

**AMENDMENT
TO
CIVIL ENGINEERING DESIGN SERVICES CONTRACT
FOR ADDITIONAL SERVICES FOR THE
BULVERDE ROAD PHASE 1
(BUTTERLEIGH DRIVE TO NORTH OF QUIET MEADOW STREET)
PROJECT NUMBER: 23-01565-06**

This amendment to the Civil Engineering Design Services Contract for Bulverde Road Phase 2 (Green Spring to Redland Road) 2022 Bond Project, an extension of the Bulverde Road Phase 1 (Butterleigh Drive to North of Quiet Meadow Street) 2017 Bond Project authorized by **Ordinance No. 2022-_____**, is entered into by and between the **City of San Antonio ("City")**, a home rule municipal corporation, and **Ardurra Group, Inc. (formerly LNV Engineers) ("Consultant")**, referred to collectively herein as the "Parties".

WHEREAS, on May 6, 2017, voters approved the 2017 Bond Program which authorized \$17,000,000.00 for the street improvements for the Bulverde Road Phase 1 (Butterleigh Drive to North of Quiet Meadow Street) project located in Council District 10 for the reconstruction and widening of Bulverde Road including curbs, sidewalks, driveway improvements, traffic signals, and drainage improvements ("Original Agreement"); and

WHEREAS, with further evaluation of the current project budget, it was determined current project savings may be utilized to begin the design of proposed Bulverde Road Phase 2 (Green Spring to Redland Road) 2022 Bond Project, an extension of the Bulverde Road Phase 1 (Butterleigh Drive to North of Quiet Meadow Street) 2017 Bond Project; and

WHEREAS, the project construction began in April 2021 and is expected to be completed in February 2023; and

WHEREAS, the project requires additional design phase services for the proposed Bulverde Road Phase 2 (Green Spring to Redland Road) 2022 Bond Project, an extension of the Bulverde Road Phase 1 (Butterleigh Drive to North of Quiet Meadow Street) in the increased amount not to exceed **\$1,353,016.00**; and

WHEREAS, of this amendment amount, **\$137,282.00** will be reimbursed by San Antonio Water System (SAWS); and

WHEREAS, it is necessary to amend the Original Agreement to add additional engineering design phase services for the project modifications; and

WHEREAS, this amendment increases the total contract capacity by **\$1,353,016.00** to provide for the cost of the additional design phase services;

NOW THEREFORE, in consideration of the terms, covenants, agreements and demises herein contained each to the other given, the sufficiency and receipt of which are hereby acknowledged, the Original Agreement is amended as follows:

- 1. Attachment 1 - Fee Summary.** The not-to-exceed contract amount set out in Attachment 1 – Fee Summary of the Original Agreement is hereby increased by **ONE MILLION THREE**

HUNDRED FIFTY-THREE THOUSAND SIXTEEN AND 00/100 DOLLARS (\$1,353,016.00) as shown in Attachment 2 for a total not-to-exceed contract amount of TWO MILLION SEVEN HUNDRED FIFTY FIVE THOUSAND FIVE HUNDRED SIXTEEN AND 00/100 DOLLARS (\$2,755,516.00).

- 2. **Attachment 2.** The 2022 31 01 Ardurra Group, Inc. (formerly LNV Engineers) signed proposal attached hereto as Attachment 2 is hereby incorporated into and made a part of Attachment 1 of the Original Agreement.
- 3. **Attachment 3.** The Design Proposal (Project Work Plan) attached hereto as Attachment 3 is hereby incorporated into and made a part of Attachment 1 of the Original Agreement.
- 4. **Attachment 4.** The Fee Summary and Timeline attached hereto as Attachment 4 is hereby incorporated into and made a part of Attachment 1 of the Original Agreement.
- 5. **Attachment 5.** The SAWS Design Proposal and Approval Letter attached hereto as Attachment 5 is hereby incorporated into and made a part of Attachment 1 of the Original Agreement.

Except as amended hereby, all other provisions of the Agreement are hereby retained in their entirety and remain unchanged.

EXECUTED and AGREED to as of the dates indicated below.

CITY OF SAN ANTONIO

Ardurra Group, Inc.

(Signature)

DocuSigned by:
Byron Sanderfer

(Signature)

Razi Hosseini, P.E.,R.P.L.S.
Director/City Engineer
Public Works Department
Date: _____

Printed Name: Byron Sanderfer
Title: Regional Public Works Practice Director
Date: 2/17/2022

Approved as to Form:

Assistant City Attorney

ATTACHMENT 1 Fee Summary of the Original Agreement

FEE SUMMARY AND TIMELINE FOR CIVIL ENGINEERING DESIGN SERVICES 2012-2017 BOND PROGRAM

Project Name: Bulverde Road Phase 1
Project Number: 23-05165
Project Manager: Sean D. Strong, P.E.

Summary of Not-to-Exceed Contract Amount

COSA Basic Design Services	\$997,500.00
COSA Additional Services / Allowances	\$405,000.00
Total Not-to-Exceed Amount	\$1,402,500.00

COSA Fee Breakdown and Timeline for Basic Design Services

Activity	Fee	Timeline in Calendar Days
Preliminary Engineering Report	\$0.00	N/A
40% Design	\$332,438.50	120
70% Design	\$297,834.25	70
95% Design	\$225,583.25	45
Bid Phase Services	\$30,388.25	30
Construction Phase Services	\$94,250.25	720
Project Closeout	\$17,005.50	-
Total Basic Design Services Fee	\$997,500.00	

Additional Services and Allowances Breakdown

Terra Design Group (Landscape Architect)	\$20,000.00
Plats and Field Notes (\$2,500 per Parcel) (Estimated 10 Parcels)	\$25,000.00
Subsurface Utility Engineering (SUE) (Estimate 20 Locations)	\$40,000.00
Additional Engineering Services	\$30,000.00
LOMR	\$40,000.00
Environmental Support	\$10,000.00
Utility Design	\$240,000.00
Total Additional Services and Allowances	\$405,000.00

Fee Summary and Timeline
 Bulverde Road Phase 1
 (Project Number 23-05165)

December 15, 2017
 Page 1 of 1

ATTACHMENT 2
The 2022 31 01 Ardurra Group, Inc. (formerly LNV Engineers) signed proposal



January 31, 2022

Sean Strong, P.E.
Senior Engineer
City of San Antonio
Public Works Department
100 W. Houston Street, 15th Floor
San Antonio, Texas 78205

**Re: Proposal for Engineering Services
Bulverde Road Phase 2 (Green Spring to Redland Road)**

Dear Mr. Strong,

Ardurra Group, Inc. is pleased to submit this fee proposal for engineering design services to the City of San Antonio (CoSA) for the Bulverde Road Phase 2 Project from Green Spring to Redland Road.

Ardurra will complete this work in the total amount of \$1,353,016 with the basic design services at \$898,275 and the additional services/allowances at \$454,741. A breakdown of the fee is in Attachment "A": Fee Summary and Timeline for Design Phase Services. Ardurra proposes to complete this work in accordance with the CoSA Design Guidance Manual except for the items listed in the scope exclusions and modifications, see Attachment B.

