

**Alliance Regional Water Authority
Board of Directors**

REGULAR MEETING



ALLIANCE WATER

BOARD MEMBER PACKETS

Wednesday, February 26, 2020 at 3:00 P.M.

San Marcos Activity Center
501 E. Hopkins, San Marcos, TX 78666

REGULAR MEETING
Alliance Regional Water Authority Board of Directors

BOARD MEMBER PACKETS

Wednesday, February 26, 2020 at 3:00 P.M.
501 E. Hopkins, San Marcos, TX 78666

This Notice is posted pursuant to the Texas Open Meetings Act (Texas Government Code Chapter 551). The Alliance Regional Water Authority (the Authority) Board of Directors will hold a meeting at 3:00 PM, Wednesday, February 26, 2020, at the San Marcos Activity Center, 501 E. Hopkins, San Marcos, Texas. Additional information can be obtained by calling Graham Moore at (512) 294-3214.

A. CALL TO ORDER

B. ROLL CALL

C. SEATING OF NEWLY APPOINTED DIRECTOR

C.1 Oath of Office and swearing in of Director

D. PUBLIC COMMENT PERIOD (Note: Each person wishing to speak must submit a completed Public Comment Form to the Executive Director or his/her designee before the public comment period begins.)

E. CONSENT AGENDA

The items included in the Consent Agenda portion of this meeting agenda can be considered and approved by the Board of Directors by one motion and vote. A Board member may request that an item included in the Consent Agenda be considered separately, in which event the Board of Directors will take action on the remaining Consent Agenda items and then consider the item removed from the Consent Agenda.

E.1 Consider approval of minutes of the Regular Meeting held January 22, 2020. ~
Graham Moore, P.E., Executive Director

E.2 Consider approval of the financial report for January 2020. ~ *Graham Moore, P.E., Executive Director*

F. PUBLIC HEARINGS / PRESENTATIONS

F.1 Discussion with Representative Erin Zwiener regarding the Authority's water supply efforts and legislative activities.

G. ITEMS FOR ACTION OR DISCUSSION/DIRECTION

G.1 Report on Technical Committee activities. ~ *Graham Moore, P.E., Executive Director*

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- G.2 Update and possible direction to Staff regarding the status of the Authority's Phase 1A projects, and direction to staff and consultants. ~ *Jason Biemer, Project Coordinator*
- G.3 Update and discussion regarding the status of the Authority's Phase 1B program, and direction to staff and consultants. ~ *Ryan Sowa, P.E., Kimley-Horn & Associates*
- G.4 Consider adoption of Resolution 2020-02-26-001 approving Work Order #4 with Freese & Nichols, Inc. for Final Design and Procurement Services for the Authority's Phase 1B Booster Pump Station & Delivery Points Project as recommended by the Technical Committee. ~ *Ryan Sowa, P.E., Kimley-Horn & Associates*
- G.5 Consider adoption of Resolution 2020-02-26-002 approving Work Order #3 with Blanton & Associates, Inc. for additional Environmental Field Investigations for the Authority's Phase 1B projects as recommended by the Technical Committee. ~ *Ryan Sowa, P.E., Kimley-Horn & Associates*
- G.6 Consider adoption of Resolution 2020-02-26-003 approving Work Order #4 with Kimley-Horn & Associates, Inc. for Owner's Representative Services for March 2020 through February 2021 for the Authority's Phase 1B Program as recommended by the Technical Committee. ~ *Graham Moore, P.E., Executive Director*
- G.7 Update, discussion and possible direction to Staff regarding the Authority's request to the Texas Water Development Board for additional SWIFT Funding. ~ *Graham Moore, P.E., Executive Director*
- G.8 Consider adoption of Resolution 2020-02-26-004 approving a Policy on Contributions to Outside Entities. ~ *Graham Moore, P.E., Executive Director*
- G.9 Consider adoption of Resolution 2020-02-26-005 approving an Amended and Restated Negotiated Export Fee Agreement between the Authority and the Gonzales County Underground Water Conservation District. ~ *Graham Moore, P.E., Executive Director*
- G.10 Consider adoption of Resolution 2020-02-26-006 making appointments to the Technical Committee. ~ *Graham Moore, P.E., Executive Director*

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- G.11 Update on status of groundwater management in project target area, and Gonzales County Underground Water Conservation District, Plum Creek Conservation District, Groundwater Management Area 13, Region L Planning Group, Guadalupe-Blanco River Authority, Hays County and CAPCOG activities. ~ *Graham Moore, P.E., Executive Director*
- H. EXECUTIVE DIRECTOR AND LEGAL COUNSEL REPORTS - Update on future meeting dates, locations, status of Authority procurements, Executive Director activities, other operational activities and the status of legal issues, where no action is required. ~ *Graham Moore, P.E., Executive Director / Mike Gershon, Lloyd Gosselink Rochelle & Townsend, P.C.*
- I. BOARD MEMBER ITEMS OR FUTURE AGENDA ITEMS – Possible acknowledgement by Committee Members of future area events and/or requests for item(s) to be placed on a future agenda where no action is required.
- J. EXECUTIVE SESSION
- J.1 *Executive Session pursuant to the Government Code, Section 551.071 (Consultation with Attorney) and/or Section 551.072 (Real Property Deliberations) regarding:*
- A. *Water supply partnership options*
 - B. *Groundwater leases*
 - C. *Acquisition of real property for water supply project purposes*
- J.2 Action from Executive Session on the following matters:
- A. *Water supply partnership options*
 - B. *Groundwater leases*
 - C. *Acquisition of real property for water supply project purposes*
- K. ADJOURNMENT

NOTE: *The Board of Directors may meet in Executive Session to consider any item listed on this agenda if a matter is raised that is appropriate for Executive Session discussion. An announcement will be made of the basis for the Executive Session discussion. The Board of Directors may also publicly discuss any item listed on the agenda for Executive Session.*

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A. CALL TO ORDER

No Backup Information for this Item.

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B. ROLL CALL

NAME	TERM ENDS	PRESENT
Mayor Jane Hughson – Vice-Chair (San Marcos)	April 2020	
Mike Taylor (CRWA - General Manager, Crystal Clear SUD)	April 2020	
Brian Lillibridge (Kyle – Asst. Public Works Director)	April 2021	
Kenneth Williams – Treasurer (Buda – City Manager)	April 2020	
Councilmember Mark Rockeymoore (San Marcos)	April 2022	
Humberto Ramos (CRWA – Water Resources Director)	April 2021	
James Earp – Secretary (Kyle – Assistant City Manager)	April 2021	
Tom Taggart (San Marcos – Executive Director of Public Services)	April 2021	
Chris Betz – Chair (CRWA - President, County Line SUD)	April 2022	
Councilmember Tracy Scheel (Kyle)	April 2021	
Jon Clack (San Marcos – Assistant Director of Public Services)	April 2022	
Pat Allen (CRWA - General Manager, Green Valley SUD)	April 2020	
Steve Parker (San Marcos – Assistant City Manager)	April 2022	

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C. SEATING OF NEWLY APPOINTED DIRECTOR

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C.1 Oath of Office and swearing in of Director

Background/Information

The San Marcos City Council recently appointed Heather Hurlbert to serve as their new representative to fill the unexpired term of Steve Parker. The oath will be recited at the meeting by Ms. Hurlbert.

Attachment(s)

- Alliance Water – Director Oath of Office

Board Decision(s) Needed:

- None.

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- D.** PUBLIC COMMENT PERIOD (Note: Each person wishing to speak must submit a completed Public Comment Form to the Executive Director or his/her designee before the public comment period begins.)
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E. CONSENT AGENDA

Items E.1 and E.2 are presented as part of the consent agenda.

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- E.1** Consider approval of minutes of the Regular Meeting held January 22, 2020. ~
Graham Moore, P.E., Executive Director
-

Attachment(s)

- 2020 01 22 Board Meeting Minutes

Board Decision(s) Needed:

- Approval of minutes.



ALLIANCE WATER

Alliance Regional Water Authority

BOARD MEETING

MINUTES

Wednesday, January 22, 2020

The following represents the actions taken by the Board of Directors of the Alliance Regional Water Authority (ARWA) in the order they occurred during the meeting. The Board of Directors convened in a meeting on Wednesday, January 22, 2020 at the San Marcos Activity Center, 501 E. Hopkins, San Marcos, Texas.

- A. CALL TO ORDER.
The Alliance Water Board Meeting was called to order at 3:04p.m. by Mr. Betz.

- B. ROLL CALL.
 - **Present: Hughson, Taylor, Lillibridge, Williams, Rockeymoore, Ramos, Taggart, Betz, Scheel, Clack and Allen.**
 - **Absent: Earp and Parker.**

- C. PUBLIC COMMENT PERIOD
 - **None.**

- D. CONSENT AGENDA
 - D.1 Consider approval of minutes of the Regular Meeting held December 18, 2019.
 - D.2 Consider approval of the financial report for December 2019.
 - D.3 Consider approval of Quarterly Investment Report for the period ending December 31, 2019.
 - **Motion to approve the consent agenda as presented was made by Mr. Taylor, seconded by Mr. Rockeymoore. Mayor Hughson abstained on Item D.1 and it was approved on a 10-0-1 vote. Items D.2 and D.3 were approved on a 11-0 vote.**

- E. PUBLIC HEARINGS / PRESENTATIONS
 - E.1 None.

F. ITEMS FOR ACTION OR DISCUSSION/DIRECTION

- F.1 Report on Technical Committee activities.
- **Mr. Moore updated the Board on the November meeting.**
 - **No Action.**
- F.2 Consider adoption of Resolution 2020-01-22-001 accepting and approving the Audit Report for the 2018-2019 Financial Audit of the Authority
- **Phil Vaughan with Armstrong, Vaughan & Associates attended the meeting and presented the findings of the financial audit for FY 18-19.**
 - **Motion to adopt Resolutions 2020-01-22-001 accepting and approving the Audit Report for the 2018-2019 Financial Audit of the Authority as presented was made by Ms. Hughson, seconded by Mr. Taggart and approved on a 11-0 vote.**
- F.3 Consider adoption of Resolution 2020-01-22-002 approving the Investment Policy for the Authority.
- **Mr. Moore presented the updated Investment Policy.**
 - **Ms. Hughson noted concern with the word “control” regarding collusion in paragraph 9.1.7.**
 - **Motion to amend paragraph 9.1.7 of the policy to replace the work “control” with “prohibition” was made by Ms. Hughson, seconded by Mr. Ramos and approved on a 11-0 vote.**
 - **Motion to adopt Resolutions 2020-01-22-002 approving the Investment Policy as amended was made by Mr. Taylor, seconded by Mr. Ramos and approved on a 11-0 vote.**
- F.4 Update and possible direction to Staff regarding the status of the Authority’s Phase 1A projects, and direction to staff and consultants.
- **Mr. Moore provided an update on the conclusion of the property acquisitions for the Phase 1A projects.**
 - **Mr. Biemer provided an update on the construction projects.**
 - **No Action.**
- F.5 Consider adoption of Resolution 2020-01-22-003 approving an agreement with MLA Labs, Inc. for materials testing associated with the Phase 1A Segment B Pipeline project.
- **Motion to adopt Resolutions 2020-01-22-003 approving an agreement with MLA Labs, Inc. for materials testing as presented was made by Mr. Taggart, seconded by Mr. Williams and approved on a 11-0 vote.**

- F.6 Update and discussion regarding the status of the Authority's Phase 1B program, and direction to staff and consultants.
- **Mr. Moore provided an update on the ongoing discussions regarding the power provider to the water treatment plant. The Authority has received verbal confirmation that Bluebonnet Electric has agreed that the Guadalupe Valley Electrical Coop will be the provider.**
 - **Mr. Sowa provided an update on the Phase 1B program.**
 - **No Action.**
- F.7 Consider adoption of Resolution 2020-01-22-004 approving Work Order #4 with R.W. Harden & Associates, Inc. for Construction Phase Services for the Authority's Phase 1B Well Drilling / Hydrogeology project as recommended by the Technical Committee.
- **Motion to adopt Resolutions 2020-01-22-004 approving Work Order #4 with R.W. Harden & Associates for Construction Phase Services for the Authority's Phase 1B Well Drilling / Hydrogeology project as presented was made by Mr. Ramos, seconded by Mr. Taggart and approved on a 11-0 vote.**
- F.8 Consider adoption of Resolution 2020-01-22-005 approving an agreement with Hicks & Company Environmental / Archaeological Consultants for Environmental On-Call Services associated with the Authority's Phase 1B Well Drilling / Hydrogeology project as recommended by the Technical Committee.
- **Motion to adopt Resolutions 2020-01-22-005 approving an agreement with Hicks & Company Environmental / Archaeological Consultants for Environmental On-Call Services associated with the Authority's Phase 1B Well Drilling / Hydrogeology project as presented was made by Mr. Taylor, seconded by Ms. Scheel and approved on a 11-0 vote.**
- F.9 Consider adoption of Resolution 2020-01-22-006 approving Work Order #3 with Walker Partners, LLC for Design and Procurement Services for the Authority's Phase 1B Water Treatment Plant project as recommended by the Technical Committee.
- **Motion to adopt Resolutions 2020-01-22-006 approving Work Order #3 with Walker Partners, LLC for Design and Procurement Services for the Authority's Phase 1B Water Treatment Plant project as presented was made by Mr. Williams, seconded by Mr. Ramos and approved on a 11-0 vote.**

- F.10 Consider adoption of Resolution 2020-01-22-007 approving Work Order #2 with Blanton & Associates, Inc. for additional hazardous materials testing associated with the Phase 1B Segment A project.
- **Motion to adopt Resolutions 2020-01-22-007 approving Work Order #2 with Blanton & Associates, Inc. for additional hazardous materials testing associated with the Phase 1B Segment project as presented was made by Mr. Taylor, seconded by Ms. Scheel and approved on a 11-0 vote.**
- F.11 Consider approval of the meeting schedule for the Board of Directors for 2020.
- **Mr. Moore presented proposed meeting dates for November and December 2020 where the regular schedule conflicts with traditional holidays.**
 - **Motion to adopt the proposed meeting schedule for 2020 as presented was made by Ms. Hughson, seconded by Mr. Rockeymoore and approved on a 11-0 vote.**
- F.12 Update on status of groundwater management in project target area, and Gonzales County Underground Water Conservation District, Plum Creek Conservation District, Groundwater Management Area 13, Region L Planning Group, Guadalupe-Blanco River Authority, Hays County and CAPCOG activities.
- **Mr. Moore provided an update on area water meetings.**
 - **No Action.**
- G. EXECUTIVE DIRECTOR AND LEGAL COUNSEL REPORTS
- **No action.**
- H. BOARD MEMBER ITEMS OR FUTURE AGENDA ITEMS
- **Mr. Betz noted that the Hays County Judge's office has requested an update to Commissioner's Court regarding Alliance Water's efforts.**
- I.1 Executive Session pursuant to the Government Code, Section 551.071 (Consultation with Attorney) and/or Section 551.072 (Real Property Deliberations) regarding:
- A. Water supply partnership options
 - B. Groundwater leases
 - C. Acquisition of real property for water supply project purposes
- **No Executive Session.**

- I.2 Action from Executive Session on the following matters:
- A. Water supply partnership options
 - B. Groundwater leases
 - C. Acquisition of real property for water supply project purposes.
 - **No Action.**

- J. ADJOURNMENT
- **Meeting was adjourned at 4:12 p.m. based on the motion by Ms. Hughson, seconded by Mr. Rockeymoore on a 11-0 vote.**

APPROVED: _____, 2020

ATTEST:

Chair, Board of Directors

Secretary, Board of Directors

REGULAR MEETING
Alliance Regional Water Authority Board of Directors

BOARD MEMBER PACKETS

Wednesday, February 26, 2020 at 3:00 P.M.
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E.2 Consider approval of the financial report for January 2020. ~ *Graham Moore, P.E., Executive Director*

Background/Information

Attached is the financial report for the period ending in January 2020.

Attachment(s)

- 2020 01 31 Financial Report

Board Decision(s) Needed:

- Approval of the financial report for the period ending January 2020.



Alliance Regional Water Authority

**Financial Statements
(Compilation)**

**For the One Month Ended and Year-to-Date
January 31, 2020**

Alliance Regional Water Authority
Balance Sheet
As of January 31, 2020

	Jan 31, 20
ASSETS	
Current Assets	
Checking/Savings	
1004 · Broadway Bank	
1005 · Broadway Checking (8040)	-12,349.15
1010 · Broadway Savings (4415)	1,507,749.52
Total 1004 · Broadway Bank	1,495,400.37
1015 · TexStar (3310)	3,356,328.99
1050 · Broadway Bank (Reserved)	
1051 · CRWA Debt Service (2785)	377,942.30
1052 · Kyle Debt Service (2787)	324,156.78
1055 · San Marcos Debt Service (6390)	365,191.82
1056 · Buda Debt Service (6391)	65,346.84
Total 1050 · Broadway Bank (Reserved)	1,132,637.74
1100 · Escrow Accounts	
1105 · BOKF, Escrow, CRWA Series 2015A	333,919.23
1106 · BOKF, Escrow, Kyle Series 2015B	221,186.26
1107 · BOKF, Escrow, CRWA Series 2017A	5,244,895.60
1108 · BOKF, Escrow, Kyle Series 2017B	4,779,358.16
1109 · BOKF, Escrow, SM Series 2017C	6,122,220.27
1110 · BOKF, Escrow, Buda Series 2017D	845,436.21
1111 · BOKF, Escrow, CRWA Series 2019A	26,197,383.45
1112 · BOKF, Escrow, Kyle Series 2019B	23,890,772.23
1113 · BOKF, Escrow, SM Series 2019C	30,446,742.46
1114 · BOKF, Escrow, Buda Series 2019D	4,235,568.06
Total 1100 · Escrow Accounts	102,317,481.93
Total Checking/Savings	108,301,849.03
Accounts Receivable	
1201 · Accounts Receivable, GBRA	975.11
1209 · Accts receivable, City of SM	344,124.84
1210 · Accts receivable, City of Buda	48,748.92
Total Accounts Receivable	393,848.87
Total Current Assets	108,695,697.90
Fixed Assets	
1405 · Engineering & Construction Cost	2,402,294.20
1420 · Projects in Progress (Cash)	
1420-01 · Legal Support	54,848.53
1420-02 · Hydrogeologic Support	167,701.69
1420-03 · PCCD Permitting	105,095.16
1420-04 · Kyle Water Model	25,000.00
1420-11 · Legal Support, GBRA	45,251.01
Total 1420 · Projects in Progress (Cash)	397,896.39
1430 · Projects in Progress Eng (Cash)	
1430-02 · Engineering - Plumbing Plan	17,663.79
1430-03 · Engineering Fees-ROW	11,594.69
1430-05 · Engineering - Rate Study	34,635.00
1430-06 · DPR Study	59,880.00
1430-07 · Alignment Study	261,120.80
1430-08 · Prelim Engineering-Well Field	65,586.00
1430-09 · GCUWCD Monitoring Wells	192,607.50
1430-10 · 2017 SWIFT Funding Apps	23,107.96
1430-11 · Blanco Basin WW	41,880.00
1430-12 · Phase 1B Programming	107,761.14

Alliance Regional Water Authority
Balance Sheet
As of January 31, 2020

	Jan 31, 20
1430-13 · ARWA-GBRA MOU Study	15,000.00
1430-14 · Phase 1A GIS	29,222.37
Total 1430 · Projects in Progress Eng (Cash)	860,059.25
1440 · Projects in Prog Eng. (Finance)	
1440-01 · Engineering-Phase 1A Pipeline	500,881.62
1440-02 · Engineering-Phase 1A Pump Stat	704,174.45
1440-03 · Engineering-ROW Acquisition	384,965.03
1440-04 · Phase 1A Const Observation	462,623.16
1440-05 · Phase 1A-Construction Trailer	40,576.09
1440-06 · Phase 1A Segment A Construction	1,734,150.32
1440-07 · Phase 1A BPS Construction	4,571,284.46
1440-08 · Phase 1A Segment B Construction	50,175.00
1440-15 · Land Acquisition Phase 1B	4,282,748.55
1440-16 · Phase 1B-Owners Rep	4,224,882.88
1440-17 · Phase 1B Environmental	1,024,801.34
1440-18 · Phase 1B Segment A Design	643,572.10
1440-19 · Phase 1B Segment B Design	552,950.94
1440-20 · Phase 1B Segment C Design	525,107.93
1440-21 · Phase 1B Segment D Design	656,806.34
1440-22 · Phase 1B Segment E Design	334,193.15
1440-23 · Phase 1B Land Attorney	216,785.88
1440-24 · Phase 1B Hydrogeology	125,840.00
1440-25 · Phase 1B WTP Design	1,183,416.05
1440-26 · Raw Water Infr.	595,628.33
1440-27 · Phase 1B Program Survey	1,545,209.25
1440-28 · Phase 1B BPS Design	656,532.95
1440-29 · GVEC Construction-in-Aid	1,000,000.00
1440-30 · Phase 1B Inline Tanks	20,624.45
Total 1440 · Projects in Prog Eng. (Finance)	26,037,930.27
1447 · Land & Easements	902,215.70
1448 · Capitalized Interest	
1448-51 · Cap Interest, CRWA Series 2015A	152,369.03
1448-52 · Cap Interest, Kyle Series 2015B	222,143.28
1448-53 · Cap Interest, CRWA Series 2017A	127,269.80
1448-54 · Cap Interest, Kyle Series 2017B	116,100.88
1448-55 · Cap Interest, SM Series 2017C	65,904.35
1448-56 · Cap Interest, Buda Series 2017D	9,576.21
Total 1448 · Capitalized Interest	693,363.55
1505 · Landowner Bonus Payments	1,043,191.83
1510 · GrWater Lease Acquisition Costs	1,004,905.76
1599 · Accumulated Amortization	-2,048,097.59
Total Fixed Assets	31,293,759.36
Other Assets	
1900 · Deferred Outflow	23,797.09
Total Other Assets	23,797.09
TOTAL ASSETS	140,013,254.35
LIABILITIES & EQUITY	
Liabilities	
Current Liabilities	
Other Current Liabilities	
2100 · Payroll Liabilities	21.98
2102 · 401(a) Liability	2,431.14
2103 · Net Pension Liability	4,718.00
2104 · Pension Deferred Inflows	82.00
2106 · Accrued Vacation	29,343.80
2300 · Accrued Costs	330,643.18

Alliance Regional Water Authority

Balance Sheet

02/13/20

As of January 31, 2020

Accrual Basis

	Jan 31, 20
2350 · Accrued Interest Payable	
2351 · Accrued Int Payable, CRWA 2015A	28,685.47
2352 · Accrued Int Payable, Kyle 2015B	39,889.85
2353 · Accrued Int Payable, CRWA 2017A	108,081.38
2354 · Accrued Int Payable, Kyle 2017B	98,557.91
2355 · Accrued Int Payable, SM 2017C	81,279.44
2356 · Accrued Int Payable, Buda 2017D	11,551.43
2357 · Accrued Int Payable, CRWA 2019A	94,824.72
2358 · Accrued Int Payable, Kyle 2019B	86,520.16
2359 · Accrued Int Payable, SM 2019C	71,412.32
2360 · Accrued Int Payable, Buda 2019D	10,129.08
Total 2350 · Accrued Interest Payable	630,931.76
Total Other Current Liabilities	998,171.86
Total Current Liabilities	998,171.86
Long Term Liabilities	
2501 · Bond Payable, CRWA Series 2015A	3,405,000.00
2502 · Bond Payable, Kyle Series 2015B	3,260,000.00
2503 · Bond Payable, CRWA Series 2017A	9,605,000.00
2504 · Bond Payable, Kyle Series 2017B	8,755,000.00
2505 · Bond Payable, SM Series 2017C	10,910,000.00
2506 · Bond Payable, Buda Series 2017D	1,550,000.00
2507 · Bond Payable, CRWA Series 2019A	26,530,000.00
2508 · Bond Payable, Kyle Series 2019B	24,200,000.00
2509 · Bond Payable, SM Series 2019C	30,800,000.00
2510 · Bond Payable, Buda Series 2019D	4,370,000.00
Total Long Term Liabilities	123,385,000.00
Total Liabilities	124,383,171.86
Equity	
2925 · Net Investment in Capital Asset	8,200,007.29
2950 · Retained Earnings	7,771,023.52
Net Income	-340,948.32
Total Equity	15,630,082.49
TOTAL LIABILITIES & EQUITY	140,013,254.35

Alliance Regional Water Authority Profit Loss

For the One Month and Four Months Ended January 31, 2020

	<u>January 2020</u>	<u>October 2019 January 2020</u>
Ordinary Income/Expense		
Income		
4010 · Project Contribution		
4011 · City of San Marcos	0.00	869,577.56
4012 · City of Kyle	417,252.25	417,252.25
4013 · City of Buda	123,363.94	123,363.94
4014 · Canyon Regional Water Authority	0.00	480,511.92
4015 · GBRA	0.00	
Total 4010 · Project Contribution	<u>540,616.19</u>	<u>1,890,705.67</u>
4200 · Shared Water		
4210 · Shared Water, City of Buda	37,269.00	111,807.00
Total 4200 · Shared Water	<u>37,269.00</u>	<u>111,807.00</u>
4250 · Non Potable Water Sales	3,272.48	9,606.70
4300 · Broadway Interest Income		
4311 · City of San Marcos	726.77	1,472.53
4312 · City of Kyle	562.63	1,146.12
4313 · City of Buda	100.34	209.09
4314 · Canyon Regional Water Authority	664.40	1,346.69
Total 4300 · Broadway Interest Income	<u>2,054.14</u>	<u>4,174.43</u>
4350 · Escrow Accounts Income		
4351 · BOKF, CRWA Series 2015A	1,060.19	6,284.10
4352 · BOKF, Kyle Series 2015B	924.02	5,656.88
4353 · BOKF, CRWA Series 2017A	5,007.22	23,130.36
4354 · BOKF, Kyle Series 2017B	4,562.78	21,077.44
4355 · BOKF, SM Series 2017C	5,844.79	26,998.25
4356 · BOKF, Buda Series 2017D	807.13	3,731.75
4357 · BOKF, CRWA Series 2019A	25,010.74	34,086.45
4358 · BOKF, Kyle Series 2019B	22,808.61	31,085.23
4359 · BOKF, SM Series 2019C	29,067.62	39,615.46
4360 · BOKF, Buda Series 2019D	4,043.71	5,511.06
Total 4350 · Escrow Accounts Income	<u>99,136.81</u>	<u>197,176.98</u>
4370 · TexStar Interest Income		
4371 · City of San Marcos	1,583.72	8,498.57
4372 · City of Kyle	1,244.10	6,676.09
4373 · City of Buda	224.35	1,203.92
4374 · Canyon Regional Water Authority	1,364.22	7,320.73
Total 4370 · TexStar Interest Income	<u>4,416.39</u>	<u>23,699.31</u>
Total Income	<u>686,765.01</u>	<u>2,237,170.09</u>
Expenses		
6000 · Groundwater Reservation Costs	136,373.43	407,479.49
6010 · Shared Water Costs		
6015 · Shared Water, City of Kyle	23,600.81	70,372.48
6020 · Shared Water, City of San Marcos	13,965.00	41,895.00
Total 6010 · Shared Water Costs	<u>37,565.81</u>	<u>112,267.48</u>
7150 · Amortization Expense	0.00	43,936.64
7210 · Bank Fees	192.21	826.14
7220 · Escrow and Paying Agent Fees	0.00	1,400.00

Alliance Regional Water Authority Profit Loss

For the One Month and Four Months Ended January 31, 2020

	<u>January 2020</u>	<u>October 2019 January 2020</u>
7240 · Bond Issue Costs		
7240-07 · Bond Issue Costs - CRWA 2019A	-43.72	366,309.28
7240-08 · Bond Issue Costs - Kyle 2019B	-182.44	339,780.56
7240-09 · Bond Issue Costs - SM 2019C	-182.24	392,340.76
7240-10 · Bond Issue Costs - Buda 2019D	-199.64	139,393.36
Total 7240 · Bond Issue Costs	<u>-608.04</u>	<u>1,237,823.96</u>
7250 · Interest Expense		
7250-51 · Interest Expense - CRWA 2015A	5,215.54	20,862.16
7250-52 · Interest Expense - Kyle 2015B	7,252.70	29,010.80
7250-53 · Interest Expense - CRWA 2017A	19,651.16	78,604.64
7250-54 · Interest Expense - Kyle 2017B	17,919.62	71,678.48
7250-55 · Interest Expense - SM 2017C	14,778.08	59,112.32
7250-56 · Interest Expense - Buda 2017D	2,100.26	8,401.04
7250-57 · Interest Expense - CRWA 2019A	47,412.36	94,824.72
7250-58 · Interest Expense - Kyle 2019B	43,260.08	86,520.16
7250-59 · Interest Expense - SM 2019C	35,706.16	71,412.32
7250-60 · Interest Expense - Buda 2019D	5,064.54	10,129.08
Total 7250 · Interest Expense	<u>198,360.50</u>	<u>530,555.72</u>
7325 · Dues	1,000.00	6,030.00
7350 · Insurance - Liability, E&O	0.00	2,370.62
7400 · Legal Fees	0.00	12,895.00
7410 · Newspaper Public Notices	421.63	421.63
7425 · Contract Services-Lobbyist	6,000.00	24,000.00
7430 · Agency Mgmt Public Relations	7,500.00	7,500.00
7450 · Permit & Fees	0.00	75,537.95
7500 · Supplies	878.45	2,814.18
7600 · Telephone, Telecommunications	0.00	675.00
7700 · Travel, Conferences & Meetings	90.29	666.21
7800 · Employee Expenses		
7810 · Salaries and wages	19,861.38	88,830.15
7820 · Auto Allowance	969.24	4,260.03
7821 · Phone Allowance	207.70	207.70
7830 · Payroll taxes	1,624.45	5,174.29
7840 · Employee Insurance	1,577.47	6,451.76
7850 · Retirement	1,401.14	5,994.46
Total 7800 · Employee Expenses	<u>25,641.38</u>	<u>110,918.39</u>
Total Expenses	<u>413,415.66</u>	<u>2,578,118.41</u>
Net Ordinary Income	<u>273,349.35</u>	<u>-340,948.32</u>
Net Income	<u><u>273,349.35</u></u>	<u><u>-340,948.32</u></u>

Alliance Regional Water Authority
Broadway Bank VISA Debit Card Transactions
July 31, 2017

Type	Date	Name	Split	Amount	Balance
2005 · Broadway Bank Visa Card					0.00
Credit Card Charge	01/02/2020	Stamps Com	7500 · Supplies	17.99	17.99
Credit Card Charge	01/06/2020	Microsoft	7500 · Supplies	10.66	28.65
Credit Card Charge	01/06/2020	Microsoft	7500 · Supplies	26.79	55.44
Credit Card Charge	01/06/2020	Microsoft	7500 · Supplies	32.48	87.92
Credit Card Charge	01/08/2020	Lockhart Post Register	7410 · Newspaper Public...	239.63	327.55
Credit Card Charge	01/09/2020	Barton Publications	7410 · Newspaper Public...	182.00	509.55
Credit Card Charge	01/10/2020	Rackspace	7500 · Supplies	97.01	606.56
Credit Card Charge	01/13/2020	Williams Scotsman	1440-05 · Phase 1A-Con...	491.95	1,098.51
Credit Card Charge	01/13/2020	United Site Service	1440-05 · Phase 1A-Con...	278.34	1,376.85
Credit Card Charge	01/17/2020	Office Depot	7500 · Supplies	170.77	1,547.62
Credit Card Charge	01/17/2020	Rackspace	7500 · Supplies	112.79	1,660.41
Credit Card Charge	01/23/2020	Smoke Shack	7700 · Travel, Conferenc...	24.10	1,684.51
Credit Card Charge	01/23/2020	USPS	7500 · Supplies	110.00	1,794.51
Credit Card Charge	01/23/2020	Wingstop	7700 · Travel, Conferenc...	25.63	1,820.14
Credit Card Charge	01/24/2020	UPS Store	7500 · Supplies	16.33	1,836.47
Credit Card Charge	01/27/2020	USPS	7500 · Supplies	5.75	1,842.22
Credit Card Charge	01/27/2020	Adobo Acropro	7500 · Supplies	16.99	1,859.21
Credit Card Charge	01/27/2020	Squarespace Inc	7500 · Supplies	28.15	1,887.36
Credit Card Charge	01/28/2020	Railyard Bar & Grill	7700 · Travel, Conferenc...	40.56	1,927.92
Credit Card Charge	01/31/2020	Amtek Information	7500 · Supplies	99.99	2,027.91
Check	01/31/2020	Broadway	1005 · Broadway Checki...	-2,027.91	0.00
Total 2005 · Broadway Bank Visa Card				0.00	0.00
TOTAL				0.00	0.00

REGULAR MEETING
Alliance Regional Water Authority Board of Directors

BOARD MEMBER PACKETS

Wednesday, February 26, 2020 at 3:00 P.M.
501 E. Hopkins, San Marcos, TX 78666

- F.1** Discussion with Representative Erin Zwiener regarding the Authority's water supply efforts and legislative activities.
-

Background/Information

Representative Erin Zwiener will attend the meeting. She will address the Board and be available to answer questions regarding either the previous and upcoming legislative sessions.

REGULAR MEETING
Alliance Regional Water Authority Board of Directors

BOARD MEMBER PACKETS

Wednesday, February 26, 2020 at 3:00 P.M.
501 E. Hopkins, San Marcos, TX 78666

G.1 Report on Technical Committee activities. ~ *Graham Moore, P.E., Executive Director*

Background/Information

The following items were discussed by the Committee at its 2/12 meeting:

- Received an update on the Phase 1A projects (Item G.2).
- Received an update on the Phase 1B program (Item G.3).
- Recommended approval of a work order with Freese & Nichols, Inc. for Final Design and Procurement Phase Services associated with the Booster Pump Station and Delivery Point project (Item G.4)
- Recommended approval of a work order with Blanton & Associates, Inc. for additional environmental investigation associated with the Phase 1B Program (Item G.5).
- Recommended approval of a work order with Kimley-Horn, Inc. to continue to serve as the Authority's Owner's Representative for the Authority's Phase 1B Program for the period from March 2020 through February 2021 (Item G.6)
- Received an update on the Authority's submission of an Abridged Application to the Texas Water Development Board for SWIFT funding (Item G.7).
- Received an update on area water meetings (Item G.11).

Board Decision(s) Needed:

- None.

