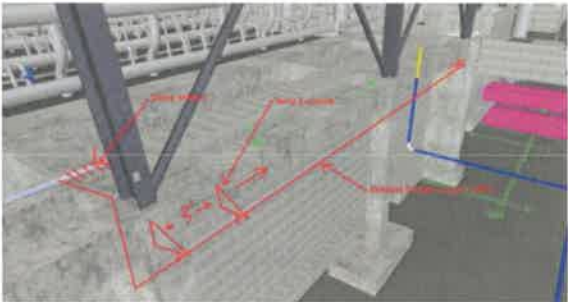
BALFOUR BEATTY
COST ESTIMATE

Date:

Estimator Victor Rojas

Drawing	Size	Material	Takeoff	Units
---------	------	----------	---------	-------

1" NAOCL Relocate				
Pipe				
1"	CPVC	Pipe sch 40	60 ft	
1"	CPVC	90deg elbow	4 ea	
1"	CPVC	Union Ball Valve	6 ea	
1"	CPVC	Couplings adapter	6 ea	
3"	CPVC	Pipe sch 40	80 ft	
3"	CPVC	90deg elbow	4 ea	
3"	CPVC	Union Ball Valve	6 ea	
3"	CPVC	Couplings adapter	6 ea	
Temp Supports				
20g	Steel	flexible perforated Galv Strap	2 ea	
1/4"	Steel	Hardware	20 ea	
2x4	Wood	Wall knee brace	20.00 ea	
3/8"	Stainless	Wedge anchors	40 ea	



Labor				
		Demo existing Line	60.00 ft	
		Install Temp Supports 3' spacing includes anchors	20.00 ea	
		install Pipe	80.00 ft	
		Install Pipe support Strap	20.00 ea	
		Crew, 2 Forman & Labor	3.00 ea	
		Work Truck	1.00 ea	

Prep time

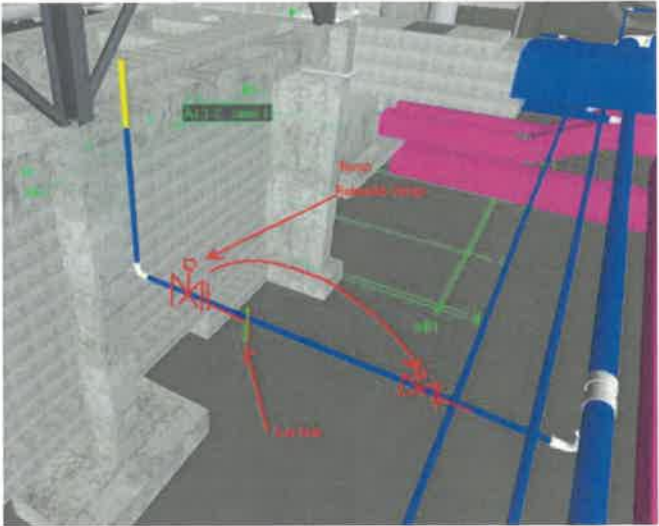
2" Temp Relocate and Re install SW line

BALFOUR BEATTY
COST ESTIMATE

Date:

Estimator Victor Rojas

Drawing	Size	Material	Takeoff	Units
2" SW Line				
Pipe	2"	HDPE	Pipe DR11	10 ft
	2"	HDPE	Electrofusion Coupling 2" IPS 230psi	4 ea
	2"	HDPE	Equipment rental 1day to relocate and 1 day to re locate	2 ea
	10"		Valve can demo and buy new	1.00 ea
Temp Supports				
20g	Steel	flexible perforated Galv Strap		1 ea
1/4"	Steel	Hardware		5 ea
2x4	Wood	Wood brace		2.00 ea
3/8"	Stainless	Wedge anchors		2 ea



Labor				
Temp Removal of hydrant				
Remove hydrant and relocate existing Line				10.00 ft
Install Temp Support				2.00 ea
install Pipe Electrofusion pipe				2.00 ea
Intall Valve				1.00 ea
Re install of hydrant				
Handle hydrant and relocate existing Line				10.00 ft
Remove Temp Support				2.00 ea
install Pipe Electrofusion pipe				2.00 ea
Intall Valve & valve Can				1.00 ea
Temp bracing for soil conpection				1 ea
Crew, 2 Forman & Labor				3.00 ea
Work Truck				1.00 ea

Air Pipe / Instruments System

BALFOUR BEATTY
COST ESTIMATE

Date:

Estimator Victor Rojas

Drawing	Size	Material	Takeoff	Units
---------	------	----------	---------	-------

Materials

1/2"	316L	Instrument Assembly	4 ea
1/2"	316L	Pipe	50 ea
1/2"	316L	90D Elbows	8 ea
1/2"	316L	45D Elbows	4 ea
1/2"	316L	Tee	4 ea
1/2"	316L	unions	8 ea
1/2"	316L	Ball Valves	8 ea
1/2"	316L	Coupling	5 ea
1/2"	316L	Nipples	4 ea
1/2"	316L	Capps	4 ea
1/2"	316L	Adapters	8 ea

Supports

5/8"	316s Strut	Single Strut	32 ft
5/8"	316s Strut	Strut Channel with Mounting Plate	2 ea
5/8"	316s Strut	Single Strut Floor Mount	2 ea
5/8"	316s Strut	Angle Brakets	12 ea
5/8"	316s Strut	1/2" Pipe Clamp	4 ea
5/8"	316s Strut	Strut Channel Nut 1/2-13	20 ea
5/8"	316s Strut	Boff 1/2-13	20 ea
5/8"	316s Strut	Washer 1/2	20 ea
5/8"	316s Strut	Strut Plastic Safety Caps	10 ea
3/8"	Stainless	Wedge anchors	20 ea



McMASTER-CARR

Line	Quantity	Stock of Material	Product	Description	Substrate	Unit Price	Total
1	1	Each	4829-25	Wettable-Resistant Pressure Gauge with 254 Stainless Steel Case with Corrosion-Resistant 1/4-20PT Center Back Connection 3-1/2" Dial 5-15 PSI	Gauges or 1 T. meters	300.00	300.00
2	1	Each	4849-200	Stainless-Steel 1/2-13PT, Standard Steel Pipe Adapter Threaded on Both Ends, 1-1/2" Lg	Strut tubing	21.00	21.00
3	1	Each	4849-110	Stainless-Steel 1/2-13PT, Standard Steel Pipe Adapter Threaded on Both Ends, 1-1/2" Lg	Strut tubing	21.00	21.00
4	2	Each	4829-175	214 Stainless Steel Threaded Pipe Fitting Lateral-Pressure Shielding Adapter 1/2" Dia x 1-1/2" Female NPT	Strut tubing	45.00	90.00
5	2	Each	4829-140	214 Stainless Steel Threaded Pipe Fitting Lateral-Pressure Shielding Adapter 1/2" Dia x 1-1/2" Female NPT	Strut tubing	45.00	90.00
6	4	Each	4829-140	214 Stainless Steel Threaded Pipe Fitting Lateral-Pressure Shielding Adapter 1/2" Dia x 1-1/2" Female NPT	Strut tubing	45.00	180.00
7	1	Each	4829-140	214 Stainless Steel Threaded Pipe Fitting Lateral-Pressure Shielding Adapter 1/2" Dia x 1-1/2" Female NPT	Strut tubing	45.00	45.00
8	1	Each	4829-140	214 Stainless Steel Threaded Pipe Fitting Lateral-Pressure Shielding Adapter 1/2" Dia x 1-1/2" Female NPT	Strut tubing	45.00	45.00
9	1	Each	4829-140	214 Stainless Steel Threaded Pipe Fitting Lateral-Pressure Shielding Adapter 1/2" Dia x 1-1/2" Female NPT	Strut tubing	45.00	45.00
10	1	Each	4829-140	214 Stainless Steel Threaded Pipe Fitting Lateral-Pressure Shielding Adapter 1/2" Dia x 1-1/2" Female NPT	Strut tubing	45.00	45.00
11	1	Each	4829-140	214 Stainless Steel Threaded Pipe Fitting Lateral-Pressure Shielding Adapter 1/2" Dia x 1-1/2" Female NPT	Strut tubing	45.00	45.00
12	4	Each	4829-140	214 Stainless Steel Threaded Pipe Fitting Lateral-Pressure Shielding Adapter 1/2" Dia x 1-1/2" Female NPT	Strut tubing	45.00	180.00

Chemical Pipe System

BALFOUR BEATTY
COST ESTIMATE

Date:

Estimator Victor Rojas

Drawing	Size	Material	Takeoff	Units
1" NAOCL & CA				
	1"	CPVC Sch 80 Pipe	40 ft	
	1"	CPVC Sch 80 90D Elbow	6 ea	
	1"	CPVC Sch 80 45D Elbow	2 ea	
	1"	CPVC Sch 80 Coupling	2 ea	
	1"	CPVC Sch 80 Reducing Bushing	0 ea	
	1"	CPVC Sch 80 Union	2 ea	
	1"	CPVC Sch 80 Tee	2 ea	
	1"	CPVC Sch 80 Union Ball Valve	4 ea	
	1"	CPVC Sch 80 Check Ball Valve	4 ea	
	1"	CPVC Sch 80 Motorized Ball Valve	4 ea	
	1"	CPVC Sch 80 Injection Coil	2 ea	
3"				
	3"	CPVC Sch 80 Double Containment Pipe	40 ft	
	3"	CPVC Sch 80 90D Elbow	6 ea	
	3"	CPVC Sch 80 45D Elbow	2 ea	
	3"	CPVC Sch 80 Coupling	2 ea	
	3"	CPVC Sch 80 Reducing Bushing	12 ea	
	3"	CPVC Sch 80 Union	2 ea	
	3"	CPVC Sch 80 Tee	2 ea	
	3"	CPVC Sch 80 Coupling Fittings	4 ea	
Supports				
	5/8"	316s Strut Single Strut	24 ft	
	5/8"	316s Strut Double Strut	12 ft	
	5/8"	316s Strut Double Strut Floor Mount	2 ea	
	5/8"	316s Strut Strut Channel with Mounting Plate	2 ea	
	5/8"	316s Strut Single Strut Floor Mount	2 ea	
	5/8"	316s Strut Angle Brakets	12 ea	
	5/8"	316s Strut 1" Pipe Clamp	4 ea	
	5/8"	316s Strut 3" Pipe Clamp	6 ea	
	5/8"	316s Strut Strut Channel Nut 1/2-13	40 ea	
	5/8"	316s Strut Bolt 1/2-13	40 ea	
	5/8"	316s Strut Washer 1/2	40 ea	
	5/8"	316s Strut Strut Plastic Safety Caps	20 ea	
	3/8"	Stainless Wedge anchors	20 ea	



Fab Stainless Pipe w/ Supports

BAIFOUR BEATTY
COST ESTIMATE

Estimator: Victor Rojas

Date:

Drawing	Size	Material	Quantity	Unit
---------	------	----------	----------	------

Fab Pipe Materials

1	16"	Fab Pipe Flange	316SS	52 ft
1	6"	Butterfly Valve	316SS	5 ea
1	10"	Reducer	316SS	1 ea
1	10"	Tea	316SS	1 ea
1	10"	Reducer	316SS	3 ea
1	10"	Flange	316SS	14 ea
1	10"	Blind	316SS	1 ea
1	10"	90 Deg elbow	316SS	1 ea
1	10"	45 Deg elbow	316SS	2 ea
1	10"	45 Deg elbow	316SS	2 ea
1	14"	Fab Pipe Flange	316SS	10 ft
1	14"	Flange	316SS	2 ea
1	14"	90 Deg elbow	316SS	2 ea
1	24"	Fab Pipe Flange	316SS	3 ft

20" RWD & 18" RWD



1	18"	Fab Pipe Flange	316SS	20 ft
1	18"	Flange	316SS	5 ea
1	18"	Blind	316SS	1 ea
1	18"	Check Valve	316SS	1 ea
1	18"	Valve	316SS	1 ea
1	18"	Pipe Fitter	316SS	1 ea
1	12"	Fab Pipe, Air Supply Bower	316SS	65 ft
1	12"	Tea	316SS	2 ea
1	12"	90 Deg elbow	316SS	2 ea
1	12"	45 Deg elbow	316SS	2 ea
1	12"	Flange	316SS	6 ea
1	12"	Blind	316SS	1 ea
1	12"	Header	316SS	1 ea
1	12"	Butterfly Valve	316SS	10 ea
1	3"	Pump Control	316SS	24 ft
1	20"	Tea	316SS	1 ea
1	20"	Flange	316SS	2 ea
1	20"	Blind	316SS	1 ea

Gaskets and Bolt Kits

1	3"	Range gasket and cap bolt sets	316SS	20 ea
1	6"	Range gasket and cap bolt sets	316SS	10 ea
1	12"	Range gasket and cap bolt sets	316SS	4 ea
1	12"	Range gasket and cap bolt sets	316SS	3 ea
1	14"	Range gasket and cap bolt sets	316SS	2 ea
1	16"	Range gasket and cap bolt sets	316SS	41 ea
1	18"	Range gasket and cap bolt sets	316SS	8 ea
1	24"	Range gasket and cap bolt sets	316SS	2 ea

Fab Supports

1	18"x12"	Fab H Pipe Support	316SS	6 ea
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1	3/4"	Stainless	Epoxy anchorbolt	48 ea
1	1 1/2"	Grout	Non Shrink 50lb	8 ea
1	500RE	hll	Nil 500r Epoxy	8 ea
1	18"x12"	316SS	Fab T Type Pipe Support	2 ea
1	3/4"	Stainless	Epoxy anchorbolt	6 ea
1	1 1/2"	Grout	Non Shrink 50lb	2 ea
1	500RE	hll	Nil 500r Epoxy	2 ea
1	18"x12"x18"	316SS	Fab T Type Long Pipe Support	1 ea
1	3/4"	Stainless	Epoxy anchorbolt	4 ea
1	1 1/2"	Grout	Non Shrink 50lb	1 ea
1	500RE	hll	Nil 500r Epoxy	2 ea
1	12"	316SS	Fab Beam mounted saddle pipe support	4 ea
1	3/4"	Stainless	Epoxy anchorbolt	4 ea
1	12"	316SS	Fab Base Mounted Saddle Pipe Support	2 ea
1	3/4"	Stainless	Epoxy anchorbolt	6 ea
1	1 1/2"	Grout	Non Shrink 50lb	1 ea
1	500RE	hll	Nil 500r Epoxy	2 ea
Additional Labor				6 ea
1	18"x12"	316SS	Remove and Relocate existing supports to new channel	48 ea
1	3/4"	Stainless	Epoxy anchorbolt	6 ea
1	1 1/2"	Grout	Non Shrink 50lb	6 ea
1	500RE	hll	Nil 500r Epoxy	6 ea
			Dunnage	6 ea
			Dunnage anchors 3/8"	48 ea



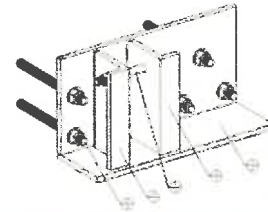
Air Supply Scour Pipe

BALFOUR BEATTY
COST ESTIMATE

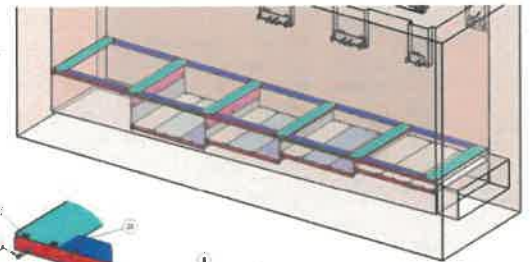
Date:

Drawing	Size	Material	Takeoff	Units
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	Fibrecast	316SS	Casnet Brakets install
1	3/4"	Stainless	Epoxy anchors/bolt
1	1 1/2"	Grout	Non Shrink 50lb
1	500RE	hilti	hilti 500r Epoxy prep time layout
	Fibrecast	316SS	Bottom Ducting Install
1	3/4"	Stainless	Epoxy anchors/bolt
1	1 1/2"	Grout	Non Shrink 50lb
1	500RE	hilti	hilti 500r Epoxy Prep Time Layout
1	Fibrecast	316SS	Assembly of filters, including Frame
1	Fibrecast	316SS	install interconnecting pipe on filters 8"
1	Fibrecast	316SS	install interconnecting pipe on filters 3" Prep Time Layout
	Additional Labor		
1	Testing	316SS	Testing, Membranes Remove 1 mebrain test and replace



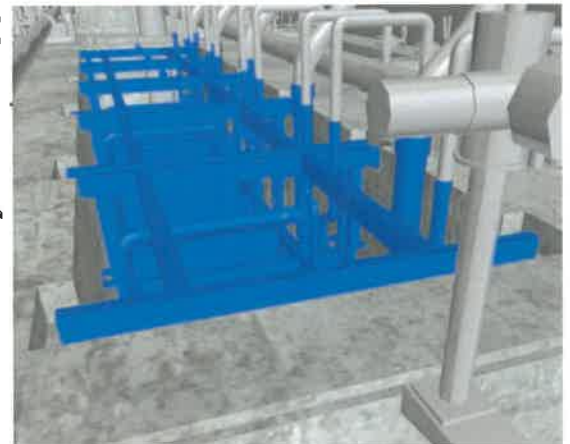
40 ea
200 ea
10 ea
10 ea



5 ea
72 ea
3.6 ea
10 ea



5 ea



5 ea
10 ea

MBR Slide Gate

BALFOUR BEATTY
COST ESTIMATE

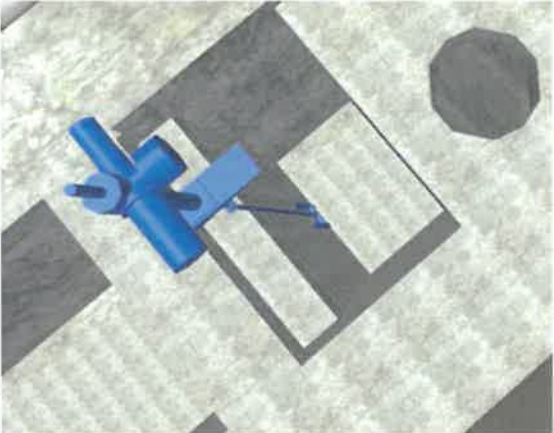
Date:

Estimator Victor Rojas

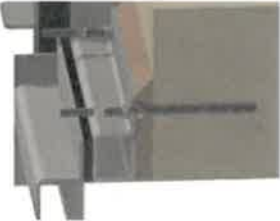
Drawing	Size	Material	Takeoff	Units
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Materials

90"Wx32"H	316SS	Effluent Slide Gate with Motor		1 ea
3/4"	Stainless	Epoxy anchors		24 ea
1/2"	Stainless	Epoxy anchors		4 ea
1 1/2"	Grout	Non Shrink 50lb		6 ea
500RE	hilti	hilti 500r Epoxy		6 ea
	Misc	Straps, U clamps		
12"Wx12"H	316SS	RAS Slide Gate with Motor		1 ea
3/4"	Stainless	Epoxy anchors		2 ea
1/2"	Stainless	Epoxy anchors		12 ea
1 1/2"	Grout	Non Shrink 50lb		2 ea
500RE	hilti	hilti 500r Epoxy		2 ea
	Misc	Straps, U clamps		



Labor				
Install Large Gate				
Set template				1.00
handle and fit slight gate include assembly				1.00 ea
Drill and install anchors with epoxy W/Hit Rebar time				28.00 ea
Grout Gate & form/Strip				1.00 ea
install Small Gate				
Set template				1.00
handle and fit slight gate include assembly				1.00 ea
Drill and install anchors with epoxy W/Hit Rebar time				14.00 ea
Grout Gate & form/Strip				1.00 ea
Crew, 2 Forman & Labor				3.00 ea
Work Truck				1.00 ea



Pumps / Blower - Equipment install

BALFOUR BEATTY
COST ESTIMATE

Date:

Estimator Victor Rojas

Drawing	Size	Material	Takeoff	Units
Install Casser Brakets				
1	Fibracast	316SS	Filtrate pump install	1 ea
1	1"	Stainless	Epoxy anchors/bolt - CORE	6 ea
1	1 1/2"	Grout	Non Shrink 50lb	4 ea
1	500RE	hilti	hilti 500r Epoxy	2 ea
			Misc cable items	1 ea
			Prep Time	
			Layout	
1	Fibracast	316SS	RAS pump install	1 ea
			Prep Time	
			Layout	
1	Fibracast	316SS	Blower install	1 ea
1	1"	Stainless	Epoxy anchors/bolt - CORE	6 ea
1	1 1/2"	Grout	Non Shrink 50lb	4 ea
1	500RE	hilti	hilti 500r Epoxy	2 ea
			Prep Time	
			Layout	
Additional Labor				
1	Testing	316SS	Testing, vibration, cable re-install.	1 ea



SW Pipe & Supports

BALFOUR BEATTY
COST ESTIMATE

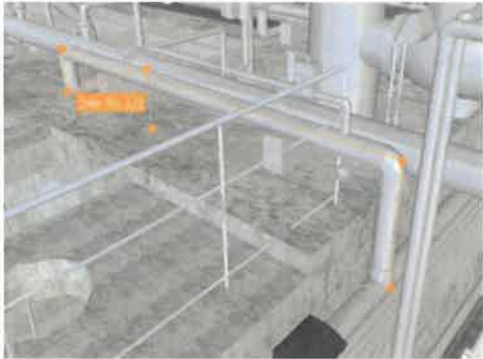
Date:

Estimator Victor Rojas

Drawing	Size	Material	Takeoff	Units
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Materials

8"	DI Grov Class 53	Pipe SW	32 ft
8"	DI Grov Class 53	Victolic Coupling 31	15 ea
8"	DI Grov Class 53	90D Elbows	4 ea
8"	DI Grov Class 53	Tee	1 ea
8"	DI Grov Class 53	Flange Grove end	2 ea
8"	DI Grov Class 53	Saddle Reducer 8"X2"	1 ea
8"		Valve	1 ea
2"	PVC SCH80	Pipe	20 ft
2"	PVC SCH80	Pipe Nipple	2 ea
2"	PVC SCH80	90D Elbows	6 ea
2"	PVC SCH80	45D Elbows	1 ea
2"	PVC SCH80	Coupling	4 ea
2"	PVC SCH80	Union	5 ea
2"	Stainless	Union	2 ea
2"		Eductor	1 ea
2"		Valve	1 ea

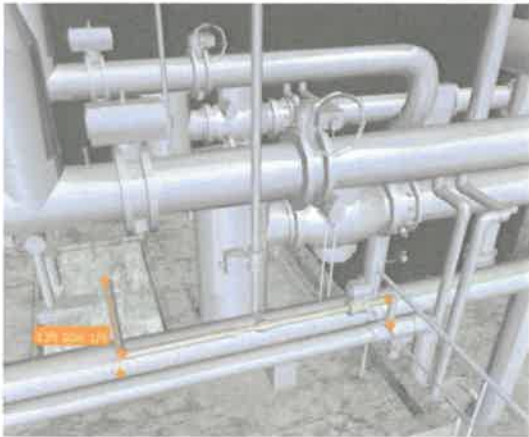


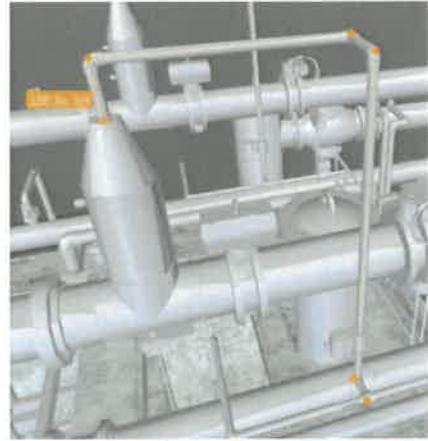
Supports

5/8"	316s Strut	Single Strut	10 ft
5/8"	316s Strut	Double Strut	30 ft
5/8"	316s Strut	Double Strut Floor Mount	4 ea
5/8"	316s Strut	Strut Channel with Mounting Plate	4 ea
5/8"	316s Strut	Single Strut Floor Mount	1 ea
5/8"	316s Strut	Angle Brakets	14 ea
5/8"	316s Strut	2" Pipe Clamp	7 ea
5/8"	316s Strut	6" Pipe Clamp	7 ea
5/8"	316s Strut	Strut Channel Nut 1/2-13	60 ea
5/8"	316s Strut	Bolt 1/2-13	60 ea
5/8"	316s Strut	Washer 1/2	60 ea
5/8"	316s Strut	Strut Plastic Safety Caps	30 ea
3/8"	Stainless	Wedge anchors	30 ea



Testing	1
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Misc Pipe

BALFOUR BEATTY
COST ESTIMATE

Date:

Estimator Victor Rojas

Drawing	Size	Material	Takeoff	Units
Instrument pipe				
Turbidity				
	2"	PVC SCH40	Pipe	32 ft
	2"	PVC SCH40	Nipple	1 ea
	2"	PVC SCH40	Union	1 ea
	2"	PVC SCH40	Couplings	1 ea
	2"	PVC SCH40	Elbows	1 ea
	2"	PVC SCH40	Tee	1 ea
	2"	PVC SCH40	Flange	1 ea
	1/2"	316L	Pipe	40 ft
	1/2"	316L	90D Elbows	8 ea
	1/2"	316L	45D Elbows	4 ea
	1/2"	316L	Tee	4 ea
	1/2"	316L	unions	8 ea
	1/2"	316L	Ball Valves	8 ea
	1/2"	316L	Coupling	5 ea
	1/2"	316L	Nipples	4 ea
	1/2"	316L	Capps	4 ea
	1/2"	316L	Adapters	8 ea
	30"x24"x8"	Cover Box	turbidity meter box with anchor bolts	1 ea
			Turbidity Equipment Install	1 ea
	1/2"	Stainless	Epoxy anchors/bolt	8 ea
Supports				
	5/8"	316s Strut	Single Strut	24 ft
	5/8"	316s Strut	Strut Channel with Mounting Plate	2 ea
	5/8"	316s Strut	Single Strut Floor Mount	2 ea
	5/8"	316s Strut	Angle Brakets	12 ea
	5/8"	316s Strut	1" Pipe Clamp	4 ea
	5/8"	316s Strut	2" Pipe Clamp	6 ea
	5/8"	316s Strut	Strut Channel Nut 1/2-13	20 ea
	5/8"	316s Strut	Bolt 1/2-13	20 ea
	5/8"	316s Strut	Washer 1/2	20 ea
	5/8"	316s Strut	Strut Plastic Safety Caps	10 ea
	3/8"	Stainless	Wedge anchors	20 ea



Subcontractor/ Vendor Quotations

EAST VALLEY WATER DISTRICT
STERLING NATURAL RESOURCE CENTER
PROGRESSIVE DESIGN BUILD

MBR Train 5 Design and Construction Period Services

TASK	DESCRIPTION	DM	EPM	PRE	QAC	SRE	PPE	LCI	PE	BIM	SCA	PA	TOTAL (HOURS)	TOTAL (\$)
MBR 5.1	Update BODR	4	4	8	2	24			24			12	78	\$17,200
MBR 5.2	Update Hydraulic Profile			4	4	32							40	\$9,840
MBR 5.3	Design Coordination Meetings (60%, Final)	12	12	20		20	24		40				128	\$30,860
MBR 5.4	Develop Civil Site Design (60%, Final)			12	8		48			12	24		104	\$21,340
MBR 5.5	Develop Structural Design (60%, Final)		12		20	40			48	24	40		184	\$37,720
MBR 5.6	Develop Mechanical Design (60%, Final)	4	4		12	40			40	8	24		132	\$27,940
MBR 5.7	Develop E&C Design (60%, 90%, Final)		8		16	48			48	8	24		152	\$32,360
MBR 5.8	Perform Power System Study		8		2				24				34	\$7,600
MBR 5.9	SCADA Coordination	4	24	24		40							132	\$33,420
MBR 5.10	Permitting Coordination		40	20		40			40				140	\$35,000
MBR 5.11	Submittal Reviews/Processing	4	20	20		40			60			20	164	\$36,700
MBR 5.12	Construction Inspection (C/S, M, E, I&C)	12	20		12			600	160			40	844	\$172,220
MBR 5.13	Punch List Substantial Completion	16	16	16		32	16		40			4	140	\$33,900
MBR 5.14	Start Up Support	8	8	40		40	32		40				168	\$40,480
MBR 5.15	As Built from Redlines Coordination		4		4	4				12	40	4	68	\$11,680
TOTAL ARCADIS LABOR		64	180	164	80	400	160	600	564	64	152	80	2,508	\$548,260

LABOR				HOURLY		SUBCONSULTANTS		ESTIMATED COST	
LABOR CATEGORY	HOURS	RATE	AMOUNT	ITEM					
DESIGN MANAGER	64	\$325.00	\$20,800						
ENGINEERING PROJECT MANAGER	180	\$300.00	\$54,000						
PRINCIPAL ENGINEER	164	\$280.00	\$45,920						
QA/QC LEADER	80	\$260.00	\$20,800						
SENIOR ENGINEER	400	\$240.00	\$96,000						
PROJECT PROFESSIONAL ENGINEER	160	\$215.00	\$34,400						
LEAD CONSTRUCTION INSPECTOR	600	\$205.00	\$123,000						
PROJECT ENGINEER	564	\$195.00	\$109,980						
CADD DESIGNER/BIM	64	\$165.00	\$10,560						
SENIOR CADD	152	\$150.00	\$22,800						
PROJECT ASSISTANT	80	\$125.00	\$10,000						
LABOR TOTALS				2,508					\$0
OTHER DIRECT COSTS - ARCADIS									\$7,500
TOTAL ARCADIS (NET)									\$555,760
TOTAL SUBCONSULTANTS									\$0

TOTAL ESTIMATED
LEVEL OF EFFORT (NET)

\$555,760



FIBREPlate™
Membrane Bioreactor System

Proposal for:

East Valley MBR 5TH Train

Fibracast Proposal No: 20595-2

Date: September 12, 2024

Submitted to:

Tom Thomas Murray

Balfour Beatty

Cell: +1 707 471 8998

Submitted by:

Stacy Mitchum

Regional Manager, Western Region

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Cell: +1 714 721 6810

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1. INTRODUCTION

Fibracast is pleased to provide a proposal for the 5th train of the East Valley Water District (Sterling Natural Resource Center) MBR system. Fibracast scope of supply will consist of membrane modules, cassettes, and the process equipment needed to operate the 5th train. The system is to be deployed in concrete membrane tanks, supplied by OTHERS. Suitable pads will be required to install the process equipment.

The proposed membrane system will filter water that will have been treated biologically. The biological system and the pre-treatment will be designed by OTHERS, and it is understood that the feed to the membrane tanks will be from the bioreactor. The following table presents the expected quality for the MLSS entering the membrane tanks.

The following values reflect a bioreactor that is properly operated, with a healthy biology. Unhealthy biological sludge tends to be sticky and exhibits poor filterability, affecting the performance of the membrane system. Deviation from some of these parameters may be indicative of operating issues with biology.

Characteristics of MLSS Entering Membrane Tank ^{note 1}	Units	Acceptable Operating Range
Bioreactor MLSS Concentration	mg/L	3,000-8,000
Bioreactor minimum MLVSS/MLSS ratio	%	≥ 70%
Membrane Tank MLSS Concentration	mg/L	Not to exceed 10,000
Minimum Q ratio (RAS to MMF ratio)	Q	4
Sand ^{note 10}	mg/L	≤ 50
Normal Operating Temperature ^{note 2}	°C	Recommended range 10 -37 Not to exceed 40
Soluble Ammonia (for nitrifying plants) ^{note 3}	mg/L	≤ 1.0
Soluble BOD ₅	mg/L	≤ 5.0
Soluble COD ^{note 4}	mg/L	≤ 50
Dissolved Oxygen (post aerobic) ^{note 5}	mg/L	> 1.5
Soluble Alkalinity	mg/L	50-200, not scaling
pH ^(note 9)		6 – 8.5 (6.5 – 8.0 if coagulant is used)
Total Hardness	mg/L	Not scaling
Colloidal TOC ^{note 6}	mg/L	Recommended ≤10, not to exceed 15
Colloidal COD ^{note 7}	mg/L	Recommended 25-40 not to exceed 60
Time to Filter (TTF) ^{note 8}	sec.	Recommended ≤ 60, not to exceed 180
Material Greater than 2 mm	mg/L	≤1.0



Dissolved Iron (Passing through a 1.5-micron filter)	mg/L	Average ≤ 0.05 Maximum ≤ 0.10
Fats, Oil & Grease (FOG)	mg/L	≤ 150 mg/L (Soluble Oil) n.d. mg/L (Non-Soluble Oil)

Table 1.1 Mixed Liquor Characteristics

Note 1: Refers to mixed liquor in the membrane tank(s), unless otherwise specified.

Note 2: Membranes must not be allowed to dry out or freeze.

Note 3: Soluble ammonia may be measured in the permeate.

Note 4: Soluble COD in mixed liquor from industrial wastewater MBR's may be higher.

Note 5: Dissolved oxygen in the aerobic zone(s) must also be > 1.5 mg/L.

Note 6: Colloidal TOC: measured as difference between filtered mixed liquor TOC on a 1.5-micron filter and permeate TOC filtered through the membranes at 0.04 micron)

Note 7: Colloidal COD: measured as difference between filtered mixed liquor COD on a 1.5-micron filter and permeate COD filtered through the membranes at 0.04 micron)

Note 8: Refer to FC's modified TTF procedure.

Note 9: With coagulants, to avoid any possibility of metal precipitation inside the membrane during membrane cleaning backpulse.

Note 10: sand for the purpose of this warranty is defined as the portion of particles ≥ 63 μm .

2. FIBRACAST MBR SCOPE OF SUPPLY

Fibracast provides membranes/cassettes and associated equipment for the membrane portion of the MBR system. A summary of the Fibracast Scope of Supply is provided hereunder.



