Regular Session

(This Regular Session may, at any time, be recessed to convene an Executive Session for any purpose authorized by the Open Meetings Act, Texas Government Code 551.)

A Call to Order
The Board may, at any time, recess the Regular Session to convene in Executive Session at the request of the Chair, a Board Member, the City Manager, Assistant City Manager, General Manager of Utilities, City Council Member, or legal counsel for any purpose authorized by the Open Meetings Act, Texas Government Code Chapter 551, and are subject to action in the Regular Session that follows.

B Introduction of Visitors

Employee Recognition --
-- None submitted at time of posting

C November GUS Board CIP Updates and October Council Actions -
Wesley Wright, P.E., Systems Engineering Director/Michael Hallmark, CIP Manager

D Electric Utility Update -- Daniel Bethapudi, Electric General Manager

E Water Utility Update -- Glenn W. Dishong, Water Utilities Director

Legislative Regular Agenda

F Public Wishing to Address the Board

On a subject that is posted on this agenda: Please fill out a speaker registration form which can be found on the table at the entrance to the Board Meeting. Clearly print your name and the letter of the item on which you wish to speak and present it to the Staff Liaison, prior to the start of the meeting. You will be called forward to speak when the Board considers that item. Only persons who have delivered the speaker form prior to the meeting being called to order may speak.

On a subject not posted on the agenda: Persons may add an item to a future Regular scheduled Board agenda by filing a written request with the Staff Liaison no later than one week prior to the Board meeting. The request must include the speaker’s name and the specific topic to be addressed with
sufficient information to inform the board and the public. **Only those persons who have submitted a timely request will be allowed to speak.** For Board Liaison contact information, please logon to https://government.georgetown.org/georgetown-utility-system-advisory-board-gus/.

-- At time of posting, no persons had signed up to address the Board.

G Review and possible action to approve the minutes from the regular GUS Board meeting held on October 11, 2019. - Sheila K. Mitchell, GUS Board Liaison

H Consideration and possible recommendation to approve a Second Renewal with Wesco Distribution, Inc. to provide Honeywell electric meters and related items for the Advanced Metering Infrastructure system in an amount not to exceed $420,000. -- Mike Maldonado, Metering Manager/Leticia Zavala, Customer Care Director

I Consideration and possible recommendation to execute Task Order No. CDM-19-006-TO with CDM Smith Inc. and to execute an Inter-local Agreement between the City of Georgetown and the Brazos River Authority for the sharing of costs of an Aquifer Storage and Recovery (ASR) Assessment Project in the amount of $165,000.00. - Glenn W. Dishong, Water Utilities Director

J Consideration and possible recommendation to approve Task Order CDM-20-001-TO with CDM Smith, Inc. for American Water Infrastructure Act Risk and Resilience Evaluation in the amount of $150,000.00. - Glenn W. Dishong, Water Utilities Director

Adjournment

**Certificate of Posting**

I, Robyn Densmore, City Secretary for the City of Georgetown, Texas, do hereby certify that this Notice of Meeting was posted at City Hall, 808 Martin Luther King Jr. Street, Georgetown, TX 78626, a place readily accessible to the general public as required by law, on the _____ day of ________________, 2019, at ________, and remained so posted for at least 72 continuous hours preceding the scheduled time of said meeting.

__________________________________
Robyn Densmore, City Secretary
SUBJECT:
Call to Order
The Board may, at any time, recess the Regular Session to convene in Executive Session at the request of the Chair, a Board Member, the City Manager, Assistant City Manager, General Manager of Utilities, City Council Member, or legal counsel for any purpose authorized by the Open Meetings Act, Texas Government Code Chapter 551, and are subject to action in the Regular Session that follows.

ITEM SUMMARY:

FINANCIAL IMPACT:
N/A

SUBMITTED BY:
SUBJECT:  
November GUS Board CIP Updates and October Council Actions -  
Wesley Wright, P.E., Systems Engineering Director/Michael Hallmark, CIP Manager

ITEM SUMMARY:  
GUS Board - CIP Updates November 2019

Berry Creek WastewaterInterceptor – 3CJ
Santa Clara crews continue testing & coating manholes as well as in Clean Up phase

Berry Creek WastewaterInterceptor Phases 1, 2 & 3
Alternative routing around Berry Springs Park near Market St. under review and redesign

Braun Elevated Storage Tank (EST)
Welding Crew has finished up & Paint Crew arrives week of November 4 to start priming & painting

Cedar Breakst to Pastor Dedicated Water Line
24” waterline has been tested and being utilized to fill the Pastor GST as needed, Automatic Fill Valve to be set week of 11/4/19

CR 255
Recommended by GUS 10/09/15, approved by CC on 10/27/15. Preliminary Construction Plans are near 80% complete & Easements 50% complete

EARZ Area 1 - 2018
Project in Close-Out Phase

Lake 980 High Service Pump Station
Mandatory PreBid Meeting set for November 14, 2019 with the Bid Opening scheduled for December 10, 2019, to be presented to GUS Board & City Council in January 2020

Lake WTP Chemical Storage Improvements
Task Order approved by GUS Board 12/8/17 & City Council 12/12/17. Possibly combined with another Project

Lake WTP Raw Water Intake & Pump Station Improvements
Divers have installed all 9 slide gates & gate control stems/brackets. Pipe work to be installed after first of the year in 2020

Park Lift Station
Task Order recommended by GUS 2/10/17& approved by City Council 2/18/17. 100% Design Plans & Specs being reviewed by Staff, Bids early 2020

Pastor Pump Station
Both submersible pumps and pump control valves set in place and able to run in automatic mode

Pecan Branch WWTP
Punchlist Items nearing completion, work on existing aeration pipe & basins to be completed week of Nov. 4

Ronald Reagan Water Line
Ronald Reagan waterlines in service, crews to start the 7th street utility line relocates week of 11/11/19

San Gabriel Wastewater Treatment Plant – Belt Press
Keystone Crews mobilize in week of 11/4/19 to start Erosion Controls
Shell Road Water line
   Final Design Plans are 90% complete & Easements are 60% complete
South Lake Water Treatment Plant – Intake & Raw Waterline
   Task Order approval by GUS Board 1/11/19 & City Council 1/22/19
Sun City 2.0 MG Elevated Storage Tank
   New EST is online. New perimeter fence in installed. 50% of area is hydro-mulched. Contractor to re-mobilize mid-November to complete paint touch up and remaining site work.
Water Tank Rehab- 2018
   CDM Task Order recommended by GUS Board 12/8/17 & approved by Council 12/12/17
   Tentatively out for Bid early 2020
Westloop Waterline Improvements
   1,740 LF of 24” waterline installed & PRV station at Cedar Ridge/DB Woods is on line
West University 2018 Waterline Improvements
   Project near completion & in Close Out Phase for paperwork
October Council Actions -- attached

FINANCIAL IMPACT:
N/A

SUBMITTED BY:
Wesley Wright, P.E., Systems Engineering Director/Michael Hallmark, CIP Manager

ATTACHMENTS:

<table>
<thead>
<tr>
<th>Description</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>November GUS CIP Updates</td>
<td>Backup Material</td>
</tr>
<tr>
<td>October Council Actions</td>
<td>Backup Material</td>
</tr>
</tbody>
</table>
Berry Creek Wastewater Interceptor – 3CJ
Santa Clara crews continue testing & coating manholes as well as in Clean Up phase

Berry Creek Wastewater Interceptor Phases 1, 2 & 3
Alternative routing around Berry Springs Park near Market St. under review and redesign

Braun Elevated Storage Tank (EST)
Welding Crew has finished up & Paint Crew arrives week of November 4 to start priming & painting

Cedar Breaks to Pastor Dedicated Water Line
24” waterline has been tested and being utilized to fill the Pastor GST as needed, Automatic Fill Valve to be set week of 11/4/19

CR 255
Recommended by GUS 10/09/15, approved by CC on 10/27/15. Preliminary Construction Plans are near 80% complete & Easements 50% complete

EARZ Area 1 - 2018
Project in Close-Out Phase

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Mandatory PreBid Meeting set for November 14, 2019 with the Bid Opening scheduled for December 10, 2019, to be presented to GUS Board & City Council in January 2020

Lake WTP Chemical Storage Improvements
Task Order approved by GUS Board 12/8/17 & City Council 12/12/17. Possibly combined with another Project

Lake WTP Raw Water Intake & Pump Station Improvements
Divers have installed all 9 slide gates & gate control stems/brackets. Pipe work to be installed after first of the year in 2020

Park Lift Station
Task Order recommended by GUS 2/10/17 & approved by City Council 2/18/17. 100% Design Plans & Specs being reviewed by Staff, Bids early 2020
Pastor Pump Station

Both submersible pumps and pump control valves set in place and able to run in automatic mode

Pecan Branch WWTP

Punchlist Items nearing completion, work on existing aeration pipe & basins to be completed week of Nov. 4

Ronald Reagan Water Line

Ronald Reagan waterlines in service, crews to start the 7th street utility line relocates week of 11/11/19

San Gabriel Wastewater Treatment Plant – Belt Press

Keystone Crews mobilize in week of 11/4/19 to start Erosion Controls

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Final Design Plans are 90% complete & Easements are 60% complete

South Lake Water Treatment Plant – Intake & Raw Waterline

Task Order approval by GUS Board 1/11/19 & City Council 1/22/19

Sun City 2.0 MG Elevated Storage Tank

New EST is online. New perimeter fence in installed. 50% of area is hydro-mulched. Contractor to re-mobilize mid-November to complete paint touch up and remaining site work.

Water Tank Rehab- 2018

CDM Task Order recommended by GUS Board 12/8/17 & approved by Council 12/12/17 Tentatively out for Bid early 2020

Westloop Waterline Improvements

1,740 LF of 24” waterline installed & PRV station at Cedar Ridge/DB Woods is on line

West University 2018 Waterline Improvements

Project near completion & in Close Out Phase for paperwork
**Project:** Berry Creek Wastewater Interceptor  
**Project#** 3CJ  
**Update – November 2019**

**Project Description:** This project will consist of approximately 15,000 linear feet of wastewater interceptor ranging in diameter from 36-inch to 30-inch from the existing Berry Creek lift station to the existing Sun City lift station. The alignment of the interceptor will generally follow Berry Creek.

**Purpose:** The purpose of this project is to add wastewater capacity in Sun City, provide wastewater service to the Shell road area, and will allow Sun City Lift Station to come off line when the future phases are complete.

**Project Manager:** Ken Taylor  
**Engineer:** CDM Smith  
**Contractor:** Santa Clara Construction

<table>
<thead>
<tr>
<th>Phase</th>
<th>Start</th>
<th>Finish</th>
<th>Status / Comments</th>
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<tbody>
<tr>
<td>Final Design</td>
<td>February 2016</td>
<td>March 2018</td>
<td>100% complete</td>
</tr>
<tr>
<td>ROW / Easements</td>
<td>June 2015</td>
<td></td>
<td>Complete</td>
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<tr>
<td>Bid / Award</td>
<td></td>
<td></td>
<td>Approved by City Council on 12/11/18, NTP issued 1/24/19</td>
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<tr>
<td>Construction</td>
<td>January 2019</td>
<td>February 2020</td>
<td>Santa Clara crews continue testing &amp; coating manholes as well as in Clean Up phase</td>
</tr>
</tbody>
</table>

Post Construction

![Image of construction site]
**Project:** Berry Creek Wastewater Interceptor  
**Phase 1,2, &3**  
**Project Update – November 2019**

**Project Description:** This project will consist of approximately 21,500 linear feet of wastewater interceptor ranging in diameter from 36-inch to 48-inch from the existing Berry Creek lift station to the existing Pecan Branch Wastewater Plant. The alignment of the interceptor will generally follow Berry Creek.

**Purpose:** The purpose of this project is to add wastewater capacity in Sun City, provide wastewater service to the Shell road area, and will allow Sun City Lift Station to come off line.

**Project Manager:** Ken Taylor  
**Engineer:** Walker Partners, LLC  
**Contractor:** TBD

<table>
<thead>
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<th>Phase</th>
<th>Start</th>
<th>Finish</th>
<th>Status / Comments</th>
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<tbody>
<tr>
<td>Preliminary Engineering</td>
<td></td>
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<td>Recommended by GUS 10/13/17 Approved by City Council 10/23/17. Boring samples being analyzed</td>
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<tr>
<td>Final Design</td>
<td>Fall 2019</td>
<td>Spring 2020</td>
<td></td>
</tr>
<tr>
<td>ROW / Easements</td>
<td></td>
<td></td>
<td>Alternative routing around Berry Springs Park near Market St. under review and redesign</td>
</tr>
<tr>
<td>Construction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post Construction</td>
<td></td>
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</tr>
</tbody>
</table>
**Project Description:** This project involves - Design, bidding and general services during construction for a 3 MG elevated storage tank (EST) at the Braun EST site

**Purpose:** The purpose of this project is to add additional elevated water storage capacity and meet the demands of the water system in the 1178 pressure plane.

**Project Manager:** Ken Taylor  
**Engineer:** CDM  
**Contractor:** Landmark Structures

<table>
<thead>
<tr>
<th>Phase</th>
<th>Start</th>
<th>Finish</th>
<th>Status / Comments</th>
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<tbody>
<tr>
<td>Preliminary Engineering</td>
<td>January 2018</td>
<td>March 2018</td>
<td>Task Order approved by GUS Board 12/8/17 &amp; by City Council 12/12/17</td>
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<tr>
<td>Final Design</td>
<td>April 2018</td>
<td>July 2018</td>
<td></td>
</tr>
<tr>
<td>Bid / Award Bid #</td>
<td>September 2018</td>
<td>October 2018</td>
<td>Approved by GUS Board &amp; Council in October</td>
</tr>
<tr>
<td>Construction</td>
<td>January 2019</td>
<td>June 2020</td>
<td>Welding Crew has finished up &amp; Paint Crew arrives week of November 4 to start priming &amp; painting</td>
</tr>
<tr>
<td>Post Construction</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Project Description: This project will consist of approximately 12,000 linear feet water line that will run from Cedar Breaks Elevated Storage Tank to the Pastor Ground Storage Tank. The waterline will run in DB Woods Rd right-of-way for the northern portion and around the north and western border of Wood Ranch for the southern portion.