REGULAR MEETING
Alliance Regional Water Authority Board of Directors

BOARD MEMBER PACKETS

Wednesday, February 26, 2020 at 3:00 P.M.
501 E. Hopkins, San Marcos, TX 78666

G.2 Update and discussion regarding the status of the Authority's Phase 1A projects, and direction to staff and consultants. ~ *Jason Biemer, Project Coordinator*

Background/Information

Below are brief updates on the Phase 1A projects.

Segment B Pipeline:

- Clearing underway.
- Stormwater protection systems installed in current construction areas.
- First sections of pipe are in place.
- Project on time. No change orders currently issued.
- Over 3,100 feet of pipe laid down so far

Pump Station:

- Pump station construction proceeding. See attached slides.
- Current substantial completion date is March 3, 2020.
- Current final completion is scheduled for April 17, 2020.
- Final and substantial dates may slide out as the coordination effort continues with various vendors.

Attachment(s)

- 1A Booster Pump Station Presentation

Board Decision(s) Needed:

- Approval of minutes.



Phase 1A

Booster Pump Station

- Status Update
- February 26, 2020

General Updates



Road work on site complete.



Preliminary punch list items drafted.



Gates, fence and security systems in final installation.



AFD wiring terminations completed / Buda delivery point wire terminations completed.

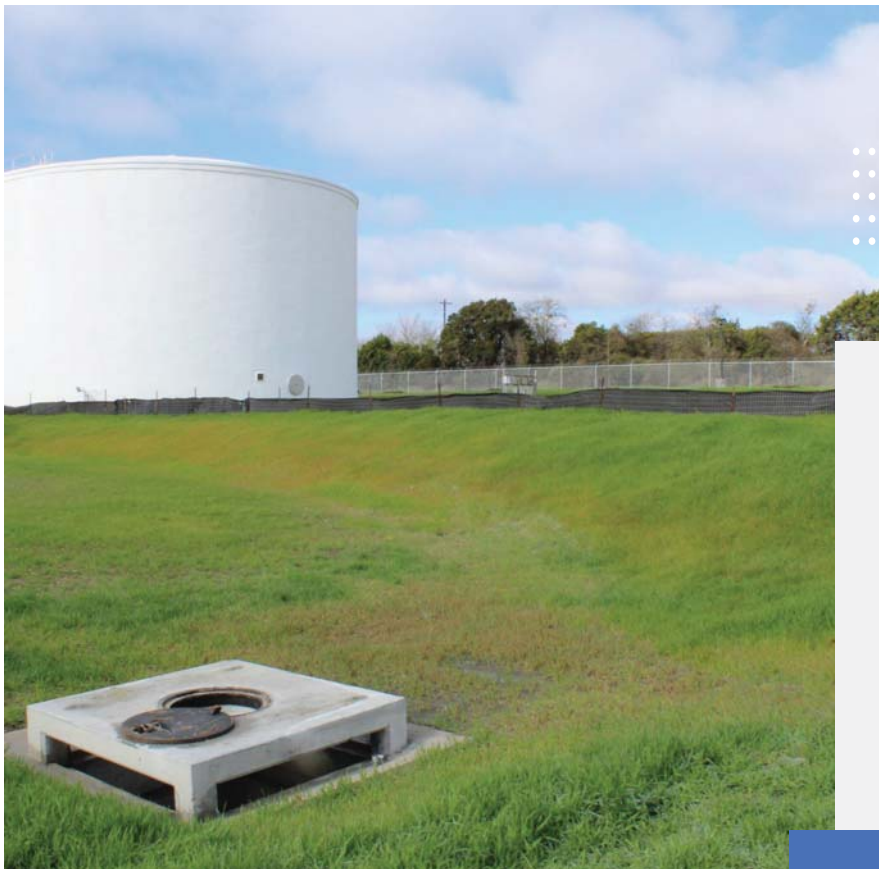


SCADA server installed and final wiring underway.



Facility Structures - *Interior*

- HVAC system installation completed.
- Chemical feed system ready to test.
- Chlorine monitoring sensor final wiring and setup ready.
- Chemical leak safety system installation complete.
- Awaiting integration into SCADA system where required.



Facility Structures – *Landscaping and Exterior*

- Vegetation establishing
- Irrigation system installation completing soon.



Facility Structures – *Landscaping and Exterior*

- Gates and fence installation underway.
- Security gates, security lights in final installation phase.





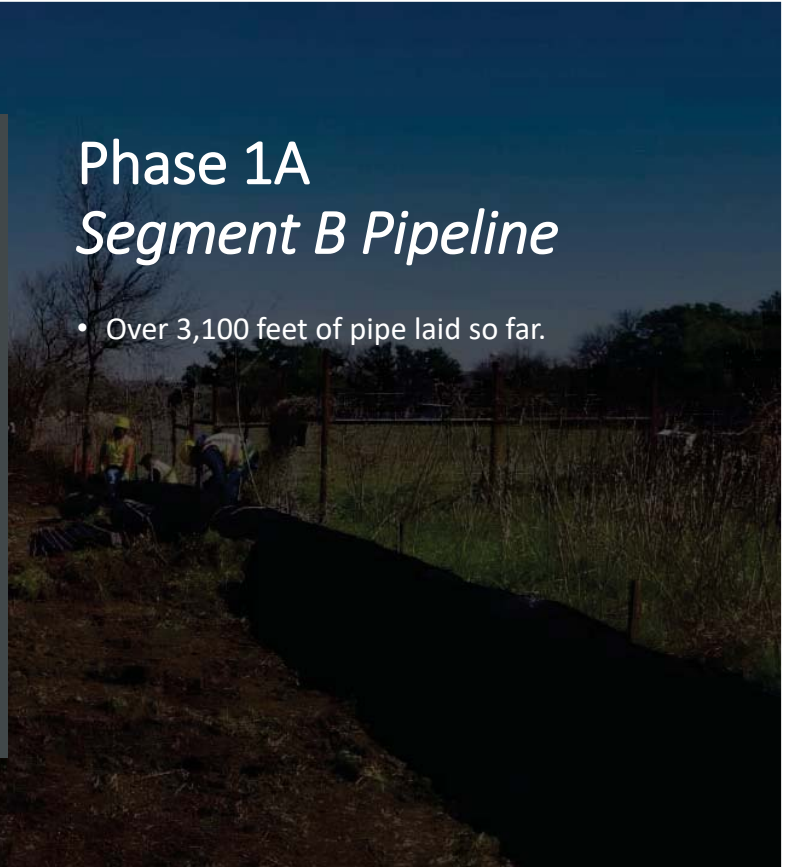
Phase 1A *Buda Delivery Point*

- Canopy completed.
- Underground plumbing completed.
- SCADA and electrical systems in final installation phase.



Phase 1A *Segment B Pipeline*

- Over 3,100 feet of pipe laid so far.



REGULAR MEETING
Alliance Regional Water Authority Board of Directors

BOARD MEMBER PACKETS

Wednesday, February 26, 2020 at 3:00 P.M.
501 E. Hopkins, San Marcos, TX 78666

- G.3** Update and discussion regarding the status of the Authority's Phase 1B program, and direction to staff and consultants. ~ *Ryan Sowa, P.E., Kimley-Horn & Associates*
-

Background/Information

Ryan Sowa with Kimley-Horn will update the Committee on their recent activities associated with the Phase 1B program.

Attachment(s)

- Phase 1B Program Update – February 26, 2020
- Kimley-Horn Monthly Summary of Activities for January 2020

Board Decision(s) Needed:

- None.



Phase 1B Program Update



Board of Directors Meeting
February 26, 2020

Kimley»Horn

Agenda

Ongoing Progress

Booster Pump Station – Final Design/Procurement Contract
(Freese and Nichols)

Environmental Services – Work Order No. 3 (Blanton)



Kimley»Horn

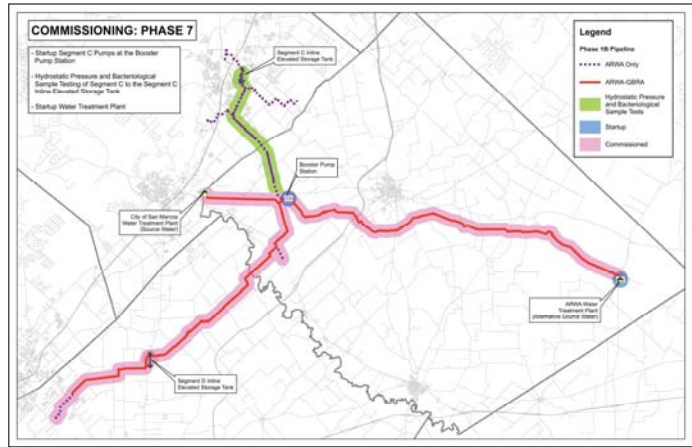
Ongoing Progress

Consultant Contracting Update

- Booster Pump Station & Delivery Points
 - Final Design Phase Contract (February)
- Pipeline Segment C
 - Final Design Phase Contract (March)
- Pipeline Segment E
 - Final Design Phase Contract (March)

Program Items Under Development

- Security Standards – out for Consultant/PAC Review
- Cathodic Protection Standards – finalizing draft for Consultant/PAC Review
- Commissioning Planning – developing presentation for Technical Committee/PAC

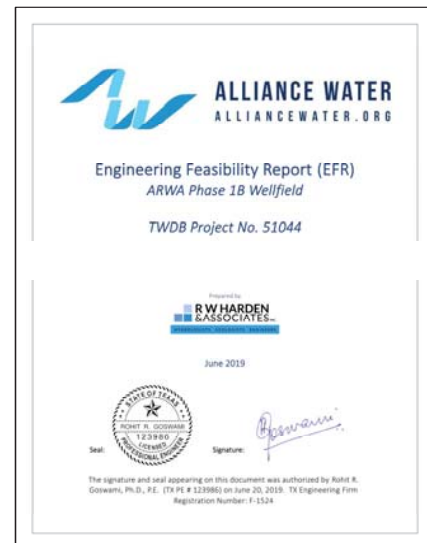


Kimley»Horn

Ongoing Progress

Texas Water Development Board Review Status

- Well Drilling
 - Final Engineering Feasibility Report (Complete)
 - Environmental Data Report (Complete)
- Water Treatment Plant
 - Final Engineering Feasibility Report (February)
 - Environmental Data Report (Complete)
- Booster Pump Station & Delivery Points
 - Final Engineering Feasibility Report (February)
 - Environmental Data Report (Complete)
- Raw Water Infrastructure
 - Final Engineering Feasibility Report (February)
 - Environmental Data Report (Complete)



Kimley»Horn

Well Drilling – Procurement Schedule

PHASE	DATE
Advertise Round 1	Wed., Feb. 26 th
Advertise Round 2	Wed., March 4 th
Preproposal Meeting	Tues., March 10 th
Last Day for Questions	Thurs. March 19 th
Last Day for Addendums	Thurs., March 26 th
Last Day to Receive Proposals	Thurs., April 2 nd
Board Approval of Selected Contractor	Wed., April 22 nd



Kimley»Horn

Pipeline Route Analyses & Rights of Entry

Pipeline Segment	Number of Right-of-Entry Requests	Right-of-Entry Received or Access Granted (No. of Parcels)	Right-of-Entry Received or Access Granted (%)	Alignment Confirmed (%)
A	38	38	100%	100%
B	46	46	100%	85%
D	69	69	100%	87%
C	88	82	93%	0%
E	35	33	94%	14%
Wellfield	20	8	40%	0%
Total	296	276		



Kimley»Horn

Pipeline Easement Acquisition Status

Pipeline Segment	Number of Parcels	Appraisals Prepared	Initial Offer Letter Delivered	Purchase Agreement Signed / Easement Closed
A	38	35	28	7
B	46	12	10	1
D	69	3	2	1
C	88	0	0	0
E	35	0	0	0
Wellfield	20	0	0	0
Total	296	50	40	9



Kimley»Horn

Questions?



Kimley»Horn

Consulting Services



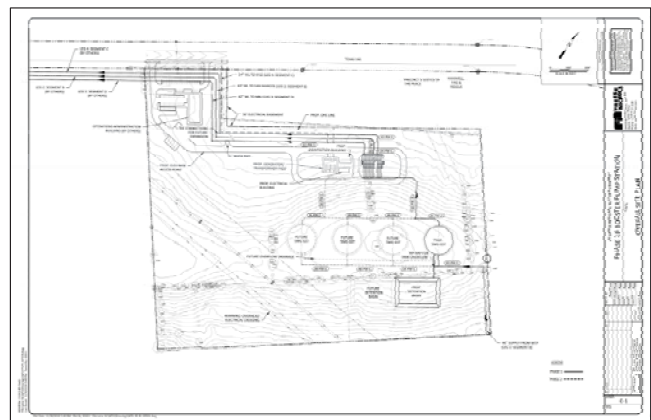
Kimley»Horn

Booster Pump Station & Delivery Points

Design Consultant – Freese and Nichols

Pump Station Infrastructure Summary

- Pump Station and Processes
- Ground Storage Tank
- Electrical Building
- Disinfection Facilities
- Site improvements (grading, drainage, paving/parking, yard piping)

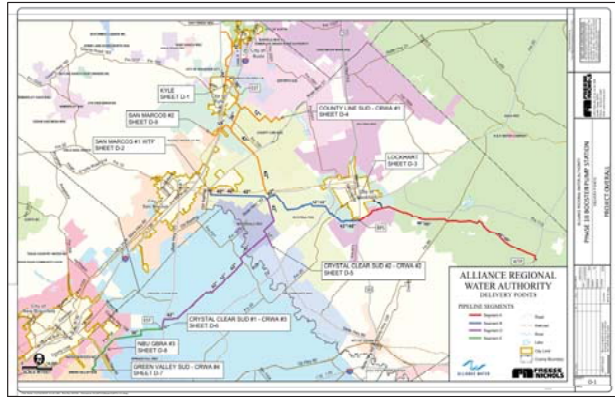


Kimley»Horn

Booster Pump Station & Delivery Points

Delivery Point Infrastructure Summary

- Seven (7) ARWA Delivery Points
- Flow Meter Assembly Design
- Connection to Facilities
- Electrical Service
- Site improvements as needed (yard piping, paving, fencing)



Kimley»Horn

Booster Pump Station & Delivery Points

Basic Services Scope to include (Lump Sum):

- Project Cost Reduction Alternatives (Peaking Factor Reduction)
- Hydraulics Update, Surge/Transient Analyses, and Chlorine Residual Analysis
- 60%, 90%, and 100% Design
- Site Civil, Mechanical, Electrical, Instrumentation, HVAC, Architectural, Structural
- Design Survey, Geotechnical, and Subsurface Utility Exploration
- Agency Coordination / Permitting – City of San Marcos, Caldwell County, TxDOT, TCEQ, Applicable Permits for each Delivery Point
- Does not include Construction Phase Services



Kimley»Horn

Booster Pump Station & Delivery Points

Supplemental Services:

- Additional Survey, SUE, & Geotechnical Services
- Additional Transient Simulations
- General Engineering Design
- Procurement (Time and Materials Basis)

Total Basic Services Lump Sum Fee = \$1,580,519.00

Total Supplemental Services Budget = \$172,677.00

Maximum Not-to-Exceed Fee = \$1,753,196.00



Kimley»Horn

Environmental Services

Work Order No. 3 (Time and Materials, Not to Exceed):

- Extension of Project Management
- Wider Field Work Corridor for Increased Easement Width
- Multiple Additional Mobilizations for Field Work
 - Alternative Alignments
 - Strict Landowner Access Requirements
 - Landowner Cancellations
 - Urgent Program Requests
- Inline Elevated Storage Tank – Site Reviews

Maximum Not-to-Exceed Fee = \$274,844.00

Supplemental = \$76,925.00



Kimley»Horn



Questions?



Kimley»Horn

ALLIANCE REGIONAL WATER AUTHORITY
 ATTN: GRAHAM MOORE
 1040 HIGHWAY 123
 SAN MARCOS, TX 78666

Invoice No: 068706602-0120
 Invoice Date: Jan 31, 2020
 Invoice Amount: \$240,687.91
 Project No: 068706602
 Project Name: ARWA PROGRAM YEAR 2
 Project Manager: SOWA, RYAN

Please send payments to:
 KIMLEY-HORN AND ASSOCIATES, INC.
 P.O. BOX 951640
 DALLAS, TX 75395-1640

Client Reference:

For Services Rendered through Jan 31, 2020

Federal Tax Id: 56-0885615

COST PLUS MAX

KHA Ref # 068706602.3-15960248

Description	Contract Value	Amount Billed to Date	Previous Amount Billed	Current Amount Due
PMP UPDATES	5,300.00	4,670.00	4,517.50	152.50
STAKEHOLDER COORD	175,090.00	174,945.00	161,812.50	13,132.50
BUDGETING	44,460.00	44,602.50	42,460.00	2,142.50
SCHEDULING	14,460.00	13,665.00	12,285.00	1,380.00
REPORTING	49,850.00	50,055.00	42,915.00	7,140.00
DATA MGMT	57,960.50	58,272.50	54,292.50	3,980.00
ENVIRONMENTAL MGMT	15,340.00	15,292.50	12,907.50	2,385.00
LAND ACQ MGMT	83,180.20	83,402.50	75,730.00	7,672.50
TWDB MGMT	5,280.00	3,710.00	3,312.50	397.50
DESIGN STDS	176,070.00	177,067.50	169,882.50	7,185.00
ENG DESIGN MGMT	459,815.00	452,605.00	398,460.00	54,145.00
QUALITY ASSURANCE	40,980.00	40,872.50	36,422.50	4,450.00
ELEC POWER PLANNING	8,535.00	8,162.50	7,897.50	265.00
PERMIT COORD	2,360.00	1,855.00	1,855.00	0.00
PROJECT ADMIN	25,380.00	25,392.50	21,987.50	3,405.00
OTHER SERVICESINITIAL BUD	31,925.00	31,532.50	31,062.50	470.00
EXPENSES	25,700.00	25,452.83	24,320.51	1,132.32
SUB FOSTER CM	228,846.00	226,333.60	199,820.04	26,513.56
SUB CP&Y	925,009.00	598,600.77	548,572.77	50,028.00
SUB GRUBB	60,500.00	47,139.97	41,221.14	5,918.83
SUB SPITZER	387,720.00	383,887.90	336,030.20	47,857.70
SUB RVK	16,164.50	8,432.34	8,432.34	0.00
SUB V&A	37,177.80	5,340.50	4,405.50	935.00
Subtotal	2,877,103.00	2,481,290.41	2,240,602.50	240,687.91
Total COST PLUS MAX				240,687.91

ALLIANCE REGIONAL WATER AUTHORITY
ATTN: GRAHAM MOORE
1040 HIGHWAY 123
SAN MARCOS, TX 78666

Please send payments to:

KIMLEY-HORN AND ASSOCIATES, INC.
P.O. BOX 951640
DALLAS, TX 75395-1640

Federal Tax Id: 56-0885615

Total Invoice: \$240,687.91

Invoice No: 068706602-0120
Invoice Date: Jan 31, 2020
Invoice Amount: \$240,687.91

Project No: 068706602
Project Name: ARWA PROGRAM YEAR 2
Project Manager: SOWA, RYAN

Client Reference:

For Services Rendered through Jan 31, 2020

ALLIANCE REGIONAL WATER AUTHORITY
 ATTN: GRAHAM MOORE
 1040 HIGHWAY 123
 SAN MARCOS, TX 78666

Invoice No: 068706602-0120
 Invoice Date: Jan 31, 2020

Project No: 068706602
 Project Name: ARWA PROGRAM YEAR 2
 Project Manager: SOWA, RYAN

COST PLUS MAX

KHA Ref # 068706602.3-15960248

Group	Description/Name	Hrs/Qty	Rate	Current Amount Due	
LABOR	ADMINISTRATIVE STAFF	JOHNSON, CJ	2.0	90.00	180.00
		MALDONADO, MARILYN	1.0	90.00	90.00
		OLIVAREZ, JESSICA	1.0	90.00	90.00
		RODRIGUEZ, LORETTA	2.5	90.00	225.00
	CIVIL ENGINEER	COBLER, NATHAN	154.5	160.00	24,720.00
		LESLIE, CHRISTOPHER	8.5	160.00	1,360.00
	ENGINEERING IN TRAINING	CRAMBLITT, REBEKAH	136.5	125.00	17,062.50
		HANNA, CHRISTOPHER	1.0	125.00	125.00
	PRINCIPAL	GARY, GLENN	43.0	265.00	11,395.00
	PRINCIPAL	SOWA, RYAN	112.5	265.00	29,812.50
	SENIOR ENGINEER	KAY, TYLER	56.0	180.00	10,080.00
	SENIOR PROJECT MANAGER	GAULT, JASON	15.0	225.00	3,375.00
		MASON, SEAN	15.5	225.00	3,487.50
		MCLEOD, LANCE	28.0	225.00	6,300.00
TOTAL LABOR		577.0		108,302.50	
EXPENSES	SUBCONSULTANTS			131,253.09	
	TRAVEL - AIRFARE			492.82	
	TRAVEL - LODGING			126.26	
	TRAVEL - MEALS			68.02	
	TRAVEL - OTHER			99.42	
	MILEAGE ON PERSONAL VEHICLES	542.0	0.638	345.80	
TOTAL EXPENSES				132,385.41	
TOTAL LABOR AND EXPENSE DETAIL				240,687.91	

This page is for informational purposes only. Please pay amount shown on cover page.

February 18, 2020

Project Monthly Summary

January 2020 Tasks Performed:

- Task 2 – Stakeholder Coordination
 - Coordination and/or meetings with entities including: Caldwell County, Guadalupe County, Bluebonnet Electric Coop, TxDOT, TCEQ, and TWDB.
 - Continued weekly task coordination with Alliance Water.
 - Prepared and presented Technical Committee Meeting Update.
 - Prepared and presented Board Meeting Update.
 - Prepared for and held Monthly Status Meeting with Alliance Water.

- Task 3 – Budgeting
 - Prepared Program budget status update for engineering, environmental, and survey services.
 - Continued updates to Budget Workbook to include monthly tracking of actual costs for ARWA review.

- Task 4 – Schedule
 - Coordinated with Program team to integrate each monthly project schedule update into overall Program schedule.

- Task 6 – Data Management
 - Developed a process for identifying easement acquisition status within GIS.
 - Ongoing maintenance of Microsoft SharePoint Online program.
 - Continued updating of web-based GIS for right-of-entry process and alignment changes.

- Task 7 – Environmental Management
 - Coordinated with the Program Environmental Consultant regarding additional hazmat studies for Segment A.
 - Continued review of Segment A environmental reports prepared by the Program Environmental Consultant.
 - Performed coordination between Program Environmental Consultant and Land Acquisition Consultant to clarify environmental field work to be done on properties as part of right-of-entry process.
 - Monthly progress meeting and ongoing coordination with Program Environmental Consultant.
 - Continued coordination between Program Environmental Consultant and Design Engineers.
 - Reviewed Program Environmental invoices, schedule, and risk log.

- Task 8 – Land Acquisition Management
 - Prepared Program budget status update for land acquisition services.
 - Coordinated the appraisal process for Segment A and Segment B parcels.
 - Coordinated with Program Survey Consultant, Program Environmental Consultant, and Land Acquisition team to address questions that arise as part of the field work coordination process.
 - Performed weekly QC of parcel files in SharePoint, provided comments to Land Acquisition team.
 - Weekly coordination meeting with land agents to discuss status of rights-of-entry and to provide Program clarification on any questions/requests that have come from landowners.
 - Reviewed Program Land Acquisition team, Program Legal, and Program Survey invoices.
 - Continued field work coordination to notify landowners of upcoming field work by consultants.

- Task 9 – Texas Water Development Board Management
 - Continue coordination with TWDB Staff to track all EFRs, environmental reports, and bid documents currently under review.
 - Provided assistance with the TWDB Abridged Application and budget revisions for loan submittal where needed.

- Task 10 – Design Standards
 - Finalized and sent out the Pipeline Construction Standards for Manufacturer review.
 - Finalized and provided the Final SCADA Package and Division 40 Specifications for review.
 - Began review of the drafted Cathodic Protection Program Standards.
 - Continued development of Draft Security Standards.

- Task 11 – Engineering Design Management
 - Pipelines:
 - Segment A
 - Continued coordination with design consultant for final design.
 - Coordinated with design consultant to finalize EFR.
 - Segment B
 - Continued coordination with design consultant for final design.
 - Coordinated with design consultant to finalize EFR.
 - Segment C
 - Continued coordination with design consultant regarding ongoing field work and pipeline alignment considerations as part of right-of-entry process and EFR development.

- Continued coordination and review of scope and fee for final design phase.
 - Segment D
 - Continued coordination with design consultant for final design.
 - Segment E
 - Continued coordination with design consultant regarding ongoing field work as part of right-of-entry process and EFR development.
 - Continued coordination and review of scope and fee for final design phase.
 - Wellfield:
 - Continued coordination regarding upcoming procurement of the construction contract for Wells 6-9.
 - Continued review of scope and fee for construction phase services.
 - Raw Water Infrastructure:
 - Reviewed and commented on draft 30% Engineering Feasibility Report.
 - Continued coordination with design consultant for 30% design development.
 - Water Treatment Plant:
 - Reviewed and commented on draft 30% Engineering Feasibility Report.
 - Continued coordination with design consultant for 30% design development.
 - Continued coordination and review of scope and fee for final design phase.
 - Booster Pump Station:
 - Reviewed and commented 30% Engineering Feasibility Report submitted by the design consultant.
 - Continue coordination and review of scope and fee for final design phase.
 - Inline Elevated Storage Tanks:
 - Reviewed and commented on Draft Tank Siting Technical Memorandum submitted by the design consultant.
 - Other:
 - Monthly progress meetings with all design consultants (pipelines, water treatment plant, raw water infrastructure, wellfield, booster pump station).
 - Review invoices, schedules, and risk logs for consultants.
- Task 13 – Electrical Power Planning
 - Continued coordinated with ARWA concerning emergency power needs and service options for the water treatment plant and wellfield.

- Continued coordination with GVEC and BBEC regarding electric service to the WTP and wellfield.
- Prepared for and attended the GVEC & BBEC Power Service Coordination Meeting.
- Task 14 – Permit Coordination/Tracking
 - Continued Permit coordination with Pipeline consultants.
 - Continued coordination with Caldwell County concerning variance request for the Site Development Permit.
 - Continued General Coordination with TxDOT.
 - Continued General Coordination with GVEC and BBEC.
 - On-going Permit Tracking Log Updates.
- Task 16 – Other Services
 - Commissioning Planning
 - Began evaluating the commissioning of the Phase 1B infrastructure and developing a draft presentation.

February 2020 Projection:

- Task 2 – Stakeholder Coordination
 - Coordination and/or meetings with entities including: Caldwell County, Guadalupe County, GVEC, Bluebonnet Electric Coop, TxDOT, TCEQ, and TWDB.
 - Continue weekly task coordination with Alliance Water.
 - Prepare and present Project Advisory Committee Meeting Update.
 - Prepare and present Technical Committee Meeting Update.
 - Prepare and present Board Meeting Update.
 - Prepare for and hold Monthly Status Meeting with Alliance Water.
- Task 3 – Budgeting
 - Continue updates to Budget Workbook to include monthly tracking of actual costs for ARWA review.
 - Prepare Program Quarterly Update for the Technical Committee and Board Meetings.
- Task 4 – Schedule
 - Coordinate with Program team to integrate each project schedule into overall Program schedule.
 - Prepare Program Quarterly Update for the for the Technical Committee and Board Meetings.
- Task 6 – Data Management
 - Ongoing maintenance of Microsoft SharePoint Online program.

- Continued updating of web-based GIS for right-of-entry process and alignment changes.
- Integrate process for identifying easement acquisition status within GIS.
- Task 7 – Environmental Management
 - Continued coordination with the Program Environmental Consultant regarding additional hazmat studies for Segment A.
 - Continued review of Segment A environmental reports prepared by the Program Environmental Consultant.
 - Perform coordination between Program Environmental Consultant and Land Acquisition Consultant to clarify environmental field work to be done on properties as part of right-of-entry process.
 - Monthly progress meeting and ongoing coordination with Program Environmental Consultant.
 - Continue coordination between Program Environmental Consultant and Design Engineers.
 - Review Program Environmental invoices, schedule, and risk log.
- Task 8 – Land Acquisition Management
 - Attend Temporary Injunction Hearings for parcels where the Program is seeking a ROE.
 - Coordinate the appraisal process for Segment A and Segment B parcels.
 - Coordinate with Program Survey Consultant, Program Environmental Consultant, and Land Acquisition team to address questions that arise as part of the field work coordination process.
 - Perform weekly QC of parcel files in SharePoint, provide comments to Land Acquisition team.
 - Weekly coordination meeting with land agents to discuss status of rights-of-entry and to provide Program clarification on any questions/requests that have come from landowners.
 - Review Program Land Acquisition team, Program Legal, and Program Survey invoices.
 - Continue field work coordination to notify landowners of upcoming field work by consultants.
- Task 9 – Texas Water Development Board Management
 - Continue coordination with TWDB Staff to track all EFRs, environmental reports, and bid documents currently under review.
- Task 10 – Design Standards
 - Compile comments from the Manufacturer review of the Pipeline Construction Standards.
 - Finalize and provide the Fiber and Security Standards for review.
 - Finalize Draft Cathodic Protection Program Standards for review by the PAC and Design Consultants.

- Finalize Draft Security Standards for review by the PAC and Design Consultants.
- Task 11 – Engineering Design Management
 - Pipelines:
 - Segment A
 - Continue coordination with design consultant to finalize EFR.
 - Continue coordination with design consultant for final design.
 - Segment B
 - Continue coordination with design consultant to finalize EFR.
 - Continue coordination with design consultant regarding for final design.
 - Segment C
 - Continue coordination with design consultant regarding ongoing field work and pipeline alignment considerations as part of right-of-entry process and EFR development.
 - Continue coordination and review of scope and fee for final design phase.
 - Segment D
 - Continue coordination with design consultant for final design.
 - Segment E
 - Continue coordination with design consultant regarding ongoing field work as part of right-of-entry process and EFR development.
 - Continue coordination and review of scope and fee for final design phase.
 - Wellfield:
 - Continue coordination regarding bidding of Wells 6-9.
 - Raw Water Infrastructure:
 - Finalize and backcheck review the Final 30% Design Report.
 - Continue coordination with design consultant for 30% design development.
 - Water Treatment Plant:
 - Coordination with the Design Consultant to finalize and submit the 30% Design Report to the TWDB.
 - Coordination with design consultant for final design.
 - Booster Pump Station:
 - Coordination with design consultant for final design.
 - Continue coordination and review of scope and fee for final design phase.
 - Inline Elevated Storage Tanks:
 - Coordination with design consultant for 30% design development.
 - Continued review and comment on 30% Design Report.
 - Other:

- Monthly progress meetings with all design consultants (pipelines, water treatment plant, raw water infrastructure, wellfield).
 - Review invoices, schedules, and risk logs for consultants
- Task 13 - Electrical Power Planning
 - Continue coordination with ARWA concerning emergency power needs and service options for the water treatment plant and wellfield.
 - Schedule and prepare for meeting with GVEC regarding electric service to the wellfield.
- Task 14 - Permit Coordination/Tracking
 - Continue Permit coordination with Pipeline consultants
 - Continue Coordination with Caldwell County for variance request for the Site Development Permit.
 - General Coordination with TxDOT
 - General Coordination with GVEC and BBEC
 - Prepare for and attend coordination meeting with GVEC.
 - Permit Tracking Log Updates
- Task 16 - Other Services
 - Commissioning Planning
 - Continue evaluating the commissioning of the Phase 1B infrastructure and finalize presentation.
 - Finalize and submit the City of San Marcos Watershed Protection Plan for the Booster Pump Station Plat.
 - Finalize solar feasibility memorandum and submit to ARWA.

Scope Elements Added/Removed:

None at this time.

Outstanding Issues/Concerns:

None at this time.

HUB Participation:

53.8% allotted by Contract (based on contract total fee)

46.5% to date of Billing

Design Consultant Certifications: N/A

Sub Consultant	Sub Consultant Certifications	Task Description	Contract Value (\$)	Percent Complete to Date (%)	Amount Billed to Date (\$)	Amount Paid to Date (\$)
Foster CM Croup, Inc.	DBE; AABE; MBE; SBE	Budgeting, Schedule, and Data Management	\$208,041.82	99%	\$205,757.82	\$181,654.58
CP&Y, Inc.	ABE; MBE	Program Standards, Compliance, and Project Management	\$840,917.27	65%	\$544,182.53	\$498,702.53
Grubb Engineering, Inc.	ESBE; SBE; WBE	Electrical Power Planning	\$58,181.82	74%	\$42,854.51	\$37,473.75
Spitzer and Associates, Inc.	SBE; WBE	Land Acquisition Management	\$387,927.27	90%	\$348,989.00	\$305,482.00
RVK Architects, Inc.	WBE	Architectural Project Management	\$17,422.73	44%	\$7,665.76	\$7,665.76
V&A Consulting Engineers, Inc.	SBE; HABE; MBE	Cathodic Protection Standards	\$36,070.91	13%	\$4,855.00	\$4,005.00
		Subtotal	\$1,548,561.82	74.5%	\$1,154,304.61	\$1,034,983.62

REGULAR MEETING
Alliance Regional Water Authority Board of Directors

BOARD MEMBER PACKETS

Wednesday, February 26, 2020 at 3:00 P.M.
501 E. Hopkins, San Marcos, TX 78666

- G.4** Consider adoption of Resolution 2020-02-26-001 approving Work Order #4 with Freese & Nichols, Inc. for Final Design and Procurement Services for the Authority's Phase 1B Booster Pump Station & Delivery Points Project as recommended by the Technical Committee. ~ *Ryan Sowa, P.E., Kimley-Horn & Associates*
-

Background/Information

Alliance Water entered into a Work Order in January 2019 with Freese & Nichols, Inc. to provide preliminary engineering services for the Phase 1B Booster Pump Station and Delivery Point project. The preliminary design is almost complete and in order to maintain progress, Staff has negotiated a scope and fee with Freese & Nichols to provide final design and procurement services for the Booster Pump Station project. Construction phase services will be negotiated at a later date and will be authorized via a separate work order.

Below are some of the key facts regarding the Phase 1B Booster Pump Station proposal:

Firm: Freese & Nichols, Inc.

Fee: \$1,753,196

Work Order Type: Lump Sum

Anticipated Duration: 16 months

Project Manager: David Bennett, P.E.

