

# SAN ANTONIO WATER SYSTEM C5 Culebra – Castroville to Laredo & C28 Zarzamora Creek – San Gabriel to NW 23<sup>rd</sup> Street PHASE 1A

SAWS Job No. 14-4507 & 14-4007 Solicitation No. CO-00018

# **ADDENDUM NO. 1**

October 22, 2015

**BID OPENING DATE: October 28, 2015** 

10:00 a.m. Central Standard Time

Consulting Engineer: CP&Y, Inc.

TBPE Registration No. F-1741



### To: All Document Holders of Record

This addendum, applicable to work referenced above, forms a part of the Contract Documents and modifies the original Contract Documents dated September 2015. Acknowledge receipt of this addendum by entering the addendum number and issue date in the spaces provided on submitted copies of the proposals. Failure to do so may subject Respondent to disqualification.

Addendum No. 1 consists of 19 items outlined in 5 pages. In addition to these 5 pages, Addendum No. 1 includes 3 re-issued documents, Contractor's Bid Packet Checklist, Bid Proposal and Supplemental Condition and includes 2 re-issued sheets, Drawings G-3 and C-A-13.

The current construction cost estimate is \$6,237,624.

### **ADDENDUM NO. 1**

### A. GENERAL QUESTIONS/CLARIFICATIONS

1. Question: Plan General Notes II item 8 requires Contractor to provide a written sequence of by-pass pumping for review and approval including "specification of pumping equipment, type, size, capacity and amount of pumps required to handle the PEAK WET WEATHER FLOW." Can SAWS supply the flows of shall the contractor calculate?

Response: The contractor should calculate the peak wet weather flows

2. Question: It is not specified whether or not sound attenuated pumps must be used. Is this a requirement since work is to be performed sun up-sun down Mon- Sat etc.?

Response: Per Specification 864 Bypass Pumping, paragraph 864.5, Sound-attenuated pump enclosures shall be required on all projects where the bypass pumps are located within 50 feet of any residence, business, park or other presence of people.

3. Question: What percentage of redundancy does SAWS require for "Back up" pumps?

Response: Per Specification 864 Bypass Pumping, paragraph 864.5, Contractor shall have one back up pump, equal in capacity to the largest pump in the system.

4. Question: Tee base neck called out as 48" – that's physically not possible with a 42" or 36" main line. The tee base neck can be 42" or 36" respectively per main line. Please clarify tee base neck size.

Response: Tee Base neck size shall match pipe diameter.

5. Question: What is the pipe stiffness for this project?

Response: The pipe stiffness for this project is SN 72.

6. Question: Will this be fiberglass or PVC pipe?

Response: The proposed 42" and 36" sanitary sewer will be fiberglass. The proposed 12", 10" and 8" will be PVC.

7. Question: Will a grinder pump be required for this project?

Response: Per Specification 864 Bypass Pumping, paragraph 864.5, The primary pump must be a grinder or chopper pump.

8. Question: Are the utilities out of the way?

Response: See sheet G-06, General Notes I, item 3.

9. Question: What are the construction restrictions in the flood plain?

Response: Contractor is required to comply with the requirements of the floodplain permit (attached). Short term stockpiling of materials within the floodplain may be allowed if approved by SAWS and COSA Storm water Engineering.

10. Question: What is flowable fill (MK1)?

Response: The flowable fill material is a quick setting low strength flowable fill in accordance with the COSA standard specification 413 bid item 413.1 flowable fill (low strength).

### B. **SPECIFICATIONS**

### 11. CONTRACTOR'S BID PACKET CHECKLIST

Remove Checklist in its entirety and replace with attached Checklist.

### 12. BID PROPOSAL

a. Remove Bid Proposal in its entirety and replace with attached Bid Proposal.

### 13. SUPPLEMENTAL CONDITIONS

a. Remove Supplemental Conditions in its entirety and replace with attached Supplemental Conditions.

### 14. SECTION 15084: FIBERGLASS REINFORCED PIPE

a. Page 15084-1, Paragraph 1.04 B. 3., Delete paragraph and replace with the following:

"Stiffness: Minimum pipe stiffness when tested in accordance with ASTM D2412 shall normally be 72 psi."

b. Page 15084-5, Paragraph 2.01 J. 1., Delete paragraph and replace with the following:

"Manhole tee-base shall be constructed of mitered sections of FRP sewer pipe connected with fiberglass reinforced laminations. Pipes used to construct the tee-base shall have the same stiffness as the adjacent line, defaulting to the greater of the two adjoining lines. Tee-base shall match pipe diameter for neck opening. The tee-base shall meet the requirements of ASTM D3262. The pipe joints used for the tee-base shall meet the requirements of ASTM 4161. Tee-base shall be provided by pipe manufacturer."

