

**Alliance Regional Water Authority  
Technical Committee**

**REGULAR MEETING**



**ALLIANCE WATER**

**COMMITTEE MEMBER PACKETS**

Wednesday, June 13, 2018 at 3:00 P.M.

Kyle – Public Works Facility  
520 E. RR 150, Kyle, TX 78640

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

**COMMITTEE MEMBER PACKETS**  
Wednesday, June 13, 2018 at 3:00 P.M.  
520 E. RR 150, Kyle, Texas 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, May 9, 2018, 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 COMMENTS (3-minute time limit, each)

D. CONSENT AGENDA

D.1 Consider approval of minutes of the Regular Technical Committee Meeting held May 9, 2018. ~ *Graham Moore, P.E., Executive Director*

E. PRESENTATIONS TO THE COMMITTEE

None.

F. ITEMS FOR COMMITTEE ACTION OR DISCUSSION/DIRECTION

F.1 Update and possible direction to Staff regarding the Authority's Phase 1A projects. ~ *Graham Moore, P.E., Executive Director*

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

F.3 Discussion and possible recommendation to the Board to approve a work order with Freese & Nichols, Inc. for Preliminary Engineering Services for the Authority's Phase 1B Segment D pipeline. ~ *Ryan Sowa, P.E., Kimley-Horn & Associates*

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- F.4 Discussion and possible approval of modifying the delivery amounts and locations for Canyon Regional Water Authority under Alliance Water's Phase 1B Program. ~ *Graham Moore, P.E., Executive Director*
- F.5 Discussion of the proposed Alliance Water budget for FY 2018-19; and possible direction to staff. ~ *Graham Moore, P.E., Executive Director*
- F.6 Discussion and possible direction to Staff to reschedule the regular July Technical Committee meeting. ~ *Graham Moore, P.E., Executive Director*
- F.7 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 ~ *Graham Moore, P.E., Executive Director*
- H. COMMITTEE MEMBER ITEMS OR FUTURE AGENDA ITEMS– no action to be taken.
- I. EXECUTIVE SESSION
  - I.1 *Executive Session pursuant to the Government Code, Section 551.071 (Consultation with Attorney) and/or Section 551.072 and 551.073 (Real Property Deliberations) regarding:*
    - A. *Water supply partnership options*
    - B. *Groundwater leases*
    - C. *Acquisition of real property for water supply project purposes*
  - 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

Mayor Travis Mitchell

NON-VOTING MEMBERS PRESENT

Mayor George Haehn

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**C. PUBLIC COMMENTS**

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Comments are limited to 3-minutes.

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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 May 9, 2018. ~ *Graham Moore, P.E., Executive Director*

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Attachment(s)

- 2018 05 09 Technical Committee Meeting Minutes

**Technical Committee decision needed:**

- Approval of minutes.





## ALLIANCE WATER

### Alliance Regional Water Authority

### TECHNICAL COMMITTEE MEETING

### MINUTES

**Wednesday, May 9, 2018**

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, May 9, 2018 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 3:00 p.m. by Mr. Earp.**

B. ROLL CALL.

- **Present: Williams, Earp, Taggart, Ramos with Parker joining in Item E.1 and Mitchell joining in Item F.2. Mr. Williams left during item F.7.**
- **Absent: Haehn.**

C. PUBLIC COMMENTS

- **None.**

D. CONSENT AGENDA

D.1 Consider approval of minutes of the Regular Executive Committee Meeting held April 11, 2018.

- **Motion to adopt the consent agenda as presented was made by Mr. Earp, seconded by Mr. Ramos 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.**
  - **Mr. Taggart requested that construction photographs be placed on the website.**
  - **No Action.**
- F.2 Update and possible direction to Staff regarding the Authority's Phase 1B program.
- **Mr. Moore provided an update on the Phase 1B RFQs.**
  - **Mr. Ryan Sowa with Kimley-Horn went through the presentation in the packet summarizing Kimley-Horn's recent activities and discussing recommendations needed from the Technical Committee.**
  - **Mr. Taggart requested more information on the pipeline pressures anticipated for the segment to Green Valley SUD. Mr. Moore indicated that this is currently under closer review and further discussion will be brought back to the Committee at a future meeting.**
  - **No Action.**

**Items F.3 through F.6 were opened simultaneously for discussion by Mr. Earp.**

- F.3 Discussion and possible recommendation to the Board to approve a work order with Blanton & Associates, Inc. for Environmental Services for the Authority's Phase 1B program.
- F.4 Discussion and possible recommendation to the Board to approve a work authorization with Lockwood, Andrews & Newnam, Inc. for Preliminary Engineering Services for the Authority's Phase 1B Segment A pipeline.
- F.5 Discussion and possible recommendation to the Board to approve a work order with K Friese & Associates, Inc. for Preliminary Engineering Services for the Authority's Phase 1B Segment B pipeline.
- F.6 Discussion and possible recommendation to the Board to approve a work authorization with BGE, Inc. for Preliminary Engineering Services for the Authority's Phase 1B Segment C pipeline.
- **Motion to recommend to the Board approval of the work authorizations indicated in items F.3 through F.6 was made by Mr. Ramos, seconded by Mr. Taggart and approved on a 6-0 vote.**

F.7 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.

- **Update, no action.**

G. EXECUTIVE DIRECTOR REPORT

- **Update, no action.**

H. COMMITTEE MEMBER ITEMS OR FUTURE AGENDA ITEMS

- **None.**

I. EXECUTIVE SESSION

I.1 The Technical Committee recessed into Executive Session at 3:45 p.m. pursuant of the Government Code, Section 551.071, to seek the General Counsel's advice regarding matters involving attorney-client privilege, and Sections 551.072 and 551.073, to discuss water supply project partnership options, groundwater leases and real property deliberations. The Technical Committee ended the Executive Session at 4:18 p.m. at which time it resumed with the regular session.

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

- A. Water supply partnership options
- B. Groundwater leases
- C. Acquisition of real property for water supply project purposes
- D. Groundwater permitting in the Gonzales County Underground Water Conservation District
- **No Action on items A, B and D.**
- **Item I.2.C – motion to settle with the Hunt parties for amount specified in the settlement hearing conducted on June 5, 2018 was made by Mr. Taggart, seconded by Mr. Earp and approved on a 5-0 vote.**

J. ADJOURNMENT

- **Meeting was adjourned at 4:19 by Mr. Earp.**

APPROVED: \_\_\_\_\_, 2018

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**E. PRESENTATIONS TO THE COMMITTEE**

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None.

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**F.1** Update regarding the Authority's Phase 1A projects. ~ *Graham Moore, P.E., Executive Director*

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Background/Information

Below are brief updates on the Phase 1A projects.

Segment B Pipeline:

- Received permit approvals from Hays County and TxDOT. Project is currently under review by Buda and will be submitted to the TWDB for their review after we receive any comments from Buda.

Pump Station:

- No response back from TCEQ as of yet, we expect comments back by July 17th. The project is set for bidding, below are the critical dates:
  - Pre-Bid Meeting: June 26, 2018
  - Bid Opening: July 17, 2018
  - Contingent Award by Alliance Water Board: July 25, 2018

Segment A Pipeline:

- LNV will make a brief presentation updating the Committee on the progress for the Segment A pipeline.

**Technical Committee Decisions Needed:**

- None.

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- F.2** Update and possible direction to Staff regarding the Authority's Phase 1B program.  
~ *Graham Moore, P.E., Executive Director*
- 

Background/Information

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

Four sets of proposals are currently under review, listed below are the number of responses received for each:

- Appraisal Services – 5
- Land Survey Services – 11
- Special Legal Counsel – 6
- Water Treatment Plant Design – 4

Attachment(s)

- Phase 1B Program Update – June 8, 2018

**Technical Committee Decisions Needed:**

- None.



## Phase 1B Program Update

Technical Committee Meeting  
June 13, 2018

Kimley»Horn

Introduction

Ongoing Progress

Consulting Services



Kimley»Horn

## Ongoing Progress

- Program Management Plan
- Stakeholder Coordination
- Budgeting
- Scheduling
- Reporting
- Data Management
- Environmental Management
- Land Acquisition Management
- TWDB Management
- Design Standards / Hydraulics
- Engineering Design Management
- Quality Assurance
- Electrical Power Planning
- Permit Coordination/Tracking
- GBRA Coordination
- Administrative / Operations Facility Layout



Kimley»Horn

## Ongoing Progress

- Program Management Plan
- Stakeholder Coordination
- Budgeting
- Scheduling
- Reporting
- Data Management
- Environmental Management
- Land Acquisition Management
- TWDB Management
- Design Standards / Hydraulics
- Engineering Design Management
- Quality Assurance
- Electrical Power Planning
- Permit Coordination/Tracking
- GBRA Coordination
- Administrative / Operations Facility Layout



Kimley»Horn



# Program Management Plan

Purpose

Communication Protocol

Document Control

EXHIBIT 1-1  
Alliance Water Phase 1B Program Communication Matrix

Stakeholder	Directly Communicates with the following Alliance Water Phase 1B Program Stakeholders:	May Directly Communicate with the following Alliance Water Phase 1B Program Stakeholders regarding contracts:	Comments
ARWA Board	Any Stakeholder		
ARWA Technical Committee	ARWA Board, Executive Director, and ARWA Phase 1B Program Manager Consultant		
Executive Director	Any Stakeholder	ARWA Phase 1B Program Manager Consultant	
ARWA Phase 1B Program Manager Consultant	Any Stakeholder	Executive Director and Consultants	
ARWA Phase 1B Project Manager	ARWA Phase 1B Program Manager Consultant, Document Control Administrator		
Document Control Administrator	Any Stakeholder as Management/Control Board and ARWA T		
Consultants	ARWA Phase 1B Con		
Other External Stakeholders	ARWA Phase 1B Con		
Third Parties	ARWA Phase 1B Con		

ALLIANCE WATER

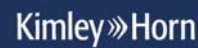
Alliance Water Phase 1B Program Management Plan

Kimley»Horn

**Section 0 – Introduction and Background**

1. Purpose

Alliance Regional Water Authority (ARWA), referred to as Alliance Water, has contracted with the Program Management Consultant for professional and administrative services to assist in the development and execution of the Phase 1B Program. The Program Management Consultant acts as the Owner's Representative to assist in management of the overall program delivery of the Phase 1B Program through the completion and startup of the infrastructure to the year 2023. The Owner's Representative will operate as an extension of, and in complete coordination with, Alliance Water staff. The Program Management Consultant shall be called Owner's Representative from this point forward.



# Engineering Design & Environmental Management

Notice to Proceed – June 11<sup>th</sup>:

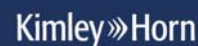
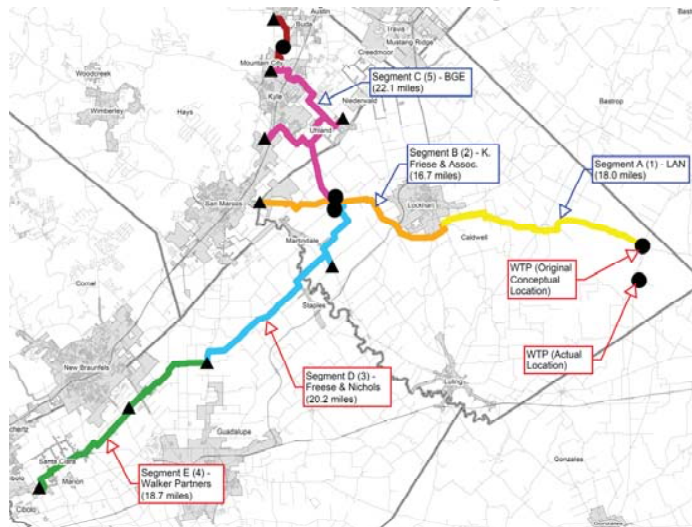
- 3 Pipeline Consultants
- Environmental Consultant

Initial Pipeline Tasks

- Windshield surveys
- Data collection

Initial Environmental Tasks

- Key agency coordination



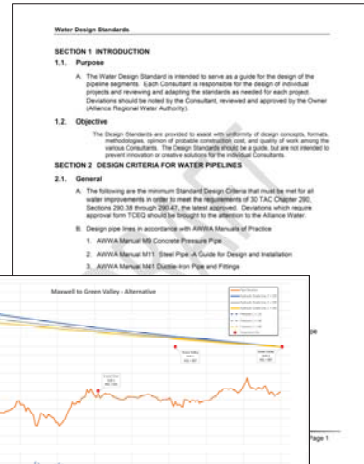
# Design Standards / Hydraulics

## Pipeline Design Standards

- Currently under Alliance Water review

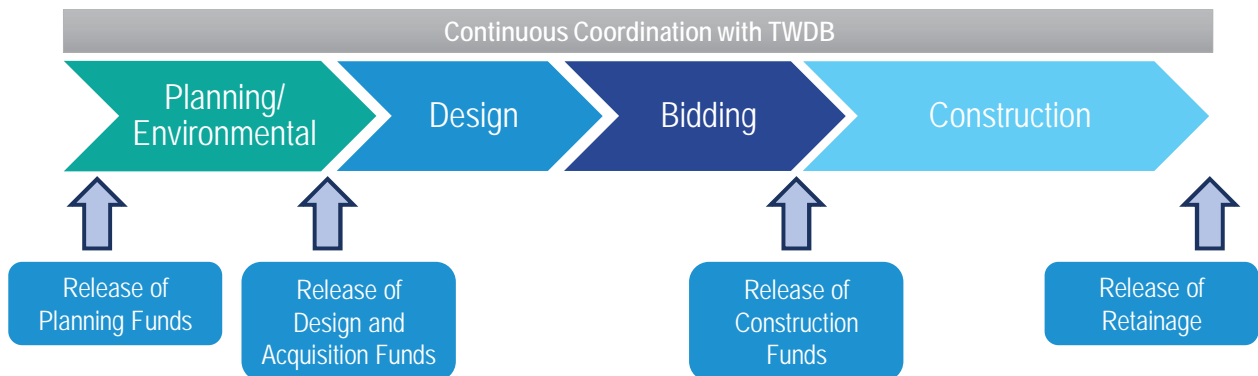
## Hydraulics

- Continued analysis of CRWA delivery
- To be discussed further under Item F.4



Kimley»Horn

# Texas Water Development Board (TWDB) Management



## Upcoming Funding Releases:

1. Water Treatment Plant / Well Field Land Acquisition Funding
2. Planning Funding – consultant contracts



Kimley»Horn



Questions?



Kimley»Horn



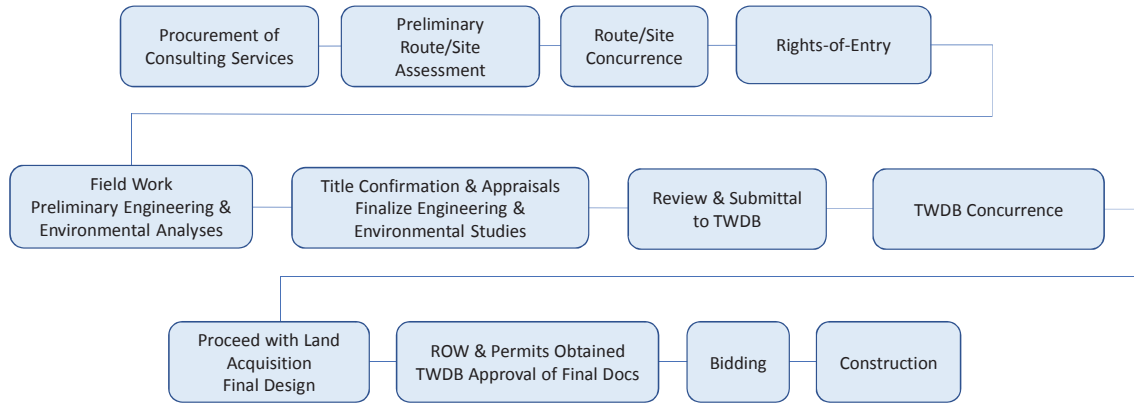
Consulting Services



Kimley»Horn

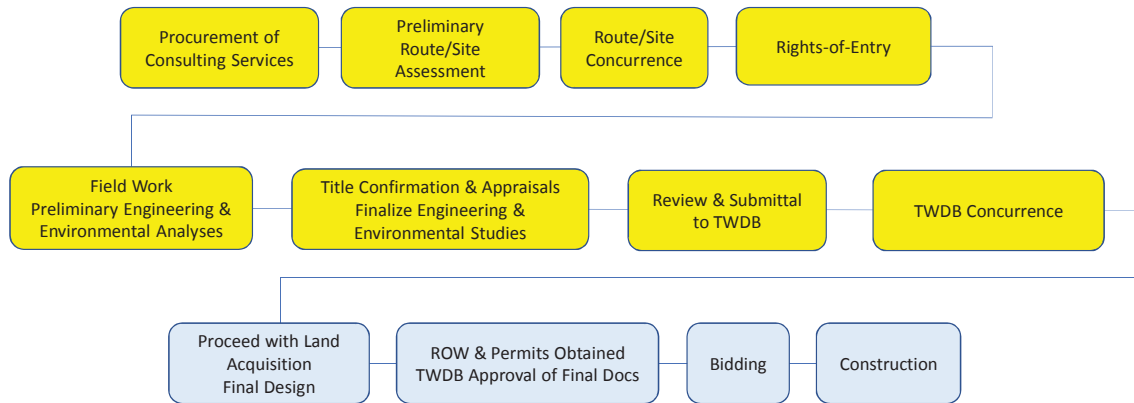


## Phase 1B Project Flowchart

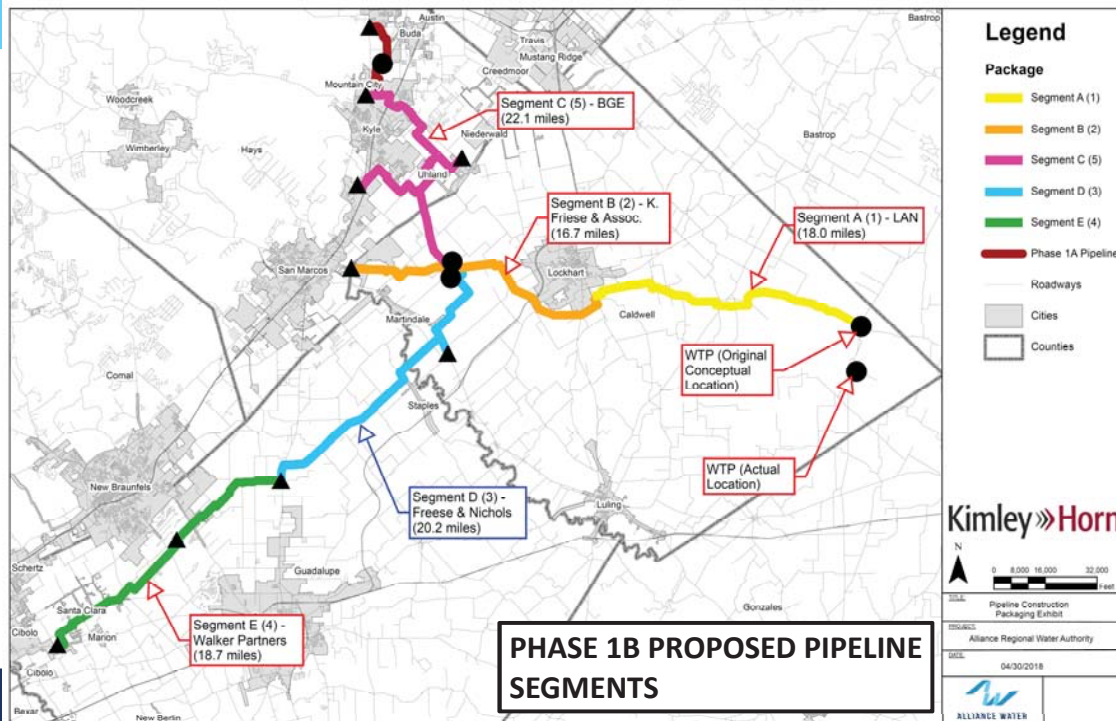


Kimley»Horn

## Phase 1B Project Flowchart



Kimley»Horn



## Phase 1B Transmission Pipeline Design Services

Five (5) selected consultants, three (3) approved at May Board meeting

Scope through preliminary design phase, to include:

