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1.0 INTRODUCTION

This Stormwater Pollution Prevention Plan (SWPPP) was prepared on behalf of the Town of Wilton by Cardinal Engineering Associates, Incorporated (Cardinal) for the Town's Public Works Facility located at 238 Danbury Road in Wilton, Connecticut. Information contained in this SWPPP has been obtained from site inspections, facility records, state records, and interviews with Town personnel and employees working at the site.

This plan has been prepared in accordance with the requirements of the General Permit for the Discharge of Stormwater Associated with Industrial Activity (General Permit - DEEP-WPED-GP-014) effective October 1, 2016, and conforms to the requirements outlined in the Connecticut Department of Energy and Environmental Protection's (CTDEEP's) Guidance Document for Preparing a Stormwater Pollution Prevention Plan. In addition, this plan supersedes any previously existing SWPP Plans (if any) prepared for the Town of Wilton Public Works Facility. The intent of this plan is to prevent the pollution of surface waters from stormwater that is generated by site operations occurring at the 238 Danbury Road property. A copy of this plan shall be maintained at the site and an electronic copy of the plan shall also be placed on the Town's website.

2.0 SITE DESCRIPTION & CONTACT INFORMATION

2.1 <u>Facility Description</u>

The Town of Wilton Public Works Facility property is situated on the east side of Danbury Road and comprises 11.16 acres. The property is situated in a largely rural, residential area with additional light commercial and undeveloped wooded parcels as neighboring parcels. The Public Works Facility property contains three (3) onsite buildings that include the following:

- <u>Maintenance Garage</u>: The maintenance garage is a steel framed, concrete block structure with a nine-bay maintenance garage and office that was constructed in 1981. The building covers 11,500 square feet. There is also a small second floor space used for mechanical equipment and storage. The maintenance garage is heated by fuel oil that is stored in a 1,000gallon underground storage tank (UST) located to the west of the building. The maintenance garage interior has a floor drain system that discharges to a 1,000-gallon oil-water separator tank. The oil-water separator tank is connected to the Town's sanitary sewer system. The oil-water separator tank is routinely emptied by a licensed contractor.
- <u>Salt Storage Building</u>: The Salt Storage Building was constructed in 1989 and consists of a reinforced concrete slab floor and perimeter wall (10+'-high) covered with a wood roof. The building covers 9,700 square feet and is not heated.
- 3. <u>Crew Quarters and Storage Building</u>: A small garage (818 square foot footprint) with an at grade basement used for storage (miscellaneous parts and tools as well as tires and vehicle seats for the police department) with the upper floor used as overnight quarters for maintenance crews during winter plowing operations. This building is heated by oil and is connected to the Town's sewer system.

The facility also includes a back-storage area that contains a small makeshift storage structure made of concrete blocks and a wooden roof used to store mason sand. In addition, there are four (4) metal (shipping) containers used to store miscellaneous items (pipe fixtures and tires). The back-storage area is also used for storage of road building materials (pipe, catch basins, etc.), dumpsters as well as miscellaneous vehicle storage including tractors/mowers, excavators, compressors and larger trucks. Most of the department's maintenance vehicles are housed in the maintenance garage when not in use.

The Public Works Facility also has a gasoline and diesel fueling station used by Town of Wilton vehicles and equipment. The fueling station products are stored in three (3) underground storage tanks (UST) comprising a 10,000-gallon tank for diesel fuel and two UST's for gasoline (10,000 and 5,000-gallons). These USTs and fuel pumps are situated along the front exterior of the maintenance garage building.

Approximately 40% of the site is paved with asphalt. The remaining area (back storage area to the east of the maintenance garage) is natural ground. The topography of the parcel slopes generally downwards from the northeast / east to the west towards Danbury Road. In addition, the residential properties to the northeast of the site are topographically higher and properties to the east are lower. The properties to the east are screened from the Public Works facility by a raised berm.

The onsite buildings are connected to the Aquarion Water Company's public water supply distribution system. All buildings (except for the Ambulance Corps building) are connected to the Town's sewer system. The Town of Wilton, by agreement, sends all of its sanitary waste to the City of Norwalk for treatment.

