

OPERATION & MAINTENANCE MANUAL

Filterra

Manual prepared: September 2017

DFI No. D00712



Figure 1: DFI No. D00712, looking West

1. Identification

Drainage Facility ID (DFI): D00712
Facility Type: Filterra
Construction Drawings: (V-File Numbers) 46V-051
Location: District: 03
Highway No.: 140
Mile Post: 36.641, LT

2. Manual Purpose

The purpose of this manual is to outline inspection needs and summarize maintenance actions for planted water quality catch basins.

3. Facility Location

The location map below details the facility location. The highway, mile posts, side streets, access location, and stormwater flow directions are noted on the map.

Facility location type: Curb and Gutter (bike lane)

Flow direction: East

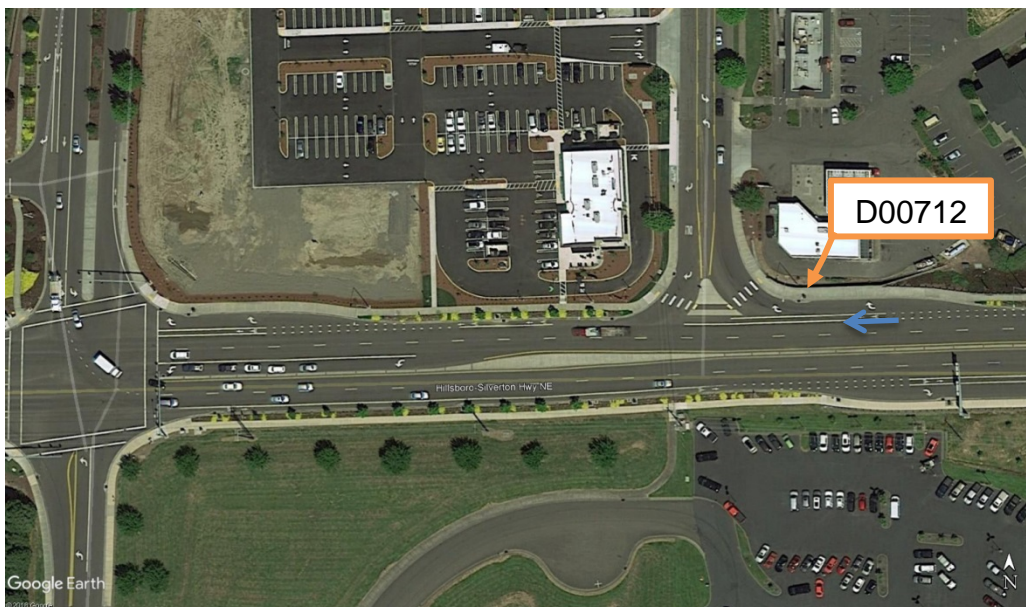


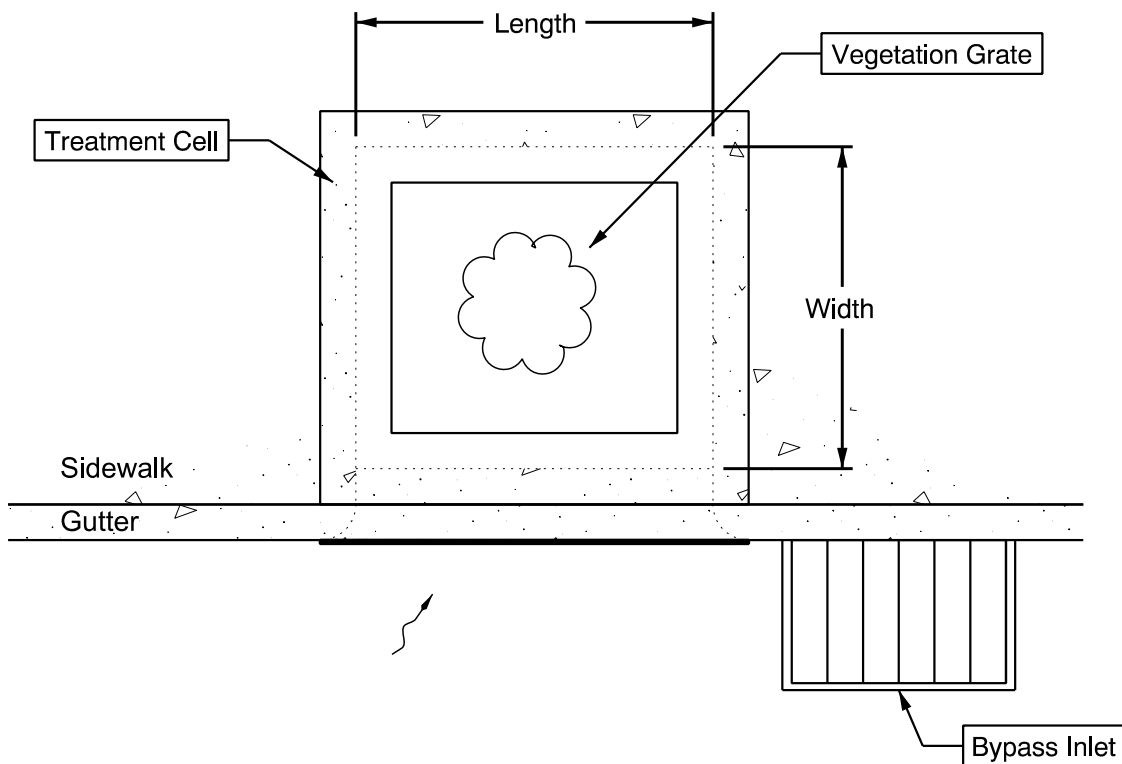
Figure 2: Facility Location Map

4. Facility Summary

The length and width of the WQ Catch Basin is based on the dimensions of the inside of the treatment cell.

The length and width of the WQ Catch Basin is:

Length (Feet)	Width (Feet)	Designation Number ¹
6	4	FT0604



Site Specific Information: Located on the West side of the I-5 Woodburn Interchange. See Appendix B for additional information.

¹ The Filterra and MWS designation number is associated with the dimensions of this type of proprietary structure. See appendix C of the Standard Operation Manual for Water Quality Catch Basins to view the Configuration Details for additional information.

5. Facility Access

Maintenance access to the facility: Curb and gutter (travel lane)

Lane Closure Needed

Water quality catch basins do not typically have access roads/access pads, nor are they gated, as they are located in urban areas alongside sidewalks and curbs. Use caution when accessing these facilities as there may be pedestrians or cyclists in the vicinity.

