

**Alliance Regional Water Authority  
Board of Directors**

**REGULAR MEETING**



**ALLIANCE WATER**

**BOARD MEMBER PACKETS**

Wednesday, March 25, 2020 at 3:00 P.M.

Conference Call Number: 1-903-405-2572  
Code: 995 024 086#

**REGULAR MEETING**  
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**In accordance with Governor Abbott's Executive Order, declaration of the COVID-19 public health threat, and action to temporarily suspend certain provisions of the Texas Open Meetings Act, a quorum of Alliance Regional Water Authority's (the Authority's) Board of Directors will hold a meeting by telephonic conference call at 3:00 PM, Wednesday, March 25, 2020. The public may participate in this meeting by calling the following number and code:**

**Conference Call Number: 1-903-405-2572**  
**Code: 995 024 086#**

**Members of the public wishing to make public comment during the meeting must register by emailing [info@alliancewater.org](mailto:info@alliancewater.org) prior to 3:00 p.m. on March 25, 2020. This meeting will be recorded and the audio recording will be available on the Authority's website after the meeting. A copy of the agenda packet will be available on the Authority's website at the time of the meeting. Additional information can be obtained by calling Graham Moore at (512) 294-3214.**

A. CALL TO ORDER

B. ROLL CALL

C. PUBLIC COMMENT PERIOD (Note: Each person wishing to speak must register with the Executive Director at [info@alliancewater.org](mailto:info@alliancewater.org) before 3:00 p.m.)

D. 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.*

D.1 Consider approval of minutes of the Regular Meeting held February 26, 2020.  
~ Graham Moore, P.E., Executive Director

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

E. PUBLIC HEARINGS / PRESENTATIONS - None

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**F. ITEMS FOR DISCUSSION NOT REQUIRING ACTION**

- F.1 Report on Technical Committee activities. ~ *Graham Moore, P.E., Executive Director*
- F.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*
- F.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*
- F.4 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*

**G. 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.*

**H. ITEMS FOR ACTION OR DISCUSSION/DIRECTION**

- H.1 Consider adoption of Resolution 2020-03-25-001 approving Work Order #4 with Walker Partners, LLC for Final Design and Procurement Services for the Authority's Phase 1B Segment E Project as recommended by the Technical Committee. ~ *Ryan Sowa, P.E., Kimley-Horn & Associates*
- H.2 Consider adoption of Resolution 2020-03-25-002 approving Work Order #4 with Blanton & Associates, Inc. for additional hazardous materials testing associated with the Phase 1B Segment B, D and E projects. ~ *Ryan Sowa, P.E., Kimley-Horn & Associates*

**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.

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**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*
- D. *Consideration of Resolution 2020-03-25-003 finding Public Convenience and Necessity and authorizing Eminent Domain Proceedings, if necessary, for acquisitions of a Permanent Easement totaling 2.055 acres located in the A. Tinney Survey, Abstract No. 26, Caldwell County, Texas, and establishing an effective date; and finding and determining that the meeting at which this Resolution is passed was noticed and is open to the public as required by law.*
- E. *Consideration of Resolution 2020-03-25-004 finding Public Convenience and Necessity and authorizing Eminent Domain Proceedings, if necessary, for acquisitions of a Permanent Easement totaling 7.935 acres located in the B.G. Ridens Survey, Abstract No. 256, Caldwell County, Texas, and 5.079 acres located in the J.D. Sowell Survey, Abstract No. 266, Caldwell County, Texas establishing an effective date; and finding and determining that the meeting at which this Resolution is passed was noticed and is open to the public as required by law.*
- F. *Consideration of Resolution 2020-03-25-005 finding Public Convenience and Necessity and authorizing Eminent Domain Proceedings, if necessary, for acquisitions of a Permanent Easement totaling 2.782 acres located in the James George Survey, Abstract No. 9, Caldwell County, Texas, establishing an effective date; and finding and determining that the meeting at which this Resolution is passed was noticed and is open to the public as required by law.*
- G. *Consideration of Resolution 2020-03-25-006 finding Public Convenience and Necessity and authorizing Eminent Domain Proceedings, if necessary, for acquisitions of a Permanent Easement totaling 3.574 acres located in the John A. Neill Survey, Abstract No. 20, Caldwell County, Texas, establishing an effective date; and finding and determining that the meeting at which this Resolution is passed was noticed and is open to the public as required by law.*

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- H. *Consideration of Resolution 2020-03-25-007 finding Public Convenience and Necessity and authorizing Eminent Domain Proceedings, if necessary, for acquisitions of a Permanent Easement totaling 1.555 acres located in the Esther Berry Survey, Abstract No. 1, Caldwell County, Texas, establishing an effective date; and finding and determining that the meeting at which this Resolution is passed was noticed and is open to the public as required by law.*

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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**BOARD MEMBER PACKETS**  
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**A. CALL TO ORDER**

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No Backup Information for this Item.

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**B. ROLL CALL**

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<b>NAME</b>	<b>TERM ENDS</b>	<b>PRESENT</b>
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	
Vacant (San Marcos)	April 2022	

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- C.** PUBLIC COMMENT PERIOD (Note: Each person wishing to speak must register with the Executive Director at [info@alliancewater.org](mailto:info@alliancewater.org) before 3:00 p.m.)
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**D. CONSENT AGENDA**

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

**REGULAR MEETING**  
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**BOARD MEMBER PACKETS**

Wednesday, March 25, 2020 at 3:00 P.M.  
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**D.1** Consider approval of minutes of the Regular Meeting held February 26, 2020. ~  
*Graham Moore, P.E., Executive Director*

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Attachment(s)

- 2020 02 26 Board Meeting Minutes

**Board Decision(s) Needed:**

- Approval of minutes.



**Alliance Regional Water Authority**

**BOARD MEETING**

**MINUTES**

**Wednesday, February 26, 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, February 26, 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: Taylor, Lillibridge, Ramos, Earp, Betz, Scheel and Clack.**
  - **Absent: Hughson, Williams, Rockeymoore, Taggart, Allen and Parker.**
  
- C. SEATING OF NEWLY APPOINTED DIRECTOR

  - C.1. Oath of Office and swearing in of Director
    - **None.**

  
- D. PUBLIC COMMENT PERIOD
  - **None.**
  
- E. CONSENT AGENDA
  - E.1 Consider approval of minutes of the Regular Meeting held January 22, 2020.
  - E.2 Consider approval of the financial report for January 2020.

- **Motion to approve the consent agenda items E.1 and E.2 as presented was made by Ms. Scheel, seconded by Mr. Earp and approved on a 7-0 vote.**

**Items G.1 thru G.6 were taken ahead of Item F.1.**

## G. ITEMS FOR ACTION OR DISCUSSION/DIRECTION

- G.1 Report on Technical Committee activities.
- **Mr. Moore updated the Board on the February meeting.**
  - **No Action.**
- G.2 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 construction projects.**
  - **No Action.**
- G.3 Update and discussion regarding the status of the Authority's Phase 1B program, and direction to staff and consultants.
- **Mr. Sowa provided an overview of the presentation that was included in the packet, including an update on recent project progress and the status of various contracts.**
  - **Mr. Taylor noted that the Authority is acquiring an easement from his property and he noted that the appraisal included with the offer is very thorough.**
  - **No Action.**

**Items G.4 and G.5 were opened together.**

- 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.
- 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.
- **Motion to adopt Resolution 2020-02-26-001 and Resolution 2020-02-26-002 as presented was made by Mr. Earp, seconded by Mr. Taylor and approved on a 7-0 vote.**
- 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.

- **Mr. Moore addressed the need for a new Work Order with Kimley-Horn to continue to serve as Owner's Representative for the Phase 1B Program. He also addressed the questions that were raised by the Technical Committee in their discussion on the work order.**
- **Mr. Moore noted that on the advice of Mr. Gerson, the legal counsel, that additional language can be added to the agreement that would allow the Authority to unilaterally reduce the scope of work for any task in the work order, upon written notice.**
- **Motion to adopt 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 with the addition of the language allowing the Authority to reduce the scope of services was made by Ms. Scheel, seconded by Mr. Ramos and approved on a 7-0 vote.**

#### F. PUBLIC HEARINGS / PRESENTATIONS

- F.1 Discussion with Representative Erin Zwiener regarding the Authority's water supply efforts and legislative activities.
- **Representative Zwiener addressed the Board and discussed the past legislative session, including the passage of the Buda Aquifer Storage and Recovery Bill and the standardization of groundwater permitting terms.**
  - **She noted that there is a push to get more standardization of smaller districts.**
  - **She also stated that eminent domain reform legislation will likely return in the next session.**
- G.7 Update, discussion and possible direction to Staff regarding the Authority's request to the Texas Water Development Board for additional SWIFT Funding.
- **Mr. Moore provided an update on the Authority's SWIFT application for funding.**
  - **No Action.**
- G.8 Consider adoption of Resolution 2020-02-26-004 approving a Policy on Contributions to Outside Entities.
- **The item was not opened for discussion. Will be brought back at a future meeting.**

- 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.
- **Motion to adopt 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 was made by Mr. Earp, seconded by Mr. Taylor and approved on a 7-0 vote.**
- G.10 Consider adoption of Resolution 2020-02-26-006 making appointments to the Technical Committee.
- **Motion to adopt Resolution 2020-02-26-006 making the following appointments to the Technical Committee: Mr. Kenneth Williams, Mr. James Earp, Mr. Brian Lillibridge, Mr. Tom Taggart, Mr. Mike Taylor and Mr. Humberto Ramos was made by Mr. Earp, seconded by Mr. Taylor and approved on a 7-0 vote.**
- 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.
- **Mr. Moore provided an update on area water meetings.**
  - **No Action.**
- H. EXECUTIVE DIRECTOR AND LEGAL COUNSEL REPORTS
- **No action.**
- I. BOARD MEMBER ITEMS OR FUTURE AGENDA ITEMS
- **None.**
- 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
- **No Executive Session.**

- 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.
    - **No Action.**

K. ADJOURNMENT

- **Meeting was adjourned at 4:25 p.m. based on the motion by Mr. Earp, seconded by Mr. Taylor on a 7-0 vote.**

**APPROVED:** \_\_\_\_\_, 2020

**ATTEST:**

\_\_\_\_\_  
Chair, Board of Directors

\_\_\_\_\_  
Secretary, Board of Directors

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**BOARD MEMBER PACKETS**

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

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Background/Information

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

Attachment(s)

- 2020 02 29 Financial Report

**Board Decision(s) Needed:**

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





# **Alliance Regional Water Authority**

**Financial Statements  
(Compilation)**

**For the One Month Ended and Year-to-Date  
February 29, 2020**

## Alliance Regional Water Authority

## Balance Sheet

As of February 29, 2020

03/12/20

Accrual Basis

	Feb 29, 20
<b>ASSETS</b>	
<b>Current Assets</b>	
<b>Checking/Savings</b>	
1004 · Broadway Bank	
1005 · Broadway Checking (8040)	-59,735.31
1010 · Broadway Savings (4415)	699,406.67
<b>Total 1004 · Broadway Bank</b>	<b>639,671.36</b>
1015 · TexStar (3310)	3,360,499.48
1050 · Broadway Bank (Reserved)	
1051 · CRWA Debt Service (2785)	590,548.00
1052 · Kyle Debt Service (2787)	172,782.57
1055 · San Marcos Debt Service (6390)	276,573.13
1056 · Buda Debt Service (6391)	52,560.09
<b>Total 1050 · Broadway Bank (Reserved)</b>	<b>1,092,463.79</b>
1100 · Escrow Accounts	
1105 · BOKF, Escrow, CRWA Series 2015A	334,302.42
1106 · BOKF, Escrow, Kyle Series 2015B	221,440.08
1107 · BOKF, Escrow, CRWA Series 2017A	5,249,827.26
1108 · BOKF, Escrow, Kyle Series 2017B	4,783,852.08
1109 · BOKF, Escrow, SM Series 2017C	6,127,976.86
1110 · BOKF, Escrow, Buda Series 2017D	846,231.15
1111 · BOKF, Escrow, CRWA Series 2019A	26,222,016.25
1112 · BOKF, Escrow, Kyle Series 2019B	23,913,236.17
1113 · BOKF, Escrow, SM Series 2019C	30,475,370.84
1114 · BOKF, Escrow, Buda Series 2019D	4,239,550.67
<b>Total 1100 · Escrow Accounts</b>	<b>102,413,803.78</b>
<b>Total Checking/Savings</b>	<b>107,506,438.41</b>
<b>Accounts Receivable</b>	
1209 · Accts receivable, City of SM	344,124.84
1210 · Accts receivable, City of Buda	48,748.92
<b>Total Accounts Receivable</b>	<b>392,873.76</b>
<b>Total Current Assets</b>	<b>107,899,312.17</b>
<b>Fixed Assets</b>	
1405 · Engineering & Construction Cost	2,402,294.20
1420 · Projects in Progress (Cash)	
1420-01 · Legal Support	56,539.03
1420-02 · Hydrogeologic Support	168,569.19
1420-03 · PCCD Permitting	105,095.16
1420-04 · Kyle Water Model	25,000.00
1420-11 · Legal Support, GBRA	45,251.01
<b>Total 1420 · Projects in Progress (Cash)</b>	<b>400,454.39</b>
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
1430-13 · ARWA-GBRA MOU Study	15,000.00
1430-14 · Phase 1A GIS	29,522.37
<b>Total 1430 · Projects in Progress Eng (Cash)</b>	<b>860,359.25</b>

## Alliance Regional Water Authority

## Balance Sheet

As of February 29, 2020

03/12/20

Accrual Basis

	<u>Feb 29, 20</u>
1440 - Projects in Prog Eng. (Finance)	
1440-01 - Engineering-Phase 1A Pipeline	504,279.12
1440-02 - Engineering-Phase 1A Pump Stat	711,399.36
1440-03 - Engineering-ROW Acquisition	387,337.97
1440-04 - Phase 1A Const Observation	481,558.16
1440-05 - Phase 1A-Construction Trailer	42,411.47
1440-06 - Phase 1A Segment A Construction	1,734,150.32
1440-07 - Phase 1A BPS Construction	4,654,649.46
1440-08 - Phase 1A Segment B Construction	315,642.22
1440-15 - Land Acquisition Phase 1B	4,370,135.54
1440-16 - Phase 1B-Owners Rep	4,465,570.79
1440-17 - Phase 1B Environmental	1,131,353.64
1440-18 - Phase 1B Segment A Design	754,992.68
1440-19 - Phase 1B Segment B Design	556,950.31
1440-20 - Phase 1B Segment C Design	548,183.58
1440-21 - Phase 1B Segment D Design	659,978.84
1440-22 - Phase 1B Segment E Design	334,193.15
1440-23 - Phase 1B Land Attorney	241,491.29
1440-24 - Phase 1B Hydrogeology	125,840.00
1440-25 - Phase 1B WTP Design	1,210,834.89
1440-26 - Raw Water Infr.	633,866.28
1440-27 - Phase 1B Program Survey	1,808,459.50
1440-28 - Phase 1B BPS Design	733,288.75
1440-29 - GVEC Construction-in-Aid	1,000,000.00
1440-30 - Phase 1B Inline Tanks	24,721.45
	<hr/>
Total 1440 - Projects in Prog Eng. (Finance)	27,431,288.77
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
	<hr/>
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
	<hr/>
Total Fixed Assets	32,689,975.86
Other Assets	
1900 - Deferred Outflow	23,797.09
	<hr/>
Total Other Assets	23,797.09
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<b>TOTAL ASSETS</b>	<b>140,613,085.12</b>
	<hr/> <hr/>
<b>LIABILITIES &amp; EQUITY</b>	
Liabilities	
Current Liabilities	
Other Current Liabilities	
2100 - Payroll Liabilities	18.00
2102 - 401(a) Liability	2,417.28
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

03/12/20

As of February 29, 2020

Accrual Basis

	Feb 29, 20
2350 · Accrued Interest Payable	
2351 · Accrued Int Payable, CRWA 2015A	2,607.77
2352 · Accrued Int Payable, Kyle 2015B	3,626.35
2353 · Accrued Int Payable, CRWA 2017A	9,825.58
2354 · Accrued Int Payable, Kyle 2017B	8,959.81
2355 · Accrued Int Payable, SM 2017C	7,389.04
2356 · Accrued Int Payable, Buda 2017D	1,050.13
2357 · Accrued Int Payable, CRWA 2019A	142,237.08
2358 · Accrued Int Payable, Kyle 2019B	129,780.24
2359 · Accrued Int Payable, SM 2019C	107,118.48
2360 · Accrued Int Payable, Buda 2019D	15,193.62
<b>Total 2350 · Accrued Interest Payable</b>	<b>427,788.10</b>
<b>Total Other Current Liabilities</b>	<b>795,010.36</b>
<b>Total Current Liabilities</b>	<b>795,010.36</b>
<b>Long Term Liabilities</b>	
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
<b>Total Long Term Liabilities</b>	<b>123,385,000.00</b>
<b>Total Liabilities</b>	<b>124,180,010.36</b>
<b>Equity</b>	
2925 · Net Investment in Capital Asset	8,200,007.29
2950 · Retained Earnings	7,771,023.52
Net Income	462,043.95
<b>Total Equity</b>	<b>16,433,074.76</b>
<b>TOTAL LIABILITIES &amp; EQUITY</b>	<b>140,613,085.12</b>

# Alliance Regional Water Authority Profit Loss

For the One Month and Five Months Ended February 29, 2020

	<u>February 2020</u>	<u>October 2019 February 2020</u>
<b>Ordinary Income/Expense</b>		
<b>Income</b>		
<b>4010 · Project Contribution</b>		
4011 · City of San Marcos	0.00	869,577.56
4012 · City of Kyle	0.00	417,252.25
4013 · City of Buda	0.00	123,363.94
4014 · Canyon Regional Water Authority	480,511.92	961,023.84
4015 · GBRA	545,183.02	545,183.02
<b>Total 4010 · Project Contribution</b>	<b>1,025,694.94</b>	<b>2,916,400.61</b>
<b>4200 · Shared Water</b>		
4210 · Shared Water, City of Buda	37,269.00	149,076.00
<b>Total 4200 · Shared Water</b>	<b>37,269.00</b>	<b>149,076.00</b>
<b>4250 · Non Potable Water Sales</b>	3,178.35	12,785.05
<b>4300 · Broadway Interest Income</b>		
4311 · City of San Marcos	327.40	1,799.93
4312 · City of Kyle	236.76	1,382.88
4313 · City of Buda	42.97	252.06
4314 · Canyon Regional Water Authority	303.13	1,649.82
<b>Total 4300 · Broadway Interest Income</b>	<b>910.26</b>	<b>5,084.69</b>
<b>4350 · Escrow Accounts Income</b>		
4351 · BOKF, CRWA Series 2015A	383.19	6,667.29
4352 · BOKF, Kyle Series 2015B	253.82	5,910.70
4353 · BOKF, CRWA Series 2017A	4,931.66	28,062.02
4354 · BOKF, Kyle Series 2017B	4,493.92	25,571.36
4355 · BOKF, SM Series 2017C	5,756.59	32,754.84
4356 · BOKF, Buda Series 2017D	794.94	4,526.69
4357 · BOKF, CRWA Series 2019A	24,632.80	58,719.25
4358 · BOKF, Kyle Series 2019B	22,463.94	53,549.17
4359 · BOKF, SM Series 2019C	28,628.38	68,243.84
4360 · BOKF, Buda Series 2019D	3,982.61	9,493.67
<b>Total 4350 · Escrow Accounts Income</b>	<b>96,321.85</b>	<b>293,498.83</b>
<b>4370 · TexStar Interest Income</b>		
4371 · City of San Marcos	1,495.54	9,994.11
4372 · City of Kyle	1,174.83	7,850.92
4373 · City of Buda	211.86	1,415.78
4374 · Canyon Regional Water Authority	1,288.26	8,608.99
<b>Total 4370 · TexStar Interest Income</b>	<b>4,170.49</b>	<b>27,869.80</b>
<b>Total Income</b>	<b>1,167,544.89</b>	<b>3,404,714.98</b>
<b>Expenses</b>		
<b>6000 · Groundwater Reservation Costs</b>	76,499.81	483,979.30
<b>6010 · Shared Water Costs</b>		
6015 · Shared Water, City of Kyle	23,414.83	93,787.31
6020 · Shared Water, City of San Marcos	13,965.00	55,860.00
<b>Total 6010 · Shared Water Costs</b>	<b>37,379.83</b>	<b>149,647.31</b>
<b>7125 · Auditing fees</b>	10,715.00	10,715.00
<b>7150 · Amortization Expense</b>	0.00	43,936.64
<b>7210 · Bank Fees</b>	205.79	1,031.93

# Alliance Regional Water Authority Profit Loss

For the One Month and Five Months Ended February 29, 2020

	February 2020	October 2019 February 2020
7220 · Escrow and Paying Agent Fees	1,050.00	2,450.00
7240 · Bond Issue Costs		
7240-07 · Bond Issue Costs - CRWA 2019A	0.00	366,309.28
7240-08 · Bond Issue Costs - Kyle 2019B	0.00	339,780.56
7240-09 · Bond Issue Costs - SM 2019C	0.00	392,340.76
7240-10 · Bond Issue Costs - Buda 2019D	0.00	139,393.36
<b>Total 7240 · Bond Issue Costs</b>	<b>0.00</b>	<b>1,237,823.96</b>
7250 · Interest Expense		
7250-51 · Interest Expense - CRWA 2015A	5,215.55	26,077.71
7250-52 · Interest Expense - Kyle 2015B	7,252.75	36,263.55
7250-53 · Interest Expense - CRWA 2017A	19,651.20	98,255.84
7250-54 · Interest Expense - Kyle 2017B	17,919.65	89,598.13
7250-55 · Interest Expense - SM 2017C	14,778.10	73,890.42
7250-56 · Interest Expense - Buda 2017D	2,100.20	10,501.24
7250-57 · Interest Expense - CRWA 2019A	47,412.36	142,237.08
7250-58 · Interest Expense - Kyle 2019B	43,260.08	129,780.24
7250-59 · Interest Expense - SM 2019C	35,706.16	107,118.48
7250-60 · Interest Expense - Buda 2019D	5,064.54	15,193.62
<b>Total 7250 · Interest Expense</b>	<b>198,360.59</b>	<b>728,916.31</b>
7325 · Dues	200.00	6,230.00
7350 · Insurance - Liability, E&O	0.00	2,370.62
7400 · Legal Fees	6,074.18	18,969.18
7410 · Newspaper Public Notices	949.68	1,371.31
7425 · Contract Services-Lobbyist	6,000.00	30,000.00
7430 · Agency Mgmt Public Relations	0.00	7,500.00
7440 · Region L Contributions	813.60	813.60
7450 · Permit & Fees	0.00	75,537.95
7500 · Supplies	561.13	3,375.31
7600 · Telephone, Telecommunications	0.00	675.00
7700 · Travel, Conferences & Meetings	117.00	783.21
7800 · Employee Expenses		
7810 · Salaries and wages	19,861.38	108,691.53
7820 · Auto Allowance	969.24	5,229.27
7821 · Phone Allowance	207.70	415.40
7830 · Payroll taxes	1,609.08	6,783.37
7840 · Employee Insurance	1,577.47	8,029.23
7850 · Retirement	1,401.14	7,395.60
<b>Total 7800 · Employee Expenses</b>	<b>25,626.01</b>	<b>136,544.40</b>
<b>Total Expenses</b>	<b>364,552.62</b>	<b>2,942,671.03</b>
<b>Net Ordinary Income</b>	<b>802,992.27</b>	<b>462,043.95</b>
<b>Net Income</b>	<b>802,992.27</b>	<b>462,043.95</b>

**Alliance Regional Water Authority**  
**Broadway Bank VISA Debit Card Transactions**  
**February 29, 2020**

Type	Date	Name	Split	Amount	Balance
<b>2005 - Broadway Bank Visa Card</b>					0.00
Credit Card Charge	02/03/2020	Stamps Com	7500 - Supplies	17.99	17.99
Credit Card Charge	02/04/2020	Microsoft	7500 - Supplies	10.66	28.65
Credit Card Charge	02/04/2020	Williams Scotsman	1440-05 - Phase 1A-Con...	1,128.57	1,157.22
Credit Card Charge	02/04/2020	Microsoft	7500 - Supplies	32.48	1,189.70
Credit Card Charge	02/04/2020	Microsoft	7500 - Supplies	26.79	1,216.49
Credit Card Charge	02/06/2020	Mod Pizza	7700 - Travel, Conferenc...	25.34	1,241.83
Credit Card Charge	02/10/2020	Rackspace	7500 - Supplies	97.01	1,338.84
Credit Card Charge	02/10/2020	Coopers BBQ	7700 - Travel, Conferenc...	36.56	1,375.40
Credit Card Charge	02/12/2020	United Site Service	1440-05 - Phase 1A-Con...	214.86	1,590.26
Credit Card Charge	02/13/2020	Williams Scotsman	1440-05 - Phase 1A-Con...	491.95	2,082.21
Credit Card Charge	02/14/2020	Spicy Bite	7700 - Travel, Conferenc...	29.76	2,111.97
Credit Card Charge	02/18/2020	MLA Labs, Inc.	1440-08 - Phase 1A Seg...	2,633.00	4,744.97
Credit Card Charge	02/18/2020	Rackspace	7500 - Supplies	113.15	4,858.12
Credit Card Charge	02/18/2020	MLA Labs, Inc.	1440-07 - Phase 1A BPS...	1,368.00	6,226.12
Credit Card Charge	02/18/2020	Barton Publications	7410 - Newspaper Public...	182.00	6,408.12
Credit Card Charge	02/19/2020	Government Payments	7500 - Supplies	18.00	6,426.12
Credit Card Charge	02/19/2020	House Records USA	7500 - Supplies	18.95	6,445.07
Credit Card Charge	02/24/2020	Office Depot	7500 - Supplies	67.97	6,513.04
Credit Card Charge	02/24/2020	Mod Pizza	7700 - Travel, Conferenc...	25.34	6,538.38
Credit Card Charge	02/24/2020	House Records USA	7500 - Supplies	1.00	6,539.38
Credit Card Charge	02/25/2020	UPS Store	7500 - Supplies	12.00	6,551.38
Credit Card Charge	02/25/2020	Barton Publications	7410 - Newspaper Public...	359.00	6,910.38
Credit Card Charge	02/26/2020	Squarespace Inc	7500 - Supplies	28.15	6,938.53
Credit Card Charge	02/26/2020	Adobo Acropro	7500 - Supplies	16.99	6,955.52
Credit Card Charge	02/26/2020	Lockhart Post Register	7410 - Newspaper Public...	408.68	7,364.20
Credit Card Charge	02/27/2020	Armtex Information	7500 - Supplies	99.99	7,464.19
Check	02/29/2020	Broadway	1005 - Broadway Checki...	-7,464.19	0.00
<b>Total 2005 - Broadway Bank Visa Card</b>				<b>0.00</b>	<b>0.00</b>
<b>TOTAL</b>				<b>0.00</b>	<b>0.00</b>

**REGULAR MEETING**  
**Alliance Regional Water Authority Board of Directors**

**BOARD MEMBER PACKETS**

Wednesday, March 25, 2020 at 3:00 P.M.  
Conference Call Number: 1-903-405-2572; Code: 995 024 086#

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

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Background/Information

The following items were discussed by the Committee at its 3/11 meeting:

- Received an update on the Phase 1A projects (Item F.2).
- Received an update on the Phase 1B program (Item F.3).
- Recommended approval of a work order with Walker Partners, LLC for Final Design and Procurement Phase Services associated with the Phase 1B Segment E Project (Item H.1)
- Received an update on the Authority's submission of an Abridged Application to the Texas Water Development Board for SWIFT funding.
- Received a presentation on the preliminary Commissioning Plan for the Phase 1B projects.
- Received a presentation on the preliminary findings of the Solar Field Production System Estimate for property at the Phase 1B Water Treatment Plant. The Committee requested a detailed return on investment analysis for possible solar production at the site.
- Received an update on area water meetings (Item F.4).

**Board Decision(s) Needed:**

- None.



**REGULAR MEETING**  
**Alliance Regional Water Authority Board of Directors**

**BOARD MEMBER PACKETS**

Wednesday, March 25, 2020 at 3:00 P.M.

Conference Call Number: 1-903-405-2572; Code: 995 024 086#

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

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Background/Information

Below are brief updates on the Phase 1A projects.

Segment B Pipeline:

- Stormwater protection systems installed in current construction areas.
- Currently on time and on budget.
- Over 4,900 feet of pipe laid down as of 3/19/2020.

Pump Station:

- Pump station construction complete.
- Currently startup testing on all systems is underway.
- Onsite training of staff on various equipment, systems and controls underway.
- Current final completion is scheduled for April 17, 2020.
- Final and substantial dates may slide out as the coordination effort continues with various vendors and in relation to the COVID-19 pandemic.

**Board Decision(s) Needed:**

- Approval of minutes.

**REGULAR MEETING**  
**Alliance Regional Water Authority Board of Directors**

**BOARD MEMBER PACKETS**

Wednesday, March 25, 2020 at 3:00 P.M.

Conference Call Number: 1-903-405-2572; Code: 995 024 086#

- F.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 – March 25, 2020
- Program Budget Update
- Kimley-Horn Monthly Summary of Activities for February 2020

**Board Decision(s) Needed:**

- None.



## Phase 1B Program Update

Board of Directors Meeting  
March 25, 2020

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### Agenda

Ongoing Progress

Schedule & Budget Update

Segment E – Final Design/Procurement Contract (Walker Partners)

Environmental – Work Order No. 4 (Additional Phase II Studies)



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## Ongoing Progress

### Consultant Contracting Update

- Pipeline Segment E
  - Final Design Phase Contract (March)
- Pipeline Segment C
  - Final Design Phase Contract (April)

### Texas Water Development Board Update

- EFR's – TWDB Review Status
  - Water Treatment Plant – Approved
  - Booster Pump Station – Under Review
- EFR's to be Submitted
  - Raw Water Infrastructure
- Release of Funds No. 6 Being Prepared
  - Well Drilling – Final Design, Procurement, and Construction
  - Water Treatment Plant – Final Design
  - Booster Pump Station – Property Acquisition



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## 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%	100%
C	90	84	93%	32%
E	32	31	97%	59%
Wellfield	20	8	40%	0%
<b>Total</b>	<b>295</b>	<b>276</b>		



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## Pipeline Easement Acquisition Status

Pipeline Segment	Number of Parcels	Appraisals Prepared	Initial Offer Letter Delivered	Purchase Agreement Signed / Easement Closed
A	38	35	29	8
B	46	14	11	1
D	69	5	3	3
C	90	0	0	0
E	32	0	0	0
Wellfield	20	0	0	0
<b>Total</b>	<b>295</b>	<b>54</b>	<b>43</b>	<b>12</b>



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## Questions?



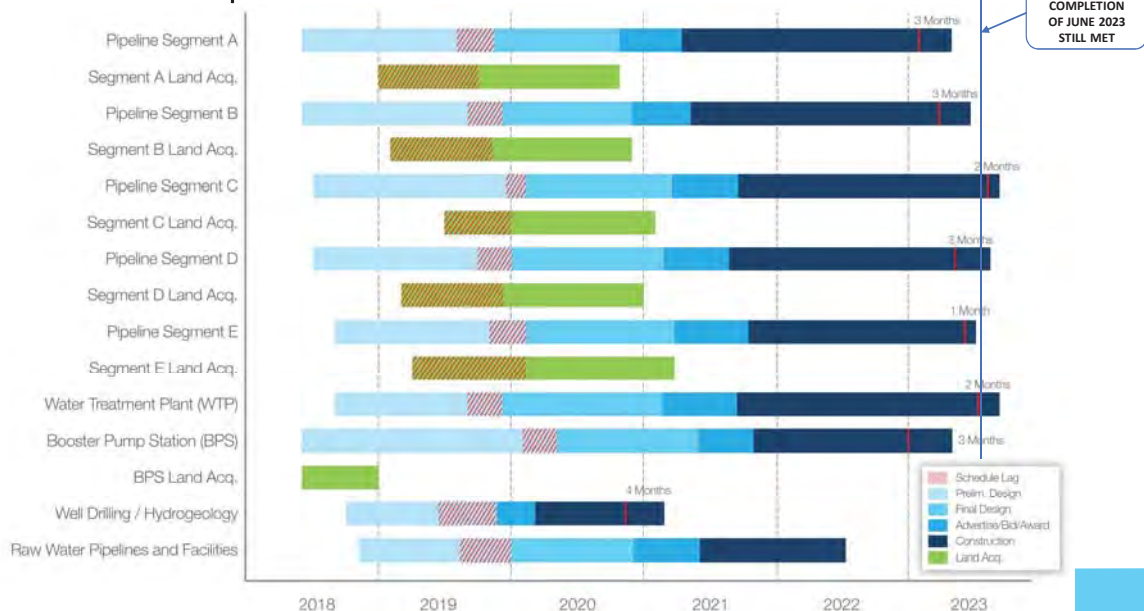
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# Schedule Update

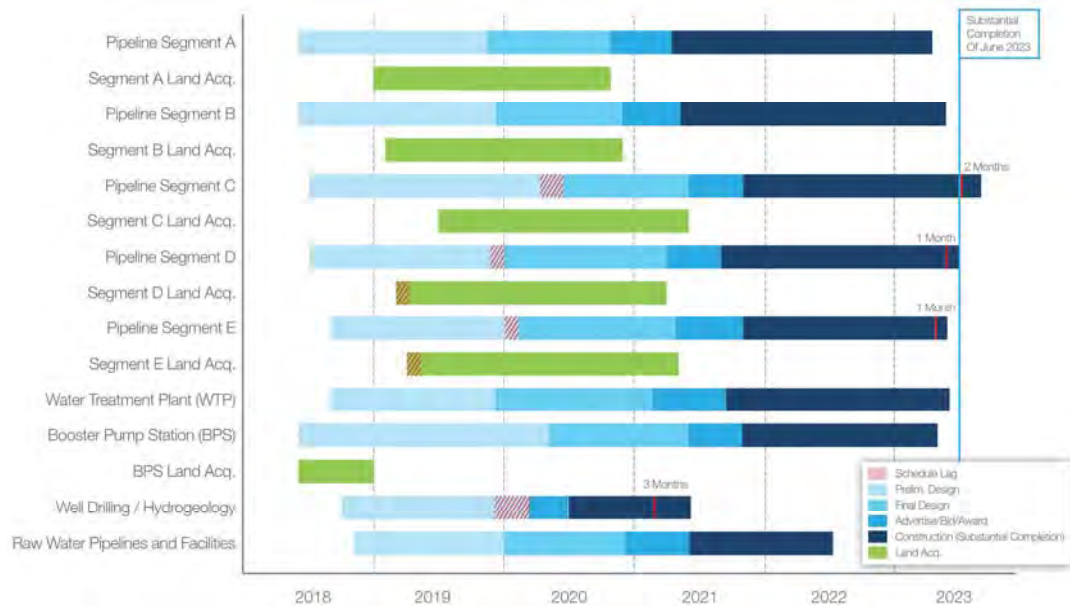


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## Schedule Update – December 2019



## Schedule Update – March 2020



## Schedule Update

### Transmission Pipelines – Segments A, B

- No Change

### Transmission Pipelines – Segments C, D, E

- Delay – 1 to 2 months
  - Rights of Entry / Alignment Confirmation Process
  - Segment C – Developer Coordination
- MITIGATION:
  - Accelerate Design Process where Feasible

## Schedule Update

### Well Drilling

- Delay – 3 months
  - TWDB Environmental Review Process
- MITIGATION: Coordination with TWDB for Future Submittals

### Water Treatment Plant

- No Change

### Booster Pump Station

- No Change

### Raw Water Infrastructure

- No Change



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## Schedule Update

### Next Steps

- Adjust project schedules for Commissioning
- Evaluate project schedules for Procurement



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# Budget Update



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## Budget Update

### Budget Tracking

- Monthly Expenditures
  - Invoices
- Budget Updates
  - Actual Contract Amounts
  - Updated Cost Projections
- TWDB Milestones & Funding Releases



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**ARWA PHASE 1B COST TRACKING -- COMBINED PROGRAM**  
Through December 2019

PHASE 1B COMBINED PROGRAM SUMMARY	PLANNING BUDGET		2019		2020	TOTAL
			September	December	March	
WATER TREATMENT PLANT CUMULATIVE TOTAL	\$46,700,000	BUDGET ACTUAL	\$3,373,000 \$2,840,000	\$4,194,000 \$3,189,000	\$4,877,296	\$46,726,000
BPS & GBRA METERING STATIONS CUMULATIVE TOTAL	\$24,100,000	BUDGET ACTUAL	\$1,685,000 \$1,246,000	\$2,157,000 \$1,498,000	\$2,632,215	\$24,067,000
IN-LINE EST (COMBINED PROGRAM) CUMULATIVE TOTAL	\$5,200,000	BUDGET ACTUAL	\$111,000 \$76,000	\$179,000 \$162,000	\$241,640	\$5,239,000
PIPELINE SEGMENT A CUMULATIVE TOTALS	\$49,700,000	BUDGET ACTUAL	\$3,353,000 \$1,328,000	\$4,575,000 \$1,667,000	\$6,188,604	\$49,685,000
PIPELINE SEGMENT B CUMULATIVE TOTALS	\$47,400,000	BUDGET ACTUAL	\$2,007,000 \$1,238,000	\$3,637,000 \$1,455,000	\$5,573,234	\$47,416,000
PIPELINE SEGMENT D CUMULATIVE TOTALS	\$53,300,000	BUDGET ACTUAL	\$2,698,000 \$1,497,000	\$3,265,000 \$1,706,000	\$5,196,093	\$53,283,000
PIPELINE SEGMENT E1 CUMULATIVE TOTALS	\$15,500,000	BUDGET ACTUAL	\$521,000 \$441,000	\$620,000 \$509,000	\$959,860	\$15,505,000
<b>PROGRAM CUMULATIVE TOTALS WITHOUT CONTINGENCY</b>	<b>\$241,900,000</b>	<b>BUDGET ACTUAL</b>	<b>\$13,740,000 \$8,666,000</b>	<b>\$19,227,000 \$10,126,000</b>	<b>\$25,648,941</b>	<b>\$241,920,000</b>
<b>ACCUMULATED PROGRAM CONTINGENCY</b>	<b>\$64,200,000</b>	<b>BUDGET</b>	<b>\$2,073,000</b>	<b>\$2,856,000</b>	<b>\$3,946,189</b>	<b>\$64,268,000</b>
<b>ARWA AND GBRA CASH FLOW FORECASTS</b>						
ARWA CUMULATIVE CASH FLOW	\$145,300,000	BUDGET ACTUAL	\$6,791,000 \$4,332,805	\$9,535,000 \$5,063,078	\$12,755,028	\$145,388,000
GBRA CUMULATIVE CASH FLOW	\$96,500,000	BUDGET ACTUAL	\$6,791,000 \$4,289,000	\$9,535,000 \$8,967,847	\$12,755,000	\$96,532,000
<b>ARWA AND GBRA CONTINGENCY ACCUMULATION FORECASTS</b>						
ARWA CUMULATIVE CONTINGENCY ACCUMULATION	\$39,500,000	BUDGET	\$1,038,000	\$1,428,000	\$1,972,866	\$39,462,000
GBRA CUMULATIVE CONTINGENCY ACCUMULATION	\$24,800,000	BUDGET	\$1,036,000	\$1,428,000	\$1,972,866	\$24,806,000

**ARWA PHASE 1B COST TRACKING -- ARWA PHASE 1B PROGRAM SUMMARY**  
Through December 2019

PHASE 1B ARWA PROGRAM SUMMARY	PLANNING BUDGET		2019		2020	TOTAL
			September	December	March	
<b>ARWA-ONLY PROJECTS</b>						
WELLFIELD CUMULATIVE TOTAL	\$3,700,000	PLANNED ACTUAL	\$200,000 \$200,000	\$780,000 \$380,000	\$1,800,000	\$1,780,200
RAW WATER INFRASTRUCTURE CUMULATIVE TOTAL	\$7,300,000	PLANNED ACTUAL	\$1,130,000 \$929,000	\$1,400,000 \$712,810	\$1,630,978	\$7,242,000
ARWA-ONLY WATER TREATMENT PLANT CUMULATIVE TOTAL	\$2,800,000	PLANNED ACTUAL	\$2,364,000 \$2,364,000	\$2,544,000 \$2,344,100	\$2,564,100	\$2,544,000
BPS Seg C & ARWA DELIVERY POINTS CUMULATIVE TOTAL	\$7,600,000	PLANNED ACTUAL	\$888,000 \$809,000	\$1,210,000 \$648,100	\$1,272,000	\$7,638,000
IN-LINE EST SEG C CUMULATIVE TOTAL	\$5,100,000	PLANNED ACTUAL	\$277,000 \$33,000	\$138,000 \$72,800	\$308,028	\$5,201,200
ADMIN & OPS CENTER CUMULATIVE TOTAL	\$4,300,000	PLANNED ACTUAL	\$133,000 \$32,000	\$210,000 \$42,500	\$243,363	\$4,290,000
PIPELINE SEGMENT C CUMULATIVE TOTALS	\$88,800,000	PLANNED ACTUAL	\$2,431,000 \$3,180,000	\$2,431,000 \$1,379,100	\$3,698,321	\$88,801,000
PIPELINE SEGMENT E2 CUMULATIVE TOTALS	\$8,300,000	PLANNED ACTUAL	\$700,000 \$545,000	\$812,000 \$648,000	\$1,040,200	\$8,349,000
<b>ARWA CUMULATIVE CASH FLOW -- ARWA-ONLY PROGRAM</b>	<b>\$104,700,000</b>	<b>PLANNED ACTUAL</b>	<b>\$8,100,000 \$5,520,000</b>	<b>\$9,980,000 \$6,390,000</b>	<b>\$13,370,000</b>	<b>\$104,910,000</b>
<b>COMBINED PROGRAM PROJECTS</b>						
WATER TREATMENT PLANT CUMULATIVE TOTAL	\$24,500,000	BUDGET ACTUAL	\$1,685,000 \$1,430,000	\$2,287,000 \$1,594,000	\$2,438,040	\$24,535,000
BPS & GBRA METERING STATIONS CUMULATIVE TOTAL	\$24,300,000	BUDGET ACTUAL	\$843,000 \$693,000	\$1,079,000 \$748,700	\$1,306,107	\$24,341,000
IN-LINE EST (COMBINED PROGRAM) CUMULATIVE TOTAL	\$3,800,000	BUDGET ACTUAL	\$162,000 \$38,000	\$280,000 \$157,000	\$330,600	\$3,831,000
PIPELINE SEGMENT A CUMULATIVE TOTALS	\$28,600,000	BUDGET ACTUAL	\$1,678,000 \$664,000	\$2,288,000 \$831,400	\$3,094,302	\$28,581,000
PIPELINE SEGMENT B CUMULATIVE TOTALS	\$23,500,000	BUDGET ACTUAL	\$1,003,000 \$619,000	\$1,833,000 \$771,500	\$2,788,817	\$23,536,000
PIPELINE SEGMENT D CUMULATIVE TOTALS	\$38,300,000	BUDGET ACTUAL	\$1,345,000 \$748,000	\$1,312,000 \$633,000	\$2,598,046	\$38,378,000
PIPELINE SEGMENT E1 CUMULATIVE TOTALS	\$9,500,000	BUDGET ACTUAL	\$240,000 \$221,000	\$310,000 \$224,000	\$479,300	\$9,497,000
<b>ARWA CUMULATIVE CASH FLOW -- COMBINED PROGRAM</b>	<b>\$145,300,000</b>	<b>PLANNED ACTUAL</b>	<b>\$8,888,000 \$6,333,000</b>	<b>\$10,312,000 \$7,660,000</b>	<b>\$13,374,471</b>	<b>\$145,388,000</b>
<b>ARWA PHASE 1B CUMULATIVE CASH FLOW W/O CONTINGENCY</b>	<b>\$136,200,000</b>	<b>PLANNED ACTUAL</b>	<b>\$14,989,000 \$9,893,000</b>	<b>\$19,314,000 \$11,294,078</b>	<b>\$24,024,471</b>	<b>\$136,288,000</b>
<b>ARWA CUMULATIVE CONTINGENCY ACCUMULATION</b>	<b>\$108,700,000</b>	<b>PLANNED</b>	<b>\$2,092,000</b>	<b>\$4,112,000</b>	<b>\$6,187,589</b>	<b>\$108,611,000</b>



Horn

# Budget Update

## Next Steps

- Update for Program Cost Directives
- Update with 30% Cost Projections



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# Questions?