We look forward to working with you on this important project. If you have any questions or comments, please feel free to contact me at bsanderfer@ardurra.com or at 210.822.2232.

Sincerely,
Ardurra Group, Inc.
TBPE Firm No. F-10053

Byron Sanderfer, P.E., CFM
Regional Public Works Practice Director

Attachment: Attachment "A", Fee Summary and Timeline for Design Phase Services
Attachment "B", Scope Exclusions and Modifications

Fee Summary and Timeline for Design Phase Services

Project Name: Bulverde Road Phase II

Date: January 24, 2022

Prepared By: Ardurra Group, Inc.

Scope of Work: Reconstruct Bulverde Road from Green Springs to Redland

Activity	Timeline in Calendar Days	Pricing
20% Utility Meeting		\$ 21,143
1. Ardurra		\$ 4,414
2. YPR		\$ 16,729
40% Design Phase	120	\$ 277,202
1. Ardurra		\$ 177,105
2. Halff (Task)		\$ 82,800
3. SSA(Task)		\$ 13,312
4. YPR		\$ 3,985
70% Design Phase	70	\$ 269,152
1. Ardurra		\$ 154,429
2. Halff (Task)		\$ 76,265
3. SSA (Task)		\$ 27,368
4. YPR		\$ 11,090
95% Design Phase	45	\$ 193,981
1. Ardurra		\$ 126,162
2. Halff (Task)		\$ 44,255
3. SSA (Task)		\$ 16,324
4. YPR		\$ 7,240
Bid Phase	30	\$ 27,132
1. Ardurra		\$ 19,119
2. Halff (Task)		\$ 4,200
3. SSA (Task)		\$ 3,813
Project Close-Out	30	\$ 15,336
1. Ardurra		\$ 13,106
2. SSA (Task)		\$ 2,230
Construction Phase	510	\$ 94,329
1. Ardurra		\$ 85,632
2. Halff (Task)		\$ 6,690
3. SSA (Task)		\$ 2,007
BASE FEE TOTAL	805	\$ 898,275

Additional Services, Allowances & Design Contingency		
1. Preliminary Design Phase		\$ 49,000
2. Plats and Field Notes for ROW Acquisition (\$3,500 per Parcel) (Est. 8 Parcels) (Ardurra)		\$ 28,000
3. Geotechnical and Pavement Design (Rock)		\$ 20,194
4. Subsurface Utility Engineering (SUE) Level A (\$2,000 per Location) (Est. 20 Locations) (Rios)		\$ 40,000
5. Subsurface Utility Engineering (SUE) Level B (Rios)		\$ 9,550
6. CLOMR (Halff)		\$ 46,890
7. LOMR (Halff)		\$ 33,650
8. WPAP (Halff)		\$ 45,200
9. Traffic Study (AC Group)		\$ 5,175
10. Traffic Signal Warrant Study (AC Group)		\$ 4,800
11. Utility Design and Coordination (Ardurra/Mendez)		\$ 137,282
12. Environmental Coordination		\$ 10,000
13. Design Contingency		\$ 25,000
ADDITIONAL SERVICES TOTAL		\$ 454,741
GRAND TOTAL		\$ 1,353,016

ATTACHMENT 3
The Design Proposal (Project Work Plan)

See attachment - 3. Design Proposal Project Work Plan

ATTACHMENT 4 The Fee Summary and Timeline

ATTACHMENT A

Fee Summary and Timeline for Design Phase Services

Project Name: Bulverde Road Phase II

Date: January 24, 2022

Prepared By: Ardurra Group, Inc.

Scope of Work: Reconstruct Bulverde Road from Green Springs to Redland

Activity	Timeline in Calendar Days	Pricing
20% Utility Meeting		\$ 21,143
1. Ardurra		\$ 4,414
2. YPR		\$ 16,729
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1. Ardurra		\$ 177,105
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2. SSA (Task)		\$ 2,230
Construction Phase	510	\$ 94,329
1. Ardurra		\$ 85,632
2. Halff (Task)		\$ 6,690
3. SSA (Task)		\$ 2,007
BASE FEE TOTAL	805	\$ 898,275

Additional Services, Allowances & Design Contingency		
1. Preliminary Design Phase		\$ 49,000
2. Plats and Field Notes for ROW Acquisition (\$3,500 per Parcel) (Est. 8 Parcels) (Ardurra)		\$ 28,000
3. Geotechnical and Pavement Design (Rock)		\$ 20,194
4. Subsurface Utility Engineering (SUE) Level A (\$2,000 per Location) (Est. 20 Locations) (Rios)		\$ 40,000
5. Subsurface Utility Engineering (SUE) Level B (Rios)		\$ 9,550
6. CLOMR (Half)		\$ 46,890
7. LOMR (Half)		\$ 33,650
8. WPAP (Half)		\$ 45,200
9. Traffic Study (AC Group)		\$ 5,175
10. Traffic Signal Warrant Study (AC Group)		\$ 4,800
11. Utility Design and Coordination (Ardurra/Mendez)		\$ 137,282
12. Environmental Coordination		\$ 10,000
13. Design Contingency		\$ 25,000
ADDITIONAL SERVICES TOTAL		\$ 454,741
GRAND TOTAL		\$ 1,353,016

ATTACHMENT 5

The SAWS Design Proposal and Approval Letter



December 7, 2021

Sean Strong, P.E.
Project Manager - TCI
City of San Antonio (COSA)
114 W. Commerce
San Antonio, Texas 78205

Re: Bulverde Phase II (Green Springs to Redland Road)
2017-2022 Bond
Work Order No. 42.0 – Approval of PFS
SAWS Water Job No. 21-5046
SAWS Sewer Job No. 21-5543

Dear Mr. Strong,

Ardugra Group, Inc. proposal dated December 2, 2021, a copy of which is attached, for performing the Basic Engineering services along with Additional services for the above referenced project has been approved and accepted. Payment will be made per Section 2 – Method of Payment under the compensation for Professional Services section of attachment 5. Please forward a copy of the approved design schedule for our records.

The following is a breakdown of the fee:

Basic Engineering Services:

Design Phase	\$ Water Fee	\$ Sewer Fee	\$ Total Fee	Days
Additional Service		\$22,178	\$22,178	
40% Design Phase	\$17,020	\$21,042	\$38,062	120
70% Design Phase	\$9,662	\$16,168	\$25,830	70
95% Design Phase	\$7,289	\$10,378	\$17,667	45
Bid Design Phase	\$5,670	\$5,949	\$11,619	30
Construction	\$6,727	\$8,324	\$15,051	TBD
Close Out	\$3,427	\$3,448	\$6,875	20
TOTAL	\$49,795	\$87,487	\$137,282	285

Additional Engineering Services: Sewage Collection Systems (SCS) Plan

It is understood that the fee as approved provides for all engineering services outlined in the SAWS Scope of Services, Attachment 5, to the City of San Antonio engineering contract, whether individually stated in the fee proposal or not. It is our understanding that the initial survey required for the design of SAWS facilities, as defined under the Base Mapping section of the Design Guidance Manual, has been included in the City's proposal. It is further understood that the design of SAWS facilities will be done in conformance with the requirements in the Design Guidance Manual.

