Town of Randolph, MA

Stormwater Management Program (SWMP): Volume 3

NPDES Phase II Small MS4 General Permit

June 2020

GOOD HOUSEKEEPING & POLLUTION PREVENTION

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GOOD HOUSEKEEPING & POLLUTION PREVENTION

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Prepared for: Town of Randolph, Ma

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1.0 Introduction

This Good Housekeeping and Pollution Prevention Plan has been developed by the Town of Randolph (the Town) to prevent and/or reduce pollutants in stormwater runoff from being discharged to the water of the United States in accordance with the 2016 MS4 general permit (the Permit). The Permit requires a Stormwater Management Program (SWMP), which is comprised of four volumes. This Good Housekeeping and Pollution Prevention Plan is Volume 3 of 4.

- SWMP Volume 1: Stormwater Management Program
- SWMP Volume 2: Illicit Discharge Detection and Elimination (IDDE) Plan
- SWMP Volume 3: Good Housekeeping and Pollution Prevention Plan
- SWMP Volume 4: Annual Reports

2.0 Objective

The objective is to protect water quality from all permittee-owned operations by preventing or reducing pollutant runoff from town-owned facilities and maintaining town-owned MS4 infrastructure.

3.0 Statement of Responsibilities

Randolph Department of Public Works (DPW) is the lead municipal department responsible for implementing the Good Housekeeping program with assistance from other Town departments.

The Department of Public Works will conduct meetings involving persons with key roles from the departments listed above to review the responsibilities and coordinate Good Housekeeping efforts between the departments. The meetings will educate the different departments about Good Housekeeping and the roles of each in identifying and resolving illicit discharges.

4.0 DEFINITIONS

The following definitions are provided for terms used in this Plan.

Best Management Practices (BMPs) is schedules of activities, practices (and prohibitions of practices), structures, vegetation, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Erosion is the removal of soil particles by wind and water. Often the eroded debris (silt or sediment) becomes a pollutant via stormwater runoff. Erosion occurs naturally but can be intensified by human activities such as farming, development, road-building, and timber harvesting.

Hazardous materials are common everyday products that are used in and around homes and municipal facilities including paint, paint thinner, herbicides, and pesticides-that, due to their chemical nature, can be hazardous if not properly disposed.

An illicit discharge is any discharge to a municipal separate storm sewer that is not composed entirely of stormwater, except discharges pursuant to a NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer) and discharges resulting from firefighting activities.

Municipal Separate Storm Sewer is a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):

(i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States;
(ii) Designed or used for collecting or conveying stormwater;
(iii) Which is not a combined sewer; and
(iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

Municipal Separate Storm Sewer System (MS4) means all separate storm sewers that are defined as "large" or "medium" or "small" municipal storm sewer systems pursuant to paragraphs 40 CFR 122.26 (b)(4) and (b)(7), or designated under paragraph 40 126.26(a) (1)(v). For the purposes of this permit "MS4" may also refer to the permittee with jurisdiction over the sewer system.

Pollutants are contaminants existing at a concentration high enough to endanger the environment or the public health or to be otherwise objectionable.

Sediment is solid material, both mineral and organic, that is being transported or has been moved from its site of origin by air, water, gravity, or ice and has come to rest on the earth's surface. Soil, sand, and minerals washed from land into water, usually after rain.

SWPPP stands for "Stormwater Pollution Prevention Plan." It is a plan of practices specific to a facility or site to make sure that the stormwater discharged from the site is clean and not polluted. The plan

describes all the site operator's activities to prevent stormwater contamination, control sedimentation and erosion, and comply with the requirements of the Clean Water Act.

5.0 Inventory of Municipal Owned Facilities

The Town has developed an inventory of all permittee owned facilities where drainage infrastructure is present and/or where pollutants may be exposed to stormwater within the following three categories: (1) parks and open space, (2) buildings and facilities and (3) vehicle and equipment storage. An inventory table and map of permittee owned facilities is provided in Appendix A and B.

6.0 Municipal Facilities Operation and Maintenance Programs

The following are Operation and Maintenance (O&M) procedures and best management practices (BMPs) for the three categories of municipally owned facilities identified in Section 5.0 to be implemented at each facility as applicable. An inventory of facilities and reporting log for maintenance is included in Appendix B. Site specific O&M Maps are provided in the Appendix for sites with extensive drainage infrastructure and/or BMPs to clarify these features and their locations. In some cases drainage structures were full of sediment or could not be opened for various reasons so mapping of site specific stormwater infrastructure could not be completed. This was noted in the inventory so that once structures are cleaned and accessible the site specific information can be updated.

6.1 Parks and Open Space

Parks and open space operations and maintenance activities commonly involve the operation of equipment such as mowers and tractors; disposal of waste from mowing, planting, weeding, raking, pruning, and trash collection; application of pesticides, herbicides, and fertilizers; cleaning and maintenance of park amenities such as play equipment, restrooms, and structures; and snow removal. These activities have the potential to generate contaminants such as sediments and toxic chemicals that may be picked up by rainwater, thereby entering the storm drainage system and receiving waters.

Pesticides, Herbicides and Fertilizers

The Town currently does not use fertilizers, pesticides or herbicides in open spaces and public parks or as part of regular maintenance activities. The Town does not contract out work that requires these products nor does it store these products in its facilities. If for any reason fertilizer and/or pesticide is needed, use shall be in strict accordance with the manufacturer's instructions and with local regulations and use shall be minimized.

Lawn Maintenance and Landscaping Activities

Lawn maintenance and landscaping activities in town are minimal and limited to mowing, tree-trimming and general landscaping on Town-owned land. The Town allows some lawn clippings to remain on mowed areas to (re)fertilize the soils and biodegrade. Anything that is removed is taken to the DPW yard for compost and is removed by a contractor who disposes of the material at their facility.

The use of landscaping equipment with small engines such as lawn mowers and weed whackers requires the transport and use of gasoline and oil, which provides a risk of spills. Spills may occur while fueling vehicles or equipment and poorly maintained equipment may leak during use.

Best management practices for lawn and landscaping activities include the following:

- All vehicles and equipment receive regular maintenance and are inspected for leaks or defective parts.
- Fueling activities should occur on impervious surfaces when possible with proper containment and a spill response kit in close proximity.
- Vehicles transporting landscaping equipment, pesticides, fertilizer, or paint shall be equipped with a spill response kit in case a spill or leak does occur.
- Personnel involved in fuel or oil handling are familiar with the spill response kit and spill response and cleanup procedures" and are properly trained to efficiently respond to spill and leak events.
- Never wash debris from parking lots into the storm drain.
- Leave clippings on grassy areas or dispose of them in the trash or by composting.
- Collect grass clippings and leaves after mowing. Do not blow or wash them into the street, gutter, or storm drains. Properly recycle or dispose of organic waste after mowing, weeding, and trimming.
- Brush off mowers (reels and decks) and tractors over grassy areas or in contained washout areas. Do not hose off mowers over paved areas that drain into the MS4 or directly to surface waters.
- Repair broken sprinkler heads as soon as possible.
- Only irrigate at a rate that can infiltrate into the soil to limit run-off and avoid irrigating close to impervious surfaces such as parking lots and sidewalks.
- When establishing new plantings, use alternative landscaping materials, such as drought resistant or native plants to reduce the need for irrigation and extensive application of fertilizers and pesticides.

Water Fowl

The Town does not currently have issues with waterfowl in specific areas. If needed to address waterfowl congregation areas and prevent droppings from entering the MS4, best management practices for waterfowl management include the following:

- Install signage discouraging the feeding waterfowl.
- Using good landscaping practices to discourage waterfowl. Plant low-growing bushes near the water's edge and avoid lawn areas around surface water, instead opt for more natural landscaping.

Pet Waste and Trash Management

Most parks in Town have trash barrels that are available year round. The DPW collects from trash receptacles throughout Town on Monday and Friday every week and the day before a holiday if it falls on Monday or Friday.

There is a dog park at 169 West Street with trash barrels and dog waste stations provided. The Town has dog regulations posted on their website that include off leash regulations. Pet waste is required to be disposed of properly per the Town's General Code Section 195-10. The following site provides advice and recommendations on installation, servicing, signage, location and quantity of dog waste stations: http://www.zerowasteusa.com/advice.asp

Best management practices for pet waste and trash management include the following:

- Provide pet waste stations with bags and trash receptacles where pets are permitted. Post signs describing the proper disposal of pet waste.
- All waste and recycling containers must be leak-tight with tight-fitting lids or covers.
- Place waste and recycling containers indoors or under a roof or overhang whenever possible.
- Clean and sweep up around outdoor waste containers regularly.
- Arrange for waste and recyclables to be picked up regularly and disposed of at approved disposal facilities.
- Do not wash out waste or recycling containers outdoors or in a parking lot.
- Conduct periodic inspections of waste areas to check for leaks and spills.
- Ensure there are enough trash and recycling containers at appropriate areas and monitor waste and recycling containers at heavily-used sites and on holidays to ensure that there is no overflow.

Erosion Control

Parks and open space maintenance activities include erosion control, specifically in regards to poor vegetation cover and particularly within 50 feet of surface water. Best management practices include the following:

- Prevention of erosion and sedimentation is preferable to installing treatments devices.
- Protect vegetated and wooded buffers and leave vegetated areas undisturbed to the extent possible.
- Inspect sites regularly for locations of poor vegetation cover, erosion and sedimentation and channelization. If stabilization is required, corrective actions should be identified and implemented as soon as possible.
- If exposed, soils should be stabilized by mulching, seeding with fast-growing native grass and/or planted with native tree and shrubs. Use erosion control blankets when seeding slopes.
- If necessary, slow stormwater runoff velocities with conveyance measures such as riprap channels or vegetated swales, check dams, level spreaders and outlet protection, etc.
- A buffer/filter strip should be left around surface waters. No fertilizers or pesticides should be applied in the buffer/filter strip except where necessary.

6.2 BUILDINGS AND FACILITIES

Municipal buildings and facilities (schools, municipal offices, police and fire stations, municipal pools, parking garages, etc.) often house various chemicals, such as petroleum products and hazardous materials. As a result, these buildings and facilities are potential sources of pollutant discharges to the storm drainage system. The goal of these procedures is to provide guidance to municipal employees on the use, storage, and disposal of chemicals and other stormwater pollutants to reduce the discharge of pollutants from the MS4.

Use Storage and Disposal of Potential Pollutants

Potential pollutants or hazardous wastes that may be used and stored in or around municipal building and facilities include pesticides, paints, cleaners, petroleum products, fertilizers, and solvents. Careful handling and proper storage of these products are the best means of preventing spills and pollution to the environment. Best management practices include the following:

- Storage and handling areas should be covered or enclosed to reduce potential contact with stormwater and wind.
- Potential pollutants should be transported using approved methods and containers to minimize the chance of spillage, and by employees that have familiarity with the potential environmental and human health hazards of the products.
- Proper spill kits applicable to the products being used at each specific building or facility should be easily accessible, and marked clearly so employees can follow procedures quickly and effectively. Leaks or spills should be cleaned up in a timely manner.
- Establish separate storage areas for these types of products with measures in place to contain any spill leaking out of the storage area.
- A designated person should be responsible for these areas.
- The storage area should be inspected frequently, kept clean and in good order with proper labels and signs, and consistent disposal practices.
- Floor drains in storage areas should be disconnected from the stormwater system.
- Routinely inspect buildings and facilities for areas of potential leaks.
- Paint and other chemicals should not be applied on the outside of buildings when it is raining or prior to expected rain.
- When sanding, painting, power washing, etc., ensure that sites are properly prepared (e.g., use tarps) and cleaned (e.g., use dry cleaning methods) especially if they are near storm drains. Protect catch basins when maintenance work is conducted upgradient of them.
- When painting, use a drop cloth and clean up any spills immediately.
- Do not leave open containers on the ground where they may accidentally tip over.
- Do not discharge chlorinated pool water into the stormwater system. Water must be properly dechlorinated and tested before it is discharged.
- Ensure that the washwater does not flow into the storm system. Containment or filtering systems should be provided.

Spill Prevention Plans

The Town has spill kits and prevention and control plans in place for all buildings and facilities where hazardous wastes are stored or used. These are coordinated with the fire department as necessary.

Per the Massachusetts Clean Water Toolkit Fact Sheet for Spill Prevention and Control Plans, it is recommended that Spill Prevention and Control Plans (SPCP) clearly state measures to stop the source of a spill, contain the spill, clean up the spill, dispose of contaminated materials, and train personnel to prevent and control future spills. The SPCP should define material handling procedures and storage requirements and outline actions necessary to reduce spill potential and impacts on stormwater quality. The plan can be a procedural handbook or a poster placed in several locations at the site.

Waste Management

All liquid and solid waste must be disposed of properly. Some of the most common sources of pollution at municipal facilities are a result of littering, improper collection of debris, and improper disposal of solid or liquid waste. Best management practices for handling, storage, transfer and disposal of trash and recyclables include the following:

- All waste and recycling receptacles must be leak-tight with tight-fitting lids or covers.
- Keep lids on dumpsters and containers closed at all times unless adding or removing material. If using an open-top roll-off dumpster, cover it and tie it down with a tarp unless adding materials.
- Place waste or recycling receptacles indoors or under a roof or overhang whenever possible.
- Locate dumpsters on a flat, paved surface and install berms or curbs around the storage area to prevent run-on and run-off.
- Do not locate dumpsters over or adjacent to catch basins.
- Prior to transporting waste, trash, or recycling, ensure that containers are not leaking (double bag if needed) and properly secure containers to the vehicle.
- Clean up any liquid leaks or spills with dry cleanup methods.
- Arrange for waste or recycling to be picked up regularly and disposed of at approved disposal facilities.
- Never place hazardous materials, liquids, or liquid-containing wastes in a dumpster or recycling or trash container.
- Do not wash trash or recycling containers outdoors or in parking lots.
- Conduct periodic inspections of solid and liquid waste storage areas to check for leaks and spills.
- Conduct periodic inspections of work areas to ensure that all wastes are being disposed of properly.
- In dumpster areas, regularly pick up surrounding trash and debris and regularly sweep the area.
- In compactor areas, regularly check the hydraulic fluid hoses and reservoir to ensure that there are no cracks or leaks. Regularly sweep the area.

