Year 3 Annual Report
Massachusetts Small MS4 General Permit
Reporting Period: July 1, 2020-June 30, 2021

Please DO NOT attach any documents to this form. Instead, attach all requested documents to an email when submitting the form

Unless otherwise noted, all fields are required to be filled out. If a field is left blank, it will be assumed the requirement or task has not been completed. Please ONLY report on activities between July 1, 2020 and June 30, 2021 unless otherwise requested.

Part I: Contact Information

Name of Municipality or Organization: Town of Arlington

EPA NPDES Permit Number: MAR041027

Primary MS4 Program Manager Contact Information

Name: Wayne A. Chouinard, P.E. Title: Town Engineer

Street Address Line 1: 51 Grove Street

Street Address Line 2: NA

City: Arlington State: MA Zip Code: 02476

Email: wchouinard@town.arlington.ma.us Phone Number: (781) 316-3321

Stormwater Management Program (SWMP) Information

SWMP Location (web address): https://www.arlingtonma.gov/home/showdocument?id=47189

Date SWMP was Last Updated: 6/23/2021

If the SWMP is not available on the web please provide the physical address:

Part II: Self-Assessment

First, in the box below, select the impairment(s) and/or TMDL(s) that are applicable to your MS4. Make sure you are referring to the most recent EPA approved Section 303(d) Impaired Waters List which can be found here: https://www.epa.gov/tmdl/region-1-impaired-waters-and-303d-lists-state

Impairment(s)

☒ Bacteria/Pathogens ☒ Chloride ☒ Nitrogen ☒ Phosphorus
☒ Solids/ Oil/ Grease (Hydrocarbons)/ Metals

TMDL(s)

In State: ☐ Assabet River Phosphorus ☐ Bacteria and Pathogen ☐ Cape Cod Nitrogen
☒ Charles River Watershed Phosphorus ☒ Lake and Pond Phosphorus

Out of State: ☐ Bacteria/Pathogens ☐ Metals ☐ Nitrogen ☐ Phosphorus

Clear Impairments and TMDLs

Next, check off all requirements below that have been completed. ***By checking each box you are certifying that you have completed that permit requirement fully.*** *If you have not completed a requirement leave the box unchecked. Additional information will be requested in later sections.*

Year 3 Requirements

☒ Inspected and screened all outfalls/interconnections (excluding Problem and Excluded outfalls)

☒ Updated outfall/interconnection priority ranking based on the information collected during the dry weather inspections as necessary

☒ Post-construction bylaw, ordinance, or other regulatory mechanism was updated and adopted consistent with permit requirements

Optional: If you would like to describe progress made on any incomplete requirements listed above, provide any additional information, and/or if any of the above year 3 requirements could not be completed due to the impacts of COVID-19, please identify the requirement that could not be completed, any actions taken to attempt to complete the requirement, and reason the requirement could not be completed below:

- Inspections and dry weather screening of all public outfalls was performed and completed in this permit year. Wet weather was planned, but delayed due to scheduling and will be performed in Spring 2022
- The Engineering Division and Inspectional Services have completed procedures stipulating requirements and enforcement of erosion control measures for required construction projects or other projects where there is a risk of erosion and sediment runoff.
-See Outfall Screening Addendum & IDDE Addendum

Annual Requirements

☐ Provided an opportunity for public participation in review and implementation of SWMP and complied with State Public Notice requirements

☒ Kept records relating to the permit available for 5 years and made available to the public

☒ The SSO inventory has been updated, including the status of mitigation and corrective measures implemented

- ○ This is not applicable because we do not have sanitary sewer
- ○ This is not applicable because we did not find any new SSOs
- ◉ The updated SSO inventory is attached to the email submission
- ○ The updated SSO inventory can be found at the following website:

☒ Properly stored and disposed of catch basin cleanings and street sweepings so they did not discharge to receiving waters

☒ Provided training to employees involved in IDDE program within the reporting period

☒ All curbed roadways were swept at least once within the reporting period

☒ Updated system map due in year 2 as necessary

☒ Enclosed all road salt storage piles or facilities and implemented winter road maintenance procedures to minimize the use of road salt

☒ Implemented SWPPPs for all permittee owned or operated maintenance garages, public works yards, transfer stations, and other waste handling facilities

☒ Updated inventory of all permittee owned facilities as necessary

☒ O&M programs for all permittee owned facilities have been completed and updated as necessary

☒ Implemented all maintenance procedures for permittee owned facilities in accordance with O&M programs

☒ Implemented program for MS4 infrastructure maintenance to reduce the discharge of pollutants

☒ Inspected all permittee owned treatment structures (excluding catch basins)

Optional: If you would like to describe progress made on any incomplete requirements listed above, provide any additional information, and/or if any of the above annual requirements could not be completed due to the impacts of COVID-19, please identify the requirement that could not be completed, any actions taken to attempt to complete the requirement, and reason the requirement could not be completed below:

Bacteria/ Pathogens (Combination of Impaired Waters Requirements and TMDL Requirements as Applicable)

Annual Requirements

*Public Education and Outreach**

☒ Annual message was distributed encouraging the proper management of pet waste, including noting any existing ordinances where appropriate

☒ Permittee or its agents disseminated educational material to dog owners at the time of issuance or renewal of dog license, or other appropriate time

☐ Provided information to owners of septic systems about proper maintenance in any catchment that discharges to a water body impaired for bacteria

** Public education messages can be combined with other public education requirements as applicable (see Appendix H and F for more information)*

Optional: If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

- Septic Systems are mandated to be replaced when homes are sold. The Board of Health monitors for compliance with Public Health Regulations.

- Efforts will be made in Permit Year #4 to send Septic Specific Maintenance and Outreach Material to properties known to have a septic system.

- See Septic System Addendum

Chloride

Annual Requirements

Public Education and Outreach

☒ Included an annual message in November/ December to private road salt applicators and commercial industrial site owners on the proper storage and application rates of winter deicing material, along with the steps that can be taken to minimize salt use and protect local waterbodies

Optional: If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

- See Education Outreach Addendum
- All seasonal and water quality related items from the Mystic River Stormwater Education Collaborative were posted on the Department of Public Works On-line News Page.

Nitrogen (Combination of Impaired Waters Requirements and TMDL Requirements as Applicable)

Annual Requirements

*Public Education and Outreach**

☒ Distributed an annual message in the spring (April/May) that encourages the proper use and disposal of grass clippings and encourages the proper use of slow-release fertilizers

☒ Distributed an annual message in the summer (June/July) encouraging the proper management of pet waste, including noting any existing ordinances where appropriate

☒ Distributed an annual message in the fall (August/September/October) encouraging the proper disposal of leaf litter

** Public education messages can be combined with other public education requirements as applicable (see Appendix H and F for more information)*

Good Housekeeping and Pollution Prevention for Permittee Owned Operations

☒ Increased street sweeping frequency of all municipal owned streets and parking lots subject to Permit part 2.3.7.a.iii.(c) to a minimum of two times per year (spring and fall)

Potential structural BMPs

☒ Any structural BMPs listed in Table 3 of Attachment 1 to Appendix H already existing or installed in the regulated area by the permittee or its agents was tracked and the nitrogen removal by the BMP was estimated consistent with Attachment 1 to Appendix H. The BMP type, total area treated by the BMP, the design storage volume of the BMP and the estimated nitrogen removed in mass per year by the BMP were documented.

- ◉ The BMP information is attached to the email submission
- ○ The BMP information can be found at the following website:

Optional: If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

- See Education Outreach Addendum
- All seasonal and water quality related items from the Mystic River Stormwater Education Collaborative were posted on the Department of Public Works On-line News Page.
- See BMP Data Addendum; information related to construction and contaminant removal are included in the GIS BMP Data

Phosphorus (Combination of Impaired Waters Requirements and TMDL Requirements as Applicable)

Annual Requirements

*Public Education and Outreach**

☒ Distributed an annual message in the spring (April/May) encouraging the proper use and disposal of grass clippings and encouraging the proper use of slow-release and phosphorus-free fertilizers

☒ Distributed an annual message in the summer (June/July) encouraging the proper management of pet waste, including noting any existing ordinances where appropriate

☒ Distributed an annual message in the fall (August/September/October) encouraging the proper disposal of leaf litter

** Public education messages can be combined with other public education requirements as applicable (see Appendix H and F for more information)*

Good Housekeeping and Pollution Prevention for Permittee Owned Operations

☒ Increased street sweeping frequency of all municipal owned streets and parking lots subject to Permit part 2.3.7.a.iii.(c) to a minimum of two times per year (spring and fall)

Potential structural BMPs

☒ Any structural BMPs already existing or installed in the regulated area by the permittee or its agents was tracked and the phosphorus removal by the BMP was estimated consistent with Attachment 3 to Appendix F. The BMP type, total area treated by the BMP, the design storage volume of the BMP and the estimated phosphorus removed in mass per year by the BMP were documented.

- ◉ The BMP information is attached to the email submission
- ○ The BMP information can be found at the following website:

Optional: If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

- All seasonal and water quality related items from the Mystic River Stormwater Education Collaborative were posted on the Department of Public Works On-line News Page.
- See BMP Data Addendum; information related to construction and contaminant removal are included in the GIS BMP Data

Solids, Oil and Grease (Hydrocarbons), or Metals

Annual Requirements

Good Housekeeping and Pollution Prevention for Permittee Owned Operations

☐ Increased street sweeping frequency of all municipal owned streets and parking lots to a schedule that targets areas with potential for high pollutant loads

☐ Prioritized inspection and maintenance for catch basins to ensure that no sump shall be more than 50 percent full; Cleaned catch basins more frequently if inspection and maintenance activities indicated excessive sediment or debris loadings

Optional: If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

Evaluation of Street Sweeping operations is underway including consideration of new equipment and frequency of cleaning to improve contaminant removal levels.

Charles River Watershed Phosphorus TMDL

☐ Completed the funding source assessment

Optional: If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

Not performed

Lake and Pond Phosphorus TMDL

☐ Completed the funding source assessment

Optional: If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

Not performed

Optional: Use the box below to provide any additional information you would like to share as part of your self-assessment:

Part III: Receiving Waters/Impaired Waters/TMDL

Have you made any changes to your lists of receiving waters, outfalls, or impairments since the NOI was submitted?

- ○ Yes
- ◉ No

If yes, describe below, including any relevant impairments or TMDLs:

Part IV: Minimum Control Measures

Please fill out all of the metrics below. If applicable, include in the description who completed the task if completed by a third party.

MCM1: Public Education

Number of educational messages completed **during this reporting period**: 9

*Below, report on the educational messages completed **during this reporting period**. For the measurable goal(s) please describe the method/measures used to assess the overall effectiveness of the educational program.*

BMP:[Message name here]

Message Description and Distribution Method:

Seasonal messages were shared with the Local Cable Station pertaining to pertinent items as follows: Construction; 6/15/2021, Grass Clippings; 5/20/2012, Catch Basins & Sump Pumps; 2/17/2021, Salt & Deicing; 12/24/2020, Developers; 12/2/21, Leaf Cleanup; 10/29/2020, Porous Pavement and Leaf Litter; 10/2/2021, Restaurants; 9/3/2020, Pesticides; 7/31/2020

Targeted Audience: Residents, Developers, Builders etc

Responsible Department/Parties: Engineering

Measurable Goal(s):

Staff are still trying to quantify effectiveness of information placed on local cable channel and DPW News Page

Message Date(s): Construction; 6/15/2021, Grass Clippings; 5/20/2012, Catch Basins & Sump Pumps; 2/17/2021, Salt & Deicing; 12/24/2020, Developers; 12/2/21, Leaf Cleanup; 10/29/2020, Porous Pavement and Leaf Litter; 10/2/2021, Restaurants; 9/3/2020, Pesticides; 7/31/2020

Message Completed for: Appendix F Requirements ☐ Appendix H Requirements ☐

Was this message different than what was proposed in your NOI? Yes ○ No ◉

If yes, describe why the change was made:

Add an Educational Message

MCM2: Public Participation

Describe the opportunity provided for public involvement in the development of the Stormwater Management Program (SWMP) **during this reporting period**:

- The SWMP has been updated with a draft version by Town staff. However, due to COVID 19 a public participation meeting was not held. As soon as public gatherings are deemed safe, a public participation session will be held to review the updates, receive input and discuss plans. Upon completion of the next SWMP public participation discussion to SWMP will be finalized and an on-line version posted for viewing.

Was this opportunity different than what was proposed in your NOI? Yes ○ No ◉

Describe any other public involvement or participation opportunities conducted **during this reporting period**:

No public involvement has been received during COVID-19.

MCM3: Illicit Discharge Detection and Elimination (IDDE)

Sanitary Sewer Overflows (SSOs)

Check off the box below if the statement is true.

☐ This SSO section is NOT applicable because we DO NOT have sanitary sewer

*Below, report on the number of SSOs identified in the MS4 system and removed **during this reporting period**.*

Number of SSOs identified: 3

Number of SSOs removed: 3

MS4 System Mapping

Optional: Provide additional status information regarding your map:

- See SSO Addendum
- The Town's Stormwater Collection System is detailed on the Town GIS map.

Screening of Outfalls/Interconnections

If conducted, please submit any outfall monitoring results from this reporting period. Outfall monitoring results should include the date, outfall/interconnection identifier, location, weather conditions at time of sampling, precipitation in previous 48 hours, field screening parameter results, and results from all analyses. Please also include the updated inventory and ranking of outfalls/interconnections based on monitoring results.