You are hereby authorized to proceed with these services in conjunction with the city schedule.

Should additional information be required, please contact me at (210) 233-3734, or Stephen Morales, E.I.T. at (210) 233-3857, or Miranda Castillo at (210) 233-3943.

Sincerely,

Dustin Bolzle, P.E.
Project Engineer - Pipelines

Attachment
Copy of Proposal

Cc: Gail Hamrick-Pigg, P.E., Director - SAWS
Herminia C. Bittle, PE, Manager- SAWS
Stephen Morales, E.I.T. – SAWS
Miranda Castillo – SAWS
Byron Sanderfer, P.E. – Ardugra Group, Inc.
File



December 2, 2021

Dustin Bolzle, P.E.
 Project Engineer – Pipelines
 San Antonio Water System
 2800 U.S. Hwy 281 North
 San Antonio, Texas 78212

Re: Proposal for Engineering Services
 Bulverde-Phase II: Green Springs to Redland Road
 SAWS Water Job No. 21-5046
 SAWS Sewer Job No. 21-5543

Dear Mr. Bolzle,

Ardurra Group, Inc. (Ardurra) is pleased to submit this lump sum proposal for engineering services to the San Antonio Water System for the above referenced project. We understand that this work will be joint bid and joint design with the City of San Antonio (COSA). We propose to perform work as described in “Attachment 5 - SAWS 2017 Bond Scope of Services” of the COSA Professional Service Agreement.

The Basic Service Fee of \$137,282 is based upon Attachment "A", SAWS Fee Breakdown – Mendez, Attachment “B”, SAWS Fee Breakdown – Ardurra. The scope of services, Attachments “A” and “B” are based on SAWS Scoping Letter dated October 27, 2021. It is understood that these design services are based on a percent of construction estimate for water and sewer adjustments, which is estimated at \$68,549.43 for the water portion and \$849,390.86 for the sewer portion, see attached cost estimates within the corresponding attachment. It is understood that should the COSA project limits change the SAWS facilities in the revised limits shall be evaluated to determine if the SAWS scope of work has been impacted. If additional water and sewer adjustments are required during design then Ardurra will provide a fee amendment to include the change in scope of work.

We propose a lump sum fee to be paid as shown in the table below. Payment will be made as work is completed and approved by SAWS to include 40% plans, 70% plans, 95% plans, Bidding, Construction Services and Closeout Phase.

Phase	\$ Water Fee	\$ Sewer Fee	Calendar Days
Base Fee			
Design Phase 40%	\$17,020	\$21,042	120
Design Phase 70%	\$9,662	\$16,168	70
Design Phase 95%	\$7,289	\$10,378	45
Bid Phase	\$5,670	\$5,949	30
Construction Phase	\$6,727	\$8,324	TBD
Close Out Phase	\$3,427	\$3,448	20
Base Fee Sub-Total	\$49,795	\$65,309	285



December 2, 2021
Page 2 of 2

Phase	\$ Water Fee	\$ Sewer Fee	Calendar Days
Additional Services			
SCS Plan		\$22,178	
Overall Fee Total	\$49,795	\$87,487	

SAWS schedule of completion and production will be in phase with COSA’s proposed design and advertising schedule.

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

Sincerely,
Ardurra Group, Inc.
TBPE Firm No. F-10053



Byron Sanderfer, P.E., CFM
Regional Public Works Practice Director

Cc: Sean Strong, P.E., CoSA Project Manager

Attachments: Attachment A – SAWS Sewer Fee Breakdown – Mendez
Attachment B – SAWS Water Fee Breakdown – Ardurra

MENDEZ ENGINEERING

November 18, 2021
December 1, 2021 (Revised)

Mr. Byron Sanderfer, P.E.
Regional Public Works Practice Director
Ardurra
8918 Tesoro Drive, Suite 401
San Antonio, TX 78217

Re: Bulverde Road Phase 2
Green Spring to Redland Road
SAWS Water Job Number: 21-5046
SAWS Sewer Job Number: 21-5543
Mendez Engineering – Scope of Work and Fee Proposal

Dear Mr. Sanderfer:

As requested, Mendez Engineering is pleased to provide a scope and fee proposal for professional services associated with the above reference project. A summary of our services is included as follows Scope of Services (Attachment A), and Fee Breakdown (Attachment B). Our lump sum fee for the project is **\$121,122.00**.

Our scope and fee is based on our understanding of the project per our coordination with Ardurra on November 2, 2021 which consists of the following:

Water Main Replacements

- Approximately 262 LF of 12-inch asbestos cement pipe along Bulverde Road from the end of the proposed relocation in Phase I

Sewer Main Replacements

- Approximately 395 LF of 42-inch reinforce concrete pipe along Bulverde Road from SSMH 60634 to SSMH 60635
- Approximately 396 LF of 42-inch reinforce concrete pipe along Bulverde Road from SSMH 60635 to SSMH 60636

If there are any questions or further assistance is required, please do not hesitate to contact me by phone or email.

Sincerely,



Marcus G. Cantu, PE, PACP
Director of Infrastructure | Mendez Engineering

1.0– BASIC SERVICES ATTACHMENT A

Task 1.1: Project Management

Mendez Engineering (Engineer) will provide project management tasks which include:

- a. Development and monitoring of project tasks, schedule, and progress reports
- b. Project initiation and administrative – contracting, schedule, and monthly invoicing

Task 1.2: 40% Design Phase

Activities under this task include: [PLEASE SEE TASKS IDENTIFIED IN ATTACHMENT B]

Deliverables: An electronic pdf file of (40%) design plans, and an Engineer's opinion of probable, Utility Conflict Matrix, and SAWS QA/QC Checklists.

Task 1.3: 70% Design Phase

Activities under this task include: [PLEASE SEE TASKS IDENTIFIED IN ATTACHMENT B]

Deliverables: An electronic pdf file of (70%) design plans, and an Engineer's opinion of probable, Utility Conflict Matrix, and SAWS QA/QC Checklists, and 40% submittal review comments with responses.

Task 1.4: 95% Design Phase

Activities under this task include: [PLEASE SEE TASKS IDENTIFIED IN ATTACHMENT B]

Deliverables: An electronic pdf file of (95%) design plans, and an Engineer's opinion of probable, Utility Conflict Matrix, and SAWS QA/QC Checklists, Change of Service form, specifications, and 70% submittal review comments with responses.

Task 1.5: Final (100%) Phase Services/Bid Phase

Activities under this task include: [PLEASE SEE TASKS IDENTIFIED IN ATTACHMENT B]

Deliverables: An electronic pdf file of final (100%) design plans, final Engineer's opinion of probable, Utility Conflict Matrix, and SAWS QA/QC Checklists, Change of Service form, specifications, and 95% submittal review comments with responses.

