



# Central Water Integration Pipeline Project

# Pipeline Segment 5-1

The Central Water Integration Project (CWIP) will provide up to 50,000 acre-feet of water to meet growth needs and diversify our water supply. Part of CWIP includes the construction of approximately 10,300 linear feet of 54-inch diameter steel water main from the Terminus Water Treatment Facility to the intersection of South Loop 1604 frontage road and Voigt Drive where Pipeline Segment 5-1 will connect to an existing 48-inch diameter ductile iron water main.

The Segment 5-1 pipeline will be constructed and placed into service by January 2020.

- Estimated Construction Cost \$37.4M
- Advertise July 2018
- Board Award September 2018
- Construction Schedule September 2018 to December 2019
- Design Engineer Tetra Tech, Inc.
  Tunnel Designer SubTerra, Inc.

The CWIP Pipeline Segment 5-1 is described below.

## Reach 1 – Terminus to Sigma Road (North)

 Construction will include driving a nominal 8-foot diameter tunnel from a shaft at the Terminus Water Treatment Facility, passing beneath the Huebner Road extension and Reagan High School soccer field, to an exit pit located at Sigma Road just south of the intersection of Sonterra Blvd, a distance of approximately 4,500 feet.

### Reach 2 – Sigma Road

 Construction will include open cut trenching of approximately 1,540 linear feet within the Sigma Road rightof-way from Sonterra Blvd to the North Loop 1604 frontage road in stages so as to maintain access to commercial properties along the road.

#### Reach 3 – Cornerstone to Sigma Road (South)

• Construction will include driving a nominal 8-foot diameter tunnel along the North Loop 1604 frontage road, approximately 3,570 linear feet, starting at a work shaft inside the Cornerstone Church parking lot to an exit pit at the intersection of the North Loop 1604 frontage road with Sigma Road.

#### Reach 4 – Cornerstone to Voigt Road / Loop 1604

 A tunnel, approximately 500 linear feet in length, will be constructed beneath Loop 1604 from the shaft at Cornerstone Church to a location just west of the intersection of the South Loop 1604 frontage road and Voigt Drive.





The Owner is providing a Draft of the Geotechnical Baseline Report (GBR) for information to prospective bidders and/or equipment manufacturers and suppliers. The Draft GBR contains an early form of the information set that will eventually be made available to Bidders with the Contract Documents. It is being issued in <u>Draft</u> form to allow potential bidders to both engage in early discussions with tunnel boring machines (TBM) and rock boring machines (RBM) manufacturers or experienced TBM and RBM refurbishers. The GBR contains a Draft Plan and Profile for the Segment 5-1 Pipeline illustrating the locations for each reach that will need to be constructed along with a draft description of the project components.

SAWS intends to bid the project in July 2018. The project needs to be completed by January 2020. To meet this schedule, SAWS anticipates the need for the use of two TBMs concurrently for Reaches 1 and 3 and a separate TBM or RBM for Reach 4. Furthermore, early identification of TBMs and RBMs is considered essential to completing the project within the timeframe noted above.

The Owner also emphasizes that geotechnical data collection is ongoing and that changes will be made to the GBR as it transitions from a Draft to the Final GBR that will be part of the Contract Documents issued for bid.