6. Operational Components / Maintenance Items

Classification and Standard Operational (Op) Plan:

This facility is classified as a:

<input checked="" type="checkbox"/> Filterra (Op Plan A)	<input type="checkbox"/> WQ Planter (Op Plan B)	<input type="checkbox"/> MWS (Op Plan C)
<p>A Filterra is a single chamber treatment cell that utilizes filter media, a plant, and a perforated underdrain.</p>	<p>A WQ Planter is a single chamber treatment cell that utilizes plants, filter media, and a perforated underdrain. The auxiliary outlet is located inside of the treatment cell.</p>	<p>A <u>Modular Wetland System</u> is a three chamber treatment cell that utilizes plants, filter media, filter media cartridges, and a perforated underdrain network.</p>
<p>A standard operational plan illustrates the general facility footprint configuration and explains the purpose of each facility component. Operational plans (A and B) are provided in the Standard Operation Manual.</p>		

See Appendix A for the site specific operational plan.

Operational Components

The facility components table (**Table 1**) has been provided to highlight the applicable components for this facility. The component is in use when the box contains an “x” (e.g.).

The Standard Operation Manual for Water Quality Catch Basins (implemented April 2018) outlines facility operation, typical footprint configuration, and component definitions and details. A link to the manual is attached to the feature marker in TransGIS. <https://gis.odot.state.or.us/TransGIS/>

Maintenance Items

Operational components marked in **Table 1** should be inspected and maintained according to Section 7. Each facility component is defined and detailed in the Standard Operation Manual using the associated ID number indicated below.