Key Subconsultants: Gupta & Associates, Inc. (Electrical & I&C) & Arias (Geotechnical)

Staff is requesting that the Committee recommend Board approval of a Work Order with a fee for the basic services of \$1,580,519 and a fee for supplemental effort in an amount not-to-exceed \$172,677 for a total fee of \$1,753,196. The Executive Director will be given the discretion to authorize the supplemental effort if needed.

Attachment(s)

- Resolution 2020-02-26-001
- Proposal for Design and Procurement for Phase 1B Booster Pump Station Project dated February 7, 2020.

Technical Committee Recommendation(s)

- Technical Committee unanimously recommended approval of the work order with Freese & Nichols, Inc. as presented.

REGULAR MEETING
Alliance Regional Water Authority Board of Directors

BOARD MEMBER PACKETS
Wednesday, February 26, 2020 at 3:00 P.M.
501 E. Hopkins, San Marcos, TX 78666

Board Decision(s) Needed:

- Adoption of Resolution 2020-02-26-001 approving Work Order #4 with Freese & Nichols, Inc. for Final Design and Procurement Services for the Authority's Phase 1B Booster Pump Station & Delivery Points Project as recommended by the Technical Committee.



ALLIANCE WATER

RESOLUTION NO. 20200226-001

A RESOLUTION OF THE ALLIANCE REGIONAL WATER AUTHORITY BOARD OF DIRECTORS APPROVING WORK ORDER #4 BETWEEN THE AUTHORITY AND FREESE & NICHOLS, INC. FOR FINAL DESIGN AND PROCUREMENT PHASE SERVICES RELATED TO THE AUTHORITY'S PHASE 1B BOOSTER PUMP STATION AND DELIVERY POINT PROJECT AND RELATED MATTERS, AND DECLARING AN EFFECTIVE DATE

RECITALS:

1. Alliance Regional Water Authority (the "Authority") entered into a master agreement with Freese & Nichols, Inc. ("Freese & Nichols") for professional engineering services and related matters in June 2018.

2. The Authority hired Kimley-Horn & Associates to serve as the Owner's Representative for the Authority's Phase 1B Program. The Owner's Representative role is to assist the Authority with development of the Phase 1B Program as a whole, including coordination with all design firms after selection through completion of the Program.

3. The Authority entered into a work order with Freese & Nichols for preliminary design services for the Authority's Phase 1B Booster Pump Station & Delivery Points Project (the "Project") in January 2019.

4. The preliminary design for the Project is almost complete and the Authority needs to progress the effort through final design and procurement.

5. The scope of services and fee for the attached work order was negotiated by the Executive Director and the Owner's Representative on behalf of the Authority. The work order references terms and conditions in the approved Master Agreement between the Authority and Freese & Nichols.

BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE ALLIANCE REGIONAL WATER AUTHORITY:

SECTION 1. The attached work order for Final Engineering Design and Procurement Services for the Project between the Authority and Freese & Nichols is approved with a total fee of \$1,580,519.

SECTION 2. The Authority's Executive Director, Graham Moore, is authorized to execute the attached agreement on behalf of the Authority.

SECTION 3. The Authority's Executive Director is authorized to issue supplemental amendments to the work order not to exceed \$172,677.

SECTION 4. This Resolution shall be in full force and effect immediately upon its passage.

Resolution 20200226-001
Phase 1B BPS Final Design & Procurement

ADOPTED: February 26, 2020.

ATTEST:

Chris Betz
Chair, Board of Directors

James Earp
Secretary, Board of Directors

February 7, 2020

Tyler Kay, P.E.
Program Manager - ARWA
Kimley-Horn
801 Cherry St, Unit 11, Suite 1300
Fort Worth, TX 78102

Re: Alliance Regional Water Authority - Phase 1B, Booster Pump Station and Delivery Points, Final Design Scope and Fee Proposal – Revised V2

Dear Mr. Kay:

Freese and Nichols is pleased to submit our revised Scope of Work (SOW) and level of effort estimate for the above referenced project. FNI and our subconsultants have developed a revised proposal based upon Program review comments and from our conference call with your team on 02/03/2020. Attached are the following documents for your review:

- Attachment A – Scope of Work
- Attachment B – Proposed Level of Effort Spreadsheet
- Attachment C – Subconsultant Proposal (Gupta and Associates)
- Attachment D – Subconsultant Proposal (Arias)
- Attachment E – Subconsultant Proposal (Bain Medina Bain, including Rios Group)
- Attachment F – Final Design Schedule

The proposed level of effort (fee) is as follows:

Scope	Fee
Basic Services Total	\$ 1,580,519
Basic Engineering Services	\$ 1,082,119
Special Engineering Services*	\$ 312,536
Survey / SUE / Geotech	\$ 185,864
Supplemental Services Total	\$ 172,677
Project Total	\$ 1,753,196

*Special Engineering Services include Tasks 8, 9, 12, 13, 14

After you've had a chance to review, please let us know if you have any questions or would like to discuss. We appreciate this opportunity and look forward to working with ARWA on this important project.

Sincerely,



David Bennett, P.E.
Project Manager
Principal / Vice President
Freese and Nichols, Inc.

**Alliance Regional Water Authority – Phase 1B
Booster Pump Station and Delivery Points
Final Design Scope of Work (Freese and Nichols, Inc.)**

A. BASIC SERVICES:

Design Consultant will provide the following Basic Design services as part of the project design:

1. Project Management
 - 1.1. Prepare Monthly Summary Reports/Invoicing as identified in the ARWA Phase 1B Program Management Plan (16 updates).
 - 1.2. Develop schedule and provide monthly updates through procurement phase. The schedule will be provided as part of the monthly invoice and project summary report. Schedule shall be in Microsoft Project format.
 - 1.3. Risk Register development and monthly updates will be provided as part of the monthly invoice and project summary report. Risk Register shall be in Microsoft Excel format.
 - 1.4. Meetings
 - 1.4.1. Conduct Monthly Progress Meetings with Owner’s Representative (16 meetings via phone). Prepare agenda and distribute meeting notes.
 - 1.4.2. Quality Control Audit (2 workshops)
 - 1.5. Deliverables
 - 1.5.1. Updated Risk Register(s)
 - 1.5.2. Updated Project Schedule(s)
 - 1.5.3. Progress Meeting notes
2. Entity/Agency Coordination - Develop and submit the following applicable permits:
 - 2.1. Caldwell County Commercial Site Construction Permit coordination for BPS (Program Manager to provide direct coordination with Caldwell County)
 - 2.1.1. Coordinate with the County during the 60% design. Preparation and submittal of permit during 90% design phase milestone
 - 2.1.2. Address comments and resubmit permit during 100% design phase milestone.
 - 2.1.3. Conduct coordination meetings with the County as required.
 - 2.2. City of San Marcos Comprehensive Site Permit coordination for BPS
 - 2.2.1. Coordinate with the City during the 60% design. Preparation and submittal of permit during 90% design phase milestone
 - 2.2.2. Address comments and resubmit permit during 100% design phase milestone.
 - 2.2.3. Conduct coordination meetings with the City as required.
 - 2.3. Site Development Permits for Delivery Point Sites as required from Caldwell County, Guadalupe County, Hays County, City of Kyle, City of San Marcos. (Program Manager to provide direct coordination with all Counties)
 - 2.3.1. Coordinate with Counties/Cities during the 60% design. Preparation and submittal of Permit during 90% design phase milestone
 - 2.3.2. Address comments and resubmit permit during 100% design phase milestone.
 - 2.3.3. The Owner’s Representative will assist with submitting and coordinating with all Counties.
 - 2.4. TxDOT Utility Installation in Right-of-Way for Crystal Clear SUD #2 Delivery Point Site (Program Manager to provide direct coordination with TxDOT).

- 2.4.1. Coordinate with TxDOT during the 60% design. Preparation and submittal of Permit during 90% design phase milestone
 - 2.4.2. Address comments and resubmit permit during 100% design phase milestone.
 - 2.4.3. The Owner's Representative will assist with submitting and coordinating with TXDOT.
 - 2.5. Texas Commission on Environmental Quality (TCEQ) Exceptions and Variance development and coordination for Storage Tank Air Gap Variance (for connections to existing Sponsor/Customer tanks). Owner's Representative will compile submittal and coordinate with the TCEQ. Design Consultant shall provide exhibits, calculations, and technical support data for each exception request.
3. Public and Private Utility Coordination
- 3.1. GIS files, Record Drawings, Utility Block Maps, and other methods not obtained in previous phase will be requested, mapped, and tracked in applicable logs.
 - 3.2. Coordinate with Owner's Representative on available GIS data collected.
 - 3.2.1. Coordinate with entities for additional data needs.
 - 3.3. Design Coordination for the following utilities:
 - 3.3.1. Bluebonnet Electric Co-operative (BPS Power Supply)
 - 3.3.1.1. Review package preparation during 60% design milestone.
 - 3.3.1.2. Submittal of review package during 90% design Phase milestone
 - 3.3.1.3. Address comments and resubmit during 100% design phase milestone.
 - 3.3.1.4. Preparation of electric service easement plats and field notes for BPS site.
 - 3.3.2. Lower Colorado River Authority (Easement on BPS Site – access during construction)
 - 3.3.2.1. Prepare easement crossing /access package during 60% design phase milestone.
 - 3.3.2.2. Submittal of easement crossing /access package during 90% design phase milestone
 - 3.3.2.3. Address Comments and resubmit during 100% design phase milestone.
 - 3.3.3. Electric Utility Providers for Delivery Points (Bluebonnet, GVEC, NBU, Pedernales)
 - 3.3.3.1. Review package preparation during 60% design milestone.
 - 3.3.3.2. Submittal of review package during 90% design Phase milestone
 - 3.3.3.3. Address comments and resubmit during 100% design phase milestone.
 - 3.3.4. Coordination with other impacted utilities (Including but not limited to AT&T, County Line SUD, CRWA, Crystal Clear SUD, City of Kyle, City of San Marcos)
 - 3.4. Meetings - Conduct maximum ten (10) coordination meetings with impacted utilities. Prepare agenda and distribute meeting notes
4. Design Consultant and Delivery Point Coordination
- 4.1. WTP Design Consultant - Three (3) meetings to coordinate various design items including disinfection boosting, system hydraulics and common design components (pumps, piping, appurtenances, electrical, instrumentation, SCADA). In-person meetings (2) to be held at 60% and 90% design milestones, with one (1) conference call as needed for additional project coordination.
 - 4.2. Pipeline Design Consultants
 - 4.2.1. One (1) meeting to coordinate and confirm tie-in locations of Delivery Points, hydraulics, surge, pipe diameter and pressure class for Segment A.

- 4.2.2. One (1) meeting to coordinate and confirm tie-in locations on BPS site and Delivery Points, hydraulics, surge, pipe diameter and pressure class for Segment B.
- 4.2.3. One (1) meeting to coordinate and confirm tie-in locations on BPS site and Delivery Points, hydraulics, surge, pipe diameter and pressure class for Segment C.
- 4.2.4. One (1) meeting to coordinate and confirm tie-in locations on BPS site and Delivery Points, hydraulics, surge, pipe diameter and pressure class for Segment D.
- 4.2.5. One (1) meeting to coordinate and confirm tie-in locations of Delivery Points, hydraulics, surge, pipe diameter and pressure class for Segment E.
- 4.3. Delivery Point Coordination
 - 4.3.1. Fourteen (14) meetings (2 for each of the 7 Delivery Points) to coordinate delivery point design with Sponsors. Assumption is that meetings will be scheduled to occur within 2 or 3 days for each round of meetings with Sponsors, to minimize travel time.
 - 4.3.2. Delivery Point Design by Others (GBRA sites: Lockhart and NBU). Provide review of delivery point infrastructure designed by others for consistency with ARWA Program guidelines and BPS/Delivery Point design performed by the Design Consultant. Review will include compatibility of valve and meter selection, instrumentation and communications with ARWA facilities. Perform review at the 60% design milestone, with cursory reviews at 90% and 100% milestones.
- 5. 60% Design Phase
 - 5.1. Perform up to eight (8) site visits for 60% design (1 for BPS, 1 for each Delivery Point).
 - 5.2. Perform Design Analyses
 - 5.2.1. Pump hydraulics, equipment sizing, phasing and selection
 - 5.2.2. Pump suction/discharge piping and appurtenances
 - 5.2.3. Surge mitigation appurtenances including surge tanks/valves
 - 5.2.4. Ground storage tank, sizing, appurtenances, overflow discharge
 - 5.2.5. Yard piping material selection, joint restraint, deflection, embedment/backfill, appurtenances
 - 5.2.6. Disinfection boosting dosing calculations, contact time, injection points, equipment sizing and selection
 - 5.2.7. Electrical, Instrumentation, Controls and SCADA equipment sizing, load calculations, incoming power, generator, duct banks, and equipment selection. Performed by Gupta and Associates, Inc; see additional details in their attached proposal.
 - 5.2.8. Building Architectural material sections, sizing, ingress/egress, and code compliance
 - 5.2.9. Structural foundations for pump and equipment slabs, ground storage tank, electrical and disinfection buildings, subsurface geotechnical
 - 5.2.10. Building HVAC, Ventilation and Plumbing for Electrical and Disinfection buildings, equipment heat loads, process/discharge water, emergency/safety requirements, equipment sizing and selection
 - 5.2.11. Site Civil grading, drainage, paving/parking, fencing, on-site detention
 - 5.3. Construction Drawings - Develop 60% Plan Set (in accordance with the ARWA Phase 1B Program Design Standards). The following sheets will be developed for the BPS site. Sheets for the Delivery Point sites may include some of these sheets as applicable:
 - 5.3.1. General Sheets (Cover, Project Layout, General Notes, etc.)

- 5.3.2. Existing site layout
- 5.3.3. Proposed site layout
- 5.3.4. Grading plan
- 5.3.5. Drainage plan and detention pond
- 5.3.6. Paving plan
- 5.3.7. Erosion and sediment control SWPPP
- 5.3.8. Tree preservation plan
- 5.3.9. Site piping plan, profile, and details
- 5.3.10. Pump station mechanical plan, sections, notes and details
- 5.3.11. Ground storage tank plan, elevation, sections, notes and details
- 5.3.12. Disinfection boosting plan, sections, notes and details
- 5.3.13. Structural foundation plan, sections, notes and details
- 5.3.14. Architectural plan, elevation, sections, schedules, notes and details
- 5.3.15. HVAC and Plumbing plan, schedules, notes and details
- 5.3.16. Electrical site plan, sections, elevations, building/facility equipment layout plans, one-line diagrams, power, duct banks, security, lighting, grounding, generator schedules, notes, legend, symbols and details
- 5.3.17. Instrumentation, facility/security network diagrams, equipment P&IDs, notes, legend, symbols and details
- 5.3.18. Project Specific Details (as developed by the Design Consultant)
- 5.4. Preparation of Project Manual - Development of Table of Contents to include all ARWA Phase 1B Program standard specifications (Provided by the Owner's Representative), project specific specifications (Provided by Design Consultant).
- 5.5. Prepare 60% OPCC.
- 5.6. Perform internal QC and address QC comments
- 5.7. 60% Design Letter documenting conformance to applicable AWWA and TCEQ standards conformance to ARWA standards, and documentation of any exceptions to these standards.
- 5.8. 60% Design Workshop
 - 5.8.1. Conduct 60% Design workshop to review the 60% Design Submittal.
 - 5.8.2. Prepare agenda and distribute meeting notes.
- 5.9. Address comments provided by the Owner and Owner's Representative.
- 5.10. 60% Design Phase Deliverables
 - 5.10.1. 60% Design Deliverables (plans and specifications)
 - 5.10.2. Draft Geotechnical Report
 - 5.10.3. Updated list of permits required for the project
 - 5.10.4. 60% Design Letter
 - 5.10.5. 60% OPCC
 - 5.10.6. 60% Design Review Workshop and meeting notes
- 6. 90% Design Phase
 - 6.1. Perform up to eight (8) site visits for 90% design (1 for BPS, 1 for each Delivery Point)
 - 6.2. Construction Drawings – Develop 90% Plan Set in accordance with the ARWA Phase 1B Program Design Standards. Further development and refinement of the 60% Plan Set sheets for the BPS and Delivery Point sites..

- 6.3. Draft Project Manual - Update all front-end documents and applicable specifications both provided by the Owner's Representative and specific to the project.
- 6.4. Prepare 90% OPCC.
- 6.5. Perform internal QC and address QC comments.
- 6.6. 90% Design Letter documenting conformance to applicable AWWA and TCEQ standards conformance to ARWA standards, and documentation of any exceptions to these standards.
- 6.7. 90% Design Workshop
 - 6.7.1. Conduct 90% Design workshop to review the 90% Design Submittal.
 - 6.7.2. Prepare agenda and distribute meeting minutes.
- 6.8. Address comments provided by Owner and Owner's Representative.
- 6.9. 90% Design Phase Deliverables
 - 6.9.1. 90% Design Deliverables (plans and specifications)
 - 6.9.2. Final Geotechnical Report
 - 6.9.3. 90% Design Letter
 - 6.9.4. 90% OPCC
 - 6.9.5. 90% Design Review Workshop and meeting notes
- 7. 100% Design Phase
 - 7.1. Perform up to three (3) site visits as needed for 100% design.
 - 7.2. Construction Drawings – Develop 100% Plan Set in accordance with the ARWA Phase 1B Program Design Standards. Further Development of 90% Plan Set sheets for the BPS and Delivery Point sites.
 - 7.3. Signed and Sealed Final Project Manual. Contract Documents to include language for Request for Competitive Sealed Proposals (RFCSP) and all applicable specifications provided by the Program and specific to the project.
 - 7.4. Prepare 100% OPCC.
 - 7.5. Perform internal QC and address QC comments.
 - 7.6. 100% Design Letter documenting conformance to applicable AWWA and TCEQ standards conformance to ARWA standards, and documentation of any exceptions to these standards.
 - 7.7. 100% Design Workshop
 - 7.7.1. Conduct 100% Design workshop to review the 100% Design Submittal.
 - 7.7.2. Prepare agenda and distribute meeting notes.
 - 7.8. Address comments provided by the Owner and Owner's Representative.
 - 7.9. Agency Review of 100% Design Documents – Prepare packet for submission of 100% construction documents (plans, project manual) to the following agencies.
 - 7.9.1. TWDB
 - 7.9.2. TCEQ
 - 7.9.3. Address comments provided by TWDB and TCEQ.
 - 7.10. 100% Design Phase Deliverables
 - 7.10.1. 100% Design Deliverables (plans, project manual)
 - 7.10.2. Final Geotechnical Report
 - 7.10.3. 100% Design Letter
 - 7.10.4. 100% OPCC
 - 7.10.5. 100% Design Review Workshop and meeting notes

8. Project Cost Reduction Alternatives
 - 8.1. Develop up to two additional alternatives for sizing and configuration of the BPS facilities based upon reduction in peaking factors.
 - 8.2. Develop revised delivery point infrastructure sizing and configuration based upon reduction in peaking factors.
 - 8.3. Develop an Opinion of Probable Construction Cost (OPCC) and technical data sheets that compare cost reduction alternatives by major facility component to the original design recommendations presented in the Final Engineering Feasibility Report (EFR).
 - 8.4. Meetings - Conduct one workshop to discuss cost reduction alternatives and to select a single preferred design approach as the basis for Final Design. Prepare agenda and distribute meeting notes.
 - 8.5. Update the ARWA selected BPS design alternative and OPCC as basis for Final Design for final approval by ARWA and Owner's Representative.

9. Hydraulic Revisions and System Hydraulics Report
 - 9.1. Hydraulic Revisions (To be performed in parallel with Project Cost Reduction Alternatives Task - Prior to beginning 60% design)
 - 9.1.1. Update peak water demand projections based upon lower peaking factors for Phase 1 demands. Phase 1 base demands will not be adjusted. Document water demands by delivery point. Update delivery point demands in the InfoWater model.
 - 9.1.2. Utilize updated hydraulic model to develop updated system information and recommendations to the following:
 - 9.1.2.1. Updated system curves (head vs. flow) for the high service pump station at the WTP for two different sizes for pipeline Segment A. System curves for the BPS will not be updated from the initial hydraulic analysis due to pipeline sizes not changing to reflect the peaking factor reduction.
 - 9.1.2.2. Updated operational range of head and flow conditions at each delivery point for reduced peak demand conditions for input to delivery point hydraulic design.
 - 9.1.2.3. Updated hydraulic grade lines (HGLs) for reduced peak demands for each major pipeline segment based on recommended pipeline diameters and control elevations.
 - 9.2. Coordination with Design Consultants – Provide hydraulics technical support to program during 60% design (WTP, In-line ESTs, Pipelines).
 - 9.3. Hydraulic Revisions (After 90% design completion) – Update hydraulic modeling, data and recommendations based upon program 90% design level for the WTP, BPS, In-line ESTs, and Pipelines (Segments A, B, C, D, E). This does not include updating delivery point demands or peaking factors.
 - 9.4. System Hydraulics Report
 - 9.4.1. Document final updates to customer delivery policy including minimum and maximum instantaneous flow rates, seasonal operations, peak hour management, and other relevant items.
 - 9.4.2. Document final recommended operating procedures to provide system operators with guidance on the intended operations of the system under various demand conditions and operations scenarios.

- 9.4.3. Summarize final results of the hydraulic analysis and recommended pump/storage tank phasing. Charts and mapping will be developed to show modeling results and recommendations. System curve data will be provided for the WTP Consultant to utilize for their final pump station design. HGL elevation data will be provided for Pipeline Consultants to utilize for their final pipeline designs and plan preparation.
 - 9.4.4. Submit Draft System Hydraulics Report. One electronic PDF copy of the report will be submitted to Owner for review. Address comments provided by Owner and Owner's Representative and finalize System Hydraulics Report. One electronic PDF copy of the final Master Plan report will be submitted.
 - 9.5. Prepare Summary Memorandum – Document final capacity of the BPS, storage tanks, and each pipeline segment. One electronic PDF copy will be submitted to Owner for review. Address comments provided by Owner and Owner's Representative and provide final sealed electronic PDF copy.
 - 9.6. Meetings - Conduct one workshop to discuss comments on Draft System Hydraulics Report. Prepare agenda and distribute meeting notes.
10. Design Survey and Subsurface Utility Exploration (SUE). Performed by Bain Medina Bain, Inc; see additional details in their attached proposal.
- 10.1. Survey Services
 - 10.1.1. Perform topographical survey for seven (7) proposed Delivery Point Sites. Based on NAD 83 coordinates (State Plane Texas South Central/Feet) will be used to develop 2D planimetric and 3D DTM data to produce a 1-foot contour delineation. Survey will identify property lines, contours, benchmarks, bores, apparent locations of existing utilities marked on the surface, and appurtenances such as trees, fences, drainage structures, and existing easements.
 - 10.1.2. For two (2) sites, perform a tree inventory in accordance with local entities; 12-inch diameter and greater or the minimum diameter required by the permitting entity. Engage a certified Arborist or Forester to confirm species (one-time confirmation).
 - 10.1.3. Verify control points provided by ARWA Owner's Representative.
 - 10.2. SUE Services
 - 10.2.1. Provide Quality Service Level A SUE services to identify the location and depth of existing utilities for Delivery Point Sites. Provide up to ten (10) Level A locates with accurate horizontal and vertical positions of subsurface utilities. The Level A SUE service will be performed by Bain Medina Bain, Inc. See attached proposal for additional details.
 - 10.2.2. Provide Quality Service Level B SUE services to identify the horizontal location of existing utilities at seven (7) Delivery Point Sites. Level B SUE service will be performed by Bain Medina Bain for a maximum of 2500-linear feet of pipeline corridor. See attached proposal for additional details.
 - 10.2.3. Provide Quality Service Level C and D SUE services to identify the horizontal location of existing utilities. Level C and Level D will be performed by Bain Medina Bain, Inc. during surveying operations. Surveyor will call Digtess, 811 or equivalent to have utilities marked in the field. Other agencies not part of 811 will be notified one time prior to survey.
11. Geotechnical Investigation. Performed by Arias Geoprosessionals; see additional details in their

attached proposal.

11.1. Geotechnical Borings

11.1.1. Ground Storage Tank – One (1) boring drilled to a maximum depth of 65 feet for the center of the tank and four (4) borings drilled to a maximum depth of 50 feet around the perimeter of the tank.

11.1.2. Pump Station and Buildings – Three (3) borings drilled to a maximum depth of 40 feet for proposed buildings, equipment pads, pipeline or site facilities.

11.1.3. Piping and Paving – Three (3) borings drilled to a maximum depth of 25 feet for proposed piping and paved areas.

11.1.4. Delivery Point Sites – Two (2) borings will be drilled each to a maximum depth of 25 feet for one (1) proposed TxDOT pipeline crossing.

11.2. Prepare geotechnical report incorporating geotechnical data with foundation recommendations for all site facilities.

12. Surge/Transient Analysis

The following tasks are identified as the stages of work for performance of the hydraulic surge analysis of ARWA water transmission system. This surge analysis will utilize two (2) separate surge models, one of which will include Phase 1 designed features of the system, and the other will include limited Phase 2 improvements to the system based upon conceptual information available. The surge models will include the BPS (pump stations and ground storage), Pipeline Segments B2, C, D, E, and the In-Line Elevated Storage Tanks located along Pipeline Segments C and D.

12.1. Data Collection. Collect and assimilate information on piping and operating philosophy, including pipe data, applicable design codes, pump data, valve data, fluid data, and significant minor pressure loss data. Pipeline data utilized in the surge model will come from, pipeline alignment and plan and profile sheets provided by the Owner's Representative. Pump data utilized in the surge model will come from manufacturers pump performance curves. Such data will be reviewed, evaluated, and formatted, as needed, for input to simulation model building. Design Consultant will review data for consistency and completeness.

12.2. Development of Surge Model. Develop numerical models for Phase 1 design features and limited Phase 2 features, as described above, using Synergi Pipeline Simulator (SPS) Version 10.2. The SPS models will be built and calibrated to meet a steady state flow conditions established for each supply point, delivery point, and lateral connections, with target pressures and flowrates based on design parameters for Phase 1 and limited Phase 2 system improvements.

12.3. Transient Case Simulations. Perform model simulations based upon the following hydraulic transient scenarios for investigation. For this project the following simulation cases are considered to be typical scenarios for simulation of surges for the modeled systems:

12.3.1. Phase 1, Power failure at BPS North Pipeline Leg (all running pumps trip off)

12.3.2. Phase 1, Power failure at BPS South Pipeline Leg (all running pumps trip off)

12.3.3. Phase 1, Power failure at BPS West Leg under pressurized flow (all running pumps trip off)

12.3.4. Phase 1, Single pump trip at BPS North Pipeline Leg

12.3.5. Phase 1, Single pump trip at BPS South Pipeline Leg

12.3.6. Phase 1, Delivery valve closure at inlet to San Marcos #1 Delivery Point (end of West Leg)

12.3.7. Phase 1, Delivery valve closure at inlet to San Marcos #2 Delivery Point

- 12.3.8. Phase 1, Delivery valve closure at inlet to County Line SUD (CRWA) Delivery Point
- 12.3.9. Phase 1, Delivery valve closure at inlet to Crystal Clear SUD #2 (CRWA) Delivery Point
- 12.3.10. Phase 1, Delivery valve closure at end of North Pipeline Leg (past EST)
- 12.3.11. Phase 1, Delivery valve closure at end of South Pipeline Leg (past EST)
- 12.3.12. Phase 2, Power failure at BPS North Pipeline Leg (all running pumps trip off)
- 12.3.13. Phase 2, Power failure at BPS South Pipeline Leg (all running pumps trip off)
- 12.3.14. Phase 2, Power failure at BPS West Leg under pressurized flow (all running pumps trip off)

Base Case Simulations - The transient cases shall be simulated for base case conditions as designed for Phase 1 and conceptual Phase 2 operations. All surge protection devices, designed for Phase 1, and conceptually planned for Phase 2 improvements, will be included in the surge analysis.

Solution Simulations - If either the maximum allowable surge pressures in the system or worst case allowable vacuum conditions are violated under conditions described in the task above, additional surge protection devices will be sized and added to the model. The cases above will be re-run at the design flow rates to determine the locations (if any), size, characteristics, and new set points for both additional surge protection devices on the system.

- 12.4. Report Preparation. Document the Surge Analysis in a report to include a summary of significant input parameters to the simulation model, as well as conclusions and recommendations. The initial draft report will be submitted to Owner for review in electronic PDF format for review and comments. A final report will be issued that includes the resolution of comments on the draft report.

12.5. Meetings.

- 12.5.1. Conduct one workshop to discuss comments on Draft Surge Analysis Report.
- 12.5.2. Prepare and distribute meeting notes.

13. Chlorine Residual Analysis

Conduct a chlorine residual analysis based on the water age analysis from the hydraulic model under Phase 1 and Phase 2 demand conditions to better define chlorine boosting locations and dosages. Documentation of the chlorine residual modeling will be prepared using a chlorine booster location map and chlorine residual concentration charts in a Technical Memorandum

14. Corrosion Investigation and Design for BPS site

- 14.1. Review available data including Cathodic Protection Design Standards provided by the ARWA Program and Design team and provide comments.
- 14.2. Conduct in-situ soil resistivity tests (Wenner 4-Pin survey in accordance with ASTM G57) at approximately 4 to 6 locations within the Booster Pump Station location. Test depths (pin spacing) shall be at 5, 10, 15 and 20- feet (and pipeline invert if depth is greater than 20-feet) at each test location.
- 14.3. Obtain 3 (three) one-quart soil samples from the site location. If available, these samples may be available from geotechnical boring samples and should be collected at the approximate pipeline invert depth at each location.

- 14.4. Conduct stray current (DC and AC) interference investigation in the proposed alignment. The purpose of performing this investigation is to identify potential sources of stray current sources that may interact with the proposed pipeline cathodic protection system.
 - 14.4.1. Potential DC stray current interference sources;
 - 14.4.1.1. Identify foreign pipeline crossings as well as locations with parallel occupancy with the project site (within 1,000-feet). Identify station locations as well as operator contact information (often provided on foreign pipeline test station posts).
 - 14.4.1.2. Identify large steel storage tanks which may have operable CP systems as well as gas stations with buried metallic fuel tanks (within 1000-feet of the project site). Identify station locations as well as operator contact information
 - 14.4.2. Potential AC stray current interference sources - Identify collocated overhead electric transmission corridors locations within 2,000- feet of the project site. Take photos depicting the electric tower construction and the wire conductor phase arrangement as well as the circuit loading (if available). Provide the identity of the electric facility owner and operator.
- 14.5. Analyze the field collected data and the results of the laboratory tests for each soil sample. The following minimum laboratory tests shall be provided for each soil sample;
 - 14.5.1. As received soil resistivity per ASTM G57
 - 14.5.2. Saturated soil resistivity per ASTM G57
 - 14.5.3. Chlorides per SW 9056
 - 14.5.4. Sulfates per SW 9056
 - 14.5.5. Alkalinity/Bicarbonate per SM 2320B
 - 14.5.6. pH per EPA 9045C
 - 14.5.7. Prepare a comprehensive soil corrosivity technical memorandum. The memorandum will include the collected field data and laboratory soil analysis results and provide conclusions and recommendations for a cathodic monitoring or cathodic protection system based on the soil conditions and stray current interference presence with respect to the proposed pipeline materials. Provide corrosion investigation services to the extent necessary as well as an Opinion of Probable Cost for all scenarios.
- 14.6. Cathodic Protection Design – Incorporate corrosion analysis and cathodic recommendations into 60%, 90% and 100% design documents

B. SUPPLEMENTAL SERVICES:

Design Consultant will provide the following Supplemental Services only upon approval and issuance of notice to proceed by the Owner:

15. Supplemental
 - 15.1. Survey - Verify/Reset horizontal and vertical controls points for construction purposes.
 - 15.2. Survey – Additional 5 days of field topographic survey.
 - 15.3. Additional SUE Potholes - At the direction of ARWA, the Design Consultant may be required to perform up to five (5) additional SUE potholes beyond those scoped for the project.
 - 15.4. At the direction of ARWA the Design Consultant may be required to perform up to two (2) additional Geotechnical Borings to a maximum depth of 25 feet beyond those scoped for the project, and conduct surveying as required to tie-in borings into the design documents.

- 15.5. General Engineering Design for additional or unanticipated tasks.
- 15.6. Attend Public Meetings (2 meetings).
- 15.7. Attend additional meetings in the vicinity of the project (5 meetings.)
- 15.8. Conduct additional half-day coordination workshops (2 workshops).
- 15.9. Additional Transient Case Simulations. Utilize the Surge Model to perform 4 additional simulations for hydraulic transient scenarios that may include simulations of pump startup scenarios, or pump trip with standby pump startup, or surge mitigation scenarios involving surge control valves, or other surge control devices. The features of these four scenarios may be determined during Final Design.
- 15.10. Procurement (Request for Competitive Sealed Proposal (RFCSP)) – To be conducted on a time and materials basis.
 - 15.10.1. Prepare and Submit Final Documents for Advertisement.
 - 15.10.2. Attend Pre-Proposal Conference (meeting to be conducted by Owner’s Representative)
 - 15.10.3. Prepare addendum and clarifications.
 - 15.10.4. Attend proposal opening.
 - 15.10.5. Review Contractor Proposals.
 - 15.10.5.1. Perform Contractor References Check.
 - 15.10.5.2. Confirm Contractor Experience.
 - 15.10.5.3. Prepare Recommendation for Award.
 - 15.10.6. Prepare Conformed Contract Documents.

ASSUMPTIONS:

- 1. No further changes beyond the Phase 1B Program Cost Saving Measures 2a and 2b to customer demands and/or peaking factors will occur in the Final Design Phase.
- 2. Final Design Phase is assumed to be maximum 12 months in length.
- 3. Final Procurement Phase is assumed to be maximum 4 months in length.
- 4. Services are based upon advertising the BPS and Delivery Point sites under a single bid package for construction.
- 5. Construction Phase services are not included in this scope of work.
- 6. All meetings to held in the immediate vicinity of the project.
- 7. Owner’s Representative will be the primary contact with TWDB and will facilitate all submittals and coordination. At request of Owner's Rep, Design Consultant may coordinate directly with TWDB as required to address specific comments.
- 8. Owner’s Representative will receive and distribute all Contractor questions during procurement process.
- 9. Owner’s Representative will provide electrical, instrumentation and controls/SCADA specifications that are common to both the WTP and BPS designs (to be prepared by the WTP Designer). Design Consultant will review and provide comments for Program provided specifications.
- 10. Delivery Point design will be conducted for seven (7) Sponsor sites including:
 - a. Crystal Clear SUD #1 (CRWA) – Provide meter, control valve and piping connection to existing ground storage tank.