East Valley 5 th Train - Membrane Tank			Supply		Installation on site	
Equipment	Code	Qty	FC	Others	FC	Others
Membrane Tank Level Transmitter	LIT-240-512	1	X			X
Membrane Air Valve, butterfly, manual	240-BV-3-590/591	2	X			X
	240-BV-3-592/593	2	X			X
	240-BV-3-594/595	2	X			X
	240-BV-3-506/597	2	X			X
	240-BV-3-598/599	2	X			X
Membrane Permeate Valve, butterfly, manual	240-BV-8-506	1	X			X
	240-BV-8-507	1	X			X
	240-BV-8-508	1	X			X
	240-BV-8-509	1	X			X
	240-BV-8-510	1	X			X
Permeate Header Pressure Transmitter	PIT-240-513	1	X			X
Air Ejector	240-PE-514	1	X			X
Ejector Level Switch Low	LSL-240-515	1	X			X
Ejector Level Switch High	LSH-240-516	1	X			X
Ejector Inlet/Discharge Valves, ball, pneumatic	240-BA-2-517	1	X			X
	240-BA-2-518	1	X			X
Citric Acid Injection Line Valve	240-BC-1-563	1	X			X
	240-BA-1-565	1	X			X
Sodium Hypo Injection Line Valve	240-BC-1-564	1	X			X
	240-BA-1-566	1	X			X
Membrane Cassettes, assembled, c/w 75 mounted modules per cassette	240-UF-501	1	X			X
	240-UF-502	1	X			X
	240-UF-503	1	X			X
	240-UF-504	1	X			X
	240-UF-505	1	X			X
Permeate Header / Pump Isolation Valve, butterfly, pneumatic	240-BV-16-519	1	X			X
Membrane Tanks Air Header, 304L SS	-	1	X			X
Membrane Tanks Permeate Header, 316L SS	-	1	X			X
Cassettes Permeate Downpipe, SS	-	5	X			X
Cassettes Air Downpipe, SS	-	5	X			X
Membrane Tank Inlet Valve	240-SG-90-500	1		X		X
Membrane Tank Outlet Valve	240-SG-18-511	1		X		X
Bolts, brackets, fasteners, and anchors	-	-		X		X
Interconnecting piping as required	-	-		X		X
All other items as required	-	-		X		X



East Valley 5 th Train – RAS Chamber			Supply		Installation on site	
Equipment	Code	Qty	FC	Others	FC	Others
RAS Chamber Level switch Low	LSL-240-521	1	X			X
RAS Chamber Level Switch High	LSH-240-522	1	X			X
RAS Pump, submersible,	240-P-520	1	X			X
RAS Pump VFD	SK-240-520	1		X		X
RSA Pump Discharge Check Valve	240-CV-20-525	1	X			X
RAS Pump Flow Meter	FT/FIT-240-527	1	X			X
RAS Pump Discharge Isolation Valve, knife gate, manual	240-BV-20-526	1	X			X
Bolts, brackets, fasteners, and anchors	-	-		X		X
Interconnecting piping as required	-	-		X		X
All other items as required	-	-		X		X

East Valley 5 th Train – Permeate Pump			Supply		Installation on site	
Equipment	Code	Qty	FC	Others	FC	Others
Permeate Pump (1 Duty)	240-P-540	1	X			X
Permeate Pump VFD	SK-240-540	1		X		X
Inlet Isolation Valve, butterfly, manual	240-BV-16-541	1	X			X
Inlet Pressure Switch High	PSH-240-542	1	X			X
Outlet Isolation Valve, butterfly, manual	240-BV-16-551	1	X			X
Outlet Pressure Switch High	PSH-240-546	1	X			X
Inlet Pressure Indicator with Isolation Valve	PI-240-544	1	X			X
	240-BA-1/4-543	1	X			X
Outlet Pressure Indicator with Isolation Valve	PI-240-549	1	X			X
	240-BA-1/4-548	1	X			X
Permeate Flowmeter	FIT-240-550	1	X			X
Permeate Line Drain Valve	240-BA-3/4-547	1	X			X
Turbidimeter Line Isolation Valve	240-BA-1/2-552	1	X			X
Turbidimeter Inlet Check Valve	240-CV-1/2-553	1	X			X
Turbidimeter Inlet Needle Valve	240-BV-1/4-553	1	X			X
Turbidimeter Inlet Solenoid Valve	240-SV-1/4-555	1	X			X
Turbidimeter	AIT-240-555	1	X			X
Bolts, brackets, fasteners, and anchors	-	-		X		X
Interconnecting piping as required	-	-		X		X
All other items as required.	-	-		X		X



East Valley 5 th Train – Membrane Blower			Supply		Installation on site	
Equipment	Code	Qty	FC	Others	FC	Others
Membrane Blower Package (1 Duty), assembly	240-BW-570	1	X			X
MBR Blower VFD	SK-240-570	1		X		X
Airflow Transmitter	FIT-240-580	1	X			X
Membrane Blower Outlet Isolation Valve	240-BV-12-578	1	X			X
Membrane Blower Crossover Valve	240-BV-12-479	1	X			X
Bolts, brackets, fasteners, and anchors	-	-		X		X
Interconnecting piping as required	-	-		X		X
All other items as required	-	-		X		X

East Valley 5 th Train – Chemical Feed System			Supply		Installation on site	
Equipment	Code	Qty	FC	Others	FC	Others
Sodium Hypochlorite/5 th Train Isolation Valve	FCV-240-561	1	X			X
Citric Acid/5 th Train Isolation Valve	FCV-240-562	1	X			X
Bolts, brackets, fasteners, and anchors	-	-		X		X
Interconnecting piping as required	-	-		X		X
All other items as required	-	-		X		X

East Valley 5 th Train – Control Panel		Supply
Incl.	<ul style="list-style-type: none"> - Develop a control strategy for integrating the 5th membrane train into the existing system. - Install required I/O modules in the existing PLC control panel for the 5th membrane train, including pumps, blower, sensors, actuators, and other devices needed. - Test and commission the expanded control system to ensure proper functionality and performance. 	Fibracast

SPARE PART LIST

EV 5 th Train	Description	Quantity	Supply
Fibracast Ltd.	Receiver Bracket	4	FC
	Module Plug	10	FC
	O-Ring	20	FC
	Rubber Washer	20	FC
	Bolt Hardware Kit (6 Pcs)	20	FC
	Spigot Adaptor	4	FC
	Membrane Repair Kit	1	FC
RAS Pump	Repair Kit (Mechanical seals, bearings & O-rings)	1	FC
	Set of mechanical seal	1	FC
Permeate Pump	1 Year Operation Part Kit	1	FC
Membrane Blower	1 Year Maintenance Kit (1 x V-Belt Set, 1 x Intake Filter)	1	FC



ENGINEERING TASKS

ENGINEERING TASKS WITH DESIGN DOCUMENTS (5 th TRAIN)		Included
Providing Submittals to the Owner, Contractor, or Engineer		√
Drawing Package (inclusive of)		√
- P&IDs		√
- Membrane Tank General Arrangement Drawing		√
- Equipment Cut Sheets		√
- Single Line Diagrams		√
- Control Panel GA's		√
- Control Panel Schematics		√
- Bill of Materials		√
O&M manual		√
PLC and HMI programming		√
Control Narrative		√

Note: All described information is for Fibracast scope of supply only. CONTRACTOR is responsible for the scope outside Fibracast's offering.



ENGINEERING ASSISTANCE SERVICE

ENGINEERING ASSISTANCE SERVICE (5 th TRAIN)		Included
Kick-Off Meeting Design Support Meetings Installation Support Meetings Programming Support Meetings		√
Field Services - Material inspection - Mechanical inspection - Commissioning - Training - Technical support		√
1-Year Remote Monitoring and 24/7 Phone Support.		√
Permeate Pump technical services for Start-up.		√
Submersible RAS Pump technical services for Start-up.		√
Membrane Blower technical services for Start-up.		√

3. CLIENT SCOPE OF SUPPLY

All other works and equipment necessary to complete the project and not shown as being supplied by Fibracast shall be supplied by others, including but not limited to:

CLIENT SCOPE OF SUPPLY	
Overall plant design and construction, including all process and membrane system equipment, biological tanks, excluding modules and cassettes (supplied by Fibracast)	√
Approval of Fibracast Submittal Package	√
Permits, approvals	√
Post disinfection if required	√
Drawing review and approval of Fibracast submittals	√
Detail drawings for piping and process connections to Fibracast supplied equipment	√
5 th Train Civil works (inclusive of):	√
• Concrete Membrane Tank and RAS Chamber	√
• Membrane tank isolation gates and drain	√
• Influent piping to the Membrane Tank	√
• Common channels, housekeeping area, personnel access	√
Piping to existing common permeate header	√
RAS pump piping and valves	√
Membrane tank drain pumps, piping and valves	√
Waste sludge pumps, piping and valves	√
Sludge piping to the Solids Holding Tanks	√
Waste solids handling system.	√
Process piping & supports (inclusive of):	√
• Pipe support includes pipe hangers for all piping supplied outside the membrane operating system.	√
• Piping between external equipment (Loose Shipped by Fibracast)	√
Receiving, unloading and safe storage of equipment at site or a storage facility until ready for installation.	√
Lifting devices for installation and servicing of Fibracast equipment	√
Equipment receiving & verification.	√
VFDs for Fibracast supplied Permeate Pump, Membrane Scour Blower, and RAS Pump.	√



CLIENT SCOPE OF SUPPLY	
Electrical wiring and MCC's, including power surge protection.	√
Installation of all Fibracast-supplied control panels.	√
Installation of all VFDs, motor control centers, and disconnects, unless otherwise specified.	√
Installation and commissioning of equipment supplied by Fibracast.	√
Pump alignment, vibration analysis, and lubricants.	√
Furnish and install anchors bolts, pipe hangers and other supports design and supply.	√
Plant SCADA System and PLC, programming, and integrated controls.	√
Weather protection.	√
Raw materials, chemicals and utilities during equipment testing. This includes potable water for system function testing and seed sludge per supplier requirements	√
Disposal of clean-in-place waste including a neutralization system (if required).	√
Any equipment, valves, instrumentation, or spare parts not specifically listed in the Fibracast scope herein.	√
Laboratory services, operating and maintenance personnel during equipment checkout, startup and operations.	√
Onsite painting or touch-up painting of MBR, except for painting required due to damage incurred prior to equipment being received onsite.	√



4. COMMERCIAL OFFER

BUDGETARY PRICING	
MEMBRANE SYSTEM COST	
Price, for Fibracast Scope of Supply, as described in this proposal	US\$ 1,300,000

Equipment Warranty

Fibracast Ltd. warrants that the equipment purchased by FC and integrated into the MBR system as well as all the goods manufactured by FC and supplied to you as part of this project shall be free from defects in material and workmanship for a period of twelve (12) months from the date of equipment startup, as certified by an authorized Fibracast technician or authorized OEM, or eighteen (18) months from the date of the equipment shipment, whichever occurs first. Any warranties on items procured by FC will be transferred to Buyer as applicable and allowable.

Membrane Warranty

Fibracast will provide a full warranty for the membranes, guaranteeing replacement for a minimum of 5 years from the date of start of beneficial use of the membranes or six (6) months from the date of the membrane shipment, whichever occurs first. After the initial 5-year full warranty period, Fibracast will continue to provide a pro-rated warranty for membrane replacement for up to 10 years. Details of the warranty provided will follow.

Taxes and Duties

Country of origin: Canada

All applicable taxes and duties are extra.

Payment Terms

PAYMENT TERMS	
With Purchase Order	25%
Upon approval of engineering submittal or 100 days from Purchase Order whichever occurs first	30%
Notification of readiness to ship equipment and membranes*	35%
Completion of Commissioning, or 100 days after delivery, whichever occurs first	10%

*Note: partial shipments are allowed and payable pro-rata.

Price Validity

Pricing is valid for 60 days. Actual price volatility for commodities may require Fibracast to adjust this proposed price at time of order.



Project Schedule

A preliminary project schedule is shown in appendix-A which can be finalized during the project implementation.

Shipping and Equipment delivery

DAP project site as defined by Inco 2021 Terms.

The final delivery schedule will be determined with CLIENT at the time of execution of a contract. Staggered delivery is acceptable.

Terms and Conditions

FIBRACAST Standards Terms and Conditions Apply which is available upon request.



APPENDIX A – Project Schedule

Fibracast's Proposed Schedule for East Valley's 5th Train

ID	Task Name	Duration	Start	Finish
0	East Valley 5th Train	146 days	2024-05-31	2024-12-20
1				
2	FIBRACAST MILESTONES	146 days	2024-05-31	2024-12-20
3	Notice to Proceed & Acceptance		2024-05-31	2024-05-31
4	Delivery of Long Lead Items		2024-12-03	2024-12-03
5	Delivery of Membranes/Cassettes		2024-11-08	2024-11-08
6	Contractor Install (8 weeks)		2024-10-16	2024-10-16
7	Startup & Commissioning		2024-12-09	2024-12-09
8	Customer Acceptance		2024-12-20	2024-12-20
9				
10	PROJECT INITIATION	6 days	2024-05-31	2024-06-07
14				
15	ENGINEERING	61 days	2024-06-10	2024-09-02
38				
39	DOCUMENTATION & QA	113 days	2024-07-08	2024-12-11
44				
45	PURCHASING & RECEIVING	133 days	2024-05-31	2024-12-03
52				
53	FINAL QA INSPECTION	3 days	2024-10-09	2024-10-11
54				
55	SHIPPING	40 days	2024-10-16	2024-12-10
59				
60	STARTUP AND COMMISSIONING	10 days	2024-12-09	2024-12-20
64				
65	CUSTOMER ACCEPTANCE	0 days	2024-12-20	2024-12-20

BUILDERS RISK PREMIUM CALCULATION WORKSHEET

Project Name: EVWD - Change Order
 Project Start Date: 7/1/2024
 Project End Date: 1/1/2026
 Project Street Address: 34.109383, -117.252711
 Project Zip Code: 92410
 Project County: San Bernardino
 Project City: San Bernardino
 Project State: CA

ACCOUNT NAME: Balfour Beatty Construction, LLC
 POLICY NUMBER: MBR 5946059
 CERTIFICATE NUMBER: CRT TBD



Flood Zone: 3
 EQ Zone: 1-E
 NWS Zone: 4

COVERAGE	INCEPTION DATE	EXPIRATION DATE	# OF DAYS	PRO RATA FACTOR (or wind mos.)	ANNUAL RATE (or rate/ mo. WS)	VALUES / SUBLIMITS	DELAY FACTOR	TERM PREMIUM	Credit / Surch 1	Credit / Surch 2	FINAL PREMIUM	FINAL ANNUAL RATE	
HARD COSTS													
Primary Class	7/1/2024	1/1/2026	549	1.504	0.06700	\$ 12,000,000		\$ 12,093	1.000	1.000	\$ 12,093	0.24350	
Secondary Class	7/1/2024	1/1/2026	549	1.504	0.00000	\$ -		\$ -	1.000	1.000	\$ -		
Other Class	7/1/2024	1/1/2026	549	1.504	0.00000	\$ -		\$ -	1.000	1.000	\$ -		
Flood	7/1/2024	1/1/2026	549	1.504	0.00000	\$ 12,000,000		\$ -	1.000	1.000	\$ -		
Windstorm	7/1/2024	1/1/2026	549	11.0	0.00000	\$ 12,000,000		\$ -	1.000	1.000	\$ -		
Earthquake	7/1/2024	1/1/2026	549	1.504	0.17850	\$ 12,000,000		\$ 31,857	1.000	1.000	\$ 31,857		
TOTAL HARD COSTS						\$ 12,000,000		\$ 43,950			\$ 43,950		
EXTENSIONS OF COVERAGES													
Transit	7/1/2024	1/1/2026	549	1.504	0.00000	\$ 5,000,000		\$ -	1.000	1.000	\$ -	0.00000	
Temp. Offsite Location	7/1/2024	1/1/2026	549	1.504	0.00000	\$ 5,000,000		\$ -	1.000	1.000	\$ -		
Design Professional Fees	7/1/2024	1/1/2026	549	1.504	0.00000	\$ 500,000		\$ -	1.000	1.000	\$ -		
Contractor Expenses	7/1/2024	1/1/2026	549	1.504	0.00000	\$ 3,000,000		\$ -	1.000	1.000	\$ -		
Debris Removal	7/1/2024	1/1/2026	549	1.504	0.00000	\$ 10,000,000		\$ -	1.000	1.000	\$ -		
Emergency Prop. Prot. Exp	7/1/2024	1/1/2026	549	1.504	0.00000	\$ 2,000,000		\$ -	1.000	1.000	\$ -		
Ordinance or Law	7/1/2024	1/1/2026	549	1.504	0.00000	\$ 5,000,000		\$ -	1.000	1.000	\$ -		
DTE- Construction Activities	7/1/2024	1/1/2026	549	1.504	0.00000	\$ 500,000		\$ -	1.000	1.000	\$ -		
TOTAL EXTENSIONS						\$ -		\$ -			\$ -		
TOTAL PROPERTY						\$ 12,000,000		\$ 43,950			\$ 43,950	0.24350	
DELAYED STARTUP													
AOP - Soft Costs	7/1/2024	1/1/2026	549	1.504	0.06700	\$ -	1.50	\$ -	1.000	1.000	\$ -	0.00000	
AOP - ALOP/ALOR	7/1/2024	1/1/2026	549	1.504	0.06700	\$ -	1.50	\$ -	1.000	1.000	\$ -		
Flood	7/1/2024	1/1/2026	549	1.504	0.00000	\$ -	2.00	\$ -	1.000	1.000	\$ -		
Windstorm	7/1/2024	1/1/2026	549	11.0	0.00000	\$ -	2.00	\$ -	1.000	1.000	\$ -		
Earthquake	7/1/2024	1/1/2026	549	1.504	0.17850	\$ -	2.00	\$ -	1.000	1.000	\$ -		
TOTAL DELAYED STARTUP						\$ -		\$ -			\$ -	0.00000	
ACCOUNT TOTALS						TIV	\$ 12,000,000	PREMIUM		\$ 43,950			
								Terrorism		2%	\$ 242		
								TOTAL PREMIUM		\$ 44,192			
								Surcharges & Assessments (in addition to the premium above)		\$ -			
RATING NOTES:	AOP Deductible:			\$25,000			Terrorism coverage is optional.						
	Windstorm Deductible:			\$25,000			Project Description: •Add a 5th filtration train to the MBR Facility •Add a 5th train to the MBR Facility and retrofit the existing equalization basin, in order to re-rate the plant to 10 MGD with the State Water Resources Control Board. oDemo - Site sidewalk, curb and gutter, asphalt oDemo - Beams of the bridge crane once the walls gets strength oDemo - Existing East Wall of train 4 for pipe supports oExcavation - Shoring oExcavation - 20' depth						
	Flood Deductible:			\$50,000									
	Earthquake Deductible:			5% Min. \$250,000									
	Water Damage Deductible:			\$100,000									
	Delay In Completion:			NCP									
	Policy Limit:			\$12,000,000			Project Location: 34.109383, -117.252711, Del Rosa Drive between 5th and 6th Street, San Bernardino, CA 92410 Project Type:						
	Windstorm Limit:			\$12,000,000									
	Flood Limit:			\$12,000,000									
	Earthquake Limit:			\$12,000,000									
	Water Damage Limit:			\$12,000,000									
	Delay in Completion:			\$0									
	Subject to:												
Terms and Conditions are only valid for 30 days from the date this was sent.													

Edit History:

BALFOUR BEATTY CONSTRUCTION, LLC
Builders Risk Indication
Project: EVWD – Change Order

ALL LIMITS OF LIABILITY, SUB-LIMITS AND DEDUCTIBLES APPLY IN ANY ONE OCCURRENCE.

Limit of Liability:

\$12,000,000 In Any One Occurrence

Sub-Limits of Liability:

Earthquake – Term Aggregate	\$12,000,000
Flood – Term Aggregate	\$12,000,000
Named Windstorm	\$12,000,000
Physical Damage	\$12,000,000
Water Damage	\$12,000,000

Deductibles:

All Risk Perils:	\$ 25,000, EXCEPT
Water Damage	\$ 100,000
Flood	\$ 50,000
Earthquake	5% Values at Risk Time of Loss, subject to a minimum of \$250,000
Named Storm	\$ 25,000

Project Location: 34.109383, -117.252711, Del Rosa Drive between 5th and 6th Street, San Bernardino, CA 92410

Project Description:

- Add a 5th filtration train to the MBR Facility and retrofit the existing equalization basin, in order to re-rate the plant to 10 MGD with the State Water Resources Control Board.
 - Demo – Site sidewalk, curb and gutter, asphalt, beams of the bridge crane once the walls gets strength, existing East Wall of train 4 for pipe supports
 - Excavation – Shoring , 20' depth
 - Concrete – Rebar and Dowels, waterstop, Holliday Rock
 - Excavation – Backfill – Holliday Rock
 - Coating – Concrete Walls, and Piping (PVC)
 - Covers – CST Aluminum Covers, CST modification to existing cover for slide gate
 - MBR – Fibrecast (List of items that they are providing is needed)
 - Electrical – Helix (VFD, Wiring, Conduits), SCADA Programing – Helix – TSI
 - Mechanical – Slide Gate
 - SAC – Stainless Steel Piping and Pipe Supports
 - Overhead – Staffing, Onsite Office

Project Term: 7/1/2024 – 1/1/2026

Flood Zone: X

Estimated Completed Value: \$12,000,000

Builders Risk Premium: \$44,192*

**TRIA Included in above premium figure*

Commission: 14%



BALFOUR BEATTY CONSTRUCTION, LLC
Builders Risk Indication
Project: EVWD – Change Order

This quote has been based on the information you provided to us and on which we have relied and is subject to the terms and conditions of the policy forms. In the event the information provided to the underwriters is not complete and accurate, it may allow the underwriters to avoid liability for a particular claim or to void the policy entirely. If any material information has been excluded or if any of the information provided is now inaccurate, please advise us immediately in order that we can seek revalidation of terms with underwriters.

This quote is valid for 30 days or the quoted effective date, whichever is sooner. It does not constitute confirmation of full or further support of the placement at these terms; it is recommended, therefore, that you respond to us as soon as possible. We will not be responsible for any consequences that may arise from any delay or failure by you to respond to us.

You are requested to review this indication to confirm that it accurately reflects the coverage conditions, limits, and other terms that you require. If the indication of coverage and terms does not accord with your instructions, please advise us immediately.

WTW Quote Date: 6/5/2024



AERZEN USA CORPORATION
 108 Independence Way
 Coatesville, PA 19320
 Tel. (610) 380-0244 ~ Fax. (610) 380-0278



AERZEN Reference Number: ENV-520081
 Re: East Valley Water District - Sterling NRC

4-Jun-24

Page 1 of 2

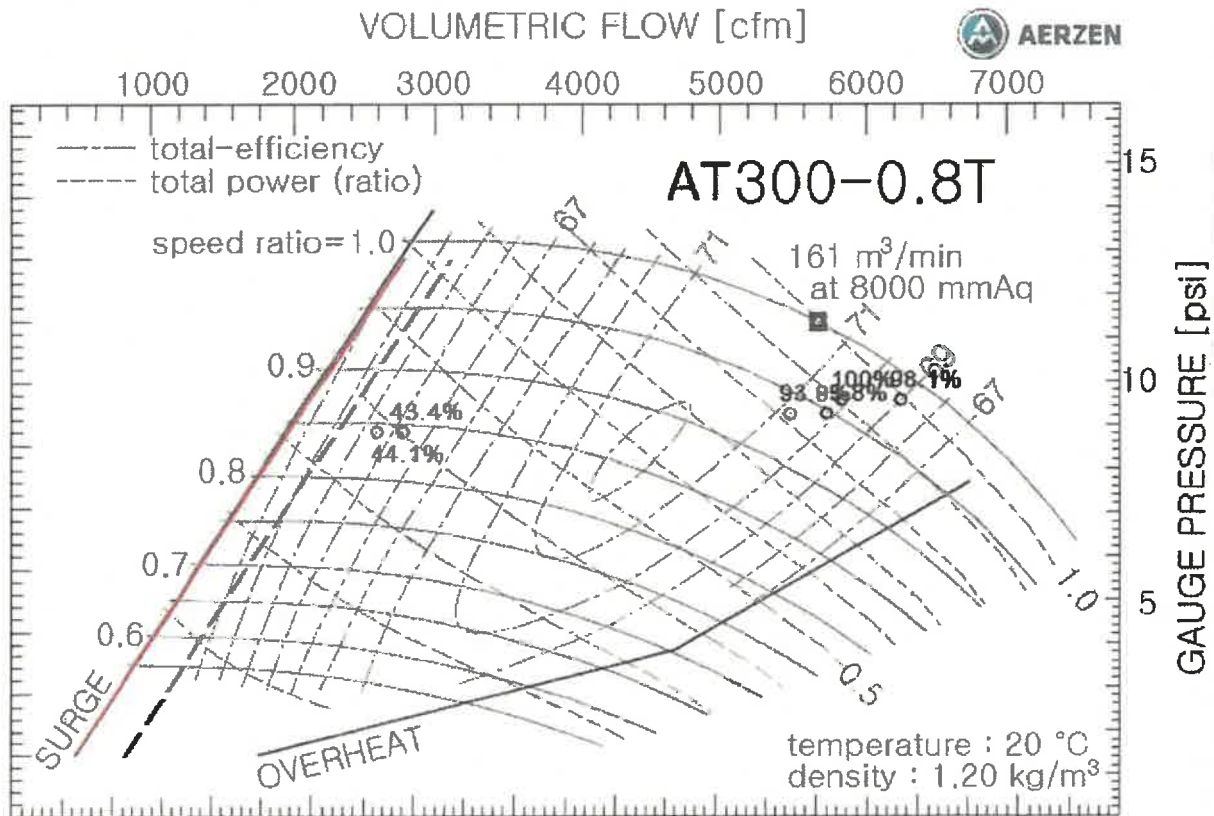
Additional Turbo Blower

Performance Data (Per Blower):

Volume, handled at intake condition
 Volume handled at normal condition
 Relative humidity
 Intake pressure (abs.)
 Pressure difference
 Intake temperature
 Discharge temperature
 Rotor speed
 Power consumption at shaft
 Unit Power
 Tolerance on flow
 Tolerance on power
 motor rating
 Sound pressure level w/ enclosure
 measured in free field at 3ft. distance from

AT 300-0.8T G5

	Point 1	Point 2	Point 3	Point 4	Point 5
icfm	5740	5318	6417	2835	5670
scfm	5300	5300	5545	2450	5650
%	70	50	80	80	50
psia	14.13	14.13	14.13	14.13	14.13
psig	8.9	8.9	9.2	8.5	9.2
°F	80	50	100	100	50
°F	185	147	214	210	151
rpm	30520	29872	31928	27254	30597
BHP	246	225	288	124	248
kW	204.6	186.8	239.8	103.1	206.3
± 5%					
± 5%					
Hp	300				
dB(A)	80				



AERZEN USA CORPORATION
108 Independence Way
Coatesville, PA 19320
Tel. (610) 380-0244 ~ Fax. (610) 380-0278



AERZEN Reference Number: ENV-520081
Re: East Valley Water District - Sterling NRC

4-Jun-24

Page 2 of 2

To Moises Ontiveros Firm - Balfour Beatty Infrastructure, inc. e-mail - MoisesOntiveros@balfourbeattyus.com phone - 909-361-7915
AERZEN Representative Info: Name - Matt Rebmann of Coombs-Hopkins e-mail - matt@chcwater.com phone - (760) 931-0555

AERZEN Proposal Prepared By: Name - Tom McCurdy e-mail - tom.mccurdy@aerzen.com phone - (610) 656-1683
AERZEN Regional Manager: Name - Tom McCurdy e-mail - tom.mccurdy@aerzen.com phone - (610) 656-1683

Additional Turbo Blower

AT 300-0.8T G5

Aerzen High Speed Centrifugal Blower Package consisting of the following components:

- Twin impeller turbo blower
- Integrated air filter panel for room intake
- Bump air foil bearings
- High speed PM motor
- Inverter
- Sound Enclosure
- PM motor cooling system
- Blow Off Valve
- Internal BOV sound silencer
- Integrated Enclosure Air Filtration system
- CPU
- LCP (MICOM control, Touch Screen)
- Protocol Converter, Ethernet I/P
- Set of necessary sensors (temp and pressure)
- 16 INCH Bellows style flexible joint, discharge

Scope of Supply

- (1) Compact blower package(s) as listed above
- (1) Nema 3R enclosed passive harmonic filter(s) (ships loose to be installed by others)
- (1) 16 INCH check valve(s) (ships loose to be installed by others)
- (1) 16 INCH discharge isolation valve(s) (ships loose to be installed by others)
- (1) 16 INCH discharge silencer(s) (ships loose to be installed by others)
- (1) Blower Anchor Bolt Set(s)

Spare Parts

- (1) Set(s) of spare filter elements

Mfg Services

- 2 day(s) mfg onsite services for inspection & startup allotted in (1) separate trip(s) for blower services (addl days \$1,800/day)
- 1 day(s) mfg onsite training allotted in (1) separate trip(s) for blower services (addl days \$1,800/day)
- Master Control Panel programming changes for the addition and integration of turbo blower #4
- PE stamped seismic calculations
- Factory Testing of (1) Turbo Blower unit (PTC13 wire-to-air)

Freight and Packaging

- Freight to jobsite
- Domestic packaging

TOTAL for(ONE) \$285,190 (Breakdown: \$243,517 equipment, \$18,873 tax (7.75%), \$11,500 freight, \$11,300 Service

C/O: Matt Rebmann of Coombs-Hopkins(760) 931-0555

Freight: CIP - Job site

Terms: This offer is subject to Aerzen Standard Terms and Conditions (AMUSA.08.22.001)

Submittals: 4 weeks after receipt of Purchase Order

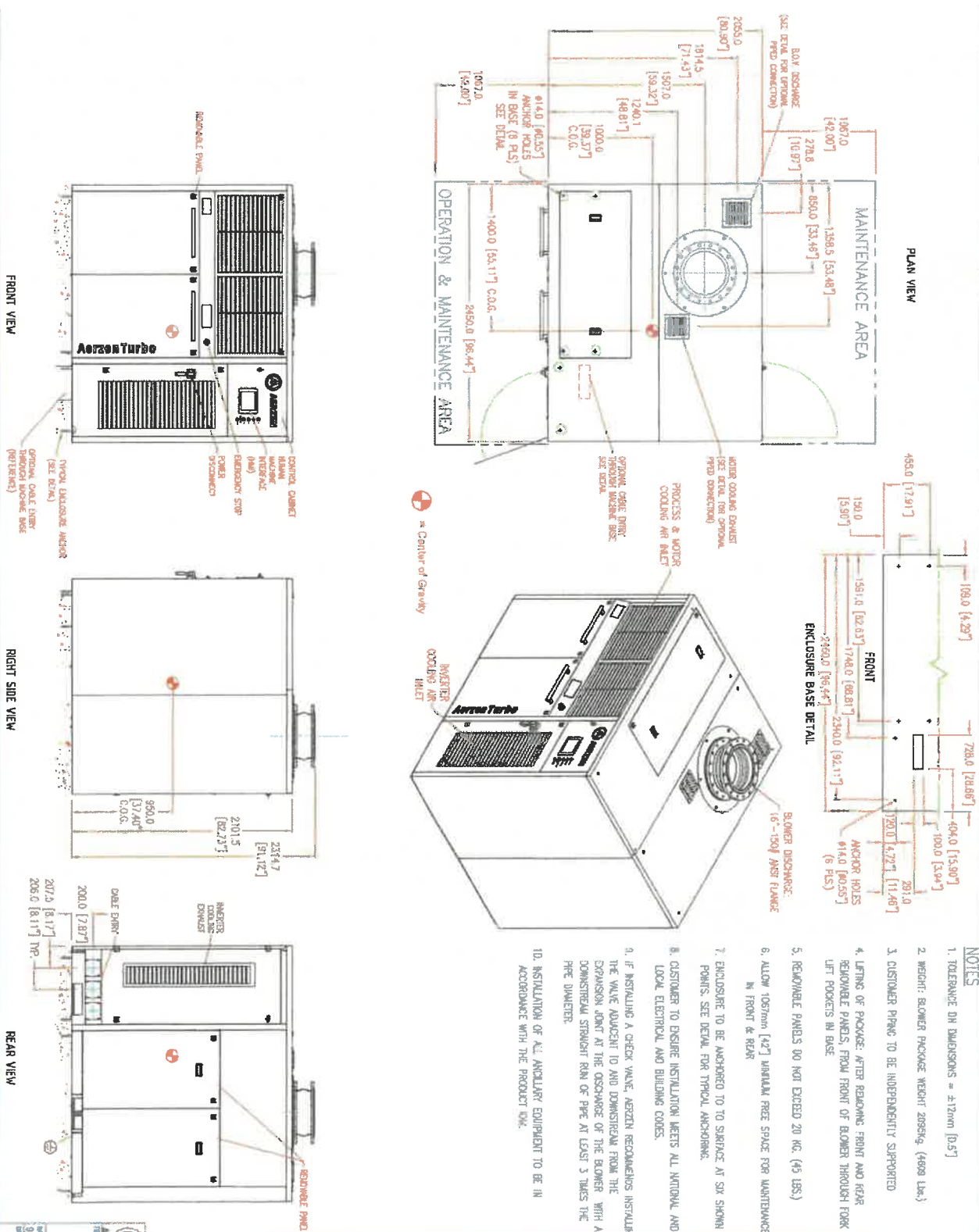
Payment: 20% upon drawings documentation, 70% upon delivery and 10% upon startup not to exceed 120 day from delivery

Delivery: presently approx. 26 weeks upon technical release by customer

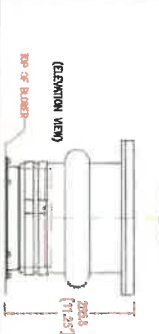
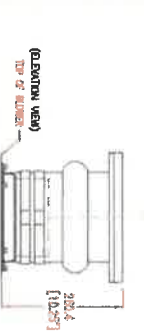
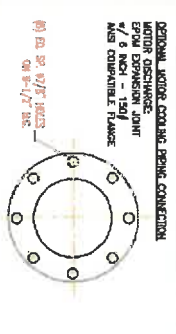
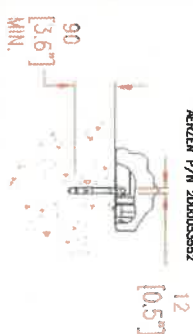
Warranty: 24 months after start up or 30 months after delivery, which ever comes first*

*Maintenance must be performed per the Instruction Manual using Aerzen spare parts.

