

**Alliance Regional Water Authority  
Technical Committee**

**REGULAR MEETING**



**ALLIANCE WATER**

**COMMITTEE MEMBER PACKETS**

Wednesday, January 15th, 2020 at 3:00 P.M.

Kyle - Public Works Building  
520 E. RR 150, Kyle, TX 78640

**REGULAR MEETING**  
**Alliance Regional Water Authority Technical Committee**

**COMMITTEE MEMBER PACKETS**

Wednesday, January 15th, 2020 at 3:00 P.M.  
520 E. RR 150, Kyle, TX 78640

This Notice is posted pursuant to the Texas Open Meetings Act (Texas Government Code Chapter 551). The Technical Committee of the Board of Directors of the Alliance Regional Water Authority (the Authority) will hold a meeting at 3:00 PM, Wednesday, January 15, 2020, at Kyle Public Works Building, 520 E. RR 150, Kyle, Texas. Additional information can be obtained by calling Graham Moore at (512) 294-3214.

Because this meeting is open to the public, members of the Authority Board of Directors who are not members of the Technical Committee may attend this meeting. If any such Board member attends this meeting such that a quorum of the Authority Board is present, this serves as notice of that potential quorum. The meeting will continue as a meeting of the Authority Technical Committee, and not a meeting of the Authority Board. A Board member who is not a Technical Committee member will have no right to vote on any matter before the Committee.

A. CALL TO ORDER

B. ROLL CALL

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

D. CONSENT AGENDA

D.1 Consider approval of minutes of the Special Technical Committee Meeting held December 11, 2019. ~ *Graham Moore, P.E., Executive Director*

E. PRESENTATIONS TO THE COMMITTEE

E.1 None.

F. ITEMS FOR COMMITTEE ACTION OR DISCUSSION/DIRECTION

F.1 Update and possible direction to Staff regarding the Authority's Phase 1A projects. ~ *Jason Biemer, Project Coordinator*

F.2 Update and possible direction to Staff regarding the Authority's Phase 1B program. ~ *Ryan Sowa, P.E., Kimley-Horn & Associates*

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- F.3 Discussion and possible recommendation to the Board to approve a work order with R.W. Harden & Associates, Inc. for Construction Phase Services for the Authority's Phase 1B Well Drilling / Hydrogeology project. ~ *Ryan Sowa, P.E., Kimley-Horn & Associates*
- F.4 Discussion and possible recommendation to the Board to approve an agreement with Hicks & Company Environmental / Archaeological Consultants for Environmental On-Call Services associated with the Authority's Phase 1B Well Drilling / Hydrogeology project. ~ *Ryan Sowa, P.E., Kimley-Horn & Associates*
- F.5 Discussion and possible recommendation to the Board to approve a work order with Walker Partners, LLC for Design and Procurement Services for the Authority's Phase 1B Water Treatment Plant project. ~ *Ryan Sowa, P.E., Kimley-Horn & Associates*
- F.6 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 REPORT - Update on future meeting dates, locations, consultant invoices paid, approved changed orders, status of Authority procurements, Executive Director activities and other operational activities where no action is required. ~ *Graham Moore, P.E., Executive Director*
  
- H. COMMITTEE 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.
  
- I. EXECUTIVE SESSION
  - I.1 *Executive Session pursuant to the Government Code, Section 551.071 (Consultation with Attorney) and/or Section 551.072 (Real Property Deliberations) regarding:*
    - A. *Water supply partnership options*
    - B. *Groundwater leases*
    - C. *Acquisition of real property for water supply project purposes*

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- I.2 Action from Executive Session on the following matters:
  - A. *Water supply partnership options*
  - B. *Groundwater leases*
  - C. *Acquisition of real property for water supply project purposes*

J. ADJOURNMENT

**NOTE:** *The Technical Committee 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 Technical Committee may also publicly discuss any item listed on the agenda for Executive Session.*

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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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NAME PRESENT

Kenneth Williams

James Earp

Tom Taggart

Humberto Ramos

Steve Parker

Mike Taylor

NON-VOTING MEMBERS PRESENT

Mayor George Haehn

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**C. PUBLIC COMMENT PERIOD**

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Each person wishing to speak must submit a completed Public Comment Form to the Executive Director or his/her designee before the public comment period begins.

Comments are limited to 3-minutes per agenda item and three minutes total for all non-agenda topics. If using a translator, comments are limited to six minutes per agenda item and six minutes total for non-agenda topics.

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**D. CONSENT AGENDA**

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Item D.1 is presented as part of the consent agenda.



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**COMMITTEE MEMBER PACKETS**  
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**D.1** Consider approval of minutes of the Regular Technical Committee Meeting held December 11, 2019. ~ *Graham Moore, P.E., Executive Director*

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Attachment(s)

- 2019 12 11 Technical Committee Meeting Minutes

**Technical Committee decision needed:**

- Approval of minutes.



## ALLIANCE WATER

### Alliance Regional Water Authority

### TECHNICAL COMMITTEE MEETING

### MINUTES

**Wednesday, December 11, 2019**

The following represents the actions taken by the Technical Committee of the Alliance Regional Water Authority (Alliance Water) in the order they occurred during the meeting. The Technical Committee convened in a meeting on Wednesday, December 11, 2019 at the Kyle Public Works Facility, 520 E. RR 150, Kyle, Texas.

A. CALL TO ORDER.

**The Alliance Water Technical Committee Meeting was called to order at 3:08 p.m. by Mr. Earp.**

B. ROLL CALL.

- **Present:** Earp, Taggart, Ramos, and Taylor with Williams joining in Item F.1.
- **Absent:** Parker and Haehn.

C. PUBLIC COMMENT PERIOD

- **None.**

D. CONSENT AGENDA

D.1 Consider approval of minutes of the Regular Technical Committee Meeting held November 12, 2019.

- **Motion to adopt the consent agenda as presented was made by Mr. Earp, seconded by Mr. Taylor and approved on a 4-0 vote.**

E. PRESENTATIONS TO THE COMMITTEE

E.1 None.

