

# MEMORANDUM

501 E First Street Newberg, Oregon 97132 | Ph. 503-554-9553 | Fax 503-537-9554

Date: **January 24, 2024**  
To: **Nate Palmer**  
From: **Andrey Chernishov, PE, CWRE**  
RE: **Stormwater detention system – City of Manzanita**

Project Number: **2023-013**

## STORMWATER ROUTING DESCRIPTION

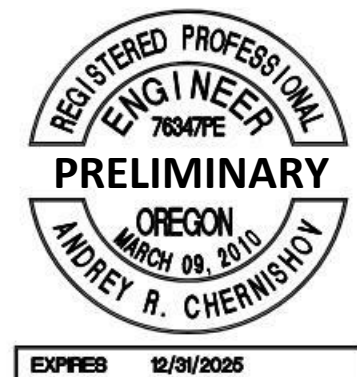
This development will utilize retention/infiltration systems installed on site, see City of Manzanita infiltrator chamber detail, and all the new impervious surface runoff will be detained or accounted for within the proposed infiltrator chambers on site.

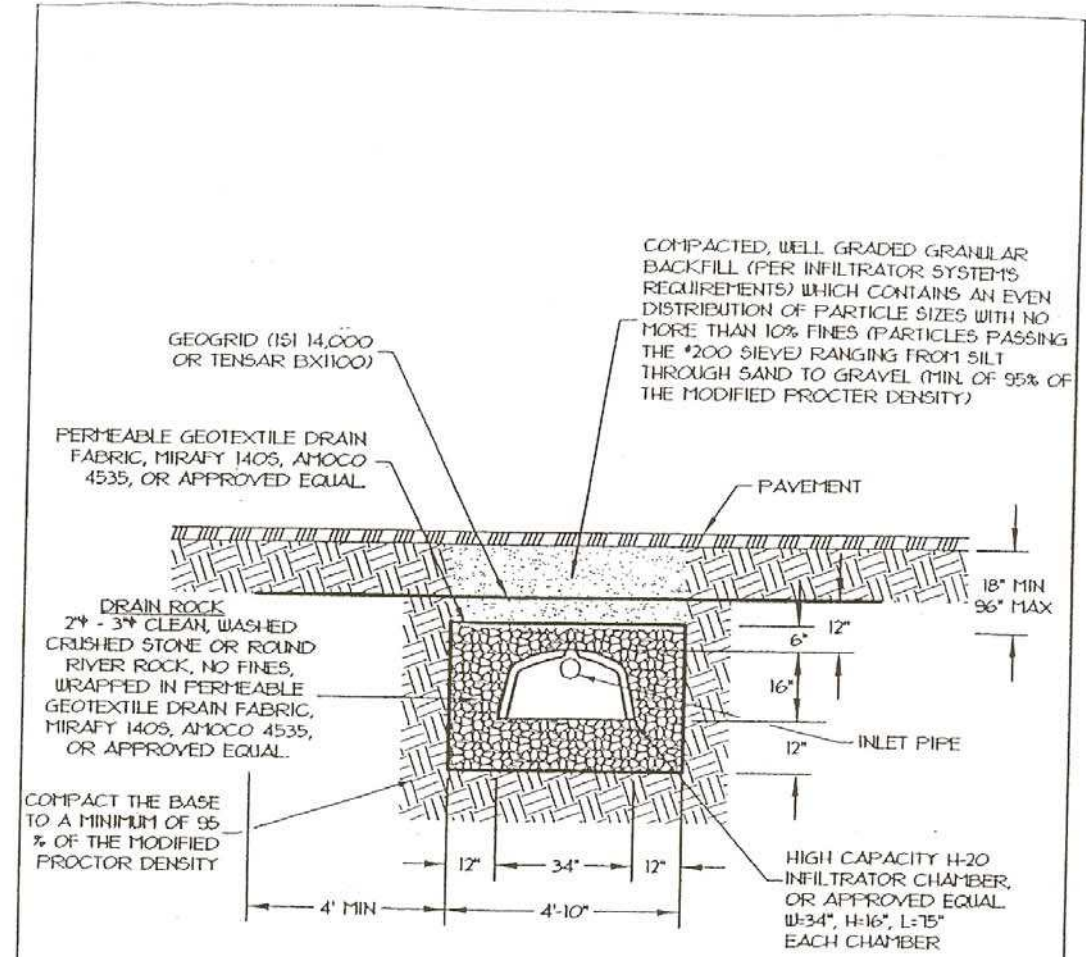
The roof runoff will be collected into sediment basins with a removable grate to allow stormwater runoff from the nearby walkways to infiltrate into the collection system. Each sediment basin will be collecting runoff from two to four homes as well as the nearby walkways. The stormwater will then be conveyed into infiltrator chambers, one located on the north side of the one-way road (collecting 17,743 square feet of impervious area and provides 406 cubic feet of storage), one located on the south side of the one-way road (collecting 14,403 square feet of impervious area and provides 361 cubic feet of storage), and two that are located on the west side of the site, underneath the access roadway that runs north to south (one collecting 13,276 square feet of impervious area and provides 316 cubic feet of storage and the other collecting 3,704 square feet of impervious area and provides 90 cubic feet of storage).

The various infiltrator chambers will have overflows that are connected to a stormwater main that runs through the center of the site and convey the runoff to the southwest corner of the site and into the public stormwater system.

This system will be over detaining stormwater on site to make up for new impervious area on Third Street and Hallie Lane. The total of 49,126 square feet of new impervious area (on site and off site) will be detained and accounted for in 1,173 cubic feet of storage on site.

If the neighboring properties to the south do not grant a stormwater easement to cross their property, then stormwater will be piped to the existing storm main in Hallie Lane.





NOTE: GEOGRID MUST OVERLAP ON ITSELF AT LEAST 2' WHEN USING MORE THAN ONE ROLL.

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## INFILTRATOR CHAMBER DETAIL

NO SCALE

CITY OF MANZANITA	
DRYWELL STANDARDS TYP. INFILTRATOR CHAMBER	

## Sediment basin

Inside dimensions approximately 12" x 12" or larger.  
Installed with removable lid flush with or higher than surrounding ground.  
Bottom is optional