### C. **DRAWINGS**

### 15. DRAWING NO. G-3

a. Delete this drawing in its entirety and replace with the attached drawing G-3:

### 16. <u>DRAWING NO. C-A-12</u>

a. Delete the following call out:
 "Existing 4" Gas, See Sheet Note 2"
 And replace with the following:
 "Existing 4" Gas, See Sheet Note 4"

b. Add the following sheet note 4:

"CONTRACTOR SHALL FIELD LOCATE AND VERIFY EXACT LOCATION OF GAS UTILITIES PRIOR TO COMMENCING EXCAVATION. RELOCATE LINE AS NEEDED FOR CONSTRUCTION ACTIVITIES. RELOCATION TO BE PAID UNDER GAS ALLOWANCE."

### 17. <u>DRAWING NO. C-A-13</u>

a. Delete this drawing in its entirety and replace with the attached drawing C-A-13.

### 18. <u>DRAWING NO. C-A-14</u>

- a. Add the following sheet note 3:
   "STA. 61+00 to 65+00 PROVIDE TEMPORARY CHAIN-LINK FENCING TO SECURE WORK AREA."
- Add the following sheet note 4:
   "BACKFILL AND PLATE OVER ACTIVE TRENCHES AT THE END OF EACH WORK DAY."

### 19. <u>DRAWING NO. C-A-15</u>

- a. Add the following sheet note 3:
   "STA. 65+00 to 67+67 PROVIDE TEMPORARY CHAIN-LINK FENCING TO SECURE WORK AREA."
- b. Add the following sheet note 4: "BACKFILL AND PLATE OVER ACTIVE TRENCHES AT THE END OF EACH WORK DAY."

### ACKNOWLEDGEMENT BY RESPONDENT

Each respondent is requested to acknowledge receipt of this Addendum No. 1 by his/her signature affixed hereto and to file same with and attached to his/her proposal.

herewith is in accordance with the info	rmation and stipulation set forth.
Date	Signature of Respondent

**END OF ADDENDUM** 

## **CONTRACTOR'S BID PACKET CHECKLIST:**

# C-5 and C-28 – Phase 1A Project SAWS Job No. 14-4507 SAWS Solicitation No. CO-00018

### Items to be included for Submittal with Bid:

0	Bid proposal and Acknowledgement of All Addendums
0	Proposal Certification; page PC-1
0	Bid Bond/Cashier's Check
0	Statement on President's Executive Orders – Page IB 6 or 7
0	Good Faith Effort Plan
0	Conflict of Interest Questionnaire - Form CIQ
0	Proof of Insurability (Letter from Insurer or Sample Certificate of Insurance)
0	W-9
0	Baseline schedule in Microsoft Project format – refer to Supplemental Conditions 5.13.5
Items t	o be submitted by Apparent Low Bidder (see Instructions to Bidders, Page IB-7, #24):
0	Company Information Packet
0	Statement regarding ability to complete the project
0	Record of Performance/Similar Projects