## F. ITEMS FOR COMMITTEE ACTION OR DISCUSSION/DIRECTION

- F.1 Update and possible direction to Staff regarding the Authority's Phase 1A projects.
- **Mr. Moore provided an update on the projects.**
  - **No Action.**
- F.2 Update and possible direction to Staff regarding the Authority's Phase 1B program.
- **Mr. Ryan Sowa with Kimley-Horn went through the presentation in the packet summarizing Kimley-Horn's recent activities, along with schedule and budget updates.**
  - **Mr. Ramos inquired if there was an agreement with GBRA on well drilling, to possibly use the same drillers. Mr. Moore responded that there is not any agreement with GBRA on well drilling.**
  - **Mr. Taylor asked if we are concerned about knowing water quality during the design process. Mr. Moore responded that actual raw water data should serve as a confirmation of the parameters expected, not anticipating anything strange that would dramatically effect the water treatment design.**
  - **Mr. Taggart requested that if schedule slips further, that monthly updates be provided.**
  - **Mr. Taggart also suggested that project savings be tracked separately from the contingency line item.**
  - **No Action.**
- F.3 Discussion and possible recommendation to the Board to amend the Phase 1B Program to incorporate Cost Saving Measures.
- **Motion to recommend to the Board to amend the Phase 1B Program through the incorporation of the recommended Cost Saving Measures in the packet was made by Mr. Taylor, seconded by Mr. Ramos and approved on a 5-0 vote.**
  - **Discussion included:**
    - **Mr. Taggart noted that San Marcos likes the separation of the peaking factor between the pipelines and facilities and the flexibility it provides.**
    - **Mr. Taylor likes building in the maximum capacity feasible in the pipelines during the Phase 1B.**
    - **Mr. Ramos noted that it was important to get consensus on the measures from the group.**
    - **Mr. Earp feels that the recommendations are responsible and prudent at this point, but also notes that difficult decisions may still be required in the future depending on how actual bids come in.**

- F.4 Discussion and possible action to reschedule the date of the January Technical Committee meeting.
- **Motion to reschedule the January Technical Meeting to Wednesday, January 15<sup>th</sup> was made by Mr. Ramos, seconded by Mr. Taggart and approved on a 5-0 vote.**
- F.5 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 the various topics.**
  - **No Action.**

G. EXECUTIVE DIRECTOR REPORT

- **Update, no action.**

H. COMMITTEE MEMBER ITEMS OR FUTURE AGENDA ITEMS

- **Mr. Ramos noted that it will be time to review water sharing needs in 2020.**

I. EXECUTIVE SESSION

- I.1 *Executive Session pursuant to the Government Code, Section 551.071 (Consultation with Attorney) and/or Section 551.072 (Real Property Deliberations) regarding:*
- A. *Water supply partnership options*
  - B. *Groundwater leases*
  - C. *Acquisition of real property for water supply project purposes*
- **None.**
- I.2 Action from Executive Session on the following matters:
- A. Water supply partnership options
  - B. Groundwater leases
  - C. Acquisition of real property for water supply project purposes
- **No Action.**

J. ADJOURNMENT

- Meeting was adjourned at 3:59 p.m. by Mr. Earp.

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

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- F.1** Update and possible direction to Staff regarding the Authority's Phase 1A projects.  
~ *Jason Biemer, Project Coordinator*
- 

Background/Information

Below are brief updates on the Phase 1A projects.

Segment A Pipeline:

- None

Segment B Pipeline:

- Notice to proceed received 12/5/2019.
- Pre-Con was held 12/17/2019.
  - Clearing underway.
  - Stormwater protection systems being installed.
- No major issues identified by contractor or staff at this time.

Pump Station:

- Pump station construction proceeding. See attached slides.
- Revised substantial completion March 3, 2020
- Revised completion March 6<sup>th</sup>, 2020
- 30-day acceptance and testing follow completion date.

**Technical Committee Decisions Needed:**

- None.

## Phase 1A Booster Pump Station

- Status Update
- December 15, 2019



## General Updates



Road work on site  
nearing completion



PEC on site this week



Building structures up  
– internal painting  
completed.



Wiring and major  
electrical components  
nearing completion.



SCADA server system  
arriving on site this  
week



## Facility Structures - *Interior*

- HVAC system installation completed.
- Chemical feed system ready to test.
- Chemical leak safety system installation complete.
- Ventilation system installation completing.
- Awaiting integration into SCADA system where required.



## Facility Structures – *Landscaping and Exterior*

- Gates and fence installation underway.
- Security gates, security lights in final installation phase.
- Vegetation establishing
- Irrigation system installation completing soon.





## Phase 1A

### *Buda Delivery Point*

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

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- F.2** Update and possible direction to Staff regarding the Authority's Phase 1B program.  
~ *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.

Graham Moore will update the Committee on the status of providing permanent power to the Water Treatment Plant.

Attachment(s)

- Phase 1B Program Update – January 15, 2020 (TO BE PROVIDED PRIOR TO THE MEETING)

**Technical Committee Decisions Needed:**

- None.

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- F.3** Discussion and possible recommendation to the Board to approve a work order with R.W. Harden & Associates, Inc. for Construction Phase Services for the Authority's Phase 1B Well Drilling / Hydrogeology project. ~ *Ryan Sowa, P.E., Kimley-Horn & Associates*
- 

Background/Information

Alliance Water entered into a Work Order in September 2018 with RW Harden & Associates, Inc. (RW Harden) to provide design and procurement services for Alliance Water's four Phase 1B Carrizo water wells. The design is almost complete, with the Texas Water Development Board anticipated to approve all aspects of the project for bidding by the end of January. The effort included in the proposed work order is for construction administration services to include: project management, submittals to TCEQ to achieve interim use approvals for the wells, observation of the well construction and contract management including responses to contract questions, contractor meetings, walkthroughs, etc.

Below are some of the key facts regarding the Phase 1B Well Drilling / Hydrogeology Construction Phaser Services proposal:

**Firm:** RW Harden & Associates, Inc.  
**Fee:** \$384,200  
**Work Order Type:** Hourly, Not-to-Exceed  
**Anticipated Duration:** 14 months  
**Project Manager:** James Bene, P.G.

Staff is requesting that the Committee recommend Board approval of a Work Order with a fee not-to-exceed \$384,200.

