



# Central Wimberley Wastewater Project - Status Update

January 24, 2020

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## Engineering

### Aqua System Feasibility Study

Aqua completed its tests on the inflow into the lift station, and the data was provided to Plummer Engineering on Wednesday (January 22). With this, Plummer is finalizing its evaluation of the maximum flow we can send to the lift station. This analysis is expected to be completed by next Friday (January 31). This flow rate will determine if any modifications to the RR 12 lift station (i.e. diameter and/or depth of wet well) will be necessary.

## Construction

### Lift Station (RR12 @ FM 3237)

A wastewater lift station is comprised of numerous components working together to send wastewater, collected from gravity lines, to a treatment facility through a force main line. Key components of a lift station include the wet well, which collects the wastewater until it is sent to the treatment facility and the pumps, which force the wastewater through the lines.

Pending the results of the HEB/Emergency Lane Lift Station analysis, it may be necessary to amend the City's lift station specifications to achieve the necessary flow into Aqua's system. Amendments could include increasing the depth and/or diameter of the wet well. This can provide additional capacity at the lift station, which can reduce the frequency the lift station needs to force wastewater to the treatment facility. Additionally, the pumps may need to be resized to reduce flow rate to the treatment facility. Once any changes are confirmed, the lift station will be ordered for construction to begin. It is expected to take five (5) months once the specifications are approved to have the lift station operational.

### Collection Lines

Capital Excavation will begin construction on gravity lines during the first part of February. Gravity lines are those that send wastewater to the lift station. Lines will be installed starting about fifty (50) feet from our lift station at Ranch Road 12 and FM 3237 connecting to the line we have already installed on Rio Bonito. Following this, the lines on Ranch Road 12 will be installed (at night) then the lines on FM 3237 (during the day). We will be coordinating with all necessary property owners and we will make sure to provide traffic updates on our website and social media accounts. Installation of the gravity lines is expected to be complete in April.

### Force Main Lines

Force main lines are those lines that take the wastewater from the lift station under pressure. Reviewing the route to connect the force main from our lift station at Ranch Road 12 & FM 3237 to the HEB/Emergency Lift Station we will look to follow the same trench back to the Cypress Creek Bridge we have used for the gravity line already installed. This would route the force main along Rio Bonito to Blue Heron. From Blue Heron we would take the line up Henson to the Square and onto Ranch Road 12 to connect to the side of the bridge. From the bridge we will direction drill along Ranch Road 12 to take the line to the HEB/Emergency Lane lift station. For convenience a map with this proposed route is attached (lines in green).

To connect the properties on Blue Hole Lane and the Deer Creek lift station to the system, a line running down Blue Hole Road will connect these two areas to a manhole at the end of the gravity line on Old Kyle. This too is shown on the attached map (line in orange).

We are continuing to work with the City Attorney to review opportunities to work with Aqua to construct the line north of the creek.

## Easements/Route

### Easements

The proposed route of the force main will require agreements with two (2) property owners. Both owners have reviewed the City's request. Completion of the agreements is expected next week, with final approval to be made by Council at an upcoming meeting.

## Texas Water Development Board (TWDB)

### Coordination

The TWDB has updated on our project status. Additionally, we provided them with a copy of the "Collection System Map" (attached). We are working with them on any necessary coordination for additions to the project not previously reviewed.

## TxDOT

### Connection to Cypress Creek Bridge

Plummer Engineering is putting together their recommended options for connection to the bridge, which will be provided to TxDOT next week (week of January 27).

Capital Excavation, concurrently, is working with their sub-contractor, should a bore under the creek be necessary. The bore machine would probably need to be on the west side of the creek since there is limited room on the east side (Square side). They are looking at the radius that will be needed to get well under the creek then back up in about a horizontal distance of approximately 245 ft.

### Ranch Road 12 (Force Main)

While we know the line will be installed via directional drilling, and that the work will be done during the day, but will not require road closures, Wimberley's utilization TxDOT Right-of-Way (ROW) will require engineered plans be developed for TxDOT's review. Coordination with other utilities in the area will also be required. Development of these plans and coordination will be incorporated into an engineering contract with Plummer, which is discussed further below.