- b. Crystal Clear SUD #2 (CRWA) – Provide meter and control valve. CRWA/Crystal Clear will make connection to new tank.
 - c. Green Valley SUD #1 (CRWA) – Provide meter, control valve and piping connection to existing domed tanks at CRWA Dunlap WTP.
 - d. San Marcos #1 & Goforth (GBRA) – Provide meter and control valve; San Marcos will make connection to new ground storage tank.
 - e. San Marcos #2 – Provide meter and control valve; San Marcos will make connection to elevated storage tank.
 - f. County Line SUD (CRWA) – Provide meter and control valve and piping connection to existing tank (either ground storage or elevated storage).
 - g. Kyle – Provide meter, control valve and piping connection to existing ground storage tank.
11. Delivery Point design will be provided by GBRA for the following sites:
- a. Lockhart (GBRA)
 - b. New Braunfels Utilities (GBRA)

Alliance Regional Water Authority Phase 1B
Booster Pump Station and Delivery Points Project
Electrical Engineering Project Scope

1. Overview and Understanding:

This project will provide the final design and advertisement services for the Phase 1B Booster Pump Station (BPS) and Delivery Points (Project) for the Alliance Regional Water Authority (ARWA). Gupta & Associates, Inc. (GAI) will perform both the electrical distribution and controls (ED&C) and the instrumentation and controls (I&C) design as a subconsultant to Freese and Nichols, Inc. (FNI).

This work includes: electrical, instrumentation, controls and SCADA equipment sizing, load calculations, incoming power, generator, duct banks, and equipment selection. It includes electrical site plans, sections, elevations, building/facility equipment layout plans, one-line diagrams, power, duct banks, security, lighting, grounding, generator schedules, instrumentation, facility/security network diagrams, and P&IDs. It includes notes, legends, symbols, details, and construction specifications.

This work is to be done in accordance with the ARWA Phase 1B Program Design Standards.

1.1. Project Description – Basic Services

1.1.1. Pump Station

1. The outdoor pump station will consist of 460V motors on all pumps. The number and size of pumps are to be determined prior to start of design.
2. Motors will be controlled by a combination of both full voltage non-reversing (FVNR) and variable frequency drives (VFDs).
3. A motor control center will be installed in a separate electrical building. The HVAC, architectural, and structural designs, including the building equipment pad, are to be provided by others.
4. These pumps will be controlled by a central programmable logic controller (PLC) and the logic will be based upon a standard lead/lag configuration to maintain a process variable (expected to be either discharge flow or discharge pressure).

1.1.2. Ground Storage Tank

1. A ground storage tank will require level monitoring and control of influent/effluent valves, but no cathodic protection.

1.1.3. Chemical Facility

1. A chemical facility will require power and instrumentation to allow flow paced chemical injection.
2. Heat trace of sample lines and/or chemical injection lines will be included.

1.1.4. Delivery Sites

1. GAI will provide design services for seven delivery sites.
2. The sites will consist of above grade or below grade meter vaults and above grade outdoor equipment rack.
3. Individual ED&C and I&C drawings will be provided for each remote site.
4. Provide review of delivery point infrastructure designed by others for consistency with ARWA Program guidelines and BPS/Delivery Point design performed by GAI. Review will include compatibility of valve and meter selection, instrumentation and communications with ARWA facilities. These reviews will consist of the following:
 - a. Three in-person meetings, one each at the 60% / 90% / 100% Review Submittals for the sites being designed by this FNI project
 - b. Three conference calls on an as-needed basis for the sites being designed by this FNI project.
 - c. Three review cycles for the two delivery sites being designed by others (GBRA) outside this FNI project (no associated meetings).

1.1.5. Power Company Coordination

1. A single supply from the power company will be installed at the pump station and each of the delivery sites.

Alliance Regional Water Authority Phase 1B
Booster Pump Station and Delivery Points Project
Electrical Engineering Project Scope

2. GAI will coordinate with Bluebonnet Electric Coop for power to the BPS.
3. GAI will coordinate with Bluebonnet Electric, GBEC, NBU, and Pedernales Electric as needed for power to the seven delivery sites included in this Project.
4. GAI will develop easement plats for power company facilities at the pump station and each of the delivery sites based upon survey reference files provided by FNI.

1.1.6. Standby Generator

1. A single standby generator will be provided to back up the pump station, but not at any of the delivery sites.

2.1. Work Definition

2.1.1. Administrative

This work will include the following administrative services:

1. GAI will provide various submittals for Owner's review of the design process. These submittals are expected to be:
 - a. 60% Design for Owner's review
 - b. 90% Design for Owner's review
 - c. 100% Design for Owner's (and TWDB if needed) review
 - d. Sealed and signed documents for advertisement
 - e. Conformed documents for construction
2. GAI will provide monthly invoicing for this work to FNI. The duration of this Project is expected to be:
 - a. Design Phase: 11 months
 - b. Advertisement/Bidding Phase: 2 months
3. GAI will conduct site surveys after notice to proceed is received as needed.
4. GAI will participate in a project initiation conference call.
5. GAI will participate in various design team coordinating conference calls and workshops to review design progress. These include:
 - a. Design Phase Bi-Weekly Coordination Conference Calls: 26
 - b. Design Phase Coordination Workshops: 0
6. GAI will participate in various design review meetings and workshops with the Owner. These consist of in-person meetings, one each after the 60%/90%/100% Review Submittals.
7. Opinions of Probable Construction Costs (OPCC) will be provided for each submittal.

2.1.2. Cost Reduction Alternatives

1. The Engineering Feasibility Report work has already been done and will serve as the basis of design for this Project with the exception as follows:
2. Project Cost Reduction Alternatives
 - a. Develop up to two additional alternatives for sizing and configuration of the BPS facilities based upon reduction in peaking factors.
 - b. Develop revised delivery point infrastructure sizing and configuration based upon reduction in peaking factors.
 - c. Develop an Opinion of Probable Construction Cost (OPCC) and technical data sheets that compare cost reduction alternatives by major facility component to the original design recommendations presented in the Final Engineering Feasibility Report (EFR).
 - d. Update ARWA selected BPS design alternative and OPCC as basis for Final Design.
3. GAI will participate in one workshop to discuss cost reduction alternatives and to select the preferred design approach as the basis for Final Design.

2.1.3. Final Design – Plan Drawings

GAI will provide half-size copies of plan drawings in 11" X 17" for the 60% / 90% / 100% Review submittals in PDF format for review. The bid ready set of plans will be signed and sealed half-sized copies in PDF format. The preliminary list of plan drawings to be provided is attached.

2.1.4. Final Design – Specifications

Alliance Regional Water Authority Phase 1B
Booster Pump Station and Delivery Points Project
Electrical Engineering Project Scope

1. ARWA has directed the Water Treatment Plant (WTP) Designer (Walker Partners) to develop all technical specifications that are common to the WTP and the BPS. GAI will still be responsible for developing specs that are unique to the BPS and Delivery Point sites. Given that Walker Partners will be carrying the effort to develop these specs, GAI will include effort to review the Walker Partners developed specifications and come to agreement on them for inclusion in GAI's design. The specifications to be provided by Walker Partners will include at a minimum the following:
 - a. Electrical Support Hardware
 - b. Power System Studies
 - c. Boxes and Enclosures
 - d. Raceways
 - e. 600V wire
 - f. Light Switches and Receptacles
 - g. NEMA Frame Induction Motors (600V and Below)
 - h. Distribution Dry-Type Transformers
 - i. Panelboards
 - j. Low Voltage Circuit Breakers
 - k. Low Voltage Disconnect Switches
 - l. Grounding and Bonding
 - m. Lighting
 - n. Underground System
2. The I&C specifications used on this Project will be based upon the ARWA Phase 1B Project Instrumentation and Controls Design Guideline – FINAL (dated December, 2019) as published by CP&Y.

2.1.5. Advertising and Bidding Services

GAI will provide the following:

1. Respond to Bidders' requests for information (RFIs) and issue addenda as required.
2. GAI is not expecting to participate in any pre-bid meetings on site.
3. Conformed documents will be provided in PDF format showing all addenda.

2.1.6. Construction Phase Services

Not included at this time.

2.1.7. Special Services

Not included at this time.

3. Fee:

GAI will perform these services based upon the following:

Description	Basis	ED&C	I&C	Total
Cost Reduction Alternatives	Fixed Fee	\$11,739	\$0	\$11,739
Design Phase	Fixed Fee	\$149,564	\$55,317	\$204,881
Advertisement/Bidding	T&M Not to Exceed	\$6,117	\$2,263	\$8,380
Total		\$164,420	\$57,580	\$225,000

4. Clarifications:

The following items apply to this proposal:

1. Opinions of Probable Construction Costs are engineering estimates and are not warranted.
2. GAI has not included any software licenses or hardware in this proposal.
3. GAI requires a process flow diagrams, equipment lists, and control strategies to be provided by FNI prior to beginning design.
4. All site plan and other mechanical background reference CAD files to be provided by FNI.
5. The contractual terms and conditions in place with the preliminary engineering design phase of this project will be applied to this scope of work.

Alliance Regional Water Authority Phase 1B
 Booster Pump Station and Delivery Points Project
Electrical Engineering Project Scope

ED&C Sheet Listing	
Sheet #	Description
00-E-01	Legend & Symbols - I
00-E-02	Legend & Symbols - II
00-E-03	General Notes
00-E-04	Light Fixture Schedule
00-E-05	Standard Construction Details - I
00-E-06	Standard Construction Details - II
00-E-07	Standard Construction Details - III
00-E-08	Standard Construction Details - IV
Booster Pump Station	
10-E-01	Site Plan Overall
10-E-02	Duct Bank Sections
10-E-03	Overall One-Line Diagram
10-E-04	MCC Elevation and Panel Schedules
10-E-05	Floor Plan - Pump Station Power and Grounding
10-E-06	Floor Plan - Cable Tray
10-E-07	Floor Plan - Pump Station Instrumentation
10-E-08	Floor Plan - Pump Station Lighting
10-E-09	Floor Plan - Chem Facility Power and Grounding
10-E-10	Floor Plan - Chemical Facility Instrumentation
10-E-11	Site Plan Detail - Meter Vault
10-E-12	Generator Plan
10-E-13	Generator Details
10-E-14	PLC Interface Diagram - Pumps
10-E-15	PLC Interface Diagram - Chemicals
10-E-16	Riser Diagram - Pumps
10-E-17	Riser Diagram - Chemicals
10-E-18	Riser Diagram - Security
10-E-19	Wiring Schematic - I

I&C Sheet Listing	
Sheet #	Description
00-N-01	Legend & Symbols - I
00-N-02	Legend & Symbols - II
00-N-03	Instrument Installation Details - I
00-N-04	Instrument Installation Details - II
00-N-05	Instrument Installation Details - III
Booster Pump Station	
10-N-01	Overall System Architecture
10-N-02	P&ID - Pumps I
10-N-03	P&ID - Pumps II
10-N-04	P&ID - Chemicals
10-N-05	Control Panel

Alliance Regional Water Authority Phase 1B
Booster Pump Station and Delivery Points Project
Electrical Engineering Project Scope

ED&C Sheet Listing	
Sheet #	Description
10-E-20	Wiring Schematic - II
10-E-21	Wiring Schematic - III
	Bluebonnet Electric Easement Plat
Delivery Site #1	
21-E-01	Site Plan Overall
21-E-02	Site Plan Detail - Meter Vault
21-E-03	Overall One-Line Diagram and Panel Schedule
	Bluebonnet Electric Easement Plat
Delivery Site #2	
22-E-01	Site Plan Overall
22-E-02	Site Plan Detail - Meter Vault
22-E-03	Overall One-Line Diagram and Panel Schedule
	Bluebonnet Electric Easement Plat
Delivery Site #3	
23-E-01	Site Plan Overall
23-E-02	Site Plan Detail - Meter Vault
23-E-03	Overall One-Line Diagram and Panel Schedule
	Bluebonnet Electric Easement Plat
Delivery Site #4	
24-E-01	Site Plan Overall
24-E-02	Site Plan Detail - Meter Vault
24-E-03	Overall One-Line Diagram and Panel Schedule
	Bluebonnet Electric Easement Plat
Delivery Site #5	
25-E-01	Site Plan Overall
25-E-02	Site Plan Detail - Meter Vault

I&C Sheet Listing	
Sheet #	Description
Delivery Site #1	
21-E-01	Overall System Architecture
21-E-02	P&ID
21-E-03	Control Panel
Delivery Site #2	
22-E-01	P&ID
22-E-02	Control Panel
Delivery Site #3	
23-E-01	P&ID
23-E-02	Control Panel
Delivery Site #4	
24-E-01	P&ID
24-E-02	Control Panel
Delivery Site #5	
25-E-01	P&ID
25-E-02	Control Panel

Alliance Regional Water Authority Phase 1B
 Booster Pump Station and Delivery Points Project
Electrical Engineering Project Scope

ED&C Sheet Listing	
Sheet #	Description
25-E-03	Overall One-Line Diagram and Panel Schedule
	Bluebonnet Electric Easement Plat
Delivery Site #6	
26-E-01	Site Plan Overall
26-E-02	Site Plan Detail - Meter Vault
26-E-03	Overall One-Line Diagram and Panel Schedule
	Bluebonnet Electric Easement Plat
Delivery Site #7	
27-E-01	Site Plan Overall
27-E-02	Site Plan Detail - Meter Vault
27-E-03	Overall One-Line Diagram and Panel Schedule
	Bluebonnet Electric Easement Plat

I&C Sheet Listing	
Sheet #	Description
Delivery Site #6	
26-E-01	P&ID
26-E-02	Control Panel
Delivery Site #7	
27-E-01	P&ID
27-E-02	Control Panel

January 14, 2020 (Revised January 21, 2020)
Arias Job No. 2018-1103

VIA Email: dtb@freese.com

Mr. David T. Bennett, P.E., ENV SP
Principal / Vice President
Treatment, Transmission & Utilities

Freese and Nichols, Inc. (FNI)
9601 McAllister Freeway, Suite 1008
San Antonio, Texas 78216

RE: Proposal for Additional Geotechnical Engineering Services
Phase 1B Booster Pump Station (BPS) at Caldwell County, Texas
Delivery Points at 10375 North Highway SH 123, Seguin, Texas
Alliance Regional Water Authority (ARWA)

Dear Mr. Bennett:

Thank you for the opportunity to submit this proposal for additional geotechnical engineering services for the proposed project. ***Arias understands that we have been pre-selected for this project based upon our qualifications.*** We provide our clients with innovative and cost-effective solutions to the geotechnical challenges present in the South Texas and South-Central Texas areas.

Project Information

Arias previously performed a Preliminary Geotechnical Study for the proposed ARWA Phase 1B Booster Pump Station located at Caldwell County, Texas, and submitted a Geotechnical Data Report (GDR) and Geotechnical Design Memorandum (GDM) on December 11, 2019. After completion of the preliminary study, we have been requested to provide additional geotechnical services for the final design.

Based on the information provided to us, we understand that the project will involve design and construction of a 5 million-gallon (MG) ground water storage tank, buildings, equipment pads and pipeline at the ARWA Phase 1B Booster Pump Station site. We also understand that a pipeline will be installed for Delivery Points using the bore and jack method at the SH 123 crossing near 10375 North Highway SH 123, Seguin, Texas.

Proposed Borings

The number of soil borings and depths for the proposed Pump Station and Delivery Points are summarized in the following table:

Item	Location	No. of Borings	Boring Depth, (ft.)	Total Depth, (ft)
5.0 MG Ground Storage Tank	Center of GST at Phase 1B Pump Station	1	65	65
	Perimeter of GST at Phase 1B Pump Station	4	50	200
Buildings, Equipment Pads, Pipeline or Site Facilities	At Pump Station, Electrical and Chlorine Building	3	40	120
Piping/Pavements	TBD	3	25	75
Delivery Points	SH 123 Crossing	2	25	50
Supplemental Borings	TBD	2	25	50
Total Boring Footage, (ft.)				560

Proposed Scope of Services

Arias Geoprosessionals, Inc. (Arias) proposes the following geotechnical services for the project:

1. Arias will mark the boring locations and will meet ARWA personnel at the site so that they can mark the locations of existing underground utilities based on their plans. Arias will also contact Texas 811 One Call service to locate and mark underground utilities. We have assumed that FNI will provide Arias with contact information for ARWA personnel so that the site meeting can be set up.
2. Arias will retain a subcontract driller to perform drilling; however, Arias personnel will locate the borings, will direct the sampling efforts, and will visually classify recovered samples. Soil interpreted to be clay in the field will be sampled by either pushing a thin-walled tube (ASTM D 1587) or with a split barrel sampler while performing the Standard Penetration Test (ASTM D 1586). Soil interpreted to be sand or gravel in the field will be sampled with a split barrel sampler while performing the Standard Penetration Test (ASTM D 1586). Rock coring will be performed only at the center boring of the proposed GST (i.e. 65-foot deep boring) location if bedrock is encountered. To obtain undisturbed samples for strength testing; competent rock will be continuously cored using an NX-core barrel. Rock coring is not planned for the other borings.
3. If groundwater is encountered, the groundwater levels within the open borehole will be recorded at the time of drilling and immediately following drilling. The boreholes will be backfilled with cuttings generated by drilling operations after completion of drilling.
4. Laboratory testing will be performed on recovered samples selected by the geotechnical engineer to aid in soil classification and to measure engineering properties. Laboratory testing is expected to include moisture content, Atterberg limits, fines content, unconsolidated undrained triaxial compression, swell, direct shear and one-dimensional consolidation tests. As suggested by FNI, five (5) corrosivity testing (i.e. pH, resistivity, sulfates, sulfides, chlorides, redox, and bicarbonate) will be performed on the GST, piping and pump station borings. During our drilling operation, a bulk sample will be collected from the location of the proposed pavements within the pump station. Lime Series and CBR tests will be conducted for the pavement design. The actual laboratory program will depend upon the type of soils encountered.

5. We will issue an electronic copy of our Geotechnical Data Report (GDR) prepared by a licensed professional engineer in Texas that will include:
 - *Description of the field exploration program;*
 - *Description of the laboratory testing program;*
 - *Soil boring plan that depicts borehole locations on a base map provided by Client;*
 - *Soil boring logs with soil classifications based on the Unified Soil Classification System (ASTM D 2487);*
 - *Description of site geology based on location of the site on the Geologic Atlas of Texas;*
 - *Generalized site stratigraphy and engineering properties developed from field and laboratory data at the explored locations; and*
 - *Depth where groundwater was encountered during drilling and its potential impact on construction;*

6. After completion of GDR, we will issue an electronic copy of our Geotechnical Design Memorandum (GDM) prepared by a licensed professional engineer in Texas that will include:
 - *Recommended foundation type to support the GST, buildings and equipment pads;*
 - *Recommended net allowable bearing pressure, minimum foundation bearing depth, and estimated settlement magnitude for a shallow foundation system, if applicable;*
 - *Estimated potential vertical rise for expansive soils, and recommendations for ground improvement to result in a PVR of about 1-inch or less;*
 - *Allowable side friction and end bearing values for a deep drilled pier foundation system, if applicable. Laterally loaded drilled pier input parameters to be used with LPILE software and estimated uplift (tension) loading from expansive soil heave will be provided;*
 - *OSHA classifications for onsite soils, bedding and backfill recommendations,*
 - *Backfill and compaction requirements for material placement behind below grade walls, and beneath slabs-on-grade,*
 - *General discussions on subsurface conditions for proposed Bore and Jack installation, and*
 - *Flexible and Rigid Pavement Recommendations. We will require traffic data/information and design parameters from the Client in order to provide pavement recommendations.*

Our report will not provide global stability evaluations for site slopes or retaining walls. We would be pleased to provide this service if desired and project conditions dictate.

CoMET Services

Please be advised that Arias can perform Construction Materials Engineering and Testing (CoMET) services for this project. If requested, we would be pleased to provide a scope of work and fee for these services.

Proposed Fee

Our proposed **Lump Sum Fees** for the performance of the scope of work as described in this proposal, and that the work will be performed as outlined in the General Conditions included with this proposal are as follows:

- **Lump Sum Fee for Basic Services: \$65,055.00**
- **Lump Sum Fee for the Supplemental Services: \$4,950.00**

We have provided fee breakdown for your review, and to establish unit rates in case additional work is requested that is beyond the scope outlined herein.

We will submit monthly progress billing during the course of our study; invoicing will be based on the percentage of project completion to bill for project tasks as they are completed (i.e. site mobilization of

geotechnical field-testing equipment and personnel, completion of field work and laboratory testing, engineering analysis, report preparation, etc.).

We have prepared our scope and fee with the understanding that no clearing will be required, no concrete coring will be required, and that no special permission will be needed for access. We have assumed that you will provide free access to the site. Meetings and supplemental letters are not included in our proposed project fees. If required, these items will be billed according to the current Arias & Associates Unit Rate Schedule for Geotechnical Services.

Schedule

In general, the field exploration can typically begin about one (1) week after receiving written authorization (signed proposal) pending ARWA approval/clearances. Field drilling and sampling is expected to take approximately one (1) to one and one-half (1½) weeks. Laboratory testing is expected to be completed within approximately two (2) to three (3) weeks after completion of the soil borings. During this time, preliminary recommendations could be provided to assist the design team in moving forward. We anticipate that our Geotechnical Report can be delivered within about five (5) to six (6) weeks after completing the borings.

Delays sometime occur due to adverse weather, utility clearance requirements, site clearing requirements for drill rig access, and other factors outside of our control. In this event, we will communicate the nature of the delay with you and provide a revised schedule at the earliest possible date.

Proposal Acceptance

Please let us know if this proposal meets your expectations. If acceptable, the authorization table at the end of this proposal should be completed as applicable. We will begin work upon receipt of a signed copy of this proposal by an authorized representative. Please return the entire signed proposal to us by fax, mail or email to gkibria@ariasinc.com. If the billing address is different, include that information as well.

Should you have any questions, please do not hesitate to contact me by email, or by phone on my direct line at (210) 499-6816. We appreciate the opportunity provided and look forward to being an integral part of the Project Team.

Sincerely,

ARIAS & ASSOCIATES, INC.

TBPE Registration No: F-32



Golam Kibria, Ph.D., P.E.
Senior Geotechnical Engineer



Christopher M. Szymczak, P.E.
Senior Geotechnical Engineer



Geotechnical Cost Estimate - Revision 01.21.2020 (Basic Services)
ARWA – Maxwell Pump Station and Delivery Points - Additional Scope of Work

Task	Item Description	Est. Qty.	Unit	Unit Price	Est. Total Price
1 Field Exploration					
1.1 Planning and Coordination					
	Field Coordination (Staking of Borings, One-Call, Drilling Plan)	12	hr	\$ 95.00	\$ 1,140.00
	Transportation Cost - Trip Charge	1	trip	\$ 50.00	\$ 50.00
	Project Management (Senior Geotechnical Engineer)	8	hr	\$ 135.00	\$ 1,080.00
				1.1 Subtotal	\$ 2,270.00
1.2 Drilling and Sampling					
	Mobilization (drill rig, support equipment, air compressor)	6	ea	\$ 450.00	\$ 2,700.00
	Drilling and Sampling (Soil Borings)	500	ft	\$ 19.00	\$ 9,500.00
	Drilling and Sampling (Shale Coring)	10	ft	\$ 26.00	\$ 260.00
	Drill Rig Stand-by (difficulty moving, moving between borings)	4	hr	\$ 175.00	\$ 700.00
	Backfill boreholes	510	ft	\$ 5.00	\$ 2,550.00
	Logger	60	hr	\$ 65.00	\$ 3,900.00
	Traffic Control (large)	1	ea	\$ 2,600.00	\$ 2,600.00
	Transportation Cost - Trip Charge (Logger)	6	trip	\$ 50.00	\$ 300.00
				1.2 Subtotal	\$ 22,510.00
				Field Exploration TOTAL:	\$ 24,780.00
2 Laboratory Soil Testing					
2.1 Lab Testing Program					
	Moisture Content	140	ea	\$ 10.00	\$ 1,400.00
	Atterberg Limits	78	ea	\$ 65.00	\$ 5,070.00
	Grain Size Analysis (Includes Percent Passing #200 Sieve)	78	ea	\$ 65.00	\$ 5,070.00
	Unconfined Compressive Strength	0	ea	\$ 65.00	\$ -
	Unconsolidated Undrained Triaxial Compression (ASTM D2850)	52	ea	\$ 110.00	\$ 5,720.00
	Swell Test (ASTM D2435)	24	ea	\$ 125.00	\$ 3,000.00
	Corrosivity (pH, resistivity, sulfates, sulfides, chlorides, redox, and bicarbonate)	5	ea	\$ 560.00	\$ 2,800.00
	One-Dimensional Consolidation Testing	2	ea	\$ 650.00	\$ 1,300.00
	Direct Shear	1	ea	\$ 600.00	\$ 600.00
	Lime Series	1	ea	\$ 325.00	\$ 325.00
	CBR testing on the Bulk Sample	1	ea	\$ 850.00	\$ 850.00
	Lab Manager/Graduate Engineer	2	hr	\$ 85.00	\$ 170.00
				Laboratory Testing TOTAL:	\$ 26,305.00
3 Engineering and Reporting					
3.1 Geotechnical Data Report (GDR)					
	Senior Geotechnical Engineer	16	hr	\$ 135.00	\$ 2,160.00
	Project Engineer	32	hr	\$ 95.00	\$ 3,040.00
	Drafting	4	hr	\$ 65.00	\$ 260.00
	Administrative (Job set-up, billing)	2	hr	\$ 65.00	\$ 130.00
				3.1 Subtotal	\$ 5,590.00
3.2 Geotechnical Design Memorandum (GDM)					
	Senior Geotechnical Engineer	32	hr	\$ 135.00	\$ 4,320.00
	Project Engineer	40	hr	\$ 95.00	\$ 3,800.00
	Drafting	4	hr	\$ 65.00	\$ 260.00
				3.2 Subtotal	\$ 8,380.00
				Engineering TOTAL:	\$ 13,970.00
Project Total					\$ 65,055.00



Geotechnical Cost Estimate - Revision 01.21.2020 (Supplemental Services)
ARWA – Maxwell Pump Station and Delivery Points - Additional Scope of Work

Task	Item Description	Est. Qty.	Unit	Unit Price	Est. Total Price
1 Field Exploration					
1.1 Planning and Coordination					
	Field Coordination (Staking of Borings, One-Call, Drilling Plan)	1	hr	\$ 95.00	\$ 95.00
	Transportation Cost - Trip Charge	1	trip	\$ 50.00	\$ 50.00
	Project Management (Senior Geotechnical Engineer)	1	hr	\$ 135.00	\$ 135.00
				1.1 Subtotal	\$ 280.00
1.2 Drilling and Sampling					
	Mobilization (drill rig, support equipment, air compressor)	1	ea	\$ 450.00	\$ 450.00
	Drilling and Sampling (Soil Borings)	50	ft	\$ 19.00	\$ 950.00
	Drilling and Sampling (Shale Coring)	0	ft	\$ 26.00	\$ -
	Drill Rig Stand-by (difficulty moving, moving between borings)	0	hr	\$ 175.00	\$ -
	Backfill boreholes	50	ft	\$ 5.00	\$ 250.00
	Logger	8	hr	\$ 65.00	\$ 520.00
	Traffic Control (large)	0	ea	\$ 2,600.00	\$ -
	Transportation Cost - Trip Charge (Logger)	1	trip	\$ 50.00	\$ 50.00
				1.2 Subtotal	\$ 2,220.00
				Field Exploration TOTAL:	\$ 2,500.00
2 Laboratory Soil Testing					
2.1 Lab Testing Program					
	Moisture Content	13	ea	\$ 10.00	\$ 130.00
	Atterberg Limits	8	ea	\$ 65.00	\$ 520.00
	Grain Size Analysis (Includes Percent Passing #200 Sieve)	8	ea	\$ 65.00	\$ 520.00
	Unconfined Compressive Strength	0	ea	\$ 65.00	\$ -
	Unconsolidated Undrained Triaxial Compression (ASTM D2850)	6	ea	\$ 110.00	\$ 660.00
	Swell Test (ASTM D2435)	0	ea	\$ 125.00	\$ -
	Corrosivity (pH, resistivity, sulfates, sulfides, chlorides, redox, and bicarbonate)	0	ea	\$ 560.00	\$ -
	One-Dimensional Consolidation Testing	0	ea	\$ 650.00	\$ -
	Direct Shear	0	ea	\$ 600.00	\$ -
	Lime Series	0	ea	\$ 325.00	\$ -
	CBR testing on the Bulk Sample	0	ea	\$ 850.00	\$ -
	Lab Manager/Graduate Engineer	0	hr	\$ 85.00	\$ -
				Laboratory Testing TOTAL:	\$ 1,830.00
3 Engineering and Reporting					
3.1 Geotechnical Data Report (GDR)					
	Senior Geotechnical Engineer	2	hr	\$ 135.00	\$ 270.00
	Project Engineer	3	hr	\$ 95.00	\$ 285.00
	Drafting	1	hr	\$ 65.00	\$ 65.00
	Administrative (Job set-up, billing)	0	hr	\$ 65.00	\$ -
				3.1 Subtotal	\$ 620.00
3.2 Geotechnical Design Memorandum (GDM)					
	Senior Geotechnical Engineer	0	hr	\$ 135.00	\$ -
	Project Engineer	0	hr	\$ 95.00	\$ -
	Drafting	0	hr	\$ 65.00	\$ -
				3.2 Subtotal	\$ -
				Engineering TOTAL:	\$ 620.00
Project Total					\$ 4,950.00

Item No.	FEE ESTIMATE FOR Freese and Nichols ARWA Booster Pump Station Survey Services	RPLS	Survey Tech. IV	CADD Tech II	3-Man Survey Crew	Administrative Assistant	Total Task Hours	Cost
		\$150.00	\$115.00	\$105.00	\$205.00	\$85.00		
		HOURS						TOTAL
1	Survey or area CRWA#1	Subtotal for this area						\$9,465.00
	Mobilization Prepare Deed and parcel sketches Identify control point locations of points to be used.	1.0	2.0		1.0		4.0	\$585.00
	Coordinate One Call, and SUE	1.0	2.0		2.0	1.0	5.0	\$875.00
	Field Survey Locate and verify control points, topography, Locate level A and B utilities in the field. CAD, Prepare 3D (DTM) of survey areas and Prepare 2D (features and utilities)	1.0	2.0	6.0	11.0		20.0	\$3,265.00
	QA/QC	1.0	1.0				2.0	\$265.00
	Deliverables Survey, Test Hole Data		1.0	1.0		1.0	2.0	\$305.00
	SUE work The Rios Group (see note below)							\$4,170.00
2	Survey or area CRWA #2	Subtotal for this area						\$13,210.00
	Mobilization Prepare Deed and parcel sketches Identify control point locations of points to be used.	1.0	2.0		1.0		4.0	\$585.00
	Coordinate One Call, SUE and Arborist Work	2.0	1.0		2.0	1.0	6.0	\$910.00
	Field Survey Locate and verify control points, topography, Locate level A and B utilities in the field, Locate Trees, CAD Prepare 3D (DTM) of survey areas and Prepare 2D (features and utilities)	1.0	2.0	8.0	14.0		25.0	\$4,090.00
	Tie down Geotech Bore Locations (13)	1.0	2.0	3.0	10.0			\$2,745.00
	QA/QC	1.0		1.0			2.0	\$255.00
	Deliverables Survey, Arborist Report, Test Hole Data		1.0	1.0		1.0	2.0	\$305.00
	Arborist							\$150.00
	SUE work The Rios Group (see note below)							\$4,170.00
3	Survey or area CRWA #3	Subtotal for this area						\$13,305.00
	Mobilization Prepare Deed and parcel sketches Identify control point locations of points to be used.	1.0	2.0		1.0		4.0	\$585.00
	Coordinate One call and SUE work	2.0	1.0		2.0	1.0	6.0	\$910.00
	Field Survey Locate and verify control points, topography, Locate level A and B utilities in the field. CAD, Prepare 3D (DTM) of survey areas and Prepare 2D (features and utilities)	1.0	4.0	8.0	15.0		28.0	\$4,525.00
	Tie down Geotech Bore Locations (2)	1.0	1.0	2.0	6.0			\$1,705.00
	QA/QC	1.0		1.0			2.0	\$255.00
	Deliverables Survey, Test Hole Data		1.0	1.0		1.0	3.0	\$305.00
	SUE work The Rios Group (see note below)							\$5,020.00
4	Survey or area CRWA #4	Subtotal for this area						\$21,385.00
	Mobilization Prepare Deed and parcel sketches Identify control point locations of points to be used.	1.0	2.0		1.0		4.0	\$585.00
	Coordinate One Call, and SUE	2.0	1.0		2.0	1.0	6.0	\$910.00
	Field Survey Locate and verify control points, topography, Locate level A and B utilities in the field. CAD, Prepare 3D (DTM) of survey areas and Prepare 2D (features and utilities)	2.0	4.0	16.0	23.0		45.0	\$7,155.00
	QA/QC	2.0		2.0			4.0	\$510.00
	Deliverables Survey, Test Hole Data		1.0	1.0		1.0	3.0	\$305.00
	SUE work The Rios Group (see note below)							\$11,920.00
5	Survey or area Kyle Delivery Point	Subtotal for this area						\$9,055.00
	Mobilization Prepare Deed and parcel sketches Identify control point locations of points to be used.	1.0	2.0		1.0		4.0	\$585.00
	Coordinate One Call, and SUE work	1.0	2.0		2.0	1.0	5.0	\$875.00
	Field Survey Locate and verify control points, topography, Locate level A and B utilities in the field. CAD, prepare 3D (DTM) of survey areas and prepare 2D (features and utilities)	1.0	2.0	6.0	9.0		18.0	\$2,855.00
	QA/QC	1.0	1.0				2.0	\$265.00
	Deliverables Survey, Test Hole Data		1.0	1.0		1.0	2.0	\$305.00
	SUE work The Rios Group (see note below)							\$4,170.00
6	Survey or area San Marcos WTP Delivery Point	Subtotal for this area						\$7,880.00
	Mobilization Prepare Deed and parcel sketches Identify control point locations of points to be used.	1.0	1.0		1.0	1.0	4.0	\$555.00
	Coordinate One Call, and SUE	1.0	1.0			1.0	3.0	\$350.00
	Field Survey Locate and verify control points, topography, Locate level A and B utilities in the field. CAD, Prepare 3D (DTM) of survey areas and Prepare 2D (features and utilities)	1.0	2.0	4.0	7.0		14.0	\$2,235.00
	QA/QC	1.0	1.0				2.0	\$265.00
	Deliverables Survey, Test Hole Data		1.0	1.0		1.0	3.0	\$305.00
	SUE work The Rios Group (see note below)							\$4,170.00
7	Survey of area San Marcos 2nd Delivery Point	Subtotal for this area						\$9,560.00
	Mobilization Prepare Deed and parcel sketches Identify control point locations of points to be used.	1.0	2.0		1.0		4.0	\$585.00
	Coordinate One Call, SUE and Arborist work	1.0	2.0		2.0	1.0	5.0	\$875.00
	Field Survey Locate and verify control points, topography, Locate level A and B utilities in the field. CAD, Locate Trees, Prepare 3D (DTM) of survey areas and Prepare 2D (features and utilities)	1.0	2.0	6.0	10.0		19.0	\$3,060.00
	QA/QC	1.0	1.0				2.0	\$265.00
	Deliverables Survey, Arborist Report, Test Hole Data		1.0	1.0		1.0	2.0	\$305.00
	Arborist							\$300.00
	SUE work The Rios Group (see note below)							\$4,170.00
	Total Hours	35.0	55.0	70.0	124.0	15.0	266.0	
	Total Cost	\$5,250.00	\$6,325.00	\$7,350.00	\$25,420.00	\$1,275.00		\$83,860.00
	Supplemental Services							
	Additional 5 Level A S.U.E. Potholes	1.0	2.0	3.0	10.0		16.0	\$8,990.00
	Survey for 5 Level A S.U.E. Potholes							\$2,745.00
	Additional 5 days of Field crew time	5.0	10.0	10.0	60.0		85.0	\$15,250.00
	Verify /Reset horizontal and vertical control points at Booster Pump Station (CRWA #2) and the other delivery points.	2.0	10.0	20.0	40.0		72.0	\$11,750.00
		8.0	22.0	33.0	110.0	0.0	173.0	
		1200.0	2530.0	3465.0	22550.0	0.0		\$38,735.00
	Professional Services Summary							
	BMB Survey total							\$75,365.00
	SUE work The Rios Group							\$46,780.00
	J & L Consulting Certified Arborist							\$450.00
	Total Cost							\$122,595.00
	Assumptions: Right of Entry has been acquired at each area to be surveyed for access and to control panels that may fall outside the required survey areas. Copies of all the easements and descriptions will be provided in digital format. Control Point Values and Metadata on the project control will be provided.	TRG Assumptions: All test holes will be accessible to truck mounted vacuum excavation equipment. ROW permits from the County, City or TXDOT will not be required. Designed traffic control plans will not be required. Non-routine traffic control measures will not be required at some locations. The coring of pavement will not be required.						
	Note: S.U.E. work the Rios Group will consist of : UP to 10 Level A locates A maximum of 2500 L.F. of pipeline corridor Level B locations.							