Table 1: Facility Components		ID #
Facility Inlet		
Inlet Grate	<input type="checkbox"/>	C1
Curb Inlet	<input checked="" type="checkbox"/>	C2
Sidewalk Chute	<input type="checkbox"/>	C3
Bypass Inlet	<input checked="" type="checkbox"/>	C4
Treatment		
Plantings (Tree or Shrub)	<input checked="" type="checkbox"/>	C5
Filter Media	<input checked="" type="checkbox"/>	C6
Filter Media Cartridge	<input type="checkbox"/>	C7
Outfall Type		
Waterbody (Creek/Lake/Ocean)	<input type="checkbox"/> C	C8
	<input type="checkbox"/> L	
	<input type="checkbox"/> O	
Ditch	<input type="checkbox"/>	C9
Storm Drain System	<input checked="" type="checkbox"/>	C10

7. Maintenance

Maintenance Frequency/Maintain Records

- Inspect per manufacturer requirements. Preferably prior to the rainy season.
- Clean and maintain as necessary. Refer to Activity 125 in the Maintenance Guide for conditions when maintenance is needed.
- Keep a record of inspections, maintenance, and repairs.

Maintenance Guide/Maintenance Actions

Proprietary Water Quality Catch Basins have an operation and maintenance manual provided by the manufacturer. See Appendix C of the Standard Operational Manual for Water Quality Catch Basins. These manuals provided guidelines on maintenance procedures for the facilities. A link to the manual is attached to the feature marker in TransGIS. <https://gis.odot.state.or.us/TransGIS/>

The Maintenance Guide outlines the standard maintenance actions for water quality facilities under Activity 125.

There are standard maintenance tables for standard ODOT designs. The maintenance tables describe the maintenance component, the defect or problem, the condition when maintenance is needed, and the recommended maintenance to correct the problem. Use the following tables to maintain ODOT Water Quality Catch Basins:

- Table 1 (General Maintenance): Contains general maintenance and inspection guidelines that are applicable to all ODOT water quality facilities

The ODOT Maintenance Guide can be viewed at the following website:

<http://www.oregon.gov/ODOT/HWY/OOM/pages/mguide.aspx>

8. Waste Material Handling

Material removed from the facility is defined as waste by the Department of Environmental Quality (DEQ). Refer to the road waste section of the ODOT Maintenance Yard Environmental Management System (EMS) Policy and Procedures Manual for disposal options:

