

PUBLIC HEARING
BEAVER CREEK WATER CONTROL AND
IMPROVEMENT DISTRICT NO. 1

August 11, 2020

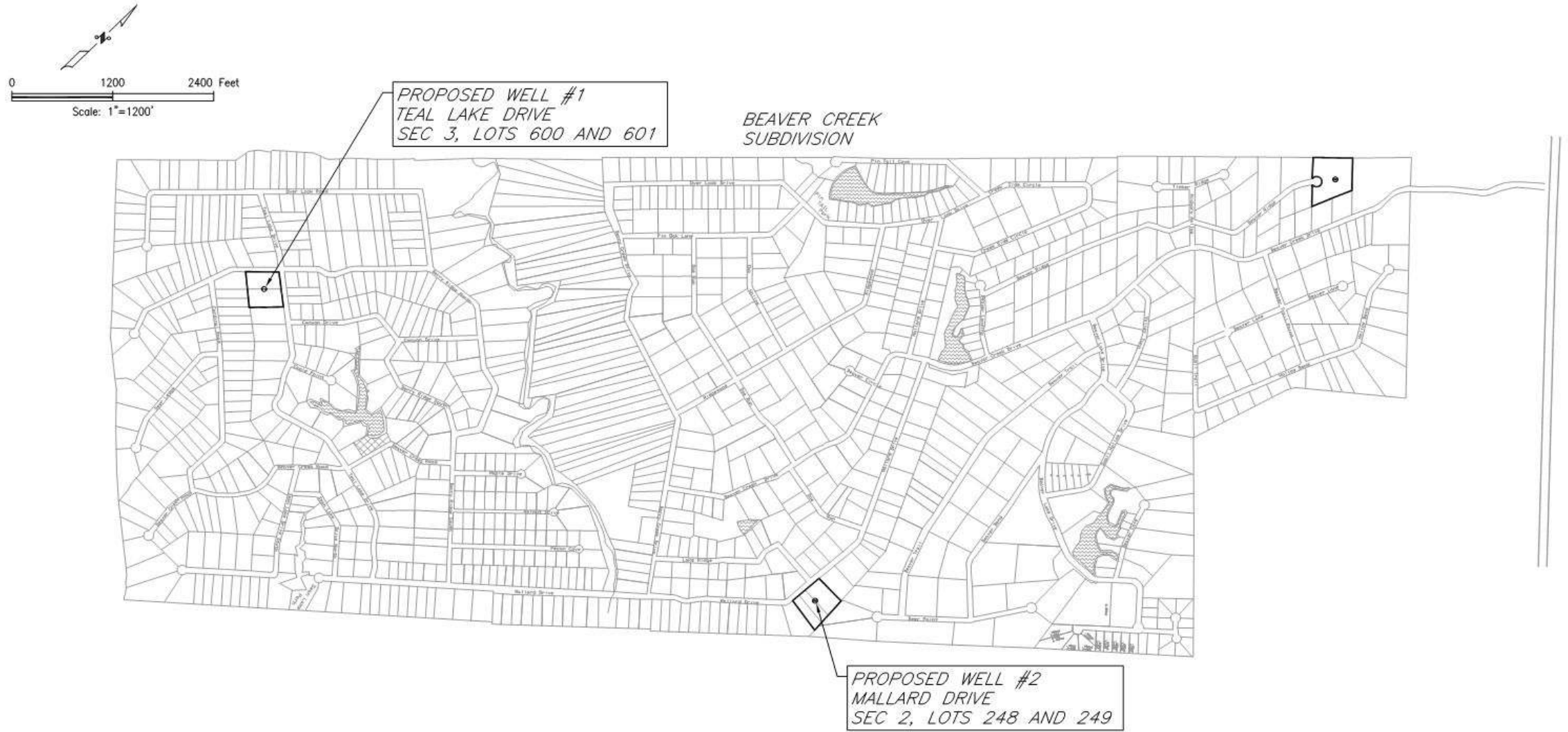
Purpose

- Under the current POSGCD Rule 4.1.4 for wells completed in the Sparta aquifer, BCWCID#1 can construct two 100 GPM water wells, but this does not meet the system design capacity or suffice the TCEQ minimum well capacity requirement of 1.5 GPM per connection.
- BCWCID#1 requests an exemption to POSGCD spacing requirements to construct two 175 GPM wells to serve the residents of Beaver Creek.

