



Small Infiltration Test Checklist

Call Before You Dig - Utility Locates 811

For use on projects with less than 3000 sq-ft of hard surface

Permit Number: _____

Project Address: _____ Date: _____

This Infiltration Test was performed by:

Company Name: _____ Contact Name: _____

Phone Number: _____ Email Address: _____

Include site map or stormwater site plan, with test locations clearly marked.

The intent of this checklist is to provide a summary of stormwater BMP subsurface observation and infiltration testing requirements. All projects and associated plans are also subject to the minimum requirements outlined in the City of Port Angeles Urban Service Standards and Guidelines Chapter 5 as well as the specific subsurface investigation and infiltration testing requirements outlined in the 2014 Stormwater Management Manual of Western Washington.

This checklist does not preclude the use of professional judgment to evaluate and manage risk associated with design, construction, and operation of infiltration BMPs. See Worksheet C for site constraints that may preclude infiltration facility feasibility for some BMPs.

The Small Infiltration Test Checklist is only allowed for use on projects with less than 3000 sq-ft of hard surface area. This worksheet may be completed by the project proponent, or other qualified professional including on-site sewage designer, soil scientist, or engineer.

Projects with 3000 sq-ft or more of hard surface area shall use a Pilot Infiltration Test (PIT).

INFILTRATION TESTING:

- 1. Is the infiltration test within the footprint of the proposed infiltration facility? Yes No
- 2. If "no," is the test within 25 feet of the proposed infiltration facility? Yes No

Explain why: _____

3. What is the total proposed new plus replaced hard surface area infiltrated on the site? _____ ft²

4. Date and time of test(s): _____

- If performed November through March, one test is required.
- If performed April through October, two tests are required.
 - Tests must be in the same hole within 2-days.
 - The beginning of each test must be spaced 24-hours apart.

5. Dig an infiltration test hole at least 2-feet deep, measured from the proposed finished grade, and 2-feet across. It is recommended that the test hole depth be at the bottom of the facility to provide the best design information. (Note: this hole is separate from the hole in Step 11 below)

6. Diameter of test hole (2-foot minimum): _____ feet

7. Depth of test hole (2-foot minimum): _____ feet



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8. Describe soil type and texture (e.g., sand, clay, gravel.): _____

9. Pre-soak period

- a) Add water to the 12-inch mark. (Measure depth using a ruler, scale, or tape measure).
- b) Stabilize water depth for a minimum of 30-minutes by adding water until the depth is maintained at a minimum of 12 inches, then move on to step c.
- c) Stop adding water, then record the number of inches the water has fallen in 1 hour: _____ inches
- d) Record the number of inches the water has fallen from hour 1 to hour 2: _____ inches
- e) What is the smaller of the two numbers in row 9c and 9d above? (check only one box below)
 - Greater than 3-inches (Use **Table 1** below – 15-minute intervals.)
 - Between 1-inch and 3-inches (Use **Table 2** below – 30-minute intervals.)
 - Less than 1-inch (Use **Table 3** below – 60-minute intervals.)

This is your “testing period”.

10. Testing period

Based on the answer to 9e above, use either Table 1, 2 or 3 on the Infiltration Test Results and Certification page to record your data and:

- a) Refill the hole with water to the 12-inch mark.
- b) Immediately record the time and depth of water in the appropriate table below.
- c) Based on your time interval (answer to 9e above):
 - Record the time and depth of water in the hole at the specified intervals.
 - Complete the table by recording six measurements (in addition to the starting depth).
 - If the hole empties prior to the six measurements, refill to the 12-inch mark and continue recording until you have completed the table.
- d) Using the depth of water recorded at each interval, calculate the infiltration rate and record the results:
 - Table 1: Infiltration Rate = Change in depth between each interval x 4
 - Table 2: Infiltration Rate = Change in depth between each interval x 2
 - Table 3: Infiltration Rate = Change in depth between each interval x 1
- e) If performed April through October, repeat steps 9 and 10 in the same hole 24 hours after the beginning of the first infiltration test and record the results in the Infiltration Test #2 Result tables.

SUBSURFACE OBSERVATION:

11. Dig a hole to the depth of 1-foot below proposed facility and approximately 5-feet from the proposed infiltration facility.

Note: The bottom of the facility is defined as the deepest portion of the proposed facility where infiltrating water is expected to be moved into the underlying soil.

12. Record total depth of hole from surrounding ground surface: _____ feet

13. While digging the hole, did you:

- a) Hit hard pan? (i.e. hardened soil that is like concrete) Yes No
- b) Encounter standing water or seepage in the hole? Yes No

14. If you answered “yes” to both (13a) and (13b), infiltration is not feasible for this site. Test is finished.