Task 1.6: Construction and Closeout Phase Services

Activities under this task include: [PLEASE SEE TASKS IDENTIFIED IN ATTACHMENT B]

2.0 – SUPPLEMENTAL SERVICES

Task 1.7: Texas Commission on Environmental Quality (TCEQ) Organized Sewage Collection Systems (SCS) Permit Application

- a. Preparation of the SCS Permit Application
- b. Geological Assessment review and coordinate as necessary
- c. TCEQ coordination for scheduling Administrative and Technical Reviews

- Confirm and incorporate any new regulations
- Implement any existing guidelines updates
- d. Prepare and submit for the Administrative Review
 - Includes meeting with TCEQ representative(s) for application completion
 - Address any comments, as necessary
- e. Prepare and submit to SAWS for review
 - Review and address comments from SAWS review
- f. Prepare and submit for Technical Review
 - Review and address any comments from TCEQ Technical Review
 - Finalize SCS Application and includes preparation of comment response log justifying all revisions
- g. Prepare and submit SCS Permit Fee
- h. Obtain SCS Permit approval and provide the appropriate documentation to SAWS
- i. Prepare and submit a certification letter to TCEQ San Antonio Regional Office certifying wastewater lines have passed all required testing

3.0 – ASSUMPTIONS FOR BASIC ENGINEERING SERVICES

The Engineer's scope of services and fee proposal are based on the following assumptions:

- a. Project is identified as water and waste water replacement as part of CoSA Bulverde Phase II Project – Green Spring to Redland Road, design by Ardurra. Mendez Engineering project limits (Project) of water and sewer replacement are as follows:
 - Water Main Replacements
 - Approximately 262 LF of 12-inch asbestos cement pipe along Bulverde Road from the end of the proposed relocation in Phase I
 - Sewer Main Replacements
 - Approximately 395 LF of 42-inch reinforce concrete pipe along Bulverde Road from SSMH 60634 to SSMH 60635
 - Approximately 396 LF of 42-inch reinforce concrete pipe along Bulverde Road from SSMH 60635 to SSMH 60636
- b. Project will joint bid with CoSA, SAWS design schedule will match with CoSA design schedule and letting schedule.
- c. Construction duration for Project is estimated at 3 months, which is basis for development of construction phase services. If additional construction duration time is needed, Mendez Engineering will provide scope and fee proposal for additional construction phase services.
- d. All drawings will be prepared on 11" X 17" half size, B size drawings. Drawings will be provided to Ardurra in AutoCAD format.
- e. An SCS Permit will be required and prepared by Mendez Engineering for TCEQ due to Project limits within Edwards Aquifer Recharge Zone.

4.0 – BASIS OF COMPENSATION

Refer to Attachment B, for Professional Services Fee and detailed man-hour breakdown.

5.0 – SCHEDULE

A schedule will be provided once the notice to proceed (NTP) is issued.

FEE ESTIMATE FOR SAWS Bulverde Phase II Project ATTACHMENT B

ATTACHMENT A

ITEM NO.	Project Name: SAWS Bulverde Road Phase II Date: December, 2021 (Revised) Prepared By: Marcus G. Cantu, PE, PACP	No.	Principal	QA/QC Manager	Sr Project Manager	Project Manager	Sr Project Engineer	Project Engineer II	Project Engineer I	Designer	CADD Designer	CADD Technician	Admin	TOTAL COST	
		Sheets	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	
			\$ 193.00	\$ 190.00	\$ 188.00	\$ 168.00	\$ 138.00	\$ 128.00	\$ 122.00	\$ 119.00	\$ 107.00	\$ 92.00	\$ 71.00		
TASK		HOURS													
Project Management		0	0	0	0	18	0	0	0	0	0	0	6	\$3,450.00	
1. Water Design - Project Management		0	0	0	0	9	0	0	0	0	0	0	3	\$ 1,725.00	
1.1 w	Development and Monitoring of Project Tasks and Schedule, Progress Reports					4								\$ 672.00	
1.2 w	Project Initiation & Administration - Contract/Schedule/Invoicing					5							3	\$ 1,053.00	
2. Sewer Design - Project Management		0	0	0	0	9	0	0	0	0	0	0	3	\$ 1,725.00	
2.1 s	Development and Monitoring of Project Tasks and Schedule, Progress Reports					4								\$ 672.00	
2.2 s	Project Initiation & Administration - Contract/Schedule/Invoicing					5							3	\$ 1,053.00	
40% Design Phase		11	0	7	12	41	0	71	74	0	26	0	0	\$31,372.00	
1. Water Design - 40% Design Phase		5	0	3	6	20	0	25	33	0	13	0	0	\$ 13,675.00	
1.1 w	Obtain, review, and implement the latest rules and regulations, specifications, special specifications, ordinances, codes, TCEQ, EPA, and any other pertinent governing entity requirements for the development of design plans and supporting documents.					1		2						\$ 424.00	
1.2 w	Design Coordination with Ardurra, SAWS, CoSA				4	4								\$ 1,424.00	
1.3 w	Review Record Drawings & Block Maps					1		2	4					\$ 912.00	
1.4 w	Perform Site Visit Field Reconnaissance to Review Survey and Record Drawings					2		2	1					\$ 714.00	
1.5 w	Utility Coordination, Assist with Developing Utility Conflict Matrix					1		1	3					\$ 662.00	
1.6 w	Develop Title Block, General Notes, Summary of Quantities, and Overall Utility Layout Sheets	4				2		4	16		8			\$ 3,656.00	
1.7 w	Develop Water Plan Sheet at 1" = 40' (H)	1				1		4	8		4			\$ 2,084.00	
1.8 w	Tabulate Quantities and Include Quantity Table Per Sheet					1		1			1			\$ 403.00	
1.9 w	Develop Engineer's Opinion of Probable Construction Cost (OPCC)					1		4						\$ 680.00	
1.10 w	Prepare SAWS QA/QC Form							1						\$ 128.00	
1.11 w	QA/QC Review			3	1	1								\$ 926.00	
1.12 w	Prepare 40% Design Submittal					1			1					\$ 290.00	
1.13 w	Prepare and Attend SAWS 40% Workshop Meeting (Includes Developing Meeting Minutes)				1	2								\$ 524.00	
1.14 w	Address SAWS 40% Comments/Redlines and Prepare Comment Response Sheet					2		4						\$ 848.00	
2. Sewer Design - 40% Design Phase		6	0	4	6	21	0	46	41	0	13	0	0	\$17,697.00	
2.1 s	Obtain, review, and implement the latest rules and regulations, specifications, special specifications, ordinances, codes, TCEQ, EPA, and any other pertinent governing entity requirements for the development of design plans and supporting documents.					1		2						\$ 424.00	
2.2 s	Design Coordination with Ardurra, SAWS, CoSA				4	4								\$ 1,424.00	

December 1, 2021 (Rev)