○ No outfalls were inspected

◉ The outfall screening data is attached to the email submission

○ The outfall screening data can be found at the following website:

*Below, report on the number of outfalls/interconnections screened **during this reporting period**.*

Number of outfalls screened: 140

*Below, report on the percent of outfalls/interconnections screened **to date**.*

Percent of outfalls screened: 100

Optional: Provide additional information regarding your outfall/interconnection screening:

- See Outfall Screening Addendum

Catchment Investigations

If conducted, please submit all data collected during this reporting period as part of the dry and wet weather investigations. Also include the presence or absence of System Vulnerability Factors for each catchment.

◉ No catchment investigations were conducted

○ The catchment investigation data is attached to the email submission

○ The catchment investigation data can be found at the following website:

*Below, report on the number of catchment investigations completed **during this reporting period**.*

Number of catchment investigations completed this reporting period: 0

*Below, report on the percent of catchments investigated **to date.***

Percent of total catchments investigated: 0

Optional: Provide any additional information for clarity regarding the catchment investigations below:

IDDE Progress

If illicit discharges were found, please submit a document describing work conducted over this reporting period, and cumulative to date, including location source; description of the discharge; method of discovery; date of discovery; and date of elimination, mitigation, or enforcement OR planned corrective measures and schedule of removal.

◉ No illicit discharges were found

○ The illicit discharge removal report is attached to the email submission

○ The illicit discharge removal report can be found at the following website:

No Illicit Discharges were found during Permit Year #3

*Below, report on the number of illicit discharges identified and removed, along with the volume of sewage removed **during this reporting period.***

Number of illicit discharges identified: 0

Number of illicit discharges removed: 0

Estimated volume of sewage removed: 0 gallons/day

*Below, report on the total number of illicit discharges identified and removed to date. At a minimum, report on the number of illicit discharges identified and removed **since the effective date of the permit (July 1, 2018)**.*

Total number of illicit discharges identified: 0

Total number of illicit discharges removed: 0

Optional: Provide any additional information for clarity regarding illicit discharges identified, removed, or planned to be removed below:

N/A

Employee Training

Describe the frequency and type of employee training conducted **during this reporting period**:

No training performed during Permit Year #3

MCM4: Construction Site Stormwater Runoff Control

*Below, report on the construction site plan reviews, inspections, and enforcement actions completed **during this reporting period**.*

Number of site plan reviews completed: 20

Number of inspections completed: 5

Number of enforcement actions taken: 0

Optional: Enter any additional information relevant to construction site plan reviews, inspections, and enforcement actions:

Five (5) cursory inspections were performed by the Town. Each Site Plan and related construction is required to provide an as-built plan and Statement of Compliance from the Designer.

MCM5: Post-Construction Stormwater Management in New Development and Redevelopment

As-built Drawings

*Below, report on the number of as-built drawings received **during this reporting period**.*

Number of as-built drawings received: 6

Optional: Enter any additional information relevant to the submission of as-built drawings:

Six (6) As-built plans were submitted as a requirement of the Town Stormwater Management By-Law

Street Design and Parking Lots Report

Describe the status of the street design and parking lots assessment due in year 4 of the permit term, including any planned or completed changes to local regulations and guidelines:

The Town of Arlington is a dense and urbanized environment. There is no significant amount of new development and no new road construction. There are no policy modifications that could be implemented reducing road width due to demand for parking and/or bicycle infrastructure. However, during evaluation of road projects by the DPW if existing road widths are excessive, consideration can be given to narrowing if practical and cost efficient.

Green Infrastructure Report

Describe the status of the green infrastructure report due in year 4 of the permit term, including the findings and progress towards making the practice allowable:

In Year 3, Arlington installed 33 infiltration trenches. Arlington continues to apply for grants to construct green infrastructure in public parks, ROWs, and other public spaces.

Retrofit Properties Inventory

Describe the status of the inventory, due in year 4 of the permit term, of permittee-owned properties that could be modified or retrofitted with BMPs to mitigate impervious areas and report on any properties that have been modified or retrofitted:

Inventory of Town properties and facilities was performed in Year 1. A Retrofit Inventory will be completed by the end of permit Year 4.

MCM6: Good Housekeeping

Catch Basin Cleaning

*Below, report on the number of catch basins inspected and cleaned, along with the total volume of material removed from the catch basins **during this reporting period**.*

Number of catch basins inspected: 1,705

Number of catch basins cleaned: 1,705

Total volume or mass of material removed from all catch basins: 3,300 tons

Below, report on the total number of catch basins in the MS4 system.

Total number of catch basins: 3,752

If applicable:

Report on the actions taken if a catch basin sump is more than 50% full during two consecutive routine inspections/cleaning events:

All Town owned Catch Basins are/will be inspected and cleaned. Inspections will identify the depth of sediment for future planning and Catch Basins with sediment depth exceeding 50% will be identified. A policy to provide additional and more frequent cleaning at these locations is underway for the next CB cleaning program. The Program schedule was delayed in the Spring and is currently underway. Data will be updated once final program is completed (anticipated in Oct. 2021). As of the time of this writing there have been 1705 catch basins inspected and cleaned.

Street Sweeping

*Report on street sweeping completed **during this reporting period** using <u>one</u> of the three metrics below.*

- (●) Number of miles cleaned: 1,812
- ( ) Volume of material removed: [Select Units]
- ( ) Weight of material removed: [Select Units]

Stormwater Pollution Prevention Plan (SWPPP)

*Below, report on the number of site inspections for facilities that require a SWPPP completed **during this reporting period**.*

Number of site inspections completed: 3

Describe any corrective actions taken at a facility with a SWPPP:

- The 3 facilities that require a SWPPP include DPW (51 Grove St), Public Safety Maintenance Facility (112 Mystic St), and Arlington High School (869 Mass Ave). No actions taken.

- The DPW Facility is currently under rehabilitation including a newly constructed DPW Yard and Facility.

Additional Information

Monitoring or Study Results

Results from any other stormwater or receiving water quality monitoring or studies conducted during the reporting period not otherwise mentioned above, where the data is being used to inform permit compliance or permit effectiveness must be attached.

- (●) Not applicable
- ( ) The results from additional reports or studies are attached to the email submission
- ( ) The results from additional reports or studies can be found at the following website(s):

N/A

If such monitoring or studies were conducted on your behalf or if monitoring or studies conducted by other entities were reported to you, a brief description of the type of information gathered or received shall be described below:

N/A

Additional Information

Optional: Enter any additional information relevant to your stormwater management program implementation during the reporting period. Include any BMP modifications made by the MS4 if not already discussed above:

- New BMP installations for 2021 include 33 new infiltration trenches. These BMP's have been added to the GIS mapping system including: location, date of installation, contractor, dimensions, contaminant removal
- See BMP Data Addendum for As-built information

COVID-19 Impacts

Optional: If any of the above year 3 requirements could not be completed due to the impacts of COVID-19, please identify the requirement that could not be completed, any actions taken to attempt to complete the requirement, and reason the requirement could not be completed below:

- Outfall Sampling and Investigations are typically performed by Summer Interns. The Town was unable to fill the positions due to COVID-19. To supplement this effort, the Town has contracted with Weston & Sampson Engineers to begin outfall screening, sampling and investigations.
- All Dry Weather Screening as completed in Permit Year #3
- All Intercommunity Connections were investigated during Permit Year #3

Activities Planned for Next Reporting Period

Please confirm that your SWMP has been, or will be, updated to comply with all applicable permit requirements including but not limited to the year 4 requirements summarized below. (Note: impaired waters and TMDL requirements are not listed below)

Yes, I agree ☒

- Develop a report assessing current street design and parking lot guidelines and other local requirements within the municipality that affect the creation of impervious cover
- Develop a report assessing existing local regulations to determine the feasibility of making green infrastructure practices allowable when appropriate site conditions exist
- Identify a minimum of 5 permittee-owned properties that could potentially be modified or retrofitted with BMPs to reduce impervious areas

Annual Requirements

- Annual report submitted and available to the public
- Annual opportunity for public participation in review and implementation of SWMP
- Keep records relating to the permit available for 5 years and make available to the public
- Properly store and dispose of catch basin cleanings and street sweepings so they do not discharge to receiving waters
- Annual training to employees involved in IDDE program
- Update inventory of all known locations where SSOs have discharged to the MS4
- Continue public education and outreach program
- Update outfall and interconnection inventory and priority ranking and include data collected in connection with the dry weather screening and other relevant inspections conducted
- Implement IDDE program
- Review site plans of construction sites as part of the construction stormwater runoff control program
- Conduct site inspection of construction sites as necessary
- Inspect and maintain stormwater treatment structures
- Log catch basins cleaned or inspected
- Sweep all curbed streets at least annually
- Continue investigations of catchments associated with Problem Outfalls
- Implemented SWPPPs for all permittee owned or operated maintenance garages, public works yards, transfer stations, and other waste handling facilities
- Review inventory of all permittee owned facilities in the categories of parks and open space, buildings and facilities, and vehicles and equipment; update if necessary
- Review O&M programs for all permittee owned facilities; update if necessary
- Implement all maintenance procedures for permittee owned facilities in accordance with O&M programs
- Implement program for MS4 infrastructure maintenance to reduce the discharge of pollutants
- Enclose all road salt storage piles or facilities and implemented winter road maintenance procedures to minimize the use of road salt
- Review as-built drawings for new and redevelopment to ensure compliance with post construction bylaws, regulations, or regulatory mechanism consistent with permit requirements
- Inspect all permittee owned treatment structures (excluding catch basins)

Provide any additional details on activities planned for permit year 4 below:

- The Engineering Division and Environmental Planner have meetings scheduled weekly to address and formulate plans to meet the requirements of the Permit. These brain storming sessions allow the Town to consider options,alternatives and adjust plans through a wide lens and overview.

- Currently the Environmental Planner position is vacant.

Part V: Certification of Small MS4 Annual Report 2021

40 CFR 144.32(d) Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: MICHAEL RADEMACHER Title: PUBLIC WORKS DIR.

Signature: Date: 9/28/21

[Signatory may be a duly authorized representative]

TOWN OF ARLINGTON
Department of Public Works
51 Grove Street
Arlington, Massachusetts 02476
Office(781) 316-3320 Fax (781) 316-3281

Engineering Division

2021 MS4 Annual Report

SSO Addendum

September 28, 2021

SSO DATE							
START	**END**	**REPORTED TO DEP**	**REPORTED BY**	**POSITION**	**LOCATION**	**CAUSE**	**EST. DISCHARGE**
03/10/2021	3/10/2021	03/15/2021	Dan Stoneking	Water & Sewer Superintendent	15 Mystic View Terrace	Blockage	15 Gal.
07/09/2021	07/09/2021	07/14/2021	Dan Stoneking	Water & Sewer Superintendent	45 Kimball Road	Blockage	10 Gal.
09/02/2021	09/02/2021	09/02/2021	Dan Stoneking	Water & Sewer Superintendent	Kimball Rd. (manhole)	Rain Event	100 Gal.

Massachusetts Department of Environmental Protection
Bureau of Water Protection – Wastewater Management Program

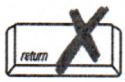
Sanitary Sewer Overflow (SSO)/Bypass Notification Form

FOR DEP USE ONLY

Tax Identification Number

A. Reporting Facility

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Facility Information

Town of Arlington
Reporting Sewer Authority

Permit #

2. Authorized Representative Transmitting Form:

Dan
First Name

Stoneking
Last Name

781-316-3310
Telephone No.

Water/Sewer Supervisor
Title

dstoneking@town.arlington.ma.us
E-mail Address

B. Phone Notifications:

See DEP Regional Office telephone and fax numbers at the end of this form.

1. **MassDEP staff** contacted: Belinda (first name) Stansbury (last name)

   Date/Time contacted: 3/15/2021 (Date) 12:30 (Time) ☐ am ☒ pm

2. **EPA staff** contacted: Douglas (first name) Koopman (last name)

   Date/Time EPA contacted: 3/15/2021 (Date) 2:31 (Time) ☐ am ☒ pm

3. Board of Health contacted: Pat (First Name) Martin (Last Name)

   Date/Time contacted: 3/15/2021 (Date) 11:45 (Time) ☒ am ☐ pm

4. Others notified (select all that apply); ☐ Conservation Commission

   ☐ Harbormaster ☐ Shellfish Warden ☐ Division of Marine Fisheries

   ☐ Downstream Drinking Water Supplier ☐ Watershed Association

   ☐ Beach Resource Manager ☐ Other: (specify)

C. SSO Information

1. SSO Discovered: 3/10/2021 (Date) 2:30 (Time) ☐ am ☒ pm

   By: Dan Stoneking

2. SSO Stopped: 3/10/2021 (Date) 3:00 (Time) ☐ am ☒ pm

3. SSO Discharge from: ☒ Sanitary Sewer Manhole ☐ Pump Station

   ☐ Backup into Property ☐ Other: (specify)

4. SSO Discharge to: ☒ Ground Surface (no release to surface water)

   ☐ Direct to Receiving Water (surface water)

   ☐ Catch basin to Receiving Water (surface water)

   ☐ Backup into Property Basement

Massachusetts Department of Environmental Protection
Bureau of Water Protection – Wastewater Management Program

Sanitary Sewer Overflow (SSO)/Bypass Notification Form

FOR DEP USE ONLY

Tax Identification Number

C. SSO Information (cont.)

Location: 15 Mystic View Terrace
(Description of discharge site or closest address)

5. Estimated SSO Volume at time of this Report: 15 Gallons

   Method of Estimating Volume: Visual

6. Cause of SSO Event:

   ☐ Rain Event ☐ Pump Station Failure ☐ Insufficient Capacity in System

   ☐ Treatment Unit failure

   ☐ Sewer System Blockage: ☐ Pipe Collapse ☐ Root Intrusion ☐ Grease Blockage

   ☒ Other: Sanitary wipes causing blockage
   (Specify)

7. Corrective Actions Taken:

   Jet towards blockage from nearest downstream manhole.