- Evaluating pipeline route
- Determining easement requirements
- Develop engineering report for TWDB approval
- Does not include Final Design, Bidding, or Construction Phase

Significant coordination with Environmental and Land Acquisition Teams

## Phase 1B Transmission Pipeline Design Services

Segment	Selected Consultant	Proposal Basic Services	Supplemental Services*	Total Proposal
A	LAN, Inc.	\$ 595,455	\$ 71,787	\$ 667,242
B	K Friese + Assoc.	\$ 565,417	\$ 65,712	\$ 631,129
C	BGE, Inc.	\$ 614,626	\$ 74,706	\$ 689,332
D	Freese and Nichols, Inc.	\$ 597,714	\$ 71,192	\$ 668,906

\* Supplemental services includes geotechnical services as well as additional meetings



Kimley»Horn

## Phase 1B Transmission Pipeline Design Services

Segment	Anticipated Construction Cost	Anticipated Engineering Basic Services Fee through Construction (7% - 8%)*		Preliminary Engineering Proposal (Basic Services)	Preliminary Engineering Fee as a % of Total Engineering	
		\$	\$			
A	\$ 31,100,000	\$ 2,177,000	\$ 2,488,000	\$ 595,455	24%	27%
B	\$ 26,900,000	\$ 1,883,000	\$ 2,152,000	\$ 565,417	26%	30%
C	\$ 35,400,000	\$ 2,478,000	\$ 2,832,000	\$ 614,626	22%	25%
D	\$ 31,900,000	\$ 2,233,000	\$ 2,552,000	\$ 597,714	23%	27%

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



Kimley»Horn



Questions?



Kimley»Horn

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**COMMITTEE MEMBER PACKETS**  
Wednesday, June 13, 2018 at 3:00 P.M.  
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- F.3** Discussion and possible recommendation to the Board to approve a work order with Freese & Nichols, Inc. for Preliminary Engineering Services for the Authority's Phase 1B Segment D pipeline. ~ *Ryan Sowa, P.E., Kimley-Horn & Associates*
- 

Background/Information

The Executive Director and the Owner's Representative negotiated the scope and fee for the preliminary engineering design with Freese & Nichols, Inc. The effort includes preliminary design work (evaluate pipeline route, determine easement requirements, develop engineering report, etc.). The work order does not include final design, bidding or construction phase services – a future work order is anticipated for these efforts.

Below are some of the key facts regarding the Phase 1B Segment D proposal:

**Firm:** Freese & Nichols, Inc.

**Fee:** \$668,906

**Work Order Type:** Lump Sum

**Anticipated Duration:** 12 months

**Project Manager:** Anne Hoskins, P.E.

**Key Subconsultants:** Brierley Associates (Trenchless) and Arias Associates (Geotechnical)

Staff is requesting that the Committee recommend Board approval of a Work Order with a fee for the basic services of \$597,714 and a fee for supplemental effort in an amount not-to-exceed \$71,192 for a total fee of \$668,906. The Executive Director will be given the discretion to authorize the supplemental effort if needed.

Attachment(s)

- Proposal for Preliminary Engineering Design for Phase 1B Segment D pipeline dated June 6, 2018

**Technical Committee Decisions Needed:**

- Possible recommendation to Board to approve a work order with Freese & Nichols, Inc. for Preliminary Engineering Services for the Authority's Phase 1B Segment D pipeline.



06/06/2018

Ryan Sowa, P.E.  
Kimley-Horn

Re: Alliance Regional Water Authority – Phase 1B – Segment D 30% Design Fee Proposal

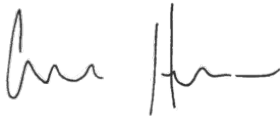
Dear Mr. Sowa:

Freese and Nichols is pleased to submit our proposal for 30% Design of the Alliance Regional Water Authority (ARWA) Segment D project. We have attached the following documents associated with Segment D for your review and discussion:

- Scope of Work (Previously Approved)
- Overall Project Area Map (For Information Purposes)
- Proposed Level of Effort Spreadsheet
- Study Level Opinion of Probable Construction Cost
- Subconsultant Proposals for Brierley and Arias

Please don't hesitate to reach out with any questions or concerns. We look forward to working with ARWA and Kimley-Horn on this important project.

Sincerely,



Anne Hoskins  
Project Manager

**Alliance Regional Water Authority – Phase 1B**  
**30% Design Pipeline Scope**  
**Segment D**

**Basic Services**

1. Project Management
  - 1.1. Prepare Monthly Summary Reports/Invoicing
  - 1.2. Develop QA/QC Plan and Implementation
  - 1.3. Develop Project Management Plan
  - 1.4. Schedule Development and monthly updates – schedule shall cover preliminary design phase through construction. Schedule will be developed in Microsoft Project format
  - 1.5. Risk Register development and monthly updates
  - 1.6. Ongoing coordination and communications with Owner’s Representative and Subconsultants, and internal Team Meetings
  - 1.7. Meetings
    - 1.7.1. Prepare for and conduct Progress Meetings with Owner’s Representative (10 meetings)
    - 1.7.2. Prepare for and conduct half-day coordination workshops (2 workshops)
    - 1.7.3. Prepare meeting notes and agendas for all meetings
  - 1.8. Deliverables
    - 1.8.1. Draft QA/QC Plan in Adobe PDF format
    - 1.8.2. Draft Project Management Plan in Adobe PDF format
2. Review of Pipeline Design Standards
  - 2.1. Review and provide comments on draft pipeline design standards prepared by Owner’s Representative
  - 2.2. Meetings
    - 2.2.1. Attend workshop to discuss comments on draft Pipeline Design Standards
  - 2.3. Deliverables
    - 2.3.1. Comments on Draft Pipeline Design Standards in Adobe PDF format
3. Environmental Coordination
  - 3.1. Review initial investigation
  - 3.2. Ongoing coordination to identify and provide additional information needed during both desktop and field level analyses
  - 3.3. Meetings
    - 3.3.1. Conduct coordination meetings with Environmental Consultant (4 meetings)
    - 3.3.2. Whenever feasible, meet with Environmental Consultant and Land Acquisition Consultant Team simultaneously for coordination
    - 3.3.3. Prepare meeting notes and agendas for all meetings
4. Land Acquisition Coordination
  - 4.1. Verify right-of-entry needs
  - 4.2. Verify easement requirements
    - 4.2.1. Temporary Construction Easements
    - 4.2.2. Permanent Easements
  - 4.3. Meetings

**Alliance Regional Water Authority – Phase 1B**  
**30% Design Pipeline Scope**  
**Segment D**

- 4.3.1. Conduct coordination meetings with Land Acquisition Consultant Team (4 meetings)
  - 4.3.2. Whenever feasible, meet with Environmental Consultant and Land Acquisition Consultant Team simultaneously for coordination
  - 4.3.3. Coordination meetings with Land Acquisition Consultant Team and Land Owners (8 meetings)
  - 4.3.4. Prepare meeting notes and agendas for all meetings
5. Permit Coordination
- 5.1. Identify anticipated permits and points of contact. Summarize all permits, requirements, points of contact and status in permitting log.
  - 5.2. Identify permit requirements and schedule
  - 5.3. Perform ongoing coordination and communication with each permitting entity
  - 5.4. Meetings
    - 5.4.1. Conduct coordination meetings with each of the following entities/agencies (assume 1 meeting each):
      - 5.4.1.1. TxDOT
      - 5.4.1.2. UPRR (if applicable)
      - 5.4.1.3. Cities
      - 5.4.1.4. Counties
      - 5.4.1.5. Other impacted entities/agencies (two maximum)
    - 5.4.2. Prepare meeting notes and agendas for all meetings
6. Public and Private Utility Coordination
- 6.1. Identify points of contact for public and private utilities
  - 6.2. Record Research/Level D SUE
    - 6.2.1. GIS files
    - 6.2.2. Record Drawings
    - 6.2.3. Utility Block Maps
    - 6.2.4. Other
    - 6.2.5. Develop existing utilities base map in AutoCAD and ArcGIS formats
  - 6.3. Alliance Water Sponsors
    - 6.3.1. Confirm location of delivery points
  - 6.4. Develop Level A and B SUE needs for future design phases based on preliminary alignment
  - 6.5. Develop a utility conflict/coordination matrix to track anticipated impacted utilities. The matrix will designate future utility location needs identified in Task 6.4
  - 6.6. Perform ongoing coordination and communication with utilities identified in the matrix in task 6.5 including any coordination required with the Vista Ridge Pipeline project.
  - 6.7. Meetings
    - 6.7.1. Conduct coordination meetings with impacted utilities – assume six 3-hour meetings for budgeting
    - 6.7.2. Conduct meetings with Alliance Water Sponsors to confirm delivery points (4 meetings)
    - 6.7.3. Prepare meeting notes and agendas for all meetings

**Alliance Regional Water Authority – Phase 1B**  
**30% Design Pipeline Scope**  
**Segment D**

7. Desktop Alignment Evaluation
  - 7.1. Perform windshield survey of potential alignments within the alignment corridor identified in the Phase 1B Pipeline Route Analysis Report prepared (provided by Owner's Representative) for the Alliance Regional Water Authority. Alignment studies outside of this corridor are an Additional Service.
  - 7.2. Existing route review and evaluation
  - 7.3. Perform conflict analysis
  - 7.4. Confirm route, identify any deviations, and provide recommendations
  - 7.5. Identify proposed trenchless crossings and potential installation methods (jack and bore, tunnel, HDD, etc.)
  - 7.6. Perform an additional alignment review and analysis of up to three routes within one mile of the alignment approach to the future selected pump station location. Provide input to the Owner's Representative regarding the pipeline route that may impact the selection of a pump station location. The task includes coordination with program booster pump station project consultant. (Assume 1 meeting)
  - 7.7. Route coordination with Segment 2, Segment 5 and Pump Station Consultants
  - 7.8. Evaluate and provide recommendations for preliminary geotechnical investigation (number of bores, depths, testing)
  - 7.9. Prepare and submit Pipeline Routing Technical Memorandum with Route Exhibits and preliminary opinion of probable construction costs. Route exhibits will be 11x17 sheets with plan view only.
  - 7.10. Address comments provided by Owner and Owner's Representative
  - 7.11. Meetings
    - 7.11.1. Draft Technical Memorandum review meeting
    - 7.11.2. Prepare agenda and meeting minutes
  - 7.12. Deliverables
    - 7.12.1. Recommended pipeline route in AutoCAD and ArcGIS formats
    - 7.12.2. Draft Technical Memorandum with Route Exhibits in Adobe PDF format
    - 7.12.3. Comment response table
    - 7.12.4. Final Technical Memorandum with Route Exhibits in Adobe PDF format
8. Engineering Feasibility Report Development
  - 8.1. Develop route recommendations and 30% Plan & Profiles
    - 8.1.1. Scale 1" = 100'H (11"x17" sheets)
    - 8.1.2. GIS topography – LIDAR data will be provided by Owner's Representative
    - 8.1.3. Show critical crossings (creeks, roads, trenchless, etc.)
    - 8.1.4. Show proposed appurtenances (valves, blow-off assemblies, air valves)
  - 8.2. Preliminary Pipeline Design
    - 8.2.1. Confirm pipeline material and pressure class of pipe based on the hydraulic grade provided by Owner and Owner's Representative

**Alliance Regional Water Authority – Phase 1B**  
**30% Design Pipeline Scope**  
**Segment D**

- 8.2.2. Identify proposed trenchless methods for the San Marcos River crossings, other creeks and roads.
- 8.3. Update preliminary opinion of probable construction cost
- 8.4. Prepare and submit Engineering Feasibility Report (EFR) in accordance with Texas Water Development Board (TWDB) format and requirements. The EFR should address/include the following:
  - 8.4.1. Executive Summary
  - 8.4.2. Introduction
  - 8.4.3. Design criteria
  - 8.4.4. Selected alignment and alternatives considered
  - 8.4.5. Required permits and associated permitting entity
  - 8.4.6. Required utility conflicts and associated utility companies
  - 8.4.7. Trenchless construction considerations
  - 8.4.8. Creek crossings and geomorphological considerations
  - 8.4.9. Constructability considerations
  - 8.4.10. Staging/hauling/spoils considerations
  - 8.4.11. Pipeline testing considerations
  - 8.4.12. Future access and maintenance considerations
  - 8.4.13. Surface restoration
  - 8.4.14. Traffic control and impacts to the public
- 8.5. Compilation of Parcel Easement Worksheets will be included as an Appendix to the EFR. A template for this worksheet will be provided by the Owner's Representative. A separate worksheet will be completed for each easement proposed across each parcel, and will include information such as: parcel number, owner information, address, proposed pipeline length and appurtenances, acreage to be acquired, environmental concerns, existing utilities, and property owner requests or concerns
- 8.6. Address comments provided by Owner and Owner's Representative
- 8.7. Address comments provided by TWDB
  - 8.7.1. Directly coordinate with TWDB to clarify and clear comments provided by TWDB as required (with the inclusion of the Owner's Representative)
- 8.8. Meetings
  - 8.8.1. Draft EFR review meeting
  - 8.8.2. Prepare agenda and meeting minutes
- 8.9. Deliverables
  - 8.9.1. Updated pipeline route in AutoCAD and ArcGIS formats (if modified from Task 7)
  - 8.9.2. Draft EFR in Adobe PDF format
  - 8.9.3. Comment response table
  - 8.9.4. Final EFR in Adobe PDF format

**Alliance Regional Water Authority – Phase 1B**  
**30% Design Pipeline Scope**  
**Segment D**

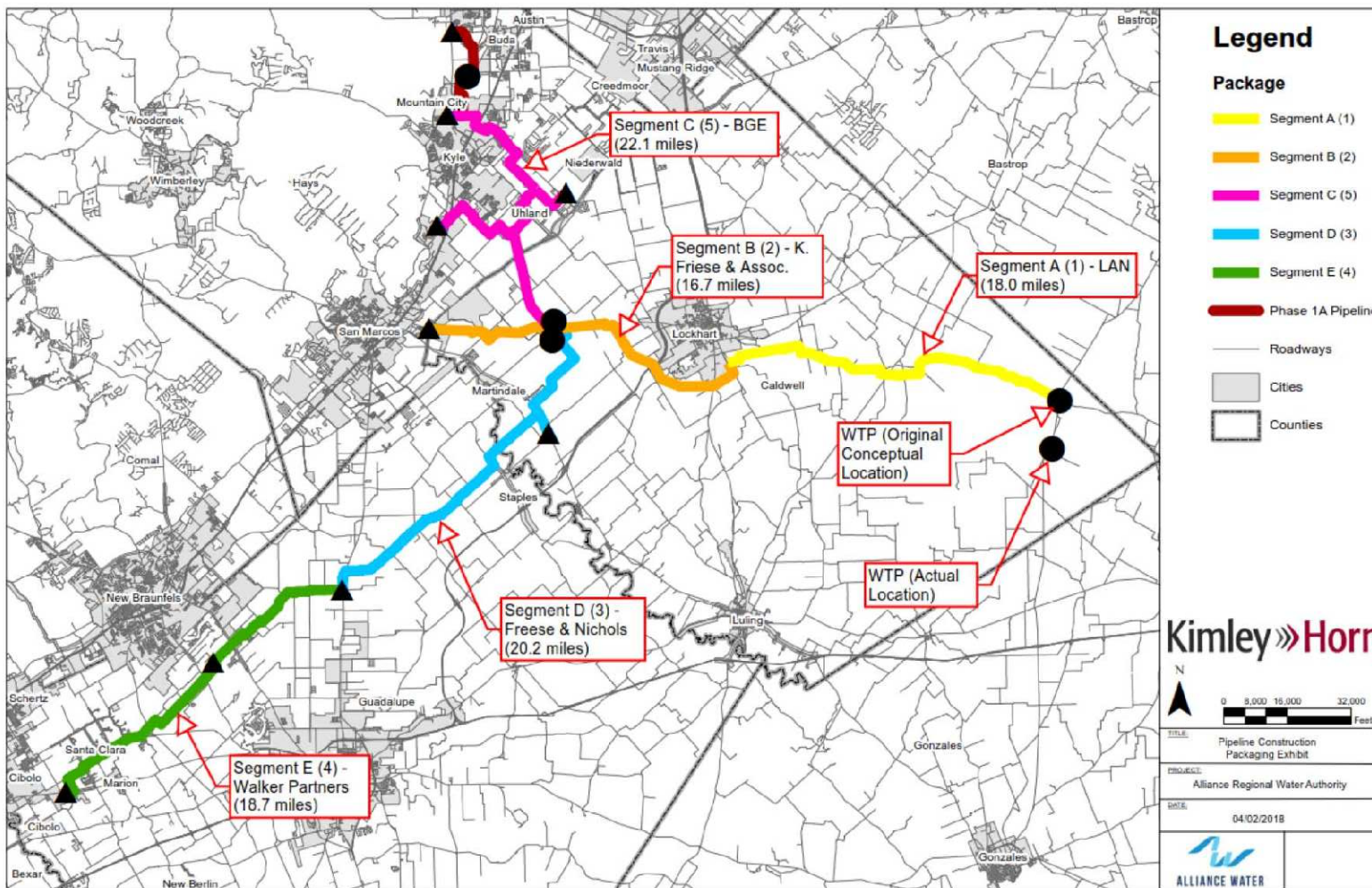
**Supplemental**

- A. Preliminary Geotechnical Investigation. Perform bores along alignment to establish representative subsurface conditions and at major trenchless crossings (major highways, rivers, etc.). Based on recommendations in Task 7.8. For scoping purposes, twenty (20) bores to an average depth of twenty (20) feet are assumed. Based upon findings during 30% Design Phase, additional bores may be required for Final Design.
- B. Additional meetings. Attend meetings in addition to those identified in the Basic Services. For scoping purposes, assume ten (10) additional meetings to be held in the immediate vicinity of the project