*Equipment not manufactured by Aerzen will carry the manufacturer's standard warranty



TYPICAL SOUND ENCLOSURE ANCHORING
SEISMIC OR OTHER CONDITIONS MAY REQUIRE ALTERNATE ANCHOR SHOWN WITH ILSBG #48 12/15
AERZEN P/N 200055552



NOTICE:
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AERZEN USA CORP.
108 Independence Way, Suite 200
Bridgewater, NJ 08807-3000
Tel: 800-300-0274 Fax: 800-300-0275

CLASS 1

GENERATION 6 TURBO BLOWER STANDARD FILTERED INLET

AT300-0.8

16" - 150# ANSI FLANGE DISCHARGE

DATE: 3/16/2020 **SCALE:** 1/1
DESIGNED BY: JFS **CHECKED BY:** JFS **PAI APPROVAL:** JFS **ISSUED:** 3/16/2020

GB-008077-300-0.8

Rojas, Victor

From: David Escarcega <david@5dcompanyllc.com>
Sent: Thursday, May 30, 2024 12:25 PM
To: Rojas, Victor
Subject: FW: Bolts for sterling bid

External Email

Please see pricing below.
Pricing for bidding purposes only.

Thank you,

David Escarcega
www.5DCompanyLLC.com
Mobile: 562-842-5789
Email: David@5DCompanyLLC.com

From: Michael Beeh <mbeeh@copperstate.com>
Sent: Thursday, May 30, 2024 12:17 PM
To: David Escarcega <david@5dcompanyllc.com>
Cc: Steven Thornburg <sthornburg@copperstate.com>
Subject: RE: Bolts for sterling bid

David,

Pricing below. I had to quote CL.E for the 3",14",16" gaskets. Currently 7 week lead time.

Size	Dia	Length	Bolts	kit qty	Kit Price
3"	5/8"	3"	4	20	\$ 58.82
8"	3/4"	2-1/4"	8	10	\$ 181.44
12"	7/8"	2-3/4"	12	4	\$ 328.91
12"	7/8"	2-3/4"	12	3	\$ 328.91
14"	1"	4-1/2"	12	2	\$ 461.41
16"	1"	4-1/2"	16	11	\$ 612.33
16"	1"	4-1/2"	16	8	\$ 612.33
24"	1-1/4"	5-1/2"	20	2	\$1,148.86

Thank you,

Mike Beeh
Phoenix Inside Sales



Copper State Bolt & Nut Co
3602 North 35th Avenue
Phoenix, AZ 85017
Direct: 602-477-7452
Office: 602-272-2384
Fax: 602-233-9182
Shop Online at www.copperstate.com

From: Rojas, Victor <VRojas@Balfourbeattyus.com>
Sent: Thursday, May 30, 2024 10:13 AM
To: David Escarcega <david5dcompany@gmail.com>
Subject: RE: Bolts for sterling Quote

David, can you give me a price for the bolt sets below. Lets go with Garlock gaskets and for cap bolts what ever is
This is for a bid. Need it today. thanks

AIS project all flanges are Class D except for 24", that will be standard 150# flange

1	3"	316SS	flange gasket and cap bolt sets	20	ea
1	8"	316SS	flange gasket and cap bolt sets	10	ea
1	12"	316SS	flange gasket and Cap bolt sets	4	ea
1	12"	316SS	flange gasket and bolt sets	3	ea
1	14"	316SS	flange gasket and bolt sets	2	ea
1	16"	316SS	flange gasket and bolt sets	11	ea
1	16"	316SS	flange gasket and cap bolt sets	8	ea
1	24"	316SS	flange gasket and bolt sets	2	ea

Victor Rojas
Project Engineer | Balfour Beatty US Civils
C: 909-601-4950
E: vrojas@balfourbeattyus.com | www.balfourbeattyus.com
640 E. Arrow Highway, La Verne, CA 91750



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PHX
3602 N 35th Ave
Phoenix, AZ 85017-4408
USA

Quotation



QT04364172-2

Quotation

QT04364172-2

Page 1 of 1 5/31/2024 9:48:20 am

Ordered by: Michael Beeh
Order Date: 5/31/2024
Expiry Date: 6/6/2024

Mode of delivery: Other
Delivery notes: FOB Origin, PPD & Add
Carrier account number: 0.00
Weight (estimated): Taxable
Tax Group: 0% 0 Days
Cash Discount: 0
Payment Days:

Customer: BAL64000
Balfour Beatty Infrastructure Inc - LAVERNE, CA
640 East Arrow Highway
LA VERNE, CA 91750
USA

Delivery Address:
Extended stay America
3331 Cypress Drive Room 101
MILPITAS, CA 95035
USA

Notes:

Item Number/Customer	Config/Source	Description	Quantity	Unit	Availability	Unit Price	Ext. Price	Sales Tax
1 23STA1201H4-10	Bundle	1 5/8 x 1 5/8 x 10' 12 Ga Single Half Slot Strut 316 S/S	130	Ft	Stock	15.4200	2,004.60	187.94
2 SIN/000000	.	6" channel bracket 316SS	10	Ea	7 days	46.6300	466.30	43.72
3 23PB054	.	1 5/8" Square Post Base (6 x 6 x 3 1/2 Hgt) 316 S/S	7	Ea	7 days	70.4000	492.80	46.20
4 23AB054	.	4 Hole 90° (3 1/2 x 4 3/16) Angle Bracket 316 S/S	50	Ea	7 days	12.1880	609.40	57.12
5 23PC034-050	.	1/2" Rigid I.P. Pipe Strut Clamp 316 S/S	8	Ea	7 days	7.8500	62.80	5.90
6 23NU014-050	.	1/2" Spring Nut 316 S/S	200	Ea	7 days	2.2155	443.10	41.55
7 15CSC4-0500100	Pkg	1/2-13 X 1" Hex Head Cap Screw 316 S/S	140	Ea	5 days	2.9600	414.40	38.85
8 15FW4-050	Pkg	1/2" Flat Washer 316 S/S (1 1/4 OD .062 Thick)	140	Ea	5 days	0.5300	74.20	6.96
9 36-ADK421GY	Caddy	Caddy #ADK421GY 1 5/8" Strut End Cap Gray	70	Ea	Stock	1.0519	73.63	6.90
10 23STA1202H4-10	Bundle	1 5/8 x 1 5/8 x 10' 12 Ga Bk to Bk Half Slot Strut 316 S/S	50	Ft	Stock	32.9400	1,647.00	154.41
11 23PB034	.	1 5/8" Square Bk to Bk Post Base (6 x 6 x 3 1/2 Hgt) 316 S/S	6	Ea	7 days	66.1500	396.90	37.20
12 23PC034-100	.	1" Rigid I.P. Pipe Strut Clamp 316 S/S	4	Ea	7 days	9.6300	38.52	3.62
13 23PC034-300	.	3" Rigid I.P. Pipe Strut Clamp 316 S/S (3 1/2 OD)	54	Ea	7 days	7.2030	388.96	36.46

For a complete copy of our Terms & Conditions, please visit our website at www.copperstate.com.
It is the policy of Copper State Bolt & Nut Co. to offer only the highest quality products supplied by established and approved vendors. We assume no liability beyond replacing defective merchandise and refunding the purchase price, providing a claim is processed within a reasonable amount of time. We will not allow claims for consequential damage, transportation charges or for labor or other expenses incurred in removing defective products or installing replacement material. Any product manufactured by Copper State is manufactured per applicable specifications and tested per those specifications in accredited laboratories.

We hereby disclaim all warranties of fitness, fitness for purpose, and/or merchantability, express or implied, other than the limited return and replacement right set forth above and any warranties which the manufacturer may supply.

Sub Total

Freight:

Order Total USD

7,112.61

0.00

7,779.44

666.83



14281 Palisades Drive, Poway CA 92064
LICENSE: CA 742112 • AZ ROC188614 • NV 0072066
DIR No. 1000004724
www.paradapainting.com

Scope of Work

Page 1 of 2

DATE: 6/6/24
TO: Balfour Beatty
ATTN: Terry Lim
RE: Sterling Filtration train to MBR Coatings

Parada Painting is submitting a QUOTE for the above referenced project. This QUOTE is limited to the following:

Work Detail:

- Concrete Walls, and piping (PVC) – Coating
- Touch up of existing liner due to modifications

Parada to provide own working platform and confined space equipment/personnel

Exclusions: Ferrous metal

Quote Price: \$119,888.00

Bond Rates are attached on page 2 of 2 and are not included in above Total Quote Price.

Should you have any questions, please contact me at 858-602-6037 or email davidparadair@yahoo.com

Sincerely,

David Parada Jr.
Superintendent

Office - Admin: (P) 951-878-7051, (F) 951-878-7052
Estimating: (P) 858-602-6036, (F) 951-878-7052
Office - A/P: (P) 858-748-3540, (F) 858-748-3774

Bond Premium Rates

Bond Base Premium Rates are as follows and are not included in the bid/quote price:

Tier 1	First \$100K	= 1.1000%	<u>Durations Included:</u> 1. Warranty of one (1) yr. 2. Contract Completion Time of 24 mos., 731 calendar days, or less.
Tier 2	Next \$400K	= 0.8810%	
Tier 3	Next \$2M	= 0.7690%	
Tier 4	Next \$2.5M	= 0.6630%	
Tier 5	Next \$2.5M	= 0.5500%	
Tier 6	Next \$7.5M	= 0.4940%	

****Additional Surcharges may apply****

The Surety surcharges the Bond Base Premium due to risk(s) associated with an extended duration.

Completion Time and Warranty that extend beyond durations included above will be subject to additional Surcharges as noted below.

Warranty Surcharge is applied for contract that have durations beyond one (1) year.

Warranty Surcharge is calculated by multiplying Tier Contract Amount times the Rate, then multiply by # of years over the one year.

Tier 1	First \$100K	= 0.275%
Tier 2	Next \$400K	= 0.25%
Tier 3	Next \$2M	= 0.219%
Tier 4	Next \$2.5M	= 0.194%
Tier 5	Next \$2.5M	= 0.163%
Tier 6	Next \$7.5M	= 0.156%

Completion Surcharge is applied for contracts that have durations beyond 24 months.

Completion Surcharge is calculated by multiplying Tier Base Premium Rate by 1%, then multiplying by the # of months over 24 months.

****IMPORTANT****

Bond Premium Rates are not included in the aforementioned Quote/Bid Price.

If the full subcontract amount includes an estimated bond premium, the bond premium should be separated out from Quote/Bid Parada provided prior to issuance of final subcontract and processing of bonds. The Surety is required to bond the contract according to the specific requirements of said subcontract. The required Performance/Payment Bonds guarantee Parada will perform the contract and the bond premium is calculated by the bond company based on the total subcontract amount. That additional bond premium will be the Contractor's responsibility as per said subcontract.

Office - Admin: (P) 951-878-7051, (F) 951-878-7052
Estimating: (P) 858-602-6036, (F) 951-878-7052
Office - A/P: (P) 858-748-3540, (F) 858-748-3774



The Global Leader in Aluminum Structures

June 6, 2024

To: Balfour Beatty Infrastructure, Inc.

Reference: Top Mount Aluminum Extruded Flat Covers Over Various Tanks,
East Valley Water District,
Highland, CA
Specification Section: Per CST previous project 219206 / USP001271
CST Inquiry: 217867
Design Build Proposal

CST proposes to furnish all materials, and specific equipment to completely design, fabricate, and deliver ONLY the below reference sections with top mount extruded flat covers in general accordance with project specifications and as stated herein.

QTY	DIMENSIONS	TOTAL SQFT.	COVER LOCATION	COVER DESIGN LOAD
1	8' x 40'	320	Cassette Train 5 [10 covers]	50psf
1	4' x 8'	32	RAS Chamber 5	50psf

A. ALUMINUM ROOF COMPLETE AND CONSISTING OF THE FOLLOWING:

1. Structural shapes and support beams: 6061-T6, 6063-T5 aluminum extrusions.
2. Extruded Flat Covers: 6061-T6, 6063-T6 Aluminum extrusions.
3. Fasteners: 7075-T73 aluminum or 300-series stainless steel.
4. Anchors: 316-series stainless steel.
5. Sealant and gaskets: Neoprene or Silicone by Pecora.
6. Finish: Mill, with integral bi-directional non-skid surface.

TOTAL APPURTENANCES FOR MBR FACILITY,

- [2] Pipe Penetrations

B. MISCELLANEOUS ITEMS INCLUDE THE FOLLOWING:

1. Crate and freight to jobsite. Estimated freight is pre-paid and add and includes a 9% processing fee.
2. Cover approval drawings and calculations shall be stamped by a CA Professional Engineer.
3. Should CST deem it necessary, a dimensional survey will be performed to only confirm the basins dimensions, prior to commencement of fabrication.
4. No Sales Tax included and should be added by the purchaser if not tax except
5. No Installation Included

C. PRICE IS BASED & CONTINGENT UPON

1. All covers being purchased under one purchase order.
2. Basins to be covered being out-of-service, drained and cleaned (by others) during the cover installation.
3. All covers being considered as "substantially" air and watertight.
4. Any required beams or ledger angle shall be shipped unassembled, and ready for onsite field assembly.



5. Any other penetrations not listed within this scope but required to penetrate our cover system are to be routed to avoid interference with the cover structure members. CST will provide information to GC and engineer at the time of submittal so any new penetrations within the covers can be coordinated.
6. All walls must be level, smooth and at a constant elevation (by others) in order for the cover to seal properly.
7. Shipping the materials for all structures at the same time. Should the Purchaser elect to stagger (or sequence) the delivery of the covers, the contract price shall be adjusted to reflect the subsequent packing inefficiencies and resulting increased number of shipping containers.
8. The price being provided is based on dimensions as listed within this proposal and not to exceed a total of +/- 350 total sqft. General reference of the covered areas as listed on drawing S-240-02.
9. Any existing handrail shall be removed by others prior to cover installation.
10. Work area(s) not being considered as confined space.
11. The top mount walking surface of covers to be 6-8-inch above top of tank wall.
12. One (1) move-in/move-out of CST personnel to perform site visit to obtain critical dimension information of all basins prior to the start of cover fabrication. It is the responsibility of others to remove (and replace, if necessary) any existing covers or other obstructions to facilitate the site visit measurements by CST personnel. If additional move-in/move-outs of CST site visit personnel are required to obtain all critical information necessary that was not available during the previous site visit, such move-in/move-outs will be charged as a contract extra to the purchase.
13. Cover layout and beam locations may differ for what is shown on the drawings.
14. Cover material types as listed within Section A of this proposal only.
15. Allowance for spec deviation. Some items within the spec are proprietary to another Cover MFG.
16. Payment terms and milestones based on a mutually agreed schedule.
17. Flat Cover system will primarily consist of removable panels, each weighing less than 150lbs. Panels with adjustable pipe penetrations shall be considered "non-easily removable", panels with fixed penetrations shall be considered "non-removable" All adjacent panels shall remain completely removable.

D. INSTALLATION:

1. Not included.

E. GENERAL NOTES

1. Because CST is not a local contractor, the punchlist for the aluminum cover (if any) shall be provided to CST for action while we are still mobilized at the site. Additional mobilizations for punchlist(s) generated after we have demobilized shall be considered a contract extra.
2. If the project is tax-exempt, the purchaser must provide CST with a tax-exempt certificate. If the project is not tax-exempt, the purchaser must furnish CST with a resale certificate. Otherwise, CST will charge applicable sales and use taxes to the purchaser as a contract extra.

F. BASIC ITEMS NOT INCLUDED

1. Supply of any appurtenances or covers not specified herein.
2. Extra labor and materials required if the tank dimensions or conditions are different than specified.
3. Modification, if required, to avoid interference with any walkways, handrail, piping or other equipment.
4. Sales tax, building permits, P&P, bonds, or any other than specified herein.
5. Warranty for buyout items (non-CST manufacture) such as louvers, vents, fans, motors, etc. are the responsibility of the manufacturer of the specific item and not included in CST warranty agreement.
6. Protection of basin / tank floor and/or interior surfaces.



7. Covers over any other sections not listed herein.
8. Epoxied anchors for new concrete walls.
9. S.S ledger angles.
10. Union labor.
11. Any exterior walkways and/or handrails shall be supplied by others.
12. Any proprietary items to another cover MFG within the specs.
13. NEEB testing, CST will submit a previous 3rd party leak test that meets and/or exceed the requirements listed with the spec [upon request]
14. Programable Logic Controller Software shall be supplied by others
15. Architectural mills finish, as specified in the NAAMM manual;
16. Sloped covers from the center out. Covers can be slightly sloped to one side to allow drainage towards the perimeter but will not be higher at the center.
17. Panel load or leak test of any kind.
18. Davit crane supports.
19. Slice gate covers.
20. MBR basins being required to support the wet cassette weight.

G. TOTAL LUMP SUM PRICE

Delivered Materials Only:	\$ 74,500
CST Install:	\$ N/A
Lump Sum Total:	\$ 74,500

H. DESIGN CONSIDERATIONS:

1. Cover Design based on ASCE 7-16, and CST previous project 219206 / USP001271
2. **NOTE:** Some codes & standards reduce load criteria within the calculations for certain scenarios. For CST to design per the requested and/or required codes and standards, reductions (when applicable) must be considered. It is the specifying engineer's responsibility to notify CST of any code or standard reductions not to be considered prior to placing the order. Otherwise, CST will calculate as per the requested code(s) and standard(s) and the customer will accept CST's interpretation of the specified standard or code. Code changes or changes due to interpretation post order will result in a charged change order and/or potential delays.

I. VALIDITY:

1. This proposal is offered for your acceptance not later than 35 days after bid opening.
2. The prices quoted are based on the current material costs of metals. Due to the current unprecedented volatility in the metals market, we reserve the right to review pricing for orders received and adjust our price accordingly.
3. Pricing is based upon the expectation that CST will be able to complete its scope of work by 12/2024. In the event that others delay or change the project schedule, CST reserves the right to adjust the contract price.



J. TERMS OF PAYMENT:

See "CST Industries Terms and Conditions of Sale for CST Industries Product Lines" included with this proposal.

- 30% Down Payment upon placement of order by buyer, Due on Receipt.
- 30% Upon completion and approval of engineered drawings, Net 30.
- 40% Upon completion of fabrication and ready to ship, Net 30.
- No Retainage Allowed

K. SHIPPING INFORMATION:

The point of origin is Conroe, Texas.

FOB: Highland, CA

Freight quote based on the current costs of shipment. Due to the current unprecedented volatility in gas and freight charges, CST reserves the right to review pricing at the time of shipment and adjust the freight price. Estimated freight is pre-paid and add and includes a 9% processing fee.

L. SCHEDULE: (Subject to work load at time of order.)

Submittal drawing preparation, material delivery and installation as mutually agreed after CST has reviewed the customer's proposed CPM schedule for the project. (Note: Delivery is contingent upon availability of materials at the time of order)

PRELIM SCHEDULE:

- Submittal Package: 4-6 weeks AFTER the PO has been executed.
- Manufacturing: 12-14 weeks AFTER the order has been released for Fabrication.

M. WARRANTY

See "CST Industries Limited Warranty" included with this proposal.

Respectfully submitted by,

Edgar Saenz,
CST Industries, Inc.
Account Executive – Water/Wastewater
Email: esaenz@cstindustries.com



CST Industries Terms and Conditions of Sale for CST Industries Product Lines

- 1) **Offer and Price Increases.** This offer shall constitute an offer to sell goods described herein by CST Industries (Seller). This offer shall be construed as inviting acceptance by Buyer as prescribed by applicable law. If Seller's material increases and/or economic conditions impact price prior to delivery of goods, Seller may increase the price of the goods. Prior to doing so, Seller shall give Buyer ten (10) days written notice of any proposed increase. If, however, within ten (10) days of receipt of Seller's notice of the proposed increase, Buyer notifies Seller in writing that it will not accept the proposed increase, Seller will have the right to cancel this Offer by written notice to Buyer within ten (10) days after receipt by Seller of Buyer's notice. Stenographic and clerical errors are subject to correction by Seller.
- 2) **Acceptance.** The terms and conditions of this Offer will apply and become a part of the contract between Seller and Buyer unless specifically changed in writing and signed by an executive officer of Seller. Upon acceptance, the terms and conditions of this Offer shall in all cases, without exception, control and take precedence over any terms and conditions in Buyer's acceptance. Any conflicting terms and conditions in any purchase order, acknowledgement or other document utilized by Buyer in this transaction, are expressly rejected and the terms of this offer will prevail.
- 3) **Delivery.** Unless otherwise agreed to in writing, the price and delivery of all goods, are FOB Seller's factory. Title to the goods shall pass to Buyer once Seller has completed its performance with reference to the physical delivery of the goods, subject to any security interest in favor of Seller, if applicable (see Section 12); except where Buyer requests a delay in shipment or where the goods are held at Seller's factory later than the agreed upon ship date, in which case the title will pass to the Buyer, at Seller's sole discretion, when the goods are ready for shipment. If the goods are held at Seller's factory later than the agreed upon ship date, then Buyer shall pay Seller's standard storage charges (see Section 8) for the period from the scheduled shipment date to the actual date of shipment. Such storage charges shall include insurance coverage for the buyer's stored product. The processing of freight claims or loss claims is the responsibility of Buyer.
- 4) **Scheduling of Goods.** Seller utilizes the same process for all orders. Receipt and execution of order from Seller, drafting and engineering, submission of engineered drawings for approval, release to manufacture. Orders can only be released to manufacture if engineered drawings have been approved by Buyer and all changes have been reconciled. Once an order has been released to manufacture it will progress through Seller's production schedules. A "Planned" schedule date is given out at the time the sales order is entered and reflects the current engineering, drafting, procurement, and fab lead times plus 2-3 weeks for customer to turn around approval drawings. Projects move to a "Soft" schedule status when the customer returns approved engineering drawings and drafting provides a committed date to have fab drawings and Bills of Material to the shop. Projects move to a "Hard" schedule status when the shop has received completed fab drawings and bills of material from drafting, and has a commitment from vendors on material availability. Until a project is hard scheduled, any shipment estimate is subject to the availability of products from vendors. In the event of a production shortage, Seller shall have the right to allocate its available goods among its customers in such a manner as Seller shall desire.
- 5) **Seller's Limited Warranty.** See attached Limited Warranty (Tanks and Covers), Document # 283970-000.
- 6) **Method of Shipment and Freight Charges.** Freight will be charged prepaid and add unless otherwise mutually agreed to in writing and are due upon receipt. Orders specifically including freight, handling or other logistics charges are based on Seller's rates in effect on date of acceptance of this Offer and on the routing of shipment arranged by Seller. Seller will ship goods in accordance with Buyer's routing whenever such routing will not result in an increase in freight or other transportation charges. In the event of such increases, the payment of any additional freight or other transportation charges is guaranteed by Buyer to Seller's satisfaction. The goods shall be packaged for shipment at the lowest acceptable rate by common or other carrier, or any other method deemed necessary or advisable by Seller. Marking shall be in accordance with ordinary commercial practice at place of shipment, unless otherwise designated by Buyer and accepted by Seller.
- 7) **Force Majeure.** Shipping and delivery dates are approximate and are based upon Seller's ability to obtain all necessary labor, materials, parts and, where applicable, the receipt of all necessary information, plans or specifications from Buyer. Seller shall not be liable for damages resulting from any delay or failure to deliver the goods, or otherwise perform under this Offer, due to circumstances beyond its control and not occasioned by its fault or negligence, including but not being limited to, any act of government, inability to obtain materials, failure of vendors, strikes, labor disputes, civil commotion, acts of God, or other occurrences rendering Seller's performance commercially impracticable, regardless of whether such occurrences are foreseeable.
- 8) **Invoice & Hold – Storage Fees.** Buyer will be invoiced immediately and accept responsibility for payment and any



applicable storage fees.

- 9) Storage – Two (2) weeks “grace period” from agreed upon ship date – no charge. A charge of \$ 500 per tank/cover per week will be assessed for weeks 3-5. A charge of \$ 1,000 per tank/cover per week will be assessed for weeks 6-8. The maximum storage period is eight (8) weeks. Arrangements must be made for shipments so that the maximum storage period is not exceeded.
- 10) Terms of Payment. Subject to satisfactory credit approval, as set forth in paragraph 10, the following terms apply:
30% Down Payment upon placement of order by buyer, Due on Receipt
30% Upon completion and approval of engineered drawings, Net 30
40% Upon completion of fabrication and ready to ship, Net 30.
 - Installation labor will be billed bi-weekly based on percentage of completion.
 - Down payment secures your position in the order of the process and allows CST to allocate engineering and company resources to advance your order. Down payment is not used to secure price or material.
 - Pricing and payment terms make no allowance for setoff, bonding, or retainage.
 - A late charge of 2.5% per month will be charged on invoices not paid at maturity.
 - Invoice date of submittal determines the due date for payment, regardless of acceptance by Buyer’s payment portal.
- 11) Credit Approval. This Offer is subject to (a) execution by Buyer of such additional contract documents, security agreements, notes or other instruments as Seller shall deem necessary or desirable and (b) Seller’s review and acceptance of the financial condition of Buyer. If the financial condition of Buyer at any time does not in the sole judgment of Seller, justify continuance of shipment under the terms of this Offer, Seller reserves the right to ship under reservation, or to require full payment before shipment, delivery or erection. Additionally, Seller may at its discretion file such notices for financial protection under the lien or bond statutes of each state.
- 12) Duty Drawback. The manufacturer reserves all drawback rights for materials it produces and sells to Buyer. If Buyer exports the product which Seller manufactures, it is agreed that evidence of exportation shall be supplied to Seller to facilitate its claim of drawback upon request and without charge to Seller.
- 13) Security Interest. To secure payment for goods, Buyer grants to Seller a security interest in the goods and agrees that Seller shall have the rights and remedies of a secured party under the Uniform Commercial Code. Buyer designates Seller as its attorney-in-fact to execute any financing statements on behalf of Buyer necessary to perfect such security interest.
- 14) Taxes. Seller’s prices do not include sales, excise or similar taxes levied by government authority, either foreign or domestic. Consequently, in addition to the prices specified herein, the amount of any present or future sales, use, excise or other similar tax applicable to this transaction, shall be paid by Buyer as part of this sale, or in lieu thereof, Buyer shall provide Seller with a valid tax exemption certificate acceptable to taxing authorities of the Shipped-To state. On any material picked up by Buyer at the plant, the tax jurisdiction of the FOB state is applicable.
- 15) Additional Work and Inspection. No extra labor, materials or parts will be furnished under this Offer, unless it has been ordered by Buyer on Seller’s sales order form, and the prices and terms of sales are approved by Seller. Seller may at its option subcontract labor, material and parts required by this Offer without Buyer’s consent. The goods shall be, at Seller’s option, subject to inspection and testing during manufacture. Any inspection by Buyer shall be made prior to shipment at Seller’s factory or point of shipment. Unless otherwise agreed to, Seller shall not be responsible for unpacking, storage, field assembly of goods, or construction of foundations. Furthermore, Seller shall not be responsible for the choice of use or linings, sealants, and gasket materials not sold hereunder; or the installation, attachment, or connection of piping, conveying and ventilating equipment, or other attachment of accessories or components not sold hereunder.
- 16) Infringement. Seller, at its own expense, shall defend the Buyer against any claims which may be instituted against the Buyer alleging infringement of United States Patents relating to the subject matter of the accompanying sales proposal, provided the Buyer gives Seller immediate notice in writing of any such alleged patent infringement claim and permits Seller, through its own counsel, to defend such claim. In such cases, Buyer shall furnish Seller with all needed information and assistance. The obligations of Seller hereunder shall not extend to any infringement claims arising as a result of the use of the equipment as part of any combination of other devices, machinery or parts.
- 17) Cancellation, etc. Buyer’s cancellation of any order is required to be in writing delivered to the Seller’s Project Manager, and Buyer is subject to pay a cancellation fee equal to 25% of the total purchase price plus all non-recoverable costs and expenses.
- 18) Change Control. The scope of work described in this proposal will be executed on a fixed price basis. Any change to the project scope that would impact pricing must be agreed to by both parties and approved in writing on a form provided by



Seller. Either party may request a change. CST has built sufficient time into this project to account for the impact of reasonable timelines that are present at the beginning of any engagement. Nevertheless, the parties agree that legitimate issues outside of Seller's control could arise during the project that would have an impact on the effort and/or time required to complete the project. Examples include, but are not limited to: Any change in project objectives or scope, deviations from the functionality used to determine scope, discovery of a requirement or issue that was not disclosed by Buyer or that could not have been reasonably anticipated by either party, failure by the Buyer to respond in a timely manner to requests by Seller for information, direction or decision. It is the Seller's responsibility to notify Buyer if a situation arises that it believes justifies a pricing or schedule change, and to provide associated rationale. Both parties agree to negotiate any disagreements in good faith. Work on any change will not begin until a change request has been agreed to and approved in writing by both parties.

- 19) Law. The rights and obligations of the parties shall be governed by the domestic laws of the State of Missouri without regard to its conflict of law rules or the United Nations Convention for the International Sale of Goods.
- 20) Arbitration. Any dispute, controversy or claim arising under this agreement shall be settled by arbitration in Kansas City, Missouri, pursuant to the American Arbitration Association rules.
- 21) Entire Agreement. This Offer contains the entire agreement between Seller and Buyer, and no modification of this Offer shall be binding upon Seller unless evidenced by an agreement in writing signed by an executive officer of Seller after the date hereof. No oral or written statements by Seller's sales representatives, or other agents, made after the date hereof shall modify or vary the express terms hereof unless evidenced by an agreement in writing signed by an executive officer of Seller after the date hereof. To the extent any advertising or promotional material of Seller contradicts or disagrees with the terms hereof, Seller and Buyer agree that the terms hereof shall control and that such advertising and/or promotional materials are not part of the agreement between Seller and Buyer.
- 22) Confidentiality of Proposal. All terms and conditions of this Offer shall be held in strict confidentiality by the Buyer and shall not be divulged by the Buyer to any other person or entity without the express prior written approval of the Seller.

Par0354

03/24/23



LIMITED WARRANTY (Tanks & Covers)

All of the following provisions on this page constitute CST Industries, Inc.'s LIMITED WARRANTY for its products, all of which are part of the terms and conditions of sale.

LIMITED WARRANTY: CST warrants to the original buyer that our products will be free from defects in material and workmanship under normal conditions and use for a period of 12 months from the date of installation or 14 months from the date of shipment, whichever is earlier. This warranty may not be transferred or assigned to any other person or entity other than the original owner of the Project if different from the Buyer. This warranty does not contemplate any future performance by us. This Warranty is contingent upon and will be invalidated by our failure to receive full and timely payment of all invoices relating to the Project.

EXCLUSIONS: This Warranty does not cover products or materials that are not manufactured or sold by us. This warranty does not cover products that have been altered or repaired by anyone other than us without our written consent.

This Warranty excludes damage to or the failure of our products or systems as a result of:

- 1) Material defects or failures of products not manufactured by us.
- 2) Fire, flood, high winds, earthquake, lightning strikes, or other catastrophic events or other Acts of God.
- 3) Vandalism, physical abuse, misuse, neglect, accident, or other physical damage to the products or systems.
- 4) Exposure to chemicals or other substances, materials, or temperatures that are not anticipated.
- 5) Physical damage to the integrity of the products including but not limited to, penetrations, crushing, breaking, or other destruction.
- 6) Any change in use of the products or the project not expressly acknowledged and agreed to by us, including without limitation, the storage of materials with different composition, maximum bulk densities or flow characteristics, or a change in the process.
- 7) Structural design and operating performance issues, problems, or consequences attributable in whole or in part to the correctness of design and operating parameters provided by Buyer or the correctness of interfacing work, material or services provided by Buyer (such as foundations or attached process or control equipment); and
- 8) Any failure to handle, store, transport, install, maintain, or operate our products in accordance with our instructions, applicable building codes, and standard industry practices. This includes, but is not limited to, proper operation and maintenance, filling and emptying. Ventilation and pressure/vacuum relief devices must be maintained by Buyer to assure that design pressures and vacuums are not exceeded. Grouting, if required, must be installed and properly maintained by Buyer. Tanks, covers, lining/coatings, cover structure or sheeting/panels, sealers and gaskets, etc. must be maintained by Buyer as necessary to protect against damage, wear and corrosion. Buyer must perform tank and cover inspections in accordance with Seller's guidelines and provide written inspection reports to Seller within two (2) months of each required maintenance period. All evidence of tank, cover, or tank lining damage, both internal and external, is to be repaired by Buyer using repair methods specified by Seller.

REMEDY: Your sole and exclusive remedy is limited to our providing you a replacement product or part, repairing the defective product or part, or paying you the prorated value of the defective product or part, at our sole discretion. We will not pay for the labor or other costs to remove or replace the defective product or part, including labor or other costs to remove the contents and/or clean a structure or obtain access to the defective product or part, or freight for shipment of the defective product or part. There may be certain circumstances where we will elect to repair the condition rather than provide you a replacement product or part, as an alternative remedy. In addition, there may be other circumstances that we elect to pay you the prorated value of the defective product or part based on the time remaining on the warranty, as an alternative remedy. This Warranty shall not have failed its essential purpose as long as we are willing to provide comparable replacement product or part or elect one of the alternative remedies.