ATTACHMENT B

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FEE ESTIMATE FOR SAWS Bulverde Phase II Project ATTACHMENT B

ATTACHMENT A

ITEM NO.	Project Name: SAWS Bulverde Road Phase II Date: December, 2021 (Revised) Prepared By: Marcus G. Cantu, PE, PACP	No. Sheets	Principal	QA/QC Manager	Sr Project Manager	Project Manager	Sr Project Engineer	Project Engineer II	Project Engineer I	Designer	CADD Designer	CADD Technician	Admin	TOTAL COST
			Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours
			\$ 193.00	\$ 190.00	\$ 188.00	\$ 168.00	\$ 138.00	\$ 128.00	\$ 122.00	\$ 119.00	\$ 107.00	\$ 92.00	\$ 71.00	
2.3 s	Review Record Drawings & Block Maps					1		2	4					\$ 912.00
2.4 s	Perform Site Visit Field Reconnaissance to Review Survey and Record Drawings					2		2	1					\$ 714.00
2.5 s	Utility Coordination, Assist with Developing Utility Conflict Matrix					1		2	4					\$ 912.00
2.6 s	Develop Title Block, General Notes, Summary of Quantities, and Overall Utility Layout Sheets	4				1		4	8		4			\$ 2,084.00
2.7 s	Develop Sewer Plan & Profile Sheets at 1" = 40' (H), 1" = 5' (V)	2				2		16	24		8			\$ 6,168.00
2.8 s	Tabulate Quantities and Include Quantity Table Per Sheet					1		2			1			\$ 531.00
2.9 s	Develop Engineer's Opinion of Probable Construction Cost (OPCC)					1		8						\$ 1,192.00
2.10 s	Prepare SAWS QA/QC Form							1						\$ 128.00
2.11 s	QA/QC Review		4	1	1									\$ 1,116.00
2.12 s	Prepare 40% Design Submittal					1		1						\$ 296.00
2.13 s	Prepare and Attend SAWS 40% Workshop Meeting (Includes Developing Meeting Minutes)			1	2									\$ 524.00
2.14 s	Address SAWS 40% Comments/Redlines and Prepare Comment Response Sheet				3			6						\$ 1,272.00
70% Design Phase		14	0	5	7	35.5	0	49	47	0	22	0	0	\$ 22,590.00
1. Water Design - 70% Design Phase		6	0	2	3	16	0	18	12	0	6	0	0	\$ 8,042.00
1.1 w	Design Coordination with Ardurra, SAWS, CoSA				2	2								\$ 712.00
1.2 w	Utility Coordination, Update Utility Conflict Matrix							1						\$ 128.00
1.3 w	SUE Coordination				1			1			1			\$ 403.00
1.4 w	Update Title Block, General Notes, Summary of Quantities, and Overall Utility Layout Sheets	4				1		2	4		2			\$ 1,126.00
1.5 w	Update Water Plan Sheet 1" = 40' (H)	1				1		2	4		2			\$ 1,126.00
1.6 w	Develop Details	1				1		2	4					\$ 912.00
1.7 w	Update Quantities and Quantity Table Per Sheet					1		1			1			\$ 403.00
1.8 w	Update Engineer's Opinion of Probable Construction Cost (OPCC)					1		4						\$ 690.00
1.9 w	Prepare SAWS QA/QC Form							1						\$ 128.00
1.10 w	QA/QC Review		2	1	1									\$ 736.00
1.11 w	Prepare 70% Design Submittal					1								\$ 168.00
1.12 w	Perform Walk-Through with SAWS Engineer(s) to Review 70% Design					2								\$ 336.00
1.13 w	Prepare and Attend SAWS 70% Workshop Meeting (Includes Developing Meeting Minutes)					2								\$ 336.00
1.14 w	Address SAWS 70% Comments/Redlines and Prepare Comment Response Sheet					2		4						\$ 848.00
2. Sewer Design - 70% Design Phase		8	0	3	4	19.5	0	31	35	0	16	0	0	\$ 14,548.00
2.1 s	Design Coordination with Ardurra, SAWS, CoSA				3	3								\$ 1,068.00
2.2 s	Utility Coordination, Update Utility Conflict Matrix							1						\$ 128.00

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FEE ESTIMATE FOR SAWS Bulverde Phase II Project ATTACHMENT B

ATTACHMENT A

ITEM NO.	Project Name: SAWS Bulverde Road Phase II Date: December, 2021 (Revised) Prepared By: Marcus G. Cantu, PE, PACP	No. Sheets	Principal	QA/QC Manager	Sr Project Manager	Project Manager	Sr Project Engineer	Project Engineer II	Project Engineer I	Designer	CADD Designer	CADD Technician	Admin	TOTAL COST
			Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours
			\$ 193.00	\$ 190.00	\$ 188.00	\$ 168.00	\$ 138.00	\$ 128.00	\$ 122.00	\$ 119.00	\$ 107.00	\$ 92.00	\$ 71.00	
2.3 s	SUE Coordination					1		1			1			\$ 403.00
2.4 s	Update Title Block, General Notes, Summary of Quantities, and Overall Utility Layout Sheets	4				1		2	8		4			\$ 1,828.00
2.5 s	Update Sewer Plan & Profile Sheets at 1" = 40' (H), 1" = 5' (V)	2				2		8	12		4			\$ 3,252.00
2.6 s	Develop Sanitary Sewer Bypass Plans	1				2		4	8		3			\$ 2,145.00
2.7 s	Develop Details	1				1		4	6		2			\$ 1,626.00
2.8 s	Update Quantities and Quantity Table Per Sheet					1		2			2			\$ 638.00
2.9 s	Update Engineer's Opinion of Probable Construction Cost (OPCC)					1		4						\$ 680.00
2.10 s	Prepare SAWS QA/QC Form							1						\$ 128.00
2.11 s	QA/QC Review			3	1	1								\$ 926.00
2.12 s	Prepare 70% Design Submittal					1			1					\$ 290.00
2.13 s	Perform Walk-Through with SAWS Engineer(s) to Review 70% Design					1.5								\$ 252.00
2.14 s	Prepare and Attend SAWS 70% Workshop Meeting (Includes Developing Meeting Minutes)					2								\$ 336.00
2.15 s	Address SAWS 70% Comments/Redlines and Prepare Comment Response Sheet					2		4						\$ 848.00
	95% Design Phase	15	0	4	5	24	0	38	20	0	13	0	0	\$ 14,427.00
	1. Water Design - 95% Design Phase	7	0	2	2	11	0	15	5	0	5	0	0	\$ 5,669.00
1.1 w	Design Coordination with Ardurra, SAWS, CoSA				1	1								\$ 356.00
1.2 w	Utility Coordination, Update Utility Conflict Matrix							1						\$ 128.00
1.3 w	Update Title Block, General Notes, Summary of Quantities, and Overall Utility Layout Sheets	4				1		1	2		2			\$ 754.00
1.4 w	Update Water Plan Layout Sheet 1" = 40' (H)	1				1		1	2		2			\$ 754.00
1.5 w	Update Details	1						1			1			\$ 235.00
1.6 w	Update Quantities and Quantity Table Per Sheet	1				1		1						\$ 296.00
1.7 w	Update Engineer's Opinion of Probable Construction Cost (OPCC)					1		2						\$ 424.00
1.8 w	Prepare Change of Service Form							1						\$ 128.00
1.9 w	Prepare SAWS QA/QC Form							1						\$ 128.00
1.10 w	Prepare Technical Specifications, Special Conditions, and General Provisions					2		4						\$ 848.00
1.11 w	QA/QC Review			2	1	1								\$ 736.00
1.12 w	Prepare 95% Design Submittal					1			1					\$ 290.00
1.13 w	Prepare and Attend SAWS 95% Workshop Meeting (Includes Developing Meeting Minutes)					1								\$ 168.00
1.14 w	Address SAWS 95% Comments/Redlines and Prepare Comment Response Sheet					1		2						\$ 424.00
	2. Sewer Design - 95% Design Phase	8	0	2	3	13	0	23	15	0	8	0	0	\$ 8,758.00
2.1 s	Design Coordination with Ardurra, SAWS, CoSA				2	2								\$ 712.00