Attachment(s)

- RW Harden proposal for Construction Phase Services for Phase 1B Well Drilling & Hydrogeology project.

**Technical Committee Decision Needed:**

- Possible recommendation to the Board to approve a work order with RW Harden & Associates, Inc. for Construction Phase Services for the Authority's Phase 1B Well Drilling / Hydrogeology project.

EXHIBIT A  
R.W. HARDEN & ASSOCIATES, INC.

SCOPE OF WORK ASSOCIATED WITH CONSTRUCTION OF PUBLIC SUPPLY  
PRODUCTION WELLS

R.W. Harden & Associates, Inc. (RWH&A) is providing herein a description of the anticipated tasks, schedule, and budget (collectively, the Scope of Work) associated with performing hydrogeologic services for Alliance Regional Water Authority (ARWA). Specifically, this Scope of Work pertains to construction of four (4) public supply production wells in Caldwell County, Texas. Within this document, the term “Client” refers to Alliance Regional Water Authority (ARWA).

General tasks to be performed by RWH&A include:

- 1) **Project Management** – Preparation of monthly progress reports and invoices, development of various plans, communications and coordination with the Client, and ongoing meeting attendance.
- 2) **TCEQ Submittals** – Preparation of submittals associated with obtaining Texas Commission on Environmental Quality (TCEQ) approval for interim use of four (4) new public supply wells.
- 3) **Well Construction Observation** – Field observation of the methods and materials used by the drilling contractor during construction and testing of four (4) production wells
- 4) **Construction Contract Management** – Administration of the production well construction contract, contractor meetings, preparation of RFI responses and change orders, performance of completion walkthroughs and punch lists, and generation of well completion reports.

The following sections provide detailed descriptions of the work to be conducted.

### TASK 1 – PROJECT MANAGEMENT

RWH&A will perform various services associated with general management of the project including: 1) preparation of monthly progress reports and invoices, 2) implementation of the QA/QC Plan developed during previous project phases, 3) implementation of the Project Management Plan developed during previous project phases, 4) preparation and routine updating of project completion schedules, 5) performance of monthly updates to the Project Risk Register, 6) coordination and communication with the Client, 7) attend project kickoff meeting, and 8) coordinate and perform monthly contractor progress meetings.

### TASK 2 – TCEQ SUBMITTALS

Where all system infrastructure and water quality comply with TCEQ standards, obtaining approval for a new public water supply well is a two-step process:

1. Before construction begins, TCEQ approval is obtained to establish a new public water system and construct wells. Data packets detailing the methods and materials to be used during well construction were submitted to the TCEQ during earlier phases of the project. Approvals to construct the ARWA production wells were obtained from the TCEQ in February 2019.
2. Following construction, approval to use the wells (“interim approval”) must be obtained from the TCEQ. The typical TCEQ review period for this submittal is approximately 60 days.

### 2.1 - Interim Use Approval

Upon completion of well drilling, acceptance testing, and selection of permanent pumping equipment, RWH&A will prepare a document package required to obtain TCEQ interim approval (which represents the final approval needed) for use of the wells as public water supplies. These documents will include geophysical and driller’s logs, final material settings, steel mill certificates of well casing and screen, casing cementing certificate, aquifer test results, chemical analysis of the water, and pumping equipment specifications. For clarification with respect to well testing, RWH&A will oversee the performance of a 36-hour pumping aquifer test on each of the four production wells and will analyze and submit the results of these tests to the TCEQ for review. No other tests are necessary to obtain TCEQ approval to use the wells as public supplies.

It should be noted that the document package will be submitted to the TCEQ after well testing has been completed using temporary pumping equipment. In RWH&A’s experience, most TCEQ reviewers will grant approval to use a well as a public supply source prior to installation of permanent pumping equipment, which, in ARWA’s case, will not occur until 2022. However, we have encountered one TCEQ reviewer who would not grant approval to use a well until after testing and sampling was completed with the permanent pumping equipment. While delaying TCEQ approvals until 2022 doesn’t represent a major setback to the project, it is desirable with respect to the logistics associated with wellfield startup to obtain approvals as early as possible. If interim approval is delayed until permanent pumping equipment is installed and tested, the added effort associated with retesting the well and resubmitting the packet documents to the TCEQ can be performed by RWH&A for an additional fee to be agreed upon by the Client and RWH&A at a later date.

## **TASK 3 – WELL CONSTRUCTION OBSERVATION**

As part of this Task, RWH&A will provide experienced on-site personnel at key points in the pilot hole drilling and well construction process to endeavor to ascertain whether the methods and materials used by the drilling Contractor are in accordance with the technical specifications and the needs of the Project. Specifically, RWH&A will provide on-site personnel to observe: 1) drilling operations during penetration of aquifer zones and collection of cuttings samples during drilling of the pilot hole, 2) geophysical logging of the pilot hole, 3) performance of an alignment survey of the reamed borehole, 4) inspection of the surface casing, 5) setting and cementing of surface casing, 6) performance of a caliper survey of the under-reamed hole, 7) inspection of the screen and liner assembly, 8) setting and gravelling of screen and liner, 7) acceptance testing to verify that well

performance guarantees included in the specifications are met, and 8) providing assistance and field guidance during well start-up.

## TASK 4 – CONSTRUCTION CONTRACT MANAGEMENT

RWH&A will assist the Client in administering the production well construction contract. Work associated with this task will include planning, contractor communications, and generation of appropriate change orders. RWH&A will attend periodic construction-phase meetings, interpret contract documents, prepare material settings authorization letters, respond to contractor inquiries/RFIs, review shop drawings and samples, review contractor payment applications. Following testing of the wells, RWH&A will attend substantial and final completion walkthroughs and prepare final completion punch lists. RWH&A will work with the contractor to compile a comprehensive report of each well’s final material settings and testing/sampling results.