Purpose: The purpose of this project is to run a dedicated water line from Cedar Breaks EST to Pastor Pump Station, this dedicated 24-inch waterline will allow the Pastor Pump Station to fill without depleting the existing distribution system and effecting fire flow. This will also increase the capacity of the Pastor Pump Station to keep up with growth and demand in the Western District.

Project Manager: Ken Taylor  
Engineer: CDM Smith  
Contractor: Prota Construction

<table>
<thead>
<tr>
<th>Phase</th>
<th>Start</th>
<th>Finish</th>
<th>Status / Comments</th>
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<td>September 2018</td>
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<td>October 2018</td>
<td>November 2018</td>
<td>Preliminary Survey work starting</td>
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<td>ROW / Easements</td>
<td>July 2018</td>
<td>November 2018</td>
<td>Complete</td>
</tr>
<tr>
<td>Bid / Award Bid #</td>
<td>January 2019</td>
<td>February 2019</td>
<td>Approved by Council 2/19</td>
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<tr>
<td>Construction</td>
<td>Early 2019</td>
<td>January 2020</td>
<td>24” waterline has been tested &amp; being utilized to fill the Pastor GST as needed, Automatic Fill Valve to be set week of 11/4/19</td>
</tr>
<tr>
<td>Post Construction</td>
<td></td>
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</tbody>
</table>
**Project Description**: This project involves upgrading the existing 15-inch water main with 16-inch C-905 or DI pipe. This project will consist of approximately 44,500 LF of 16-inch water main replacement.

**Purpose**: The purpose of this project is to upgrade the class pipe water mains to C-905 or DI pipe, and replace this existing main that has a large amount of water leaks.

**Project Manager**: Ken Taylor  
**Engineer**: KPA  
**Contractor**: TBD

<table>
<thead>
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<th>Phase</th>
<th>Start</th>
<th>Finish</th>
<th>Status / Comments</th>
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<tr>
<td>Final Design</td>
<td>March 2016</td>
<td>Winter 2019</td>
<td>80% Complete</td>
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<td>October 2015</td>
<td></td>
<td>50% complete</td>
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<tr>
<td>Bid / Award</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bid #</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post Construction</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
**Project Description:** This project will consist of pipe bursting, cured-in-place, open trench, & rehabbing manholes.

**Purpose:** The purpose of this project is to make repairs on the wastewater collection system to be in compliance with TCEQ rules and regulations.

**Project Manager:** Chris Logan  
**Engineer:** KPA  
**Contractor:** PM Construction

<table>
<thead>
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<th>Phase</th>
<th>Start</th>
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<th>Status / Comments</th>
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<td>Preliminary Engineering</td>
<td>March 2017</td>
<td>June 2017</td>
<td>Task Order Recommended by GUS 2/10/17</td>
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<td></td>
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<td>Approved by CC 2/28/17</td>
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<tr>
<td>Final Design</td>
<td>June 2017</td>
<td>August 2017</td>
<td>September 2018, reviewing 90% plans</td>
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<td>ROW / Easements</td>
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<td>N/A</td>
<td>N/A</td>
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<tr>
<td>Bid / Award</td>
<td></td>
<td></td>
<td>Approved by City Council 12/11/18</td>
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<tr>
<td>Bid #</td>
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<tr>
<td>Bid opening</td>
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</tr>
<tr>
<td>Construction</td>
<td></td>
<td></td>
<td>Project in Close-Out Phase</td>
</tr>
</tbody>
</table>

Page 13 of 72
**Project Description:** This project includes installing 4 vertical turbine pumps, 1,245 linear feet of 30-inch waterline, electrical & instrumentation building and new flowmeter with vault.

**Purpose:** The purpose of this project is to upgrade pumping capacity into the 980 pressure plane to meet peak water demands and growth in this pressure plane area.

**Project Manager:** Ken Taylor  
**Engineer:** CDM  
**Contractor:** TBD

<table>
<thead>
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<th>Phase</th>
<th>Start</th>
<th>Finish</th>
<th>Status / Comments</th>
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<tbody>
<tr>
<td>Preliminary Engineering</td>
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<td>August 2019</td>
<td>Project out for Bid early November 2019</td>
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<td>Final Design</td>
<td>August 2019</td>
<td>October 2019</td>
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<td>ROW / Easements</td>
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<td></td>
</tr>
<tr>
<td>Bid / Award</td>
<td></td>
<td></td>
<td>Project out for Bid November 2019 with Bid Opening 12/10/19</td>
</tr>
<tr>
<td>Construction</td>
<td>February 2020</td>
<td>October 2020</td>
<td>Substantial Completion is 270 days from NTP</td>
</tr>
</tbody>
</table>

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![Diagram](C:\YourDiagramPath.png)
Project: Lake WTP – Chemical Storage Improvements  
Project# 2CW  
Update – November 2019

Project Description: This project involves - Design, bidding and general services during construction for the design of sodium permanganate storage and feed system improvements at the Lake WTP.

Purpose: The purpose of this project is the sodium permanganate storage and feed system improvements will be bid so that small specialized, qualified chemical feed contractors can bid the project.

Project Manager: Ken Taylor  
Engineer: CDM  
Contractor: TBD

<table>
<thead>
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<th>Phase</th>
<th>Start</th>
<th>Finish</th>
<th>Status / Comments</th>
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<tr>
<td>Preliminary Engineering</td>
<td>January 2018</td>
<td>March 2018</td>
<td>Task Order approved by GUS Board 12/8/17 &amp; City Council 12/12/17</td>
</tr>
<tr>
<td>Final Design</td>
<td>April 2018</td>
<td>June 2018</td>
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<td>ROW / Easements</td>
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<tr>
<td>Bid / Award</td>
<td></td>
<td></td>
<td>Possibly combined with another Project</td>
</tr>
<tr>
<td>Bid #</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction</td>
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</tr>
<tr>
<td>Post Construction</td>
<td></td>
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<td></td>
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</tbody>
</table>
Project: Lake Water Treatment Plant Raw Water Intake & Pump Station Maintenance Improvements
Project# 2CU
Update – November 2019

Project Description: This project involves - Design bidding and general services during construction for the maintenance improvements consist of replacing the intake gates and other general maintenance on the 40-year-old intake. The maintenance improvements also consist of replacing some discharge piping at the Raw Water Pump Station.

Purpose: The purpose of this project is the replacing the intake gates and other general maintenance on the 40-year-old intake. There will also be revisions to the discharge piping that will reduce the pump head loss at the existing pump.

Project Manager: Ken Taylor
Engineer: CDM
Contractor: Huffman Contractors

<table>
<thead>
<tr>
<th>Phase</th>
<th>Start</th>
<th>Finish</th>
<th>Status / Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary Engineering</td>
<td>October 2017</td>
<td>November 2017</td>
<td>Approved by GUS Board 9/17 &amp; City Council September 17</td>
</tr>
<tr>
<td>Final Design</td>
<td>November 2017</td>
<td>February 2018</td>
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<tr>
<td>ROW / Easements</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Bid / Award Bid #</td>
<td>April 2018</td>
<td>May 2018</td>
<td>Approved by City Council 5/22/18</td>
</tr>
<tr>
<td>Construction</td>
<td>Fall 2018</td>
<td>Spring 2020</td>
<td>Divers have installed all 9 slide gates &amp; gate control stems/brackets. Pipe work to be installed after first of year in 2020</td>
</tr>
<tr>
<td>Post Construction</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Project:** San Gabriel Park Lift Station Improvements  
**Project#** 3CN  
**Update – November 2019**

**Project Description:** This project will consist of the construction a new wastewater lift station with appurtenant electrical and instrumentation improvements.

**Purpose:** The purpose of this project is to provide wastewater service for growth and development in the San Gabriel Wastewater Basin.

**Project Manager:** Ken Taylor  
**Engineer:** KPA  
**Contractor:** TBD

<table>
<thead>
<tr>
<th>Phase</th>
<th>Start</th>
<th>Finish</th>
<th>Status / Comments</th>
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</thead>
<tbody>
<tr>
<td>Preliminary Engineering</td>
<td>March 2017</td>
<td>June 2017</td>
<td>Recommended by GUS 2/10/17 &amp; City Council 2/18/17</td>
</tr>
<tr>
<td>Final Design</td>
<td>July 2017</td>
<td>December 2017</td>
<td>90% Plans under review by Staff TCEQ variance under review</td>
</tr>
<tr>
<td>ROW / Easements</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>
| Bid / Award            |           |             | Tentatively Bids early 2020  
Reviewing 100% Plans & Specs prior to Bid |
| Construction           |           |             |                                            |
| Post Construction      |           |             |                                            |

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City of Georgetown, Texas  
SAN GABRIEL PARK LIFT STATION IMPROVEMENTS  
100% SET  

![City Council Seal]

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Page 17 of 72
Project: Pastor Pump Station  
Project#: 2BZ  
Update – November 2019

Project Description: This project involves upgrading the existing pump station with two new motors, pumps, electrical, instrumentation & HVAC. Design of pipeline improvements to provide more water to the Pastor Pump Station and to complete the West Loop Water Line near SH 29 and DB Wood Road.

Purpose: The purpose of this project is to upgrade pipeline improvements and to provide more water to the Pastor Pump Station and to complete the West Loop Water Line near SH 29 and DB Wood Road.

Project Manager: Ken Taylor  
Engineer: CDM  
Contractor: Archer Western

<table>
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<th>Phase</th>
<th>Start</th>
<th>Finish</th>
<th>Status / Comments</th>
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<tbody>
<tr>
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<tr>
<td>Final Design</td>
<td>October 2017</td>
<td>February 2018</td>
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</tr>
<tr>
<td>ROW / Easements</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bid / Award</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bid #</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>April 2018</td>
<td>Winter 2019</td>
<td>Pump# 1 has had power cables &amp; bracket installed and is On Line, Pump# 2 was pulled and sent to FlowServe for cable replacement</td>
</tr>
</tbody>
</table>

![Image of pump station]
**Project: Pecan Branch Wastewater Treatment Plant Expansion**  
**Project# 3CA**  
**Update – November 2019**

**Project Description:** The project includes expanding the existing Pecan Branch WWTP from 1.5 to 3.0 MGD including the construction of an influent pump station, screening and grit removal facilities, aeration basins, secondary clarifiers, cloth disk filters, UV disinfection facility, sludge holding tanks facilities, site grading and paving, electrical improvements, and instrumentation improvements.

**Purpose:** The purpose of this project is to provide wastewater treatment for future growth and development.

**Project Manager:** Ken Taylor  
**Engineer:** CDM Smith  
**Contractor:** CSA Construction

<table>
<thead>
<tr>
<th>Phase</th>
<th>Start</th>
<th>Finish</th>
<th>Status / Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary</td>
<td>November 2012</td>
<td>March 2013</td>
<td>Complete</td>
</tr>
<tr>
<td>Engineering</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final Design</td>
<td>December 2015</td>
<td>January 2017</td>
<td>100% Set of Plans</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROW / Easements</td>
<td></td>
<td></td>
<td>Complete</td>
</tr>
<tr>
<td>Bid / Award</td>
<td>March 2017</td>
<td>May 2017</td>
<td>Bid Opening 3/28/17</td>
</tr>
<tr>
<td>Bid # 201717</td>
<td></td>
<td></td>
<td>GUS Board approved 4/14/17</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>City Council 4/25/17</td>
</tr>
<tr>
<td>Construction</td>
<td>July 2017</td>
<td>Dec. 2019</td>
<td>Punchlist Items nearing completion, work on existing aeration pipe &amp; basins to be completed week of Nov. 4</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Post Construction</td>
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</tr>
</tbody>
</table>
**Project Description:** This project involves upgrading the existing 15-inch water main with 16-inch C-905 or DI pipe. This project will consist of approximately 44,500 LF of 16-inch water main replacement.

**Purpose:** The purpose of this project is to install 21,300 LF of 30" water main on the west side of Ronald Reagan from FM 2338 (Williams dr) to FM 3405

**Project Manager:** Ken Taylor  
**Engineer:** KPA  
**Contractor:** Royal Vista

<table>
<thead>
<tr>
<th>Phase</th>
<th>Start</th>
<th>Finish</th>
<th>Status / Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary Engineering</td>
<td>October 2015</td>
<td>March 2016</td>
<td>KPA Task Order approved by GUS Board &amp; City Council on 8/28/18</td>
</tr>
<tr>
<td>Final Design</td>
<td>March 2016</td>
<td>February 2018</td>
<td>80% Complete</td>
</tr>
<tr>
<td>ROW / Easements</td>
<td>October 2015</td>
<td></td>
<td>50% complete</td>
</tr>
<tr>
<td>Bid / Award Bid #</td>
<td></td>
<td></td>
<td>Approved by City Council 12/11/18</td>
</tr>
<tr>
<td>Construction</td>
<td>January 2019</td>
<td>February 2020</td>
<td>Ronald Reagan waterlines in service, crews to start the 7th street utility line relocates week of 11/11/19</td>
</tr>
</tbody>
</table>
**Project:** San Gabriel Wastewater Treatment Plant – Belt Press  
**Project# 3CP**  
**Update – November 2019**

**Project Description:** This project involves - Design, bidding and general services during construction for a new sludge dewatering building and the installation of dewatering equipment, a polymer system and a conveyor for the San Gabriel Wastewater Treatment Plant (WWTP)

**Purpose:** The purpose of this project is to replace the existing drying beds with a new sludge dewatering building and the installation of dewatering equipment, a polymer system and a conveyor to load a roll-off dumpster.