Alliance Regional Water Authority
Phase 1B Booster Pump Station and Delivery Points
Final Design Project Schedule - **DRAFT**

ID	Task Name	Duration	Start	Finish	2020												2021												2022			2023	
					J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	J	F
1	Booster Pump Station and Delivery Points	204.6 wks	Wed 1/23/19	Fri 12/23/22	[Gantt bar spanning from 1/23/19 to 12/23/22]																												
2	Notice To Proceed	0 wks	Wed 1/23/19	Wed 1/23/19																													
3	Kickoff Meeting	0 wks	Wed 2/13/19	Wed 2/13/19																													
4	Preliminary Design	51.9 wks	Mon 2/11/19	Fri 2/7/20	[Gantt bar spanning from 2/11/19 to 2/7/20]																												
37	Final Design & Engineering Design Report	50.6 wks	Wed 2/26/20	Fri 2/12/21	[Gantt bar spanning from 2/26/20 to 2/12/21]																												
38	Board Award of Final Design Contract	0 days	Wed 2/26/20	Wed 2/26/20																													
39	Final Design Notice to Proceed	0 days	Fri 2/28/20	Fri 2/28/20																													
40	Project Cost Reduction Alternatives	6 wks	Mon 3/2/20	Fri 4/10/20	[Gantt bar spanning from 3/2/20 to 4/10/20]																												
41	Project Cost Reduction Alternatives	4 wks	Mon 3/2/20	Fri 3/27/20																													
42	Cost Reduction Alternatives Workshop w/ARWA	1 wk	Mon 3/30/20	Fri 4/3/20																													
43	Finalize BPS Design Approach	1 wk	Mon 4/6/20	Fri 4/10/20																													
44	Revise Hydraulics & System Hydraulics Report	50 wks	Mon 3/2/20	Fri 2/12/21	[Gantt bar spanning from 3/2/20 to 2/12/21]																												
45	Hydraulic Revisions - Draft	4 wks	Mon 3/2/20	Fri 3/27/20																													
46	Hydraulic Revisions - Final	2 wks	Mon 4/6/20	Fri 4/17/20																													
47	Draft System Hydraulics Report (Begin after 90%)	6 wks	Mon 11/16/20	Fri 12/25/20																													
48	ARWA Review & Workshop	3 wks	Mon 12/28/20	Fri 1/15/21																													
49	Final System Hydraulics Report	4 wks	Mon 1/18/21	Fri 2/12/21																													
50	Field Work	12 wks	Mon 4/13/20	Fri 7/3/20	[Gantt bar spanning from 4/13/20 to 7/3/20]																												
51	Topographic Survey for Delivery Points	4 wks	Mon 4/13/20	Fri 5/8/20																													
52	SUE Potholing	4 wks	Mon 6/8/20	Fri 7/3/20																													
53	Geotechnical Investigation	10 wks	Mon 4/13/20	Fri 6/19/20	[Gantt bar spanning from 4/13/20 to 6/19/20]																												
54	Field Work	3 wks	Mon 4/13/20	Fri 5/1/20																													
55	Testing	3 wks	Mon 5/4/20	Fri 5/22/20																													
56	Reporting	4 wks	Mon 5/25/20	Fri 6/19/20																													
57	Construction Plans & Specifications	39 wks	Mon 4/13/20	Fri 1/8/21	[Gantt bar spanning from 4/13/20 to 1/8/21]																												
58	60% Plans, Specs, Cost Projection	15 wks	Mon 4/13/20	Fri 7/24/20																													
59	ARWA Review & Workshop	3 wks	Mon 7/27/20	Fri 8/14/20																													
60	90% Plans, Specs, Cost Projection	10 wks	Mon 8/17/20	Fri 10/23/20																													
61	ARWA Review & Workshop	3 wks	Mon 10/26/20	Fri 11/13/20																													
62	100% Plans, Specs, Cost Projection, EDR	5 wks	Mon 11/16/20	Fri 12/18/20																													
63	ARWA Review & Workshop	2 wks	Mon 12/21/20	Fri 1/1/21																													
64	Final Plans, Specs, Cost Projection, EDR	1 wk	Mon 1/4/21	Fri 1/8/21																													
65	Texas Water Development Board	68.1 wks	Fri 2/7/20	Fri 5/28/21	[Gantt bar spanning from 2/7/20 to 5/28/21]																												
66	Engineering Feasibility Report Approval	8 wks	Fri 2/7/20	Fri 4/3/20	[Gantt bar spanning from 2/7/20 to 4/3/20]																												
67	Submit EFR to TWDB	0 wks	Fri 2/7/20	Fri 2/7/20																													
68	TWDB Approval of EFR	8 wks	Fri 2/7/20	Fri 4/3/20																													
69	Final Design Approval	8 wks	Fri 1/8/21	Fri 3/5/21	[Gantt bar spanning from 1/8/21 to 3/5/21]																												
70	Submit Final Construction Docs & EDR to TWDB/T	0 wks	Fri 1/8/21	Fri 1/8/21																													
71	TWDB/TCEQ Approval of Construction Docs & EDF	8 wks	Mon 1/11/21	Fri 3/5/21																													
72	TWDB Concurrence with Construction Award	4 wks	Mon 5/3/21	Fri 5/28/21																													
73	Advertise/Bid/Award	16 wks	Mon 3/8/21	Fri 6/25/21	[Gantt bar spanning from 3/8/21 to 6/25/21]																												
74	Advertise	6 wks	Mon 3/8/21	Fri 4/16/21																													

REGULAR MEETING
Alliance Regional Water Authority Board of Directors

BOARD MEMBER PACKETS

Wednesday, February 26, 2020 at 3:00 P.M.
501 E. Hopkins, San Marcos, TX 78666

- G.5** Consider adoption of Resolution 2020-02-26-002 approving Work Order #3 with Blanton & Associates, Inc. for additional Environmental Field Investigations for the Authority's Phase 1B projects as recommended by the Technical Committee. ~ *Ryan Sowa, P.E., Kimley-Horn & Associates*
-

Background/Information

Alliance Water entered into a Work Order in May 2018 with Blanton & Associates, Inc. to provide environmental services for the Phase 1B projects. The work order covered desktop studies, field work, environmental data forms, etc. to achieve environmental clearance for the Phase 1B projects. The new work order addresses changes from the original scope, including:

- Extension of project management time
- Wider field work corridor (due to wider easements resulting from agreement with GBRA)
- Multiple additional mobilizations for field work due to:
 - Alternative alignments
 - Strick landowner access requirements
 - Landowner cancellations
 - Urgent program requests
- Inline Elevated Storage Tank – site reviews

Below are some of the key facts regarding the Phase 1B Environmental Services proposal:

Firm: Blanton & Associates, Inc.

Fee: \$351,769

Work Order Type: Hourly, Not-to-Exceed

Anticipated Duration: 10 months

Project Manager: Velma Danielson

Key Subconsultants: W&M Environmental Group, LLC

Staff is requesting that the Committee recommend Board approval of a Work Order with a fee for the basic services of \$274,844 and a fee for supplemental effort in an amount not-to-exceed \$76,925 for a total fee of \$351,769. The Executive Director will be given the discretion to authorize the supplemental effort if needed.

REGULAR MEETING
Alliance Regional Water Authority Board of Directors

BOARD MEMBER PACKETS

Wednesday, February 26, 2020 at 3:00 P.M.
501 E. Hopkins, San Marcos, TX 78666

Attachment(s)

- Resolution 2020-02-26-002
- Proposal for Additional Environmental Investigation for the Phase 1B Program dated January 31, 2020.

Technical Committee Recommendation(s)

- Technical Committee unanimously recommended approval of the work order with Blanton & Associates.

Board Decision(s) Needed:

- Adoption of Resolution 2020-02-12-002 approving Work Order #3 with Blanton & Associates, Inc. for additional Environmental Field Investigations for the Authority's Phase 1B projects as recommended by the Technical Committee.



ALLIANCE WATER

RESOLUTION NO. 20200226-002

A RESOLUTION OF THE ALLIANCE REGIONAL WATER AUTHORITY BOARD OF DIRECTORS APPROVING WORK ORDER #3 BETWEEN THE AUTHORITY AND BLANTON & ASSOCIATES, INC. FOR ADDITIONAL ENVIRONMENTAL FIELD INVESTIGATIONS FOR THE PHASE 1B PROGRAM AND RELATED MATTERS, AND DECLARING AN EFFECTIVE DATE

RECITALS:

1. Alliance Regional Water Authority (the "Authority") entered into a master agreement with Blanton & Associates, Inc. for professional environmental services and related matters in May 2018.

2. The Authority hired Kimley-Horn & Associates to serve as the Owner's Representative for the Authority's Phase 1B Program. The Owner's Representative role is to assist the Authority with development of the Phase 1B Program as a whole, including coordination with all design firms after selection through completion of the Program.

3. The Authority entered into a work order with Blanton & Associates, Inc. for environmental investigations for the Authority's Phase 1B Projects in May 2018.

4. The proposed work order addresses some changes in the original scope for work, including: extended project management time, wider field work corridor associated with agreement with GBRA, additional mobilizations to account for landowner changes and program timing and surveys for the inline tanks.

5. The scope of services and fee for the attached work order was negotiated by the Executive Director and the Owner's Representative on behalf of the Authority. The work order references terms and conditions in the approved Master Agreement between the Authority and Blanton & Associates, Inc.

BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE ALLIANCE REGIONAL WATER AUTHORITY:

SECTION 1. The attached work order for additional Environmental Investigation between the Authority and Blanton & Associates, Inc. is approved with a fee not-to-exceed \$351,769.

SECTION 2. The Authority's Executive Director, Graham Moore, is authorized to execute the attached agreement on behalf of the Authority.

SECTION 3. This Resolution shall be in full force and effect immediately upon its passage.

Resolution 20200226-002
Phase 1B Additional Environmental Services

ADOPTED: February 26, 2020.

ATTEST:

Chris Betz
Chair, Board of Directors

James Earp
Secretary, Board of Directors

Blanton & Associates, Inc. - Environmental Scope for Alliance Water Phase 1B Program**Pursuant to Master Services Agreement Between Alliance Regional Water Authority and
Blanton & Associates, Inc., Dated May 23, 2018****Work Order No. 003****January 31, 2020****WORK ORDER NO. 003 - DEFINITION AND BACKGROUND**

The Environmental Consultant (B&A) was given notice to commence work on Work Order No. 001 (dated May 17, 2018) on June 11, 2018. Since that time, and as requested as part of the monthly invoice format provided by the Owner's Representative (Owner's Rep,) under "Recommended Scope Elements to Add/Remove," the Environmental Consultant has compiled a summary of observations regarding Work Order No. 001, noting amended scope items that may be necessary but did not require immediate discussion or action beginning with the February 15, 2019 invoice (for January 2019 services). This Work Order No. 003 is based largely on the cumulative list of scope items provided previously, which has been updated as necessary. These items reflect:

1. Requests from the Owner's Rep for B&A to perform additional work;
2. Changes or modifications to B&A's scope resulting from additional requirements not known at the time B&A's Work Order No. 001 scope was approved;
3. Recognition that pipeline alignment length in mileage and corridor width determined by the survey buffer will determine the project area for B&A Team field surveys.
4. Inefficiencies in field survey work that have occurred to date and that can reasonably be anticipated in future tasks based on progression of the Phase 1B Program Project to date; and
5. An estimated revised contract period of May 2018 through December 2020, for a total of 31 months.

In this Environmental Consultant's Work Order No. 003, scope of work amendments incorporate the changes indicated below (with reference to Work Order No. 001 tasks and section numbers) and in an attached cost spreadsheet. These modifications are consistent with: 1) email comments received from Owner's Representative on June 20, 2019; 2) email comments from Owner's Representative on August 6, 2019; 3) email comments received by B&A from the Owner's Representative on September 17, 2019; 4) comments received by B&A during a meeting between the Owner, Owner's Representative and B&A on October 8, 2019; 5) discussion in a memorandum from B&A to the Owner and Owner's Representatives dated November 5, 2019; and 6) comments received by B&A from the Owner's Representative on December 20, 2019 via email. The December 20th email comments (which relate to a Work Order No. 001 amendment request as well as this Work Order No. 003) are summarized below:

B&A is to submit an official Work Order No. 001 Amendment request to utilize the Task 7 - Supplemental Services funding in B&A's original Work Order No. 001 Level of Effort spreadsheet as follows:

- Re-allocate the \$170,895 budget for Task 7 - Supplemental Services funding in B&A's original Work Order No. 001 Level of Effort spreadsheet to fund the revised scope and fee that B&A submitted as the Work Order No. 001 – Amendment No. 1 revisions for Task 3 – Desktop Constraints Analysis, Task 5 – Water Treatment Plant, Task 6 – Environmental Documents and

Permitting Requirements (Transmission lines, Administration/ Operations Facility and Booster Pump Station), and Task 7 – Supplemental Services, for a lump sum amount of \$87,332.

- Convert Task 1 – Project Management and Task 4 – Field Surveys to time and materials compensation. B&A is to utilize the remaining \$83,563 of the \$170,895 (original Task 7 Work Order No. 001 budget) to fund a portion of B&A's revised scope of work and fee for Tasks 1 and 4, with the remainder of B&A's revised scope of work and fees for these two tasks to be addressed in new B&A Work Order No. 003 (i.e., this Work Order).

Assessing the status of right-of-entry (ROE) and property access as of January 1, 2020, B&A anticipates that no more than five multiple-field-day mobilizations will be necessary to complete field work for the Phase 1B Program Projects, and these mobilizations will be conducted in the manner outlined in B&A's memorandum to the Owner's Representative dated November 5, 2019. B&A's Level of Effort spreadsheet and fee for Task 4 – Field Surveys, is based on these five multiple-field-day mobilizations.

If additional mobilizations are required, B&A will request authorization to use the fee available in Task 7 – Supplemental Services - Task 7.6 Limited Alignment/Parcel Field Work Requests from Owner's Representative that is addressed in this Work Order No. 003. The additional scope and fee for Task 7 – Supplemental Services, is to provide access to additional funding for B&A, with prior approval from the Owner's Representative, for up to five un-anticipated and un-scoped limited parcel/alignment field survey mobilizations requested by the Owner's Representative.

Additional field mobilizations beyond the five multiple-field day mobilizations discussed above and under Task 4 of this scope of work, and beyond the five un-anticipated and un-scoped limited parcel/alignment field survey mobilizations discussed above and under Task 7 of this scope of work may result in an amendment to this scope of work and Level of Effort spreadsheet fee.

Compensation for Work Order No. 003 will be on a time and materials basis.

The scope items discussed in this Work Order No. 003 are additive to the tasks (with the same identifying task numbers) listed in B&A's original and revised Work Order No. 001.

SCOPE OF WORK

1. Project Management

- B&A's original contract period was May 2018 through June 2020 (based on environmental schedules), for a total of 25 months. Because the ROE process has taken longer than anticipated, B&A has added six additional months to the contract period (May 2018 through December 2020) as an estimate, for a total of 31 months. Therefore, additional time is included in the Project Management Task (Task 1) through this Work Order.

4. Field Surveys

4.2. Land Acquisition Coordination (With Exception of WTP Site)

- 4.2.1. Complete and submit property access request forms.
- 4.2.2. Coordinate with landowners to arrange for property access when directed by the land acquisition agent(s).
- 4.2.3. Additional work required to verify ROE property specific requirements.
- 4.2.4. Field surveys will be performed when ROE is obtained on as many contiguous parcels as possible, and the Owner's Rep has issued a notice to proceed (NTP) on parcels cleared for survey. Additional costs are included in this Work Order to accommodate field survey

inefficiencies that have been experienced (and are expected to continue) due to lack of ROE on sufficient parcels to allow for full days or multiple full days of field survey. Field survey activities include preparing all field data, including field data forms, field check lists, and GIS data.

No more than five multiple-field-day mobilizations will be necessary to complete field work for the Phase 1B Program Projects, and these mobilizations will be conducted in the manner outlined in B&A's memorandum to the Owner's Representative dated November 5, 2019. If additional mobilizations are required, B&A will request authorization to use the fee available in Task 7 – Supplemental Services - Task 7.6 Limited Alignment/Parcel Field Work Requests from Owner's Representative that is addressed in this Work Order No. 003.

- 4.2.5. Complete one agenda and meeting with land acquisition to detail specific field tasks and requests.

Revised Assumption(s) for Section 4.2:

- The Owner's Rep will issue ROE and NTP to the Environmental Consultant in order to begin field work.
- Receipt of ROE will be provided to the Environmental Consultant prior to field surveys being conducted, as required by the Owner's Rep's Field Work Site Visit Protocol.
- B&A will submit Property Access Request Forms (PARFs) to complete field work once B&A receives NTP for enough parcels to ensure efficient field crew deployment and confirms the most recent segment alignment.
- B&A will conduct this field work contingent upon receipt of the completed PARFs, and provided that the Program does not make changes to survey area requirements and landowners do not either revoke access or add last minute restrictions severely limiting B&A's ability to access these parcels or prohibiting B&A from conducting planned field work within the two-week PARF window. Should these issues arise, B&A will assess any impacts to planned field work to determine whether we are able to move forward as scheduled or will need to postpone field work due to circumstances beyond either the Program's or B&A's control.
- Archeological pedestrian surveys will occur during the first week, and any needed trenching will occur during the second week, of the two-week access window.

4.3 Survey Transmission lines, Administration/Operations Facility and Booster Pump Station, delivery points:

- 4.3.6. Based on re-alignments, alignment alternatives or deviations of proposed transmission lines and associated or additional delivery points, evaluate information to perform field surveys on those re-alignments, alternatives or deviations and delivery points.
- 4.3.7. Prepare a risk register prior to commencement of field work
- 4.3.8. Prepare for field surveys in compliance with the Owner's Rep's Field Work Site Visit Protocol, original and revised, including preparation of field binders (ROE table, field checklists, survey forms, field maps, etc.) and making crew assignments and travel arrangements.
- 4.3.9. For Administration/Operations Facility and Booster Pump Station site only, perform windshield survey of pond adjacent to site for Owner's Rep to prepare a City of San Marcos Watershed Protection Plan, as requested by Owner's Rep on June 20, 2019.

- 4.3.10 For Segments C and D only, conduct field surveys on the two selected inline tank sites, as requested by the Owner's Rep on August 6, 2019.

Revised Assumption(s), Alignment Modification(s), and Project Revision(s) Addressed in this Work Order, for Section 4.3:

- Transmission lines will be studied along a 150-foot buffer (75 feet to each side of the center line of the alignment) for Segments A, B, D, and E. This revised 150-ft study corridor includes the co-location of the GBRA line and the additional 20 ft on each side of the buffer for stream/creek crossings. The transmission line for Segment C will be studied along the originally scoped 100-foot buffer (50 feet to each side of the center line of the alignment).
- Realignment requires additional field surveys and review of desktop information resources. Costs associated with realignments based on project experience to date are included in this Work Order. For realignments resulting in limited access/parcel field survey mobilizations, B&A will request authorization to use the fee available in Task 7 – Supplemental Services - Task 7.6 Limited Alignment/Parcel Field Work Requests from Owner's Representative that is addressed in this Work Order No. 003.
- Pipeline alignment length in mileage and corridor width determined by the survey buffer will determine the project area for B&A Team field surveys.

4.4. Deliverables

Deliverables changed or added to the Scope of Work:

- 4.4.1 GIS data uploads/updates including survey corridor status shapefiles, and excel file with status are required to be submitted within two weeks of field survey event
- 4.4.3 Field Checklists (required to be submitted within two weeks of field survey event)

7. Supplemental Services

7.6 Limited Alignment/Parcel Field Work Requests from Owner's Representative

- 7.6.1 Based on previous experience with field survey work performed to date and as discussed in B&A's memorandum dated November 5, 2019 to the Owner and Owner's Representative, B&A anticipates additional requests from the Owner's Representative for field mobilizations on limited numbers of parcels or portions of the alignment in response to alignment revisions, landowner conditions, or requirements that are beyond the control of either Alliance Water or B&A including, but not limited to, ROE expiration dates, specific landowner access conditions, alignment changes resulting in additional field work, temporary injunction parcel access, etc.

No more than five limited-access field survey mobilizations (i.e., beyond the protocol outlined in B&A's memorandum dated November 5, 2019) will be requested by the Owner's Representative. Additional requests beyond this number may result in an amendment to this Work Order scope and fee.

Assumption(s) for Section 7.6:

- The Owner's Representative will continue to request B&A conduct field surveys on a limited number of parcels that will add field mobilizations scope and costs beyond those included in B&A's Task 4 scope of work in Work Order No. 003.
- B&A assumes these requests will continue for the duration of B&A's work on Task 4 in the same manner that they occurred from January 2019 – December 2019. As such, any requests for limited field work that are beyond the protocol outlined in B&A's memorandum dated November 5, 2019 will be subject to the supplemental field work budget included in Task 7 of Work Order No. 003.

Alliance Water
 Note: Text in blue font indicates changes in scope included in B&A's Work Order No. 003

**Pipeline Consultant
 1/31/2020
 Detailed Overall Env Consultant Cost Breakdown**

Work Order #3 Summary	
Tasks 1 - 6	\$ 274,844.00
Task 7	\$ 76,925.00
Total Work Order #3	\$ 351,769.00

Task	Project Role	Principal	PM	DPM	ENV Professional	Endangered Species Lead	Endangered Species Scientist	ENV Tech II	ENV Tech I	USACE Permit Lead	USACE Permit Scientist I	ENV Tech I	CR Lead	CR Scientist II	Env Tech II - Waters	Env Tech I - Waters	Senior GIS Analyst	GIS Analyst	GIS Technician	B&A Total Hours	B&A Total Labor Effort	B&A Total Expense Effort	W&M Labor	W&M Expense Effort	Total Sub Effort	Total Effort	Assumptions	
		\$225.00	\$180.00	\$170.00	\$150.00	\$160.00	\$130.00	\$110.00	\$90.00	\$160.00	\$130.00	\$90.00	\$160.00	\$130.00	\$110.00	\$90.00	\$140.00	\$110.00	\$95.00									
1	Task 1 - Project Management																				167	23270	0			0	23270	See Discussion - Task 1, Scope of Work
1.1	Prepare Monthly Summary Reports/Invoicing (6 additional months)	8	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14	2,880	-	-	-	2,880	See Discussion - Task 1, Scope of Work	
1.2	Compliance with the PMP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	See Discussion - Task 1, Scope of Work	
1.5	Schedule Development and Monthly Updates (for seven program elements, plus 2 inline storage tanks added to project)	7	4	-	-	-	-	-	41	-	-	-	-	-	-	-	-	-	-	-	52	5,985	-	-	-	5,985	See Discussion - Task 1, Scope of Work	
1.6	Meetings																											
1.6.1	Conduct Progress Meetings with Owner's Representative (6 additional meetings)	-	16	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	4,920	-	-	-	4,920	See Discussion - Task 1, Scope of Work	
1.6.2	Internal team scrums (6 additional months)	-	4	16	4	-	-	-	24	7	-	-	7	-	-	-	-	-	11	-	73	9,485	-	-	-	9,485	See Discussion - Task 1, Scope of Work	
4	Task 4 - Field Surveys																				1,445	177,065	13,297			61,212	251,574	
4.2	Land ROE Coordination (With Exception of WTP Site)																											
4.2.1	Complete and submit PARFs	-	4	3	-	-	-	-	22	-	-	-	-	-	-	-	-	-	-	-	29	3,210	-	-	-	3,210	See Discussion/Assumptions - Task 4, Scope of Work	
4.2.2	Arrange property access, as required	-	9	9	-	-	-	-	15	-	-	-	-	-	-	-	-	-	-	-	33	4,500	-	1,400	-	1,400	5,900	See Discussion/Assumptions - Task 4, Scope of Work
4.2.3	Verify ROE property specific requirements	-	-	-	-	-	-	-	15	-	-	-	-	-	-	-	-	-	-	-	15	1,350	-	-	-	1,350	See Discussion/Assumptions - Task 4, Scope of Work	
4.2.4	Field survey costs due to ROE inefficiencies	-	15	30	-	15	60	67	30	4	90	75	-	60	184	-	-	-	-	-	630	75,200	9,551	26,550	-	26,550	111,300	See Discussion/Assumptions - Task 4, Scope of Work
4.2.5	Agenda & Meeting w/ land acquisition	-	3	6	-	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-	15	2,100	-	573	-	573	2,673	See Discussion/Assumptions- Task 4, Scope of Work
4.3	Survey Transmission lines, Administration/Operations Facility and Booster Pump Station, delivery points																											
4.3.6	Survey re-alignments, alternatives, and increased area	-	60	120	-	6	-	-	45	6	-	-	6	-	-	-	-	-	6	-	249	38,700	-	11,921	1,293	13,214	51,914	See Discussion/Assumptions - Task 4, Scope of Work
4.3.7	Risk register prior to field work	-	1	1	-	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-	9	980	-	-	-	980	See Discussion/Assumptions - Task 4, Scope of Work	
4.3.8	Prepare for field surveys	-	11	22	-	-	3	-	22	-	3	-	-	3	-	-	3	18	180	-	265	28,370	3,746	3,765	-	3,765	35,881	See Discussion/Assumptions - Task 4, Scope of Work
4.3.9	Administration/Operations Facility and Booster Pump Station - Survey	-	1	1	-	-	-	-	-	3	3	-	-	-	-	-	-	1	-	-	9	1,330	-	-	-	1,330	See Discussion/Assumptions - Task 4, Scope of Work	
4.3.10	Inline Tank (Segments C and D) surveys	-	1	3	-	1	3	3	6	3	6	6	3	6	-	-	-	-	4	-	45	5,550	-	1,510	-	1,510	7,060	See Discussion/Assumptions - Task 4, Scope of Work
4.4	Deliverables																											
4.4.1	Submit GIS data uploads	-	4	6	-	-	-	-	7	-	-	-	-	-	-	-	7	7	45	-	76	8,395	-	10,670	-	10,670	19,065	See Discussion/Assumptions - Task 4, Scope of Work
4.4.3	Submit Field Checklists	-	4	3	-	-	-	6	45	-	-	-	-	6	6	-	-	-	-	-	70	7,380	-	3,530	-	3,530	10,910	See Discussion/Assumptions - Task 4, Scope of Work
7	Task 7 - Supplemental Services																				475	57,425	1,250			18,250	76,925	
7.6.1	Limited Alignment/Parcel Field Work Requests from Owner's Representative (Assume 5 Field Events)	-	10	30	-	5	40	55	60	5	-	-	10	160	-	60	5	30	5	-	475	57,425	1,250	17,250	1,000	18,250	76,925	See Discussion/Assumptions - Task 7, Scope of Work

REGULAR MEETING
Alliance Regional Water Authority Board of Directors

BOARD MEMBER PACKETS

Wednesday, February 26, 2020 at 3:00 P.M.
 501 E. Hopkins, San Marcos, TX 78666

- G.6** Consider adoption of Resolution 2020-02-26-003 approving Work Order #4 with Kimley-Horn & Associates, Inc. for Owner’s Representative Services for March 2020 through February 2021 for the Authority’s Phase 1B Program as recommended by the Technical Committee. ~ *Graham Moore, P.E., Executive Director*

Background/Information

The Authority entered into a work order with Kimley-Horn & Associates, Inc. in February 2018 for the first year of Owner’s Representative Services for the Phase 1B Program and entered into a second work order in February 2019 for the second year. The current work order is set to expire on February 29, 2019.

The table below outlines the contracted fees for Owner’s Representative services for the first two work orders and the actual/projected total expenditure for each:

Work Order / Period	Contract Value	Total Expenditure
#1 (3/18 – 2/19)	\$2,609,966	\$1,984,280
#2 (3/19 – 2/20)	\$2,877,103	\$2,815,225

The Executive Director negotiated a new work order with Kimley-Horn to begin on March 1, 2020 and extend through February 28, 2021. Below is a summary of the scope of work.

Scope of Work

A detailed scope of work is attached with summary costs listed below. Due to the scale of the effort it is difficult to get a definitive list of all activities that will be required. It will be incumbent upon the Executive Director to closely monitor the activities and expenditures.

Task	Anticipated Fee
1 – Program Management Plan Updates	\$49,374
2 – Stakeholder Coordination	\$312,436
3 - Budgeting	\$119,180
4 - Schedule	\$98,555
5 – Reporting	\$48,920
6 – Data Management	\$119,291
7 – Environmental Management	\$162,199
8 – Land Acquisition Management	\$510,978
9 – TWDB Management	\$66,260
10 – Design Standards	\$339,134

REGULAR MEETING
Alliance Regional Water Authority Board of Directors

BOARD MEMBER PACKETS

Wednesday, February 26, 2020 at 3:00 P.M.
501 E. Hopkins, San Marcos, TX 78666

11 – Engineering Design Management	\$774,030
12 – Quality Assurance	\$48,021
13 – Electrical Power Planning*	\$72,514
14 – Permit Coordination/Tracking	\$46,899
15 – Procurement & Construction Phase	\$29,213
16 – Project Administration	\$57,076
17 – Other Services	\$256,342
Maximum Fee	\$3,110,422

Fee Schedule

The work is proposed to be contracted on an hourly rate basis. Kimley-Horn's subconsultants account for 56.7% of the total anticipated effort, with 53.4% of the total effort contracted to Historically Underutilized Businesses. The costs include a 10% markup by Kimley-Horn on all subconsultants work.

Contract

The work order will be issued under the terms and conditions of the Master Agreement entered into between Kimley-Horn and Alliance Water in May 2016.

Attachment(s)

- Resolution 2020-02-26-003
- Proposal dated February 7, 2020 from Kimley-Horn for Phase 1B – Owner's Representative Services

Technical Committee Recommendation(s)

- Technical Committee unanimously recommended approval of the work order with Kimley-Horn for Phase 1B Owner's Representative Services.

Board Decision(s) Needed:

- Consider adoption of Resolution 2020-02-26-002 approving Work Order #4 with Kimley-Horn & Associates, Inc. for Owner's Representative Services for March 2020 through February 2021 for the Authority's Phase 1B Program as recommended by the Technical Committee.



ALLIANCE WATER

RESOLUTION NO. 20200226-003

A RESOLUTION OF THE ALLIANCE REGIONAL WATER AUTHORITY BOARD OF DIRECTORS APPROVING WORK ORDER #4 BETWEEN THE AUTHORITY AND KIMLEY-HORN & ASSOCIATES, INC. FOR OWNER’S REPRESENTATIVE SERVICES FOR MARCH 2020 THROUGH FEBRUARY 2021 RELATED TO THE AUTHORITY’S PHASE 1B PROGRAM AND RELATED MATTERS, AND DECLARING AN EFFECTIVE DATE

RECITALS:

1. The Alliance Regional Water Authority (the “Authority”) through the adoption of Resolution 20180228-003 entered into a work order with Kimley-Horn & Associates, Inc. (“Kimley-Horn”) for Owner’s Representative Services for the Authority’s Phase 1B Program. The scope of services was for the time period beginning March 1, 2018 and ending February 28, 2019. A separate work order for the March 1, 2019 through February 29, 2020 period was approved by the Board through the adoption of Resolution 20190227-002.

2. The Hays Caldwell Public Utility Agency, the predecessor to the Authority entered into a master agreement with Kimley-Horn for engineering services and related matters in August 2015.

3. The scope of services and fee for the attached work order was negotiated by the Executive Director on behalf of the Authority. The scope of services covers the period from March 1, 2020 through February 28, 2021. The work order references terms and conditions in the approved Master Agreement between the Authority and Kimley-Horn.

BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE ALLIANCE REGIONAL WATER AUTHORITY:

SECTION 1. The attached work order for Owner’s Representative services between the Authority and Kimley-Horn is approved.

SECTION 2. The Chair of the Authority’s Board of Directors, Chris Betz, is authorized to execute the attached agreement on behalf of the Authority.

SECTION 3. This Resolution shall be in full force and effect immediately upon its passage.

ADOPTED: February 26, 2020.

ATTEST:

Chris Betz
Chair, Board of Directors

James Earp
Secretary, Board of Directors



February 7, 2020

Mr. Graham Moore, P.E.
Executive Director
Alliance Regional Water Authority
1040 Highway 123
San Marcos, TX 78666

**RE: *Scope of Services – Work Order No. 4
Phase 1B Infrastructure – Owner’s Representative***

PROJECT DEFINITION AND BACKGROUND

The Alliance Regional Water Authority (Alliance Water) has developed a Capital Improvements Plan (CIP) per Resolution 20160525-008 that identifies anticipated infrastructure requirements over the several decades. This CIP is divided into multiple project delivery phases. Phase 1A is scheduled to be completed in 2018. Phase 1B consists of infrastructure to be delivered by the end of 2023 and includes groundwater wells, water treatment plant, transmission mains, booster pump station, and eight (8) delivery points. Alliance Water and Guadalupe Blanco River Authority (GBRA) have entered into an agreement to oversize a portion of the proposed Phase 1B infrastructure to accommodate delivery of water to both Alliance Water as well as GBRA customers (three additional delivery points). The infrastructure to be oversized includes: water treatment plant, a significant portion of the transmission mains, and booster pump station.

Alliance Water has obtained a State Water Implementation Fund for Texas (SWIFT) loan from the Texas Water Development Board (TWDB) for the proposed Phase 1B Program.

The Scope of Services for this agreement consists of Kimley-Horn and Associates, Inc. (“Kimley-Horn” or “Owner’s Representative”) serving Alliance Water as an Owner’s Representative by assisting in the management of the overall project delivery of Phase 1B Program through the completion and startup of the infrastructure in 2023. In performing the services, the Owner’s Representative will operate as an extension of, and in complete coordination with, Alliance Water’s staff. While maintaining a high level of coordination with Alliance Water, the Owner’s Representative will be the representative and not the agent of Alliance Water. The Owner’s Representative will exercise independent judgment and will operate without extensive oversight and direction. The Owner’s Representative will commit the personnel and resources required to fully and effectively perform the services throughout the term of this Agreement.

Work Order No. 4 will extend for a duration of 12 months. Attachment A identifies the key phases that each infrastructure contract is anticipated to complete within this 12-month period.

KEY TERMINOLOGY

- **Consultants** – refers collectively to consultants (design, environmental, and land acquisition) that will be procured by and contracted directly with Alliance Water for the Phase 1B Program.
- **Land Acquisition Consultant Team** – refers to consultants (legal, land agent / appraisal, and survey) that will be procured by and contracted directly with Alliance Water for the land acquisition process for the Phase 1B Program.
- **Environmental Consultant** – refers to the consultant that will be procured by and contracted directly with Alliance Water to perform environmental services for the Phase 1B Program.
- **Combined Program** – refers to the infrastructure that will be shared between Alliance Water and GBRA.

SCOPE OF WORK

1. Program Management Plan Updates

This task consists of the ongoing implementation and maintenance of the Phase 1B Program Management Plan (PMP) that was developed in Work Order No. 2. The PMP defines the policies and procedures to be implemented by Phase 1B Program personnel. Tasks to be performed may include the development of additional PMP components as well as the maintenance of the following components already developed:

- 1.1. Communication Protocol
- 1.2. Document Control / Data Management Protocol
- 1.3. Quality Assurance Plan
- 1.4. Milestone Review Process Protocol
- 1.5. Risk Management Plan
- 1.6. Land Acquisition Protocol
- 1.7. Environmental Management Protocol
- 1.8. Texas Water Development Board (TWDB) Protocol
- 1.9. Design Management Protocol
- 1.10. Budget and Funding Protocol
- 1.11. Schedule Protocol
- 1.12. Reporting Protocol
- 1.13. Permit Management Protocol
- 1.14. GBRA & Project Advisory Committee (PAC) Protocol
- 1.15. Procurement Protocol
- 1.16. Construction Protocol, including integration of the Construction Management & Inspection (CM&I) team
- 1.17. PMP Appendices

Task Meetings:

- None

2. Stakeholder Coordination

This task consists of the coordination that will be required by the Owner’s Representative in performance of the management of the Phase 1B program. Perform stakeholder coordination in accordance with the protocol established in the PMP. This task includes:

2.1. Stakeholder identification

2.2. Initial and/or Ongoing Coordination

- 2.2.1. Executive Director
- 2.2.2. Technical Committee and Board Meetings – attend and present status updates
- 2.2.3. Project Advisory Committee (PAC) Meetings – attend and present status updates
- 2.2.4. Other Alliance Water Consulting Services (Public Relations, Accounting, Legal)
- 2.2.5. Texas Commission on Environmental Quality (TCEQ)
- 2.2.6. Texas Department of Transportation (TxDOT)
- 2.2.7. Union Pacific Railroad (UPRR)
- 2.2.8. Counties (Hays, Caldwell, Guadalupe)
- 2.2.9. Cities (Kyle, San Marcos, Umland, Lockhart, Maxwell, others)
- 2.2.10. GBRA and/or its consultants
- 2.2.11. Other utilities, entities

Task Meetings:

- Alliance Water Executive Director coordination meetings
- Alliance Water Executive Committee and Board Meetings
- PAC Meetings
- Other Alliance Water Consulting Services – as part of coordination meetings with Executive Director
- Texas Commission on Environmental Quality
- Texas Department of Transportation
- Union Pacific Railroad
- Counties
- Cities
- Other utilities, entities
- Design consultants will be required to meet with agencies separately on project specific issues.

3. Budgeting

Maintain the budget tracking protocol developed in the PMP for the Phase 1B Program. It is assumed that the budget will be maintained in Microsoft Excel and linked to the schedule. The format of the budget will be in accordance with TWDB requirements. Monthly Budget updates are anticipated with monthly review sessions as established in the PMP. This task includes:

3.1. Perform monthly budget updates:

- 3.1.1. Track costs to the Phase 1B Program versus the anticipated budget. Costs associated with the Combined Program will be tracked separately
- 3.1.2. Coordinate with applicable parties to receive current opinion of probable construction cost (OPCC) data for projects as identified in PMP.
- 3.1.3. Identify budget deviations and coordinate with applicable parties for potential corrective measures. Summarize budget deviations within monthly updates.
- 3.2. Prepare budget updates for the following parties at the frequency identified:
 - 3.2.1. Executive Director – monthly
 - 3.2.2. Alliance Water Board and Technical Committee – quarterly
 - 3.2.3. PAC – quarterly
 - 3.2.4. TWDB – quarterly
 - 3.2.5. Public – quarterly
- 3.3. Program Cost Analysis and Review – perform cost analyses, which may include: evaluating proposed design standards and specifications, obtaining contractor input, and comparing cost projections prepared by Design Consultants to look for potential options for controlling projected program costs.

Task Meetings:

- None

4. Schedule

Maintain the schedule as Identified in the PMP for the Phase 1B Program. The schedule management will be performed monthly using Microsoft Project with schedule review sessions as established in the PMP (concurrent with budget review sessions). This task includes:

- 4.1. Perform monthly schedule updates:
 - 4.1.1. Coordinate with applicable parties to obtain current schedules for projects
 - 4.1.2. Identify schedule deviations and coordinate with applicable parties for potential corrective measures
 - 4.1.3. Special updates will be performed when critical information becomes known
- 4.2. Prepare schedule updates for the following parties at the frequency identified:
 - 4.2.1. Executive Director – monthly
 - 4.2.2. Alliance Water Board and Technical Committee – quarterly
 - 4.2.3. PAC – quarterly
 - 4.2.4. TWDB – quarterly
 - 4.2.5. Public – quarterly
- 4.3. Program Schedule Analysis and Review – perform overall program schedule analysis, which may include: obtaining contractor input and comparing schedules prepared by Design Consultants to look for potential options for controlling projected program schedule.

Task Meetings:

- None.

5. Reporting

Prepare routine progress reports as identified in the PMP for the Phase 1B Program. This task includes:

- 5.1. Prepare monthly progress reports:
 - 5.1.1. Coordinate with applicable parties to obtain status for project tasks
 - 5.1.2. Provide Board and Technical Committee a detailed report identifying what was worked on during the previous month and what is anticipated for the following month
- 5.2. Prepare progress updates for the following parties at the frequency identified:
 - 5.2.1. Executive Director – weekly summary and monthly report
 - 5.2.2. Alliance Water Board and Technical Committee – monthly
 - 5.2.3. PAC – monthly
 - 5.2.4. TWDB – quarterly
 - 5.2.5. Public – quarterly

Task Meetings:

- None.

6. Data Management

Manage record keeping as established in the PMP. Data storage will continue to be performed utilizing Microsoft SharePoint as well as Esri ArcGIS. This task includes:

- 6.1. Overall data management:
 - 6.1.1. Perform administrative support functions for overall project record keeping and implementing the data management system;
 - 6.1.2. Enter information into applicable data management system;
 - 6.1.3. Distribute updated contract documents ensuring program team maintain current version of project documents;
 - 6.1.4. Prepare, manage, record, distribute and archive documentation of project activities, progress, and related communications;
 - 6.1.5. Log receipt of documents and inquiries requiring a response, ensure delivery of documents to appropriate parties, track documents, and monitor timely response;
 - 6.1.6. Review supporting documents for conformance with PMP guidelines;
 - 6.1.7. Maintain project records;
 - 6.1.8. Maintain change management logs, RFI logs, RFPs logs, submittal logs;
 - 6.1.9. Perform internal audits for quality assurance of overall documents.
- 6.2. Microsoft SharePoint:
 - 6.2.1. Perform ongoing data management of documents within SharePoint,
- 6.3. Interactive Web-based GIS:
 - 6.3.1. Perform data updates for the following data to be hosted in ArcGIS application, assumed to occur at the frequencies identified:
 - Background Imagery (provided by Esri basemapping) – annually;
 - Parcel data (right-of-entry and land acquisition status) – weekly;
 - City / County / District boundaries – annually;

- Alliance Water proposed infrastructure – monthly;
- FEMA 100-year floodplain (from FEMA map service) – annually;
- United States Geological Service (USGS) National Hydrography Dataset (from USGS hosted map service) – annually;
- United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (from USFWS hosted map service) – annually;
- Desktop/Field Environmental data provided by Environmental Consultant – monthly;
- Topographical data – annually;
- Existing utility data – monthly

Updates/edits will be performed in an ArcGIS Desktop environment prior to being viewable in the web-based application. Data and application support and hosting will be provided for the duration of this this Work Order.

Task Meetings:

- None.

Deliverables:

- Hard copy deliverables to be provided to Alliance Water and other parties as part of the Owner’s Representative services are included in this task. Deliverables may include:
 - Meeting agendas;
 - Program status reports;
 - Copies of the PMP;
 - Exhibits.

7. Environmental Management

Perform environmental management and coordination for the Phase 1B Program in accordance with the PMP. This task includes:

- 7.1. Perform regular coordination with Environmental Consultant to discuss ongoing activities, schedule, potential issues, deliverables, and other items related to their scope of work.
- 7.2. In conjunction with the Environmental Consultant, perform ongoing coordination with key agencies, including:
 - 7.2.1. United States Army Corps of Engineers (USACE)
 - 7.2.2. Texas Parks and Wildlife Department (TPWD)
 - 7.2.3. Local floodplain administrators.
- 7.3. Assist with the review of Environmental Consultant monthly invoices.
- 7.4. Perform continuous tracking of Environmental Consultant’s project scope and assist with the development and review of potential amendments.
- 7.5. Perform as-needed site visits with Environmental Consultant during their field studies.
- 7.6. To the extent reasonably possible, site visits will be coordinated with those identified in Task 8 and 11.
- 7.7. Review and comment on environmental permitting documents (prepared by Environmental Consultant) for the following agencies:

- 7.7.1. USACE
- 7.7.2. TPWD
- 7.7.3. United States Fish and Wildlife Service (USFWS)
- 7.7.4. Texas Historical Commission (THC).
- 7.8. Review and comment on TWDB environmental deliverables prepared by Environmental Consultant.
- 7.9. Other Environmental Services as identified and assigned by Alliance Water.

Task Meetings:

- Environmental agency (USACE, USFWS, TPWD, THC) meetings
- Environmental Consultant Team progress meetings

8. Land Acquisition Management

Perform management and coordination for the Phase 1B Program land acquisition process in accordance with the PMP and the RAMP. This task includes:

- 8.1. Perform regular coordination with Land Acquisition Consultant Team (including weekly progress meetings) to discuss ongoing activities, schedule, potential issues, deliverables, and other items related to their scope of work.
- 8.2. Assist with the review of Land Acquisition Consultant Team monthly invoices.
- 8.3. Perform continuous tracking of Land Acquisition Consultant’s project scope and assist with the development and review of potential amendments.
- 8.4. Review land acquisition data for conformance to the PMP/RAMP requirements and provide comments to the Land Acquisition Consultant Team.
- 8.5. Perform as-needed site visits with Land Acquisition Consultant Team.
- 8.6. To the extent reasonably possible, site visits will be coordinated with those identified in Task 7 and 11.
- 8.7. Review and comment on TWDB land acquisition deliverables prepared by Land Acquisition Consultant Team.
- 8.8. Coordination with landowners to facilitate access for Consultants for field work,
- 8.9. Weekly meetings with Alliance Water and Special Counsel,
- 8.10. Other Land Acquisition Services as identified and assigned by Alliance Water.

Task Meetings:

- Land Acquisition Team progress meetings

9. Texas Water Development Board Management

Perform management and coordination with the TWDB for the Phase 1B Program in accordance with the PMP. This task includes:

- 9.1. Identify milestone deliverables and provide feedback on critical path schedule.
- 9.2. Review TWDB deliverables for conformance to TWDB requirements and provide comments to the Consultants.
- 9.3. Perform regular coordination with the TWDB to discuss ongoing activities, schedule, potential issues, status of deliverables, and other items related to the TWDB SWIFT loan.

- 9.4. Prepare fund release request letters for submission to the TWDB, including required backup information.

Task Meetings:

- TWDB progress meetings

10. Design Standards

Prepare Design Standards, Standard Specifications for Construction, and associated Standard Details for the Consultants to utilize in the development of design documents. In general, the specification or details should incorporate nationally recognized standards, or regionally recognized standards, for references. Categories include:

- 10.1. Development of Design Standards, Specifications and Details (develop and/or update as needed):
 - 10.1.1. Transmission Pipelines and Delivery Points Design Standards
 - 10.1.2. Standard Specifications for Construction
 - 10.1.3. Standard Details
 - 10.1.4. Pipeline Corrosion Protection Standards
 - 10.1.5. Telemetry, Instrumentation & Controls, SCADA, and Security Standards – Development of Design Standards, Specifications and Details for the following:
 - 10.1.5.1. Fiber Optic Design Standards, Specifications and Details
 - 10.1.5.2. SCADA Communication Standards, Specifications and Details
 - 10.1.5.3. Instrumentation Standards, Specifications and Details
 - 10.1.5.4. Security Standards, Specifications and Details
 - 10.1.6. Facility General Electrical Standards – to be developed by the Water Treatment Plant Consultant as part of their specification development. The Owner’s Representative will review and comment and coordinate with other applicable Consultants to ensure consistency.
- 10.2. Master Specifications – develop and/or update as needed
- 10.3. Record Drawings (Plans & GIS)
- 10.4. Address comments from Design Consultant Teams and finalize

Task Meetings:

- Specifications and Details Review Meeting (1 total).

11. Engineering Design Management

Perform engineering design management and coordination for the Phase 1B Program in accordance with the PMP. Manage the following proposed design contracts:

- 11.1. Hydrogeology / Well Drilling
- 11.2. Raw Water Infrastructure
- 11.3. Water Treatment Plant and High Service Pump Station
- 11.4. Transmission Pipelines (5 contracts)
- 11.5. Administration Building and Operations Center
- 11.6. Booster Pump Station and Delivery Points
- 11.7. Elevated Storage Tanks

11.8. Program Survey

The following tasks shall be performed, as applicable to the current status of the contract:

- Identify early actions required.
- Assist with the development and review of project scope (new contracts and/or contract amendments) for the Design Consultants.
- Assist with the review of proposed LOE developed by the Design Consultants.
- Review and provide comments on the Project Management Plans prepared by the Design Consultants.
- Assist with the review of Design Consultant monthly invoices.
- Perform regular coordination with the Design Consultants to discuss ongoing activities, schedule, potential issues, deliverables, and other items related to their scope of work.
- Perform as-needed site visits with Design Consultants.
- To the extent reasonably possible, site visits will be coordinated with those identified in Task 7 and 8.
- Review and comment on TWDB Engineering Feasibility Report (EFR) deliverables prepared by Design Consultants.
- Review and comment on milestone submittals (60%, 90%, final) prepared by Design Consultants.
- Review/Provide comments on Consultant OPCCs at milestones.
- Other Design-related services as assigned by Alliance Water.

Task Meetings:

- Consultant Design Teams progress meetings

12. Quality Assurance

Perform Quality Assurance protocol for the Phase 1B Program in accordance with the PMP. This task includes:

- 12.1. Review the Quality Assurance / Quality Control (QA/QC) Plans prepared by the Consultants for conformance to the PMP and provide comments.
- 12.2. Perform regular coordination with Consultants to confirm implementation of QA/QC in project activities.
- 12.3. At each milestone submittal, receive QA/QC documentation from Consultants and review for adherence to QA/QC Plan.

Task Meetings:

- None.

13. Electrical Power Planning

Perform ongoing planning and coordination support associated with the electrical power required for the Phase 1B Program infrastructure, including the following:

- Well Pumps and Raw Water Infrastructure
- Water Treatment Plant and High Service Pump Station

- Booster Pump Station, Administration Building and Operations Center
- Potential Corrosion Protection Systems for Transmission Pipelines

The following tasks shall be performed:

- 13.1. Perform preliminary analyses and coordinate with Design Consultants to determine approximate demand and energy associated with each of the potential service locations.
- 13.2. Develop a strategy for contacting, gathering system quality and reliability data, and discussing rates with each of the electrical service providers.
- 13.3. Coordinate with the electrical service providers to evaluate potential cost and reliability of service options for each location.
- 13.4. Assist Alliance Water with negotiations of the electrical supply agreements.
- 13.5. Assist the Alliance by defining special equipment needs such as power factor correction, motor starting equipment to mitigate voltage dips, etc.

Task Meetings:

- Alliance Water and Electrical Service Providers coordination meetings

14. Permit Coordination/Tracking

Perform permit coordination and tracking associated with the Phase 1B Program in accordance with the PMP. The following tasks shall be performed:

- 14.1. Perform regular coordination with the Consultants to discuss ongoing activities, schedule, potential issues, and other items related to permitting.
- 14.2. Incorporate permit updates from Consultants into master permit tracking list. The master permit tracking list will maintain linkage to the master schedule.
- 14.3. The following list identifies the anticipated entities that will require approvals and/or permits in the performance of the Phase 1B Program. The Consultant will provide design documents and exhibits required as part of the permit submittal.
 - 14.3.1. TCEQ
 - 14.3.2. TxDOT
 - 14.3.3. UPRR
 - 14.3.4. Counties (Hays, Caldwell, Guadalupe)
 - 14.3.5. Cities (Kyle, San Marcos, Uhland, Lockhart, Maxwell, others)
 - 14.3.6. Private utilities

Task Meetings:

- As already defined in Task 2 – Stakeholder Coordination.

15. Procurement and Construction Phase Services

Perform Procurement and Construction Phase Services associated with the Phase 1B Program in accordance with the PMP. The following tasks are anticipated:

- 15.1. Procurement Services
 - 15.1.1. Pre-Proposal Meeting

- 15.1.1.1. Prepare agenda and lead meeting
- 15.1.1.2. Collect questions and provide to Design Consultant for review and response
- 15.1.2. Proposal Evaluation and Recommendation
 - 15.1.2.1. Review Design Consultant recommendation and provide formal recommendation to Owner
- 15.1.3. Committee and Board Items
 - 15.1.3.1. Present Proposal Summary and formal recommendation to PAC, Technical Committee, and Board
- 15.1.4. Execution of Contract
 - 15.1.4.1. Coordinate construction contract execution
- 15.2. Construction Phase Services
 - 15.2.1. Administration
 - 15.2.1.1. Prepare and present at workshop on administrative construction procedures
 - 15.2.1.2. Review and comment on Construction Administrative Data Management Plan (prepared by the CM&I)
 - 15.2.2. Preconstruction Meetings
 - 15.2.2.1. Attend
 - 15.2.3. Monthly Construction Meetings
 - 15.2.3.1. One (1) member of the Owner's Representative team will attend monthly construction meetings for all projects, scheduled on the same 1 to 2-day span each month.
 - 15.2.4. Construction Activities – Review and comment on applicable items, and attend meetings as needed:
 - 15.2.4.1. Submittals (review of Program-wide elements only)
 - 15.2.4.2. Substitutions (Consultant provides recommendation, Owner's Representative reviews and advises Owner)
 - 15.2.4.3. Request for Information (only if RFI has contractual implications)
 - 15.2.4.4. Pay Request (review for administrative completeness only)
 - 15.2.4.5. Defective Work (Consultant provides recommendation, Owner's Representative reviews and advises Owner)
 - 15.2.4.6. Change Orders (Consultant provides recommendation, Owner's Representative reviews and advises Owner)
 - 15.2.4.7. Record Drawings (review for administrative completeness only)
 - 15.2.4.8. Commissioning (attend and coordinate ARWA sponsors as needed)
 - 15.2.4.9. Substantial Completion
 - 15.2.4.10. Final Walkthrough
 - 15.2.4.11. Warranty Walkthrough

Task Meetings:

- As already defined in Task 15 – Procurement and Construction Phase Services.

16. Project Administration

For this task, "Project" refers to the contract between the Owner's Representative and Alliance Water. The following tasks shall be performed:

- 16.1. Invoicing – the Owner’s Representative shall submit invoices monthly in the approved format for Alliance Water review and approval. Each monthly invoice package shall include the invoice and project status report.
- 16.2. Project Management – the Owner’s Representative shall perform miscellaneous administrative tasks, including management of manpower and budgets, subconsultant management, and other activities associated with managing the overall Owner’s Representative contract.

Task Meetings:

- None.

17. Other Services

Perform services on an as-needed basis as directed by Alliance Water. These tasks could include:

- 17.1. Water Quality Testing and Coordination – This task consists of sampling and testing of the raw water source and customer treated water sources. This task will include testing protocols, on-site testing, lab coordination and review, summary reporting and coordination with the Water Treatment Plant Design Consultant. Sampling will occur at the raw water wells for Alliance Water and GBRA for evaluating chlorine decay, trihalomethane (THM) formation, and/or other constituents. Treated water quality sampling will be near the locations of the Alliance Water delivery points and will be performed for water blending analyses. Water quality sampling and testing will be approved in advance by Alliance Water based on the outcomes of water quality workshops and related coordination. Lab and equipment fees will be paid separately by Alliance Water.
- 17.2. TCEQ Exception Request Submittals – This task includes compilation and preparation of the exception requests for the transmission pipelines associated with: minimum pressures, sampling frequency and creek crossings. This task will include coordinating information from Design Consultants, submitting supporting documents to TCEQ and providing updated information as requested by the TCEQ. This task also includes exception request coordination for the water treatment plant, as deemed necessary.
- 17.3. Fiber, SCADA, Security Design and Procurement –
 - 17.3.1. Fiber Network, SCADA communication network design
 - 17.3.2. SCADA top end network, HMI systems design
 - 17.3.3. Security top end network, Video management and Access control system design
 - 17.3.4. For the procurement of the Fiber Optic, SCADA, and Security evaluate the use of methods such as: design build, construction manager at risk (CMAR), or sole sourcing in bid documents. Assist with the development of the Request for Qualifications (RFQ) or Request for Proposals (RFP) for this contract. Prepare a Basis of Design document to be utilized by potential bidders for the RFP.
 - 17.3.4.1. SCADA Fiber Optic Drawings and Specifications
 - 17.3.4.2. SCADA Top End Equipment Drawings and Specifications
 - 17.3.4.3. Security Top End Equipment Drawings and Specifications
 - 17.3.5. Facility Electrical and Instrument design coordination for SCADA fiber network SCADA Top End and Security Top End.
- 17.4. SCADA Programming
 - 17.4.1. Review and Comment on each facility IC design package

- 17.4.2. Provide comments on the process control strategies, PLC IO list and Facility network design.
- 17.5. Commissioning Planning – This task includes evaluating potential options for start-up and commissioning of the Phase 1B infrastructure, including coordination with Alliance Water members (sponsors) and other water utilities in the vicinity of the Phase 1B infrastructure.
- 17.6. Other Tasks as Assigned by Alliance Water – These tasks may include items such as: desktop-level analyses of specific technical topics (such as water quality), preparation of presentations related to technical or risk topics, and other services as requested by Alliance Water.

Task Meetings:

- None

FEE AND EXPENSES

Kimley-Horn will perform the services in Tasks 1 – 17 on a labor fee plus expense basis with the maximum fee shown below.

Task 1 Program Management Plan	\$ 49,374.00
Task 2 Stakeholder Coordination	\$ 312,436.00
Task 3 Budgeting	\$ 119,180.00
Task 4 Schedule	\$ 98,555.00
Task 5 Reporting	\$ 48,920.00
Task 6 Data Management	\$ 119,291.00
Task 7 Environmental Management	\$ 162,199.00
Task 8 Land Acquisition Management	\$ 510,978.00
Task 9 TWDB Management	\$ 66,260.00
Task 10 Design Standards	\$ 339,134.00
Task 11 Engineering Design Management	\$ 774,030.00
Task 12 Quality Assurance	\$ 48,021.00
Task 13 Electrical Power Planning	\$ 72,514.00
Task 14 Permit Coordination/Tracking	\$ 46,899.00
Task 15 Procurement and Construction Phase Services	\$ 29,213.00
Task 16 Project Administration	\$ 57,076.00
Task 17 Other Services	\$ 256,342.00
Maximum Fee	\$3,110,422.00

Kimley-Horn will not exceed the total maximum fee shown without authorization from Alliance Water. Individual task amounts are provided for budgeting purposes only. Kimley-Horn reserves the right to reallocate amounts among tasks as necessary. Labor fee will be billed on an hourly basis according to our then-current rates. As to these tasks, direct reimbursable expenses such as subconsultants, express delivery services, fees, air travel, and other direct expenses will be billed at 1.10 times cost. Administrative time related to the project may be billed hourly. All permitting, application, and similar project fees will be paid directly by Alliance Water.

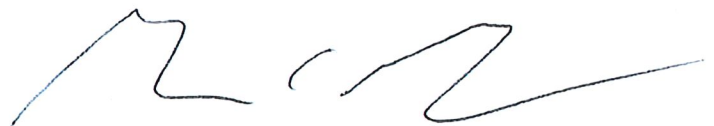
Payment will be due within 25 days of your receipt of the invoice and should include the invoice number and Engineer project number.

Please contact me at (210) 321-3414 or ryan.sowa@kimley-horn.com should you have questions.

Very Truly Yours,



V. Ryan Sowa, P.E.
Project Manager



Glenn Gary, P.E.
Senior Vice President

ATTACHMENT A – ANTICIPATED TASKS FOR PHASE 1B CONTRACTS DURING WORK ORDER NO. 4

CONTRACT	CONTRACT PHASE									
	CONSULTANT PROCUREMENT	CONSULTANT CONTRACT EXECUTION	DESKTOP ANALYSES & SITE/ROUTE SELECTION	RIGHTS-OF-ENTRY OBTAINED	FIELD VISITS & ANALYSES	PRELIMINARY ENGINEERING REPORT COMPLETED	TWDB FINAL DESIGN/LAND ACQ. FUNDING RELEASES	FINAL DESIGN	PROCUREMENT FOR CONSTRUCTION	CONSTRUCTION PHASE
PIPELINE SEGMENT A							X	X		
PIPELINE SEGMENT B							X	X		
PIPELINE SEGMENT C							X	X		
PIPELINE SEGMENT D							X	X		
PIPELINE SEGMENT E							X	X		
WELL DRILLING									X	X
OPS. CENTER & ADMIN. BUILDING	X	X	X	X	N/A	X	N/A	X		
RAW WATER INFRASTRUCTURE			X	X	X	X	X	X		
WATER TREATMENT PLANT							X	X		
BOOSTER PUMP STATION & DELIVERY POINTS							X	X		
ELEVATED STORAGE TANKS			X	X	X	X	X	X		

**Alliance Regional Water Authority Owner's Representative
Work Order No. 4 Rate Schedule
(Hourly Rate)**

QA/QC Engineer / Senior Project Manager / Principal	\$265
Senior Technical Advisor / Deputy Project Manager	\$235
Senior Instrumentation / Electrical Engineer	\$225
Property Acquisition Manager	\$210
Senior Scheduler	\$216
Senior Architect	\$205
Senior Environmental Manager	\$200
Senior Engineer	\$180
GIS Specialist	\$170
Instrumentation / Electrical Engineer	\$170
Senior Biologist	\$165
Civil Engineer	\$160
GIS Developer	\$155
IT Professional	\$150
Architectural Project Manager	\$130
CADD Operator / Senior Technician	\$130
Engineer-in-Training	\$125
GIS Analyst	\$125
Biologist	\$120
Acquisition Specialist	\$110
Senior Historian	\$110
Document Control Specialist	\$98
Administrative Staff / Technician	\$90
Archeologist	\$85

Alliance Regional Water Authority																			Project Fee Summary					
Owner's Representative / Program Management (Work Order No. 4)																			Total Effort	\$ 3,110,422				
2/5/2020																								
Detailed Overall Kimley-Horn Cost Breakdown																								
Scope of Services																								
Task	Project Role	QA/QC Engineer / Senior Project Manager / Principal	Senior Tech. Advisor / Deputy Project Manager	Senior Engineer	GIS Specialist	Civil Engineer	IT Professional	Engineering-in-Training	GIS Analyst	Administrative Staff / Technician		Total Hours	Total Labor Effort	Total Expense Effort	Foster CM Group	CP&Y	Grubb	Spitzer	RVK	V&A	Total Sub Effort	Total Effort	Assumptions	
	Hourly Bill Rate	\$265.00	\$235.00	\$180.00	\$170.00	\$160.00	\$150.00	\$125.00	\$125.00	\$90.00														
17.3.5	Facility Electrical and Instrument Design coordination											0	\$ -		\$ -	\$ 15,708	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,708	\$ 15,708	
17.4	SCADA Programing	20										20	\$ 5,300		\$ -	\$ 1,210	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,210	\$ 6,510	
17.4.1	Review and Comment on each facility IC design package											0	\$ -		\$ -	\$ 6,952	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,952	\$ 6,952	
17.4.2	Provide comments											0	\$ -		\$ -	\$ 3,476	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,476	\$ 3,476	
17.5	Commissioning Planning	40				60		60				160	\$ 27,700		\$ -	\$ 5,632	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,632	\$ 33,332	
17.6	Other design tasks as assigned by Alliance Water	40				40		40				120	\$ 22,000		\$ -	\$ 7,260	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,260	\$ 29,260	
	Grand Total												\$ 1,138,330	\$ 31,400	\$ 246,853	\$ 1,033,868	\$ 65,648	\$ 480,931	\$ 51,926	\$ 61,466	\$ 1,940,692	\$ 3,110,422		
																\$ 224,412	\$ 939,880	\$ 59,680	\$ 437,210	\$ 47,205	\$ 55,878	SUM		
																7.2%	30.2%	1.9%	14.1%	1.5%	1.8%	56.7%		
																10% Markup	\$ 246,853	\$ 1,033,868	\$ 65,648	\$ 480,931	\$ 51,926	\$ 61,466		

Alliance Water						Project Fee Summary		
Owners Representative						Total Effort	\$	224,412
2/6/2020								
Detailed Overall Foster CM Group Cost Breakdown								

Basic Services									
Task	Project Role	Senior Scheduler	Document Control Specialist		Total Hours	Total Labor Effort	Total Expense Effort	Total Effort	Assumptions
	Hourly Bill Rate	\$216.00	\$98.00						
Task 1 - Program Management Plan Updates						\$ 11,384	\$ 90	\$ 11,474	
1.1	Communication Protocol				0	\$ -	\$ -	\$ -	
1.2	Document Control / Data Management Protocol		20		20	\$ 1,960	\$ 30	\$ 1,990	Allowance for Protocol Modification; mileage for 3 mtgs
1.3	Quality Assurance Plan				0	\$ -	\$ -	\$ -	
1.4	Milestone Review Process Protocol				0	\$ -	\$ -	\$ -	
1.5	Risk Management Plan				0	\$ -	\$ -	\$ -	
1.6	Land Acquisition Protocol				0	\$ -	\$ -	\$ -	
1.7	Environmental Management Protocol				0	\$ -	\$ -	\$ -	
1.8	Texas Water Development Board (TWDB) Protocol				0	\$ -	\$ -	\$ -	
1.9	Design Management Protocol				0	\$ -	\$ -	\$ -	
1.10	Budget and Funding Protocol	10	4		14	\$ 2,552	\$ 20	\$ 2,572	Allowance for Protocol Modification; mileage for 2 mtgs Filing in Sharepoint
1.11	Schedule Protocol	10	4		14	\$ 2,552	\$ 20	\$ 2,572	Allowance for Protocol Modification; mileage for 2 mtgs Filing in Sharepoint
1.12	Reporting Protocol				0	\$ -	\$ -	\$ -	
1.13	Permit Management Protocol				0	\$ -	\$ -	\$ -	
1.14	GBRA & PAC Protocol				0	\$ -	\$ -	\$ -	
1.15	Procurement Protocol				0	\$ -	\$ -	\$ -	
1.16	Construction Protocol	20			20	\$ 4,320	\$ 20	\$ 4,340	Establish Protocol; mileage for 2 meetings
1.17	PMP Appendices				0	\$ -	\$ -	\$ -	
Task 2 - Stakeholder Coordination						\$ 16,336	\$ 440	\$ 16,776	
2.1	Stakeholder Identification				0	\$ -	\$ -	\$ -	
2.2	Initial and/or Ongoing Coordination				0	\$ -	\$ -	\$ -	
2.2.1	Executive Director				0	\$ -	\$ -	\$ -	
2.2.2	Technical Committee and Board				0	\$ -	\$ -	\$ -	
2.2.3	PAC				0	\$ -	\$ -	\$ -	
2.2.4	Other Alliance Water Consulting Services				0	\$ -	\$ -	\$ -	
2.2.5	Texas Commission on Environmental Quality				0	\$ -	\$ -	\$ -	
2.2.6	Texas Department of Transportation				0	\$ -	\$ -	\$ -	
2.2.7	Union Pacific Railroad				0	\$ -	\$ -	\$ -	
2.2.8	Counties (Hays, Caldwell, Guadalupe)				0	\$ -	\$ -	\$ -	
2.2.9	Cities (Kyle, San Marcos, Umland, Lockhart, Maxwell, others)				0	\$ -	\$ -	\$ -	
2.2.10	GBRA and/or its Consultants				0	\$ -	\$ -	\$ -	
2.2.11	Other Utilities/Entities				0	\$ -	\$ -	\$ -	
2.3	Alliance Water Executive Director coordination meetings	24			24	\$ 5,184	\$ 300	\$ 5,484	4 hr/mtg x 6 mtgs; mileage
2.4	Alliance Water Technical Committee and Board Meetings				0	\$ -	\$ -	\$ -	
2.5	PAC Meetings				0	\$ -	\$ -	\$ -	
2.6	Other ARWA Consulting Services - as part of Coord. Mtg. with ED.				0	\$ -	\$ -	\$ -	
2.7	Texas Commission on Environmental Quality - Meetings				0	\$ -	\$ -	\$ -	
2.8	Texas Department of Transportation - Meetings				0	\$ -	\$ -	\$ -	
2.9	Union Pacific Railroad - Meetings				0	\$ -	\$ -	\$ -	
2.10	Counties - Meetings				0	\$ -	\$ -	\$ -	
2.11	Cities - Meetings				0	\$ -	\$ -	\$ -	