<http://www.oregon.gov/ODOT/HWY/OOM/pages/ems.aspx>

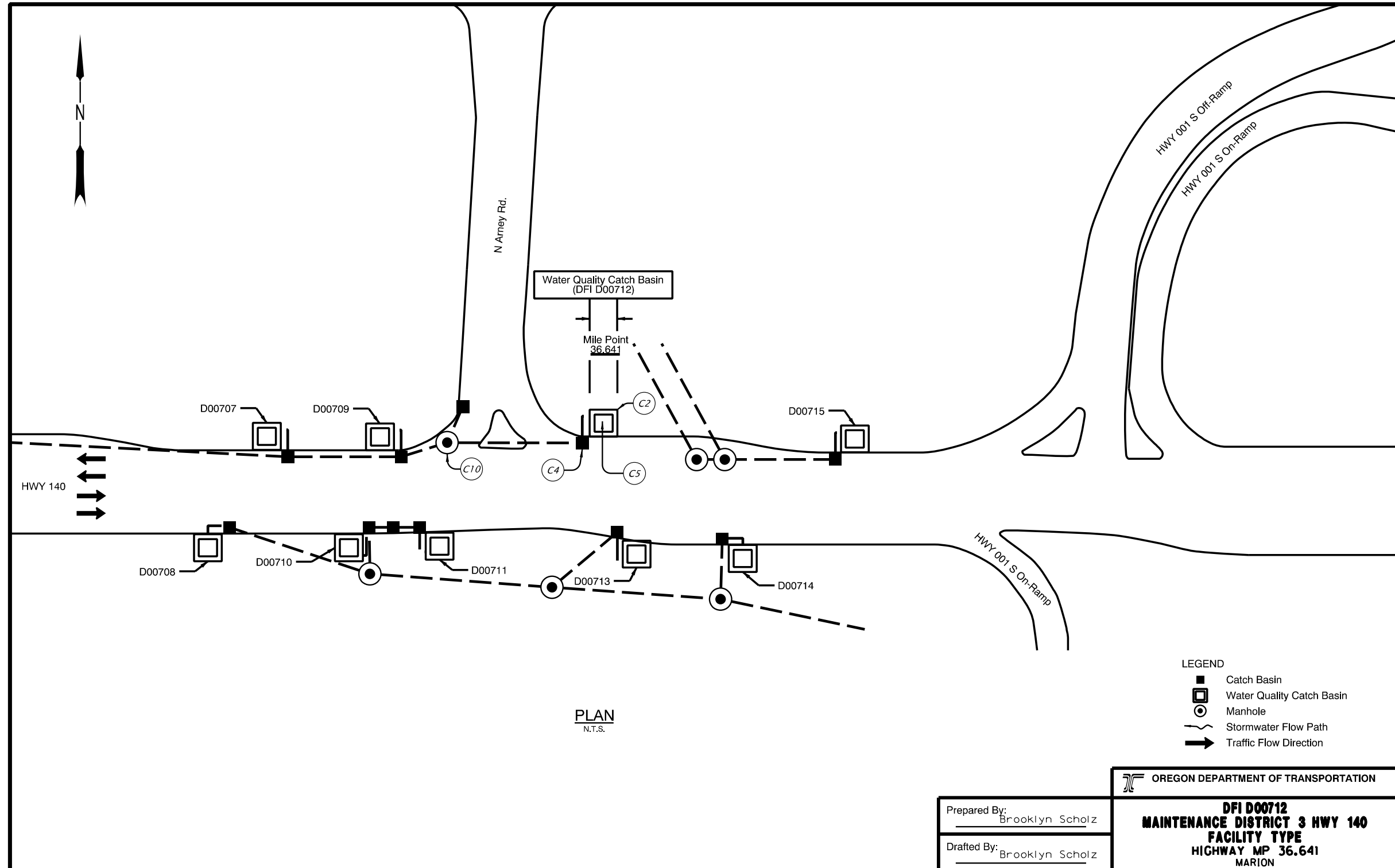
Contact any of the following for more detailed information about management of waste materials found on site:

ODOT Clean Water Unit	(503) 986-3008
ODOT Statewide Hazmat Coordinator	(503) 667-7442
ODOT Region 1 Hazmat Coordinator	(503) 731-8290
ODOT Region 2 Hazmat Coordinator	(503) 986-2647
ODOT Region 3 Hazmat Coordinator	(541) 957-3594
ODOT Region 4 Hazmat Coordinator	(541) 388-6186
ODOT Region 5 Hazmat Coordinator	(541) 963-1590
ODEQ Northwest Region Office	(503) 229-5263

A Appendix A – Site Specific Operational Plan

Contents:

Operational Plan: DFI D00712



- LEGEND**
- Catch Basin
 - ◻ Water Quality Catch Basin
 - ⊙ Manhole
 - Stormwater Flow Path
 - Traffic Flow Direction

OREGON DEPARTMENT OF TRANSPORTATION	
Prepared By: <u>Brooklyn Scholz</u> Drafted By: <u>Brooklyn Scholz</u>	DFI D00712 MAINTENANCE DISTRICT 3 HWY 140 FACILITY TYPE HIGHWAY MP 36.641 MARION

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B Appendix B – Project Contract Plans

Contents:

Site Specific Subset of Project Contract Plan 46V-051