   Impact Area cleaned and/or disinfected: ☒ Yes ☐ No

   Disinfected area with biodegradable sanitizing virucide cleaner.

   Corrective Actions Completed: ☒ Yes ☐ No

   Modified schedule for sewer lines frequency of cleaning and maintenance.

D. Comments/Attachments/Follow-up

I wish to provide (select all that apply):

☒ Attachment ☐ Additional comments below: ☐ No additional comments or attachments

Additional comments and planned actions:

Massachusetts Department of Environmental Protection
Bureau of Water Protection – Wastewater Management Program

Sanitary Sewer Overflow (SSO)/Bypass Notification Form

FOR DEP USE ONLY

Tax Identification Number

E. Certification Statement

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

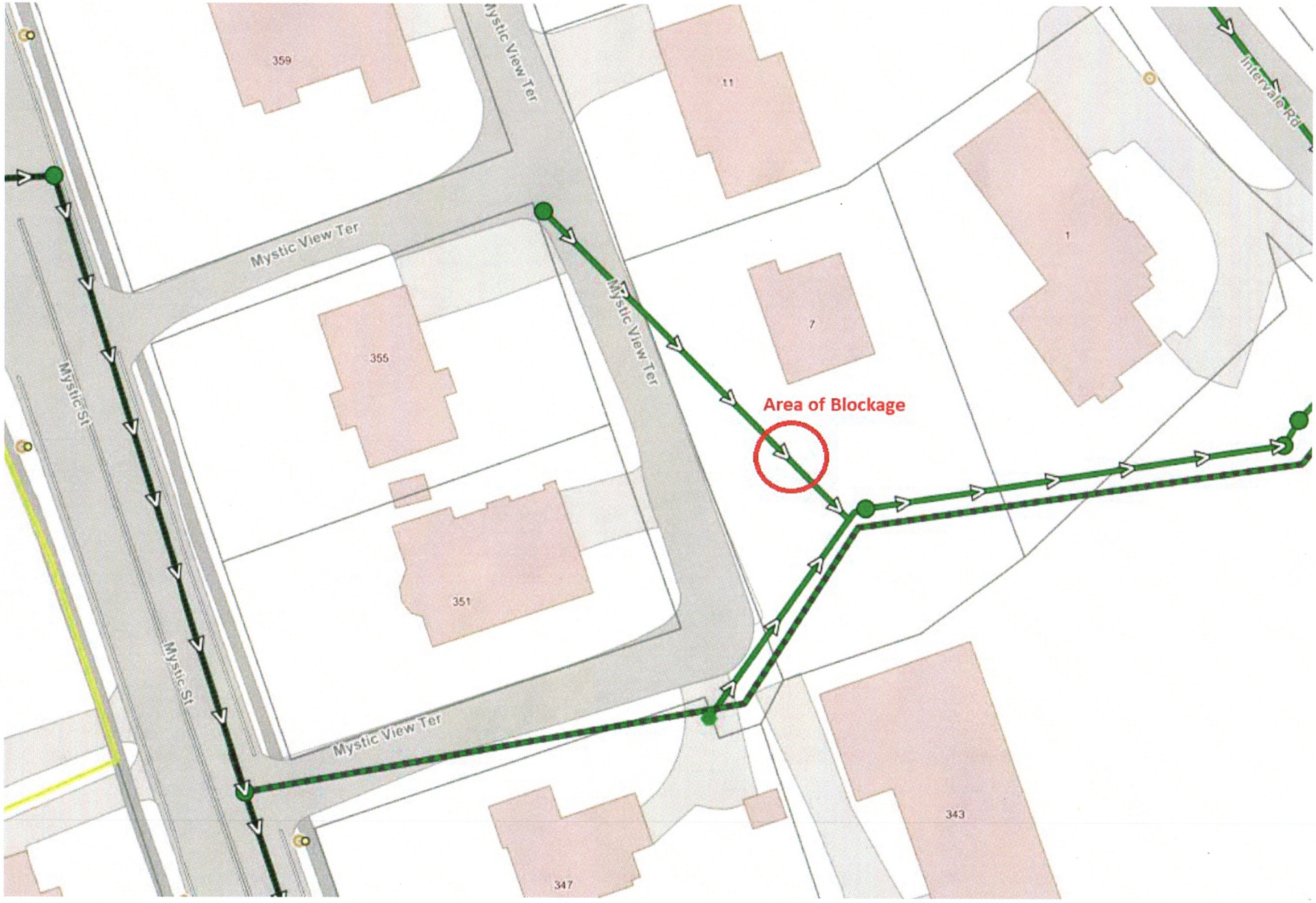
Signature of Authorized Representative

3/15/2021
Date Signed

Please keep a copy of this report for your records. When submitting additional information, include the MassDEP Incident Number from this report.

MassDEP Regional Office and EPA Telephone and Fax Numbers:

Northeast Region	Phone: 978-694-3215	Fax: 978-694-3499
Southeast Region	Phone: 508-946-2750	Fax: 508-947-6557
Central Region	Phone: 508-792-7650	Fax: 508-792-7621
Western Region	Phone: 413-784-1100	Fax: 413-784-1149
EPA	Phone: 617-918-1510	
EPA for Southeast Region, David Turin	Phone: 617-918-1598	Fax: 617-918-0598
EPA for Northeast, Central and Western Regions, Douglas Koopman	Phone: 617-918-1747	Fax: 617-918-0747
DEP 24-hour emergency	Phone: 888-304-1133	


359
11
Mystic View Ter
Interval Rd
Mystic View Ter
1
7
355
Area of Blockage
Mystic St
351
Mystic St
Mystic View Ter
343
347

Massachusetts Department of Environmental Protection
Bureau of Water Protection – Wastewater Management Program

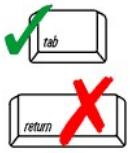
Sanitary Sewer Overflow (SSO)/Bypass Notification Form

FOR DEP USE ONLY

Tax Identification Number

A. Reporting Facility

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Facility Information

Town of Arlington
Reporting Sewer Authority

Permit #

2. Authorized Representative Transmitting Form:

Dan	Stoneking	781-316-3310
First Name	Last Name	Telephone No.

Water/Sewer Supervisor	dstoneking@town.arlington.ma.us
Title	E-mail Address

B. Phone Notifications:

See DEP Regional Office telephone and fax numbers at the end of this form.

1. **MassDEP staff** contacted: Left Message (first name) ____ (last name)

Date/Time contacted: 7/14/21 (Date) 11:45 (Time) ☒ am ☐ pm

2. **EPA staff** contacted: Douglas (first name) Koopman (last name)

Date/Time EPA contacted: 7/14/21 (Date) 11:57 (Time) ☒ am ☐ pm

3. Board of Health contacted: Emily (First Name) Sullivan (Last Name)

Date/Time contacted: 7/14/21 (Date) 1:02 (Time) ☐ am ☒ pm

4. Others notified (select all that apply); ☐ Conservation Commission

☐ Harbormaster ☐ Shellfish Warden ☐ Division of Marine Fisheries

☐ Downstream Drinking Water Supplier ☐ Watershed Association

☐ Beach Resource Manager ☐ Other: ____ (specify)

C. SSO Information

1. SSO Discovered: 7/9/21 5:00 (Time) ☐ am ☒ pm

By: Dan Stoneking

2. SSO Stopped: 7/9/21 (Date) 10:00 (Time) ☐ am ☒ pm

3. SSO Discharge from: ☒ Sanitary Sewer Manhole ☐ Pump Station

☒ Backup into Property ☐ Other: 45 Kimball Road (specify)

4. SSO Discharge to: ☐ Ground Surface (no release to surface water)

☐ Direct to Receiving Water ____ (surface water)

☐ Catch basin to Receiving Water ____ (surface water)

☒ Backup into Property Basement

Massachusetts Department of Environmental Protection
Bureau of Water Protection – Wastewater Management Program

Sanitary Sewer Overflow (SSO)/Bypass Notification Form

FOR DEP USE ONLY

Tax Identification Number

C. SSO Information (cont.)

Location: 45 Kimball Road
(Description of discharge site or closest address)

5. Estimated SSO Volume at time of this Report: 10 Gallons

   Method of Estimating Volume: Visual

6. Cause of SSO Event:

   ☒ Rain Event ☐ Pump Station Failure ☐ Insufficient Capacity in System

   ☐ Treatment Unit failure

   ☐ Sewer System Blockage: ☐ Pipe Collapse ☐ Root Intrusion ☐ Grease Blockage

   ☐ Other: _____
   (Specify)

7. Corrective Actions Taken:

   Continuous rain caused a surcharge in the system.

   Impact Area cleaned and/or disinfected: ☒ Yes ☒ No

   Backup in basement, no discharge to receiving water. Homeowner would contact a cleaning company.

   Corrective Actions Completed: ☒ Yes ☒ No

   No corrective action required, waited until system surcharge subsided.

D. Comments/Attachments/Follow-up

I wish to provide (select all that apply):

☐ Attachment ☐ Additional comments below: ☐ No additional comments or attachments

Additional comments and planned actions:

Massachusetts Department of Environmental Protection
Bureau of Water Protection – Wastewater Management Program

Sanitary Sewer Overflow (SSO)/Bypass Notification Form

FOR DEP USE ONLY

Tax Identification Number

E. Certification Statement

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of Authorized Representative

7/14/21
Date Signed

Please keep a copy of this report for your records. When submitting additional information, include the MassDEP Incident Number from this report.

MassDEP Regional Office and EPA Telephone and Fax Numbers:

Northeast Region	Phone: 978-694-3215	Fax: 978-694-3499
Southeast Region	Phone: 508-946-2750	Fax: 508-947-6557
Central Region	Phone: 508-792-7650	Fax: 508-792-7621
Western Region	Phone: 413-784-1100	Fax: 413-784-1149
EPA	Phone: 617-918-1510	
EPA for Southeast Region, David Turin	Phone: 617-918-1598	Fax: 617-918-0598
EPA for Northeast, Central and Western Regions, Douglas Koopman	Phone: 617-918-1747	Fax: 617-918-0747
DEP 24-hour emergency	Phone: 888-304-1133	

Massachusetts Department of Environmental Protection
Bureau of Water Protection – Wastewater Management Program

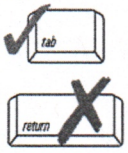
Sanitary Sewer Overflow (SSO)/Bypass Notification Form

FOR DEP USE ONLY

Tax Identification Number

A. Reporting Facility

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Facility Information

Town of Arlington
Reporting Sewer Authority

Permit #

2. Authorized Representative Transmitting Form:

Dan	Stoneking	781-316-3310
First Name	Last Name	Telephone No.

Water/Sewer Supervisor	dstoneking@town.arlington.ma.us
Title	E-mail Address

B. Phone Notifications:

See DEP Regional Office telephone and fax numbers at the end of this form.

1. **MassDEP staff** contacted: Left Message (first name) ____ (last name)

   Date/Time contacted: 9/2/21 (Date) 1:43 (Time) ☒ am ☒ pm

2. **EPA staff** contacted: Douglas (first name) Koopman (Voicemail) (last name)

   Date/Time EPA contacted: 9/2/21 (Date) 2:24 (Time) ☐ am ☒ pm

3. Board of Health contacted: Natasha (First Name) Waden (Last Name)

   Date/Time contacted: 9/2/21 (Date) 2:27 (Time) ☐ am ☒ pm

4. Others notified (select all that apply); ☐ Conservation Commission

   ☐ Harbormaster ☐ Shellfish Warden ☐ Division of Marine Fisheries

   ☐ Downstream Drinking Water Supplier ☐ Watershed Association

   ☐ Beach Resource Manager ☐ Other: ____ (specify)

C. SSO Information

1. SSO Discovered: 9/2/21 9:00 (Time) ☒ am ☐ pm

   By: Dan Stoneking

2. SSO Stopped: 9/2/21 (Date) 11:30 (Time) ☒ am ☐ pm

3. SSO Discharge from: ☒ Sanitary Sewer Manhole ☐ Pump Station

   ☐ Backup into Property ☐ Other: Kimball Road (specify)

4. SSO Discharge to: ☒ Ground Surface (no release to surface water)

   ☐ Direct to Receiving Water ____ (surface water)

   ☐ Catch basin to Receiving Water ____ (surface water)

   ☐ Backup into Property Basement

Massachusetts Department of Environmental Protection
Bureau of Water Protection – Wastewater Management Program

Sanitary Sewer Overflow (SSO)/Bypass Notification Form

FOR DEP USE ONLY

Tax Identification Number

C. SSO Information (cont.)

Location: Manhole at End of Kimball Road
(Description of discharge site or closest address)

5. Estimated SSO Volume at time of this Report: 100 Gallons

   Method of Estimating Volume: Visual

6. Cause of SSO Event:

   ☒ Rain Event ☐ Pump Station Failure ☐ Insufficient Capacity in System

   ☐ Treatment Unit failure

   ☐ Sewer System Blockage: ☐ Pipe Collapse ☐ Root Intrusion ☐ Grease Blockage

   ☐ Other: _____
   (Specify)

7. Corrective Actions Taken:

   Continuous rain caused a surcharge in the system.

