

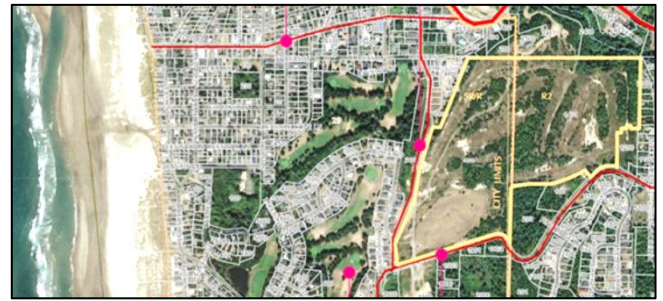
April 5, 2022

Ralph Henderson, PE. [rhenderson@mcknze.com](mailto:rhenderson@mcknze.com)  
Mackenzie  
PO Box 14310  
Portland, OR 97293

**Re: City of Manzanita (PWS ID #00505) Highlands Subdivision – PH II-IV  
Conditional Approval - PR #48-2022**

Dear Mr. Henderson,

Thank you for submitting plans for the Highlands (formerly Pacific Dunes #8) Subdivision – Phase II-IV located in Manzanita, OR. The plans, \$3,300 review fee payment, land use forms, and project specifications were received March 25, 2022.



The project involves a pump station, waterlines and appurtenances to support a new subdivision annexed into the City of Manzanita near the vicinity of Classic Street and Necarney City Road as shown in the site maps on pages 4-5 of this letter. PH II-IV complement PH I (lots 1-16) previously granted Final Approval on March 22, 2022 under PR# 38-2020. The overall project is anticipated to include a total of 72 lots completed in 5 phases (PH I-V), with lots ranging from 5,200-sqft to 8,868-sqft to be developed on 64.18 acres encompassing 3 tax lots all within Township 3 North, Range 10 West:



- Section 29D – TL 100
- Section 29AD – TL 200
- Section 28 – TL 1401

The phases of the Highlands Subdivision development are as follows:

Phase	Tax Lot	# of lots	Lot No.	Plan Review #
I	TL200	16	1-16	38-2020 Final 3/22/22
II	TL200	13	17-29	48-2022
III	TL100	13	30-42	w/Pump Station
IV	TL100 & 1401	15	53-68	(PS) on TL100*
V		15		Not Received

\*PS includes a single Amtrol WellXTrol pressure tank and a Grundfos pump skid with two 12-gpm duty pumps and one 85-gpm high demand pump, which pump out of the Meadows Drive distribution main and into the Highlands Drive main at that intersection.

**The project is approved for construction as shown in the submitted plans, provided the following conditions are met:**

1. A Land Use Form  [PDF](#) or  [MSWord](#) is submitted that addresses the development regarding all lots and roadways developed for PH I-IV. Consider incorporating PH-V in this LUCS review, however, only PH II-IV are required as part of this current plan review. The submitted land use documentation for this plan review and PR #38-2000 only included the following:
  - a. A land use compatibility statement applicable for a DEQ NPDES stormwater permit for 15 lots on TL100 & 200 signed by the City Manager on 3-8-22,
  - b. Annexation Order of Recommendation documentation for TL1401 signed by the City Planning Commission on 1-26-22, and
  - c. A land use compatibility statement for a 29-lot development on TL100 signed by the City Manager on 12-11-19 for Pacific Dunes #8 Subdivision (used to satisfy the LUCS requirement under PR #38-2020).

It is my understanding that Ph I-IV involves 57 lots with another 15 lots planned for PH V.

2. An AWG #18 (minimum) tracer wire is installed per [OAR 333-061-0050\(8\)\(k\)](#):  
*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.*
3. Air valves are placed at high elevations per [OAR 333-061-0050\(8\)\(i\)](#):
  - (i) Air-relief valves shall be installed at high points where air can accumulate. The breather tube on air-relief valves shall be extended above ground surface and provided with a screened, downward facing elbow;

Plans for PH IV did not show a blow-off or air relief valve for the end of meadows drive near lot #68 visible on sheet R1.4

4. The design ensures 20 psi to be maintained at all service meters per [OAR 333-061-0050\(8\)\(e\)](#).
  - (e) 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;

5. Pumps which take suction from distribution mains for the purpose of serving areas of higher elevation shall be provided with a low pressure cut-off switch on the suction side set at no less than 20 psi ([OAR 333-061-0050\(7\)\(b\)](#)).
6. The capacity, make & model # of the pressure tank is submitted and meets NSF Standard 61. Bypass piping around pressure tanks shall be provided to permit operation of the system while the tank is being maintained or repaired ([OAR 333-061-0050\(6\)\(b\)\(B\)](#)). Although the entire pump station can be isolated and removed from service to allow servicing the pressure tank, you may want to consider installing a valve between the pump skid and the pressure tank to allow the pumps to continue to maintain distribution pressure while the pressure tank and/or pressure switch are serviced and/or replaced.
7. Locations where waterlines cross sanitary sewer lines meet requirements in [OAR 333-061-0050\(9\)](#).
8. Disinfection and bacteriological testing of new facilities conforms to [OAR 333-061-0050\(10\)](#).

