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RESIDENTIAL STORM WATER RETENTION MINIMUM STANDARD

In order to be in compliance with the requirements of the Thurston County Storm Drainage Manual for residences, the following shall be the policy of the City of Tumwater.

1. Roof run-off from residential structures constructed in plats where drainage facilities are not per the Storm Drainage Manual or from new additions with less than 5,000 square feet of new impervious surface must be retained on-site.
2. The minimum requirements for construction and sizing of residential storm water retention facilities shall be as follows:

GENERAL REQUIREMENTS:

Individual systems must be sized to infiltrate the typical sustained winter storm rainfall intensities characteristic of Western Washington. For these purposes and for ease of implementation, a constant volume requirement of thirteen percent (13%) of the roof area (square feet) will be used for sizing infiltration trenches. Also, infiltration trenches, in general, shall be four (4) feet deep, and backfilled with three (3) feet of washed rock and one (1) foot of soil.

To extend the useful life of the system, infiltration trenches shall be lined with filter fabric on all sides, top and bottom, and be equipped with cleanout sumps to collect leaves, needles, roof grit and other debris.

Long, narrow trenches must have a four (4) inch perforated pipe that is connected to the catch basin, placed in the upper portion of the rock fill, extending the length of the trench.

3. The sizing of infiltration trenches shall meet the following criteria:

The volume of the trench (including soil cover) will equal thirteen percent (13%) of the individual roof area being drained.

The bottom area of the trench will equal twenty-five (25%) of the volume of the trench.

If needed, the trench depth may be deeper than four feet; however, the volume of the trench must be increased by the same percentage as the bottom area was reduced. The minimum trench depth shall be two (2) feet.

4. Infiltration trench location and design will be included with this site plan submitted at the time of application for building permits, and will be reviewed by Building Safety Division staff. All requests for modifications outside the requirements of section three above will be referred to the City Engineer for review.

Inspection of infiltration trenches will be made by Building Safety Division staff upon request by the contractor or his representative and approval must be granted prior to covering with topsoil.

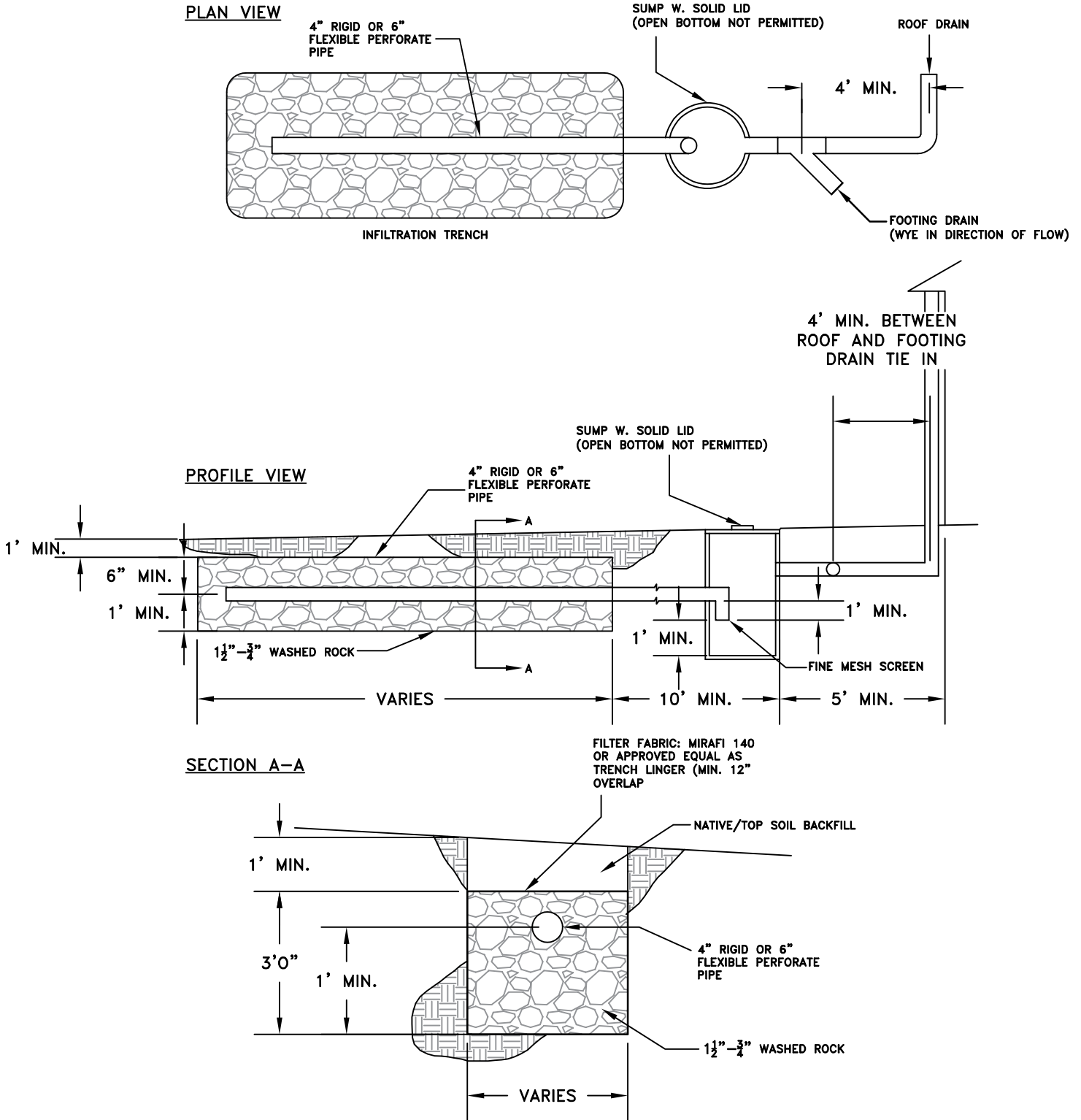
Additional requirements for the location of the trenches are included with the accompanying drawings.

MODIFICATIONS

The City will consider modifying the drywell requirements on a case-by-case basis. Modifications may be approved in cases where a less costly alternative will provide similar environmental benefits (such as surface storage), where a residential lot is relatively large (over 10,000 square feet) and flat, or where construction of a drywell is infeasible due to soil, ground water or lot coverage constraints. Please contact the Building Safety Section of Community Development at: 754-4180.

CITY OF TUMWATER

RESIDENTIAL STORMWATER RETENTION MINIMUM STANDARDS



NOTE: INFILTRATION TRENCHES IN WHICH THE LENGTH EXCEEDS 2:1 SHALL HAVE THE PERFORATED PIPE INSTALLED THE FULL LENGTH OF THE TRENCH.

COMMUNITY DEVELOPMENT DEPARTMENT
 BUILDING SAFETY DIVISION
 360-754-4180