Sweeping and Cleaning of Parking Lots

Vehicle surfaces can collect a variety of contaminants such as sediments, oil, grease, and metals during daily activities. The MS4 permit requires that parking lots are swept and surrounding areas of the facility are kept clean to reduce runoff of pollutants.

Parking lot sweeping and cleaning follows the same schedule as street sweeping, at least twice per year in Spring and Fall, with additional sweeping as need for specific sites. Procedures for sweeping parking lots are included in Section 7.2 Streets and Parking Lots.

Catchbasin and Stormwater Management BMP Maintenance

All catchbasin on town-owned sites are to be included in the Town catchbasin inspection and cleaning optimization program described in Section 7.1.

Stormwater BMPs for facilities are to be included in the Town Stormwater Treatment Structures BMP Inspection and Maintenance program described in Section 7.5 and maintained as necessary to provide optimum treatment of stormwater runoff.

6.3 VEHICLES AND EQUIPMENT

Regular maintenance of both municipal and contracted vehicles and heavy equipment not only prolongs the life of municipal assets but also helps reduce the potential for leaking of fluids associated with normal wear and tear. Potential pollutants include fuels, oil, antifreeze, brake fluid, solvents, and battery acid. The goal of this procedure is to provide guidance to municipal employees to help reduce the discharge of pollutants from the MS4 as a result of leaks from vehicles and equipment.

Storage

Rainfall on vehicles and equipment storage areas has the potential to collect pollutants and result in high loads of nutrients, metals, and hydrocarbons in stormwater runoff. To prevent this, best management practices include the following:

- All vehicles, equipment and hazardous waste storage containers should receive regular maintenance and be inspected for leaks or defective parts.
- Vehicles and equipment should be stored on a covered slab or within a building with a common drain that discharges to an oil/water separator.
- Outdoor storage of vehicles and equipment should not occur in areas that drain to the storm drain system unless adequate devices are in place to remove oil, sediment and other pollutants.
- Vehicles with fluid leaks should be stored indoors or containment be provided until repaired.

Vehicle and Equipment Maintenance

Vehicle and equipment maintenance shall be conducted in a manor to reduce the discharge of pollutants by following these best management practices:

- Conduct routine inspections of heavy equipment and vehicles to proactively identify maintenance needs or potential leaks.
- Use drip pans as needed until repairs can be performed and when drip pans are used, avoid overtopping.

- Drain fluids from leaking or wrecked vehicles and parts as soon as possible. Dispose of fluids properly.
- Perform routine preventive maintenance to ensure heavy equipment and vehicles are operating optimally.
- Recycle or dispose of waste properly and promptly.
- Conduct all body repair and painting work indoors.
- Minimize waste from paints and thinners. Calculate paint needs based on surface area.
- Do not wash or hose down storage areas unless there is prior approval to collect and discharge the water into the sanitary sewer. Use dry cleanup methods (vacuum, sweep) to clean up metal filings and dust and paint chips from grinding, shaving and sanding. Sweep debris from wet sanding after allowing it to dry overnight on the shop floor. Dispose of waste properly; never dump waste into storm or sanitary sewers.
- Do not dump any liquids or other materials outside, especially near or in storm drains or ditches.
- Store materials and waste in labeled containers under cover and in secondary containment.
- Chemicals should not be combined in containers.
- Carefully transfer collected fluids from containers into designated storage areas as soon as possible.
- Store new and used batteries securely to avoid breakage. Store indoors or in secondary containment to contain potential acid leaks. Recycle used batteries.

Fueling Areas

Vehicle fueling activities can result in gasoline and diesel fuel entering the storm drain system. Spills can occur by topping off fuel tanks and during deliveries. If possible, fueling areas are to be places under cover in order to minimize exposure. Best management practices for fueling areas include the following:

- Deliveries to fuel tanks and fueling of vehicles and equipment should occur on impervious surfaces with proper containment and that spill response kits be readily accessible at fueling and maintenance areas.
- Fueling areas owned or operated by the municipality should be covered.

Parts Cleaning

Cleaning of parts can transport pollutants into the municipal system storm drain system or surface waters. The Permit does not authorize these types of discharges. Best management practices to avoid this include the following:

- Use designated areas for engine, parts, or radiator cleaning. Do not wash or rinse parts outdoors. If parts cleaning equipment is not available, then capture parts cleaning fluids.
- Recycle cleaning solution. Never discharge waste to the sanitary sewer or storm sewer.
- Use steam cleaning or pressure washing of parts instead of solvent cleaning. Cleaning equipment must be connected to an oil/water interceptor prior entering the sanitary sewer.

- When using solvents for cleaning, drain parts over the solvent tank to avoid drips to the floor. Catch excess solutions and divert them back to tank. Allow parts to dry over the hot tank.

Vehicle and Equipment Wash Waters

Washing down of maintenance and fueling areas and vehicles can transport pollutants into the municipal system storm drain system or surface waters. The Permit does not authorize these types of discharges. Best management practices to ensure that vehicle wash waters are not discharged to the municipal system or surface waters include the following:

- Vehicles and equipment should be washed inside whenever possible to reduce runoff to the stormwater system.
- Grassy and pervious (porous) surfaces may be used to promote direct infiltration of wash water, providing treatment before recharging groundwater and minimizing runoff to an adjacent stormwater system. Pervious surfaces or other infiltration-based systems should not be used within wellhead protection areas or within other protected resources.
- Avoid discharge of any wash water directly to the storm drainage system or surface water (e.g., stream, pond, or drainage swale)
- Do not use solvents except in dedicated solvent parts washer systems.
- Wash vehicles with non-toxic, phosphate-free, biodegradable cleaners
- Wash vehicles on an asphalt lot using a collection system with containment berms and discharge to water quality devices that will remove pollutants. Detergents should not be used in areas where oil/water separators provide pre-treatment of drainage.
- Floor drains should be connected to a sanitary sewer or tight tank. Floor drains discharging to adjacent surface water bodies or engineered storm drain systems should be permanently plugged or otherwise abandoned before any vehicle wash activities are completed.
- Designate separate areas for routine maintenance and vehicle cleaning. This helps prevent contamination of wash water by motor oils, hydraulic lubricants, greases, or other chemicals.

7.0 Municipal Infrastructure Operation and Maintenance

The Permit requires a written program detailing the activities and procedures the Town will implement so that the MS4 infrastructure is maintained in a timely manner to reduce the discharge of pollutants from the MS4. This program includes operation and maintenance of stormwater infrastructure such as catch basins and treatment structures and the impervious surfaces, streets and parking lots that are tributary to them.

7.1 Catch Basins

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 (older catch basins may not have a sump). Catch basin cleaning reduces foul odors, prevents clogs in the storm drain system, and reduces the loading of trash, suspended solids, nutrients, bacteria, and other pollutants to receiving waters. Randolph DPW performs routine inspection and cleaning of all town-owned catch basins of the MS4 system. The Town tracks the volume of material removed during catch basin cleanings and the percentage sumps are full.

For the purposes of this part, an excessive sediment or debris loading is a catch basin sump more than 50 percent full. A catch basin sump is more than 50 percent 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.

Optimization Procedure:

As part of routine inspections/cleaning events, debris levels in catch basins will be recorded if the basin is found to be more than 50% full– See tracking form in Appendix C.

Records from consecutive inspections/cleaning events will be compared to identify basins that may need to be cleaned more or less frequently than once per year.

Inspection and maintenance for catch basins located near construction activities (roadway construction, residential, commercial, or industrial development or redevelopment) will be prioritized. Clean catch basins in such areas more frequently if inspection and maintenance activities indicate excessive sediment or debris loadings.

If a catch basin sump is more than 50 percent full during two consecutive cleanings the Town will document that finding, investigate the contributing drainage area for sources of excessive sediment loading, and to the extent practicable, address the source or clean the catch basin more frequently. Actions taken will be described in the annual report.

In cases where a catch basin inspection or cleaning reveals abnormal, non-natural discoloration or detection of petroleum and/or chemical odors, the crew performing the inspection and cleaning shall notify supervisors for proper handling of hazardous materials and the Town should implement protocols outlined in their Illicit Discharge Detection & Elimination (IDDE) Plan.

Record Keeping

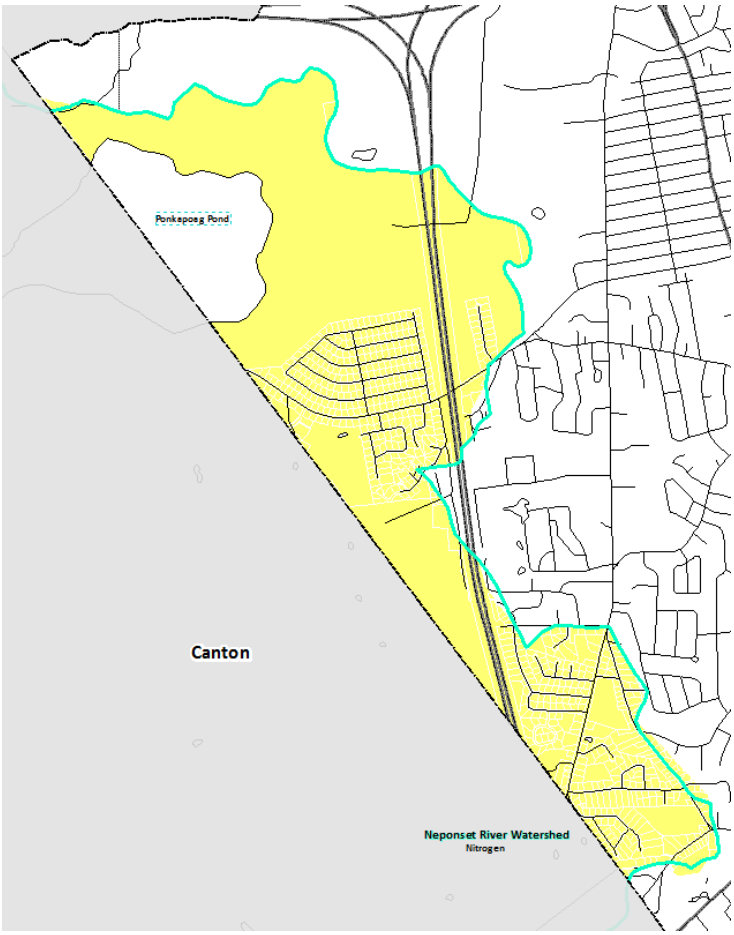
The Town will keep a log of catch basins cleaned or inspected and report in each annual report the total number of catch basins inspected and cleaned and the total volume of material removed from catch basins. Record keeping forms can be found in Appendix C.

7.2 Streets and Parking Lots

Regular sweeping of streets and municipally-owned parking lots is important for maintaining clean and safe roadways. It also plays a vital role in keeping pollutants like sand, trash, and leaves out of the MS4. The Town's current practice includes street sweeping all town roads twice per year, once in spring and once in the fall.

All streets shall be swept and/or cleaned a minimum of once per year in the spring (following winter activities such as sanding). Sweeping frequency is to be increased as necessary to target areas as determined by the Town on the basis of pollutant load reduction, based on inspections, pollutant loads, catch basin cleaning or inspection results, land use, water quality limited or TMDL waters or other relevant factors.

In areas that discharge to certain nutrient-impaired waters, sweeping must be performed a minimum of two times per year, once in the spring (following winter activities such as sanding) and at least once in the fall (Sept 1 – Dec 1; following leaf fall). In Randolph this applies to the Neponset River Watershed due to phosphorus impairment. See Map of area requiring twice/year sweeping in yellow (below).



Record Keeping

The Town will report in each annual report the number of miles cleaned and/or volume of material removed. Record keeping forms can be found in Appendix D.

7.3 Storage and Disposal of Catch Basin Cleanings and Street Sweepings

The Town ensures proper storage of catch basin cleanings and street sweepings prior to disposal or reuse so that they do not discharge to receiving waters, in compliance with current MassDEP policies. The policies as listed in Section 2.3.7.a.iii.4 of the Permit include the following:

- Properly dispose of collected sediments and catch basin cleanings (solid material, such as leaves, sand, and twigs removed from stormwater collection systems during cleaning operations).
- 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 properly to prevent pollution.
- Catch Basin Cleanings disposal shall follow:

  http://www.mass.gov/eea/agencies/massdep/recycle/regulations/management-of-catch-basin-cleanings.html
- Street Sweepings disposal shall follow Mass DEP Policy #BWP-94-092: Reuse & Disposal of Street Sweepings:

  http://www.mass.gov/eea/docs/dep/recycle/laws/stsweep.pdf

7.4 Winter Road Maintenance

Randolph DPW's scope of responsibilities during snow and ice events includes 113 miles of roadways, sidewalks, school and municipal parking lots, access to fire and police stations, water and sewer pump stations and water treatment plant. The DPW reserves the right to modify any plan as needed to adjust to various circumstances that a storm might present and provides detailed winter road maintenance and snowstorm procedures on their website. The DPW Director will be responsible for carrying out this policy to satisfy the Permit. Parking during snow removal shall comply with Town By-Laws and as referenced on the Snow and Ice Policy on the DPW website.

Priorities

1. The first priority is to ensure that police, fire and medical emergency equipment can move safely on streets.
2. The second priority is to open main and secondary roads for use by the public.
3. The third priority is to open residential streets.
4. The fourth priority is to open all schools, public facilities, and clear sidewalks used to walk to schools/businesses/public transportation.

Materials Used

With safety as the priority, the Town's goal is to minimize the use of salt and sand through optimization of application. This is achieved through the use, where practicable, of automated application equipment, anti-icing and pre-wetting techniques, implementation of pavement management systems, and alternate chemicals. The types of materials used by the Department of Public Works are detailed below.