   Impact Area cleaned and/or disinfected: ☒ Yes ☐ No

   Disinfected area with biodegradable sanitizing virucide cleaner.

   Corrective Actions Completed: ☐ Yes ☒ No

   No corrective action required, waited until system surcharge subsided.

D. Comments/Attachments/Follow-up

I wish to provide (select all that apply):

☐ Attachment ☐ Additional comments below: ☐ No additional comments or attachments

Additional comments and planned actions:

Massachusetts Department of Environmental Protection
Bureau of Water Protection – Wastewater Management Program

Sanitary Sewer Overflow (SSO)/Bypass Notification Form

FOR DEP USE ONLY

Tax Identification Number

E. Certification Statement

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

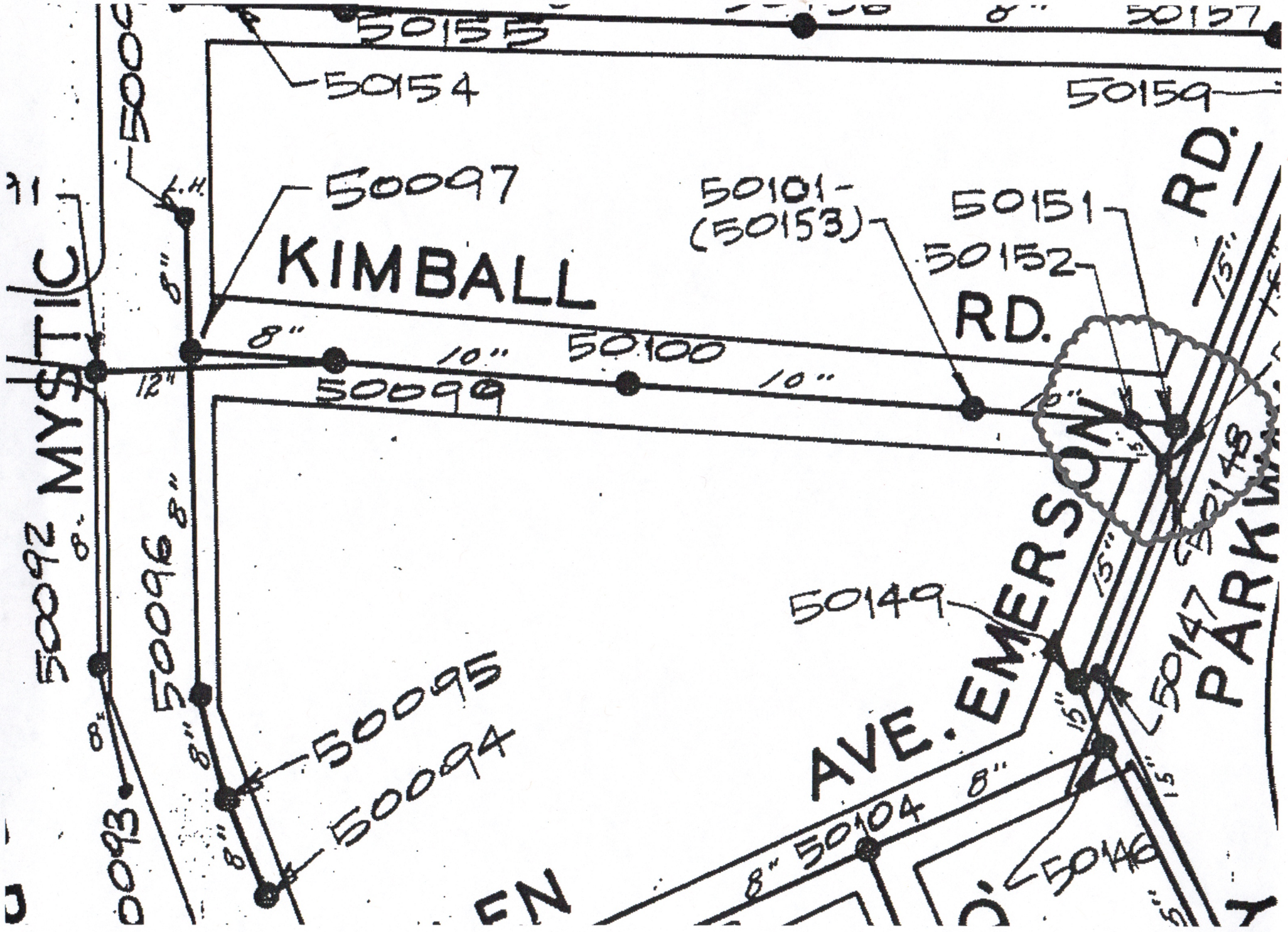
Signature of Authorized Representative

9/2/21
Date Signed

Please keep a copy of this report for your records. When submitting additional information, include the MassDEP Incident Number from this report.

MassDEP Regional Office and EPA Telephone and Fax Numbers:

Northeast Region	Phone: 978-694-3215	Fax: 978-694-3499
Southeast Region	Phone: 508-946-2750	Fax: 508-947-6557
Central Region	Phone: 508-792-7650	Fax: 508-792-7621
Western Region	Phone: 413-784-1100	Fax: 413-784-1149
EPA	Phone: 617-918-1510	
EPA for Southeast Region, David Turin	Phone: 617-918-1598	Fax: 617-918-0598
EPA for Northeast, Central and Western Regions, Douglas Koopman	Phone: 617-918-1747	Fax: 617-918-0747
DEP 24-hour emergency	Phone: 888-304-1133	


50155
50154
50157
50159
50097
KIMBALL
RD.
50101
(50153)
50151
50152
50100
50099
MYSTIC
50092
50096
50095
50094
50093
AVE.
EMERSON
50149
50147
50148
PARKWAY
50104
50146
8"
10"
12"
15"

TOWN OF ARLINGTON
Department of Public Works
51 Grove Street
Arlington, Massachusetts 02476
Office(781) 316-3320 Fax (781) 316-3281

Engineering Division

2021 MS4 Annual Report
Septic System Addendum
September 28, 2021

Address #	Street	Status
13	Aerial Street	
19	Brand Street	
25	Brand Street	
84	Brand Street	
147	Charlton Street	connected
96	Edmund Road	connected
35	Evergreen Lane	
30	Garden Street	
271	Hillside Ave	connected
16	James Street	connected
21	James Street	
263	Lake Street	
331	Lake Street	
56	Madison Ave	connected
1520	Mass Ave.	
339	Mystic Street	connected
385	Mystic Street	connected
429	Mystic Street	connected
469	Mystic Street	connected
471	Mystic Street	connected
4	Old Mystic Street	
16	Perth Road	connected
146	Pleasant Street	removed 6/13/17
281	Renfrew Street	
110	Rhinecliff Street	
110	Rhinecliff Street	
18	Ronald Road	connected
22	Ronald Road	
600	Summer Street	
15	Thesda Street	connected
59	Thesda Street	?
69	Westminster Ave	
193	Westminster Ave	connected
96	Westmoreland Ave	removed 8/19/21
11	Woodbury Street	
20	Woodbury Street	
26	Garden Street	removed in 2020

TOWN OF ARLINGTON
Department of Public Works
51 Grove Street
Arlington, Massachusetts 02476
Office(781) 316-3320 Fax (781) 316-3281

Engineering Division

2021 MS4 Annual Report

Outfall Screening Addendum

September 28, 2021

The Town of Arlington has contracted with Weston & Sampson Engineers to perform and coordinate necessary outfall screening,sampling and IDDE investigations in conjunction with the year 3 Permit. During the course of this work Weston & Sampson will update the GIS data and mapping accuracy on the Stormwater GIS layers. Results of the screening will be in coordination with the outfall prioritization matrix and IDDE Plan. The Town fo Arlington and Weston and Sampson will review and evaluate progress made and identify the scope of progress, update the long term plan and review budgetary items.

- All Town Outfalls were Inspected and screend for Dry Weather Sampling during Permit Year #3
- Intercommuniity Connections were inspected and screened during Permit Year #3

TOWN OF ARLINGTON
Department of Public Works
51 Grove Street
Arlington, Massachusetts 02476
Office(781) 316-3320 Fax (781) 316-3281

Engineering Division

2021 MS4 Annual Report

IDDE Addendum

September 28, 2021

Included with this addendum are the following:

1. Catchment Prioritization & Ranking; Year #3
2. Dry Weather Outfall Inspections and Sampling Data; Year #3

TOWN OF ARLINGTON
Department of Public Works
51 Grove Street
Arlington, Massachusetts 02476
Office(781) 316-3320 Fax (781) 316-3281

Engineering Division

2021 MS4 Annual Report

Public Education & Outreach Addendum

September 28, 2021

The following are the outreach notices performed during the permit year.

MS4 YEAR 3 (7/1/2020 - 6/30/2021) WEB POSTINGS

STORMWATER WEBPAGE
(https://www.arlingtonma.gov/departments/public-works/engineering/stormwater-information)

1. Tip Sheets
    a. Tips Sheet :
        i. Scoop Your Dog's Poop
        ii. Catch Your Rain
        iii. Test Your Soil and Read Your Fertilizer Labels
        iv. Bag or Compost Your Grass
        v. Bag Your Leaves

2. Additional Resources (7/1/2020 – 6/30/21) – Resources of Note to Local Cable Channel:
    a. Construction; 6/15/2021
    b. Grass Clippings; 5/20/2012
    c. Catch Basins & Sump Pumps; 2/17/2021
    d. Salt & Deicing; 12/24/2020
    e. Developers; 12/2/21
    f. Leaf Cleanup; 10/29/2020
    g. Porous Pavement and Leaf Litter; 10/2/2021
    h. Restaurants; 9/3/2020
    i. Pesticides; 7/31/2020

TOWN OF ARLINGTON
Department of Public Works
51 Grove Street
Arlington, Massachusetts 02476
Office(781) 316-3320 Fax (781) 316-3281

Engineering Division

September 28, 2021

2021 MS4 Annual Report
Year #3
Catch Basin Cleaning Optimization Plan - Addendum

September 28, 2021

Year #3

Annual Catch Basin maintenance scheduled to continue and underway at the time of writing this report. Data collection of sediment depths will occur during the catch basin cleaning program. Upon completion, the location of each catch basin with sediment greater than 50% of sump will be identified and an additional round of catch basin cleaning will be planned for those specific catch basins.

- The Town has implemented a work order system identifying catch basins needing repairs that has been implemented during permit Year #

BMP ID: **2021ST#1**

Location: 76 River Street

Watershed Area: 45892 sf = 1.05 ac.

% Impervious Cover: 70% Multi-Family High Density Residential

BMPType: Street Trench

Infiltration Rate: 2.41 in/hr

Location 76 River Street

Watershed Area: 1.05 acres

BMP Type: Street Trench

			As-built data	
L =	18	feet	L =	feet
W =	3	feet	W =	feet
D =	2.58	feet	D =	feet
P removal =	0.97	lb/yr	P removal =	lb/yr
N removal =	5.85	lb/yr	N removal =	lb/yr
TSS Removal =	253.30	lb/yr	TSS Removal =	lb/yr
Vol. Reductic	146.00	cf	Vol. Reduction =	cf

BMP ID: **2021ST#4**

Location: 48 River Street

Watershed Area: 43402 sf = 1.00 ac.

% Impervious Cover: 70% Multi-Family High Density Residential

BMPType: Street Trench

Infiltration Rate: 2.41 in/hr

Location 48 River Street

Watershed Area: 1.00 acres

BMP Type: Street Trench

L =	18	feet	**As-built data**		
W =	3	feet	L =		feet
D =	2.58	feet	W =		feet
P removal =	0.95	lb/yr	D =		feet
N removal =	5.70	lb/yr	P removal =		lb/yr
TSS Removal =	244.54	lb/yr	N removal =		lb/yr
Vol. Reductic	143.00	cf	TSS Removal =		lb/yr
			Vol. Reduction =		cf

BMP ID: **2021ST#7**

Location: 26 River Street

Watershed Area: 52424 sf = 1.20 ac.