**Project Manager:** Ken Taylor  
**Engineer:** CDM  
**Contractor:** TBD

<table>
<thead>
<tr>
<th>Phase</th>
<th>Start</th>
<th>Finish</th>
<th>Status / Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary Engineering</td>
<td>April 2018</td>
<td>August 2018</td>
<td>Task Order approved by GUS Board 3/9/18 &amp; by City Council 3/27/18</td>
</tr>
<tr>
<td>Final Design</td>
<td>August 2018</td>
<td>December 2018</td>
<td></td>
</tr>
<tr>
<td>Bid / Award Bid #</td>
<td>February 2019</td>
<td>August 2019</td>
<td>NTP issued 11/4/19</td>
</tr>
<tr>
<td>Construction</td>
<td>Nov. 2019</td>
<td>August 2020</td>
<td>Keystone Crews mobilize in week of 11/4/19 to start Erosion Controls</td>
</tr>
<tr>
<td>Post Construction</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Project:** Shell Road Waterline Improvements  
**Project#** 3CI  
**Update – November 2019**

**Project Description:** This project will consist of approximately 13,500 LF of 16-inch water line and approximately 2300 LF of 12-inch waterline.  
**Purpose:** The purpose of this project is to provide secondary feed of water to Sun City.  
**Project Manager:** Ken Taylor  
**Engineer:** KPA  
**Contractor:** TBD

<table>
<thead>
<tr>
<th>Phase</th>
<th>Start</th>
<th>Finish</th>
<th>Status / Comments</th>
</tr>
</thead>
</table>
| Preliminary Engineering | April 2015 | August 2015 | Task Order Recommended by GUS 3/13/15  
Approved by CC 3/24/15. |
| Final Design    | August 2015 | March 2018  | 90% complete                           |
| ROW / Easements| June 2015   | October 2017| 60% complete                           |
| Bid / Award Bid |             |             |                                        |
| Construction    |             |             |                                        |
| Post Construction|            |             |                                        |
**Project:** South Lake Water Treatment Plant Intake & Raw Waterline  
**Project# 2BN**  
**Update – November 2019**

**Project Description:** This project will consist of design/engineering for a 22 MGD raw water intake & pump station with future expansion to 44 MGD and 3,800 LF if raw water pipeline to carry water to the SLWTP.  
**Purpose:** The purpose of this project is to provide the supply & demand for future water needs for the City of Georgetown and Western District

**Project Manager:** Ken Taylor  
**Engineer:** CDM  
**Contractor:** TBD

<table>
<thead>
<tr>
<th>Phase</th>
<th>Start</th>
<th>Finish</th>
<th>Status / Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary</td>
<td>February 2019</td>
<td>August 2019</td>
<td>Task Order approval by GUS Board 1/11/19 &amp; City Council 1/22/19</td>
</tr>
<tr>
<td>Engineering</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final Design</td>
<td>August 2019</td>
<td>April 2020</td>
<td></td>
</tr>
<tr>
<td>ROW / Easements</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bid / Award Bid</td>
<td>Summer 2020</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>Fall 2020</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post Construction</td>
<td></td>
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</tr>
</tbody>
</table>
**Project Description:** This project will consist of the replacement of the existing .4 million gallon Elevated Water Storage Tank with a 2 million gallon Elevated Water Storage Tank.

**Purpose:** The purpose of this project is to increase elevated water storage in the Sun City 1015 pressure plan from .4 MG to 2MG to meet the demands of the water system in the 1015 pressure plane.

**Project Manager:** Chris Pousson  
**Engineer:** Dunham Engineering, Inc.  
**Contractor:** CB&I

<table>
<thead>
<tr>
<th>Phase</th>
<th>Start</th>
<th>Finish</th>
<th>Status / Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final Design</td>
<td>May 2017</td>
<td>June 2017</td>
<td>100% complete</td>
</tr>
<tr>
<td>ROW / Easements</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Bid / Award Bid #</td>
<td>July 2017</td>
<td>September 2017</td>
<td>GUS Board and Council Approved</td>
</tr>
<tr>
<td>Construction</td>
<td>December 2017</td>
<td>June 2019</td>
<td>New EST is online. Contractor to re-mobilize mid-November to complete paint touch up and remaining site work.</td>
</tr>
<tr>
<td>Post Construction</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Project Description:** This project involves - Design bidding and general services during construction for the demolition of the steel ground storage tank (GST) and steel lime silo at the Park Water Treatment Plant (WTP), demolition of the Woods GST, and rehabilitation of the 1 MG GST at the Southside WTP; and design

**Purpose:** The purpose of this project is the demolition of the steel structures at the Park WTP and the Woods sites and rehabilitation of the 1 MG GST at the Southside WTP site will be bid so that qualified demolition and tank rehab contractors can bid the project.

**Project Manager:** Ken Taylor  
**Engineer:** CDM  
**Contractor:** TBD

<table>
<thead>
<tr>
<th>Phase</th>
<th>Start</th>
<th>Finish</th>
<th>Status / Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary Engineering</td>
<td>January 2018</td>
<td>March 2018</td>
<td>Task Order recommended by GUS Board 12/8/17 &amp; approved by Council 12/1/2/17</td>
</tr>
<tr>
<td>Final Design</td>
<td>April 2018</td>
<td>June 2018</td>
<td></td>
</tr>
<tr>
<td>ROW / Easements</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bid / Award</td>
<td>July 2018</td>
<td>November 2019</td>
<td>Tentatively out for Bid early 2020</td>
</tr>
<tr>
<td>Bid #</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post Construction</td>
<td></td>
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</tr>
</tbody>
</table>
**Project:** West University 2018 Waterline Improvements  
**Project#** 2JJ  
**Update – November 2019**

**Project Description:** This project will consist of approximately 1,220 LF of 12-inch water line and approximately 150 LF of 8-inch waterline.  
**Purpose:** The purpose of this project is to provide adequate flows & pressure to the University/IH 35 area  
**Project Manager:** Ken Taylor  
**Engineer:** CDM  
**Contractor:** Smith Contracting

<table>
<thead>
<tr>
<th>Phase</th>
<th>Start</th>
<th>Finish</th>
<th>Status / Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final Design</td>
<td>August 2015</td>
<td>March 2018</td>
<td>October 2018</td>
</tr>
<tr>
<td>ROW / Easements</td>
<td>June 2015</td>
<td>October 2017</td>
<td>Complete</td>
</tr>
<tr>
<td>Bid / Award Bid</td>
<td>January 2019</td>
<td>November 2019</td>
<td>Approved by City Council 12/11/18, PreConstruction Meeting scheduled for 1/11/19 with NTP to be issued shortly after</td>
</tr>
<tr>
<td>Construction</td>
<td>January 2019</td>
<td>November 2019</td>
<td>Project near completion &amp; in Close Out Phase for paperwork</td>
</tr>
</tbody>
</table>

**Post Construction**
Project: West Loop Waterline Improvements
Project#: 2JJ
Update – November 2019

Project Description: The project consists of furnishing, installing, and providing all labor and materials required to install approximately 2,410 linear feet of new 24-inch diameter water pipeline and approximately 425 linear feet of 8-inch diameter water pipeline.

Purpose: The purpose of this project is to provide adequate flows & pressure to the West University and River Chase areas.

Project Manager: Ken Taylor
Engineer: CDM
Contractor: Santa Clara Construction

<table>
<thead>
<tr>
<th>Phase</th>
<th>Start</th>
<th>Finish</th>
<th>Status / Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary Engineering</td>
<td>Feb</td>
<td>March 2019</td>
<td>Task Order Issued 1/24/19</td>
</tr>
<tr>
<td>Final Design</td>
<td>March 2019</td>
<td>May 2019</td>
<td>Complete</td>
</tr>
<tr>
<td>ROW / Easements</td>
<td>June 2015</td>
<td>October 2017</td>
<td>Complete</td>
</tr>
<tr>
<td>Bid / Award Bid</td>
<td>September 2019</td>
<td>April 2020</td>
<td>Approved by City Council 6/25/19, PreConstruction Meeting held 8/12/19 &amp; NTP issued for 9/6/19 1,740 LF of 24” waterline installed &amp; PRV station at Cedar Ridge/DB Woods is on line</td>
</tr>
<tr>
<td>Construction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post Construction</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
GUS BOARD ITEMS FORWARDED TO COUNCIL
October 22, 2019

P
Forwarded from Georgetown Utility Systems Advisory Board (GUS):
Consideration and possible action to authorize the expenditure of funds for the purchase of single phase electric meters and water modules for the Advanced Meter Infrastructure system for an annual estimated expenditure of $800,000.00 from Elster Solutions, LLC, pursuant to the Settlement/Compromise Agreement between the City of Georgetown and Elster Solutions approved by Council on November 27, 2018 -- Glenn W. Dishong, Water Utilities Director

Q
Forwarded from Georgetown Utility Systems Advisory Board (GUS):
Consideration and possible action to approve the third renewal for sludge and bio-solids transport and disposal services, with Sheridan Environmental, LLC, in an amount not to exceed $556,234.87 -- Glenn W. Dishong, Water Utilities Director

R
Forwarded from Georgetown Utility Systems Advisory Board (GUS):
Consideration and possible action to approve a renewal for contracted wastewater laboratory services, with Pollution Control Services Laboratory in the estimated amount of $74,508.00 -- Glenn W. Dishong, Water Utilities Director

S
Forwarded from Georgetown Utility Systems Advisory Board (GUS):
Consideration and possible action to renew the Tree Trimming and Vegetation Management Contract to National Tree Expert Company, Inc. of Burnet, Texas, in the estimated amount of $280,000.00 -- Daniel Bethapudi, Electric General Manager

T
Forwarded from Georgetown Utility Systems Advisory Board (GUS):
Consideration and possible action to approve the second renewal for Brush Trimming and Removal Services to Austex Tree Service, Inc., of Round Rock, Texas in the estimated amount of $100,000.00 -- Daniel Bethapudi, Electric General Manager

U
Forwarded from Georgetown Utility Systems Advisory Board (GUS):
Consideration and possible action to renew the contract for labor services for Outside Plant Fiber Optic Infrastructure Construction to JC Communications of Cedar Park, Texas, in the not to exceed amount of $300,000.00 -- Wesley Wright, P.E., Systems Engineering Director
V

Forwarded from Georgetown Utility Systems Advisory Board (GUS):

Consideration and possible action to renew the Annual Electric System Underground Construction and Maintenance Bid for labor services to Pedro S.S. Services, Inc. of Austin, Texas, in the not to exceed amount of $2,500,000.00 -- Wesley Wright, P.E., Systems Engineering Director

W

Forwarded from Georgetown Utility Systems Advisory Board (GUS):

Consideration and possible action to approve Task Order CDM-20-002 for Utility Evaluation Support, to CDM Smith Inc. in the amount of $55,000.00 -- Wesley Wright, PE, Systems Engineering Director

X

Forwarded from Georgetown Utility Systems Advisory Board (GUS):

Consideration and possible action to approve a Contract Amendment with Royal Vista, Inc. of Liberty Hill, Texas for relocating water and wastewater utilities along 7th Street in the amount of $278,735.00 -- Wesley Wright, P.E., Systems Engineering Director

Z

Forwarded from Georgetown Utility Systems Advisory Board (GUS):

Consideration and possible action to continue utilizing the annual agreement for LCRA Material Acquisition to purchase electric distribution, fiber, water, safety, and substation materials, hardware, and tools for Fiscal Year 2020 from Techline Ltd. under their contract with the Lower Colorado River Authority ("LCRA") Electric Material Acquisition Program in the not to exceed amount of $4,000,000.00 -- Wesley Wright, PE, Systems Engineering Director

ALL ITEMS PASSED
SUBJECT:
Electric Utility Update -- Daniel Bethapudi, Electric General Manager

ITEM SUMMARY:

FINANCIAL IMPACT:

SUBMITTED BY:
Daniel Bethapudi, Electric General Manager
SUBJECT: Water Utility Update -- Glenn W. Dishong, Water Utilities Director

ITEM SUMMARY: ...

FINANCIAL IMPACT: .

SUBMITTED BY: Glenn W. Dishong, Water Utilities Director
SUBJECT:
Review and possible action to approve the minutes from the regular GUS Board meeting held on October 11, 2019. - Sheila K. Mitchell, GUS Board Liaison

ITEM SUMMARY:
Board to review, revise and/or approve the minutes from the regular GUS Board meeting held on October 11, 2019.

FINANCIAL IMPACT:
N/A

SUBMITTED BY:
Sheila K. Mitchell/GUS Board Liaison

ATTACHMENTS:

<table>
<thead>
<tr>
<th>Description</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>GUS Oct 11 2019 DRAFT Minutes</td>
<td>Backup Material</td>
</tr>
</tbody>
</table>
The City of Georgetown is committed to compliance with the Americans with Disabilities Act (ADA). If you require assistance in participation at a public meeting due to a disability, as defined under the ADA, reasonable assistance, adaptations, or accommodations will be provided upon request. Please contact the City Secretary’s Office, at least three (3) days prior to the scheduled meeting date, at (512) 930-3652 or City Hall at 808 Martin Luther King, Jr. Street, Georgetown, TX 78626 for additional information: TTY users route through Relay Texas at 711.

Board Members Present: Ed Pastor – Chair, John Copelan – Vice Chair, Edward Wiley – Secretary, Steve Fought, Arthur Yaeger, David Maserang

Board Members Absent: Mike Cunningham

Staff Members Present: Glenn Dishong, Daniel Bethapudi, Wesley Wright, Michael Hallmark, Mike Westbrook, Mike Welch, Laurie Brewer, David Thomison, Brian Mikulencak, Chelsea Solomon, Mike Maldonado, Mike Bezner, Cheryl Turney, Paul Conomos, Sheila Mitchell, Paul Diaz

Others Present: Trae Sutton/KPA

Regular Session
(This Regular Session may, at any time, be recessed to convene an Executive Session for any purpose authorized by the Open Meetings Act, Texas Government Code 551.)