- Rock Salt (Sodium Chloride): Salt is used to expedite the melting of snow and ice from the street surface and also to keep the ice from forming a bond to the street surface.
- Sand: Sand is used as an abrasive for traction on slick roadways.
- Other Materials: The Town may choose to use alternative chloride-containing materials used to treat paved surfaces for deicing, including sodium chloride, calcium chloride, magnesium chloride, and brine solutions.

Materials Storage

All salt, sand and deicing compounds are properly stored under cover to ensure they are not exposed to precipitation or otherwise carried to a catch basin, resource area or waterbodies. Diversion berms and good housekeeping practices shall be used to minimize runoff from storage areas.

Application and Equipment Calibration

Each piece of application equipment owned by the Town is calibrated prior to the winter season. Salt application shall be calibrated to dispense at minimum rates while maintaining safety rates (EPA guidance recommends 200 pounds per mile lane). Trucks equipped with pre-wetting brine tanks are calibrated to dispense at minimum rates while maintaining safety rates (EPA guidance recommends 8 gallons of pre-wet liquid to 1 ton of salt, to be varied based on temperature).

Snow Disposal

The MS4 Permit prohibits snow disposal into waters of the United States. Snow disposal activities, including selection of appropriate snow disposal sites, will adhere to the Massachusetts Department of Environmental Protection Snow Disposal Guidance, Guideline No. BWR G2015-01 (Effective Date: December 21, 2015).

Record Keeping

The Town maintains records of prioritized plow routes, miles of roads plowed annually, the quantity of salt and other materials used annually, and equipment calibration records.

7.5 Stormwater Treatment Structures (Structural BMPs) Inspection and Maintenance

Stormwater treatment structures, also referred to as structural BMPs, include water quality swales, retention/detention basins, infiltration structures, proprietary treatment devices or other similar structures. The Town has established and implemented inspection and maintenance frequencies and procedures for all structural BMPs. Inspection frequency for all permittee-owned stormwater treatment structures (excluding catch basins) shall be determined at initial and subsequent inspections based on observed conditions. Structures that are routinely observed with accumulated sediment or other performance issues will be inspected at lease annually and Records from consecutive inspections/cleaning events will be compared to identify structures that may need to be cleaned more or less frequently than once per year.

If a structure proves to be problematic during two consecutive inspections the Town will document that finding, investigate the contributing drainage area for sources of excessive sediment loading, and to the extent practicable, address the source. Actions taken will be described in the annual report.

The Town will keep a log of stormwater management structures inspected and report on the condition and maintenance performed in each annual report. A Stormwater Treatment Structures Inspection and Maintenance Guide for BMPs is provided in Appendix E and BMPs are inventoried on the stormwater infrastructure map in Appendix A and the Facilities Inventory and Reporting Log of Appendix B. The following are maintenance activities and procedure for each category of BMP based on the Massachusetts Stormwater Handbook:

Structural Pretreatment BMPs

WATER QUALITY UNIT (OIL/GRIT SEPARATOR)

Water quality units, also referred to as oil/grit separators, are underground storage tanks with chambers designed to remove heavy particles, floating debris and hydrocarbons from stormwater. These units are typically considered a pretreatment BMP for land uses with higher potential pollutant loads and risk of petroleum spills. Cleaning these units is important to prevent sediment from re-suspending and discharging during future storm events. Inspection and maintenance should include the following:

- Inspect and clean unit – cleaning includes removal of accumulated oils and grease and sediment using a vacuum truck or other ordinary catch basin cleaning device
- Polluted water or sediments removed from an oil grit separator unit should be disposed of in accordance with all applicable local, state and federal laws and regulations including M.G.L.c. 21C and 310 CMR 30.00.

PROPRIETARY SEPARATOR

A proprietary separator is a flow-through structure with a settling or separation unit to remove sediments and other pollutants. They typically use the power of swirling or flowing water to separate floatables and coarser sediments. Some rely solely on gravity separation and contain no swirl chamber. These units are typically considered a pretreatment BMP for land uses with higher potential pollutant loads and risk of petroleum spills. Vactor trucks are typically used to clean these

units. Clamshell buckets typically used for cleaning catch basins are almost never allowed by manufacturers. Sometimes it will be necessary to remove sediment manually. Inspection and maintenance should include the following:

- Inspect and clean these units in strict accordance with manufacturers' recommendations and requirements

Treatment BMPs

BIORETENTION AREAS & RAIN GARDEN

Bioretention areas and rain gardens are shallow depressions filled with sandy soil, topped with a thick layer of mulch and planted with dense native vegetation. Bioretention areas require careful attention while plants are being established and seasonal landscaping maintenance thereafter. Regular inspection and maintenance for sediment build-up, structural damage and standing water can extend the life of the soil media and prevent against premature failure of the system. Snow should never be stored or plowed into bioretention areas or rain gardens. Annual Inspection and maintenance should be conducted in the spring and include the following:

- Inspect and remove trash and sediment build-up
- Mow and/or Mulch
- Remove and replace dead vegetation
- Prune and remove invasive species as needed
- Upon failure, replace entire media and all vegetation

EXTENDED DRY DETENTION BASIN

Extended dry detention basins are designed to control both stormwater quantity and quality. These BMPs are designed to hold stormwater for at least 24 hours, allowing solids to settle and to reduce local and downstream flooding. Potential maintenance problems requiring immediate repairs include: erosion within the basin and banks, tree growth on the embankment, damage to the emergency spillway and sediment accumulation around the outlet. Annual Inspection and maintenance should be conducted in the spring and include the following:

- Inspect basin – examine outlet structure for clogging or high outflow release velocities
- Mow upper stage, side slopes, embankment and emergency spillway
- Remove trash and debris
- Remove sediment from basin

Conveyance BMPs

WATER QUALITY SWALE

Water quality swales are vegetated open channels designed to treat a required water quality volume and incorporate specific features to enhance pollutant removal. Inspection and maintenance should be conducted annually and include the following:

- Inspection – make sure vegetation is adequate and slopes are not eroding, check for rilling and gullying, ponding and sedimentation
- Manually remove sediment and debris
- Mow swale depending on vegetation type – if grass, now when height reaches 6 inches but do not cut shorter than 3 inches
- Repair eroded areas and re-vegetate if needed
- Re-seed as necessary

Infiltration BMPs

INFILTRATION BASIN

Infiltration basins are stormwater runoff impoundments that are constructed over permeable soils. Infiltration basins are prone to clogging and failure so pretreatment BMPs are typically included to reduce maintenance requirements for the basin itself. Runoff is stored until it exfiltrates through the soil of the basin floor. Inspection and maintenance should be conducted annually and include the following:

- Inspection to ensure proper functioning – look for signs of settlement, erosion, tree growth on embankments, condition of riprap and turf, ponding and sedimentation
- Preventative maintenance
- Mow the buffer area, side slopes, and basin bottom if grassed floor, rake if stone bottom
- Remove trash and debris, remove grass clippings and accumulated organic matter
- Remove sediment as necessary – use light equipment and caution so as not to compact underlying soils
- Inspect and clean pretreatment devices associated with the basin

INFILTRATION TRENCH

Infiltration trenches are shallow excavations filled with stone capturing sheet flow or piped inflow. The stored runoff gradually exfiltrates through the bottom and/or sides of the trench into the subsoils. The visible surface of the trench may be either stone of grassed. Infiltration trenches always require a pretreatment BMP such as a vegetated filter strip for sheet flow of a sediment forebay for piped flow. Inspection and maintenance should be conducted annually and include the following:

- Inspect – inspect the trench 24 hours or several days after a rain event to look for ponded water indicating that the trench is clogged or has failed
- Mow top of trench if it is grassed
- Remove accumulated sediment, trash, debris, leaves and grass clippings and tree seedlings
- Inspect and clean pretreatment BMPs –check inlets and outlets for clogging

INFILTRATION CHAMBERS (SUBSURFACE STRUCTURES)

Infiltration chambers, more generally referred to as subsurface structures, are underground systems that capture runoff and gradually infiltrate it into the groundwater through rock and gravel. The most common types include pre-cast concrete or plastic pits, chambers (manufactured pipes), perforated pipes, and galleys. Pretreatment is required for stormwater runoff from land uses or activities with the potential for high sediment or pollutant loads. Structural pretreatment BMPs for these systems include deep sump catch basins, proprietary separators, and oil/grit separators. Because they are underground, subsurface structures are difficult to maintain with inspection of water levels through an observation well pipe at grade. Inspection and maintenance should include the following:

- Inspect inlets
- Remove any debris that might clog the system
- Remove sediment from pretreatment BMPs

LEACHING CATCH BASINS

A leaching catch basin is a pre-cast concrete barrel and riser with an open bottom the allows runoff to infiltrate into the ground. These can be configured as a stand alone structure or combined with a deep sump catch basin to provide pretreatment. Leaching basins are typically set in an excavation lined with a geotextile liner to prevent fine soil particles from migrating into the void spaces of the stone surrounding it. Inspection and maintenance should include the following:

- Inspect unit and remove debris
- Remove sediment when the basin is 50% full
- Rehabilitate the basin as needed if it fails do to clogging

Other BMPs

POROUS PAVEMENT

Porous pavement is a permeable paving technique that allows parking lot, driveway and/or roadway runoff to infiltrate directly into the soil and receive water quality treatment. Permeable paving techniques include porous asphalt, pervious concrete, paving stones and manufactured “grass pavers” made of concrete or plastic. The systems consist of a durable, load-bearing pervious surface overlying a stone bed that stores rainwater before it infiltrates into the underlying soil. Inspection should be conducted annually and maintenance as needed including the following:

- Inspect the surface annually for deterioration and assess exfiltration capacity- monitor after a storm to ensure the paving surface drains properly
- For porous asphalts and concrete, clean the surface using power washer to dislodge trapped particles and then vacuum sweep the area. For paving stones, add joint material (sand) to replace material that has been transported

- Re-seed grass pavers to fill in bare spots

STONE CHIP OR GRAVEL DRIVEWAYS AND PARKING AREAS

Stone chip or gravel surfaces allows parking lot, driveway and/or roadway runoff to infiltrate directly into the soil. They need to be designed and constructed with a base similar to a traditional road in order to prevent ponding of water and washout. Inspection should be conducted annually and maintenance as needed including the following:

- Inspect the surface annually for deterioration and assess exfiltration capacity- monitor after a storm to ensure the surface drains properly without ponding
- Remove debris (leaves, sticks, weeds, etc) on a weekly basis
- Regrade surface for proper drainage and add new stone/gravel where necessary to fill holes and ruts
- Apply a fresh layer of gravel to the surface every 1-2 years

Additional guidance for Structural BMP operations and maintenance can be found in the latest version of the Massachusetts Department of Environmental Protection Stormwater Handbook, Volume 2, Chapter 2, located at: http://www.mass.gov/eea/docs/dep/water/laws/i-thru-z/v2c2.pdf

8.0 Stormwater Pollution Prevention Plans (SWPPP)s

The permit requires a Stormwater Pollution Prevention Plan (SWPPP) be developed and implemented for each of the following permittee-owned or operated facilities: maintenance garages, public works yards, transfer stations, and other waste handling facilities where pollutants are exposed to stormwater as determined by the permittee. The Town has these types of facilities located at a single property, the DPW Facility at 4 Carlino Way. The SWPPP that has been developed and is being implemented is included in Appendix F.

9.0 Training

The MS4 permit requires employee training be provided as necessary so that those responsible for use, storage, and disposal of petroleum products and other potential stormwater pollutants know proper procedures outlined in this plan. The Town will provide training to employees involved in the Good Housekeeping program as follows:

- Employees who perform maintenance or other applicable work at municipal buildings and facilities shall be trained on the handling of products and the proper operation of related equipment that has the potential to cause stormwater pollution.
- DPW employees are also trained annually on stormwater pollution prevention, illicit discharge detection and elimination (IDDE) procedures, and spill and response procedures. Employees who work in areas where materials or activities are exposed to stormwater, or who are responsible for implementing activities identified in the SWPPP (e.g., inspectors, maintenance personnel), including all members of the Pollution Prevention Team are to be trained regularly. Training shall cover both the specific components and scope of the SWPPP and the control measures required, including spill response, good housekeeping, material management practices, any best management practice operation and maintenance, etc.
- Employees involved in hazardous waste handling will be made familiar with the spill response kit and spill response and cleanup procedures as outlined in the spill prevention and control plans for the building or facility.
- If outside services are contracted, the contractor should be given a copy of this and any applicable standard operating procedures to ensure compliance with MS4 regulations.

The DPW shall document the following information for each training:

- The training date, title and training duration;
- List of municipal attendees;
- Subjects covered during training

10.0 Records and Reporting

The progress and effectiveness of the Good Housekeeping program will be evaluated and reported on in each annual report. The success of the Good Housekeeping program will be measured by the activities completed within the required Permit timelines.