**Assumptions**

- 1. The 30% Design Phase of work will be approximately 12 months in length. This phase may run up to 18 months in length to account for environmental permitting efforts but project meetings and all other work except environmental permitting assistance will be confined to 12 months.
- 2. A Risk Register Template will be provided by Owner’s Representative.
- 3. Workshops are anticipated to be a Kick-off Workshop and a Pre-EFR Workshop.
- 4. Land Acquisition Consultant Team will prepare, maintain, and share a database of easement tract information.
- 5. Pipeline route is assumed to follow corridor identified in the Phase 1B Pipeline Route Analysis Report (provided by Owner’s Representative) and alignment evaluation will be limited to modifications within the identified corridor.
- 6. System integration will be the responsibility of others. Segment will end at the fence/property line.
- 7. Owner’s Representative will provide information common to all segments to be included in EFR.
- 8. Owner’s Representative will be primary contact with TWDB and will facilitate submittals and coordination.
- 9. Owner’s Representative will provide CAD standards and GIS base files.
- 10. Owner’s Representative will provide design flows and hydraulic grade along pipeline.
- 11. Topographic survey is not included in 30% design.
- 12. Metes and bounds preparation for easements is not included in 30% design.
- 13. Cathodic protection design is not included in 30% design.
- 14. Geomorphological field assessments at creek crossings are not included in 30% design.
- 15. Field utility location will not be provided in the 30% design phase.
- 16. All meetings will be held in the immediate vicinity of the project (Travis, Hays, or Guadalupe Counties).
- 17. Environmental and cultural resource investigations will be conducted by others .
- 18. Hydraulic and surge modeling will not be performed in this scope of work.
- 19. Pump station location will be determine prior to route evaluation.

Exhibit A  
 Preliminary Map Showing Locations of Six  
 Alliance Regional Water Authority  
 Phase 1B Program Projects



<b>Alliance Water Phase 1B Program</b>															<b>Project Fee Summary</b>		
<b>Freese and Nichols</b>															<b>Basic Effort</b>	\$	597,714
<b>6/5/2018</b>															<b>Supplemental</b>	\$	71,192
<b>Detailed Overall Consultant Cost Breakdown</b>															<b>Total Effort</b>	\$	668,906

Task	Employee	Anne Carrel Hoskins	David Bennett	Rosa Valdez	Helen Salama	Elena Lopez	Scott Maughn	Richard Provolt	Sean Barry	Brian King	Kimberly Patak	Drew Hardin	Billy Metzger	Total Hours	Total Labor Effort	Total Expense Effort	Brierley	Arias	Total Sub Effort	Total Effort	Assumptions
		Project Role	Engineer VI	Engineer VI	Engineer IV	Engineer I	Technician III	Group Manager	Construction Manager V	Engineer V	GIS Analyst V	Engineer VI	Engineer VI								
Hourly Bill Rate		\$209.00	\$209.00	\$156.00	\$137.00	\$96.00	\$240.00	\$173.00	\$178.00	\$156.00	\$209.00	\$209.00	\$148.00								

<b>Basic Services</b>																				
<b>Task 1 - Project Management</b>														\$ 73,742	\$ 5,472	\$ -	\$ -	\$ -	\$ 79,214	
1.1	Prepare Monthly Summary Reports/Invoicing	20											20	40	\$ 7,140	\$ 390	\$ -	\$ -	\$ -	\$ 7,530
1.2	Develop QA/QC Plan and Implementation	2	4	2										12	\$ 2,402	\$ 117	\$ -	\$ -	\$ -	\$ 2,519
1.3	Develop Project Management Plan	2	4	2									4	12	\$ 2,402	\$ 117	\$ -	\$ -	\$ -	\$ 2,519
1.4	Schedule Development and Monthly Updates	20												20	\$ 4,180	\$ 196	\$ -	\$ -	\$ -	\$ 4,376
1.5	Risk Register Development and Monthly Updates	12		10										22	\$ 4,068	\$ 215	\$ -	\$ -	\$ -	\$ 4,283
1.6	Ongoing coordination and communications with Owner's Representative and Subconsultants, and internal Team Meetings	60	6	40	40								10	156	\$ 27,604	\$ 1,525	\$ -	\$ -	\$ -	\$ 29,129
1.7	Meetings													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1.7.1	Conduct Progress Meetings with Owner's Representative (10 Meetings)	30	16	30										76	\$ 14,294	\$ 1,996	\$ -	\$ -	\$ -	\$ 16,290
1.7.2	Conduct half-day coordination workshops (2 workshops)	12	12	12	12									48	\$ 8,532	\$ 720	\$ -	\$ -	\$ -	\$ 9,252
1.7.3	Prepare meeting notes			20										20	\$ 3,120	\$ 196	\$ -	\$ -	\$ -	\$ 3,316

<b>Task 2 - Review of Pipeline Design Standards</b>														\$ 14,138	\$ 927	\$ -	\$ -	\$ -	\$ 15,065	
2.1	Review and provide comments on draft pipeline design standards prepared by Owner's Representative	4	8	16	16									44	\$ 7,196	\$ 430	\$ -	\$ -	\$ -	\$ 7,626
2.2	Meetings													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2.2.1	Attend workshop to discuss comments on draft Pipeline Design Standards	8	8	8	8								6	38	\$ 6,942	\$ 497	\$ -	\$ -	\$ -	\$ 7,439
														0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
														0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
														0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Task 3 - Environmental Coordination</b>														\$ 16,588	\$ 1,459	\$ -	\$ -	\$ -	\$ 18,047	
3.1	Review initial investigation	8		2	12									22	\$ 3,628	\$ 215	\$ -	\$ -	\$ -	\$ 3,843
3.2	Ongoing coordination to identify additional information needed during both desktop and field level analyses	12		12	16									40	\$ 6,572	\$ 391	\$ -	\$ -	\$ -	\$ 6,963
3.3	Meetings													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3.3.1	Conduct coordination meetings with Environmental Consultant ( 4 meetings)	16		8	4									28	\$ 5,140	\$ 775	\$ -	\$ -	\$ -	\$ 5,915
3.3.3	Prepare meeting notes			8										8	\$ 1,248	\$ 78	\$ -	\$ -	\$ -	\$ 1,326
														0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Task 4 - Land Acquisition Coordination</b>														\$ 20,918	\$ 3,066	\$ -	\$ -	\$ -	\$ 23,984	
4.1	Verify right-of-entry needs	2		4	8									14	\$ 2,138	\$ 137	\$ -	\$ -	\$ -	\$ 2,275
4.2	Verify easement requirements													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4.2.1	Temporary Construction Easements	2		2	4			4						12	\$ 1,970	\$ 117	\$ -	\$ -	\$ -	\$ 2,087
4.2.2	Permanent Easements	2		2	4									8	\$ 1,278	\$ 78	\$ -	\$ -	\$ -	\$ 1,356
4.3	Meetings													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4.3.1	Conduct coordination meetings with Land Acquisition Consultant Team (4 meetings)	12		8										20	\$ 3,756	\$ 697	\$ -	\$ -	\$ -	\$ 4,453
4.3.3	Coordination meetings with Land Acquisition Consultant Team and Land Owners (8 meetings)	16		24	16									56	\$ 9,280	\$ -	\$ -	\$ -	\$ -	\$ 9,280
4.3.4	Prepare meeting notes			16										16	\$ 2,496	\$ 1,881	\$ -	\$ -	\$ -	\$ 4,377
														0	\$ -	\$ 156	\$ -	\$ -	\$ -	\$ 156
<b>Task 5 - Permit Coordination</b>														\$ 17,494	\$ 1,828	\$ -	\$ -	\$ -	\$ 19,322	
5.1	Identify anticipated permits and points of contact	2	2	4	10									18	\$ 2,830	\$ 176	\$ -	\$ -	\$ -	\$ 3,006
5.2	Identify permit requirements and schedule	2		4	10									16	\$ 2,412	\$ 156	\$ -	\$ -	\$ -	\$ 2,568
5.3	Perform ongoing coordination and communication with each permitting entity	2		4	10									16	\$ 2,412	\$ 156	\$ -	\$ -	\$ -	\$ 2,568
5.4	Meetings													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5.4.1	Conduct coordination meetings with each of the following entities/agencies (as required):			4	4									8	\$ 1,172	\$ -	\$ -	\$ -	\$ -	\$ 1,172
5.4.1.1	TxDOT			4	4									8	\$ 1,172	\$ 204	\$ -	\$ -	\$ -	\$ 1,376
5.4.1.2	UPRR			4	4									8	\$ 1,172	\$ 204	\$ -	\$ -	\$ -	\$ 1,376
5.4.1.3	Cities			8	8									16	\$ 2,344	\$ 204	\$ -	\$ -	\$ -	\$ 2,548
5.4.1.4	Counties			4	4									8	\$ 1,172	\$ 407	\$ -	\$ -	\$ -	\$ 1,579
5.4.1.5	Other impacted entities/agencies			12										12	\$ 1,872	\$ 204	\$ -	\$ -	\$ -	\$ 2,076
5.4.2	Prepare meeting notes			6										6	\$ 936	\$ 117	\$ -	\$ -	\$ -	\$ 1,053
														0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Task 6 - Public and Private Utility Coordination</b>														\$ 50,183	\$ 4,202	\$ -	\$ -	\$ -	\$ 54,385	
6.1	Identify points of contact for public and private utilities	2		2	2									6	\$ 1,004	\$ 59	\$ -	\$ -	\$ -	\$ 1,063
6.2	Record Research/Level D SUE													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6.2.1	GIS files	2		4	8					24				38	\$ 5,882	\$ 371	\$ -	\$ -	\$ -	\$ 6,253
6.2.2	Record Drawings	2		4	8									14	\$ 2,138	\$ 137	\$ -	\$ -	\$ -	\$ 2,275
6.2.3	Utility Block Maps	2		4	8									14	\$ 2,138	\$ 137	\$ -	\$ -	\$ -	\$ 2,275



<b>Alliance Water Phase 1B Program</b>																			<b>Project Fee Summary</b>	
<b>Freese and Nichols</b>																			Basic Effort \$ 597,714	
<b>6/5/2018</b>																			Supplemental \$ 71,192	
<b>Detailed Overall Consultant Cost Breakdown</b>																			Total Effort \$ 668,906	

Task	Employee	Anne Carrel Hoskins	David Bennett	Rosa Valdez	Helen Salama	Elena Lopez	Scott Maughn	Richard Provolt	Sean Barry	Brian King	Kimberly Patak	Drew Hardin	Billy Metzger	Total Hours	Total Labor Effort	Total Expense Effort	Brierley	Arias	Total Sub Effort	Total Effort	Assumptions
Hourly Bill Rate		\$209.00	\$209.00	\$156.00	\$137.00	\$96.00	\$240.00	\$173.00	\$178.00	\$156.00	\$209.00	\$209.00	\$148.00								
6.2.4	Other	2		4	8									14	\$ 2,138	\$ 137	\$ -	\$ -	\$ -	\$ 2,275	
6.2.5	Develop existing utilities base map in AutoCAD and ArcGIS formats	2		8	24	60				40				134	\$ 16,954	\$ 1,310	\$ -	\$ -	\$ -	\$ 18,264	
6.3	Alliance Water Sponsors	2												2	\$ 418	\$ 20	\$ -	\$ -	\$ -	\$ 438	
6.3.1	Confirm locations of delivery points (as applicable)	2		4	8									14	\$ 2,138	\$ 137	\$ -	\$ -	\$ -	\$ 2,275	
6.4	Develop Level A and B SUE needs for future design phases based on preliminary alignment	2	2	4	6									14	\$ 2,282	\$ 137	\$ -	\$ -	\$ -	\$ 2,419	
6.5	Develop a utility conflict/coordination matrix to track anticipated impacted utilities. The matrix will designate future utility location needs identified in Task 6.4	2		4	12									18	\$ 2,686	\$ 176	\$ -	\$ -	\$ -	\$ 2,862	
6.6	Perform ongoing coordination and communication with utilities identified in the matrix in task 6.5 including any coordination required with the Vista Ridge Pipeline project.	4		4	8									16	\$ 2,556	\$ 156	\$ -	\$ -	\$ -	\$ 2,712	
6.7	Meetings													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
6.7.1	Conduct coordination meetings with impacted utilities	9		9										18	\$ 3,285	\$ 552	\$ -	\$ -	\$ -	\$ 3,837	
6.7.2	Conduct meetings with Alliance Water Sponsors to confirm delivery points (as applicable)	12		12										24	\$ 4,380	\$ 736	\$ -	\$ -	\$ -	\$ 5,116	
6.7.3	Prepare meeting notes			14										14	\$ 2,184	\$ 137	\$ -	\$ -	\$ -	\$ 2,321	
														0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
<b>Task 7 - Desktop Alignment Evaluation</b>															\$ 115,062	\$ 8,046	\$ 32,278	\$ 5,635	\$ 37,913	\$ 161,021	
7.1	Perform windshield survey of potential alignments	10	4	36	32									82	\$ 12,926	\$ 1,712	\$ -	\$ -	\$ -	\$ 14,638	
7.2	Existing route review and evaluation	8	4	20	24									56	\$ 8,916	\$ 547	\$ -	\$ -	\$ -	\$ 9,463	
7.3	Perform conflict analysis	8	4	20	24									56	\$ 8,916	\$ 547	\$ -	\$ -	\$ -	\$ 9,463	
7.4	Confirm route, identify any deviations, and provide recommendations	8	4	20	24									56	\$ 8,916	\$ 547	\$ -	\$ -	\$ -	\$ 9,463	
7.5	Identify proposed trenchless crossings	8	4	20	24									56	\$ 8,916	\$ 547	\$ 32,278	\$ -	\$ 32,278	\$ 41,741	
7.6	Perform an additional alignment review and analysis of up to three routes within one mile of the alignment approach to the future selected pump station location. Provide input to the Owner's Representative regarding the pipeline route that may impact the selection of a pump station location. The task includes coordination with program booster pump station project consultant. (Assume 1 meeting)	8	4	28	40									80	\$ 12,356	\$ 782	\$ -	\$ -	\$ -	\$ 13,138	
7.7	Route coordination with Segment 2, Segment 5 and Pump Station Consultants	8	4	20										32	\$ 5,628	\$ 313	\$ -	\$ -	\$ -	\$ 5,941	
7.8	Evaluate and provide recommendations for preliminary geotechnical investigation (number of bores, depths)	8		8	8									24	\$ 4,016	\$ 235	\$ -	\$ 5,635	\$ 5,635	\$ 9,886	
7.9	Prepare and submit Pipeline Routing Technical Memorandum with Route Exhibits (1"=100', 11x17, plan view only)	22	8	50	60	24				16				180	\$ 27,090	\$ 1,760	\$ -	\$ -	\$ -	\$ 28,850	
7.10	Address comments provided by Owner and Owner's Representative	8		30	24	8				8				78	\$ 11,656	\$ 743	\$ -	\$ -	\$ -	\$ 12,399	
7.11	Meetings													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
7.11.1	Draft Technical Memorandum review meeting	4	6	8	6							6		30	\$ 5,414	\$ 293	\$ -	\$ -	\$ -	\$ 5,707	
7.11.2	Prepare meeting minutes			2										2	\$ 312	\$ 20	\$ -	\$ -	\$ -	\$ 332	
														0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
														0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
														0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
														0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
<b>Task 8 - Engineering Feasibility Report Development</b>															\$ 210,479	\$ 16,197	\$ -	\$ -	\$ -	\$ 226,676	
8.1	Develop route recommendations and 30% Plan & Profiles													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
8.1.1	Scale 1" = 100'H (11"x17" sheets)	32	12	80	80	808	10	10						1,032	\$ 114,334	\$ 10,088	\$ -	\$ -	\$ -	\$ 124,422	
8.1.2	GIS topography	2	2	6	8	8				20				46	\$ 6,756	\$ 450	\$ -	\$ -	\$ -	\$ 7,206	
8.1.3	Show trenchless crossings	2	2	6	12									22	\$ 3,416	\$ 215	\$ -	\$ -	\$ -	\$ 3,631	
8.1.4	Show proposed appurtenances (valves, blow-off assemblies, air valves)	2	2	6	8									18	\$ 2,868	\$ 176	\$ -	\$ -	\$ -	\$ 3,044	
8.2	Develop preliminary opinion of probable construction cost	2	2											4	\$ 836	\$ 39	\$ -	\$ -	\$ -	\$ 875	
8.2.1	Confirm pipeline material and pressure class of pipe based on the hydraulic grade provided by Owner and Owner's Representative	2	2	6	12									22	\$ 3,416	\$ 215	\$ -	\$ -	\$ -	\$ 3,631	
8.2.2	Identify proposed trenchless methods for the San Marcos River crossings, other creeks and roads.	2	2	6	12									22	\$ 3,416	\$ 215	\$ -	\$ -	\$ -	\$ 3,631	
8.3	Update preliminary opinion of probable construction cost	2		6	12					8				28	\$ 4,382	\$ 274	\$ -	\$ -	\$ -	\$ 4,656	
8.4	Prepare and submit Engineering Feasibility Report (EFR) in accordance with Texas Water Development Board (TWDB) format and requirements. The EFR should address/include the following:													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
8.4.1	Executive Summary	4	2	6	6		10							28	\$ 5,412	\$ 274	\$ -	\$ -	\$ -	\$ 5,686	
8.4.2	Introduction	2	2	2	4									10	\$ 1,696	\$ 98	\$ -	\$ -	\$ -	\$ 1,794	
8.4.3	Design criteria	4	2	6	8									20	\$ 3,286	\$ 215	\$ -	\$ -	\$ -	\$ 3,501	
8.4.4	Selected alignment and alternatives considered	4	2	6	12									24	\$ 3,834	\$ 215	\$ -	\$ -	\$ -	\$ 4,049	
8.4.5	Required permits and associated permitting entity	2	2	4	8									16	\$ 2,556	\$ 215	\$ -	\$ -	\$ -	\$ 2,771	
8.4.6	Required utility conflicts and associated utility companies	2	2	4	8									16	\$ 2,556	\$ 215	\$ -	\$ -	\$ -	\$ 2,771	
8.4.7	Trenchless construction considerations	2	2	4	6									14	\$ 2,282	\$ 215	\$ -	\$ -	\$ -	\$ 2,497	