A. Call to Order – Called to order by Chair at 2:00 p.m.

The Board may, at any time, recess the Regular Session to convene an Executive Session at the request of the Chair, a Board Member, the City Manager, Assistant City Manager, General Manager of Utilities, City Council Member, or legal counsel for any purpose authorized by the Open Meetings Act, Texas Government Code Chapter 551, and are subject to action in the Regular Session that follows.

B. Introduction of Visitors

– Trae Sutton/KPA and staff introductions around room. Pastor announced this was Maserang’s last meeting; resignation due to relocation. Board thanked him for his service; he will be missed.

Employee Recognition –

-- Brewer introduced Daniel Bethapudi, new Electric General Manager, started with the City on October 7. He comes from College Station Electric Utility after 6 years and previously an electric coop for 4 years. In the industry for about 15 years. He enjoys the financial side of the business. Board welcomed Bethapudi to the City.

C. October 2019 GUS CIP Project Updates and September Council Actions – Wesley Wright, P.E., Systems Engineering Director/Michael Hallmark, CIP Manager

Wright noted reports in packets, gave brief updates on each. Maserang asked about taking down old Sun City tank and Wright noted will be taken down early 2020. No further questions from board members.

D. Industry Updates

Dishong noted no specific industry updates to provide. Stated he, Bethapudi, Zavala and Wright met regarding this section of the agenda. They offer a new suggestion of providing information regarding utility updates which will set the context for future spending decisions regarding CIP project expenditures and/or rates. Would like to present new format possibly next meeting. Dishong also noted metrics used to measure our performance, which will eventually be shared citywide with the public. Board seemed receptive to new information to be provided. Fought would especially like to see metrics regarding new billing system.
**Legislative Regular Agenda.**

The Board will individually consider and possibly take action on any or all of the following items:

E.  **Public Wishing to Address the Board**

   On a subject that is posted on this agenda: Please fill out a speaker registration form which can be found on the table at the entrance to the Board Meeting. Clearly print your name and the letter of the item on which you wish to speak and present it to the Staff Liaison, prior to the start of the meeting. You will be called forward to speak when the Board considers that item. Only persons who have delivered the speaker form prior to the meeting being called to order may speak.

   On a subject not posted on the agenda: Persons may add an item to a future Regular scheduled Board agenda by filing a written request with the Staff Liaison no later than one week prior to the Board meeting. The request must include the speaker’s name and the specific topic to be addressed with sufficient information to inform the board and the public. Only those persons who have submitted a timely request will be allowed to speak. For Board Liaison contact information, please logon to [https://government.georgetown.org/georgetown-utility-system-advisory-board-gus/](https://government.georgetown.org/georgetown-utility-system-advisory-board-gus/).

   - No persons signed up to address the board.

F.  Review and possible action to approve the minutes from the Regular GUS Board meeting held on September 13, 2019. – Sheila K. Mitchell, GUS Board Liaison

   Minutes were considered for approval. No questions or revisions. Motion by Maserang, seconded by Copelan to approve the minutes from the Regular GUS Board meeting held on September 13, 2019. Approved 6-0-1 (Cunningham absent)

G.  Consideration and possible recommendation to authorize the expenditure of funds for the purchase of single phase electric meters and water modules for the Advanced Meter Infrastructure system for an annual estimated expenditure of $800,000 from Elster Solutions, LLC, pursuant to the Settlement/Compromise Agreement between the City of Georgetown and Elster Solutions approved by Council on November 27, 2018. – Glenn W. Dishong, Utility Director

   Dishong provided update on the continuation of the settlement agreement with Elster previously approved by Council. This is a direct sole source purchase. Due to the settlement agreement, these are lower prices than what we was previously received from either Elster or our normal channel for meters. Yaeger asked and Dishong noted a 10-year time frame is considered for the impact fee study; 5 year for CIP projects and then yearly growth when making predictions. Motion by Wiley, seconded by Copelan to authorize the expenditure of funds for the purchase of single phase electric meters and water modules for the Advanced Meter Infrastructure system for an annual estimated expenditure of $800,000 from Elster Solutions, LLC, pursuant to the Settlement/Compromise Agreement between the City of Georgetown and Elster Solutions approved by Council on November 27, 2018. Approved 6-0-1 (Cunningham absent)

H.  Consideration and possible recommendation to approve the third renewal for sludge and bio-solids transport and disposal services, with Sheridan Environmental, LLC, in an amount not to exceed $56,234.87. – Mike Welch, Plant Operations Superintendent

   Welch presented item request for third renewal services with Sheridan. Noted costs are going down due to decreased need to remove liquids. Motion by Yaeger, seconded by Copelan to approve the third renewal for sludge and bio-solids transport and disposal services, with Sheridan Environmental, LLC, in an amount not to exceed $56,234.87. Approved 6-0-1 (Cunningham absent)

I.  Consideration and possible recommendation to approve a renewal for contracted wastewater laboratory services, with Pollution Control Services Laboratory in the estimated amount of $74,508.00. – Mike Welch, Plant Operations Superintendent

   Welch presented item request for the first renewal for wastewater lab services. These are regulatory required testing. Wiley asked and Welch stated occasionally a test fails due to the high volume of tests performed. Motion by Maserang, seconded by Wiley to approve a renewal for contracted wastewater laboratory services, with Pollution Control Services Laboratory in the estimated amount of $74,508.00. Approved 6-0-1 (Cunningham absent)
J. Consideration and possible recommendation to renew the Tree Trimming and Vegetation Management Contract to National Tree Expert Company, Inc. of Burnet, Texas, in the estimated amount of $280,000.00. – Mike Westbrook, Electric Operations Manager

Westbrook provided information on tree trimming and vegetation management for the third year renewal. Overhead powerline tree trimming for 494 miles we maintain, to provide reliability of electric service. National does a great job, stays on schedule and very responsive. Pastor commented on oak wilt west of Georgetown and timing of trimming. Westbrook noted National Tree has an arborist on staff to monitor that situation and is a requirement of their contract. **Motion by Maserang, seconded by Copelan** to renew the Tree Trimming and Vegetation Management Contract to National Tree Expert Company, Inc. of Burnet, Texas, in the estimated amount of $280,000.00. **Approved 6-0-1** (Cunningham absent)

K. Consideration and possible recommendation to approve the second renewal for Brush Trimming and Removal Services to Austex Tree Service, Inc., of Round Rock, Texas in the estimated amount of $100,000.00. – Mike Westbrook, Electric Operations Manager

Westbrook provided request for second renewal for vegetation management around pad mount transformers in Sun City. We delayed this service last year due to financial constraints but plan to start up program again this year. Reliability, safety and identification is any issues. Copelan asked about process, timeline, etc., Westbrook preparing timeline now and when set, will reach out to Copelan and neighborhood contacts to distribute program information. **Motion by Wiley, seconded by Copelan** to approve the second renewal for Brush Trimming and Removal Services to Austex Tree Service, Inc., of Round Rock, Texas in the estimated amount of $100,000.00. **Approved 6-0-1** (Cunningham absent)

L. Consideration and possible recommendation to continue utilizing the annual agreement for LCRA Material Acquisition to purchase electric distribution, fiber, water, safety, and substation materials, hardware, and tools for Fiscal Year 2020 from Techline Ltd. under their contract with the Lower Colorado River Authority (“LCRA”) Electric Material Acquisition Program in the not to exceed amount of $4,000,000.00 -- Wesley Wright, PE, Systems Engineering Director

Wright explained annual agreement for renewal, piggybacking on the agreement utilized by LCRA, noting most equipment purchased from Techline. We have used this program for many years and have a great relationship with them. **Motion by Wiley, seconded by Maserang** to continue utilizing the annual agreement for LCRA Material Acquisition to purchase electric distribution, fiber, water, safety, and substation materials, hardware, and tools for Fiscal Year 2020 from Techline Ltd. under their contract with the Lower Colorado River Authority (“LCRA”) Electric Material Acquisition Program in the not to exceed amount of $4,000,000.00. **Approved 6-0-1** (Cunningham absent)

M. Consideration and possible recommendation to renew the contract for labor services for Outside Plant Fiber Optic Infrastructure Construction to JC Communications of Cedar Park, Texas, in the not to exceed amount of $300,000.00 -- Wesley Wright, P.E., Systems Engineering Director

Wright noted renewal is for labor services for the city owned fiber network to city facilities for communications and internet. Some reimbursements from developers when they come in and need fiber which our network will need access to. JC Communications have been doing an excellent job for the city for many years. Copelan asked and Wright noted if we do not renew, we will need to go back out for bid; not enough in-house expertise for perform all aspects of work. Work is performed on an as needed basis. **Motion by Copelan, seconded by Maserang** to renew the contract for labor services for Outside Plant Fiber Optic Infrastructure Construction to JC Communications of Cedar Park, Texas, in the not to exceed amount of $300,000.00. **Approved 6-0-1** (Cunningham absent)

N. Consideration and possible recommendation to renew the Annual Electric System Underground Construction and Maintenance Bid for labor services to Pedro S.S. Services, Inc. of Austin, Texas, in the not to exceed amount of $2,500,000.00 -- Wesley Wright, P.E., Systems Engineering Director

Wright explained renewal for labor of underground electric construction; internal staff is capable to do some of the work but due to demands, we need additional assistance with labor. They are heavily relied upon and considered an extension of city staff. **Motion by Wiley, seconded by Maserang** to renew the Annual Electric System Underground Construction and Maintenance Bid for labor services...
to Pedro S.S. Services, Inc. of Austin, Texas, in the not to exceed amount of $2,500,000.00. **Approved 6-0-1 (Cunningham absent)**

O. Consideration and possible recommendation to approve Task Order CDM-20-002 for Utility Evaluation Support, to CDM Smith Inc. in the amount of $55,000.00. -- Wesley Wright, PE, Systems Engineering Director

Wright explained need to perform utility evaluations when new development comes in. CDM updates our masterplan/model every 3-5 years, however with new developments assistance is needed from CDM to allow for those developments. Previous years were under the level required for board and council approvals, however due to increase in development, higher costs are anticipated. In order to allow work to continue we are requesting advance approval to not interrupt new development. Wiley asked and Wright noted CDM provides a good model to serve growth. Pastor asked and Wright confirmed evaluations are for water and wastewater; McCord Engineering handles electric. **Motion by Wiley, seconded by Copelan** to approve Task Order CDM-20-002 for Utility Evaluation Support, to CDM Smith Inc. in the amount of $55,000.00. **Approved 6-0-1 (Cunningham absent)**

P. Consideration and possible recommendation to approve a Contract Amendment with Royal Vista, Inc. of Liberty Hill, Texas for relocating water and wastewater utilities along 7th Street in the amount of $278,735.00 -- Wesley Wright, P.E., Systems Engineering Director/Michael Hallmark, CIP Manager

Wright updated board on required amendment to the contract, showing location of work to be performed. Previous Council Chambers, which has been sold. Existing utility lines are in the way for future development of property; city agreed in sale of property to move lines. Funds are available in water and wastewater budget as well as contract with Royal Vista. **Motion by Copelan, seconded by Maserang** to approve a Contract Amendment with Royal Vista, Inc. of Liberty Hill, Texas for relocating water and wastewater utilities along 7th Street in the amount of $278,735.00. **Approved 6-0-1 (Cunningham absent)**

**Adjournment**

Board again wished Maserang best of luck with his relocation and new endeavors. **Motion by Fought, seconded by Maserang** to adjourn. Meeting adjourned at 2:32PM

__________________________  __________________________
Ed Pastor – Chair  Ed Wiley – Secretary

_________________________________
Sheila K. Mitchell, GUS Board Liaison
SUBJECT:
Consideration and possible recommendation to approve a Second Renewal with Wesco Distribution, Inc. to provide Honeywell electric meters and related items for the Advanced Metering Infrastructure system in an amount not to exceed $420,000. -- Mike Maldonado, Metering Manager/Leticia Zavala, Customer Care Director

ITEM SUMMARY:
Wesco Distribution, Inc. is the only authorized distributor for Honeywell AMI compatible meters in the State of Texas and is purchased via Sole Source procurement. The Local Government Code approves an exemption from competitive bidding laws for sole source procurement due to patents, copyrights, secret processes, or natural monopolies.
The City initially contracted with Wesco Distribution in June 2017 for one year, with four (4) one-year renewal options, not to exceed $420,000 annually. The 2nd contract renewal was approved by Council this past May 2019, but the item included the initial agreement’s rate sheet. This item is to authorize and approve the 2nd contract renewal with revised meter prices as presented by Wesco Distribution.
Wesco Distribution explained that Honeywell, the manufacturer of the meters, has increased the cost of some meters and decreased the cost of others, as shown in Exhibit A to the Second Renewal. The unit price of some of the meters have increased by more than the 5% limit set forth in the original contract, but Staff proposes to waive the limit and accept the new prices because Wesco Distribution is the sole source for these meters. The annual not-to-exceed amount is unchanged from the renewal approved by Council in May.

STAFF RECOMMENDATION:
Staff recommends approval of this item.

FINANCIAL IMPACT:
This Second Renewal with Wesco Distribution, Inc. includes revised per-unit prices, but the annual not-to-exceed amount of $420,000 is unchanged. The meters are purchased as inventory and expensed (in various accounts) when removed from the warehouse and installed.