## BUDGET

The estimated costs to perform the work described above are:

- 1) Task 1: Project Management – \$50,480
- 2) Task 2: TCEQ Submittals (Four Wells) – \$23,200
- 3) Task 3: Well Construction Observation (Four Wells) – \$250,800
- 4) Task 4: Contract Administration – 59,720

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Total Estimated Budget: \$384,200

Please note that the proposed budget represents a maximum “not to exceed unless authorized” amount for the tasks described herein. The costs include only RWH&A professional engineering services and expenses. Costs associated with surveying, laboratory services, and well contractor costs are not included. We work on projects of this nature in accordance with the actual man-hours involved plus direct out-of-pocket expenses in accordance with the contract and fee schedule (Exhibit B). These budgets assume that the drilling contractor performs the work in an efficient and skillful manner and that the tasks associated with this scope will be completed within approximately 14 months. If significant delays result from inclement weather, contractor performance or contractor equipment failure, RWH&A requests the opportunity to discuss how these may affect project costs.

**EXHIBIT B**  
**STANDARD FEES FOR TECHNICAL SERVICES**  
**BY R.W. HARDEN & ASSOCIATES, INC.**

- 1) Fees for professional services are based on the actual time of personnel directly involved with the project at the following hourly rates:

Senior Principal	\$240
Principal	\$220
Technical Staff 8	\$180
Technical Staff 7	\$160
Technical Staff 6	\$140
Technical Staff 5	\$130
Technical Staff 4	\$120
Technical Staff 3	\$110
Technical Staff 2	\$100
Technical Staff 1	\$90
Graphics Staff	\$100
Administrative Staff	\$70
Clerical Staff	\$60

- 2) External expenses, including but not limited to: reproduction, transportation, meals and lodging, parking and taxi fares, geophysical logs, printing, maps and photographs, field supplies, equipment rental, shipping, test drilling, well construction, and test laboratories, are charged at actual invoice cost plus 10 percent service fee.
- 3) R.W. Harden and Associates, Inc. equipment and services, including but not limited to: company vehicles, generators, reproduction, computer time, GPS equipment, pressure transducers/data logger, field equipment, calipers, pumps, cameras, pH meters, conductivity meter, turbidity meters, water level meters are charged at rates competitive with commercial rates.
- 4) The above fees for professional services are applicable to work conducted through December 31, 2020. RWH&A may revise their standard rates yearly any time after December 31, 2020.



<b>Alliance Water Phase 1B Program</b>																<b>Project Fee Summary</b>		
<b>Well Field Construction</b>																<b>Basic Effort</b>	\$	384,200
<b>Detailed Overall RW Harden &amp; Assoc., Inc. Cost Breakdown</b>																<b>Supplemental</b>	\$	-
																<b>Total Effort</b>	\$	384,200

Task	Employee Project Role	Principal	Project Mgr.	Geologist 3	Geologist 2	Geologist 1	Engineer 3	Engineer 2	Engineer 1	Graphics	Admin	Total Hours	Total Labor Effort	Total Expense Effort	Subconsultant Cost	Total Effort	Assumptions			
		Hourly Bill Rate	\$240.00	\$180.00	\$160.00	\$140.00	\$120.00	\$180.00	\$160.00	\$140.00	\$100.00							\$70.00		
<b>Basic Services</b>																				
<b>Task 1 - Project Management</b>																				
1.1	Prepare Monthly Summary Reports/Invoicing	16	16							2	16	50	\$ 50,480	\$ -	\$ -	\$ 50,480				
1.2	PMP and QA/QC Plan Implementation	12	8	4	4	4	4					36	\$ 8,040	\$ -	\$ -	\$ 8,040				
1.3	Risk Register & Schedule Development and Monthly Updates	12	8							2		22	\$ 6,720	\$ -	\$ -	\$ 6,720				
1.4	Client Communication, Coordination, and Meetings	80	20	20			20			16		156	\$ 4,520	\$ -	\$ -	\$ 4,520				
													\$ 31,200	\$ -	\$ -	\$ 31,200				
<b>Task 2 - TCEQ Submittals</b>																				
2.1	Prepare Interim Approval Packets	2	4	32			8			16		62	\$ 23,200	\$ -	\$ -	\$ 23,200				
2.2	TCEQ Communications	16	8	24			24			4		76	\$ 9,360	\$ -	\$ -	\$ 9,360				
													\$ 13,840	\$ -	\$ -	\$ 13,840				
													\$ -	\$ -	\$ -	\$ -				
<b>Task 3 - Well Construction Observation</b>																				
3.1	Task Coordination and Data Analysis	20	80	120								220	\$ 250,800	\$ -	\$ -	\$ 250,800				
3.2	Pilot Hole Drilling and Logging	8	40	288								336	\$ 38,400	\$ -	\$ -	\$ 38,400				
3.3	Reaming, Casing Inspection and Setting	8	40	192								240	\$ 55,200	\$ -	\$ -	\$ 55,200				
3.4	Inspection and Setting Screen/Liner/Gravel Assembly	8	40	192								240	\$ 39,840	\$ -	\$ -	\$ 39,840				
3.5	Development and Pre-Testing Tasks	8	40	80								128	\$ 39,840	\$ -	\$ -	\$ 39,840				
3.6	Acceptance Testing	8	40	288						4		340	\$ 21,920	\$ -	\$ -	\$ 21,920				
													\$ 55,600	\$ -	\$ -	\$ 55,600				
													\$ -	\$ -	\$ -	\$ -				
<b>Task 4 - Contract Administration and Management</b>																				
4.1	Work Planning and Contractor Coordination	8	32									40	\$ 59,720	\$ -	\$ -	\$ 59,720				
4.2	RFIs, Shop Drawings, Change Orders and Material Settings	20	16	8			20			40	4	108	\$ 7,680	\$ -	\$ -	\$ 7,680				
4.3	Meetings and Correspondence	12	40	20			16					88	\$ 16,840	\$ -	\$ -	\$ 16,840				
4.4	Completion Walkthroughs and Punchlists	4	16	16			16					52	\$ 16,160	\$ -	\$ -	\$ 16,160				
4.5	Well Completion and Testing/Sampling Reports	2	16	40								58	\$ 9,280	\$ -	\$ -	\$ 9,280				
												0	\$ 9,760	\$ -	\$ -	\$ 9,760				
												0	\$ -	\$ -	\$ -	\$ -				
<b>Supplemental Services</b>																				
<b>Supplemental Services</b>																				
A												0	\$ -	\$ -	\$ -	\$ -				
												0	\$ -	\$ -	\$ -	\$ -				
												<b>Grand Total</b>	\$	384,200	\$	-	\$	-	\$	384,200