LIMITATION OF LIABILITY: THE WARRANTY DESCRIBED ABOVE IS THE ONLY WARRANTY MADE BY US AND SHALL BE IN LIEU OF ANY OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. WE SHALL NOT BE LIABLE FOR ANY OTHER DAMAGE OF ANY KIND, INCLUDING BUT NOT LIMITED TO, LOSS OF REVENUES OR PROFITS, LOST SALES, LOSS OF CONTENTS, LOSS OF USE, ANY INABILITY OF BUYER TO PROVIDE PRODUCT OR SERVICES TO A CUSTOMER, INJURY TO PERSON OR PROPERTY (INCLUDING DAMAGE TO THE BUILDING OR ITS CONTENTS AS A RESULT OF FIRE, EXPLOSION OR OTHERWISE), ENVIRONMENTAL INJURIES, OR ANY OTHER INCIDENTAL OR CONSEQUENTIAL LOSS OR DAMAGE. THE TOTAL LIABILITY OF SELLER TO BUYER IN CONTRACT, TORT (INCLUDING FAULT,



NEGLIGENCE OR STRICT LIABILITY) OR OTHERWISE RESULTING FROM OR ARISING OUT OF ANY CAUSE WHATSOEVER IN CONNECTION WITH THIS SALE SHALL UNDER NO CIRCUMSTANCES EXCEED THE EX-WORKS

MATERIAL AMOUNTS ACTUALLY PAID TO US. This limitation of liability shall apply to any claim against us to the fullest extent permitted by law, including without limitation any claim of breach of contract, negligence, misrepresentation, nondisclosure, breach of any duty of good faith and fair dealing, violation of any consumer protection statute, or any tort claims.

CLAIM PROCESS: To make a claim under this Warranty you must follow the claims process set forth in the Warranty Online service, which is available at partsonline.cstindustries.com. CST must be notified of all warrantable conditions within ninety (90) days of discovery.

For reimbursement, all claims must be filed within forty-five (45) days after you discover the problem. Any action brought by you arising out of or in connection with breach of this Limited Warranty shall be commenced within ninety (90) days after the expiration of the Warranty. Once a claim has been made, we have the right to perform an on-site inspection of our products.

AERZEN USA CORPORATION
 108 Independence Way
 Coatesville, PA 19320
 Tel. (610) 380-0244 " Fax. (610) 380-0278



AERZEN Reference Number: ENV-520081
 Re: East Valley Water District - Sterling NRC

4-Jun-24

Page 1 of 2

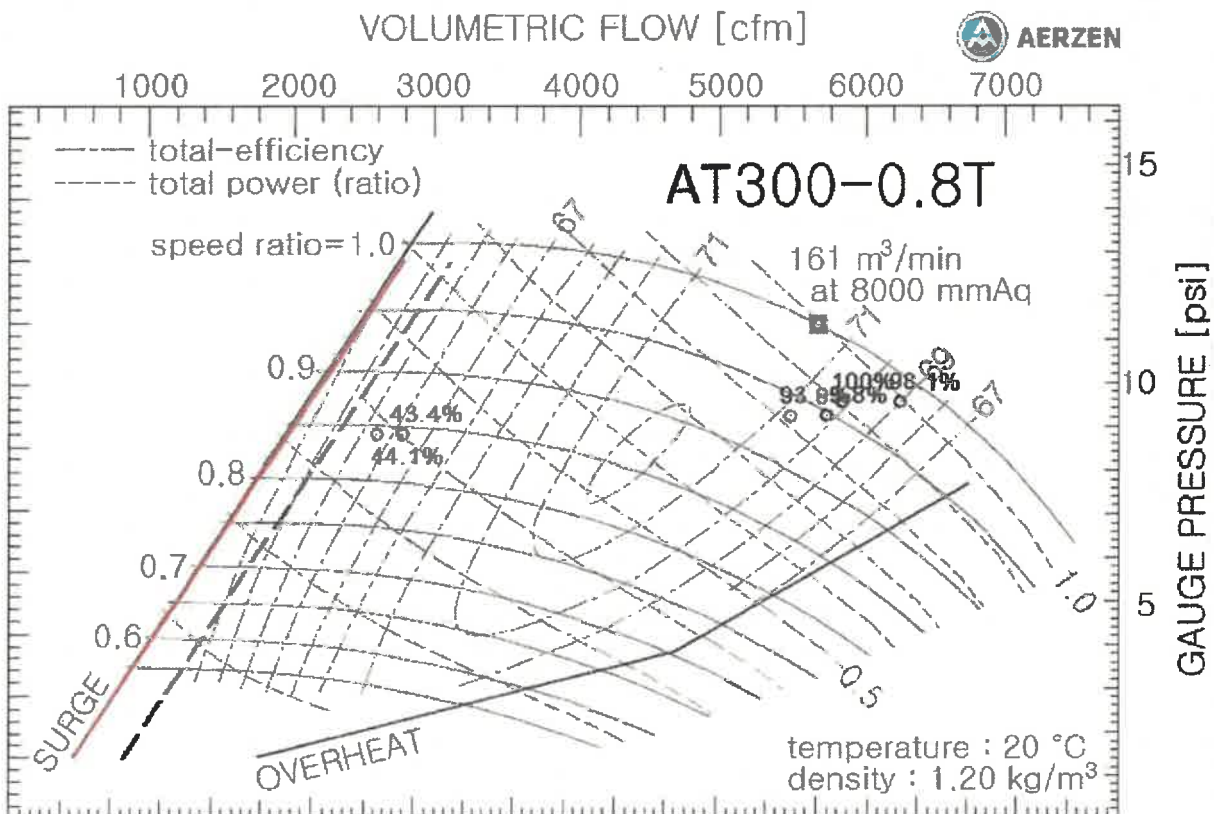
Additional Turbo Blower

Performance Data (Per Blower):

Volume, handled at intake condition
 Volume handled at normal condition
 Relative humidity
 Intake pressure (abs.)
 Pressure difference
 Intake temperature
 Discharge temperature
 Rotor speed
 Power consumption at shaft
 Unit Power
 Tolerance on flow
 Tolerance on power
 motor rating
 Sound pressure level w/ enclosure
 measured in free field at 3ft. distance from

AT 300-0.8T G5

	Point 1	Point 2	Point 3	Point 4	Point 5
icfm	5740	5318	6417	2835	5670
scfm	5300	5300	5545	2450	5650
%	70	50	80	80	50
psia	14.13	14.13	14.13	14.13	14.13
psig	8.9	8.9	9.2	8.5	9.2
°F	80	50	100	100	50
°F	185	147	214	210	151
rpm	30520	29872	31928	27254	30597
BHP	246	225	288	124	248
kW	204.6	186.8	239.8	103.1	206.3
± 5%					
± 5%					
Hp	300				
dB(A)	80				



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4-Jun-24

Page 2 of 2

To Moises Ontiveros Firm - Balfour Beatty Infrastructure, inc. e-mail - MoisesOntiveros@balfourbeattyus.com phone - 909-361-7915
AERZEN Representative Info: Name - Matt Rebmann of Coombs-Hopkins e-mail - matt@chcwater.com phone - (760) 931-0555

AERZEN Proposal Prepared By: Name - Tom McCurdy e-mail - tom.mccurdy@aerzen.com phone - (610) 656-1683
AERZEN Regional Manager: Name - Tom McCurdy e-mail - tom.mccurdy@aerzen.com phone - (610) 656-1683

Additional Turbo Blower

AT 300-0.8T G5

Aerzen High Speed Centrifugal Blower Package consisting of the following components:

- Twin impeller turbo blower
- Integrated air filter panel for room intake
- Bump air foil bearings
- High speed PM motor
- Inverter
- Sound Enclosure
- PM motor cooling system
- Blow Off Valve
- Internal BOV sound silencer
- Integrated Enclosure Air Filtration system
- CPU
- LCP (MICOM control, Touch Screen)
- Protocol Converter, Ethernet I/P
- Set of necessary sensors (temp and pressure)
- 16 INCH Bellows style flexible joint, discharge

Scope of Supply

- (1) Compact blower package(s) as listed above
- (1) Nema 3R enclosed passive harmonic filter(s) (ships loose to be installed by others)
- (1) 16 INCH check valve(s) (ships loose to be installed by others)
- (1) 16 INCH discharge isolation valve(s) (ships loose to be installed by others)
- (1) 16 INCH discharge silencer(s) (ships loose to be installed by others)
- (1) Blower Anchor Bolt Set(s)

Spare Parts

- (1) Set(s) of spare filter elements

Mfg Services

- 2 day(s) mfg onsite services for inspection & startup allotted in (1) separate trip(s) for blower services (addl days \$1,800/day)
- 1 day(s) mfg onsite training allotted in (1) separate trip(s) for blower services (addl days \$1,800/day)
- Master Control Panel programming changes for the addition and integration of turbo blower #4
- PE stamped seismic calculations
- Factory Testing of (1) Turbo Blower unit (PTC13 wire-to-air)

Freight and Packaging

- Freight to jobsite
- Domestic packaging

TOTAL for(ONE) \$285,190 (Breakdown: \$243,517 equipment, \$18,873 tax (7.75%), \$11,500 freight, \$11,300 Service

C/O: Matt Rebmann of Coombs-Hopkins(760) 931-0555

Freight: CIP - Job site

Terms: This offer is subject to Aerzen Standard Terms and Conditions (AMUSA.08.22.001)

Submittals: 4 weeks after receipt of Purchase Order

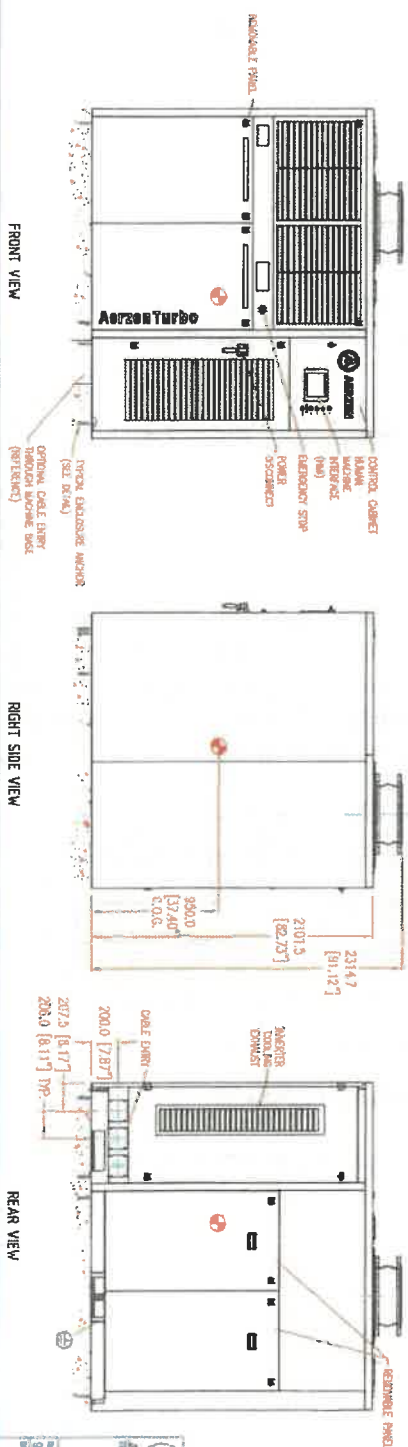
Payment: 20% upon drawings documentation, 70% upon delivery and 10% upon startup not to exceed 120 day from delivery

Delivery: presently approx. 26 weeks upon technical release by customer

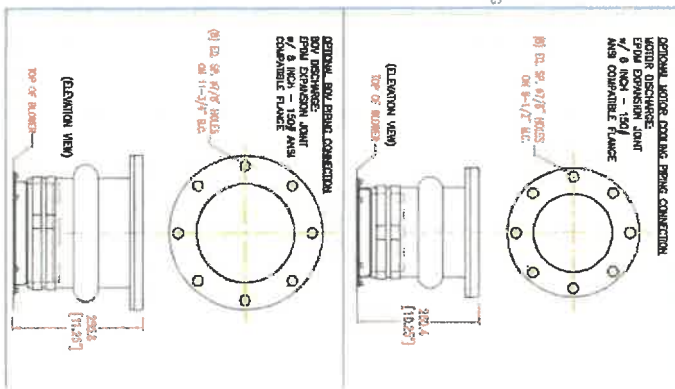
Warranty: 24 months after start up or 30 months after delivery, which ever comes first*

*Maintenance must be performed per the Instruction Manual using Aerzen spare parts.

*Equipment not manufactured by Aerzen will carry the manufacturer's standard warranty



- TYPICAL SOUND ENCLOSED AIRBORING
 RESONANCE OR OTHER CONDITIONS MAY REQUIRE ALTERNATE ANCHOR
 SHOWN WITH U2B6 #18 12/75
 METZEN P/N 2000035512
-
- 90
 3.6
 12
 0.5



NOTICE:
THIS DRAWING AND ALL INFORMATION HEREON IS THE PROPERTY OF HEZEN USA INC. AND ITS SUBSIDIARIES AND SHALL NOT BE REPRODUCED BY ANY MEANS IN WHOLE OR IN PART OR USED AS THE BASIS FOR MANUFACTURE WITHOUT WRITTEN PERMISSION.

CLASS 1

AERZEN USA CORP.
108 Independence Way, KATY, TX 75132
(810) 360-0214 (F) (810) 360-0278 (EX)

SIZE		STRAIN RC		TENSILE ST		Y.P. APPROX.		SCALE		SHEET	
9/16/2020		JPS		DET				SHEET		1/1	
GB-008077-300-0.8											



Ask about [RebarZero](#)® – the only true net-zero steel product



BID PROPOSAL FORM
Contractor's License # 778010
DIR #100000298

ESTIMATE #: ESO24277

BID DATE: 05/021/2024

BID TIME: 02:00PM

TO: Balfour Beatty

ATTN: Nathan Rom

EMAIL: nrom@balfourbeatty.com

PHONE: 909.915.4660

PROJECT NAME: Sterling National Resource Center

PROJECT LOCATION: Highland, CA

CMC Steel Fabricators, Inc. dba CMC Rebar Seller-Supplier is pleased to submit the following offer/agreement for the above referenced project. Performance of this Bid/Offer shall be governed by and in compliance with the **Concrete Reinforcing Steel Institute Manual of Standard Practices**. This offer represents the full scope and intent on the part of this Seller-Supplier to provide services and materials to Contractor. This bid submitted is subject to and expressly conditioned upon all the terms and conditions set forth below. **WE ARE A UNION CONTRACTOR.**

SCOPE OF WORK / PRICE

Bid Item:	UOM	Total Price
01-Base Bid Reinforcing	LS	\$ 29,856
01-Base Bid / FOB Drill & Grout	LS	\$ 3,053
Grand Total	LBS	\$ 32,909
Bid Cost (Rate = .315%)		\$ 104

Reinforcing Steel Quoted Conforms to the Requirements of the Inflation Reduction Act

PRICES ABOVE ARE ONLY GUARANTEED THROUGH THE START & FINISH DATES AS INDICATED IN THE SCHEDULE BELOW

Special Notes:

1. All reinforcing to be delivered on 1 load only, estimated weight 25,562 LBS.

CONSTRUCTION SCHEDULE

1. The above pricing is based on the following concrete construction schedule:
Start = Assumed 8-24
Finish = Assumed 12-24
2. Prices, as quoted, will remain firm for fifteen (15) calendar days, after which time Subcontractor reserves the right to revise this quotation. Written notification within fifteen (15) calendar days is required to guarantee pricing for the durations noted above.
3. If awarded, prices will be held to construction schedule finish date listed above. After that date, \$50 / ton per quarter may be added for any remaining scope.

5425 Industrial Parkway | San Bernardino, CA 92407 | cmc.com

Tel: (909) 803-1500 | Fax: (909) 899-9799

License # 778010 | DIR # 100000298



PLANS AND SPECIFICATIONS:

Architect/Engineer: East Valley Water District
Specifications: General notes
Plans/Drawings: Sheets 1-14
Dated: 3/29/2019
Addendum:

SCOPE OF WORK INCLUSIONS:

FURNISHED & INSTALLED

1. Deformed reinforcing bars for C.I.P. concrete

FURNISHED F.O.B. TRUCKS JOBSITE

1. Drill & grouted dowels

GENERAL CLARIFICATIONS:

1. Prices include applicable State and Local Sales Tax. 8.75%
2. Prices / Bid items quoted are not for separate acceptance without prior approval from Subcontractor.
3. Subcontractor's price is based on detailing, fabricating, shipping, and placing on a normal five (5) day, forty (40) hour work week (all Union contract and nationally recognized holidays are observed). Night and/or shift work is not included. All work performed outside of such hours shall be charged at Subcontractor's standard rates for overtime, weekend, night, or holiday work.
4. **Subcontractor's price is based on Contractor furnishing all design information, location of construction joints and lift plans in sufficient time to allow for preparation and approval of submittals (if they are required), plus seven (7) working days for fabrication and delivery.** Performance will be based on conventional construction and the timely receipt of two (2) complete printed sets of plans, specifications and CADD files (if available). Additional lead time will be required for special mill rolling (including but not limited to #14, #18, A706, Grade 80 & Grade 100 reinforcing steel bars), spirals, threaded bars, welded hoops, epoxy coating, galvanizing, special mesh, mechanical connections, T-Headed anchors, etc. A Letter of Intent and/or a Subcontract authorizing procurement of these long lead / mill order items must be received in a timely manner. Delays of more than forty-five (45) days may result in additional cost of materials.
5. Subcontractor's price includes additional labor time for a Foreman to attend standard weekly scheduling meetings and for all onsite employees to attend daily safety tail-gate meetings. It does not include any additional labor time for any type of special safety, coordination, and/or instructional training meetings unless specifically included in the Special Notes section.
6. The Contract and/or Change Order unit prices (if reflected herein) is (are) based on receipt of information or scope of work changes, prior to detailing, fabrication, shipment and/or placement of material.
7. "Black" A615/A706 grade 60 reinforcing steel bars to be furnished and installed, as noted herein, for the bid items listed above only, unless noted otherwise.

HOISTING/LOWERING NOTES:



Contractor shall furnish, without charge, suitable equipment fully operated for hoisting/lowering reinforcing steel, accessories, etc., including unloading trucks, staging of reinforcing to points of installation (into foundations and onto elevated decks, etc.) setting wall cages and/or any other pre-tied assemblies and including any power placing of individual bars that Subcontractor may require.

SCOPE OF WORK EXCLUSIONS:

(Unless included in Scope of Work Above - Furnishing and/or installing)

1. All testing, inspection, X-ray and/or any related costs thereof other than mill test reports. (Rebar test bar samples to be provided F.O.B. trucks jobsite if required).
2. As-Built Drawings / Building Information Modeling / Record Drawings / Coordination Drawings (Rebar Placement Drawings will be provided as submittals in lieu of).
3. Threaded bars, rods, sleeves, dowel baskets, anchors (DBA's & misc.), bolts (anchor & misc.), embeds and inserts.
4. Plain (smooth) round bars.
5. Stud rails, shear studs, similar.
6. Wrapping, coating, sheathing/sleeves (Rubitex, plastic and/or cardboard), painting, and/or greasing of reinforcing steel, smooth round and/or wire mesh.
7. Supplying, installing, and/or maintaining any form of rebar cap or safety device on installed reinforcing steel, any bars to be "field" bent and/or any reinforcing steel on the ground/stored. (Per latest OSHA Standards).
8. Cost of pour watchman, unless from crews already working on site.
9. All permits (except hauling) and licenses, other than city/county business licenses and State Contractor's license, required for the work.
10. Cost of Payment and Performance Bonds.
11. Any or all reinforcing steel, and/or wire mesh not shown on drawings unless specifically included in Scope of Work/Price.
12. Rebar placing drawings prepared, reviewed, signed, sealed, or stamped by a licensed engineer.
13. Quality control manager, inspector, and a quality control plan. (Contractor to provide these services.)
14. Costs for relocation of materials for the convenience of others after materials are unloaded at Contractor designated areas.
15. Composite clean-up crews.
16. The cost of reworking, rehabilitating and/or replacing reinforcing steel damaged or lost as a result of flood conditions. If storm damage should occur, responsibility for steel fully or partially in place, and for steel stored in locations designated by Contractor, shall be for Contractor's account.
17. Traffic control (Lane closures, barricades, signs, lights, etc.). (A flagman for our deliveries only is included.)
18. Splices in reinforcing bars and/or construction joint dowels for Contractor's convenience shall be for Contractor's account. Also splices required due to low overhead, power lines and/or deficiencies in hoisting equipment unless specifically shown on contract drawings at that particular location, shall be for Contractor's account.
19. Any reinforcing referred to as "Spec. Steel", "Allowance" and/or "As directed by Engineer" other than by additive quote. Accessories, wire mesh and/or mechanical couplers will not be included in this type of additive quote. If Change Orders are to be applied against "Spec. Steel" allowances, then the dollar value and NOT the weight of the Change Order will be applied.
20. Exposing, cutting, burning, cleaning, straightening and/or bending of existing steel, previously poured steel and/or improperly placed drill and grout/bond dowels.
21. Drilling, coring, grouting, dry packing, and the placing of bars into and/or through any drilled and/or precast holes. Extensive coordination between the Contractor responsible for drilling and grouting the reinforcing steel



- dowels and this Subcontractor must take place prior to installation and grouting of these items to ensure our ability to install remainder of reinforcing steel for that element
22. Furnishing and/or welding of dowels/anchors to miscellaneous steel and/or structural steel.
 23. All welding.
 24. Breakout dowels, Form Savers, etc. and/or installation of same.
 25. Masonry Steel, other than deformed rebar. (Dura-Wall, ladders, positioners, hangers, etc.)
 26. Reinforcing for precast concrete items. (Cast off site.)
 27. Providing and/or laying out holes in structural steel for reinforcing bars to pass.
 28. Stainless Steel / Epoxy Coated / Galvanized deformed and/or plain bars and/or wire mesh.
 29. Field bending of rebar other than by additive quote.
 30. Added reinforcing in precast work for lifting stresses or pick-up devices.
 31. All site work, including but not limited to paving, sidewalks, site walls (CMU or C.I.P.), light pole bases and all storm drain items such as curb and gutter, catch basins, clean-outs, inlets, outlets, manholes, headwalls, collars, etc. unless specifically included in Scope of Work/Price.
 32. Any "offsite" work.
 33. Reinforcing in metal stair pan treads and landings.
 34. Protection of exposed steel for future construction.
 35. Mock-up and/or test panel reinforcing steel.
 36. Cleaning of marks left on forms that transferred to the concrete.
 37. Electrical duct bank encasement reinforcing.
 38. Reinforcing steel and/or additional labor required due to any type of shoring system. (Tiebacks, rakers, etc.)
 39. Reinforcing in topping / insulating slabs (i.e., key deck mesh, etc.).
 40. Prestressing and/or prestressing materials. (Including but not limited to any additional reinforcing steel required by any prestressing/post tensioning system).
 41. Parking costs for Field Crews
 42. Overtime and Shift Premium Costs.
 43. Lines, Grades, Layout of Concrete and Masonry Elements, and Supporting Rebar Templates.
 44. Dust control, track out and tire wash costs.

CONTRACTOR TO PROVIDE:

The following items are to be provided by Contractor, fully erected for use at all locations necessary without charge:

1. Accurate & level grades / elevations.
2. Proper layout lines for all concrete elements such as footings, slabs, walls, columns, openings, depressions, masonry wall dowels, etc. Subcontractor will layout its own reinforcing steel from the contractor provided lines.
3. Templates/starter walls constructed with sufficient accuracy to support any vertical reinforcing steel and/or dowels within placing tolerances specified by Owner. Templates/Starter walls shall not be double formed before reinforcing steel is installed unless prior approval has been granted.
4. Full access to all working areas via ramps, ladders, etc. for material, equipment and manpower & level space for delivery, assembly, and storage of steel, accessible to tractor-semi-trailer deliveries and adjacent to jobsite location where steel is to be installed and/or hoisted/lowered. Ramps for all work below grade and shall be maintained in place until all work below grade is complete. If above ramps are not provided, all cost for equivalent service shall be for Contractor's account.
5. Sufficient staging area for prefabricating cages at the jobsite.



6. Full access to all areas of the project for at least one (1) Subcontractor Foreman's truck to provide supplies and accessories as needed for the project.
7. Adequate working CAL/OSHA approved heavy duty scaffolding / platforms as required from which placing of reinforcing steel can be safely performed.
8. Adequate lighting, ventilation, electrical power, compressed air (90 PSI Min.), sanitary facilities & trash bins.
9. Open footings / trenches until after rebar is installed ("school forms" to be erected after rebar is installed).
10. Parking for all Subcontractor employees within three (3) standard blocks of the jobsite. If Contractor does not provide this parking, Contractor will pay extra to Subcontractor for all parking related costs including cost of vehicle parking fees, cost of shuttle services and travel time costs while Subcontractor employees are in transit unless specifically included in Scope of Work / Price or by additive quote.
11. Approved work drawings of the temporary support system for columns, wall cages and/or any assemblies regardless of height, which the bid documents, may require. Contractor shall furnish and maintain adequate bracing, rigging, cables and guys, set all dead men required to guy vertical reinforcing, and comply with the temporary system design. (Rigging includes but is not limited to chokers, shackles, spreader bars, etc.)
12. All supports in tunnels and shafts, which Subcontractor may require for supporting and placing steel.
13. All necessary field dimensions so that the material can be detailed correctly. Subcontractor shall not take any responsibility for any dimensions not shown on the drawings or those provided by others. These dimensions must be provided to Subcontractor a minimum of three (3) weeks prior to delivery and six (6) weeks if submittals and/or special materials are required.

Terms & Conditions

(The following provisions are a condition of Subcontractor's Bid Proposal)

Contractor's acceptance of all of the terms and conditions of this Bid/Offer shall be conclusively evidenced by Contractor listing Subcontractor, Contractor permitting/directing performance by Subcontractor, Contractor signing and returning this offer or if this offer is attached to and made a part of the subcontract agreement.

CMC Steel Fabricators, Inc. d/b/a CMC Rebar ("Subcontractor") may begin performance of the work, pending receipt of an executed final agreement. However, should a final mutually acceptable agreement not be forthcoming, or should the terms and conditions of Subcontractor's offer be altered or modified, Subcontractor reserves the right to immediately stop performance. Subcontractor shall be paid for such work and/or materials according to the terms and conditions of this proposal.

Contractor shall provide Subcontractor with copies of all contract documents that define and/or describe Subcontractor's work. Subcontractor shall only be bound by contract information received, as applicable to Subcontractor's work. Subcontractor shall have the benefit of all rights, remedies, and redress with regard to Contractor as Contractor has with regard to the Owner.

ORDER OF PRECEDENCE – The order of precedence in interpreting the agreement between Contractor and Subcontractor is 1) Addendum(s) to Subcontract; 2) Subcontract; 3) Prime Contract.

CREDIT – The final Subcontract and payment terms shall be subject to the approval of Subcontractor's credit department.

PROGRESS PAYMENTS – Contractor shall pay Subcontractor within 60 days of receipt of Subcontractor's invoice or 10 days of receipt of payment from Contractor's Customer, whichever occurs first.

CHANGE ORDERS – Subcontractor will submit Notice of Cost and/or Schedule Impact within 7 working days of receipt of notice of change. Change Order Proposals will be submitted within a reasonable time thereafter depending on magnitude of change. Subcontractor shall not waive its right to properly performed change order work conducted pursuant to the written direction of Contractor. If any completed change orders remain unapproved for more than 90 days from the date of submission by Subcontractor, Contractor will meet in person with Subcontractor to resolve the unapproved change order, and Contractor will arrange for the attendance of any other parties reasonably necessary to resolve the unapproved change order.

RETENTION – Contractor shall pay Subcontractor retention within 60 days of Contractor's final retention billing date or 10 days from receipt of retention from Contractor's Customer, whichever occurs first. Contractor shall not withhold more retention from Subcontractor than the amount withheld by Contractor's Customer. Contractor agrees to use its best efforts to reduce any retention



due Subcontractor upon substantial completion of Subcontractor's work; this includes arranging in-person meetings with Contractor's Customer and Owner.

F.O.B. – No retention shall be withheld on FOB and/or tied and stockpiled material. Payment shall be NET 30 days from Subcontractor's billing.

OWNER NEGOTIATIONS – In the event of any offer under a cost reduction incentive provision of the General Contract and/or change order negotiations, Contractor shall offer Subcontractor the right to participate fully in all negotiations relevant to Subcontractor's work. Contractor shall protect Subcontractor's interest and shall keep Subcontractor fully apprised of all offers, which may affect the value of Subcontractor's work.

NO WAIVERS – No provision of the subcontract shall serve to void Subcontractor's entitlement to payment for properly performed contract or change order work or to void Subcontractor's right to file a lien, stop notice and/or claim on its behalf.

SET-OFF – Neither party shall set-off beyond this subcontract.

TERMINATION – Contractor shall be liable to Subcontractor for damages, including lost profits, if Contractor either wrongfully terminates Subcontractor or terminates Subcontractor for convenience.

PROTECTION OF WORK – Subcontractor shall not be liable for repair of any damage to Subcontractor's work caused by others outside the control of Subcontractor, regardless of when such damage occurs.

WARRANTY – Subcontractor warrants the materials and workmanship of its work for a period of one year from substantial completion of such work, and EXCLUDES ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTIES OF MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE. Subcontractor's warranty does not extend to any work that has been misused, abused, modified, improperly or insufficiently maintained; to defects caused by normal wear and tear under normal usage or to any materials supplied but not manufactured by Subcontractor.

INDEMNIFICATION – Subcontractor shall only indemnify, hold harmless, and defend Contractor and Contractor's Customer against all claims for bodily injury, death, and/or property damage (as defined by Commercial General Liability policy – standard ISO Form CG 00 01) to the extent attributable to the negligent acts or omissions of Subcontractor. Subcontractor's indemnification obligations shall not extend to any design professionals for design related work for their professional services or for defects in designs furnished by such persons.

INSURANCE – Subcontractor will provide: 1) Worker's Compensation: statutory. 2) Employer's Liability \$1M limits. 3) Auto: standard "any auto", \$1M each accident. 4) Commercial General Liability: standard (ISO Form CG 00 01) including, \$1M each occurrence, \$5K med pay, \$1M personal and advertising, \$2M general aggregate, \$1M products/completed operations aggregate (2 years max. coverage). 4) Excess/Umbrella: follow form to satisfy limits where subcontract dollar amount justifies increase in limits. If CGL Additional Insured Endorsement required, it shall be Subcontractor's standard form or CG 20 10 04 13 and CG 20 37 04 13 if specifically required by subcontract. Subcontractor will not provide insurance coverage for any design professionals for their professional services or for defects in designs furnished by such persons but will provide a general liability CG 20 32 04 13 Additional Insured Endorsement form for design professionals if required by subcontract.

TIME / SCHEDULE – Subcontractor shall be provided a mutually agreed upon construction schedule which provides a reasonable amount of time in which to make delivery of submittals, materials and/or labor so as to commence and complete the performance of the Subcontract.

Notwithstanding any provision(s) of this proposal or potential Subcontract or Purchase Order, if Subcontractor's work is delayed, disrupted, suspended, or otherwise impacted for any period of time as a direct result of an epidemic ("Epidemic Time Impact"), including, but not limited to, (1) disruptions to material and/or equipment supply; (2) illness of Subcontractor's workforce and/or unavailability of labor; (3) government quarantines, closures, or other mandates, restrictions, and/or directives; (4) Owner or Contractor restriction and/or directives; and/or (5) fulfillment of Subcontractor's contractual or legal health and safety obligations associated with an epidemic; then, Subcontractor shall not be subject to liquidated damages for the Epidemic Time Impact and Subcontractor shall be entitled to an equitable adjustment to the Subcontract schedule and duration to account for the Epidemic Time Impact.

PERFORMANCE OF THE WORK – Field labor called for under the subcontract shall be performed during Subcontractor's regular working hours, eight hours per day, five days a week (all Union Holidays are observed) unless stipulated otherwise in Subcontractor's Bid Proposal. All work performed outside of such hours shall be charged at the applicable prevailing wage rates for Subcontractor's work force for overtime, weekend, or holiday work. However, should Subcontractor be behind the mutually agreed to construction schedule, due to Subcontractor's own fault or failure to perform in accordance with such schedule, then all overtime/premium time required to regain the construction schedule shall be paid for by Subcontractor.



DAMAGES – The Contractor shall make no demand for liquidated damages for delays in excess of the amount specified in the Contract Documents and no liquidated damages may be assessed against Subcontractor for more than the amount paid by the Contractor for unexcused delays to the extent actually caused by Subcontractor. In no event shall liquidated damages exceed 10% of the original subcontract dollar amount. Subcontractor will not be liable for consequential, incidental, special, liquidated, indirect or punitive damages, however caused.

No back charge or claim of the Contractor for services provided for or on behalf of Subcontractor shall be valid except by an agreement in writing, submitted to and approved by Subcontractor at time of occurrence and before work is initiated.

Accepted this _____ day of _____ 2024

CMC Steel Fabricators, Inc. dba CMC Rebar

Buyer: _____

By: _____

By: _____

David Hansen
909.803.1598 D / 909.201.3412 M
david.hansen@cmc.com
Sales Manager

Name: _____

Title: _____



RebarZero® may be eligible for innovation credits in the LEED Building rating system. Ask your sales representative for more information.



FERGUSON WATERWORKS #1088
1502 COLUMBIA AVE
RIVERSIDE, CA 92507-2014

Phone: 951-674-1323
Fax: 951-674-1084

Deliver To:

From: James Bryan

Comments:

16:17:15 JUN 01 2024

Page 1 of 1

FERGUSON WATERWORKS #1083

Price Quotation

Phone: 951-674-1323

Fax: 951-674-1084

Bid No: B476212

Bld Date: 06/01/24

Quoted By: JPB

Cust Phone: 404-875-0356

Terms: NET 10TH PROX

Customer: BALFOUR BEATTY INFRASTRUCR
999 PEACHTREE ST NE STE 200
PO# 44173008-702-002
ATLANTA, GA 30309

Ship To: BALFOUR BEATTY INFRASTRUCR
999 PEACHTREE ST NE STE 200
PO# 44173008-702-002
ATLANTA, GA 30309

Cust PO#: 24" STRAUB COUPLING

Job Name: 2018-01 STERLING NATURAL

Item	Description	Quantity	Net Price	UM	Total
SP-SSTR25519SI	24 GRIP VITON FPM/FKM SS IPS COUP	2	4254.030	EA	8508.06
Net Total:					\$8508.06
Tax:					\$0.00
Freight:					\$0.00
Total:					\$8508.06

Quoted prices are based upon receipt of the total quantity for immediate shipment (48 hours). SHIPMENTS BEYOND 48 HOURS SHALL BE AT THE PRICE IN EFFECT AT TIME OF SHIPMENT UNLESS NOTED OTHERWISE. QUOTES FOR PRODUCTS SHIPPED FOR RESALE ARE NOT FIRM UNLESS NOTED OTHERWISE.