SUBMITTED BY:
Mike Maldonado, Metering Manager

ATTACHMENTS:

<table>
<thead>
<tr>
<th>Description</th>
<th>Type</th>
</tr>
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<tr>
<td>Wesco 2nd Renewal</td>
<td>Backup Material</td>
</tr>
<tr>
<td>Wesco - Price List</td>
<td>Backup Material</td>
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</table>
RENEWAL AGREEMENT

This Renewal Agreement is entered into by and between CITY OF GEORGETOWN, a Texas Home-Rule Municipal Corporation (the “City”), and WESCO DISTRIBUTION, INC. (the “Contractor”), collectively, the PARTIES follows:

WHEREAS, the Parties entered into an Agreement on June 13, 2017 for the purchase of Honeywell Electric Meters related to the City’s Advanced Metering Infrastructure, Contract No. 17-0074-GC (the “Original Agreement”),

WHEREAS, the Parties agreed to renew the Original Agreement for a first renewal term that ended on June 12, 2019,

WHEREAS, the Original Agreement limited unit price adjustments at the time of renewal to the lesser of changes in the Consumer Price Index or five (5) percent, and the Consumer Price Index has increased by more than five (5) percent,

WHEREAS, the Contractor has proposed some unit price adjustments greater than five (5) percent, but the City agrees to waive the five (5) percent limit for those items due to Contractor’s status as the sole supplier of those units, and

WHEREAS, the Parties hereby agree to renew the Original Agreement in accordance with the terms of the Original Agreement as well as any terms provided herein,

NOW THEREFORE, in consideration of the mutual covenants contained herein, the Parties agree as follows:

1. The initial term of the Original Agreement ended on June 12, 2018.

2. The Original Agreement provided for (4) four additional one (1) year renewal terms.

3. The Parties agree to renew the Original Agreement for a second additional term which will begin immediately upon the expiration of the first renewal term and will end on June 12, 2020, this being the second renewal term.

4. During the second renewal term, the prices shown in Exhibit A, attached hereto, shall apply to the supply of Honeywell electric meters and related items for City’s Advanced Metering Infrastructure (AMI) System.

5. This renewal binds and benefits the Parties and their successors or assigns. This document, including the Original Agreement, is the entire agreement between the Parties.

6. During this renewal term, the City will pay the Contractor an amount not to exceed four hundred twenty thousand dollars ($420,000.00).

7. All other terms and conditions of the Original Agreement remain in full force and effect.

[signatures on the following page]
By: _______________________________

Printed Name: ______________________

Title: ______________________________

Date: ______________________________

By: _______________________________

Mayor, Dale Ross

Date: ______________________________

ATTEST:

________________________________

Robyn Densmore, City Secretary

APPROVED AS TO FORM:

________________________________

Skye Masson,  
First Assistant City Attorney
July 23, 2019  
ATTN: Paul Conomos

2019 Price List – Expires 06/30/2020

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<tr>
<th>Customer Part Number</th>
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**Note** - The pricing shown does require quantity thresholds to be met. For REX meters, we need at least 96 per order and that total can be met by the total of all line items in the PO. For A3 meters, the threshold for attached pricing is 24 and that can be totaled in the PO as well.

Sincerely,

Morgan Aikins  
Wesco Distribution  
4410 Dividend Dr  
San Antonio, TX 78219  
Cell: (210) 823-4096
SUBJECT:
Consideration and possible recommendation to execute Task Order No. CDM-19-006-TO with CDM Smith Inc. and to execute an Inter-local Agreement between the City of Georgetown and the Brazos River Authority for the sharing of costs of an Aquifer Storage and Recovery (ASR) Assessment Project in the amount of $165,000.00. - Glenn W. Dishong, Water Utilities Director

ITEM SUMMARY:
Aquifer Storage and Recovery (ASR) of water resources can be a long term water resource development as well as a source of water to meet peak demands using off peak supplies for storage. An assessment of aquifer viability and costs must be completed prior to additional development of the resource. The Task order completes two phases of a longer term project to develop an ASR resource for use by the City of Georgetown and neighboring municipal systems.

The first phase of the project assesses the viability of the Hosston Aquifer to the east of Georgetown as an ASR resource including use objectives, recharge capability, hydrogeologic review, water quality, and pretreatment needs. The second phase establishes planning level costs and development of multiple scenarios to determine most cost beneficial approach to ASR.

STAFF RECOMMENDATION:
Staff recommends approval of Task Order No. CDM-19-006-TO with CDM Smith Inc. and to execute an Inter-local Agreement between the City of Georgetown and the Brazos River Authority for the sharing of costs of an Aquifer Storage and Recovery (ASR) Assessment Project.

FINANCIAL IMPACT:
The cost of the assessment is being shared with the Brazos River Authority through an Inter-local Agreement where BRA will pay up to $82,500.00 (1/2 the cost). Net cost to the City of Georgetown of $82,500.00.

SUBMITTED BY:
Glenn W Dishong

ATTACHMENTS:

<table>
<thead>
<tr>
<th>Description</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDM Task Order 19-006</td>
<td>Exhibit</td>
</tr>
<tr>
<td>BRA Interlocal</td>
<td>Exhibit</td>
</tr>
</tbody>
</table>
In accordance with paragraph 1.01 of the Master Services Agreement between Owner and CDM Smith, Inc. (“Engineer”) for Professional Services – Task Order Edition, dated September 30, 2016, (“Agreement”), Owner and Engineer agree as follows:

1. Specific Project Data

A. Title: Aquifer Storage and Recovery Project Tasks 1 and 2

B. Description: First two Phases of a multi-phase project to determine if Aquifer Storage and Recovery (ASR) will be an effective and economic water management strategy to meet the max day demands and long-term water supply needs of the City of Georgetown.

C. City of Georgetown Project Number: 

D. City of Georgetown General Ledger Account No.: 660-9-0580-90-168

E. City of Georgetown Purchase Order No.: 

F. Master Services Agreement, Contract Number: 2016-738-MSA

2. Services of Engineer

Background

The City of Georgetown is experiencing rapid increases in water demand, due primarily to unprecedented levels of residential and commercial growth. One of the water supply options being considered to meet future water supply needs, and possibly delay the construction of the South Lake Water Treatment Plant, is Aquifer Storage Recovery (ASR). In simple terms ASR is the use of purpose drilled wells that are designed to both recharge water into an aquifer and recover the water when required using the same well. There are many benefits of implementing ASR projects, with multiple recharge objectives and types of water that may potentially be used for recharge. For the City of Georgetown, this includes seasonal recharge of surplus reservoir water from Lake Georgetown, treating this water during times when there is spare water treatment capacity and then conveying this water to a suitable location within aquifer(s) that can be used to store the water. During periods of high water demand or extended drought, the stored water may then be recovered with hopefully just simple disinfection required to meet drinking water standards.

An initial assessment of surplus reservoir water from Lake Georgetown and spare treatment capacity at the Lake Water Treatment Plant indicates a significant water resource may currently be available for recharge. A preliminary evaluation of the hydrogeology between Lake Georgetown and Lake Granger also suggests the Hosston Sands within the lower Trinity aquifer may be a suitable aquifer for ASR. For example, very encouraging hydraulic results were obtained during recent test well drilling into the Hosston immediately south of Lake Granger for the Brazos River Authority (BRA). The production well completed for BRA has a
well yield in excess of 3,400 gpm, although one of the challenges at this location is the aquifer depth, with a well depth of 3,168 feet. The Cities of Taylor and Granger also have historically used the Hosston aquifer for water supply with moderate to high well yields obtained. At these locations the thickness of Hosston Sands can exceed 500 feet, meaning there is a potential to store significant volumes of water and the rate at which each well may store and recover water is favorable.

However, these locations are up to 20 miles away from the Lake Water Treatment Plant which means in addition to the high cost of well construction due to the depth of the aquifer, conveyance costs for a new ASR well field constructed at these locations will also be high. Therefore, a location where the aquifer is closer and shallower is preferred. Near Lake Georgetown, the depth to the Hosston aquifer is significantly less, but unfortunately the thickness of the Hosston Sands is also known to thin significantly towards Lake Georgetown. Consequently, the potential volume of water that may be stored and the rate at which each well may store and recover water may be significantly less, thereby requiring a greater number of ASR wells to be installed, driving costs higher. The City therefore requires guidance on a preferred location or locations for the development of an ASR wellfield that meets its recharge objectives at a favorable cost.

To assist with this evaluation a basic cost model is proposed that compares project cost elements at different locations to meet different recharge objectives, e.g. cost of wells and pipeline conveyance costs. This preliminary cost model will likely assist in the decision-making process, but very limited hydrogeologic data exists for the Hosston and other deeper aquifers between Lake Georgetown and Lake Granger. Therefore, before full scale ASR implementation can proceed one or more test wells will ultimately need to be drilled to confirm likely hydraulic parameters at locations closer to City facilities. The potential geochemical rock water interactions and hydraulic performance when recharging is also poorly understood, with currently only one ASR facility in Texas utilizing the Hosston aquifer (City of Kerrville ASR). Therefore, one recommended interim step, or step to be performed in parallel with test well drilling, is to temporarily retrofit the BRA Lake Granger production well for ASR cycle testing if possible. Favorable results from this testing will then provide increased confidence of success for a site located farther west.

For these reasons, and because relatively limited experience still exists with the development of ASR systems in Texas, a phased approach is proposed prior to implementing a full-scale ASR system. An important preliminary task, following agreement on the recharge and recovery objectives, will be an assessment that includes planning level cost estimates of potential ASR systems to be confident implementing ASR is both potentially viable but also compares financially favorable to other more traditional water supply solutions.

**Project Approach**

Engineer proposes a phased approach for developing ASR as a water supply alternative for the City of Georgetown. The approach includes the following broad phases:

- **Phase 1 Initial Assessment** - The initial assessment includes a project kick-off workshop to better define the recharge and recovery objectives for both seasonal and long-term water supply use. Following the kickoff meeting desktop-based studies will be completed to evaluate available reservoir and water use data to better define recharge water availability; finalize a hydrogeologic review of suitable aquifers and locations; evaluate water quality compatibility and define minimum pre-treatment needs for recharge.

- **Phase 2 Conceptual ASR Development** – ASR Scenarios will be developed that meet the recharge objectives defined during Phase I. Planning level costs will be developed, and a ranking exercise completed to identify the most feasible ASR project that compares favorably with alternative traditional water supply solutions.
Phase 3 ASR Pilot Testing – This phase consists of temporarily retrofitting the BRA Granger Well for ASR cycle testing, on the assumption it can be made available. Anticipated testing period is one year, and upon completion of testing, the well would be returned to its original use. Included are the associated tasks for design, permitting, construction, testing and data evaluation. The assumption is that if for any reason ASR is not viable at the Granger well site, then it is less likely ASR would be viable at a site located further west.

Phase 4 Exploratory Well Drilling – A test well program is proposed to obtain basic aquifer information (thickness, permeability and water quality) at one or more sites located between Lake Georgetown and Lake Granger. This phase comprises test well design, including siting, potentially enhancing the siting selection by using seismic data to evaluate potential sand thickness and depth, construction observation during drilling and reporting of the results. This phase, or the initial tasks within this phase could potentially be conducted concurrently with Phase 3 ASR Pilot Testing.

Phase 5 ASR System Design and Permitting – Assuming Phases 3 and 4 are successful, a full-scale ASR system design is proposed. Dependent also on the outcome from Phase 2, Conceptual ASR Development, one or more sites identified for ASR development will be designed allowing for increased flexibility with phased development. Fully operational ASR systems will be designed to meet the agreed recharge objectives. Included will be multiple ASR wells with associated wellhead appurtenances, instrumentation, monitoring and control systems, pumping and recovery systems, and conveyance. The exploratory well drilling program and / or results obtained from the BRA Granger ASR Pilot testing will be used to assist with obtaining Class V ASR permit(s).

Phase 6 ASR System Implementation – Construction, Testing and Operational start-up of the ASR system designed and permitted during Phase 5. Implementation could commence with completion of a single ASR well followed by wellfield expansion with additional ASR wells, or completed in a single step, dependent on the level of confidence obtained during earlier phases.

This proposal outlines the scope of work, schedule, and budget for conducting Phases 1 and 2. The work effort, schedule and budget required for implementing the subsequent phases, i.e. ASR Pilot testing (Phase 3), Exploratory Well Drilling (Phase 4), ASR System Design and Permitting (Phase 5) and ASR System Implementation (Phase 6) will be very much dependent on the outcome from the initial phases. Therefore, it is proposed that once the initial phases are complete and a more detailed understanding for the location and type of ASR system has been obtained, a more accurate work scope for the final phases can then be developed.

Scope of Work
A phased approach for implementing ASR has been developed. This approach reduces risk and cost by only implementing the next step when the outcome is more certain. Tasks have therefore been grouped accordingly in a logical progression. At the completion of each phase, recommendations will be made on whether to progress to the next phase of work. Work will only proceed to the next phase with full concurrence of the City.

PHASE 1
The proposed scope of work for the Initial Assessment (Phase 1) will be conducted as follows:

Task 1 Initial Assessment

Task 1.1 – Kick-off Workshop
A single full-day workshop is proposed, with representatives from the City, BRA and any other appropriate stakeholders in attendance to confirm the type of ASR system that would best meet the needs of the City. The following items will be discussed/determined during the workshop:

- Define the recharge and recovery objectives for both seasonal and long-term water supply use.
- Confirm the source water location, i.e. Lake Georgetown and/or Lake Granger.
- An ASR 101 primer that includes a presentation of simplistic cost elements for ASR development, permitting issues and findings from very preliminary hydrogeologic evaluations.
- Confirm any preferred and alternate ASR system locations, including identifying land parcels under City ownership and/or control.
- Confirm operational strategies for an ASR system.
- Identify and agree upon responsibilities for any additional requirements during the project, e.g. public outreach, regulatory agency involvement.

The decisions made during this important kick-off task will influence how Engineer proceeds with this Initial Assessment to identify the preferred and alternative ASR system sites.

**Task 1.2 – Recharge Water Availability Review**

The objective of Task 1.2 is to confirm the availability of water for recharge using both firm and non-firm yields under different climate variability scenarios, using both historic water demand data and projected increased water demand data so that the timing, rates and volumes of surface water available for recharge may be determined. This task is divided into four sub-tasks as outlined below. It is assumed the source of recharge water, i.e. Lake Georgetown and/or Lake Granger will be agreed during the kick-off workshop.

