



PUBLIC HEALTH DIVISION
Drinking Water Services

Kate Brown, Governor

Oregon
Health
Authority

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December 17, 2019

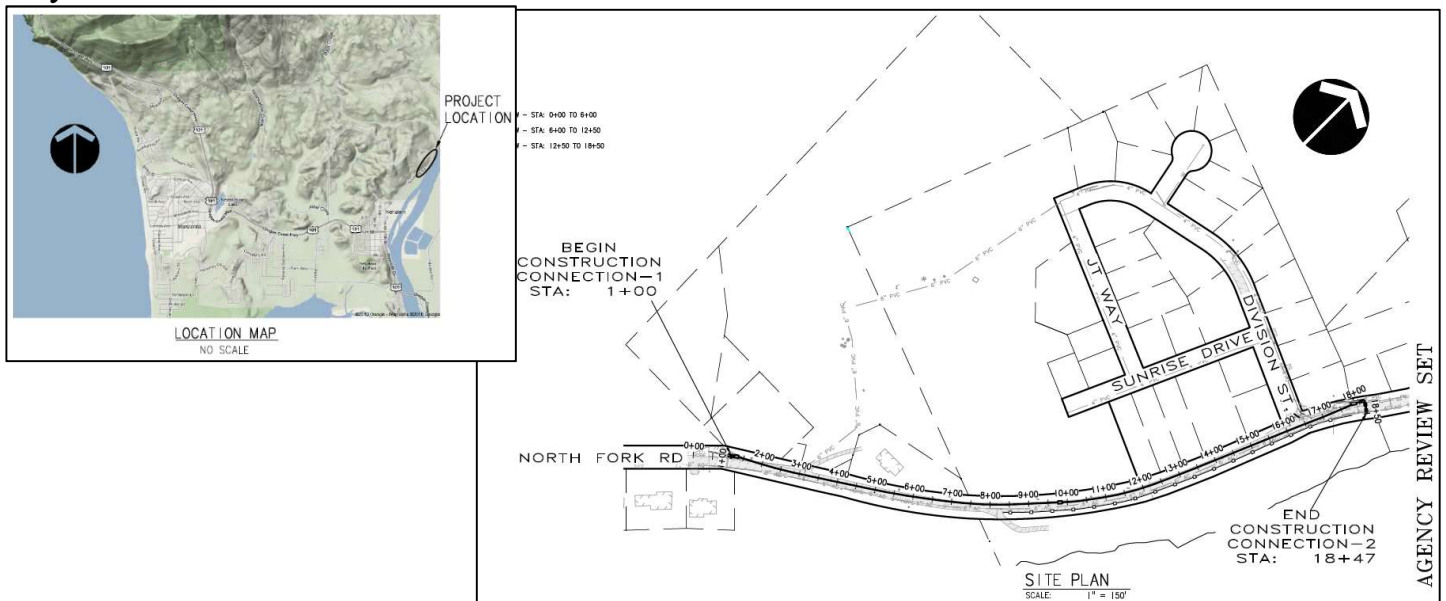
Kyle Ayers, PE
OTAK
808 SW Third Ave, Suite 300
Portland, OR 97204

Re: **North Fork Water Main Bore Project (PR#186-2019)**
City of Nehalem (PWS ID#00554)
Conditional Approval

Dear Mr. Ayers:

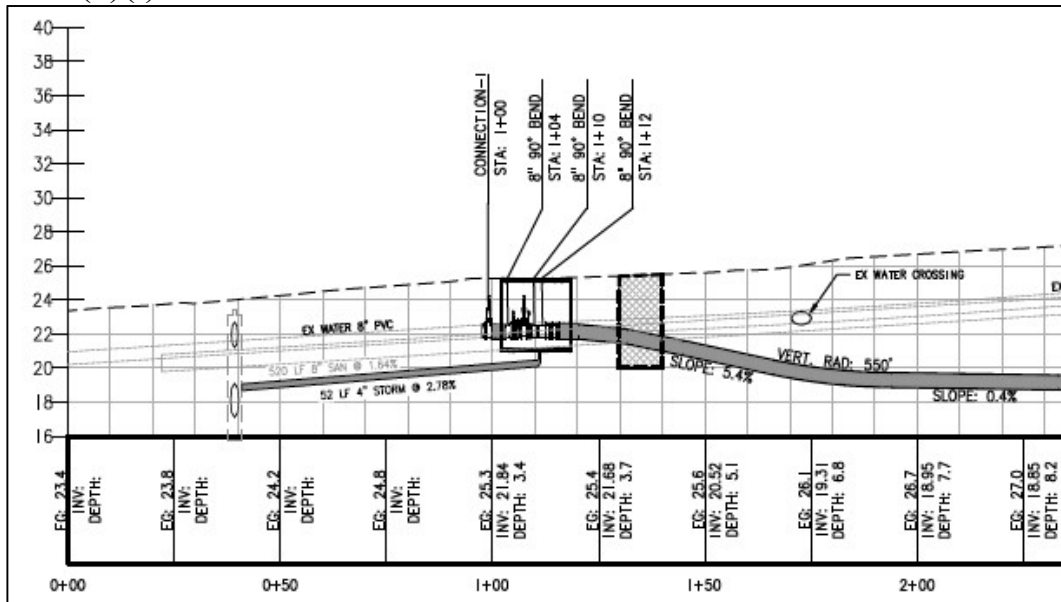
Thank you for your submittal to the Oregon Health Authority's Drinking Water Services (DWS) of plan review information for the North Fork Water Main Bore Project on behalf of the City of Nehalem (PWS ID#00554). On December 16, 2019 our office received a hard copy of the plans, Land Use Compatibility Statement (LUCS) and a check to cover the \$3,300 review fee. Plans, LUCS, and Technical Specifications were received via e-mail on 12/11/19.