CONTRACTOR CUSTOMERS: IF YOU HAVE DBE/MBE/WBE/VBE/SDVBE/SBE GOOD FAITH EFFORTS DIVERSITY GOALS/ REQUIREMENTS ON A FEDERAL, STATE, LOCAL GOVERNMENT, PRIVATE SECTOR PROJECT, PLEASE CONTACT YOUR BRANCH SALES REPRESENTATIVE IMMEDIATELY PRIOR TO RECEIVING A QUOTE/ORDER.

Seller not responsible for delays, lack of product or increase of pricing due to causes beyond our control, and/or based upon Local, State and Federal laws governing type of products that can be sold or put into commerce. This Quote is offered contingent upon the Buyer's acceptance of Seller's terms and conditions, which are incorporated by reference and found either following this document, or on the web at <https://www.ferguson.com/content/website-info/terms-of-sale>
Govt Buyers: All items are open market unless noted otherwise.

LEAD LAW WARNING: It is illegal to install products that are not "lead free" in accordance with US Federal or other applicable law in potable water systems anticipated for human consumption. Products with "NP" in the description are NOT lead free and can only be installed in non-potable applications. Buyer is solely responsible for product selection.

WATER FLOW RATE NOTICE: Lavatory Faucets with flow rates over 0.5 GPM are not allowed for 'public use' in California.



HOW ARE WE DOING? WE WANT YOUR FEEDBACK!

Scan the QR code or use the link below to
complete a survey about your bids:

<https://survey.medallia.com/?bidsorder&fc=1083&on=25623>



11909 TECH CENTER CT
POWAY CA, 92064
PH (858) 391-3700
FAX (858) 391-5958

QUOTATION

PROJECT

STERLING NATURAL
MATERIAL IS AIS

BID DATE: 5/31/2024

QTY	DESCRIPTION	UNIT PRICE	TOTAL
2	6" X 19'6" CL53 DI CL/BC BE PIPE	\$2,394.60	\$4,789.20
15	6" STYLE 31 GROOVE COUPLING	\$569.87	\$8,548.05
4	6" DI GRV 90 DEG ELL	\$596.70	\$2,386.80
1	6" DI GRV TEE	\$770.40	\$770.40
2	6" GRV FLANGE ADAPTER	\$531.60	\$1,063.20
1	6" X 2" SADDLE	\$329.23	\$329.23
20	2" SCH80 PVC PIPE	\$7.83	\$156.60
2	2" X 6" SCH80 PVC NIPPLE	\$15.89	\$31.78
6	2" SCH80 PVC 90 DEG ELL	\$16.70	\$100.20
1	2" SCH80 PVC 45 DEG ELL	\$39.17	\$39.17
4	2" SCH80 PVC COUPLING	\$20.74	\$82.96
5	2" SCH80 PVC UNION	\$75.40	\$377.00
2	2" SS UNION	\$246.18	\$492.36
SUBTOTAL			\$19,166.95

NOTES:

- 1) NO TAXES INCLUDED.
- 2) PER FERGUSON'S STANDARD TERMS AND CONDITIONS.
- 3) THIS IS OUR INTERPRETATION OF THE PLANS, SPECIFICATIONS AND IS NOT A GUARANTEED BILL OF MATERIALS.
- 4) PRICES ARE SUBJECT TO CHANGE.

JAMES BRYAN

CELL=951-239-6379



5/31/2024

Page 1 of 2



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Comments:

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Price Quotation
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Fax: 951-674-1084

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Bid Date: 06/01/24
Quoted By: JPB

Cust Phone: 404-875-0356
Terms: NET 10TH PROX

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PO# 44173008-702-002
ATLANTA, GA 30309

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Job Name: 2018-01 STERLING NATURAL

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POWAY CA, 92064
PH (858) 391-3700
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BID DATE: 5/31/2024

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- 4) PRICES ARE SUBJECT TO CHANGE.

JAMES BRYAN

CELL=951-239-6379



5/31/2024

Page 1 of 2

Harrington Industrial Plastics LLC

**Harrington Industrial Plastics
4111 Latham Street
Riverside CA 92501**

Phone: 951-784-0256

Fax: 951-784-5024

Attention: VICTOR ROJAS

Company: BALFOUR BEATTY INFRASTRUCTURE

To: DRODRIGUEZ@HIPCO.COM

From: David J. Rodriguez

Subject: QUOTE 012D7134

Memo:

Harrington Industrial Plastics
4111 Latham Street
Riverside CA 92501
951-784-0256
951-784-5024 Fax

Quotation# 012D7134
Written: DJR
Quote Date 05/30/24
Expire Date 06/13/24
Page 2 OF 2

Product/Description	Quantity	Price	U/M	Extension
800C-030 3" PIPE P/E CPVC SCH80	60	16.02	FT	961.20
806C-030S 3" 90 ELBOW S GRY CPVC SCH80	6	48.06	EA	288.36
817C-030S 3" 45 ELBOW S GRY CPVC SCH80	2	52.09	EA	104.18
829C-030S 3" COUPLING S GRY CPVC SCH80	6	32.90	EA	197.40
837C-335S 3"X1" BUSHING FLUSH RDCR SPIGXS GRY CPVC SCH80	12	39.27	EA	471.24
897C-030S 3" UNION FITTING OLD STYLE S GRY CPVC EPDM SCH80	2	124.24	EA	248.48
801C-030S 3" TEE S GRY CPVC SCH80	2	62.50	EA	125.00

Merchandise	Tax	Est.Freight / Handling	Net Quote Total
3,632.60	0.00	0.00	3,632.60

Thanks For Thinking Harrington.

Respectfully David J. Rodriguez

All Quotations are subject to review upon placement of order.

Freight/Handling and applicable taxes if not listed above will be added.

Harrington standard terms and conditions apply to this quote.

Harrington Industrial Plastics
4111 Latham Street
Riverside CA 92501
951-784-0256
951-784-5024 Fax

Quotation# 012D7134
Written: DJR
Quote Date 05/30/24
Expire Date 06/13/24
Page 1 OF 2

Quotation

114209
BALFOUR BEATTY INFRASTRUCTURE

P O BOX 1768
SAN BERNARDINO, CA 92402

Ship To:
BALFOUR BEATTY
25376 WEST 5TH STREET
SAN BERNARDINO, CA 92410

Job: RFQ# STERLING PROJECT

Contact: VICTOR ROJAS
Phone#: 951-462-7706
Fax:

Ship Via: BEST WAY POSSIBLE
FOB / Delivery ARO: SHIPPING POINT
Frt-Terms: CHRG INBOUND & OUTBOUND

Product/Description	Quantity	Price	U/M	Extension
800C-010 1" PIPE P/E CPVC SCH80	60	3.63	FT	217.80
806C-010S 1" 90 ELBOW S GRY CPVC SCH80	6	6.32	EA	37.92
817C-010S 1" 45 ELBOW S GRY CPVC SCH80	2	8.77	EA	17.54
829C-010S 1" COUPLING S GRY CPVC SCH80	2	6.21	EA	12.42
897C-010S 1" UNION FITTING OLD STYLE S GRY CPVC EPDM SCH80	2	17.50	EA	35.00
801C-010S 1" TEE S GRY CPVC SCH80	2	9.13	EA	18.26
800C-020 2" PIPE P/E CPVC SCH80	40	8.52	FT	340.80
887C-020S 2"x2" NIPPLE TBE CPVC SCH80	2	36.42	EA	72.84
806C-020S 2" 90 ELBOW S GRY CPVC SCH80	6	18.43	EA	110.58
817C-020S 2" 45 ELBOW S GRY CPVC SCH80	1	19.84	EA	19.84
829C-020S 2" COUPLING S GRY CPVC SCH80	4	13.61	EA	54.44
897C-020S 2" UNION FITTING OLD STYLE S GRY CPVC EPDM SCH80	5	59.86	EA	299.30

Continued

Harrington Industrial Plastics LLC

**Harrington Industrial Plastics
4111 Latham Street
Riverside CA 92501**

Phone: 951-784-0256

Fax: 951-784-5024

Attention: VICTOR ROJAS

Company: BALFOUR BEATTY INFRASTRUCTURE

To: SSALINAS@HIPCO.COM

From: David J. Rodriguez

Subject: QUOTE 012D7134

Memo:

Harrington Industrial Plastics
 4111 Latham Street
 Riverside CA 92501
 951-784-0256
 951-784-5024 Fax

Quotation# 012D7134
 Written: DJR
 Quote Date 05/30/24
 Expire Date 06/13/24
 Page 1 OF 3

Quotation

114209
 BALFOUR BEATTY INFRASTRUCTURE

 P O BOX 1768
 SAN BERNARDINO, CA 92402

Ship To:
 BALFOUR BEATTY
 25376 WEST 5TH STREET
 SAN BERNARDINO, CA 92410

Job: RFQ# STERLING PROJECT

=====
 Contact: VICTOR ROJAS Ship Via: BEST WAY POSSIBLE
 Phone#: 951-462-7706 FOB / Delivery ARO: SHIPPING POINT
 Fax: Frt-Terms: CHRG INBOUND & OUTBOUND
 =====

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Harrington Industrial Plastics
 4111 Latham Street
 Riverside CA 92501
 951-784-0256
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Product/Description	Quantity	Price	U/M	Extension
800C-030 3" PIPE P/E CPVC SCH80	60	16.02	FT	961.20
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801C-030S 3" TEE S GRY CPVC SCH80	2	62.50	EA	125.00
4381034430 1/2" 90 ELBOW THD 316SS	16	4.77	EA	76.32
*4349 TUBING MISC 1/2"ODx0.035" WALL 316SS SEAMLESS TUBING PRODUCT IS NON-RETURNABLE ITEMS MAY NOT BE CANCELLED	60	4.17	FT	250.20
S3116F 004 1/2" 45 ELBOW T 316SS 150# HEAVY	8	5.40	EA	43.20
S3116T 004 1/2" TEE T 316SS 150# HVY	8	5.93	EA	47.44
S3116U 004 1/2" UNION T 316SS 150# HVY	16	11.26	EA	180.16
4373000620 1/2" VALVE BALL 316 TH FP 1000 2PC	16	28.92	EA	462.72
4381034230 1/2" COUPLING FPT 316SS	10	3.75	EA	37.50
4321002640 1/2"x2" NIPPLE WELD 316SS S40	8	4.55	EA	36.40
S3116C 004 1/2" CAP T 316SS 150# HVY	8	3.01	EA	24.08

Continued

Harrington Industrial Plastics
4111 Latham Street
Riverside CA 92501
951-784-0256
951-784-5024 Fax

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Quote Date 05/30/24
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Page 3 OF 3

Product/Description	Quantity	Price	U/M	Extension
S3116HB010004 1"x1/2" BUSHING T 316SS 150#	16	5.57	EA	89.12

Merchandise	Tax	Est.Freight / Handling	Net Quote Total
4,879.74	0.00	0.00	4,879.74

Thanks For Thinking Harrington.
Respectfully David J. Rodriguez
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Harrington standard terms and conditions apply to this quote.

Harrington Industrial Plastics LLC

**Harrington Industrial Plastics
4111 Latham Street
Riverside CA 92501**

Phone: 951-784-0256

Fax: 951-784-5024

Attention: VICTOR ROJAS

Company: BALFOUR BEATTY INFRASTRUCTURE

To: DRODRIGUEZ@HIPCO.COM

From: David J. Rodriguez

Subject: QUOTE 012D7134

Memo:

Harrington Industrial Plastics
 4111 Latham Street
 Riverside CA 92501
 951-784-0256
 951-784-5024 Fax

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800C-030 3" PIPE P/E CPVC SCH80	60	16.02	FT	961.20
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 SAN BERNARDINO, CA 92402

Ship To:
 BALFOUR BEATTY
 25376 WEST 5TH STREET
 SAN BERNARDINO, CA 92410

Job: RFQ# STERLING PROJECT

Contact: VICTOR ROJAS
 Phone#: 951-462-7706
 Fax:

Ship Via: BEST WAY POSSIBLE
 FOB / Delivery ARO: SHIPPING POINT
 Frt-Terms: CHRG INBOUND & OUTBOUND

Product/Description	Quantity	Price	U/M	Extension
800C-010 1" PIPE P/E CPVC SCH80	60	3.63 FT		217.80
806C-010S 1" 90 ELBOW S GRY CPVC SCH80	6	6.32 EA		37.92
817C-010S 1" 45 ELBOW S GRY CPVC SCH80	2	8.77 EA		17.54
829C-010S 1" COUPLING S GRY CPVC SCH80	2	6.21 EA		12.42
897C-010S 1" UNION FITTING OLD STYLE S GRY CPVC EPDM SCH80	2	17.50 EA		35.00
801C-010S 1" TEE S GRY CPVC SCH80	2	9.13 EA		18.26
800C-020 2" PIPE P/E CPVC SCH80	40	8.52 FT		340.80
887C-020S 2"x2" NIPPLE TBE CPVC SCH80	2	36.42 EA		72.84
806C-020S 2" 90 ELBOW S GRY CPVC SCH80	6	18.43 EA		110.58
817C-020S 2" 45 ELBOW S GRY CPVC SCH80	1	19.84 EA		19.84
829C-020S 2" COUPLING S GRY CPVC SCH80	4	13.61 EA		54.44
897C-020S 2" UNION FITTING OLD STYLE S GRY CPVC EPDM SCH80	5	59.86 EA		299.30

Continued

Harrington Industrial Plastics
 4111 Latham Street
 Riverside CA 92501
 951-784-0256
 951-784-5024 Fax

Quotation# 012D7134
 Written: DJR
 Quote Date 05/30/24
 Expire Date 06/13/24
 Page 2 OF 3

Product/Description	Quantity	Price	U/M	Extension
800C-030 3" PIPE P/E CPVC SCH80	60	16.02	FT	961.20
806C-030S 3" 90 ELBOW S GRY CPVC SCH80	6	48.06	EA	288.36
817C-030S 3" 45 ELBOW S GRY CPVC SCH80	2	52.09	EA	104.18
829C-030S 3" COUPLING S GRY CPVC SCH80	6	32.90	EA	197.40
837C-335S 3"X1" BUSHING FLUSH RDCR SPIGXS GRY CPVC SCH80	12	39.27	EA	471.24
897C-030S 3" UNION FITTING OLD STYLE S GRY CPVC EPDM SCH80	2	124.24	EA	248.48
801C-030S 3" TEE S GRY CPVC SCH80	2	62.50	EA	125.00
4381034430 1/2" 90 ELBOW THD 316SS	16	4.77	EA	76.32
*4349 TUBING MISC 1/2"ODx0.035" WALL 316SS SEAMLESS TUBING PRODUCT IS NON-RETURNABLE ITEMS MAY NOT BE CANCELLED	60	4.17	FT	250.20
S3116F 004 1/2" 45 ELBOW T 316SS 150# HEAVY	8	5.40	EA	43.20
S3116T 004 1/2" TEE T 316SS 150# HVY	8	5.93	EA	47.44
S3116U 004 1/2" UNION T 316SS 150# HVY	16	11.26	EA	180.16
4373000620 1/2" VALVE BALL 316 TH FP 1000 2PC	16	28.92	EA	462.72
4381034230 1/2" COUPLING FPT 316SS	10	3.75	EA	37.50
4321002640 1/2"x2" NIPPLE WELD 316SS S40	8	4.55	EA	36.40
S3116C 004 1/2" CAP T 316SS 150# HVY	8	3.01	EA	24.08

Continued

Harrington Industrial Plastics
4111 Latham Street
Riverside CA 92501
951-784-0256
951-784-5024 Fax

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Written: DJR
Quote Date 05/30/24
Expire Date 06/13/24
Page 3 OF 3

Product/Description	Quantity	Price	U/M	Extension
S3116HB010004 1"x1/2" BUSHING T 316SS 150#	16	5.57	EA	89.12

Merchandise	Tax	Est.Freight / Handling	Net Quote Total
4,879.74	0.00	0.00	4,879.74

Thanks For Thinking Harrington.

Respectfully David J. Rodriguez

All Quotations are subject to review upon placement of order.

Freight/Handling and applicable taxes if not listed above will be added.

Harrington standard terms and conditions apply to this quote.

Fibracast Package

BALFOUR BEATTY
COST ESTIMATE

Date:

Estimator Victor Rojas

Drawing	Size	Material	Takeoff	Units
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Install Casset Brackets

Fibracast	Package	1 LS
	Offload	6 loads
	Shipping	6 loads



Creating Concrete Excellence

749 North Poplar Street
Orange, CA 92868 Suite #200
Phone: 714-978-2222
Fax: 714-978-6931
License No. 242898
DIR No. 1000005924

To:	Balfour Beatty	Contact:	Terry Lim
Address:	1600 Iowa Ave, Suite 120 Riverside, CA 92504 USA	Phone:	951-462-7709
		Fax:	
Project Name:	SNRC - Additional MOB For Misc. Concrete - Per Terry Lim	Bid Number:	8139
Project Location:	3111 Greenspot Road, Highland, CA	Bid Date:	8/16/2021

Item #	Item Description	Estimated Quantity	Unit
01	<u>Construct 6" Curb & Gutter Per SPPWC Std. 120-2 - A2-150(6)</u> - Natural Gray Color, Medium Broom Finish, Non-Reinforced, Tooled Joints - Compacted Subgrade To Be Received Plus Or Minus 0.10 Ft. To Balance - Excludes Excavation, Subgrade Preparation, Fine Grading, Base Installation & Backfilling	56.00	LF
02	<u>Construct 4" Concrete Pedestrian Paving</u> - Natural Gray Color, Medium Broom Finish, Non-Reinforced - Compacted Subgrade To Be Received Plus Or Minus 0.10 Ft. To Balance - Excludes Excavation, Subgrade Preparation, Fine Grading, Base Installation, Thickened Edges & Backfilling	556.00	SF
Total Bid Price:			\$48,300.00

Notes:

- **J&M Concrete Contractors is a UNION contractor signatory to Laborers, Cement Mason and Carpenters.**
- **Bond Cost is EXCLUDED.** If a payment & performance bond is required, add 1.20% to bid total, subject to final bid dollar value.
- Proposal is based on working **Monday through Friday 7am – 4pm. Excludes working weekend, night, and premium time.**
- **Date Good Through:** This bid is subject to acceptance within **30 Days** of its bid date. Price quoted are valid through **April 1, 2026** or additional costs may apply.
- Based on (1) mobilization. **Cost for additional mobilization will be billed at \$4,500.00 per move per operation.**
- This proposal is a lump sum proposal. Individual items are not stand alone pricing.
- **Subgrade is to be received compacted plus or minus 0.10 ft. to balance, including thickened edge | subslab depressions.**
- **Deepened Section:** If deep grade is experienced and you want Subcontractor to install a thicker section of base or concrete, the following rates will apply. Rock base will be \$150.00 for each additional ton and concrete will be charged at \$300.00 for each additional cubic yard.
- Includes Concrete Washout Bins for our Operation.
- **Excludes the following unless specifically noted otherwise within individual bid items:** Surveying, engineering of any kind, testing of any kind (i.e. compaction, material, shop | plant inspection), bond cost, cost of water, posting or notifications, saw cutting, hardscape removals, temporary fencing, crash cushions, k-rail, traffic control implementation | maintenance, traffic control plan, subgrade preparation, presaturation of soil, installation of aggregate base and/or sand base layers, installation of vapor | moisture barrier, adjustment of utilities, potholing, ground penetrating radar scanning, x-ray scanning of reinforcement, reinforcement, structural fiber reinforcement polymers, over-excavation, unsuitable soil remediation, subgrade preparation, excavation or backfilling of any kind, cold milling, temporary | permanent striping, truncated domes, preparation of asphalt surfaces to receive truncated domes, colored concrete, bagged colored concrete, special concrete finishes, special exposure concrete mixes, synthetic fibers or special additives in concrete mixes, bollards, joint sealant, embeds and anchor bolts, site furnishings, thresholds plates, entrance mats | alcoves, fence post or roadway sign footings, light pole footings, housekeeping pads, concrete sealers or hardeners, ventilation and exhaust scrubbers for interior emissions and/or residual fuel vapors, waterproofing, sub-drainage, profilograph/floor flatness/floor levelness testing, wall coatings (i.e. anti-graffiti coating, waterproofing, stucco, plaster, painting, etc.), masonry scope items (i.e. brick/pedestal pavers, CMU walls/columns/pilasters, stone veneers, etc.), precast concrete items of any kind, full time safety officer, attendance of general contractor onboarding classes longer than 30 minutes, daily composite clean-up crews, project allowance provisions, utility trench patching, repairs caused by trade damage, cost associated with CA State Assembly Bill 219, rail road flaggers | watch persons, portable toilets, insurance for railroad, professional liability, errors and omissions.
- **Mechanically Excavated Footings:** All footing excavation is based on being mechanically excavated and/or augered. If hand digging is required, additional cost will apply.
- **Earthen Shored Footing:** All footing construction is based on casting concrete directly against the excavation (earth forming). If wood forming of the footing is required, additional cost will apply.
- Any scope of work items not specifically listed are not included and should not be assumed as included in proposal.
- **(1) Year Warranty:** Proposal includes standard (1) year warranty. Warranty periods beyond (1) year can be provided at an additional cost.
- **Concrete Cracking:** J&M Concrete is not responsible for any concrete cracking which occurs at known locations such as corners of concrete, around embeds/posts/poles/thickened edges, odd shaped concrete panels, or at any locations where concrete joint dimensions exceed joint ratio maximums of American Concrete Institute of 1.5:1 Length:Width ratio.

- **Fly Ash Shortages:** Due to major industry-wide disruptions in the Fly-ash production, distribution, and availability, there are extreme shortages for the foreseeable future and it may not be possible to offer concrete mix designs containing fly-ash. All pricing is based upon 100% cement based mix designs due to this market condition. Concrete material pricing may be volatile and subject to change."
- **ACI Standard 303.1-97 Acceptance:** American Concrete Institute (A.C.I.) standard 303.1-97 sub-section 5.3.9 should be utilized for acceptance of concrete.
- **Licensed Intecrete Installer:** We are a licensed Intecrete® Installer & Pervious Concrete Installer.
- **PRICE IS BASED ON FORMING AND POURING SAME DAY.**

ASSUMING NO VERTICAL ITEMS TO PROJECT ADJACENT TO WORK AREA.

<p>ACCEPTED:</p> <p>The above prices, specifications and conditions are satisfactory and hereby accepted.</p> <p>Buyer: _____</p> <p>Signature: _____</p> <p>Date of Acceptance: _____</p>	<p>CONFIRMED:</p> <p>J&M Concrete Contractors</p> <p>Authorized Signature: _____</p> <p>Estimator: Gustavo Vega 714-978-2222 x 135 gvega@jmcontractors.com</p>
--	---



victor rojas <varbcorp@gmail.com>

FW: Plant Rerate - 10MGD upgrade

Matthew Rebmann <matt@chcwater.com>
To: "varbcorp@gmail.com" <varbcorp@gmail.com>

Tue, Jun 4, 2024 at 12:40 PM

Victor Rojas:

My Whipps price before taxes is \$64,150 (includes freight). Breakdown as follows.

Item No 1 – Tag No. 245-SG-103

\$24,312

Item No 2 – Tag No. 240-SG-18-511

\$39,838

Let me know if you have questions.

Matthew D. Rebmann | Vice President

2011 Palomar Airport Road, Suite 303 | Carlsbad, CA 92011

760/579-9411 Cell | 760/931-0555 Office

www.chcwater.com | matt@chcwater.com



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QUOTATION



370 South Athol Road
Athol, MA 01331
Phone : 978-249-7924
Fax : 978-249-3072

Quotation No. 34489

May 14, 2024

Please Reply To :
Coombs-Hopkins
2011 Palomar Airport Rd Suite 303
Carlsbad, California 92011
Rick Eismin

Subject : East Valley WD - Sterling Natural Resource Center
San Bernardino, California
Engineer : Arcadis
Bid Date : Friday, May 17, 2024
Bid Expires : Tuesday, July 16, 2024

Bidding Contractors :

We are pleased to offer the following quotation for **specification section 43 26 23 – Stainless Steel Slide Gates.**

Item No 1	Tag No. 245-SG-103
Location - Drawing Number :	MBR Facility - RAS Chamber - BC-925-2565
Quantity :	One (1)
Gate Size - Model :	18" Wide x 12" High - Model 925 Non Self Contained Stainless Steel Slide Gate
Invert To Floor :	17.92 ft
Max Design Head :	15.8 ft seating - 0 ft unseating
Description :	The upward opening stainless steel slide gate will have the following features : SS316L construction; UHMW side and top seals and a neoprene invert seal; The single operating stem will be SS316L with a plastic stem cover.
Mounting Style :	Wall mounted with non-shrink grout and SS anchor studs.
Lifting Mechanism :	Wall pedestal mounted AUMA electric actuator.
Anchor Bolts :	1/2" anchor studs and nuts included.

Item No 2	Tag No. 240-SG-18-511
Location - Drawing Number :	MBR Eff. Ch WAS Pump Station - M-240-04, 05 & S-240-03, 07
Quantity :	One (1)
Gate Size - Model :	90" Wide x 32" High - Model 935I Non Self Contained Stainless Steel Slide Gate
Invert To Floor :	17.09 ft
Max Design Head :	0 ft seating - 15.34 ft unseating
Description :	The upward opening stainless steel slide gate will have the following features : SS304 construction; UHMW side and top seals and a neoprene invert seal; The dual operating stems will be SS304 with plastic stem covers.
Mounting Style :	Wall mounted with non-shrink grout and SS anchor studs.
Lifting Mechanism :	Wall pedestals mounted interconnected gearboxes with single AUMA electric actuator.
Anchor Bolts :	3/4" anchor studs and nuts included.

Comments:

1. Pricing includes P.E. stamped seismic calcs.
2. It is assumed that the field service quoted for the other portion of this project – Whipps Order/Job #28654 – will be used to cover these gates too. If the start up is at a different period of time a quote for additional field service can be provided.

Price: \$68,773 (Breakdown: \$59,650 Equip, \$4,623 Tax, \$4,500 Freight, Service Not Included)

Whipps Inc. Quotation No. 34489

Page 1 of 2

WATER CONTROL GATES

This quotation represents our best interpretation of the project plans and specifications. Any subsequent changes may result in a price change.

Whipps Inc. is ISO 9001:2015 certified. Whipps Inc. complies with Buy America, AIS and BABA requirements. Whipps, Inc. unequivocally disclaims any liability associated with the electrical operators required for the project, especially those suppliers explicitly designated and named in the contract specifications.

INCLUDED: Submittal drawings and O&M manuals.

EXCLUDED: Field Measurements, Installation, grout, deck sleeves, blind flanges, mastic, lubricant, control panels, instrumentation, wiring and epoxy capsules for anchor bolts.

DURATION: Our price is held firm for 60 days from the bid date listed on Page 1. Please contact our local representative for updated pricing after 60 days.

FORCE MAJEURE: Whipps Inc. shall not be considered in default in the performance of its obligations under this agreement to the extent that the performance of such obligations is prevented or delayed by an event or circumstance of Force Majeure, including without limitation: strike, labor disputes, civil commotion, rebellion, invasion, epidemic, hostilities, war, embargo, natural disaster, act of God, fire, sabotage, loss and destruction of property, changes in laws, regulations or orders, absence of necessary orders or permits of any kind which have been applied for, other events beyond the reasonable control of the affected party, or a situation which the affected party was unable to prevent or overcome despite the exercise of due diligence and best efforts by it.

PAYMENT TERMS: Payment terms are net 30 days with no retainer allowance. Interest will be charged on amounts past due at 1-1/2% per month.

SPARE PARTS: No spare parts are required.

TAXES: Taxes, duties and tariffs are not included in this quotation. Sales tax is not included in our Total Price. However, Whipps, Inc. is registered to collect sales tax in the states of California, Florida, Maryland and Massachusetts.

DELIVERIES: The standard delivery of submittal drawings is 4-6 weeks after receipt of written purchase order. The equipment will ship 18-20 weeks after receipt of approved submittal drawings. Delivery of electric actuator may be (22-23) weeks after approval of submittal drawings. Whipps, Inc accepts no liability for the performance of the electric actuator vendors. We will make every effort to coordinate our engineering and manufacturing schedule with your construction schedule. Please contact our local representative for expedited or extended delivery dates.

FREIGHT: The price quoted is F.O.B. our factory in Athol, Massachusetts with freight allowed to jobsite. Partial shipments may be provided upon request for an additional charge. Price includes shipment via common carrier. (Open top truck shipment may be provided upon request for an additional charge). Price does not include unloading at job site.

VOLUME DISCOUNT DISCLAIMER: The price shown reflects a volume discount for the quantity quoted. Please contact our local representative if you need to order a different quantity than the number shown herein and we will send a revised quotation.

FIELD SERVICE: No field service is included. Three weeks advance notice in writing is required for field service.

OPERATION AND MAINTENANCE MANUALS : Whipps, Inc. manuals are produced project specific. Our manual is set up in a manner designed for the user to easily comprehend information relating to our gates. This is our standard structured document representing the Whipps, Inc. products. Whipps, Inc. reserves the right to deviate from what is listed in the Project Specifications should Whipps, Inc. determine that specific provisions add little or no value to the Manual.

Sincerely,

Randy Stewart
Western Regional Sales Manager
Oregon Office : 503-263-3477
Cell : 971-272-3477
Whipps – Quality & Experience
<http://www.whipps.com>



victor rojas <varbcorp@gmail.com>

FW: Plant Rerate - 10MGD upgrade

Matthew Rebmann <matt@chcwater.com>
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QUOTATION

Whipps, inc.

370 South Athol Road
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Phone : 978-249-7924
Fax : 978-249-3072

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Location - Drawing Number :	MBR Facility - RAS Chamber - BC-925-2565
Quantity :	One (1)
Gate Size - Model :	18" Wide x 12" High - Model 925 Non Self Contained Stainless Steel Slide Gate
Invert To Floor :	17.92 ft
Max Design Head :	15.8 ft seating - 0 ft unseating
Description :	The upward opening stainless steel slide gate will have the following features : SS316L construction; UHMW side and top seals and a neoprene invert seal; The single operating stem will be SS316L with a plastic stem cover.
Mounting Style :	Wall mounted with non-shrink grout and SS anchor studs.
Lifting Mechanism :	Wall pedestal mounted AUMA electric actuator.
Anchor Bolts :	1/2" anchor studs and nuts included.
Item No 2	Tag No. 240-SG-18-511
Location - Drawing Number :	MBR Eff. Ch WAS Pump Station - M-240-04, 05 & S-240-03, 07
Quantity :	One (1)
Gate Size - Model :	90" Wide x 32" High - Model 935I Non Self Contained Stainless Steel Slide Gate
Invert To Floor :	17.09 ft
Max Design Head :	0 ft seating - 15.34 ft unseating
Description :	The upward opening stainless steel slide gate will have the following features : SS304 construction; UHMW side and top seals and a neoprene invert seal; The dual operating stems will be SS304 with plastic stem covers.
Mounting Style :	Wall mounted with non-shrink grout and SS anchor studs.
Lifting Mechanism :	Wall pedestals mounted interconnected gearboxes with single AUMA electric actuator.
Anchor Bolts :	3/4" anchor studs and nuts included.

Comments:

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Sincerely,

Randy Stewart
Western Regional Sales Manager
Oregon Office : 503-263-3477
Cell : 971-272-3477
Whipps – Quality & Experience
<http://www.whipps.com>



FERGUSON WATERWORKS #1088
1502 COLUMBIA AVE
RIVERSIDE, CA 92507-2014

Phone: 951-674-1323
Fax: 951-674-1084

Deliver To:
From: James Bryan
Comments:

16:17:15 JUN 01 2024

Page 1 of 1

FERGUSON WATERWORKS #1083

Price Quotation
Phone: 951-674-1323
Fax: 951-674-1084

Bid No: B476212
Bid Date: 06/01/24
Quoted By: JPB

Cust Phone: 404-875-0356
Terms: NET 10TH PROX

Customer: BALFOUR BEATTY INFRASTRUCR
999 PEACHTREE ST NE STE 200
PO# 44173008-702-002
ATLANTA, GA 30309

Ship To: BALFOUR BEATTY INFRASTRUCR
999 PEACHTREE ST NE STE 200
PO# 44173008-702-002
ATLANTA, GA 30309

Cust PO#: 24" STRAUB COUPLING

Job Name: 2018-01 STERLING NATURAL

Item	Description	Quantity	Net Price	UM	Total
SP-SSTR25519SI	24 GRIP VITON FPM/FKM SS IPS COUP	2	4254.030	EA	8508.06

Net Total: \$8508.06
Tax: \$0.00
Freight: \$0.00
Total: \$8508.06

Quoted prices are based upon receipt of the total quantity for immediate shipment (48 hours). SHIPMENTS BEYOND 48 HOURS SHALL BE AT THE PRICE IN EFFECT AT TIME OF SHIPMENT UNLESS NOTED OTHERWISE. QUOTES FOR PRODUCTS SHIPPED FOR RESALE ARE NOT FIRM UNLESS NOTED OTHERWISE.

CONTRACTOR CUSTOMERS: IF YOU HAVE DBE/MBE/WBE/VBE/SDVBE/SBE GOOD FAITH EFFORTS DIVERSITY GOALS/ REQUIREMENTS ON A FEDERAL, STATE, LOCAL GOVERNMENT, PRIVATE SECTOR PROJECT, PLEASE CONTACT YOUR BRANCH SALES REPRESENTATIVE IMMEDIATELY PRIOR TO RECEIVING A QUOTE/ORDER.

Seller not responsible for delays, lack of product or increase of pricing due to causes beyond our control, and/or based upon Local, State and Federal laws governing type of products that can be sold or put into commerce. This Quote is offered contingent upon the Buyer's acceptance of Seller's terms and conditions, which are incorporated by reference and found either following this document, or on the web at <https://www.ferguson.com/content/website-info/terms-of-sale>
Govt Buyers: All items are open market unless noted otherwise.