APPENDIX A – Town-owned Facilities, BMPs and Stormwater Infrastructure Map

Town of Randolph, Massachusetts

Town-owned Facilities, BMPs and MS4 Stormwater Infrastructure Map

Milton
Quincy
Braintree
Canton
Avon
Holbrook
Neponset River Watershed
Weir River Watershed
HOUGHTONS POND
PONKAPOAG POND
DUCK POND
PAKOMET SPRING
GREAT CEDAR SWAMP
OLD QUINCY RESERVOIR
Blue Hill River
Farm River
GREAT POND
UPPER RESERVOIR
RICHARDI RESERVOIR
NORROWAY BROOK
BROAD MEADOW
COCHATO RIVER
Glovers Brook
Tumbling Brook
SYLVAN LAKE
LAKE HOLBROOK
BEAR SWAMP
MARY LEE BROOK
INTERSTATE 93
RAMP-RT 24 NB TO RT 93 NB
RAMP-RT 24 NB TO RT 93 SB
RAMP-RT 93 NB TO RT 24 SB
RAMP-RT 93 SB TO RT 24 SB
RAMP-RT 93 NB TO RT 28 NB
RAMP-RT 28 SB TO RT 93 NB
NORTH MAIN STREET
AMVETS MEMORIAL HIGHWAY
PONKAPOAG ROAD
Pump Station
Margaret L. Donovan Elementary School
Fire Station
Randolph Community Middle School
Tower Hill School
Dog Park
Park
Powers Farm
Water Treatment Plant
Elderly Housing
Elizabeth J. Lyons Elementary School
Joseph J. Zapustas Ice Arena
Belcher Park
DPW Yard
Intergenerational Center
Imagination Station Playground
Housing Authority
John F. Kennedy Elementary School
Luddington Park
Turner Free Library
Randolph High School
Food Pantry
Stetson Hall
Police Station/Town Hall
Senior Center
Martin E. Young Elementary School

Map Legend

Outfall Ranking Priority
- Outfall to Waterbody within MS4 Area (200 Total Outfalls)
- Outfall to Upland Area (>100' from wetland, >200' from waterbody, 73 Total Outfalls)

Stormwater Structures
- A BMP
-) Town Owned Catch Basin
-) State Owned Catch Basin
-) Private Catch Basin
- (Town Owned Manhole
- (State Owned Manhole
- (Private Manhole
- Inlet
- Stormwater Basin or Rain Garden Inlet
- Private or State Owned Outfall

Conveyance
- Pipe
- Culvert
- Swale/Channel

Hydrography
- Hydrologic Connection
- Open Water
- Wetland
- Major Watershed Boundary

*MassDEP 2016 Integrated List of Waters
- Rivers: Category 4A
- Lakes, Estuaries: Category 4A
- Rivers: Category 4C
- Lakes, Estuaries: Category 4C
- Rivers: Category 5
- Lakes, Estuaries: Category 5

Regulated Areas
- MA MS4 Urban Area

Roadway Owner
- State
- Town and Private

Parcel Owner
- Town
- Other

Category 1: Attaining all designated uses.
Category 2: Attaining some of the designated uses and insufficient or no data and information is available to determine if the remaining uses are attained.
Category 3: Insufficient or no data and information to determine if any designated uses are attained.
Category 4A: Impaired for one or more designated uses but does not require the development of a TMDL: TMDL has been completed.
Category 4B: Impaired for one or more designated uses but does not require the development of a TMDL: Other pollution control requirements are reasonably expected to result in the attainment of designated uses.
Category 4C: Impaired for one or more designated uses but does not require the development of a TMDL: Impairment is not caused by a pollutant.
Category 5: Impaired for one or more designated uses, requires the development of a TMDL: Impairment is caused by a pollutant.

Stormwater infrastructure includes features mappin in conjunction with the development with the development of the O&M plan not included on previous maps. Town-owned parcels include sites listed in the Inventory of Permitee Owned Facilities and additional open-space parcels.

Data Source: Town of Randolph, BETA Drainage Field Inspections(2015 - Ongoing) and MassGIS

Issue Date: June 2020
This Map is Intended for Planning Purposes Only

BETA
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0 0.125 0.25 Miles

MILTON
QUINCY
BRAINTREE
CANTON
HOLBROOK
STOUGHTON
AVON

APPENDIX B – Town-owned Facilities Inventory and Reporting Log and O&M Maps

Town of Randolph, MA
Municipal Stormwater Operations and Maintenance Program
Permittee Owned Facilities Inventory and Reporting Log
Reporting Period: July 1 20___ - June 30, 20___

www.BETA-Inc.com

Notes:
1) There are no separate facilities for Vehicles and Equipment storage, these are included under Buildings and Facilities Sites
2) Inventory includes facilities and site within the designated MS4 area
3) Recommended maintenance to be conducted in accordance with the Operation and Maintenance (O&M) procedures and best management practices described in the Good Housekeeping and Pollution Prevention Plan developed by the Town.
4) O&M Maps are provided for sites with extensive drainage infrastructure and/or BMPs to clarify these features and their locations.

PARKS AND OPEN SPACE								
O&M Map #	**Record Plan Y/N**	**Facility Name**	**Location**	**BMP/Feature Description**	**Standard Maintenance Recommendations**	**Recommended Maintenance**	**Follow-Up Required (Y/N)**	**Inspection Date**
-	N	Powers Farm Community Park	North Main Street at Jones Ave	3 Riprap drainage swales	Inspection for condition of riprap			
				Maintained Lawn	Re-seed as necessary			
				Mulch playground	Refresh mulch			
				Parking Area (~36 spaces)	Sweep			
				Trash Receptacle	Check for leaks and spills, covers in place			
				Vegetation Buffer/Filter Around Surface Water	Mantain vegetation & check for erosion within 50' of waters edge			
-	N	Dog Park	169 West Street	Stone Chips (Parking Area ~14 spaces)	Refresh stone chips			
				Paved Driveway	Sweep			
				Trash Receptacles and Dog Waste Stations	Check for leaks and spills, covers in place, replace dog waste bags			
-	N	Imagination Station Playground & Park	North Street & Pleasant Street	Maintained Lawn	Re-seed as necessary			
				Parking Area (~30 spaces)	Sweep			
				Vegetation Buffer/Filter Around Surface Water	Mantain vegetation & check for erosion within 50' of waters edge			
-	N	Park	741 North Main Street	Maintained Lawn	Re-seed as necessary			
-	N	Belcher Park	Park Street	Parking Area (~24 spaces)	Sweep			
				Stone Chips	Refresh stone chips			
				Vegetation Buffer/Filter Around Surface Water	Mantain vegetation & check for erosion within 50' of waters edge			
				Soccer Field, Basketball Field, Maintained Lawn	Re-seed as necessary			
-	N	Luddington Park	Adjacent to 10 Memorial Parkway	Maintained Lawn	Re-seed as necessary			
				Landscaped Area with Mulch	Refresh mulch			

BUILDINGS AND FACILITIES								
O&M Map #	**Record Plan Y/N**	**Facility Name**	**Location**	**BMP/Feature Description**	**Standard Maintenance Recommendations**	**Recommended Maintenance**	**Follow-Up Required (Y/N)**	**Inspection Date**
SWPPP	N	DPW Yard - See SWPPP for this facility in Appendix F	4 Carlino Way	Parking Area (~20 spaces)	Sweep			
				Trash Receptacles	Check for leaks and spills, covers in place			
				Vehicle/ Equipment Storage	Perform regular vehicle equipment maintenance and inspection for leaks			
				Fuel tank on concrete pad	Check for leaks			
				8 Deep Sump Catch Basins	Remove Sediments and Debris			
-	N	Water Treatment Plant	275 Pond Street	Maintained Lawn	Re-seed as necessary			
				Paved Driveway	Sweep			
				Trash Receptacles	Check for leaks and spills, covers in place			
				Vehicle/ Equipment Storage	Check for spills			
				1 Deep Sump Catch Basin	Remove Sediments and Debris			
1	Y	Donovan School	123 Reed Street	Maintained Lawn	Re-seed as necessary			
				Mulch playground	Refresh mulch			
				Parking Area (~79 spaces) and Driveways	Sweep			
				Dumpsters	Check for leaks and spills, covers in place			
				Vegetation Buffer/Filter Around Stream	Mantain vegetation & check for erosion within 50' of waters edge			
				8 Deep Sump Catch Basins	Remove Sediments and Debris			
2	N	Kennedy School	20 Hurley Drive	2 baseball fields, 1 football field, 3 basketball courts, maintained lawn areas	Re-seed as necessary			
				Mulch playground	Refresh mulch			
				Parking Area (~190 spaces) and Driveways	Sweep			
				Dumpsters	Check for leaks and spills, covers in place			
				2 Storage Containers	Check for leaks and proper storage			
				19 Deep Sump Catch Basins	Remove Sediments and Debris			
3	Y	Lyons Elementary School	60 Vesey Road	1 baseball field, maintained lawn areas	Re-seed as necessary			
				Mulch playground	Refresh mulch			
				Parking Areas (~88 Spaces) and Driveways	Sweep			
				Dumpsters	Check for leaks and spills, covers in place			
				Vegetation Buffer/Filter Around Stream	Mantain vegetation & check for erosion within 50' of waters edge			
				Fuel tank on concrete pad	Check for leaks			
				6 Deep Sump Catch Basins	Remove Sediments and Debris			
4	Y	Young School	30 Lou Courtney Drive	1 baseball field, 3 tennis courts, maintained lawn areas	Re-seed as necessary			
				Mulch playground	Refresh mulch			
				Parking Area (~83 Spaces) and Driveways	Sweep			
				Dumpsters	Check for leaks and spills, covers in place			
				Storage Container	Check for spills and proper storage			
				6 Deep Sump Catch Basins	Remove Sediments and Debris			

Town of Randolph, MA
Municipal Stormwater Operations and Maintenance Program
Permittee Owned Facilities Inventory and Reporting Log
Reporting Period: July 1 20___ - June 30, 20___

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Notes:
1) There are no separate facilities for Vehicles and Equipment storage, these are included under Buildings and Facilities Sites
2) Inventory includes facilities and site within the designated MS4 area
3) Recommended maintenance to be conducted in accordance with the Operation and Maintenance (O&M) procedures and best management practices described in the Good Housekeeping and Pollution Prevention Plan developed by the Town.
4) O&M Maps are provided for sites with extensive drainage infrastructure and/or BMPs to clarify these features and their locations.

BUILDINGS AND FACILITIES

O&M Map #	Record Plan Y/N	Facility Name	Location	BMP/Feature Description	Standard Maintenance Recommendations	Recommended Maintenance	Follow-Up Required (Y/N)	Inspection Date
5	N	Randolph High School & Randolph Community Pool	70 Memorial Pkwy	Stone chips (Shotput area)	Refresh stone chips			
				Baseball field, maintained lawn areas	Re-seed as necessary			
				Parking Areas (~287 spaces) and Driveways	Sweep			
				Dumpsters, Trash Receptacles	Check for leaks and spills, covers in place			
				orage Containers (3), Field shed, Parked school buses and maintenance vehicl	Check for spills and proper storage			
				29 Deep Sump Catch Basins	Remove Sediments and Debris			
6	Y	Randolph Community Middle School	225 High Street	Stormwater Basin	Inspect outlets; Mow upper stage, side slopes, embankment and spillway; Remove trash and debris; Remove sediment from basin			
				3 baseball fields, 1basketball court, 4 tennis courts, maintained grass areas	Re-seed as necessary			
				Parking Areas (~118 spaces) and Driveways	Sweep			
				Dumpsters	Check for leaks and spills, covers in place			
				14 Deep Sump Catch Basins	Remove Sediments and Debris			
-	N	Tower Hill School	6 Adams Street	Maintained Lawn	Re-seed as necessary			
				Mulch playground	Refresh mulch			
				Parking Area (~38 spaces)	Sweep			
				Dumpsters	Check for leaks and spills, covers in place			
				Storage shed	Check for spills			
				Fuel tank on concrete pad	Check for leaks			
				1 Deep Sump Catch Basin	Remove Sediments and Debris			
-	N	Turner Free Library	2 North Main Street	Maintained Lawn	Re-seed as necessary			
				1 Deep Sump Catch Basin	Remove Sediments and Debris			
-	N	Stetson Hall	6 South Main Street	Maintained Lawn	Re-seed as necessary			
				Parking Area (~54 spaces)	Sweep			
				1 Deep Sump Catch Basin	Remove Sediments and Debris			
7	Y	Zapustas Ice Arena	240 North Street	5 baseball fields, maintained lawn area	Re-seed as necessary			
				Parking Area (170 spaces) and Driveways	Sweep			
				Vegetation Buffer/Filter Around Stream	Mantain vegetation & check for erosion within 50' of waters edge			
				Fuel tank on concrete pad	Check for leaks			
				Equipment Storage Shed	Check for spills and proper storage			
				10 Deep Sump Catch Basins	Remove Sediments and Debris			
5	N	Police Station/Town Hall	41 South Main Street	Maintained Lawn	Re-seed as necessary			
				Mulch playground	Refresh mulch			
				Parking Areas (98 spaces) and Driveways	Sweep			
				Trash Receptacles	Check for leaks and spills, covers in place			
				Police Cruisers stored inside and outside	Perform regular vehicle maintenance and inspection for leaks			
				5 Deep Sump Catch Basins	Remove Sediments and Debris			
8	N	Fire Station	952 North Main Street	Rain Garden	Remove Sediments and Debris; Replace vegetation as necessary; Remove invasive species as needed			
				Maintained Lawn	Re-seed as necessary			
				Parking Areas (~20 spaces) and Driveways	Sweep			
				Dumpsters	Check for leaks and spills, covers in place			
				Fire Truck Storage	Perform regular vehicle maintenance and inspection for leaks			
-	Y (outdated)	Fire Station	10 Memorial Parkway	Maintained Lawn	Re-seed as necessary			
				Parking Areas (~19 Spaces)	Sweep			
				Fire Truck Storage	Perform regular vehicle maintenance and inspection for leaks			
-	N	Housing Authority	391 South Street	Maintained Lawn	Re-seed as necessary			
				Parking Area (~12 spaces)	Sweep			
9	Y	Housing Authority	DeCelle Drive	Maintained Lawn	Re-seed as necessary			
				Parking Area (~38 spaces) and Driveways	Sweep			
				Dumpsters	Check for leaks and spills, covers in place			
				Maintenance building, Maintenance Vehicle Storage	Check for spills and proper storage			
				8 Deep Sump Catch Basins	Remove Sediments and Debris			
10	N	Elderly Housing	64 Sunshine Avenue	Maintained Lawn	Re-seed as necessary			
				Parking Areas (~40 spaces)	Sweep			
				Dumpsters	Check for leaks and spills, covers in place			
				Storage Building	Check for spills and proper storage			
				12 Deep Sump Catch Basins (within roadway)	Remove Sediments and Debris			

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4) O&M Maps are provided for sites with extensive drainage infrastructure and/or BMPs to clarify these features and their locations.