Alliance Water						Project Fee Summary		
Owners Representative						Total Effort	\$	224,412
2/6/2020								
Detailed Overall Foster CM Group Cost Breakdown								

Basic Services									
Task	Project Role	Senior Scheduler	Document Control Specialist		Total Hours	Total Labor Effort	Total Expense Effort	Total Effort	Assumptions
	Hourly Bill Rate	\$216.00	\$98.00						
2.12	Other Utilities/Entities - Meetings				0	\$ -		\$ -	
2.13	Internal Program Monthly Meetings	48	8		56	\$ 11,152	\$ 140	\$ 11,292	Scheduler: 4 hr/mtg x 12 mtgs / Doc Controls: 4 hr/mtg x 2 mtgs
Task 3 - Budgeting						\$ 79,920	\$ 280	\$ 80,200	
3.1	Perform Monthly Budget Updates				0	\$ -		\$ -	
3.1.1	Track costs to the Phase 1B Program vs. the anticipated budget	280			280	\$ 60,480	\$ 40	\$ 60,520	Allowance based upon Year 2 activity reduced for existing templet ; 4 mtgs
3.1.2	Coordinate with applicable parties to receive current OPCC data	12			12	\$ 2,592	\$ 20	\$ 2,612	Allowance
3.1.3	Identify budget deviations and coordinate with applicable parties	10			10	\$ 2,160	\$ 20	\$ 2,180	Allowance
3.2	Prepare Budget Updates				0	\$ -		\$ -	
3.2.1	Executive Director (Monthly)	12			12	\$ 2,592		\$ 2,592	1 hr/mnth x 12 months
3.2.2	Alliance Water Board and Technical Committee (Quarterly)	8			8	\$ 1,728		\$ 1,728	2 hr/qtr x 4 qtr
3.2.3	PAC (Quarterly)	8			8	\$ 1,728		\$ 1,728	2 hr/qtr x 4 qtr
3.2.4	TWDB (Quarterly)	8			8	\$ 1,728		\$ 1,728	2 hr/qtr x 4 qtr
3.2.5	Public (Quarterly)	8			8	\$ 1,728		\$ 1,728	2 hr/qtr x 4 qtr
3.3	Program Cost Evaluation	24			24	\$ 5,184	\$ 200	\$ 5,384	6 hr / qtr x 4 qtr, incl mtgs
Task 4 - Schedule						\$ 64,800	\$ 250	\$ 65,050	
4.1	Perform Monthly Schedule Updates	180			180	\$ 38,880	\$ 40	\$ 38,920	Allowance based upon Year 2 activity increased for new schedule development / 4 mtgs
4.1.1	Coordinate with applicable parties to obtain current schedules	12			12	\$ 2,592		\$ 2,592	Allowance based upon Year 2 activity increased for new schedule development / 4 mtgs
4.1.2	Identify schedule deviations and coordinate with applicable parties	20			20	\$ 4,320		\$ 4,320	Allowance based upon Year 2 activity increased for new schedule development / 4 mtgs
4.1.3	Special updates will be performed when critical info becomes known	20			20	\$ 4,320	\$ 10	\$ 4,330	Allowance with 1 mtg
4.2	Prepare Schedule Updates				0	\$ -		\$ -	
4.2.1	Executive Director (Monthly)	12			12	\$ 2,592		\$ 2,592	1 hr / mnth x 12 mnths
4.2.2	Alliance Water Board and Technical Committee (Quarterly)	8			8	\$ 1,728		\$ 1,728	2 hr/qtr x 4 qtr
4.2.3	PAC (Quarterly)	8			8	\$ 1,728		\$ 1,728	2 hr/qtr x 4 qtr
4.2.4	TWDB (Quarterly)	8			8	\$ 1,728		\$ 1,728	2 hr/qtr x 4 qtr
4.2.5	Public (Quarterly)	8			8	\$ 1,728		\$ 1,728	2 hr/qtr x 4 qtr
4.3	Program Schedule Evaluation	24			24	\$ 5,184	\$ 200	\$ 5,384	6 hr / qtr x 4 qtr, incl mtgs
Task 5 - Reporting						\$ -	\$ -	\$ -	
Task 6 - Data Management						\$ 45,668	\$ 60	\$ 45,728	
6.1	Overall Data Management		418		418	\$ 40,964	\$ 60	\$ 41,024	Allowabce based upon Year 2 effort with 1 trip / month
6.1.1	Perform admin. Support functions for overall project record keeping				0	\$ -		\$ -	
6.1.2	Enter information into applicable data management system				0	\$ -		\$ -	
6.1.3	Distribute updated contract documents				0	\$ -		\$ -	
6.1.4	Prepare, manage, record, distribute and archive documentation				0	\$ -		\$ -	
6.1.5	Log receipt of all documents and inquiries requiring a response				0	\$ -		\$ -	
6.1.6	Review supporting documents for conformance with PMP				0	\$ -		\$ -	
6.1.7	Maintain project records				0	\$ -		\$ -	
6.1.8	Maintain change management logs, RFI logs, RFP logs, Submittal logs				0	\$ -		\$ -	

Alliance Water				Project Fee Summary			
Owners Representative 2/6/2020				Total Effort	\$	224,412	
Detailed Overall Foster CM Group Cost Breakdown							

Basic Services									
Task	Project Role	Senior Scheduler	Document Control Specialist		Total Hours	Total Labor Effort	Total Expense Effort	Total Effort	Assumptions
	Hourly Bill Rate	\$216.00	\$98.00						
6.1.9	Perform internal audits for quality assurance of overall documents				0	\$ -		\$ -	
6.2	Microsoft SharePoint		48		48	\$ 4,704		\$ 4,704	Allowance for additional file setup
6.2.1	Perform ongoing data management of documents within SharePoint				0	\$ -		\$ -	
6.3	Interactive Web-based GIS				0	\$ -		\$ -	
6.3.1	Perform ongoing incorporation of data within ArcGIS				0	\$ -		\$ -	
6.4	Deliverables				0	\$ -		\$ -	
6.4.1	Hard copy deliverable to be provided to Alliance Water				0	\$ -		\$ -	
6.4.1.1	Meeting Agendas				0	\$ -		\$ -	
6.4.1.2	Program status reports				0	\$ -		\$ -	
6.4.1.3	Copies of the PMP				0	\$ -		\$ -	
6.4.1.4	Exhibits				0	\$ -		\$ -	
	Task 7 - Environmental Management					\$ -	\$ -	\$ -	
	Task 8 - Land Acquisition Management					\$ -	\$ -	\$ -	
	Task 9 - Texas Water Development Board Management					\$ -	\$ -	\$ -	
	Task 10 - Design Standards					\$ -	\$ -	\$ -	
	Task 11 - Engineering Design Management					\$ -	\$ -	\$ -	
	Task 12 - Quality Assurance					\$ -	\$ -	\$ -	
	Task 13 - Electrical Power Planning					\$ -	\$ -	\$ -	
	Task 14 - Permit Coordination/Tracking					\$ -	\$ -	\$ -	
	Task 15 - Procurement and Construction Phase Services					\$ -	\$ -	\$ -	
	Task 16 - Project Administration					\$ 5,184	\$ -	\$ 5,184	
16.1	Invoicing	24			24	\$ 5,184		\$ 5,184	
16.2	Project Management				0	\$ -		\$ -	
	Task 17 - Other Services					\$ -	\$ -	\$ -	
					Grand Total	\$ 223,292	\$ 1,120	\$ 224,412	

Alliance Water Owners Representative 2/6/2020 Detailed Overall CP&Y Cost Breakdown	Project Fee Summary Total Effort \$ 939,880
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Basic Services																	Total Hours	Total Labor Effort	Total Expense Effort	Total Effort	Assumptions		
Task	Project Role	QA/QC Engineer / Senior Project Manager / Principal	Senior Tech. Advisor / Deputy Project Manager	Senior Instrumentation / Electrical Engineer	Senior Environmental Manager	Senior Engineer	Instrumentation/ Elec Eng	Civil Engineer	Senior Biologist	GIS Developer	CADD Operator / Senior Technician	Engineering-in-Training	Biologist	Administrative Staff / Technician	Archeologist	Senior Historian							
	Hourly Bill Rate	\$265.00	\$235.00	\$225.00	\$200.00	\$180.00	\$170.00	\$160.00	\$165.00	\$155.00	\$130.00	\$125.00	\$120.00	\$90.00	\$85.00	\$110.00							
16.2	Project Management		8		8									8				24	\$ 4,200		\$ 4,200		
Task 17 - Other Services																			\$ 153,320	\$ 4,400	\$ 157,720		
17.1	Water Quality Testing and Coordination		16			16		40				40						112	\$ 18,040	\$ 1,100	\$ 19,140		
17.2	TCEQ Exception Request Submittals		8			16						24		24				72	\$ 9,920		\$ 9,920		
17.3	Fiber, SCADA, Security Design and Procurement																	0	\$ -	\$ 1,100	\$ 1,100		
17.3.1	Fiber Network, SCADA communication network design					24						40						88	\$ 14,480		\$ 14,480		
17.3.2	SCADA top end network, HMI systems design					24						40						88	\$ 14,480		\$ 14,480		
17.3.3	Security top end network, Video management and Access control system design					24						40						88	\$ 14,480		\$ 14,480		
17.3.4	Procurement of the Fiber Optic, SCADA, and Security																	0	\$ -	\$ 1,100	\$ 1,100		
17.3.4.1	SCADA Fiber Optic Drawings and Specifications					24						48						96	\$ 15,480		\$ 15,480		
17.3.4.2	SCADA Fiber Top End Equipment Drawings and Specifications					24						48						96	\$ 15,480		\$ 15,480		
17.3.4.3	Security Top End Equipment Drawings and Specifications					24						48						96	\$ 15,480		\$ 15,480		
17.3.5	Facility Electrical and Instrument Design coordination					32						24						80	\$ 14,280		\$ 14,280		
17.4	SCADA Programing																	0	\$ -	\$ 1,100	\$ 1,100		
17.4.1	Review and Comment on each facility IC design package					16												32	\$ 6,320		\$ 6,320		
17.4.2	Provide comments					8						8						16	\$ 3,160		\$ 3,160		
17.5	Commissioning Planning		8	8		8												24	\$ 5,120		\$ 5,120		
17.6	Other design tasks as assigned by Alliance Water		8			8		8				16						40	\$ 6,600		\$ 6,600		
Grand Total																				\$ 928,330	\$ 11,550	\$ 939,880	

Alliance Water	Project Fee Summary	
Owners Representative	Total Effort	\$ 59,680
2/6/2020		
Detailed Overall Grubb Cost Breakdown		

Basic Services											
Task	Project Role	QA/QC Engineer / Senior Project Manager / Principal	Senior Instrumentation / Electrical Engineer	Senior Engineer	Administrativ e Staff / Technician		Total Hours	Total Labor Effort	Total Expense Effort	Total Effort	Assumptions
	Hourly Bill Rate	\$265.00	\$220.00	\$180.00	\$90.00						
	Task 1 - Program Management Plan Updates							\$ -	\$ -	\$ -	
	Task 2 - Stakeholder Coordination							\$ -	\$ -	\$ -	
	Task 3 - Budgeting							\$ -	\$ -	\$ -	
	Task 4 - Schedule							\$ -	\$ -	\$ -	
	Task 5 - Reporting							\$ -	\$ -	\$ -	
	Task 6 - Data Management							\$ -	\$ -	\$ -	
	Task 7 - Environmental Management							\$ -	\$ -	\$ -	
	Task 8 - Land Acquisition Management							\$ -	\$ -	\$ -	
	Task 9 - Texas Water Development Board Management							\$ -	\$ -	\$ -	
	Task 10 - Design Standards							\$ -	\$ -	\$ -	
	Task 11 - Engineering Design Management							\$ -	\$ -	\$ -	
	Task 12 - Quality Assurance							\$ -	\$ -	\$ -	
	Task 13 - Electrical Power Planning							\$ 58,240	\$ -	\$ 58,240	
13.1	Perform Prelim. Analyses to determine approx. demand and energy	8	8	4			20	\$ 4,600		\$ 4,600	
13.2	Develop a strategy for cont., gathering system quality, and reliability data	8	8	6			22	\$ 4,960		\$ 4,960	
13.3	Coordination with Electrical Service Providers to evaluate costs	35	16	8			59	\$ 14,235		\$ 14,235	
13.4	Assist Alliance Water with negotiations on the electrical supply agr.	35	16	8			59	\$ 14,235		\$ 14,235	
13.5	Assist Alliance Water by defining special equipment needs	8	8	8			24	\$ 5,320		\$ 5,320	
13.6	Alliance Water and Electrical Service Providers Coord. Meetings	30	25	8			63	\$ 14,890		\$ 14,890	
	Task 14 - Permit Coordination/Tracking							\$ -	\$ -	\$ -	
	Task 15 - Procurement and Construction Phase Services							\$ -	\$ -	\$ -	
	Task 16 - Project Administration							\$ 1,440	\$ -	\$ 1,440	
16.1	Invoicing				16		16	\$ 1,440		\$ 1,440	
16.2	Project Management						0	\$ -		\$ -	
	Task 17 - Other Services							\$ -	\$ -	\$ -	
							Grand Total	\$ 59,680	\$ -	\$ 59,680	

Alliance Water	Project Fee Summary	
Owners Representative	Total Effort	\$ 437,210
2/6/2020		
Detailed Overall Spitzer Cost Breakdown		

Basic Services										
Task	Project Role	Property Acquisition Manager	Acquisition Specialist	Document Control Specialist		Total Hours	Total Labor Effort	Total Expense Effort	Total Effort	Assumptions
	Hourly Bill Rate	\$210.00	\$110.00	\$98.00						
Task 1 - Program Management Plan										
1.1	Communication Protocol					0	\$ -	\$ -	\$ -	
1.2	Document Control / Data Management Protocol					0	\$ -	\$ -	\$ -	
1.3	Quality Assurance Plan					0	\$ -	\$ -	\$ -	
1.4	Milestone Review Process Protocol					0	\$ -	\$ -	\$ -	
1.5	Risk Management Plan					0	\$ -	\$ -	\$ -	
1.6	Land Acquisition Protocol	11		6		17	\$ 2,898	\$ -	\$ 2,898	
1.7	Environmental Management Protocol					0	\$ -	\$ -	\$ -	
1.8	Texas Water Development Board (TWDB) Protocol					0	\$ -	\$ -	\$ -	
1.9	Design Management Protocol					0	\$ -	\$ -	\$ -	
1.10	Budget and Funding Protocol					0	\$ -	\$ -	\$ -	
1.11	Schedule Protocol					0	\$ -	\$ -	\$ -	
1.12	Reporting Protocol					0	\$ -	\$ -	\$ -	
1.13	Permit Management Protocol					0	\$ -	\$ -	\$ -	
1.14	GBRA & PAC Protocol					0	\$ -	\$ -	\$ -	
1.15	Procurement Protocol					0	\$ -	\$ -	\$ -	
1.16	Construction Protocol					0	\$ -	\$ -	\$ -	
1.17	PMP Appendices					0	\$ -	\$ -	\$ -	
Task 2 - Stakeholder Coordination										
2.1	Stakeholder Identification					0	\$ -	\$ -	\$ -	
2.2	Initial and/or Ongoing Coordination					0	\$ -	\$ -	\$ -	
2.2.1	Executive Director					0	\$ -	\$ -	\$ -	
2.2.2	Technical Committee and Board					0	\$ -	\$ -	\$ -	
2.2.3	PAC					0	\$ -	\$ -	\$ -	
2.2.4	Other Alliance Water Consulting Services					0	\$ -	\$ -	\$ -	
2.2.5	Texas Commission on Environmental Quality					0	\$ -	\$ -	\$ -	
2.2.6	Texas Department of Transportation					0	\$ -	\$ -	\$ -	
2.2.7	Union Pacific Railroad					0	\$ -	\$ -	\$ -	
2.2.8	Counties (Hays, Caldwell, Guadalupe)					0	\$ -	\$ -	\$ -	
2.2.9	Cities (Kyle, San Marcos, Umland, Lockhart, Maxwell, others)					0	\$ -	\$ -	\$ -	
2.2.10	GBRA and/or its Consultants					0	\$ -	\$ -	\$ -	
2.2.11	Other Utilities/Entities					0	\$ -	\$ -	\$ -	
2.3	Alliance Water Executive Director coordination meetings	36				36	\$ 7,560	\$ -	\$ 7,560	
2.4	Alliance Water Technical Committee and Board Meetings					0	\$ -	\$ -	\$ -	
2.5	PAC Meetings					0	\$ -	\$ -	\$ -	
2.6	Other ARWA Consulting Services - as part of Coord. Mtg. with ED.					0	\$ -	\$ -	\$ -	
2.7	Texas Commission on Environmental Quality - Meetings					0	\$ -	\$ -	\$ -	
2.8	Texas Department of Transportation - Meetings					0	\$ -	\$ -	\$ -	
2.9	Union Pacific Railroad - Meetings					0	\$ -	\$ -	\$ -	
2.10	Counties - Meetings					0	\$ -	\$ -	\$ -	
2.11	Cities - Meetings					0	\$ -	\$ -	\$ -	
2.12	Other Utilities/Entities - Meetings					0	\$ -	\$ -	\$ -	
2.13	Internal Program Monthly Meetings	32		32		64	\$ 9,856	\$ -	\$ 9,856	

Alliance Water Owners Representative 2/6/2020 Detailed Overall Spitzer Cost Breakdown	Project Fee Summary	
	Total Effort	\$ 437,210

Basic Services										
Task	Project Role	Property Acquisition Manager	Acquisition Specialist	Document Control Specialist		Total Hours	Total Labor Effort	Total Expense Effort	Total Effort	Assumptions
	Hourly Bill Rate	\$210.00	\$110.00	\$98.00						
	Task 3 - Budgeting						\$ -	\$ -	\$ -	
	Task 4 - Schedule						\$ -	\$ -	\$ -	
	Task 5 - Reporting						\$ -	\$ -	\$ -	
	Task 6 - Data Management						\$ -	\$ -	\$ -	
	Task 7 - Environmental Management						\$ -	\$ -	\$ -	
	Task 8 - Land Acquisition Management						\$ 414,544	\$ -	\$ 414,544	
8.1	Perform regular coordination with Ld. Acq. Cons.	720		1,200		1,920	\$ 268,800		\$ 268,800	
8.2	Assist with the review of Ld. Acq. Cons. monthly invoices	24		48		72	\$ 9,744		\$ 9,744	
8.3	Continuous tracking of Land Acq. Scope of work & amendments	32				32	\$ 6,720		\$ 6,720	
8.4	Review land acquisition data for conformance to the PMP/RAMP	135				135	\$ 28,350		\$ 28,350	
8.5	Perform as-needed site visits with Ld. Acq. Cons.	5				5	\$ 1,050		\$ 1,050	
8.6	Coordinated site visits with those identified in Task 7 and 11	5				5	\$ 1,050		\$ 1,050	
8.7	Review and comment on TWDB land acquisition deliverables	15		6		21	\$ 3,738		\$ 3,738	
8.8	Coord. with landowners to facilitate access for Consultants for field work	12	600			612	\$ 68,520		\$ 68,520	
8.9	Other Ld. Acq. services as identified and assigned by Alliance Water					0	\$ -		\$ -	
8.10	Land Acquisition Team progress meetings	78		104		182	\$ 26,572		\$ 26,572	
	Task 9 - Texas Water Development Board Management						\$ -	\$ -	\$ -	
	Task 10 - Design Standards						\$ -	\$ -	\$ -	
	Task 11 - Engineering Design Management						\$ -	\$ -	\$ -	
	Task 12 - Quality Assurance						\$ -	\$ -	\$ -	
	Task 13 - Electrical Power Planning						\$ -	\$ -	\$ -	
	Task 14 - Permit Coordination/Tracking						\$ -	\$ -	\$ -	
	Task 15 - Procurement and Construction Phase Services						\$ -	\$ -	\$ -	
	Task 16 - Project Administration						\$ 2,352	\$ -	\$ 2,352	
16.1	Invoicing			24		24	\$ 2,352		\$ 2,352	
16.2	Project Management					0	\$ -		\$ -	
	Task 17 - Other Services						\$ -	\$ -	\$ -	
	Grand Total						\$ 437,210	\$ -	\$ 437,210	

Alliance Water Owners Representative 2/6/2020 Detailed Overall RVK Cost Breakdown	Project Fee Summary	
	Total Effort	\$ 47,205

Basic Services											
Task	Project Role	Administrative Staff / Technician	Senior Architect	Architectural Project Manager			Total Hours	Total Labor Effort	Total Expense Effort	Total Effort	Assumptions
	Hourly Bill Rate	\$90.00	\$205.00	\$130.00							
	Task 1 - Program Management Plan							\$ -	\$ -	\$ -	
	Task 2 - Stakeholder Coordination							\$ -	\$ -	\$ -	
	Task 3 - Budgeting							\$ -	\$ -	\$ -	
	Task 4 - Schedule							\$ -	\$ -	\$ -	
	Task 5 - Reporting							\$ -	\$ -	\$ -	
	Task 6 - Data Management							\$ -	\$ -	\$ -	
	Task 7 - Environmental Management							\$ -	\$ -	\$ -	
	Task 8 - Land Acquisition Management							\$ -	\$ -	\$ -	
	Task 9 - Texas Water Development Board Management							\$ -	\$ -	\$ -	
	Task 10 - Design Standards							\$ -	\$ -	\$ -	
	Task 11 - Engineering Design Management							\$ 42,585	\$ -	\$ 42,585	
11.1	Management and Coordination of Hydrogeology/Well Drilling						0	\$ -		\$ -	
11.2	Management and Coordination of Well Pumps and Raw Water Inf.						0	\$ -		\$ -	
11.3	Management and Coordination of WTP and HSPS						0	\$ -		\$ -	
11.4	Management and Coordination of Transmission Pipeline (5 Contracts)						0	\$ -		\$ -	
11.5	Management and Coordination of Admin. Building and Ops. Center						0	\$ -		\$ -	
	Identify early actions required						0	\$ -		\$ -	
	Assist with the development and review of project scope for the DC		9				9	\$ 1,845		\$ 1,845	
	Assist with the review of proposed LOE developed by the DC		6				6	\$ 1,230		\$ 1,230	
	Review and provide comments on the PMP prepared by the DC		2	4			6	\$ 930		\$ 930	
	Assist with the review of Design Consultants monthly invoices	10		20			30	\$ 3,500		\$ 3,500	Assume 8 months (8 invoices)
	Perform regular coordination with the DC to discuss ongoing tasks		45	65			110	\$ 17,675		\$ 17,675	Assume 8 months
	Perform initial windshield survey to review the overall Phase 1B projects		0	0			0	\$ -		\$ -	
	Perform as-needed site visits with Design Consultants			4			4	\$ 520		\$ 520	
	Review/Comment on TWDB EFR deliverables prepared by DC		2	4			6	\$ 930		\$ 930	
	Review/Comment on milestone submittals prepared by DC		15	30			45	\$ 6,975		\$ 6,975	
	Review/Comment on OPCC's prepared by DC	2	2	8			12	\$ 1,630		\$ 1,630	
	Other Design-related services as assigned by Alliance Water		5	10			15	\$ 2,325		\$ 2,325	
11.6	Management and Coordination of BPS & Delivery Points						0	\$ -		\$ -	
11.7	Management and Coordination of Elevated Storage Tanks						0	\$ -		\$ -	
11.8	Management and Coordination of Program Survey						0	\$ -		\$ -	
11.9	Consultant Design Teams progress meetings		15	15			30	\$ 5,025		\$ 5,025	
11.9.1	Hydrogeology / Well Drilling						0	\$ -		\$ -	
11.9.2	Raw Water Facilities						0	\$ -		\$ -	
11.9.3	WTP / HSPS						0	\$ -		\$ -	
11.9.4	Pipelines						0	\$ -		\$ -	
11.9.5	Administrative Building and Operations Center						0	\$ -		\$ -	
11.9.6	BPS & Delivery Points						0	\$ -		\$ -	
11.9.7	Elevated Storage Tanks						0	\$ -		\$ -	
11.9.8	Program Survey						0	\$ -		\$ -	
	Task 12 - Quality Assurance							\$ -	\$ -	\$ -	
	Task 13 - Electrical Power Planning							\$ -	\$ -	\$ -	
	Task 14 - Permit Coordination/Tracking							\$ -	\$ -	\$ -	
	Task 15 - Procurement and Construction Phase Services							\$ -	\$ -	\$ -	

Alliance Water Owners Representative 2/6/2020 Detailed Overall RVK Cost Breakdown	Project Fee Summary	
	Total Effort	\$ 47,205

Basic Services											
Task	Project Role	Administrative Staff / Technician	Senior Architect	Architectural Project Manager			Total Hours	Total Labor Effort	Total Expense Effort	Total Effort	Assumptions
	Hourly Bill Rate	\$90.00	\$205.00	\$130.00							
	Task 16 - Project Administration							\$ 4,620	\$ -	\$ 4,620	
16.1	Invoicing	24	12				36	\$ 4,620		\$ 4,620	
16.2	Project Management						0	\$ -		\$ -	
	Task 17 - Other Services							\$ -	\$ -	\$ -	
							Grand Total	\$ 47,205	\$ -	\$ 47,205	

Alliance Water										Project Fee Summary		
Owners Representative 2/6/2020										Total Effort	\$	55,878
Detailed Overall V&A Cost Breakdown												

Basic Services														
Task	Project Role	QA/QC Engineer / Senior Project Manager / Principal	Senior Tech. Advisor / Deputy Project Manager	Senior Engineer	Civil Engineer	CADD Operator / Senior Technician	Engineering- in-Training	Administrativ e Staff / Technician		Total Hours	Total Labor Effort	Total Expense Effort	Total Effort	Assumptions
	Hourly Bill Rate	\$265.00	\$235.00	\$180.00	\$160.00	\$130.00	\$125.00	\$90.00						
	Task 1 - Program Management Plan Updates										\$ -	\$ -	\$ -	
	Task 2 - Stakeholder Coordination										\$ -	\$ -	\$ -	
	Task 3 - Budgeting										\$ -	\$ -	\$ -	
	Task 4 - Schedule										\$ -	\$ -	\$ -	
	Task 5 - Reporting										\$ -	\$ -	\$ -	
	Task 6 - Data Management										\$ -	\$ -	\$ -	
	Task 7 - Environmental Management										\$ -	\$ -	\$ -	
	Task 8 - Land Acquisition Management										\$ -	\$ -	\$ -	
	Task 9 - Texas Water Development Board Management										\$ -	\$ -	\$ -	
	Task 10 - Design Standards										\$ 50,625	\$ 173	\$ 50,798	
10.1	Development of Design Standards, Specifications, and Details								0	\$ -		\$ -		
10.1.1	Transmission Pipelines and Delivery Points Design Stds. - Finalize								0	\$ -		\$ -		
10.1.2	Preparation of Standard Specifications for Const. - Finalize								0	\$ -		\$ -		
10.1.3	Preparation of Standard Details - Finalize								0	\$ -		\$ -		
10.1.4	Pipeline Corrosion Protection Standards								0	\$ -		\$ -		
10.1.4.1	Document Review		29	34	49		4		116	\$ 21,275		\$ 21,275	21 submittal review (3 per design engineer). 7 hrs for each 60%, 4 hrs for each 90%, 3 hrs for each 100%.	
10.1.4.2	Corrosivity Investigation Standards		4	2			6		12	\$ 2,050		\$ 2,050		
10.1.4.3	Cathodic Protection Design Standards		2	2			2		6	\$ 1,080		\$ 1,080		
10.1.4.4	Pipeline Corrosion Standards TM	1	8	4	6		20	4	43	\$ 6,685		\$ 6,685		
10.1.4.5	Standard Details & Specifications	1	8	8		30	30		77	\$ 11,235		\$ 11,235		
10.1.4.6	Standards Review Meeting		28	4			8		40	\$ 8,300	\$ 173	\$ 8,473	300 Miles @ \$0.575/mile	
10.1.5	Facility General Electrical Standards								0	\$ -		\$ -		
10.1.6	Telemetry, Instrumentation & Controls, SCADA, and Security Standards								0	\$ -		\$ -		
10.1.6.1	Fiber Optic Standards								0	\$ -		\$ -		
10.1.6.2	SCADA Standards								0	\$ -		\$ -		
10.1.6.3	I&C Standards								0	\$ -		\$ -		
10.1.6.4	Security Standards								0	\$ -		\$ -		
10.2	Master Specifications - Finalize								0	\$ -		\$ -		
10.3	Record Drawings (Plans & GIS)								0	\$ -		\$ -		
10.4	Address comments from Design Consultant Teams and Finalize								0	\$ -		\$ -		
10.5	Standards Review Meeting								0	\$ -		\$ -		
	Task 11 - Engineering Design Management									\$ -	\$ -	\$ -		
	Task 12 - Quality Assurance									\$ -	\$ -	\$ -		
	Task 13 - Electrical Power Planning									\$ -	\$ -	\$ -		
	Task 14 - Permit Coordination/Tracking									\$ -	\$ -	\$ -		
	Task 15 - Procurement and Construction Phase Services									\$ -	\$ -	\$ -		
	Task 16 - Project Administration									\$ 5,080	\$ -	\$ 5,080		
16.1	Invoicing							12	12	\$ 1,080		\$ 1,080		
16.2	Project Management	2	14	1					17	\$ 4,000		\$ 4,000		
	Task 17 - Other Services									\$ -	\$ -	\$ -		
Grand Total										\$ 55,705	\$ 173	\$ 55,878		

REGULAR MEETING
Alliance Regional Water Authority Board of Directors

BOARD MEMBER PACKETS

Wednesday, February 26, 2020 at 3:00 P.M.
 501 E. Hopkins, San Marcos, TX 78666

- G.7** Update, discussion and possible direction to Staff regarding the Authority’s request to the Texas Water Development Board for additional SWIFT Funding. ~ *Graham Moore, P.E., Executive Director*

Background/Information

Staff submitted a new Abridged Application to the Texas Water Development Board (TWDB) for additional SWIFT Funding prior to the February 3, 2020 deadline. The request was for an additional \$65 million. The request was made for low interest loans, similar to the funding that has been secured to date. Staff indicated the following schedule for issuances of the debt:

2020 Additional Funding Request		
	2020	2021
Original Request	\$95,575,000	\$0
Updated Request	\$122,575,000	\$38,000,000
DIFFERENCE	\$27,000,000	\$38,000,000

The table below breaks out the proposed funding for 2020 and 2021 for each Sponsor. Staff recently received new projected debt service schedules for the proposed issuance amounts and is reviewing them prior to sharing with the Sponsors.

Funding by Sponsor		
	2020	2021
San Marcos	\$43,955,000	\$13,625,000
CRWA	\$37,865,000	\$11,740,000
Kyle	\$34,530,000	\$10,705,000
Buda	\$6,225,000	\$1,930,000

The application is currently under review by the TWDB. If approved, additional information will be required from the Sponsors to support the funding request. As has been done in the past, Staff will lead this effort and will coordinate with the Sponsors to receive and submit this information.

The final decision on how much financing to receive in 2020 will need to be made by the early September 2020.

Board Decision(s) Needed:

- Possible direction to Staff.

REGULAR MEETING
Alliance Regional Water Authority Board of Directors

BOARD MEMBER PACKETS

Wednesday, February 26, 2020 at 3:00 P.M.
501 E. Hopkins, San Marcos, TX 78666

- G.8** Consider adoption of Resolution 2020-02-26-004 approving a Policy on Contributions to Outside Entities. ~ *Graham Moore, P.E., Executive Director*
-

Background/Information

In December 2019 the Board of Directors requested that Staff develop a policy for dealing with possible contributions to outside entities. Legal Counsel developed a memorandum discussing the legal criteria that must be met in order for a political subdivision to make a contribution to an outside entity. The three key criteria are:

1. The contribution's predominant purpose must be to accomplish a public purpose, and not to benefit private parties;
2. The political subdivision must retain a modicum of control over the funds to ensure that the public purpose is accomplished and to protect the public's investment; and
3. The political subdivision receives a reciprocal benefit in exchange for its contribution.

Staff prepared the attached policy on contributions to reiterate these criteria. If the Authority is approached to make a contribution, the Executive Director (or designee) will review the request against the criteria and will report to the Board the results of the review. If all criteria is met, Staff will place an item on the next available Board agenda for possible action by the Board to approve the contribution.

