

May 31, 2022



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Matthew Kohlbecker, RG Principal Hydrogeologist GSI Water Solutions Via email mkohlbecker@gsiws.com

Re: Riverside Wells 1 and 2 (PR#80-2022) City of The Dalles (PWS ID#00869) Site Plan Evaluation

Dear Matthew:

Thank you for your submittal to the Oregon Health Authority's Drinking Water Services (DWS) of plan review information for the Riverside wells for City of The Dalles. On May 11, 2022, our office received items a site plan, land use compatibility statement (LUCS), proposed drilling specifications, water rights information and a plan review fee of \$3,300.

The project includes drilling two wells, Riverside Well 1 and Riverside Well 2 to a depth of approximately 320 feet. The City does not currently have the 100-foot radius of control around the wells. As part of the project, the City will establish a 100-foot radius of control around each well through either a transfer in property ownership or through a perpetual restrictive easement. Note that if the City opts for the perpetual restrictive easement instead of the radius of control, an access easement may also necessary. Generally, DWS prefers that water systems own some portion of the land on which their water sources are sited.

Section A of the LUCS must indicate the project "is" compatible and be resubmitted prior to drilling the wells. Note that the site plan evaluation letter is only valid with a signed LUCS as indicated above.

A regional geologist in our program reviewed the proposed well construction. He noted the following, which should be shared with the well driller:

• The estimated depth to a water-bearing zone for each well is approximately 277-

286 feet below ground surface (bgs) based on well logs WASC 3255 and 3256, located about 1,200 feet to the north.

- The estimated nature of the aquifer is confined.
- The estimated depth of the casing seals is 210 feet bgs. The well casing and seal for each of the new wells need to extend from land surface to a minimum of 5 feet into solid uncerviced, consolidated rock formation (Columbia River Basalts) overlying the water bearing zone (see OAR 690-210-0150 and 690-210-0155). The proposed well construction for the wells appears to meet Oregon Water Resources standards.

A waiver for the radius of control issue cannot be approved prior to drilling a well. If the well is properly drilled into a confined aquifer, then OHA/DWS may be able to waive the requirement, assuming that the City owns some portion of the property around each well.

If the well is not drilled into a confining aquifer, then OHA/DWS may not be able to approve the well for use by the water system. As noted above, the water system expects to obtain the 100-foot radius of control prior to the end of the project, in which case a waiver may not be necessary.

Due to the radius of control issue, **the site plan/location cannot be approved at this time.** If a properly constructed confined aquifer well is drilled, please submit:

- 1. The well driller's report (well log).
- 2. Well pumping test information including static water level, pumping rate, drawdown and rate of recovery.
- 3. Raw (Untreated) Water Quality Data including coliform bacteria, IOC, SOC, VOC and radionuclides. These are to be taken from the new well's raw water sample tap at the wellhead.
- 4. Engineered plans that show the above-well structure detail including the well house, concrete slab, drainage, pump information (manufacturer and model), pump-to-waste piping and plans and specifications for connection of the new well to the water system.

The above items should reference Plan Review #80-2022 and can be emailed to me at Carrie.L.Gentry@dhsoha.state.or.us.

If you have any questions, please feel free to call me at (971) 201-9794. Sincerely,

CAS

Carrie Gentry, PE Regional Engineer Drinking Water Services

ec: Michelle Byrd, REHS, OHA/DWS Rodrigo Prugue, RG, GSI Water Solutions, rprugue@gsiws.com Dave Anderson, Public Works Director, danderson@ci.the-dalles.or.us