BUILDINGS AND FACILITIES								
O&M Map #	**Record Plan Y/N**	**Facility Name**	**Location**	**BMP/Feature Description**	**Standard Maintenance Recommendations**	**Recommended Maintenance**	**Follow-Up Required (Y/N)**	**Inspection Date**
-	Y	Elderly Housing	1 Elderly Drive	Maintained Lawn	Re-seed as necessary			
				Parking Area (~31 spaces)	Sweep			
				Dumpsters	Check for leaks and spills, covers in place			
				Storage Building	Check spills and proper storage			
				5 Deep Sump Catch Basins	Remove Sediments and Debris			
-	Y	Senior Center	Fencourt Avenue	Maintained Lawn	Re-seed as necessary			
				Parking Area (~69 spaces)	Sweep			
				3 Deep Sump Catch Basins	Remove Sediments and Debris			
-	Y	Food Pantry	1 Turner Lane	Maintained Lawn	Re-seed as necessary			
				Parking Area (~9 spaces) and Driveways	Sweep			
				Dumpsters	Check for leaks and spills, covers in place			
				2 Deep Sump Catch Basins	Remove Sediments and Debris			
11	N	Intergenerational Center	128 Pleasant Street	Rain Garden	Remove Sediments and Debris; Replace vegetation as necessary; Remove invasive species as needed			
				2 Tennis courts, bocci courts, maintained Lawn	Re-seed as necessary			
				Parking Area (~87 spaces) and Driveways	Sweep			
				Dumpsters, Trash Receptacles	Check for leaks and spills, covers in place			
				Storage shed, town vehicles	Check for spills and proper storage			
				3 Deep Sump Catch Basins	Remove Sediments and Debris			
-	N	Pump Station 1	26 Martindale Road	None Found	-			
-	N	Pump Station 2	159 Pond Street	Subsurface station with paved driveway	Sweep			
-	N	Pump Station 3	25 Turner Drive	Station building - maintenance equipment and supplies storage	Check for leaks and proper storage			
-	N	Pump Station 4	32 Vine Street	Station building - maintenance equipment and supplies storage	Check for leaks and proper storage			
				Paved Driveway	Sweep			
				Maintained Lawn	Re-seed as necessary			
-	N	Pump Station 5	Michelle Lane/1102 Avalon Dr	None Found	-			
-	N	Pump Station 6	26 Thomas Patten Drive	Subsurface station with paved driveway	Sweep			
-	N	Pump Station 7	Root Street/Newcomb Ave	Subsurface station with paved driveway	Sweep			
-	N	Pump Station 8	300 Old West Street	None Found	-			
-	N	Pump Station 9	21 Fawn Circle	Subsurface station with paved driveway	Sweep			
-	N	Pump Station 10	South Main Street	None Found	-			

Map 1 of 11

Margaret L. Donovan Elementary School

123 Reed Street

Town of Randolph, MA
O&M Plan
Facilities Maps

Margaret L. Donovan Elementary School

REED STREET

SHERMAN DRIVE

DENISE DRIVE

Stormwater Legend

- Town-Owned DMH
- Town-Owned CB
- Outfall
- Pipe

0 80 Feet

N

Map Location

BETA

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Map 2 of 11

John F. Kennedy Elementary School

20 Hurley Drive

Town of Randolph, MA O&M Plan Facilities Maps

Stormwater Legend

- Town-Owned DMH
- Town-Owned CB
- Private CB
- Outfall
- Pipe

0 80 Feet

N

Map Location

QUINCY
BRAINTREE
CANTON
STOUGHTON

BETA

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Map 3 of 11

Elizabeth G. Lyons Elementary School

60 Vesey Road

Town of Randolph, MA
O&M Plan
Facilities Maps

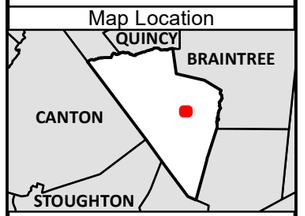
Stormwater Legend

- Town-Owned DMH
- Private
- Town-Owned CB
- Private CB
- Inlet
- Outfall
- Pipe

0 80 Feet

N

Map Location



BETA

Map 4 of 11

Martin E. Young Elementary School

30 Lou Courtney Drive

Town of Randolph, MA
O&M Plan
Facilities Maps

Martin E. Young Elementary School

LOU COURTNEY DRIVE

SOUTH MAIN STREET

RICHARD ROAD

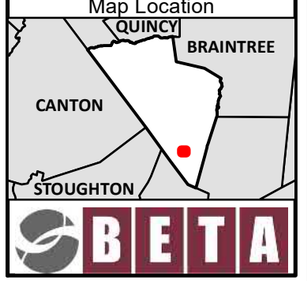
Stormwater Legend

- Town-Owned DMH
- State-Owned DMH
- Town-Owned CB
- State-Owned CB
- Inlet
- Outfall
- Culvert
- Pipe

0 80 Feet

N

Map Location



BETA

Map 5 of 11

Randolph High School & Randolph Community Pool
70 Memorial Parkway

Town of Randolph, MA
O&M Plan
Facilities Maps

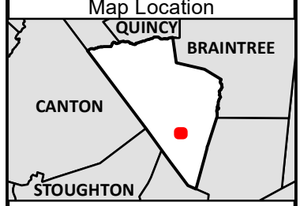
Stormwater Legend

- Town-Owned DMH
- State-Owned DMH
- Private
- Area Drain
- Town-Owned CB
- Private CB
- State-Owned CB
- Inlet
- Pipe

0 80 Feet

N

Map Location



BETA

Map 6 of 11

Randolph Community Middle School

225 High Street

Town of Randolph, MA
O&M Plan
Facilities Maps

HIMOOR LANE

HIMOOR CIRCLE

SCALLY CIRCLE

Randolph Community Middle School

Stormwater Basin

DOLLY LANE

HIGH STREET

PRIVATE

MICHAEL ROAD

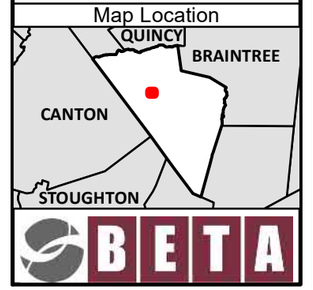
Stormwater Legend

- Town-Owned DMH
- Town-Owned CB
- Private CB
- Inlet
- Outfall
- Basin Inlet
- BMP
- Culvert
- Pipe

0 80 Feet

N

Map Location



BETA

Map 7 of 11

Joseph J. Zapustas Ice Arena

240 North Main Street

Town of Randolph, MA
O&M Plan
Facilities Maps

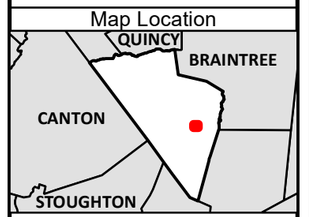
Stormwater Legend

- Town-Owned DMH
- Town-Owned CB
- Private CB
- Inlet
- Outfall
- Culvert
- Pipe

0 60 Feet

N

Map Location



BETA

Map 8 of 11

Fire Station

952 North Main Street

Town of Randolph, MA
O&M Plan
Facilities Maps

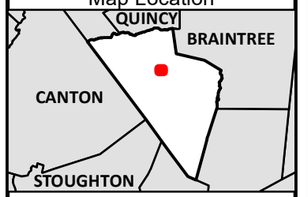
Stormwater Legend

- Town-Owned DMH
- State-Owned DMH
- Private CB
- State-Owned CB
- Inlet
- Basin Inlet
- BMP
- Swale/Channel
- Pipe

0 30 Feet

N

Map Location



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Map 9 of 11

Housing Authority

Decelle Drive

Town of Randolph, MA
O&M Plan
Facilities Maps

Stormwater Legend

- Town-Owned DMH
- Town-Owned CB
- Inlet
- Outfall
- Pipe

0 40 Feet

N

Map Location

BETA

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Map 10 of 11

Elderly Housing

64 Sunshine Avenue

Town of Randolph, MA
O&M Plan
Facilities Maps

SUNSHINE AVENUE

Elderly Housing

BROWN STREET

SUNSHINE AVENUE

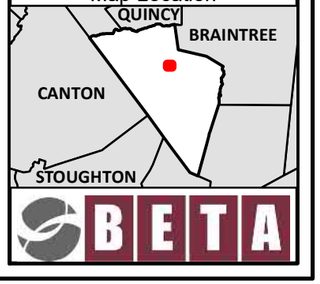
Stormwater Legend

- Town-Owned DMH
- Town-Owned CB
- Outfall
- Pipe

0 50 Feet

N

Map Location



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Map 11 of 11

Intergenerational Center

128 Pleasant Street

Town of Randolph, MA
O&M Plan
Facilities Maps

Intergenerational Center

Rain Garden

AMVETS LANE

PLEASANT STREET

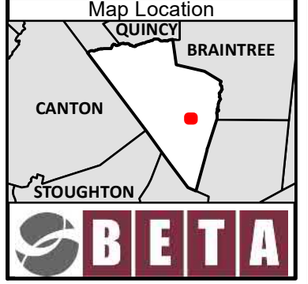
Stormwater Legend

- Town-Owned DMH
- Town-Owned CB
- Inlet
- Outfall
- BMP
- Culvert
- Pipe

0 50 Feet

N

Map Location



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APPENDIX C –Catch Basin Inspection Log

MCM 6: Good Housekeeping - Catch Basin Cleaning

Catch Basin Cleaning Log

Reporting Period: _____ – _____

Date Range	Location(s)	# CBs Cleaned	Volume of Cleaning

RECORD OF CATCH BASINS FOUND TO BE MORE THAN 50% FULL AT CLEANING

Reporting Period: _____ – _____

Inspector: _____ Sheet _____of _____

CB ID	Date	Address	Location Description

APPENDIX D – Street and Parking Lot Sweeping Log

MCM 6: Good Housekeeping - Street and Parking Lot Sweeping

Street and Parking Lot Spring Sweeping Log

Reporting Period: _____ – _____

Date Range	Area	Volume of Cleaning	# lots

STREET AND PARKING LOT FALL SWEEPING LOG

Reporting Period: _____ – _____

Date Range	Area	Volume of Cleaning	# lots

STREET AND PARKING LOT ADDITIONAL SWEEPING LOG

Reporting Period: _____ – _____

Date Range	Area	Volume of Cleaning	# lots

APPENDIX E – Stormwater Treatment Structures Inspection and Maintenance Guide

MCM 6: Good Housekeeping - Stormwater Treatment Structures Inspection & Maintenance

The following establishes inspection and maintenance actions for permittee-owned stormwater treatment structures.

#	BMP Description	Required Action
1	Water Quality Unit (Oil/Grit Separator)	a) Remove accumulated oils, grease and sediments
2	Proprietary Separator	a) Inspect and clean units according to manufacturers' recommendations
		b) Remove sediments & debris
3	Leaching Catch Basin	a) Remove sediments & debris
		b) Rehabilitate the basin if it fails due to clogging
4	Bio-retention Areas & Rain Garden	a) Remove sediments & debris
		b) Mow and/or mulch
		c) Replace vegetation if needed
		d) Remove Invasive species as needed
5	Extended Dry Detention Basin	a) Inspect outlets
		b) Mow upper stage, sides slopes, embankment & spillway
		c) Remove trash and debris
		d) Remove sediments from basin
6	Water Quality Swale	a) Make sure vegetation is adequate and slopes are not eroding, check for rilling and gullying, ponding and sedimentation
		b) Mow 3"-6"
		c) Remove sediments & debris
		d) Repair eroded areas if needed
		e) Re-seed as necessary
7	Infiltration Basin	a) Inspection for settlement, erosion, tree growth on embankments, condition of riprap and turf, ponding and sedimentation
		b) Mow the buffer area, side slopes, and basin bottom if grassed floor
		c) Inspect and clean pretreatment devices associated with the basin
		d) Remove sediments & debris
8	Infiltration Trench	a) Inspect the trench 24 hours or several days after a rain event
		b) Mow top of trench if is grassed
		c) Inspect and clean pretreatment BMPs, check inlets and outlets for clogging
		d) Remove sediments & debris
9	Infiltration Chamber	a) Inspect Inlets
		b) Remove sediment from pretreatment BMPs
		c) Remove sediments & debris
10	Porous Pavement	a) Vacuum sweep or Power wash surface
11	Maintained Lawn	a) Re-seed as necessary

APPENDIX F – SWPPP

Randolph, Massachusetts

Stormwater Pollution Prevention Plan (SWPPP)

Department of Public Works

June 2020

DEPARTMENT OF PUBLIC WORKS - 4 CARLINO WAY

BETA
315 Norwood Park South
2nd Floor
Norwood, Massachusetts 02062
781.255.1982
www.BETA-Inc.com

Stormwater Pollution Prevention Plan (SWPPP)

Randolph, Massachusetts

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DEPARTMENT OF PUBLIC WORKS - 4 CARLINO WAY

Prepared by: BETA GROUP, INC.
Prepared for: Town of Randolph

June 2020

SWPPP 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 gathered and evaluated 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.