**Subtask 1.2.1 – Define Recharge Water Availability – Permitted**

Specific tasks and issues to be examined within this task include the following:

- Compile and review historic reservoir and water demand data.
- Determine the potential volume, frequency, duration and rates of water available for recharge currently permitted under existing firm yield water rights, i.e. using historic reservoir storage data, permit rights, and calculated spare treatment capacity (spare treatment capacity equals treatment design capacity, less historic water demand, less operating “headroom”), determine how much excess treated water could be available for recharge if the treatment plants are operated at their design rates.
- Determine the potential volume of water available for recharge as above but using projected future water demand. As water demand increases the water available for recharge will decrease, but by how much and when?

**Subtask 1.2.2 – Define Recharge Water Availability – Flood Pool**

Specific tasks and issues to be examined within this task include the following:
• Compile and review historic reservoir flood pool data to determine water availability using reservoir flood pool storage (non-firm capacity).

• Determine the potential volume, frequency, duration and rates of water available for recharge that may be available using non-firm flood pool water, i.e. using historic reservoir flood pool storage data, assumed agreements, and calculated spare treatment capacity determine how much excess treated water could be available for recharge if the treatment plants are operated at their design rates.

• Determine the potential volume of water available for recharge as above but using projected future water demand.

• Coordinate with USACE Lake Operations staff and the City to facilitate a strategy and process for obtaining formal agreements to use the flood pool water for additional non-firm yield. Actual agreements will be obtained by the City, but before any agreements are formulated it is important to assess the potential for using flood pool storage and likely durations over which flood pool water may be used without jeopardizing reservoir safety or flood functions of the reservoirs assessed.

**Subtask 1.2.3 – Future Meteorological Projections**

Hydrologic variations (rainfall, reservoir inflows and evaporation) due to climatic variations or climate change have the potential to impact reservoir storage volumes and flood flows, which in turn can change the frequency and duration that flood pool storage occurs. Using historic reservoir data typically provides the most reliable assessment of water availability, but recent shifts in climate patterns with wetter winters projected may result in more frequent / higher flood pools. Therefore, a high-level assessment will be performed using published meteorological projections for climate variability / climate change to assess the order of magnitude change or variation in reservoir storage that can be expected in the future.

**Subtask 1.2.4 – Refine Potential Recharge Scenarios**

Potential recharge scenarios using surplus permitted rights and non-firm flood pool storage will be summarized so that volumes, rates and durations for both seasonal and long-term use can be made. This summary is critical, because not only does the data determine whether the recharge objectives defined under Task 1.1 can be met, but it also shapes the design for any recharge system, e.g. the number of ASR wells needed, and the hydraulic capacity of pipelines needed to convey recharge water at the required rates.

**Task 1.3 – Hydrogeologic Review**

The primary objectives of Task 1.3 are to provide a hydrogeologic overview of suitable aquifers for ASR; to confirm the recommended target storage zone (Hosston Aquifer); and to summarize known hydrogeologic parameters for sites identified for each potential ASR system. Emphasis will be on assessing projected aquifer depths, well yields, and storage zone thickness so that comparative costs for different ASR options can be made (Task 2.1).

Seismic reflection data has successfully been used elsewhere to assist with identifying aquifer depths and the thickness of target storage zones. The most economical assessment method is re-interpretation of existing seismic data captured by Oil and Gas companies. However, the availability of existing data may be limited due to limited oil and gas exploration in the area of interest. Data availability will be investigated and the cost of alternatively capturing new data will be assessed. Although not inexpensive, acquiring and interpreting new data may still be more cost effective than drilling additional investigation wells.

The proposed hydrogeologic review will be a desk-top based study and will use the following information sources:
Regional and local hydrogeologic reports and data available from Texas Water Development Board, Bureau of Economic Geology (BEG);

- Site specific hydrogeologic data (e.g., geological logs, geophysical logs, aquifer testing results, groundwater quality data) available from TWDB, BEG and log libraries;

- Available construction, water level, water quality, and production data for water supply wells and other nearby water supply wells, including the BRA Granger well reports;

- Potentiometric surface (groundwater level) elevation maps for the targeted aquifers in the vicinity of the proposed ASR sites from monitoring data or GAM groundwater modeling;

- Data for other nearby users of the targeted aquifers such as well locations, existing and future pumping rates and permitted allocations to ensure ASR storage zones are not impacted by existing groundwater users.

**Task 1.4 – Water Quality Analysis**

The objectives of Task 1.4 are to determine the water quality of the recharge water; identify any pre-treatment needs prior to recharge; and to identify any potential adverse geochemical rock water interactions that may occur between the recharge water, groundwater and aquifer rock matrix that could subsequently impact the recovered water quality and necessitate additional water treatment when the stored water is recovered.

Specific tasks to be completed within this task are:

- Define minimum pre-treatment needs and water quality for recharge. It is anticipated that lake water will be treated using existing water treatment plants prior to recharge. Therefore, existing treated water quality data will be compiled. Any data gaps identified will be highlighted so that the City may obtain additional water quality samples. There may be options for using partially treated water, e.g. pre-disinfection, which will be identified during the water quality review.

- Water Quality compatibility analysis will be performed using preliminary geochemical modelling using PHREAQC. This modelling will identify any potential major ion stability issues (for example potential for precipitates to form that could clog the ASR wells) and oxidative reactions that could mobilize metals (e.g. Mn and other metals).

**Task 1.5 – Technical Memorandum**

A Technical Memorandum will be prepared that presents the results from the initial Phase 1 evaluation. The Technical Memorandum will include the following:

- Summary of the items discussed / determined during the kick-off workshop.

- A series of graphical outputs and tables that summarize the availability of water for recharge using both firm and non-firm yields under different climate variability scenarios, using both historic and projected increased water demand data.

- A summary of discussions and any preliminary agreements made with USACE regarding use of flood pool water for additional non-firm yield.

- A hydrogeologic overview of suitable aquifers for ASR, identifying recommended target storage zones and summary of known hydrogeologic parameters for each agreed potential ASR system location.
Summary evaluation and recommendations for the use of seismic reflection data to determine aquifer depths and the thickness of target storage zones.

Water quality analysis to determine pre-treatment requirements and results from preliminary geochemical modelling to identify any potential water quality compatibility issues during recharge and recovery.

Recommended next steps.

The technical memorandum will be issued as a draft for comment. Following circulation of the draft to all participants the Engineer proposes to conduct an in-person meeting with the City, BRA and other agreed stakeholders to present the findings and recommendations from the memorandum. During this meeting review comments will be received, and the Engineer and City will jointly agree on whether to proceed to the next phase of work. The technical memorandum will be finalized following the review meeting and after receiving one round of review and comments.

**PHASE 2**

The proposed scope of work for Conceptual ASR Development (Phase 2) is described below:

**Task 2  Conceptual ASR Development**

**Task 2.1 – Develop ASR Scenarios**

The objective of Task 2.1 is to develop concept designs for locations identified during the kick-off workshop, or subsequently agreed upon during review of the Task 1.5 Technical Memorandum. Wellfield layouts and pipeline corridors will be used to generate planning level cost estimates so that the different ASR scenarios may be compared and ranked. The cost of ASR development is impacted by several key factors which include the local hydrogeology, costs of land, costs of pipelines and pumping and other infrastructure requirements. So, although there may be preferable hydrogeological locations for ASR as already outlined, infrastructure requirements can still significantly impact the cost.

Specific tasks to be completed within this task are:

- Provide conceptual ASR wellfield layouts for land parcels identified for ASR development. In addition to reviewing existing major land use features that may limit placement of ASR wells, conceptual groundwater modelling will be completed to help determine the number of ASR wells and optimum well spacing required to achieve the recharge objectives defined during Phase I. Any groundwater users that intersect the proposed target storage zone in the vicinity of the proposed ASR sites will be identified and considered.

- Complete preliminary ASR well designs (well depths, screened intervals, casing diameters, pump capacities and injection control requirements) using hydrogeological data summarized during Phase I, suitable for completing planning level cost estimates for wells located at each site.

- Provide conceptual pipeline designs for both the on-site wellfield pipelines and the conveyance pipelines needed to convey water to and from the ASR wellfields, including conceptual designs for connection to existing GUS water utility infrastructure.

- Assess the potential need for additional pump stations to convey either the recharge water and or recovered water from the ASR wellfields identified. Determine the approximate size of the pump stations, the power requirements and availability of power that will impact planning level price estimates.

- Estimate the costs for water treatment to meet recharge and recovered water quality criteria.
TASK ORDER

- Provide planning level cost estimates for each ASR scenario, including capital construction costs and operating costs on a net present cost basis.

Task 2.2 – Ranking

It is important that the development of ASR compares favorably to other water supply options and that the ASR site(s) identified for development are the most favorable in terms of risk and cost. A simple ranking methodology will be developed that considers the costs and risks of implementation. Costs developed during Task 2.1 will be used. Risk factors to be included are environmental impact, ease of obtaining permits, likely recharge and recovery volumes and rates, likely water quality of the recovered water, and ease of construction.

The results from the initial ranking exercise will be presented for discussion with the City and then finalized.

Task 2.3 – Site Selection and Conceptual ASR Design

The objective of Task 2.3 is to agree to the preferred site for ASR development and finalize the conceptual design for the selected site. Included within the conceptual design will be recommended locations for drilling one or more test wells, which if agreed upon, would be implemented as part of Phase 4 Exploratory Well Drilling.

Specific tasks to be completed within this task are:

- Finalize preferred site(s) for ASR development.
- Identify potential locations for test well drilling.
- If required, update the planning level cost estimate for ASR development at the preferred location.
- Provide an updated planning level cost estimate for test well drilling.

3. Owner's Responsibilities

Owner shall have those responsibilities set forth in the Agreement subject to the following:

1. Owner shall have those responsibilities set forth in the Agreement subject to the following: Designate a person to act as GUS’s representative with respect to the services to be performed or furnished by the Professional. This representative will have authority to transmit instructions, receive information, interpret and define GUS’s policies and decisions with respect to Professional’s services.

2. Provide data/information pertinent to the study as requested.

Any documents or information related to the Work/Services provided by GUS to the Professional, including, without limitation, engineering studies, maps, reports, filed data, notes, plans, diagrams, sketches, or maps (the “Information”) is and shall remain the property of GUS, and Professional shall have no ownership or other interest in same. The Professional shall deliver to GUS, if requested, a written itemized receipt for the Information, and shall be responsible for its safe keeping and shall return it to GUS, upon request, in as good condition as when received, normal wear and tear excepted.

4. Times for Rendering Services
5. **Payments to Engineer**

   A. Owner shall pay Engineer for services rendered as follows:

<table>
<thead>
<tr>
<th>Category of Services</th>
<th>Compensation Method</th>
<th>Lump Sum or Not to Exceed Amount of Compensation for Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Services</td>
<td>Lump Sum</td>
<td>$79,640</td>
</tr>
<tr>
<td>Phases 2</td>
<td>Lump Sum</td>
<td>$85,360</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>$165,000</strong></td>
</tr>
</tbody>
</table>

   B. The terms of payment are set forth in Article 4 of the Agreement unless modified in this Task Order.

6. **Consultants:**

   None

7. **Other Modifications to Agreement:**

   None

8. **Attachments:**

   None

TASK ORDER

The Effective Date of this Task Order is ________________, 20____.

OWNER: 

By: ___________________________  
Name: Dale Ross  
Title: Mayor, City of Georgetown  
Date: _________________________  
Engineer License or Firm’s Certificate No.  
State of: Texas

ENGINEER: 

By: ___________________________  
Name: Allen Woelke, P.E.  
Title: Vice President  
Date: _________________________

ATTEST: 

Robyn Densmore, City Secretary  

APPROVED AS TO FORM: 

City Attorney
DESIGNATED REPRESENTATIVE FOR TASK ORDER:

Name: Michael Hallmark
Title: Project Manager
Address: 300-1 Industrial Ave.
         Georgetown, TX  78626
Phone: 512-930-3569
Fax: 
E-Mail: Michael.Hallmark@georgetown.org

DESIGNATED REPRESENTATIVE FOR TASK ORDER:

Name: Allen Woelke
Title: Vice President
Address: 9430 Research Blvd
         Suite 1-200
         Austin, TX  78759
Phone: 512-346-1100
Fax: 512-345-1483
E-Mail: woelkead@cdmsmith.com
INTERLOCAL AGREEMENT
BETWEEN
CITY OF GEORGETOWN
AND
BRAZOS RIVER AUTHORITY

This Interlocal Agreement between City of Georgetown and Brazos River Authority (“Agreement”) is made and entered into pursuant to the provisions of the Interlocal Cooperation Act, Chapter 791, Texas Government Code, as of the date last executed below (“Effective Date”) by and between the Brazos River Authority (“BRA”), a river authority of the State of Texas, and City of Georgetown (“City”), a home-rule municipality situated in Williamson County, Texas (collectively, the “Parties” and separately as “Party”).

RECITALS

WHEREAS, City and BRA recognize the potential for Aquifer Storage and Recovery (ASR) to meet the water resource needs of the City;

WHEREAS, ASR is a water resource strategy that has been included in the Region G State Water Plan for 2019;

WHEREAS, City has hired an engineering firm to prepare an ASR Assessment that will evaluate the feasibility of ASR in the Hosston formation in eastern Williamson County;

WHEREAS, the engineering firm shall assess the benefits, costs, and risks of developing and operating an ASR project for use by the City and others;

WHEREAS, BRA desires to participate in the ASR Assessment and is willing to fund the assessment up to a total amount not to exceed eighty-two thousand, five hundred dollars ($82,500).

NOW, THEREFORE, based on the mutual promises contained herein, which constitute good and valuable consideration, the Parties agree as follows:

Section I. Agreement

1.1 Aquifer Storage and Recovery Assessment. City shall be solely responsible for conducting the Aquifer Storage and Recovery Assessment (“Assessment”), which shall be performed through the services of any engineering firm retained by City. The scope of the Assessment has been determined by City and BRA and shall include the following: 1) Initial ASR assessment including ASR objectives, available data, hydrogeologic review, water quality assessment, and pretreatment requirements; 2) Conceptual ASR development including planning level costs, alternative costing, and concept selection. City will coordinate with BRA regarding any scope modifications or future phases and shall provide BRA a copy of the Assessment upon completion.

