

Tina Kotek, Governor

November 22, 2024

Christopher Stephenson
City of Phoenix
P.O. Box 330
Phoenix, OR 97535

**Re: North Phoenix Reservoir (PR#2024-122)
City of Phoenix (PWS ID#00625)
Conditional Approval**

Dear Christopher Stephenson:

Thank you for your submittal to the Oregon Health Authority's Drinking Water Services (DWS) of plan review information for the North Phoenix Reservoir for the City of Phoenix. On September 17, 2024, our office received plans and specifications for the reservoir and waterlines along with a Jackson County Land Use Permit, Engineering Geology Report, and a plan review fee of \$3,300.

The project includes construction of a 2-million gallon reinforced concrete reservoir, approximately 6,400 feet of 12" ductile iron and 14" HDPE piping, and various required fittings.

The plans are approved subject to the following conditions:

1. Pipe, pipe fittings, valves and other appurtenances utilized at Community water systems shall be manufactured, installed and tested in conformance with the latest standards of the American Water Works Association, NSF International or other equivalent standards acceptable to the Authority (OAR 333-061-0050(8)(b)). Please confirm all piping will meet NSF Standard 61 or equivalent.
2. Distribution piping shall be designed and installed so that the pressure measured at the property line in the case of Community water systems, or at the furthest point of water use, in the case of a TNC of the type described in subsection (d) of this section, shall not be reduced below 20 psi (OAR 333-061-0050(8)(e)). Please confirm the waterline pressure will be at least 20 psi in all locations.

3. The breather tube on air-relief valves shall be extended above ground surface and provided with a screened, downward facing elbow (OAR 333-061-0050(8)(i)). On the construction details for the air-release assembly the vent pipe is shown sticking straight up. Please confirm is it screened with a downward facing bend.
4. Nonconductive water pipe (plastic or other material) that is not encased in conductive pipe or casing must have an electrically conductive wire ... The distance between tracer lead access locations shall not be more than 1,000 feet. Joints or splices in wire shall be waterproof (OAR 333-061-0050(8)(k)). The specifications stated the distance between tracer lead access locations should not be more than 1,500 feet. Please confirm this is changed to 1,000 feet.
5. After the pipe is disinfected, flushed and filled with potable water, bacteriological samples must be collected to determine the procedures' effectiveness. At least two samples must be collected from the new pipe at least 16 hours apart and analyzed for coliform bacteria. If the pipe has held potable water for at least 16 hours before sample collection, two samples may be collected at least 15 minutes apart while the sample tap is left running. If the results of both analyses indicate the water is free of coliform bacteria, the pipe may be put into service. If either sample indicates the presence of coliform bacteria, the pipe may be re-flushed, filled with potable water and re-sampled. If this second set of samples is free of coliform bacteria, the pipe may be put into service, otherwise the disinfection and flushing process must be repeated until samples are free of coliform (OAR 333-061-0050(10)(b)(C)). The specifications listed the number of samples required after disinfection as only one.

Until we receive verification that the conditions have been met and final approval has been issued, the project is not approved for use. For waterline construction, engineers must inspect and be prepared to sign off before burying lines. Upon completion of the project, the engineer must verify in writing that construction was completed according to the submitted plans. If substantial changes are made, a set of as-built drawings must be submitted. Documentation demonstrating how the above conditions were met should reference Plan Review #2024-122 and can be emailed to me at rebecca.a.templin@oha.oregon.gov.

In addition to the conditions above, I have the following comment:

- The elevations provided on Drawing S01, specifically the Reservoir Section AA, the elevations called out (1245') do no match the elevations from the grading plan, with a ground elevation of approximately 1660'.

If you have any questions, please feel free to email me or call me at 541-650-4868.

Sincerely,



Rebecca Templin, PE
Regional Engineer
Drinking Water Services

CC: File, DWS
Tony George, Jackson County Environmental Health
Jeff Ballard, PE & Kris Lillie, PE, RH2 Engineering, Inc.
Tawni Bean, Business Oregon