% Impervious Cover: 70% Multi-Family High Density Residential

BMPType: Street Trench

Infiltration Rate: 2.41 in/hr

Location 26 River Street

Watershed Area: 1.20 acres

BMP Type: Street Trench

L =	18	feet	**As-built data**	
W =	3.5	feet	L =	feet
D =	2	feet	W =	feet
P removal =	0.94	lb/yr	D =	feet
N removal =	5.75	lb/yr	P removal =	lb/yr
TSS Removal =	254.23	lb/yr	N removal =	lb/yr
Vol. Reductic	144.00	cf	TSS Removal =	lb/yr
			Vol. Reduction =	cf

BMP ID: **2021ST#10**

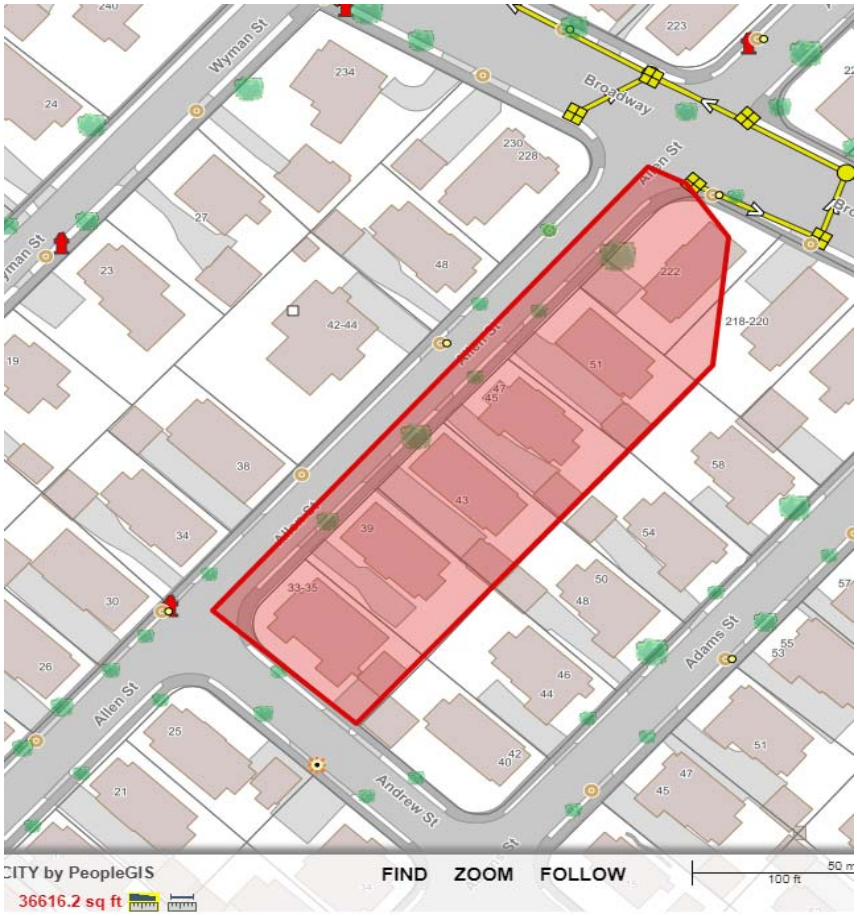
Location: 222 Broadway

Watershed Area: 36616 sf = 0.84 ac.

% Impervious Cover: 70% Multi-Family High Density Residential

BMPType: Street Trench

Infiltration Rate: 2.41 in/hr



Location 222 Broadway

Watershed Area: 0.84 acres

BMP Type: Street Trench

L =	17	feet	**As-built data**	
W =	3	feet	L =	feet
D =	2.75	feet	W =	feet
P removal =	0.88	lb/yr	D =	feet
N removal =	5.23	lb/yr	P removal =	lb/yr
TSS Removal =	216.98	lb/yr	N removal =	lb/yr
Vol. Reductic	131.00	cf	TSS Removal =	lb/yr
			Vol. Reduction =	cf

BMP ID: **2021ST#13**

Location: 23 Oxford Street

Watershed Area: 52471 sf = 1.20 ac.

% Impervious Cover: 70% Multi-Family High Density Residential

BMPType: Street Trench

Infiltration Rate: 2.41 in/hr

Location	23 Oxford Street			
Watershed Area:	1.20	acres		
BMP Type:	Street Trench		**As-built data**	
L =	16	feet	L =	feet
W =	3.5	feet	W =	feet
D =	2.42	feet	D =	feet
P removal =	1.00	lb/yr	P removal =	lb/yr
N removal =	6.06	lb/yr	N removal =	lb/yr
TSS Removal =	267.03	lb/yr	TSS Removal =	lb/yr
Vol. Reductic	152.00	cf	Vol. Reduction =	cf

BMP ID: **2021ST#16**

Location: 26 Bates Road

Watershed Area: 39800 sf = 0.91 ac.

% Impervious Cover: 70% Multi-Family High Density Residential

BMPType: Street Trench

Infiltration Rate: 2.41 in/hr

Location	26 Bates Road			
Watershed Area:	0.91	acres		
BMP Type:	Street Trench		**As-built data**	
L =	17	feet	L =	feet
W =	3	feet	W =	feet
D =	2.25	feet	D =	feet
P removal =	0.75	lb/yr	P removal =	lb/yr
N removal =	4.55	lb/yr	N removal =	lb/yr
TSS Removal =	200.45	lb/yr	TSS Removal =	lb/yr
Vol. Reductic	114.00	cf	Vol. Reduction =	cf

BMP ID: **2021ST#19**

Location: 17 Adams Street

Watershed Area: 30075 sf = 0.69 ac.

% Impervious Cover: 70% Multi-Family High Density Residential

BMPType: Street Trench

Infiltration Rate: 2.41 in/hr

Location 17 Adams Street

Watershed Area: 0.69 acres

BMP Type: Street Trench

L =	17	feet	**As-built data**	
W =	3	feet	L =	feet
D =	2	feet	W =	feet
P removal =	0.67	lb/yr	D =	feet
N removal =	4.04	lb/yr	P removal =	lb/yr
TSS Removal =	171.65	lb/yr	N removal =	lb/yr
Vol. Reductic	101.00	cf	TSS Removal =	lb/yr
			Vol. Reduction =	cf

BMP ID: **2021ST#22**

Location: 22 University Road

Watershed Area: 32487 sf = 0.75 ac.

% Impervious Cover: 70% Multi-Family High Density Residential

BMPType: Street Trench

Infiltration Rate: 2.41 in/hr

Location 22 University Road

Watershed Area: 0.75 acres

BMP Type: Street Trench

L =	15	feet	**As-built data** L =	feet
W =	3.5	feet	W =	feet
D =	2	feet	D =	feet
P removal =	0.71	lb/yr	P removal =	lb/yr
N removal =	4.28	lb/yr	N removal =	lb/yr
TSS Removal =	183.66	lb/yr	TSS Removal =	lb/yr
Vol. Reductic	107.00	cf	Vol. Reduction =	cf

BMP ID: **2021ST#25**

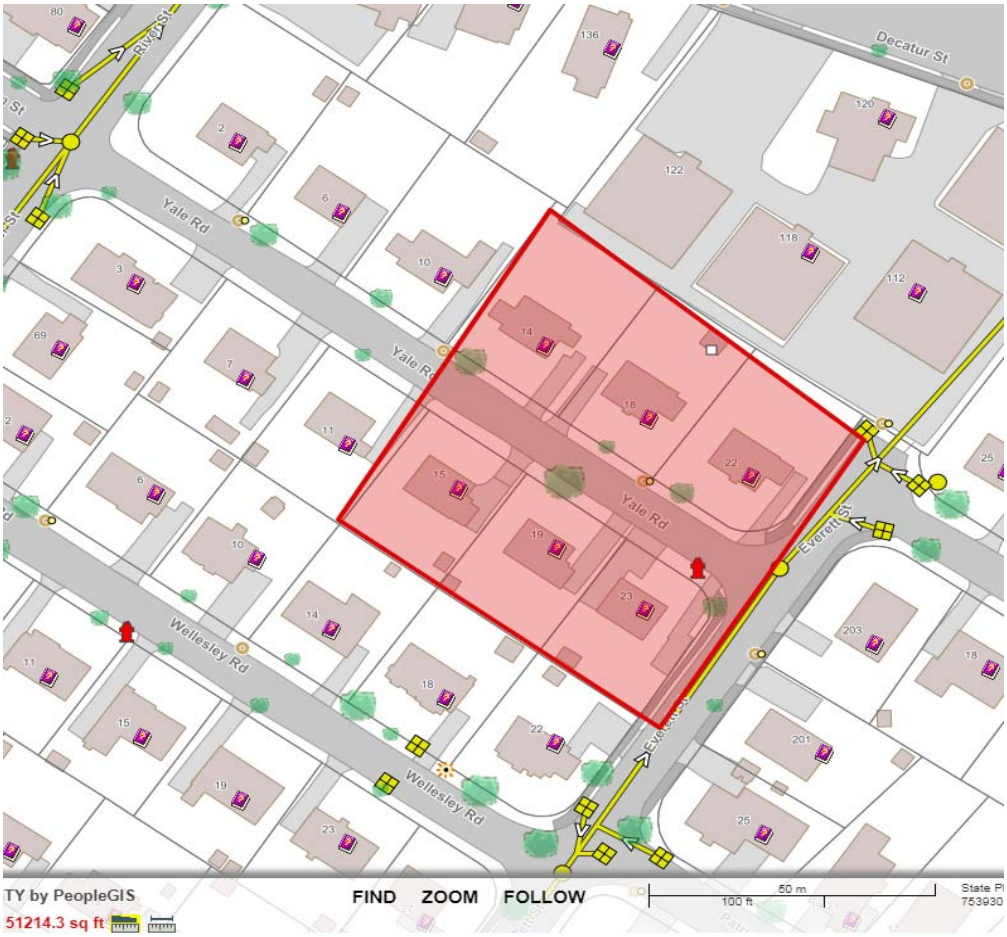
Location: 22 Yale Road

Watershed Area: 51214 sf = 1.18 ac.

% Impervious Cover: 70% Multi-Family High Density Residential

BMPType: Street Trench

Infiltration Rate: 2.41 in/hr



Location 22 Yale Road

Watershed Area: 1.18 acres

BMP Type: Street Trench

			As-built data	
L =	17	feet	L =	feet
W =	3	feet	W =	feet
D =	2.17	feet	D =	feet
P removal =	0.85	lb/yr	P removal =	lb/yr
N removal =	5.21	lb/yr	N removal =	lb/yr
TSS Removal =	232.20	lb/yr	TSS Removal =	lb/yr
Vol. Reductic	130.00	cf	Vol. Reduction =	cf

BMP ID: **2021ST#28**

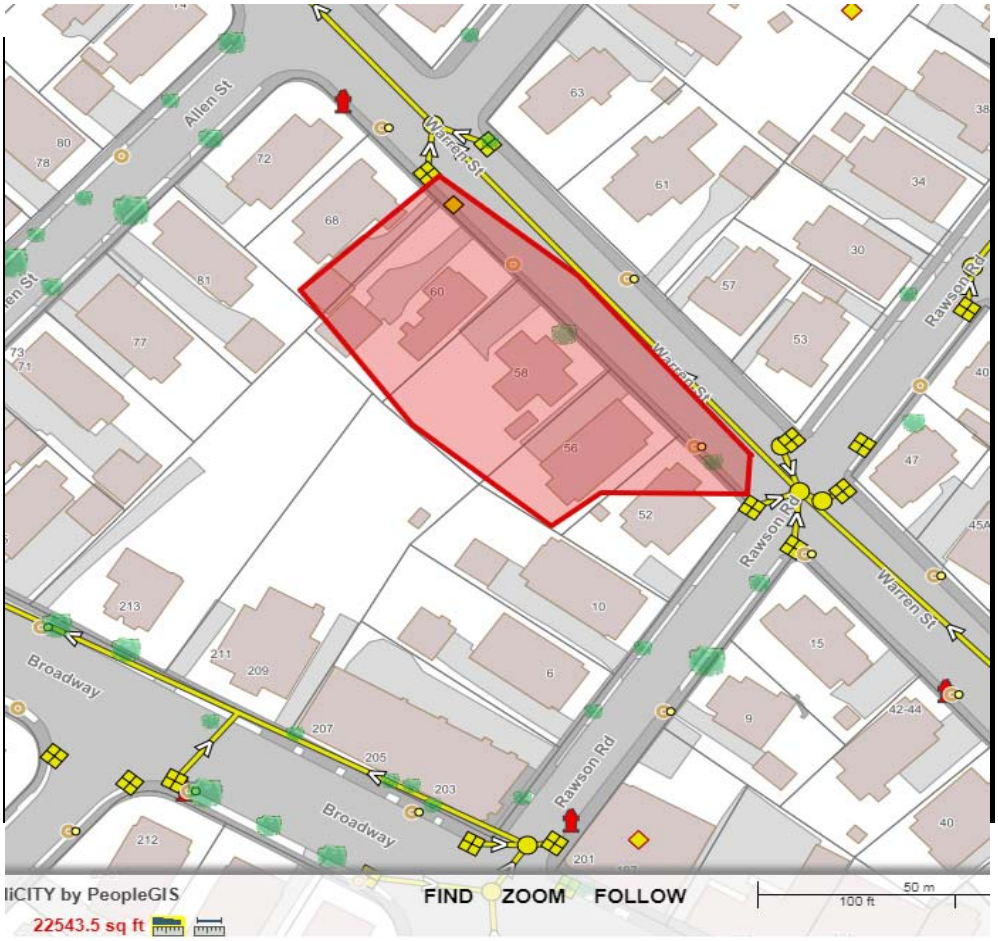
Location: 68 Warren Street

Watershed Area: 22543 sf = 0.52 ac.