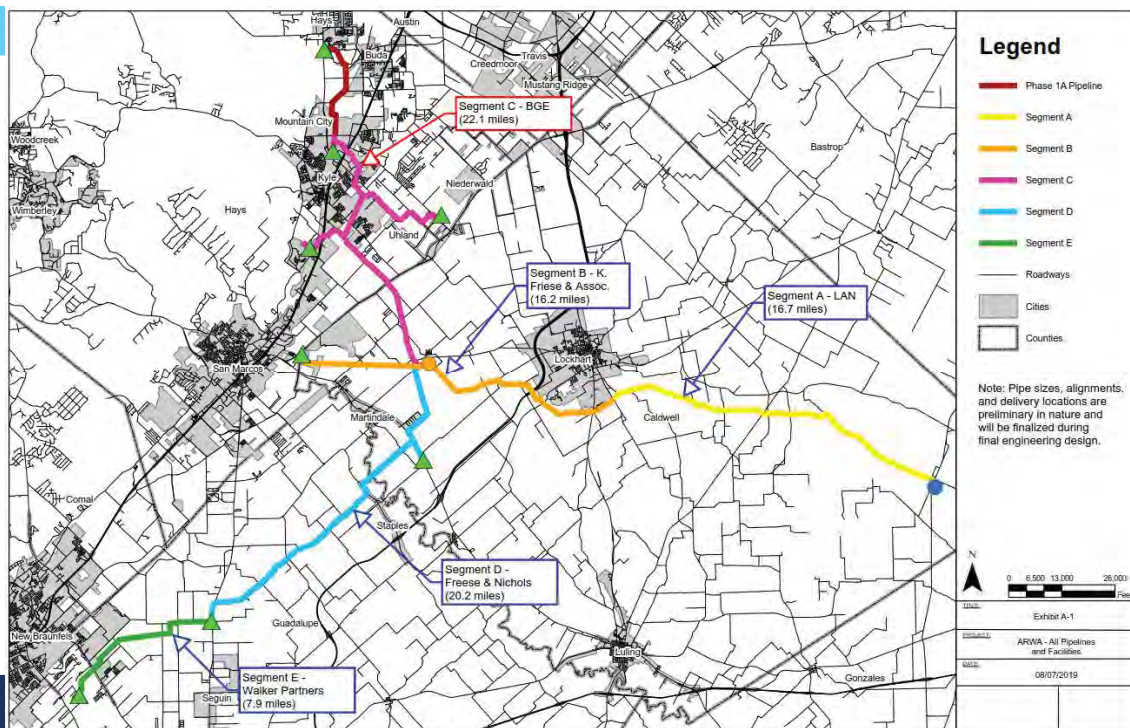


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# Consulting Services



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## Phase 1B Transmission Pipeline Design Services

### Final Design Phase Pipeline Proposal status update

- Segment A and B approved at the August meeting
- Segment D approved at the November meeting
- Segment E on the March agenda
- Segment C on the April agenda

### Scope through final design phase, to include:

- 60%, 90%, and 100% Design
- Procurement
- Geotechnical, SUE, and Survey Services
- Does not include Construction Phase Services



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## Phase 1B Transmission Pipeline Design Services

### Supplemental Services:

- Additional Survey, SUE, and Geotechnical Services
- General Engineering Design
- Eminent Domain Support (Up to 10% of Parcels Assumed)
- Additional Meetings



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## Phase 1B Transmission Pipeline Design Services

Project	Selected Consultant	Basic Services	Supplemental Services	Total Proposal
A	LAN, Inc.	\$ 1,903,077.00	\$ 232,949.00	\$ 2,136,026.00
B	K Friese + Assoc.	\$ 1,830,994.00	\$ 421,051.00	\$ 2,252,045.00
D	Freese & Nichols	\$ 1,999,464.00	\$ 251,427.00	\$ 2,250,891.00
E	Walker Partners	\$ 1,190,421.00	\$ 376,066.00	\$ 1,566,487.00



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## Phase 1B Transmission Pipeline Design Services

Project	Anticipated Construction Cost (Draft Engineering Feasibility Report)	Anticipated Engineering Basic Services Fee through Construction (7%-8%)*		Preliminary + Final Design Engineering Services (Basic Services)*	Preliminary + Final Design Engineering Fee as a % of Total Construction Cost
A	\$ 44,000,000.00	\$ 3,080,000.00	\$ 3,520,000.00	\$ 1,997,649.00	4.5%
B	\$ 43,400,000.00	\$ 3,038,000.00	\$ 3,472,000.00	\$ 1,795,055.00	4.1%
D	\$ 50,200,000.00	\$ 3,514,000.00	\$ 4,016,000.00	\$ 2,039,279.00	4.1%
E	\$ 29,000,000.00	\$ 2,030,000.00	\$ 2,320,000.00	\$ 1,330,388.00	4.6%

\*Does not include survey, geotechnical, environmental, subsurface utility engineering (potholing)



Kimley»Horn

# Pipeline Segments B, D, & E – Hazardous Materials Phase II Investigations

Blanton Performed Phase I Investigations, and Identified Nineteen (19) Locations Requiring Additional Studies

Phase II Scope of Work (Time & Materials on an As-Needed Basis):

- Project Management (Additional Coordination and Meetings)
- Phase II Investigations
  - Soil sampling at each location
  - Temporary monitoring well will be installed if groundwater is present (proposal assumes install at all locations)
  - If temporary well does not yield a groundwater sample, then a permanent well installation would be evaluated (additional funding will be required)
  - Asbestos containing material investigation at one location
- Preparation of Letter Report

Maximum Not-to-Exceed Fee = \$244,160.00



Kimley»Horn

## Questions?



Kimley»Horn

**ARWA PHASE 1B COST TRACKING -- COMBINED PROGRAM**

Through December 2019

PHASE 1B COMBINED PROGRAM SUMMARY	PLANNING BUDGET		2019		2020	TOTAL
			September	December	March	
WATER TREATMENT PLANT CUMULATIVE TOTAL	\$46,700,000	BUDGET ACTUAL	\$3,373,000 \$2,840,000	\$4,194,000 \$3,189,000	\$4,877,296	\$46,726,000
BPS & GBRA METERING STATIONS CUMULATIVE TOTAL	\$24,100,000	BUDGET ACTUAL	\$1,685,000 \$1,246,000	\$2,157,000 \$1,498,000	\$2,612,215	\$24,067,000
IN-LINE EST (COMBINED PROGRAM) CUMULATIVE TOTAL	\$5,200,000	BUDGET ACTUAL	\$111,000 \$76,000	\$179,000 \$102,000	\$241,640	\$5,239,000
PIPELINE SEGMENT A CUMULATIVE TOTALS	\$49,700,000	BUDGET ACTUAL	\$3,353,000 \$1,328,000	\$4,575,000 \$1,667,000	\$6,188,604	\$49,685,000
PIPELINE SEGMENT B CUMULATIVE TOTALS	\$47,400,000	BUDGET ACTUAL	\$2,007,000 \$1,238,000	\$3,637,000 \$1,455,000	\$5,573,234	\$47,416,000
PIPELINE SEGMENT D CUMULATIVE TOTALS	\$53,300,000	BUDGET ACTUAL	\$2,690,000 \$1,497,000	\$3,865,000 \$1,706,000	\$5,196,091	\$53,283,000
PIPELINE SEGMENT E1 CUMULATIVE TOTALS	\$15,500,000	BUDGET ACTUAL	\$521,000 \$441,000	\$620,000 \$509,000	\$959,860	\$15,505,000
<b>PROGRAM CUMULATIVE TOTALS WITHOUT CONTINGENCY</b>	<b>\$241,900,000</b>	<b>BUDGET ACTUAL</b>	<b>\$13,740,000 \$8,666,000</b>	<b>\$19,227,000 \$10,126,000</b>	<b>\$25,648,941</b>	<b>\$241,920,000</b>
<b>ACCUMULATED PROGRAM CONTINGENCY</b>	<b>\$64,200,000</b>	<b>BUDGET</b>	<b>\$2,073,000</b>	<b>\$2,856,000</b>	<b>\$3,946,189</b>	<b>\$64,268,000</b>
ARWA AND GBRA CASH FLOW FORECASTS						
ARWA CUMULATIVE CASH FLOW	\$145,300,000	BUDGET ACTUAL	\$6,791,000 \$4,332,805	\$9,535,000 \$5,063,078	\$12,755,028	\$145,388,000
GBRA CUMULATIVE CASH FLOW	\$96,500,000	BUDGET ACTUAL	\$6,791,000 \$4,289,000	\$9,535,000 \$4,967,847	\$12,755,000	\$96,532,000
ARWA AND GBRA CONTINGENCY ACCUMULATION FORECASTS						
ARWA CUMULATIVE CONTINGENCY ACCUMULATION	\$39,500,000	BUDGET	\$1,036,000	\$1,428,000	\$1,972,866	\$39,462,000
GBRA CUMULATIVE CONTINGENCY ACCUMULATION	\$24,800,000	BUDGET	\$1,036,000	\$1,428,000	\$1,972,866	\$24,806,000



**ARWA PHASE 1B COST TRACKING -- ARWA PHASE 1B PROGRAM SUMMARY**  
Through December 2019

PHASE 1B ARWA PROGRAM SUMMARY	PLANNING BUDGET		2019		2020 March	TOTAL
			September	December		
<b>ARWA-ONLY PROJECTS</b>						
WELLFIELD CUMULATIVE TOTAL	\$3,700,000	PLANNED ACTUAL	\$200,000 \$100,000	\$700,000 \$160,001	\$1,601,962	\$3,700,000
RAW WATER INFRASTRUCTURE CUMULATIVE TOTAL	\$7,300,000	PLANNED ACTUAL	\$1,138,000 \$525,000	\$1,400,000 \$712,610	\$1,630,578	\$7,282,000
ARWA-ONLY WATER TREATMENT PLANT CUMULATIVE TOTAL	\$2,600,000	PLANNED ACTUAL	\$2,564,000 \$2,564,000	\$2,564,000 \$2,564,100	\$2,564,100	\$2,564,000
BPS Seg C & ARWA DELIVERY POINTS CUMULATIVE TOTAL	\$7,600,000	PLANNED ACTUAL	\$898,000 \$609,000	\$1,193,000 \$668,169	\$1,272,000	\$7,638,000
INLINE EST SEG C CUMULATIVE TOTAL	\$5,100,000	PLANNED ACTUAL	\$77,000 \$51,000	\$138,000 \$71,845	\$200,016	\$5,051,000
ADMIN & OPS CENTER CUMULATIVE TOTAL	\$4,300,000	PLANNED ACTUAL	\$133,000 \$32,000	\$216,000 \$39,266	\$247,563	\$4,296,000
PIPELINE SEGMENT C CUMULATIVE TOTALS	\$65,800,000	PLANNED ACTUAL	\$2,431,000 \$1,120,000	\$2,835,000 \$1,370,889	\$4,659,125	\$65,805,000
PIPELINE SEGMENT E2 CUMULATIVE TOTALS	\$8,500,000	PLANNED ACTUAL	\$700,000 \$545,000	\$817,000 \$648,037	\$1,045,203	\$8,549,000
ARWA CUMULATIVE CASH FLOW -- ARWA-ONLY PROGRAM	\$104,900,000	PLANNED ACTUAL	\$8,100,000 \$5,500,000	\$9,900,000 \$6,200,000	\$13,200,000	\$104,900,000
<b>COMBINED PROGRAM PROJECTS</b>						
WATER TREATMENT PLANT CUMULATIVE TOTAL	\$24,500,000	BUDGET ACTUAL	\$1,686,000 \$1,420,000	\$2,097,000 \$1,594,565	\$2,438,648	\$24,535,000
BPS & GBRA METERING STATIONS CUMULATIVE TOTAL	\$13,300,000	BUDGET ACTUAL	\$843,000 \$623,000	\$1,079,000 \$748,758	\$1,306,107	\$13,341,000
IN-LINE EST (COMBINED PROGRAM) CUMULATIVE TOTAL	\$3,600,000	BUDGET ACTUAL	\$56,000 \$38,000	\$89,000 \$51,021	\$120,820	\$3,619,000
PIPELINE SEGMENT A CUMULATIVE TOTALS	\$28,600,000	BUDGET ACTUAL	\$1,676,000 \$664,000	\$2,288,000 \$833,464	\$3,094,302	\$28,582,000
PIPELINE SEGMENT B CUMULATIVE TOTALS	\$29,500,000	BUDGET ACTUAL	\$1,003,000 \$619,000	\$1,818,000 \$727,584	\$2,786,617	\$29,506,000
PIPELINE SEGMENT D CUMULATIVE TOTALS	\$36,300,000	BUDGET ACTUAL	\$1,345,000 \$748,000	\$1,932,000 \$853,006	\$2,598,046	\$36,308,000
PIPELINE SEGMENT E1 CUMULATIVE TOTALS	\$9,500,000	BUDGET ACTUAL	\$260,000 \$221,000	\$310,000 \$254,681	\$479,930	\$9,497,000
ARWA CUMULATIVE CASH FLOW -- COMBINED PROGRAM	\$145,300,000	PLANNED ACTUAL	\$6,869,000 \$4,333,000	\$9,613,000 \$5,063,078	\$12,824,471	\$145,388,000
<b>ARWA PHASE1B CUMULATIVE CASH FLOW W/O CONTINGENCY</b>	<b>\$250,200,000</b>	PLANNED ACTUAL	<b>\$14,969,000 \$9,833,000</b>	<b>\$19,513,000 \$11,263,078</b>	<b>\$26,024,471</b>	<b>\$250,288,000</b>
ARWA CUMULATIVE CONTINGENCY ACCUMULATION	\$105,700,000	PLANNED	\$2,992,000	\$4,132,000	\$6,167,589	\$105,611,000

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

Invoice No: 068706602-0220  
 Invoice Date: Feb 29, 2020  
 Invoice Amount: \$ 388,234.17  
 Project No: 068706602  
 Project Name: ARWA PROGRAM YEAR 2  
 Project Manager: SOWA, RYAN

Work Order No. 3  
 Duration: March 2019 - Feb. 2020

Invoice Duration: Feb. 1, 2020 to Feb. 29, 2020  
 Final Invoice for Work Order No. 3

COST PLUS MAX  
 KHA Ref # 068706602.3-16049648

Description	Contract Value	Amount Billed to Date	Previous Amount Billed	Current Amount Due
PROGRAM MANAGEMENT PLAN UPDATES	9,934.20	9,479.20	9,301.00	178.20
STAKEHOLDER COORDINATION	287,811.89	287,750.03	258,337.13	29,412.91
BUDGETTING	144,873.00	144,847.50	135,187.50	9,660.00
SCHEDULE	94,084.00	93,946.50	84,529.20	9,417.30
REPORTING	53,250.00	53,080.00	50,055.00	3,025.00
DATA MANAGEMENT	134,479.33	134,470.93	117,443.23	17,027.70
ENVIRONMENTAL MANAGEMENT	139,632.00	139,627.43	111,238.93	28,388.50
LAND ACQUISITION MANAGEMENT	517,440.29	517,369.54	408,473.52	108,896.02
TEXAS WATER DEVELOPMENT BOARD MANAGEMENT	46,940.19	46,844.90	36,413.82	10,431.08
DESIGN STANDARDS	321,033.48	320,862.31	277,990.65	42,871.67
ENGINEERING DESIGN MANAGEMENT	807,919.24	807,917.50	703,242.30	104,675.19
QUALITY ASSURANCE	69,446.00	69,418.46	67,421.46	1,997.00
ELECTRICAL POWER PLANNING	62,511.19	62,455.97	55,523.27	6,932.71
PERMIT COORDINATION/TRACKING	50,682.00	50,680.83	43,222.83	7,458.00
PROJECT ADMINISTRATION	53,599.20	47,349.67	41,236.77	6,112.90
OTHER SERVICES	83,467.00	83,423.80	81,673.80	1,750.00
Subtotal	2,877,103.00	2,869,524.58	2,481,290.41	388,234.17
Total COST PLUS MAX				388,234.17

Total Invoice: \$ 388,234.17

If you have questions regarding this invoice, please call Jessica Olivarez at (972) 770-1352.

March 18, 2020

## **Project Monthly Summary**

### **February 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 and presented Project Advisory Committee Meeting Update.
  - Prepared for and held Monthly Status Meeting with Alliance Water.
  - Prepared for and attended Fiber Coordination Meeting with ARWA and GBRA.
- Task 3 – Budgeting
  - Prepared Program Quarterly Update for the Technical Committee and Board Meetings.
  - Continued updates to Budget Workbook to include monthly tracking of actual costs for ARWA review.
- Task 4 – Schedule
  - Prepared Program Quarterly Update for the for the Technical Committee and Board Meetings.
  - Coordinated with Program team to integrate each monthly project schedule update into overall Program schedule.
- Task 6 – Data Management
  - Integrated 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
  - Attended Phase II Field Work Coordination Meeting for Segment A.
  - 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.

**Alliance Water – Phase 1B Infrastructure – Owner’s Representative**

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- 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
  - 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
  - Submitted the WTP EFR to the TWDB for review.
  - Coordinated with TWDB for Well Drilling procurement process.
  - Continue coordination with TWDB Staff to track all EFRs, environmental reports, and bid documents currently under review.
  
- Task 10 – Design Standards
  - Began compiling comments from the Manufacturer review of the Pipeline Construction Standards.
  - Finalized Draft Cathodic Protection Program Standards for review by the PAC and Design Consultants.
  - Attended PAC Meeting to present overview of Draft Cathodic Protection Program Standards.
  - Finalized Draft Security Standards for review by the PAC and Design Consultants.
  - Continued development of Draft Fiber Standards.
  - Prepared for and attended Fiber Discussion meeting with the Design Consultants.
  
- Task 11 – Engineering Design Management
  - Pipelines:
    - Segment A
      - Continued coordination with Design Consultant for final design.

**Alliance Water – Phase 1B Infrastructure – Owner’s Representative**

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- 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:
  - Finalized Contract Documents and continued coordination regarding procurement of the construction contract for Wells 6-9.
- Raw Water Infrastructure:
  - Reviewed and commented on 30% Engineering Feasibility Report.
  - Continued coordination with Design Consultant for 30% design development.
- Water Treatment Plant:
  - Coordinated with the Design Consultant to finalize and submit the 30% Engineering Feasibility Report to the TWDB.
  - Continued coordination with Design Consultant for final design.
- 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:
  - Continued coordination with Design Consultant for 30% design development.
  - Coordinated with the Design Consultant to finalize the 30% Design Report.
- Other:
  - Monthly progress meetings with all Design Consultants (pipelines, water treatment plant, raw water infrastructure, wellfield, booster pump station).

**Alliance Water – Phase 1B Infrastructure – Owner’s Representative**

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- 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 regarding electric service to the WTP and wellfield.
- 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
    - Continued evaluating the commissioning of the Phase 1B Program infrastructure and finalized a draft presentation.
  - Finalized solar feasibility memorandum and submitted to ARWA.

**March 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.
  - Finalize 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.

**Alliance Water – Phase 1B Infrastructure – Owner’s Representative**

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- Finalize 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.
- 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.
  - Coordinate with Environmental Consultant to develop proposal for additional hazmat studies for Segments B and D.
  - 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
  - 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
  - Submit EFRs for Booster Pump Station and Raw Water Infrastructure.
  - Continue coordination with TWDB Staff to track all EFRs, environmental reports, and bid documents currently under review.
  - Begin preparations for reimbursement funding release.

**Alliance Water – Phase 1B Infrastructure – Owner’s Representative**

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- Task 10 - Design Standards
  - Compile and address comments from the Manufacturer review of the Pipeline Construction Standards.
  - Revise the Cathodic Protection Program Standards given feedback from the PAC and Design Consultants.
  - Revise the Security Standards given feedback from the PAC and Design Consultants.
  - Finalize Draft Fiber Standards for review by the PAC and Design Consultants.
  
- Task 11 - Engineering Design Management
  - Pipelines:
    - Segment A
      - 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.
      - Begin review of Draft 30% Engineering Feasibility Report prepared by the Design Consultant.
      - 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 procurement of the construction contract for Wells 6-9.
    - Prepare for and attend Pre-Proposal Meeting.
  - Raw Water Infrastructure:
    - Finalize and backcheck review the Final 30% Engineering Feasibility Report.
    - Continue coordination with Design Consultant for 30% design development.



**Alliance Water – Phase 1B Infrastructure – Owner’s Representative**

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- Water Treatment Plant:
  - Coordination with the Design Consultant to finalize value engineering cost analysis.
  - Coordination with Design Consultant for final design.
- Booster Pump Station:
  - Coordination with the Design Consultant to finalize and submit the 30% Design Report to the TWDB.
  - Coordination with Design Consultant for final design.
- Inline Elevated Storage Tanks:
  - Coordination with Design Consultant for 30% design development.
- 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.
  - Continue coordination with GVEC regarding electric service to the WTP and 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.
  - Coordinate with Hays County concerning the Site Development Permit.
  - General Coordination with TxDOT
  - General Coordination with GVEC and BBEC
  - 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.
  - Prepare a presentation summarizing the solar feasibility memorandum findings.

**Scope Elements Added/Removed:**

None at this time.

**Outstanding Issues/Concerns:**

None at this time.

**Alliance Water – Phase 1B Infrastructure – Owner’s Representative**

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**HUB Participation:**

50.6% allotted by Contract (based on contract total fee)

49.5% 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	\$230,864.00	100%	\$230,846.02	\$205,757.82
CP&Y, Inc.	ABE; MBE	Program Standards, Compliance, and Project Management	\$691,002.53	96%	\$666,625.03	\$544,182.53
Grubb Engineering, Inc.	ESBE; SBE; WBE	Electrical Power Planning	\$55,000.00	89%	\$48,963.26	\$42,854.51
Spitzer and Associates, Inc.	SBE; WBE	Land Acquisition Management	\$430,069.00	103%	\$445,065.00	\$348,989.00
RVK Architects, Inc.	WBE	Architectural Project Management	\$14,695.00	52%	\$7,665.76	\$7,665.76
V&A Consulting Engineers, Inc.	SBE; HABE; MBE	Cathodic Protection Standards	\$33,798.00	66%	\$22,328.15	\$4,855.00
		Subtotal	\$1,455,428.53	97.7%	\$1,421,493.22	\$1,154,304.61

**REGULAR MEETING**  
**Alliance Regional Water Authority Board of Directors**

**BOARD MEMBER PACKETS**

Wednesday, March 25, 2020 at 3:00 P.M.

Conference Call Number: 1-903-405-2572; Code: 995 024 086#

- F.4** 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.

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Gonzales County Underground Water Conservation District (GCUWCD)

The GCUWCD met on March 10th. The GCUWCD held a public hearing to receive comments on its proposed rules. The Authority submitted several comments, about half of which the GCUWCD seemed interested in incorporating. The GCUWCD also circulated a list of costs for some additional monitoring well efforts. The groups funding the effort, including the Authority, are currently reviewing the list and costs.

Plum Creek Conservation District (PCCD)

The PCCD met on March 17th. No items affecting the Authority were on the agenda. Due to the COVID-19 pandemic, no staff from the Authority attended the meeting.

Groundwater Management Area 13

No update.

Region L Planning Group

The TWDB has developed a draft interactive state water plan site with data from the Draft 2021 Regional Water Plan. The draft interactive site may be accessed at the following link: <https://2022.texasstatewaterplan.org/statewide>

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

No update.

**Board Decision(s) Needed:**

- None.

**REGULAR MEETING**  
**Alliance Regional Water Authority Board of Directors**

**BOARD MEMBER PACKETS**

Wednesday, March 25, 2020 at 3:00 P.M.

Conference Call Number: 1-903-405-2572; Code: 995 024 086#

- G. 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.*

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**EXECUTIVE DIRECTOR**

RFQ Update

- The Public Relation Services RFQ was posted on January 29th. An addendum was issued to push back the due date to March 26<sup>th</sup>.

Job Posting

- The Authority has posted its Operator position on the Authority's website (<http://alliancewater.org/were-hiring>). Staff paid for advertising of the position with the Texas Water Utility Association, both on their website and in their journal. The position is scheduled to close on April 17<sup>th</sup>.

Board Appointments

- Letters went out to all Sponsors that are scheduled to appoint Board members in April (San Marcos – 2, CRWA – 2 & Buda – 1).

Water Sharing / Water Use Survey

- Water use surveys for our use in reviewing water sharing options were sent out to all Sponsors.

Log and Calendar of Events

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

**Executive Director  
Log of Activities**

February						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1-Feb
2-Feb	3-Feb	4-Feb	5-Feb	6-Feb	7-Feb	8-Feb
	Sign ROEs	1B Monthly Meeting	Regional Water Alliance mtg	Weekly ROW call	GMA-13 Meeting	
	CRWA Board write-up	ROEs and settlement reviews	1A PS review with GAI	Sign ROEs	Tech Cmte agenda & packet	
	Water use invoices		LAN Open House	CM&I addendum		
9-Feb	10-Feb	11-Feb	12-Feb	13-Feb	14-Feb	15-Feb
	Mtg w/ County Line to discuss interim needs	Mtg w/ House Nat'l Rscs staff	WTP value engineering discussion	1A Pump Station Const Mtg	Meeting w/ Winklers	
	CRWA Board mtg	Region L chapter review	Tech Cmte meeting	1A Segment B Const Mtg	Meeting with County Judge	
	Jan financial info	WTP value engineering review	Invoicing	Weekly ROW call	1B ROW coordination	
	GW lease coordination	Cathodic protection review				
16-Feb	17-Feb	18-Feb	19-Feb	20-Feb	21-Feb	22-Feb
	1ASB - easement info review	PCCD Board meeting	Buda Comms call	Region L meeting	Project Advisory Cmte meeting	
	PAC & Board agendas	Consultant invoices	Press release	WTP Monthly Conf Call	Board packet	
	Comments on GCUWCD rules	Response to TWDB SWIFT question	Ph1ASB permit coordination	Pick-Up CM&I RFQs	ROW acquisition coordination	
	PR RFQ addendum	Cathodic protection pres.				
23-Feb	24-Feb	25-Feb	26-Feb	27-Feb	28-Feb	29-Feb
	Mtg w/ Kenneth Williams	Sign ROEs	Board Mtg	GBC Mtg	PTO	
	GVEC coordination	Meet with Darrin Coe	Review CM&I submittals	1A SB Coord.		
	WDH schedule coordination	Owner's Rep WO coordination	WDH coordination	1/2 Day PTO		
	WDH bidding - posting					

# March 2020

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

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
Mar 1	2 Operator Job Posting - Jason Biemer 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 8:30am FW: ARWA1BWTP - WTP Design Scrum (Skype Meeting) - Felipe 10:30am Sign ROEs (Kyle - Starbucks)	7
8	9 10:30am PR RFQ Discussion 1:30pm ARWA Phase 1B Weekly Progress 2:00pm Alliance Water 6:30pm CRWA Board	10 10:00am Well Drilling - Pre-Proposal (ARWA) 5:30pm GCUWCD Board Meeting (GCUWCD) 5:30pm Public Hearing on Gonzales	11 11:30am Sign ROEs (Kyle - Starbucks) 1:00pm Right Of Way Meeting (407 S) 3:00pm ARWA Technical Committee Meeting	12 9:15am Darrin Coe 10:00am ARWA Teleconference re 10:00am GVEC Call (Conference Call) 11:00am ARWA1B -	13 9:00am Commissioner Barbara Shelton (Caldwell County Courthouse)	14
15	16 10:00am ARWA - Dittmar Acquisition (CRWA Offices (850) 1:30pm ARWA Phase 1B Weekly Progress	17 1:00pm PCCD Meeting (Lockhart, Texas, United States) 3:00pm Call in Testing - Jason Biemer	18 3:30pm ARWA1B - Discussion of COVID-19 Impact (Skype Meeting) - Sowa, Ryan	19 11:00am ARWA1B - Weekly ROW Call (Skype Meeting) - Sowa, Ryan	20 9:00am Project Advisory Committee Meeting (TEAMS Conference Call) - Graham Moore	21
SPRING BREAK						
22	23 11:30am LNV and Graham Lunch Meeting (Serrano's, 1:30pm ARWA Phase 1B Weekly Progress Meetings (WEBEX) -	24	25 10:00am CRWA Board of Managers Meeting (CRWA Offices) 3:00pm ARWA March Board Meeting (Canyon Regional	26 11:00am ARWA1B - Weekly ROW Call (Skype Meeting) - Sowa, Ryan	27 11:45am Jason/Graham Mid-Year Goal Check-In (TBD) - 1:30pm ARWA1BWTP - Monthly Meeting (Conference Call) -	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							May 2020						
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4						1	2
5	6	7	8	9	10	11	3	4	5	6	7	8	9
12	13	14	15	16	17	18	10	11	12	13	14	15	16
19	20	21	22	23	24	25	17	18	19	20	21	22	23
26	27	28	29	30			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) - 2:00pm Well Drilling - Bid Opening (Kyle Public Works)	3 8:00am ARWA1BSC - Draft EFR Comment to Sean - Mason, Sean	4
5	6 1:30pm ARWA Phase 1B Weekly Progress Meetings (WEBEX) - Shore, Nichola	7 1:30pm ARWA1BBPSPD - Booster PS & Delivery Points - Cost Reduction Alternatives Workshop (FNI San	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

# May 2020

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

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
Apr 26	27	28	29	30	May 1	2 10:00am Possible Leaseholder BBQ
3	4 1:30pm ARWA Phase 1B Weekly Progress Meetings (WEBEX) - Shore, Nichola	5 9:00am Alliance Water - Monthly Check-in (Skype Meeting) - Cobler, Nathan	6	7 11:00am ARWA1B - Weekly ROW Call (Skype Meeting) - Sowa, Ryan	8 9:30am GMA-13 Meeting	9
10	11 1:30pm ARWA Phase 1B Weekly Progress 6:30pm CRWA Board Meeting (CRWA)	12 5:30pm GCUWCD Board Meeting (GCUWCD Offices)	13 3:00pm ARWA Technical Committee Meeting (Kyle Public Works)	14 11:00am ARWA1B - Weekly ROW Call 1:30pm Phase 1A 3:00pm ARWA 1A-B	15 9:00am Project Advisory Committee Meeting (Kyle Public Works)	16
17	18 1:30pm ARWA Phase 1B Weekly Progress Meetings (WEBEX) - Shore, Nichola	19 1:00pm PCCD Meeting (Lockhart, Texas, United States)	20	21 11:00am ARWA1B - Weekly ROW Call 6:00pm Region L Public Meeting (San Marcos)	22	23
24	25 MEMORIAL DAY HOLIDAY 1:30pm ARWA Phase 1B Weekly Progress	26	27 10:00am CRWA Board of Managers Meeting 3:00pm ARWA Board Meeting (TBD)	28 11:00am ARWA1B - Weekly ROW Call (Skype Meeting) - Sowa, Ryan	29	30
31	Jun 1	2	3	4	5	6



**REGULAR MEETING**  
**Alliance Regional Water Authority Board of Directors**

**BOARD MEMBER PACKETS**

Wednesday, March 25, 2020 at 3:00 P.M.

Conference Call Number: 1-903-405-2572; Code: 995 024 086#

- H.1** Consider adoption of Resolution 2020-03-25-001 approving Work Order #4 with Walker Partners, LLC for Final Design and Procurement Services for the Authority's Phase 1B Segment E Project as recommended by the Technical Committee. ~ *Ryan Sowa, P.E., Kimley-Horn & Associates*
- 

Background/Information

Alliance Water entered into a Work Order in August 2018 with Walker Partners, LLC to provide preliminary engineering services for the Phase 1B Segment project. The preliminary design is almost complete and in order to maintain progress, Staff has negotiated a scope and fee with Walker Partners to provide final design and procurement services for the Segment E 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 Segment E proposal:

**Firm:** Walker Partners, LLC

**Fee:** \$1,566,487

**Work Order Type:** Lump Sum

**Anticipated Duration:** 16 months

**Project Manager:** Joe Jenkins, P.E.

**Key Subconsultants:** Schnabel Engineering (Trenchless), Holt Engineering (Geotechnical), Rios Group (SUE), Elk Engineering (Cathodic Design) & DAS (Survey)

Staff is requesting that the Committee recommend Board approval of a Work Order with a fee for the basic services of \$1,190,421 and a fee for supplemental effort in an amount not-to-exceed \$376,066 for a total fee of \$1,566,487. The Executive Director will be given the discretion to authorize the supplemental effort if needed.

Attachment(s)

- Resolution 2020-03-25-001
- Proposal for Design and Procurement for Phase 1B Segment E Project dated March 6, 2020.

Technical Committee Recommendation(s)

- Technical Committee unanimously recommended approval of the work order with Walker Partners, LLC as presented.

**REGULAR MEETING**  
**Alliance Regional Water Authority Board of Directors**

**BOARD MEMBER PACKETS**

Wednesday, March 25, 2020 at 3:00 P.M.

Conference Call Number: 1-903-405-2572; Code: 995 024 086#

**Board Decision(s) Needed:**

- Adoption of Resolution 2020-03-25-001 approving Work Order #4 with Walker Partners, LLC for Final Design and Procurement Services for the Authority's Phase 1B Segment E Project as recommended by the Technical Committee.



## ALLIANCE WATER

### RESOLUTION NO. 20200325-001

**A RESOLUTION OF THE ALLIANCE REGIONAL WATER AUTHORITY BOARD OF DIRECTORS APPROVING WORK ORDER #4 BETWEEN THE AUTHORITY AND WALKER PARTNERS, LLC FOR FINAL DESIGN AND PROCUREMENT PHASE SERVICES RELATED TO THE AUTHORITY'S PHASE 1B SEGMENT E PROJECT AND RELATED MATTERS, AND DECLARING AN EFFECTIVE DATE**

#### **RECITALS:**

1. Alliance Regional Water Authority (the "Authority") entered into a master agreement with Walker Partners, LLC ("Walker Partners") for professional engineering services and related matters in September 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 Walker Partners for preliminary design services for the Authority's Phase 1B Segment E Pipeline Project (the "Project") in September 2018.

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 Walker Partners.

#### **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 Walker Partners is approved with a total fee of \$1,190,421.

**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 work orders not to exceed \$376,066 for the items noted as supplemental services, at the Executive Director's discretion.

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

Resolution 20200325-001  
Phase 1B Segment E Final Design & Procurement

**ADOPTED:** March 25, 2020.

**ATTEST:**

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Chris Betz  
Chair, Board of Directors

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James Earp  
Secretary, Board of Directors

March 6, 2020

Graham Moore, PE  
 Executive Director  
 Alliance Regional Water Authority  
 630 E. Hopkins  
 San Marcos, TX 78666

Re: Phase 1B – Treated Pipeline Segment E – Proposal for Final Design and Procurement Services

Dear Mr. Moore:

Walker Partners, LLC (Engineer) appreciates this opportunity to submit this Proposal to provide professional surveying and engineering services to Alliance Regional Water Authority (Owner) in connection with the Phase 1B – Treated Pipeline Segment E (Project).

The scope of services, schedule, assumptions and exclusions are outlined in the attached Scope. The associated lump sum fees that Walker Partners proposes to provide for Engineering Basic Services are based on the assumptions in the Scope and the level of effort estimated in the Detail Cost Breakdown (see attached). Table 1, below, includes an itemized breakdown of proposed task fees for an overall lump sum fee for Engineering Basic Services:

**Table 1: Task Fee Breakdown for Lump Sum Basic Engineering Services**

<b>Task</b>	<b>Description</b>	<b>Lump Sum Fee</b>
1	Project Management	70,769
2	Review of Final Pipeline Construction Standards	17,630
3	Environmental Coordination	11,532
4	Land Acquisition Coordination	34,417
5	Entity/Agency Coordination	39,108
6	Public and Private Utility Coordination	88,949
7	Design Consultant Coordination	13,533
8	Design Survey	133,102
9	Subsurface Investigations	162,660
10	60% Design Phase	277,013
11	90% Design Phase	185,435
12	100% Design Phase	112,728
13	Procurement (RFCSP)	43,545
<b>TOTAL BASIC SERVICES LUMP SUM FEE</b>		<b>1,190,421</b>

We understand that Walker Partners may also provide Supplemental Services for this Project as shown on Table 2, below, and described in the attached scope document. The estimated budgets in Table 2 and the Detail Cost Breakdown are budgetary placeholders for the final design Work Order Supplemental Services. These proposed services will be negotiated and authorized on a case-by-case basis.

**Table 2: Estimated Supplemental Services Budget**

<b>Task</b>	<b>Description</b>	
14.1	Survey	43,945
14.2	General Engineering Design	22,522
14.3	Land Acquisition Support	27,378
14.4	Environmental Coordination	2,290
14.5	Attend Public Meetings (2 meetings)	7,281
14.6	Attend Additional Meetings in the Project Vicinity	11,418
14.7	Additional SUE Investigations	26,406
14.8	Additional Geotechnical Borings & Piezometers	155,153
14.9	Program Coordination for Combined Construction Packages	20,215
14.10	Up to six (6) additional coordination meetings with impacted utilities	6,075
14.11	Corrosivity Alignment Investigation (i.e., Induced AC Study)	53,383
<b>TOTAL ESTIMATED SUPPLEMENTAL SERVICES BUDGET</b>		<b>376,066</b>

Our team looks forward to developing this project to the next phase – final design and procurement of a construction contractor. Please let us know if the proposal review team has any questions or comments.

Sincerely,



George E. "Jed" Walker, Jr., P.E.  
Project Principal

#### **Attachments**

Alliance Regional Water Authority – Phase 1B Final Design and Procurement of a Construction Contractor for the Treated Pipeline Segment E Project Scope

#### Appendices

Appendix A – Total Fee Breakdown

Appendix B – Project Scope Exhibits

#### Subconsultant Proposals

Attachment 1 – Schnabel Engineering

Attachment 2 – Holt Engineering

Attachment 3 – The Rios Group

Attachment 4 – Elk Engineering

Attachment 5 – DAS

Attachment 6 – Davey

**Alliance Regional Water Authority – Phase 1B  
Final Design Pipeline Segment E Scope**

1. Project Management (see attached proposal from Schnabel Engineering, also)
  - 1.1. Prepare Monthly Summary Reports/Invoicing as identified in the ARWA Phase 1B Program Management Plan
  - 1.2. Schedule Development and monthly updates; schedule shall cover preliminary design phase through construction. Project Schedule also to include applicable permits, permit submittal dates, review period, addressing comments and resubmit for approval. Monthly updates will also be included with the 60%, 90% and 100% design phase deliverables or updates from the design phase deliverable will be included in the monthly invoice package.
    - 1.2.1. Schedule shall be in Microsoft Project format
  - 1.3. Risk Register development and monthly updates. Monthly updates will also be included with the 60%, 90% and 100% design phase deliverables or updates from the design phase deliverable will be included in the monthly invoice package.
    - 1.3.1. Risk Register shall be in Microsoft Excel format
  - 1.4. Update Project Management Plan
  - 1.5. Ongoing coordination and communications for Project Management
  - 1.6. Meetings
    - 1.6.1. Conduct Progress Meetings with Owner’s Representative (16 meetings) over the phone or internet conference (Assume 2 Walker Partners “WP” attendees for all meetings and 1 Schnabel attendee at 3 meetings)
    - 1.6.2. Conduct half-day coordination workshops (2 workshops) (Assume 2 WP attendees)
    - 1.6.3. Prepare and distribute meeting notes
    - 1.6.4. Quality Control Audit (1 workshop) (Assume 2 WP attendees)
2. Review of Final Pipeline Construction Standards
  - 2.1. Review and provide comments on Updates to Pipeline Construction Standards prepared by Owner’s Representative (see attached proposal from Schnabel Engineering, also)
  - 2.2. Meetings
    - 2.2.1. Attend one half-day workshop to discuss comments on Final Pipeline Construction Standards (Assumes 2 WP attendees)
  - 2.3. Deliverables
    - 2.3.1. Comments on Updates to Pipeline Construction Standards in Adobe PDF format
3. Environmental Coordination
  - 3.1. Review Final Environmental Document provided by Owner’s Representative for applicable project and develop Construction Documents based on findings.
  - 3.2. Incorporate recommendations from Environmental into Contract Documents
  - 3.3. Ongoing coordination and communications for Environmental Coordination
  - 3.4. Meetings
    - 3.4.1. Conduct coordination meeting with Environmental Consultant to discuss the Final Environmental Report and incorporation of recommended items into contract documents for Pipeline Segment E. (Assume 3 WP attendees)
    - 3.4.2. Prepare and distribute meeting notes

4. Land Acquisition Coordination
  - 4.1. Provide Program with right-of-entry needs for final design phase
  - 4.2. Easement Development (see attached proposal from Schnabel Engineering, also)
    - 4.2.1. Review and comment on draft and final easement exhibits to verify that the exhibit reflects the intent of the Design.
    - 4.2.2. Update Parcel Data Forms and easement exhibits, including environmental findings
      - 4.2.2.1. Include deed sketch exhibit provided by Owner's Representative for each parcel.
  - 4.3. Meetings
    - 4.3.1. Coordination with Land Acquisition team to address easement items
      - 4.3.1.1. Basic questions regarding the easement, such as where the pipeline will be located in the easement, will there be any aboveground appurtenances, etc. (Assume 24 of 30 easements) (Assume 2 WP attendees) (Assume phone conferences only)
      - 4.3.1.2. Issues such as requests for a fence barrier during construction to protect cattle and minor alignment adjustments within a parcel that do not require additional field studies. (Assume 6 of 30 easements) (Assume phone conferences only)
5. Entity/Agency Coordination
  - 5.1. Update and maintain permit tracking log
  - 5.2. Develop and submit the following applicable permits (assumes design plans will be used for all permit applications and no additional exhibits will be drafted for permit applications, except the exhibit created by the Program Surveyor for the GLO Miscellaneous Easement application)
    - 5.2.1. City of New Braunfels Public Infrastructure Permit coordination during design phase
      - 5.2.1.1. Coordination with the City during 60% Design Phase
      - 5.2.1.2. Permit Preparation during 90% Design Phase milestone
      - 5.2.1.3. Submittal of Permit during 90% Design Phase milestone
      - 5.2.1.4. Address Comments and Resubmit Permit during 100% Design Phase milestone
      - 5.2.1.5. Conduct up to two (2) coordination meetings with City (Assume 2 WP attendees)
    - 5.2.2. Guadalupe County Floodplain Permit coordination during design phase
      - 5.2.2.1. Coordination with the County during 60% Design Phase
      - 5.2.2.2. Permit Preparation during 90% Design Phase milestone
      - 5.2.2.3. Submittal of Permit during 90% Design Phase milestone
      - 5.2.2.4. Address Comments and Resubmit Permit during 100% Design Phase milestone
      - 5.2.2.5. Conduct up to two (2) coordination meetings with Guadalupe County for all Guadalupe County permits (Assume 2 WP attendees)
    - 5.2.3. Guadalupe County Road Crossing Permit coordination during design phase
      - 5.2.3.1. Coordination with the County during 60% Design Phase
      - 5.2.3.2. Permit Preparation during 90% Design Phase milestone
      - 5.2.3.3. Submittal of Permit during 90% Design Phase milestone
      - 5.2.3.4. Address Comments and Resubmit Permit during 100% Design Phase milestone



- 5.2.4. Guadalupe County Culvert /Access Permit (temporary construction driveway) coordination during design phase
  - 5.2.4.1. Coordination with the County during 60% Design Phase
  - 5.2.4.2. Permit Preparation during 90% Design Phase milestone
  - 5.2.4.3. Submittal of Permit during 90% Design Phase milestone
  - 5.2.4.4. Address Comments and Resubmit Permit during 100% Design Phase milestone
- 5.2.5. TXDOT Utility Installation in Right-of-Way for San Antonio District (Owner's Representative to provide direct coordination with TXDOT)
  - 5.2.5.1. Coordination with TXDOT during 60% Design Phase
  - 5.2.5.2. Permit Preparation during 90% Design Phase milestone
  - 5.2.5.3. Submittal of Permit during 90% Design Phase milestone
  - 5.2.5.4. Address Comments and Resubmit Permit during 100% Design Phase milestone
  - 5.2.5.5. Conduct up to two (2) coordination meetings with TXDOT for all TXDOT permits (Assume 2 WP attendees)
  - 5.2.5.6. Assume the Owner's Representative will assist with submitting and coordinating with TXDOT.
- 5.2.6. TXDOT Temporary Driveway Permit for San Antonio District (Owner's Representative to provide direct coordination with TXDOT)
  - 5.2.6.1. Coordination with TXDOT during 60% Design Phase
  - 5.2.6.2. Permit Preparation during 90% Design Phase milestone
  - 5.2.6.3. Submittal of Permit during 90% Design Phase milestone
  - 5.2.6.4. Address Comments and Resubmit Permit during 100% Design Phase milestone
  - 5.2.6.5. Assume the Owner's Representative will assist with submitting and coordinating with TXDOT.
- 5.2.7. General Land Office (GLO) coordination and preparation of Miscellaneous Easement Documents
  - 5.2.7.1. Coordinate with GLO during 60% Design Phase
  - 5.2.7.2. Complete Miscellaneous Easement application and append exhibit prepared by Program Surveyor to application during 90% Design Phase milestone
  - 5.2.7.3. Submittal of Permit during 90% Design Phase milestone
  - 5.2.7.4. Address Comments and Resubmit Permit during 100% Design Phase milestone
  - 5.2.7.5. Assume no meetings are required with GLO and all comments are addressed through correspondence
- 5.3. Texas Commission on Environmental Quality (TCEQ) Exceptions and Variance Development and Coordination. Assume 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
  - 5.3.1. Minimum Pressure Variance - TCEQ 290.44 (d)
  - 5.3.2. Stream Crossing Exception – TCEQ 290.44 (f) (2)
  - 5.3.3. Sampling Frequency Variance - TCEQ 290.44 (f) (3)

- 5.3.4. Assume the following per each exception/variance:
  - 5.3.4.1. One (1) draft submittal of exhibits, calculations, and technical support data to Owner's Representative for review and comment.
  - 5.3.4.2. One (1) review meeting with Owner's Representative by phone or internet conference to review draft submittal and resolve comments (Assume 2 WP attendees).
  - 5.3.4.3. One (1) final submittal to Owner's Representative to address Owner's Representative comments.
  - 5.3.4.4. One (1) review meeting with Owner's Representative by phone or internet conference to review and resolve TCEQ comments (Assume 2 WP attendees).
  - 5.3.4.5. One (1) re-submittal to address TCEQ comments.
  