LEAD LAW WARNING: It is illegal to install products that are not "lead free" in accordance with US Federal or other applicable law in potable water systems anticipated for human consumption. Products with "NP" in the description are NOT lead free and can only be installed in non-potable applications. Buyer is solely responsible for product selection.

WATER FLOW RATE NOTICE: Lavatory Faucets with flow rates over 0.5 GPM are not allowed for 'public use' in California.



HOW ARE WE DOING? WE WANT YOUR FEEDBACK!

Scan the QR code or use the link below to
complete a survey about your bids:

<https://survey.medallia.com/?bidsorder&fc=1083&on=25623>



11909 TECH CENTER CT
POWAY CA, 92064
PH (858) 391-3700
FAX (858) 391-5958

QUOTATION

PROJECT

STERLING NATURAL
MATERIAL IS AIS

BID DATE: 5/31/2024

QTY	DESCRIPTION	UNIT PRICE	TOTAL
2	6" X 19'6" CL53 DI CL/BC BE PIPE	\$2,394.60	\$4,789.20
15	6" STYLE 31 GROOVE COUPLING	\$569.87	\$8,548.05
4	6" DI GRV 90 DEG ELL	\$596.70	\$2,386.80
1	6" DI GRV TEE	\$770.40	\$770.40
2	6" GRV FLANGE ADAPTER	\$531.60	\$1,063.20
1	6" X 2" SADDLE	\$329.23	\$329.23
20	2" SCH80 PVC PIPE	\$7.83	\$156.60
2	2" X 6" SCH80 PVC NIPPLE	\$15.89	\$31.78
6	2" SCH80 PVC 90 DEG ELL	\$16.70	\$100.20
1	2" SCH80 PVC 45 DEG ELL	\$39.17	\$39.17
4	2" SCH80 PVC COUPLING	\$20.74	\$82.96
5	2" SCH80 PVC UNION	\$75.40	\$377.00
2	2" SS UNION	\$246.18	\$492.36
SUBTOTAL			\$19,166.95

NOTES:

- 1) NO TAXES INCLUDED.
- 2) PER FERGUSON'S STANDARD TERMS AND CONDITIONS.
- 3) THIS IS OUR INTERPRETATION OF THE PLANS, SPECIFICATIONS AND IS NOT A GUARANTEED BILL OF MATERIALS.
- 4) PRICES ARE SUBJECT TO CHANGE.

JAMES BRYAN

CELL=951-239-6379



5/31/2024

Page 1 of 2

Harrington Industrial Plastics LLC

**Harrington Industrial Plastics
4111 Latham Street
Riverside CA 92501**

Phone: 951-784-0256

Fax: 951-784-5024

Attention: VICTOR ROJAS

Company: BALFOUR BEATTY INFRASTRUCTURE

To: DRODRIGUEZ@HIPCO.COM

From: David J. Rodriguez

Subject: QUOTE 012D7134

Memo:

Harrington Industrial Plastics
 4111 Latham Street
 Riverside CA 92501
 951-784-0256
 951-784-5024 Fax

Quotation# 012D7134
 Written: DJR
 Quote Date 05/30/24
 Expire Date 06/13/24
 Page 2 OF 2

Product/Description	Quantity	Price	U/M	Extension
800C-030 3" PIPE P/E CPVC SCH80	60	16.02	FT	961.20
806C-030S 3" 90 ELBOW S GRY CPVC SCH80	6	48.06	EA	288.36
817C-030S 3" 45 ELBOW S GRY CPVC SCH80	2	52.09	EA	104.18
829C-030S 3" COUPLING S GRY CPVC SCH80	6	32.90	EA	197.40
837C-335S 3"X1" BUSHING FLUSH RDCR SPIGXS GRY CPVC SCH80	12	39.27	EA	471.24
897C-030S 3" UNION FITTING OLD STYLE S GRY CPVC EPDM SCH80	2	124.24	EA	248.48
801C-030S 3" TEE S GRY CPVC SCH80	2	62.50	EA	125.00

Merchandise	Tax	Est.Freight / Handling	Net Quote Total
3,632.60	0.00	0.00	3,632.60

Thanks For Thinking Harrington.

Respectfully David J. Rodriguez

All Quotations are subject to review upon placement of order.

Freight/Handling and applicable taxes if not listed above will be added.

Harrington standard terms and conditions apply to this quote.

Harrington Industrial Plastics
 4111 Latham Street
 Riverside CA 92501
 951-784-0256
 951-784-5024 Fax

Quotation# 012D7134
 Written: DJR
 Quote Date 05/30/24
 Expire Date 06/13/24
 Page 1 OF 2

Quotation

114209
 BALFOUR BEATTY INFRASTRUCTURE

 P O BOX 1768
 SAN BERNARDINO, CA 92402

Ship To:
 BALFOUR BEATTY
 25376 WEST 5TH STREET
 SAN BERNARDINO, CA 92410

Job: RFQ# STERLING PROJECT

=====
 Contact: VICTOR ROJAS
 Phone#: 951-462-7706
 Fax:

Ship Via: BEST WAY POSSIBLE
 FOB / Delivery ARO: SHIPPING POINT
 Frt-Terms: CHRG INBOUND & OUTBOUND
 =====

Product/Description	Quantity	Price	U/M	Extension
800C-010 1" PIPE P/E CPVC SCH80	60	3.63	FT	217.80
806C-010S 1" 90 ELBOW S GRY CPVC SCH80	6	6.32	EA	37.92
817C-010S 1" 45 ELBOW S GRY CPVC SCH80	2	8.77	EA	17.54
829C-010S 1" COUPLING S GRY CPVC SCH80	2	6.21	EA	12.42
897C-010S 1" UNION FITTING OLD STYLE S GRY CPVC EPDM SCH80	2	17.50	EA	35.00
801C-010S 1" TEE S GRY CPVC SCH80	2	9.13	EA	18.26
800C-020 2" PIPE P/E CPVC SCH80	40	8.52	FT	340.80
887C-020S 2"x2" NIPPLE TBE CPVC SCH80	2	36.42	EA	72.84
806C-020S 2" 90 ELBOW S GRY CPVC SCH80	6	18.43	EA	110.58
817C-020S 2" 45 ELBOW S GRY CPVC SCH80	1	19.84	EA	19.84
829C-020S 2" COUPLING S GRY CPVC SCH80	4	13.61	EA	54.44
897C-020S 2" UNION FITTING OLD STYLE S GRY CPVC EPDM SCH80	5	59.86	EA	299.30

Continued

Harrington Industrial Plastics
4111 Latham Street
Riverside CA 92501
951-784-0256
951-784-5024 Fax

Quotation# 012D7134
Written: DJR
Quote Date 05/30/24
Expire Date 06/13/24
Page 1 OF 2

Quotation

114209
BALFOUR BEATTY INFRASTRUCTURE

P O BOX 1768
SAN BERNARDINO, CA 92402

Ship To:
BALFOUR BEATTY
25376 WEST 5TH STREET
SAN BERNARDINO, CA 92410

Job: RFQ# STERLING PROJECT

=====
Contact: VICTOR ROJAS Ship Via: BEST WAY POSSIBLE
Phone#: 951-462-7706 FOB / Delivery ARO: SHIPPING POINT
Fax: Frt-Terms: CHRG INBOUND & OUTBOUND
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Continued

Harrington Industrial Plastics LLC

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4111 Latham Street
Riverside CA 92501**

Phone: 951-784-0256

Fax: 951-784-5024

Attention: VICTOR ROJAS

Company: BALFOUR BEATTY INFRASTRUCTURE

To: SSALINAS@HIPCO.COM

From: David J. Rodriguez

Subject: QUOTE 012D7134

Memo:

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Riverside CA 92501
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Page 1 OF 3

Quotation

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P O BOX 1768
SAN BERNARDINO, CA 92402

Ship To:
BALFOUR BEATTY
25376 WEST 5TH STREET
SAN BERNARDINO, CA 92410

Job:

RFQ# STERLING PROJECT

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801C-030S 3" TEE S GRY CPVC SCH80	2	62.50	EA	125.00
4381034430 1/2" 90 ELBOW THD 316SS	16	4.77	EA	76.32
*4349 TUBING MISC 1/2"ODx0.035" WALL 316SS SEAMLESS TUBING PRODUCT IS NON-RETURNABLE ITEMS MAY NOT BE CANCELLED	60	4.17	FT	250.20
S3116F 004 1/2" 45 ELBOW T 316SS 150# HEAVY	8	5.40	EA	43.20
S3116T 004 1/2" TEE T 316SS 150# HVY	8	5.93	EA	47.44
S3116U 004 1/2" UNION T 316SS 150# HVY	16	11.26	EA	180.16
4373000620 1/2" VALVE BALL 316 TH FP 1000 2PC	16	28.92	EA	462.72
4381034230 1/2" COUPLING FPT 316SS	10	3.75	EA	37.50
4321002640 1/2"x2" NIPPLE WELD 316SS S40	8	4.55	EA	36.40
S3116C 004 1/2" CAP T 316SS 150# HVY	8	3.01	EA	24.08

Continued

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Page 3 OF 3

Product/Description	Quantity	Price	U/M	Extension
S3116HB010004 1"x1/2" BUSHING T 316SS 150#	16	5.57	EA	89.12

Merchandise	Tax	Est.Freight / Handling	Net Quote Total
4,879.74	0.00	0.00	4,879.74

Thanks For Thinking Harrington.

Respectfully David J. Rodriguez

All Quotations are subject to review upon placement of order.

Freight/Handling and applicable taxes if not listed above will be added.

Harrington standard terms and conditions apply to this quote.



Southern Contracting Company

LIC NO. 222252

559 Twin Oaks Valley Road • P.O. Box 445 • San Marcos, California 92079
Phone 760-744-0760 • Fax 760-744-6475 • www.SouthernContracting.com

TO: Balfour Beatty Construction US **"Confirming"** August 21, 2024
ATTN: Pedro Anaya

**PROJECT: STERLING NATURAL RESOURCE CENTER
ADDITIONAL MBR TRAIN #5
SAN BERNARDINO, CALIFORNIA**

BID DATE: August 21, 2024

Southern Contracting Co. is pleased to present our Bid Proposal for the Electrical work on the above referenced project, per plans & specifications, as outlined below:

SPECIFICATIONS: "Basis of Quotation" document, not dated; and supplemental emails 8-2-24, 8-7-24, 8-15-24, 8-16-24, & 8-20-24.

PLANS: Drawings included with the Basis of Quotation, Plot Dated 8-9-2019, annotated for the MBR Train #5 Additions.

ADDENDA: None (N/A)

Southern Contracting Co. will furnish all labor, materials, equipment, and supervision required for the Electrical and Instrumentation work per the documents indicated above. All work to be performed by California Certified Electricians, with manpower provided by the International Brotherhood of Electrical Workers.

Item 1, MBR Train #5 Additions, Electrical work..... **\$ 557,000.⁰⁰**

Item 2, Square D Equipment, Quotation # Q-5249648..... **\$ 213,152.⁰⁰**

Proposal Total: Electrical work..... **\$ 770,152.⁰⁰**

See attached Clarifications.

If you have any questions or require additional information, please contact me at your convenience.

Michael Hughes

(760)744-0760 x619

MHughes@SouthernContracting.com

STERLING NRC, ADDITIONS TO MBR TRAIN #5
BID PROPOSAL

Clarifications:

We are a Licensed California Electrical Contractor, C-10 #222252.

We are registered as a California Public Works Contractor, Registration #1000002172, per the California Department of Industrial Relations, in full compliance with California Labor Code sections 1725.5 and 1771.1.

We are an IBEW Union shop, and have included California prevailing wages.

We have included all applicable sales taxes.

We are fully insured and bondable.

We have included all the wiring and new VFD's, for the 5th RAS Pump, the 5th Air Scour Blower, and the 5th Permeate pump (Filtrate Pump). We have included new feeder breakers in the existing Switchboard, and motor disconnects, same as shown for trains 1 thru 4. We have used the existing ductbanks for conductors from the Main Electrical Building to the MBR Facility, and we have used existing designated empty conduits where we can. We have included wiring for the Fibracast Instruments and Equipment per Fibracast Drawings D-003E & D-004A. We have included pedestals and stanchion racks for the field located equipment. We have included disconnects for the slide gates as well. We have included all the wiring shown in the block diagrams for the ancilliary devices, instrumentation, valves, and equipment, including the Local Control Stations for the RAS & Filtrate pumps.

We have included grounding & bonding for all circuits and equipment as required.

We have included scheduling, shutdown & coordination, submittals, shop drawings, O&M Manuals, and as-builts, as required.

We have based our pricing upon construction period of 12 months.

We have included the Square D equipment quotation. Balfour Beatty accepts the Square D BOM and all Square D clarifications, and their terms & conditions; as well as equipment and submittal lead times, and ground freight. Southern Contracting will not be held responsible for equipment & submittal delays.

We have not included System Integration; Instrumentation, Control Panels, PLC's, SCADA, or Programming.
We have not included any Fibracast equipment.

We have not included Short Circuit Coordination study or Arc-Flash studies. We can provide pricing for these studies upon receipt of the necessary plans & specifications.

We have excluded: All Instrumentation, PLC & SCADA Modifications, Installation of In-Line Instrumentation & Primary Elements; Pneumatic or process piping, tubing, taps, or valves; Concrete equipment pads, pole bases, grout, drypacking, blockouts, or other formed concrete; Asphalt & concrete sawcut, removal, & replacement; Trenching, excavation, backfill, concrete, & rebar; Bollards & removable barrier posts; Demolition (we will safe off any and all circuits as required); Surveying and staking; Traffic Control; Relocating utilities not shown; Temporary power, lighting, communication, telephone, & temporary security; Hazardous material handling; Painting; Permits or inspection fees, pollution control fees, engineering fees; Landscaping; Cathodic Protection; Bond costs (add 1% for bonding if required).



Creating Concrete Excellence

749 North Poplar Street
Orange, CA 92868 Suite #200
Phone: 714-978-2222
Fax: 714-978-6931
License No. 242898
DIR No. 1000005924

To:	Balfour Beatty	Contact:	Terry Lim
Address:	1600 Iowa Ave, Suite 120 Riverside, CA 92504 USA	Phone:	951-462-7709
Project Name:	SNRC - Additional MOB For Misc. Concrete - Per Terry Lim	Fax:	
Project Location:	3111 Greenspot Road, Highland, CA	Bid Number:	8139
		Bid Date:	8/16/2021

Item #	Item Description	Estimated Quantity	Unit
01	<u>Construct 6" Curb & Gutter Per SPPWC Std. 120-2 - A2-150(6)</u> - Natural Gray Color, Medium Broom Finish, Non-Reinforced, Tooled Joints - Compacted Subgrade To Be Received Plus Or Minus 0.10 Ft. To Balance - Excludes Excavation, Subgrade Preparation, Fine Grading, Base Installation & Backfilling	56.00	LF
02	<u>Construct 4" Concrete Pedestrian Paving</u> - Natural Gray Color, Medium Broom Finish, Non-Reinforced - Compacted Subgrade To Be Received Plus Or Minus 0.10 Ft. To Balance - Excludes Excavation, Subgrade Preparation, Fine Grading, Base Installation, Thickened Edges & Backfilling	556.00	SF

Total Bid Price: \$48,300.00

Notes:

- **J&M Concrete Contractors is a UNION contractor signatory to Laborers, Cement Mason and Carpenters.**
- **Bond Cost is EXCLUDED.** If a payment & performance bond is required, add 1.20% to bid total, subject to final bid dollar value.
- Proposal is based on working **Monday through Friday 7am – 4pm. Excludes working weekend, night, and premium time.**
- **Date Good Through:** This bid is subject to acceptance within **30 Days** of its bid date. Price quoted are valid through **April 1, 2026** or additional costs may apply.
- Based on (1) mobilization. **Cost for additional mobilization will be billed at \$4,500.00 per move per operation.**
- This proposal is a lump sum proposal. Individual items are not stand alone pricing.
- **Subgrade is to be received compacted plus or minus 0.10 ft. to balance, including thickened edge | subslab depressions.**
- **Deepened Section:** If deep grade is experienced and you want Subcontractor to install a thicker section of base or concrete, the following rates will apply. Rock base will be \$150.00 for each additional ton and concrete will be charged at \$300.00 for each additional cubic yard.
- Includes Concrete Washout Bins for our Operation.
- **Excludes the following unless specifically noted otherwise within individual bid items:** Surveying, engineering of any kind, testing of any kind (i.e. compaction, material, shop | plant inspection), bond cost, cost of water, posting or notifications, saw cutting, hardscape removals, temporary fencing, crash cushions, k-rail, traffic control implementation | maintenance, traffic control plan, subgrade preparation, presaturation of soil, installation of aggregate base and/or sand base layers, installation of vapor | moisture barrier, adjustment of utilities, potholing, ground penetrating radar scanning, x-ray scanning of reinforcement, reinforcement, structural fiber reinforcement polymers, over-excavation, unsuitable soil remediation, subgrade preparation, excavation or backfilling of any kind, cold milling, temporary | permanent striping, truncated domes, preparation of asphalt surfaces to receive truncated domes, colored concrete, bagged colored concrete, special concrete finishes, special exposure concrete mixes, synthetic fibers or special additives in concrete mixes, bollards, joint sealant, embeds and anchor bolts, site furnishings, thresholds plates, entrance mats | alcoves, fence post or roadway sign footings, light pole footings, housekeeping pads, concrete sealers or hardeners, ventilation and exhaust scrubbers for interior emissions and/or residual fuel vapors, waterproofing, sub-drainage, profilograph/floor flatness/floor levelness testing, wall coatings (i.e. anti-graffiti coating, waterproofing, stucco, plaster, painting, etc.), masonry scope items (i.e. brick/pedestal pavers, CMU walls/columns/pilasters, stone veneers, etc.), precast concrete items of any kind, full time safety officer, attendance of general contractor onboarding classes longer than 30 minutes, daily composite clean-up crews, project allowance provisions, utility trench patching, repairs caused by trade damage, cost associated with CA State Assembly Bill 219, rail road flaggers | watch persons, portable toilets, insurance for railroad, professional liability, errors and omissions.
- **Mechanically Excavated Footings:** All footing excavation is based on being mechanically excavated and/or augered. If hand digging is required, additional cost will apply.
- **Earthen Shored Footing:** All footing construction is based on casting concrete directly against the excavation (earth forming). If wood forming of the footing is required, additional cost will apply.
- Any scope of work items not specifically listed are not included and should not be assumed as included in proposal.
- **(1) Year Warranty:** Proposal includes standard (1) year warranty. Warranty periods beyond (1) year can be provided at an additional cost.
- **Concrete Cracking:** J&M Concrete is not responsible for any concrete cracking which occurs at known locations such as corners of concrete, around embeds/posts/poles/thickened edges, odd shaped concrete panels, or at any locations where concrete joint dimensions exceed joint ratio maximums of American Concrete Institute of 1.5:1 Length:Width ratio.

- **Fly Ash Shortages:** Due to major industry-wide disruptions in the Fly-ash production, distribution, and availability, there are extreme shortages for the foreseeable future and it may not be possible to offer concrete mix designs containing fly-ash. All pricing is based upon 100% cement based mix designs due to this market condition. Concrete material pricing may be volatile and subject to change."
- **ACI Standard 303.1-97 Acceptance:** American Concrete Institute (A.C.I.) standard 303.1-97 sub-section 5.3.9 should be utilized for acceptance of concrete.
- **Licensed Intecrete Installer:** We are a licensed Intecrete® Installer & Pervious Concrete Installer.
- **PRICE IS BASED ON FORMING AND POURING SAME DAY.**

ASSUMING NO VERTICAL ITEMS TO PROJECT ADJACENT TO WORK AREA.

ACCEPTED: The above prices, specifications and conditions are satisfactory and hereby accepted. Buyer: _____ Signature: _____ Date of Acceptance: _____	CONFIRMED: J&M Concrete Contractors Authorized Signature: _____ Estimator: Gustavo Vega 714-978-2222 x 135 gvega@jmcontractors.com
---	--



Sterling – Job No. TBD
June 5, 2024

Balfour Beatty
640 E. Arrow Highway
La Verne, CA 91750
ATTN: Victor Rojas

Subject: Sterling MBR Expansion – Piping & Supports

Mr. Rojas,

SAC submits the following proposal in the amount of **\$350,000** broken down as follows:

- \$250,000; Pipe & fittings per the below
 - o Scope A (Blower No. 5): \$16,000
 - o Scope B (Train No. 5): \$234,000
- \$100,000; Pipe supports per the below
 - o Scope A (Blower No. 5): \$4,000
 - o Scope B (Train No. 5): \$96,000

Scope

Design, fabrication and delivery of pipe supports and stainless steel piping for the addition of Membrane Train NO. 5 to the Sterling NRC. Includes piping & supports only for the added equipment below:

Process Air Blower No. 5
Membrane Air Scour Blower No. 5
Filtrate Pump No. 5
RAS Pump No. 5

SAC will supply new pipe support and piping submittals using the original design criteria and materials used on the previous scope of work. Piping materials will be a combination of A312/A403 & A778/A774. All pipe materials will be 304SS and match the pipe SCH original supplied for Membrane Trains 1-4. Rough estimates of LF are included for reference below:

12" – 60 LF
14" – 2 LF
16" – 60 LF
18" – 20 LF
24" – 6 LF
28" – 24 LF (For RAS Pump Can)

Lead times will be as follows:

8 weeks for submittals.
12 weeks for support fabrication.
16 weeks for pipe fabrication.

www.SACIncorporated.com

SAC EAST

1050 Hinesburg Road
South Burlington, VT 05403
(802) 448-5700

SAC FABRICATION

200 East 700 South
Clearfield, UT 84015
(385) 275-2500

SAC SOUTHWEST

9875 South Priest Dr, STE 104
Tempe, AZ 85284
(480) 866-8800

SAC WEST

505 N Tustin Ave. STE 150
Santa Ana, CA 92705
(951) 823-8840



Sterling – Job No. TBD
June 5, 2024

Pipe Supports Exclusions:

- a. Samples, O&M Manuals, Field Quality Control, Training, Startup, Testing, ETC.
- b. Installation of Supports
- c. Structural/Misc. Metal items to be supplied by others
- d. Plumbing/HVAC/Fire Suppression Supports
- e. Supply of Small Bore Supports (2-1/2" and less), including Double Containment pipe
- f. Temporary Supports
- g. Insulation inserts such as Cal-Sil, and/or pipe shields for supports in contact with pipe insulation
- h. AIS Compliant Expansion anchors.
- i. Supports called off as concrete
- j. Supports called off as Ductile Iron Base Elbows or Base Tees
- k. Supports for Valve Actuators
- l. Pipe Supports for Diffuser Piping, supplied by Diffuser Manufacturer
- m. Nitric Acid Passivation: Passivation for Stainless Steel Supports shall be Citric Acid. The Citric Acid process is more environmentally friendly, safer, and less toxic method.
- n. Undercut, Hastelloy, or Titanium anchors.
- o. Coating/Painting of supports. See material table above.
- p. Pipe Stress Analysis
- q. Third Party/Special Inspections
- r. BIM/3D modeling; If required, SAC can provide at an additional cost.
- s. Field Dimension and Verification

Piping Exclusions:

- a. Shop hydrostatic testing of pipe
- b. 100% X-Ray welding
- c. Floor & Wall *Sleeves*
- d. Post fabrication Pickle & Passivation by full immersion in Nitric or Hydrochloric Acid
- e. Temporary Pipe
- f. HVAC, Fire Suppression and Plumbing Pipe
- g. Pipe Labels
- h. Field Dimensions and verification
- i. Seamless Pipe
- j. Electropolishing
- k. Pipe Insulation
- l. Prime and/or Finish Coat
- m. Small Bore – 2-1/2" and under.
- n. BIM/3D modeling

General Notes:

2 Shipments are included
No site visits are included
No taxes are included

www.SACIncorporated.com

SAC EAST

1050 Hinesburg Road
South Burlington, VT 05403
(802) 448-5700

SAC FABRICATION

200 East 700 South
Clearfield, UT 84015
(385) 275-2500

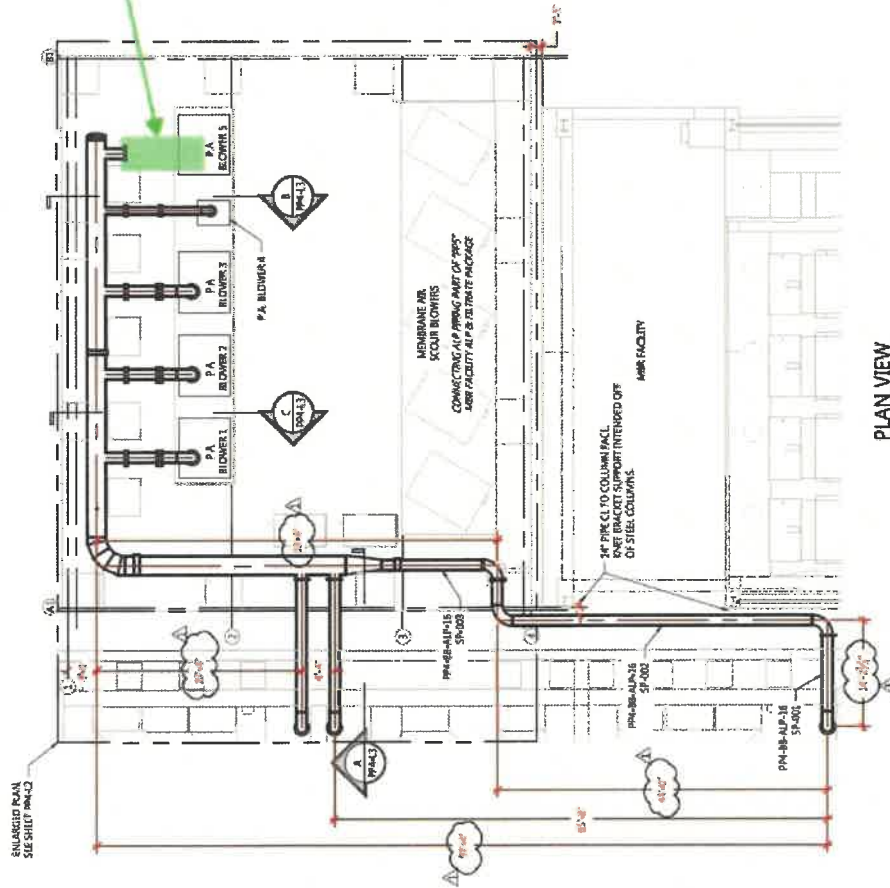
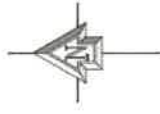
SAC SOUTHWEST

9875 South Priest Dr, STE 104
Tempe, AZ 85284
(480) 866-8800

SAC WEST

505 N Tustin Ave. STE 150
Santa Ana, CA 92705
(951) 823-8840

SCOPE A



NOTES:
1. CONTRACTOR TO VERIFY DIMENSIONS, LAY LENGTHS, AND ELEVATIONS.
2. VALVES AND BLOWERS BY OTHERS.

DEATH BY:	5/5/00
CHECKED BY:	
FILE NAME:	PP4-041
DATE:	06/19/00
FILED:	
FILED FROM:	4-2309-09
PROJECT:	ASP
FILED:	N/A
PP4-11	
PP4-11	

STERLING NATURAL
RESOURCE CENTER
EAST VALLEY WATER DISTRICT
HIGHLAND, CA

[illegible]

SAC
INCORPORATED
131 Talcott Place
Middletown, VT 05455
Phone (802) 448-5708
Fax (802) 448-5700

RELEASE
19042 04A



LEGAL ENTITY:
ANCAO U.S., INC.

Balfour Beatty

CONFIDENTIAL



STERLING NATURAL
RESOURCE CENTER



**East Valley
Water District**
31111 GREENSPOT ROAD
HIGHLAND, CALIFORNIA 92346

[illegible]

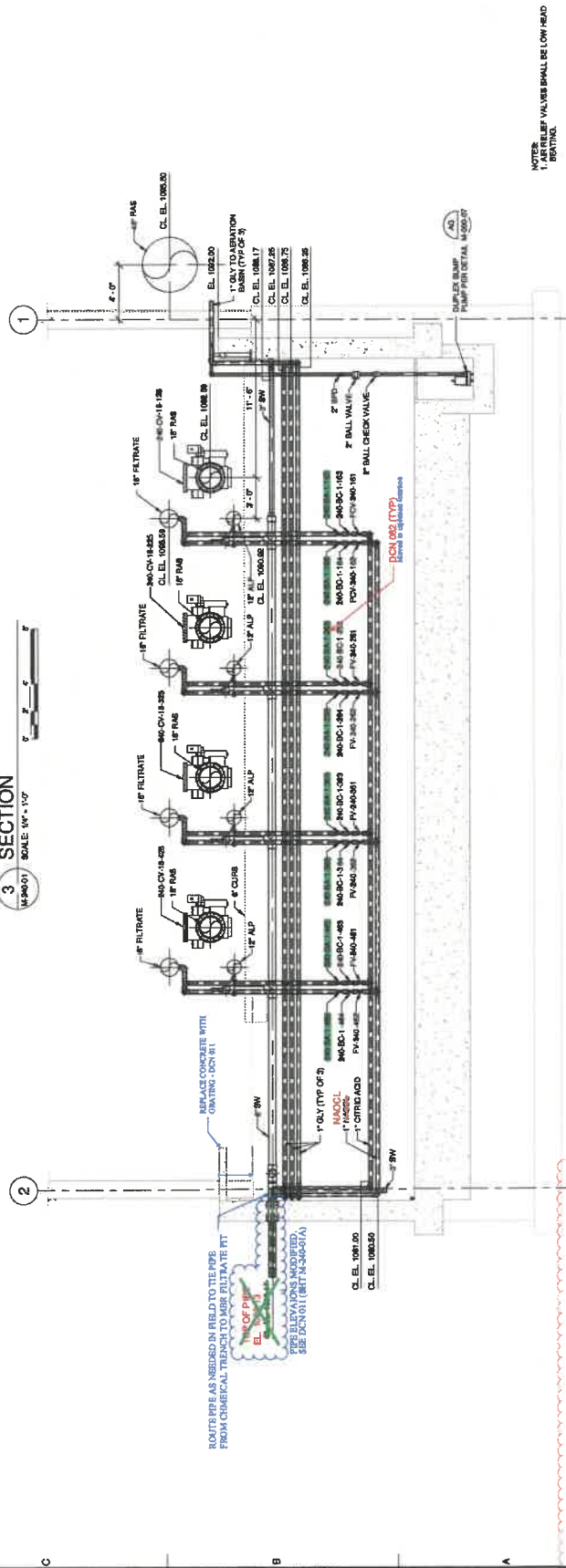
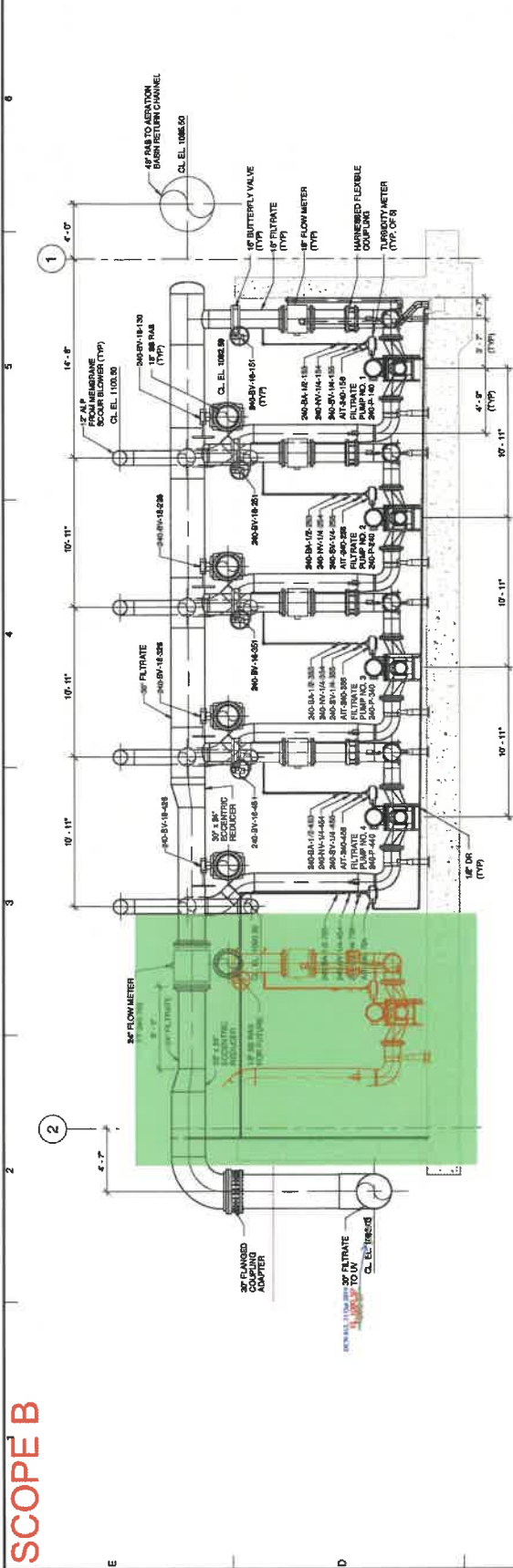
1111

DATE:	08/05/2019
PROJECT NO.:	00040819.00048
FILE NAME:	
DESIGNED BY:	K. HANNAH
DRAWN BY:	R. SHANDE
CHECKED BY:	A. HUSNIK

MEDICALITY

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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SHEET OF
M-240-03



NOTES:
1. AIR RELIEF VALVES SHALL BE LOW HEAD

APPROVED DRAWINGS IN PROCORE
(use this set for limited reference ONLY)

SCOPE B

ARCADIS

LEGAL ENTITY:
ARCADIS U.S., INC.