% Impervious Cover: 70% Multi-Family High Density Residential

BMPType: Street Trench

Infiltration Rate: 2.41 in/hr



Location 68 Warren Street

Watershed Area: 0.52 acres

BMP Type: Street Trench

			As-built data	
L =	15	feet	L =	feet
W =	3	feet	W =	feet
D =	2	feet	D =	feet
P removal =	0.55	lb/yr	P removal =	lb/yr
N removal =	3.29	lb/yr	N removal =	lb/yr
TSS Removal =	135.90	lb/yr	TSS Removal =	lb/yr
Vol. Reductic	82.00	cf	Vol. Reduction =	cf

BMP ID:	**2021ST#31**				
Location:	281 Massachusetts Avenue				
Watershed Area:	33519	sf	=	0.77	ac.
% Impervious Cover:	70%	Multi-Family High Density Residential			
BMPType:	Street Trench				
Infiltration Rate:	2.41	in/hr			

Location	281 Massachusetts Avenue			
Watershed Area:	0.77	acres		
BMP Type:	Street Trench		**As-built data**	
L =	15	feet	L =	feet
W =	3	feet	W =	feet
D =	2	feet	D =	feet
P removal =	0.66	lb/yr	P removal =	lb/yr
N removal =	3.99	lb/yr	N removal =	lb/yr
TSS Removal =	175.43	lb/yr	TSS Removal =	lb/yr
Vol. Reductic	100.00	cf	Vol. Reduction =	cf

Design Information

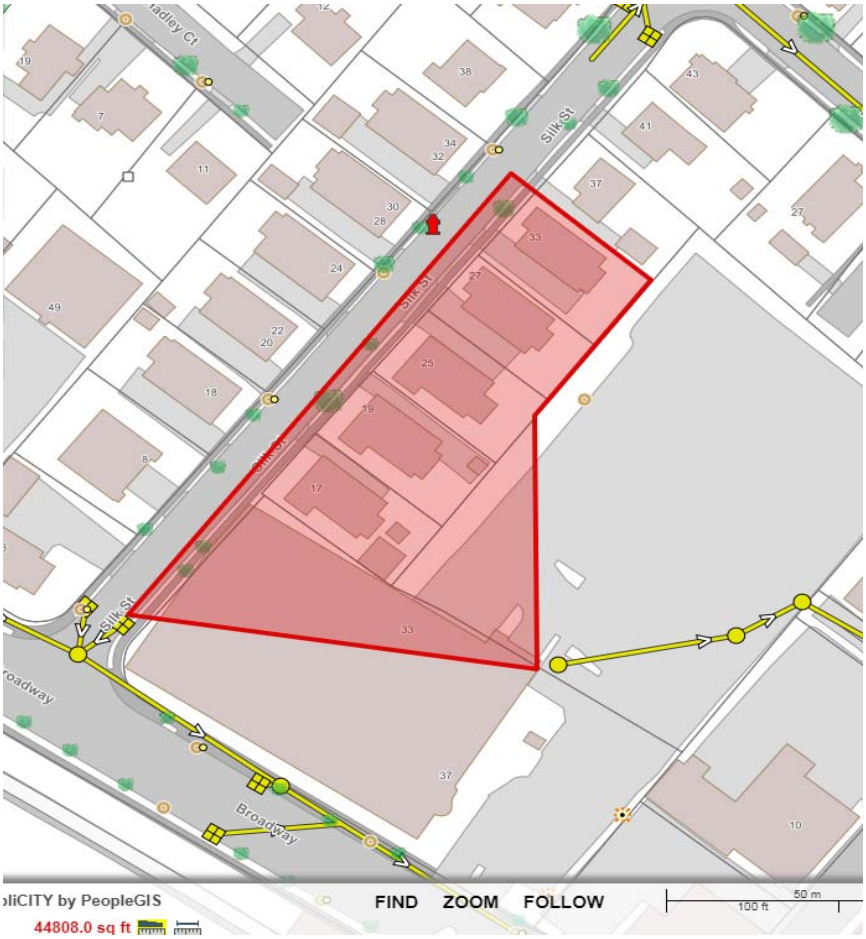
BMP ID:	**2021ST#2**				
Location:	80 River Street				
Watershed Area:	53171	sf	=	1.22	ac.
% Impervious Cover:	70%	Multi-Family High Density Residential			
BMPType:	Street Trench				
Infiltration Rate:	2.41	in/hr			

Location	80 River Street				
Watershed Area:	1.22	acres			
BMP Type:	Street Trench		**As-built data**		
L =	18	feet	L =		feet
W =	3	feet	W =		feet
D =	2.5	feet	D =		feet
P removal =	1.00	lb/yr	P removal =		lb/yr
N removal =	6.07	lb/yr	N removal =		lb/yr
TSS Removal =	267.79	lb/yr	TSS Removal =		lb/yr
Vol. Reductic	152.00	cf	Vol. Reduction =		cf

BMP ID:	**2021ST#5**				
Location:	36 River Street				
Watershed Area:	44104	sf	=	1.01	ac.
% Impervious Cover:	70%	Multi-Family High Density Residential			
BMPType:	Street Trench				
Infiltration Rate:	2.41	in/hr			

Location	36 River Street				
Watershed Area:	1.01	acres			
BMP Type:	Street Trench			**As-built data**	
L =	16	feet		L =	feet
W =	3	feet		W =	feet
D =	2.75	feet		D =	feet
P removal =	0.93	lb/yr		P removal =	lb/yr
N removal =	5.59	lb/yr		N removal =	lb/yr
TSS Removal =	242.65	lb/yr		TSS Removal =	lb/yr
Vol. Reductic	140.00	cf		Vol. Reduction =	cf

BMP ID:	**2021ST#8**				
Location:	37 Broadway				
Watershed Area:	44808	sf	=	1.03	ac.
% Impervious Cover:	70%	Multi-Family High Density Residential			
BMPType:	Street Trench				
Infiltration Rate:	2.41	in/hr			



Location	37 Broadway			
Watershed Area:	1.03	acres		
BMP Type:	Street Trench		**As-built data**	
L =	18	feet	L =	feet
W =	3	feet	W =	feet
D =	2	feet	D =	feet
P removal =	0.81	lb/yr	P removal =	lb/yr
N removal =	4.93	lb/yr	N removal =	lb/yr
TSS Removal =	218.01	lb/yr	TSS Removal =	lb/yr
Vol. Reductic	123.00	cf	Vol. Reduction =	cf

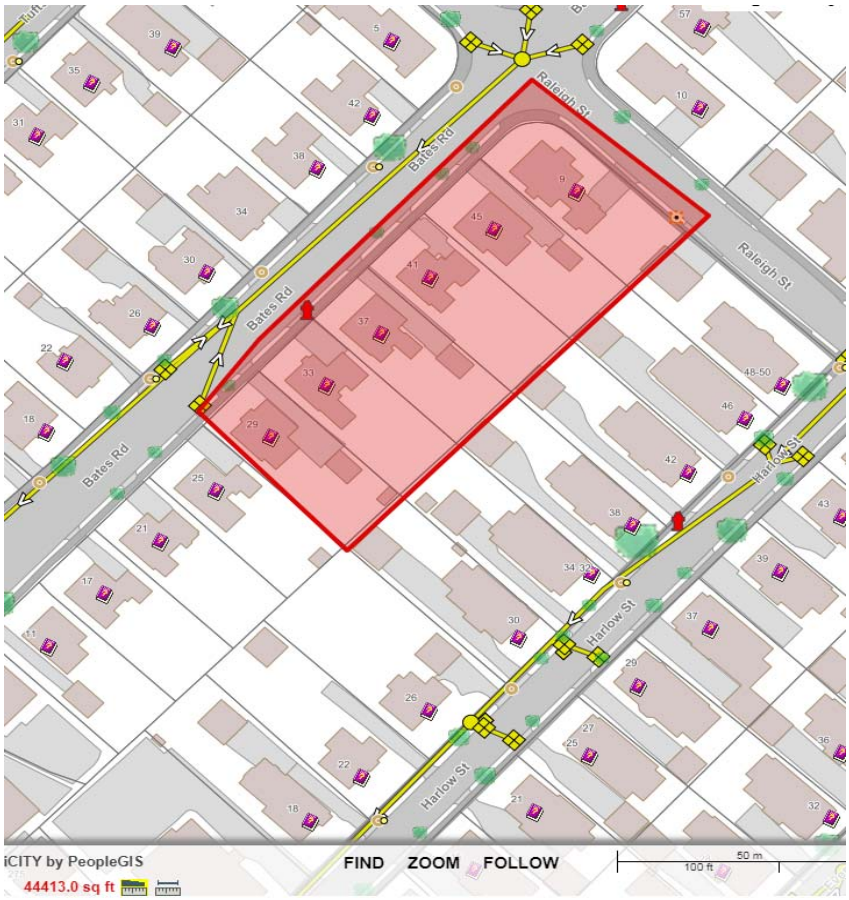
BMP ID:	**2021ST#11**				
Location:	39 Exeter Street				
Watershed Area:	31621	sf	=	0.73	ac.
% Impervious Cover:	70%	Multi-Family High Density Residential			
BMPType:	Street Trench				
Infiltration Rate:	2.41	in/hr			

Location	39 Exeter Street				
Watershed Area:	0.73	acres			
BMP Type:	Street Trench		**As-built data**		
L =	18	feet	L =		feet
W =	3.5	feet	W =		feet
D =	2	feet	D =		feet
P removal =	0.77	lb/yr	P removal =		lb/yr
N removal =	4.62	lb/yr	N removal =		lb/yr
TSS Removal =	190.61	lb/yr	TSS Removal =		lb/yr
Vol. Reductic	116.00	cf	Vol. Reduction =		cf

BMP ID:	**2021ST#14**				
Location:	6 Raleigh Street				
Watershed Area:	51666	sf	=	1.19	ac.
% Impervious Cover:	70%	Multi-Family High Density Residential			
BMPType:	Street Trench				
Infiltration Rate:	2.41	in/hr			

Location	6 Raleigh Street				
Watershed Area:	1.19	acres			
BMP Type:	Street Trench		**As-built data**		
L =	15	feet	L =		feet
W =	3	feet	W =		feet
D =	2.67	feet	D =		feet
P removal =	0.91	lb/yr	P removal =		lb/yr
N removal =	5.54	lb/yr	N removal =		lb/yr
TSS Removal =	245.65	lb/yr	TSS Removal =		lb/yr
Vol. Reductic	139.00	cf	Vol. Reduction =		cf

BMP ID:	**2021ST#17**			
Location:	29 Bates Road			
Watershed Area:	44413	sf	=	0.69 ac.
% Impervious Cover:	70%	Multi-Family High Density Residential		
BMPType:	Street Trench			
Infiltration Rate:	2.41	in/hr		



Location	29 Bates Road			
Watershed Area:	0.69	acres		
BMP Type:	Street Trench		**As-built data**	
L =	15	feet	L =	feet
W =	3	feet	W =	feet
D =	2.67	feet	D =	feet
P removal =	0.88	lb/yr	P removal =	lb/yr
N removal =	5.32	lb/yr	N removal =	lb/yr
TSS Removal =	233.64	lb/yr	TSS Removal =	lb/yr
Vol. Reductic	133.00	cf	Vol. Reduction =	cf

BMP ID: **2021ST#20**

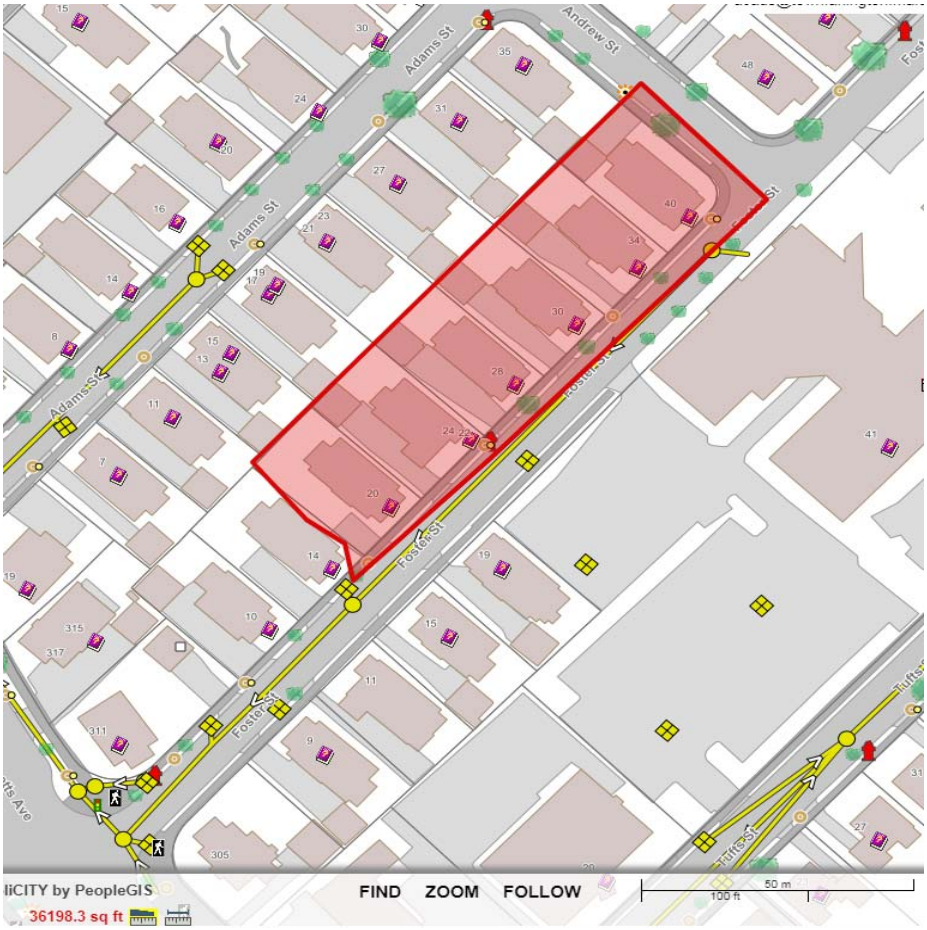
Location: 14 Foster Street

Watershed Area: 36198 sf = 0.83 ac.