- 6. Public and Private Utility Coordination (see attached proposal from The Rios Group)
  - 6.1. Provide thirteen (13) Quality Level (QL) "A" SUE test holes to identify the location and depth of existing utilities, as shown on Exhibit A.
  - 6.2. Provide 430 linear feet of Quality Level "B" locating, as shown on Exhibit A.
  - 6.3. Provide Quality Level "C" and "D" SUE services to identify the horizontal location of existing utilities.
    - 6.3.1. GIS files, Record Drawings, Utility Block Maps, and Other methods
  - 6.4. Coordinate with Owner's Representative on available GIS data collected
    - 6.4.1. Coordinate with entities for additional data needs
  - 6.5. Update and maintain utility coordination log
  - 6.6. Coordinate Design Reviews at 60%, 90% and 100% Design Milestones
    - 6.6.1. Lower Colorado River Authority (LCRA)
    - 6.6.2. Canyon Regional Water Authority (CRWA)
    - 6.6.3. New Braunfels Utility (NBU)
    - 6.6.4. Green Valley Special Utility District (SUD)
  - 6.7. Coordinate Encroachment Agreements at 60%, 90% and 100% Design Milestones
    - 6.7.1. Crystal Clear Special Utility District
    - 6.7.2. Energy Transfer Company
    - 6.7.3. Guadalupe Blanco River Authority
    - 6.7.4. Central Texas Regional Water Supply Corporation
  - 6.8. Coordinate Courtesy Plan Reviews at 60%, 90% and 100% Design Milestones
    - 6.8.1. Springs Hill WSC
    - 6.8.2. Guadalupe Valley Electric Cooperative
    - 6.8.3. AT&T
    - 6.8.4. Charter/Spectrum/Time Warner Cable
    - 6.8.5. Fiberlight
  - 6.9. Meetings
    - 6.9.1. Conduct up to eight (8) coordination meetings with impacted utilities (Assume 2 WP attendees)
    - 6.9.2. Prepare agendas and distribute meeting notes (Assume up to 8 meetings)

7. Design Consultant Coordination
  - 7.1. BPS/Delivery Point Design Consultant
    - 7.1.1. Coordinate to confirm tie-in locations to GBRA and CRWA delivery points
    - 7.1.2. Coordinate to confirm hydraulics, surge, pipe diameter, and pressure class
    - 7.1.3. Review transient analysis model and results provided by BPS Design Consultant
  - 7.2. Other Transmission Main Design Consultants
    - 7.2.1. Coordinate to confirm tie-in location to Pipeline Segment D
  
8. Design Survey
  - 8.1. Horizontal and Vertical survey based on NAD 83 coordinates (State Plane Texas South Central/Feet) and NAVD 88, respectively.
    - 8.1.1. Aerial survey performed by DAS Geospatial (see attached proposal) will identify all visible features such as roads, bridges, houses, buildings, creeks, rivers, lakes, ponds, railroads, transmission lines, power poles, fences, and group tree outlines within a 400-foot-wide corridor centered on the proposed waterline easement. Aerial surveyor will also utilize LiDAR in the support of generating one (1) foot contours.
    - 8.1.2. Topographic survey will be provided in areas with dense vegetation where LiDAR cannot be used to generate one (1) foot contours, to establish wastewater flowlines, and locate drainage structures and drainage features as shown on Exhibit B.
    - 8.1.3. Provide forty (40) ground control points for aerial survey.
    - 8.1.4. Provide twenty-two (22) LIDAR verification points for aerial survey.
    - 8.1.5. Locate twenty-eight (28) geotechnical bores.
    - 8.1.6. Locate thirteen (13) QL "A" SUE test holes and QL "B" markings for QL "A" SUE test holes.
    - 8.1.7. Locate 430 linear feet of QL "B" SUE markings.
    - 8.1.8. Perform a tree inventory in accordance with local entities
      - 8.1.8.1. 8-inch diameter and greater per City of New Braunfels' requirements
      - 8.1.8.2. Certified Arborist or Forester to confirm species
    - 8.1.9. Verify control points provided by Owner's Representative
  
9. Subsurface Investigations
  - 9.1. Geotechnical Investigation (see attached proposal from Schnabel Engineering, also)
    - 9.1.1. Provide geotechnical investigation services to the extent necessary to characterize the subsurface soils for the areas affected by this project. A preliminary geotechnical investigations map is included as Exhibit C and a detailed proposal from Holt Engineering is attached. The geotechnical investigation generally assumes the following.
      - 9.1.1.1. Geotechnical bore spacing not to exceed  $\pm 2,000$  linear feet.
      - 9.1.1.2. Twelve (12) 20-foot-deep, eight (8) 40-foot-deep, three (3) 45-foot-deep, and one (1) 50-foot deep, one (1) 100-foot-deep, and one (1) 115-foot-deep geotechnical bores.
      - 9.1.1.3. Geotechnical bores at potential trenchless/tunnel locations are at least thirty (30) feet below the conflict to be avoided (assumes a 5-foot-diameter trenchless/tunnel zone, with a clearance of three (3) trenchless/tunnel diameters from conflict and ten (10) feet below trenchless/tunnel zone. See Exhibit C for depth of conflict.

## 9.2. Soil Corrosivity Investigation and Testing

9.2.1. Provide soil corrosivity investigation and testing per ARWA's Corrosivity Investigation and Cathodic Protection Design Standards. Tests to include ASTM G57 Resistivities, EPA 9045C pH, SW 9056 Chlorides and Sulfates, SM 2320B Bicarbonates. See attached proposal from Elk Engineering for further details.

9.2.1.1. Wenner 4-pi testing ASTM G57 every 2,000 feet.

9.2.1.2. Holt Engineering to obtain soil sample from approximate pipeline depth at least every 4,000 feet and deliver to Elk Engineering for testing

9.2.1.2.1. Minimum of 1-quart soil sample

9.2.1.3. One (1) Walker Partners escort to coordinate access to properties and accompany Elk Engineering during field investigation for up to five (5) days.

## 10. 60% Design Phase (see attached proposal from Schnabel Engineering, also)

10.1. Perform site visits, right-of-entry requests, and field checklists as needed for 60% design (Assume 5 visits with 3 WP attendees)

### 10.2. Construction Drawings

10.2.1. Perform analyses

10.2.1.1. Cathodic Protection analysis, calculations, and design of a cathodic protection system per ARWA's Corrosivity Investigation and Cathodic Protection Design Standards.

10.2.1.2. Joint Restraint (the pipe material that requires the longest restrained length shall be used to be conservative)

10.2.1.3. Trenchless Engineering and Calculations, which may include settlement analyses, feasibility-level shaft designs, feasibility-level tunnel ground support designs, input to instrumentation plans, casing thickness structural design, ground loading criteria determination, etc. The results of each will be summarized in a draft basis of design technical memorandum (see attached proposal from Schnabel Engineering).

10.2.1.4. Embedment

10.2.1.5. Backfill

10.2.1.6. Scour

10.2.1.7. Buoyancy

10.2.1.8. Pipe Deflection

10.2.1.9. Combination Air Vacuum and Air Release Valve (size and location)

10.2.1.10. Blow-off Valve (size)

10.2.2. Develop 60% Plan Set (in accordance with the ARWA Phase 1B Program Design Standards)

10.2.2.1. General Sheets (Cover, Project Layout, General Notes, Quantities, etc.)

10.2.2.2. Overall Dimensional Control Plan

10.2.2.3. Survey Control sheets

10.2.2.4. Contractor access sheets (including permanent access driveways, low water crossings, etc.)

- 10.2.2.5. Plan and Profile sheets Identify scale of P&P sheets: 1"=50' H, 1"=5' V (22"x34" sheet); 1"=100' H, 1"=10'V (11"x17" sheet) (Quantity boxes to be included on all design and plan and profile sheets)
- 10.2.2.6. Erosion Control Sheets
- 10.2.2.7. Cathodic Protection sheets
- 10.2.2.8. Standard Details (Provided by the Owner's Representative)
- 10.2.2.9. Cathodic Protection detail sheets
- 10.2.2.10. Project Specific Details (as developed by the Design Consultant)
- 10.3. Preparation of Project Manual
  - 10.3.1. Provide Table of Contents and draft project specific technical specifications
    - 10.3.1.1. Table of Contents to include list of all ARWA Phase 1B Program standard specifications, provided by the Owner's Representative, and project specific technical specifications written by the Walker Partners' design team.
    - 10.3.1.2. Provide draft project specific technical specifications written by the Walker Partners' design team.
- 10.4. 60% Opinions of Probable Construction Cost
- 10.5. Perform internal QC and address QC comments.
- 10.6. 60% Design Workshop
  - 10.6.1. Conduct 60% Design workshop to review the 60% Design Submittal (Assume 1 Schnabel and 3 WP attendees)
  - 10.6.2. Prepare agenda and distribute meeting notes
- 10.7. Address comments provided by the Owner and Owner's Representative
- 10.8. 60% Design Phase Deliverables
  - 10.8.1. 60% Design Deliverables (plans and specifications)
  - 10.8.2. Draft Geotechnical Report
  - 10.8.3. Draft Geotechnical Baseline Report (Guadalupe River crossing only)
  - 10.8.4. Draft Basis of Design for Tunneling Methodologies completed in Task 10.2.1.3
  - 10.8.5. Updated list of permits required for the project
  - 10.8.6. Updated utility coordination log
  - 10.8.7. Updated Risk Register
  - 10.8.8. SUE Deliverables
  - 10.8.9. Updated Project Schedule
  - 10.8.10. Cathodic Protection Report
  - 10.8.11. 60% Opinion of Probable Construction Cost (OPCC)
- 11. 90% Design Phase (see attached proposal from Schnabel Engineering, also)
  - 11.1. Perform site visits, right-of-entry requests, and field checklists as needed for 90% design (Assume 1 site visit and 2 WP attendees)
  - 11.2. Construction Drawings
    - 11.2.1. Develop 90% Plan Set (in accordance with the ARWA Phase 1B Program Design Standards)
      - 11.2.1.1. Further Development of 60% Plan Set sheets
        - 11.2.1.1.1. General Sheets (Cover, Project Layout, General Notes, Quantities, etc.)
        - 11.2.1.1.2. Overall Dimensional Control Plan
        - 11.2.1.1.3. Survey Control Sheets

- 11.2.1.1.4. Contractor Access Sheets (including permanent access driveways, low water crossings, etc)
- 11.2.1.1.5. Plan and Profile Sheets
- 11.2.1.1.6. Erosion Control Sheets
- 11.2.1.1.7. Cathodic Protection Sheets
- 11.2.1.1.8. Standard Details (Provided by the Owner's Representative\_
- 11.2.1.1.9. Cathodic Protection detail sheets
- 11.2.1.1.10. Project Specific Details (as developed by the Design Consultant)
- 11.2.1.2. Temporary Traffic Control Plan
- 11.2.1.3. Tree Preservation Plan
- 11.2.1.4. Pond Adjustment Plan (Parcels E008G and E029G)
- 11.2.1.5. Demolition and Water Well Abandonment Plan (Parcels E005G and E023G)
- 11.3. Draft Project Manual
  - 11.3.1. Include all front-end documents and applicable specifications, both provided by the Owner's Representative
  - 11.3.2. Complete front-end documents provided by Owner's Representative with project specific information
  - 11.3.3. Update project specific technical specifications written by the Walker Partners' design team.
- 11.4. 90% Opinions of Probable Construction Cost
- 11.5. Perform internal QC, address QC comments, and provide documentation to Program
- 11.6. 90% Design Workshop
  - 11.6.1. Conduct 90% Design workshop to review the 90% Design Submittal (Assume 1 Schnabel and 3 WP attendees)
  - 11.6.2. Prepare agenda and distribute meeting minutes
- 11.7. Address comments provided by Owner and Owner's Representative
- 11.8. 90% Design Phase Deliverables
  - 11.8.1. 90% Design Deliverables (plans and specifications)
  - 11.8.2. Final Geotechnical Report
  - 11.8.3. Final Geotechnical Baseline Report
  - 11.8.4. Final Basis of Design for Tunneling Methodologies (drafted in Task 10.2.1.3)
  - 11.8.5. Updated list of permits required for the project
  - 11.8.6. Updated utility coordination log
  - 11.8.7. Updated Risk Register
  - 11.8.8. Updated Project Schedule
  - 11.8.9. 90% Opinion of Probable Construction Cost (OPCC)
  - 11.8.10. QA/QC Documentation
- 12. 100% Design Phase (see attached proposal from Schnabel Engineering, also)
  - 12.0 100% Design Letter
    - 12.0.1 Documenting conformance to applicable AWWA and TCEQ standards, conformance to ARWA standards, and documentation of any exceptions to these standards.
  - 12.1. Perform site visits, right-of-entry requests, and field checklists as needed for 100% design (Assume 2 visits and 3 WP attendees)

- 12.2. Construction Drawings
    - 12.2.1. Develop 100% Plan Set (in accordance with the ARWA Phase 1B Program Design Standards)
      - 12.2.1.1. Further Development of 90% Plan Set sheets
  - 12.3. Final Project Manual (signed and sealed)
    - 12.3.1. Contract Documents to include language from Owner's Representative for Request for Competitive Sealed Proposals (RFCSP)
    - 12.3.2. Update and/or finalize all applicable specifications
  - 12.4. 100% Opinions of Probable Construction Cost
  - 12.5. Perform internal QC, address QC comments, and provide documentation to Program
  - 12.6. 100% Design Workshop
    - 12.6.1. Conduct 100% Design workshop to review the 100% Design Submittal (Assume 1 Schnabel and 3 WP attendees)
    - 12.6.2. Prepare agenda and distribute meeting notes
  - 12.7. Address comments provided by the Owner and Owner's Representative
  - 12.8. Agency Review of 100% Plan Set
    - 12.8.1. Prepare packet for submission of 100% construction documents (plans and specifications) to the following agencies
      - 12.8.1.1. TWDB
      - 12.8.1.2. TCEQ
    - 12.8.2. Address comments provided by TWDB and TCEQ
  - 12.9. 100% Design Phase Deliverables
    - 12.9.1. 100% Design Deliverables (plans and specifications)
    - 12.9.2. Updated list of permits required for the project
    - 12.9.3. Updated utility coordination log
    - 12.9.4. Updated Risk Register
    - 12.9.5. Updated Project Schedule
    - 12.9.6. 100% Opinion of Probable Construction Cost (OPCC)
    - 12.9.7. 100% Design Letter
    - 12.9.8. QA/QC Documentation
13. Procurement (Request for Competitive Sealed Proposal (RFCSP)) (see attached proposal from Schnabel Engineering, also)
- 13.1. Submit Final Documents for Advertisement
  - 13.2. Attend Pre-Proposal Conference (Assume 1 Schnabel and 1 WP attendee)
  - 13.3. Prepare Addenda and Clarifications (Assume 2 addenda)
  - 13.4. Attend Proposal Opening (Assume 1 WP attendee)
  - 13.5. Review Contractor Proposals (Assume 3 proposal reviews)
    - 13.5.1. Perform Contractor References Check
    - 13.5.2. Confirm Contractor Experience
    - 13.5.3. Prepare Recommendation for Award (Assume 1 draft and 1 final letter)
  - 13.6. Prepare Conformed Contract Documents

## 14. Supplemental

### 14.1. Survey

- 14.1.1. Verify/Reset horizontal and vertical controls points for construction purposes
- 14.1.2. Additional topographic survey to supplement gaps or deficient data in aerial survey due to collection of data during leaf-on and/or dense crop conditions. See Exhibit B for assumed locations where topographic survey could be necessary to supplement aerial survey where aerial survey equipment may not penetrate dense vegetation or tree canopies during the growing season.

### 14.2. General Engineering Design

- 14.2.1. At the direction of ARWA, the Consultant may be required to perform additional engineering design that would be authorized as supplemental services to this scope of work.

### 14.3. Land Acquisition

- 14.3.1. Attend up to three (3) Eminent domain hearings (Assume 2 WP attendees)
- 14.3.2. Provide support documents and exhibits for Eminent domain hearings
- 14.3.3. Attend meetings with Owner's Representative to prepare for eminent domain hearings (Assume 2 WP attendees)

### 14.4. Environmental Coordination based on necessary additional environmental investigations

- 14.4.1. At the direction of ARWA, the Consultant may be required to perform additional environmental coordination that would be authorized as supplemental services to this scope of work.

### 14.5. Attend Public Meetings (2 meetings) (Assume 2 WP attendees)

### 14.6. Attend additional meetings in the vicinity of the project (5 meetings) (see attached proposal from Schnabel Engineering, also) (Assume 2 WP attendees at each meeting and 1 Schnabel attendee at 2 meetings)

### 14.7. Additional SUE Investigations (see attached proposal from the Rios Group)

- 14.7.1. At the direction of ARWA, the Consultant may be required to perform up to five (5) additional Level A SUE potholes beyond those scoped for the project, and conduct surveying as required to locate additional potholes.
- 14.7.2. At the direction of ARWA, the Consultant may be required to perform up to 500 linear feet of additional Level B SUE locates beyond those scoped for the project, and conduct surveying as required to locate additional Level B SUE designations.

### 14.8. Additional Geotechnical Borings & Piezometers (see attached proposals from Holt Engineering and Schnabel Engineering)

- 14.8.1. At the direction of ARWA the Consultant may be required to perform additional geotechnical borings up to five (5) bores to a depth of 45 vertical feet and two (2) bores to a depth of 60 vertical feet, for a total of 345 vertical feet beyond those scoped for the project, and conduct surveying as required to locate borings.
- 14.8.2. At the direction of ARWA the Consultant may be required to install and monitor up to seven (7) piezometers for the project, as well as conduct surveying to locate piezometers. See Exhibit C for assumed locations for four (4) of the seven (7) piezometers; the remaining three (3) piezometers are included as a contingency.
- 14.8.3. One (1) geotechnical bore (no deeper than 100 feet to approximately a depth of 480 ft-msl) to be collected from a barge at the deepest point of Lake Dunlap, as determined



by bathymetric survey. Also includes survey support to place the barge at the correct location.

- 14.9. Program Coordination to prepare additional procurement package for combined construction packages. (see attached proposal from Schnabel Engineering)
- 14.10. Conduct up to six (6) coordination meetings with impacted utilities (Assume 2 WP attendees)
- 14.11. Corrosivity Alignment Investigation (i.e., Induced AC Study)
  - 14.11.1. Provide a desktop and visual alignment investigation of potential sources of stray AC and DC current per ARWA's Corrosivity Investigation and Cathodic Protection Design Standards.

#### Assumptions

- 1) Segment E will begin at the connection point with Segment D and end at the CRWA water treatment plant fence/property line. System integration will be the responsibility of others.
- 2) Segment E alignment changes from the 30% drawings will require additional services.
- 3) Final Design Phase is assumed to be a maximum 10 months in length, per Program schedule.
- 4) Procurement Phase is assumed to be a maximum 6 months in length, per Program schedule.
- 5) Construction Phase services are excluded from this scope of work.
- 6) All meetings are to be held in the immediate vicinity of the Project (Travis, Hays, or Guadalupe Counties).
- 7) Permitting and review fees are not included.
- 8) Advertisement fees are not included.
- 9) Overall system hydraulics are being completed by Freese and Nichols at the Program level.
- 10) Any investigation and remediation of possible hazardous waste, asbestos, lead paint, or other types of contamination, will be conducted as a separate contract by others. Mitigation requirements (if any) to be incorporated into contract documents by Walker Partners.
- 11) Complete demolition of barns on Parcel E005G will be accomplished as part of this contract. It is assumed that no drawings for this facility are available and that the demolition will only be noted on the plans. No salvaging or relocation of materials and equipment is required.
- 12) An allowance for plugging and abandoning existing water wells on Parcels E005G and E0023G will be included in the Project Documents, in case the landowners have not plugged and abandoned the existing water wells prior to construction of the pipeline. Plug and abandonment will also include demolition and removal of water pumping systems and appurtenances. No salvaging or relocation of materials and equipment is required.
- 13) It is assumed all deliverables will be in electronic format. No hard copy submittals are required.
- 14) Cost estimates to be prepared for guidance in project evaluation and implementation from the information available at the time of the estimate. The final costs of the project will depend on actual labor and material costs, competitive market conditions, final project costs, implementation schedule and other variable factors. As a result, the final project costs will vary from the estimates presented.
- 15) Program Surveyor will establish all horizontal and vertical control necessary for design and construction.
- 16) Program Surveyor will identify right-of-way, property lines, and existing easements based on available information.

- 17) No easement preparation.
- 18) No utility relocation designs or drawings.
- 19) Detailed design of pits, shafts, or other support of excavation, etc are excluded. Feasibility level design may be appropriate for some of the shafts, but generally the final and detailed design of the pits and shafts will be the contractor's responsibility. (see attached proposal from Schnabel Engineering, also)
- 20) Assessment of settlements related to or impacts to adjacent properties are excluded. (see attached proposal from Schnabel Engineering, also)
- 21) Owner's Representative will be the primary contact with TWDB and will facilitate all submittals and coordination.
- 22) Owner's Representative will post or otherwise distribute RFCSP addenda and clarifications.
- 23) Owner's Representative will conduct Pre-bid meeting, including developing agenda, and WP will participate at the meeting as requested.
- 24) Owner's Representative will receive and distribute all Contractor questions during procurement process.
- 25) Owner's Representative will coordinate TWDB procurement approvals and construction contract execution.
- 26) The Owner will provide the following information to the Engineer:
  - a. Right-of-Entry to all parcels impacted by the alignment
  - b. Boundary survey to all parcels impacted by the alignment
  - c. Control points set by ARWA near the alignment.

# Appendix A

## Total Fee Breakdown









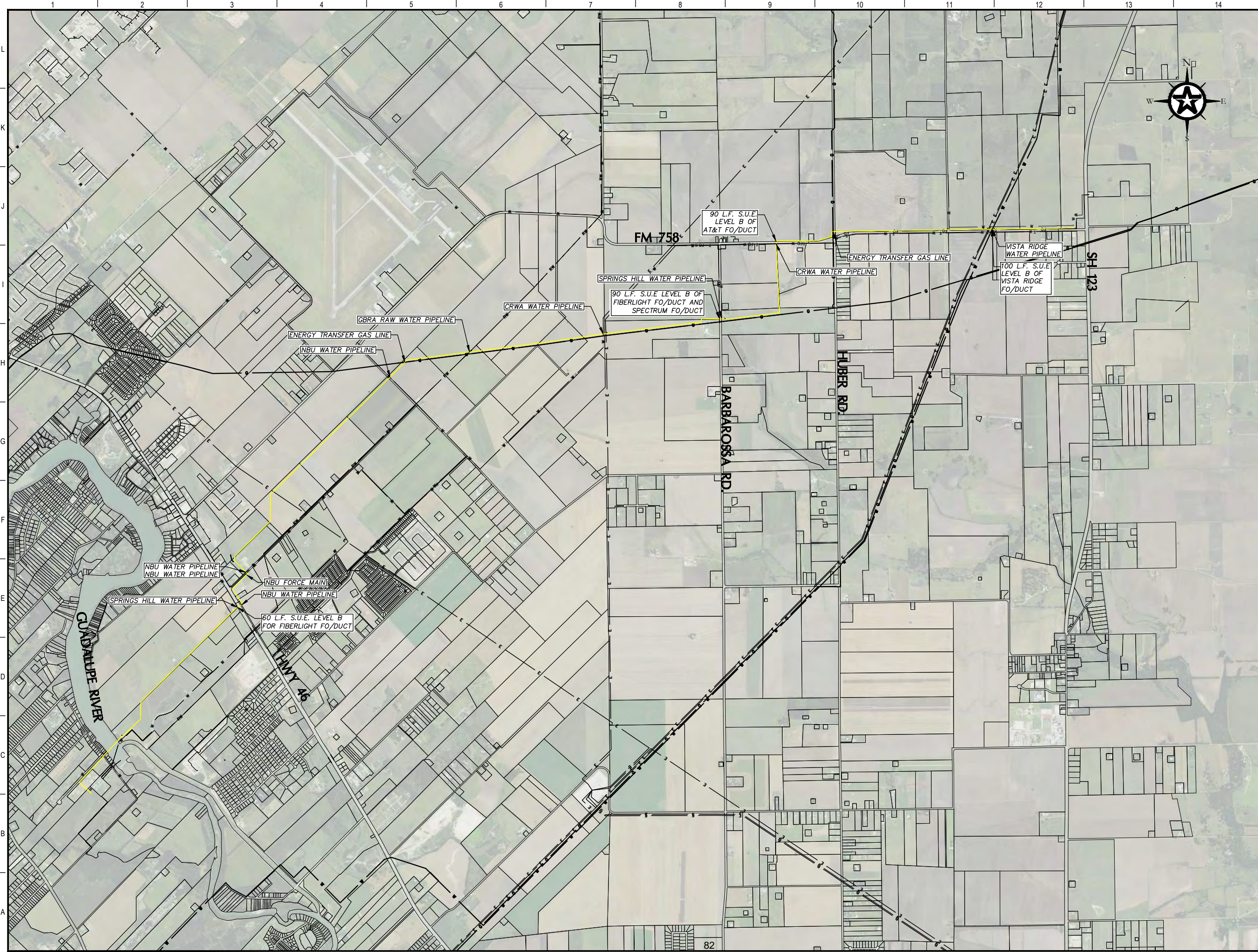




# **Appendix B**

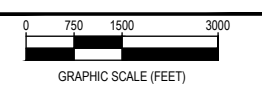
## **Project Scope Exhibits**

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KEY MAP

— PROPOSED ROUTE



ALLIANCE REGIONAL WATER AUTHORITY

ARWA PIPELINE  
PHASE 1B SEGMENT E

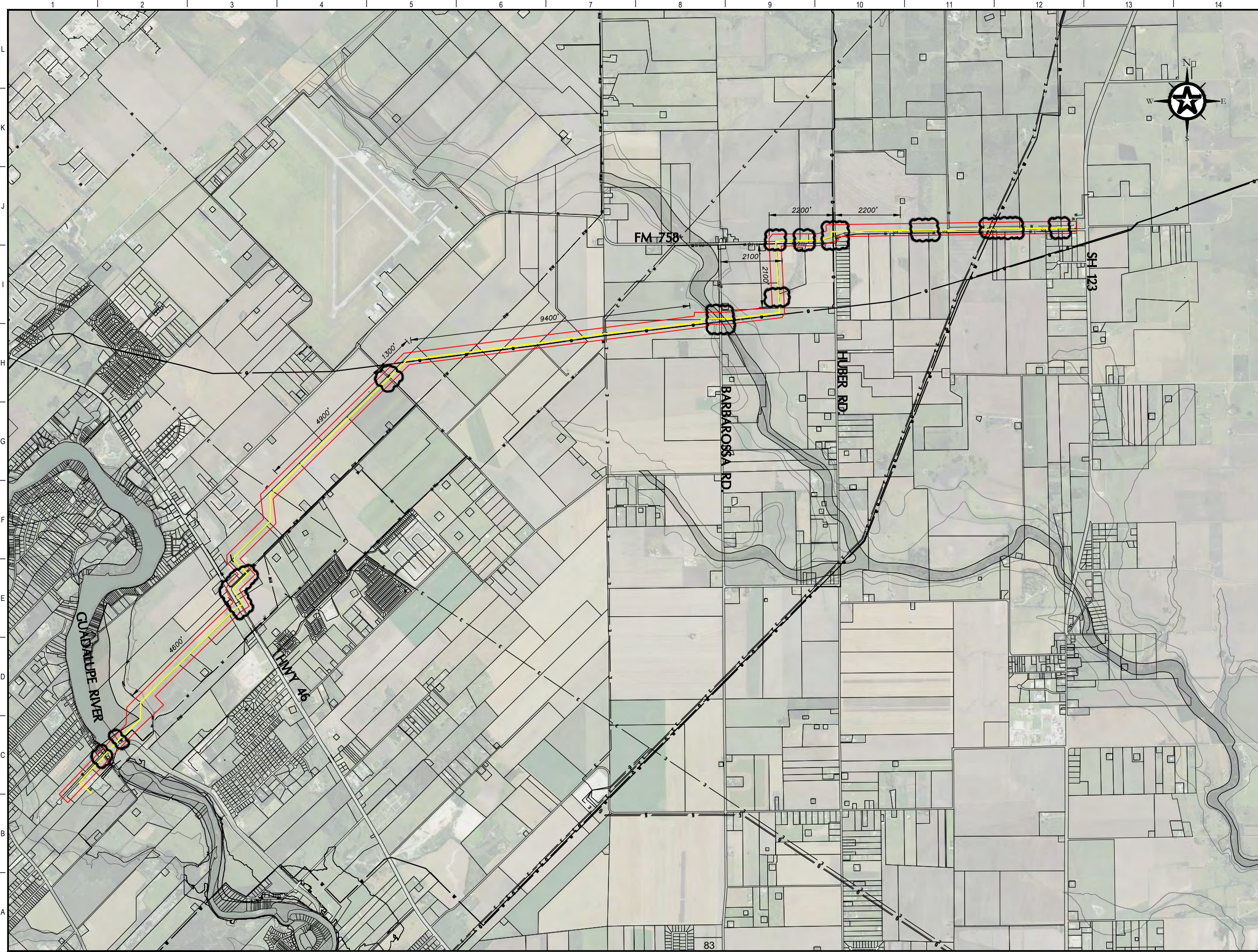
SUE LEVELS A & B

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF PROFESSIONAL ENGINEER ERIC LEE NELSON #114449 ON THE DATE SHOWN ON THE DATE STAMP. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.

PM	JWJ
DESIGNED	ELN
DRAWN	HAF
CHECKED	GCG
PROJECT NO.	3-00666

EXHIBIT  
**A**

G:\PROJECTS\3-00666\2 DESIGN\2.0 CAD\EXHIBITS\SURVEY LOCATIONS\SURVEY MAP.DWG, SUE LEVELS A&B, 1/14/2020 4:32:50 PM, hfinley



### KEY MAP

- PROPOSED ROUTE
- TOPOGRAPHIC SURVEY (BASIC)
- XX' CULTIVATED AREAS (SUPPLEMENTAL)
- 400-WIDE AERIAL SURVEY CORRIDOR

GRAPHIC SCALE (FEET)

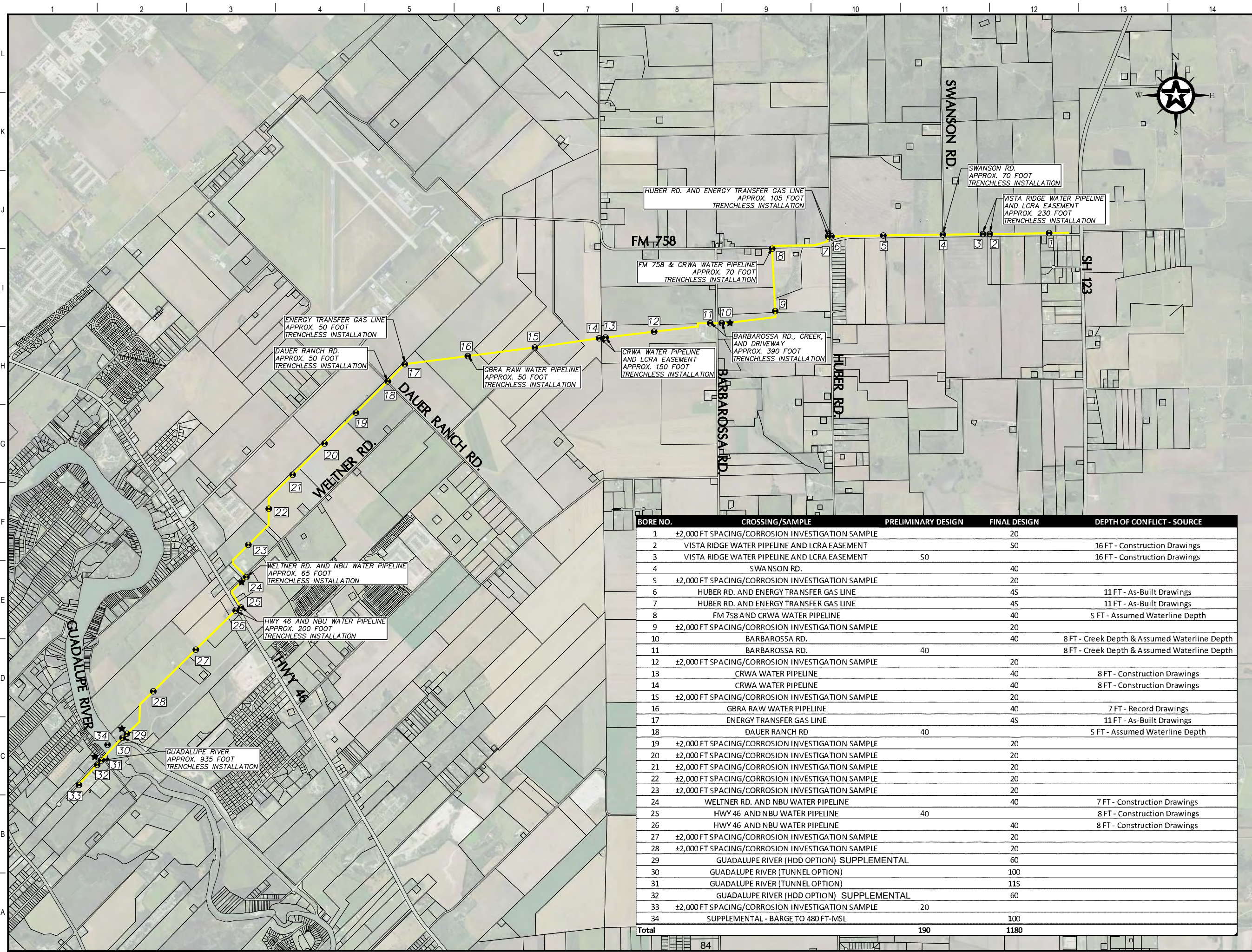
**Walker Partners**  
engineers & surveyors  
T.B.P.E. Registration No. 8853

**ALLIANCE REGIONAL WATER AUTHORITY**  
ARWA PIPELINE  
PHASE 1B SEGMENT E

SURVEY LOCATIONS

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PM	JWJ												
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DRAFTED	HAF												
CHECKED	GCG												
PROJECT NO.	3-00666												
EXHIBIT	<b>B</b>												

G:\PROJECTS\3-00666\2 DESIGN\2.0 CAD\EXHIBITS\GEOTECH INVESTIGATIONS MAP\BORE MAP.DWG, FINAL, 1/14/2020 2:40:07 PM, hrfiley

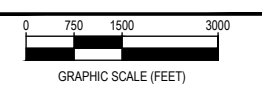


### KEY MAP

- PROPOSED GEOTECH BORE
- PROPOSED PIEZOMETER
- PROPOSED ROUTE



BORE NO.	CROSSING/SAMPLE	PRELIMINARY DESIGN	FINAL DESIGN	DEPTH OF CONFLICT - SOURCE
1	±2,000 FT SPACING/CORROSION INVESTIGATION SAMPLE		20	
2	VISTA RIDGE WATER PIPELINE AND LCRA EASEMENT		50	16 FT - Construction Drawings
3	VISTA RIDGE WATER PIPELINE AND LCRA EASEMENT	50		16 FT - Construction Drawings
4	SWANSON RD.		40	
5	±2,000 FT SPACING/CORROSION INVESTIGATION SAMPLE		20	
6	HUBER RD. AND ENERGY TRANSFER GAS LINE		45	11 FT - As-Built Drawings
7	HUBER RD. AND ENERGY TRANSFER GAS LINE		45	11 FT - As-Built Drawings
8	FM 758 AND CRWA WATER PIPELINE		40	5 FT - Assumed Waterline Depth
9	±2,000 FT SPACING/CORROSION INVESTIGATION SAMPLE		20	
10	BARBAROSSA RD.		40	8 FT - Creek Depth & Assumed Waterline Depth
11	BARBAROSSA RD.	40		8 FT - Creek Depth & Assumed Waterline Depth
12	±2,000 FT SPACING/CORROSION INVESTIGATION SAMPLE		20	
13	CRWA WATER PIPELINE		40	8 FT - Construction Drawings
14	CRWA WATER PIPELINE		40	8 FT - Construction Drawings
15	±2,000 FT SPACING/CORROSION INVESTIGATION SAMPLE		20	
16	GBRA RAW WATER PIPELINE		40	7 FT - Record Drawings
17	ENERGY TRANSFER GAS LINE		45	11 FT - As-Built Drawings
18	DAUR RANCH RD	40		5 FT - Assumed Waterline Depth
19	±2,000 FT SPACING/CORROSION INVESTIGATION SAMPLE		20	
20	±2,000 FT SPACING/CORROSION INVESTIGATION SAMPLE		20	
21	±2,000 FT SPACING/CORROSION INVESTIGATION SAMPLE		20	
22	±2,000 FT SPACING/CORROSION INVESTIGATION SAMPLE		20	
23	±2,000 FT SPACING/CORROSION INVESTIGATION SAMPLE		20	
24	WELTNER RD. AND NBU WATER PIPELINE		40	7 FT - Construction Drawings
25	HWY 46 AND NBU WATER PIPELINE	40		8 FT - Construction Drawings
26	HWY 46 AND NBU WATER PIPELINE		40	8 FT - Construction Drawings
27	±2,000 FT SPACING/CORROSION INVESTIGATION SAMPLE		20	
28	±2,000 FT SPACING/CORROSION INVESTIGATION SAMPLE		20	
29	GUADALUPE RIVER (HDD OPTION) SUPPLEMENTAL		60	
30	GUADALUPE RIVER (TUNNEL OPTION)		100	
31	GUADALUPE RIVER (TUNNEL OPTION)		115	
32	GUADALUPE RIVER (HDD OPTION) SUPPLEMENTAL		60	
33	±2,000 FT SPACING/CORROSION INVESTIGATION SAMPLE	20		
34	SUPPLEMENTAL - BARGE TO 480 FT-MSL		100	
<b>Total</b>		<b>190</b>	<b>1180</b>	



**ALLIANCE REGIONAL WATER AUTHORITY**  
**ARWA PIPELINE PHASE 1B SEGMENT E**  
**GEOTECHNICAL INVESTIGATIONS MAP**

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	DRAFTED	ELN
	CHECKED	HAF
	PROJECT NO.	3-00666
EXHIBIT		<b>C</b>

# **Attachment 1**

## **Scope and Fee for Schnabel Engineering**



March 2, 2020

*Transmitted via email:* enelson@walkerpartners.com

Mr. Eric Nelson  
Walker Partners  
804 Las Cimas Pkwy., Suite 150  
Austin, Texas 78746

**Subject: 19P64039.00: Alliance Regional Water Authority (ARWA)  
Treated Pipeline Project Phase 1B – Segment E  
Final Design and Procurement Services  
New Braunfels, TX  
Trenchless and Tunnel Engineering Services**

Dear Mr. Nelson:

**SCHNABEL ENGINEERING, LLC** (Schnabel) is pleased to submit this proposal to provide trenchless and tunneling consulting and final design services for the ARWA Treated Pipeline Projects Phase 1B Segment E project. We prepared this proposal in response to your request on December 10, 2019.

#### **PROJECT DESCRIPTION**

Our understanding of the overall project is based upon information Walker Partners sent with the request for our proposal. We understand that Segment E consists of design and construction of approximately 8 miles of 36 inch diameter treated water line using open cut methods in conjunction with trenchless and tunneling methods at required crossings. Based on an initial review of the proposed alignment, it appears that there are potentially 9 trenchless or tunnel crossings of state or county roads, creeks, gas pipelines, and a crossing under the Guadalupe River as identified on the project plan provided by Walker Partners. The crossing under the Guadalupe River is in the vicinity of a Guadalupe-Blanco River Authority owned dam. It is understood that during the design development, it may be possible that some of these trenchless or tunnel crossings could be determined to be feasible as open cut installations.

## **SCOPE OF SERVICES**

Based on conversations with Walker Partners and our understanding of the project, we have outlined and organized our proposed services in accordance with the outline provided by ARWA.

### **Task 1 – Project Management**

#### **1.1 – Prepare Monthly Summary Reports/Invoicing**

Schnabel will prepare monthly Lump Sum invoices based on the estimated percent of work completed to date, accompanied by a brief narrative summary of work performed.

#### **1.2 – Schedule Development**

Schnabel will provide estimates of construction durations for the trenchless and tunneling work to be incorporated into the overall schedule. This will be developed once as part of this task. Separate schedule updates will include updated construction durations for trenchless and tunneling work at each design phase milestone, and are included separately below.

#### **1.3 – Risk Register Development and Monthly Updates**

We understand that the project risk register will be updated during monthly meetings with both design team members and with ARWA based on the status of the design and other project developments. Schnabel will provide input to the risk register once as part of this task. Separate updates to the risk register for each design phase are included separately below.

#### **1.6 – Meetings**

Schnabel will prepare for and attend Progress Meetings with the Owner's Representative. We have assumed a total of three progress meetings (two conference calls and one in-person) that will require attendance by Schnabel (outside of 60%, 90%, & 100% phase meetings).

### **Task 2 – Review of Final Pipeline Construction Standards**

#### **2.1 – Review and provide comments on Updates to Pipeline Construction Standards prepared by Owner's Representative**

Schnabel will review and provide comments on applicable shaft, pit, trenchless, and/or tunneling sections of the Pipeline Construction Standards.

### **Task 4 – Land Acquisition Coordination**

#### **4.2 – Easement Development and Support**

Schnabel will provide input to the size of staging and construction areas necessary at each tunnel alignment based on the appropriate or expected tunnel methodologies to be utilized and provide support to and coordination with the Land Acquisition team as required.

### **Task 9 – Subsurface Investigations**

#### **9.1 – Geotechnical Investigation**

Schnabel will review the Preliminary Geotechnical Investigation and update input for recommended subsurface investigation and laboratory testing at the tunnel and trenchless crossings as needed.

## Task 10 – 60% Design

### 10.2.1.3 – Trenchless Engineering and Calculations

Schnabel will provide analyses, feasibility-level designs, and calculations related to the development of the design documents and appropriate tunnel methodologies. This may include settlement analyses, feasibility-level shaft designs, feasibility-level tunnel ground support designs, input to instrumentation plans, casing thickness structural design, ground loading criteria determination, etc. The results of each will be summarized in a basis of design technical memorandum.

### 10.6 – 60% Design Workshop

Schnabel will send one representative to attend the 60% Design Workshop. This task includes time for preparation, travel attendance, and follow-up items/tasks.

### 10.8.1 – 60% Design Deliverables (plans and specifications)

Schnabel will provide redlines and comments relating to tunnel and shaft plans, profiles, dimensions, notes, and details for your use in developing/drafting the plans.

Schnabel will also prepare applicable specifications related to tunnels and shafts. We envision this will include 10-12 specification sections (e.g. pit construction, different tunneling methodologies, shaft construction, instrumentation and monitoring, carrier pipe installation/grouting).

### 10.8.2 – Draft Geotechnical Report

Schnabel will provide review and comments on the 60% Draft Geotechnical Report as it relates to the tunnels and shafts.