1.2 Funding. Within thirty (30) days of City’s completion of the Assessment, BRA shall
reimburse City an amount not to exceed eighty-two thousand, five hundred dollars ($82,500).

13 Liability. AS BETWEEN THE CITY AND BRA, THE CITY SHALL BE RESPONSIBLE FOR AND BEAR ANY AND ALL LIABILITY ASSOCIATED WITH CONDUCTING THE ASSESSMENT.

14 Term. This Agreement shall commence upon the Effective Date, and shall terminate August 31, 2020. This Agreement may only be extended upon a written amendment approved by both Parties. Any extensions shall be at the same terms and conditions, plus any approved changes.

15 Termination. This Agreement may be terminated by either party upon thirty (30) days’ written notice.

Section II. Miscellaneous Provisions

2.1 Entire Agreement. The terms and provisions of this Agreement contain the entire Agreement between the Parties with respect to the matters addressed above.

2.2 Severability. The provisions of this Agreement are severable, and if for any reason any one or more of the provisions contained in this Agreement shall be deemed to be invalid, illegal, or unenforceable in any respect, the invalidity, illegality, or unenforceability shall not affect any other provisions of this Agreement and this Agreement shall remain in effect and be construed as if the invalid, illegal, or unenforceable provision had never been contained in the Agreement.

2.3 Amendments. No modification, addition, deletion, revision or other change to this Agreement shall be effective unless such change is reduced to writing and executed by both Parties.

2.4 Assignability: This Agreement shall bind the Parties and their legal successors, but shall otherwise not be assignable by the Parties without prior written consent of the other Party, which consent shall not be unreasonably withheld. All of the respective obligations of each of the Parties shall bind that Party and shall apply to and bind any successors or assigns of that Party.

2.5 Governing Law. This Agreement shall be governed by the Constitution and law of the State of Texas, except as to matters exclusively controlled by the Constitution and Statutes of the United States of America.

2.6 Venue. Venue for any action arising hereunder shall be in Williamson County, Texas.

2.7 Third Party Beneficiaries. Except as expressly provided herein, nothing in this Agreement, express or implied, is intended to confer upon any person, other than the Parties, any rights, benefits, or remedies under or by reason of this Agreement.
2.8 **Relationship of Parties.** Neither the execution nor the delivery of this Agreement shall create or constitute a partnership, joint venture, or any other form of business organization or arrangement between the Parties, except for the contractual arrangements specifically set forth in this Agreement. Except as is expressly agreed to in writing in this Agreement, no Party (or any of its agents, officers or employees) has any power to assume or create any obligation on behalf of the other Party.

2.9 **Notices.** All notices, communications, invoices, bills and reports (unless otherwise provided by the terms of this Agreement) required under the Agreement shall be personally delivered or mailed to the respective Parties by certified mail, return receipt requested at the addresses shown below, unless and until either Party is otherwise notified in writing by the other Party of a change in address. Mailed notices shall be deemed communicated as of five (5) days after mailing regular mail.

If intended for BRA, to: If intended for City, to:

4600 Cobbs Drive  P.O. Box 409  
Waco, Texas 76710  ATTN: Utility Director  
                           Georgetown, TX 78627

2.10 **Interpretation and Reliance.** No presumption will apply in favor of either Party in the interpretation of this Agreement or in the resolution of any ambiguity of any provisions thereof.

2.11 **Multiple Counterparts.** This Agreement may be executed in multiple counterparts, each of which shall constitute an original.

[Signatures on the following page]
IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed, intending to be bound thereby.

BRAZOS RIVER AUTHORITY

By: __________________________
   DAVID COLLINSWORTH
   GENERAL MANAGER/CEO

Title: __________________________

Date: __________________________

CITY OF GEORGETOWN

By: __________________________
   Dale Ross

Title: Mayor

Date: __________________________

Attest:

By: __________________________
   Robyn Densmore

Title: City Secretary

Approved as to Form:

By: __________________________
   Charlie McNabb

Title: City Attorney
SUBJECT:
Consideration and possible recommendation to approve Task Order CDM-20-001-TO with CDM Smith, Inc. for American Water Infrastructure Act Risk and Resilience Evaluation in the amount of $150,000.00. - Glenn W. Dishong, Water Utilities Director

ITEM SUMMARY:
The America's Water Infrastructure Act of 2018 (AWIA) was signed into law on October 23, 2018. The guidance for conduct of the evaluation is now available and the City must complete a risk assessment and evaluate the water utility's resilience to hazards including assessment of capital and operational needs by March 31, 2020.
This Task Order accomplishes the necessary risk and resilience evaluation as well as completion of the EPA certification process of the Emergency Response Plan by September 30, 2020.

STAFF RECOMMENDATION:
Staff recommends approval of the Task Order in the amount of $150,000.

FINANCIAL IMPACT:
Cost of the Task Order to be funded from the Water Administration Budget - Water Fund. 660-5-0527-51-0330.

SUBMITTED BY:
Glenn W Dishong

ATTACHMENTS:

<table>
<thead>
<tr>
<th>Description</th>
<th>Type</th>
</tr>
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<tbody>
<tr>
<td>CDM Task Order - AWIA</td>
<td>Exhibit</td>
</tr>
</tbody>
</table>
1. **Specific Project Data**

   A. Title: American Water Infrastructure Act Risk Assessment and Emergency Response Plan

   B. Description: Prepare and submit a risk and resiliency assessment and modifications to the Emergency Response Plan for the City of Georgetown’s water infrastructure in compliance with the America’s Water Infrastructure Act.

   C. City of Georgetown Project Number: N/A

   D. City of Georgetown General Ledger Account No.: 660-5-0527-51-330

   E. City of Georgetown Purchase Order No.:

   F. Master Services Agreement, Contract Number: 2016-738-MSA

2. **Services of Engineer**

**Project Understanding, Approach, and Scope**

**Introduction**

A new federal legislative requirement to America’s Water Infrastructure Act of 2018 (AWIA) was signed into law on October 23, 2018, called the Community Water System Risk and Resilience Act (Act). This new Act is broader than other assessments related to risks and resilience, and specifically calls out the risks of “natural hazards” that have not been assessed by all utilities in the past under previously required vulnerability assessments. The AWIA encompasses:

- Pipes and constructed conveyances, physical barriers, source water, water collection and intake, pretreatment, treatment, storage and distribution facilities, electronic, computer, or other automated systems;
- Monitoring practices;
- Financial infrastructure (such as billing mechanisms);
- Use, storage or handling of chemicals;
TASK ORDER

- Operation and maintenance; and
- May include capital and operational needs for risk management

As part of the AWIA, utilities are required to perform the following by March 31, 2020:
- Conduct risk assessments for all likely “hazards”
- Determine the System’s resilience to those hazards
- Evaluate the capital and operational needs for resilience and risk management

In addition, utilities are required to certify compliance of their Emergency Response Plans with the Act by six months following the certification of the Risk and Resilience Assessment but no later than September 30, 2020.

The City of Georgetown (City) is responsible for providing safe and reliable water to about 42,000 water accounts representing about 110,000 customers. It must therefore meet the requirements of the AWIA. The City’s water distribution system consists of several pressure planes from which potable water is distributed to the customers. Failure of delivering water from any of these pressure planes would not meet the City’s mission of providing water for its customers. The Risk and Resilience Assessment (RRA) will be conducted to evaluate the critical assets that could prohibit a pressure plane from delivering safe and reliable water.

CDM Smith proposes the following approach to perform the RRA and reviewing and updating the City’s existing Emergency Response Plans (ERPs), along with associated tasks to provide compliance with the AWIA requirements. These tasks will be conducted in accordance with American Water Works Association (AWWA) standards – specifically the “Risk and Resilience Management for Water and Wastewater Systems” (ANSI/AWWA J100-10 (R13)) and the “Emergency Preparedness Practices” (ANSI/AWWA G440-17) for guidance.

The overall goal of the project is to build upon prior vulnerability assessments and ERPs performed by the City, and conduct a current assessment of City’s existing vertical and horizontal (above-ground and below-ground) assets and business processes to determine the current and future risks and hazards associated with these, in order to comply with the AWIA. After identification of these hazards and risks, an assessment of the vulnerability and resilience of the operational and business needs will then be conducted.

Scope of Service
CDM Smith will spend up to 770 hours of professional time performing the services outlined below. A determination of which facilities that CDM Smith will focus their 770 hours of professional time on will take place during the project kick off meeting.

At the beginning of this project, all CDM Smith project staff must sign a confidentiality statement. Once signed, CDM Smith will perform the following scope of services to assist the City in complying with the requirements of this Act.

Task 1: Data Gathering/Review of City’s Existing Materials/Kick-Off Meeting
City will provide the following existing information to CDM Smith following notice to proceed:
- Locations and facility descriptions of above ground assets
TASK ORDER

- Previously prepared vulnerability assessments
- Previously prepared Emergency Response Plans (ERPs) and associated annexes
- Emergency Operations Plans
- Business Continuity Plans and associated appendices and annexes

CDM Smith will perform an initial review of the above documents then prepare a data needs list of additional information needed for this effort. CDM Smith will also review existing data based on the AWWA J100, G440 guidelines and the additional guidance released by USEPA in August 2019 to identify additional criteria and procedures needed to be included in the AWIA RRA or ERP.

CDM Smith will facilitate a kick-off meeting to be held in person with representatives of City to confirm project goals and key stakeholders for the project and to determine the facilities that CDM Smith will focus their 770 hours of professional time on. Prior to the kick-off meeting, CDM Smith will prepare a questionnaire to be introduced at the meeting to include documentation of City staff’s institutional knowledge and understanding of system redundancies and vulnerabilities. City staff will complete the questionnaires and return them to CDM within two weeks following the kick-off meeting.

As part of this task, CDM Smith will prepare and submit a brief Data Collection Memorandum documenting existing information collected and its applicability in completion of the remaining tasks under this scope of services. At the completion of the project, CDM Smith will return all hard copies of the documents to City.

**Deliverables:** Data Collection Memorandum; Questionnaire; Kick-off meeting agenda; Kick-off meeting summary notes. All in Microsoft Word format.

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**Task 2: Initial Threat and Asset Characterizations**

Following receipt of the questionnaires and prior to the two-day workshop in Task 3, CDM Smith will conduct an initial threat characterization, based on the information in the questionnaires and CDM Smith’s knowledge of the City system. The initial threat characterization will identify threats to the water system from a comprehensive “all-hazards” list of malicious acts and natural hazards from the J100 Appendix E guidance, EPA, and additional vulnerabilities and threats as identified by the City. The J100 guidance is selective in order to produce high net benefit options for reducing risk and improving resilience.

During the initial asset characterization stage, the following will be performed:

- Identification and evaluation of critical assets, mission-critical functions, and supporting infrastructure and evaluation if there have been changes to the system that warrant an update to the critical asset list.
- Identification of the critical internal and external supporting infrastructure which will likely include the following: Operations & Maintenance, Monitoring Practices (new), and Financial Infrastructure (new). This includes identifying any existing protective countermeasures and mitigation measures/features.
**Task 3: Stakeholder Workshop and Development of the “All-Hazards” Listing**

Following completion of Task 2, CDM Smith will facilitate a two-day workshop with City leadership and subject matter experts across the production, transmission, water treatment plants, SCADA and financial sections. CDM Smith will provide a workshop agenda and preliminary information to participants prior to the meeting. The workshop focuses on populating a risk matrix for “all hazards” and critical assets, which will provide the basis to create the threat-asset pairs in J100. CDM Smith proposes modifying the assets to match categories required under the AWIA (such as pipes and constructed conveyances, physical barriers, treatment facilities, storage, etc.). As part of the workshop, “critical” facilities will be refined based on the facilities’ individual impact on meeting the City mission to deliver potable water to its customers.

The workshop will review the City’s water system assets located in all pressure planes developed in Task 1 and narrow these down to focus on the critical facilities based on the eight (8) pressure planes. These critical facilities could potentially include any or all of the four water treatment plants, associated clearwell storage tanks, high service pump stations, raw water intakes, and booster pump stations that could impact providing water to various distribution system pressure planes. In addition, the review will include:

- Supervisory Control and Data Acquisition (SCADA) System
- Electrical Power Supply Systems
- Financial Systems, including the Customer Billing System, the City’s Enterprise Financial System, the Maximo Work Order System, the Customer Relationship Management System, and the Call Center Technology
- Assets and systems related to ensuring City facilities can treat water to meet or exceed the required public health standards.

Assets may be categorized into broad groups as necessary to move the discussion forward. This stakeholder workshop will provide an efficient method to gather/refine institutional knowledge about hazards, risks, and resilience from City stakeholders by:

- Understanding connections between ongoing issues and challenges, hazards, and current plans or actions
- Identifying vulnerabilities to inform the risk and resilience profiles for the threat-asset pairs under J100
- Developing and prioritizing actions to improve resilience that inform the Emergency Response Plan

The J100 guidance recommends that a core team of City staff collaborate at the workshop, including members from the City security, safety, treatment/distribution, O&M, information technology (IT) and finance sections. Additional stakeholders may include legal, human resources (HR), customer service, finance, laboratory, and local first responders.
TASK ORDER

The “all-hazards” approach should include both short-term and long-term consequences for at least the following hazards (or threats):

- Malevolent acts, both internal and external:
  - Assault on Utility – Physical
    - Employee assaults/threats/pandemic
    - Drone/other physical attacks
  - Contamination of Finished Water – Accidental
  - Contamination of Finished Water – Intentional
  - Theft or Diversion – Physical
  - Cyber Attack on Business Enterprise Systems
  - Cyber Attack on Process Control Systems
  - Sabotage – Physical
    - Vandalism and tampering of storage/pumping facilities
    - Transmission system incursions
    - Facility intrusions
    - Arson
    - Power Outages
    - Communication systems outages (cell towers, radio network outages, etc.)
  - Contamination of Source Water – Accidental
  - Contamination of Source Water – Intentional

- Natural hazards (as applicable):
  - Earthquakes
  - Wind events, including tornados and major storms
  - Floods
  - Wildfires
  - Hydrologic changes
  - Droughts and extreme heat
  - Ice storms
  - Power outages
  - Communication systems outages (cell towers, radio network outages, etc.)