**REGULAR MEETING**  
**Alliance Regional Water Authority Technical Committee**

**COMMITTEE MEMBER PACKETS**

Wednesday, January 15th, 2020 at 3:00 P.M.  
520 E. RR 150, Kyle, TX 78640

- F.4** Discussion and possible recommendation to the Board to approve an agreement with Hicks & Company Environmental / Archaeological Consultants for Environmental On-Call Services associated with the Authority's Phase 1B Well Drilling / Hydrogeology project. ~ *Ryan Sowa, P.E., Kimley-Horn & Associates*
- 

Background/Information

Hicks & Company provided the environmental investigation for the Well Drilling / Hydrogeology & Raw Water Infrastructure as a subconsultant to LNV, Inc. A standard requirement of environmental approvals from the Texas Water Development Board is to have environmental professionals on-call to survey any areas to be cleared for migratory bird nests during the peak season of March to September. In addition the clearance requires Alliance Water to have a consultant on-call should the contractor identify any of the threatened and/or endangered species outlined in the Texas Parks & Wildlife Department guidelines.

Staff negotiated the attached scope and fee with Hicks & Company for these services, should they be required. The contract will be billed on an hourly basis based on actual time spent, not-to-exceed \$23,938.75.

Attachment(s)

- Proposal dated October 16, 2019 from Hicks & Company for Phase 1B Environmental On-Call Services for Construction

**Technical Committee Decision Needed:**

- Possible recommendation to the Board to approve an agreement with Hicks & Company Environmental / Archaeological Consultants for Environmental On-Call Services associated with the Authority's Phase 1B Well Drilling / Hydrogeology project.

October 16, 2019

Amy Esguerra  
CP&Y  
One Countryside Place  
12500 San Pedro, Ste. 450  
San Antonio, Texas 78126

RE: Scope of Services and Fee Estimate; ARWA Phase 1B Environmental On-call Services for Construction; Caldwell County, Texas

Dear Ms. Esguerra:

In response to your email request of October 3, 2019, this transmits a proposal for environmental on-call services for construction of portions of the Alliance Regional Water Authority's Phase 1B Raw Water Infrastructure Project located in Caldwell County, Texas.

This proposal follows your email instructions involving the performance migratory bird nest surveys prior to clearing if scheduled clearing falls within the nesting season period; as well as being on-call in the event the drilling/construction team identifies any of the threatened and endangered species outlined in the coordination with Texas Parks & Wildlife Department (TPWD); and coordination/consultation should cultural resources be encountered. Assumptions for expenditure of time also follows instructions provided in your email. Please see the attached Scope of Services and fee estimate for details.

Hicks & Company appreciates the opportunity to provide environmental services if needed for the project. If you have any questions or need further assistance, please contact me at (512) 478-0858 or [rfrye@hicksenvironment.com](mailto:rfrye@hicksenvironment.com).

Sincerely,  
Roy G. Frye

Senior Project Manager  
Hicks & Company Environmental/Archeological Consultants

Attachments

Scope of Services  
Fee Estimate  
Location Map

**SCOPE OF SERVICES**  
**ARWA Phase 1B – Environmental On-call Services for Construction**  
**October 16, 2019**

**PROJECT DESCRIPTION AND UNDERSTANDING**

This Scope of Services responds to an email request by Amy Esguerra, CP&Y, on October 3, 2019. The request was made on behalf of Alliance Regional Water Authority (ARWA) to provide a proposal to conduct environmental services to ensure compliance with the federal Migratory Bird Treaty Act (MBTA). The services will consist of completing migratory bird nest surveys prior to clearing if scheduled clearing falls within the nesting season period; as well as being on-call in the event the drilling/construction team identifies any of the threatened and endangered species outlined in the coordination with Texas Parks & Wildlife Department (TPWD); and coordination/consultation should cultural resources be encountered. Assumptions for expenditure of time have been established by guidance provided by CP&Y. If additional time is required due to unforeseen circumstances and upon approval by ARWA, such services can be provided under a supplemental scope of services and associated fee. A detailed description of proposed tasks follows.

**Task 1. Survey for Nesting Migratory Birds**

If construction occurs during the TPWD-specified nesting period, between March 15 and September 15 (TPWD coordination letter dated May 3, 2019), pre-construction nesting surveys will be performed. Such surveys are intended to identify and avoid active nests in advance of construction activities to achieve compliance with the MBTA. For this project, it is assumed that construction schedules will not be able to completely avoid the nesting period and that nesting surveys will be required. These nesting surveys will be performed according to the following protocol.

*Coordination and Scheduling of Surveys with Construction Supervisor(s)*

Construction is anticipated to begin in 2020 and last for approximately 10 months. If the planned construction schedule overlaps with the established nesting period between March 15 and September 15, CP&Y will coordinate a meeting to be attended by the designated construction supervisor(s) and Hicks & Company staff including the Project Manager (PM), to identify construction schedules, associated construction locations, and personnel contacts. It will be critical to the success of this Task that the nesting surveys for specific corridor segments will be scheduled as close to the occurring construction activities as possible, but not earlier than one week before clearing and grubbing or other construction disturbance will actually occur. Survey dates will coincide with established clearing and grubbing dates to ensure timely survey immediately prior to vegetation clearing activities. Prior to the initiation of the nesting survey(s), Hicks & Company will be provided with the latest digital shapefiles showing the location of the road and collection pipeline alignments and well sites (including test well locations). At the beginning of the day that a nesting survey will occur, the Hicks & Company PM will contact the appropriate construction supervisor to confirm where the clearing and grubbing activities are occurring, location of construction access points, and where the nesting surveys will be conducted.

After the nesting survey has been completed, the Hicks & Company PM will immediately notify the construction supervisor as to the findings of the survey. This will include information concerning whether active nests have been located, location of the active nests, and types and extent of buffer protection zones.

### Survey Methodology

The survey schedules will be coordinated with construction schedules for specific parcels with the goal of being completed within seven days before clearing, grubbing, or other disturbance begins.