### 10.8.3 – Draft Geotechnical Baseline Report (GBR)

Schnabel will prepare the 60% Draft GBR for the Guadalupe River tunnel crossing. The purpose of a GBR is to present an interpretative summary of the results of the geotechnical investigation completed for the tunnel and shaft components of this project. A GBR is a contract document and, in conjunction with the other contract documents, is intended to: assist prospective bidders in evaluating requirements for excavating, shoring, dewatering, and other activities relating to the construction of the tunnel and associated shafts; assist the Contractor in planning the work and designing temporary facilities; and assist the Engineer, Owner, and Construction Manager in reviewing and monitoring the Contractor's submittals and operations. This GBR will include discussions of the soil and groundwater conditions and what would be (in our opinion) the most appropriate tunnel method(s) for the Guadalupe River crossing.

### 10.8.7 – Updated Risk Register

Schnabel will provide input and updates to tunnel and shaft related risks at the 60% Design Phase.

### 10.8.9 – Updated Project Schedule

Schnabel will provide updates to the estimates of construction durations for the trenchless and tunneling work at the 60% Design Phase.

### 10.8.11 – 60% Opinions of Probable Construction Costs

Schnabel will provide an opinion of the probable construction costs of each crossing based on the results of the borings and testing program, the proposed location and depth of each crossing, and other assumptions in the 60% design.



## **Task 11 – 90% Design Phase**

### **11.6 – 90% Design Workshop**

Schnabel will send one representative to attend the 90% Design Workshop. This task includes time for preparation, travel attendance, and follow-up items/tasks.

### **11.8.1 – 90% Design Deliverables (plans and specifications)**

Schnabel will provide updated redlines and comments relating to tunnel and shaft plans, profiles, dimensions, notes, and details for your use in continuing the development of the plans.

Schnabel will also continue to develop applicable specifications related to tunnels and shafts.

### **11.8.2 – Final Geotechnical Report**

Schnabel will provide review and comments on the Geotechnical Report as it relates to the tunnels and shafts to assist in its finalization.

### **11.8.3 – Final Geotechnical Baseline Report (GBR)**

Schnabel will finalize the GBR for the Guadalupe River tunnel crossing.

### **11.8.4 – Final Basis of Design Technical Memorandum**

Schnabel will finalize the Basis of Design Technical Memorandum drafted in Task 10.2.1.3.

### **11.8.7 – Updated Risk Register**

Schnabel will provide input and updates to tunnel and shaft related risks at the 90% Design Phase.

### **11.8.8 – Updated Project Schedule**

Schnabel will provide updates to the estimates of construction durations for the trenchless and tunneling work at the 90% Design Phase.

### **11.8.9 – 90% Opinions of Probable Construction Costs**

Schnabel will provide an update to the opinion of the probable construction costs of each crossing based on general assumptions in the 90% Design.

## **Task 12 – 100% Design**

### **12.6 – 100% Design Workshop**

Schnabel will send one representative to attend the 100% Design Workshop. This task includes time for preparation, travel attendance, and follow-up items/tasks.

### **12.9.1 – 100% Design Deliverables (plans and specifications)**

Schnabel will provide updated redlines and comments relating to tunnel and shaft plans, profiles, dimensions, notes, and details for completion of plans.

Schnabel will also finalize applicable specifications related to tunnels and shafts.

### **12.9.4 – Updated Risk Register**

Schnabel will provide input and updates to tunnel and shaft related risks at 100% Design.

**12.9.5 – Updated Project Schedule**

Schnabel will provide updates to the estimates of construction durations for the trenchless and tunneling work at 100% Design.

**12.9.6 – 100% Opinions of Probable Construction Costs**

Schnabel will provide an update to the opinion of the probable construction costs of each crossing based on general assumptions in the 100% design.

**Task 13 – Procurement (Request for Competitive Sealed Proposal (RFCSP))**

**13.2 – Attend Pre-Proposal Conference**

Schnabel will send one representative to attend the Pre-Proposal Conference. This task includes time for preparation, travel attendance, and follow-up items/tasks.

**13.3 – Prepare Addenda and Clarifications**

Schnabel will assist in preparation of addenda and answering contractor questions related to tunnel and trenchless crossings.

**13.5 – Review Contractor Proposals**

Schnabel will assist in the review of contractor proposals as they relate to tunnel and trenchless crossings (e.g. previous tunnel experience, work plans, references).

**SUPPLEMENTAL SERVICES**

**14.6 – Attend additional meetings in the vicinity of the project**

As described above, we have assumed attendance at seven meetings total (three general Progress Meetings, three design phase workshops, and the Pre-Proposal Conference). For the purposes of estimating this task, we have assumed that we will attend two additional meetings (e.g. design review meetings, public meetings, additional progress meetings).

**14.8 – Additional Geotechnical Borings & Piezometers**

We understand that at the direction of ARWA, Walker Partners, Schnabel, or other design team members additional borings or piezometers may be required. If related to tunnel or shaft locations, Schnabel will provide recommendations on boring locations and depths, sampling requirements, groundwater observations, backfill requirements, screening depths, and in-situ or laboratory testing. For the purposes of estimating this task, we have assumed that one occurrence of approximately 2-3 supplemental borings or piezometers are requested.

**14.9. – Assistance with Combined Construction Packages**

Program Coordination to prepare additional procurement package for combined construction packages.

**ESTIMATED FEE**

The estimated lump sum fee for the required scope of services based on the outline provided by ARWA is **\$153,920**. A breakdown of this estimate is provided in Table 1.

Table 1. Summary of lump sum fees for services

<b>Task</b>	<b>Fee</b>
<b>Task 1 – Project Management</b>	
Task 1.1 – Prepare Monthly Summary Reports/Invoicing	\$4,080
Task 1.2 – Schedule Development	\$3,840
Task 1.3 – Risk Register Development and Monthly Updates	\$1,840
Task 1.6 – Meetings	\$6,100
<b>Task 2 – Review of Final Pipeline Construction Standards</b>	
Task 2.1 – Review and provide comments on Updates to Pipeline Construction Standards prepared by Owner’s Representative	\$3,680
<b>Task 4 – Land Acquisition Coordination</b>	
Task 4.2 – Easement Development and Support	\$2,320
<b>Task 9 – Subsurface Investigations</b>	\$0
Task 9.1 – Geotechnical Investigation	\$2,320
<b>Task 10 – 60% Design</b>	
10.2.1.3 – Trenchless Engineering and Calculations	\$18,400
10.6 – 60% Design Workshop	\$3,780
10.8.1 – 60% Design Deliverables (plans and specifications)	\$10,640
10.8.2 – Draft Geotechnical Report	\$1,840
10.8.3 – Draft Geotechnical Baseline Report (GBR)	\$12,560
10.8.7 – Updated Risk Register	\$1,840
10.8.9 – Updated Project Schedule	\$3,840
10.8.11 – 60% Opinions of Probable Construction Costs	\$11,320
<b>Task 11 – 90% Design Phase</b>	
11.6 – 90% Design Workshop	\$3,780
11.8.1 – 90% Design Deliverables (plans and specifications)	\$5,320
11.8.2 – Final Geotechnical Report	\$1,160
11.8.3 – Final Geotechnical Baseline Report (GBR)	\$8,200
11.8.4 – Final Basis of Design Technical Memorandum	\$6,000
11.8.7 – Updated Risk Register	\$1,160
11.8.8 – Updated Project Schedule	\$2,160
11.8.9 – 90% Opinions of Probable Construction Costs	\$7,200
<b>Task 12 – 100% Design</b>	
12.6 – 100% Design Workshop	\$3,780
12.9.1 – 100% Design Deliverables (plans and specifications)	\$3,680
12.9.4 – Updated Risk Register	\$1,160
12.9.5 – Updated Project Schedule	\$1,660
12.9.6 – 100% Opinions of Probable Construction Costs	\$5,840
<b>Task 13 – Procurement (Request for Competitive Sealed Proposal (RFCSP))</b>	
13.2 – Attend Pre-Proposal Conference	\$3,780
13.3 – Prepare Addenda and Clarifications	\$6,000
13.5 – Review Contractor Proposals	\$4,640
<b>Total Fee:</b>	<b>\$153,920</b>

**Walker Partners**  
**ARWA Treated Pipeline Projects Phase 1B Segment E – Final Design**

The breakdown of the estimated fee for supplemental services based on the outline provided by ARWA is provided in Table 2. These services will be billed for actual time and expenses incurred at the billing rates contained in the attached Schedule of Personnel Fees. A rough estimate for these services is **\$12,600**.

Table 2. Summary of fee estimate for supplemental services

<b>Task</b>	<b>Fee</b>
14.6 – Attend additional meetings in the vicinity of the project	\$3,880
14.8 – Additional Geotechnical Borings & Piezometers	\$3,680
14.9. – Assistance with Combined Construction Packages	\$5,040
<b>Total Estimated Fee:</b>	<b>\$12,600</b>

**ASSUMPTIONS AND EXCLUSIONS**

Services not specifically identified above are not included in the scope of services under this agreement. The following services are not included in our proposed scope, but can be provided upon request:

- Detailed design of pits, shafts, or other support of excavation, etc. Feasibility level design may be appropriate for some of the shafts, but generally the final and detailed design of the pits and shafts will be the contractor’s responsibility.
- Assessment of settlements related to or impacts to adjacent properties.
- Detailed drawings or CAD work.
- Environmental studies or coordination.
- Coordination with Land Owners for easement acquisition other than provided recommended access and square footage.
- Permit coordination.
- Public or Private Utility Coordination.
- Subsurface investigation or geotechnical reporting. Schnabel will provide input to the investigation program as indicated above, but will not provide inspection or oversight of the investigation program or prepare boring logs or a geotechnical data report.
- Preparation of meeting minutes or summaries. It is assumed that meeting minutes or summaries of workshops will be prepared by others.

**GENERAL**

The Standard Contract Terms and Conditions of Attachment 2 will apply to services to be provided under this proposed agreement. Consultation after submission of our report will be provided at your request at our standard hourly rates in effect at the time. Our 2020 hourly rates are included as Attachment 1.

Please sign and return one copy of this proposal to our office to form our agreement. You may transmit your acceptance of this agreement electronically with the understanding that the signature on the electronic document will be considered an original signature. This proposal is valid for 90 days from the date shown.

We appreciate the opportunity to submit our proposal for these services and are looking forward to working with you on this project. Please contact us if you have any questions regarding this proposal.

Walker Partners  
ARWA Treated Pipeline Projects Phase 1B Segment E – Final Design

Sincerely,

**SCHNABEL ENGINEERING, LLC**



Glen Frank  
Senior Associate



Matt Koziol, PE  
Senior Engineer

MKK:GF

Attachments:

- (1) Schedule of Personnel Fees
- (2) Standard Contract Terms and Conditions (2 Sheets)

**The terms and conditions of this proposal, including the attached Standard Contract Terms and Conditions are:**

**ACCEPTED BY:** Walker Partners

**SIGNATURE:** \_\_\_\_\_

**PRINTED NAME:** \_\_\_\_\_

**TITLE:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

## **Attachment 2**

### **Scope and Fee for Holt Engineering**

Revised: 2 March 2020  
16 January 2020

Walker Partners  
804 Las Cimas Parkway, Suite 150  
Austin, Texas 78746

Attn: Mr. Eric Nelson, P.E.

Re: Proposal for Geotechnical Engineering Services  
Alliance Waterline Segment E  
Caldwell County, Texas

Dear Mr. Nelson:

As per your request, Holt Engineering, Inc. (Holt) is pleased to provide a cost proposal for performing a geotechnical investigation at the above referenced project site. The purpose of the investigation is to determine subsurface soil and rock conditions at the site in order to provide geotechnical data to the engineering for utility construction. The scope of work presented in this proposal is based on your email dated 15 January 2020 and in accordance with the Alliance Regional Water Authority – Phase 1B, Segment E Basic Services. This project is in the 30% design phase at this time.

It is our understanding the project will consist of installing approximately 7.85 miles of new waterline from the Guadalupe River near Lake Dunlap Dam to Highway 123. Holt will perform borings at locations suggested by the client, along the alignment. Holt understands the line will be installed by typical cutting and trenching except where the line crosses some roads, rivers and existing utilities. In these locations, which will be determined during the design phase, trenchless construction methods will be used.

### GEOTECHNICAL SCOPE OF SERVICES

1. Laying out soil borings in the field and coordinating utilities (electrical, water, wastewater, sewer, telephone, and gas) with line locators. Borings will be laid out along the alignment on approximately 2,000-foot centers except at creek/river crossings and street crossings. One boring is planned in the Guadalupe River and will be drilled on a barge.
2. Obtain street cut permits, if necessary, for drilling in City of New Braunfels' right-of-way.

3. Provide all necessary manpower, equipment and materials for drilling, logging and sampling 24 soil borings to depths of approximately 15 feet to 60 feet each and two borings to depths of approximately 100 feet to 115 feet each. Borings along the alignment will be drilled approximately 5 feet below flow depths except where HDD/trenchless/tunneling is planned. In these areas we plan to drill approximately 10 feet to 30 feet below the tunnel zone. All bore holes will be sampled using Shelby tubes or split-spoon samplers as appropriate. Grab samples of coarse sand and gravel will be obtained for grain size analysis. A Christianson wireline core barrel will be used to core selected rock/shale samples for strength testing. All borings relating to trenchless crossings and those near and in the river shall be continuously sampled.
4. Soil samples for soil corrosion investigation will be collected from the approximate pipeline depth at least every 4,000 feet along the pipeline alignment and delivered to Elk Engineering at 8950 Forum Way, Fort Worth, TX 76140. The minimum soil sample volume should be 1 quart.
5. Providing an engineering letter report including monitor well reports, groundwater levels and recommendations for special compaction needs, interceptor drains and underdrains.
6. Field logging to include visual classifications, percent core recovery, RQD and pocket penetrometer tests. Pictures of all cores will be provided.
7. Plugging all bore holes upon completion of the drilling operations.
8. In-house logging of the cores by the geotechnical engineer.
9. Laboratory testing of selected samples for Atterberg limits, moisture contents, unconfined compression tests, minus 200 mesh sieves and unit weights. Sieve analyses and hydrometers will be run in cohesionless soils encountered within the pipe zone as necessary. Specialty lab testing including Brazilian Tensile Strength, Cerchar Abrasivity, and Slake Durability will be run on samples in the tunnel zone at the direction the tunnel engineer. Samples will be stored on site for a duration of approximately 2 years. Corrosion tests will also be run on selected samples and will be collected by Holt and tested by an outside lab.



10. Geotechnical Data Reports (GDRs, preliminary and final) which will include a generalized boring location plan, logs of borings with geologic formations, laboratory test results, description of drilling operations and groundwater conditions. In house QA/QC reviews will be conducted during all phases of the work and on all our deliverables provided. A senior geotechnical engineer or principal engineer will conduct the review on each submittal.
11. Geotechnical Design Memorandum (GDM) which will include construction considerations and recommendations for backfill compaction, pipe bedding, etc. for the open cut portion of the line. Recommendations will also be provided for any structures and pavement thickness recommendations at open cut street crossings. In house QA/QC reviews will be conducted during all phases of the work and on all our deliverables provided. A senior geotechnical engineer or principal engineer will conduct the review on each submittal.

#### ASSUMPTIONS

The following assumptions were made in developing the scope and fee for this project:

- All right of entry will be obtained by others;
- Surveying of the boreholes will be done by others;
- All spoils from the job site will be left onsite and will not be containerized to dispose of offsite.

Attached is an itemized cost estimate based on the project scope outlined above. We are providing an itemized cost estimate for the initial scope including only 28 borings. The not-to-exceed cost for this work will be on the order of **\$119,481.49**. We expect the costs provided in the individual items listed in the cost estimate may be moved between the various scope elements to accommodate the overall geotechnical services estimate.

We are also providing additional costs for three supplemental items as listed below:

- **Supplement #1:** 7 Additional borings to a depth of 45 feet to 60 feet each, including laying the holes out, locating utilities, drilling, logging, and sampling, lab testing, and any updates to the GDR. The not-to-exceed cost is **\$27,652.07**.
- **Supplement #2:** 7 piezometers as a stand-alone effort. This includes laying the holes out, locating utilities, drilling the holes, and installing five temporary piezometers to depths of 20 feet to 60 feet each and two temporary piezometers to depths of 100 feet to 115 feet. Wells

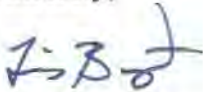
Mr. Eric Nelson, P.E.  
Revised: 2 March 2020  
16 January 2020  
Page 4 of 4

will be completed with steel risers and locking caps. Water levels will be monitored on intervals of 24 hours, 48 hours, 7 days, 14 days, 30 days, 3 months, 6 months, 9 months, 12 months, and 24 months or until a static groundwater level has been measured. Plugging all wells in the future at the request of the Project Manager. Submitting State Well Reports and Plugging Reports and updating GDR – The not-to-exceed cost is **\$35,828.82**.

- **Supplement #3:** At the direction of ARWA, barge rental and crane service for mobilization and demobilization shall be included to collect one soil boring no deeper than 100 feet to an approximate depth of 480 ft-msl. This will include an anchoring system to hold the barge in place, proper lighting of barge at night. Security will be provided for the barge when unoccupied by drilling crew, i.e. at night and 24-hour security over week-ends or holidays. Safety boat for drill crew during drilling to provide emergency shore access. Includes updates to the GDR - The not-to-exceed cost is **\$60,569.76**.

We appreciate the opportunity to offer our services. If we can answer any questions concerning the above, please do not hesitate to call.

Sincerely,



Travis H. Bryant, P.E.  
Project Engineer

Holt Engineering, Inc.  
TBPE Firm Registration No. F-430

Enclosures:

Cost estimate for Base Estimate for 24 Borings  
Cost Estimate for Supplement #1  
Cost Estimate for Supplement #2  
Cost Estimate for Supplement #3

**Project Name: Alliance Waterline Segment E  
Base Estimate for 24 Borings**

**Date:** Revised 2 March 2020; 1/16/2020

**GEOTECHNICAL ENGINEERING SERVICES IN GENERAL ACCORDANCE WITH ALLIANCE GEOTECHNICAL SCOPE**

Rig Mobilization	Ea.	No.	Total	Price Total
Caldwell County	\$700.00	2	2	\$1,400.00
SUBTOTAL				\$1,400.00

Layout Borings/Locate Utilities, Etc.	Hr.	Hrs.	Total	Price Total
EIT 1	\$105.73	33	33	\$3,489.09
SUBTOTAL				\$3,489.09

**Drilling, Logging and Sampling: 24 borings @ 15-60 Ft. Ea. - 745 LF; 2 borings @ 100 and 115 Ft. Ea. - 215 LF; (Total 960 L.F.)**

	Unit	Total	Price Totals
Auger Drilling 0 - 25 Ft.	590 Ft.	590	\$13,275.00
Auger Drilling 25 - 45 Ft.	240 Ft.	240	\$6,000.00
Rock Coring 45 - 75 Ft.	65 Ft.	65	\$2,535.00
Rock Coring 75 - 100 Ft.	50 Ft.	50	\$2,250.00
Rock Coring 100 - 120 Ft.	15 Ft.	15	\$765.00
Plug Borings with Benotnite Chips	960 Ft.	960	\$4,800.00
TCP/Split Spoon/Shelby Tubes:	375 Ea.	375	\$9,562.50
Core Boxes	14 Ea.	14	\$350.00
Core Photos (EIT 1 Time)	16 Hr.	16	\$1,691.68
Water Truck (Used When Coring)	6 Day	6	\$1,530.00
Support Truck (When Rig is Left Onsite)	12 Day	12	\$1,776.00
Soil Resistivity (2 Man Crew/8 Hr Day)	2 Day	2	\$2,000.00
SUBTOTAL		960	\$46,535.18

Project Coordination:	No.	Total	Price Total
Principal Engineer	2 Hr.	2	\$710.66
Supervisory Engineer VI	25 Hr.	25	\$5,974.00
Professional Engineer II	32 Hr.	32	\$3,910.40
EIT 1	40 Hr.	40	\$4,229.20
SUBTOTAL			\$14,113.60

**Alliance Waterline Segment E**

**Project Name:**

In-House Laboratory Testing:		No.	Total	Price Totals
Atterberg Limits	\$80.00 Ea.	92		\$7,360.00
Moisture Contents	\$30.00 Ea.	92		\$2,760.00
Minus 200 Mesh Sieve	\$49.00 Ea.	92		\$4,508.00
Particle Gradation Incl #200 Sieve	\$82.00 Ea.	13		\$1,066.00
Moisture Content + Dry Density	\$46.00 Ea.	76		\$3,496.00
Unconfined Compression Tests	\$77.00 Ea.	76		\$5,852.00
Specialty Clayshale/Rock Testing	\$5,000.00 Ea.	1		\$5,000.00
Sulfate/Sulfite Testing	\$100.00 Ea.	18		\$1,800.00
Eng Tech VI for Prep Specialty Samples	\$113.75 Hr.	10		\$1,137.50
Corrosion Tests	\$125.00 Ea.	15		\$1,875.00
SUBTOTAL				\$34,854.50

Engineering Data Report		Total	Price Total
Principal Engineer (QA/QC)	\$335.33 Hr.	6	\$2,131.98
Supervisory Engineer VI	\$238.96 Hr.	20	\$4,779.20
Professional Engineer II	\$122.20 Hr.	30	\$3,666.00
Administrative	\$91.89 Hr.	24	\$2,205.36
SUBTOTAL			\$12,782.54

Engineering Design Memorandums		Total	Price Total
Principal Engineer (QA/QC)	\$335.33 Hr.	4	\$1,421.32
Supervisory Engineer VI	\$238.96 Hr.	12	\$2,867.52
Professional Engineer II	\$122.20 Hr.	12	\$1,466.40
Administrative	\$91.89 Hr.	6	\$551.34
SUBTOTAL			\$6,306.58

**TOTAL ESTIMATED COST**

**\$119,481.49**

**Project Name:** Alliance Waterline Segment E  
**Supplement #1 - Drilling 7 Additional Bore Holes at 45 Ft. to 60 Ft. Each.**

**Date:** Revised: 2 March 2020; 1/16/2020

**GEOTECHNICAL ENGINEERING SERVICES IN GENERAL ACCORDANCE WITH ALLIANCE GEOTECHNICAL SCOPE**

Rig Mobilization	No.	Price Total	Total	Price Total
Caldwell County	1	\$700.00	1	\$700.00
SUBTOTAL				
				\$700.00

Layout Borings/Locate Utilities, Etc.	Hrs.	Price Total	Total	Price Total
EIT 1 (2 Man Crew)	10	\$105.73	10	\$1,057.30
SUBTOTAL				
				\$1,057.30

**Drilling, Logging and Sampling: 7 borings @ 45-60 Ft. Ea.-345 LF**

	Unit	Price Total	Total	Price Totals
Auger Drilling 0 - 25 Ft.	175 Ft.	\$22.50	175	\$3,937.50
Auger Drilling 25 - 45 Ft.	140 Ft.	\$25.00	140	\$3,500.00
Rock Coring 45 - 75 Ft.	30 Ft.	\$39.00	30	\$1,170.00
Rock Coring 75 - 100 Ft.	Ft.	\$45.00	0	\$0.00
Rock Coring 100 - 120 Ft.	Ft.	\$51.00	0	\$0.00
Plug Borings with Benotnite Chips	345 Ft.	\$5.00	345	\$1,725.00
TCP/Split Spoon/Sheilby Tubes:	105 Ea.	\$25.50	105	\$2,677.50
Core Boxes	2 Ea.	\$25.00	2	\$50.00
Core Photos (EIT 1 Time)	7 Hr.	\$105.73	7	\$740.11
Water Truck (Used When Coring)	1 Day	\$255.00	1	\$255.00
Support Truck (When Rig is Left Onsite)	5 Day	\$148.00	5	\$740.00
Soil Resistivity (2 Man Crew/8 Hr Day)	Day	\$1,000.00	0	\$0.00
SUBTOTAL				\$14,795.11
			175	

**Project Coordination:**

	No.	Price Total	Total	Price Total
Principal Engineer	0 Hr.	\$355.33	0	\$0.00
Supervisory Engineer VI	0 Hr.	\$238.96	0	\$0.00
Professional Engineer II	4 Hr.	\$122.20	4	\$488.80
EIT 1	4 Hr.	\$105.73	4	\$422.92
SUBTOTAL				
				\$911.72

**Project Name: Alliance Waterline Segment E**

In-House Laboratory Testing:		No.									Total	Price Totals
Atterberg Limits	Ea.	23	\$80.00								23	\$1,840.00
Moisture Contents	Ea.	23	\$30.00								23	\$690.00
Minus 200 Mesh Sieve	Ea.	23	\$49.00								23	\$1,127.00
Particle Gradation Incl #200 Sieve	Ea.	7	\$82.00								7	\$574.00
Moisture Content + Dry Density	Ea.	19	\$46.00								19	\$874.00
Unconfined Compression Tests	Ea.	19	\$77.00								19	\$1,463.00
Specialty Clayshale/Rock Testing	Ea.		\$5,000.00								0	\$0.00
Sulfate/Sulfite Testing	Ea.	7	\$100.00								7	\$700.00
Eng Tech VI for Prep Specialty Samples	Hr.		\$113.75								0	\$0.00
Corrosion Tests	Ea.	7	\$125.00								7	\$875.00
SUBTOTAL												\$8,143.00

Engineering Data Report											Total	Price Total
Principal Engineer (QA/QC)	Hr.	2	\$355.33								2	\$710.66
Supervisory Engineer VI	Hr.	2	\$238.96								2	\$477.92
Professional Engineer II	Hr.	4	\$122.20								4	\$488.80
Administrative	Hr.	4	\$91.89								4	\$367.56
SUBTOTAL												\$2,044.94

**TOTAL ESTIMATED COST**

**\$27,652.07**

**Project Name:** Alliance Waterline Segment E  
 Supplement #2 - Installing 7 Piezometers  
**Date:** 1/16/20

**GEOTECHNICAL ENGINEERING SERVICES IN GENERAL ACCORDANCE WITH ALLIANCE GEOTECHNICAL SCOPE**

Rig Mobilization		No.		Price Total	
	Ea.				
Caldwell County	\$700.00	1			\$700.00
SUBTOTAL					
Layout Borings/Locate Utilities, Etc.		Hrs.		Price Total	
EIT 1	\$105.73	16			\$1,691.68
SUBTOTAL					
\$1,691.68					

**Installing 7 Piezometers @ 60 Ft. to 115 Ft.**

Monitoring Wells (Materials, Installation, Monitoring, etc.)		No.		Price Total	
	Ea.				
Piezometer to depths of 20 feet to 60 feet	\$2,500.00	5			\$12,500.00
Piezometer to depths of 100 feet to 115 feet	\$5,000.00	2			\$10,000.00
Monitoring of Groundwater (EIT I)	\$105.73	80			\$8,458.40
SUBTOTAL					
\$30,958.40					

**Project Coordination:**

		No.	Price Total
Principal Engineer	\$355.33	1	\$355.33
Supervisory Engineer VI	\$238.96	0	\$0.00
Professional Engineer II	\$122.20	4	\$488.80
EIT 1	\$105.73	4	\$422.92
SUBTOTAL			
\$911.72			

**Engineering Data Report**

		No.	Price Total
Principal Engineer (QA/QC)	\$355.33	2	\$710.66
Supervisory Engineer VI	\$238.96	0	\$0.00
Professional Engineer II	\$122.20	4	\$488.80
Administrative	\$91.89	4	\$367.56
SUBTOTAL			
\$1,567.02			

**TOTAL ESTIMATED COST**

**\$35,828.82**

**Project Name:** Alliance Waterline Segment E  
**Supplement #3 Barge Boring (75 to 100 Ft.)**

**Date:** Revised: 1/16/2020

**GEOTECHNICAL ENGINEERING SERVICES IN GENERAL ACCORDANCE WITH ALLIANCE GEOTECHNICAL SCOPE**

Rig Mobilization	No.	Price Total	Total	Price Total
Caldwell County	1	\$700.00	1	\$700.00
SUBTOTAL				\$700.00

Layout Borings/Locate Utilities, Etc.	Hrs.	Price Total	Total	Price Total
EIT 1	16	\$105.73	16	\$1,691.68
SUBTOTAL				\$1,691.68

**Drilling, Logging and Sampling: 1 boring @ 100 Ft Ea. L.F.**

	Unit	Price Total	Total	Price Totals
HS Lake Drilling 0 - 25 Ft.	Ft. 25	\$35.50	25	\$887.50
HS Lake Drilling 25 - 45 Ft.	Ft. 10	\$35.00	10	\$350.00
Rock Coring 35 - 75 Ft.	Ft. 40	\$39.00	40	\$1,560.00
Rock Coring 75 - 100 Ft.	Ft. 25	\$45.00	25	\$1,125.00
Rock Coring 100 - 120 Ft.	Ft.	\$51.00	0	\$0.00
Plug Borings with Benotmitte Chips	Ft.	\$5.00	0	\$0.00
TCP/Split Spoon/Shelby Tubes:	Ea.	\$25.50	0	\$0.00
Core Boxes	Ea. 40	\$25.00	40	\$1,000.00
Core Photos (EIT 1 Time)	Hr. 3	\$105.73	3	\$317.19
Water Truck (Used When Coring)	Day	\$255.00	0	\$0.00
Support Truck (When Rig is Left Onsite)	Day 3	\$148.00	3	\$444.00
Soil Resistivity (2 Man Crew/8 Hr Day)	Day	\$1,000.00	0	\$0.00
SUBTOTAL				\$5,683.69

Barge Rental	No.	Price Total	Total	Price Total
One week with set up	1	\$40,000.00	1	\$40,000.00
SUBTOTAL				\$40,000.00



**Project Name:** Alliance Waterline Segment E

Project Coordination:		No.		Total	Price Total
Principal Engineer	\$355.33	Hr.		0	\$0.00
Supervisory Engineer VI	\$238.96	Hr.	15	15	\$3,584.40
Professional Engineer II	\$122.20	Hr.	20	20	\$2,444.00
EIT I	\$105.73	Hr.	15	15	\$1,585.95
SUBTOTAL					\$7,614.35

In-House Laboratory Testing:		No.		Total	Price Totals
Atterberg Limits	\$80.00	Ea.	2	2	\$160.00
Moisture Contents	\$30.00	Ea.	2	2	\$60.00
Minus 200 Mesh Sieve	\$49.00	Ea.	2	2	\$98.00
Particle Gradation Incl #200 Sieve	\$82.00	Ea.	2	2	\$164.00
Moisture Content + Dry Density	\$46.00	Ea.	4	4	\$184.00
Unconfined Compression Tests	\$77.00	Ea.	4	4	\$308.00
Specialty Clayshale/Rock Testing	\$500.00	Ea.	1	1	\$500.00
Sulfate/Sulfite Testing	\$100.00	Ea.		0	\$0.00
Eng Tech VI for Prep Specialty Samples	\$113.75	Hr.	4	4	\$455.00
Corrosion Tests	\$125.00	Ea.		0	\$0.00
SUBTOTAL					\$1,929.00

Engineering Data Report		No.		Total	Price Total
Principal Engineer (QA/QC)	\$355.33	Hr.	2	2	\$710.66
Supervisory Engineer VI	\$238.96	Hr.	4	4	\$955.84
Professional Engineer II	\$122.20	Hr.	6	6	\$733.20
Administrative	\$91.89	Hr.	6	6	\$551.34
SUBTOTAL					\$2,951.04

**TOTAL ESTIMATED COST**

**\$60,569.76**

Note: The charge for an additional boring from the barge will be on the order of \$8,800.00 drilled during the week of the barge rental.

## **Attachment 3**

### **Scope and Fee for The Rios Group**

January 13, 2020

Eric Nelson, P.E.  
Project Manager  
Walker Partners  
804 Las Cimas Pkwy., Suite 150  
Austin, Texas 78746  
W: 512.382.0021  
enelson@walkerpartners.com

**RE: Subsurface Utility Engineering  
Alliance Regional Water Authority Phase 1B Segment E**

Dear Mr. Nelson:

The Rios Group, Inc. (TRG) is pleased to submit a cost proposal for Subsurface Utility Engineering (SUE) for the above referenced project. This proposal is based on information provided via email and telephone correspondence the week of January 5, 2020.

**Introduction**

TRG will perform SUE services for this project in general accordance with the recommended practices and procedures described in ASCE publication CI/ASCE 38-02 “Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data.” As described in the publication, four levels have been established to describe and depict the quality of subsurface utility information. The four quality levels are as follows:

- Quality Level D (QL“D”) – Information obtained from existing utility records.
- Quality Level C (QL“C”) – Surveyed data depicting visible above-ground features supplemented with QL“D” information.
- Quality Level B (QL“B”) – Two-dimensional horizontal information obtained through the application and interpretation of non-destructive surface geophysical methods. Also known as “designating,” this level incorporates QL“C” information and provides horizontal positioning of subsurface utilities to within approximately 1.0 foot.
- Quality Level A (QL“A”) – Three-dimensional horizontal and vertical information obtained through non-destructive vacuum excavation equipment to expose utilities at critical points. Also known as “locating,” this level incorporates QL“B” information and provides horizontal and vertical positioning of subsurface utilities to within approximately 0.05 feet.

**Scope of Work**

Based on information provided by Walker Partners (Client), TRG has developed a proposed scope for SUE services on this project. This scope may be modified, with Client and TRG concurrence, during the performance of work if warranted by changing or unexpected field conditions.

The scope of this proposal includes QL“A” and QL“B” SUE services for the Alliance Regional Water Authority Phase 1B Segment E pipeline project Guadalupe County, Texas. The Base Scope of this proposal includes the SUE needs called out on the attached ‘SUE Levels A & B’ exhibit. Specifically, the Base Scope includes 430 linear feet of QL“B” SUE and thirteen (13) QL“A” SUE test holes.

The Supplemental Services of the proposal includes an additional 500 linear-feet of QL“B” SUE and five (5) QL“A” SUE test holes at locations that will be provided by the Client.

The survey of SUE field markings is not included for either the Base Scope or Supplemental Services. It is assumed that the Client will provide TRG with survey data for use in preparing the final deliverables.

Any necessary Right-Of-Entry (ROE) permits, including railroad ROE, will be provided by the Client prior to the start of field work.

### **TRG Procedures**

#### *QL“D” and “C” – Records Research and Surface Feature Survey*

It is the responsibility of the SUE provider to perform due-diligence with regard to records research and the acquisition of available utility records. The due-diligence provided for this project will consist of contacting the applicable One Call agency and associated utility owners/municipalities, visually inspecting the work area for evidence of utilities, and reviewing available utility record information. Additional utilities not identified through these efforts will be referred to as Unknown utilities.

#### *QL“B” – Designating*

Following a review of the project scope and available utility records with the project manager, TRG field personnel will begin designating the approximate horizontal position of known subsurface utilities within the project area. A suite of geophysical equipment that includes magnetic and electromagnetic induction will be used to designate conductive utilities. Where access is available, a sonde will be inserted into non-conductive utilities to provide a medium for transmission which can then be designated using geophysical equipment. Non-conductive utilities can also be designated using other proven methods, such as rodding and probing. TRG will make a reasonable attempt to designate Unknown utilities identified during field work; however, no guarantee is made that all Unknown utilities will be designated. Utilities will be marked and labeled to distinguish type and ownership. Field data depicting the designated utilities, as well as relevant surface features, will be produced to ensure accuracy and completeness of subsequent survey data. The TRG project manager will review the collected survey data, field data, and utility records for accuracy and completeness.

#### *QL“A” – Locating*

TRG will utilize non-destructive vacuum excavation equipment to excavate test holes at the requested locations. To layout the test holes, TRG will follow the *QL“B” – Designating* procedures described above. Once each utility is located, TRG will record the size, type,

material, and depth. Test holes will be uniquely marked. Excavations will be backfilled by mechanical means with the appropriate material, and the original surface will be restored. If necessary, TRG can core pavement up to a depth of 12 inches. Asphalt surfaces will be repaired with an asphalt cold patch, and concrete cores will be epoxied in place, flush with the surrounding surface. TRG assumes that flowable fill will not be required when backfilling test holes and that full-section pavement repair (including sidewalks) will not be required to restore the original pavement surface. If requested, these services can be provided at an additional cost.

TRG will establish any necessary routine traffic control measures at no additional cost. However, if non-routine traffic control measures (lane closures, traffic detours, flagpersons, etc.) are required, this service will be invoiced as a direct expense. Due to the risk of damage, TRG will not attempt to probe or excavate test holes on AC water lines unless approval is obtained from the owner in advance. Additionally, excavation in rock, or to a depth greater than 18 feet, is considered beyond the scope of this proposal.

TRG has made the following assumptions with regard to the test holes on this project:

- All test holes will be accessible to truck-mounted vacuum excavation equipment.
- Right-Of-Way (ROW) permits from Guadalupe County will be required. TRG will obtain all required County permits and ensure that coordination and compliance with the County is provided.
- Designed traffic control plans will not be required.
- Non-routine traffic control measures will be required. TRG will acquire the services of a qualified Maintenance-Of-Traffic (MOT) Subcontractor, and ensure that adequate traffic control is provided.
- The coring of pavement will not be required.

### **Deliverables**

TRG will provide the following as a final deliverable to the Client:

- A utility file in CAD format depicting all designated and located utilities. The Client will provide TRG with any necessary background files for use in completing the final deliverables.
- A summary sheet of all test hole coordinate data and depth information.
- 8.5" x 11" Test Hole Data Forms for all test hole locations completed. These plans will be signed and sealed by a Professional Engineer and delivered to the Client in electronic PDF form.
- 11" x 17" SUE Plan Sheets depicting all designated and located utilities. These plans will be signed and sealed by a Professional Engineer and delivered to the Client in electronic PDF form.

### **Schedule**

TRG can mobilize within three (3) weeks of receiving Notice-To-Proceed (NTP). TRG estimates that the SUE work for the Base Scope can be completed in twenty-two (22) working days, broken down as follows:

- QL“B” SUE field work – 3 days
- QL“A” SUE field work – 9 days
- Deliverable preparation – 10 days (following receipt of survey data)

TRG estimates that the SUE work for the Supplemental Services can be completed in twelve (12) working days, broken down as follows:

- QL“B” SUE field work – 2 days
- QL“A” SUE field work – 3 days
- Deliverable preparation – 7 days (following receipt of survey data)

### **Estimated Fee**

The total estimated cost to complete the work described herein for the Base Scope is **Thirty Thousand Five Hundred Eighty Dollars and NO/100 (\$30,580.00)**. An itemized breakdown of cost is provided in Exhibit A-1.

The total estimated cost to complete the work described herein for the Supplemental Services is **Fifteen Thousand Three Hundred Eighty Dollars and NO/100 (\$15,380.00)**. An itemized breakdown of cost is provided in Exhibit A-2.

Please note that these pricings are based on an assumption of quantities, and that only actual quantities will be invoiced – up to the total Contract amount.

We look forward to working with you on this project. If there are any questions, please do not hesitate to call at 512.580.5440.

Respectfully,

**The Rios Group, Inc.**



Ryan C. Chapin, P.E.  
Project Manager

Prime Provider: Walker Partners  
Subprovider: The Rios Group, Inc.  
ARWA Phase 1B Segment E

**EXHIBIT A-1 - Base Scope**  
**FEE SCHEDULE SUMMARY**  
Method of Payment: Specified Rate and Unit Cost

	Description of Work Task	Total
	SUE Office Effort	\$ 5,280.00
	SUE Field Effort	\$ 22,900.00
	Other Direct Expenses	\$ 2,400.00
	Total Fee	\$30,580.00

**Total Fee**

**\$30,580.00**

Prime Provider Walker Partners  
 Subprovider The Rios Group, Inc.  
 Alliance Regional Water Authority  
 Phase 1B Segment E

**Exhibit A-1 - Base Scope**

BASIS SERVICES		\$ 220.00	\$ 180.00	\$ 120.00	\$ 90.00	\$ 70.00					
Task Descriptions	Project Manager	Project Engineer	Engineer In Training	CADD Operator	Admin		Total Hours	Total Cost	Total Sheets or # of Items	Hours per Sheet or item	
<b>Project Management</b>	2	10	8	20	4		44	\$ 5,280.00			
<b>Totals</b>	<b>2</b>	<b>10</b>	<b>8</b>	<b>20</b>	<b>4</b>	<b>0</b>	<b>44</b>	<b>\$ 5,280.00</b>	<b>0</b>		



Prime Provider: Walker Partners  
 Subprovider: The Rios Group, Inc.  
 Alliance Regional Water Authority Phase 1B Segment E

**Exhibit A-1 - Base Scope**

Specified Rate Classification	Unit	Specified Contract Rate	Quantity	Total Cost
<b>SUE (Quality Level C and D)</b>				
This unit price includes personnel and equipment for records research, CADD, and mapping. Price per linear foot (including all related services)	LF	0.60	0.00	\$ -
<b>SUE (Quality Level B - Utility Designating)</b>				
This unit price includes personnel and equipment for records research, designating, engineering, surveying, CADD, mapping and limited traffic control. Price per linear foot (including all related services)	LF	1.55	0.00	\$ -
<b>SUE (Quality Level A - Utility Locate, Test Holes)</b>				
Includes labor and equipment for vacuum excavation, engineering, surveying, and CADD.				
Price per Test Hole:				
Level A: 0 to 5 ft.	EA	\$ 1,100.00	5.00	\$ 5,500.00
Level A: > 5 to 10 ft.	EA	\$ 1,350.00	5.00	\$ 6,750.00
Level A: > 10 to 15 ft.	EA	\$ 1,750.00	3.00	\$ 5,250.00
Level A: > 15 to 20 ft.	EA	\$ 2,300.00	0.00	\$ -
Level A: > 20 ft.	VF	\$ 160.00	0.00	\$ -
<b>SUE Mobilization/Demobilization</b>	mile	\$ 5.00	0.00	\$ -
<b>SUE Field Services One (1) Designating Person with Equipment</b>	Hour	\$ 135.00	20.00	\$ 2,700.00
<b>SUE Field Services Two (2) Designating Person with Equipment</b>	Hour	\$ 180.00	15.00	\$ 2,700.00
<b>TOTAL</b>				<b>\$ 22,900.00</b>

The unit costs shown include labor, overhead, and profit. Payment based on units completed. No partial payments.

All unit costs are negotiated costs and are not subject to change or adjustment.

Unit Cost Payment Basis: If unit costs by year are included, unit costs billed should correspond to the fiscal or calendar year, if applicable, in which the work was done.

Note: Any direct labor, unit cost, or other direct expense classification included in the contract, but not in a work authorization, is not eligible for payment under that work authorization.

Prime Provider: Walker Partners  
 Subprovider: The Rios Group, Inc.  
 Alliance Regional Water Authority Phase 1B Segment E

**Exhibit A-1  
 Base Scope**

<b>OTHER DIRECT EXPENSE</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>QUANTITY</b>	<b>COST</b>
Lodging/Hotel (Taxes/fees not included)	day/person	\$ 141.00	0	\$ -
Lodging/Hotel - Taxes and Fees	day/person	\$ 30.00	0	\$ -
Meals (Excluding alcohol & tips) (Overnight stay required)	day/person	\$ 59.00	0	\$ -
Mileage	mile	\$ 0.535	0	\$ -
Traffic Control	day	\$ 1,200.00	2	\$ 2,400.00
<b>Subtotal Other Direct Expense:</b>				<b>\$ 2,400.00</b>

**Profit not allowed on Other Direct Expenses.**

Prime Provider: Walker Partners  
Subprovider: The Rios Group, Inc.  
ARWA Phase 1B Segment E

**EXHIBIT A-2 - Supplemental Services**  
**FEE SCHEDULE SUMMARY**  
Method of Payment: Specified Rate and Unit Cost

	Description of Work Task	Total
	SUE Office Effort	\$ 2,580.00
	SUE Field Effort	\$ 11,600.00
	Other Direct Expenses	\$ 1,200.00
	Total Fee	\$15,380.00

**Total Fee**

**\$15,380.00**

Prime Provider Walker Partners  
 Subprovider The Rios Group, Inc.  
 Alliance Regional Water Authority  
 Phase 1B Segment E

**Exhibit A-2 - Supplemental Services**

	<b>BASIS SERVICES</b>	\$ 220.00	\$ 180.00	\$ 120.00	\$ 90.00	\$ 70.00					
<b>Task Descriptions</b>	Project Manager	Project Engineer	Engineer In Training	CADD Operator	Admin		Total Hours	Total Cost	Total Sheets or # of Items	Hours per Sheet or item	
<b>Project Management</b>	1	5	5	8	2		21	\$ 2,580.00			
<b>Totals</b>	<b>1</b>	<b>5</b>	<b>5</b>	<b>8</b>	<b>2</b>	<b>0</b>	<b>21</b>	<b>\$ 2,580.00</b>	<b>0</b>		

Prime Provider: Walker Partners  
 Subprovider: The Rios Group, Inc.  
 Alliance Regional Water Authority Phase 1B Segment E

**Exhibit A-2 - Supplemental Services**

Specified Rate Classification	Unit	Specified Contract Rate	Quantity	Total Cost
<b>SUE (Quality Level C and D)</b>				
This unit price includes personnel and equipment for records research, CADD, and mapping. Price per linear foot (including all related services)	LF	0.60	0.00	\$ -
<b>SUE (Quality Level B - Utility Designating)</b>				
This unit price includes personnel and equipment for records research, designating, engineering, surveying, CADD, mapping and limited traffic control. Price per linear foot (including all related services)	LF	1.55	0.00	\$ -
<b>SUE (Quality Level A - Utility Locate, Test Holes)</b>				
Includes labor and equipment for vacuum excavation, engineering, surveying, and CADD.				
Price per Test Hole:				
Level A: 0 to 5 ft.	EA	\$ 1,100.00	2.00	\$ 2,200.00
Level A: > 5 to 10 ft.	EA	\$ 1,350.00	2.00	\$ 2,700.00
Level A: > 10 to 15 ft.	EA	\$ 1,750.00	1.00	\$ 1,750.00
Level A: > 15 to 20 ft.	EA	\$ 2,300.00	0.00	\$ -
Level A: > 20 ft.	VF	\$ 160.00	0.00	\$ -
<b>SUE Mobilization/Demobilization</b>	mile	\$ 5.00	0.00	\$ -
<b>SUE Field Services One (1) Designating Person with Equipment</b>	Hour	\$ 135.00	10.00	\$ 1,350.00
<b>SUE Field Services Two (2) Designating Person with Equipment</b>	Hour	\$ 180.00	20.00	\$ 3,600.00
<b>TOTAL</b>				<b>\$ 11,600.00</b>

The unit costs shown include labor, overhead, and profit. Payment based on units completed. No partial payments.