				Quotes				
Line No.	Item No.	Quote Category	SOV Item	Item Description	Unit	Quantity	Unit Bid Price	Total Price
1	103.1			Remove Concrete Curb	LF	1962		
2	103.3			Remove Concrete Sidewalks and Driveways	LF	2824		
3	202.1	General Sanitary Sewer Bid Items		Prime Coat	GAL	4803		
4	203.1	General Sanitary Sewer Bid Items		Tack Coat	GAL	2402		
				Hot Mix Asphaltic Concrete Pavement, Type D (2" Compacted				
5	205.4	General Sanitary Sewer Bid Items		Depth)	SY	1050		
				Hot Mix Asphaltic Concrete Pavement, Type D (3" Compacted				
6	205.4	General Sanitary Sewer Bid Items		Depth)	SY	22966		
7	208.1	General Sanitary Sewer Bid Items		Salvage, Haul, Stockpile Asphaltic Pavement (2" Depth)	SY	1050		
8	208.1	General Sanitary Sewer Bid Items		Salvage, Haul, Stockpile Asphaltic Pavement (3" Depth)	SY	22966		
9	413.1	General Water Bid Items		Flowable Fill (MK1)	CY	230		
10	500.1			Concrete Curb	LF	1962		
11	502.1			Concrete Sidewalks	SY	427		
12	511.3			Replacing with Hot Mix Asphaltic Concrete Pavement (15" Type B)	SY	6617		
13	511.3	General Sanitary Sewer Bid Items		Replacing with Hot Mix Asphaltic Concrete Pavement (12" Type B)	SY	324		
14	511.3	General Sanitary Sewer Bid Items		Pavement 8" Depth Portland Cement	SY	35		
15	516.2	General Sanitary Sewer Bid Items		Bermuda Sodding	SY	2519		
16	520	General Sanitary Sewer Bid Items		Hydromulching	SY	4417		
17	530.1			Barricades, Signs and Traffic Handling	LS	1		
18	540			Stormwater Pollution Prevention Plan	LS	1		
19	550			Trench Excavation Safety Protection	LF	10986		
20	818	General Water Bid Items		6" Water Line	LF	25		
21	818	General Water Bid Items		8" Water Line	LF	1035		
22	818	General Water Bid Items		12" Water Line	LF	1569		
23	818	General Water Bid Items		16" Water Line	LF	65		
24	824	General Water Bid Items		Relay 3/4"-2" Metered SVC Line (Long)	EA	24		
25	828	General Water Bid Items		6" Gate Valve	EA	1		
26	828	General Water Bid Items		8" Gate Valve	EA	7		
27	828	General Water Bid Items		12" Gate Valve	EA	3		
28	828	General Water Bid Items		16" Gate Valve	EA	1		
29	831	General Water Bid Items		8" X 6" Tee	EA	1		
30	831	General Water Bid Items		8" X 8" Tee	EA	2		
31	831	General Water Bid Items		12" X 12" Tee	EA	2		
32	831	General Water Bid Items		16" X 8" Tee	EA	1		
33	836	General Water Bid Items		Ductile Iron Fittings	TN	4.31		
34	840	General Water Bid Items		6" Tie-ins	EA	3		
35	840	General Water Bid Items		8" Tie-ins	EA	1		
36	840	General Water Bid Items		12" Tie-ins	EA	3		
37	840	General Water Bid Items		16" Tie-ins	EA	2		