Timeline

- November 4, 2008 – BCWCID#1 is created.
- July 2011 – BCWCID#1 began working through the TWDB EDAP Program.
- February 25, 2014 – TDSHS determines a Health Nuisance in Beaver Creek.
- August 2014 – BCWCID#1 purchases Lot 600 to meet POSGCD Rule 4.1.4 for proposed Teal Lake water well.
- September 15, 2014 – BCWCID#1 secures grant funding for design.
- May 2015 – BCWCID#1 purchases Lot 248 to meet POSGCD Rule 4.1.4 for proposed Mallard Drive water well.
- December 3, 2015 – Design approved by TWDB and TCEQ.
- May 2017 – POSGCD Rule 4.1.4 amended increasing spacing requirements for Sparta aquifer from 1 ft/GPM to 2.5 ft/GPM.
- March 6, 2019 – BCWCID#1 secures grant funding for construction.
- April 7, 2020 – BCWCID#1 is issued CCN 13280 from PUC.
- July 7, 2020 – BCWCID#1 submits applications to Drill Non-Exempt Wells.
- July 20, 2020 – BCWCID#1 requests exception to POSGCD Spacing Requirements.

Proposed Well Locations



Proposed Water Well Applications

- The BCWCID#1 Permit Applications to Drill Non-Exempt Wells include two wells with pumping capacities of 175 GPM each and not exceed 135,696 gallons per day or 152 acre-feet per year.
- BCWCID#1 is proposing to construct the two water wells within the Sparta aquifer for public supply to serve the residents of Beaver Creek.
- The Sparta aquifer is at a depth of approximately 1,000 to 1,200 feet below ground level at the proposed well locations.
- Because BCWCID#1's Permit Applications did not meet POSGCD spacing requirements, groundwater modeling and hydrogeological reporting was prepared by RW Harden & Associates, Inc. to predict the 40-year drawdown in the Sparta aquifer.

Response to INTERA's Review of Hydrogeological Study

We concur with INTERA's review (Aug. 6, 2020) and summary regarding the 40-year predicted drawdowns in the Sparta aquifer as a result of the proposed production with the variance granted, which includes the:

- The drawdown, as a result of granting the variance, would only cause an estimated additional drawdown of 7.5 to 8.2 feet of artesian pressure in the Sparta aquifer beneath the properties of the adjacent landowners.
- "The additional drawdown would have a de minimis effect on the ability to produce groundwater from the Sparta aquifer underlying the adjacent properties." (INTERA, 2020)
- "The additional drawdown would have a negligible increase in the cost associated with pumping groundwater from the Sparta aquifer underlying the adjacent properties." (INTERA, 2020)

Response to Public Comments

1. The noise the well will make being so close to my property.
 - The water well will have a submersible pump and motor that will be located 450 feet below ground surface. Wells of similar setup do not produce sound at the surface.
2. If there is a problem with the well, how will it affect my property, i.e., leak underground, malfunction of the well, traffic for maintenance, etc.?
 - All proposed water well equipment adhere to state and federal requirements for potable water wells. Water well controls and equipment monitor the well and shut the well down in the event of a malfunction or failure. All maintenance work and traffic will be contained within the BCWCID#1 water plant boundary.
3. The location of the well could cause depreciation of my property.
 - Existing trees along the boundary of the BCWCID#1 property are being preserved to shield the proposed water plant as much as possible. It is common that public water systems increase the value of high-density subdivisions, because it alleviates the 100-foot separation requirements between private water wells and septic system leach fields. Additionally, the cost of a new private water well averages \$10,000, making a public water system an economical source of water.