<b>Alliance Water Phase 1B Program</b>															<b>Project Fee Summary</b>		
<b>Freese and Nichols</b>															<b>Basic Effort</b>	\$	597,714
<b>6/5/2018</b>															<b>Supplemental</b>	\$	71,192
<b>Detailed Overall Consultant Cost Breakdown</b>															<b>Total Effort</b>	\$	668,906

Task	Employee	Anne Carrel Hoskins	David Bennett	Rosa Valdez	Helen Salama	Elena Lopez	Scott Maughn	Richard Provolt	Sean Barry	Brian King	Kimberly Patak	Drew Hardin	Billy Metzger	Total Hours	Total Labor Effort	Total Expense Effort	Brierley	Arias	Total Sub Effort	Total Effort	Assumptions
Hourly Bill Rate		\$209.00	\$209.00	\$156.00	\$137.00	\$96.00	\$240.00	\$173.00	\$178.00	\$156.00	\$209.00	\$209.00	\$148.00								
8.4.8	Creek crossings and geomorphological considerations	4	2	6	12						12			36	\$ 6,342	\$ 332	\$ -	\$ -	\$ -	\$ 6,674	
8.4.9	Constructability considerations	3	2	4	8			4						21	\$ 3,457	\$ 254	\$ -	\$ -	\$ -	\$ 3,711	
8.4.10	Staging/hauling/spoils considerations	3	2	6	8			4						23	\$ 3,769	\$ 254	\$ -	\$ -	\$ -	\$ 4,023	
8.4.11	Pipeline testing considerations	3	2	6	10									21	\$ 3,351	\$ 215	\$ -	\$ -	\$ -	\$ 3,566	
8.4.12	Future access and maintenance considerations	4	2	4	10									20	\$ 3,248	\$ 215	\$ -	\$ -	\$ -	\$ 3,463	
8.4.13	Surface restoration	4	2	4	8									18	\$ 2,974	\$ 215	\$ -	\$ -	\$ -	\$ 3,189	
8.4.14	Traffic control and impacts to the public	4	2	6	12				16					40	\$ 6,682	\$ 371	\$ -	\$ -	\$ -	\$ 7,053	
8.5	Compilation of Parcel Easement Worksheets will be included as an Appendix to the EFR. A template for this worksheet will be provided by the Owner's Representative. A separate worksheet will be completed for each easement proposed across each parcel, and will include information such as: parcel number, owner information, address, proposed pipeline length and appurtenances, acreage to be acquired, environmental concerns, existing utilities, and property owner requests or concerns	4	2	6	10									22	\$ 3,560	\$ 196	\$ -	\$ -	\$ -	\$ 3,756	
8.6	Address comments provided by Owner and Owner's Representative	4	2	8	12									26	\$ 4,146	\$ 235	\$ -	\$ -	\$ -	\$ 4,381	
8.7	Address comments provided by TWDB	4	2	8	12									26	\$ 4,146	\$ 235	\$ -	\$ -	\$ -	\$ 4,381	
8.7.1	Directly coordinate with TWDB to clarify and clear comments provided by TWDB as required (with the inclusion of the Owner's Representative)	4		8	8									20	\$ 3,180	\$ 176	\$ -	\$ -	\$ -	\$ 3,356	
8.8	Meetings													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
8.8.1	Draft EFR review meeting	6		6	6							6		24	\$ 4,266	\$ 360	\$ -	\$ -	\$ -	\$ 4,626	
8.8.2	Prepare meeting notes			2										2	\$ 312	\$ 20	\$ -	\$ -	\$ -	\$ 332	
														0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
														0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
														0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
														0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
														0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
<b>Supplemental Services</b>																					
A	Supplemental Services													0	\$ 12,510	\$ 1,840	\$ 4,342	\$ 52,500	\$ 56,842	\$ 71,192	
A	Preliminary Geotechnical Investigation													0	\$ -	\$ -	\$ 4,342	\$ 52,500	\$ 56,842	\$ 56,842	
B	Additional Meetings - 10	30		40										70	\$ 12,510	\$ 1,840	\$ -	\$ -	\$ -	\$ 14,350	
														<b>Grand Total</b>	\$ 531,114	\$ 43,037	\$ 36,621	\$ 58,135	\$ 94,755	\$ 668,906	



Innovative approaches  
Practical results  
Outstanding service

### OPINION OF PROBABLE CONSTRUCTION COSTS

PROJECT TITLE	Phase 1B Pipeline - Segment D	DATE	5/23/2018
CLIENT	ARWA	GROUP	1147
% OF SUBMITTAL	Conceptual	PM	ACH

ESTIMATOR	QC CHECKED BY	FNI PROJECT NO.
ECM	ACH, BB	0

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	MOBILIZATION (5%)	1	LS	\$1,032,610	\$1,032,610
2	12" DIAMETER PIPELINE	5,590	LF	\$80	\$447,200
3	30" DIAMETER PIPELINE	100,860	LF	\$175	\$17,650,500
4	PIPELINE ROW CLEARING AND RESTORATION	50	AC	\$2,500	\$125,000
5	CATHODIC PROTECTION	106,450	LF	\$10	\$1,064,500
6	AIR VALVES	33	EA	\$5,000	\$165,000
7	BLOW-OFF VALVES	30	EA	\$10,000	\$300,000
8	SAN MARCOS SAN MARCOS RIVER CROSSING (54" CASING)	1,000	LF	\$900	\$900,000
SUBTOTAL:					\$21,684,810
CONTINGENCY 30%					\$6,505,443
SUBTOTAL					\$28,190,253
OH&P 10%					\$2,819,025.30

**PROJECT TOTAL \$31,009,278**

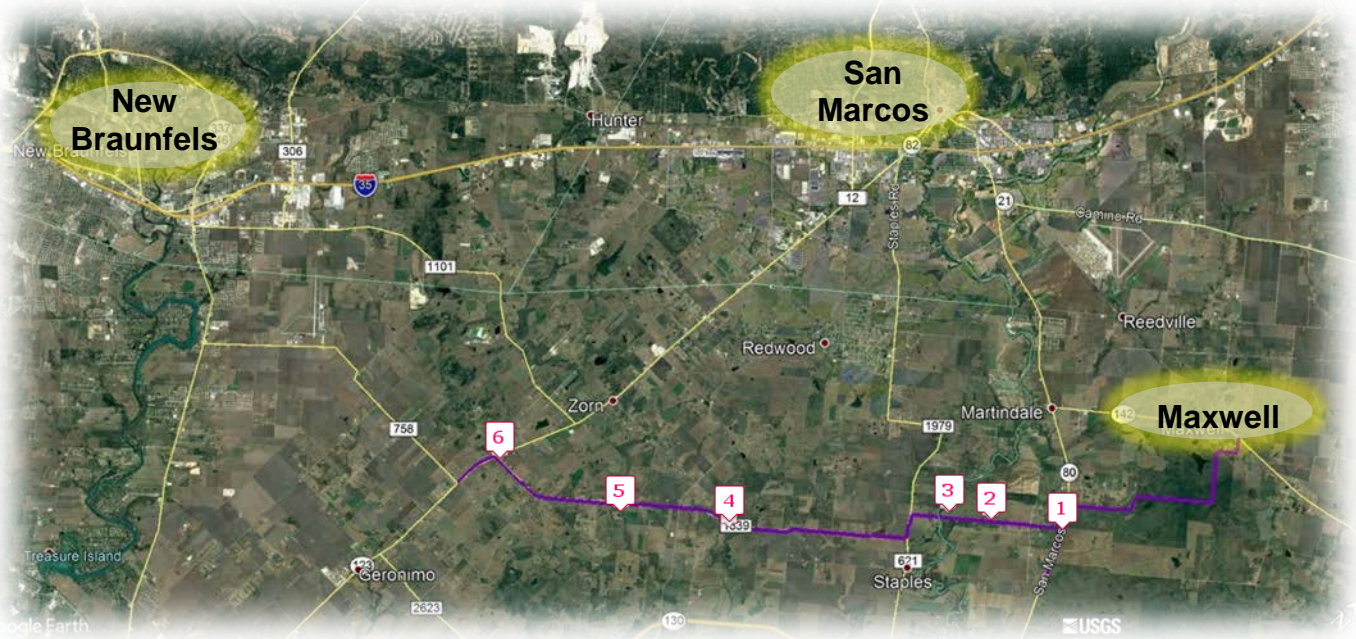
May 22, 2018  
 Brierley Project # 617048

Mrs. Anne Hoskins, P.E.  
 Freese and Nichols, Inc.  
 10431 Morado Circle, Suite 300  
 Austin, TX 78759

RE: REVISED Proposal for Alliance Regional Water Authority Treated Pipeline Project – Segment D

Dear Mrs. Hoskins:

Brierley Associates (Brierley) is pleased to submit this proposal to Freese and Nichols, Inc. (FNI) to provide tunneling and trenchless design associated with the Alliance Regional Water Authority (ARWA) Treated Pipeline Project -- Segment D. The proposed Segment D pipeline is approximately 16 miles long and will generally begin at the new proposed Booster Pump Station #1 located in Maxwell, Texas. From the Booster Pump Station #1, the pipeline will generally head south and southwest to the Crystal Clear SUD delivery point located near the intersection of State Highway 123 and FM 758 in Seguin, Texas. We understand that FNI would like Brierley's assistance with the following 6 trenchless components based on discussions with FNI and the information provided from ARWA RFQ #2017-003 Treated Pipeline Projects dated January 18, 2018:



Trenchless Components

- 1 - San Marcos Hwy
- 2 - Morrison Creek
- 3 - San Marcos River
- 4 - Cottonwood Creek
- 5 - Long Creek and York Creek
- 6 - Highway 123

Based on the cursory review of the alignment and discussions with FNI, it appears that 6 segments of the alignment will be constructed using tunneling or trenchless techniques that FNI would like our assistance with (for the remainder of this proposal the term “tunneling” will be used, but could refer to either a tunneling or trenchless construction technique). For purposes of this proposal, Brierley assumes 6 tunneled segments will be required, along with a construction shaft and retrieval shaft for each tunneled segment, totaling 12 shaft structures.

The ARWA has elected to utilize a phased approach for the project as outlined in the RFQ and highlighted below:

- a. Feasibility/Preliminary Engineering Phase Services (30% Design)
- b. Design and Permitting Services (60%, 90%, and 100% Design)
- c. Bidding Services
- d. Construction Phase Services
- e. Warranty Phase Services

This proposal is specifically for the **a. Feasibility/Preliminary Engineering Phase Services** within the RFQ, and it is understood that an additional proposal will be requested for the future design phases. The preliminary tunneled trenchless components have been identified for the 30 percent Level of Effort and some crossings may be eliminated during this phase as potential open cut options. The purpose of the 30% Level of Effort is to develop a clear and well-defined scope for the project which will layout the path for the rest of the project. The 30% Level of Effort will focus on feasibility which will include route confirmation and final selection, preliminary engineering to initiate future design phases, and development and submittal of a preliminary cost estimate and schedule.

Brierley’s work associated with this phase of the ARWA project will generally be incorporated into the following Tasks:

***Feasibility/Preliminary Engineering Phase Services***

- Task 1*** – Project Management
- Task 2*** – Desktop Alignment Evaluation
- Task 3*** – Engineering Feasibility Report Development
- Task 4*** – Preliminary Geotechnical Investigation

Brierley understands that the 30% Design Phase addressed in this proposal will be approximately 12 months in length, with Brierley’s involvement on an on/off basis throughout this 12 month period.

***TASK 1 – PROJECT MANAGEMENT***

***1.1 Prepare Monthly Summary Reports/Invoicing*** - Brierley will prepare monthly Lump Sum invoices, under the assumptions that this phase of the work will be completed in 12 months. Based on conversations with FNI, we have assumed up to 6 months of invoicing for BA involvement.

***1.2 Coordination calls*** - Brierley assumes 6 coordination calls, to be distributed throughout this 12-month duration. Brierley assumed that these calls will involve 2 people from Brierley’s design team.

***TASK 2 – DESKTOP ALIGNMENT EVALUATION***

***2.1 Perform windshield survey of potential Tunnel Crossings*** - Brierley’s design team (2 BA members) will perform a windshield survey with the FNI team to identify the 6 potential tunnel crossings and 12 shaft locations. It is anticipated that the windshield survey will take one full day in the field and that Right-of-Entry may not be obtained until later stages of the project. With this in mind, some crossings may only be visible from public access points or via available aerial imagery. In order to perform this windshield survey in the most efficient manner, we

assume that FNI will provide Brierley with aerial images for the anticipated crossings. It should be further noted that we assume that FNI will provide Brierley with timely updated CAD/aerial files for the purpose of all Tasks discussed herein, at an interval determined to be most appropriate by Brierley and FNI, as the project progresses. It is understood that geotechnical work will not be performed prior to the windshield survey. During this windshield survey, Brierley will add input to FNI regarding route review.

**2.2 Identify proposed trenchless crossings and potential installation methods (jack and bore, tunnel, HDD, etc.)** - With the route confirmed, Brierley will identify the six tunnel crossings in this proposal and present recommendations to FNI in tabular form for utilization in the development of their Engineering Feasibility Report. This table will identify potential installation methods, preliminary space requirements, and Geology at each of the six tunnel crossings.

**2.3 Evaluate and provide recommendations for preliminary geotechnical investigation (number of bores, depths, testing)** - Brierley will evaluate and provide recommendations for the preliminary geotechnical investigation at the proposed trenchless crossings and provide a Technical Memorandum to FNI. This Technical Memorandum will provide bore locations, depths, standard geotechnical laboratory testing, specialized testing at tunnel and shaft locations, packer testing, piezometer locations, etc.

**2.4 Prepare preliminary opinion of probable construction costs** - Brierley will develop the opinion of probable construction costs (OPCC) for the six tunnel crossings on the project. The OPCC will be based on the preliminary geotechnical investigation (assuming at least 4 borings are drilled for the six crossings) and could change significantly as more geotechnical information is acquired, and as design of the project progresses. The OPCC will be based on a Class 4 estimate classification system as detailed by the AACE Cost Estimating Classification System. The level of detail for this OPCC will be four to six lines per tunnel crossing.

**2.5 Address comments provided by FNI, Owner, and Owner's Representative** - Brierley will address any comments that FNI, Owner, and Owner's Representative may have regarding the Technical Memorandum provided in Task 2. Our proposal and associated fee assumes that comments to these Memos will be addressed in two sets: (1) the first set of comments will be from FNI, to which Brierley will provide a response; (2) the second set of comments will be from the Owner/Rep, to which Brierley will respond, through FNI.

### **TASK 3 - PRELIMINARY GEOTECHNICAL INVESTIGATION (ADDITIONAL SERVICES)**

**Perform bores along alignment to establish representative subsurface conditions at major trenchless crossings (major highways, rivers, etc.)**

Based on conversations with FNI during development of this proposal, we understand that very limited drilling will be performed at specific tunnel crossings yet to be determined. The fee identified in the attached fee worksheet in the section titled "Preliminary Geotechnical Investigation" assumes that a Brierley Professional Geologist will be onsite while these borings are conducted, to observe ground behavior as it pertains to the tunneled crossings. For this proposal, we have assumed two (2) borings will be observed by a Brierley representative, over the course of two to three days. Brierley assumes that all drilling, logging and testing will be performed by the geotechnical consultant. Brierley further assumes that the geotechnical consultant will compile the results of the Preliminary Geotechnical Investigation into a Preliminary Geotechnical Data Report for the development of our technical memoranda.

### **COST**

Brierley proposes to perform the tasks described herein, and summarized on the attached Fee Estimate worksheet to be paid as a Lump Sum.

Note that the hourly rates used are reflective of Brierley's 2018 Standard Fee Schedule. If, for some reason, the 30% design is not completed by December 31, 2019, we reserve

the right to escalate our fees by 5% per year from the 2018 hourly rates. Brierley expects to be allowed to utilize skilled engineering staff throughout Brierley, as needed to perform and review its work. Our fees for this scope will be invoiced monthly, with estimated percent complete for lump sum items. If additional effort beyond the scope detailed is requested, a negotiated fee and contract amendment will be agreed to prior to commencing work. An e-mail or other written directive will be sent to Brierley prior to proceeding with additional scope.

Please call me at 512-219-1733 if you need anything else to clarify this proposal or if we can be of any other assistance to FNI.

A handwritten signature in black ink, appearing to read 'Kevin Mandeville', with a large, stylized flourish at the end.

