

## CATCH BASIN CLEANING

### Catch basin sampling 2019

In an effort to ascertain whether the Town of Burlington is largely in compliance with the requirements of the MS4 permit and to determine the extent of the ongoing Burlington catch basin cleaning program, on May 8, 2019, Mike Giardina, Working Foreman Burlington Highway Department, inspected a subsample of 61 catch basins. The basins were located throughout town. As required by the MS4 permit, the inspection program included catch basins located near construction activities (roadway construction, residential, commercial, or industrial development or redevelopment).

Of those sampled, no basin had accumulated sediment to a depth of more than 3 feet and more than half (33) had sediment accumulation of 1 foot or less. A table summarizing the findings of the sub-sample inspection event is attached, as are maps depicting the locations of the 61 catch basins and of some of the largest construction projects in Burlington in 2018. Each will also be provided in the 2019 MS4 Annual Report.

### Municipal Catch Basin cleaning 2017-2019

In recent years, Town of Burlington Highway Staff have been responsible for catch basin cleaning. Based on years of experience with the department and his institutional knowledge of the town and catch basin cleaning history, Highway Department staff member Tom Harrington determines his daily route to avoid areas of town where municipal work is ongoing and to address areas that have a tendency for sediment to accumulate more rapidly. In the 3 years that the catch basin cleaning program has been conducted in house, Mr. Harrington has moved through each of the 6 zones into which the town is divided for the purposes of basin cleaning, street sweeping and plowing. Within each sub-zone, he prioritizes the bases of hills as sediment and trash tends to accumulate in the lower elevations. While catch basin cleaning was being done in-house, inspection efforts were conducted between 3 and 5 days per week during the months of April through November.

Of the 2600 town-owned catch basins, over 600 were cleaned between April 2018 and April 2019. The volumes of sediment collected and the volume/mass disposed at an approved location will be reported in the 2019 MS4 Annual Report.

### Catch Basin cleaning schedule after 2019

Based on the results of the sampling program of May 2019, it was determined that the current program of catch basin inspection and cleaning appears to be adequate and likely fulfills the requirements of this town's MS4 permit. However, in order to ensure that no catch basin is more

than 50% full<sup>1</sup>, the Town of Burlington will issue an invitation to submit bids for basin cleaning townwide. The town will inspect 60-80 basins annually in the designated zones to assess the amount of debris accumulated in each area. The town will continue to clean the basins on a three year basis **via a contractor** regardless of how full they are. Basins in troublesome areas (i.e. the bottom of hills) will be cleaned more frequently by town forces.

The sample inspection program revealed that several catch basins located near construction activities may have been more than 50% full, so those areas will be required to be prioritized in the maintenance and cleaning contract. Per the permit, the goal of the ongoing maintenance program shall be that the frequency of routine cleaning will ensure that no catch basin at any time will be more than 50 percent full.

### **Plan to update the cleaning schedule**

If a catch basin sump is more than 50 percent full during two consecutive routine inspections/cleaning events, that finding shall be documented, the contributing drainage area shall be investigated for sources of excessive sediment loading, and to the extent practicable, contributing sources shall be abated. Based on the results of that investigation, the schedule shall be updated to prioritize areas other than construction site locations that require additional inspections.

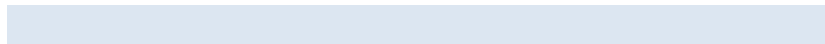
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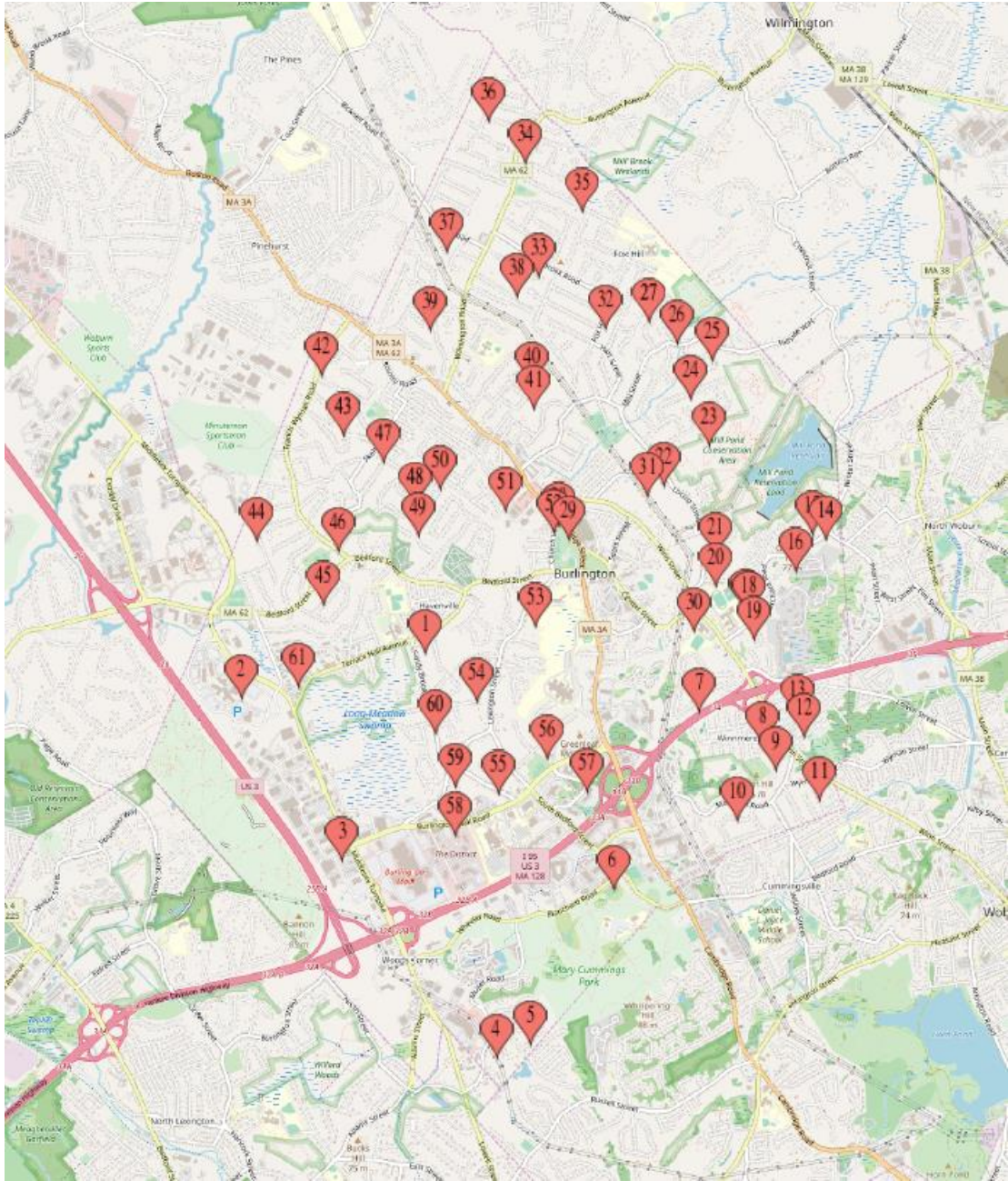
<sup>1</sup> A catch basin sump is more than 50% full if the contents within the sump exceed one half the distance between the bottom interior of the catch basin to the invert of the deepest outlet of the catch basin