All unit costs are negotiated costs and are not subject to change or adjustment.

Unit Cost Payment Basis: If unit costs by year are included, unit costs billed should correspond to the fiscal or calendar year, if applicable, in which the work was done.

Note: Any direct labor, unit cost, or other direct expense classification included in the contract, but not in a work authorization, is not eligible for payment under that work authorization.

Prime Provider: Walker Partners  
 Subprovider: The Rios Group, Inc.  
 Alliance Regional Water Authority Phase 1B Segment E

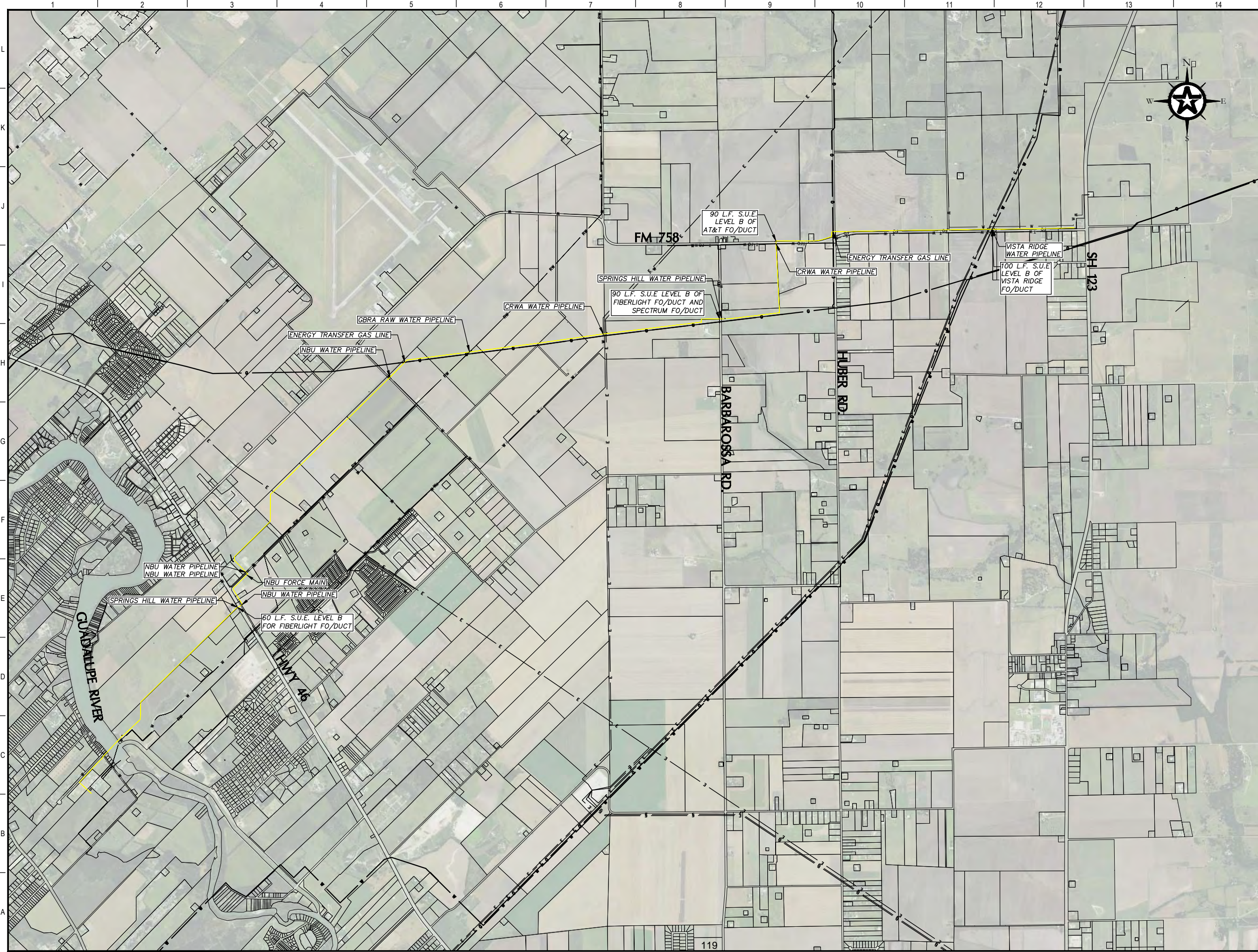
**Exhibit A-2  
 Supplemental Services**

<b>OTHER DIRECT EXPENSE</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>QUANTITY</b>	<b>COST</b>
Lodging/Hotel (Taxes/fees not included)	day/person	\$ 141.00	0	\$ -
Lodging/Hotel - Taxes and Fees	day/person	\$ 30.00	0	\$ -
Meals (Excluding alcohol & tips) (Overnight stay required)	day/person	\$ 59.00	0	\$ -
Mileage	mile	\$ 0.535	0	\$ -
Traffic Control	day	\$ 1,200.00	1	\$ 1,200.00
<b>Subtotal Other Direct Expense:</b>				<b>\$ 1,200.00</b>

**Profit not allowed on Other Direct Expenses.**

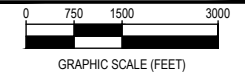
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KEY MAP

PROPOSED ROUTE



ALLIANCE REGIONAL WATER AUTHORITY

ARWA PIPELINE PHASE 1B SEGMENT E

SUE LEVELS A & B

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF PROFESSIONAL ENGINEER ERIC LEE NELSON #114449 ON THE DATE SHOWN ON THE DATE STAMP. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.

PM	JWJ
DESIGNED	ELN
DRAWN	HAF
CHECKED	GCG
PROJECT NO.	3-00666

EXHIBIT A

## **Attachment 4**

### **Scope and Fee for Elk Engineering**





## ELK ENGINEERING ASSOCIATES, INC.

8950 Forum Way, Fort Worth, Texas 76140  
817.568.8585 ♦ FAX 817.568.8590  
TOLL FREE 1.800.442.5641

Specializing in Corrosion Control and Cathodic Protection Services

27 February 2020

Attn: Eric L. Nelson  
Walker Partners  
804 Las Cimas Pkwy., Suite 150  
Austin, Texas 78746

Via Email: [enelson@walkerpartners.com](mailto:enelson@walkerpartners.com)

Re: ELK Proposal Number 19-1203 & 19-1203.01 Rev. 2  
ARWA1BSE Corrosion Investigation and Design Support

Gentlemen,

ELK Engineering Associates, Inc. (ELK) is a self-certified, veteran owned small business and is not an MW/DBE firm. ELK is pleased to present our proposal for cathodic protection materials, limited construction support, and final acceptance testing to your firm on the above referenced project. Our Fee and Scope of Work are shown below.

<u>Describe Bid Item</u>	<u>Qty</u>	<u>Cost</u>
ARWA1BSE Corrosion Investigation and Design Support		
Subsurface Investigation/Testing	1 LS	<u>\$15,000.00</u>
60%	1 LS	<u>\$15,000.00</u>
90%	1 LS	<u>\$2,500.00</u>
100%	1 LS	<u>\$2,500.00</u>
Induced AC Study	NTE	<u>\$48,530.00</u>

I Terms – Net 30, FOB Destination

1. Acceptance of this proposal acknowledges all the terms and qualifications stated herein and shall take precedence over Contract Specifications, Contractor Purchase Orders, or Contracts, and as such ELK shall be paid according to invoicing terms and conditions within this proposal.
2. All invoicing that exceeds **45 days** shall result in a **10%** per month interest penalty.
3. Unpaid invoices will result in delayed Testing or other Services.
4. This proposal shall be incorporated into any document authorizing the work described below.

## II Work Product

1. Upon receipt of fully executed document(s) issued by Walker Partners, ELK will commence work on the project. Said documents, regardless of nomenclature (i.e., Notice -To-Proceed, Purchase Order No., Work Order No., Task Agreement No., AFE, etc.) shall bind Walker Partners to compensate ELK for all work product including but not limited to materials of construction, engineering fee's, travel, wages, burden, benefits, G&A, OH, and other related expenses.
  - a. No work product of any type shall be provided by ELK without prior authorization by Walker Partners to proceed with such work.
  - b. Authorization to provide work product shall include all methods of invoicing including Accounts Payable mailing address and an applicable number or charge code against which work product shall be billed.
2. Upon receipt of any request for payment, bill, or invoice prepared by ELK, the accounts payable department for Walker Partners shall take such steps as required to insure prompt and accurate payment to ELK. All of Walker Partners PO numbers shall be referenced on all ELK Invoices.
  - a. Walker Partners shall pay all undisputed portions of ELK's monthly invoice within 45 business days of the date first written on said invoice. Interest will accrue at a rate of 10% per month on any unpaid invoices.
3. All documents issued to authorize this project shall include the ELK proposal number and a tax exemption certificate for our records.
  - a. All sales taxes are excluded from this proposal.
  - b. If sales tax is applicable, the tax will be in addition to the amounts shown above.

## III Scope of Work

1. The scope of work is based upon the google earth map (kmz.), information and e-mail conversations provided to ELK Engineering.
2. All work shall be under the direction of "Corrosion Expert" that is a Texas PE with NACE International accreditation as a Corrosion and Cathodic Protection Specialist.
3. Upon completion of all testing, a 60% report containing our tabulated field data will be prepared and submitted stating our findings, conclusions, recommendations, cathodic protection drawings and specifications.
4. A 90% submittal will be provided by ELK containing report, cathodic protection drawings, details and specifications.
5. A 100% submittal will be provided by ELK along with a signed and sealed report for construction drawings and specifications.
- 6.

7. The scope of work is based on (2) trips to gather all soil information from the site. (1) one week for the cathodic protection and (1) one week for the Induced AC study.
8. All work shall be under the direction of "Corrosion Expert" that is a Texas PE with NACE International accreditation as a Corrosion and Cathodic Protection Specialist

#### IV Testing Services

1. Testing shall include: Approximately (24) Twenty Four tests using the Wenner 4-pin test method in accordance with ASTM G57-06 "Standard Test method for Field Measurement of Soil Resistivity Using the Wenner Four-Electrode Method" in conjunction with a prefabricated cable set and an AC ratio ohmmeter to measure SR to depths of typically 2.5, 5, 10, 15, and 20 feet.
2. In-situ (Surface) pH will be measured at each soil resistivity location using an approved method. ELK proposes to use an antimony reference electrode, copper/copper sulphate reference electrode (CSE), and a high impedance voltmeter such as a Fluke 87. The reference electrodes will be placed side by side in contact with the soil approximately one-foot below grade. The voltage drop between the two references will be read and converted to pH using the chart provided on the antimony electrode.
3. The AC stray current interference investigation shall include identification of any overhead electric transmission facilities within 2,000 feet of the project alignment which have a circuit loading of 69kV or higher. The limits of collocation with the project pipeline shall be identified by stationing.
4. Photos including the electric tower construction with wire phase arrangement should be provided. The overhead electric facility owner/operator shall be identified.
5. The DC stray current interference investigation shall include a comprehensive review and identification of existing metallic foreign pipelines or structures that cross the project pipeline or are within 1,000 feet of the project alignment easement.
6. The location of existing foreign pipeline rectifiers and deep anode wells shall be noted. At a minimum, the Texas Railroad Commission Public Viewer Map shall be used in addition to a site alignment walk to identify all pipelines/structures. Each potential DC interference source shall be identified by owner, project location stationing, and description of the pipeline/structure.
7. Pipe to soil potential testing of available existing structures identified during the alignment investigation shall be performed.
8. Upon completion of all testing, a report containing our tabulated field data will be prepared and submitted stating our findings, conclusions, recommendations, and acceptance of work if warranted.

V Conditions

1. Invoicing – Net 30, FOB Destination
  - a. All invoicing that exceeds **45 days** shall result in a **10%** per month interest penalty.
  - b. Unpaid invoices will result in delayed Testing or other services.
2. This quotation is firm for sixty (60) days from the date first written above. After that date, ELK reserves the right to revise this quotation.
3. Any purchase order issued for this project shall include the ELK proposal number, a tax exemption certificate, and copies of payment bonds for our records. If sales tax is applicable, the tax will be in addition to the amount shown above.
4. All invoicing shall be monthly and shall be billed in accordance with the Agreement Documents or Purchase Order unless stated elsewhere in this proposal.
5. This quotation is based upon the following insurance limits. Insurance limits greater than or different from these limits shall be either waived, carried under the contractor's insurance, or shall be billed in addition to this quotation.: CGL = \$2MM, Auto Combined Single Limit = \$1MM, Professional Liability = \$2MM, Pollution Liability = \$2MM, Excess Umbrella Liability Aggregate = \$4MM, WC = \$1MM. Any other insurance form other than a standard ACORD form may result in changes to the contract amount.
6. Retention may not be withheld from any ELK invoices.

VI Qualifications and Exclusions

1. This proposal is based upon the google earth map (kmz.), information and e-mail conversations provided to ELK Engineering. All bid, performance, and payment bonds are specifically excluded from this proposal.
2. All as-built drawings are excluded from this proposal.
3. ELK excludes all on-site construction meetings from this proposal.
  - a. If requested ELK will attend construction meetings via teleconference set up by the general contractor.
4. All invoicing by ELK shall be monthly based upon a percentage completion for Tests.
5. Walker Partner **must** guarantee Right of Way (ROW) access along with providing an escort with knowledge and lay schedule of said ROW.
6. Walker Partner **must** notify all landowners informing them that ELK will be conducting testing 1 week prior to ELK entering the ROW.
7. Collection of soil sample from approximate pipeline depth every 4,000 feet are excluded from this scope of work. Walker Partners Geotech company shall collect the soil samples and send to ELK engineering for testing.

Walker Partners acceptance of this proposal acknowledges all the terms and qualifications stated above and shall take precedence over Contract Specifications, Contractor Purchase Orders, or other Contracts.

When a provision of this Proposal is inconsistent with the Prime Contract, Purchase Order, or Agreement, the provisions of this Proposal shall prevail.

We appreciate the opportunity to submit a proposal for this project and look forward to a favorable response.

Sincerely,

A handwritten signature in blue ink, appearing to read "Taylor Leon", with a long horizontal flourish extending to the right.

Taylor Leon  
President/CEO

## **Attachment 5**

### **Scope and Fee for DAS Geospatial**



January 14, 2020

Mr. Eric L. Nelson, P.E.  
Walker Partners  
804 Las Cimas Pkwy., Suite 150  
Austin, Texas 78746

**RE: Aerial Survey of the ARWA Pipeline - Segment E in Guadalupe County, Texas**

Dear Mr. Nelson:

DAS is pleased to submit this Proposed Scope of Work for providing aerial survey services. The location and area to be mapped is as outlined on the map you provided on December 4, 2019 with a 200-foot buffer (400-foot wide corridor). Please see Appendix A.

**Aerial Imagery**

New color aerial imagery will be taken with a digital camera. This digital aerial camera has a current calibration report. DAS shall determine a flight plan that will show the number, spacing and length of flight lines over the project area and the spacing of the photographs along the flight lines. We will fly at an altitude sufficient to acquire imagery at 5cm GSD to support National Map Accuracy Standards for 1"=50' planimetric mapping and one (1)-foot contours.

**LiDAR Data Collection**

LiDAR will be flown with the Riegl VUX-1 LR Sensor. In areas covered by trees, DAS will collect points through the tree canopy, however, areas of heavy vegetation and especially dense underbrush may cause the accuracy of these obscured areas to diminish, and in some instances may leave void areas. It is recommended in these areas that field survey crews provide supplemental on-the-ground survey shots along with a report of the conditions. The LiDAR will support the generation of one (1)-foot contours. DAS will collect at 30 ppsm (points per square meter).

**Airborne GPS/IMU**

Airborne GPS (ABGPS) will be collected during the flight. This reduces the number of GPS points required in the field. Camera drift inputs to the mount are sent via the Flight Management System in conjunction with accurate measurements supplied by the Airborne Global Positioning System Applanix POS-AV with IMU. The ABGPS/IMU components are used to record accurate rotations and accelerations which are applied to the imagery during post processing. The stabilized mount, working with the IMU, allows for the acquisition of NADIR imagery.

**Survey Services**

Walker Partners will provide all ground control surveys that are necessary to determine the elevation and horizontal position of all control points required. Horizontal and vertical control shall be established by either conventional or GPS. Control shall comply with National Map Accuracy Standards. Upon completion of ground control responsibilities, please furnish DAS with a diagram of control locations, along with a list of coordinates in ASCII format, as follows: Pt# X Y Z. DAS will require a total of forty (40) control points. Additionally, DAS will require twenty-two (22) ground truthing points to QC the LiDAR data and digital terrain model.

**Analytical Aerotriangulation**

Prior to the photogrammetric map compilation, it will be necessary to expand the network of control points obtained in the field. This will be accomplished through an aerotriangulation adjustment of the aerial imagery. This will provide sufficient supplemental control for setting individual stereo-models in our softcopy photogrammetric workstations.

**Map Compilation**

Planimetric features to be shown will include all visible features such as roads, bridges, houses, buildings, creeks, rivers, lakes, ponds, railroads, transmission lines, power poles, fences, and group tree outlines.



214.349.2200



4397 Westgrove Dr.  
Addison, TX 75001



www.dasmaps.com

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**RE: Aerial Survey of the ARWA Pipeline - Segment E in Guadalupe County, Texas**

**Contours**

A digital terrain model (DTM) will be provided in 3D, consisting of LiDAR bare earth ground points and break lines. Contours will be generated from the resulting surfaces and intervals will be shown as solid lines with index contours indicated by a heavier line weight and labeled. In obscured areas contours shall be shown as dashed lines. Contours will be provided at one (1)-foot intervals.

**Digital Orthophotography**

The photographic images will be ortho-rectified to produce digital imagery. Each image will be processed using the generated DTM. The result will be a corrected photographic image. The Imagery will be produced at **three (3)-inch (0.25')** ground resolution.

**Deliverables**

- 1"=50' Scale 2D planimetric mapping in an AutoCAD DWG format.
- One (1)-foot contour data in an AutoCAD DWG format.
- 3D DTM data in an AutoCAD DWG format.
- 0.25-foot ground resolution digital orthophotography in ECW format or JP2 format.
- LiDAR bare earth data in .las format.

**Schedule**

DAS anticipates the aerial data acquisition to be collected within two (2) to three (3) weeks of the aerial panels being set. However, this is dependent on the weather conditions.

Production time will require approximately six (6) weeks following receipt of imagery and acceptable ground control. If your schedule requires a more expedited delivery, please call to discuss.

**Lump Sum Fee ..... \$36,000**

DAS, Inc. shall invoice 25% of the Lump Sum Fee upon completion of the flight/s.

The remaining amount shall be invoiced upon delivery. Our terms for payment are Net 30 days. Please make arrangements to invoice your client for this portion of the job upon receipt of products from DAS. If your firm decides to seek bankruptcy relief, is purchased by another individual or firm, or ceases operation for any reason, said client is still responsible for balance owed for this contract.

We appreciate the opportunity to present this proposal. If you have any questions, please do not hesitate to give us a call. If all items and terms are acceptable, please sign below and fax to us, which will serve as our authorization to proceed. We look forward to working with you on this project.

Sincerely,



Kim Johnson  
President  
DAS, Inc.

\_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Type/Print Name

KJ/cs

\_\_\_\_\_  
Title      Date





**RE: Aerial Survey of the ARWA Pipeline - Segment E in Guadalupe County, Texas**

**Appendix A**

**Mapping Limits**

Blue Polygon = Mapping Limits (427.18-acres)



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# **Attachment 6**

## **Scope and Fee for Davey**



Client	Service Location	1/10/2020
Eric Nelson 804 Las Cimas Pkwy Ste 150 Austin, TX 78746-5972	New Braunfels/hwy 46 Project Attn: Eric Nelson 2049 S TX-46 New Braunfels, TX 78130	Proposal #: 20054587-1578677807 Account #: Work: (512) 382-0021 Mobile: (512) 221-9048

Tree Care	Service Period	Price	Tax	Total
<input type="checkbox"/> Land Clearing CONSULTING		\$6,000.00		\$6,000.00

-4 day budgetary allowance to inspect designated trees and confirm species, provide summary report, and excel spreadsheet.


-CG will be responsible for coordinating with land owners to access all designated areas.

-Work will be billed at an hourly rate of \$150/hr (port to port)


\*This would allow for 2 full days of field work and 2 full days of office work, supplemental reports, interfacing with municipalities, etc. \*

Sales tax will be added per local jurisdiction unless tax exempt form is on file.

Yes, please schedule the services marked above.

No Deposit may be required upon acceptance \$ _____ Deposit Required / \$ _____ Deposit Received Upon completion of work, please charge balance to credit card ___Yes ___No	Deposit payment options we accept are check or credit card <b>To pay by check mail to</b> The Davey Tree Expert Company 9224 Research Blvd Austin, TX 78758-6802	<b>To pay by credit card call</b> (512) 451-4986 
---	--	--

**ACCEPTANCE OF PROPOSAL:**The above prices and conditions are hereby accepted. You are authorized to do this work as specified. I am familiar with and agree to the terms and conditions appended to this form. All deletions have been noted. I understand that once accepted, this proposal constitutes a binding contract. This proposal may be withdrawn if not accepted within 30 days.

	<i>Heath Gober</i>		
Heath Gober ISA Certified Arborist TX-4310A	_____ Authorizing Signature	_____ Date	

**REGULAR MEETING**  
**Alliance Regional Water Authority Board of Directors**

**BOARD MEMBER PACKETS**

Wednesday, March 25, 2020 at 3:00 P.M.

Conference Call Number: 1-903-405-2572; Code: 995 024 086#

- H.2** Consider adoption of Resolution 2020-03-25-002 approving Work Order #4 with Blanton & Associates, Inc. for additional hazardous materials testing associated with the Phase 1B Segment B, D and E projects. ~ *Ryan Sowa, P.E., Kimley-Horn & Associates*
- 

Background/Information

Alliance Water entered into a Work Order in May 2018 with Blanton & Associates, Inc. for the environmental investigation for the Phase 1B projects. As a result of the initial investigations on the Segment B, D and E projects, Blanton & Associates, and their subconsultant W&M, are recommending that Phase 2 Environmental Investigations proceed on ten parcels. The investigation will be conducted on a progressive basis, beginning with soil samples and progressing to monitoring wells only if groundwater is present. There will need to be a future work order for any remaining Phase 2 investigations needed on the other Segment E parcels and on Segment C parcels.

Below are some of the key facts regarding the additional investigation:

**Firm:** Blanton & Associates, Inc.  
**Fee:** \$244,160  
**Work Order Type:** Time and Materials  
**Anticipated Duration:** 3 months  
**Project Manager:** Velma Danielson  
**Key Subconsultants:** W&M (HazMat)

Staff is requesting Board approval of a Work Order with a fee not-to-exceed \$244,160.

Attachment(s)

- Resolution 2020-03-25-002
- Proposal for Additional Environmental Investigation for the Phase 1B Segment B, D and E Pipeline Projects dated March 15, 2020.

**Board Decision(s) Needed:**

- Adoption of Resolution 2020-03-25-002 approving Work Order #4 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. 2020325-002

**A RESOLUTION OF THE ALLIANCE REGIONAL WATER AUTHORITY BOARD OF DIRECTORS APPROVING WORK ORDER #4 BETWEEN THE AUTHORITY AND BLANTON & ASSOCIATES, INC. FOR ADDITIONAL HAZARDOUS MATERIALS TESTING ASSOCIATED WITH THE AUTHORITY'S PHASE 1B SEGMENTS B, D AND E PIPELINE PROJECTS 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. During the course of the initial investigations, Blanton & Associates has determined that a few parcels on the Segment B, D and E Pipeline Project alignments require additional investigation.

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 Walker Partners.

#### **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 \$244,160.

**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 20200325-002  
Phase 1B Additional HazMat Investigation

**ADOPTED:** March 25, 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. 004****March 15, 2020****WORK ORDER NO. 004 - DEFINITION AND BACKGROUND**

On February 26, 2020, the Owner's Representative requested Blanton & Associates, Inc. (Environmental Consultant) prepare Work Order No. 004 to conduct soil and groundwater limited Phase IIs on ten parcels along the Phase 1B Program Segment B (2 parcels), D (7 parcels), and E (1 parcel) pipeline alignments.

The Environmental Consultant Work Order No. 004 scope of work consists of the task and sub-tasks indicated below (that are additive to Work Order No. 001, Work Order No. 001 – Amendment No. 1, Work Order No. 002, and Work Order No. 003 tasks) and in the attached cost spreadsheet. Compensation for Work Order No. 004 will be on a time and materials basis.

The Environmental Consultant is not responsible, or liable, for any work performed by W&M as part of their Limited Phase II Investigation work included in Work Order No. 004 for the Phase 1B Program Projects. W&M will provide all insurance necessary for work related to the Limited Phase II Investigations for the Phase 1B Program Projects.

**SCOPE OF WORK****9. Limited Phase II Investigations – Segment B, D, and E Pipeline Alignments****9.1. Project Management****9.1.1. Prepare Monthly Summary Reports/Invoicing****Assumption(s) for 9.1.1:**

- Invoice format and due date will be the same as required in the Project Management Plan (PMP) in effect at time of Task 9 approval and will not be revised for the duration of work on Work Order No. 004.

**9.1.2. Implement PMP Requirements and QA/QC Plan Requirements for Task 9.****Assumption(s) for 9.1.2:**

- QC review of one draft and one final Phase II report for all ten parcels.
- There will not be any revisions to PMP requirements related to Task 9 for the duration of work on Work Order No. 004.

**9.1.3. Schedule Development and Monthly Updates**

**Assumption(s) for 9.1.3:**

- Environmental Consultant will provide the project schedule utilizing Microsoft™ Project software for the project.
- Environmental Consultant will provide schedule updates no more than six times for the duration of Work Order No. 004 based on ten planned field mobilizations.
- If more than ten field mobilizations are required resulting in additional schedule updates, additional project costs will be incurred.
- Environmental Consultant will provide abbreviated schedule updates during the monthly progress meetings.

9.1.4. Risk Register related to Limited Phase II Investigation field work.

9.1.5. Meetings

9.1.5.1. Monthly Progress Meetings with Owner's Rep Env Staff

**Assumption(s) for 9.1.5.1:**

- Attendance at these meetings will be by conference call.
- An item related to Task 9 will be added to the monthly progress meeting agenda for the duration of work on Task 9. The Environmental Consultant's sub-consultant will participate in related discussions during these meetings.

9.1.5.2. Additional Meetings – Owner's Representative/Segment B, D, and E Engineers

**Assumptions(s) for 9.1.5.2:**

- Combined meetings will be held with the Owner's Representative and the Segment B, D and E engineers.
- Up to two in-person meetings may be held with the Owner's Representative and engineers. These meetings will be held in Austin.

9.1.5.3 Internal Environmental Consultant Team Meetings

**Assumptions(s) for 9.1.5.3:**

- Up to four meetings may be held by conference call.

9.1.6. Deliverables

9.1.6.1. Monthly Summary Reports

9.1.6.2. Schedule (and schedule updates to be provided with Item 9.1.1 as necessary)

9.1.6.3 Meeting Notes

**Assumption(s) for 9.1.6.3:**

- Owner's Representative's meeting notes template will be used.
- Environmental Consultant will be responsible for initial development, compilation of changes, and distribution of final meeting notes for each meeting.

9.2. Limited Phase II Investigations

9.2.1 Limited Phase II Investigation field work (See attached *Work Order No. 004 for Professional Services Limited Phase II Investigations Alliance Water Proposed*)



*Transmission Pipeline "Segments B, D, and E (partial)" Caldwell & Guadalupe Counties, Texas from W&M Environmental).*

**Assumption(s) for 9.2.1:**

- Assumptions for this section are detailed in the attached W&M Work Order scope of work.

9.2.2 Data Evaluation, Reporting, & Project Management (See attached *Work Order No. 004 for Professional Services Limited Phase II Investigations Alliance Water Proposed Transmission Pipeline "Segments B, D, and E (partial)" Caldwell & Guadalupe Counties, Texas* from W&M Environmental).

**Assumption(s) for 9.2.2:**

- Assumptions for this section are detailed in the attached W&M Work Order scope of work.

9.3. Land Acquisition Coordination for Parcel Access

**Assumption(s) for 9.3:**

- The Owner's Rep will issue notice to proceed (NTP) to the Environmental Consultant in order to begin field work.
- Receipt of NTP 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.
- Preparation for field surveys will follow the Owner's Rep's Field Work Site Visit Protocol, original and revised, including preparation of field binders (right of entry table, field checklists, survey forms, field maps, etc.) and making crew assignments and travel arrangements. B&A will submit property access request forms (PARFs) to complete field work.
- Environmental Consultant 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 our ability to access these parcels or prohibiting the Environmental Consultant from conducting planned field work within the four-week PARF window. Should these issues arise, the Environmental Consultant 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 the Environmental Consultant's control.

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

9.3.2 Complete and submit PARFs.

9.3.3 Coordinate with landowners to arrange for property access when directed by the land acquisition agent(s).

9.3.4 Conduct additional work required to verify property access specific requirements.

9.3.5 Deliverables

9.3.5.1 GIS data uploads/updates consisting of sampling location kmzs within two weeks of each Phase II event.

9.3.5.2 Field Checklists (required to be submitted within two weeks of each Phase II event).

9.3.5.3 A brief email to be sent to the Owner's Representative on the status of each mobilization after drilling and sampling collection. Also, preliminary findings summaries to be sent by email to the Owner's Representative no later than five business days of receiving the analytical lab reports.



**WORK ORDER NO. 004 FOR PROFESSIONAL SERVICES  
LIMITED PHASE II INVESTIGATIONS  
ALLIANCE WATER PROPOSED TRANSMISSION PIPELINE “SEGMENTS B, D and E (partial)”  
CALDWELL & GUADALUPE COUNTIES, TEXAS**

This Work Order constitutes authorization by **Blanton & Associates, Inc.** (otherwise referred to as Client or B&A) for **W&M Environmental, a Division of Braun Intertec Corporation** (W&M, otherwise referred to as Consultant) to proceed with Limited Phase II Investigations of 10 parcels located along Segments B, D and E of the proposed Alliance Regional Water Authority (Alliance Water) water transmission pipeline in Caldwell and Guadalupe Counties, Texas. Segments B, D and E are three of five segments in the Alliance Water Phase 1B Program (Program). A map outlining the locations of the 10 parcels is provided as **Figure 1**. W&M has completed a desktop review and field reconnaissance for hazardous materials of parcels along Segments B, D and portions of E and identified recognized environmental conditions (RECs) on or adjacent to 10 parcels. A limited Phase II investigation is recommended at 10 parcels [REDACTED] to determine if soil and/or groundwater within the construction excavation zone of the proposed pipeline easement has been impacted from the identified RECs. A summary of our Phase II recommendations for Segments B, D and E is attached as **Table 1**. Please note that our review of Segment E for this Work Order was limited to only two parcels.

The purpose of soil and groundwater sampling during the Phase II investigation is to provide the Program with analytical data to lessen the risk of construction delays. If the soil or groundwater is found to be contaminated, work can be done ahead of construction to 1) consider potential worker safety concerns and 2) profile the soil and/or groundwater for proper disposal in case soil needs special disposal or the water has to be pumped out of the excavation. Also, if the groundwater is contaminated, a plan can be developed to prevent migration of the impacted groundwater via the trench (conduit) that is being excavated. The cost to install and sample soil and temporary wells is minor compared to the cost of construction delays if potentially-impacted soil and/or groundwater is encountered during construction.

W&M will work with Client representatives to gain access to the Site but will not be responsible for obtaining landowner right of entry agreements or Property Access Request Forms for the proposed activity. Because it is unlikely that access to drill at the 10 parcels will be obtained for the same time period, this Work Order assumes that up to 10 separate mobilizations may be necessary to complete the proposed field work.

*B&A is not responsible, or liable, for any work performed by W&M as part of the Limited Phase II Investigation work included in Work Order No. 004 for the Phase 1B Program Projects. W&M will provide all insurance coverage necessary for work related to the Phase II Investigations for the Phase 1B Program Projects.*

**Scope of Services**

The proposed scope of services is as follows:

- 1. Field Work - Soil & Groundwater Sampling (Task 9.2.1).** Prior to initiating field work, W&M will obtain the proposed piping construction depths from the Program in order to determine the appropriate drilling depth for each proposed drilling location. W&M will prepare a project specific health and safety plan, mark proposed drilling locations, and notify public utilities through Texas 811. A private utility locate service will also be contracted to assess the proposed drilling locations. A Texas-licensed driller will be contracted to advance up to 19 soil borings associated with suspected source areas. The 3.5-inch diameter soil borings will be advanced within the construction easement using a truck-mounted direct-push drilling rig to approximately 2 feet below the estimated total depth of the excavation needed for piping installation (generally 15 to 20 feet below ground surface). Field support trucks will also be utilized by W&M staff and contractors. The soil column from each boring will be continuously logged by a W&M field geologist and soil samples will be collected and screened with a photoionization detector (PID) at 2.5-foot intervals. Up to two soil samples from each boring will be selected for laboratory analysis of volatile organic compounds (VOCs), total petroleum hydrocarbons (TPH),

Resource Conservation & Recovery Act (RCRA) metals, and poly-aromatic hydrocarbons (PAH). To address potential impacts from asbestos-containing material (ACM) in Parcel [REDACTED], soil and ACM samples may be collected for asbestos analysis if the ACM is observed within the construction zone. Up to five composite soil stockpile samples will be collected and submitted for laboratory analysis to investigate the REC identified in parcel [REDACTED]. Refer to **Table 1** for sampling parameters and methods. Please note that, as of the date of this Work Order, location information for the construction easements has not been received.

Soil samples collected for the analysis of VOCs and TPH will be collected using U.S. Environmental Protection Agency (EPA) Method 5035 with dedicated Terracore samplers provided by the laboratory. Samples will be immediately stored on ice and submitted to an accredited laboratory for analysis using EPA or Texas Commission on Environmental Quality (TCEQ) approved methods. For quality assurance/quality control (QA/QC) purposes, duplicate soil samples will be recovered at a 10% frequency, or one duplicate for every 10 samples collected, for analysis of VOCs. Standard turn-around times will be requested on the chain-of-custody, with results expected within 7 to 10 business days.

If groundwater is observed during drilling, temporary monitoring wells (TMWs) will be installed in up to 11 of the 19 soil boring locations for the collection of groundwater samples. The 11 TMW locations represent areas where shallow groundwater, if present, may be impacted by a previously identified REC located either within the construction easement or adjacent to the construction easement. (Note: TMWs are not proposed to be installed at all drilling locations. Some of the proposed borings are for soil sampling only, as described in **Table 1**.) The TMWs will be developed and sampled (if sufficient water is present) for VOCs, TPH, RCRA metals, and PAHs, and plugged by the drilling contractor the same day or within 48 hours. Samples collected for metals analysis will be filtered in the field. Standard turn-around times will be requested on the chain-of-custody, with most results expected within 7 to 10 business days. At Parcel [REDACTED], a groundwater sample will be collected for analysis of per- and/or polyfluoroalkyl substances (PFAS). Additional QA/QC samples will be collected for PFAS analysis in accordance with our PFAS field sampling protocol. Standard turn-around for PFAS analysis is 15 business days.

If a groundwater sample cannot be collected prior to plugging the TMW, then W&M will evaluate the field observations to determine if a permanent well(s) is warranted. If a permanent well is recommended, the work will be conducted under a separate work order.

The drilling depths of soil borings and TMWs will be REC-specific but not to exceed 25 feet (in many places, the depth may be only 8 to 12 feet). The location of the REC will be compared to the proposed piping/construction depths provided by the Program to determine an appropriate drilling depth. The cost to evaluate this information and determine specific drilling depths for each REC is included in this Work Order. The termination depth will depend on the proposed construction depth and will extend to slightly below (~2 feet) the total depth of excavation needed for pipeline construction. If no groundwater is observed during drilling to the specified depth, then no temporary monitoring well will be installed.

The location of each soil boring and TMW will be recorded with a handheld GPS unit.

Investigation derived waste (IDW) such as soil cuttings and purged groundwater will be containerized in 55-gallon steel drums. Up to two 55-gallon steel drums containing soil cuttings and purged groundwater may be generated at each parcel (up to 20 drums total) and will be temporarily placed near the drilling operations. Representative samples of the IDW will be collected to profile the waste for disposal. If the waste is not impacted, then W&M will return to the parcel to spread the material on-site and remove the empty drums. However, if the waste is found to be impacted, costs to profile and dispose of up to 20 drums as a Class 2 non-hazardous waste are included in this Work Order. Any additional costs required for proper disposal of the IDW will be addressed in a separate work order. IDW management and disposal also assumes that the field work will be conducted under 10 separate mobilizations.

- 2. Data Evaluation, Reporting, & Project Management (Task 9.2.2).** A preliminary findings summary will be provided to Blanton via email within 3 business days following the completion of each field mobilization. Preliminary results for each parcel will be provided to Blanton via email correspondence within 5 business days of receiving the analytical report(s) for each parcel. W&M will present the results of the investigation in a single

Limited Phase II ESA letter report. The report will detail the sampling results, conclusions, and recommendations, if needed, for assistance with construction activities or for regulatory assistance. Report figures, soil boring logs, and the report itself will be reviewed and sealed by a Professional Geoscientist.

This task includes project management costs for scope development, kickoff meeting with the Program in Austin, preparation/review of a risk register, submittal of preliminary finding summaries and field checklists, monthly conference calls for up to 6 months, two in-person meetings in Austin, and preparation of a monthly summary for up to 6 months.

**Payment**

The fees for these professional consulting services will be billed on a time and material basis for \$210,000 based on the attached fee schedule. W&M will not exceed \$210,000 in billings without prior written consent from Client. Work shall be performed under the terms and conditions set forth in the Assignment, Assumption, and Consent effective September 30, 2018.

**Schedule**

W&M will proceed immediately following a written notice-to-proceed from the Client. Because the actual dates of field work will be constrained by parcel access and driller availability, W&M will immediately contact the drilling subcontractor and the appropriate land agent to coordinate field work schedules upon receiving a written notice-to-proceed from the Client. The draft Phase II report is anticipated to be completed within 6 weeks of receiving the final analytical results.

BILLING INFORMATION:  
**BLANTON & ASSOCIATES, INC.**  
5 Lakeway Centre Court, Suite 200  
Austin, Texas 78734

REMIT PAYMENT TO:  
**W&M ENVIRONMENTAL, A DIVISION OF  
BRAUN INTERTEC CORPORATION**  
NW 7644 PO Box 1450  
Minneapolis, Minnesota 55485

Don Blanton  
(512) 264-1095  
[dblanton@blantonassociates.com](mailto:dblanton@blantonassociates.com)

PIC: Diana Rader, P.G.  
PM: Trudy Hasan, P.G.  
[thasan@braunintertec.com](mailto:thasan@braunintertec.com)  
512-721-0005 Direct

Authorized:

Accepted:

SIGNATURE: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

TABLE 1  
 PHASE II RECOMMENDATIONS  
 Segments B, D and E Area  
 Caldwell & Guadalupe Counties, Texas

Parcel ID	Date visited	Findings Description	Findings ID	Location	Notes	Recommendations	Soil Borings <sup>1</sup>	Monitoring Wells <sup>2</sup>	Laboratory Analysis <sup>3</sup>
<b>SEGMENT B</b>									
█	2/27/2020	Trash Pit	█	Adjacent	A10 in Desktop Report; 55 feet east of Segment B area. Numerous burned drums and smaller containers (possibly paint cans) observed 2/27/2020. The drums and containers appeared empty, however, they may have contained hazardous materials when they were burned. Trash pit is on adjacent unidentified parcel.	Collect GW sample	Screen soil during MW installation	1, up to 25 feet deep	TPH, VOCs, PAHs, RCRA metals
█	4/23/2019	Stockpiles (imported)	█	Within	Confirmed with landowner that stockpiles are imported material. Imported material of unknown origin/not tested is considered a REC. Could sample to characterize this material to resolve the REC.	Collect three composite soil stockpile samples at south end of pile to characterize material.	None, stockpile sampling only	None	TPH, VOCs, PAH, RCRA metals
<b>SEGMENT D</b>									
█	5/30/2019	Trash Pile	█	Adjacent/Within	Not observed in the field. Only active a few years on adjacent unidentified parcel but extended onto Segment D Area. Looks like debris might be buried within the easement. Unknown contents.	Collect soil and GW samples	2 probes, up to 20 feet deep, sample soil	1, up to 25 feet deep	TPH, VOCs, PAH, RCRA metals
█	8/20/2019	Debris/Solid Waste	█	Within	Scattered debris (refrigerator, wood, plastic, metal, paint cans); associated with Desktop finding A13.	Collect soil and GW samples	Screen soil during MW installation	1, up to 25 feet deep	TPH, VOCs, PAH, RCRA metals
█	5/30/2019	Gravel Pit or other Ground Disturbance (desktop finding)	█	Within/Adjacent	Ground disturbance; possible pit filled in, extends to the pipeline route. Interviewed current landowner and she did not know anything about the disturbed area.	Collect soil and GW samples	2, up to 20 feet deep	1, up to 25 feet deep	TPH, VOCs, PAH, RCRA metals
█	5/31/2019	Trash Pile/Auto Junkyard (desktop finding)	█	Adjacent	Trash pile within 50' of Segment D Area; >10 years; also discarded autos within easement.	Collect GW sample	Screen soil during MW installation	1, up to 25 feet deep	TPH, VOCs, PAH, RCRA metals

TABLE 1  
PHASE II RECOMMENDATIONS

Segments B, D and E Area  
Caldwell & Guadalupe Counties, Texas

█	11/16/2019	Debris/Solid Waste (desktop finding)	█	Adjacent	Possible hazardous materials noted at several locations in this area	Collect soil and GW samples; if REC is within the construction zone, then collect only GW samples from construction zone. If REC is outside the construction zone, sample soil in direct contact with ground inside the construction zone, sample soil and the material itself to assist with future disposal.	6, up to 20 feet deep	2, up to 25 feet deep	TPH, VOCs, PAH, RCRA metals, asbestos
	11/16/2019	Debris/Solid Waste/Burn Piles (several locations)	█	Within	Asphalt stockpile on ground surface	Collect soil samples; borings will be outside the footprint of the stockpiles.	2, up to 20 feet deep	1, up to 25 feet deep	TPH, VOCs, PAH, RCRA metals
█	7/28/2019	Asphalt Pile	█	Within	Discarded concrete/asphalt				
	7/28/2019	Concrete/Asphalt Pile	█	Within	About 75 feet from pipeline. Trash is just past the █ parcel boundary but within the Segment D Area on unidentified parcel. Trash may be buried.	Collect GW sample	Screen soil during MW installation	1, up to 25 feet deep	TPH, VOCs, PAH, RCRA metals
█	8/21/2019	Historical Trash Pile (desktop finding)	█	Within					
	<b>SEGMENT E</b>								
█	6/12/2019	Firefighting Training Facility	█	Adjacent	Potential PFAS use on adjacent parcel █ also includes A1, A2, A3, A4, and A5. Potential PFAS impacts should be investigated in parcel E002G if work does not occur in parcel █	Collect GW sample	Screen soil during MW installation	1, up to 25 feet deep	PFAS
	6/12/2019	Unlabeled drums, not empty	█	Within	Three rusted metal drums, not labeled, stressed vegetation	Collect soil and GW samples	2, up to 20 feet deep	1, up to 25 feet deep	TPH, VOCs, PAH, RCRA metals

Notes:

<sup>1</sup>Soil borings and temporary monitoring wells to be installed using a licensed well driller using direct-push rig.

