SOP 15: PRIVATE DRAINAGE CONNECTIONS

Introduction

The 2003 Massachusetts MS4 Permit described a number of non-stormwater discharges to the engineered storm drain system that are considered “allowable”, as long as an individual community has not prohibited the discharge. Allowable non-stormwater discharges to the storm drain system can include the following, per Page 8 of the 2003 Massachusetts MS4 Permit (not inclusive):

* Diverted stream flows;
* Uncontaminated groundwater infiltration (as defined at 40 CFR 35.2005(20));
* Uncontaminated pumped groundwater;
* Foundation drains;
* Water from crawl space pumps;
* Footing drains; and
* Flows from riparian habitats and wetlands.

The municipalities regulated under the 2003 Massachusetts MS4 Permit have approved connection of the above sources to engineered storm drain systems in a variety of ways, ranging from full acceptance to full prohibition of discharges from these sources.

This Standard Operating Procedure intends to provide guidance to the municipalities on how to evaluate non-stormwater discharges to the engineered storm drain system from private connections such as foundation drains (also referred to as perimeter drains), footing drains (similar to foundation drains), non-pumped groundwater infiltration, and other private non-stormwater discharges. Discharges from sump pumps or other pumped groundwater sources are being addressed by a separate Sump Pump Discharge Policy, and are not covered by this Standard Operating Procedure.

Applicability of Private Drainage Connections

Connections of private drainage to the municipal storm drain system generate two primary concerns. The first concern is the potential for pollution from the connection, such as if subsurface contamination or septic system waste is conveyed via drainage from a foundation drain to the stormwater outfall. The second concern is that system capacity can be reduced because of pipe space occupied by flow from private sources. This results in a decreased capacity for the system to convey stormwater during wet weather events, increasing pipe surcharging and the potential for localized street flooding.

For both of these reasons, this SOP is not intended to encourage connections of private drainage to the engineered storm drain system. Instead, this SOP is to be used as guidance for connecting private drainage in scenarios where property damage may result, where discharge of water to the ground surface would result in a public hazard or nuisance, and where there is no other reasonable alternative for discharge of stormwater from the private property.

The connection of private drainage cannot be used for the discharge of non-stormwater from the site.

Requirements for Connection of Private Drainage

A community may consider connection of private drainage to the engineered storm drain system if all of the following conditions are met.

1. The owner of the private drainage (hereafter referred to as the applicant) accepts responsibility for securing all other permits or approvals for the completion of the work, including any right-of-way process required by the municipality.
2. The applicant agrees to submit plans for review by the municipality, showing the location of all proposed work.
3. The applicant agrees to pay for all costs associated with the completion of the work, including but not limited to the costs of land survey, legal reviews, testing, permitting, construction, engineering design, and traffic control.
4. The applicant agrees to compensate the municipality for the time of its Town Engineer, Code Enforcement Officer, water department (or quasi-municipal water district), consulting engineer, and/or other official, as required, for their review of the proposed connection plans.
5. The applicant agrees to perform flow metering to determine the volume of discharge that would enter the municipal system from the property.
6. The applicant agrees to have dye and/or smoke testing performed to confirm that no prohibited fixtures would be connected to the municipal system from the property (i.e., to document that the connection would not represent an illicit discharge).
7. The applicant agrees to use the same materials specified by the municipality for construction of the system, and provide a materials list to the municipality for review and approval in advance of construction. If any pump is to be utilized to convey the drainage, cut sheets on the selected pump shall be provided to the municipality for review and approval in advance of construction.
8. The applicant’s contractor agrees to secure all road opening permits, drainlayer permits, and other construction permits as required by the municipality.
9. The applicant’s discharge is in close proximity to the municipal system, for example, within 300 linear feet, and the connection to the municipal system can be completed without impacting other private property or municipal infrastructure and without significant impact to aboveground assets. Aboveground assets may include trees, fences, stone walls, utility poles, gardens, signs, or other semi-permanent features.
10. The applicant agrees to execute a covenant for the property to reflect the drainage connection, and record this covenant with the Registry of Deeds for the property.
11. The applicant agrees to install a backflow preventer, cleanout, and a shutoff device in such places that all fittings are accessible to the municipality.
12. The applicant agrees to install an oil/water separator, if required by the municipality, and provide documentation of maintenance of this device.
13. The applicant agrees to complete confirmation analytical testing of the discharge, with pollutants and laboratory specified by the municipality. This testing may occur during the initial evaluation phase, and may be required annually or on some other frequency to demonstrate ongoing compliance.
14. The applicant agrees to provide record drawings to the municipality documenting the location of the discharge, with ties to permanent structures.
15. The applicant agrees to pay any annual review or inspection fees associated with the discharge.

Right of Refusal for New Connections of Private Drainage

The municipality shall reserve the right to refuse connection of the private drainage to the engineered storm drain system if any of the following can be demonstrated:

1. The municipal system does not have adequate capacity to manage proposed flow from the connection.
2. The private drainage includes flow from municipal users or sources.
3. The stormwater outfall that manages flow from the applicant’s property discharges to a water body identified as impaired in the most current version of the Integrated List of Waters (i.e., the 303(d) list) or is subject to stringent local controls.
4. The connection would be located within 100 linear feet of a subsurface wastewater disposal system (i.e., septic system).
5. The connection would be located within a public drinking water supply Zone I.
6. The connection would be located within a public drinking water supply Zone II, and the municipality’s water department (or quasi-municipal water district) has not approved of the connection in writing.
7. Flow conveyed by the discharge would create a safety hazard such as ponding or freezing to vehicular, pedestrian, bicycle or other transportation, or would create erosion or the potential for erosion.
8. The connection jeopardizes public health, safety, or natural resources.
9. The the connection fails to meet the terms and conditions of this SOP.

Existing Connections of Private Drainage

Existing private connections are considered to be a grandfathered, as long as they are used only for discharge of non-stormwater discharges allowed by the 2003 Massachusetts MS4 Permit. Any modification made to any grandfathered connection shall be subject to the conditions in this SOP.

The municipality may revoke grandfathered approval if the municipality determines that any of the nine conditions under “Right of Refusal for New Connections of Private Drainage” become applicable.