

NOTES:

1. Install downspouts and other conveyance connections (e.g. scupper, channel, overhead runnel) from building to drain above design ponding elevation. Refer to applicable City building codes for conveyance connection requirements. Provide cobbles per Note 12 beneath discharge locations. Diffuser or other method of energy dissipation may be required based on drainage area.
2. Penetrations through facility wall shall be watertight and shall prevent preferential flow into utility trenches (e.g. water stop, trench block, or trench collar), as appropriate.
3. Facility Type:
 - A. Infiltrating facilities:
 - 1) See SWMM for site suitability.
 - 2) Avoid compaction of existing subgrade below planter.
 - 3) Scarify subgrade to a depth of 3 inches (min.) immediately prior to placement of gravel storage and bioretention soil mix for infiltration facilities in accordance with SWMM.
 - B. Non-infiltrating facilities:
 - 1) Geomembrane liner per SWMM BMP L630 and shall be PVC with a minimum thickness of 30 mils and in accordance with ASTM D7176. Seams shall be waterproof. Waterproof liner to extend to top of freeboard.
 - 2) Prepare subgrade for liner per Engineer.
4. Provide geotextile under PVC liner to protect liner from sharp rocks if recommended by liner manufacturer. Geotextile per liner manufacturer.
5. Liner secured at top per manufacturer. All seams to be sealed and waterproof per manufacturer and all penetrations to be booted. Liner shall be installed and seamed to create a watertight installation to top of freeboard.
6. Freeboard minimum (2" or 6") varies with tributary area. For freeboard, ponding, and overflow depth, see SWMM BMP L630. Overflow grate per plans, see Std. Plans GSI-13 or GSI-14.
7. Adjacent surface (e.g. wall notch at walkway) elevation must be set above top of freeboard, street and inlet elevation to allow for excess flow to drain through overflow structure.
8. Planter Walls:
 - A. Material shall be stone, brick, concrete, wood, or other durable material (no chemically treated wood).
 - B. Concrete, brick, or stone walls shall be included on foundation plans for new building construction.
 - C. Planter wall and footing design per Engineer/Architect and shall meet ACI 350 or 318.
 - D. See Std Plans GSI-06d and GSI-06e for structural details.
9. Expansion joints per SU-04 to be provided between sidewalks and walls.
10. This detail has been prepared for new construction (building foundation and footing drain are schematic). If project is a retrofit, Engineer shall review existing building conditions and modify accordingly.
11. Aggregate per WSDOT 9-03.12(4) Gravel Backfill for Drains. Underdrain pipe, 4" min. Ø slotted PVC per ASTM D1785 Sch. 40. Slots per SWMM BMP L630. Slope pipe at 0.5% min. unless otherwise specified.
12. Cobbles shall be 6" or 8" cobbles per WSDOT 9-03.11(2), 10" thick 12" X 12" pad.

<p><i>DCS</i> PUBLIC WORKS</p> <hr/> <p><i>NA</i> TACOMA POWER</p>	<p>REVIEWED BY <i>GMS</i></p> <p>ENVIRONMENTAL SERVICES</p> <hr/> <p><i>NA</i> TACOMA WATER</p>		<p>APPROVED FOR PUBLICATION</p> <p><i>[Signature]</i></p> <hr/> <p>CITY ENGINEER</p> <p><i>4/4/12</i></p> <hr/> <p>DATE</p>	<p>CITY OF TACOMA WALLED BIORETENTION SECTION VIEW</p> <p>STANDARD PLAN NO. GSI-06c(3)</p>
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