## Contract

### Wastewater Treatment Contract (Aqua Texas)

Council Member Barchfeld, Aqua Texas President Bob Laughman, Aqua's attorney, the City Attorney, and I will be meeting on Wednesday (January 29) to put the final touches on the wastewater treatment contract. Final approval of the contract will be made at an upcoming Council meeting.

### Engineering (Design)

While we are reviewing whether Aqua can construct the line north of the creek, we are also working with Plummer Engineering on a proposal for engineering services to design this section of the project. There has been no design engineering on the connection to Aqua's lift station at HEB/Emergency Lane. In addition to design, this contract would also include bid coordination for construction of this section. Key components to the proposal are any conditions TxDOT will ask for regarding connecting to the Cypress Creek Bridge. As stated above the City and Plummer are working on putting a rendering for review by TxDOT.

## Communication

### Property/Business Owners

Council Member Minnick and I meet with property owners on Wednesday (January 22) to discuss the project. The project timeline, pump and haul, rates, and next steps were among the many topics discussed. The purpose of this meeting and future meetings is to answer any and all questions we can, listen to concerns and feedback, and provide as much project transparency as possible. If there are any property or business owners who would like to meet with the City, please reach out to me at [scox@cityofwimberley.com](mailto:scox@cityofwimberley.com)

As we did previously, the City and Capital Excavation will work with each property owner to determine the best location for their connection to the system. Additionally, we will coordinate any work in the Square and along Ranch Road 12 with the merchants to mitigate any impact to business.

### Town Hall

The Town Hall meeting is scheduled for **Thursday, January 30 at 6:00 pm**. Much like the meeting with the business and property owners we are looking to provide as much information as we can and answer any and all question we can.

## Other Items

### Sewer Utility Rates

Building from the previous rate studies the City has undertaken, and utilizing the developed models and schedules, a new rate model is being developed internally. The model will make sure the rate schedule adopted is enough to cover the cost of operating the utility system (maintenance/administration costs/etc.), payment of debt, capital improvements (major repairs/improvements). A draft is anticipated to be ready for Council discussion in late February or early march.

### Impact Fees

The City started the development of its impact fees in 2016 with the selection of HDR to assist in the assessment and establishment of the fees. While this was to be completed in January 2017, no committee was established, and no fees were evaluated or adopted.

Based on the utilization of Aqua Texas to treat the wastewater produced, I am working with our City Engineer/Project manager and Plummer Engineering to determine if there is still a need to establish these fees.

