

February 25, 2025

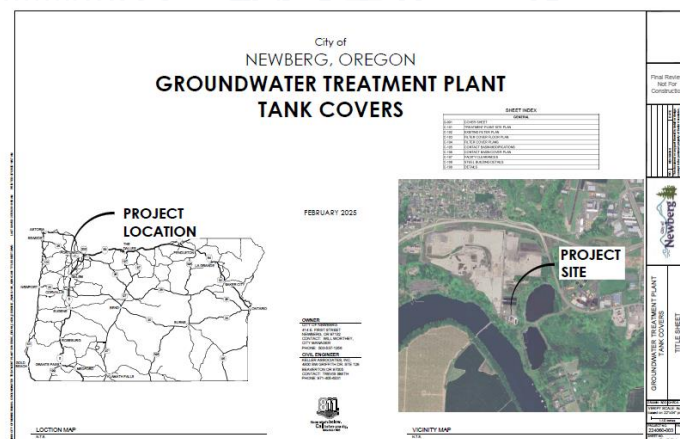
Trevis Smith
Keller Associates, Inc.
tsmith@Kellerassociates.com

Letter sent via email only

Re: Groundwater Treatment Plant Tank Covers ([PR#27-2025](#))
City of Newberg ([PWS ID#00557](#))
Conditional Approval

Dear Mr Smith,

Thank you for your submittal to the Oregon Health Authority's Drinking Water Services (DWS) of plan review information for the *Groundwater Treatment Plant Tank Covers* for the City of Newberg. On February 13, 2025 our office received 90% plans and specifications needed to cover existing contact and filtration basins for Newberg's groundwater source iron removal filtration plant (WTP-A). On February 14, 2025, I provided comments via email on the submittal and requested that a plan review fee be submitted. A plan review fee payment in the amount of \$825 was received on February 24, 2025.



The project includes the installation of steel structures to cover the existing filter basins and a flame-retardant polyethylene fabric cover over the existing contact basins.

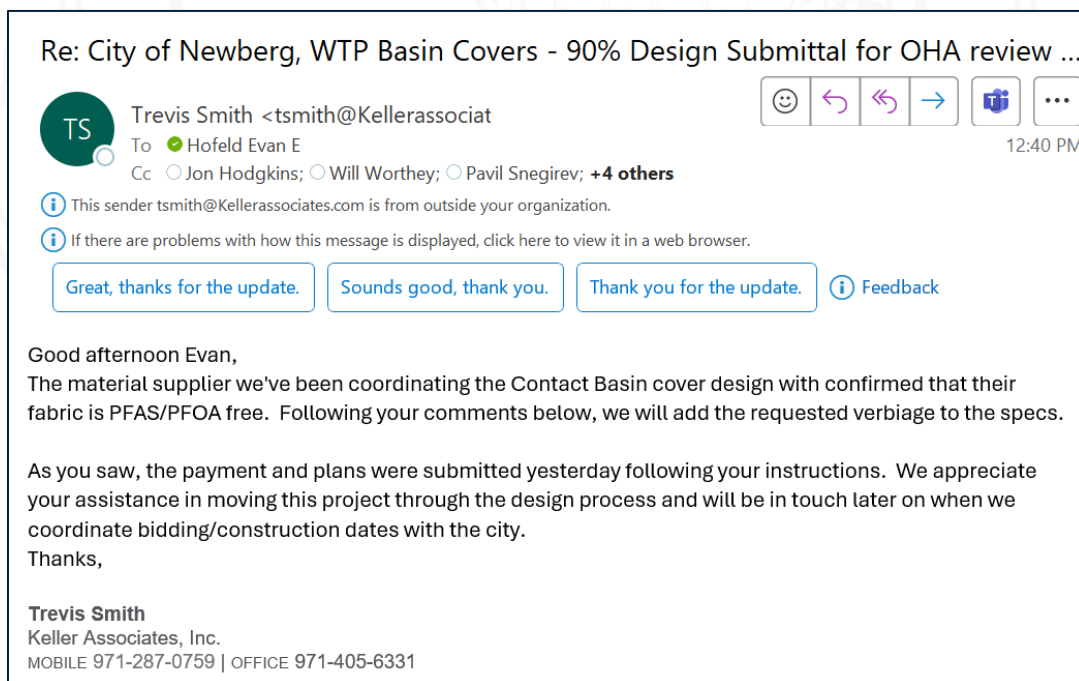
The plans are approved subject to the following conditions:

1. The finished structures and related air vents keep runoff from rain and snowmelt, rodents, birds, and insects out of the contact and filtration basins.
2. Materials in contact with water in the basins are NSF-61 approved (the covers as designed do not appear to require any materials to be in contact with the water).