Deliverables: Workshop agenda with background materials; Workshop summary notes; Populated risk matrix for all hazards and critical assets resulting from the workshop
Task 4: Risk and Resilience Assessment and Stakeholder Meeting

After the completion of the two-day workshop in Task 3, CDM Smith will conduct the formal Risk and Resilience Assessment (RRA). This will be conducted using a Microsoft Excel spreadsheet template, that is consistent with the AWWA J100 and AWIA requirements, to provide documents in a consistent manner. This RRA will build off the workshop conducted in Task 3. The final product will include a report with an executive summary of the methods and results. This process will follow the Risk Analysis and Management for Critical Asset Protection (RAMCAP) method in the AWWA J100 guidance. The specific tasks to conduct the assessment are as follows:

1. Finalize the asset and threat characterizations based on City priorities and the findings of Task 3 to identify, rank, and record City critical assets. The goal of this is to determine the critical and high-consequence facilities/assets and the high threat-likelihoods. These determine the "threat-asset pairs" which are the focus of the RRA. CDM Smith will use input from the workshop (conducted as part of Task 3) and data review (conducted as part of Task 1) to ensure that medium-consequence or likelihood threat-asset pairs are also included, as appropriate. The high-priority threat-asset pairs will move on to the Consequence Analysis, Vulnerability Assessment, and Threat Analysis stages described below.

2. In order to conduct the Consequence, Vulnerability, and Threat Calculations for high-priority threat-asset pairs, the following will be performed:

   - Consequence Analysis: Develop and refine consequence metrics or criteria (such as financial, casualties, loss of revenue, or regional economic impact). The RAMCAP methodology is used to define ranges of consequence and analyze based on the consequence metrics for each threat-asset pair following the RAMCAP process, are measured in dollars.

   - Vulnerability Assessment: For each critical threat-asset pair the vulnerability is determined by estimating the likelihood of an occurrence to the "all-hazards" threat.

The output for a vulnerability analysis of malevolent incidents is the likelihood of success of the adversary for each specified attack scenario on each threat-asset pair, given that the attack is carried out. The parallel concept for natural hazards is the likelihood that the hazard will produce the consequences already estimated, given that the hazard occurs. This is expressed in a numerical value from zero (the threat is unlikely to occur and produce the consequence) to one (the threat is certain to occur).

   - Threat Likelihood Analysis: Conduct the threat analysis using the J100 guidance to estimate the likelihood or frequency of malevolent threats using the proxy measure, best estimate, or conditional assignment and the probability of natural hazards and likelihood of dependency or proximity hazards. This is expressed in a numerical value from nearly zero (the threat is unlikely to occur) to one (the threat is certain to occur).

3. In order to conduct the Risk and Resilience Analysis, the following will be performed:

   - Calculate risk for each threat-asset pair as the product of the results from Consequence Analysis, Vulnerability Analysis, and Threat Analysis, using the following equation:
TASK ORDER

Risk = Consequences x Vulnerability x Threat

Likelihood Risk = C x V x T

- Create the Utility Resilience Index (URI) as outlined in J100 as:
  - Operational – These indicators reflect the tactical capacity of the utility to react quickly and/or cope with various incidents that have the potential to disrupt services.
  - Financial – These indicators reflect the fiscal capacity of the utility and supporting community to react quickly and/or cope with various incidents that have the potential to disrupt revenue.

- Each of these indicators are numerical values from zero (not resilient) to one (highly resilient) designed to reflect the resilience of the utility as a whole. They help to further focus City toward areas that need further attention to reduce risk and improve resilience. This will be presented in easy-to-understand dashboards as it applies to each critical asset.

4. The methodology, findings, costs, and recommendations of the RRA will be documented in a report format, including an executive summary. This summary report will only cover City infrastructure, processes, etc. that might impact the customers’ RRA.

An electronic copy of the draft RRA Report will be provided to City for review. CDM Smith will meet with City to review these draft reports during a half-day meeting prior to completion of the final reports. CDM Smith will incorporate City’s written comments on these draft reports into the final Risk and Resilience Assessment report.

5. Certify the Risk and Resilience Assessment: CDM Smith will assist City in completing the required EPA certification process. The certification details are expected to require the water system name, PWSID#, the date certified, and a statement from City that it has conducted and reviewed (and revised as needed) the RRA. CDM Smith will provide City with the needed documentation for review by February 1, 2020 with the understanding that City will review and return a consolidated set of comments and modifications by February 28, 2020 to allow time for finalizing any documents by March 15, 2020 for the March 31, 2020 deadline.

Deliverables: Half-day meeting agenda; Meeting summary notes; Draft and Final Risk and Resilience Assessment Report in Microsoft Word format; RRA spreadsheet template

Task 5: ERP Update, Best Practices Integration and Six Month ERP Update

As part of this task, CDM Smith will review and update the current City Emergency Response Plans (ERPs) for City facilities to incorporate additional items from the AWIA not currently covered in the plans. CDM Smith will prepare a short chapter or section that can be incorporated into their current ERP that explains how their All-Hazards ERP, the RRA and other relevant documents meet the AWIA and Safe Drinking Water Act (SDWA) requirements and AWWA standards. This will include addressing how all of the documents utilized throughout this planning process will be updated, cross referenced or otherwise incorporated into planning processes on an ongoing basis. No new ERPs will be developed.
TASK ORDER

CDM Smith will provide guidance and input on actions that may be taken on the water system based on the outcome of the RRA.

The City ERPs will be updated to comply with the following standards:

- AWWA M19 "Emergency Planning for Water and Wastewater Utilities" Fifth edition published in 2018

The ERPs will be updated to incorporate the findings from the RRA not currently included in the ERPs to include:

- Strategies and resources to improve resilience, including physical security and cybersecurity;
- Plans, procedures, and equipment for responding to a malevolent act or natural hazard;
- Actions, procedures, and equipment to lessen the impact of a malevolent act or natural hazard, including alternative source water, relocation of intakes, and flood protection barriers;
- Strategies to detect malevolent acts or natural hazards.

Emergency Response Plans for the following facilities will be reviewed and updated:

- Lake Georgetown WTP
- San Gabriel Park WTP
- Domel WTP
- Southside WTP

It is anticipated that the City will provide Word documents for use in updating the existing ERPs. An electronic copy of the updated draft ERP will be provided to City for review by August 1, 2020. City will review and return a consolidated set of comments and modifications to CDM Smith by August 31, 2020. CDM Smith will incorporate City’s written comments on this draft report into a final ERP to be provided to City by September 15, 2020.
TASK ORDER

CDM Smith will assist City to complete the EPA certification process for the ERP no later than six months following certification of the Risk and Resilience Assessment but no later than September 30, 2020.

Deliverables: Draft and Final ERPs in Microsoft Word format

Task 6: Project Management Related Tasks

CDM Smith will perform project management tasks throughout the project, to include the day-to-day administrative, technical, and financial management of the project activities to ensure that the project budget, schedule, scope, and quality objectives are achieved. This effort will include invoicing and progress reports, and quality assurance/quality control (QA/QC) review of the work. CDM Smith’s designated Project Manager will keep the City Project Manager informed of the status of the project work and will coordinate all activities with the City Project Manager.

- CDM Smith will prepare a detailed project schedule that provides the different project tasks, activities and key project milestones. This schedule will be updated monthly. The project budget will be monitored through an earned value system (EVS), developed at the beginning of the project to track the work performed versus budget expended. Monthly invoices will be prepared and submitted based upon the work performed the previous month. A monthly status report that includes the invoice, list of work performed during the month, and an updated project schedule will be provided.

- CDM Smith will employ its firm’s written QA/QC procedures throughout the course of the Project and work assignment.

- CDM Smith Project Manager will coordinate with City Project Manager throughout the course of the project to keep the City Project Manager up to date on project status and schedule. It is anticipated that brief bi-weekly calls will be conducted between the two project managers.

- CDM Smith will return any and all hard copies of City documents collected by CDM Smith as part of Task 1 at the completion of the project.

Deliverables: Detailed project schedule; Project invoices with monthly status report and schedule update; Return hard copies of all City documents collected as part of Task 1.

3. Owner's Responsibilities

Owner shall have those responsibilities set forth in the Agreement subject to the following:

1. Owner shall have those responsibilities set forth in the Agreement subject to the following: Designate a person to act as GUS’s representative with respect to the services to be performed or furnished by the Engineer. This representative will have authority to transmit instructions, receive information, interpret and define GUS’s policies and decisions with respect to Engineer’s services.

2. Provide data/information pertinent to the study as requested.

Georgetown — Revised 3.11
EJCDC E-505 Standard Form of Agreement Between Owner and Engineer Professional Services—Task Order Edition
Copyright ©2004 National Society of Professional Engineers for EJCDC. All rights reserved.
Attachment 1 — Task Order Form
3. Any documents or information related to the Work/Services provided by GUS to the Engineer, including, without limitation, engineering studies, maps, reports, filed data, notes, plans, diagrams, sketches, or maps (the “Information”) is and shall remain the property of GUS, and Engineer shall have no ownership or other interest in same. The Engineer shall deliver to GUS, if requested, a written itemized receipt for the Information, and shall be responsible for its safe keeping and shall return it to GUS, upon request, in as good condition as when received, normal wear and tear excepted.

4. **Times for Rendering Services**

<table>
<thead>
<tr>
<th>Phase</th>
<th>Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submit Draft R&amp;R</td>
<td>February 1, 2020</td>
</tr>
<tr>
<td>Submit Final R&amp;R</td>
<td>February 28, 2020</td>
</tr>
<tr>
<td>Submit Final Documents to support</td>
<td>March 15, 2020</td>
</tr>
<tr>
<td>Certification Letter to EPA</td>
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<tr>
<td>Submit Draft Updated ERP</td>
<td>August 1, 2020</td>
</tr>
<tr>
<td>Submit Final Updated ERP</td>
<td>September 15, 2020</td>
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5. Payments to Engineer

A. Owner shall pay Engineer for services rendered as follows:

<table>
<thead>
<tr>
<th>Category of Services</th>
<th>Compensation Method</th>
<th>Not to Exceed Amount of Compensation for Services</th>
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<tbody>
<tr>
<td>Basic Services</td>
<td>Standard Hourly Rates</td>
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<tr>
<td>Other Direct Costs</td>
<td>Cost plus 5%</td>
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</table>

B. The terms of payment are set forth in Article 4 of the Agreement unless modified in this Task Order.

6. Consultants:

7. Other Modifications to Agreement:
   - 6.02.A – Insert: “Notwithstanding any other provision of this Agreement to the contrary, Engineer shall retain its rights in its pre-existing standard drawing details, designs, specifications, databases, computer software, proprietary information, documents, templates, and any other property owned by Engineer on the date of this Agreement or developed outside of this Agreement.”

8. Attachments:

   Billing Rate Schedule

<table>
<thead>
<tr>
<th>Personnel Category</th>
<th>Billing Rate ($/hr)</th>
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<tbody>
<tr>
<td>Engineer 10</td>
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<tr>
<td>Engineer 9</td>
<td>280</td>
</tr>
<tr>
<td>Engineer 8</td>
<td>240</td>
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<tr>
<td>Engineer 7</td>
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<td>Engineer 6</td>
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<td>Engineer 5</td>
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<td>Engineer 4</td>
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<td>Engineer 3</td>
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<tr>
<td>Engineer 1/2</td>
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<tr>
<td>Senior Technician/CADD</td>
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<tr>
<td>Drafter</td>
<td>115</td>
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<tr>
<td>Senior Administration</td>
<td>110</td>
</tr>
<tr>
<td>Contract Administration</td>
<td>100</td>
</tr>
<tr>
<td>Clerical</td>
<td>90</td>
</tr>
</tbody>
</table>
TASK ORDER

Terms and Conditions: Execution of this Task Order by Owner and Engineer shall make it subject to the terms and conditions of the Agreement (as modified above), which Agreement is incorporated by this reference. Engineer is authorized to begin performance upon its receipt of a copy of this Task Order signed by Owner.

The Effective Date of this Task Order is ________________, 20__.  

OWNER: ____________________________________________

By:  

Name:  Dale Ross  

Title:  Mayor, City of Georgetown  

Date:  

ATTEST:  

Robyn Densmore, City Secretary  

ENGINEER: ____________________________________________

By:  

Name:  Allen Woelke, P.E.  

Title:  Vice President  

Engineer License or Firm’s Certificate No.  F-3043  

State of:  Texas  

Date:  10 October 2019  

APPROVED AS TO FORM:  

City Attorney
<table>
<thead>
<tr>
<th>DESIGNATED REPRESENTATIVE FOR TASK ORDER:</th>
<th>DESIGNATED REPRESENTATIVE FOR TASK ORDER:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name: Glenn Dishong</td>
<td>Name: Allen Woelke</td>
</tr>
<tr>
<td>Title: Utility Director</td>
<td>Title: Vice President</td>
</tr>
<tr>
<td>Address: 300-1 Industrial Ave.</td>
<td>Address: 9430 Research Blvd</td>
</tr>
<tr>
<td></td>
<td>Suite 1-200</td>
</tr>
<tr>
<td></td>
<td>Austin, TX 78759</td>
</tr>
<tr>
<td>E-Mail Address: <a href="mailto:Glenn.Dishong@georgetown.org">Glenn.Dishong@georgetown.org</a></td>
<td>E-Mail Address: <a href="mailto:woelkead@cdmsmith.com">woelkead@cdmsmith.com</a></td>
</tr>
<tr>
<td>Phone: 512-930-2574</td>
<td>Phone: 512-346-1100</td>
</tr>
<tr>
<td>Fax:</td>
<td>Fax: 512-345-1483</td>
</tr>
</tbody>
</table>