Authorized Official

DPW Director

Title

6-25-2020

Date

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INTRODUCTION

This Stormwater Pollution Prevention Plan (SWPPP) has been developed by BETA Group, Inc. (BETA) on behalf of the Town of Randolph (the Town), Massachusetts, Department of Public Works (DPW) to address the requirements of the United States Environmental Protection Agency (EPA) 2016 National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4) in Massachusetts, hereafter referred to as the PERMIT. This SWPPP is outlined as follows:

1. Pollution Prevention Team
2. Description of Facility
3. Identification of Stormwater Controls
4. Management Practices
5. Site Inspections

1.0 POLLUTION PREVENTION TEAM

The Randolph DPW has assigned a Pollution Prevention Team (PPT) for this SWPPP. PPT team members and contact information are summarized below. The role of the PPT is to develop, implement, maintain, and revise as necessary, this SWPPP. The PPT also has the following responsibilities:

Name:	Keith Nastasia	Title:	Director	Department	Department of Public Works
Phone:	781-961-0940	Email:	knastasia@randolph-ma.gov		
Responsibilities: MS4 Coordinator, IDDE Program, Good Housekeeping, Reporting & Record Keeping					

Name:	Jean Pierre-Louis	Title:	Town Engineer	Department:	DPW-Engineering
Phone:	781-961-0950	Email:	jpierrelousi@randolph-ma.gov		
Responsibilities: MS4 Co-Coordinator IDDE Program, Good Housekeeping, SWPPP Training, Reporting & Record Keeping					

Name:	Arthur O'Leary	Title:	Foreman	Department:	DPW-Highway
Phone:	781-961-0943	Email:	N/A		
Responsibilities: Good housekeeping, O&M of facilities, SWPPP					

Name:	Melissa Recos, PE	Title:	Project Manager	Company	BETA Group
Phone:	781-255-1982	Email:	mrecos@beta-inc.com		
Responsibilities: MS4 Consultant to the Town					

2.0 DESCRIPTION OF FACILITY

2.1 FACILITY SUMMARY

The Town of Randolph DPW facility is located at 4 Carlino Way in Randolph, Massachusetts (the site) and is owned and operated by the Town. Information provided in this, and the following sections is based on observations made during a site visit on March 18, 2020. During the site visit, BETA personnel were escorted by Mr. Arthur O'Leary of the Town of Randolph. Mr. O'Leary provided a general overview and layout of facility operations, activities performed and material storage information.

The site is primarily covered by buildings and paved parking areas. This site is surrounded by other Town owned facilities including baseball and soccer fields and a senior center. The site's location is depicted on the Site Map included in Appendix A. Pertinent site details, including layout, location of any stormwater outfalls, receiving waters and structural controls, are depicted on the Site Map.

2.2 SITE MAP

The facility consists of approximately 6.5 acres and contains the structures and other features identified above, shown on the Site Map and described in detail in the following sections. Components shown on the site map include:

- Location of the engineered drainage system, including catch basins, ditches, drain manholes, and treatment BMPs
- Outfalls to a receiving water, and the name of the receiving water
- Direction of surface water flow
- Structural stormwater pollution control measures
- Vehicle fueling areas
- Aboveground storage tanks (indoors and outdoors)
- Chemical storage areas
- Salt storage areas
- Materials stockpiles
- Waste disposal areas

2.2.1 INVENTORY OF BUILDING

The site includes the following buildings and structures and their use:

Table 2.1 - Inventory of Buildings

No.	Use	Floor Drain
1	Salt Storage	☐Y ☒N
2	Highway Division Administration/Storage	☐Y ☒N
3	Mechanics Garage/Vehicle Storage	☒Y ☐N
4	Water Department Administration/Storage	☐Y ☒N
5	Vehicle Storage and Washing	☒Y ☐N
6	Sewer Department Administration/Storage	☐Y ☒N

2.2.2 Parking Areas

Employee parking is provided at the following locations: the area north of Building 5 provides parking for approximately 15± vehicles and the area adjacent to the west of Building 2 provides an additional 5± parking space. Town-owned heavy equipment and larger vehicles are stored in the various garages at the facility.

2.2.3 Inventory of Vehicles & Equipment

The Town maintains an inventory of vehicles and heavy equipment. A copy of the inventory is included in Appendix B.

2.3 Site Drainage & Receiving Waters

Drainage from the on-site impervious surfaces is directed to an engineered drainage system including catchbasins and manholes. Floor drains located in the vehicle maintenance and washing areas (Buildings 3 and 5 – Site Map) are connected to the drainage system. There is an Oil/Water Separator on the drain line from Building 5. Maintenance of the drainage system is completed by the Department of Public Works.

2.3.1 Receiving Waters

The final point of discharge for stormwater from this site is Glovers Brook. Based on field reconnaissance and outfall mapping provided by the Town, the outfall location is where Glovers Brook flows beneath North Street, south of Regina Road. Glovers Brook flows east to it confluence with the Cochato River near the eastern border of Town. The Cochato River has been categorized as a 303(d) List (Impaired) surface water. Impaired water or "impaired condition" means a water body that does not meet applicable water quality standards or fully support applicable beneficial uses, due in whole or in part to water pollution from point or nonpoint sources. This receiving water is assigned the unique identifier MA72-21 and is considered a Category 5, meaning that one or more designated use is impaired for a particular pollutant. Impairments of this water body are shown in Table 2-1, below.

Table 2-2. Impaired Waters Receiving Drainage from the Facility

Water Body Name	ID	Category	Impairment(s)
Cochato River	MA74-06	5	Chlordane and DDT in fish tissue Fecal coliform Escherichia coli Dissolved oxygen

The types of impairments documented for this surface water body are related to pesticides and human and animal waste and bacteria levels (dissolved oxygen impairment). These impairments are not likely related to stormwater operations at the site.

2.4 Potential Pollutant Sources

An inventory of activities performed at the site and associated potential stormwater pollutants is provided in Appendix C. Locations of activities and potential stormwater pollutants are indicated in on the Site Map.

3.0 STORMWATER CONTROLS

Structural stormwater controls including drainage structures, pipes and conveyances; stormwater best management practices (BMPs) and outfall(s) are shown on the Site Map. These controls, used and maintained in accordance with good engineering practices, manufacturer's specifications and management practices detailed in Section 4.0 below, address the quality of discharges from the site.

4.0 MANAGEMENT PRACTICES

The following sections summarize the management practices (non-structural stormwater controls) to be implemented at the site to mitigate the potential for potential pollutants to impact stormwater.

4.1 MINIMIZE OR PREVENT EXPOSURE

To the extent practicable, either locate materials and activities inside or protect them with storm-resistant coverings in order to prevent exposure to rain, snow, snowmelt and runoff (although significant enlargement of impervious surface area is not recommended). Materials do not need to be enclosed or covered if stormwater runoff from affected areas will not be discharged directly or indirectly to surface waters or to the MS4 or if discharges are authorized under another NPDES permit.

Fueling Areas

Vehicle fueling activities can result in gasoline and diesel fuel entering the storm drain system. Spills can occur by topping off fuel tanks and during deliveries. If possible, fueling areas should be placed under cover in order to minimize exposure. Best management practices for fueling areas include the following:

- Deliveries to fuel tanks and fueling of vehicles and equipment should occur on impervious surfaces with proper containment. Spill response kits should be readily accessible at fueling and maintenance areas.
- Fuel dispenser containment features (grooves in concrete pad perimeter) should be kept free of debris.
- Fueling areas owned or operated by the municipality should be covered.

Vehicle Storage

Rainfall on vehicles and equipment storage areas has the potential to collect pollutants and result in high loads of nutrients, metals, and hydrocarbons in stormwater runoff. To prevent this, best management practices include the following:

- All vehicles, equipment and hazardous waste storage containers should receive regular maintenance and be inspected for leaks or defective parts.
- Vehicles and equipment should be stored on a covered slab or within a building with a common drain that discharges to an oil/water separator.
- Outdoor storage of vehicles and equipment should not occur in areas that drain to the storm drain system unless adequate devices are in place to remove oil, sediment and other pollutants.
- Vehicles with fluid leaks should be stored indoors or containment be provided until repaired.

Vehicle and Equipment Maintenance

Vehicle and equipment maintenance shall be conducted in a manor to reduce the discharge of pollutants by following these best management practices:

- Conduct routine inspections of heavy equipment and vehicles to proactively identify maintenance needs or potential leaks.
- Use drip pans as needed until repairs can be performed and when drip pans are used, avoid overtopping.

- Drain fluids from leaking or wrecked vehicles and parts as soon as possible. Dispose of fluids properly.
- Perform routine preventive maintenance to ensure heavy equipment and vehicles are operating optimally.
- Recycle or dispose of waste properly and promptly.
- Conduct all body repair and painting work indoors.
- Minimize waste from paints and thinners. Calculate paint needs based on surface area.
- Do not wash or hose down storage areas unless there is prior approval to collect and discharge the water into the sanitary sewer. Use dry cleanup methods (vacuum, sweep) to clean up metal filings and dust and paint chips from grinding, shaving and sanding. Sweep debris from wet sanding after allowing it to dry overnight on the shop floor. Dispose of waste properly; never dump waste into storm or sanitary sewers.
- Do not dump any liquids or other materials outside, especially near or in storm drains or ditches.
- Store materials and waste in labeled containers under cover and in secondary containment.
- Chemicals should not be combined in containers.
- Carefully transfer collected fluids from containers into designated storage areas as soon as possible.
- Waste liquids (oil, antifreeze, etc.) should be properly stored on-site and routinely disposed by licensed waste haulers at licensed disposal facilities.
- Store new and used batteries securely to avoid breakage. Store indoors or in secondary containment to contain potential acid leaks. Recycle used batteries.

Parts Cleaning

Cleaning of parts can transport pollutants into the storm drain system or surface waters. The MS4 Permit does not authorize these types of discharges. Best management practices to avoid this include the following:

- Use designated areas for engine, parts, or radiator cleaning. Do not wash or rinse parts outdoors. If parts cleaning equipment is not available, then capture parts cleaning fluids.
- Recycle cleaning solution. Never discharge waste to the sanitary sewer or storm sewer.
- Use steam cleaning or pressure washing of parts instead of solvent cleaning. Cleaning equipment must be connected to an oil/water interceptor prior entering the sanitary sewer.
- When using solvents for cleaning, drain parts over the solvent tank to avoid drips to the floor. Catch excess solutions and divert them back to tank. Allow parts to dry over the hot tank.

Vehicle and Equipment Wash Waters

Washing down of maintenance and fueling areas, as well as equipment and vehicles can transport pollutants into the storm drain system or surface waters. The MS4 Permit does not authorize these types of discharges. Best management practices to ensure that vehicle wash waters are not discharged to the municipal system or surface waters include the following:

- Vehicles and equipment should be washed inside whenever possible to reduce runoff to the stormwater system.
- Grassy and pervious (porous) surfaces may be used to promote direct infiltration of wash water, providing treatment before recharging groundwater and minimizing runoff to an adjacent stormwater system. Pervious surfaces or other infiltration-based systems should not be used within wellhead protection areas or within other protected resources.
- Avoid discharge of any wash water directly to the storm drainage system or surface water (e.g., stream, pond, or drainage swale)
- Do not use solvents except in dedicated solvent parts washer systems.
- Wash vehicles with non-toxic, phosphate-free, biodegradable cleaners
- Wash vehicles on an asphalt lot using a collection system with containment berms and discharge to water quality devices that will remove pollutants. Detergents should not be used in areas where oil/water separators provide pre-treatment of drainage.
- Floor drains should be connected to a sanitary sewer or tight tank. Floor drains discharging to adjacent surface water bodies or engineered storm drain systems should be permanently plugged or otherwise abandoned before any vehicle wash activities are completed.
- Designate separate areas for routine maintenance and vehicle cleaning. This helps prevent contamination of wash water by motor oils, hydraulic lubricants, greases, or other chemicals.

Earth Material Stockpile Areas

Stockpiling material on the site may be needed temporarily or permanently depending on the time or year or town projects. BMPs for protecting stockpiles include adequate cover or temporary stabilization as well as temporary sediment perimeter controls at the base of the stockpile.

- Divert stormwater runoff around stockpile areas.
- Cover stockpiles with plastic, geotextile of temporary seed.
- Temporary sediment perimeter controls, including silt fence, filters socks, or fiber rolls, may be placed a short distance from the base of the stockpile. Maintaining a short distance from the base of the stockpile to the perimeter control is important as it allows water to pond, if needed.

4.2 GOOD HOUSEKEEPING

All exposed areas that are potential sources of pollutants, shall keep clean using such measures as sweeping at regular intervals. Ensure that trash containers are closed when not in use, keep storage areas well swept and free from leaking or damaged containers; and store leaking vehicles needing repair indoors.

Sweeping and Cleaning of Parking Lots

Vehicle surfaces can collect a variety of contaminants such as sediments, oil, grease, and metals during daily activities. The MS4 permit requires that parking lots are swept, and surrounding areas of the facility are kept clean to reduce runoff of pollutants.

Parking lot sweeping and cleaning follows the same schedule as street sweeping, at least twice per year in Spring and Fall, with additional sweeping as need for specific sites.

Waste Management

All liquid and solid waste must be disposed of properly. Some of the most common sources of pollution at municipal facilities are a result of littering, improper collection of debris, and improper disposal of solid or liquid waste. Best management practices for handling, storage, transfer and disposal of trash and recyclables include the following:

- All waste and recycling receptacles must be leak-tight with tight-fitting lids or covers.
- Keep lids on dumpsters and containers closed at all times unless adding or removing material. If using an open-top roll-off dumpster, cover it and tie it down with a tarp unless adding materials.
- Place waste or recycling receptacles indoors or under a roof or overhang whenever possible.
- Locate dumpsters on a flat, paved surface and install berms or curbs around the storage area to prevent run-on and run-off.
- Do not locate dumpsters over or adjacent to catch basins.
- Prior to transporting waste, trash, or recycling, ensure that containers are not leaking (double bag if needed) and properly secure containers to the vehicle.
- Clean up any liquid leaks or spills with dry cleanup methods.
- Arrange for waste or recycling to be picked up regularly and disposed of at approved disposal facilities.
- Never place hazardous materials, liquids, or liquid-containing wastes in a dumpster or recycling or trash container.
- Do not wash trash or recycling containers outdoors or in parking lots.
- Conduct periodic inspections of solid and liquid waste storage areas to check for leaks and spills.
- Conduct periodic inspections of work areas to ensure that all wastes are being disposed of properly.
- In dumpster areas, regularly pick up surrounding trash and debris and regularly sweep the area.
- In compactor areas, regularly check the hydraulic fluid hoses and reservoir to ensure that there are no cracks or leaks. Regularly sweep the area.

4.3 Preventative Maintenance

All equipment and systems shall be regularly inspected, tested, maintained, and repaired to avoid situations that may result in leaks, spills, and other releases of pollutants to stormwater and receiving waters. Inspections shall occur at a minimum once per quarter.