The nesting surveys will consist of a 100 percent pedestrian survey by two investigators that will walk along and within proposed road and pipeline clearing corridors to identify and locate active nests within 30 feet of each side of the alignment and within well pad site locations that will comprise 250 square feet (pursuant to CP&Y email of October 3, 2019). Vegetation within the road and pipeline corridors and four well pad sites (that may also include an unknown number of test well locations) will be scrutinized for the presence of nests and/or nesting cavities that appear to be in use. Avian behavior will be assessed for obvious signs of nesting, brood rearing, and breeding. All avian species detected will be noted. The location of active nests will be recorded by a hand held GPS unit and marked on aerial photography. Identification of active nests will trigger immediate coordination with designated construction supervisors to establish protection zones and implement procedures for periodically monitoring nest activities and determining when nesting activities are completed. Results of the nesting surveys will be documented in a report that will be submitted to ARWA.

### Establishment of Protection Buffer Zones Around Active Nests

If an active nest is discovered during the survey, the TPWD coordination letter of May 3, 2019, recommends the establishment of a protective buffer of 150 feet surrounding the nest. This protective buffer will be considered; however, previous experience with construction projects has shown disturbance tolerance of some nesting birds can be much lower than 150 feet. The size of the buffer zone will be established based on the species of bird involved, specific location of the nest with respect to the anticipated construction activity, and previous experience with nesting avoidance buffers on other projects. Construction buffers typically involve a protection zone marked with continuous colored flagging surrounding the active nest staked within a specified radius distance. Such distances may vary according to type and behavior of the nesting species but have ranged from as little as six feet to as much as 300 feet on previous projects. Buffers would remain in effect around the active nest until the young have fledged or the nest is abandoned. For the purposes of accomplishing this Task and based on guidance provided by CP&Y email on October 3, 2019, it is assumed that the nest surveys will require five trips by two ecologists, with each trip requiring eight hours to complete, including travel time (80 hours total).

### **Task 2. Monitoring of Active Nests**

Detection of active nests will require on-going protection and subsequent weekly field visits to determine when young birds fledge and the nest becomes inactive. If eggs are present in the nest, then

protection zones will be established and maintained, and weekly follow-up visits will be conducted for approximately 28 days (to allow time for incubation and fledging according to the nesting species) or until the nest becomes empty. Monitoring of active nests may be performed while on site before or after surveys are completed for other portions of the road/pipeline corridors. It is assumed that if the monitoring of active nests exceeds the amount of approved time and budget, such services can be completed under a supplement scope of services or alternatively, that the required monitoring activities will be completed by others.

### **Task 3. On-Call Services for T&E Species and Cultural Resources**

#### *Threatened and Endangered Species*

On-call services will be provided as needed or required in the event any threatened or endangered species are encountered by construction workers during the construction period. Species noted by the TPWD coordination letter of May 3, 2019, include the state-listed wood stork (*Mycteria americana*), Texas horned lizard (*Phrynosoma cornutum*), and timber rattlesnake (*Crotalus horridus*). Because these species are protected by state law, it is unlawful to collect, transport, or possess them without a permit issued by TPWD. In the event these species are encountered, injured, or otherwise need to be relocated, a qualified permitted biologist with Hicks & Company, or under the supervision of Hicks & Company, will be available to perform these services.

Prior to construction, CP&Y will coordinate contact information between ARWA construction supervisors and Hicks & Company to ensure that timely notification and consultation follow-up occurs. Upon notification by the ARWA construction supervisor or other designated representative, a Hicks & Company ecologist will assess the situation, determine the need for on-site inspection or assistance, and complete any necessary field inspection, consultation, or coordination that is required.

Consultation and assistance will be provided if other state or federally listed species are encountered. Although not expected to occur, if federally listed species are encountered as determined by consultation with Hicks & Company, the U.S Fish and Wildlife Service Field Office in Austin, Texas will be immediately notified.

#### *Cultural resources*

In the unlikely event that cultural resources are encountered or excavation reveals sites of potential cultural importance, unmarked graves, or human remains, Hicks & Company will be contacted and an archeologist will assess the situation, conduct a site visit if needed or required, determine the need for further investigation, and complete disposition of any identified features. If cultural resource features are encountered, the Texas Historical Commission (THC) will be contacted for further consultation and guidance as to the need for further investigations or surveys. These services do not include an archeological survey. If such a survey is required, it could be provided under a supplemental scope of services and fee.

For the purposes of accomplishing this Task and based on guidance provided by CP&Y email on October 3, 2019, it is assumed that 10 on-call trips, each requiring four hours of staff time for threatened and endangered species or cultural resources will be required by one staff person (40 hours total).

## **DELIVERABLES**

This Scope of Services includes the following deliverables:

- A brief summary of any found nests or T&E species (or lack there-of) will be reported via email the same day as the surveys (**Task 1**).
- A letter report will be prepared to document results of the migratory bird nesting survey and submitted to ARWA (**Task 1**).
- Active nest protection zones will be established by staked and flagged marker(s) (**Task 2**).
- A summary report detailing the results of any consultation, field visits or other coordination that is required concerning any threatened/endangered species or cultural resources (**Task 3**).

## **SCHEDULE**

Work will be completed, and deliverables will be prepared and submitted, according to construction schedules established by ARWA. Performance of all tasks listed in this proposal will require close coordination with ARWA for schedule updates and any changes in project construction activities.

## **COSTS**

The proposed not-to-exceed cost to complete this Scope of Services is **\$23,938.75**. An itemized fee estimate based on current hourly billing rates is attached.

## **OVERALL ASSUMPTIONS**

This Scope of Services and fee estimate has been prepared as accurately as possible with the current level of knowledge of the project and based on the assumptions included in the above described Tasks.

If substantial changes occur in the project corridor boundaries or infrastructure footprint locations, or later design modifications require reevaluations, such additional reevaluations will be supplemental to those performed under this Scope of Services.