% Impervious Cover: 70% Multi-Family High Density Residential

BMPType: Street Trench

Infiltration Rate: 2.41 in/hr



Location 14 Foster Street

Watershed Area: 0.83 acres

BMP Type: Street Trench

			As-built data		
L =	17	feet	L =		feet
W =	3	feet	W =		feet
D =	2	feet	D =		feet
P removal =	0.77	lb/yr	P removal =		lb/yr
N removal =	4.66	lb/yr	N removal =		lb/yr
TSS Removal =	201.16	lb/yr	TSS Removal =		lb/yr
Vol. Reductic	117.00	cf	Vol. Reduction =		cf

BMP ID:	**2021ST#23**				
Location:	23 University Road				
Watershed Area:	27444	sf	=	0.63	ac.
% Impervious Cover:	70%	Multi-Family High Density Residential			
BMPType:	Street Trench				
Infiltration Rate:	2.41	in/hr			

Location	23 University Road				
Watershed Area:	0.63	acres			
BMP Type:	Street Trench			**As-built data**	
L =	16	feet		L =	feet
W =	3	feet		W =	feet
D =	2	feet		D =	feet
P removal =	0.63	lb/yr		P removal =	lb/yr
N removal =	3.75	lb/yr		N removal =	lb/yr
TSS Removal =	158.16	lb/yr		TSS Removal =	lb/yr
Vol. Reductic	94.00	cf		Vol. Reduction =	cf

BMP ID: **2021ST#26**

Location: 37 Wyman Terrace

Watershed Area: 42613 sf = 0.98 ac.

% Impervious Cover: 70% Multi-Family High Density Residential

BMPType: Street Trench

Infiltration Rate: 2.41 in/hr

Location 37 Wyman Terrace

Watershed Area: 0.98 acres

BMP Type: Street Trench

			As-built data		
L =	14	feet	L =		feet
W =	3	feet	W =		feet
D =	2.17	feet	D =		feet
P removal =	0.70	lb/yr	P removal =		lb/yr
N removal =	4.30	lb/yr	N removal =		lb/yr
TSS Removal =	191.81	lb/yr	TSS Removal =		lb/yr
Vol. Reductic	108.00	cf	Vol. Reduction =		cf

BMP ID: **2021ST#29**

Location: 281 Massachusetts Avenue

Watershed Area: 33519 sf = 0.77 ac.

% Impervious Cover: 70% Multi-Family High Density Residential

BMPType: Street Trench

Infiltration Rate: 2.41 in/hr

Location 281 Massachusetts Avenue

Watershed Area: 0.77 acres

BMP Type: Street Trench

			As-built data	
L =	15	feet	L =	feet
W =	3	feet	W =	feet
D =	2	feet	D =	feet
P removal =	0.66	lb/yr	P removal =	lb/yr
N removal =	3.99	lb/yr	N removal =	lb/yr
TSS Removal =	175.43	lb/yr	TSS Removal =	lb/yr
Vol. Reductic	100.00	cf	Vol. Reduction =	cf

BMP ID: **2021ST#32**

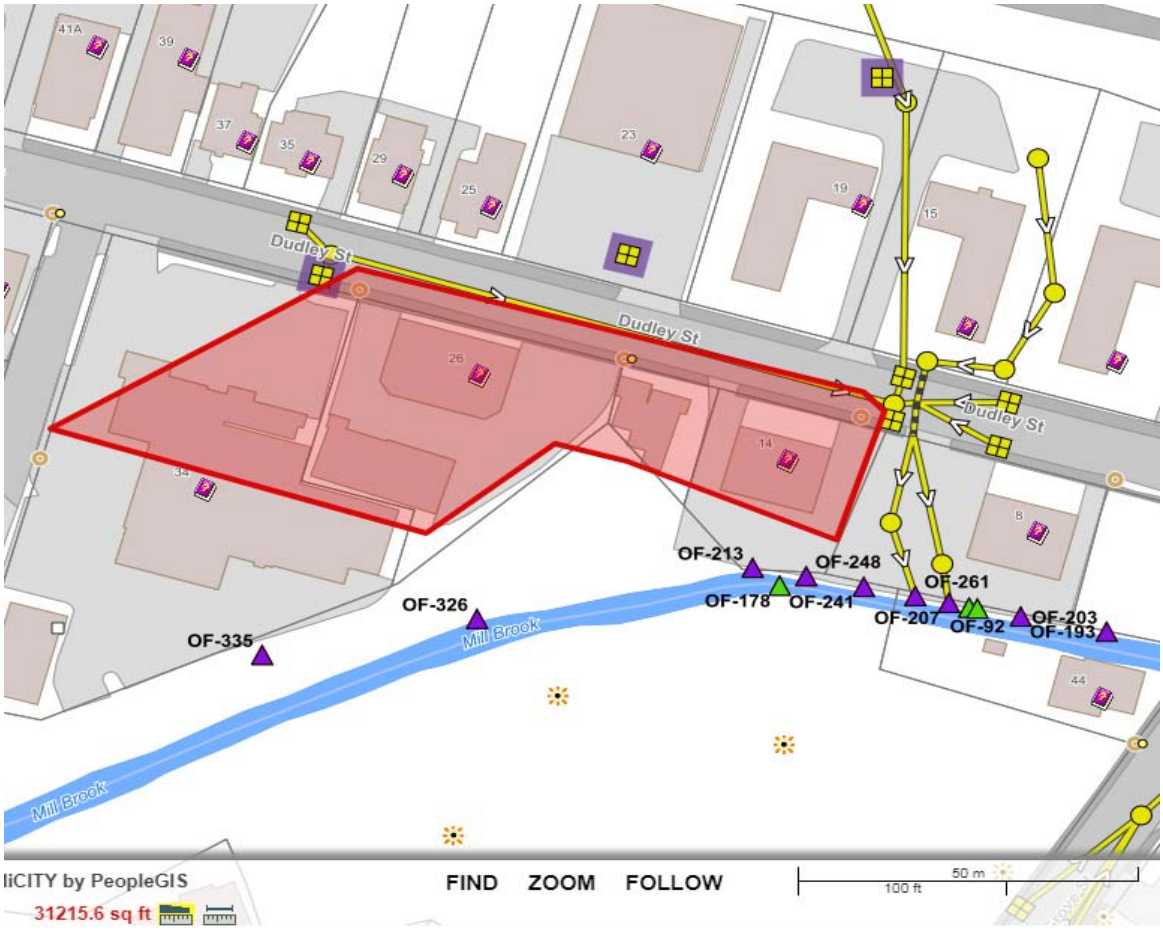
Location: 14 Dudley Street

Watershed Area: 31215 sf = 0.72 ac.

% Impervious Cover: 70% Multi-Family High Density Residential

BMPType: Street Trench

Infiltration Rate: 2.41 in/hr



Location	14 Dudley Street				
Watershed Area:	0.72	acres			
BMP Type:	Street Trench		**As-built data**		
L =	16	feet	L =		feet
W =	3	feet	W =		feet
D =	2.25	feet	D =		feet
P removal =	0.71	lb/yr	P removal =		lb/yr
N removal =	4.25	lb/yr	N removal =		lb/yr
TSS Removal =	179.90	lb/yr	TSS Removal =		lb/yr
Vol. Reductic	106.00	cf	Vol. Reduction =		cf

BMP ID:	**2021ST#3**			
Location:	54 River Street			
Watershed Area:	34170	sf	0.78	ac.
% Impervious Cover:	70%	Multi-Family High Density Residential		
BMPType:	Street Trench			
Infiltration Rate:	2.41	in/hr		

Location	54 River Street			
Watershed Area:	0.78	acres		
BMP Type:	Street Trench		**As-built data**	
L =	18	feet	L =	feet
W =	3.5	feet	W =	feet
D =	2.25	feet	D =	feet
P removal =	0.85	lb/yr	P removal =	lb/yr
N removal =	5.07	lb/yr	N removal =	lb/yr
TSS Removal =	207.21	lb/yr	TSS Removal =	lb/yr
Vol. Reduc	127.00	cf	Vol. Reduction =	cf

BMP ID:	**2021ST#6**			
Location:	30 River Street			
Watershed Area:	47352	sf	1.09	ac.
% Impervious Cover:	70%	Multi-Family High Density Residential		
BMPType:	Street Trench			
Infiltration Rate:	2.41	in/hr		

Location	30 River Street				
Watershed Area:	1.09	acres			
BMP Type:	Street Trench		**As-built data**		
L =	17	feet	L =		feet
W =	3.5	feet	W =		feet
D =	2.17	feet	D =		feet
P removal =	0.94	lb/yr	P removal =		lb/yr
N removal =	5.71	lb/yr	N removal =		lb/yr
TSS Removal =	250.64	lb/yr	TSS Removal =		lb/yr
Vol. Reduc	143.00	cf	Vol. Reduction =		cf

BMP ID:	**2021ST#9**			
Location:	43 Broadway			
Watershed Area:	49024	sf	1.13	ac.
% Impervious Cover:	70%	Multi-Family High Density Residential		
BMPType:	Street Trench			
Infiltration Rate:	2.41	in/hr		

Location	43 Broadway			
Watershed Area:	1.13	acres		
BMP Type:	Street Trench		**As-built data**	
L =	18	feet	L =	feet
W =	3.5	feet	W =	feet
D =	2	feet	D =	feet
P removal =	0.93	lb/yr	P removal =	lb/yr
N removal =	5.65	lb/yr	N removal =	lb/yr
TSS Removal =	249.28	lb/yr	TSS Removal =	lb/yr
Vol. Reduc	141.00	cf	Vol. Reduction =	cf

BMP ID:	**2021ST#12**			
Location:	40 Exeter Street			
Watershed Area:	62761	sf	1.44	ac.
% Impervious Cover:	70%	Multi-Family High Density Residential		
BMPType:	Street Trench			
Infiltration Rate:	2.41	in/hr		

Location	40 Exeter Street				
Watershed Area:	1.44	acres			
BMP Type:	Street Trench		**As-built data**		
L =	17	feet	L =		feet
W =	3	feet	W =		feet
D =	2	feet	D =		feet
P removal =	0.85	lb/yr	P removal =		lb/yr
N removal =	5.27	lb/yr	N removal =		lb/yr
TSS Removal =	238.92	lb/yr	TSS Removal =		lb/yr
Vol. Reduc	132.00	cf	Vol. Reduction =		cf

BMP ID: **2021ST#15**

Location: 10 Raleigh Street

Watershed Area: 40987 sf 0.94 ac.

% Impervious Cover: 70% Multi-Family High Density Residential

BMPType: Street Trench

Infiltration Rate: 2.41 in/hr

Location	10 Raleigh Street				
Watershed Area:	0.94	acres			
BMP Type:	Street Trench		**As-built data**		
L =	17	feet	L =		feet
W =	3	feet	W =		feet
D =	2	feet	D =		feet
P removal =	0.76	lb/yr	P removal =		lb/yr
N removal =	4.61	lb/yr	N removal =		lb/yr
TSS Removal =	203.58	lb/yr	TSS Removal =		lb/yr
Vol. Reduc	115.00	cf	Vol. Reduction =		cf

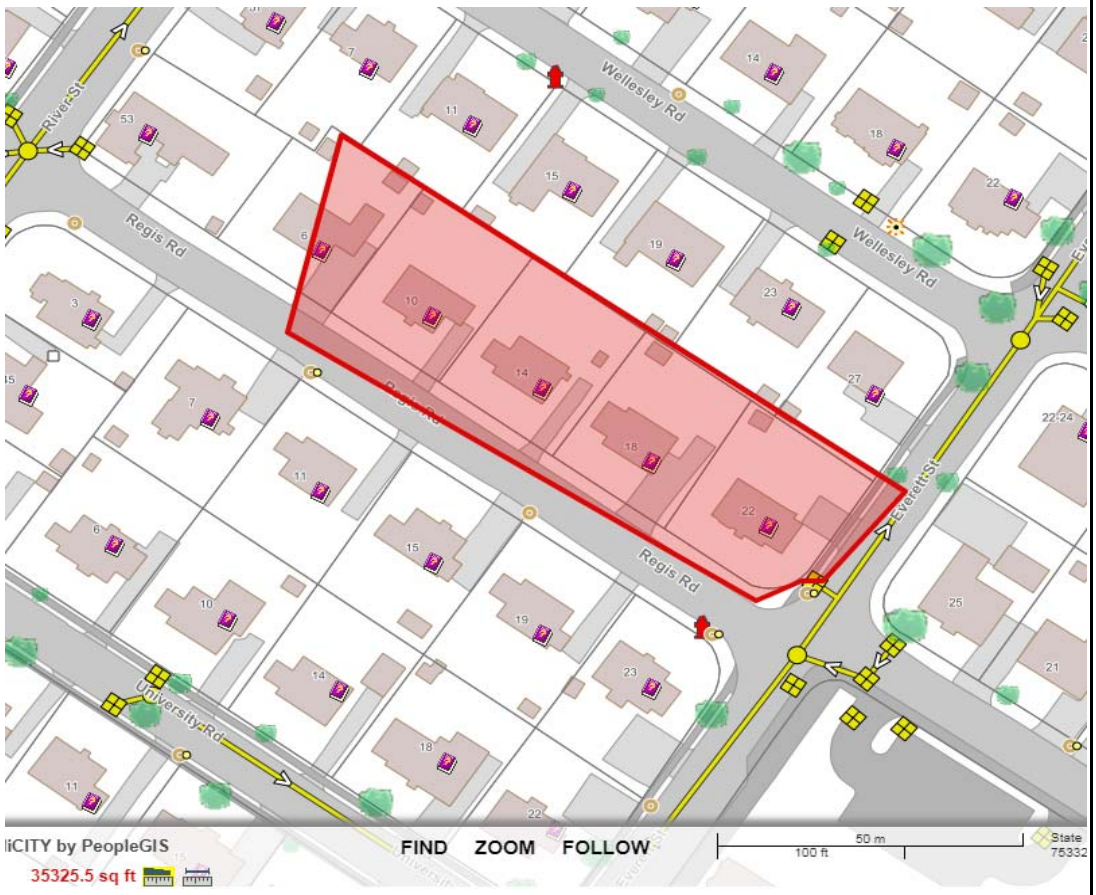
BMP ID:	**2021ST#18**			
Location:	16 Adams Street			
Watershed Area:	30286	sf	0.70	ac.
% Impervious Cover:	70%	Multi-Family High Density Residential		
BMPType:	Street Trench			
Infiltration Rate:	2.41	in/hr		