Balfour Beatty

CONSULTANTS

SEALS



STERLING NATURAL
RESOURCE CENTER



East Valley
Water District
31111 GREENSPOT ROAD
HIGHLAND, CALIFORNIA 92346

ARCADIS PROJ. NO. 0000819.008

NO.	DATE	ISSUED FOR	BY

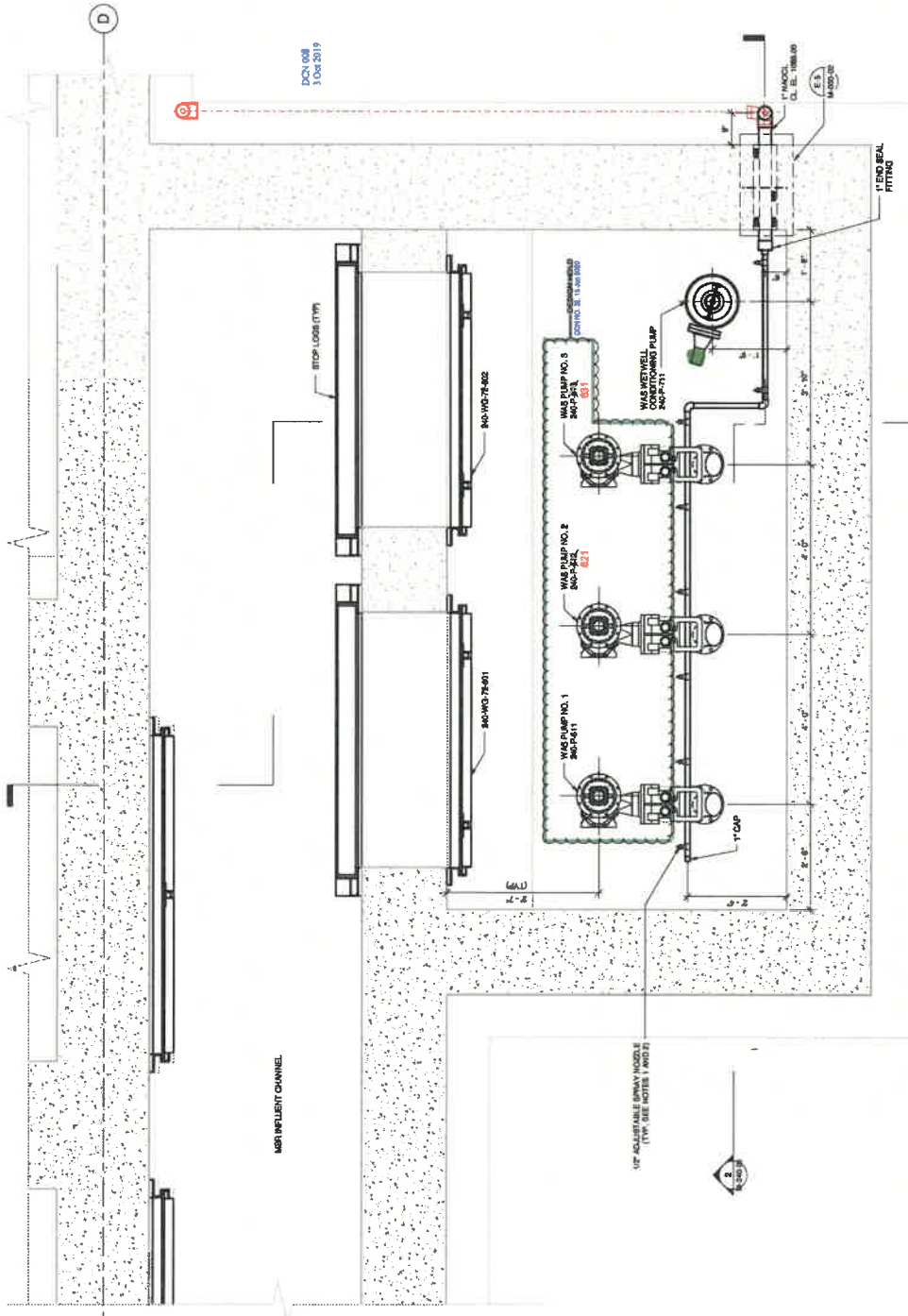
COPYRIGHT: ARCADIS U.S., INC.
DATE: 08/08/2019
PROJECT NO.: 0000819.008
FILE NAME: M. JACOBUS
DESIGNED BY: J. BRANDE
DRAWN BY: P. THORNTON / J. JACOBUS
CHECKED BY: P. THORNTON / J. JACOBUS

WAS PUMP STATION
LOWER PLAN

SCALE: 3/4" = 1'-0"

M-240-04
SHEET

N



- NOTES:
1. PUMP STATION ACCESSIBLE BY SPRAY NOZZLES NEAR ACCESS
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A WAS PUMP STATION LOWER PLAN

SCALE: 3/4" = 1'-0"

APPROVED DRAWINGS IN PROCORE
(use this set for limited reference ONLY)



**ALL AMERICAN ASPHALT
ALL AMERICAN AGGREGATES**
ENGINEERING – CONTRACTORS – ASPHALT PAVING
P.O. BOX 2229, CORONA, CA 92878-2229
STATE CONTRACTORS LICENSE #267073-A DIR #1000001051

To: GENERAL CONTRACTOR		Contact:			
Address: ESTIMATING DEPARTMENT		Phone:			
		Fax:			
Project Name: Sterling Natural Resource Center Change Order Work		Bid Number: ER#24-080			
Project Location:		Bid Date: 6/3/2024			
Item #	Item Description	Estimated Quantity	Unit	Unit Price	Total Price
1	6" AC Paving (B/C PG 64-10 Per Green Book, 2 Lifts)	2,000.00	SF	\$23.59	\$47,180.00
Total Bid Price:					\$47,180.00

Notes:

• **1. Bid Conditions**

- a. The price of asphalt is determined by the thickness and/or grade specified in this proposal item list. Any deviations from the specified thickness or grade may result in price adjustments.
- b. All American Asphalt shall not bear any responsibility for damage to streets or concrete improvements caused by third parties.
- c. Asphalt paving will be performed on a grade certified by others. The base must be compacted to the appropriate moisture content prior to paving. Scarification or recompaction of the subgrade is not included in the scope of work. The base must be in a Rock-Ready condition. Balancing is not included.
- d. The Prime contractor is responsible for painting all finish surface fill, including fills at grade breaks, on the pavement at 25-foot stations along each lane line. Fills must be completed prior to paving. The prime contractor is responsible for all associated costs.
- e. All American Asphalt is not responsible for final slope and flow when slope is 1% or less.
- f. All quantities and site conditions are subject to verification prior to contract execution.
- g. Pricing is based on 8-hour work shifts from Monday through Friday.
- h. A minimum of 4 weeks' notice is required to schedule any work.
- i. Construction water and a water truck accessible to our equipment and immediately adjacent to our work area must be provided by others.
- j. Excavating and replacing unstable dirt is not included in the scope of work. Excavation of existing dirt behind existing berms is the responsibility of others.
- k. The designated tack coat is SS-1H. Any deviations from the specified tack coat may result in price adjustments.
- l. If the number of required lifts exceeds the number specified in the Bid Item Description, the price is subject to change.
- m. If the final quantity for each item falls below 75%, the price is subject to change.
- n. This bid is based on One Move-In for AC Paving. Any additional Move-In cost will be charged for each additional move-in as follows. AC Paving \$20,000.
- o. Only the numbered line items and their specific descriptions are included in the scope of work. All other work is excluded.
- p. The prices quoted in this proposal remain valid for 30 days from the date of submission. Acceptance of this proposal within the specified timeframe is required.

• **2. EXCLUSIONS from this proposal : Unless included in the bid item Description**

- a. QC, QA, Engineering, Surveying, Staking, Inspection and/or Testing fees, Water Flow Testing, any Training, any Profilograph, any Profilograph Grinding.
- b. Bond cost, any Permit, Railroad Permit, Insurance Premium, Project Labor Agreement, Local Hire Requirement, Targeted Worker Requirement, OCIP / CCIP / WRAP insurance. Add 1.0% if bond is required.
- c. Traffic control, Traffic Control Plan, Railroad Flagging, Sign posting, Notice.
- d. Prime coat, Fog seal, Slurry seal, Seal coat.
- e. Manhole and/or Valve Adjustment and/or Patching, Coatings/Linings in manholes, Manhole Reconstruction, Frame and/or Cover Replacements.
- f. Sweeping and Cleaning, Weedkiller, Striping, Sign, Crack Seal, Routing.
- g. Any Filter Fabric work and/or Material, Underground work, Retaining wall, Bollard, Pipe work, and Redwood Header.
- h. Drainage related paving and/or Slot Paving and/or Trench paving.
- i. Any Removal, No Import or Export of sub-grade, Excavating and replacing unstable dirt, Excavating of existing dirt behind existing berm, Any Work related with Hazardous Material.
- j. Any Landscaping or/and Landscaping Related Work / Any Phasing of Work / Any Hazard Material Removal / Any Retaining Wall.
- k. If any support is required along the AC paving edge to achieve enough compaction, the support is to be provided by the Prime Contractor.

ACCEPTED:

The above prices, specifications and conditions are satisfactory and hereby accepted.

Buyer: _____

Signature: _____

Date of Acceptance: _____

CONFIRMED:

All American Asphalt

Authorized Signature: _____

Estimator: RYU, EDWARD
951-736-7600 eryu@allamericanasphalt.com



The Global Leader in Aluminum Structures

June 6, 2024

To: Balfour Beatty Infrastructure, Inc.

Reference: Top Mount Aluminum Extruded Flat Covers Over Various Tanks,
East Valley Water District,
Highland, CA
Specification Section: Per CST previous project 219206 / USP001271
CST Inquiry: 217867
Design Build Proposal

CST proposes to furnish all materials, and specific equipment to completely design, fabricate, and deliver ONLY the below reference sections with top mount extruded flat covers in general accordance with project specifications and as stated herein.

QTY	DIMENSIONS	TOTAL SQFT.	COVER LOCATION	COVER DESIGN LOAD
1	8' x 40'	320	Cassette Train 5 [10 covers]	50psf
1	4' x 8'	32	RAS Chamber 5	50psf

A. ALUMINUM ROOF COMPLETE AND CONSISTING OF THE FOLLOWING:

1. Structural shapes and support beams: 6061-T6, 6063-T5 aluminum extrusions.
2. Extruded Flat Covers: 6061-T6, 6063-T6 Aluminum extrusions.
3. Fasteners: 7075-T73 aluminum or 300-series stainless steel.
4. Anchors: 316-series stainless steel.
5. Sealant and gaskets: Neoprene or Silicone by Pecora.
6. Finish: Mill, with integral bi-directional non-skid surface.

TOTAL APPURTENANCES FOR MBR FACILITY,

- [2] Pipe Penetrations

B. MISCELLANEOUS ITEMS INCLUDE THE FOLLOWING:

1. Crate and freight to jobsite. Estimated freight is pre-paid and add and includes a 9% processing fee.
2. Cover approval drawings and calculations shall be stamped by a CA Professional Engineer.
3. Should CST deem it necessary, a dimensional survey will be performed to only confirm the basins dimensions, prior to commencement of fabrication.
4. No Sales Tax included and should be added by the purchaser if not tax except
5. No Installation Included

C. PRICE IS BASED & CONTINGENT UPON

1. All covers being purchased under one purchase order.
2. Basins to be covered being out-of-service, drained and cleaned (by others) during the cover installation.
3. All covers being considered as "substantially" air and watertight.
4. Any required beams or ledger angle shall be shipped unassembled, and ready for onsite field assembly.



5. Any other penetrations not listed within this scope but required to penetrate our cover system are to be routed to avoid interference with the cover structure members. CST will provide information to GC and engineer at the time of submittal so any new penetrations within the covers can be coordinated.
6. All walls must be level, smooth and at a constant elevation (by others) in order for the cover to seal properly.
7. Shipping the materials for all structures at the same time. Should the Purchaser elect to stagger (or sequence) the delivery of the covers, the contract price shall be adjusted to reflect the subsequent packing inefficiencies and resulting increased number of shipping containers.
8. The price being provided is based on dimensions as listed within this proposal and not to exceed a total of +/- 350 total sqft. General reference of the covered areas as listed on drawing S-240-02.
9. Any existing handrail shall be removed by others prior to cover installation.
10. Work area(s) not being considered as confined space.
11. The top mount walking surface of covers to be 6-8-inch above top of tank wall.
12. One (1) move-in/move-out of CST personnel to perform site visit to obtain critical dimension information of all basins prior to the start of cover fabrication. It is the responsibility of others to remove (and replace, if necessary) any existing covers or other obstructions to facilitate the site visit measurements by CST personnel. If additional move-in/move-outs of CST site visit personnel are required to obtain all critical information necessary that was not available during the previous site visit, such move-in/move-outs will be charged as a contract extra to the purchase
13. Cover layout and beam locations may differ for what is shown on the drawings.
14. Cover material types as listed within Section A of this proposal only.
15. Allowance for spec deviation. Some items within the spec are proprietary to another Cover MFG.
16. Payment terms and milestones based on a mutually agreed schedule.
17. Flat Cover system will primarily consist of removable panels, each weighing less than 150lbs. Panels with adjustable pipe penetrations shall be considered "non-easily removable", panels with fixed penetrations shall be considered "non-removable" All adjacent panels shall remain completely removable.

D. INSTALLATION:

1. Not included.

E. GENERAL NOTES

1. Because CST is not a local contractor, the punchlist for the aluminum cover (if any) shall be provided to CST for action while we are still mobilized at the site. Additional mobilizations for punchlist(s) generated after we have demobilized shall be considered a contract extra.
2. If the project is tax-exempt, the purchaser must provide CST with a tax-exempt certificate. If the project is not tax-exempt, the purchaser must furnish CST with a resale certificate. Otherwise, CST will charge applicable sales and use taxes to the purchaser as a contract extra.

F. BASIC ITEMS NOT INCLUDED

1. Supply of any appurtenances or covers not specified herein.
2. Extra labor and materials required if the tank dimensions or conditions are different than specified.
3. Modification, if required, to avoid interference with any walkways, handrail, piping or other equipment.
4. Sales tax, building permits, P&P, bonds, or any other than specified herein.
5. Warranty for buyout items (non-CST manufacture) such as louvers, vents, fans, motors, etc. are the responsibility of the manufacturer of the specific item and not included in CST warranty agreement.
6. Protection of basin / tank floor and/or interior surfaces.



7. Covers over any other sections not listed herein.
8. Epoxied anchors for new concrete walls.
9. S.S ledger angles.
10. Union labor.
11. Any exterior walkways and/or handrails shall be supplied by others.
12. Any proprietary items to another cover MFG within the specs.
13. NEEB testing, CST will submit a previous 3rd party leak test that meets and/or exceed the requirements listed with the spec [upon request]
14. Programable Logic Controller Software shall be supplied by others
15. Architectural mills finish, as specified in the NAAMM manual;
16. Sloped covers from the center out. Covers can be slightly sloped to one side to allow drainage towards the perimeter but will not be higher at the center.
17. Panel load or leak test of any kind.
18. Davit crane supports.
19. Slice gate covers.
20. MBR basins being required to support the wet cassette weight.

G. TOTAL LUMP SUM PRICE

Delivered Materials Only:	\$ 74,500
CST Install:	\$ N/A
Lump Sum Total:	\$ 74,500

H. DESIGN CONSIDERATIONS:

1. Cover Design based on ASCE 7-16, and CST previous project 219206 / USP001271
2. NOTE: Some codes & standards reduce load criteria within the calculations for certain scenarios. For CST to design per the requested and/or required codes and standards, reductions (when applicable) must be considered. It is the specifying engineer's responsibility to notify CST of any code or standard reductions not to be considered prior to placing the order. Otherwise, CST will calculate as per the requested code(s) and standard(s) and the customer will accept CST's interpretation of the specified standard or code. Code changes or changes due to interpretation post order will result in a charged change order and/or potential delays.

I. VALIDITY:

1. This proposal is offered for your acceptance not later than 35 days after bid opening.
2. The prices quoted are based on the current material costs of metals. Due to the current unprecedented volatility in the metals market, we reserve the right to review pricing for orders received and adjust our price accordingly.
3. Pricing is based upon the expectation that CST will be able to complete its scope of work by 12/2024. In the event that others delay or change the project schedule, CST reserves the right to adjust the contract price.



J. TERMS OF PAYMENT:

See "CST Industries Terms and Conditions of Sale for CST Industries Product Lines" included with this proposal.

- 30% Down Payment upon placement of order by buyer, Due on Receipt.
- 30% Upon completion and approval of engineered drawings, Net 30.
- 40% Upon completion of fabrication and ready to ship, Net 30.
- No Retainage Allowed

K. SHIPPING INFORMATION:

The point of origin is Conroe, Texas.

FOB: Highland, CA

Freight quote based on the current costs of shipment. Due to the current unprecedented volatility in gas and freight charges, CST reserves the right to review pricing at the time of shipment and adjust the freight price. Estimated freight is pre-paid and add and includes a 9% processing fee.

L. SCHEDULE: (Subject to work load at time of order.)

Submittal drawing preparation, material delivery and installation as mutually agreed after CST has reviewed the customer's proposed CPM schedule for the project. (Note: Delivery is contingent upon availability of materials at the time of order)

PRELIM SCHEDULE:

- Submittal Package: 4-6 weeks AFTER the PO has been executed.
- Manufacturing: 12-14 weeks AFTER the order has been released for Fabrication.

M. WARRANTY

See "CST Industries Limited Warranty" included with this proposal.

Respectfully submitted by,

Edgar Saenz,
CST Industries, Inc.
Account Executive – Water/Wastewater
Email: esaenz@cstindustries.com



CST Industries Terms and Conditions of Sale for CST Industries Product Lines

- 1) **Offer and Price Increases.** This offer shall constitute an offer to sell goods described herein by CST Industries (Seller). This offer shall be construed as inviting acceptance by Buyer as prescribed by applicable law. If Seller's material increases and/or economic conditions impact price prior to delivery of goods, Seller may increase the price of the goods. Prior to doing so, Seller shall give Buyer ten (10) days written notice of any proposed increase. If, however, within ten (10) days of receipt of Seller's notice of the proposed increase, Buyer notifies Seller in writing that it will not accept the proposed increase, Seller will have the right to cancel this Offer by written notice to Buyer within ten (10) days after receipt by Seller of Buyer's notice. Stenographic and clerical errors are subject to correction by Seller.
- 2) **Acceptance.** The terms and conditions of this Offer will apply and become a part of the contract between Seller and Buyer unless specifically changed in writing and signed by an executive officer of Seller. Upon acceptance, the terms and conditions of this Offer shall in all cases, without exception, control and take precedence over any terms and conditions in Buyer's acceptance. Any conflicting terms and conditions in any purchase order, acknowledgement or other document utilized by Buyer in this transaction, are expressly rejected and the terms of this offer will prevail.
- 3) **Delivery.** Unless otherwise agreed to in writing, the price and delivery of all goods, are FOB Seller's factory. Title to the goods shall pass to Buyer once Seller has completed its performance with reference to the physical delivery of the goods, subject to any security interest in favor of Seller, if applicable (see Section 12); except where Buyer requests a delay in shipment or where the goods are held at Seller's factory later than the agreed upon ship date, in which case the title will pass to the Buyer, at Seller's sole discretion, when the goods are ready for shipment. If the goods are held at Seller's factory later than the agreed upon ship date, then Buyer shall pay Seller's standard storage charges (see Section 8) for the period from the scheduled shipment date to the actual date of shipment. Such storage charges shall include insurance coverage for the buyer's stored product. The processing of freight claims or loss claims is the responsibility of Buyer.
- 4) **Scheduling of Goods.** Seller utilizes the same process for all orders. Receipt and execution of order from Seller, drafting and engineering, submission of engineered drawings for approval, release to manufacture. Orders can only be released to manufacture if engineered drawings have been approved by Buyer and all changes have been reconciled. Once an order has been released to manufacture it will progress through Seller's production schedules. A "Planned" schedule date is given out at the time the sales order is entered and reflects the current engineering, drafting, procurement, and fab lead times plus 2-3 weeks for customer to turn around approval drawings. Projects move to a "Soft" schedule status when the customer returns approved engineering drawings and drafting provides a committed date to have fab drawings and Bills of Material to the shop. Projects move to a "Hard" schedule status when the shop has received completed fab drawings and bills of material from drafting, and has a commitment from vendors on material availability. Until a project is hard scheduled, any shipment estimate is subject to the availability of products from vendors. In the event of a production shortage, Seller shall have the right to allocate its available goods among its customers in such a manner as Seller shall desire.
- 5) **Seller's Limited Warranty.** See attached Limited Warranty (Tanks and Covers), Document # 283970-000.
- 6) **Method of Shipment and Freight Charges.** Freight will be charged prepay and add unless otherwise mutually agreed to in writing and are due upon receipt. Orders specifically including freight, handling or other logistics charges are based on Seller's rates in effect on date of acceptance of this Offer and on the routing of shipment arranged by Seller. Seller will ship goods in accordance with Buyer's routing whenever such routing will not result in an increase in freight or other transportation charges. In the event of such increases, the payment of any additional freight or other transportation charges is guaranteed by Buyer to Seller's satisfaction. The goods shall be packaged for shipment at the lowest acceptable rate by common or other carrier, or any other method deemed necessary or advisable by Seller. Marking shall be in accordance with ordinary commercial practice at place of shipment, unless otherwise designated by Buyer and accepted by Seller.
- 7) **Force Majeure.** Shipping and delivery dates are approximate and are based upon Seller's ability to obtain all necessary labor, materials, parts and, where applicable, the receipt of all necessary information, plans or specifications from Buyer. Seller shall not be liable for damages resulting from any delay or failure to deliver the goods, or otherwise perform under this Offer, due to circumstances beyond its control and not occasioned by its fault or negligence, including but not being limited to, any act of government, inability to obtain materials, failure of vendors, strikes, labor disputes, civil commotion, acts of God, or other occurrences rendering Seller's performance commercially impracticable, regardless of whether such occurrences are foreseeable.
- 8) **Invoice & Hold – Storage Fees.** Buyer will be invoiced immediately and accept responsibility for payment and any



applicable storage fees.

- 9) **Storage** – Two (2) weeks “grace period” from agreed upon ship date – no charge. A charge of \$ 500 per tank/cover per week will be assessed for weeks 3-5. A charge of \$ 1,000 per tank/cover per week will be assessed for weeks 6-8. The maximum storage period is eight (8) weeks. Arrangements must be made for shipments so that the maximum storage period is not exceeded.
- 10) **Terms of Payment.** Subject to satisfactory credit approval, as set forth in paragraph 10, the following terms apply:
30% Down Payment upon placement of order by buyer, Due on Receipt
30% Upon completion and approval of engineered drawings, Net 30
40% Upon completion of fabrication and ready to ship, Net 30.
 - Installation labor will be billed bi-weekly based on percentage of completion.
 - Down payment secures your position in the order of the process and allows CST to allocate engineering and company resources to advance your order. Down payment is not used to secure price or material.
 - Pricing and payment terms make no allowance for setoff, bonding, or retainage.
 - A late charge of 2.5% per month will be charged on invoices not paid at maturity.
 - Invoice date of submittal determines the due date for payment, regardless of acceptance by Buyer’s payment portal.
- 11) **Credit Approval.** This Offer is subject to (a) execution by Buyer of such additional contract documents, security agreements, notes or other instruments as Seller shall deem necessary or desirable and (b) Seller’s review and acceptance of the financial condition of Buyer. If the financial condition of Buyer at any time does not in the sole judgment of Seller, justify continuance of shipment under the terms of this Offer, Seller reserves the right to ship under reservation, or to require full payment before shipment, delivery or erection. Additionally, Seller may at its discretion file such notices for financial protection under the lien or bond statutes of each state.
- 12) **Duty Drawback.** The manufacturer reserves all drawback rights for materials it produces and sells to Buyer. If Buyer exports the product which Seller manufactures, it is agreed that evidence of exportation shall be supplied to Seller to facilitate its claim of drawback upon request and without charge to Seller.
- 13) **Security Interest.** To secure payment for goods, Buyer grants to Seller a security interest in the goods and agrees that Seller shall have the rights and remedies of a secured party under the Uniform Commercial Code. Buyer designates Seller as its attorney-in-fact to execute any financing statements on behalf of Buyer necessary to perfect such security interest.
- 14) **Taxes.** Seller’s prices do not include sales, excise or similar taxes levied by government authority, either foreign or domestic. Consequently, in addition to the prices specified herein, the amount of any present or future sales, use, excise or other similar tax applicable to this transaction, shall be paid by Buyer as part of this sale, or in lieu thereof, Buyer shall provide Seller with a valid tax exemption certificate acceptable to taxing authorities of the Shipped-To state. On any material picked up by Buyer at the plant, the tax jurisdiction of the FOB state is applicable.
- 15) **Additional Work and Inspection.** No extra labor, materials or parts will be furnished under this Offer, unless it has been ordered by Buyer on Seller’s sales order form, and the prices and terms of sales are approved by Seller. Seller may at its option subcontract labor, material and parts required by this Offer without Buyer’s consent. The goods shall be, at Seller’s option, subject to inspection and testing during manufacture. Any inspection by Buyer shall be made prior to shipment at Seller’s factory or point of shipment. Unless otherwise agreed to, Seller shall not be responsible for unpacking, storage, field assembly of goods, or construction of foundations. Furthermore, Seller shall not be responsible for the choice of use or linings, sealants, and gasket materials not sold hereunder; or the installation, attachment, or connection of piping, conveying and ventilating equipment, or other attachment of accessories or components not sold hereunder.
- 16) **Infringement.** Seller, at its own expense, shall defend the Buyer against any claims which may be instituted against the Buyer alleging infringement of United States Patents relating to the subject matter of the accompanying sales proposal, provided the Buyer gives Seller immediate notice in writing of any such alleged patent infringement claim and permits Seller, through its own counsel, to defend such claim. In such cases, Buyer shall furnish Seller with all needed information and assistance. The obligations of Seller hereunder shall not extend to any infringement claims arising as a result of the use of the equipment as part of any combination of other devices, machinery or parts.
- 17) **Cancellation, etc.** Buyer’s cancellation of any order is required to be in writing delivered to the Seller’s Project Manager, and Buyer is subject to pay a cancellation fee equal to 25% of the total purchase price plus all non-recoverable costs and expenses.
- 18) **Change Control.** The scope of work described in this proposal will be executed on a fixed price basis. Any change to the project scope that would impact pricing must be agreed to by both parties and approved in writing on a form provided by



Seller. Either party may request a change. CST has built sufficient time into this project to account for the impact of reasonable timelines that are present at the beginning of any engagement. Nevertheless, the parties agree that legitimate issues outside of Seller's control could arise during the project that would have an impact on the effort and/or time required to complete the project. Examples include, but are not limited to: Any change in project objectives or scope, deviations from the functionality used to determine scope, discovery of a requirement or issue that was not disclosed by Buyer or that could not have been reasonably anticipated by either party, failure by the Buyer to respond in a timely manner to requests by Seller for information, direction or decision. It is the Seller's responsibility to notify Buyer if a situation arises that it believes justifies a pricing or schedule change, and to provide associated rationale. Both parties agree to negotiate any disagreements in good faith. Work on any change will not begin until a change request has been agreed to and approved in writing by both parties.

- 19) **Law.** The rights and obligations of the parties shall be governed by the domestic laws of the State of Missouri without regard to its conflict of law rules or the United Nations Convention for the International Sale of Goods.
- 20) **Arbitration.** Any dispute, controversy or claim arising under this agreement shall be settled by arbitration in Kansas City, Missouri, pursuant to the American Arbitration Association rules.
- 21) **Entire Agreement.** This Offer contains the entire agreement between Seller and Buyer, and no modification of this Offer shall be binding upon Seller unless evidenced by an agreement in writing signed by an executive officer of Seller after the date hereof. No oral or written statements by Seller's sales representatives, or other agents, made after the date hereof shall modify or vary the express terms hereof unless evidenced by an agreement in writing signed by an executive officer of Seller after the date hereof. To the extent any advertising or promotional material of Seller contradicts or disagrees with the terms hereof, Seller and Buyer agree that the terms hereof shall control and that such advertising and/or promotional materials are not part of the agreement between Seller and Buyer.
- 22) **Confidentiality of Proposal.** All terms and conditions of this Offer shall be held in strict confidentiality by the Buyer and shall not be divulged by the Buyer to any other person or entity without the express prior written approval of the Seller.

Par0354

03/24/23



LIMITED WARRANTY (Tanks & Covers)

All of the following provisions on this page constitute CST Industries, Inc.'s LIMITED WARRANTY for its products, all of which are part of the terms and conditions of sale.

LIMITED WARRANTY: CST warrants to the original buyer that our products will be free from defects in material and workmanship under normal conditions and use for a period of 12 months from the date of installation or 14 months from the date of shipment, whichever is earlier. This warranty may not be transferred or assigned to any other person or entity other than the original owner of the Project if different from the Buyer. This warranty does not contemplate any future performance by us. This Warranty is contingent upon and will be invalidated by our failure to receive full and timely payment of all invoices relating to the Project.

EXCLUSIONS: This Warranty does not cover products or materials that are not manufactured or sold by us. This warranty does not cover products that have been altered or repaired by anyone other than us without our written consent.

This Warranty excludes damage to or the failure of our products or systems as a result of:

- 1) Material defects or failures of products not manufactured by us.
- 2) Fire, flood, high winds, earthquake, lightning strikes, or other catastrophic events or other Acts of God.
- 3) Vandalism, physical abuse, misuse, neglect, accident, or other physical damage to the products or systems.
- 4) Exposure to chemicals or other substances, materials, or temperatures that are not anticipated.
- 5) Physical damage to the integrity of the products including but not limited to, penetrations, crushing, breaking, or other destruction.
- 6) Any change in use of the products or the project not expressly acknowledged and agreed to by us, including without limitation, the storage of materials with different composition, maximum bulk densities or flow characteristics, or a change in the process.
- 7) Structural design and operating performance issues, problems, or consequences attributable in whole or in part to the correctness of design and operating parameters provided by Buyer or the correctness of interfacing work, material or services provided by Buyer (such as foundations or attached process or control equipment); and
- 8) Any failure to handle, store, transport, install, maintain, or operate our products in accordance with our instructions, applicable building codes, and standard industry practices. This includes, but is not limited to, proper operation and maintenance, filling and emptying. Ventilation and pressure/vacuum relief devices must be maintained by Buyer to assure that design pressures and vacuums are not exceeded. Grouting, if required, must be installed and properly maintained by Buyer. Tanks, covers, lining/coatings, cover structure or sheeting/panels, sealers and gaskets, etc. must be maintained by Buyer as necessary to protect against damage, wear and corrosion. Buyer must perform tank and cover inspections in accordance with Seller's guidelines and provide written inspection reports to Seller within two (2) months of each required maintenance period. All evidence of tank, cover, or tank lining damage, both internal and external, is to be repaired by Buyer using repair methods specified by Seller.

REMEDY: Your sole and exclusive remedy is limited to our providing you a replacement product or part, repairing the defective product or part, or paying you the prorated value of the defective product or part, at our sole discretion. We will not pay for the labor or other costs to remove or replace the defective product or part, including labor or other costs to remove the contents and/or clean a structure or obtain access to the defective product or part, or freight for shipment of the defective product or part. There may be certain circumstances where we will elect to repair the condition rather than provide you a replacement product or part, as an alternative remedy. In addition, there may be other circumstances that we elect to pay you the prorated value of the defective product or part based on the time remaining on the warranty, as an alternative remedy. This Warranty shall not have failed its essential purpose as long as we are willing to provide comparable replacement product or part or elect one of the alternative remedies.

LIMITATION OF LIABILITY: THE WARRANTY DESCRIBED ABOVE IS THE ONLY WARRANTY MADE BY US AND SHALL BE IN LIEU OF ANY OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. WE SHALL NOT BE LIABLE FOR ANY OTHER DAMAGE OF ANY KIND, INCLUDING BUT NOT LIMITED TO, LOSS OF REVENUES OR PROFITS, LOST SALES, LOSS OF CONTENTS, LOSS OF USE, ANY INABILITY OF BUYER TO PROVIDE PRODUCT OR SERVICES TO A CUSTOMER, INJURY TO PERSON OR PROPERTY (INCLUDING DAMAGE TO THE BUILDING OR ITS CONTENTS AS A RESULT OF FIRE, EXPLOSION OR OTHERWISE), ENVIRONMENTAL INJURIES, OR ANY OTHER INCIDENTAL OR CONSEQUENTIAL LOSS OR DAMAGE. THE TOTAL LIABILITY OF SELLER TO BUYER IN CONTRACT, TORT (INCLUDING FAULT,



East Valley Water District,
CST REF#217867
Extruded flat covers over various tanks

June 6, 2024

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NEGLIGENCE OR STRICT LIABILITY) OR OTHERWISE RESULTING FROM OR ARISING OUT OF ANY CAUSE WHATSOEVER IN CONNECTION WITH THIS SALE SHALL UNDER NO CIRCUMSTANCES EXCEED THE EX-WORKS MATERIAL AMOUNTS ACTUALLY PAID TO US. This limitation of liability shall apply to any claim against us to the fullest extent permitted by law, including without limitation any claim of breach of contract, negligence, misrepresentation, nondisclosure, breach of any duty of good faith and fair dealing, violation of any consumer protection statute, or any tort claims.

CLAIM PROCESS: To make a claim under this Warranty you must follow the claims process set forth in the Warranty Online service, which is available at partsonline.cstindustries.com. CST must be notified of all warrantable conditions within ninety (90) days of discovery.

For reimbursement, all claims must be filed within forty-five (45) days after you discover the problem. Any action brought by you arising out of or in connection with breach of this Limited Warranty shall be commenced within ninety (90) days after the expiration of the Warranty. Once a claim has been made, we have the right to perform an on-site inspection of our products.

283970-000 Rev.