38	841	General Water Bid Items	Hydrostatic Testing Operations	EA	2			
39	844	General Water Bid Items	2" Temporary Blow-off	EA	4			
40	848	General Sanitary Sewer Bid Items	8" Sanitary Sewer Line (6'-10')	LF	74			
41	848	General Sanitary Sewer Bid Items	10" Sanitary Sewer Line (0'-6')	LF	10			
42	848	General Sanitary Sewer Bid Items	10" Sanitary Sewer Line (6'-10')	LF	53			
43	848	General Sanitary Sewer Bid Items	12" Sanitary Sewer Line (6'-10')	LF	1242			
44	848	General Sanitary Sewer Bid Items	12" Sanitary Sewer Line (10'-14')	LF	727			
45	848	General Sanitary Sewer Bid Items	12" Sanitary Sewer Line (14'-18')	LF	387			
46	848	General Sanitary Sewer Bid Items	36" Sanitary Sewer Line (6'-10')	LF	70			
47	848	General Sanitary Sewer Bid Items	36" Sanitary Sewer Line (10'-14')	LF	50			
48	848	General Sanitary Sewer Bid Items	36" Sanitary Sewer Line (14'-18')	LF	2342			
49	848	General Sanitary Sewer Bid Items	36" Sanitary Sewer Line (18'-22')	LF	55			
50	848	General Sanitary Sewer Bid Items	42" Sanitary Sewer Line (6'-10')	LF	300			
51	848	General Sanitary Sewer Bid Items	42" Sanitary Sewer Line (10'-14')	LF	400			
52	848	General Sanitary Sewer Bid Items	42" Sanitary Sewer Line (14'-18')	LF	979			
53	848	General Sanitary Sewer Bid Items	42" Sanitary Sewer Line (18'-22')	LF	1600			
54	852.1	General Sanitary Sewer Bid Items	4" Dia. Sanitary Sewer Manhole (0'-6')	EA	7			
55	852.3	General Sanitary Sewer Bid Items	Extra Depth Manholes (>6")	VF	30			
56	853	General Sanitary Sewer Bid Items	Sanitary Sewer Glass-Fiber Reinforced Polyester Manholes	EA	29			
			Sanitary Sewer Glass-Fiber Reinforced Polyester Manholes					
57	853.1	General Sanitary Sewer Bid Items	Extra Depth	VF	325			
58	854	General Sanitary Sewer Bid Items	Sanitary Sewer Laterals	LF	546			
59	854.1	General Sanitary Sewer Bid Items	One Way Sanitary Sewer Clean-Out	EA	42			
60	856.1	General Sanitary Sewer Bid Items	Jacking, Boring, or Tunneling 54"	LF	327			
61	856.2	General Sanitary Sewer Bid Items	36" Carrier Pipe for Jacking, Boring, Tunneling	LF	327			
62	856.2	General Sanitary Sewer Bid Items	54" Casing	LF	327			
63	858	General Sanitary Sewer Bid Items	Concrete Encasement, Cradles, Saddles and Collars	CY	18			
64	860	General Sanitary Sewer Bid Items	Vertical Stacks	VF	130			
65	862	General Sanitary Sewer Bid Items	Abandonement of Sanitary Sewer Main	LF	7562			
66	864	General Sanitary Sewer Bid Items	Bypass Pumping	LS	1			
67	866	General Sanitary Sewer Bid Items	Sewer Main Television Inspection (8" Through 15" Dia.)	LF	2493			
68	866	General Sanitary Sewer Bid Items	Sewer Main Television Inspection (27" Through 36" Dia.)	LF	2844			
69	866	General Sanitary Sewer Bid Items	Sewer Main Television Inspection (42" Through 48" Dia.)	LF	3279			
70		General Sanitary Sewer Bid Items	Existing Main Pre-Televising	LF	9593			
71		General Sanitary Sewer Bid Items	Temporary Chain Link Fence (6 Ft)	LF	1350			
72		General Sanitary Sewer Bid Items	Brace Power Poles	ALW		\$	40,000.00	\$ 40,000.00
73		General Sanitary Sewer Bid Items	Gas Relocation	ALW		\$		50,000.00
74		General Sanitary Sewer Bid Items	Remove and Replace Basket Ball Court	ALW	1	Ψ	35,000.00	\$ 35,000.00
75	535.1	General Sanitary Sewer Bid Items	4 Inch Wide Yellow Line (<100,000 LF)	LF	7500			
76	535.2	General Sanitary Sewer Bid Items	4 Inch Wide White Line (<30,000 LF)	LF	3720			
77	535.4	General Sanitary Sewer Bid Items	8 Inch Wide White Line	LF	110	L		
78	535.7	General Sanitary Sewer Bid Items	24 Inch Wide White Line (<1,500)	LF	22			
79	535.9	General Sanitary Sewer Bid Items	Left White Arrow	EA	2			
80	537.2	General Sanitary Sewer Bid Items	Traffic Button (Type Y)	EA	120			

81	537.6	General Sanitary Sewer Bid Items	Pavement Marker (Type I-C)	EA	94	
82	537.8	General Sanitary Sewer Bid Items	Pavement Marker (Type II A-A)	EA	106	
83	SS 3000	General Water Bid Items	Removal, Transportation, and Disposal of A.C. Pipe	LF	650	
84		General Water Bid Items	3" Schedule 80 PVC Conduit for Metered SVC Line	LF	951	
			Mobilization (Maximum of 10% of Line 1 - 84 Sub-total Base			
85	100		Bid amount)	LS	1	
			Preparation of Right-of-Way (Maximum of 5% of Line 1 - 84			
86	101		Sub-total Base Bid amount)	LS	1	

### **BID PROPOSAL**

PROPOSAL OF	, a corporation	
a partnership consisting of		
an individual doing business as		
THE SAN ANTONIO WATER SYSTEM: Pursuant to Instructions and Invitation to Bidders, the undersig work required for the project as specified, in accordance with t		
(PLEASE SEE ATTACHED PDF LIST OF BID ITEMS)		
TOTAL BID PRICE	\$	
Mobilization and Prep of ROW shall be limited to the maximu stated for mobilization and or preparation of ROW, SAWS represents the extensions of the bid items accordingly.		
	BIDDER'S SIGNATURE & TITLE	
	FIRM'S NAME (TYPE OR PRINT)	
	FIRM'S ADDRESS	
	FIRM'S PHONE NO. / FAX NO.	
	FIRM'S EMAIL ADDRESS	
The Contractor herein acknowledges receipt of the following: Addendum Nos		
OWNER RESERVES THE RIGHT TO ACCEPT THE OVERA	LL MOST RESPONSIBLE BID.	