Sincerely,  
Kevin Mandeville, P.G.  
Associate  
Brierley Associates

Accepted by:

---

Anne Hoskins, P.E.  
Associate

2018 LABOR HOURS AND COSTS

Task	Task Description	Principal / Sr. Consultant II	Sr. Assoc./Sr. Consultant I	Associate/Sr. Project Mgr	Sr. Professional II	Sr. Professional I	Professional II	Professional I	Staff Professional II	BIM/VDC Manager	BIM Technician/Drafter		Administrative	Total Hours	Expense Effort	Total Cost
	Rate	\$ 242	\$ 227	\$ 201	\$ 185	\$ 165	\$ 149	\$ 139	\$ 129	\$ 139	\$ 118	\$ -	\$ 67		LS	
<b>1</b>	<b>Project Management</b>													0		\$ -
1.1	Prepare Monthly Invoices			12									6	18		\$ 2,814
1.2	Coordination Calls	6		6										12		\$ 2,658
<b>2</b>	<b>Desktop Alignment Evaluation</b>													0		\$ -
2.1	Perform Windshield Survey of potential Tunnel Crossings		10	10						2				22	100	\$ 4,658
2.2	Identify Proposed Trenchless Crossing and Potential Installation Methods	2	2	8		20							2	34		\$ 5,980
2.3	Evaluate and provide recommendations for Geotechnical Investigation for Trenchless Crossings	2		10		10							2	24		\$ 4,278
2.4	Prepare Preliminary Opinion of Probable Construction Costs			16		10				2				28		\$ 5,144
2.5	Address Comments provided FNI, Owner, and Owner's Representative	2		2		10								14		\$ 2,536
<b>3</b>	<b>Preliminary Geotechnical Investigation (Additional Services)</b>													0		\$ -
3.1	Preliminary Geotechnical Investigation						24							24	200	\$ 3,776
														0		\$ -
																\$ -
Hours		12	12	64	0	50	24	0	0	4	0	0	10	176		
Total		\$ 2,904	\$ 2,724	\$ 12,864	\$ -	\$ 8,250	\$ 3,576	\$ -	\$ -	\$ 556	\$ -	\$ -	\$ 670		\$ 300	\$ 31,844



**BRIERLEY ASSOCIATES CORPORATION**  
**STANDARD FEE SCHEDULE**  
**January 2018**

1. Fees for services will be based on the time worked on the project by staff personnel plus reimbursable expenses. The hourly fee for professional services will be charged as follows unless otherwise noted in the proposal:

Principal/Senior Consultant II	\$242
Senior Associate/Senior Consultant I	\$227
Associate/Senior Project Manager	\$201
Senior Professional II	\$185
Senior Professional I	\$165
Professional II	\$149
Professional I	\$139
Staff Professional II	\$129
Staff Professional I	\$118
BIM/VDC Manager	\$139
Senior BIM/VDC Designer	\$118
BIM Technician/Drafter	\$98
CADD	\$98
GIS Analyst	\$98
Administrative	\$67

2. Overtime hours will be charged at straight time rates.

3. The fee for direct non-salary expenses will be billed at our cost plus a fifteen (15) percent handling fee and shall include the following: a) Transportation or subsistence expenses incurred for necessary travel, such as use of personal or company vehicles at IRS allowed mileage rates; use of public carriers, airplanes, rental cars, trucks, boats or other means of transportation; b) Reproduction and printing costs for reports, drawings and other project records; c) Express deliveries such as FedEx.

4. Subcontractors engaged to perform services required by the project will be billed at our cost plus fifteen (15) percent.

5. Communications and computer expenses will be charged at a flat rate of three and one half (3.5) percent of the total gross labor charges to include normal telephone, e-mail, faxes, long distance telephone, mailing of correspondence, in-house computer use and computer aided design and drafting (CADD).

6. Specialized computer usage, separately defined in the proposal for specific client needs, will be charged as identified in the proposal.

7. Payment: Invoices generally are submitted once a month for services performed during the previous month. Payment will be due and payable upon receipt of invoice. Interest may be added to accounts in arrears at the rate of one and one-half (1.50%) percent per month on the outstanding balance. In the event Brierley Associates Corp must engage counsel to enforce overdue payment, Client will reimburse Brierley Associates Corp for all reasonable attorney's fees and court costs.

8. The billing rates given above are subject to change at the beginning of each year, unless noted otherwise in the signed proposal.



142 Chula Vista, San Antonio, Texas 78232 • Phone: (210) 308-5884 • Fax: (210) 308-5886

June 4, 2018  
Arias Job No. 2018 - 467

VIA Email: [Anne.Hoskins@freese.com](mailto:Anne.Hoskins@freese.com)

Ms. Anne Carrel Hoskins, P.E.  
Freese and Nichols, Inc.  
10431 Morado Circle, Suite 300  
Austin, Texas 78759

**RE: Proposal for Geotechnical Engineering Services**  
Segment D Pipelines  
Alliance Regional Water Authority (ARWA)  
From Geronimo to Maxwell, Texas

Dear Ms. Hoskins:

Thank you for the opportunity to submit this proposal for the Geotechnical Engineering Services for the proposed project. We understand that Arias Geoprofessionals, Inc. (Arias) has been preselected for this project based on our qualifications.

### **Project Information**

The scope of the overall project generally includes the planning and design of treated water pipelines. The proposed Segment D pipeline will extend from the north of Geronimo to Maxwell, Texas.

### **Proposed Scope of Services**

As a part of the 30% design phase, Arias will involve in the following tasks:

- Perform a limited Desktop Study to assist the Project Design team in developing bore location plans, depths, etc., and
- Perform Preliminary Geotechnical Study using limited borings.

As a part of the Preliminary Geotechnical Study, Arias will perform limited soil test borings. The number and depths of borings were provided by Freese and Nichols, Inc. (FNI). Our scope of services for the Preliminary Geotechnical Study will include the following:

1. Our scope of work will include twenty (20) borings, each drilled and sampled to the maximum depth of 20 feet (i.e. total maximum drilling footage 400 feet). The locations of the borings will be selected based on our discussion with the Project Design team. Arias will retain a subcontract driller with an all-terrain-mounted rig to perform the drilling and sampling; however, an Arias Senior Technician, working under the supervision of a Licensed Texas Professional Engineer, will field locate and mark the borings, and will direct the sampling efforts. Subsurface materials will be sampled with either a split barrel sampler while performing the Standard Penetration Test (ASTM D 1586), or with a thin walled Shelby Tube Sampler (ASTM D 1587). Our scope does not include rock coring.
2. Arias will locate the borings, and contact Texas 811 One Call service in order to mark public utilities in the immediate vicinity of the proposed borings. We have assumed that the client will assist with the coordination and planning to avoid potential private utilities that may be located in the project area. We should be provided with the as-built construction drawings of any underground structures and/or utility feature before we start drilling.

3. If groundwater is encountered, the groundwater levels within the open boreholes will be recorded immediately after drilling. The boreholes will be backfilled with drill cuttings after completion of the drilling.
4. Arias will provide the approximate GPS coordinates of the borings so that FNI can survey the locations and provide Arias with Texas State Plane Coordinates and elevations of the borings.
5. Laboratory testing will be performed on recovered samples selected by the geotechnical engineer to aid in soil classification and to measure engineering properties. Laboratory testing is expected to include moisture content, Atterberg limits, fines content, sulfate content and unconfined compressive strength. The actual laboratory program will depend upon the type of soils encountered.
6. An electronic copy (pdf format) of our engineering report will be prepared by a Licensed Texas Professional Engineer that will include:
  - *Description of the field exploration program;*
  - *Description of the laboratory testing program;*
  - *Boring location plan that depicts borehole locations;*
  - *Boring logs with soil classifications based on the Unified Soil Classification System (ASTM D 2487) with a chart illustrating the soil classification criteria and the terminology and symbols used on the boring logs;*
  - *Description of site geology based on location of the site on the Geologic Atlas of Texas;*
  - *Generalized site stratigraphy and engineering properties developed from field and laboratory data at the explored locations;*
  - *Depth where groundwater was encountered during drilling;*
  - *Evaluation of the possible excavation methods;*
  - *Bedding and backfill recommendations, and allowable bearing capacity; and*
  - *OSHA soil/rock classifications and shear strength design parameters for temporary excavation and shoring considerations.*

Our report will not include providing/conducting local or global stability analyses for retaining walls, shoring systems, or slopes, pavement design and geomorphological study. We can provide these services if desired under a separate service scope for an additional fee.

### **Proposed Fee**

Our estimated fees to perform the assigned tasks as noted above for the proposed project are presented below:

- Limited Desktop Study: **\$4,900.00**
- Preliminary Geotechnical Study: **\$45,652.00**

The work will be performed as outlined in the General Conditions included with this proposal. A cost breakdown is included with this proposal. We will submit monthly progress billing during the course of our study in accordance with unit rates given in the attached breakdown.

***We have prepared our scope and fee with the understanding that the site is accessible to an all-terrain-mounted drilling rig, limited clearing will be required, any permits (such as tree cut permits) will be procured and paid for by others, no concrete coring will be required, and that no special permission will be needed for access. We have assumed that you will provide free access (Right of Entry) to the proposed drilling locations. Supplemental letters are not included in our work scope, and if required,***

**they will be billed according to the unit rates given in the attached fee estimate.**

### **Schedule**

Arias will coordinate with the Project Design team to perform a Limited Desktop Study along the pipeline alignment. We understand that the limited desktop study will be performed to develop bore location plans and depths. Arias will not submit any report for the Desktop Study.

**Preliminary Geotechnical Study:** In general, the field exploration can begin about one (1) week after receiving written authorization (signed proposal). Field drilling and sampling is expected to take approximately five (5) to six (6) days. Laboratory testing is expected to be completed within approximately ten (10) to 15 days after completion of the soil borings. During this time, interim preliminary recommendations could be provided in order to assist the design team in moving forward. We anticipate that our Preliminary Geotechnical Report can be delivered within about six (6) to eight (8) weeks of receiving written authorization. If this schedule does not meet your needs, please inform us.

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

### **Proposal Acceptance**

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

Should you have any questions, please do not hesitate to contact me by email or on my direct line at (210) 499-6816 or on my cell phone at (817) 821-0801. We appreciate the opportunity provided and look forward to being an integral part of the Project Team.

Sincerely,  
**ARIAS & ASSOCIATES, INC.**  
TBPE Registration No: F-32



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



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

Attachments: Cost Breakdown

**ARIAS & ASSOCIATES, INC.**  
**PROFESSIONAL SERVICES AGREEMENT**  
**GEOTECHNICAL AND ENVIRONMENTAL**  
**GENERAL CONDITIONS**  
(20140214R1)

This Professional Services AGREEMENT between Arias & Associates, Inc., hereinafter defined as "ARIAS" and CLIENT includes the attached Proposal and these General Conditions which constitute the AGREEMENT. ARIAS will perform its Services under this Agreement as an independent contractor.

1. Parties. CLIENT is defined as the entity that authorizes performance of services as stated in the Proposal by ARIAS and any entity that accepts responsibility for payment as stated in these General Conditions. If the CLIENT is ordering the services on behalf of another, the CLIENT represents and warrants that the CLIENT is authorized to act on behalf of said party in ordering and directing ARIAS' services. ARIAS will provide the proposed services to and for the CLIENT. The AGREEMENT is not intended to benefit any other person or entity. CONTRACTOR is defined as the CONTRACTOR or contractors, and including its/their subcontractors of every tier, retained to perform construction Work on the Project for which ARIAS is providing Services under this AGREEMENT.
2. Work. Work is defined as the labor, materials, equipment and services of CONTRACTOR.
3. Testing. Testing is defined as the measurement, examination, performance of tests, and any other activities to determine the characteristics or performance of materials.
4. Scope of Services. The scope of services is outlined in the Proposal, which along with these General Conditions, constitutes the Agreement. "Services" means the specific analytical, testing or other service to be performed by ARIAS & ASSOCIATES INC, hereinafter referred to as ARIAS, as set forth in ARIAS' proposal, CLIENT's acceptance thereof and these General Conditions. The CLIENT has sole responsibility for determining whether the scope of ARIAS' services is adequate and sufficient based on the CLIENT's needs and budgetary constraints. The verbal or written ordering of services of ARIAS shall constitute acceptance of the terms of ARIAS' proposal and these General Conditions, regardless of the terms of any subsequently issued document. Arias has no right or responsibility to approve, accept, reject or stop work of any agent or the CLIENT, including CONTRACTOR.
5. On-Site Responsibilities and Risks. Unless otherwise agreed, CLIENT will furnish right-of-entry and obtain permits as required for ARIAS to perform the fieldwork. ARIAS will take reasonable precautions to minimize damage to land and other property caused by ARIAS's operations, but ARIAS has not included in the fee the cost of restoration of damage that may occur. If CLIENT desires ARIAS to restore the site to its former conditions and if ARIAS agrees to do so, ARIAS will undertake the repairs and add the cost to the fee.
6. Toxic and Hazardous Materials. CLIENT will provide ARIAS with all information within its possession or knowledge as to the potential occurrence of toxic or hazardous materials at the site being investigated. ARIAS is entitled to reasonably rely on all such information. If toxic or hazardous materials are encountered though not anticipated as stated in ARIAS's Proposal, ARIAS reserves the right to demobilize field operations at CLIENT's expense. Remobilization may proceed upon agreement by ARIAS and with CLIENT's acceptance of proposed safety fee adjustments.
7. Utilities and Pipelines/Subsurface Indemnification. While performing fieldwork, ARIAS will take reasonable precautions to avoid damage to sub-surface structures, pipelines and utilities. CLIENT AGREES TO DEFEND, INDEMNIFY AND HOLD ARIAS AND ITS OFFICERS, AGENTS, EMPLOYEES AND SUBCONTRACTORS HARMLESS FROM ALL CLAIMS, SUITS, LOSSES, COSTS AND EXPENSES INCLUDING REASONABLE ATTORNEY'S FEES AS A RESULT OF PERSONAL INJURY, DEATH OR PROPERTY DAMAGE OCCURRING WITH RESPECT TO THE PERFORMANCE OF ARIAS'S SERVICES AND ARISING FROM SUBSURFACE CONDITIONS WHICH ARE NOT CALLED TO ARIAS'S ATTENTION AND/OR CORRECTLY SHOWN ON PLANS FURNISHED.
8. Representations. CLIENT acknowledges that subsurface conditions may vary from those encountered at the location where borings, surveys, tests or explorations are made and that ARIAS'S data, interpretations and recommendations are based solely on the information available to ARIAS, constitutes ARIAS'S opinion based on professional judgment and should not be interpreted as representations of fact. CLIENT represents that it has disclosed to ARIAS all information about conditions at the site of which CLIENT or any representative of CLIENT is aware.
9. Use of Information by Others. ARIAS is not responsible for the interpretation by those other than the CLIENT of the information provided to our CLIENT, including the Instruments of Professional Service.
10. Limitation of Liability. THE TOTAL CUMULATIVE LIABILITY OF ARIAS, ITS SUBCONSULTANTS AND SUBCONTRACTORS, AND ALL OF THEIR RESPECTIVE SHAREHOLDERS, DIRECTORS, OFFICERS, EMPLOYEES AND AGENTS (COLLECTIVELY "ARIAS ENTITIES") TO CLIENT ARISING FROM SERVICES UNDER THIS AGREEMENT, INCLUDING ANY AMENDMENT HERETO, INCLUDING ANY REIMBURSEMENT OF ATTORNEY'S FEES AND/OR INDEMNITY OBLIGATION UNDER THIS AGREEMENT, WILL NOT EXCEED THE GROSS COMPENSATION RECEIVED BY ARIAS UNDER THIS AGREEMENT OR \$50,000, WHICHEVER IS GREATER. THIS LIMITATION APPLIES TO ALL LAWSUITS, CLAIMS OR ACTIONS THAT ALLEGE ERRORS OR OMISSIONS IN THE ARIAS ENTITIES'S SERVICES, WHETHER ALLEGED TO ARISE IN TORT, CONTRACT, WARRANTY OR OTHER LEGAL THEORY.
11. Invoices and Payment. An invoice will be submitted monthly or upon completion of ARIAS' scope of services. Payment is due upon receipt of invoice. CLIENT agrees to pay a finance charge of 1.5% per month or the maximum legal rate on past due accounts.
12. Credit Check. ARIAS reserves the right to inquire with third parties as to CLIENT's credit and ARIAS reserves the right to cancel this Proposal and Agreement with CLIENT if ARIAS, in its sole discretion, is not fully satisfied with such inquiry.
13. Construction Observation. ARIAS shall not supervise, direct or have control over the CONTRACTOR's Work nor have any responsibility for the construction means, methods, techniques, sequences or procedures selected by the CONTRACTOR. Arias is not responsible for the CONTRACTOR's safety precautions or programs in connection with the Work. These rights and responsibilities are solely those of the CONTRACTOR in accordance with the Contract Documents. ARIAS shall not be responsible for any acts or omissions of the CONTRACTOR, subcontractor, or any entity performing any portions of the Work, or any agents or employees of any of them. ARIAS does not guarantee the performance of the CONTRACTOR and shall not be responsible for the CONTRACTOR's failure to perform its Work in accordance with the Contract Documents or any applicable laws, codes, rules or regulations.

Observations and standardized sampling, inspection and testing procedures employed by ARIAS will indicate conditions of materials and construction activities only at the precise location and time where and when Services were performed. CLIENT recognizes that conditions of materials and construction activities at other locations may vary from those measured or observed and that conditions at one location and time do not necessarily indicate the conditions of apparently identical materials(s) at other locations and times. Services of ARIAS, even if performed on a continuous basis, should not be interpreted to mean that ARIAS is observing, verifying, testing or inspecting all materials on

the Project. ARIAS is responsible only for those data, interpretations, and recommendations regarding the actual materials and construction activities observed, sampled, inspected or tested and is not responsible for other parties' interpretations or use of the information developed. ARIAS may make certain inferences based upon the information derived from these procedures to formulate professional opinions regarding conditions in other areas.