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**FEE ESTIMATE FOR
SAWS Bulverde Phase II Project
ATTACHMENT B**

ATTACHMENT A

ITEM NO.	Project Name: SAWS Bulverde Road Phase II Date: December, 2021 (Revised) Prepared By: Marcus G. Cantu, PE, PACP	No. Sheets	Principal	QA/QC Manager	Sr Project Manager	Project Manager	Sr Project Engineer	Project Engineer II	Project Engineer I	Designer	CADD Designer	CADD Technician	Admin	TOTAL COST
			Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours
			\$ 193.00	\$ 190.00	\$ 188.00	\$ 168.00	\$ 138.00	\$ 128.00	\$ 122.00	\$ 119.00	\$ 107.00	\$ 92.00	\$ 71.00	
2.2 s	Utility Coordination, Update Utility Conflict Matrix							1						\$ 128.00
2.3 s	Update Title Block, General Notes, Summary of Quantities, and Overall Utility Layout Sheets	4				1		1	2		1			\$ 647.00
2.4 s	Update Plan & Profile Layout Sheets 1" = 40' (H)	2				1		4	8		4			\$ 2,084.00
2.5 s	Update Sanitary Sewer Bypass Plans	1				1		2	4		2			\$ 1,126.00
2.6 s	Update Details	1						1			1			\$ 235.00
2.7 s	Update Quantities and Quantity Table Per Sheet					1		1						\$ 296.00
2.8 s	Update Engineer's Opinion of Probable Construction Cost (OPCC)					1		2						\$ 424.00
2.9 s	Prepare SAWS QA/QC Form							1						\$ 128.00
2.10 s	Prepare Technical Specifications, Special Conditions, and General Provisions					2		8						\$ 1,360.00
2.11 s	QA/QC Review		2	1	1									\$ 736.00
2.12 s	Prepare 95% Design Submittal				1				1					\$ 290.00
2.13 s	Prepare and Attend SAWS 95% Workshop Meeting (Includes Developing Meeting Minutes)				1									\$ 168.00
2.14 s	Address SAWS 95% Comments/Redlines and Prepare Comment Response Sheet				1			2						\$ 424.00
	Bid Phase	15	0	0	4	17	0	27	10	0	4	3	1	\$ 9,059.00
	1. Water Design - Bid Phase	7	0	0	2	8.5	0	14	4	0	2	1	0	\$ 4,390.00
1.1 w	Coordination with Ardurra, SAWS, CoSA				1	1								\$ 356.00
1.2 w	Utility Coordination, Finalize Utility Conflict Matrix							1						\$ 128.00
1.3 w	Prepare and attend 100% Review Meeting (Includes Developing Meeting Minutes)				1									\$ 168.00
1.4 w	Address Comments/Redlines from 100% Review Meeting				1			1	2		2			\$ 754.00
1.5 w	Finalize Signed & Sealed Plans	7				1		2						\$ 424.00
1.6 w	Update Change of Service Form							1						\$ 128.00
1.7 w	Prepare SAWS QA/QC Form							1						\$ 128.00
1.8 w	Review/Update Pre-Bid Agenda and Attend Pre-Bid Meeting			1	2									\$ 524.00
1.9 w	Prepare Signed & Sealed Addenda				1			4	2			1		\$ 1,016.00
1.10 w	Attend Bid Opening				0.5									\$ 84.00
1.11 w	Prepare Bid Tabulation and Letter of Recommendation				1			4						\$ 680.00
	2. Sewer Design - Bid Phase	8	0	0	2	8.5	0	13	6	0	2	2	1	\$ 4,669.00
2.1 s	Coordination with Ardurra, SAWS, CoSA				1	1								\$ 356.00
2.2 s	Utility Coordination, Finalize Utility Conflict Matrix							1						\$ 128.00
2.3 s	Prepare and attend 100% Review Meeting (Includes Developing Meeting Minutes)				1									\$ 168.00
2.4 s	Address Comments/Redlines from 100% Review Meeting				1			1	4		2			\$ 998.00

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FEE ESTIMATE FOR SAWS Bulverde Phase II Project ATTACHMENT B