When the project is complete, please respond if the project was completed as planned and according to the conditions listed above. A [Request for Project Final Approval](#) is also required to be submitted. Written correspondence should reference plan review #48-2022 and water system ID #00505 and can be e-mailed to me at [evan.e.hofeld@dhsosha.state.or.us](mailto:evan.e.hofeld@dhsosha.state.or.us).

**Until we receive verification that the project was completed with the conditions listed above met and we have granted Final Approval for the project, the waterlines and pump station are not approved for use.** If you have any questions or would like this information in an alternate format, please feel free to contact me at any time at 971-200-0288 or via e-mail at [evan.e.hofeld@dhsosha.state.or.us](mailto:evan.e.hofeld@dhsosha.state.or.us).

Sincerely,



Evan Hofeld, Regional Engineer  
Oregon Health Authority – Drinking Water Service

Cc: Dan Weitzel, Manzanita Water Department  
[dweitzel@ci.manzanita.or.us](mailto:dweitzel@ci.manzanita.or.us)  
Jaime Craig, Tillamook County Public Health  
[jcraig@co.tillamook.or.us](mailto:jcraig@co.tillamook.or.us)

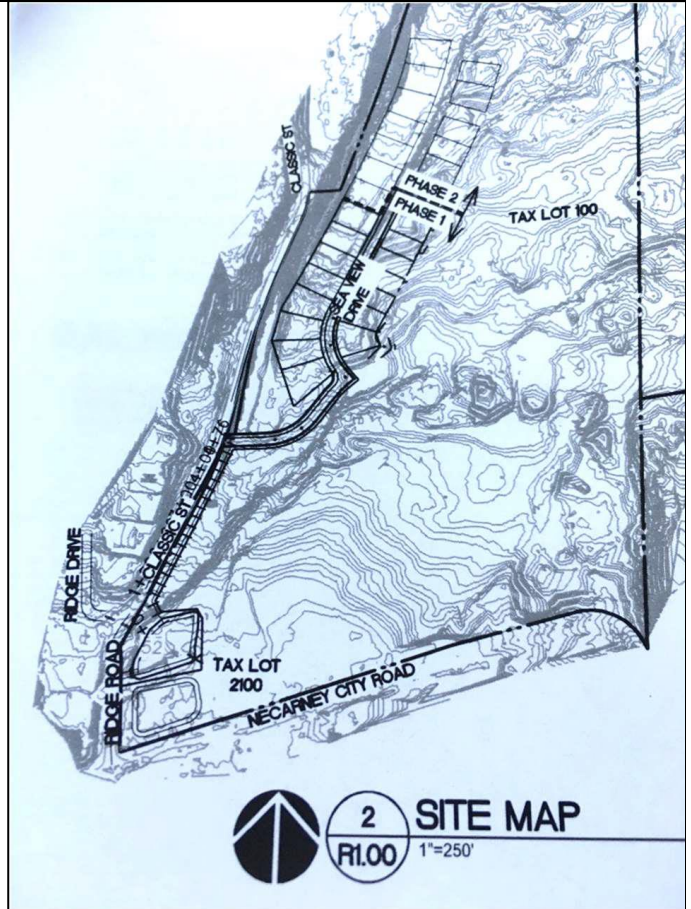
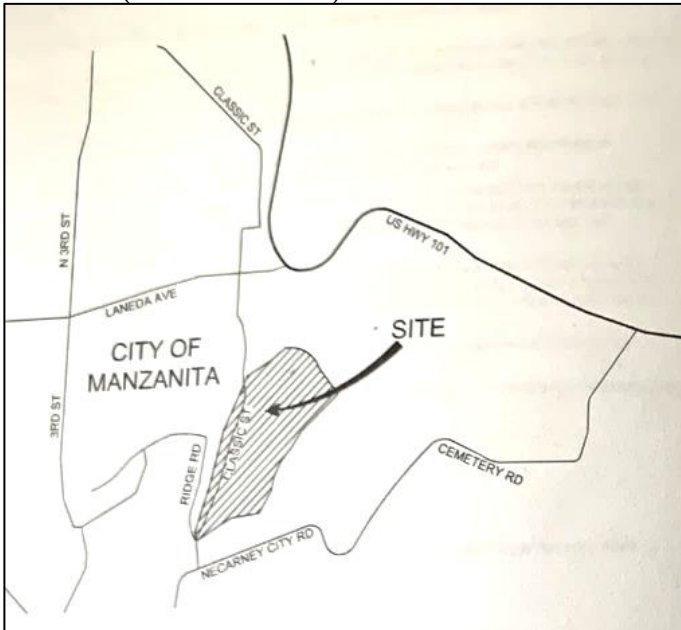


### Maps Related to PH I of the Highlands Subdivision:

Phase	Tax Lot	# of lots	Lot No.	Plan Review #
I	TL200	16	1-16	38-2020 Final 3/22/22
II	TL200	13	17-29	48-2022 w/Pump Station (PS) on TL100
III	TL100	13	30-42	
IV	TL100 & 1401	15	53-68	
V		15		Not Received



### Phase I (PR #38-2020)



April 5, 2022

Maps Related to PH II-IV of the Highlands Subdivision:

Phase	Tax Lot	# of lots	Lot No.	Plan Review #
I	TL200	16	1-16	38-2020 Final 3/22/22
II	TL200	13	17-29	48-2022 w/Pump Station (PS) on TL100
III	TL100	13	30-42	
IV	TL100 & 1401	15	53-68	

Phase II-IV (PR #48-2022)