<sup>2</sup>Groundwater samples will be collected from temporary monitoring wells using low flow methods if sufficient flow is available; otherwise, samples will be collected with a disposable bailer. Maximum depths estimated from existing geotechnical boring data.

<sup>3</sup>TPH=total petroleum hydrocarbons by TCEQ Method 1005. VOCs = volatile organic compounds by U.S. Environmental Protection Agency (EPA) Method 8260. Resource Conservation & Recovery Act (RCRA) metals by EPA Methods 6010/7471. PAH = polycyclic aromatic hydrocarbons by EPA Method 8270. Per- and polyfluoroalkyl substances (PFAS) by modified EPA 537. Asbestos by ASTM D 7521.16 (soil) and EPA Method 600/R-93/116 (debris).

The Phase II recommendations provided in this table represent an initial scope of work to determine if soil and/or groundwater is impacted above regulatory action levels. Another round or two of sampling may be necessary at some locations to further define the nature and extent of contamination.

B	C	D	E	F	G	H	I	AC	AD	AE	AF	AG	AI	AK	AL	
1	W&M															
2	Alliance Water															
3	Pipeline Consultant															
4	3/10/2020															
5	Project Fee Summary - W.O. #004															
6											W&M Labor			113,640		
7											W&M Expenses			96,360		
8											Total Effort			210,000		
Detailed Overall Envy Consultant Cost Breakdown																
Task	Project Role	Project Consultant I	Sr Consultant II	Project Consultant III	Project Consultant III	Staff Consultant III	GIS Analyst	Total Hours	W&M Labor Effort	W&M Expense & Subs	W&M Labor	SUB consultants (lab, drilling, waste)	W&M Expense Effort	Total W&M Effort	Assumptions	
	Hourly Bill Rate	\$245.00	\$197.00	\$160.00	\$138.00	\$118.00	\$100.00									
9	<b>Task 9 - Limited Phase II Investigations - Segments B, D, partial E</b>															
11	<b>Pipeline Alignment</b>															
12	9.1															
13	9.1.1	Prepare Monthly Summary Reports / Invoicing						818.00	113,640.00	96,360.00	113,640.00	89,075.00	7,285.00	210,000.00		
14	9.1.2	Implement PMP Requirements & CA/OC Plan Requirements						0	\$	\$	\$	\$	\$	\$		
15	9.1.3	Schedule Development & Monthly Updates						0	\$	\$	\$	\$	\$	\$		
16	9.1.4	Risk Register related to Phase II ESA field work						0	\$	\$	\$	\$	\$	\$		
17	9.1.5	Meetings						0	\$	\$	\$	\$	\$	\$		
18	9.1.5.1	Attend Meetings						0	\$	\$	\$	\$	\$	\$		
19	9.1.5.2	Additional Meetings						0	\$	\$	\$	\$	\$	\$		
20	9.1.5.3	Internal Environmental Consultant Team Meetings						0	\$	\$	\$	\$	\$	\$		
21	9.1.6	Deliverables						0	\$	\$	\$	\$	\$	\$		
22	9.1.6.1	Monthly Summary Reports						0	\$	\$	\$	\$	\$	\$		
23	9.1.6.2	Schedules						0	\$	\$	\$	\$	\$	\$		
24	9.1.6.3	Meeting Notes						0	\$	\$	\$	\$	\$	\$		
25	9.2	<b>Phase II ESAs (see W&amp;M Work Order)</b>														
26	9.2.1	Field Work - Soil and Groundwater Sampling	8	20	100	20	20	488	\$ 64,380	\$ 96,360	\$ 64,380	\$ 89,075	\$ 7,285	\$ 160,740	See W&M Work Order	
27	9.2.2	Data Evaluation, Reporting & Project Management	20	40	110	40	40	330	\$ 49,260	\$ -	\$ 49,260	\$ -	\$ -	\$ 49,260	See W&M Work Order	
28																
29																
30																
31																
193									818.00	\$ 113,640	\$ 96,360	\$ 113,640	\$ 89,075	\$ 7,285	\$ 210,000	



**Blanton Associates  
Alliance Water  
Pipeline Consultant  
Expense Breakdown**

		TASK #9	
OTHER DIRECT COST			
Item	Per Unit	# of Units	Cost
Lodging	\$120.00		\$0.00
ATV	\$75.00		\$0.00
GPS	\$100.00		\$0.00
Camera	\$45.00		\$0.00
Vehicle Mileage	0.575	1,000	\$575.00
Vehicle Rental	\$100.00	20	\$2,000.00
4X4 Vehicle Rental	\$125.00		\$0.00
Per Diem - Meals	\$45.00	10	\$450.00
Misc. (Tolls, Parking)	\$10.00		\$0.00
Field Supplies	\$426.00	10	\$4,260.00
Facility Rental	\$800.00		\$0.00
Backhoe Rental	\$1,000.00		\$0.00
Overnight Mail	\$40.00		\$0.00
Mail	\$0.50		\$0.00
Color Plot (sq.ft.)	\$1.50		\$0.00
Color Copies (per 8.5x11 sheet)	\$0.35		\$0.00
Color Copies (per 11x17 sheet)	\$0.50		\$0.00
Copies (per 8.5x11 sheet)	\$0.10		\$0.00
Copies (per 11x17 sheet)	\$0.10		\$0.00
Court Reporter	\$500.00		\$0.00
Curation of Archeological Materials	\$200.00		\$0.00
Newspaper Ads	\$1,200.00		\$0.00
Regulatory Database Search, Aerials, Topos (georeferenced)	\$345.00		\$0.00
Archeological Site Form TARL Processing Fee	\$96.00		\$0.00
<b>TOTAL OTHER DIRECT COST</b>			<b>\$7,285.00</b>



**W&M ENVIRONMENTAL,  
A DIVISION OF BRAUN INTERTEC**

**STANDARD FEE SCHEDULE**  
*Effective January 1, 2020 – December 31, 2020*

<b>LABOR CATEGORY</b>	<b>HOURLY RATE</b>
Principal Consultant II.....	\$245
Principal Consultant I.....	\$218
Senior Consultant II.....	\$197
Senior Consultant I.....	\$175
Project Consultant III.....	\$160
Project Consultant II.....	\$145
Project Consultant I.....	\$136
Staff Consultant III.....	\$118
Staff Consultant II.....	\$100
Staff Consultant I.....	\$90
Field Scientist IV.....	\$105
Field Scientist III.....	\$96
Field Scientist II.....	\$88
Field Scientist I.....	\$80
GIS Analyst II.....	\$100
GIS Analyst I.....	\$90
Project Coordinator.....	\$90

Charges for expert witness, emergency, litigation support related depositions, court appearances, and trial testimony will be billed at the above rates plus 100%.

<b>OTHER DIRECT COSTS</b>	
Rental Equipment.....	Cost + 15%
Travel.....	Cost + 15%
Food and Lodging (Professional Staff).....	Cost + 15%
Company Vehicle.....	\$125/day (+ mileage > 50 miles)
Mileage.....	IRS Standard Mileage Rate + 15%*
W&M Field Equipment.....	project specific, on request

\* Rate may vary based on prevailing IRS Standard Mileage Rate.

<b>OUTSIDE PROFESSIONALS &amp; SERVICES</b>
Outside services, equipment, and facilities provided by W&M will be billed at cost plus 15 percent (15%) and may include the following:
Laboratory Testing
Drilling and Geoprobe™ Services
Remediation Subcontractors
Waste Disposal and/or Transportation Subcontractors
Other Consultants

<b>INVOICES</b>
Invoices will be generated and submitted monthly, at a minimum, and are payable upon receipt. Additional payment terms are presented in the Consulting Agreement.

Alliance Water													Work Order #4 Summary		
Pipeline Consultant 3/20/2020													Bianton W&M	\$	34,160
Detailed Overall Env Consultant Cost Breakdown													Total W.O. #4	\$	244,160
Task	Project Role	PM	DPM	ENV Professional	ENV Tech I	Admin	Total Hours	Total Labor Effort	Total Expense Effort	W&M Labor	W&M Expense Effort	Total Sub Effort	Total Effort	Assumptions	
	Hourly Bill Rate	\$180.00	\$170.00	\$150.00	\$90.00	\$70.00									
<b>Basic Services</b>															
9	Task 9 - Limited Phase II Investigations - Segments B, D, and E Pipeline Alignments						274	34160	0	113640	96360	210000	244160		
9.1	Project Management														
9.1.1	Prepare Monthly Summary Reports / Invoicing	6	4		6	3	19	2,510		-	-	-	2,510	See Discussion/Assumption(s) - Task 9.1.1, Scope of Work	
9.1.2	Implement PMP Requirements & QA/QC Plan Requirements	6		4	16	3	29	3,330		-	-	-	3,330	See Discussion/Assumption(s) - Task 9.1.2, Scope of Work	
9.1.3	Schedule Development & Monthly Updates	6			12		18	2,160		-	-	-	2,160	See Discussion/Assumption(s) - Task 9.1.3, Scope of Work	
9.1.4	Risk Register related to Limited Phase II Investigations field work	2			6		8	900		-	-	-	900	See Discussion - Task 9.1.4, Scope of Work	
9.1.5	Meetings														
9.1.5.1	Attend Meetings	4			4		8	1,080		-	-	-	1,080	See Discussion/Assumption(s) - Task 9.1.5.1, Scope of Work	
9.1.5.2	Additional Meetings	12			6		18	2,700		-	-	-	2,700	See Discussion/Assumption(s) - Task 9.1.5.2, Scope of Work	
9.1.5.3	Internal Environmental Consultant Team Meetings	6	3		6		15	2,130		-	-	-	2,130	See Discussion/Assumption(s) - Task 9.1.5.3, Scope of Work	
9.1.6	Deliverables														
9.1.6.1	Monthly Summary Reports	6					-	-		-	-	-	-	See Discussion - Task 9.1.6.1, Scope of Work	
9.1.6.2	Schedules	4					-	-		-	-	-	-	See Discussion - Task 9.1.6.2, Scope of Work	
9.1.6.3	Meeting Notes	6			6		12	1,620		-	-	-	1,620	See Discussion/Assumption(s) - Task 9.1.6.3, Scope of Work	
9.2	Limited Phase II Investigations														
9.2.1	Field Work -Soil & Groundwater Sampling						-	-		64,380	96,360	160,740	160,740	See Discussion/Assumption(s) - Task 9.2.1, Scope of Work	
9.2.2	Data Evaluation, Reporting & Project Management	8	6		26		40	4,800		49,260	-	49,260	54,060	See Discussion/Assumption(s) - Task 9.2.2, Scope of Work	
9.3	Land Acquisition Coordination for Parcel Access													See Discussion/Assumption(s) - Task 9.3, Scope of Work	
9.3.1	Complete one agenda and meeting w/ land acquisition	6	2		8	1	17	2,210		-	-	-	2,210	See Discussion - Task 9.3.1, Scope of Work	
9.3.2	Complete and submit property access request forms	4			10		14	1,620		-	-	-	1,620	See Discussion - Task 9.3.2, Scope of Work	
9.3.3	Coordinate with landowners	4			10		14	1,620		-	-	-	1,620	See Discussion - Task 9.3.3, Scope of Work	
9.3.4	Conduct additional work required to verify property access requirements	2	4		10		16	1,940		-	-	-	1,940	See Discussion - Task 9.3.4, Scope of Work	
9.3.5	Deliverables														
9.3.5.1	GIS data uploads / updates	4			10		14	1,620		-	-	-	1,620	See Discussion - Task 9.3.5.1, Scope of Work	
9.3.5.2	Field Checklists	4			10		14	1,620		-	-	-	1,620	See Discussion - Task 9.3.5.2, Scope of Work	
9.3.5.3	Preliminary finding summaries	4	4		10		18	2,300		-	-	-	2,300	See Discussion - Task 9.3.5.3, Scope of Work	
							274	34,160	-	113,640	96,360	210,000	244,160		

B	C	D	E	F	G	H	I	AB	AE	AH	AI	AJ	AK		
1	W&M														
2	Alliance Water														
3	Pipeline Consultant														
4	3/20/2020														
5	Detailed Overall Envy Consultant Cost Breakdown														
6	Project Fee Summary - W.O. #3														
													W&M Labor \$ 113,640		
													W&M Expenses \$ 96,360		
													Total Effort \$ 210,000		
7	Task	Project Role	Principal Consultant	Sr. Consultant I	Project Consultant III	Project Consultant I	Staff Consultant III	GIS Analyst	Total Hours	W&M Labor	W&M Expense Effort	Total Sub Effort	Total W&M Effort	Assumptions	
8		Hourly Bill Rate	\$245.00	\$197.00	\$160.00	\$136.00	\$118.00	\$100.00							
9	Task 9 - Limited Phase II Investigations - Segments B, D, and E Pipeline Alignment				Basic Services										
11	9.1	Project Management							818.00	113,640.00	96,360.00	210,000.00	210,000.00		
12	9.1.1	Prepare Monthly Summary Reports / Invoicing							0	\$ -	\$ -	\$ -	\$ -		
13	9.1.2	Implement PMP Requirements & QA/QC Plan Requirements							0	\$ -	\$ -	\$ -	\$ -		
14	9.1.3	Schedule Development & Monthly Updates							0	\$ -	\$ -	\$ -	\$ -		
15	9.1.4	Risk Register related to Limited Phase II Investigations field work							0	\$ -	\$ -	\$ -	\$ -		
16	9.1.5	Meetings							0	\$ -	\$ -	\$ -	\$ -		
17	9.1.5.1	Attend Meetings							0	\$ -	\$ -	\$ -	\$ -		
18	9.1.5.2	Additional Meetings							0	\$ -	\$ -	\$ -	\$ -		
19	9.1.5.3	Internal Environmental Consultant Team Meetings							0	\$ -	\$ -	\$ -	\$ -		
20	9.1.6	Deliverables							0	\$ -	\$ -	\$ -	\$ -		
21	9.1.6.1	Monthly Summary Reports							0	\$ -	\$ -	\$ -	\$ -		
22	9.1.6.2	Schedules							0	\$ -	\$ -	\$ -	\$ -		
23	9.1.6.3	Meeting Notes							0	\$ -	\$ -	\$ -	\$ -		
24	9.2	Limited Phase II Investigations													
25	9.2.1	Field Work and reporting	8	20	100	20	320	20	488	\$ 64,380	\$ 96,360	\$ 160,740	\$ 160,740		
26	9.2.2	Data Evaluation, Reporting & Project Management	20	40	110	40	80	40	330	\$ 49,260	\$ -	\$ 49,260	\$ 49,260		
27	9.3	Land Acquisition Coordination for Parcel Access													
28	9.3.1	Complete one agenda and meeting w/ land acquisition							0	\$ -	\$ -	\$ -	\$ -		
29	9.3.2	Complete and submit property access request forms							0	\$ -	\$ -	\$ -	\$ -		
30	9.3.3	Coordinate with landowners							0	\$ -	\$ -	\$ -	\$ -		
31	9.3.4	Conduct additional work required to verify property access requirements							0	\$ -	\$ -	\$ -	\$ -		
32	9.3.5	Field Work							0	\$ -	\$ -	\$ -	\$ -		
33	9.3.6	Deliverables													
34	9.3.6.1	GIS data uploads / updates							0	\$ -	\$ -	\$ -	\$ -		
35	9.3.6.2	Field Checklists							0	\$ -	\$ -	\$ -	\$ -		
36	9.3.6.2	Field Checklists							0	\$ -	\$ -	\$ -	\$ -		
37	9.3.6.2	Field Checklists							0	\$ -	\$ -	\$ -	\$ -		
38									818.00	\$ 113,640	\$ 96,360	\$ 210,000	\$ 210,000		

**Blanton Associates  
Alliance Water  
Pipeline Consultant  
Expense Breakdown**

			TASK #9	
OTHER DIRECT COST				
<u>Item</u>	<u>Per Unit</u>	<u># of Units</u>	<u>Cost</u>	
Lodging	\$120.00		\$0.00	
ATV	\$75.00		\$0.00	
GPS	\$100.00		\$0.00	
Camera	\$45.00		\$0.00	
Vehicle Mileage	0.575	1,000	\$575.00	
Vehicle Rental	\$100.00	20	\$2,000.00	
4X4 Vehicle Rental	\$125.00		\$0.00	
Per Diem - Meals	\$45.00	10	\$450.00	
Misc. (Tolls, Parking)	\$10.00		\$0.00	
Field Supplies	\$426.00	10	\$4,260.00	
Facility Rental	\$800.00		\$0.00	
Lab, Drilling, Waste	\$89,075.00	1	\$89,075.00	
Overnight Mail	\$40.00		\$0.00	
Mail	\$0.50		\$0.00	
Color Plot (sq.ft.)	\$1.50		\$0.00	
Color Copies (per 8.5x11 sheet)	\$0.35		\$0.00	
Color Copies (per 11x17 sheet)	\$0.50		\$0.00	
Copies (per 8.5x11 sheet)	\$0.10		\$0.00	
Copies (per 11x17 sheet)	\$0.10		\$0.00	
Court Reporter	\$500.00		\$0.00	
Curation of Archeological Materials	\$200.00		\$0.00	
Newspaper Ads	\$1,200.00		\$0.00	
Regulatory Database Search, Aerials, Topos (georeferenced)	\$345.00		\$0.00	
Archeological Site Form TARL Processing Fee	\$96.00		\$0.00	
<b>TOTAL OTHER DIRECT COST</b>			<b>\$96,360.00</b>	

**REGULAR MEETING**  
**Alliance Regional Water Authority Board of Directors**

**BOARD MEMBER PACKETS**

Wednesday, March 25, 2020 at 3:00 P.M.

Conference Call Number: 1-903-405-2572; Code: 995 024 086#

- I. BOARD MEMBER ITEMS OR FUTURE AGENDA ITEMS – Possible acknowledgement by Board 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 Board 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, March 25, 2020 at 3:00 P.M.

Conference Call Number: 1-903-405-2572; Code: 995 024 086#

- 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, March 25, 2020 at 3:00 P.M.

Conference Call Number: 1-903-405-2572; Code: 995 024 086#

**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, March 25, 2020 at 3:00 P.M.

Conference Call Number: 1-903-405-2572; Code: 995 024 086#

- D. *Consideration of Resolution 2020-03-25-003 finding Public Convenience and Necessity and authorizing Eminent Domain Proceedings, if necessary, for acquisitions of a Permanent Easement totaling 2.055 acres located in the A. Tinney Survey, Abstract No. 26, Caldwell County, Texas, and establishing an effective date; and finding and determining that the meeting at which this Resolution is passed was noticed and is open to the public as required by law.*
- 

Attachment(s)

- Resolution 2020-03-25-003

**Board Decision(s) Needed:**

- Adoption of Resolution 2020-03-25-003.



## ALLIANCE WATER

### RESOLUTION NO. 2020-03-25-003

*Thomas M. Boyd - Parcel A016C - 2.055 acre permanent  
Pipeline and Right-of-Way easement out of 21.819 acre tract*

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE ALLIANCE REGIONAL WATER AUTHORITY FINDING PUBLIC CONVENIENCE AND NECESSITY AND AUTHORIZING EMINENT DOMAIN PROCEEDINGS, IF NECESSARY, FOR ACQUISITION OF A PERMANENT EASEMENT TOTALING 2.055 ACRES LOCATED IN THE A. TINNEY SURVEY, ABSTRACT NO. 26, CALDWELL COUNTY, TEXAS, AND ESTABLISHING AN EFFECTIVE DATE; AND FINDING AND DETERMINING THAT THE MEETING AT WHICH THIS RESOLUTION IS PASSED WAS NOTICED AND IS OPEN TO THE PUBLIC AS REQUIRED BY LAW.

WHEREAS, in order to promote public health, safety, and welfare, ALLIANCE REGIONAL WATER AUTHORITY (“ARWA”) hereby finds that public convenience and necessity require acquisition of a permanent easement over a tract of land totaling 2.055 acre, 90 foot wide permanent Pipeline and Right-of-Way easement, situated in the A. Tinney Survey, Abstract No. 26, Caldwell County, Texas, and being a portion of a called 21.819 acre tract as described in Deed to Thomas M. Boyd, as recorded in Document No. 2006064069, of the Official Public Records of Caldwell County, Texas (O.P.R.C.C.T.) with the 2.055 acre parcel being more specifically described by metes and bounds in Exhibit “A” and also being referred to herein as the “Easement,” for the public use to construct, reconstruct, operate, inspect, and maintain a water transmission line and related facilities and improvements (the “Project”); and

WHEREAS, in order to effectuate the Project, it will be necessary and convenient that agents, representatives, or employees of ARWA lay out the Project, and acquire permanent and temporary easements from properties for the purpose of construction, reconstruction, operation, and maintenance of the Project; and

WHEREAS, it may be necessary to hire engineers, surveyors, appraisers, attorneys, title companies, architects, or other persons or companies to effect the laying out, establishment, and acquisition of land rights necessary to effectuate said Project; and

WHEREAS, in order to acquire the necessary land rights, it will be or has been necessary for ARWA's agents, representatives, or employees to enter upon the above-described property for the purpose of surveying and establishing said land titles and to determine adequate compensation for said land rights, to conduct tests, and to negotiate with the owners thereof for the purchase of necessary land rights; and

WHEREAS, it was necessary to set out procedures for the establishment and approval of just compensation for the necessary land rights to be acquired for the Project;

**NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF ALLIANCE REGIONAL WATER AUTHORITY:**

**SECTION 1.**

1. That in order to promote the public health, safety, and welfare, public convenience and necessity require ARWA's acquisition of a permanent easement for the public use for construction, reconstruction, operation, maintenance, inspection and repair of a water transmission line and appurtenances over that certain 2.055 acre (89,518 square foot) parcel of land described with particularity on Exhibit "A," attached and incorporated herein by reference as if fully set out.

2. That ARWA's agents, representatives, or employees are hereby authorized to:

- a. Lay out the exact location of the land area needed for the Easement;
- b. Hire such engineers, surveyors, appraisers, title companies, architects, and other persons or companies needed to effect the laying out of the facilities, the establishment and acquisition of easement rights and other rights necessary for the Project;
- c. Enter upon any property necessary for the purpose of surveying and establishing title, to determine adequate compensation for the necessary land rights, and to conduct tests;
- d. Negotiate with the owners of any such properties for the purchase thereof;
- e. To purchase any necessary easements and rights-of-way on, over, under and across the Easement and execute all documents necessary to acquire such necessary land rights, all subject to express approval of the specific, negotiated terms by ARWA;
- f. Initiate eminent domain proceedings against the owner(s) of the

Easement for acquisition thereof in the event the owner(s) fail to accept a bona fide offer to purchase the Easement; and

g. Take whatever further actions deemed appropriate to economically effect the establishment of the Project and appurtenances thereto.

3. That all previous acts and proceedings done or initiated by ARWA's agents, representatives, or employees for establishment of the Project, including the negotiation for and/or acquisition of any necessary property rights for the Easement are hereby authorized, ratified, approved, confirmed, and validated. This resolution shall take effect immediately from and after its passage.

SECTION 2. That it is hereby officially found and determined that the meeting at which this resolution is passed is open to the public and that public notice of the time, place, and purpose of said meeting was given as required by law.

PASSED AND APPROVED this the \_\_\_\_ day of \_\_\_\_\_ 2020.

**ALLIANCE REGIONAL WATER AUTHORITY**

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Chris Betz  
Chair of the Board of Directors of  
ALLIANCE REGIONAL WATER AUTHORITY

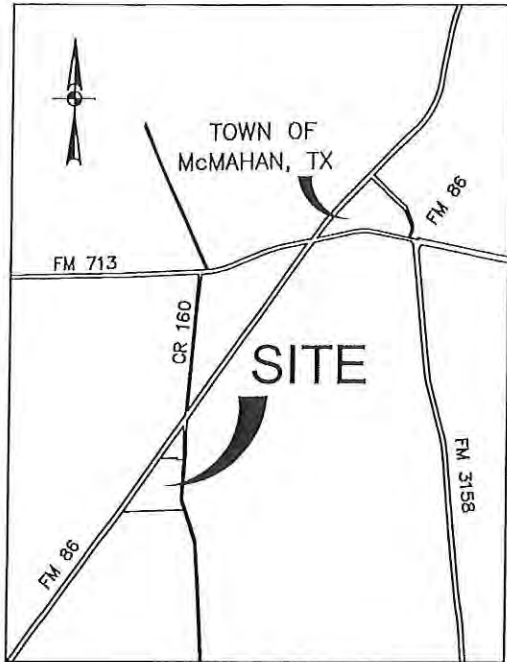
**ATTEST:**

---

James Earp  
Secretary of the Board of Directors of  
ALLIANCE REGIONAL WATER AUTHORITY

Exhibit A

PARCEL A016C  
CALDWELL COUNTY, TEXAS  
ALLIANCE WATER PH 1B



LOCATION MAP  
NOT TO SCALE

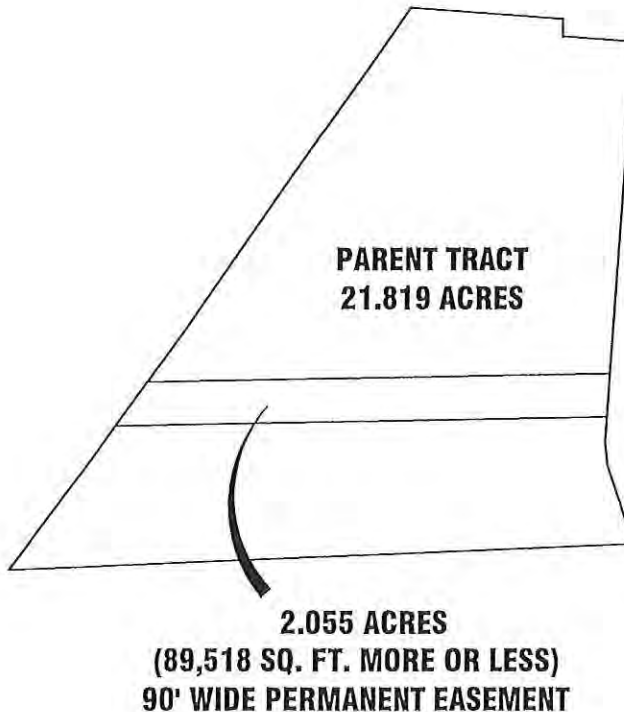
NOTES:

1. THE PROFESSIONAL SERVICES PROVIDED HERewith INCLUDE THE PREPARATION OF A METES AND BOUNDS DESCRIPTION.
2. THE BEARINGS ARE BASED ON THE TEXAS COORDINATE SYSTEM ESTABLISHED FOR THE SOUTH CENTRAL ZONE FROM THE NORTH AMERICAN DATUM OF 1983 (NA2011) EPOCH 2010.00.
3. AREAS AND DISTANCES SHOWN ARE IN U.S. SURVEY FEET. TO CONVERT TO GRID, APPLY THE COMBINED SCALE FACTOR OF 1.00013.
4. ANY UTILITIES SHOWN ON THIS SURVEY ARE BASED UPON VISIBLE ABOVE GROUND LOCATION ONLY. ALL UNDERGROUND UTILITIES HAVE NOT BEEN VERIFIED NEITHER ANY SUBSURFACE UTILITY ENGINEERING LEVELS A-D WERE PERFORMED BY CP&Y. THERE MAY BE ADDITIONAL UTILITIES THAT CP&Y HAS NOT BEEN ADVISED OF.

SCHEDULE B COMMENTS:

CHICAGO TITLE INSURANCE COMPANY  
GF# CTA-21-CTA1802662G  
ISSUE DATE: APRIL 18, 2019

- 10J.) RIGHT-OF-WAY EASEMENT BETWEEN SAM G. COLE AND HUMBLE PIPE LINE COMPANY VOLUME 159, PAGE 615 D.R.C.C.T. (CAN NOT DETERMINE DUE TO AMBIGUOUS DESCRIPTION BLANKET BY NATURE)
- 10K.) RIGHT-OF-WAY EASEMENT BETWEEN JEWEL ALEXANDER AND MCMAHAN WATER SUPPLY VOLUME 341, PAGE 290 D.R.C.C.T. (DOES AFFECT, BLANKET BY NATURE)
- 10L.) RIGHT-OF-WAY EASEMENT BETWEEN JEWEL ALEXANDER AND HUSBAND GARLON ALEXANDER AND C.C. GALLOWAY AND WIFE EMMA LOIS GALLOWAY AND MCMAHAN WATER SUPPLY VOLUME 34B, PAGE 685 D.R.C.C.T. (DOES NOT AFFECT)



Date: Sep 11, 2019, 7:28am User ID: mhalling File: G:\Projects\ARWA1800532-Alliance Water\SURVEY\SEGMENT A TITLES - Caldwell County\A016C\EXHIBIT EASEMENT\A016C PE.dwg



200 W. Hwy 6, Suite 620, Waco, Texas 76712  
254.772.9272 TBPLS 10194124



**Legal Description**  
**2.055 Acres (89,518 Square Foot)**  
**90 Foot Wide Permanent Easement**

BEING A 2.055 ACRE, 90 FOOT WIDE PERMANENT EASEMENT, SITUATED IN THE A. TINNEY SURVEY, ABSTRACT NO. 26, CALDWELL COUNTY, TEXAS, AND BEING A PORTION OF A CALLED 21.819 ACRE TRACT AS DESCRIBED IN DEED TO THOMAS M. BOYD, AS RECORDED IN DOCUMENT NO. 2006064069, OF THE OFFICIAL PUBLIC RECORDS OF CALDWELL COUNTY, TEXAS (O.P.R.C.C.T.). SAID 2.055 ACRES BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

**COMMENCING** at a Type I concrete right-of-way (ROW) monument found in the fenced southeast ROW of FM 86 (100 foot wide ROW) for the southwest corner of said 21.819 acre tract, also being the northwest corner of that called 5.659 acre tract of land described in deed to Raymond Johnson and Dorothy Duke Tees as recorded in Volume 441, Page 781 of the Deed Records of Caldwell County, Texas.;

**THENCE** N 36°09'01" E (record call is N 36°30'11" E), with the common line of said 21.819 acre tract and said ROW, a distance of 370.88 feet, to a point for the **POINT OF BEGINNING** and the southwest corner of the herein described tract;

**THENCE** N 36° 09' 01" E, continuing with said common line, a distance of 112.94 feet, to a point for this northwest corner hereof, from which a TXDOT Type I concrete monument found bears N 36° 09' 01" E, a distance of 136.67 feet;

**THENCE** N 88° 58' 54" E, leaving said common line over and across said 21.819 acre tract, a distance of 964.14 feet, to a point for the northeast corner hereof and lying in the east line of said 21.819 acre tract and the west ROW line of County Road 160, (a.k.a. Old Colony Line Rd, a 40 foot wide apparent ROW), from which a 1/2 inch iron pipe found for the northeast corner of said 21.819 acre tract bears N 03° 34' 01" E, a distance of 691.53 feet;

**THENCE** S 03° 34' 01" W, with the east line of said 21.819 acre tract and the said west ROW of CR 160, a distance of 90.29 feet, to a point for this southeast corner hereof;

**THENCE** S 88° 58' 54" W, over and across said 21.819 acre tract, a distance of 1,025.16 feet, to the **POINT OF BEGINNING** and containing 2.055 acres, more or less.

The bearings shown hereon are based on the Texas Coordinate System, South Central Zone, NAD 83/2011. All distances shown are in U.S. Survey Feet and may be converted to grid by applying the combined scale factor of 1.00013.

Adam M. Whitfield  
Registered Professional Land Surveyor  
Texas Registration Number 5786

Date: 9.13.19

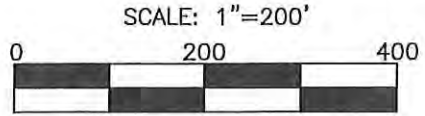


September 13, 2019



PARCEL A016C  
 CALDWELL COUNTY, TEXAS  
 ALLIANCE WATER PH 1B  
 EXHIBIT A

- LEGEND
- △ = Calculated Point
  - = Property Boundary Line
  - - - = Proposed Permanent Easement
  - · - · = Adjoining Boundary (approx.)
  - x - x = Barbed Wire Fence
  - ( ) = Record/Deed Call
  - O.P.R.C.C.T. = Official Public Records  
 Caldwell County, Texas
  - D.R.C.C.T. = Deed Records Caldwell  
 County, Texas



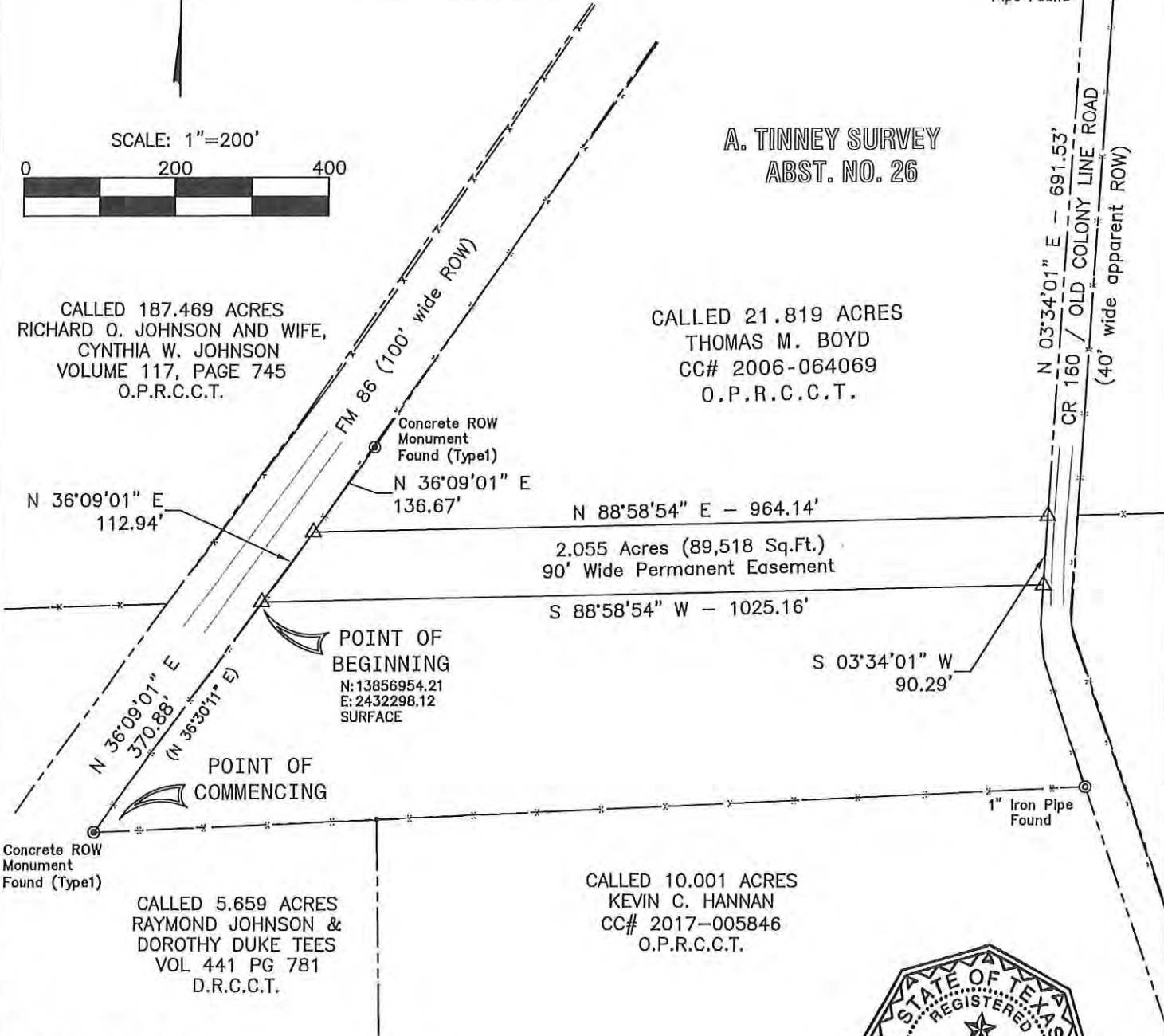
A. TINNEY SURVEY  
 ABST. NO. 26

CALLLED 187.469 ACRES  
 RICHARD O. JOHNSON AND WIFE,  
 CYNTHIA W. JOHNSON  
 VOLUME 117, PAGE 745  
 O.P.R.C.C.T.

CALLLED 21.819 ACRES  
 THOMAS M. BOYD  
 CC# 2006-064069  
 O.P.R.C.C.T.

CALLLED 5.659 ACRES  
 RAYMOND JOHNSON &  
 DOROTHY DUKE TEES  
 VOL 441 PG 781  
 D.R.C.C.T.

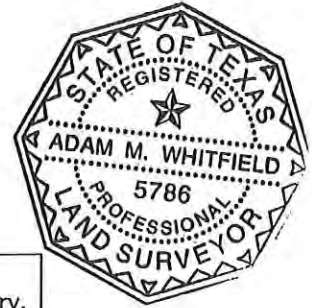
CALLLED 10.001 ACRES  
 KEVIN C. HANNAN  
 CC# 2017-005846  
 O.P.R.C.C.T.



Date: Sep 11, 2019, 7:28am User ID: mhollng File: G:\Projects\ARWA1800532-Alliance Water\SURVEY\SEGMENT A TITLES - Caldwell County\A016C\EXHIBIT EASEMENT\A016C PE.dwg



200 W. Hwy 6, Suite 620, Waco, Texas 76712  
 254.772.9272 TBPLS 10194124



To the best of my knowledge, information, and belief, the plat hereon is a correct representation of the property as determined by a survey made on the ground February, 2019, the lines and dimensions of said property being as indicated by the plat. This survey substantially complies with the current Texas Society of Professional Surveyors standards and specifications.

*Adam M. Whitfield*  
 ADAM M. WHITFIELD, RPLS NO. 5786

**REGULAR MEETING**  
**Alliance Regional Water Authority Board of Directors**

**BOARD MEMBER PACKETS**

Wednesday, March 25, 2020 at 3:00 P.M.

Conference Call Number: 1-903-405-2572; Code: 995 024 086#

- E. *Consideration of Resolution 2020-03-25-004 finding Public Convenience and Necessity and authorizing Eminent Domain Proceedings, if necessary, for acquisitions of a Permanent Easement totaling 7.935 acres located in the B.G. Ridens Survey, Abstract No. 256, Caldwell County, Texas, and 5.079 acres located in the J.D. Sowell Survey, Abstract No. 266, Caldwell County, Texas establishing an effective date; and finding and determining that the meeting at which this Resolution is passed was noticed and is open to the public as required by law.*
- 

Attachment(s)

- Resolution 2020-03-25-004

**Board Decision(s) Needed:**

- Adoption of Resolution 2020-03-25-004.





## ALLIANCE WATER

### RESOLUTION NO. 2020-03-25-004

*JKW Family, LP - Parcel A018C (A) 7.935 acre permanent Pipeline and Right-of-Way easement out of 236.87 acre tract*

*JKW Family, LP – Parcel A018C (B) 5.079 acre permanent Pipeline and Right of Way easement out of 20.436 acre tract*

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE ALLIANCE REGIONAL WATER AUTHORITY FINDING PUBLIC CONVENIENCE AND NECESSITY AND AUTHORIZING EMINENT DOMAIN PROCEEDINGS, IF NECESSARY, FOR ACQUISITION OF A PERMANENT EASEMENT TOTALING 7.935 ACRES LOCATED IN THE B. G. RIDENS SURVEY, ABSTRACT NO. 256, CALDWELL COUNTY, TEXAS, AND 5.079 ACRES LOCATED IN THE J. D. SOWELL SURVEY, ABSTRACT NO. 266, CALDWELL COUNTY, TEXAS, ESTABLISHING AN EFFECTIVE DATE; AND FINDING AND DETERMINING THAT THE MEETING AT WHICH THIS RESOLUTION IS PASSED WAS NOTICED AND IS OPEN TO THE PUBLIC AS REQUIRED BY LAW.

WHEREAS, in order to promote public health, safety, and welfare, ALLIANCE REGIONAL WATER AUTHORITY (“ARWA”) hereby finds that public convenience and necessity require acquisition of a permanent easement over a tract of land totaling 7.935 acre, 90 foot wide permanent Pipeline and Right-of-Way easement, situated in the B. G. Ridens Survey, Abstract No. 256, Caldwell County, Texas, and being a portion of a called 236.87 acre tract of land called Tract III described in Deed to JKW Family Limited Partnership as recorded in Volume 165, Page 376 of the Official Public Records of Real Property of Caldwell County, Texas (O.P.R.R.C.C.T.) and 5.079 acre, 90 foot wide permanent Pipeline and Right-of-Way easement, situated in the J. D. Sowell Survey, Abstract No. 266, Caldwell County, Texas, and being a portion of a 20.436 acre tract of land called Tract I described in Deed to JKW Family Limited Partnership, as Recorded in Volume 165, Page 376 of the Official Public Records of Real Property of Caldwell County, Texas (O.P.R.R.P.C.C.T.) with the 7.935 and the 5.79 acre parcels being more specifically described by metes and bounds in Exhibit “A” and Exhibit “B” and also being referred to herein as the “Easement,” for the public use to construct, reconstruct, operate, inspect, and maintain a water transmission line and related facilities and improvements (the “Project”); and

WHEREAS, in order to effectuate the Project, it will be necessary and convenient that agents, representatives, or employees of ARWA lay out the Project, and acquire permanent and temporary easements from properties for the purpose of construction, reconstruction, operation, and maintenance of the Project; and

WHEREAS, it may be necessary to hire engineers, surveyors, appraisers, attorneys, title companies, architects, or other persons or companies to effect the laying out, establishment, and acquisition of land rights necessary to effectuate said Project; and

WHEREAS, in order to acquire the necessary land rights, it will be or has been necessary for ARWA's agents, representatives, or employees to enter upon the above-described property for the purpose of surveying and establishing said land titles and to determine adequate compensation for said land rights, to conduct tests, and to negotiate with the owners thereof for the purchase of necessary land rights; and

WHEREAS, it was necessary to set out procedures for the establishment and approval of just compensation for the necessary land rights to be acquired for the Project;

**NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF ALLIANCE REGIONAL WATER AUTHORITY:**

**SECTION 1.**

1. That in order to promote the public health, safety, and welfare, public convenience and necessity require ARWA's acquisition of a permanent easement for the public use for construction, reconstruction, operation, maintenance, inspection and repair of a water transmission line and appurtenances over that certain 7.935 acres (345,637 square foot) and 5.079 acres (221,248 square foot) parcel of land described with particularity on Exhibit "A," and Exhibit "B" attached and incorporated herein by reference as if fully set out.

2. That ARWA's agents, representatives, or employees are hereby authorized to:

- a. Lay out the exact location of the land area needed for the Easement;
- b. Hire such engineers, surveyors, appraisers, title companies, architects, and other persons or companies needed to effect the laying out of the facilities, the establishment and acquisition of easement rights and other rights necessary for the Project;
- c. Enter upon any property necessary for the purpose of surveying and establishing title, to determine adequate compensation for the necessary land rights, and to conduct tests;

d. Negotiate with the owners of any such properties for the purchase thereof;

e. To purchase any necessary easements and rights-of-way on, over, under and across the Easement and execute all documents necessary to acquire such necessary land rights, all subject to express approval of the specific, negotiated terms by ARWA;

f. Initiate eminent domain proceedings against the owner(s) of the Easement for acquisition thereof in the event the owner(s) fail to accept a bona fide offer to purchase the Easement; and

g. Take whatever further actions deemed appropriate to economically effect the establishment of the Project and appurtenances thereto.

3. That all previous acts and proceedings done or initiated by ARWA's agents, representatives, or employees for establishment of the Project, including the negotiation for and/or acquisition of any necessary property rights for the Easement are hereby authorized, ratified, approved, confirmed, and validated. This resolution shall take effect immediately from and after its passage.

SECTION 2. That it is hereby officially found and determined that the meeting at which this resolution is passed is open to the public and that public notice of the time, place, and purpose of said meeting was given as required by law.

PASSED AND APPROVED this the \_\_\_\_ day of \_\_\_\_\_ 2020.