The bidder offers to construct the Project in accordance with the Contract Documents for the contract price, and to complete the Project within <u>365</u> calendar days after the start date, as set forth in the Authorization to Proceed. **The bidder understands and accepts the provisions of the contract Documents relating to liquidated damages of the project if not completed on time.** 

Complete the additional requirements of the Bid Proposal which are included on the following pages.

# **Supplemental Condition**

### **Article V. – Contractor Responsibilities**

Page GC 26: The following is to be replaced as to Section 5.7 Contractor's Insurance Requirements adequately specifies the lines of insurance coverage with the above Assessment results with one exception: Section 5.7.1.1.7.8 – Builders Risk line of coverage.

Builders Risk Coverage is being Waived.

Page GC 33: Section 5.13.5, last sentence shall be replaced with the following:

The Bidder is required to submit a baseline schedule as part of the bid. The baseline schedule shall be a detailed, precedence-style critical path management schedule in Microsoft Project format. The baseline schedule must encompass the entire contract duration from Notice to Proceed to the Contract End Date. This baseline schedule must show a completion date that corresponds to the Contract End Date. The baseline schedule must be inclusive of all work necessary to complete the project including sufficient time necessary for submission and review of submittals, permits, etc. For the purpose of preparing this baseline schedule, all bidders shall assume a notice to proceed date of January 4, 2016. Failure to include this baseline schedule with the bid documents may result in the bidder being considered non-responsive.

### **Article VIII. - Contract Completion Time**

Section 8.6 <u>Liquidated Damages for Failure to Complete on Time</u>: of the General Conditions shall be amended as follows:

Add the following to the end of the paragraph:

Liquidated Damages, for the purpose of this contract, will be assessed at \$3,300.00 per day in addition to Remedial Requirements of Consent Decree that will be assessed for each day that the Contractor fails to complete the Contract by the time specified in the Contract Documents as follows:

$1^{st} - 30^{th}$ Day	\$ 750.00 per day
$31^{st} - 60^{th}$ Day	\$1,500.00 per day
$61^{st}-180^{th} Day$	\$2,500.00 per day
More than 180 Days	\$4,000.00 per day

SAWS	JOB	NO.
saws 14-	-45	07

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SAN ANTONI	WATER SYSTE

	GWM 10/22/15	DATE	RIGINAL INCH ON ALE
	GWM	ВУ	ON O T ONE JST SC
	ADDENDUM 1	REVISION	VERIFY SCALE BAR IS ONE INCH ON ORIGINAL PROPERTY ON THIS SHEET, ADJUST SCALE THIS SHEET, ADJUST SCALE
	1	NO.	الہ∀