**HICKS & COMPANY ENVIRONMENTAL/ARCHEOLOGICAL CONSULTANTS**  
**FEE ESTIMATE - ARWA Phase 1B On-Call Environmental Services for Construction - October 16, 2019**

<b>LABOR</b>	<b>Sr. Program Mgr</b>	<b>Sr. Env'l Scientist II</b>	<b>Sr. Env'l Scientist I</b>	<b>Env'l Scientist II</b>	<b>Env'l Prof III</b>	<b>Env'l Prof II</b>	<b>Env'l Prof I</b>	<b>Env'l Staff I</b>	<b>Env'l Tech I</b>	<b>TOTAL</b>
	\$196.94	\$151.50	\$130.29	\$121.20	\$106.05	\$96.96	\$86.35	\$69.69	\$54.54	
<b>TASK 1 -</b>										
MBTA Field Surveys and Monitoring		40		40						80.0
Report Preparation		8		4						12.0
GIS Support				6						6.0
Project Management & Coordination		8								8.0
Task 1 Labor Hours	0.0	56.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	106.0
<b>Task 1 Subtotal</b>	\$ -	\$ 8,484.00	\$ -	\$ 6,060.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,544.00
<b>TASK 2 -</b>										
Monitoring Active Nests										0.0
Assumes monitoring will be completed as part of nest Surveys in Task 1 or be completed by others										0.0
Task 2 Labor Hours	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Task 2 Subtotal</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>TASK 3 -</b>										
On-call Services for T/E and Cultural Resources		32		8						40.0
Report Preparation		8		2						10.0
GIS Support					3					3.0
Project Management & Coordination		3			2					5.0
Task 3 Labor Hours	0.0	43.0	0.0	10.0	5.0	0.0	0.0	0.0	0.0	58.0
<b>Task 3 Subtotal</b>	\$ -	\$ 6,514.50	\$ -	\$ 1,212.00	\$ 530.25	\$ -	\$ -	\$ -	\$ -	\$ 8,256.75
<b>TOTAL LABOR</b>										\$ 22,800.75
<b>DIRECT EXPENSES</b>										
	<b>Unit</b>	<b>Rate</b>	<b>Quantity</b>							<b>TOTAL</b>
Research materials	report									\$ -
Mileage	mile	\$0.58	1,850							\$ 1,073.00
Hotel	night									\$ -
Field supplies	bundle	\$65.00	1							\$ 65.00
<b>TOTAL DIRECT EXPENSES</b>										\$ 1,138.00
<b>TOTAL COST</b>										\$ 23,938.75

**REGULAR MEETING**  
**Alliance Regional Water Authority Technical Committee**

**COMMITTEE MEMBER PACKETS**

Wednesday, January 15th, 2020 at 3:00 P.M.

520 E. RR 150, Kyle, TX 78640

- F.5** Discussion and possible recommendation to the Board to approve a work order with Walker Partners, LLC for Design and Procurement Services for the Authority's Phase 1B Water Treatment Plant project. ~ *Ryan Sowa, P.E., Kimley-Horn & Associates*
- 

Background/Information

Alliance Water Staff is finalizing negotiations with Walker Partners on the final design and procurement services scope and fee. Details will be provided in an updated packet no later than Tuesday, January 14<sup>th</sup>.

**Technical Committee Decision Needed:**

- Possible recommendation to the Board to approve a work order with Walker Partners, LLC for Design and Procurement Services for the Authority's Phase 1B Water Treatment Plant project.



**REGULAR MEETING**  
**Alliance Regional Water Authority Technical Committee**

**COMMITTEE MEMBER PACKETS**

Wednesday, January 15th, 2020 at 3:00 P.M.  
520 E. RR 150, Kyle, TX 78640

- F.6** 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*
- 

Gonzales County Underground Water Conservation District (GCUWCD)

The GCUWCD is scheduled to meet on January 14th. A verbal update of the meeting's activities will be provided to the Technical Committee.

Plum Creek Conservation District (PCCD)

The PCCD is scheduled to meet on January 21st.

Groundwater Management Area 13

No update.

Region L Planning Group

The next Region L Planning Group meeting is scheduled for Thursday, January 23<sup>rd</sup>. This will be the final opportunity to get updates on the plan prior to possible action approving the Initially Prepared Plan in March 2020.

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

No update.

**Technical Committee decision needed:**

- None.

**REGULAR MEETING**  
**Alliance Regional Water Authority Technical Committee**

**COMMITTEE MEMBER PACKETS**

Wednesday, January 15th, 2020 at 3:00 P.M.  
 520 E. RR 150, Kyle, TX 78640

- G. EXECUTIVE DIRECTOR REPORT** - Update on future meeting dates, locations, consultant invoices paid, approved changed orders, status of Authority procurements, Executive Director activities and other operational activities where no action is required. ~ *Graham Moore, P.E., Executive Director*

Board Meeting

- The January Board meeting will be held at the San Marcos Activity Center on Wednesday, January 22nd.

RFQ Update

- The RFQ for the Phase 1B Construction Management & Inspection was issued in mid-December. Responses are due in mid-February.
- Staff has also drafted the RFQ for Public Relation Services with the intent of issuing it at the end of January.

Consultant Invoices Paid

- Below are reports on the consultant invoices paid in December.

**FY 19-20 CONSULTANT INVOICES PAID in DECEMBER 2019**

Consultant	Total Authorized	Current Invoice	Invoiced-to-Date	% of Contract Invoiced	Remaining	Notes/Anomalies
Mark B. Taylor	\$17,500.00	\$6,050.00	\$12,895.00	74%	\$4,605.00	
LAN - Kyle/Buda Design	\$116,280.27	\$3,860.31	\$5,842.26	5%	\$110,438.01	
Patricia Ehrlinger Carls	\$25,000.00	\$0.00	\$6,157.75	25%	\$18,842.25	
RW Harden	\$40,000.00	\$2,383.25	\$7,516.75	19%	\$32,483.25	
Tx Solutions Group	\$72,000.00	\$6,000.00	\$18,000.00	25%	\$54,000.00	
BGE - Ph 1A CA	\$53,938.59	\$6,621.87	\$6,621.87	12%	\$47,316.72	
LAN - ROW Acquisition	\$32,110.04	\$0.00	\$0.00	0%	\$32,110.04	
Kent Alan Sick - ROW Legal	\$45,000.00	\$4,130.04	\$14,539.74	32%	\$30,460.26	
LNV - Ph 1A Observations	\$4,006.84	\$110.00	\$110.00	3%	\$3,896.84	
LNV - GIS Svcs	\$30,777.63	\$0.00	\$0.00	0%	\$30,777.63	
MLA Labs, Inc.	\$10,814.00	\$0.00	\$1,232.00	11%	\$9,582.00	
Armstrong, Vaughan & Associates, P.C.	\$10,715.00	\$0.00	\$0.00	0%	\$10,715.00	
J.R. Tolles & Associates, Inc.	\$189,985.00	\$18,486.00	\$35,854.00	19%	\$154,131.00	
<b>Total</b>	<b>\$458,142.37</b>	<b>\$29,155.47</b>	<b>\$72,915.37</b>		<b>\$385,227.00</b>	

