



Catch Basin Inspection and Cleaning Standard Operating Procedures

Catch basins help minimize flooding and protect water quality by removing trash, sediment, decaying debris, and other solids from stormwater runoff. These materials are retained in a sump below the invert of the outlet pipe. Catch basin cleaning reduces foul odors, prevents clogs in the storm drain system, and reduces the loading of suspended solids, nutrients, and bacteria to receiving waters. Each catch basin shall be cleaned and inspected annually. Catch basins in high-use areas may require more frequent cleaning. Performing street sweeping on an appropriate schedule will complement the following operating procedure for catch basin inspection and cleaning. The Town will provide these services in a responsible manner balancing Public Works fiduciary responsibility to the residents and the commitment to infrastructure inspection/ environmental & water quality improvements.

Operations

The Town owns 1 chassis mounted Stetco clamshell Catch Basin Cleaner and utilizes members of the Highway Division to operate the machinery. Public Works will begin basin cleaning and inspection during the summer dry months, typically August. This time allows for increased workability via the reduction in water stored within the basin sump. Basin cleaning and inspection will be supplemented by hiring private contractors. The Town's catch basins will be cleaned and inspected in whole and inspection findings shall be documented.

Priorities

- **STORMWATER MANAGEMENT-** Catch basins will be inspected and cleaned with a goal of ensuring no catch basin is more than 50% full to comply with EPA's National Pollutant Discharge Elimination System (NPDES) Stormwater Permit Program
- **CRYSTAL AND QUANNAPOWITT LAKES/MILL AND SAUGUS RIVERS-** The areas adjacent to these natural assets shall be in high priority/frequency. Catch basins in these areas shall be continually cleaned and inspected to ensure clean water is entering our water ways.
- **RESIDENTIAL AREAS HIGH WATER TABLE/FLOOD PLAIN-** Residential areas that are located in Town within the flood plain or in such areas that have historically shown high water table shall be made a priority in pre/post storm cleaning and inspections. It shall be a priority that these catch basins remain operational to their full extent practical.
- **RESIDENT REQUEST-** At any time, a resident can request a Town owned catch basin to be cleaned and inspected. Response is evaluated and scheduled by the Highway Division Supervisor.



- **CONSTRUCTION DEBRIS-** Erosion/siltation dirt & debris cleanup from construction projects is the responsibility of the developer, contractor and property owner. As part of the ROW permit process contractors will be made aware that they are responsible for controlling runoff and stopping any debris entering into Town owned catch basins. In the event the Town observes or is notified of a contractor who is not complying with this requirement the Town reserves the right to clean any affected basin at a cost to be appropriately charged to the contractor for service provided.

Procedures

Catch basin inspection and cleaning procedures should address both the grate opening and the basin's sump. All observations about the condition of the catch basin structure and water quality should be documented with the Catch Basin Inspection Form.

- Work upstream to downstream.
- Clean sediment and trash off grate.
- Visually inspect the outside of the grate.
- Visually inspect the inside of the catch basin to determine cleaning needs.
- Inspect catch basin for structural integrity.
- Determine the most appropriate equipment and method for cleaning each catch basin.
 - Manually use a shovel to remove accumulated sediments, or
 - Use a bucket loader to remove accumulated sediments, or
 - Use a high pressure washer to clean any remaining material out of catch basin while capturing the slurry with a vacuum.
 - If necessary, after the catch basin is clean, use the rodder of the vacuum truck to clean downstream pipe and pull back sediment that might have entered downstream pipe. (Note- the Town of Wakefield does not own a vacuum, any such service would require outsourcing to hired contractors)
- Document percentage full of debris at time of routine maintenance
 - Increase frequency of inspections in given location if catch basin is more than 50% full
- If contamination is suspected, chemical analysis will be required to determine if the materials comply with the Massachusetts DEP Hazardous Waste Regulations, 310 CMR 30.000 (<http://www.mass.gov/dep/service/regulations/310cmr30.pdf>). Chemical analysis required will depend on suspected contaminants. Note the identification number of the catch basin on the sample label, and note sample collection on the Catch Basin Inspection Form.
- Properly dispose of collected sediments.
- If fluids collected during catch basin cleaning are not being handled and disposed of by a third party, dispose of these fluids to a sanitary sewer system, with permission of the system operator.
- If illicit discharges are observed or suspected, note on the inspection form.
- At the end of each day, document location and number of catch basins cleaned, amount of waste collected, and disposal method for all screenings.
- Report additional maintenance or repair needs to the appropriate Department.

Disposal of Screenings

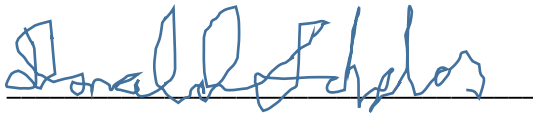
Catch basin cleanings from stormwater-only drainage systems may be disposed at any landfill that is permitted by MassDEP to accept solid waste. MassDEP does not routinely require stormwater-only catch basin cleanings to be tested before disposal, unless there is evidence that they have been contaminated by a spill or some other means. Screenings may need to be placed in a drying bed to allow water to evaporate before proper disposal. In this case, ensure that the screenings are managed to prevent pollution.

Revising the SOP

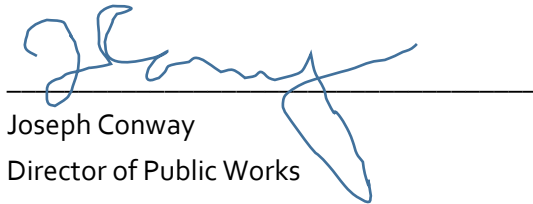
- These procedures are reviewed annually and updated as needed.

Effective

1/1/2020

A handwritten signature in blue ink, appearing to read "Donald Schneider", written over a horizontal line.

Donald Schneider
Highway Supervisor

A handwritten signature in blue ink, appearing to read "Joseph Conway", written over a horizontal line.

Joseph Conway
Director of Public Works