14. Termination of Services. This Agreement may be terminated with or without cause by the CLIENT or ARIAS upon written notice. In the event of termination, the CLIENT shall pay ARIAS for all services rendered to the date of termination and all reimbursable expenses due to termination. If termination for cause is determined not to exist, then the termination will be considered a termination for convenience.
15. Changed Conditions. The CLIENT shall rely on ARIAS' judgment as to the continued adequacy of the Scope of Services of this Agreement in light of occurrences or discoveries that were not originally contemplated by or known to ARIAS. Should ARIAS call for contract renegotiation, ARIAS shall identify the changed project or subsurface conditions necessitating renegotiation and the CLIENT shall promptly and in good faith enter into renegotiation of this Agreement. If terms cannot be agreed to, the parties agree that either party has the absolute right to terminate this Agreement. ARIAS reserves the right to refuse to perform services not expressly included in the scope of services outlined in the proposal.
16. Indemnification. THE CLIENT AGREES, TO THE FULLEST EXTENT PERMITTED BY LAW, TO INDEMNIFY, DEFEND AND HOLD HARMLESS ARIAS, ITS OFFICERS, DIRECTORS, EMPLOYEES AND SUBCONSULTANTS (COLLECTIVELY, "ARIAS ENTITIES") AGAINST ALL DAMAGES, LIABILITIES OR COSTS INCLUDING REASONABLE ATTORNEY'S FEES AND DEFENSE COSTS, ARISING OUT OF, RELATED TO OR CAUSED BY THE CLIENT'S ACTS IN CONNECTION WITH THE PROJECT AND THE ACTS OF ITS REPRESENTATIVES, CONTRACTORS, SUBCONTRACTORS, OR CONSULTANTS OR ANYONE FOR WHOM THE CLIENT IS LEGALLY LIABLE, OR THE FAILURE TO MAINTAIN OR REPAIR THE PROJECT BY ANYONE.
17. Mediation/Choice of Law & Venue. All disputes between the parties regarding this Agreement or the services performed hereunder shall be subject to mandatory mediation prior to either party instituting arbitration or litigation. All disputes shall be resolved in accordance with the laws of the State of Texas and the parties agree that the venue for any mediation, arbitration, or litigation shall be in Bexar County, Texas.
18. Duration of Offer. The rate pricing, scope, and conditions offered in this proposal will remain in force and effect for a period of 60 days from the date of this proposal. If the proposal has not been accepted by execution and returned within the 60-day period, ARIAS reserves the right to revise any rate pricing, scope or condition in the proposal as may be necessary.
19. Third-Party Beneficiaries. Nothing contained in this Agreement shall create a contractual relationship with or a cause of action in favor of a third party against either the CLIENT or ARIAS. ARIAS' services under this Agreement are being performed solely for the CLIENT's benefit, and no other party or entity shall have any claim against ARIAS because of this Agreement or the performance or nonperformance of services hereunder. The CLIENT and ARIAS agree to require a similar provision in all contracts with CONTRACTORS, subcontractors, subconsultants, vendors and other entities involved in the Project to carry out the intent of this provision.
20. Assignment. During the term of this AGREEMENT and following its termination for any reason, neither party to this Agreement shall transfer, sublet or assign any rights under or interest in this Agreement (including but not limited to monies that are due or monies that may be due) without the prior written consent of the other party. Subcontracting to subconsultants normally contemplated by ARIAS shall not be considered as an assignment for purposes of this Agreement.
21. No Personal Liability. CLIENT and ARIAS intend that ARIAS' services will not subject ARIAS' individual employees, officers or directors to any personal liability. Therefore, and notwithstanding any other provision of this Agreement, CLIENT agrees as its sole and exclusive remedy to direct or assert any claim, demand or suit only against Arias & Associates, Inc.
22. Insurance. ARIAS will maintain the following minimum coverages: Statutory Workers' Compensation/Employer's Liability Insurance; Commercial General Liability Insurance with a combined single limit of \$1,000,000; Automobile Liability Insurance, including liability for all owned, hired and non-owned vehicles with minimum limits of \$1,000,000 for bodily injury per person, \$1,000,000 property damage, and \$1,000,000 combined single limit per occurrence; and ; Professional Liability Insurance in amounts of \$1,000,000 per claim and annual aggregate. ARIAS will provide CLIENT with certificates of insurance evidencing the existence of these policies. Except for Professional Liability and Workers' Compensation Insurance, all policies required under this AGREEMENT shall contain a waiver of subrogation.
23. Integration and Severability. This AGREEMENT reflects the parties' entire Agreement with respect to its terms and limitations and supersedes all prior Agreements, written and oral. If any portion of this AGREEMENT is found void or voidable, such portion will be deemed stricken and the AGREEMENT reformed to as closely approximate the stricken portions as law allows. These terms and conditions survive the completion of the Services under and the termination of the Agreement, whether for cause or for convenience.
24. Standard of Care. In providing services under this AGREEMENT, ARIAS will endeavor to perform in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances at the same time as the Project. Upon notice to ARIAS and by mutual AGREEMENT between the parties, ARIAS will without additional compensation, correct those services not meeting this standard. ARIAS makes no warranty, express or implied, as to its professional services rendered under this AGREEMENT.
25. Consequential Damages. Notwithstanding any other provision of this Agreement, and to the fullest extent permitted by law, neither the CLIENT nor ARIAS, their respective officers, directors, partners, employees, contractors or subconsultants shall be liable to the other or shall make any claim for any incidental, indirect or consequential damages arising out of or connected in any way to the Project or to this Agreement. This mutual waiver of consequential damages shall include, but is not limited to, loss of use, loss of profit, loss of business, loss of income, delay, loss of reputation or any other consequential damages that either party may have incurred from any cause of action including but not limited to negligence, strict liability, breach of contract and breach of strict or implied warranty.
26. Instruments of Professional Service. Instruments of Professional Service are defined as all documents and information – e.g., letters, memoranda, reports, boring logs, maps, field data, field notes, drawings and specifications and test data – prepare by ARIAS. Except as otherwise agreed to by CLIENT and ARIAS, Instruments of Professional Service are and shall remain ARIAS' property, and ARIAS has the right, in its sole discretion, to dispose of or retain the Instruments of Professional Service. CLIENT will not provide Instruments of Professional Service to any other person or entity without ARIAS' prior written consent.
27. Unauthorized Use. Any reuse or modification of the Instruments of Professional Service by CLIENT or anyone obtaining it through CLIENT will be at CLIENT'S sole risk and without liability to ARIAS. CLIENT will defend, indemnify and hold ARIAS harmless from all third party claims, demands, actions, and expenses (including reasonable attorney's fees, expert fees, and other costs of defense) arising out of or in any way related to the reuse or modification of the Instruments of Professional Service by CLIENT or anyone obtaining the Instruments of Professional Service through CLIENT.

28. Statutes of Limitations. The Parties hereto agree that any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events no later than the date of substantial completion of ARIAS'S services hereunder.

ARIAS and CLIENT hereby agree to the terms and conditions of this Proposal and have caused this AGREEMENT to be executed by their duly authorized officers and made effective as of the day and year first written above.

Consultant: **ARIAS & ASSOCIATES, INC.**

By:  Date: June 4, 2018

Printed Name: Christopher M. Szymczak, P.E. Title: Senior Geotechnical Engineer

Address: 142 Chula Vista  
San Antonio, Texas 78232

Phone: (210) 308-5884 Fax: (210) 308-5886

CLIENT: \_\_\_\_\_

By: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Desktop Study - Segment D

DIRECT COSTS				
Description	Qty.	Unit	Unit Cost	Total
Site Visit				
Mileage	0	miles	\$ 0.52	\$ -
GPS	0	day	\$ 100.00	\$ -
Photocopies B/W (8.5" x 11")	0	ea	\$ 0.10	\$ -
Photocopies Color (8.5" x 11")	0	ea	\$ 0.40	\$ -
Photocopies Color (11" x 17")	0	ea	\$ 0.75	\$ -
<b>TOTAL DIRECT COSTS</b>				<b>\$ -</b>

LABOR COSTS																
Description	Principal	Senior Project Engineer	Senior Project Manager	Project Engineer	Prof Geologist	E.I.T. II	E.I.T. I	Laboratory Director	Geologist	CADD Technician / Draftsperson	Drilling Coordinator	Senior Engineering Technician	Engineering Technician	Administrative Specialist	Clerical	Total by Task
	\$ 195.00	\$ 140.00	\$ 175.00	\$ 125.00	\$ 100.00	\$ 95.00	\$ 85.00	\$ 95.00	\$ 85.00	\$ 75.00	\$ 75.00	\$ 75.00	\$ 60.00	\$ 55.00	\$ 50.00	
Review maps and data		1.5		3.0			4.0									\$ 925.00
Review existing boring logs		1.5		3.0			4.0									\$ 925.00
Invoicing and Meetings				2.0												\$ 250.00
Draft Report Preparation		2.0		4.0			8.0									\$ 1,460.00
Final Report Preparation and Review Comments																\$ -
Site Visit																\$ -
Specific construction issue (Trenchless, Staging, Hauling, constructability)		2.0		4.0												
Address comments provided by Owner		1.0		2.0			2.0									
<b>Subtotal Hours</b>	0.0	8.0		18.0	0.0	0.0	18.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
<b>Subtotal</b>	\$ -	\$ 1,120.00	\$ -	\$ 2,250.00	\$ -	\$ -	\$ 1,530.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,560.00
<b>TOTAL LABOR COSTS</b>																<b>\$ 4,900.00</b>
<b>PROJECT TOTAL</b>																<b>\$ 4,900.00</b>

Summary of Fees	
Direct Costs	\$ -
Labor Costs	\$ 4,900.00
<b>Total Fee</b>	<b>\$ 4,900.00</b>



**ARWA Phase Segment D Pipelines - Preliminary Geotech**

<b>DIRECT COSTS</b>				
<b>Description</b>	<b>Qty.</b>	<b>Unit</b>	<b>Unit Cost</b>	<b>Total</b>
<b>Field Exploration</b>				
Site Clearing	1	ea	\$ 1,200.00	\$ 1,200.00
Traffic Control Large Project	1	LS	\$ 2,600.00	\$ 2,600.00
Drill Rig Mobilization (Personnel & Equipment)	6	day	\$ 352.00	\$ 2,112.00
Drilling & Sampling	400	ft	\$ 18.00	\$ 7,200.00
Bulk Samples	0	ea	\$ 175.00	\$ -
Piezometer Installation	0	ea	\$ 1,000.00	\$ -
<b>SUBTOTAL FIELD:</b>				<b>\$ 13,112.00</b>
<b>Laboratory Tests</b>				
Moisture Content	160	ea	\$ 18.00	\$ 2,880.00
Atterberg limits test	80	ea	\$ 75.00	\$ 6,000.00
Minus #200 sieve test	80	ea	\$ 55.00	\$ 4,400.00
UC Soil	60	ea	\$ 65.00	\$ 3,900.00
Sieve Analysis	0	ea	\$ 100.00	\$ -
Lime Series Testing	0	ea	\$ 325.00	\$ -
CBR on Bulk Samples w/ moisture density	0	ea	\$ 850.00	\$ -
Sulfate	20	ea	\$ 35.00	\$ 700.00
<b>SUBTOTAL LAB:</b>				<b>\$ 17,880.00</b>
<b>Engineering Report</b>				
Copies (max. 3 copies of report)	0	ls	500.00	\$ -
<b>SUBTOTAL REPORT:</b>				<b>\$ -</b>
<b>TOTAL DIRECT COSTS</b>				<b>\$ 30,992.00</b>

<b>LABOR COSTS</b>									
<b>Description</b>	<b>Project Manager</b>	<b>Sr. Project Engineer</b>	<b>Project Engineer</b>	<b>Professional Geologist</b>	<b>Sr. Eng. Technician</b>	<b>EIT (I)</b>	<b>Admin. Specialist</b>	<b>Clerical</b>	<b>Total by Task</b>
	\$ 175.00	\$ 140.00	\$ 125.00	\$ 100.00	\$ 75.00	\$85.00	\$55.00	\$ 50.00	
<b>Description</b>									
Field Coordination	2.0						4.0		\$ 570.00
Field Reconnaissance - Locate Borings & Utility Clearance					8.0				\$ 600.00
Soil Sampling and Logging					48.0				\$ 3,600.00
Delayed Groundwater Readings					12.0				\$ 900.00
Review Field/Lab Data			4.0			8.0			\$ 1,180.00
Engineering Analysis	2.0	2.0	4.0			12.0			\$ 2,150.00
Draft Report Preparation	2.0	4.0	20.0			12.0			\$ 4,430.00
Final Report Production	2.0	2.0	4.0					2.0	\$ 1,230.00
<b>Subtotal Hours</b>	8.0	8.0	32.0	0.0	68.0	32.0	4.0	2.0	
<b>Subtotal</b>	\$ 1,400.00	\$ 1,120.00	\$ 4,000.00	\$ -	\$ 5,100.00	\$ 2,720.00	\$ 220.00	\$ 100.00	\$ 14,660.00
<b>TOTAL LABOR COSTS</b>									<b>\$ 14,660.00</b>

<b>PROJECT TOTAL</b>	<b>\$ 45,652.00</b>
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<b>Summary of Fees</b>	
Direct Costs	\$ 30,992.00
Labor Costs	\$ 14,660.00
<b>Total Fee</b>	<b>\$ 45,652.00</b>

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

**COMMITTEE MEMBER PACKETS**  
Wednesday, June 13, 2018 at 3:00 P.M.  
520 E. RR 150, Kyle, Texas 78640

- F.4** Discussion and possible approval of modifying the delivery amounts and locations for Canyon Regional Water Authority under Alliance Water's Phase 1B Program.  
~ *Graham Moore, P.E., Executive Director*
- 

Background/Information

As mentioned to the Technical Committee in May, Mr. Moore and Kimley-Horn have been working with Canyon Regional Water Authority on a request they had to modify the delivery location, amount and pressure on the segment that goes into Guadalupe County.

Attached is a presentation that Mr. Moore will go through summarizing the requested changes and the impacts.

Attachment(s)

- Presentation on Request to Modify Delivery Quantity and Location by CRWA

**Technical Committee Decisions Needed:**

- Possible approval to modify the delivery location and infrastructure capacity for CRWA associated with the Authority's Phase 1B program.