JOHN E. LEVITT

SHEET G-03 SHEET 3 OF 58

																(YYY)
		COSA 103.1	COSA 103.3	COSA 202.1	COSA 203.1	COSA 205.4	COSA 205.4	COSA 208.1	COSA 208.1	COSA 413.1	COSA 500.1	COSA 502.1	COSA 511.3	COSA 511.3	COSA 511.3	
SHEET NUMBER	STATION TO STATION	REMOVE CONCRETE CURB	REMOVAL CONCRETE SIDEWALKS AND DRIVEWAYS	PRIME COAT	TACK COAT	HOT MIX ASPHALTIC CONCRETE PAVEMENT, TYPE D (2" COMPACTED DEPTH)	HOT MIX ASPHALTIC CONCRETE PAVEMENT, TYPE D (3" COMPACTED DEPTH)	SALVAGE, HAUL, STOCKPILE ASPHALT PAVEMENT (2" DEPTH)	SALVAGE, HAUL, STOCKPILE ASPHALT PAVEMENT (3" DEPTH)	FLOWABLE FILL (LOW STRENGTH)	CONCRETE CURB	CONCRETE SIDEWALKS	REPLACING WITH HOT MIX ASPHALTIC CONCRETE PAVEMENT (12" TYPE B)	REPLACING WITH HOT MIX ASPHALTIC CONCRETE PAVEMENT (15" TYPE B)	PAVEMENT 8 DEPTH PORTLAND CEMENT CONCRETE	CHAIN-LINK FENCE
		LF	SF	GAL	GAL	SY	SY	SY	SY	CY	LF	SY	SY	SY	SY (	LF
C-A-01	STA 10+00 TO STA 13+00	0	0	366.6	183.3	0	1833	0	1833	0	0	0	0	250	0 /	0
C-A-02	STA 13+00 TO STA 17+00	0	0	401.4	200.7	0	2007	0	2007	0	0	0	0	333.3	0 (	0
C-A-03	STA 17+00 TO STA 21+00	0	0	434.4	217.2	0	2172	0	2172	0	0	0	0	333.3	0 /	0
C-A-04	STA 21+00 TO STA 25+00	0	0	393.2	196.6	0	1966	0	1966	0	0	0	0	333.3	0 (	0
C-A-05	STA 25+00 TO STA 29+00	0	0	397.2	198.6	0	1986	0	1986	0	0	0	0	333.3	0 /	0
C-A-06	STA 29+00 TO STA 33+00	0	0	441.8	220.9	0	2209	0	2209	0	0	0	0	333.3	0 (	0
C-A-07	STA 33+00 TO STA 37+00	76	0	396.8	198.4	0	1984	0	1984	0	76	0	0	333.3	0 /	0
C-A-08	STA 37+00 TO STA 41+00	260	35	393.8	196.9	0	1969	0	1969	0	260	3.9	0	379.2	0 (	0
C-A-09	STA 41+00 TO STA 45+00	0	0	<u></u>	1982	0	1982	0	1982	0	0	0	0	333.3	0 /	0
C-A-10	STA 45+00 TO STA 49+00	10	80	496	248	<b>V</b> 0	2480	0	2480	0	10	8.9	0	361	0 (	0
C-A-11	STA 49+00 TO STA 53+00	0	0	295.6	147.8		1478	$\bigcirc$	1478	0	0	0	0	333.3	0 /	0
C-A-12	STA 53+00 TO STA 57+00	0	0	<b>(</b> 180	90	<b>V V</b> 0 <b>V</b>	γ <b>γ</b> 900 γ	Y Y 0 Y	<b>1</b> √ 900	0	0	0	0	148	0 (	0
C-A-13	STA 57+00 TO STA 61+00	93	70	> 86.6	43.3	433	0	433	0	0	93	9.5	128	0	35 /	200
C-A-14	STA 61+00 TO STA 65+00	0	895	(	0 /	~ ^0 ×	1 10 1		0 /	0	0	165	0	0	0 (	680
C-A-15	STA 65+00 TO STA 69+00	100	622	<b>&gt;</b> 52	26	280			)	0	100	114	96	0	0	470
C-A-16	STA 69+00 TO END PHASE 1A	0	0	( 71.4	35.7 <i>J</i>	357	0	357	0	0	0	0	100	0	0 (	0
C-B-01	STA 100+00 TO STA 104+00	10	140	> 0	0	0	0	0	0	0	10	15.5	0	29	0	<b>&gt;</b> 0
C-AC-01	STA 100+00 TO STA 103+00	0	0	0	0 /	0	0	0	0	0	0	0	0	168	0 (	0
C-AC-02	STA 103+00 TO STA 107+00	0	0	$\geq$	0 )	0	0	0	0	0	0	0	0	223	0	<b>&gt;</b> 0
C-AC-03	STA 107+00 TO STA 111+00	0	0	0	0 <	0	0	0	0	0	0	0	0	223	0 (	0
C-AC-04	STA 111+00 TO STA 115+00	0	0	$\sim$	0 )	0	0	0	0	0	0	0	0	223	0	<b>&gt;</b> 0
C-AC-05	STA 115+00 TO STA 119+00	95	0	( 0	0 <	0	0	0	0	0	95	0	0	223	0 (	0
	STA 119+00 TO STA END 12" MAIN	322	0	<b>^</b> 0	0 )	0	0	0	0	0	322	0	0	215	0	> 0
	LAREDO ST 8" WATER REPLACEMENT	660	601	٥	0 <	0	0	0	0	19	660	67	0	382	0 (	0
	LAREDO ST 8" WATER REPLACEMENT	300	293	0	0 )	<b>0</b>	0	0	0	78	300	33	0	207	0	$ ightarrow \circ$
	LAREDO ST 12" WATER REPLACEMENT	12	28	0	0 5	<b>/</b> 1 <b>\</b> 0	0	0	0	65	12	3.3	0	288	0 (	0
	LAREDO ST 12" WATER REPLACEMENT	12	60	0	0 )			$\sim$	0	68	12	7	0	281	0	> 0
C-WTR-05	LAREDO ST 12" WATER REPLACEMENT	12	0	\ \	0	0	0	0	) 0	0	12	0	0	349	0 (	0
	PROJECT TOTALS	1962	2824	4803	2402	7 1050	22966	1050	22966	230	1962	427.1	324	6617	35	1350