The project includes installation of roughly 1,840 LF of 8" DR-11, Class 200 fused HDPE waterline within Tillamook County public right-of-way for the North Fork Rd northeast of the City of Nehalem as shown below.



The plans are approved with the following conditions:

1. The Land Use Compatibility Statement (LUCS) was signed by the City of Nehalem Manager. It is unclear if this project extends beyond the City of Nehalem limits, therefore, a LUCS signed by Tillamook County may be needed. Please submit a LUCS signed by Tillamook Co. as applicable.
2. The design must allow for 20 psi to be maintained at the service meters.
3. Disinfection and testing of the waterline must be completed according to AWWA C651.
4. Air relief valves are placed at all high points in the waterline. Sta. 1+00 appears to be a high point and may need an air relief valve in accordance with OAR 333-061-0050(8)(i).

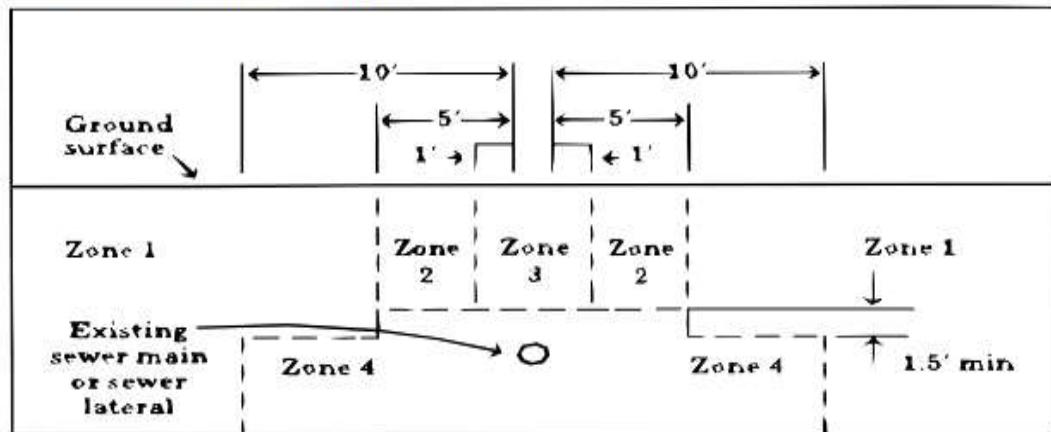


5. All items in contact with potable water must meet NSF Standard 61.
6. Parallel sewer/waterline separations must conform to OAR 333-061-0050(9). Note that any zone conflicts represented in Figure 1 in that rule other than zone 1 conflicts must be approved by OHA/DWS.
7. Any sewer and water line crossings must conform to OAR 333-061-0050(9)(c)(B). At all sewer crossings where the vertical separation between the waterline and the sewer

line is less than 1.5-ft, the sewer line should be inspected for leaks. If the sewer line is found to be in poor condition with evidence of leaks, the sewer line shall be replaced with a full length of pipe centered at the crossing point or the sewer shall be encased in a reinforced concrete jacket for a distance of 10-ft on both sides of the crossing. The plans indicate that until potholing is complete, separation of sewer and waterlines is uncertain. Note that any zone conflicts represented in Figure 1 other than in zone 1 must be approved by OHA/DWS.

Note: Refer to OAR 333-061-0050(9) and Figure 1 below. Please ensure record drawings indicate actual as-built sewer/water separations.

Figure 1: Water Line-Sewer Line Separation



- Zone 1: Only crossing restrictions apply
- Zone 2: Case-by-case determination
- Zone 3: Parallel water line prohibited
- Zone 4: Parallel water line prohibited

8. Ensure tracer wire is installed according to OAR 333-061-0050(8)(k), which states that nonconductive water pipe (plastic or other material) that is not encased in conductive pipe or casing must have an electrically conductive wire or other approved conductor for locating the pipe when the pipeline is underground. The wire shall be No. 18 AWG (minimum) solid copper with blue colored insulation. Ends of wire shall be accessible in water meter boxes, valve boxes or casings, or outside the foundation of buildings where the pipeline enters the building. The distance between tracer lead access locations shall not be more than 1,000 feet. Joints or splices in wire shall be waterproof.

Until we receive verification that these conditions have been met and final approval has been issued, the project is not approved for use. 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 #186-2019 and can be emailed to me at evan.e.hofeld@state.or.us or mailed to:

Attn: Evan Hofeld
OHA-Oregon Drinking Water Services
PO Box 14450
Portland, OR 97293-0450

If you have any questions, please feel free to call me at (971) 673-0419.

Sincerely,



Evan Hofeld, PE
Regional Engineer
Drinking Water Services

cc: Don Davidson
City of Nehalem
PO Box 143
Nehalem, OR 97131