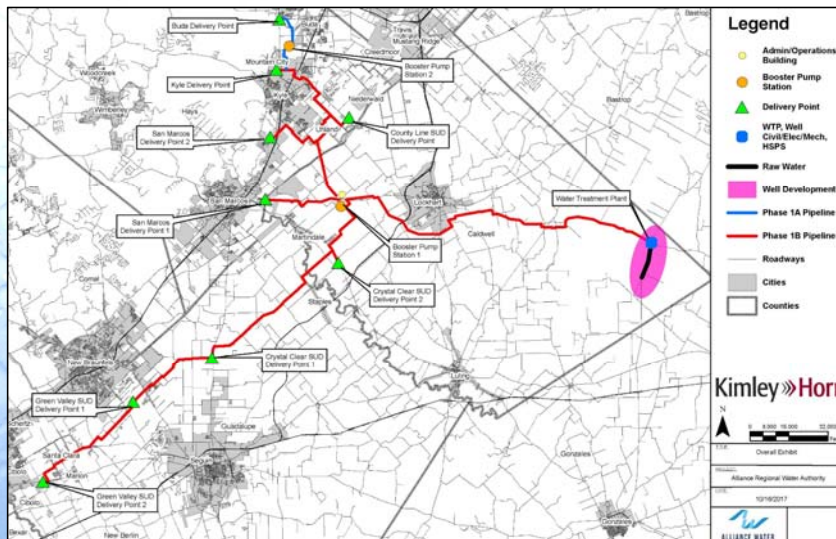
# ALLIANCE REGIONAL WATER AUTHORITY

## PHASE 1B – REQUEST TO MODIFY DELIVERY QUANTITY AND LOCATION FOR CRWA

TECHNICAL COMMITTEE MEETING  
JUNE 13, 2018



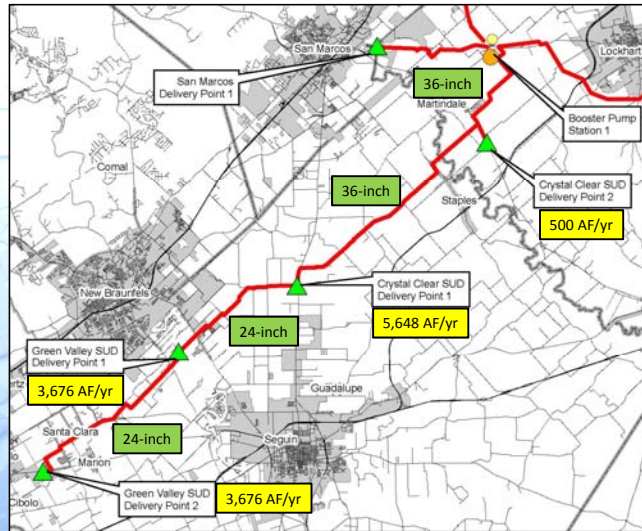
### EXISTING PHASE 1B PLAN



ALLIANCE REGIONAL WATER AUTHORITY



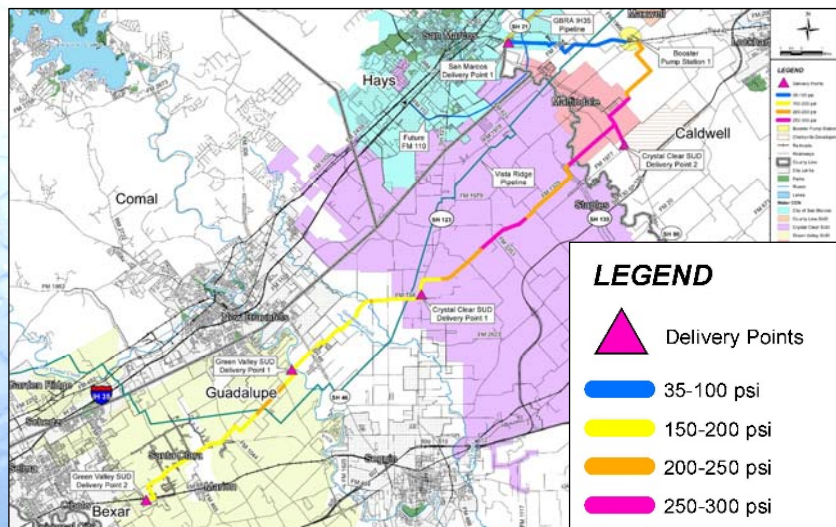
### CRWA ORIGINAL DELIVERIES



ALLIANCE REGIONAL WATER AUTHORITY



### EXISTING PHASE 1B PRESSURES



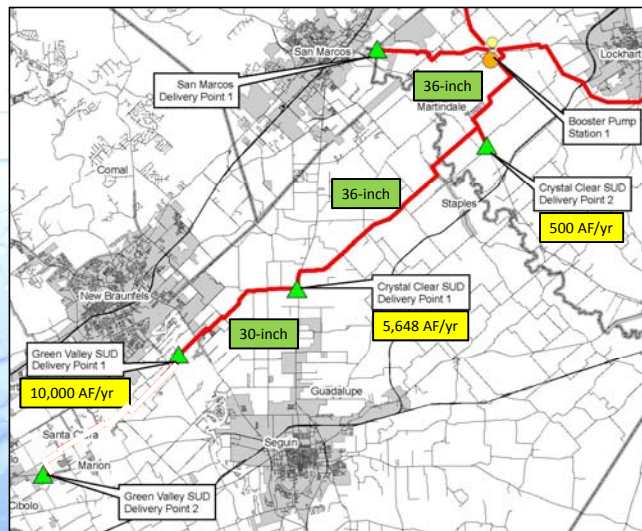
ALLIANCE REGIONAL WATER AUTHORITY



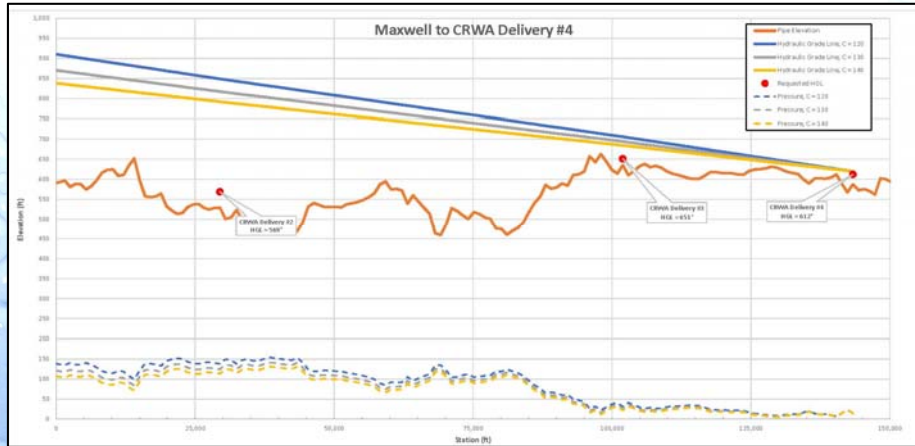
## REQUESTED CHANGES

- Deliver flow to the Dunlap WTP only - no longer additional delivery to Wagner BPS
- Deliver at ground storage tank (not at system pressure)
- Increase delivered flow to 10,000 AF/yr on average day (Note: this does not provide CRWA with additional water, just capacity)

## CRWA PROPOSED DELIVERIES



## CRWA PROPOSED DELIVERIES



ALLIANCE REGIONAL WATER AUTHORITY



## RESULTS OF CHANGES

- Delete 10-miles of 24-inch pipeline (**\$15 million savings**)
- Increase 8-miles of pipeline from 24-inch to 30-inch (**\$2.75 million addition**)
- Consider adding an elevated surge tank to make operations easier (**\$4.95 million addition**)
- Net Result: **\$7.3 million in savings**

ALLIANCE REGIONAL WATER AUTHORITY



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

**COMMITTEE MEMBER PACKETS**  
Wednesday, June 13, 2018 at 3:00 P.M.  
520 E. RR 150, Kyle, Texas 78640

**F.5** Discussion of the proposed Alliance Water budget for FY 2018-19; and possible direction to staff. ~ *Graham Moore, P.E., Executive Director*

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Background/Information

Attached is the proposed budget information for FY 2018-19.

The Authority Financial Policies call for the following schedule as it relates to the budget and CIP process:

<u>Deadline</u>	<u>Action</u>
May 31st	Summary Prelim Budget presented to Technical Committee and Board
June 30th	Proposed Budget presented to Technical Committee
July 31st	Draft budget recommended by the Technical Committee to the Board
August 31st	Approval of budget for ensuing year

Below are some of the highlights of the Agency FY 18-19 budget (Appendix A):

- No significant changes in consultant expenditures, other than a \$70,000 reduction in Legal Support (not Legal Fees, i.e. Mark Taylor), Hydrogeologic Support and Groundwater Permitting.
- Includes cash funding of \$75,000 for some engineering projects and/or studies.
- Updates the construction line item to match agreement with the GCUWCD for the monitoring well project. This payment may get deferred until October 2019, this should be determined in the next 30 days or so.
- Debt service payments for 2015 and 2017 issuances match the final debt service tables.

The projects budget (Appendix B) is being updated to match Kimley-Horn's budgeting effort on the Phase 1B Program, this will be presented in the future.

Appendix C projects out revenues and expenditures for the Authority for the next five years. The water sharing expenditures to be paid by Buda have been included, but the revenues to Kyle and San Marcos have been excluded from this analysis.

Appendix D accounts for the projected revenues and expenses to be made as part of the water sharing plan. This is a revenue neutral proposition for the Authority but does affect three of the Sponsors.

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

**COMMITTEE MEMBER PACKETS**  
 Wednesday, June 13, 2018 at 3:00 P.M.  
 520 E. RR 150, Kyle, Texas 78640

The table below summarizes the payments made by each Sponsor in support of the Operating Budget and Debt Service in FY 2016-17, those being made in FY 2017-18, what was previously projected for FY 2018-19 and what is initially projected for FY 2018-19.

<b>SPONSOR</b>	<b>ACTUAL 2016-17</b>	<b>APPROVED 2017-18</b>	<b>PROJECTED 2018-19</b>	<b>INITIAL ESTIMATES 2018-19</b>
San Marcos	\$628,039	\$778,760	\$1,563,920	\$1,563,449
Kyle	\$687,097	\$849,130	\$1,302,547	\$1,296,685
Buda	\$88,973	\$111,280	\$221,760	\$220,056
Canyon Regional Water Authority	\$812,567	\$984,195	\$1,469,499	\$1,472,650
<b>TOTAL</b>	<b>\$2,216,676</b>	<b>\$2,723,365</b>	<b>\$4,557,726</b>	<b>\$4,552,840</b>

Staff is seeking input from the Technical Committee on the draft budget.

Attachment(s)

- Draft Budget FY 2018-19 dated June 8, 2018

**Technical Committee Decisions Needed:**

- Possible direction to Staff.



ALLIANCE REGIONAL WATER AUTHORITY

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**DRAFT SUMMARY  
BUDGET**

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**ALLIANCE WATER**

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FOR FISCAL YEAR 2018-19

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June 8, 2018

**Alliance Regional Water Authority**  
**APPENDIX A: FY 2018-19 GENERAL OPERATIONS BUDGET**

Expense	Actual FY 2016/17	Approved FY 2017/18	Estimated FY 2017/18	Proposed FY 2018/19
<b>Operations &amp; Maintenance Expenditures</b>				
Royalties & Permit Fees				
Groundwater Royalties	1,065,318.00	1,350,000.00	1,270,000.00	1,350,000.00
Permit Fees	56,753.00	62,700.00	63,000.00	69,200.00
Total Royalties & Permit Fees	1,122,071.00	1,412,700.00	1,333,000.00	1,419,200.00
Contract Services				
Agency Mgmt Public Relations	62,181.66	50,000.00	50,000.00	55,000.00
Contract Services-Lobbyist	90,000.00	78,000.00	72,000.00	72,000.00
Auditing fees	14,669.00	18,000.00	15,500.00	20,000.00
Legal Fees	72,187.50	90,000.00	90,000.00	90,000.00
Total Contract Services	239,038.16	236,000.00	227,500.00	237,000.00
Regional Water Planning Contribution	356.78	5,800.00	2,500.00	5,000.00
Operations				
Dues	4,764.09	5,000.00	4,911.00	6,500.00
Bank Fees	437.59	500.00	575.00	650.00
Insurance - Liability, E&O	1,741.00	2,500.00	1,750.00	2,750.00
Non-Project Newspaper Public Notices	998.80	0.00	566.28	500.00
Books, Subscriptions, Reference	0.00	0.00	0.00	0.00
Postage, Mailing Service	0.00	300.00	0.00	300.00
Printing and Copying	0.00	500.00	2,000.00	2,500.00
Telephone, Telecommunications	1,800.00	3,000.00	2,000.00	3,000.00
Supplies	3,298.27	5,000.00	5,000.00	5,000.00
Operations - Other	0.00	2,500.00	2,000.00	2,500.00
Total Operations	13,039.75	19,300.00	18,802.28	23,700.00
Travel, Conferences & Meetings	1,943.58	4,000.00	2,250.00	4,000.00
Employee Expenses				
Salaries and wages	145,784.48	232,100.00	170,000.00	265,034.00
Auto Allowance	7,800.00	7,800.00	7,800.00	7,800.00
Payroll taxes	9,899.15	18,352.35	14,700.00	20,871.80
Employee Insurance	11,298.67	26,400.00	16,000.00	26,400.00
Retirement	9,218.78	14,125.86	11,000.00	16,319.26
Licenses & Permits	40.00	500.00	300.00	500.00
Mileage Reimbursement	0.00	0.00	400.00	1,200.00
Employee Expenses - Other	0.00	1,000.00	1,000.00	1,000.00
Total Employee Expenses	184,041.08	300,278.00	221,200.00	339,125.07
<b>Total O&amp;M Expenditures</b>	<b>1,560,490.00</b>	<b>1,978,080.00</b>	<b>1,805,250.00</b>	<b>2,028,030.00</b>
<b>Capital Expenditures</b>				
Projects-in-Progress (Cash)				
Legal Support	28,549.84	80,000.00	70,000.00	50,000.00
Hydrogeologic Support	11,876.25	40,000.00	40,000.00	25,000.00
Groundwater Permitting	16,002.25	35,000.00	35,000.00	0.00
Total Projects-in-Progress (Cash)	56,428.34	155,000.00	145,000.00	75,000.00
Contribution to Kyle Water Model	25,000.00	0.00	0.00	0.00
Projects-in-Progress Eng. (Cash)				
Engineering - General	8,805.67	15,000.00	6,200.00	75,000.00
Engineering - Alignment Study	239,818.84	0.00	0.00	0.00
Engineering - Well Field Easements	25,228.75	0.00	49,000.00	0.00
Engineering - DPR Study	46,243.78	0.00	331.00	0.00
SWIFT Support	23,107.96	0.00	0.00	0.00
Blanco Basin WW Study	41,880.00	0.00	0.00	0.00
GIS Development	0.00	0.00	25,000.00	30,000.00
Phase 1B Programming & Standards	62,020.87	0.00	46,000.00	0.00
Total Projects-in-Progress Eng. (Cash)	447,105.87	15,000.00	126,531.00	105,000.00
Projects-in-Progress Construction				
Construction -GCUWCD Monitor Wells	30,411.78	60,825.00	60,825.00	101,375.00
Total Projects-in-Progress Construction	30,410.00	60,825.00	60,825.00	101,380.00
Debt Service Payment				
Series 2015a (CRWA)	250,657.50	249,954.50	249,954.50	248,918.50
Series 2015b (Kyle)	178,814.50	178,409.50	178,409.50	177,806.50
Series 2017a (CRWA)	0.00	240,000.00	173,737.80	497,816.00
Series 2017b (Kyle)	0.00	220,000.00	158,445.45	456,883.50
Series 2017c (San Marcos)	0.00	205,000.00	132,039.88	720,739.00
Series 2015d (Buda)	0.00	30,000.00	18,757.38	100,675.50
Total Debt Service Payment	429,470.00	1,123,360.00	911,340.00	2,202,840.00
<b>Total Capital Expenditures</b>	<b>988,410.00</b>	<b>1,354,190.00</b>	<b>1,243,700.00</b>	<b>2,484,220.00</b>
<b>Total Expense</b>	<b>2,548,900.00</b>	<b>3,332,270.00</b>	<b>3,048,950.00</b>	<b>4,512,250.00</b>

**Alliance Regional Water Authority**  
**APPENDIX A: FY 2018-19 GENERAL OPERATIONS BUDGET**

	<u>Actual</u> <u>FY 2016/17</u>	<u>Approved</u> <u>FY 2017/18</u>	<u>Estimated</u> <u>FY 2017/18</u>	<u>Proposed</u> <u>FY 2018/19</u>
<b>Ordinary Income/Expense</b>				
<b>Beginning Unreserved Fund Balance</b>	<b>2,629,412.00</b>	<b>2,305,422.00</b>	<b>2,305,422.00</b>	<b>1,990,080.00</b>
<b>Revenue</b>				
Project Contribution				
City of San Marcos	628,069.00	778,760.00	778,760.00	1,563,449.00
City of Kyle	687,097.00	849,129.50	849,130.00	1,296,685.00
City of Buda	88,973.00	111,280.00	111,280.00	220,055.50
Canyon Regional Water Authority	812,567.00	984,194.50	984,195.00	1,472,649.50
Project Contribution - Other	0.00	0.00	6,500.00	6,500.00
<b>Total Project Contribution</b>	<b>2,216,706.00</b>	<b>2,723,364.00</b>	<b>2,729,865.00</b>	<b>4,559,339.00</b>
TexStar Interest Revenue				
City of San Marcos	2,149.86	730.00	1,330.00	730.00
City of Kyle	1,688.78	574.00	1,045.00	574.00
City of Buda	304.55	103.00	190.00	103.00
Canyon Regional Water Authority	1,851.86	630.00	1,150.00	630.00
TexStar Interest Revenue - Other	0.00	0.00	0.00	0.00
<b>Total TexStar Interest Revenue</b>	<b>5,995.05</b>	<b>2,037.00</b>	<b>3,715.00</b>	<b>2,037.00</b>
Broadway Interest Revenue				
City of San Marcos	759.06	730.00	10.00	730.00
City of Kyle	625.87	574.00	10.00	574.00
City of Buda	107.54	103.00	2.00	103.00
Canyon Regional Water Authority	717.92	630.00	10.00	630.00
Broadway Interest Revenue - Other	0.00	0.00	0.00	0.00
<b>Total Broadway Interest Income</b>	<b>2,210.39</b>	<b>2,037.00</b>	<b>32.00</b>	<b>2,037.00</b>
<b>Total Operating Revenue</b>	<b>2,224,910.00</b>	<b>2,727,440.00</b>	<b>2,733,610.00</b>	<b>4,563,410.00</b>
<b>Total Funds Available</b>	<b>4,854,322.00</b>	<b>5,032,862.00</b>	<b>5,039,032.00</b>	<b>6,553,490.00</b>
<b>Net Income</b>	<b>-323,990.00</b>	<b>-604,830.00</b>	<b>-315,340.00</b>	<b>51,160.00</b>
<b>Ending Unreserved Balance</b>	<b>2,305,422.00</b>	<b>1,700,590.00</b>	<b>1,990,080.00</b>	<b>2,041,240.00</b>
<b>Fund Balance as Percentage of Operating</b>	<b>147.74%</b>	<b>85.97%</b>	<b>110.24%</b>	<b>100.65%</b>

**Alliance Regional Water Authority  
APPENDIX C: PROJECTED 5-YR BUDGET**

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
<b>Beginning Fund Balance</b>	<b>\$2,305,422</b>	<b>\$1,769,880</b>	<b>\$1,814,550</b>	<b>\$1,942,140</b>	<b>\$2,035,440</b>	<b>\$2,043,160</b>
<b>GENERAL OPERATIONS</b>						
<b>Expenditures</b>						
Operations & Maintenance						
Royalties & Permits	\$1,333,000	\$1,419,200	\$1,426,120	\$1,440,381	\$1,454,785	\$1,469,333
Contract Services	\$227,500	\$237,000	\$232,000	\$254,000	\$269,000	\$269,000
Operations	\$21,302	\$28,700	\$25,150	\$26,408	\$27,728	\$29,114
Employee Expenses	\$221,200	\$339,125	\$369,212	\$383,981	\$438,340	\$467,314
Travel, Conferences & Meetings	\$2,250	\$4,000	\$4,000	\$6,000	\$6,500	\$7,000
Total Operations & Maintenance	\$1,805,252	\$2,028,025	\$2,056,482	\$2,110,770	\$2,196,353	\$2,241,761
Capital Projects (Cash)						
Permitting/Groundwater Support	\$145,000	\$75,000	\$55,000	\$35,000	\$35,000	\$35,000
Engineering & Studies (Cash)	\$126,531	\$105,000	\$115,000	\$115,000	\$115,000	\$100,000
Construction (Cash)	\$60,825	\$101,375	\$0	\$0	\$0	\$0
Total Capital Projects (Cash)	\$332,356	\$281,375	\$170,000	\$150,000	\$150,000	\$135,000
Shared Water						
Payments to Kyle	\$270,000	\$270,000	\$286,000	\$314,600	\$377,520	\$388,846
Payments to San Marcos	\$171,000	\$171,000	\$180,000	\$185,400	\$190,962	\$210,058
ARWA O&M	\$0	\$0	\$55,000	\$60,500	\$72,600	\$81,312
Total Shared Water	\$441,000	\$441,000	\$521,000	\$560,500	\$641,082	\$680,216
<b>Total Expenditures</b>	<b>\$2,578,610</b>	<b>\$2,750,400</b>	<b>\$2,747,480</b>	<b>\$2,821,270</b>	<b>\$2,987,440</b>	<b>\$3,056,980</b>
<b>Revenues</b>						
35.86%    City of San Marcos	\$778,760	\$842,710	\$842,710	\$842,710	\$842,710	\$842,710
28.17%    City of Kyle	\$599,176	\$661,995	\$661,995	\$661,995	\$661,995	\$661,995
5.08%    City of Buda	\$111,280	\$119,380	\$119,380	\$119,380	\$119,380	\$119,380
30.89%    Canyon Regional Water Authority	\$805,786	\$725,915	\$725,915	\$725,915	\$725,915	\$725,915
<b>Total Revenues</b>	<b>\$2,295,001</b>	<b>\$2,350,000</b>	<b>\$2,350,000</b>	<b>\$2,350,000</b>	<b>\$2,350,000</b>	<b>\$2,350,000</b>

