

INFILTRATION SYSTEM TESTING PROCEDURE OPTIONS

THE APPLICANT MUST DEMONSTRATE THROUGH INFILTRATION TESTING, SOIL LOGS, AND THE WRITTEN OPINION OF A GEOTECHNICAL ENGINEER THAT SUFFICIENT PERMEABLE SOIL EXISTS AT THE PROPOSED FACILITY LOCATION TO ALLOW CONSTRUCTION OF A PROPERLY FUNCTIONING INFILTRATION FACILITY.

THE SATURATION PERIOD IS REQUIRED TO APPROXIMATE THE SOIL MOISTURE CONDITIONS THAT MAY EXIST PRIOR TO THE ONSET OF A MAJOR WINTER RUNOFF EVENT.

EXCAVATE AND CONDUCTION INFILTRATION TEST AT THE BOTTOM ELEVATION OF THE PROPOSED INFILTRATION FACILITY.

THE FOLLOWING INFILTRATION TEST PROCEDURES CAN BE USED TO MEET CORE REQUIREMENTS 3 (FLOW CONTROL FACILITIES) AND 9 (FLOW CONTROL BMPS), PER THE 2016 KING COUNTY SURFACE WATER DESIGN MANUAL (KCSWDM):

1. SINGLE RING PERCOLATION TEST, USING A RING AT LEAST 3' IN DIAMETER.
3 INFILTRATION TESTS (IN SEPARATE LOCATIONS) ARE REQUIRED.
FOLLOW TEST PROCEDURE IN 2016 KCSWDM, REFERENCE 6-A.
2. SMALL OR LARGE SCALE PILOT INFILTRATION TEST (PIT).
1 INFILTRATION TEST IS REQUIRED.
FOLLOW TEST PROCEDURE IN 2016 KCSWDM, REFERENCE 6-A.
3. EPA FALLING HEAD PERCOLATION TEST.
3 INFILTRATION TESTS (IN SEPARATE LOCATIONS) ARE REQUIRED.
FOLLOW TEST PROCEDURE IN 2016 KCSWDM, REFERENCE 6-A.
4. DOUBLE RING INFILTROMETER TEST - THIS OPTION CAN ONLY BE USED FOR CORE REQUIREMENT 9:FLOW CONTROL BMPS (NOT FOR CORE REQUIREMENT 3:FACILITIES).
3 INFILTRATION TESTS (IN SEPARATE LOCATIONS) ARE REQUIRED.
FOLLOW TEST PROCEDURE IN ASTM D3385.

CITY OF KIRKLAND

PLAN NO. CK – D.22D



**INFILTRATION SYSTEM
TESTING PROCEDURE
OPTIONS**