In addition to the two listed conditions, I would consider adding the following three specifications in the design criteria for section 2.2 Fabrication (steel covers) and section 1.2 Design Criteria (fabric covers).

- *All ventilation louvers and vents shall be screened with 24x24 (24 openings per inch) T-316 stainless steel mesh with 0.014" wire diameter or equivalent with a secondary outer course screen, louvers, or equivalent measures to protect the insect screen from damage.*
- *Where possible, field applied paint, sealants (including thread sealants) and mastics shall be ANSI/NSF-61 approved or equivalent and in conformance with the manufacturer or supplier of the steel building and fabric cover components.*
- *The contact basin structure shall be clad with a PFOA/PFAS-free flame-retardant polyethylene fabric.*

Noted per the email below, the material supplier for the contact basin cover design confirmed that their fabric is PFAS/PFOA free.



I've also included screen shots below of other sections in the bid specifications that could apply to the recommended specifications.

2.4 MATERIALS

- A. All materials used in the structure shall be new, without defects and free of repairs. The quality of the materials used shall be such that the structure is in conformance with the performance requirements specified herein.
- B. Cladding Membrane: The structure shall be clad with a **flame retardant polyethylene fabric** manufactured by an approved and reputable supplier with demonstrated long-term performance. The membrane fabric shall be waterproof and free from defects. All roofs, walls, end walls and connecting sections shall be weather tight.

2.2 FABRICATION

- A. Workmanship: Conform to accepted shop practices. Form work true to details, with clean, straight, sharply defined profiles.
- B. Fit and shop assemble items in largest practical sections, for delivery to site. Disassemble units only as necessary for shipping and handling limitations. Use connections that maintain structural value of joined pieces. Clearly mark units for reassembly and coordinated installation.
- C. Use materials of size and thickness indicated or, if not indicated, as required to produce strength and durability in finished product for intended use and, where applicable, to meet performance requirements.
- D. Fabricate items with joints tightly fitted and secured.
- E. Continuously seal joined members by continuous welds, unless otherwise indicated on Drawings.

1.2 DESIGN CRITERIA

- A. Warranty: 50-year on Frame & 15-year on Fabric.
- B. The membrane shall be tensioned over the framework.
- C. The structure shall be rectangular in shape with both ends enclosed.
- D. The rear of the shelter will be enclosed with steel supports and fabric cladding and must include fixed louvers and door as shown on the drawings.
- E. The front of the shelter will be enclosed with steel supports and fabric cladding and must include fixed louvers and doors as shown on the drawings.
- F. Fabric termination shall be overlapping style.
- G. The interior of the structure below the main trusses shall be clear span free of any structural support members and shall provide unobstructed floor space.
- H. No exterior purlins, guy ropes or cables shall be used for anchoring the structures.

2.11 LOUVERS

- A. Provide fixed galvanized steel louvers. The metal building erector shall provide all necessary accessories including framing, flashing, trim, closures and sealants to install the louvers.

2.12 GRAVITY VENTILATORS

- A. Provide galvanized steel rooftop gravity ventilators. Provide ventilators with 16 inch throat.

SECTION 23 34 23 – POWER VENTILATORS

PART 1 - GENERAL

1.1 WORK INCLUDED

- A. This Section includes furnishing and installing Propeller Fans.

2.8 CLOSURES, MASTICS AND SEALANTS

- A. Closures formed to match roof and wall panel profiles shall be used to provide weathertightness. Closures shall be of a closed cell material, EPDM (Ethylene-Propylene-Duene-Monomer) in a gray or neutral color.
- B. Pre-formed tape mastics, and/or non-skinning tube sealants shall be used for the sidelaps and endlaps of all roof coverings.

Upon completion of the project, the engineer must verify in writing that construction was completed according to the submitted plans and conditions listed in this letter.

Documentation demonstrating how the above conditions were met should reference [Plan Review #27-2025](#).

To close out a project and request final approval from DWS, please submit as-builts and a completed Project Final Approval [pdf request form](#) and email them to me at evan.e.hofeld@oha.oregon.gov.

If you have any questions, please feel free to email me at evan.e.hofeld@oha.oregon.gov or call me at 971-200-0288.

Sincerely,



Evan Hofeld, PE
 Regional Engineer
 Drinking Water Services

CC: City of Newberg:

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