Location	16 Adams Street			
Watershed Area:	0.70	acres		
BMP Type:	Street Trench		**As-built data**	
L =	16	feet	L =	feet
W =	3.5	feet	W =	feet
D =	2.42	feet	D =	feet
P removal =	0.79	lb/yr	P removal =	lb/yr
N removal =	4.71	lb/yr	N removal =	lb/yr
TSS Removal =	190.10	lb/yr	TSS Removal =	lb/yr
Vol. Reduc	118.00	cf	Vol. Reduction =	cf

BMP ID:	**2021ST#21**			
Location:	24 Foster Street			
Watershed Area:	41399	sf	0.95	ac.
% Impervious Cover:	70%	Multi-Family High Density Residential		
BMPType:	Street Trench			
Infiltration Rate:	2.41	in/hr		

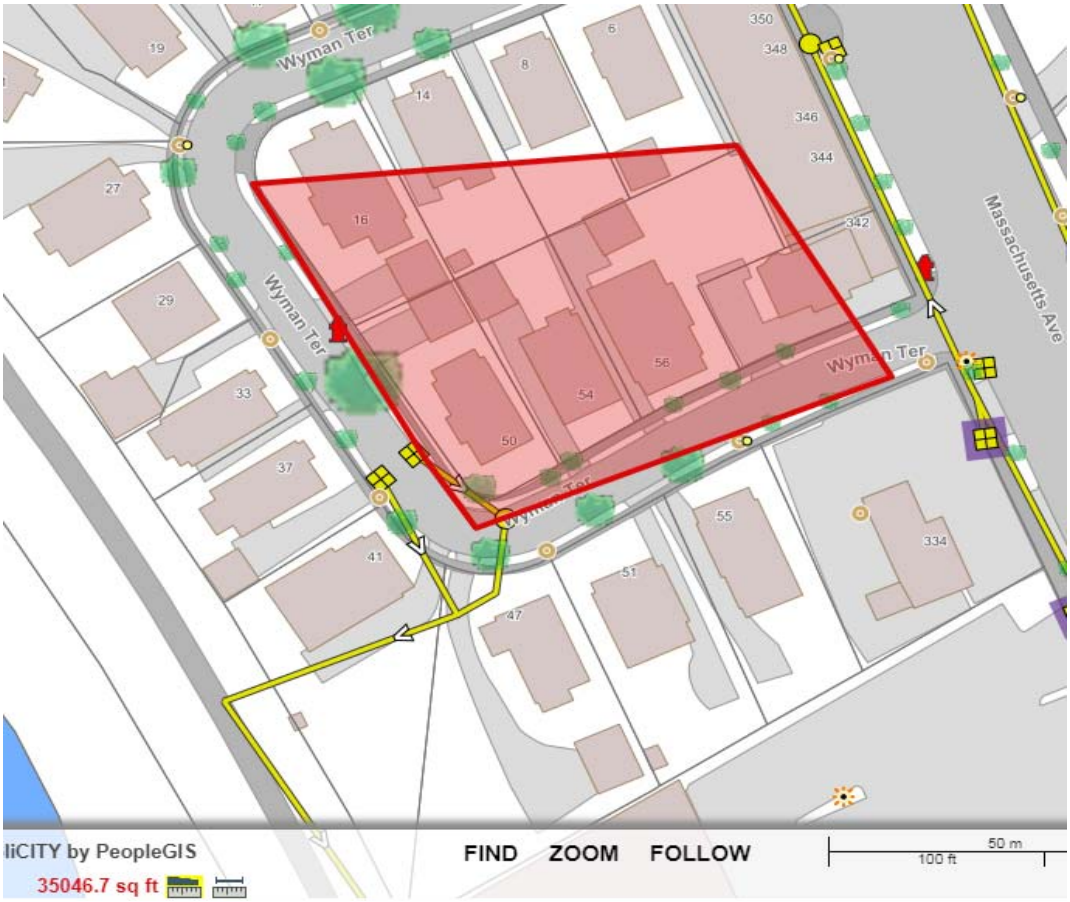
Location	24 Foster Street			
Watershed Area:	0.95	acres		
BMP Type:	Street Trench		**As-built data**	
L =	18	feet	L =	feet
W =	3	feet	W =	feet
D =	2	feet	D =	feet
P removal =	0.79	lb/yr	P removal =	lb/yr
N removal =	4.82	lb/yr	N removal =	lb/yr
TSS Removal =	212.35	lb/yr	TSS Removal =	lb/yr
Vol. Reduc	121.00	cf	Vol. Reduction =	cf

BMP ID:	**2021ST#24**			
Location:	22 Regis Road			
Watershed Area:	35326	sf	0.81	ac.
% Impervious Cover:	70%	Multi-Family High Density Residential		
BMPType:	Street Trench			
Infiltration Rate:	2.41	in/hr		



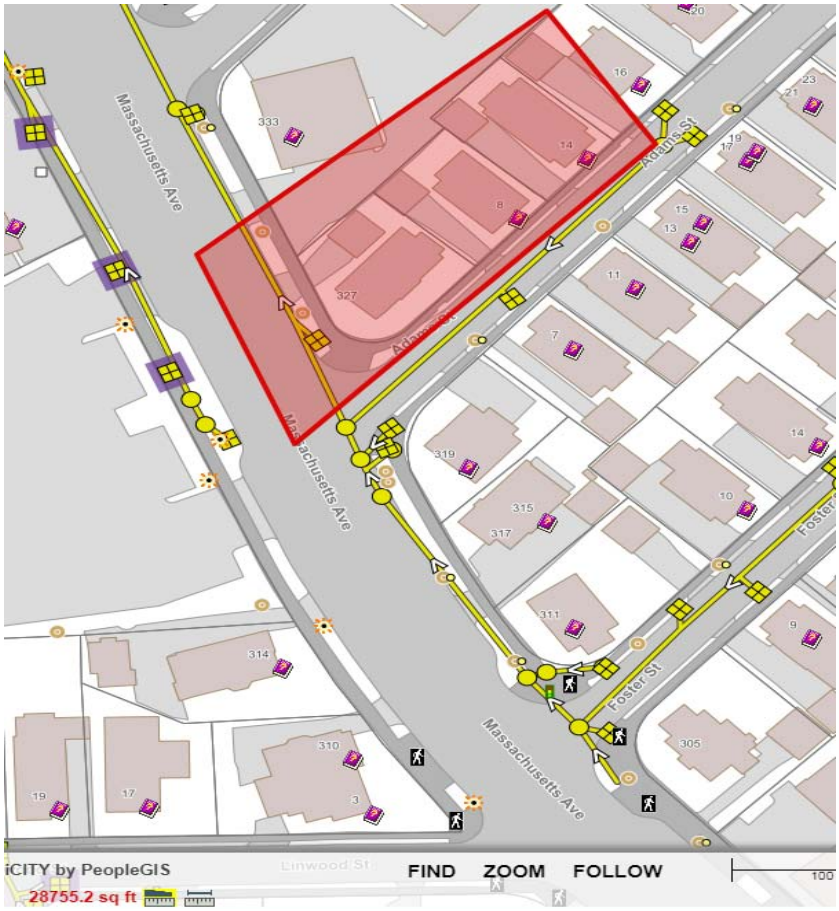
Location	22 Regis Road			
Watershed Area:	0.81	acres		
BMP Type:	Street Trench		**As-built data**	
L =	16	feet	L =	feet
W =	3	feet	W =	feet
D =	2	feet	D =	feet
P removal =	0.70	lb/yr	P removal =	lb/yr
N removal =	4.24	lb/yr	N removal =	lb/yr
TSS Removal =	186.32	lb/yr	TSS Removal =	lb/yr
Vol. Reduc	106.00	cf	Vol. Reduction =	cf

BMP ID:	**2021ST#27**			
Location:	50 Wyman Terrace			
Watershed Area:	35047	sf	0.80	ac.
% Impervious Cover:	70%	Multi-Family High Density Residential		
BMPType:	Street Trench			
Infiltration Rate:	2.41	in/hr		



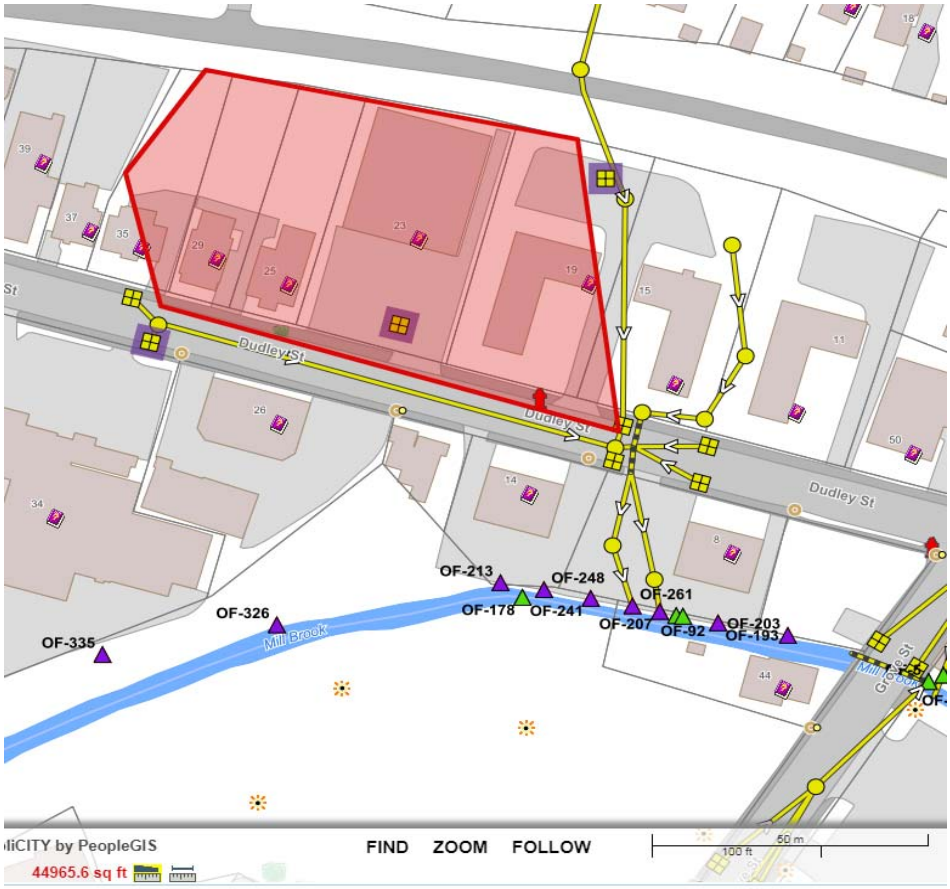
Location	50 Wyman Terrace			
Watershed Area:	0.80	acres		
BMP Type:	Street Trench		**As-built data**	
L =	16	feet	L =	feet
W =	3	feet	W =	feet
D =	2.5	feet	D =	feet
P removal =	0.79	lb/yr	P removal =	lb/yr
N removal =	4.72	lb/yr	N removal =	lb/yr
TSS Removal =	199.89	lb/yr	TSS Removal =	lb/yr
Vol. Reduc	118.00	cf	Vol. Reduction =	cf

BMP ID:	**2021ST#30**			
Location:	327 Massachusetts Avenue			
Watershed Area:	28755	sf	0.66	ac.
% Impervious Cover:	70%	Multi-Family High Density Residential		
BMPType:	Street Trench			
Infiltration Rate:	2.41	in/hr		



Location	327 Massachusetts Avenue			
Watershed Area:	0.66	acres		
BMP Type:	Street Trench		**As-built data**	
L =	15	feet	L =	feet
W =	3	feet	W =	feet
D =	2	feet	D =	feet
P removal =	0.62	lb/yr	P removal =	lb/yr
N removal =	3.72	lb/yr	N removal =	lb/yr
TSS Removal =	160.42	lb/yr	TSS Removal =	lb/yr
Vol. Reduc	93.00	cf	Vol. Reduction =	cf

BMP ID:	**2021ST#33**			
Location:	15 Dudley Street			
Watershed Area:	44965	sf	1.03	ac.
% Impervious Cover:	70%	Multi-Family High Density Residential		
BMPType:	Street Trench			
Infiltration Rate:	2.41	in/hr		



Location	15 Dudley Street				
Watershed Area:	1.03	acres			
BMP Type:	Street Trench		**As-built data**		
L =	15	feet	L =		feet
W =	3	feet	W =		feet
D =	2	feet	D =		feet
P removal =	0.71	lb/yr	P removal =		lb/yr
N removal =	4.33	lb/yr	N removal =		lb/yr
TSS Removal =	193.81	lb/yr	TSS Removal =		lb/yr
Vol. Reduc	108.00	cf	Vol. Reduction =		cf