Attachment(s)

- Resolution 2020-02-26-004
- Policy on Contributions to Outside Entities

Board Decision(s) Needed:

- Consider adoption of Resolution 2020-02-26-004 approving a Policy on Contributions to Outside Entities.



ALLIANCE WATER

RESOLUTION NO. 20200226-004

A RESOLUTION OF THE ALLIANCE REGIONAL WATER AUTHORITY BOARD OF DIRECTORS APPROVING A POLICY ON CONTRIBUTIONS TO OUTSIDE ENTITIES; AND DECLARING AN EFFECTIVE DATE

RECITALS:

1. The Alliance Regional Water Authority (the "Authority") was approached in 2019 by an outside entity requesting a contribution to their efforts. The Authority does not currently have a policy to deal with such requests.
2. The Authority Board wishes to adopt a policy on contributions to outside entities to help provide guidance to Staff and the Authority's Board of Director.
3. The Authority Board has reviewed the attached Policy on Contributions to Outside Entities drafted by the Authority's staff and general counsel, and the Authority Board wishes to approve and adopt the policy.

BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE ALLIANCE REGIONAL WATER AUTHORITY:

SECTION 1. The Authority Board approves and adopts the attached Policy on Contributions to Outside Entities.

SECTION 2. This Resolution shall be in full force and effect immediately upon its passage.

ADOPTED: February 26, 2020.

ATTEST:

Chris Betz
Chair, Board of Directors

James Earp
Secretary, Board of Directors



**Alliance Regional Water Authority
Policy on Contributions of Public Funds
Adopted XXXX**

It is the policy of Alliance Regional Water Authority, which may from time to time choose to contribute public funds to external public or private entities, to conform with the State’s constitutional ban on gratuitous gifts to any person, association or corporation, whether public or private, except where otherwise permitted by law.

Article 1. In General

Section 1.01. Definitions. In this Policy:

- A. *Authority* means the Alliance Regional Water Authority.
- B. *Board* means the Board of Directors of the Authority.
- C. *Executive Director* means the person appointed by the Board as the chief executive officer of the Authority.
- D. *Request for Contribution* means a request submitted by an external person or entity to the Authority for contribution of funds for any purpose other than funds related to a contract or agreement approved by the Authority separate from any *Request for Contribution*.

Section 1.02. General Policy Statements

- A. It is the policy of the Authority to evaluate requests for contributions of public funds in a structured manner in accordance with the guidelines in this policy.
- B. It is the policy of the Authority not to proactively seek areas to contribute funds, but instead to only react to a request(s) for contributions.

Article 2. Procedure and Criteria for Considering Requests

Section 2.01. Application. Each Request for Contribution submitted to the Authority must at a minimum include the legal name of the person or entity requesting contribution, the intended purpose of the funds, and the reciprocal benefit to the Authority for the contribution.

Section 2.02. Criteria for Evaluations of Applications. The criteria used in evaluating requests for contributions will include, without limitation, the following:

- A. Ensure that the contribution’s predominant purpose is to accomplish a public purpose, and not to benefit private parties.
- B. Ensure that the Authority retains a modicum of control over the funds to ensure that the public purpose is accomplished and to protect the public’s investment.
- C. Ensure that the Authority receives a reciprocal benefit in exchange for its contribution.

Section 2.03. Procedure for Review of Requests for Contribution. The Executive Director, or their designee, will perform a review of each Request for Contribution using the criteria in Section 2.02 of this policy. A summary report will be prepared detailing specifically how each of the criteria is either met or why the Request for Contribution did not meet the criteria.

Section 2.04. Presentation of Findings to the Board.

A. If all criteria in Section 2.02 are met as demonstrated by the initial review conducted in Section 2.03, the Executive Director will place an item on the next available Board Agenda for possible action by the Board to approve the contribution.

B. If not all criteria in Section 2.02 are met, the Executive Director will inform the Board of the request and will provide the summary report prepared in Section 2.03. The Executive Director will also notify the entity that submitted the Request for Contribution that their request has been denied based on one or more of the criteria in Section 2.02.

Section 2.05. Disbursement of Funds. If the Board approves a request for contribution, the Executive Director, or their designee, will disburse the contribution according the Board's conditions, ensuring:

- A. The funds are disbursed in the amount authorized by the Board;
- B. The Authority retains certain controls over the funds to be contributed; and
- C. The Authority receives a reciprocal benefit for the contribution.

REGULAR MEETING
Alliance Regional Water Authority Board of Directors

BOARD MEMBER PACKETS

Wednesday, February 26, 2020 at 3:00 P.M.
501 E. Hopkins, San Marcos, TX 78666

- G.9** Consider adoption of Resolution 2020-02-26-005 approving an Amended and Restated Negotiated Export Fee Agreement between the Authority and the Gonzales County Underground Water Conservation District. ~ *Graham Moore, P.E., Executive Director*
-

Background/Information

In 2019 the Authority requested a permit amendment that added an additional 1,320 acre-feet per year of Carrizo water to the Gonzales County Underground Water Conservation District (District) permit. The expansion of the permit amount necessitates an amended Negotiated Export Fee Agreement that the Authority entered into as part of the original permit from the District. The agreement provides that those participating (Alliance Water, CRWA & GBRA) will pay fees annually to the District on a pro rata basis instead of based on the metered amount of water exported out of the District. The amended and restated agreement clarifies the process for determining the pro rata split between the participants to account for any future permit amendments.

Attachment(s)

- Resolution 2020-02-26-005
- Amended and Restated Negotiated Export Fee Agreement

Board decision needed:

- Adoption of Resolution 2020-02-26-005 approving Amended and Restated Negotiated Export Fee Agreement between the Authority and the Gonzales County Underground Water Conservation District.



ALLIANCE WATER

RESOLUTION NO. 20200226-005

A RESOLUTION OF THE ALLIANCE REGIONAL WATER AUTHORITY BOARD OF DIRECTORS APPROVING AN AMENDED AND RESTATED NEGOTIATED EXPORT FEE AGREEMENT WITH THE GONZALES COUNTY UNDERGROUND WATER CONSERVATION DISTRICT AND RELATED MATTERS, AND DECLARING AN EFFECTIVE DATE

RECITALS:

1. The Hays Caldwell Public Utility Agency (the "HCPUA") was granted a permit (Permit No. 11-12-01) for production and export of 10,300 acre-feet per year of Carrizo aquifer water from the Gonzales County Underground Water Conservation District (the "District") in November 13, 2012.

2. Permit 11-12-01 included as an attachment the original "Negotiated Export Fee Agreement" by and between the HCPUA and the District establishing an agreed export fee to be paid to the District by the HCPUA as a percentage share of the District's annual budget.

3. Permit 11-12-01 was transferred from the HCPUA to Alliance Regional Water Authority (the "Authority") via Chapter 11010, Subtitle X, Title 6 of the Texas Special District and Laws Code (Acts 2017, 85th R.S. ch 806, General and Special Laws of Texas).

4. On November 14, 2017 the District renewed and replaced Permit 11-12-01 with two separate permits issued to the Authority – Operating Permit No. 11-14-17 and Export Permit No. 11-12-01.

5. On July 9, 2018 the District approved amendments to the Authority's Permit 11-12-01 and 11-14-17.

6. The Authority and District agreed to a Corrected Negotiated Export Fee Agreement in August 2019 through the adoption of Resolution 2019-08-28-006.

7. The Authority was granted by the District an amendment to its Operating Permit and Export Permit in October 2019 to add 1,320 acre-feet per year of Carrizo Water.

6. The District and the Authority wish to amend and restate the Negotiated Export Fee Agreement to clarify the process by which the pro rata split between the participants in the agreement is calculated and to account for the additional permitted amount granted to the Authority.

BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE ALLIANCE REGIONAL WATER AUTHORITY:

SECTION 1. The attached Amended and Restated Negotiated Export Fee Agreement by and between the Authority and the District is approved.

Resolution 20200226-005
Amended and Restated Negotiation Export Fee Agreement

SECTION 2. The Authority's Board Chair, Chris Betz, is authorized to execute the attached agreement on behalf of the Authority.

SECTION 3. This Resolution shall be in full force and effect immediately upon its passage.

ADOPTED: February 26, 2020.

ATTEST:

Chris Betz
Chair, Board of Directors

James Earp
Secretary, Board of Directors

AMENDED AND RESTATED NEGOTIATED EXPORT FEE AGREEMENT

This Amended and Restated Negotiated Export Fee Agreement (“Agreement”) is by and among the Gonzales County Underground Water Conservation District (the “District”), Alliance Regional Water Authority (“ARWA”), Canyon Regional Water Authority (“CRWA”), and Guadalupe Blanco River Authority (“GBRA”) (collectively, the “Parties”).

RECITALS

WHEREAS, prior to the Effective Date, the District issued export permits (collectively, the “Export Permits” and each an “Export Permit”) to Hays Caldwell Public Utility Agency (ARWA’s predecessor in interest) CRWA, and Texas Water Alliance, Limited (GBRA’s predecessor in interest) (collectively, the “Contributing Parties” and each a “Contributing Party”) authorizing each of them to export groundwater from the Carrizo aquifer from wells located within the District’s jurisdictional boundaries.

WHEREAS, pursuant to the authority granted to the District under Chapter 36 of the Texas Water Code and as a condition of issuing the Export Permits, the District entered into negotiated export fee agreements with each of the Contributing Parties (collectively, the “Original Agreements”) which required the Contributing Parties to pay, as a negotiated export fee, pro-rata shares of the part of the District’s annual operating budget not covered by assessed taxes or by export fees paid by others, with a Contributing Party’s pro-rata share based on its share of the total amount of water authorized to be exported by the Contributing Parties.

WHEREAS, since 2012, several changes occurred, including transfers of ownership of the export permits and changing amounts of water authorized to be exported by some of the Contributing Parties.

WHEREAS, the Parties desire to clarify the method by which the Contributing Parties’ negotiated export fees are calculated, and to automatically adjust the negotiated export fees when the amount of water authorized to be exported by a Contributing Party changes.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants and agreements set forth herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. **District Duties.**

1.1. Each calendar year beginning in 2020, not later than August 31, for the period commencing October 1 and ending September 30 (a “Fiscal Year”), the District shall provide to each of the Contributing Parties a written notice containing the following information for the District’s upcoming Fiscal Year (the “District Notice”):

1.1.1. The total amount of the District’s projected operating budget (“Total Budget”);

1.1.2. The total amount of taxes projected to be assessed by the District (“Tax Revenue”);

- 1.1.3. The total and itemized amounts of export fees due to the District from exporters other than the Contributing Parties (“Other Exporter Fees”); and
- 1.1.4. The “Adjusted Budget” (herein so called) calculated as follows: Adjusted Budget = Total Budget – (Tax Revenue + Other Exporter Fees).

1.2. The District Notice shall also include:

- 1.2.1. The maximum amount of water (in acre-feet) authorized to be exported by each Contributing Party under its Export Permit (each, an “Individual Contributing Party Permitted Amount”); and
- 1.2.2. The total maximum amount of water (in acre-feet) authorized to be exported by all of the Contributing Parties (“Total Contributing Parties Permitted Amounts”).

2. **Contributing Party Duties.**

2.1. Subject to the limitations, terms and conditions set forth below, each Contributing Party shall pay to the District not later than October 1, a “Negotiated Export Fee” (herein so called) calculated as follows:

$$\text{Negotiated Export Fee} = \text{Adjusted Budget} \times (\text{Individual Contributing Party Permitted Amount} / \text{Total Contributing Parties Permitted Amounts}).$$

2.2. Notwithstanding the provisions of Section 2.1,

- 2.2.1. A Contributing Party’s Negotiated Export Fee for the Fiscal Year commencing October 1, 2019 and ending September 31, 2020 shall not increase more than 10% over the Contributing Party’s negotiated export fee paid by it under its Original Agreement for the District’s Fiscal Year commencing October 1, 2018 and ending on September 31, 2019; thereafter in no case shall a Contributing Party’s Negotiated Export Fee increase more than 10% over the Contributing Party’s Negotiated Export Fee for the preceding Fiscal Year; and
- 2.2.2. A Contributing Party’s deadline for paying its Negotiated Export Fee shall be extended one day for each day after August 31 that the District fails to deliver the District Notice to the Contributing Party.

3. Default and Remedies. In the event of default by a Contributing Party (a “Defaulting Party”), the District shall give the Defaulting Party written notice specifying the default (a “Default Notice”). If the Defaulting Party fails to fully cure the default within 30 days after receipt of the Default Notice, the District shall be entitled to a proper writ issued by a court of competent jurisdiction compelling and requiring the Defaulting Party to observe and perform the covenants, obligations and conditions described in this Agreement. The District agrees that it will not impede the rights or activities of a Contributing Party who is not a Defaulting Party under this Agreement.

4. Term and Termination. As to each Contributing Party, the term of this Agreement shall begin on the Effective Date and end when the Contributing Party’s Export Permit (as the same may be renewed or amended from time to time by the District) terminates for reasons

other than non-compliance by the Contributing Party with the terms of this Agreement. In the event of such termination, the Total Contributing Parties' Permitted Amounts shall be reduced by the amount of the terminated Contributing Party's Individual Contributing Party Permitted Amount.

5. **Notice.** All notices, requests or other communications required or permitted by this Agreement shall be in writing and shall be sent by (i) by overnight courier service or hand delivery, or (ii) certified mail, postage prepaid, return receipt requested, and addressed to the Parties at the following addresses, or to such other address as a Party may from time to time designate by giving notice in writing to the other Parties:

To the District: Gonzales County Underground Water Conservation District
Attn: General Manager
P.O. Box 1919
522 Saint Matthew Street
Gonzales, Texas 78629

To ARWA: Alliance Regional Water Authority
Attn: Executive Director
630 E. Hopkins
San Marcos, Texas 78666

To CRWA: Canyon Regional Water Authority
Attn: General Manager
850 Lakeside Pass
New Braunfels, Texas 78130

To GBRA: Guadalupe Blanco River Authority
Attn: General Manager
933 East Court Street
Seguin, TX 78155

The Parties may change their respective addresses to any other address within the United States of America or designate additional persons to receive notice by giving at least five (5) days' written notice to the other Parties.

6. **Severability.** If any provision of this Agreement is illegal, invalid, or unenforceable, under present or future laws, it is the intention of the Parties that the remainder of this Agreement not be affected, and, in lieu of each illegal, invalid, or unenforceable provision, that a provision be added to this Agreement which is legal, valid, and enforceable and is as similar in terms to the illegal, invalid or enforceable provision as is possible.
7. **No Waiver.** Any failure by a Party to insist upon strict performance by another Party of any provision of this Agreement will not be deemed a waiver of that provision or of any other

provision, and such Party may at any time thereafter insist upon strict performance of any and all of the provisions of this Agreement.

8. **Applicable Law and Venue.** The interpretation, performance, enforcement and validity of this Agreement are governed by the laws of the State of Texas. Venue will be in a court of appropriate jurisdiction in Gonzales County, Texas.
9. **Entire Agreement.** This Agreement contains the entire agreement of the Parties regarding the subject matter addressed in this Agreement. Save and except for the Export Permits issued by the District to the Contributing Parties, there are no other agreements or promises, oral or written, among the Parties regarding the subject matter of this Agreement. To the extent of any conflict between an Export Permit and this Agreement, the terms of this Agreement shall control concerning the subject matters addressed in this Agreement.
10. **Amendment by Agreement.** This Agreement can only be amended by mutual written agreement of the Contributing Parties (or their respective successors and/or permitted transferees or assigns) and the District. Notwithstanding the preceding sentence, if this Agreement is terminated as to a Contributing Party for reasons allowed in Section 4, this Agreement may be amended by mutual written agreement of the remaining Contributing Parties, if any; and the District, and the joinder of the terminated Contributing Party(ies) will not be required.
11. **Runs with the Export Permit.** A Contributing Party's rights and obligations under this Agreement shall run with the Contributing Party's Export Permit and if a Contributing Party transfers or assigns its rights under its Export Permit, this Agreement shall automatically be transferred or assigned to the holder of the Export Permit without the prior consent of the other Contributing Parties or the District. The transferring or assigning Contributing Party shall give written notice of the transfer or assignment of its Export Permit to the other Contributing Parties and to the District.
12. **Authority for Execution.** By their signatures hereon, each Party certifies, represents, and warrants that the execution of this Agreement is duly authorized and adopted in conformity with its enabling legislation, rules, regulations, and all other governing documents applicable to said Party. A facsimile or scanned signature shall be deemed an original signature for all purposes.
13. **Effective Date.** Subject to the provisions of Section 14, this Agreement is made to be effective on the latest date accompanying the signature lines of the Parties below (the "Effective Date").
14. **Effect on Original Agreements.** This Agreement totally supersedes and replaces the Original Agreements, and the Original Agreements shall have no further force or effect after the Effective Date.
15. **Headings, Construction and Counterparts.** The section headings contained in this Agreement are for convenience only and do not enlarge or limit the scope or meaning of the sections. Wherever appropriate, words of the masculine gender may include the feminine or neuter, and the singular may include the plural, and vice-versa. The Parties acknowledge that

they have been actively and equally involved in the negotiation of this Agreement. Accordingly, the rule of construction that any ambiguities are to be resolved against the drafting Party will not be employed in interpreting this Agreement. This Agreement may be executed in any number of counterparts, each of which will be deemed to be an original, and all of which will together constitute the same instrument. This Agreement will become effective as of the Effective Date only when one or more counterparts, individually or taken together, bear the signatures of all of the Parties.

(The remainder of this page is intentionally left blank.

Signatures follow on separate pages.)

**GONZALES COUNTY
UNDERGROUND WATER
CONSERVATION DISTRICT**

By Bruce Ticken
Printed Name Bruce Ticken
Title: Board President
Date: 10-08-2019

ATTEST:

By: Barry Miller
Printed Name: Barry Miller
Title: Board Secretary

**ALLIANCE REGIONAL WATER
AUTHORITY**

By _____
Printed Name _____
Title: _____ Board President _____
Date: _____

ATTEST:

By: _____
Printed Name: _____
Title: _____ Board Secretary _____

**CANYON REGIONAL WATER
AUTHORITY**

By _____
Printed Name _____
Title: Board President
Date: _____

ATTEST:

By: _____
Printed Name: _____
Title: Board Secretary

**GUADALUPE BLANCO RIVER
AUTHORITY**

By _____
Printed Name _____
Title: _____ Board President _____
Date: _____

ATTEST:

By: _____
Printed Name: _____
Title: _____ Board Secretary _____

REGULAR MEETING
Alliance Regional Water Authority Board of Directors

BOARD MEMBER PACKETS

Wednesday, February 26, 2020 at 3:00 P.M.
501 E. Hopkins, San Marcos, TX 78666

- G.10** Consider adoption of Resolution 2020-02-26-006 making appointments to the Technical Committee. ~ *Graham Moore, P.E., Executive Director*
-

Background/Information

The Authority's Board of Directors created and made initial appointments to the Technical Committee through the adoption of Resolution 20180328-004 in March 2018. Resolution 20190123-003 updated to the appointments to the committee to the following:

- Kenneth Williams
- James Earp
- Tom Taggart
- Humberto Ramos
- Mike Taylor
- Steve Parker
- Non-Voting: George Haehn

With Mr. Parker's departure from the City of San Marcos, his position either needs to be filled or the size of the committee needs to be reduced. The Committee membership is limited to a maximum of six (6) Board members.

Attachment(s)

- Resolution 2020-02-26-006

Board Decision(s) Needed:

- Adoption of Resolution 2020-02-26-006 making appointments to the Technical Committee.



ALLIANCE WATER

RESOLUTION NO. 20200226-006

A RESOLUTION OF THE ALLIANCE REGIONAL WATER AUTHORITY BOARD OF DIRECTORS MAKING APPOINTMENTS TO THE TECHNICAL COMMITTEE; AND DECLARING AN EFFECTIVE DATE

RECITALS:

1. The Alliance Regional Water Authority (the "Authority") Board of Directors (the "Authority Board") created and made appointments to the Technical Committee through the adoption of Resolution 20180328-004 in March 2018.

2. The Authority Board wishes to affirm some appointments and make a new appointment to the Technical Committee.

BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE ALLIANCE REGIONAL WATER AUTHORITY:

SECTION 1. The Authority Board appoints _____, _____, _____, _____, and _____ as voting members of the Technical Committee, and _____ as a non-voting member of the Technical Committee.

SECTION 2. This Resolution shall be in full force and effect immediately upon its passage.

ADOPTED: February 26, 2020

ATTEST:

Chris Betz
Chair, Board of Directors

James Earp
Secretary, Board of Directors

REGULAR MEETING
Alliance Regional Water Authority Board of Directors

BOARD MEMBER PACKETS

Wednesday, February 26, 2020 at 3:00 P.M.
501 E. Hopkins, San Marcos, TX 78666

- G.11** Update on status of groundwater management in project target area, and Gonzales County Underground Water Conservation District, Plum Creek Conservation District, Groundwater Management Area 13, Region L Planning Group, Guadalupe-Blanco River Authority, Hays County and Capital Area Planning Group activities.

Gonzales County Underground Water Conservation District (GCUWCD)

The GCUWCD met on February 11th. No items affecting the Authority were discussed. After the GMA-13 meeting, the group's involved in funding the Monitoring Wells met with the GCUWCD to discuss the results and the next steps. Greg Senglemann is gathering cost information for additional studies and will then reconvene the group to determine if and/or which of the additional efforts to move forward with. Finally, the GCUWCD will hold a public hearing on their proposed rules changes immediately before their regularly scheduled March 10th Board meeting. Staff is preparing comments on the proposed rules with support from Trish Carls.

Plum Creek Conservation District (PCCD)

The PCCD met on February 18th. Staff and LAN made a presentation to the PCCD on the Segment A pipeline route where they cross any PCCD easements. The PCCD Board agreed to forward the engineering design plans to the to the National Resources Conservation Service (NRCS) for their review/approval.

Groundwater Management Area 13

GMA-13 held a meeting on February 7th. The consultant is continuing to refine the model inputs and has requested information from the groundwater districts as to what pumping scenarios they would like to see in the future.

Region L Planning Group

The Region L Planning Group met on February 20th where the Initially Prepared Plan (i.e. Draft Plan) was adopted. A public hearing on the plan will be held at the San Marcos Activity Center on Thursday, May 21st at 6:00 PM at the San Marcos Activity Center.

Guadalupe-Blanco River Authority; Hays County Activities; CAPCOG Activities

Mr. Moore met with Judge Becerra and Chief-of-Staff Villalobos on February 14th. It was requested that Mr. Moore update the Commissioner's Court on Alliance Water's efforts at an upcoming meeting and then periodically as critical milestones are reached.

Board Decision(s) Needed:

- None.

REGULAR MEETING
Alliance Regional Water Authority Board of Directors

BOARD MEMBER PACKETS

Wednesday, February 26, 2020 at 3:00 P.M.
501 E. Hopkins, San Marcos, TX 78666

- H. EXECUTIVE DIRECTOR AND LEGAL COUNSEL REPORTS - Update on future meeting dates, locations, status of Authority procurements, Executive Director activities, other operational activities and the status of legal issues, where no action is required. ~ *Graham Moore, P.E., Executive Director / Mike Gershon, Lloyd Gosselink Rochelle & Townsend, P.C.*

EXECUTIVE DIRECTOR

RFQ Update

- The RFQ for the Phase 1B Construction Management & Inspection was issued in mid-December. An addendum was issued to remove the construction materials testing from the RFQ. A total of nine (9) responses were received.
- The Public Relation Services RFQ was posted on January 29th. An addendum was issued to push back the due date to March 26th.

Log and Calendar of Events

- Attached is the log of activities for January along with the 3-month look ahead calendar for the Executive Director.

**Executive Director
Log of Activities**

January						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1-Jan	2-Jan	3-Jan	4-Jan
			HOLIDAY	PTO	1B Monthly meeting	
					Audit review	
					RFQ Posting	
5-Jan	6-Jan	7-Jan	8-Jan	9-Jan	10-Jan	11-Jan
	WTP scope and fee review	WTP EFR & scope meeting	GVEC/BBEC meeting	ROW Call	Sign ROEs	
	Land acquisition coordination	Sign ROEs	Tech Cmt agenda	1A BPS Const. mtg	WTP scope/fee review mtg	
	Audit review	BPS EFR review comments	Coordination of 2020 payroll	WTP scope review mtg	Blanton meeting	
	Leaseholder change coordination	PR RFQ finalization		1B hazmat scope meeting	Tech Cmte packet	
12-Jan	13-Jan	14-Jan	15-Jan	16-Jan	17-Jan	18-Jan
	CRWA Board meeting	December financials	Tech Cmte meeting	Region L Staff Work Group mtg	PAC Meeting	
	K-H WO Comments	PAC agenda	Mail	Board agenda	Board packet	
	GBRA invoice	Pipeline easement template comments	Board agenda and packet	GCUWCD Rules		
	BPS Site Plan coordination	Inline EST tech memo review		ROW call		
19-Jan	20-Jan	21-Jan	22-Jan	23-Jan	24-Jan	25-Jan
	Elevated storage tank memo review	Easement closing coordination	CRWA Board of Managers mtg	Region L Meeting	Operations Workshop	
	2019 1099 Info	Review draft WO#4 for K-H	Board of Directors Mtg	Enviro on-call agreement coord	WTP Monthly Coordination Mtg	
	GBRA Invoice prep & submission	Respond to online questions	Back-up power revisions	Mailing / filing	Kyle shared easement	
	Land acquisition form review				Closing docs for A028C	
26-Jan	27-Jan	28-Jan	29-Jan	30-Jan	31-Jan	
	Sign ROEs	Review Seg A enviro report	Temp const easement call	Weekly ROW call	PTO	
	Lunch w/ Betsy J. & Mike M.	Review security design guideline	SWIFT application submission	GCUWCD rules call		
	Execute WOs	WPP comments to K H	Addenda for CM&I RFQ	PR Services RFQ		
	BPS Final Design Scope/Fee Review	SWIFT Application prep		K-H WO #4 review & comments		

February 2020

February 2020							March 2020						
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa
						1	1	2	3	4	5	6	7
2	3	4	5	6	7	8	8	9	10	11	12	13	14
9	10	11	12	13	14	15	15	16	17	18	19	20	21
16	17	18	19	20	21	22	22	23	24	25	26	27	28
23	24	25	26	27	28	29	29	30	31				

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
Jan 26	27	28	29	30	31	Feb 1
2	3 10:30am Sign ROEs (Starbucks (5401 S Fm 1626, Kyle, TX 78640, 1:30pm ARWA Phase 1B Weekly Progress Meetings (WEBEX) -	4 9:00am Alliance Water - Monthly Check-in (Skype Meeting) - Cobler, Nathan	5 10:00am FW: [EXTERNAL] Regional 1:00pm ARWA Phase 1A BPS Site Visit (2281 4:30pm Lockwood , Andrews & Newnam,	6 11:00am ARWA1B - Weekly ROW Call (Skype Meeting) - Sowa, Ryan 2:00pm Sign ROEs (Kyle Starbucks)	7 9:30am GMA-13 Meeting (Pleasanton, TX)	8
9	10 10:00am Meeting to Discuss Interim Water 1:30pm ARWA Phase 1B Weekly Progress 6:30pm CRWA Board Meeting (CRWA	11 11:30am Phone Call 2:00pm Meeting with House Natural Resource - Cristine 5:30pm GCUWCD Board Meeting (GCUWCD	12 10:30am ARWA1BWTP - Value Engineering Discussion (Skype 3:00pm ARWA Technical Committee Meeting (Kyle Public Works)	13 10:00am Region L Staff Workgroup Meeting 11:00am ARWA1B - Weekly ROW Call 1:30pm Phase 1A 3:00pm ARWA 1A-B	14 9:00am Sign ROEs (Starbucks (5401 S Fm 10:00am Denny Winkler - Sign Lease 1:00pm Alliance Water (111 E. San Antonio	15
16	17 11:00am 1ASB - Coe Construction Mtg (Construction Trailer) 1:30pm ARWA Phase 1B Weekly Progress Meetings (WEBEX) -	18 10:00am Graham Moore - discuss procurement plans 1:00pm PCCD Meeting (Lockhart, Texas, United States)	19	20 9:30am Region L Meeting (San Antonio 11:00am ARWA1B - Weekly ROW Call 1:30pm ARWA1BWTP - Monthly Meeting	21 9:00am Project Advisory Committee Meeting (Kyle Public Works)	22
23	24 1:30pm ARWA Phase 1B Weekly Progress 4:00pm ARWA Update - Graham Moore (Buda 4:00pm Meeting with Kenneth Williams	25	26 10:00am CRWA Board of Managers Meeting (CRWA Offices) 3:00pm ARWA Board Meeting (San Marcos Actiivty Center)	27 10:00am RWA Meeting (200 S Main St (200 S 11:00am ARWA1B - Weekly ROW Call 1:30pm ROW Update (LAN Offices: 407 S	28 10:00am GBC Meeting (NBU Downtown)	29

March 2020

March 2020						
Su	Mo	Tu	We	Th	Fr	Sa
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				

April 2020						
Su	Mo	Tu	We	Th	Fr	Sa
			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		

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
Mar 1	2 1:30pm ARWA Phase 1B Weekly Progress Meetings (WEBEX) - Shore, Nichola	3 9:00am Alliance Water - Monthly Check-in (Skype Meeting) - Cobler, Nathan	4 6:00pm GVEC Open House for Substation (Waelder Community Center)	5 11:00am ARWA1B - Weekly ROW Call (Skype Meeting) - Sowa, Ryan	6	7
8	9 1:30pm ARWA Phase 1B Weekly Progress Meetings (WEBEX) - 6:30pm CRWA Board Meeting (CRWA Offices (850 Lakeside	10 5:30pm GCUWCD Board Meeting (GCUWCD Offices) 5:30pm Public Hearing on Gonzales Groundwater District	11 3:00pm ARWA Technical Committee Meeting (Kyle Public Works)	12 11:00am ARWA1B - Weekly ROW Call 1:30pm Phase 1A Construction 3:00pm ARWA 1A-B Progress Meeting	13	14
15	16 1:30pm ARWA Phase 1B Weekly Progress Meetings (WEBEX) - Shore, Nichola	17 1:00pm PCCD Meeting (Lockhart, Texas, United States)	18 SPRING BREAK	19 11:00am ARWA1B - Weekly ROW Call (Skype Meeting) - Sowa, Ryan	20 9:00am Project Advisory Committee Meeting (Kyle Public Works)	21
22	23 1:30pm ARWA Phase 1B Weekly Progress Meetings (WEBEX) - Shore, Nichola	24	25 10:00am CRWA Board of Managers Meeting (CRWA Offices) 3:00pm ARWA Board Meeting (TBD)	26 11:00am ARWA1B - Weekly ROW Call (Skype Meeting) - Sowa, Ryan	27	28
29	30 1:30pm ARWA Phase 1B Weekly Progress Meetings (WEBEX) - Shore, Nichola	31 9:00am Alliance Water - Monthly Check-in (Skype Meeting) - Cobler, Nathan	Apr 1	2	3	4

April 2020

April 2020						
Su	Mo	Tu	We	Th	Fr	Sa
			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		

May 2020						
Su	Mo	Tu	We	Th	Fr	Sa
					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						

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
Mar 29	30	31	Apr 1	2 11:00am ARWA1B - Weekly ROW Call (Skype Meeting) - Sowa, Ryan	3	4
5	6 1:30pm ARWA Phase 1B Weekly Progress Meetings (WEBEX) - Shore, Nichola	7	8 3:00pm ARWA Technical Committee Meeting (Kyle Public Works)	9 11:00am ARWA1B - Weekly ROW Call 1:30pm Phase 1A Construction 3:00pm ARWA 1A-B Progress Meeting	10 GOOD FRIDAY HOLIDAY	11
12	13 1:30pm ARWA Phase 1B Weekly Progress Meetings (WEBEX) - 6:30pm CRWA Board Meeting (CRWA Offices (850 Lakeside	14 5:30pm GCUWCD Board Meeting (GCUWCD Offices)	15	16 11:00am ARWA1B - Weekly ROW Call (Skype Meeting) - Sowa, Ryan	17 9:00am Project Advisory Committee Meeting (Kyle Public Works)	18
19	20 1:30pm ARWA Phase 1B Weekly Progress Meetings (WEBEX) - Shore, Nichola	21 1:00pm PCCD Meeting (Lockhart, Texas, United States)	22 10:00am CRWA Board of Managers Meeting (CRWA Offices) 3:00pm ARWA Board Meeting (TBD)	23 11:00am ARWA1B - Weekly ROW Call (Skype Meeting) - Sowa, Ryan	24	25
26	27 1:30pm ARWA Phase 1B Weekly Progress Meetings (WEBEX) - Shore, Nichola	28	29	30 11:00am ARWA1B - Weekly ROW Call (Skype Meeting) - Sowa, Ryan	May 1	2

REGULAR MEETING
Alliance Regional Water Authority Board of Directors

BOARD MEMBER PACKETS

Wednesday, February 26, 2020 at 3:00 P.M.
501 E. Hopkins, San Marcos, TX 78666

- I. BOARD MEMBER ITEMS OR FUTURE AGENDA ITEMS – Possible acknowledgement by Committee Members of future area events and/or requests for item(s) to be placed on a future agenda where no action is required.
-

Background/Information

The Committee Members have an opportunity to make announcements or to request that items be added to future Board or Committee agendas.

REGULAR MEETING
Alliance Regional Water Authority Board of Directors

BOARD MEMBER PACKETS

Wednesday, February 26, 2020 at 3:00 P.M.
501 E. Hopkins, San Marcos, TX 78666

- J.1** *Executive Session pursuant to the Government Code, Section 551.071 (Consultation with Attorney) and/or Section 551.072 (Real Property Deliberations) regarding:*
- A. Water supply partnership options*
 - B. Groundwater leases*
 - C. Acquisition of real property for water supply project purposes*
-

REGULAR MEETING
Alliance Regional Water Authority Board of Directors

BOARD MEMBER PACKETS

Wednesday, February 26, 2020 at 3:00 P.M.
501 E. Hopkins, San Marcos, TX 78666

J.2 Action from Executive Session on the following matters:

- A. *Water supply partnership options*
 - B. *Groundwater leases*
 - C. *Acquisition of real property for water supply project purposes*
-

REGULAR MEETING
Alliance Regional Water Authority Board of Directors

BOARD MEMBER PACKETS
Wednesday, February 26, 2020 at 3:00 P.M.
501 E. Hopkins, San Marcos, TX 78666

K. ADJOURNMENT