Use Storage and Disposal of Potential Pollutants

Potential pollutants or hazardous wastes that may be used and stored in or around municipal building and facilities include pesticides, paints, cleaners, petroleum products, fertilizers, and solvents. Careful handling and proper storage of these products are the best means of preventing spills and pollution to the environment. Best management practices include the following:

- Storage and handling areas should be covered or enclosed to reduce potential contact with stormwater and wind.

- Potential pollutants should be transported using approved methods and containers to minimize the chance of spillage, and by employees that have familiarity with the potential environmental and human health hazards of the products.
- Proper spill kits applicable to the products being used at each specific building or facility should be easily accessible and marked clearly so employees can follow procedures quickly and effectively. Leaks or spills should be cleaned up in a timely manner.
- Establish separate storage areas for these types of products with measures in place to contain any spill leaking out of the storage area.
- A designated person should be responsible for these areas.
- The storage area should be inspected frequently, kept clean and in good order with proper labels and signs, and consistent disposal practices.
- Floor drains in storage areas should be disconnected from the stormwater system.
- Routinely inspect buildings and facilities for areas of potential leaks.
- Paint and other chemicals should not be applied on the outside of buildings when it is raining or prior to expected rain.
- When sanding, painting, power washing, etc., ensure that sites are properly prepared (e.g., use tarps) and cleaned (e.g., use dry cleaning methods) especially if they are near storm drains. Protect catch basins when maintenance work is conducted upgradient of them.
- When painting, use a drop cloth and clean up any spills immediately.
- Do not leave open containers on the ground where they may accidentally tip over.
- Do not discharge chlorinated pool water into the stormwater system. Water must be properly dechlorinated and tested before it is discharged.
- Ensure that the washwater does not flow into the storm system. Containment or filtering systems should be provided.

4.4 Spill Prevention and Response

The permittee shall minimize the potential for leaks, spills, and other releases that may be exposed to stormwater and develop plans for effective response to such spills if or when they occur. At a minimum, the permittee shall have procedures that include:

- Preventive measures such as barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling.
- Response procedures that include notification of appropriate facility personnel, emergency agencies, and regulatory agencies, and procedures for stopping, containing, and cleaning up leaks, spills and other releases. Measures for cleaning up hazardous material spills or leaks shall be consistent with applicable Resource Conservation and Recovery Act (RCRA) regulations at 40 CFR section 264 and 40 CFR section 265. Employees who may cause, detect, or respond to a spill or leak shall be trained in these procedures and have necessary spill response equipment available. If possible, one of these individuals should be a member of the Pollution Prevention Team; and

- Contact information for individuals and agencies that shall be notified in the event of a leak, spill, or other release. Where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under 40 CFR section 110, 40 CFR section 117, or 40 CFR section 302, occurs during a 24-hour period, the permittee shall notify the National Response Center (NRC) at (800) 424-8802 in accordance with the requirements of 40 CFR section 110, 40 CFR section 117, and 40 CFR section 302 as soon as the permittee has knowledge of the discharge. State or local requirements may necessitate reporting spills or discharges to local emergency, public health or drinking water supply agencies, and owners of public drinking water supplies. Contact information shall be in locations that are readily accessible and available.

Spill Prevention Plans

The Town has spill kits and prevention and control plans in place for all buildings and facilities where hazardous wastes are stored or used. These are coordinated with the fire department as necessary.

Per the Massachusetts Clean Water Toolkit Fact Sheet for Spill Prevention and Control Plans, it is recommended that Spill Prevention and Control Plans (SPCP) clearly state measures to stop the source of a spill, contain the spill, clean up the spill, dispose of contaminated materials, and train personnel to prevent and control future spills. The SPCP should define material handling procedures and storage requirements and outline actions necessary to reduce spill potential and impacts on stormwater quality. The plan can be a procedural handbook, or a poster placed in several locations at the site.

4.5 Erosion and Sediment Control

Structural and non-structural control measures shall be used at the facility to stabilize and contain runoff from exposed areas and to minimize or eliminate onsite erosion and sedimentation. Efforts to achieve this may include the use of flow velocity dissipation devices at discharge locations and within outfall channels where necessary to reduce erosion.

Erosion Control

Site maintenance activities include erosion control, specifically with respect to poor vegetation cover and particularly within 50 feet of surface water. Best management practices include the following:

- Prevention of erosion and sedimentation is preferable to installing treatments devices.
- Protect vegetated and wooded buffers and leave vegetated areas undisturbed to the extent possible.
- Inspect sites regularly for locations of poor vegetation cover, erosion and sedimentation and channelization. If stabilization is required, corrective actions should be identified and implemented as soon as possible.
- If exposed, soils should be stabilized by mulching, seeding with fast-growing native grass and/or planted with native tree and shrubs. Use erosion control blankets when seeding slopes.
- If necessary, slow stormwater runoff velocities with conveyance measures such as riprap channels or vegetated swales, check dams, level spreaders and outlet protection, etc.
- A buffer/filter strip should be left around surface waters. No fertilizers or pesticides should be applied in the buffer/filter strip except where necessary.

4.6 MANAGEMENT OF RUNOFF

The permittee shall manage stormwater runoff from the facility to prevent or reduce the discharge of pollutants. This may include management practices which divert runoff from areas that are potential sources of pollutants, contain runoff in such areas, or reuse, infiltrate or treat stormwater to reduce the discharge of pollutants.

Catchbasin Cleaning Program

All catchbasins on the site are to be included in the catchbasin inspection and cleaning optimization program.

Stormwater Management Structural BMP Maintenance

Stormwater BMPs for this facility (excluding catch basins) are to be inspected quarterly and maintained as necessary to provide optimum treatment of stormwater runoff. The Town will keep a log of stormwater management structures inspected and report on the condition and maintenance performed. BMPs are included in the SWPPP inspection form provided in Appendix D.

The following are maintenance activities and procedures for each type of structural BMP on the site based on the Massachusetts Stormwater Handbook:

Structural Pretreatment BMPs

WATER QUALITY UNIT (OIL/GRIT SEPARATOR)

Water quality units, also referred to as oil/grit separators, are underground storage tanks with chambers designed to remove heavy particles, floating debris and hydrocarbons from stormwater. These units are typically considered a pretreatment BMP for land uses with higher potential pollutant loads and risk of petroleum spills. Cleaning these units is important to prevent sediment from re-suspending and discharging during future storm events. Inspection and maintenance should include the following:

- Inspect and clean unit – cleaning includes removal of accumulated oils and grease and sediment using a vacuum truck or other ordinary catch basin cleaning device
- Polluted water or sediments removed from an oil grit separator unit should be disposed of in accordance with all applicable local, state and federal laws and regulations including M.G.L.c. 21C and 310 CMR 30.00.

Additional guidance for Structural BMP operations and maintenance can be found in the latest version of the Massachusetts Department of Environmental Protection Stormwater Handbook, Volume 2, Chapter 2, located at: http://www.mass.gov/eea/docs/dep/water/laws/i-thru-z/v2c2.pdf

4.7 SALT STORAGE PILES OR PILES CONTAINING SALT

For storage piles of salt or piles containing salt used for deicing or other purposes (including maintenance of paved surfaces) for which the discharge during precipitation events discharges to the permittee's MS4, any other storm sewer system, or to a Water of the US, the permittee shall prevent exposure of the storage pile to precipitation by enclosing or covering the storage piles. As of July 1, 2020, such piles shall be enclosed or covered. The permittee shall implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile. The permittee is encouraged to store piles in such a manner as not to impact surface water resources, ground water resources, recharge areas, and wells.

4.8 EMPLOYEE TRAINING

The permittee shall regularly train employees who work in areas where materials or activities are exposed to stormwater, or who are responsible for implementing activities identified in the SWPPP (e.g., inspectors, maintenance personnel), including all members of the Pollution Prevention Team. Training shall cover both the specific components and scope of the SWPPP and the control measures required under this part, including spill response, good housekeeping, material management practices, any best management practice operation and maintenance, etc. EPA recommends annual training.

The permittee shall document the following information for each training:

- The training date, title and training duration
- List of municipal attendees
- Subjects covered during training

4.9 MAINTENANCE OF CONTROL MEASURES

The permittee shall maintain all control measures, required by the permit in effective operating condition. The permittee shall keep documentation onsite that describes procedures and a regular schedule for preventative maintenance of all control measures and discussions of back-up practices in place should a runoff event occur while a control measure is off-line. Nonstructural control measures shall also be diligently maintained (e.g., spill response supplies available, personnel trained).

5.0 SITE INSPECTIONS

Inspect all areas that are exposed to stormwater and all stormwater control measures. Inspections shall be conducted at least once each calendar quarter (winter, spring, summer and fall). The quarters begin on January 1, April 1, July 1 and October 1. More frequent inspections may be required if significant activities are exposed to stormwater. Inspections shall be performed when the facility is in operation. At least one of the quarterly inspections shall occur during a period when a stormwater discharge is occurring.

The permittee shall document the following information for each facility inspection:

- The inspection date and time
- The name of the inspector
- Weather information and a description of any discharge occurring at the time of the inspection
- Identification of any previously unidentified discharges from the site
- Any control measures needing maintenance or repair
- Any failed control measures that need replacement
- Any SWPPP changes required as a result of the inspection

If during the inspections, or any other time, the permittee identifies control measures that need repair or are not operating effectively, the permittee shall repair or replace them before the next anticipated storm event if possible, or as soon as practicable following that storm event. In the interim, the permittee shall have back-up measures in place.

A SWPPP inspection form is provided in Appendix D. The permittee shall report the findings from the Site Inspections in the annual report.

6.0 RECOMMENDATIONS

Based on BETA's March 18, 2020 site visit, we are providing the following recommendations to attain or maintain compliance with the MS4 permit requirements.

6.1 STRUCTURAL COMPONENTS

Structural components of stormwater management include those that are physically constructed and/or implemented such as catchbasins, material enclosures, drainage swales or berms. The following structural components are recommended for the site.

1. The current fueling area is uncovered and exposed to rain. If a petroleum release were to occur during a storm event, this could result in a discharge of petroleum to the stormwater system. We recommend that a cover be installed over the vehicle fueling area.
2. Current vehicle washing at the site results in washwater discharge directly to the stormwater drainage system at the site. Such discharges are not authorized under the MS4 permit. We recommend one or more of the following be performed to eliminate this discharge:
    a. Construct a wash rack to collect and discharge washwaters to the sanitary sewer system (with authorization from the local sewer authority) via a water quality system such as an oil/water or grit separator.
    b. Procure 3rd party vehicle washing services. These operations are equipped to handle fleet vehicle washing and resulting washwater. This would eliminate the discharge of washwater to the storm drain system at the site.
3. Road sand is currently stored in an uncovered area at the site. We recommend that road sand be stored under a covered structure (existing or new) to prevent potential impacts to the storm drainage system.
4. In order to address the concerns of items 1-3 noted above, the Town may consider installing a stormwater treatment device prior to the outfall to Glovers Brook to treat all of the stormwater on the site.

6.2 NON-STRUCTURAL COMPONENTS

Non-structural components of stormwater management include administrative controls, planning, routine maintenance and cleaning operations. Based on BETA's site visit we recommend the following:

1. Scrap metal, leaf litter and debris and other miscellaneous debris stored in uncovered areas are potential stormwater pollutants. We recommend that these materials be routinely removed from the site to reduce potential stormwater impacts.

APPENDIX A – Site Map

Map 1 of 1

DPW Yard

4 Carlino Way

Town of Randolph, MA
SWPPP Map

Equipment Storage (Seasonal)
Sand Storage
Scrap Pile
PRIVATE
PRIVATE
Building 1 Salt Storage
Equipment & Misc. Storage
Solid Waste Storage 2 Dumpsters
Street Sweepings Storage
Building 3 Mechanics Garage
Debris & Leaf Litter Collection
Road Fill Storage
Building 4 Water Department
Vehicle Storage
Building 2 Highway Division
Gravel & Aggregate Storage
Administration, Vehicle & Material Storage
Recycled Material Storage
Castings Storage
Administration & Storage
Outfall to Glovers Brook (Tributary to Cochato River)
Vehicle Fueling 3000-Gallon Gasoline Tank 3000-Gallon Diesel Tank
Oil/Water Separator
Building 5 Garage
Misc. Vehicle Storage
Vehicle Storage & Washing
Building 6 Sewer Department
Administration & Vehicle Storage
Intergenerational Center Overflow Parking (Maintained by DPW)
AMVETS LANE
ICE RINK

Stormwater Legend

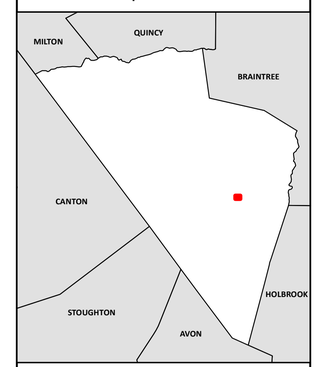
- Private DMH
- Town-Owned DMH
- Town-Owned CB
- Private CB
- Inlet
- Outfall
- BMP
- Pipe
- Surface Water Flow Direction