**ALLIANCE REGIONAL WATER AUTHORITY**

---

Chris Betz  
Chair of the Board of Directors of  
ALLIANCE REGIONAL WATER AUTHORITY

**ATTEST:**

---

James Earp  
Secretary of the Board of Directors of  
ALLIANCE REGIONAL WATER AUTHORITY

Exhibit A

PARCEL A018C\_A  
CALDWELL COUNTY, TEXAS  
ALLIANCE WATER PH 1B

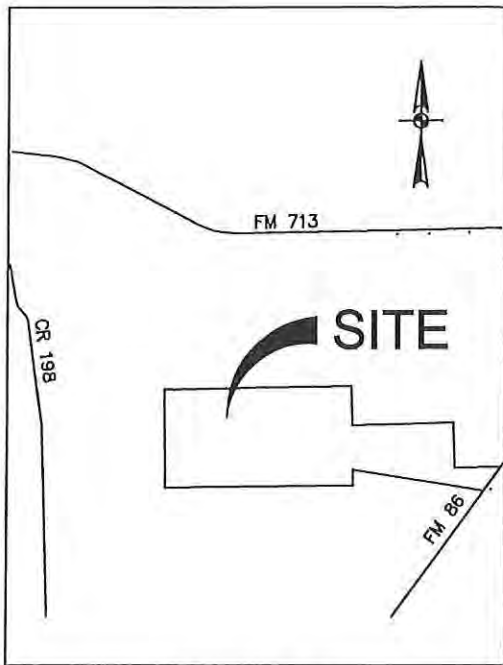
NOTES:

1. THE PROFESSIONAL SERVICES PROVIDED HERewith INCLUDE THE PREPARATION OF A METES AND BOUNDS DESCRIPTION.
2. THE BEARINGS ARE BASED ON THE TEXAS COORDINATE SYSTEM ESTABLISHED FOR THE SOUTH CENTRAL ZONE FROM THE NORTH AMERICAN DATUM OF 1983 (NA2011) EPOCH 2010.00.
3. AREAS AND DISTANCES SHOWN ARE IN U.S. SURVEY FEET. TO CONVERT TO GRID, APPLY THE COMBINED SCALE FACTOR OF 1.00013.
4. ANY UTILITIES SHOWN ON THIS SURVEY ARE BASED UPON VISIBLE ABOVE GROUND LOCATION ONLY. ALL UNDERGROUND UTILITIES HAVE NOT BEEN VERIFIED NEITHER ANY SUBSURFACE UTILITY ENGINEERING LEVELS A-D WERE PERFORMED BY CP&Y. THERE MAY BE ADDITIONAL UTILITIES THAT CP&Y HAS NOT BEEN ADVISED OF.

SCHEDULE B COMMENTS:

CHICAGO TITLE INSURANCE COMPANY  
ISSUE DATE: APRIL 18, 2019  
GF#: CTA-21-COA1802667G

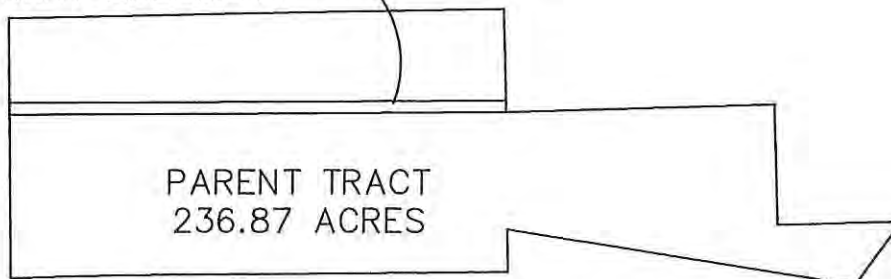
- 10j.) RIGHT-OF-WAY EASEMENT BETWEEN HUMBLE PIPE LINE COMPANY AND F. ALVES RECORDED IN VOLUME 159, PAGE 604, D.R.C.C.T. (DOES NOT AFFECT ABANDONED BY INST. #132145, O.P.R.R.P.C.C.T.);
- 10k.) RIGHT-OF-WAY EASEMENT BETWEEN HUMBLE PIPE LINE COMPANY AND MARTIN TEAGUS RECORDED IN VOLUME 160, PAGE 64, D.R.C.C.T. (DOES NOT AFFECT ABANDONED BY INST. #132145, O.P.R.R.P.C.C.T.);
- 10m.) EASEMENT BETWEEN PLUM CREEK CONSERVATION DISTRICT AND CURTIS K. OWEN AND WIFE, EDITH OWEN RECORDED IN VOLUME 295, PAGE 344, D.R.C.C.T. (DOES AFFECT AREA COVERED BY LAKE);
- 10n.) RIGHT-OF-WAY BETWEEN McMAHAN WATER SUPPLY CORPORATION AND ELIZABETH OWEN RECORDED IN VOLUME 311, PAGE 291, D.R.C.C.T. (DOES NOT AFFECT BLANKET BY NATURE)
- 10o.) RIGHT-OF-WAY BETWEEN McMAHAN WATER SUPPLY CORPORATION AND CURTIS OWEN AND WIFE, EDITH R. OWEN RECORDED IN VOLUME 341, PAGE 292, D.R.C.C.T. (DOES NOT AFFECT BLANKET BY NATURE)
- 10p.) RIGHT-OF-WAY BETWEEN PLUM CREEK CONSERVATION DISTRICT AND VERMO ELLISON RECORDED IN VOLUME 345, PAGE 380, D.R.C.C.T. (DOES NOT AFFECT)
- 10s.) EASEMENT BETWEEN THE CITY OF LOCKHART AND CURTIS OWEN AND WIFE EDITH OWEN RECORDED IN VOLUME 507, PAGE 614, D.R.C.C.T. (DOES NOT AFFECT)
- 10t.) EASEMENT BETWEEN BLUEBONNET ELECTRIC COOPERATIVE AND CURTIS K, OWEN RECORDED IN VOLUME 512, PAGE 110, O.P.R.R.P.C.C.T. (DOES NOT AFFECT BLANKET BY NATURE)
- 10u.) BILL OF SALE & PARTIAL RELEASE BETWEEN EXXONMOBIL PIPELINE COMPANY AND JKW FAMILY LIMITED PARTNERSHIP RECORDED IN INST. #132145, O.P.R.R.P.C.C.T. (DOES AFFECT THIS INSTRUMENT ABANDONED PIPELINE EASEMENTS RECORDED IN VOLUME 159, PAGE 604 AND VOLUME 160, PAGE 64 - SEE ITEMS 10j) AND 10k) ABOVE)
- 10v.) EASEMENT BETWEEN BLUEBONNET ELECTRIC COOPERATIVE AND JOE WELLS RECORDED IN INST. #132510, O.P.R.R.P.C.C.T. (DOES AFFECT BLANKET BY NATURE)
- 10w.) 15' WIDE EASEMENT BETWEEN AQUA WATER SUPPLY CORPORATION AND CURTIS K. OWEN ET ALL RECORDED IN INST. #2017-001867, O.P.R.C.C.T. (DOES NOT AFFECT BLANKET BY NATURE)
- 10x.) EASEMENT BETWEEN BLUEBONNET ELECTRIC COOPERATIVE AND JKW FAMILY LP RECORDED IN INST. #2017-005007, O.P.R.C.C.T. (DOES AFFECT BLANKET BY NATURE)



LOCATION MAP  
NOT TO SCALE



7.935 ACRES  
(345,637 SQ. FT. MORE OR LESS)  
90' WIDE PERMANENT EASEMENT



200 W. Hwy 6, Suite 620, Waco, Texas 76712  
254.772.9272 TBPLS 10194124

Date: Sep 12, 2019, 9:48am User ID: mchelling File: G:\Projects\ARWA1800532-Alliance Water\SURVEY\SEGMENT A TITLES - Caldwell County\A018C\EXHIBIT EASEMENT\A018C PE\_A.dwg



**Legal Description  
7.935 Acres (345,637 Square Foot)  
90 Foot Wide Permanent Easement**

BEING A 7.935 ACRE, 90 FOOT WIDE PERMANENT EASEMENT, SITUATED IN THE B. G. RIDENS SURVEY, ABSTRACT NO. 256, CALDWELL COUNTY, TEXAS, AND BEING A PORTION OF A 236.87 ACRE TRACT OF LAND CALLED TRACT III DESCRIBED IN DEED TO JKW FAMILY LIMITED PARTNERSHIP, AS RECORDED IN VOLUME 165, PAGE 376 OF THE OFFICIAL PUBLIC RECORDS OF REAL PROPERTY OF CALDWELL COUNTY, TEXAS (O.P.R.R.P.C.C.T). SAID 7.935 ACRE 90 FOOT WIDE PERMANENT EASEMENT BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

**BEGINNING** at a 30 inch Post Oak Tree found on the west line of said 236.87 acre tract, being the southeast corner of a 20.436 acre tract of land called Tract I described in deed to JKW Family Limited Partnership, as recorded in Volume 165, Page 376, (O.P.R.R.P.C.C.T), and the northeast corner of a called 87.06 acre tract of land described in a deed to E. J. Haidusek and wife, Bobbie Mitchell Haidusek, as recorded in Volume 320, Page 833, (O.P.R.R.P.C.C.T), for the southwest corner hereof;

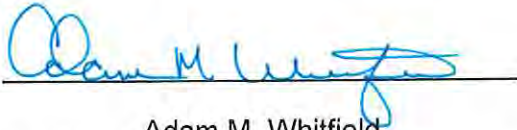
**THENCE** N 01° 01' 04" W, along the common line of said 236.87 acre tract and said 20.436 acre tract, a distance of 90.01 feet, to a point for the northwest corner hereof;

**THENCE** N 89° 43' 05" E, over and across said 236.87 acre tract, a distance of 3,839.85 feet, to a point on the east line of said 236.87 acre tract and the west line of a 187.469 acre tract of land described in a deed to Richard O. Johnson and wife, Cynthia W. Johnson, as recorded in Volume 117, Page 745, (O.P.R.R.P.C.C.T), for the northeast corner hereof, from which a 6 inch creosote fence corner post found, being the most northerly northeast corner of said 236.87 acre tract and an angle point on the west line of said 187.469 acre tract, bears N01° 44' 26" W, a distance of 705.28 feet;

**THENCE** S 01° 44' 26" E, along the common line of said 236.87 acre tract and said 187.469 acre tract, a distance of 90.01 feet, to a 6 inch creosote fence corner post found, being an interior corner of said 236.87 acre tract and the southwest corner of said 187.469 acre tract, for the southeast corner hereof;

**THENCE** S 89° 43' 05" W, over and across said 236.87 acre tract, a distance of 3,840.98 feet, to the **POINT OF BEGINNING** and containing 7.935 acres, more or less.

The bearings shown hereon are based on the Texas Coordinate System, South Central Zone, NAD 83/2011. All distances shown are in U.S. Survey Feet and may be converted to grid by applying the combined scale factor of 1.00013.



Adam M. Whitfield  
Registered Professional Land Surveyor  
Texas Registration Number 5786

Date: 9-13-19



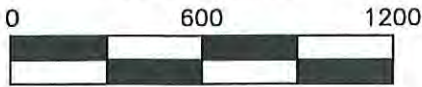
September 13, 2019



PARCEL A018C\_A  
CALDWELL COUNTY, TEXAS  
ALLIANCE WATER PH 1B  
EXHIBIT A



SCALE: 1"=600'



LEGEND

- $\triangle$  = Calculated Point
- $\circ$  = 1/2" Iron Rod Found Unless Otherwise Noted
- = Proposed Permanent Easement
- - - = Adjoining Boundary (approx.)
- · · = Abstract Line (approx.)
- x - = Barbed Wire Fence
- D.R.C.C.T. = Dead Records of Caldwell County, Texas
- O.P.R.C.C.T. = Official Public Records of Caldwell County, Texas
- O.P.R.R.P.C.C.T. = Official Public Records of Real Property of Caldwell County, Texas
- (XX) = Record Call

CALLED 20.436 ACRE TRACT II  
JKW FAMILY LIMITED PARTNERSHIP  
VOLUME 165, PAGE 376,  
DESCRIBED IN VOLUME 129, PAGE 784,  
O.P.R.R.P.C.C.T.

CALLED 20.436 ACRE TRACT I  
JKW FAMILY LIMITED PARTNERSHIP  
VOLUME 165, PAGE 376,  
DESCRIBED IN VOLUME 129, PAGE 784,  
O.P.R.R.P.C.C.T.

7.935 ACRES  
345,637 SQ. FT. MORE OR LESS  
90' WIDE PERMANENT EASEMENT

B. G. RIDENS SURVEY  
ABSTRACT NO. 256

N 89°43'05" E - 3839.85'  
S 89°43'05" W - 3840.98'

BURNET RANDLE SURVEY  
ABSTRACT NO. 258

POINT OF BEGINNING

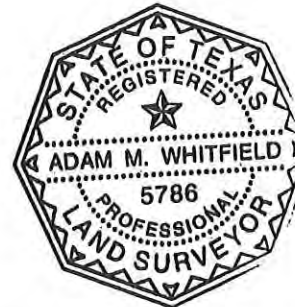
30" Post Oak  
N: 13,857,776.66  
E: 2,425,272.23  
SURFACE

CALLED 87.06 ACRES  
E.J. HADUSEK AND WIFE,  
BOBBIE MITCHELL HADUSEK  
VOLUME 320, PAGE 833,  
O.P.R.R.P.C.C.T.

CALLED 236.87 ACRES  
TRACT III  
JKW FAMILY LIMITED PARTNERSHIP  
VOLUME 165, PAGE 376,  
DESCRIBED IN  
VOLUME 87, PAGE 281,  
O.P.R.R.P.C.C.T.

CALLED 70 ACRES  
CURTIS K. OWEN, EDITH R. OWEN,  
ODUS OWEN, JR., KAYE DIANE ROSS,  
BEVERLY JEAN COATES, AND TOM HAZEL OWEN  
VOLUME 177, PAGE 319  
O.P.R.R.P.C.C.T.

PIPELINE EASEMENT  
VOLUME 159, PAGE 604,  
VOLUME 180, PAGE 64, D.R.C.C.T.  
ABANDONED BY INST. #132145, O.P.R.C.C.T.  
Approximate location of pipeline based on above  
ground signs only



200 W. Hwy 6, Suite 620, Waco, Texas 76712  
254.772.9272 TBPLS 10194124

To the best of my knowledge, information, and belief, the plat hereon is a correct representation of the property as determined by a survey made on the ground February, 2019, the lines and dimensions of said property being as indicated by the plat. This survey substantially complies with the current Texas Society of Professional Surveyors standards and specifications.

*Adam M. Whitfield*  
ADAM M. WHITFIELD, RPLS NO. 5786

Date: September 13, 2019

PAGE 3 of 3

WORK ORDER ARWA1800532 DIGITAL FILE A018C\_A PE.dwg Revision # XX DRAWN BY GL

Exhibit B

PARCEL A018C\_B  
CALDWELL COUNTY, TEXAS  
ALLIANCE WATER PH 1B

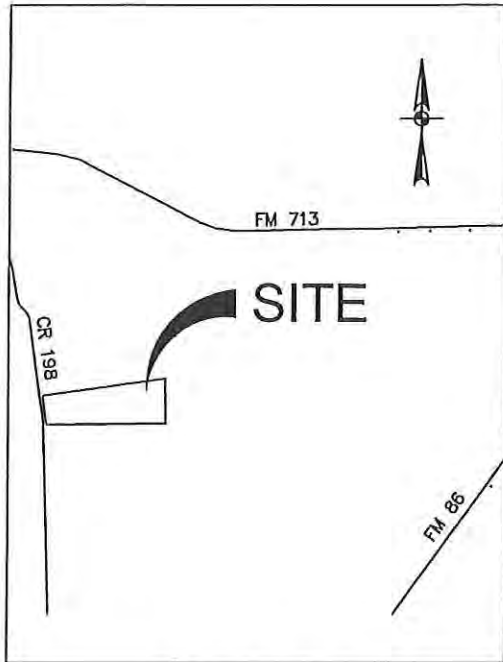
NOTES:

1. THE PROFESSIONAL SERVICES PROVIDED HERewith INCLUDE THE PREPARATION OF A METES AND BOUNDS DESCRIPTION.
2. THE BEARINGS ARE BASED ON THE TEXAS COORDINATE SYSTEM ESTABLISHED FOR THE SOUTH CENTRAL ZONE FROM THE NORTH AMERICAN DATUM OF 1983 (NA2011) EPOCH 2010.00.
3. AREAS AND DISTANCES SHOWN ARE IN U.S. SURVEY FEET. TO CONVERT TO GRID, APPLY THE COMBINED SCALE FACTOR OF 1.00013.
4. ANY UTILITIES SHOWN ON THIS SURVEY ARE BASED UPON VISIBLE ABOVE GROUND LOCATION ONLY. ALL UNDERGROUND UTILITIES HAVE NOT BEEN VERIFIED NEITHER ANY SUBSURFACE UTILITY ENGINEERING LEVELS A-D WERE PERFORMED BY CP&Y. THERE MAY BE ADDITIONAL UTILITIES THAT CP&Y HAS NOT BEEN ADVISED OF.

SCHEDULE B COMMENTS:

CHICAGO TITLE INSURANCE COMPANY  
ISSUE DATE: APRIL 18, 2019  
GF#: CTA-21-CTA1802667G

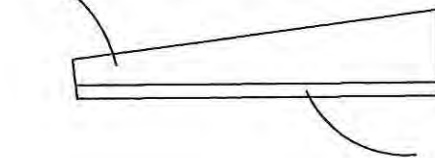
- 10j.) RIGHT-OF-WAY EASEMENT BETWEEN HUMBLE PIPE LINE COMPANY AND F. ALVES RECORDED IN VOLUME 159, PAGE 604, D.R.C.C.T. (DOES NOT AFFECT ABANDONED BY INST. #132145, O.P.R.R.P.C.C.T.);
- 10k.) RIGHT-OF-WAY EASEMENT BETWEEN HUMBLE PIPE LINE COMPANY AND MARTIN TEAGUE RECORDED IN VOLUME 160, PAGE 64, D.R.C.C.T. (DOES NOT AFFECT ABANDONED BY INST. #132145, O.P.R.R.P.C.C.T.);
- 10m.) EASEMENT BETWEEN PLUM CREEK CONSERVATION DISTRICT AND CURTIS K. OWEN AND WIFE, EDITH OWEN RECORDED IN VOLUME 295, PAGE 344, D.R.C.C.T. (DOES NOT AFFECT AREA COVERED BY LAKE);
- 10n.) RIGHT-OF-WAY BETWEEN McMAHAN WATER SUPPLY CORPORATION AND ELIZABETH OWEN RECORDED IN VOLUME 311, PAGE 291, D.R.C.C.T. (DOES AFFECT BLANKET BY NATURE)
- 10o.) RIGHT-OF-WAY BETWEEN McMAHAN WATER SUPPLY CORPORATION AND CURTIS OWEN AND WIFE, EDITH R. OWEN RECORDED IN VOLUME 341, PAGE 292, D.R.C.C.T. (DOES NOT AFFECT BLANKET BY NATURE)
- 10p.) RIGHT-OF-WAY BETWEEN PLUM CREEK CONSERVATION DISTRICT AND VERMO ELLISON RECORDED IN VOLUME 345, PAGE 380, D.R.C.C.T. (DOES AFFECT)
- 10s.) EASEMENT BETWEEN THE CITY OF LOCKHART AND CURTIS OWEN AND WIFE EDITH OWEN RECORDED IN VOLUME 507, PAGE 614, D.R.C.C.T. (DOES NOT AFFECT)
- 10t.) EASEMENT BETWEEN BLUEBONNET ELECTRIC COOPERATIVE AND CURTIS K. OWEN RECORDED IN VOLUME 512, PAGE 110, O.P.R.R.P.C.C.T. (DOES NOT AFFECT BLANKET BY NATURE)
- 10u.) BILL OF SALE & PARTIAL RELEASE BETWEEN EXXONMOBIL PIPELINE COMPANY AND JKW FAMILY LIMITED PARTNERSHIP RECORDED IN INST. #132145, O.P.R.R.P.C.C.T. (DOES AFFECT THIS INSTRUMENT ABANDONED PIPELINE EASEMENTS RECORDED IN VOLUME 159, PAGE 604 AND VOLUME 160, PAGE 64 - SEE ITEMS 10J AND 10K ABOVE)
- 10v.) EASEMENT BETWEEN BLUEBONNET ELECTRIC COOPERATIVE AND JOE WELLS RECORDED IN INST. #132510, O.P.R.R.P.C.C.T. (DOES AFFECT BLANKET BY NATURE)
- 10w.) 15' WIDE EASEMENT BETWEEN AQUA WATER SUPPLY CORPORATION AND CURTIS K. OWEN ET AL RECORDED IN INST. #2017-001867, O.P.R.C.C.T. (DOES NOT AFFECT BLANKET BY NATURE)
- 10x.) EASEMENT BETWEEN BLUEBONNET ELECTRIC COOPERATIVE AND JKW FAMILY LP JOE K. WELLS, JR. GP RECORDED IN INST. #2017-005007, O.P.R.C.C.T. (DOES AFFECT BLANKET BY NATURE)



LOCATION MAP  
NOT TO SCALE



PARENT TRACT  
20.436 ACRES



5.079 ACRES  
(221,248 SQ. FT. MORE OR LESS)  
90' WIDE PERMANENT EASEMENT



200 W. Hwy 6, Suite 620, Waco, Texas 76712  
254.772.9272 TBPLS 10194124

Date: Sep 17, 2019, 2:36pm User ID: mthalling  
File G:\Projects\ARWA1800532-Alliance Water\SURVEY\SEGMENT A TITLES - Caldwell County\A018C\EXHIBIT EASEMENT\A018C PE\_B.dwg



**Legal Description**  
**5.079 Acres (221,248 Square Foot)**  
**90 Foot Wide Permanent Easement**

BEING A 5.079 ACRE, 90 FOOT WIDE PERMANENT EASEMENT, SITUATED IN THE J. D. SOWELL SURVEY, ABSTRACT NO. 266, CALDWELL COUNTY, TEXAS, AND BEING A PORTION OF A 20.436 ACRE TRACT OF LAND CALLED TRACT I DESCRIBED IN DEED TO JKW FAMILY LIMITED PARTNERSHIP, AS RECORDED IN VOLUME 165, PAGE 376 OF THE OFFICIAL PUBLIC RECORDS OF REAL PROPERTY OF CALDWELL COUNTY, TEXAS (O.P.R.R.P.C.C.T). SAID 5.079 ACRE 90 FOOT WIDE PERMANENT EASEMENT BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

**BEGINNING** at a 30 inch Post Oak Tree found being the southeast corner of said 20.436 acre tract also being the northeast corner of a called 87.06 acre tract of land described in a deed to E. J. Haidusek and wife, Bobbie Mitchell Haidusek, as recorded in Volume 320, Page 833, of said (O.P.R.R.P.C.C.T), and a point on the west line of a 236.87 acre tract of land called Tract III described in a deed to JKW Family Limited Partnership, as recorded in Volume 165, Page 376, of said (O.P.R.R.P.C.C.T), and the southeast corner hereof;

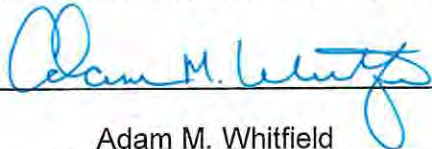
**THENCE** S 89° 27' 21" W, along the common line of said 20.436 acre tract and said 87.06 acre tract, a distance of 2,453.19 feet a point on the east line of County Road 198 (40 feet wide), being the southwest corner of said 20.436 acre tract and the northwest corner of said 87.06 acre tract. From which an 8 inch creosote fence corner post found, bears S89° 27' 21" W, a distance of 1.14 feet;

**THENCE** N 07° 21' 17" W, along the common west line of said 20.436 acre tract and said County Road 198, a distance of 90.64 feet, to a point for the northwest corner hereof;

**THENCE** N 89° 27' 21" E, leaving said common line over and across said 20.436 acre tract, a distance of 2,463.19 feet, to a point on the east line of said 20.436 acre tract and the west line of said 236.87 acre tract for the northeast corner hereof;

**THENCE** S 01° 01' 04" E, along the common line of said 20.436 acre tract and said 236.87 acre tract, a distance of 90.01 feet, to the **POINT OF BEGINNING** and containing 5.079 acres, more or less.

The bearings shown hereon are based on the Texas Coordinate System, South Central Zone, NAD 83/2011. All distances shown are in U.S. Survey Feet and may be converted to grid by applying the combined scale factor of 1.00013.

  
Adam M. Whitfield

Registered Professional Land Surveyor  
Texas Registration Number 5786

Date: 9-13-19

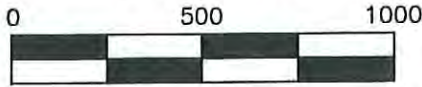
September 13, 2019





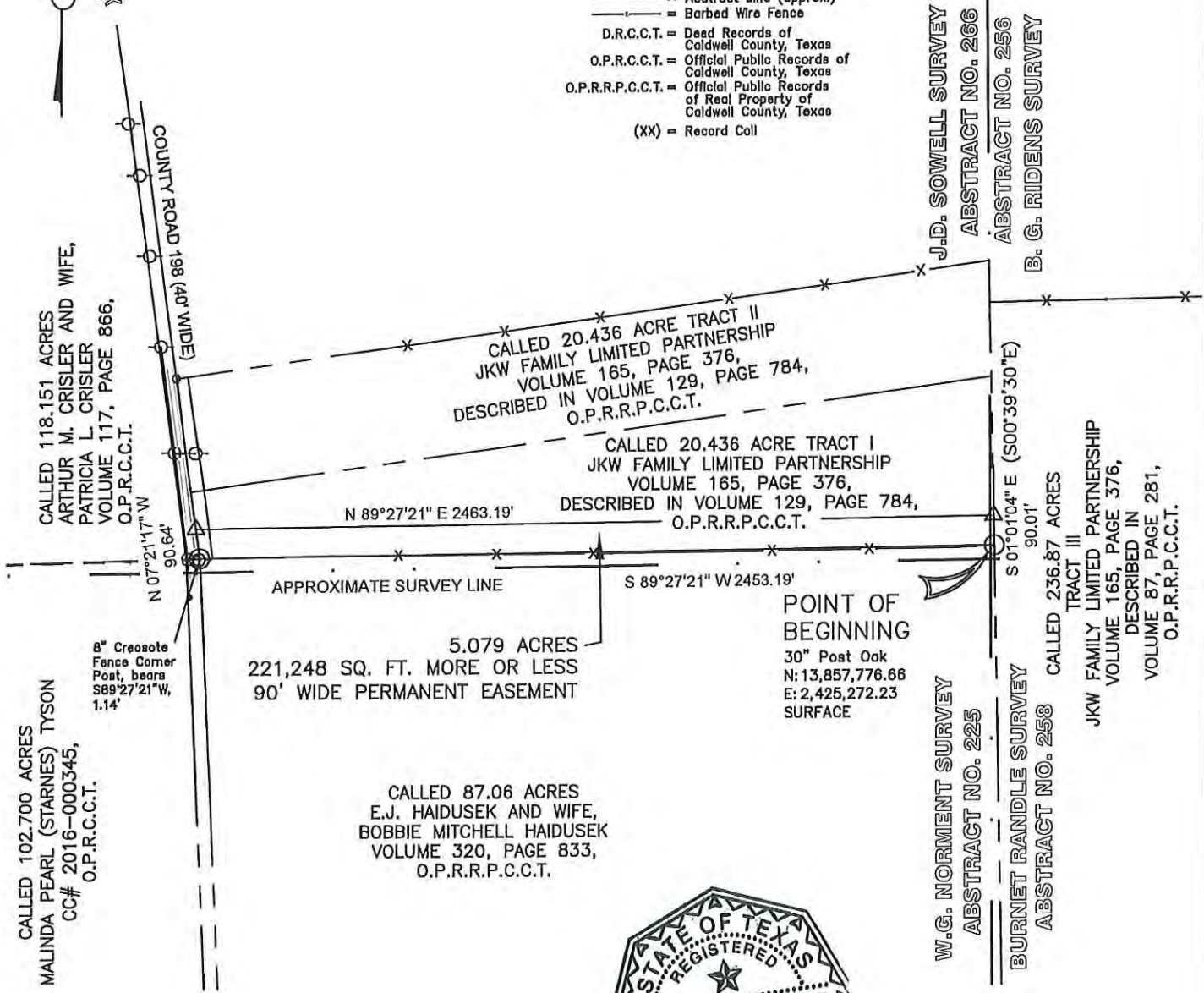
PARCEL A018C\_B  
CALDWELL COUNTY, TEXAS  
ALLIANCE WATER PH 1B  
EXHIBIT A

SCALE: 1"=500'



LEGEND

- △ = Calculated Point
- = Boundary Monument As Noted
- = Proposed Permanent Easement
- = Adjoining Boundary (approx.)
- = Abstract Line (approx.)
- = Barbed Wire Fence
- D.R.C.C.T. = Dead Records of Caldwell County, Texas
- O.P.R.C.C.T. = Official Public Records of Caldwell County, Texas
- O.P.R.R.P.C.C.T. = Official Public Records of Real Property of Caldwell County, Texas
- (XX) = Record Call



200 W. Hwy 6, Suite 620, Waco, Texas 76712  
254.772.9272 TBPLS 10194124



To the best of my knowledge, information, and belief, the plat hereon is a correct representation of the property as determined by a survey made on the ground February, 2019, the lines and dimensions of said property being as indicated by the plat. This survey substantially complies with the current Texas Society of Professional Surveyors standards and specifications.

Date: September 13, 2019

*Adam M. Whitfield*  
ADAM M. WHITFIELD, RPLS NO. 5786

Date: Sep 12, 2019, 9:51am User ID: mhalling File G:\Projects\ARWA1800532-Alliance Water\SURVEY\SEGMENT A TITLES - Caldwell County\A018C\EXHIBIT EASEMENT\A018C PE\_B.dwg

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**REGULAR MEETING**  
**Alliance Regional Water Authority Board of Directors**

**BOARD MEMBER PACKETS**

Wednesday, March 25, 2020 at 3:00 P.M.

Conference Call Number: 1-903-405-2572; Code: 995 024 086#

- F. Consideration of Resolution 2020-03-25-005 finding Public Convenience and Necessity and authorizing Eminent Domain Proceedings, if necessary, for acquisitions of a Permanent Easement totaling 2.782 acres located in the James George Survey, Abstract No. 9, Caldwell County, Texas, establishing an effective date; and finding and determining that the meeting at which this Resolution is passed was noticed and is open to the public as required by law.*
- 

Attachment(s)

- Resolution 2020-03-25-005

**Board Decision(s) Needed:**

- Adoption of Resolution 2020-03-25-005.



## ALLIANCE WATER

### RESOLUTION NO. 2020-03-25-005

*Bonnie L. Hazelett – Parcel A033C 2.782 acre permanent Pipeline and Right-of-Way easement out of 72.282 acre tract*

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE ALLIANCE REGIONAL WATER AUTHORITY FINDING PUBLIC CONVENIENCE AND NECESSITY AND AUTHORIZING EMINENT DOMAIN PROCEEDINGS, IF NECESSARY, FOR ACQUISITION OF A PERMANENT EASEMENT TOTALING 2.782 ACRES LOCATED IN THE JAMES GEORGE SURVEY, ABSTRACT NO. 9, CALDWELL COUNTY, TEXAS, ESTABLISHING AN EFFECTIVE DATE; AND FINDING AND DETERMINING THAT THE MEETING AT WHICH THIS RESOLUTION IS PASSED WAS NOTICED AND IS OPEN TO THE PUBLIC AS REQUIRED BY LAW.

WHEREAS, in order to promote public health, safety, and welfare, ALLIANCE REGIONAL WATER AUTHORITY (“ARWA”) hereby finds that public convenience and necessity require acquisition of a permanent easement over a tract of land totaling 2.782 acre, 90 foot wide permanent Pipeline and Right-of-Way easement, situated in the James George Survey, Abstract No. 9, Caldwell County, Texas, and being a portion of that called 72.282 acre tract of land described in Deed to George Hazelett, as recorded in Volume 182, Page 89 of the Official Public Records of Caldwell County, Texas (O.P.R.C.C.T.) with the 2.782 acre parcel being more specifically described by metes and bounds in Exhibit “A” and also being referred to herein as the “Easement,” for the public use to construct, reconstruct, operate, inspect, and maintain a water transmission line and related facilities and improvements (the “Project”); and

WHEREAS, in order to effectuate the Project, it will be necessary and convenient that agents, representatives, or employees of ARWA lay out the Project, and acquire permanent and temporary easements from properties for the purpose of construction, reconstruction, operation, and maintenance of the Project; and

WHEREAS, it may be necessary to hire engineers, surveyors, appraisers, attorneys, title companies, architects, or other persons or companies to effect the laying out, establishment, and acquisition of land rights necessary to effectuate said Project; and

WHEREAS, in order to acquire the necessary land rights, it will be or has been necessary for ARWA's agents, representatives, or employees to enter upon the above-described property for the purpose of surveying and establishing said land titles and to determine adequate compensation for said land rights, to conduct tests, and to negotiate with the owners thereof for the purchase of necessary land rights; and

WHEREAS, it was necessary to set out procedures for the establishment and approval of just compensation for the necessary land rights to be acquired for the Project;

**NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF ALLIANCE REGIONAL WATER AUTHORITY:**

**SECTION 1.**

1. That in order to promote the public health, safety, and welfare, public convenience and necessity require ARWA's acquisition of a permanent easement for the public use for construction, reconstruction, operation, maintenance, inspection and repair of a water transmission line and appurtenances over that certain 2.782 acres (121,198 square foot) parcel of land described with particularity on Exhibit "A," attached and incorporated herein by reference as if fully set out.

2. That ARWA's agents, representatives, or employees are hereby authorized to:

- a. Lay out the exact location of the land area needed for the Easement;
- b. Hire such engineers, surveyors, appraisers, title companies, architects, and other persons or companies needed to effect the laying out of the facilities, the establishment and acquisition of easement rights and other rights necessary for the Project;
- c. Enter upon any property necessary for the purpose of surveying and establishing title, to determine adequate compensation for the necessary land rights, and to conduct tests;
- d. Negotiate with the owners of any such properties for the purchase thereof;
- e. To purchase any necessary easements and rights-of-way on, over, under and across the Easement and execute all documents necessary to acquire such necessary land rights, all subject to express approval of the specific, negotiated terms by ARWA;
- f. Initiate eminent domain proceedings against the owner(s) of the

Easement for acquisition thereof in the event the owner(s) fail to accept a bona fide offer to purchase the Easement; and

g. Take whatever further actions deemed appropriate to economically effect the establishment of the Project and appurtenances thereto.

3. That all previous acts and proceedings done or initiated by ARWA's agents, representatives, or employees for establishment of the Project, including the negotiation for and/or acquisition of any necessary property rights for the Easement are hereby authorized, ratified, approved, confirmed, and validated. This resolution shall take effect immediately from and after its passage.

SECTION 2. That it is hereby officially found and determined that the meeting at which this resolution is passed is open to the public and that public notice of the time, place, and purpose of said meeting was given as required by law.

PASSED AND APPROVED this the \_\_\_\_ day of \_\_\_\_\_ 2020.

**ALLIANCE REGIONAL WATER AUTHORITY**

---

Chris Betz  
Chair of the Board of Directors of  
ALLIANCE REGIONAL WATER AUTHORITY

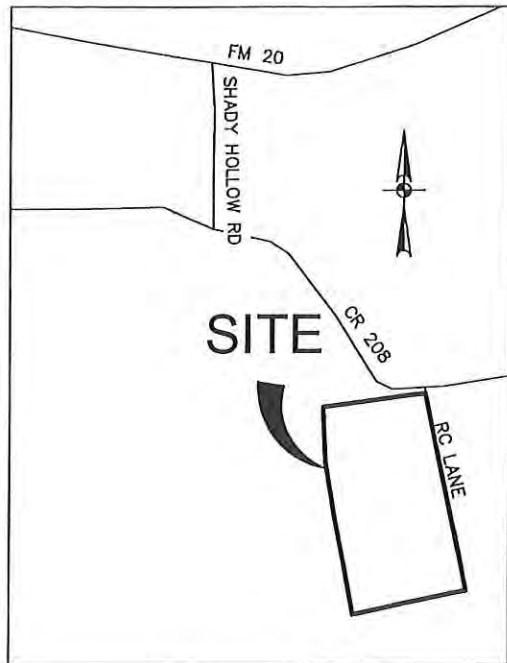
**ATTEST:**

---

James Earp  
Secretary of the Board of Directors of  
ALLIANCE REGIONAL WATER AUTHORITY

# Exhibit "A"

PARCEL A033C  
CALDWELL COUNTY, TEXAS  
ALLIANCE WATER PH 1B



LOCATION MAP  
NOT TO SCALE

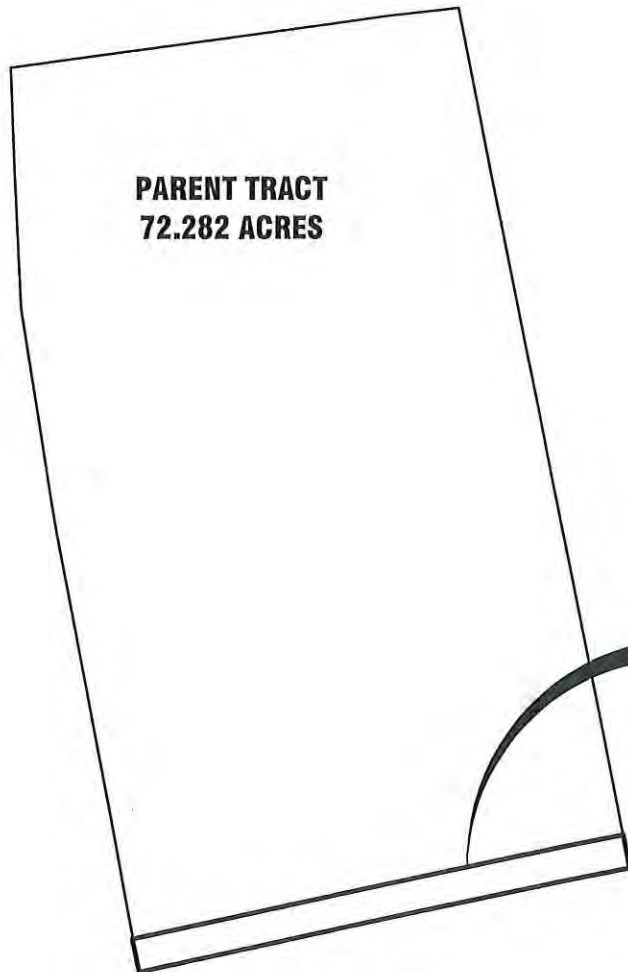
### NOTES:

1. THE PROFESSIONAL SERVICES PROVIDED HEREWITH INCLUDE THE PREPARATION OF A METES AND BOUNDS DESCRIPTION.
2. THE BEARINGS ARE BASED ON THE TEXAS COORDINATE SYSTEM ESTABLISHED FOR THE SOUTH CENTRAL ZONE FROM THE NORTH AMERICAN DATUM OF 1983 (NA2011) EPOCH 2010.00.
3. AREAS AND DISTANCES SHOWN ARE IN U.S. SURVEY FEET. TO CONVERT TO GRID, APPLY THE COMBINED SCALE FACTOR OF 1.00013.

### SCHEDULE B COMMENTS:

CHICAGO TITLE INSURANCE COMPANY  
GF NO. CAT-21-CTA1802673G  
ISSUE DATE: APRIL 29, 2019

- 10i.) TERMS AND CONDITIONS IN UTILITY EASEMENT VOLUME 290, PAGE 43 D.R.C.C.T. (DOES AFFECT BLANKET BY NATURE)
- 10j.) RIGHT OF WAY EASEMENT 85 FEET WIDE TO THE LOWER COLORADO RIVER AUTHORITY INST# 2169 (Volume 378, Page 543) D.R.C.C.T. (DOES AFFECT)
- 10k.) TERMS AND CONDITIONS IN UTILITY EASEMENT 30 FEET WIDE TO BLUEBONNET ELECTRIC COOPERATIVE INST# 945 (Volume 23, Page 393) D.R.C.C.T. (DOES AFFECT)



**2.782 ACRES  
(121,198 SQ. FT. MORE OR LESS)  
90' WIDE PERMANENT EASEMENT**



200 W. Hwy 6, Suite 620, Waco, Texas 76712  
254.772.9272 TBPLS 10194124



**Legal Description  
2.782 Acres (121,198 Square Foot)  
90 Foot Wide Permanent Easement**

BEING A 2.782 ACRE, 90 FOOT WIDE PERMANENT EASEMENT, SITUATED IN THE JAMES GEORGE SURVEY, ABSTRACT NO. 9, CALDWELL COUNTY, TEXAS, AND BEING A PORTION OF THAT CALLED 72.282 ACRE TRACT OF LAND DESCRIBED IN DEED TO GEORGE HAZELETT, AS RECORDED IN VOLUME 182, PAGE 89 OF THE OFFICIAL PUBLIC RECORDS OF CALDWELL COUNTY, TEXAS (O.P.R.C.C.T.). SAID 2.782 ACRE 90 FOOT WIDE PERMANENT EASEMENT BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

**BEGINNING** at a 4 inch wood fence corner post found at the southeast corner of said 72.282 acre tract, and the southwest corner of that called 121 acre tract of land described as "First Tract" in Deed to Raymond G. Henderson and Carolyn V. Henderson, as recorded under County Clerks No. 2018-003195 of said (O.P.R.C.C.T), also being a point on the north line of that called 218.82 acre tract of land as described in deed to Raymond G. Henderson and wife Carolyn V. Henderson, as recorded in Volume 516, Page 159 of the Deed Records of Caldwell County, Texas (D.R.C.C.T.), and the southeast corner hereof;

**THENCE** S 78° 33' 33" W, along the common line of said 72.282 and 218.82 acre tracts, and generally along a fence, passing at a distance of 166.22 feet the northwest corner of said 218.82 acre tract said point also being the northeast corner of that called 121 acre tract, described in Deed to Raymond G. Henderson and Carolyn V. Henderson, as recorded under County Clerk's File Number 2018-003195 of said (O.P.R.C.C.T). Continuing along the common line of said 72.282 and 121 acre tracts in all a total distance of 239.61 feet to a 4 inch fence post found being an angle point on the common line of said 72.282 and 121 acre tracts;

**THENCE** along the common line of said 72.282 and 121 acre tracts, and generally along a fence the following two (2) courses and distances:

1. S 78° 09' 28" W, a distance of 662.59 feet, to a point for corner;
2. S 77° 53' 56" W, passing at a distance of 204.38 feet the northwest corner of said 121 acre tract and the northeast corner of that called 133-1/2 acre tract of land described as "Tract 1" in Deed to James H. Haun, as recorded in Volume 321, Page 73 of said (D.R.C.C.T.). Continuing along the common line of said 72.282 and 133-1/2 acre tracts in all a total distance of 444.94 feet, to a 4 inch wood fence corner post found being the southwest corner of said 72.282 acre parcel, the southeast corner of that called 24 acre tract of land described in Deed as "Tract 2" to James H. Haun, as recorded in Volume 321, Page 73 of said (D.R.C.C.T.), and the southwest corner hereof;

**THENCE** N 10° 53' 21" W, along the along the common line of said 72.282 and 24 acre tracts a distance of 90.02 feet, to a point for the northwest corner hereof. From which a 8 inch wood fence post found being an angle point in the West line of said 72.282 acre parcel also being the northeast corner of said 24 acre tract bears N 10° 53' 21" W, a distance of 1093.29 feet;

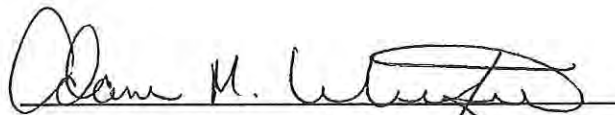


**THENCE** departing said common line, over and across said 72.282 acre tract the following three (3) courses and distances:

1. N 77° 53' 56" E, a distance of 443.24 feet, to a point for corner;
2. N 78° 09' 28" E, a distance of 663.11 feet, to a point for corner;
3. N 78° 33' 33" E, a distance of 239.79 feet, to a point on the common line of said 72.282 and 121 acre tracts for the northeast corner hereof;

**THENCE** S 11° 31' 44" E, along said common line, a distance of 90.00 feet, to the **POINT OF BEGINNING** and containing 2.782 acres, more or less.

The bearings shown hereon are based on the Texas Coordinate System, South Central Zone, NAD 83/2011. All distances shown are in U.S. Survey Feet and may be converted to grid by applying the combined scale factor of 1.00013.