3/24/2023



FERGUSON WATERWORKS #1088
1502 COLUMBIA AVE
RIVERSIDE, CA 92507-2014

Phone: 951-674-1323
Fax: 951-674-1084

Deliver To:
From: James Bryan
Comments:

16:17:15 JUN 01 2024

Page 1 of 1

FERGUSON WATERWORKS #1083

Price Quotation
Phone: 951-674-1323
Fax: 951-674-1084

Bid No: B476212
Bld Date: 06/01/24
Quoted By: JPB

Cust Phone: 404-875-0356
Terms: NET 10TH PROX

Customer: BALFOUR BEATTY INFRASTRUCR
999 PEACHTREE ST NE STE 200
PO# 44173008-702-002
ATLANTA, GA 30309

Ship To: BALFOUR BEATTY INFRASTRUCR
999 PEACHTREE ST NE STE 200
PO# 44173008-702-002
ATLANTA, GA 30309

Cust PO#: 24" STRAUB COUPLING

Job Name: 2018-01 STERLING NATURAL

Item	Description	Quantity	Net Price	UM	Total
SP-SSTR25519SI	24 GRIP VITON FPM/FKM SS IPS COUP	2	4254.030	EA	8508.06

Net Total: \$8508.06
Tax: \$0.00
Freight: \$0.00
Total: \$8508.06

Quoted prices are based upon receipt of the total quantity for immediate shipment (48 hours). SHIPMENTS BEYOND 48 HOURS SHALL BE AT THE PRICE IN EFFECT AT TIME OF SHIPMENT UNLESS NOTED OTHERWISE. QUOTES FOR PRODUCTS SHIPPED FOR RESALE ARE NOT FIRM UNLESS NOTED OTHERWISE.

CONTRACTOR CUSTOMERS: IF YOU HAVE DBE/MBE/WBE/VBE/SDVBE/SBE GOOD FAITH EFFORTS DIVERSITY GOALS/ REQUIREMENTS ON A FEDERAL, STATE, LOCAL GOVERNMENT, PRIVATE SECTOR PROJECT, PLEASE CONTACT YOUR BRANCH SALES REPRESENTATIVE IMMEDIATELY PRIOR TO RECEIVING A QUOTE/ORDER.

Seller not responsible for delays, lack of product or increase of pricing due to causes beyond our control, and/or based upon Local, State and Federal laws governing type of products that can be sold or put into commerce. This Quote is offered contingent upon the Buyer's acceptance of Seller's terms and conditions, which are incorporated by reference and found either following this document, or on the web at <https://www.ferguson.com/content/website-info/terms-of-sale>
Govt Buyers: All items are open market unless noted otherwise.

LEAD LAW WARNING: It is illegal to install products that are not "lead free" in accordance with US Federal or other applicable law in potable water systems anticipated for human consumption. Products with *NP in the description are NOT lead free and can only be installed in non-potable applications. Buyer is solely responsible for product selection.

WATER FLOW RATE NOTICE: Lavatory Faucets with flow rates over 0.5 GPM are not allowed for 'public use' in California.



HOW ARE WE DOING? WE WANT YOUR FEEDBACK!

Scan the QR code or use the link below to
complete a survey about your bids:

<https://survey.medallia.com/?bidsorder&fc=1083&on=25623>



11909 TECH CENTER CT
POWAY CA, 92064
PH (858) 391-3700
FAX (858) 391-5958

QUOTATION

PROJECT

STERLING NATURAL
MATERIAL IS AIS

BID DATE: 5/31/2024

QTY	DESCRIPTION	UNIT PRICE	TOTAL
2	6" X 19'6" CL53 DI CL/BC BE PIPE	\$2,394.60	\$4,789.20
15	6" STYLE 31 GROOVE COUPLING	\$569.87	\$8,548.05
4	6" DI GRV 90 DEG ELL	\$596.70	\$2,386.80
1	6" DI GRV TEE	\$770.40	\$770.40
2	6" GRV FLANGE ADAPTER	\$531.60	\$1,063.20
1	6" X 2" SADDLE	\$329.23	\$329.23
20	2" SCH80 PVC PIPE	\$7.83	\$156.60
2	2" X 6" SCH80 PVC NIPPLE	\$15.89	\$31.78
6	2" SCH80 PVC 90 DEG ELL	\$16.70	\$100.20
1	2" SCH80 PVC 45 DEG ELL	\$39.17	\$39.17
4	2" SCH80 PVC COUPLING	\$20.74	\$82.96
5	2" SCH80 PVC UNION	\$75.40	\$377.00
2	2" SS UNION	\$246.18	\$492.36
SUBTOTAL			\$19,166.95

NOTES:

- 1) NO TAXES INCLUDED.
- 2) PER FERGUSON'S STANDARD TERMS AND CONDITIONS.
- 3) THIS IS OUR INTERPRETATION OF THE PLANS, SPECIFICATIONS AND IS NOT A GUARANTEED BILL OF MATERIALS.
- 4) PRICES ARE SUBJECT TO CHANGE.

JAMES BRYAN

CELL=951-239-6379



5/31/2024

Page 1 of 2



Ask about [RebarZero®](#) – the only true net-zero steel product



BID PROPOSAL FORM
Contractor's License # 778010
DIR #1000000298

ESTIMATE #: ESO24277

BID DATE: 05/021/2024

BID TIME: 02:00PM

TO: Balfour Beatty

ATTN: Nathan Rom

EMAIL: nrom@balfourbeatty.com

PHONE: 909.915.4660

PROJECT NAME: Sterling National Resource Center

PROJECT LOCATION: Highland, CA

CMC Steel Fabricators, Inc. dba CMC Rebar Seller-Supplier is pleased to submit the following offer/agreement for the above referenced project. Performance of this Bid/Offer shall be governed by and in compliance with the **Concrete Reinforcing Steel Institute Manual of Standard Practices**. This offer represents the full scope and intent on the part of this Seller-Supplier to provide services and materials to Contractor. This bid submitted is subject to and expressly conditioned upon all the terms and conditions set forth below. **WE ARE A UNION CONTRACTOR.**

SCOPE OF WORK / PRICE

Bid Item:	UOM	Total Price
01-Base Bid Reinforcing	LS	\$ 29,856
01-Base Bid / FOB Drill & Grout	LS	\$ 3,053
Grand Total	LBS	\$ 32,909
Bid Cost (Rate = .315%)		\$ 104

Reinforcing Steel Quoted Conforms to the Requirements of the Inflation Reduction Act

PRICES ABOVE ARE ONLY GUARANTEED THROUGH THE START & FINISH DATES AS INDICATED IN THE SCHEDULE BELOW

Special Notes:

1. All reinforcing to be delivered on 1 load only, estimated weight 25,562 LBS.

CONSTRUCTION SCHEDULE

1. The above pricing is based on the following concrete construction schedule:
Start = Assumed 8-24
Finish = Assumed 12-24
2. Prices, as quoted, will remain firm for fifteen (15) calendar days, after which time Subcontractor reserves the right to revise this quotation. Written notification within fifteen (15) calendar days is required to guarantee pricing for the durations noted above.
3. If awarded, prices will be held to construction schedule finish date listed above. After that date, \$50 / ton per quarter may be added for any remaining scope.

5425 Industrial Parkway | San Bernardino, CA 92407 | cmc.com
Tel: (909) 803-1500 | Fax: (909) 899-9799
License # 778010 | DIR # 100000298



PLANS AND SPECIFICATIONS:

Architect/Engineer: East Valley Water District
Specifications: General notes
Plans/Drawings: Sheets 1-14
Dated: 3/29/2019
Addendum:

SCOPE OF WORK INCLUSIONS:

FURNISHED & INSTALLED

1. Deformed reinforcing bars for C.I.P. concrete

FURNISHED F.O.B. TRUCKS JOBSITE

1. Drill & grouted dowels

GENERAL CLARIFICATIONS:

1. Prices include applicable State and Local Sales Tax. 8.75%
2. Prices / Bid items quoted are not for separate acceptance without prior approval from Subcontractor.
3. Subcontractor's price is based on detailing, fabricating, shipping, and placing on a normal five (5) day, forty (40) hour work week (all Union contract and nationally recognized holidays are observed). Night and/or shift work is not included. All work performed outside of such hours shall be charged at Subcontractor's standard rates for overtime, weekend, night, or holiday work.
4. **Subcontractor's price is based on Contractor furnishing all design information, location of construction joints and lift plans in sufficient time to allow for preparation and approval of submittals (if they are required), plus seven (7) working days for fabrication and delivery.** Performance will be based on conventional construction and the timely receipt of two (2) complete printed sets of plans, specifications and CADD files (if available). Additional lead time will be required for special mill rolling (including but not limited to #14, #18, A706, Grade 80 & Grade 100 reinforcing steel bars), spirals, threaded bars, welded hoops, epoxy coating, galvanizing, special mesh, mechanical connections, T-Headed anchors, etc. A Letter of Intent and/or a Subcontract authorizing procurement of these long lead / mill order items must be received in a timely manner. Delays of more than forty-five (45) days may result in additional cost of materials.
5. Subcontractor's price includes additional labor time for a Foreman to attend standard weekly scheduling meetings and for all onsite employees to attend daily safety tail-gate meetings. It does not include any additional labor time for any type of special safety, coordination, and/or instructional training meetings unless specifically included in the Special Notes section.
6. The Contract and/or Change Order unit prices (if reflected herein) is (are) based on receipt of information or scope of work changes, prior to detailing, fabrication, shipment and/or placement of material.
7. "Black" A615/A706 grade 60 reinforcing steel bars to be furnished and installed, as noted herein, for the bid items listed above only, unless noted otherwise.

HOISTING/LOWERING NOTES:



Contractor shall furnish, without charge, suitable equipment fully operated for hoisting/lowering reinforcing steel, accessories, etc., including unloading trucks, staging of reinforcing to points of installation (into foundations and onto elevated decks, etc.) setting wall cages and/or any other pre-tied assemblies and including any power placing of individual bars that Subcontractor may require.

SCOPE OF WORK EXCLUSIONS:

(Unless included in Scope of Work Above - Furnishing and/or installing)

1. All testing, inspection, X-ray and/or any related costs thereof other than mill test reports. (Rebar test bar samples to be provided F.O.B. trucks jobsite if required).
2. As-Built Drawings / Building Information Modeling / Record Drawings / Coordination Drawings (Rebar Placement Drawings will be provided as submittals in lieu of).
3. Threaded bars, rods, sleeves, dowel baskets, anchors (DBA's & misc.), bolts (anchor & misc.), embeds and inserts.
4. Plain (smooth) round bars.
5. Stud rails, shear studs, similar.
6. Wrapping, coating, sheathing/sleeves (Rubitex, plastic and/or cardboard), painting, and/or greasing of reinforcing steel, smooth round and/or wire mesh.
7. Supplying, installing, and/or maintaining any form of rebar cap or safety device on installed reinforcing steel, any bars to be "field" bent and/or any reinforcing steel on the ground/stored. (Per latest OSHA Standards).
8. Cost of pour watchman, unless from crews already working on site.
9. All permits (except hauling) and licenses, other than city/county business licenses and State Contractor's license, required for the work.
10. Cost of Payment and Performance Bonds.
11. Any or all reinforcing steel, and/or wire mesh not shown on drawings unless specifically included in Scope of Work/Price.
12. Rebar placing drawings prepared, reviewed, signed, sealed, or stamped by a licensed engineer.
13. Quality control manager, inspector, and a quality control plan. (Contractor to provide these services.)
14. Costs for relocation of materials for the convenience of others after materials are unloaded at Contractor designated areas.
15. Composite clean-up crews.
16. The cost of reworking, rehabilitating and/or replacing reinforcing steel damaged or lost as a result of flood conditions. If storm damage should occur, responsibility for steel fully or partially in place, and for steel stored in locations designated by Contractor, shall be for Contractor's account.
17. Traffic control (Lane closures, barricades, signs, lights, etc.). (A flagman for our deliveries only is included.)
18. Splices in reinforcing bars and/or construction joint dowels for Contractor's convenience shall be for Contractor's account. Also splices required due to low overhead, power lines and/or deficiencies in hoisting equipment unless specifically shown on contract drawings at that particular location, shall be for Contractor's account.
19. Any reinforcing referred to as "Spec. Steel", "Allowance" and/or "As directed by Engineer" other than by additive quote. Accessories, wire mesh and/or mechanical couplers will not be included in this type of additive quote. If Change Orders are to be applied against "Spec. Steel" allowances, then the dollar value and NOT the weight of the Change Order will be applied.
20. Exposing, cutting, burning, cleaning, straightening and/or bending of existing steel, previously poured steel and/or improperly placed drill and grout/bond dowels.
21. Drilling, coring, grouting, dry packing, and the placing of bars into and/or through any drilled and/or precast holes. Extensive coordination between the Contractor responsible for drilling and grouting the reinforcing steel



dowels and this Subcontractor must take place prior to installation and grouting of these items to ensure our ability to install remainder of reinforcing steel for that element

22. Furnishing and/or welding of dowels/anchors to miscellaneous steel and/or structural steel.
23. All welding.
24. Breakout dowels, Form Savers, etc. and/or installation of same.
25. Masonry Steel, other than deformed rebar. (Dura-Wall, ladders, positioners, hangers, etc.)
26. Reinforcing for precast concrete items. (Cast off site.)
27. Providing and/or laying out holes in structural steel for reinforcing bars to pass.
28. Stainless Steel / Epoxy Coated / Galvanized deformed and/or plain bars and/or wire mesh.
29. Field bending of rebar other than by additive quote.
30. Added reinforcing in precast work for lifting stresses or pick-up devices.
31. All site work, including but not limited to paving, sidewalks, site walls (CMU or C.I.P.), light pole bases and all storm drain items such as curb and gutter, catch basins, clean-outs, inlets, outlets, manholes, headwalls, collars, etc. unless specifically included in Scope of Work/Price.
32. Any "offsite" work.
33. Reinforcing in metal stair pan treads and landings.
34. Protection of exposed steel for future construction.
35. Mock-up and/or test panel reinforcing steel.
36. Cleaning of marks left on forms that transferred to the concrete.
37. Electrical duct bank encasement reinforcing.
38. Reinforcing steel and/or additional labor required due to any type of shoring system. (Tiebacks, rakers, etc.)
39. Reinforcing in topping / insulating slabs (i.e., key deck mesh, etc.).
40. Prestressing and/or prestressing materials. (Including but not limited to any additional reinforcing steel required by any prestressing/post tensioning system).
41. Parking costs for Field Crews
42. Overtime and Shift Premium Costs.
43. Lines, Grades, Layout of Concrete and Masonry Elements, and Supporting Rebar Templates.
44. Dust control, track out and tire wash costs.

CONTRACTOR TO PROVIDE:

The following items are to be provided by Contractor, fully erected for use at all locations necessary without charge:

1. Accurate & level grades / elevations.
2. Proper layout lines for all concrete elements such as footings, slabs, walls, columns, openings, depressions, masonry wall dowels, etc. Subcontractor will layout its own reinforcing steel from the contractor provided lines.
3. Templates/starter walls constructed with sufficient accuracy to support any vertical reinforcing steel and/or dowels within placing tolerances specified by Owner. Templates/Starter walls shall not be double formed before reinforcing steel is installed unless prior approval has been granted.
4. Full access to all working areas via ramps, ladders, etc. for material, equipment and manpower & level space for delivery, assembly, and storage of steel, accessible to tractor-semi-trailer deliveries and adjacent to jobsite location where steel is to be installed and/or hoisted/lowered. Ramps for all work below grade and shall be maintained in place until all work below grade is complete. If above ramps are not provided, all cost for equivalent service shall be for Contractor's account.
5. Sufficient staging area for prefabricating cages at the jobsite.



6. Full access to all areas of the project for at least one (1) Subcontractor Foreman's truck to provide supplies and accessories as needed for the project.
7. Adequate working CAL/OSHA approved heavy duty scaffolding / platforms as required from which placing of reinforcing steel can be safely performed.
8. Adequate lighting, ventilation, electrical power, compressed air (90 PSI Min.), sanitary facilities & trash bins.
9. Open footings / trenches until after rebar is installed ("school forms" to be erected after rebar is installed).
10. Parking for all Subcontractor employees within three (3) standard blocks of the jobsite. If Contractor does not provide this parking, Contractor will pay extra to Subcontractor for all parking related costs including cost of vehicle parking fees, cost of shuttle services and travel time costs while Subcontractor employees are in transit unless specifically included in Scope of Work / Price or by additive quote.
11. Approved work drawings of the temporary support system for columns, wall cages and/or any assemblies regardless of height, which the bid documents, may require. Contractor shall furnish and maintain adequate bracing, rigging, cables and guys, set all dead men required to guy vertical reinforcing, and comply with the temporary system design. (Rigging includes but is not limited to chokers, shackles, spreader bars, etc.)
12. All supports in tunnels and shafts, which Subcontractor may require for supporting and placing steel.
13. All necessary field dimensions so that the material can be detailed correctly. Subcontractor shall not take any responsibility for any dimensions not shown on the drawings or those provided by others. These dimensions must be provided to Subcontractor a minimum of three (3) weeks prior to delivery and six (6) weeks if submittals and/or special materials are required.

Terms & Conditions

(The following provisions are a condition of Subcontractor's Bid Proposal)

Contractor's acceptance of all of the terms and conditions of this Bid/Offer shall be conclusively evidenced by Contractor listing Subcontractor, Contractor permitting/directing performance by Subcontractor, Contractor signing and returning this offer or if this offer is attached to and made a part of the subcontract agreement.

CMC Steel Fabricators, Inc. d/b/a CMC Rebar ("Subcontractor") may begin performance of the work, pending receipt of an executed final agreement. However, should a final mutually acceptable agreement not be forthcoming, or should the terms and conditions of Subcontractor's offer be altered or modified, Subcontractor reserves the right to immediately stop performance. Subcontractor shall be paid for such work and/or materials according to the terms and conditions of this proposal.

Contractor shall provide Subcontractor with copies of all contract documents that define and/or describe Subcontractor's work. Subcontractor shall only be bound by contract information received, as applicable to Subcontractor's work. Subcontractor shall have the benefit of all rights, remedies, and redress with regard to Contractor as Contractor has with regard to the Owner.

ORDER OF PRECEDENCE – The order of precedence in interpreting the agreement between Contractor and Subcontractor is 1) Addendum(s) to Subcontract; 2) Subcontract; 3) Prime Contract.

CREDIT – The final Subcontract and payment terms shall be subject to the approval of Subcontractor's credit department.

PROGRESS PAYMENTS – Contractor shall pay Subcontractor within 60 days of receipt of Subcontractor's invoice or 10 days of receipt of payment from Contractor's Customer, whichever occurs first.

CHANGE ORDERS – Subcontractor will submit Notice of Cost and/or Schedule Impact within 7 working days of receipt of notice of change. Change Order Proposals will be submitted within a reasonable time thereafter depending on magnitude of change. Subcontractor shall not waive its right to properly performed change order work conducted pursuant to the written direction of Contractor. If any completed change orders remain unapproved for more than 90 days from the date of submission by Subcontractor, Contractor will meet in person with Subcontractor to resolve the unapproved change order, and Contractor will arrange for the attendance of any other parties reasonably necessary to resolve the unapproved change order.

RETENTION – Contractor shall pay Subcontractor retention within 60 days of Contractor's final retention billing date or 10 days from receipt of retention from Contractor's Customer, whichever occurs first. Contractor shall not withhold more retention from Subcontractor than the amount withheld by Contractor's Customer. Contractor agrees to use its best efforts to reduce any retention



due Subcontractor upon substantial completion of Subcontractor's work; this includes arranging in-person meetings with Contractor's Customer and Owner.

F.O.B. – No retention shall be withheld on FOB and/or tied and stockpiled material. Payment shall be NET 30 days from Subcontractor's billing.

OWNER NEGOTIATIONS – In the event of any offer under a cost reduction incentive provision of the General Contract and/or change order negotiations, Contractor shall offer Subcontractor the right to participate fully in all negotiations relevant to Subcontractor's work. Contractor shall protect Subcontractor's interest and shall keep Subcontractor fully apprised of all offers, which may affect the value of Subcontractor's work.

NO WAIVERS – No provision of the subcontract shall serve to void Subcontractor's entitlement to payment for properly performed contract or change order work or to void Subcontractor's right to file a lien, stop notice and/or claim on its behalf.

SET-OFF – Neither party shall set-off beyond this subcontract.

TERMINATION – Contractor shall be liable to Subcontractor for damages, including lost profits, if Contractor either wrongfully terminates Subcontractor or terminates Subcontractor for convenience.

PROTECTION OF WORK – Subcontractor shall not be liable for repair of any damage to Subcontractor's work caused by others outside the control of Subcontractor, regardless of when such damage occurs.

WARRANTY – Subcontractor warrants the materials and workmanship of its work for a period of one year from substantial completion of such work, and EXCLUDES ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTIES OF MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE. Subcontractor's warranty does not extend to any work that has been misused, abused, modified, improperly or insufficiently maintained; to defects caused by normal wear and tear under normal usage or to any materials supplied but not manufactured by Subcontractor.

INDEMNIFICATION – Subcontractor shall only indemnify, hold harmless, and defend Contractor and Contractor's Customer against all claims for bodily injury, death, and/or property damage (as defined by Commercial General Liability policy – standard ISO Form CG 00 01) to the extent attributable to the negligent acts or omissions of Subcontractor. Subcontractor's indemnification obligations shall not extend to any design professionals for design related work for their professional services or for defects in designs furnished by such persons.

INSURANCE – Subcontractor will provide: 1) Worker's Compensation: statutory. 2) Employer's Liability \$1M limits. 3) Auto: standard "any auto", \$1M each accident. 4) Commercial General Liability: standard (ISO Form CG 00 01) including, \$1M each occurrence, \$5K med pay, \$1M personal and advertising, \$2M general aggregate, \$1M products/completed operations aggregate (2 years max. coverage). 4) Excess/Umbrella: follow form to satisfy limits where subcontract dollar amount justifies increase in limits. If CGL Additional Insured Endorsement required, it shall be Subcontractor's standard form or CG 20 10 04 13 and CG 20 37 04 13 if specifically required by subcontract. Subcontractor will not provide insurance coverage for any design professionals for their professional services or for defects in designs furnished by such persons but will provide a general liability CG 20 32 04 13 Additional Insured Endorsement form for design professionals if required by subcontract.

TIME / SCHEDULE – Subcontractor shall be provided a mutually agreed upon construction schedule which provides a reasonable amount of time in which to make delivery of submittals, materials and/or labor so as to commence and complete the performance of the Subcontract.

Notwithstanding any provision(s) of this proposal or potential Subcontract or Purchase Order, if Subcontractor's work is delayed, disrupted, suspended, or otherwise impacted for any period of time as a direct result of an epidemic ("Epidemic Time Impact"), including, but not limited to, (1) disruptions to material and/or equipment supply; (2) illness of Subcontractor's workforce and/or unavailability of labor; (3) government quarantines, closures, or other mandates, restrictions, and/or directives; (4) Owner or Contractor restriction and/or directives; and/or (5) fulfillment of Subcontractor's contractual or legal health and safety obligations associated with an epidemic; then, Subcontractor shall not be subject to liquidated damages for the Epidemic Time Impact and Subcontractor shall be entitled to an equitable adjustment to the Subcontract schedule and duration to account for the Epidemic Time Impact.

PERFORMANCE OF THE WORK – Field labor called for under the subcontract shall be performed during Subcontractor's regular working hours, eight hours per day, five days a week (all Union Holidays are observed) unless stipulated otherwise in Subcontractor's Bid Proposal. All work performed outside of such hours shall be charged at the applicable prevailing wage rates for Subcontractor's work force for overtime, weekend, or holiday work. However, should Subcontractor be behind the mutually agreed to construction schedule, due to Subcontractor's own fault or failure to perform in accordance with such schedule, then all overtime/premium time required to regain the construction schedule shall be paid for by Subcontractor.



DAMAGES – The Contractor shall make no demand for liquidated damages for delays in excess of the amount specified in the Contract Documents and no liquidated damages may be assessed against Subcontractor for more than the amount paid by the Contractor for unexcused delays to the extent actually caused by Subcontractor. In no event shall liquidated damages exceed 10% of the original subcontract dollar amount. Subcontractor will not be liable for consequential, incidental, special, liquidated, indirect or punitive damages, however caused.

No back charge or claim of the Contractor for services provided for or on behalf of Subcontractor shall be valid except by an agreement in writing, submitted to and approved by Subcontractor at time of occurrence and before work is initiated.

Accepted this _____ day of _____ 2024

CMC Steel Fabricators, Inc. dba CMC Rebar

Buyer: _____

By: _____

By: _____

David Hansen
909.803.1598 D / 909.201.3412 M
david.hansen@cmc.com
Sales Manager

Name: _____

Title: _____



[RebarZero®](#) may be eligible for innovation credits in the LEED Building rating system. Ask your sales representative for more information.

Rojas, Victor

From: David Escarcega <david@5dcompanyllc.com>
Sent: Thursday, May 30, 2024 12:25 PM
To: Rojas, Victor
Subject: FW: Bolts for sterling bid

External Email

Please see pricing below.
Pricing for bidding purposes only.

Thank you,

David Escarcega
www.5DCompanyLLC.com
Mobile: 562-842-5789
Email: David@5DCompanyLLC.com

From: Michael Beeh <mbeeh@copperstate.com>
Sent: Thursday, May 30, 2024 12:17 PM
To: David Escarcega <david@5dcompanyllc.com>
Cc: Steven Thornburg <sthornburg@copperstate.com>
Subject: RE: Bolts for sterling bid

David,

Pricing below. I had to quote CL.E for the 3", 14", 16" gaskets. Currently 7 week lead time.

Size	Dia	Length	Bolts	kit qty	Kit Price
3"	5/8"	3"	4	20	\$ 58.82
8"	3/4"	2-1/4"	8	10	\$ 181.44
12"	7/8"	2-3/4"	12	4	\$ 328.91
12"	7/8"	2-3/4"	12	3	\$ 328.91
14"	1"	4-1/2"	12	2	\$ 461.41
16"	1"	4-1/2"	16	11	\$ 612.33
16"	1"	4-1/2"	16	8	\$ 612.33
24"	1-1/4"	5-1/2"	20	2	\$1,148.86

Thank you,

Mike Beeh
Phoenix Inside Sales



Copper State Bolt & Nut Co
3602 North 35th Avenue
Phoenix, AZ 85017
Direct: 602-477-7452
Office: 602-272-2384
Fax: 602-233-9182

Shop Online at www.copperstate.com

From: Rojas, Victor <VRojas@Balfourbeattyus.com>
Sent: Thursday, May 30, 2024 10:13 AM
To: David Escarcega <david5dcompany@gmail.com>
Subject: RE: Bolts for sterling Quote

David, can you give me a price for the bolt sets below. Lets go with Garlock gaskets and for cap bolts what ever is

This is for a bid. Need it today. thanks

AIS project all flanges are Class D except for 24", that will be standard 150# flange

1	3"	316SS	flange gasket and cap bolt sets	20	ea
1	8"	316SS	flange gasket and cap bolt sets	10	ea
1	12"	316SS	flange gasket and Cap bolt sets	4	ea
1	12"	316SS	flange gasket and bolt sets	3	ea
1	14"	316SS	flange gasket and bolt sets	2	ea
1	16"	316SS	flange gasket and bolt sets	11	ea
1	16"	316SS	flange gasket and cap bolt sets	8	ea
1	24"	316SS	flange gasket and bolt sets	2	ea

Victor Rojas

Project Engineer | Balfour Beatty US Civils

C: 909-601-4950

E: vrojas@balfourbeattyus.com | www.balfourbeattyus.com

640 E. Arrow Highway, La Verne, CA 91750

Balfour Beatty

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PHX
3602 N 35th Ave
Phoenix, AZ 85017-4408
USA

Quotation



QT04364172-2

Quotation

QT04364172-2

Ordered by: Michael Beeh Order Date: 5/31/2024 Expiry Date: 6/6/2024		Customer: BAL64000 Balfour Beatty Infrastructure Inc - LAVERNE, CA 640 East Arrow Highway LA VERNE, CA 91750 USA		Cust P.O.: Cust Ref: Contact: Phone: Mobile: Email:	
Mode of delivery: Other		Notes:			
Delivery notes: FOB Origin, PPD & Add		Extended stay America			
Carrier account number: 0.00		Delivery Address: 3331 Cypress Drive Room 101			
Weight (estimated): Taxable		MILPITAS, CA 95035			
Tax Group: 0% 0 Days		USA			
Cash Discount: 0					
Payment Days:					

Item Number/Customer	Config/Source	Description	Quantity	Unit	Availability	Unit Price	Ext. Price	Sales Tax
1 23STA1201H4-10	Bundle	1 5/8 x 1 5/8 x 10' 12 Ga Single Half Slot Strut 316 S/S	130	Ft	Stock	15.4200	2,004.60	187.94
2 SIN/0000000		6" channel bracket 316SS	10	Ea	7 days	46.6300	466.30	43.72
3 23PB054		1 5/8" Square Post Base (6 x 6 x 3 1/2 Hgt) 316 S/S	7	Ea	7 days	70.4000	492.80	46.20
4 23AB054		4 Hole 90° (3 1/2 x 4 3/16) Angle Bracket 316 S/S	50	Ea	7 days	12.1880	609.40	57.12
5 23PC034-050		1/2" Rigid I.P. Pipe Strut Clamp 316 S/S	8	Ea	7 days	7.8500	62.80	5.90
6 23NU014-050		1/2" Spring Nut 316 S/S	200	Ea	7 days	2.2155	443.10	41.55
7 15CSC4-0500100	Pkg	1/2-13 X 1" Hex Head Cap Screw 316 S/S	140	Ea	5 days	2.9600	414.40	38.85
8 15FW4-050	Pkg	1/2" Flat Washer 316 S/S (1 1/4 OD .062 Thick)	140	Ea	5 days	0.5300	74.20	6.96
9 36-ADK421GY	Caddy	Caddy #ADK421GY 1 5/8" Strut End Cap Gray	70	Ea	Stock	1.0519	73.63	6.90
10 23STA1202H4-10	Bundle	1 5/8 x 1 5/8 x 10' 12 Ga Bk to Bk Half Slot Strut 316 S/S	50	Ft	Stock	32.9400	1,647.00	154.41
11 23PB034		1 5/8" Square Bk to Bk Post Base (6 x 6 x 3 1/2 Hgt) 316 S/S	6	Ea	7 days	66.1500	396.90	37.20
12 23PC034-100		1" Rigid I.P. Pipe Strut Clamp 316 S/S	4	Ea	7 days	9.6300	38.52	3.62
13 23PC034-300		3" Rigid I.P. Pipe Strut Clamp 316 S/S (3 1/2 OD)	54	Ea	7 days	7.2030	388.96	36.45

For a complete copy of our Terms & Conditions, please visit our website at www.copperstate.com. It is the policy of Copper State Bolt & Nut Co. to offer only the highest quality products supplied by established and approved vendors. We assume no liability beyond replacing defective merchandise and refunding the purchase price, providing a claim is processed within a reasonable amount of time. We will not allow claims for consequential damage, transportation charges or for labor or other expenses incurred in removing defective products or installing replacement material. Any product manufactured by Copper State is manufactured per applicable specifications and tested per those specifications in accredited laboratories.

We hereby disclaim all warranties of fitness, fitness for purpose, and/or merchantability, express or implied, other than the limited return and replacement right set forth above and any warranties which the manufacturer may supply.

Sub Total

Freight:

Order Total USD

7,112.61

0.00

7,779.44

666.83



14281 Palisades Drive, Poway CA 92064
LICENSE: CA 742112 • AZ ROC188614 • NV 0072066
DIR No. 1000004724
www.paradapainting.com

Scope of Work

Page 1 of 2

DATE: 6/6/24
TO: Balfour Beatty
ATTN: Terry Lim
RE: Sterling Filtration train to MBR Coatings

Parada Painting is submitting a QUOTE for the above referenced project. This QUOTE is limited to the following:

Work Detail:

- Concrete Walls, and piping (PVC) – Coating
- Touch up of existing liner due to modifications

Parada to provide own working platform and confined space equipment/personnel

Exclusions: Ferrous metal

Quote Price: \$119,888.00

Bond Rates are attached on page 2 of 2 and are not included in above Total Quote Price.

Should you have any questions, please contact me at 858-602-6037 or email davidparadair@yahoo.com

Sincerely,

David Parada Jr.
Superintendent

Office - Admin: (P) 951-878-7051, (F) 951-878-7052
Estimating: (P) 858-602-6036, (F) 951-878-7052
Office - A/P: (P) 858-748-3540, (F) 858-748-3774

Bond Premium Rates

Bond Base Premium Rates are as follows and are not included in the bid/quote price:

Tier 1	First \$100K	= 1.1000%	<u>Durations Included:</u> 1. Warranty of one (1) yr. 2. Contract Completion Time of 24 mos., 731 calendar days, or less.
Tier 2	Next \$400K	= 0.8810%	
Tier 3	Next \$2M	= 0.7690%	
Tier 4	Next \$2.5M	= 0.6630%	
Tier 5	Next \$2.5M	= 0.5500%	
Tier 6	Next \$7.5M	= 0.4940%	

****Additional Surcharges may apply****

The Surety surcharges the Bond Base Premium due to risk(s) associated with an extended duration.

Completion Time and Warranty that extend beyond durations included above will be subject to additional Surcharges as noted below.

Warranty Surcharge is applied for contract that have durations beyond one (1) year.

Warranty Surcharge is calculated by multiplying Tier Contract Amount times the Rate, then multiply by # of years over the one year.

Tier 1	First \$100K	= 0.275%
Tier 2	Next \$400K	= 0.25%
Tier 3	Next \$2M	= 0.219%
Tier 4	Next \$2.5M	= 0.194%
Tier 5	Next \$2.5M	= 0.163%
Tier 6	Next \$7.5M	= 0.156%

Completion Surcharge is applied for contracts that have durations beyond 24 months.

Completion Surcharge is calculated by multiplying Tier Base Premium Rate by 1%, then multiplying by the # of months over 24 months.

****IMPORTANT****

Bond Premium Rates are not included in the aforementioned Quote/Bid Price.

If the full subcontract amount includes an estimated bond premium, the bond premium should be separated out from Quote/Bid Parada provided prior to issuance of final subcontract and processing of bonds. The Surety is required to bond the contract according to the specific requirements of said subcontract. The required Performance/Payment Bonds guarantee Parada will perform the contract and the bond premium is calculated by the bond company based on the total subcontract amount. That additional bond premium will be the Contractor's responsibility as per said subcontract.

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Estimating: (P) 858-602-6036, (F) 951-878-7052
Office - A/P: (P) 858-748-3540, (F) 858-748-3774

Schedule