N

0 40 80 Feet

Plot Date: 6/26/2020

Map Location



BETA

APPENDIX B – Vehicle Inventory

APPENDIX B
VEHICLE INVENTORY
DEPARTMENT OF PUBLIC WORKS
4 CARLINO WAY
RANDOLPH, MASSACHUSETTS

DPW HIGHWAY VEHICLES AND EQUIPMENT							
DPW #	DESCRIPTION	REGISTR	FUEL	CONDITION	RADIO	MILES/HOURS	VIN #
1	2018 Ford Explorer	M99055	G	NEW	N	7700	1FM5K8D84JGA57997
2	2003 Chevy Blazer	M54992	G	POOR	Y	65896	1GNCT18X83K147114
2a	2003 Chevy PU	M65858	G	POOR	Y	116611	1GCEK19VX3E249143
3	2006 INT Dump	M72389	D	FAIR	Y	15257	1HTWDAAR46J326584
4	2015 INT Dump	M15730	D	GOOD	Y	850	1HTWDAAR1FH736038
4a	2016 INT Dump	--	D	GOOD	Y	800	1HTWDSTR3GH259780
5	1999 INT Dump	M60161	D	FAIR	Y	37610	1HTSDAAR2XH659762
6	1999 INT Dump	M60151	D	FAIR	Y	42989	1HTSDAAR0XH659761
7	2011 Chevy Utility	M7668	D	GOOD	Y	15791	1GB3KZCL0BF241532
8	2012 Chevy Utility	M39553	D	GOOD	Y	16586	1GC3KZC87CF221674
9	1992 Chevy Dump	M7635	D	POOR	Y	30930	1GBM7H1J1NJ100925
10	2006 INT CB cleaner	M72388	D	GOOD	Y	10086	1HTWDAAR26J326583
11	1994 INT Sander	M63262	D	POOR	Y	319062	1HTSDN2NXRH567160
12	1988 INT Sander	M63269	D	POOR	Y	140643	1HTLCZWN3JH623307
13	1978 Mack Dump	M26217	D	POOR	Y	54750	R487P-2337
14	1988 INT Sander	M64875	D	POOR	Y	175284	1HTLCZWN1JH579193
15	1986 INT Sander	M34720	D	POOR	Y	49868	1HTLAHGP4GHA16926
16	2009 Ford 1 ton dump	M41693	D	GOOD	Y	17379	1LFDAF57R59EA61246
17	2003 Chevy 1 ton dump	M39552	D	FAIR	Y	73898	1GBJK34183E252285
18	2015 Ford 1 ton dump	M54991	D	GOOD	Y	127	1LFDUF4HT4FEC42058
19	1996 Utility truck	M64332	G	FAIR	Y	158670	1HTSCAAM8VH432998
20	2007 Volvo loader	M7643	D	FAIR	Y	44940 hrs	DW624GB539595
21	1995 JD loader	M55620	D	POOR	Y	3517 hrs	DW544GB550335
22	2002 JD loader	M7649	D	FAIR	Y	2635 hrs	T0410GX903147
23	2013 ELGIN Sweeper	M64349	D	GOOD	Y	385 hrs	1J9VM3H48TC172058
24	1987 DE-ICER	M87042	D	POOR	Y	124056	1FDNF70KXKVA16741
0	1988 INT Sander	M82987	D	POOR	Y	309297	1HSHBAHNXTH341034
25	2004 Sweeper	M45226	D	FAIR	Y	4626 hrs	1FVAB6BV34M31607
27	2003 Bobcat	M26388	D	FAIR	Y	3782 HRS	519033166
28	2014 CAT Skid Steer	M49844	D	GOOD	N	138HRS	511526040
29	1986 Compressor	M7652	D	POOR	N	1443 HRS	004-92097
BM1	1990 Bombardier	M41666	D	POOR	Y	2573 HRS	901900033
BM2	1994 Bombardier	M64326	D	FAIR	Y	2697 HRS	LD33618U615238Y
TRAC-1	1997 Snowblower	M38010	D	FAIR	Y	888 HRS	MT5T1007
TRAC-2	1997 Snowblower	M61850	D	FAIR	Y	902 HRS	MT51008
TRAC-3	2003 Snowblower	M74204	D	GOOD	Y	1509 HRS	MT5T2202
TRAC-4	2011 Snowblower	M83979	D	GOOD	Y	267 HRS	MT61444
BUTR1	1996 Bucket truck	M80280	D	FAIR	Y	10205 HRS	1HTSDAAN0TH294652
M1	1999 Chevy PU	M54949	D	POOR	Y	113555	1GCHK34F3XF067292
TR1	2002 Trailer	M41665	N/A	FAIR	N	NA	4K8NX162921D84869
TR2	1985 Trailer	M41664	N/A	FAIR	N	NA	10HHSE148F100316
TR3	1988 Trailer	M46407	N/A	FAIR	N	NA	1S9TS2126J1132133
CH-1	1998 Brush Chipper	M38883	G	FAIR	N	604 HRS	1VRN15175W1002096
MT-1	1986 Mower/Trimmer	M63273	D	POOR	N	2752 HRS	U 28148
--	1999 JET TRUCK	OFF LINE	D	--	--	--	--
31	1999 CHEVY PU	M91272	D	POOR	Y	124914	1GBHK34F8XF067700
32	2011 CHEVY UTIL	M49868	D	GOOD	Y	22613	1GB3KZCL0BF241532
33	2015 FORD PU	M92218	D	GOOD	Y	4816	1FDRF3BT3FEA00595
34	1992 UTIL VAN	M45207	G	POOR	Y	253741	1GBKP32K2N3314926
35	2015 FORD PU	MM92219	D	GOOD	Y	5128	1FDR3BT5FEA00596
36	1987 INT DUMP	M36509	D	POOR	Y	41350	1HTLAHGPXHHA14373
38	2008 COMPRESS	M7671	D	GOOD	N	682 HRS	B4-6B-2087
39	TRACK EXCAVATOR	NA	D	GOOD	Y	839 HRS	--
42	2003 FORD PU	M65857	D	FAIR	Y	79787	1FDSF31P73EC09937
43	2009 UTIL CRANE	M53197	D	GOOD	Y	45513	1FDAF47R09EA61245
44	2015 VACTOR	M90654	D	FAIR	Y	88 HRS	1HTWKAZR2FH523206

APPENDIX C –Summary of Site Activities and Potential Stormwater Pollutants

APPENDIX C: Summary of Site Activities and Potential Stormwater Pollutants

Activity	Description	Building Reference	Material Inventory	Potential Stormwater Pollutants	Quantity	Potential Exposure to Stormwater	Management Practices	
							Structural	Non-structural
Vehicle Fueling	Fueling of Town-owned and operated vehicles	2	Gasoline	Petroleum Hydocarbons	3,000-gal UST	Low - underground storage and pipinig	Dispenser pad containment	Spill Kit in Close Proximity
			Diesel Fuel		3,000-gal UST	High - spill during fueling		
Vehicle Maintenance	Maintenance of Town-owned and operated vehicles	8	Motor Oil	Petroleum Hydrocarbons	Varies	Low - in covered bldg	Floor Drains to storm drain system	Maintenance conducted inside building, good housekeeping, catchbasin and oil/water separator cleaning
			Hydraulic Fluid	Petroleum Hydrocarbons				
			Lubricants	Petroleum Hydrocarbons				
			Transmission Fluid	Petroleum Hydrocarbons				
			Waste Oil	Petroleum Hydrocarbons				
			Antifreeze	Ethylene glycol				
			Coolant	Ethylene glycol				
			Brake Fluid	Glycols				
			Used Batteries	Acid				
			Used Tires	Solids, polycyclic aromatic hydrocarbons				
Vehicle Washing	Washing of Town-owned and operated vehicles	5	Detergents	Surfactants	Varies	High - direct discharge of uncontained washwater to stormwater system	Storm drain	Good housekeeping practices
				Wastewater				
Construction Materials	Storage and handling of construction materials and miscellaneous maintenance products (gravel, loam, aggregates, etc.)	1	Asphalt	Petroleum Hydrocarbons	Varies	Low - covered storage	Covered storage	Catchbasin cleaning and good housekeeping
		2	Recycled material	Sediment		High - not covered, not stored in paved areas	N/A	Routine sweeping and good housekeeping
		2	Road fill	Sediment		High - not covered, not stored in paved areas		Routine sweeping and good housekeeping
		2	Street sweepings	Sediment, debris		High - not covered, not stored in paved areas		Routine sweeping and good housekeeping
		3/4	Brush/Compost	Nutrients, debris		High - not covered, not stored in paved areas		Routine removal from site
		2	Castings, blocks	Metals		High - not covered, not stored in paved areas		Routine sweeping and good housekeeping
		3	Scrap Metal	Metals		High - not covered, not stored in paved areas		Removed from site when full
Sand/Salt Storage and Handling	Storage and handling of sand/salt for winter roadway applications	1	Sand	Sediment	100 cy (approx.)	High - not covered	Covered storage for salt	Routing sweeping
			Salt	Chlorides	5,000 cy (approx.)	Low - covered storage		Good housekeeping practices
Above Ground Storage Tanks	Building 5 Heating	5	Fuel oil	Petroleum Hydrocarbons	500-gal	Low - stored in covered area	N/A	Spill Kit in Close Proximity
	Waste oil	5	Waste Oil	Petroleum Hydrocarbons	300-gal	Low - stored in covered area with secondary containment	Secondary containment	Good housekeeping practices
Emergency Generators	Facility back-up generator	3	Diesel Fuel	Petroleum	10-gal (approx.)	Low - petroleum products are stored in generator in a covered building	Covered storage	Spill Kit on-site
Solid Waste Management	Two dumpsters	1	Solid waste	Debris, metals	Varies	Low - potential pollutants are covered	Covered storage	Solid waste removal
								Good housekeeping practices
Parking Areas	Parking for Town employees at the Administration Building and DPW Yard	2/5	N/A	Sediment, oil from vehicles	Varies	High - uncovered parking area, direct discharge to catchbasins during storm event	Catchbasin maintenance	Routine sweeping
								Good housekeeping practices
Adminstration	Town administrative offices, and plublic meeting space	2	Miscellaneous equipment and supplies	Paints, cleaning supplies, etc.	Varies	Low - stored in covered areas	Covered storage	Good housekeeping practices

APPENDIX D – SWPPP Inspection Form

STORMWATER POLLUTION PREVENTION PLAN (SWPPP) INSPECTION FORM

Report No. _____

Location:	Department of Public Works: 4 Carlino Way	Date:		Last Insp:	
		Arrive:		Leave:	
Inspector:					
Recent Rainfall:		Current Weather:			
Unidentified Discharges? Spills?					
Add. Info:					

CONTROL MEASURES/ACTION REQUIRED: ☐ YES ☐ NO

(INSPECT FOR ALL APPLICABLE CONTROLS LISTED)

Control	Condition	Required Action	Completed (by)	Date
☐ Fuel Dispensing Area BMPs			☐	
☐ Vehicle Washing Area BMPs			☐	
☐ Vehicle Repair Indoors			☐	
☐ Pavement Sweeping			☐	
☐ Trash Management			☐	
☐ Spill Prevention & Response			☐	
☐ Erosion & Sediment Controls			☐	
☐ Manage Runoff			☐	
☐ Salt Storage Area			☐	
☐ Drainage Swale			☐	
☐ Oil/Water Separator			☐	
☐ Other			☐	

FAILED CONTROL MEASURES REQUIRE REPLACEMENT: ☐ YES ☐ NO

Control	Condition	Required Action	Completed (by)	Date
☐			☐	

SWPPP CHANGES: ☐ YES ☐ NO

Control	Change	Completed (by)	Date
☐		☐	

MANAGEMENT PRACTICES

1. Minimize or Prevent Exposure: To the extent practicable either locate materials and activities inside, or protect them with storm-resistant coverings in order to prevent exposure to rain, snow, snowmelt and runoff (although significant enlargement of impervious surface area is not recommended). Materials do not need to be enclosed or covered if stormwater runoff from affected areas will not be discharged directly or indirectly to surface waters or to the MS4 or if discharges are authorized under another NPDES permit.
2. Good Housekeeping: Keep clean all exposed areas that are potential sources of pollutants, using such measures as sweeping at regular intervals. Ensure that trash containers are closed when not in use, keep storage areas well swept and free from leaking or damaged containers; and store leaking vehicles needing repair indoors.
3. Preventative Maintenance: Regularly inspect, test, maintain, and repair all equipment and systems to avoid situations that may result in leaks, spills, and other releases of pollutants in stormwater to receiving waters. Inspections shall occur at a minimum once per quarter.
4. Spill Prevention and Response: Minimize the potential for leaks, spills, and other releases that may be exposed to stormwater and develop plans for effective response to such spills if or when they occur. At a minimum, the permittee shall have procedures that include:
    a. Preventive measures such as barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling.
    b. Response procedures that include notification of appropriate facility personnel, emergency agencies, and regulatory agencies, and procedures for stopping, containing, and cleaning up leaks, spills and other releases. Measures for cleaning up hazardous material spills or leaks shall be consistent with applicable Resource Conservation and Recovery Act (RCRA) regulations at 40 CFR section 264 and 40 CFR section 265. Employees who may cause, detect, or respond to a spill or leak shall be trained in these procedures and have necessary spill response equipment available. If possible, one of these individuals should be a member of the Pollution Prevention Team; and
    c. Contact information for individuals and agencies that shall be notified in the event of a leak, spill, or other release. Where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under 40 CFR section 110, 40 CFR section 117, or 40 CFR section 302, occurs during a 24-hour period, the permittee shall notify the National Response Center (NRC) at (800) 424-8802 in accordance with the requirements of 40 CFR section 110, 40 CFR section 117, and 40 CFR section 302 as soon as the permittee has knowledge of the discharge. State or local requirements may necessitate reporting spills or discharges to local emergency, public health or drinking water supply agencies, and owners of public drinking water supplies. Contact information shall be in locations that are readily accessible and available.
5. Erosion and Sediment Control: Use structural and non-structural control measures at the facility to stabilize and contain runoff from exposed areas and to minimize or eliminate onsite erosion and sedimentation.
6. Management of Runoff: Manage stormwater runoff from the facility to prevent or reduce the discharge of pollutants. This may include management practices which divert runoff from areas that are potential sources of pollutants, contain runoff in such areas, or reuse, infiltrate or treat stormwater to reduce the discharge of pollutants.
7. Salt Storage Piles or Piles Containing Salt: Prevent exposure of the storage pile to precipitation by enclosing or covering the storage piles. Such piles shall be enclosed or covered within two (2) years of the permit effective date. Implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile. Store piles in such a manner as not to impact surface water resources, ground water resources, recharge areas, and wells.