ATTACHMENT A

ITEM NO.	Project Name: SAWS Bulverde Road Phase II Date: December, 2021 (Revised) Prepared By: Marcus G. Cantu, PE, PACP	No. Sheets	Principal	QA/QC Manager	Sr Project Manager	Project Manager	Sr Project Engineer	Project Engineer II	Project Engineer I	Designer	CADD Designer	CADD Technician	Admin	TOTAL COST
			Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours
			\$ 193.00	\$ 190.00	\$ 188.00	\$ 188.00	\$ 138.00	\$ 128.00	\$ 122.00	\$ 119.00	\$ 107.00	\$ 92.00	\$ 71.00	
2.5 s	Finalize Signed & Sealed Plans	8				1		2						\$ 424.00
2.6 s	Prepare SAWS QA/QC Form							1						\$ 128.00
2.7 s	Review/Update Pre-Bid Agenda and Attend Pre-Bid Meeting				1	2								\$ 524.00
2.8 s	Prepare Signed & Sealed Addenda					1		4	2			2	1	\$ 1,179.00
2.9 s	Attend Bid Opening					0.5								\$ 84.00
2.10 s	Prepare Bid Tabulation and Letter of Recommendation					1		4						\$ 680.00
Construction Phase		0	0	0	6	34	0	43	0	0	1	0	0	\$ 12,451.00
1. Water Design - Construction Phase		0	0	0	4	15	0	16	0	0	1	0	0	\$ 5,427.00
1.1 w	Attend Pre-Construction Meeting & Develop Meeting Minutes				2	3								\$ 880.00
1.2 w	Site Visits (Three per Month) - Assume 1 Month Construction					3		3						\$ 888.00
1.3 w	Prepare Site Visit Reports					1		3						\$ 552.00
1.4 w	Review Material Submittals					2		4						\$ 848.00
1.5 w	Address RFI's and Change Orders					2		2		1				\$ 699.00
1.6 w	Prepare RFP's, Independent Cost Estimate					1		4						\$ 680.00
1.7 w	Review Contractor's Pay Applications					1								\$ 168.00
1.8 w	Substantial and Final Completion Inspection				2	2								\$ 712.00
2. Sewer Design - Construction Phase		0	0	0	2	19	0	27	0	0	0	0	0	\$ 7,024.00
2.1 s	Site Visits (Three per Month) - Assume 2 Month Construction					6		6						\$ 1,776.00
2.2 s	Prepare Site Visit Reports					2		6						\$ 1,104.00
2.3 s	Review Material Submittals					2		4						\$ 848.00
2.4 s	Address RFI's and Change Orders					3		3						\$ 888.00
2.5 s	Prepare RFP's, Independent Cost Estimate					2		8						\$ 1,360.00
2.6 s	Review Contractor's Pay Applications					2								\$ 336.00
2.7 s	Substantial and Final Completion Inspection				2	2								\$ 712.00
Close Out Phase		15	0	0	0	8	0	19	0	0	17	0	0	\$ 5,595.00
1. Water Design - Close Out Phase		7	0	0	0	4	0	9	0	0	9	0	0	\$ 2,787.00
1.1 w	Prepare Water Plan of Record					2		4			4			\$ 1,276.00
1.2 w	Address SAWS Comments					1		3			4			\$ 980.00
1.3 w	Finalize Water Plan of Record	7				1		1			1			\$ 403.00
1.4 w	Finalize Change of Service Form							1						\$ 128.00
2. Sewer Design - Close Out Phase		8	0	0	0	4	0	10	0	0	8	0	0	\$ 2,808.00
2.1 s	Prepare Sewer Plan of Record					2		5			5			\$ 1,511.00

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**FEE ESTIMATE FOR
SAWS Bulverde Phase II Project
ATTACHMENT B**

ATTACHMENT A

ITEM NO.	Project Name: SAWS Bulverde Road Phase II Date: December, 2021 (Revised) Prepared By: Marcus G. Cantu, PE, PACP	No.	Principal	QA/QC Manager	Sr Project Manager	Project Manager	Sr Project Engineer	Project Engineer II	Project Engineer I	Designer	CADD Designer	CADD Technician	Admin	TOTAL COST
		Sheets	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours
			\$ 193.00	\$ 190.00	\$ 188.00	\$ 168.00	\$ 138.00	\$ 128.00	\$ 122.00	\$ 119.00	\$ 107.00	\$ 92.00	\$ 71.00	
2.2 s	Address SAWS Comments					1		3			2			\$ 766.00
2.1 s	Finalize Sewer Plan of Record	8				1		2			1			\$ 531.00
	Supplemental Services	0	0	0	0	16	0	110	32	0	8	0	0	\$ 22,178.00
	Preparation of TCEQ SCS Permit					16		110	32		8			\$ 21,528.00
	TCEQ Permit Fees													\$ 650.00
	OTHER (COMBINED) SUB-TOTAL													
	WATER SUB-TOTAL		0	7	17	83.5	0	97	54	0	36	1	3	\$ 41,715.00
	SEWER SUB-TOTAL		0	9	17	94	0	150	97	0	47	2	4	\$ 57,229.00
	SUPPLEMENTAL SERVICES SUB-TOTAL		0	0	0	16	0	110	32	0	8	0	0	\$ 22,178.00
	TOTAL FOR ENGINEERING FEE SAWS		0	16	34	193.5	0	357	183	0	91	3	7	\$ 121,122.00

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SAN ANTONIO WATER SYSTEM
ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST
SAWS - Bulverde Phase II Project - OPCC Water
12/01/2021 (Revised)

SUBDIVISION NAME: Bulverde Road Phase 2 - Green Spring to Redland Road

ENGINEER: Mendez Engineering

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT PRICE	AMOUNT
100.1	MOBILIZATION (10%)	LS	1	\$5,960.82	\$5,960.82
101.1	PREPARING RIGHT OF WAY (5%)	LS	1	\$2,980.41	\$2,980.41
413.2	FLOWABLE BACKFILL (HIGH STRENGTH)	CY	3	\$165.00	\$495.00
550.1	TRENCH EXCAVATION SAFETY PROTECTION	LF	276	\$3.20	\$883.20
814	12" DUCTILE IRON PIPE (WATERLINE, RESTRAINED AS REQUIRED)	LF	276	\$120.00	\$33,120.00
836	PIPE FITTINGS, ALL SIZES AND TYPES	TN	1	\$6,250.00	\$6,250.00
840	12" WATER TIE-INS	EA	2	\$4,000.00	\$8,000.00
841	HYDROSTATIC TESTING	EA	1	\$1,774.00	\$1,774.00
844	2" BLOWOFF, TEMPORARY	EA	2	\$1,583.00	\$3,166.00
1020	WATER MAIN BREAK, LEAK REPAIRS	EA	1	\$4,750.00	\$4,750.00
3000	HANDLING ASBESTOS CEMENT PIPE	LF	26	\$45.00	\$1,170.00
SUBTOTAL WATER IMPROVEMENTS:					\$68,549.43
Contingency (0%)					\$0.00
TOTAL WATER IMPROVEMENTS:					\$68,549.43

SAN ANTONIO WATER SYSTEM
ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST
SAWS - Bulverde Phase II Project - OPCC Sewer
12/01/2021 (Revised)

SUBDIVISION NAME: Bulverde Road Phase 2 - Green Spring to Redland Road
ENGINEER: Mendez Engineering

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT PRICE	AMOUNT
100.1	MOBILIZATION (10%)	LS	1	\$73,860.08	\$73,860.08
101.1	PREPARING RIGHT OF WAY (5%)	LS	1	\$36,930.04	\$36,930.04
550.1	TRENCH EXCAVATION SAFETY PROTECTION	LF	791	\$3.20	\$2,531.20
857	42-INCH FRP (ASTM D-3262) (PS 72) SANITARY SEWER LINE (14' TO 18')	LF	791	\$700.00	\$553,700.00
850	FIBER-REINFORCED SANITARY SEWER MANHOLE - TEE BASE FIBERGLASS	EA	3	\$25,000.00	\$75,000.00
852	FIBER-REINFORCED SANITARY SEWER MANHOLE - TEE BASE FIBERGLASS	VF	30	\$225.00	\$6,750.00
858	CONCRETE ENCASEMENT, CRADLES, SADDLES, AND COLLARS	CY	1	\$170.00	\$170.00
866	SEWER MAIN PRE-TELEVISION INSPECTION	LF	791	\$5.75	\$4,548.25
866	SEWER MAIN POST TELEVISION INSPECTION (30" OR LARGER)	LF	791	\$4.30	\$3,401.30
864-S1	BYPASS PUMPING (SMALL DIAMETER SANITARY SEWER).	LS	1	\$27,500.00	\$27,500.00
864-S2	BYASS PUMPING (LARGE DIAMETER SANITARY SEWER) / PROJ. LOC.	LS	1	\$50,000.00	\$50,000.00
	CPS POLE BRACING ALLOWANCE	LS	1	\$15,000.00	\$15,000.00
SUBTOTAL WATER IMPROVEMENTS:					\$849,390.86
					Contingency (0%)
					\$0.00
TOTAL WATER IMPROVEMENTS:					\$849,390.86