**REGULAR MEETING**  
**Alliance Regional Water Authority Technical Committee**

**COMMITTEE MEMBER PACKETS**

Wednesday, January 15th, 2020 at 3:00 P.M.  
 520 E. RR 150, Kyle, TX 78640

- Below is the report on the Phase 1B invoices paid in December.

**PHASE 1B FY 19-20 CONSULTANT INVOICES PAID in DECEMBER 2019**

Consultant	Total Authorized	Current Invoice	Invoiced-to-Date	% of Contract Invoiced	Remaining	Notes/ Anomalies
Kimley-Horn Ph 1B Owner's Rep	\$1,372,351.19	\$212,818.12	\$478,551.53	35%	\$893,799.66	
Blanton -	\$429,534.08	\$0.00	\$0.00	0%	\$429,534.08	
LAN - Segment A	\$131,884.80	\$35,788.55	\$35,788.55	27%	\$96,096.25	
KFA - Segment B Prelim	\$68,207.94	\$21,546.06	\$21,546.06	32%	\$46,661.88	
BGE - Segment C Prelim	\$172,491.20	\$36,333.75	\$36,333.75	21%	\$136,157.45	
FNI - Segment D	\$17,963.86	\$10,334.20	\$10,334.20	58%	\$7,629.66	
Walker - Segment E Prelim	\$230,594.60	\$7,344.34	\$7,344.34	3%	\$223,250.26	
LAN - ROW Acquisition	\$2,145,847.22	\$0.00	\$0.00	0%	\$2,145,847.22	
DTR&G	\$894,535.31	\$31,747.11	\$67,459.53	8%	\$827,075.78	
CBRE - Appraisals	\$2,291,500.00	\$0.00	\$52,000.00	2%	\$2,239,500.00	
CP&Y - Survey	\$1,957,932.20	\$47,524.25	\$47,524.25	2%	\$1,910,407.95	
RW Harden - WDH	\$13,920.00	\$5,200.00	\$5,200.00	37%	\$8,720.00	
LNV - RWI	\$1,063,283.45	\$97,759.65	\$97,759.65	9%	\$965,523.80	
Walker Partners - WTP Design	\$214,531.12	\$136,939.98	\$136,939.98	64%	\$77,591.14	
FNI - BPS Prelim	\$268,527.88	\$67,327.95	\$67,327.95	25%	\$201,199.93	
Plummer - Inline Elevated Tank	\$87,509.05	\$5,476.50	\$5,476.50	6%	\$82,032.55	
<b>Total</b>	<b>\$11,360,613.90</b>	<b>\$716,140.46</b>	<b>\$1,069,586.29</b>		<b>\$10,291,027.61</b>	

Approved Change Orders

- See below for Change Orders approved in December 2019.

<b>CHANGE ORDERS APPROVED IN DECEMBER 2019</b>				
Consultant	Original Authorization	Change Orders to Date	Change Order Approved this Month	New Total Contract Amount
Walker Partners: 1B Segment E	\$ 408,755.00	\$ 111,824.00	\$ -	\$ 520,579.00
Black Castle - Phase 1A BPS Construction	\$ 4,999,080.00	\$ 111,827.56	\$ -	\$ 5,110,907.56
RW Harden - 1B Well Drilling & Hydrogeology	\$ 114,000.00	\$ 31,380.00	\$ -	\$ 145,380.00
Freese & Nichols: 1B BPS & DP Prelim	\$ 771,617.00	\$ 34,863.00	\$ -	\$ 806,480.00
LAN: 1B Segment A	\$ 595,455.00	\$ 60,375.00	\$ -	\$ 655,830.00
K Friese & Assoc.: 1B Segment B	\$ 565,417.00	\$ 60,095.00	\$ -	\$ 625,512.00
BGE: 1B Segment C	\$ 614,626.00	\$ 10,290.00	\$ -	\$ 624,916.00
Freese & Nichols: 1B Segment D	\$ 597,714.00	\$ 66,722.00	\$ -	\$ 664,436.00
Walker Partners: 1B WTP	\$ 1,203,606.00	\$ 40,406.00	\$ -	\$ 1,244,012.00
CP&Y: Ph 1B Program Survey	\$ 3,375,780.00	\$ 30,000.00	\$ 30,000.00	\$ 3,405,780.00

**REGULAR MEETING**  
**Alliance Regional Water Authority Technical Committee**

**COMMITTEE MEMBER PACKETS**

Wednesday, January 15th, 2020 at 3:00 P.M.  
520 E. RR 150, Kyle, TX 78640

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

Background/Information

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

**REGULAR MEETING**  
**Alliance Regional Water Authority Technical Committee**

**COMMITTEE MEMBER PACKETS**

Wednesday, January 15th, 2020 at 3:00 P.M.  
520 E. RR 150, Kyle, TX 78640

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

**REGULAR MEETING**  
**Alliance Regional Water Authority Technical Committee**

**COMMITTEE MEMBER PACKETS**

Wednesday, January 15th, 2020 at 3:00 P.M.  
520 E. RR 150, Kyle, TX 78640

**I.2** Action from Executive Session on the following matters:

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

**REGULAR MEETING**  
**Alliance Regional Water Authority Technical Committee**

**COMMITTEE MEMBER PACKETS**  
Wednesday, January 15th, 2020 at 3:00 P.M.  
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J. ADJOURNMENT

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