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	(	COSA 516.2	COSA 520	SAWS 550	SAWS 818	SAWS 818	SAWS 818	SAWS 818	SAWS 824	SAWS 828	SAWS 828	SAWS 828	SAWS 828	SAWS 831	SAWS 831	SAWS 831	SAWS 831	SAWS 834.1	SAWS 836
	1 /	BERMUDA	HYDRO-	) TRENCH	6" PVC	8" PVC	12" PVC	16" PVC		6" GATE	8" GATE	12"	16"	8" X 8"	8" X 6"	12" X 12"	16" X 8"	FIRE	DUCTILE
		SODDING	MULCHING	<b>K</b> EXCAVATION	WATER	WATER	WATER	WATER	RELAY 3/4"-2"	VALVE	VALVE	GATE	GATE	TÊE	TÊE	TÊE'	TÉÈ	HYDRANT	IRON
SHEET NUMBER	STATION TO STATION	1		SAFETY	LINE	LINE	LINE	LINE	METERED SVC LINE			VALVE	VALVE						FITTINGS
NUMBER	1		-	Kerecion					(LONG)										
	1			)					` ´										
		> SY	SY 1	K LF	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	TON
C-A-01	STA 10+00 TO STA 13+00	0	125	300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	STA 13+00 TO STA 17+00 /	0	366	439	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C-A-03	STA 17+00 TO STA 21+00	0	213 -	400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C-A-04	STA 21+00 TO STA 25+00	0	338	) 400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C-A-05	STA 25+00 TO STA 29+00 \	0	379 -	400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C-A-06	STA 29+00 TO STA 33+00 /	0	272	) 400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C-A-07	STA 33+00 TO STA 37+00 \	0	311 -	400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	STA 37+00 TO STA 41+00	0	360	) 455	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C-A-09	STA 41+00 TO STA 45+00	0	513 -	400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C-A-10	STA 45+00 TO STA 49+00	0	258	) 486	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C-A-11	STA 49+00 TO STA 53+00	0	609 -	400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C-A-12	STA 53+00 TO STA 57+00	0	191	) 190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C-A-13	STA 57+00 TO STA 61+00	259	49	323	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C-A-14	STA 61+00 TO STA 65+00	1426	0	) 400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	STA 65+00 TO STA 69+00	834	269	428	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	STA 69+00 TO END PHASE 1A	0	164	) 133	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C-B-01	STA 100+00 TO STA 104+00	0	0 -	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C-AC-01	STA 100+00 TO STA 103+00 (	0	0	) 303	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	STA 103+00 TO STA 107+00	0	0 .	400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	STA 107+00 TO STA 111+00 (	0	0	400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C-AC-04	STA 111+00 TO STA 115+00	9 0	0 .	400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	STA 115+00 TO STA 119+00 (	0	0	400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	STA 119+00 TO STA END 12" MA			387	0	0	0	0	0	0	3	0	0	0	0	0	0	0	
	LAREDO ST 8" WATER REPLACEMENT		0	670	25	645	0	0	16	1	3	0	0			1 0	1	0	0.8
C-WTR-02				377 514	0	312 78	436	65	1 0	0	7	1 1	0	0	0	1 1	0		1.00 0.8
	LAREDO ST 12" WATER REPLACEMENT LAREDO ST 12" WATER REPLACEMENT		0	505	0	/8 0	505	0	1	0	0		0		0	<u> </u>	0	0	0.86
	LAREDO ST 12 WATER REPLACEMENT		0	628	0	0	628	0	0	0	0	2	0	0	0	1	0	0	0.85
C-WIK-05	PROJECT TOTALS	2519	4417	10986	25	1035	1569	65	24	1	7	3	1	2	1	'	1	0	4.31
	TROUBLET TOTALS	2019	441/	10900		1000	1309	1 00		<u>'</u>			<u> </u>				<u> </u>		4.51