**Alliance Regional Water Authority  
APPENDIX C: PROJECTED 5-YR BUDGET**

		2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
<b>PROJECTS</b>							
<b>Expenditures</b>							
30.89%	Series 2015a (CRWA)	\$249,955	\$248,919	\$247,587	\$250,977	\$249,058	\$251,854
28.17%	Series 2015b (Kyle)	\$178,410	\$177,807	\$177,033	\$181,088	\$179,929	\$178,608
30.89%	Series 2017a (CRWA)	\$240,000	\$497,816	\$500,814	\$498,562	\$501,018	\$498,048
28.17%	Series 2017b (Kyle)	\$220,000	\$456,884	\$455,036	\$452,996	\$455,692	\$452,997
35.86%	Series 2017c (San Marcos)	\$205,000	\$720,739	\$722,337	\$723,522	\$719,232	\$719,282
5.08%	Series 2017d (Buda)	\$30,000	\$100,676	\$100,203	\$104,678	\$104,054	\$103,334
30.89%	Series 2019a (CRWA)	\$0	\$0	\$700,000	\$1,520,000	\$1,520,000	\$1,520,000
28.17%	Series 2019b (Kyle)	\$0	\$0	\$635,000	\$1,385,000	\$1,385,000	\$1,385,000
35.86%	Series 2019c (San Marcos)	\$0	\$0	\$610,000	\$2,130,000	\$2,130,000	\$2,130,000
5.08%	Series 2019d (Buda)	\$0	\$0	\$90,000	\$305,000	\$305,000	\$305,000
30.89%	Series 2021a (CRWA)	\$0	\$0	\$0	\$0	\$835,000	\$1,745,000
28.17%	Series 2021b (Kyle)	\$0	\$0	\$0	\$0	\$760,000	\$1,590,000
35.86%	Series 2021c (San Marcos)	\$0	\$0	\$0	\$0	\$745,000	\$2,420,000
5.08%	Series 2021d (Buda)	\$0	\$0	\$0	\$0	\$110,000	\$345,000
	<b>Total Expenditures</b>	<b>\$1,123,364</b>	<b>\$2,202,839</b>	<b>\$4,238,009</b>	<b>\$7,551,822</b>	<b>\$9,998,982</b>	<b>\$13,644,122</b>
<b>Revenues</b>							
	Reimbursement						
	Series 2015a (CRWA)	\$0	\$0	\$0	\$0	\$0	\$0
	Series 2015b (Kyle)	\$0	\$0	\$0	\$0	\$0	\$0
	Total Reimbursement	\$0	\$0	\$0	\$0	\$0	\$0
	Sponsor Payments						
	City of San Marcos	\$205,000	\$720,739	\$1,332,337	\$2,853,522	\$3,594,232	\$5,269,282
	City of Kyle	\$249,955	\$634,690	\$1,267,068	\$2,019,083	\$2,780,620	\$3,606,605
	City of Buda	\$30,000	\$100,676	\$190,203	\$409,678	\$519,054	\$753,334
	Canyon Regional Water Authority	\$178,410	\$746,735	\$1,448,401	\$2,269,539	\$3,105,076	\$4,014,902
	Total Sponsor Payments	\$663,364	\$2,202,839	\$4,238,009	\$7,551,822	\$9,998,982	\$13,644,122
	<b>Total Revenues</b>	<b>\$663,364</b>	<b>\$2,202,839</b>	<b>\$4,238,009</b>	<b>\$7,551,822</b>	<b>\$9,998,982</b>	<b>\$13,644,122</b>

**Alliance Regional Water Authority  
APPENDIX C: PROJECTED 5-YR BUDGET**

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
<b>Net Sponsor Payments</b>						
Sponsor Payments						
City of San Marcos	\$778,760	\$1,563,449	\$2,175,047	\$3,696,232	\$4,436,942	\$6,111,992
City of Kyle	\$849,130	\$1,296,685	\$1,929,063	\$2,681,078	\$3,442,615	\$4,268,600
City of Buda	\$552,280	\$661,056	\$830,583	\$1,089,558	\$1,279,516	\$1,552,930
Canyon Regional Water Authority	\$984,195	\$1,472,650	\$2,174,316	\$2,995,454	\$3,830,991	\$4,740,817
<b>Total Net Sponsor Payments</b>	<b>\$3,164,365</b>	<b>\$4,993,839</b>	<b>\$7,109,009</b>	<b>\$10,462,322</b>	<b>\$12,990,064</b>	<b>\$16,674,338</b>
Interest Income	\$2,069	\$4,074	\$4,074	\$4,074	\$4,074	\$4,074
<b>NET INCOME</b>	<b>-\$535,540</b>	<b>\$44,670</b>	<b>\$127,590</b>	<b>\$93,300</b>	<b>\$7,720</b>	<b>-\$22,690</b>
<b>ENDING FUND BALANCE</b>	<b>\$1,769,880</b>	<b>\$1,814,550</b>	<b>\$1,942,140</b>	<b>\$2,035,440</b>	<b>\$2,043,160</b>	<b>\$2,020,470</b>
	98.04%	89.47%	94.44%	96.43%	93.03%	90.13%

**One-Time Cash Contribution to Project**

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
One-Time Cash Contribution to Project						
City of San Marcos	\$3,004,900	\$2,077,500	\$623,100	\$0	\$0	\$0
City of Buda	\$425,700	\$294,300	\$88,300	\$0	\$0	\$0
<b>Total One-Time Cash Contribution</b>	<b>\$3,430,600</b>	<b>\$2,371,800</b>	<b>\$711,400</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

**Alliance Regional Water Authority  
Projected 5-Yr Contributions by Sponsor**

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
35.86% San Marcos	\$778,760	\$3,640,949	\$2,798,147	\$3,696,232	\$4,436,942	\$6,111,992
28.17% Kyle	\$849,130	\$1,296,685	\$1,929,063	\$2,681,078	\$3,442,615	\$4,268,600
5.08% Buda	\$111,280	\$955,356	\$918,883	\$1,089,558	\$1,279,516	\$1,552,930
30.89% Canyon Regional Water Authority	\$984,195	\$1,472,650	\$2,174,316	\$2,995,454	\$3,830,991	\$4,740,817
<b>TOTAL</b>	<b>\$2,723,365</b>	<b>\$7,365,639</b>	<b>\$7,820,409</b>	<b>\$10,462,322</b>	<b>\$12,990,064</b>	<b>\$16,674,338</b>

**Alliance Regional Water Authority**  
**APPENDIX C: PROJECTED 5-YR BUDGET**

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
<b>DEBT SERVICE RECAPITULATION BY SPONSOR</b>						
Series 2015a (CRWA)	\$249,955	\$248,919	\$247,587	\$250,977	\$249,058	\$251,854
Series 2017a (CRWA)	\$240,000	\$497,816	\$500,814	\$498,562	\$501,018	\$498,048
Series 2019a (CRWA)	\$0	\$0	\$700,000	\$1,520,000	\$1,520,000	\$1,520,000
Series 2021a (CRWA)	\$0	\$0	\$0	\$0	\$835,000	\$1,745,000
<b>CRWA Total</b>	<b>\$489,955</b>	<b>\$746,735</b>	<b>\$1,448,401</b>	<b>\$2,269,539</b>	<b>\$3,105,076</b>	<b>\$4,014,902</b>
Series 2015b (Kyle)	\$178,410	\$177,807	\$177,033	\$181,088	\$179,929	\$178,608
Series 2017b (Kyle)	\$220,000	\$456,884	\$455,036	\$452,996	\$455,692	\$452,997
Series 2019b (Kyle)	\$0	\$0	\$635,000	\$1,385,000	\$1,385,000	\$1,385,000
Series 2021b (Kyle)	\$0	\$0	\$0	\$0	\$760,000	\$1,590,000
<b>Kyle Total</b>	<b>\$398,410</b>	<b>\$634,690</b>	<b>\$1,267,068</b>	<b>\$2,019,083</b>	<b>\$2,780,620</b>	<b>\$3,606,605</b>
Series 2017c (San Marcos)	\$205,000	\$720,739	\$722,337	\$723,522	\$719,232	\$719,282
Series 2019c (San Marcos)	\$0	\$0	\$610,000	\$2,130,000	\$2,130,000	\$2,130,000
Series 2021c (San Marcos)	\$0	\$0	\$0	\$0	\$745,000	\$2,420,000
<b>San Marcos Total</b>	<b>\$205,000</b>	<b>\$720,739</b>	<b>\$1,332,337</b>	<b>\$2,853,522</b>	<b>\$3,594,232</b>	<b>\$5,269,282</b>
Series 2017d (Buda)	\$30,000	\$100,676	\$100,203	\$104,678	\$104,054	\$103,334
Series 2019d (Buda)	\$0	\$0	\$90,000	\$305,000	\$305,000	\$305,000
Series 2021d (Buda)	\$0	\$0	\$0	\$0	\$110,000	\$345,000
<b>Buda Total</b>	<b>\$30,000</b>	<b>\$100,676</b>	<b>\$190,203</b>	<b>\$409,678</b>	<b>\$519,054</b>	<b>\$753,334</b>

**Alliance Regional Water Authority**  
**APPENDIX D: FY 2018-19 WATER SHARING**

	Actual FY 2016/17	Approved FY 2017/18	Estimated FY 2017/18	Proposed FY 2018/19
<b>Ordinary Income/Expense</b>				
<b>Revenue</b>				
Interim Water Revenue				
City of San Marcos	0.00	0.00	0.00	0.00
City of Kyle	0.00	0.00	0.00	0.00
City of Buda	276,968.00	441,000.00	387,900.00	441,000.00
Canyon Regional Water Authority	0.00	0.00	0.00	0.00
Total Interim Water Revenue	276,968.00	441,000.00	387,900.00	441,000.00
<b>Total Operating Revenue</b>	<b>276,968.00</b>	<b>441,000.00</b>	<b>387,900.00</b>	<b>441,000.00</b>
<b>Total Funds Available</b>	<b>276,968.00</b>	<b>441,000.00</b>	<b>387,900.00</b>	<b>441,000.00</b>
<b>Expense</b>				
<b>Water Expenditures</b>				
Payments for Shared Water				
City of San Marcos	108,368.00	171,000.00	164,220.00	171,000.00
City of Kyle	168,600.00	270,000.00	223,680.00	270,000.00
City of Buda	0.00	0.00	0.00	0.00
Canyon Regional Water Authority	0.00	0.00	0.00	0.00
Total Payments for Water	276,968.00	441,000.00	387,900.00	441,000.00
Phase 1A BPS O&M				
Electricity	0.00	0.00	0.00	0.00
Chemicals	0.00	0.00	0.00	0.00
Maintenance	0.00	0.00	0.00	0.00
Total Phase 1A BPS O&M	0.00	0.00	0.00	0.00
<b>Total Capital Expenditures</b>	<b>276,968.00</b>	<b>441,000.00</b>	<b>387,900.00</b>	<b>441,000.00</b>



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

**COMMITTEE MEMBER PACKETS**  
Wednesday, June 13, 2018 at 3:00 P.M.  
520 E. RR 150, Kyle, Texas 78640

**F.6** Discussion and possible direction to Staff to reschedule the regular July Technical Committee meeting. ~ *Graham Moore, P.E., Executive Director*

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Background/Information

Mr. Moore cannot attend the regularly scheduled Technical Committee meeting (7/11) as he will be on PTO that day. Staff recommends that the meeting be rescheduled, below are the potential options:

- Wednesday, July 18<sup>th</sup> @ 3:00 PM
- Friday, July 13<sup>th</sup> @ 2:00 PM

In addition to routine matters the agenda will likely contain possible recommendations on approval of the Segment E Pipeline preliminary engineering design and Land Acquisition Consultant contracts.

**Technical Committee Decisions Needed:**

- Possible direction to Staff to reschedule the July Technical Committee meeting.

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

**COMMITTEE MEMBER PACKETS**

Wednesday, June 13, 2018 at 3:00 P.M.  
520 E. RR 150, Kyle, Texas 78640

- F.7** 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 June 12th. A verbal update on the meeting will be provided to the Committee.

Plum Creek Conservation District (PCCD)

The PCCD is scheduled to meet on June 19th.

Groundwater Management Area 13

Greg Sengelmann, the GMA-13 administrator, indicated that a GMA-13 meeting is likely to be held on July 19<sup>th</sup> or 20<sup>th</sup>. Among the topics for discussion will be the possible inclusion of the TWDB BRACS Study into the next round of DFCs, whether to consider similar rules across districts and an RFQ for hydrogeological consultant to assist the GMA.

Region L Planning Group

No update.

Guadalupe-Blanco River Authority

No update.

Hays County Activities

No update.

CAPCOG Activities

No update.

**Technical Committee decision needed:**

- None.

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

**COMMITTEE MEMBER PACKETS**  
 Wednesday, June 13, 2018 at 3:00 P.M.  
 520 E. RR 150, Kyle, Texas 78640

**G. EXECUTIVE DIRECTOR REPORT**

Board Meeting

- The June Board meeting is scheduled for Wednesday, June 27th at 3:00 PM at the San Marcos Activity Center.

Staff Hiring

- Mr. Moore prepared a job description for the Project Coordinator position and has posted it on the Authority's website and on Indeed.com. It will also be publicized through the use of social media. The first review of resumes is scheduled to occur on July 2<sup>nd</sup>.

Consultant Invoices Paid

- Below is a report on the consultant invoices paid in May.

**FY 17-18 CONSULTANT INVOICES PAID in MAY 2018**

Consultant	Total Authorized	Current Invoice	Invoiced-to-Date	% of Contract Invoiced	Remaining	Notes/Anomalies
Mark B. Taylor	\$90,000.00	\$5,685.00	\$54,490.00	61%	\$35,510.00	
LAN - Kyle/Buda Design	\$175,207.63	\$13,127.18	\$106,448.12	61%	\$68,759.51	
Carls, McDonald & Dalrymple, LLP	\$50,000.00	\$199.02	\$6,746.02	13%	\$43,253.98	
RW Harden	\$75,000.00	\$7,494.00	\$62,509.15	83%	\$12,490.85	
Tx Solutions Group	\$72,000.00	\$6,000.00	\$48,000.00	67%	\$24,000.00	
Gap Strategies	\$50,000.00	\$3,116.32	\$23,097.32	46%	\$26,902.68	
Atchley & Associates	\$15,500.00	\$0.00	\$15,500.00	100%	\$0.00	
BGE - Ph 1A Final Design	\$28,843.86	\$0.00	\$11,096.34	38%	\$17,747.52	
AECOM - DPR Study	\$331.00	\$0.00	\$331.00	100%	\$0.00	
LNV - Wellfield Prelim	\$33,641.25	\$4,737.25	\$26,501.00	79%	\$7,140.25	
LAN - ROW Acquisition	\$55,216.41	\$3,444.18	\$17,624.18	32%	\$37,592.23	
Kent Alan Sick - ROW Legal	\$20,938.76	\$13,536.48	\$36,660.59	175%	(\$15,721.83)	
Kimley-Horn Ph 1B Prgm Dev	\$162,279.13	\$0.00	\$45,740.27	28%	\$116,538.86	
HDR - Common Facilities MOU	\$6,194.33	\$0.00	\$6,194.33	100%	\$0.00	
LNV - Ph 1A Observations	\$390,890.00	\$21,060.00	\$110,348.16	28%	\$280,541.84	
LNV - Env Svcs for Land Acquisition	\$14,986.00	\$5,886.00	\$14,986.00	100%	\$0.00	
LNV - GIS Svcs	\$60,000.00	\$3,453.75	\$11,478.62	19%	\$48,521.38	
Lloyd Gosselink	\$50,000.00	\$11,836.40	\$24,986.30	50%	\$25,013.70	
Fugro	\$13,880.00	\$0.00	\$2,409.00	17%	\$11,471.00	
Kimley-Horn Ph 1B Owner's Rep	\$2,289,173.00	\$153,331.54	\$153,331.54	7%	\$2,135,841.46	
<b>Total</b>	<b>\$3,654,081.37</b>	<b>\$252,907.12</b>	<b>\$778,477.94</b>		<b>\$2,875,603.43</b>	

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

**COMMITTEE MEMBER PACKETS**  
 Wednesday, June 13, 2018 at 3:00 P.M.  
 520 E. RR 150, Kyle, Texas 78640

Approved Change Orders

- RW Harden's fee increased due to additional expenditures in revising the permit applications.
- LAN's additional fee was for testimony and support of the Authority's condemnation hearing.

<b>CHANGE ORDERS APPROVED IN MAY 2018</b>				
<b>Consultant</b>	<b>Original Authorization</b>	<b>Change Ordes to Date</b>	<b>Change Order Approved this Month</b>	<b>New Total Contract Amount</b>
RW Harden & Assoc.	\$ 50,000.00	\$ 25,000.00	\$ 15,000.00	\$ 75,000.00
LAN - Kyle/Buda Design	\$ 475,900.00	\$ 189,488.96	\$ 2,400.00	\$ 665,388.96
BGE - Ph 1A Final Design	\$ 390,152.00	\$ 7,250.00	\$ -	\$ 397,402.00
LAN - ROW Acquisition	\$ 212,650.00	\$ -	\$ -	\$ 212,650.00
LNV - Ph 1A Observations	\$ 394,870.00	\$ -	\$ -	\$ 394,870.00
LNV - Wellfield Prelim	\$ 58,870.00	\$ -	\$ -	\$ 58,870.00
Central Road & Utility - Phase 1A Segment A	\$1,718,117.99	\$ -	\$ -	\$ 1,718,117.99

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

**COMMITTEE MEMBER PACKETS**  
Wednesday, June 13, 2018 at 3:00 P.M.  
520 E. RR 150, Kyle, Texas 78640

- H. COMMITTEE MEMBER ITEMS OR FUTURE AGENDA ITEMS – no action to be taken.
- 

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, June 13, 2018 at 3:00 P.M.  
520 E. RR 150, Kyle, Texas 78640

- I.1 *Executive Session pursuant to the Government Code, Section 551.071 (Consultation with Attorney) and/or Section 551.072 and 551.073 (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, June 13, 2018 at 3:00 P.M.  
520 E. RR 150, Kyle, Texas 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, June 13, 2018 at 3:00 P.M.  
520 E. RR 150, Kyle, Texas 78640

**J. ADJOURNMENT**

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