Adam M. Whitfield  
Registered Professional Land Surveyor  
Texas Registration Number 5786

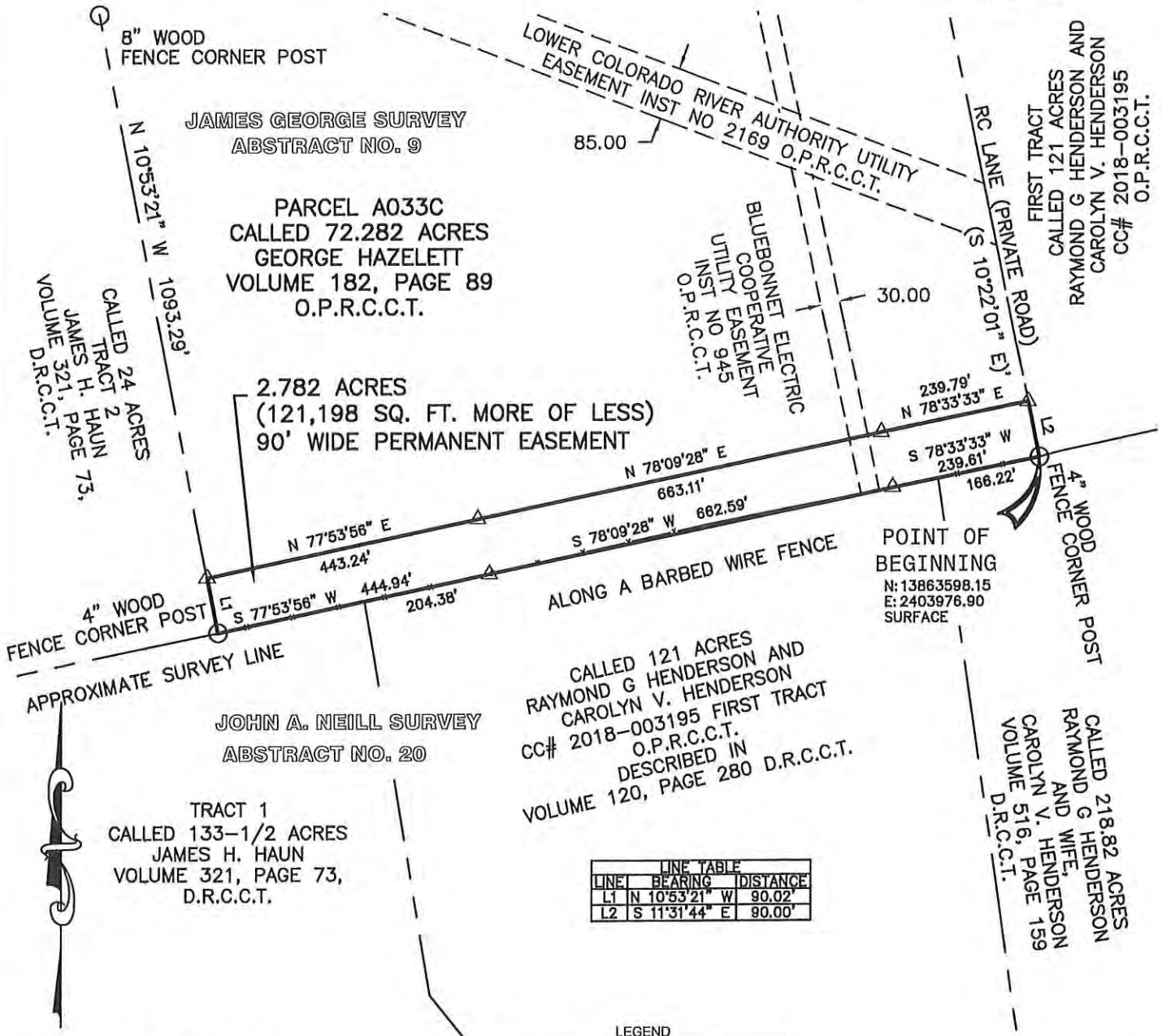
Date: 07.29.2019

July 29, 2019





PARCEL A033C  
CALDWELL COUNTY, TEXAS  
ALLIANCE WATER PH 1B  
EXHIBIT A



PARCEL A033C  
CALLED 72.282 ACRES  
GEORGE HAZELETT  
VOLUME 182, PAGE 89  
O.P.R.C.C.T.

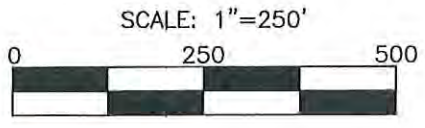
2.782 ACRES  
(121,198 SQ. FT. MORE OF LESS)  
90' WIDE PERMANENT EASEMENT

CALLLED 121 ACRES  
RAYMOND G HENDERSON AND  
CAROLYN V. HENDERSON  
CC# 2018-003195 FIRST TRACT  
O.P.R.C.C.T.  
DESCRIBED IN  
VOLUME 120, PAGE 280 D.R.C.C.T.

TRACT 1  
CALLED 133-1/2 ACRES  
JAMES H. HAUN  
VOLUME 321, PAGE 73,  
D.R.C.C.T.

LINE	BEARING	DISTANCE
L1	N 10°53'21" W	90.02
L2	S 11°31'44" E	90.00'

- LEGEND
- △ = Calculated Point
  - = Proposed Permanent Easement
  - - - = Adjoining Boundary (approx.)
  - · · = Abstract Line (approx.)
  - x- = Barbed Wire Fence
  - O.P.R.C.C.T. = Official Public Records  
Caldwell County, Texas
  - D.R.C.C.T. = Deed Records Caldwell  
County, Texas
  - (XX) = Record Call



200 W. Hwy 6, Suite 620, Waco, Texas 76712  
254.772.9272 TBPLS 10194124

To the best of my knowledge, information, and belief, the plat hereon is a correct representation of the property as determined by a survey made on the ground February, 2019, the lines and dimensions of said property being as indicated by the plat. This survey substantially complies with the current Texas Society of Professional Surveyors standards and specifications.  
Date: July 29, 2019  
ADAM M. WHITFIELD, RPLS No. 5786

Date: Jul 29, 2019, 4:43pm User ID: whitfield File: G:\Projects\ARWA1800532-Alliance Water\SURVEY\SEGMENT A TITLES - Caldwell County\EXHIBIT EASEMENT\A033C PE.dwg

**REGULAR MEETING**  
**Alliance Regional Water Authority Board of Directors**

**BOARD MEMBER PACKETS**

Wednesday, March 25, 2020 at 3:00 P.M.

Conference Call Number: 1-903-405-2572; Code: 995 024 086#

- G. *Consideration of Resolution 2020-03-25-006 finding Public Convenience and Necessity and authorizing Eminent Domain Proceedings, if necessary, for acquisitions of a Permanent Easement totaling 3.574 acres located in the John A. Neill Survey, Abstract No. 20, Caldwell County, Texas, establishing an effective date; and finding and determining that the meeting at which this Resolution is passed was noticed and is open to the public as required by law.*
- 

Attachment(s)

- Resolution 2020-03-25-006

**Board Decision(s) Needed:**

- Adoption of Resolution 2020-03-25-006.



## ALLIANCE WATER

### RESOLUTION NO. 2020-03-25-006

*William R. Clark, aka William Robert Clark and Spouse, Anne  
J. Clark - Parcel A039C 3.574 acre permanent Pipeline and  
Right-of-Way easement out of 254.813 acre tract*

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE ALLIANCE REGIONAL WATER AUTHORITY FINDING PUBLIC CONVENIENCE AND NECESSITY AND AUTHORIZING EMINENT DOMAIN PROCEEDINGS, IF NECESSARY, FOR ACQUISITION OF A PERMANENT EASEMENT TOTALING 3.574 ACRES LOCATED IN THE JOHN A. NEILL SURVEY, ABSTRACT NO. 20, CALDWELL COUNTY, TEXAS, AND ESTABLISHING AN EFFECTIVE DATE; AND FINDING AND DETERMINING THAT THE MEETING AT WHICH THIS RESOLUTION IS PASSED WAS NOTICED AND IS OPEN TO THE PUBLIC AS REQUIRED BY LAW.

WHEREAS, in order to promote public health, safety, and welfare, ALLIANCE REGIONAL WATER AUTHORITY (“ARWA”) hereby finds that public convenience and necessity require acquisition of a permanent easement over a tract of land totaling 3.574 acre, 90 foot wide permanent Pipeline and Right-of-Way easement, situated in the John A. Neill Survey, Abstract No. 20, Caldwell County, Texas, and being a portion of a called 254.813 acre tract of land described in Deed to William R. Clark and Anne J. Clark, as recorded in County Clerks file No. 2013-132443 of the Official Property Records of Caldwell County, Texas (O.P.R.C.C.T) with the 3.574 acre parcel being more specifically described by metes and bounds in Exhibit “A” and also being referred to herein as the “Easement,” for the public use to construct, reconstruct, operate, inspect, and maintain a water transmission line and related facilities and improvements (the “Project”); and

WHEREAS, in order to effectuate the Project, it will be necessary and convenient that agents, representatives, or employees of ARWA lay out the Project, and acquire permanent and temporary easements from properties for the purpose of construction, reconstruction, operation, and maintenance of the Project; and

WHEREAS, it may be necessary to hire engineers, surveyors, appraisers, attorneys, title companies, architects, or other persons or companies to effect the laying out, establishment, and acquisition of land rights necessary to effectuate said Project; and

WHEREAS, in order to acquire the necessary land rights, it will be or has been necessary for ARWA's agents, representatives, or employees to enter upon the above-described property for the purpose of surveying and establishing said land titles and to determine adequate compensation for said land rights, to conduct tests, and to negotiate with the owners thereof for the purchase of necessary land rights; and

WHEREAS, it was necessary to set out procedures for the establishment and approval of just compensation for the necessary land rights to be acquired for the Project;

**NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF ALLIANCE REGIONAL WATER AUTHORITY:**

**SECTION 1.**

1. That in order to promote the public health, safety, and welfare, public convenience and necessity require ARWA's acquisition of a permanent easement for the public use for construction, reconstruction, operation, maintenance, inspection and repair of a water transmission line and appurtenances over that certain 3.574 acre parcel of land described with particularity on Exhibit "A," attached and incorporated herein by reference as if fully set out.

2. That ARWA's agents, representatives, or employees are hereby authorized to:

- a. Lay out the exact location of the land area needed for the Easement;
- b. Hire such engineers, surveyors, appraisers, title companies, architects, and other persons or companies needed to effect the laying out of the facilities, the establishment and acquisition of easement rights and other rights necessary for the Project;
- c. Enter upon any property necessary for the purpose of surveying and establishing title, to determine adequate compensation for the necessary land rights, and to conduct tests;
- d. Negotiate with the owners of any such properties for the purchase thereof;
- e. To purchase any necessary easements and rights-of-way on, over, under and across the Easement and execute all documents necessary to acquire such necessary land rights, all subject to express approval of the specific, negotiated terms by ARWA;
- f. Initiate eminent domain proceedings against the owner(s) of the

Easement for acquisition thereof in the event the owner(s) fail to accept a bona fide offer to purchase the Easement; and

g. Take whatever further actions deemed appropriate to economically effect the establishment of the Project and appurtenances thereto.

3. That all previous acts and proceedings done or initiated by ARWA's agents, representatives, or employees for establishment of the Project, including the negotiation for and/or acquisition of any necessary property rights for the Easement are hereby authorized, ratified, approved, confirmed, and validated. This resolution shall take effect immediately from and after its passage.

SECTION 2. That it is hereby officially found and determined that the meeting at which this resolution is passed is open to the public and that public notice of the time, place, and purpose of said meeting was given as required by law.

PASSED AND APPROVED this the \_\_\_\_ day of \_\_\_\_\_ 2020.

**ALLIANCE REGIONAL WATER AUTHORITY**

---

Chris Betz  
Chair of the Board of Directors of  
ALLIANCE REGIONAL WATER AUTHORITY

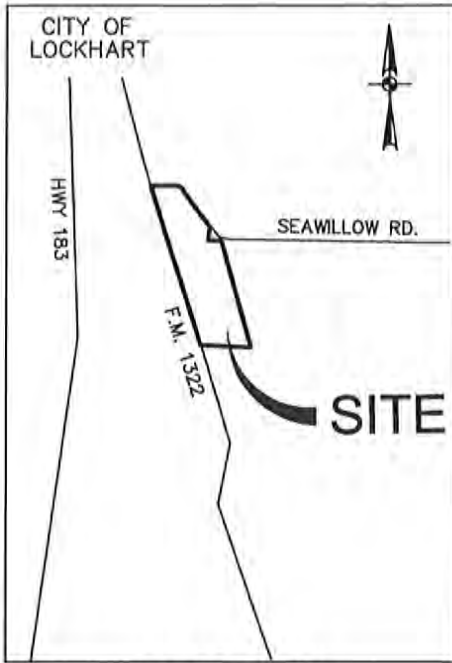
**ATTEST:**

---

James Earp  
Secretary of the Board of Directors of  
ALLIANCE REGIONAL WATER AUTHORITY

# Exhibit "A"

PARCEL A039C  
CALDWELL COUNTY, TEXAS  
ALLIANCE WATER PH 1B



**LOCATION MAP**  
NOT TO SCALE

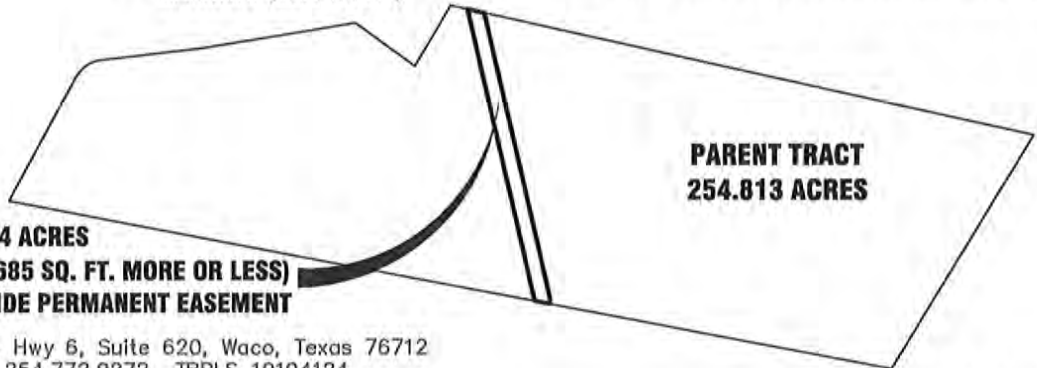
**NOTES:**

1. THE PROFESSIONAL SERVICES PROVIDED HERewith INCLUDE THE PREPARATION OF A METES AND BOUNDS DESCRIPTION.
2. THE BEARINGS ARE BASED ON THE TEXAS COORDINATE SYSTEM ESTABLISHED FOR THE SOUTH CENTRAL ZONE FROM THE NORTH AMERICAN DATUM OF 1983 (NA2011) EPOCH 2010.00.
3. AREAS AND DISTANCES SHOWN ARE IN U.S. SURVEY FEET. TO CONVERT TO GRID, APPLY THE COMBINED SCALE FACTOR OF 1.00013.
4. ANY UTILITIES SHOWN ON THIS SURVEY ARE BASED UPON VISIBLE ABOVE GROUND LOCATION ONLY. ALL UNDERGROUND UTILITIES HAVE NOT BEEN VERIFIED NEITHER ANY SUBSURFACE UTILITY ENGINEERING LEVELS A-D WERE PERFORMED BY CP&Y. THERE MAY BE ADDITIONAL UTILITIES THAT CP&Y HAS NOT BEEN ADVISED OF.

**SCHEDULE B COMMENTS:**

CHICAGO TITLE INSURANCE COMPANY  
GF NO. CTA-21-CTA1802661G  
ISSUE DATE: APRIL 5, 2019

- 10k.) RIGHT-OF-WAY EASEMENT BETWEEN GRAYBERG PIPELINE COMPANY AND J.T. CONNOLLY ESTATE VOLUME 102, PAGE 122 D.R.C.C.T. (DOES AFFECT ALONG PIPE AS INSTALLED);
- 10l.) RIGHT-OF-WAY EASEMENT BETWEEN SHELL PIPE LINE CORP AND R.H. PARRISH VOLUME 138, PAGE 167 D.R.C.C.T. (DOES AFFECT ALONG PIPE AS INSTALLED);
- 10m.) RIGHT-OF-WAY EASEMENT BETWEEN TEXAS POWER AND LIGHT COMPANY AND F.C. RICHARDS VOLUME 171, PAGE 561 D.R.C.C.T. (DOES NOT AFFECT);
- 10n.) RIGHT-OF-WAY EASEMENT BETWEEN TEXAS POWER AND LIGHT COMPANY AND F.C. RICHARDS VOLUME 184, PAGE 56 D.R.C.C.T. (DOES AFFECT);
- 10o.) RIGHT-OF-WAY EASEMENT BETWEEN TEXAS POWER AND LIGHT COMPANY W.T. DEATON VOLUME 175, PAGE 57 D.R.C.C.T. (DOES AFFECT ALONG PIPE AS INSTALLED);
- 10p.) RIGHT-OF-WAY BETWEEN H.W. BENNER, ET AL AND DOW PUCKETT VOLUME 245, PAGE 500 D.R.C.C.T. (DOES AFFECT);
- 10q.) EASEMENT BETWEEN HUMBLE PIPE LINE COMPANY AND JAMES V. HILLIARD JR ET AL VOLUME 291, PAGE 572 D.R.C.C.T. (DOES AFFECT ALONG PIPE AS INSTALLED);
- 10r.) RIGHT-OF-WAY BETWEEN HUMBLE PIPE LINE COMPANY AND DOW PUCKETT VOLUME 291, PAGE 577 D.R.C.C.T. (DOES AFFECT AS SHOWN);
- 10s.) EASEMENT BETWEEN POLONIA WATER SUPPLY AND JAMES T. BUFKIN VOLUME 346, PAGE 27 & VOLUME 352, PAGE 396 D.R.C.C.T. (DOES NOT AFFECT);
- 10t.) EASEMENT BETWEEN POLONIA WATER SUPPLY AND JAMES T. BUFKIN VOLUME 347, PAGE 109 D.R.C.C.T. (DOES NOT AFFECT);
- 10u.) EASEMENT BETWEEN POLONIA WATER SUPPLY AND JAMES T. BUFKIN VOLUME 347, PAGE 110 D.R.C.C.T. (DOES NOT AFFECT);
- 10v.) RIGHT-OF-WAY BETWEEN ARKANSAS LOUISIANA GAS COMPANY AND JAMES T. BUFKIN VOLUME 359, PAGE 471 D.R.C.C.T. (UNABLE TO LOCATE DUE TO AMBIGUOUS BLANKET DESCRIPTION);
- 10w.) RIGHT-OF-WAY EASEMENT BETWEEN POLONIA WATER SUPPLY AND JAMES T. BUFKIN VOLUME 395, PAGE 643 D.R.C.C.T. (DOES NOT AFFECT);
- 10x.) WARRANTY DEED BETWEEN POLONIA WATER SUPPLY AND JAMES T. BUFKIN VOLUME 463, PAGE 407 D.R.C.C.T. (DOES NOT AFFECT);
- 10y.) RELEASE OF EASEMENT EXECUTED BY POLONIA WATER SUPPLY VOLUME 268, PAGE 882 D.R.C.C.T. RELEASING EASEMENT VOLUME 347, PAGE 109 (10t) (DOES NOT AFFECT);
- 10z.) PIPELINE EASEMENT BETWEEN GUADALUPE-BLANCO RIVER AUTHORITY AND DAVID E. HOOD VOLUME 382, PAGE 645 O.P.R.C.C.T. (DOES AFFECT);
- 10ab.) RIGHT-OF-WAY BETWEEN S.L. HURWITZ, TRUSTEE AND JAMES T. BUFKIN VOLUME 484, PAGE 765 O.P.R.C.C.T. (DOES AFFECT)



200 W. Hwy 6, Suite 620, Waco, Texas 76712  
254.772.9272 TBPLS 10194124



Date: Sep 12, 2019, 8:33am User ID: omhfield  
File: G:\Projects\ARWA1800532-Alliance Water\SURVEY\SEGMENT A TITLES - Caldwell County\A039C (Same as B001C)\EXHIBIT EASEMENT\A039C\_R01 Easement.dwg



**Legal Description  
3.574 Acre (155,685 Square Foot)  
90 Foot Wide Permanent Easement**

BEING A 3.574 ACRE, 90 FOOT WIDE PERMANENT EASEMENT, SITUATED IN THE JOHN A. NEILL SURVEY, ABSTRACT NO. 20, CALDWELL COUNTY, TEXAS, AND BEING A PORTION OF A CALLED 254.813 ACRE TRACT OF LAND DESCRIBED IN DEED TO WILLIAM R. CLARK AND ANNE J. CLARK, AS RECORDED IN COUNTY CLERKS FILE NO. 2013-132443 OF THE OFFICIAL PROPERTY RECORDS OF CALDWELL COUNTY, TEXAS (O.P.R.C.C.T.). SAID 3.574 ACRE 90 FOOT WIDE PERMANENT EASEMENT BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

**BEGINNING** at a point in the east line of said 254.813 tract and the common west line of a called 358.536 acre tract of land described in deed to David Acevedo, et al, as recorded in Volume 209, Page 425 of the said O.P.R.C.C.T. for the northwest corner of the herein described tract. From which a 1/2 inch iron rod found in the south line of that called 2.606 acre tract of land described in deed to Ray C. Nash and wife Helen K. Nash as recorded in Volume 76, Page 743, of the Deed Records of Caldwell County, Texas (D.R.C.C.T.) for the westerly northwest corner of said Acevedo tract bears N 29°54'59" W, a distance of 101.10 feet;

**THENCE** S 29°54'59" E (record call is S 29°10' E), along the common line of said 254.813 and 358.536 acre tracts, a distance of 99.82 feet, to a point for the northeast corner hereof, from which a 1/2 inch iron rod found with cap stamped "HINKLE SURVEYORS" bears S 29°54'48" E, a distance of 3,260.83 feet;

**THENCE** departing said common line, over and across said Clark tract the following two (2) courses and distances:

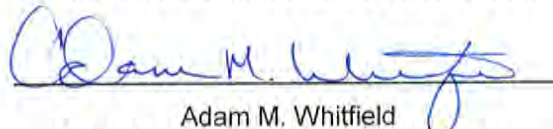
- 1.) S 34°27'02" W, a distance of 1,702.00 feet to a point for the southeast corner hereof;
- 2.) S 58°08'11" W, a distance of 25.26 feet, to a point lying in the northeast right-of-way (ROW) of F.M. 1322 (having an 80 foot wide ROW) and the west line of said 254.813 acre tract for corner;

**THENCE** N 31°42'07" W, with common line of said right-of-way and 254.813 acre tract, a distance of 90.00 feet, to a point for the westerly southwest corner hereof, from which a 1/2 inch iron rod found for the westerly northwest corner of said 254.813 tract bears N 31°42'07" W, a distance of 3,102.97 feet;

**THENCE** departing said northeast ROW, over and across said 254.813 tract the following two (2) courses and distances:

- 1.) N 58°08'11" E, a distance of 6.14 feet to a point for corner;
- 2.) N 34°27'02" E, a distance of 1,726.31 feet, to the **POINT OF BEGINNING** and containing 3.574 acres, more or less.

The bearings shown hereon are based on the Texas Coordinate System, South Central Zone, NAD 83/2011. All distances are in U.S. Survey Feet and may be converted to grid by applying the combined scale factor of 1.00013.



Adam M. Whitfield  
Registered Professional Land Surveyor  
Texas Registration Number 5786

Date: 9-12-19

September 12, 2019

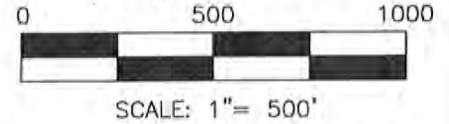


PARCEL A039C  
CALDWELL COUNTY, TEXAS  
ALLIANCE WATER PH 1B

TRACT TWO  
CALLED 13.6 ACRES  
JOAN MARIE GABRIEL  
CC# 2011-115417  
O.P.R.C.C.T.

1/2" IRF  
HINKLE  
SURVEYORS  
RIGHT-OF-WAY EASEMENT  
VOLUME 484, PAGE 785

LINE	BEARING	DISTANCE
L1	N 29°54'59" W	101.10'
L2	S 29°54'59" E	99.82'
L3	S 58°08'11" W	25.26'
L4	N 31°42'07" W	90.00'
L5	N 58°08'11" E	6.14'



CALLLED 45.094 ACRES  
HAZELETT LEASE SERVICES, INC.  
CC# 2011-111836,  
O.P.R.C.C.T.

REMAINDER OF  
CALLED 254.813 ACRES  
WILLIAM R. & ANNE J. CLARK  
CC# 2013-132443  
O.P.R.C.C.T.

CALLLED 2.606 ACRES  
RAY C. NASH & WIFE  
HELEN K. NASH  
VOLUME 76, PAGE 743  
D.R.C.C.T.

RIGHT-OF-WAY EASEMENT  
VOLUME 245, PAGE 500

P.O.B.  
N: 13861886.07  
E: 2396743.35  
SURFACE

CALLLED 358.536 ACRES  
DAVID V. ACEVEDO, ET AL  
VOLUME 209, PAGE 425  
O.P.R.C.C.T.

F.M. 1322 (80' wide ROW)  
ESTHER BERRY SURVEY  
ABSTRACT NO. 1

JAMES GEORGE SURVEY  
ABSTRACT NO. 9

JOHN A. NEILL SURVEY  
ABSTRACT NO. 20

PIPELINE EASEMENT  
TO HUMBLE PIPE LINE CO.  
VOLUME 291, PAGE 572  
D.R.C.C.T.

45' WIDE PIPELINE EASEMENT  
TO HUMBLE PIPE LINE CO.  
VOLUME 291, PAGE 577  
D.R.C.C.T.

ASPHALT PAVEMENT

OVERHEAD  
ELECTRIC LINES

**LEGEND**

- △ = CALCULATED POINT
- = IRON ROD FOUND  
UNLESS OTHERWISE NOTED
- ⊗ = POWER POLE
- ⊙ = BURIED PHONE SIGN
- ( ) = DEED/RECORD CALL
- O.P.R.C.C.T. = OFFICIAL PROPERTY  
RECORDS CALDWELL  
COUNTY, TEXAS
- D.R.C.C.T. = DEED RECORDS CALDWELL  
COUNTY, TEXAS

Approximate location of pipeline  
based on above  
signs only

**3.574 ACRES**  
**(155,685 SQ. FT.)**  
**MORE OR LESS**  
**90' WIDE**  
**PERMANENT EASEMENT**



200 W. Hwy 6, Suite 620, Waco, Texas 76712  
254.772.9272 TBPLS 10194124

To the best of my knowledge, information, and belief, the plat hereon is a correct representation of the property as determined by a survey made on the ground February, 2019, the lines and dimensions of said property being as indicated by the plat. This survey substantially complies with the current Texas Society of Professional Surveyors standards and specifications.

Date: September 12, 2019

ADAM M. WHITFIELD, RPLS NO. 5786



Date: Sep 12, 2019, 8:31am User: c:\amh\field File: c:\projects\ARWA1800532-Alliance Water\SURVEY\SEGMENT A TITLES - Caldwell County\A039C (Same as B001C)\EXHIBIT EASEMENT\A039C Easement.dwg



**REGULAR MEETING**  
**Alliance Regional Water Authority Board of Directors**

**BOARD MEMBER PACKETS**

Wednesday, March 25, 2020 at 3:00 P.M.

Conference Call Number: 1-903-405-2572; Code: 995 024 086#

- H. *Consideration of Resolution 2020-03-25-007 finding Public Convenience and Necessity and authorizing Eminent Domain Proceedings, if necessary, for acquisitions of a Permanent Easement totaling 1.555 acres located in the Esther Berry Survey, Abstract No. 1, Caldwell County, Texas, establishing an effective date; and finding and determining that the meeting at which this Resolution is passed was noticed and is open to the public as required by law.*
- 

Attachment(s)

- Resolution 2020-03-25-007

**Board Decision(s) Needed:**

- Adoption of Resolution 2020-03-25-007.



## ALLIANCE WATER

### RESOLUTION NO. 2020-03-25-007

*Shermie L. Allen and Spouse, Barbara A. Allen - Parcel B057C  
1.555 acre permanent Pipeline Right-of-Way  
easement out of 97.39 acre tract*

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE ALLIANCE REGIONAL WATER AUTHORITY FINDING PUBLIC CONVENIENCE AND NECESSITY AND AUTHORIZING EMINENT DOMAIN PROCEEDINGS, IF NECESSARY, FOR ACQUISITION OF A PERMANENT EASEMENT TOTALING 1.555 ACRES LOCATED IN THE ESTHER BERRY SURVEY, ABSTRACT NO. 1, CALDWELL COUNTY, TEXAS, AND ESTABLISHING AN EFFECTIVE DATE; AND FINDING AND DETERMINING THAT THE MEETING AT WHICH THIS RESOLUTION IS PASSED WAS NOTICED AND IS OPEN TO THE PUBLIC AS REQUIRED BY LAW.

WHEREAS, in order to promote public health, safety, and welfare, ALLIANCE REGIONAL WATER AUTHORITY (“ARWA”) hereby finds that public convenience and necessity require acquisition of a permanent easement over a tract of land totaling 1.555 acre, 90 foot wide permanent Pipeline Right-of-Way easement, situated in the Esther Berry Survey, Abstract No. 1, Caldwell County, Texas, and being a portion of a called 97.39 acre tract as described in a Deed to Shermie L. Allen and wife, Barbara A. Allen, and Recorded in Volume 472, Page 442, of the Official Public Records of Caldwell County, Texas (O.P.R.C.C.T.) with the 1.555 acre parcel being more specifically described by metes and bounds in Exhibit “A” and also being referred to herein as the “Easement,” for the public use to construct, reconstruct, operate, inspect, and maintain a water transmission line and related facilities and improvements (the “Project”); and

WHEREAS, in order to effectuate the Project, it will be necessary and convenient that agents, representatives, or employees of ARWA lay out the Project, and acquire permanent and temporary easements from properties for the purpose of construction, reconstruction, operation, and maintenance of the Project; and

WHEREAS, it may be necessary to hire engineers, surveyors, appraisers, attorneys, title companies, architects, or other persons or companies to effect the laying out, establishment, and acquisition of land rights necessary to effectuate said Project; and

WHEREAS, in order to acquire the necessary land rights, it will be or has been necessary for ARWA's agents, representatives, or employees to enter upon the above-described property for the purpose of surveying and establishing said land titles and to determine adequate compensation for said land rights, to conduct tests, and to negotiate with the owners thereof for the purchase of necessary land rights; and

WHEREAS, it was necessary to set out procedures for the establishment and approval of just compensation for the necessary land rights to be acquired for the Project;

**NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF ALLIANCE REGIONAL WATER AUTHORITY:**

**SECTION 1.**

1. That in order to promote the public health, safety, and welfare, public convenience and necessity require ARWA's acquisition of a permanent easement for the public use for construction, reconstruction, operation, maintenance, inspection and repair of a water transmission line and appurtenances over that certain 1.555 acre parcel of land described with particularity on Exhibit "A," attached and incorporated herein by reference as if fully set out.

2. That ARWA's agents, representatives, or employees are hereby authorized to:

- a. Lay out the exact location of the land area needed for the Easement;
- b. Hire such engineers, surveyors, appraisers, title companies, architects, and other persons or companies needed to effect the laying out of the facilities, the establishment and acquisition of easement rights and other rights necessary for the Project;
- c. Enter upon any property necessary for the purpose of surveying and establishing title, to determine adequate compensation for the necessary land rights, and to conduct tests;
- d. Negotiate with the owners of any such properties for the purchase thereof;
- e. To purchase any necessary easements and rights-of-way on, over, under and across the Easement and execute all documents necessary to acquire such necessary land rights, all subject to express approval of the specific, negotiated terms by ARWA;
- f. Initiate eminent domain proceedings against the owner(s) of the

Easement for acquisition thereof in the event the owner(s) fail to accept a bona fide offer to purchase the Easement; and

g. Take whatever further actions deemed appropriate to economically effect the establishment of the Project and appurtenances thereto.

3. That all previous acts and proceedings done or initiated by ARWA's agents, representatives, or employees for establishment of the Project, including the negotiation for and/or acquisition of any necessary property rights for the Easement are hereby authorized, ratified, approved, confirmed, and validated. This resolution shall take effect immediately from and after its passage.

SECTION 2. That it is hereby officially found and determined that the meeting at which this resolution is passed is open to the public and that public notice of the time, place, and purpose of said meeting was given as required by law.

PASSED AND APPROVED this the \_\_\_\_ day of \_\_\_\_\_ 2020.

**ALLIANCE REGIONAL WATER AUTHORITY**

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Chris Betz  
Chair of the Board of Directors of  
ALLIANCE REGIONAL WATER AUTHORITY

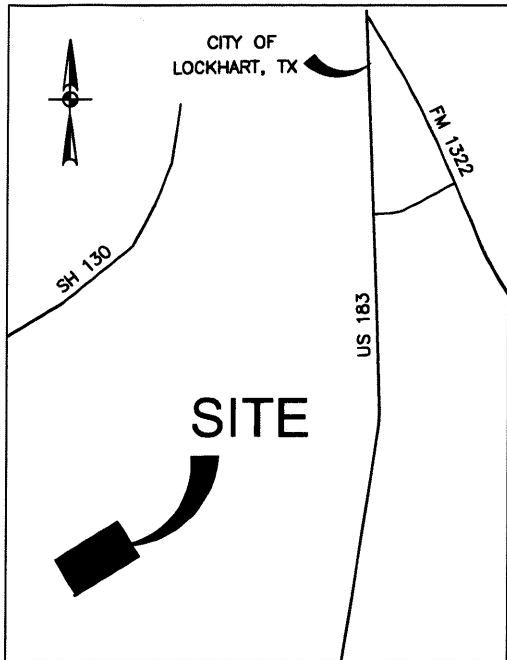
**ATTEST:**

---

James Earp  
Secretary of the Board of Directors of  
ALLIANCE REGIONAL WATER AUTHORITY

# Exhibit "A"

PARCEL B057C  
CALDWELL COUNTY, TEXAS  
ALLIANCE WATER PH 1B



**LOCATION MAP**  
NOT TO SCALE

### NOTES:

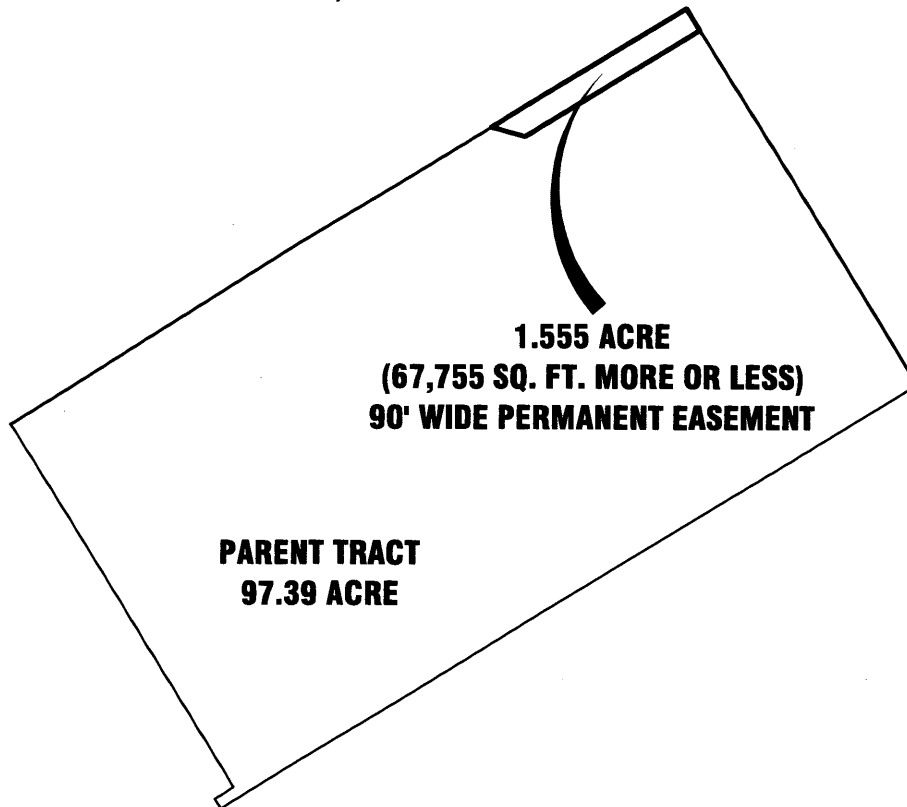
1. THE PROFESSIONAL SERVICES PROVIDED HERewith INCLUDE THE PREPARATION OF A METES AND BOUNDS DESCRIPTION.
2. THE BEARINGS ARE BASED ON THE TEXAS COORDINATE SYSTEM ESTABLISHED FOR THE SOUTH CENTRAL ZONE FROM THE NORTH AMERICAN DATUM OF 1983 (NA2011) EPOCH 2010.00.
3. AREAS AND DISTANCES SHOWN ARE IN U.S. SURVEY FEET. TO CONVERT TO GRID, APPLY THE COMBINED SCALE FACTOR OF 1.00013.
4. ANY UTILITIES SHOWN ON THIS SURVEY ARE BASED UPON VISIBLE ABOVE GROUND LOCATION ONLY. ALL UNDERGROUND UTILITIES HAVE NOT BEEN FIELD VERIFIED NEITHER ANY SUBSURFACE UTILITY ENGINEERING LEVELS A-D WERE PERFORMED BY SAM. THERE MAY BE ADDITIONAL UTILITIES THAT SAM HAS NOT BEEN ADVISED OF

### SCHEDULE B COMMENTS:

CHICAGO TITLE INSURANCE COMPANY  
GF# CTA-21-CTA1901893G  
ISSUE DATE: JULY 10, 2019

PARCEL B057C

10.) TERMS CONDITIONS PROMSIONS UTILITY EASEMENT INST NO. 093078 O.P.R.C.C.T. IS BLANKET CALLS FOR OVERHEAD ELECTRIC FACILITIES SHALL BE 15 FEET EACH SIDE OF CENTER LINE OF THE INITIAL LINE(S) CONSTRUCT AND AREA FOR UNDERGROUND ELECTRIC FACILITIES SHALL BE 10 FEET EITHER SIDE OF THE INITIAL LINE(S) AS CONSTRUCTED BY THE GRANTEE. (NO UTILITIES LOCATED WITHIN EASEMENT AREA)



4801 Southwest Parkway  
Building Two, Suite 100  
Austin Texas, 78735  
Ofc: 512.447.0575  
Fax: 512.326.3029  
email: info@sam.biz

Texas Firm Registration No. 10064300



SAM, LLC

4801 Southwest Parkway, Bldg. Two, Suite 100, Austin, TX 78735

Ofc 512.447.0575 Fax 512.326.3029

info@sam.biz www.sam.biz TBPLS # 10064300



**Legal Description**  
**1.555 Acre (67,755 Square Foot)**  
**90 Foot Wide Permanent Easement**

BEING A 1.555 ACRE, 90 FOOT WIDE PERMANENT EASEMENT, SITUATED IN THE ESTHER BERRY SURVEY, ABSTRACT NO. 1, CALDWELL COUNTY, TEXAS, AND BEING A PORTION OF A CALLED 97.39 ACRE TRACT AS DESCRIBED IN A DEED TO SHERMIE L. ALLEN AND WIFE, BARBARA A. ALLEN, AND RECORDED IN VOLUME 472, PAGE 442, OF THE OFFICIAL PUBLIC RECORDS OF CALDWELL COUNTY, TEXAS (O.P.R.C.C.T.). SAID 1.555 ACRE 90 FOOT WIDE PERMANENT EASEMENT BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

**COMMENCING** at a 1/2" iron rod found, for the southwest corner of a remainder of a called 273 acre tract, as described in a deed to W. W. McNeal, and recorded in Volume 360, Page 482, O.P.R.C.C.T., further described as Third tract, and recorded in Volume 242, Page 193, Deed Records of Caldwell County, Texas (D.R.C.C.T.), same being the southeast corner of said 97.39 acre tract;

**THENCE** N 31°49'20" W , with the common line of said remainder of a called 273 acre tract and said 97.39 acre tract, a distance of 1,447.36 feet, to a point, for the **POINT OF BEGINNING** and the east corner of this 90 foot wide permanent easement;

**THENCE** departing said common line, over and across said 97.39 acre tract, the following two (2) courses and distances:

1) S 58°28'49" W, a distance of 710.69 feet, to a point for this south easement corner, and

2) N 74°44'48" W, a distance of 123.53 feet, to a point on the common line of said 97.39 acre tract and of a called 219.495 acre tract, as described as Tract 2 in a deed to Fredrica Wiegand Kinnard as trustee of the Fredrica Wiegand Kinnard Trust, and recorded in Instrument No. 2012-126615, O.P.R.C.C.T., for this west easement corner. From said point, a 1/2" iron rod found, for the southwest corner of said 219.495 acre tract bears S 58°28'49" W 774.23 feet;

**THENCE** N 58°28'49" E, with said common line, a distance of 794.82 feet, to a 1/2" iron rod found, for the northwest corner of said remainder of a called 273 acre tract, same being the north corner of said 97.39 acre tract and this easement corner;



**THENCE** S 31°49'20" E, departing said common line, with the common line of said remainder of a called 273 acre tract and said 97.39 acre tract, a distance of 90.01 feet, to the **POINT OF BEGINNING** and containing 1.555 acre, more or less.

The bearings shown hereon are based on the Texas Coordinate System, South Central Zone, NAD 83/2011. All distances shown are in U.S. Survey Feet and may be converted to grid by applying the combined scale factor of 1.00013.

Neil Hines

NEIL HINES  
Registered Professional Land Surveyor  
Texas Registration Number 5642



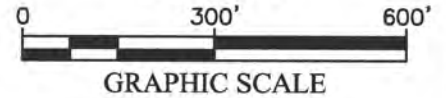
Date: 25 October 2019

LEGEND

- = Calculated Point
- = Iron Rod Found (As Noted)
- = Iron Rod Set (As Noted)
- = Mag Nail Found
- = PK Nail Found
- = Iron Pipe Found (As Noted)
- = Brass Disk
- = Axle Found
- = Concrete Monument (As Noted)
- = Nail Found (As Noted)
- = Fence Post Found (As Noted)
- = Property Boundary Line
- = Adjoining Boundary (approx.)
- = Barbed Wire Fence
- = Easement Line
- = Survey Line
- = Proposed Permanent Easement

O.P.R.C.C.T. = Official Public Records  
Caldwell County, Texas  
D.R.C.C.T. = Deed Records Caldwell  
County, Texas

PARCEL B057C  
CALDWELL COUNTY, TEXAS  
ALLIANCE WATER PH 1B  
EXHIBIT A



PARCEL B008C  
FREDRICA WIEGAND KINNARD  
AS TRUSTEE OF THE  
FREDRICA WIEGAND KINNARD TRUST  
TRACT 2  
CALLED 219.495 ACRE  
INST NO 2012-126615  
O.P.R.C.C.T.

POINT OF  
BEGINNING  
N:13,857,112.32  
E:2,383,673.69  
SURFACE

PARCEL B007C  
W. W. MCNEAL  
REMAINDER OF A  
CALLED 273 ACRE  
VOL. 360, PG. 482  
O.P.R.C.C.T.

FURTHER DESCRIBED AS  
THIRD TRACT  
VOL. 242, PG. 193  
D.R.C.C.T.

**1.555 ACRE  
(67,755 SQ. FT. MORE OR LESS)  
90' WIDE PERMANENT EASEMENT**

PARCEL B057C  
SHERMIE L. ALLEN AND WIFE,  
BARBARA A. ALLEN  
CALLED 97.39 ACRE  
VOL. 472, PG. 442  
O.P.R.C.C.T.

ESTHER BERRY SURVEY  
ABSTRACT NO. 1

LINE TABLE		
NUMBER	DIRECTION	LENGTH
L1	N74°44'48"W	123.53'
L2	S31°49'20"E	90.01'

POINT OF  
COMMENCEMENT  
1/2" IR



4801 Southwest Parkway  
Building Two, Suite 100  
Austin Texas, 78735  
Ofc: 512.447.0575  
Fax: 512.326.3029  
email: info@sam.biz

Texas Firm Registration No. 10064300



To the best of my knowledge, information, and belief, the plat hereon is a correct representation of the property as determined by a survey made on the ground February, 2019, the lines and dimensions of said property being as indicated by the plat. This survey substantially complies with the current Texas Society of Professional Surveyors standards and specifications.

*Neil Hines 25 October 2019*  
NEIL HINES, RPLS NO.5642

Date: Oct 24, 2019, 1:51pm User ID: bchohulov File: \\learning\AUS\PROJECTS\1018043608B\100\Survey\08\Plate\Segment B Parcels\B057C\B057C\_PE.dwg



**REGULAR MEETING**  
**Alliance Regional Water Authority Board of Directors**

**BOARD MEMBER PACKETS**  
Wednesday, March 25, 2020 at 3:00 P.M.  
Conference Call Number: 1-903-405-2572; Code: 995 024 086#

**K. ADJOURNMENT**

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