FEE ESTIMATE FOR SAWS WORK Attachment B

ITEM NO.	Project Name: Bulverde Road Phase II Date: 11/16/21 Prepared By: Byron Sanderfer, PE	No. Sheets	Project Manager	Project Engineer	EIT II	EIT I	CADD Tech	Project Surveyor	Survey Tech	2 Man Crew	3 Man Crew	4 Man Crew	Clerical/Admin	Task Budget
			\$ 170.00	\$ 150.00	\$ 120.00	\$ 110.00	\$ 85.00	\$ 145.00	\$ 110.00	\$ 180.00	\$ 210.00	\$ -	\$ 70.00	
TASK														
40% Design Phase														
	1. Water Design - 40% Design Phase	0	12	8	0	0	0	0	0	0	0	0	0	\$ 3,240.00
1.1 w	Meetings - Not Covered by Section 5.0 of DGM		6	4	0	0	0	0	0	0	0	0	0	\$ 1,820.00
1.2 w	QA/QC Review		2	2										\$ 640.00
	2. Sewer Design - 40% Design Phase	0	6	4	0	0	0	0	0	0	0	0	0	\$ 1,820.00
2.1 s	Meetings - Not Covered by Section 5.0 of DGM		2	2										\$ 640.00
2.2 s	QA/QC Review		4	2										\$ 980.00
70% Design Phase														
	1. Water Design - 70% Design Phase	0	12	8	0	0	0	0	0	0	0	0	0	\$ 3,240.00
1.1 w	Meetings - Not Covered by Section 5.0 of DGM		6	4	0	0	0	0	0	0	0	0	0	\$ 1,820.00
1.2 w	QA/QC Review		2	2										\$ 640.00
	2. Sewer Design - 70% Design Phase	0	6	4	0	0	0	0	0	0	0	0	0	\$ 1,820.00
2.1 s	Meetings - Not Covered by Section 5.0 of DGM		2	2										\$ 640.00
2.2 s	QA/QC Review		4	2										\$ 980.00
95% Design Phase														
	1. Water Design - 95% Design Phase	0	12	8	0	0	0	0	0	0	0	0	0	\$ 3,240.00
1.1 w	Meetings - Not Covered by Section 5.0 of DGM		6	4	0	0	0	0	0	0	0	0	0	\$ 1,820.00
1.2 w	QA/QC Review		2	2										\$ 640.00
	2. Sewer Design - 95% Design Phase	0	6	4	0	0	0	0	0	0	0	0	0	\$ 1,820.00
2.1 s	Meetings - Not Covered by Section 5.0 of DGM		2	2										\$ 640.00
2.2 s	QA/QC Review		4	2										\$ 980.00
Bid Phase														
	1. Water Design - Bid Phase	0	4	4	0	0	0	0	0	0	0	0	0	\$ 2,560.00
1.1 w	Prepare 100% submittal		4	4	0	0	0	0	0	0	0	0	0	\$ 1,280.00
1.2 w	Prepare Sealed Plans & Specifications													\$ -
1.3 w	Prepare Addendums													\$ -
1.4 w	Review SAWS portion of bid tabulation													\$ -
1.5 w	Prepare Sealed Plans & Specifications with Addendums													\$ -
1.6 w	SAWS Coordination		4	4										\$ 1,280.00
	2. Sewer Design - Bid Phase	0	0	0	0	0	0	0	0	0	0	0	0	\$ 1,280.00
2.1 s	Prepare 100% submittal													\$ -
2.2 s	Prepare Sealed Plans & Specifications													\$ -
2.3 s	Prepare Addendums													\$ -
2.4 s	Review SAWS portion of bid tabulation													\$ -
2.5 s	Prepare Sealed Plans & Specifications with Addendums													\$ -
2.6 s	SAWS Coordination		4	4										\$ 1,280.00
Construction Phase														
	1. Water Design - Construction Phase	0	6	3	0	0	0	0	0	0	0	0	0	\$ 2,600.00
1.1 w	Site Visits (Two per Month) & Prepare Report		5	3	0	0	0	0	0	0	0	0	0	\$ 1,300.00
1.2 w	Redline/Quantity Review - One per month													\$ -
1.3 w	Review Material Submittals													\$ -
1.4 w	Address RFI and Change Orders													\$ -
1.5 w	SAWS Coordination		4	2										\$ 980.00
1.6 w	Final Walk Through		1	1										\$ 320.00
	2. Sewer Design - Construction Phase	0	0	0	0	0	0	0	0	0	0	0	0	\$ 1,300.00
2.1 s	Site Visits (Two per Month) & Prepare Report													\$ -
2.2 s	Redline/Quantity Review - One per month													\$ -
2.3 s	Review Material Submittals													\$ -
2.4 s	Address RFI and Change Orders													\$ -
2.5 s	SAWS Coordination		4	2										\$ 980.00
2.6 s	Final Walk Through		1	1										\$ 320.00
Close Out Phase														
	1. Water Design - Close Out Phase	0	2	2	0	0	0	0	0	0	0	0	0	\$ 1,280.00
1.1 w	Prepare Record Drawings		2	2	0	0	0	0	0	0	0	0	0	\$ 640.00
1.2 w	Finalize Change of Service Form													\$ -
1.3 w	SAWS Coordination		2	2										\$ 640.00
	2. Sewer Design - Close Out Phase	0	0	0	0	0	0	0	0	0	0	0	0	\$ -
2.1 s	Prepare Record Drawings													\$ -
2.2 s	Finalize Change of Service Form													\$ -
2.3 s	SAWS Coordination		2	2										\$ 640.00
Supplemental Services														
	1. Survey Outside Project Limits													\$ -
	2. Potholes Requested by SAWS													\$ -
	3. Prepare SC3 Permit for TCEG													\$ -
	4. Prepare metec and bounds for SAWS easements													\$ -
	5. Design for temporary water main													\$ -
	6. Traffic Control Plan outside CO3A Project Limits													\$ -
	7. Additional Permits													\$ -
WATER SUB-TOTAL			29	21	0	0	0	0	0	0	0	0	0	\$ 8,080.00
SEWER SUB-TOTAL			18	12	0	0	0	0	0	0	0	0	0	\$ 8,080.00
SUPPLEMENTAL SERVICES SUB-TOTAL			0	0	0	0	0	0	0	0	0	0	0	\$ -
TOTAL FOR ENGINEERING FEE SAWS			47	33	0	0	0	0	0	0	0	0	0	\$ 16,160.00