Table providing the results of the catch basin spot sampling conducted on May 8, 2019

Catch basin location	Sediment Depth
29 Terrace Hall Avenue, Burlington, MA	>3'
0 Network Drive, Burlington, MA	1.5'
128 Middlesex Turnpike, Burlington, MA	1'
96 Muller Road, Burlington, MA	1'
47 Eugene Road, Burlington, MA	8"
111 South Bedford Street, Burlington, MA	>3'
18 Keans Road, Burlington, MA	6"
4 Winnmere Avenue, Burlington, MA	1'
50 Harriett Avenue, Burlington, MA	2'
65 Mountain Road, Burlington, MA	2'
9 Randall Drive, Burlington, MA	1.5'
17 Hampden Avenue, Burlington, MA	6"
5 Crawford Road, Burlington, MA	10"
2 Maguire Way, Burlington, MA	1'
11 Julia Connors Drive, Burlington, MA	1.5'
70 Peach Orchard Road, Burlington, MA	2.5'
4 Mooney Road, Burlington, MA	>2'
10 Oak Street, Burlington, MA	6"
20 Peach Orchard Road, Burlington, MA	6"
3 McCafferty Way, Burlington, MA	1'
37 Locust Street, Burlington, MA	6"
105 Locust Street, Burlington, MA	1'
36 Chandler Road, Burlington, MA	1'
29 Mallard Way, Burlington, MA	4"
200 Mill Street, Burlington, MA	8"
8 Erin Lane, Burlington, MA	6"
1 Lee Avenue, Burlington, MA	1.5'
265 Winn Street, Burlington, MA	2'
1 Forbes Avenue, Burlington, MA	1.5'
135 Winn Street, Burlington, MA	3.5'
41 Mill Street, Burlington, MA	6"
213 Fox Hill Road, Burlington, MA	3.5'
24 Beaverbrook Road, Burlington, MA	2'
136 Wilmington Road, Burlington, MA	1.5"
37 Wheatland Street, Burlington, MA	1.5"
15 Brookside Lane, Burlington, MA	1'
20 Prouty Road, Burlington, MA	1.5'
4 Sheldon Street, Burlington, MA	0'
5 Ellen Road, Burlington, MA	6"
25 Holly Street, Burlington, MA	8"

10 Dolores Drive, Burlington, MA	2'
24 Francis Wyman Road, Burlington, MA	1'
27 Manhattan Drive, Burlington, MA	3'
5 Corcoran Road, Burlington, MA	1'
117 Bedford Street, Burlington, MA	1'
3 Mellin Street, Burlington, MA	1'
62 Macon Road, Burlington, MA	2.5'
6 Princeton Road, Burlington, MA	1'
22 Carey Avenue, Burlington, MA	<1.5'
17 Pathwoods Avenue, Burlington, MA	6"
24 Arthur Woods Avenue, Burlington, MA	1'
1 Church Lane, Burlington, MA	0"
25 Lexington Street, Burlington, MA	1.5'
12 Marrett Road, Burlington, MA	1'
1 Fred Street, Burlington, MA	1.5'
22 Sunset Drive, Burlington, MA	3'
1 Burlington Mall Road, Burlington, MA	2-3'
60 Burlington Mall Road, Burlington, MA	1'
2 South Bedford Street, Burlington, MA	1'
1 Hilltop Drive, Burlington, MA	6"
8 A Street, Burlington, MA	1'





Map showing the locations of 61 catch basins across Burlington inspected for sediment accumulation on May 8, 2019