### Utility Billing

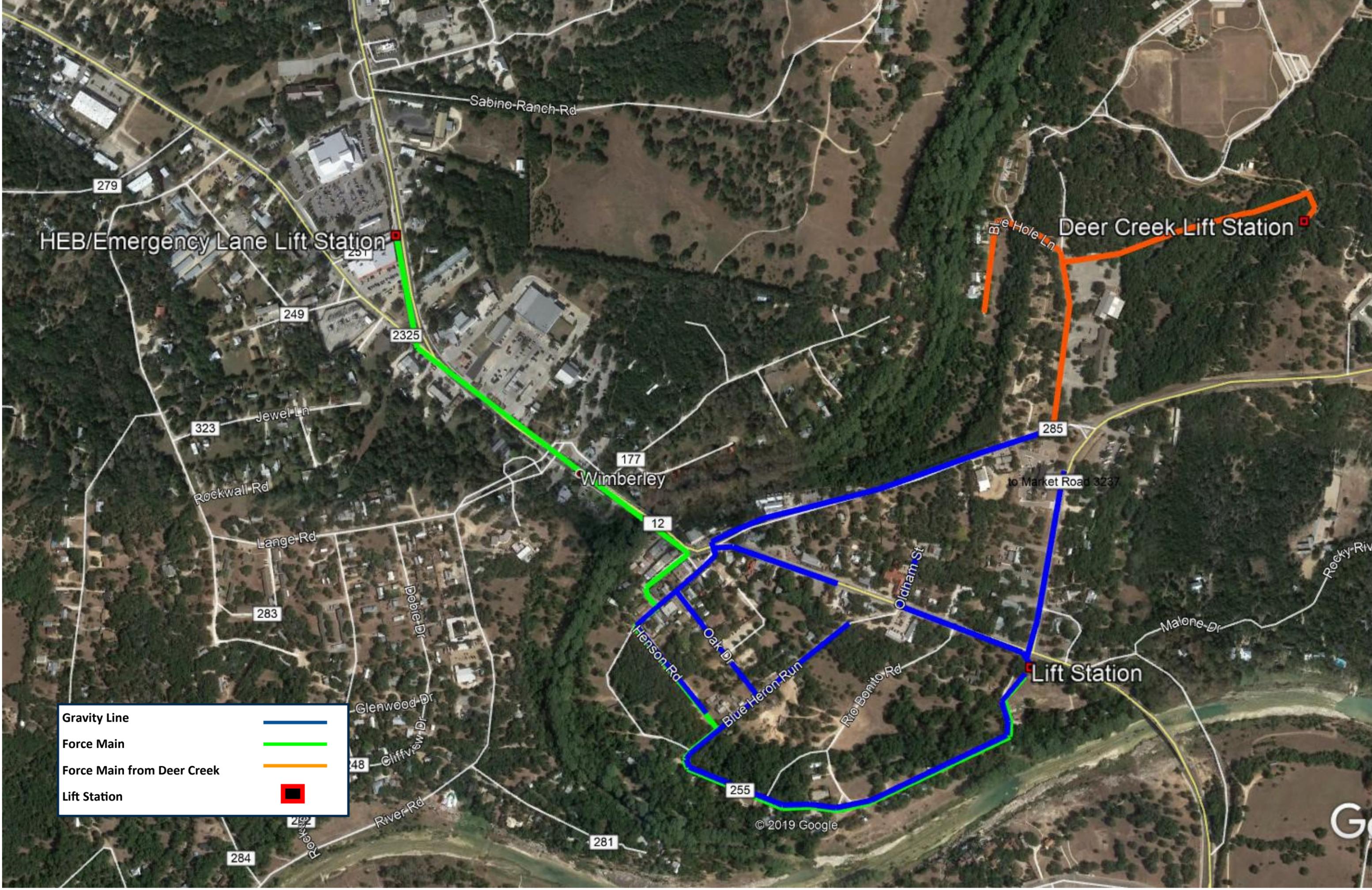
Currently the City's Financial Clerk sends out the utility bills for the City. There are only two (2) customers being billed. We are reviewing our current finance software and the modules it can accommodate to see if there is a solution for expanding our billing needs. We, along with the Wastewater Ad Hoc Advisory Committee have also looked at how this could be accomplished with the programs we have now. Options for Council consideration are anticipated to be reviewed in March or early April.

#### Schedule

<b>Construction</b>		
<b><u>Component</u></b>	<b><u>Start</u></b>	<b><u>Completion</u></b>
<b>Collection Lines (CO#4)</b>	<b>February 2020</b>	<b>July 17, 2020</b>
- Gravity Lines (RR12)	February 2020	April 2020
- Gravity Lines (FM 3237)	February 2020	April 2020
- Force Main (Deer Creek/Blue Hole)	TBD	TBD
- Lift Station	TBD	5 Months from Start
<b>Collection Lines (Aqua Connection)</b>	TBD	TBD
- Connection to Cypress Creek Bridge	TBD	TBD
- Force Main (RR12-Directional Drill)	TBD	TBD
- Tie in to HEB Lift Station	TBD	TBD
<b>Contract</b>		
<b>Negotiate Aqua Contract</b>	<b>August 2018</b>	<b>TBD</b>
<b>Other</b>		
<b>Update Sewer Utility Rates</b>	<b>January 2020</b>	<b>February/March 2020</b>
<b>Impact Fees</b>	<b>TBD</b>	<b>TBD</b>
<b>Utility Billing</b>	<b>January 2020</b>	<b>March/April 2020</b>

#### Attachment(s)

- Collection System Map



HEB/Emergency Lane Lift Station

Deer Creek Lift Station

Wimberley

Lift Station

Gravity Line	
Force Main	
Force Main from Deer Creek	
Lift Station	