The primary industrial activity at the Public Works Facility property is classified under the Standard Industrial Classification Code (SIC) 9199 – General Government/Public Works Garage, and operations at the property are categorized under Sector G – Transportation and Public Works. The site performs vehicle maintenance and storage, vehicle and equipment fueling, as well as sand and salt storage and is therefore required to implement a SWPPP and register for a General Permit for the Discharge of Stormwater Associated with Industrial Activity.

2.2 General Location Map

Figure 1 in Appendix A depicts the general location of the Town of Wilton's Public Facility at 238 Danbury Road. The facility is located on the east side of Danbury Road (U.S. Route 7), approximately 2,800-feet north of the intersection of Wolf Pit Road (CT Route 106) and approximately 2,300-feet south of Ridgefield Road (CT Route 33). The Public Works Facility is part of a larger Town Government Complex that includes the Town Hall, Town Hall Annex, Fire Department, Police Department, Animal Control and EMS (Wilton Volunteer Ambulance Corps).

The total acreage of the Town Government complex is approximately 11.16 acres of which the Public Works Facility occupies approximately 15 percent.

2.3 Environmental Setting

The CTDEEP's November 2015 Water Quality Classification Map (Appendix A) indicates that the Town of Wilton Public Works Facility is situated in a GA groundwater classified area. The GA groundwater classification indicates that the groundwater may be suitable for private and public drinking water supplies without the need for treatment. This map also indicates that the site is not within an Aquifer Protection Area or within an area of contribution to a public water supply well. The nearest surface water body, the Norwalk River, is located approximately 1,500-feet to the west. The Norwalk River is classified as a Class" B" surface water body, which indicates that it may be used for Class B designated uses such as habitat for fish and aquatic life and wildlife; recreation; navigation; and industrial and agricultural water supply.

The Public Works Facility site is situated within the Norwalk River watershed (7300-00) which is a part of the Western Coastal Area Watershed (Appendix A). The CTDEEP's Impaired Waters Monitoring Requirements Table (Effective October 1, 2011) (Appendix A) indicates that this water body or drainage basin is impaired. In addition, the Public Works Facility property is not situated within a coastal boundary or coastal area. A review of the current Federal Emergency Management Agency (FEMA) flood maps indicated that the site is not situated within the 100-year floodplain (Appendix A).

The CTDEEP's June 2017 Natural Diversity Data Base Areas map for the Town of Wilton indicates that there are no state-listed special concern, threatened, and/or endangered species on or adjacent to the site.

According to the Town of Wilton's property records, the Public Works Facility property does not have any conservation or preservation restrictions, and it is not situated within any federally recognized Indian lands.

2.4 <u>Pollution Prevention Team</u>

This SWPPP was developed on behalf of the Town of Wilton by Cardinal Engineering Associates, Inc. (Cardinal). Cardinal and/or the Town of Wilton is also responsible for making any necessary revisions to the SWPPP, based upon any changes to existing site conditions or activities that may occur in the future. The proper implementation of this plan is ultimately the responsibility of the Town of Wilton Public Works employees designated as the "Pollution Prevention Team" members. The Pollution Prevention Team listed below is responsible for implementing this SWPPP and ensuring that all Wilton employees working at the Public Works Facility property are familiar with the protocols outlined in the SWPPP. In addition, the team members must be familiar with the Town's Emergency Response Plan (ERP) – Appendix A, including the regulatory spill reporting requirements, spill cleanup procedures and spill prevention measures. The Pollution Prevention Team is also responsible for relaying any critical information to Cardinal regarding changing conditions or other activities that would warrant any revisions to either the SWPPP or ERP.

This SWPPP was prepared by:

Consultant:	Cardinal Engineering Associates, Inc.
Contact:	Gary J. Giroux, P.E.
	Telephone (office): (203) 238-1969
	Email: gary@cardinal-engineering.com

The following Town of Wilton personnel are designated as the Public Works Facility's Pollution

Prevention Team members:

Town of Wilton

Leader: Michael S. Ahern, P.E. Title: Interim Manager, Public Works Telephone (office): (203) 563-0152 Telephone (mobile): (203) 216-8385 Email: mike.ahern@wiltonct.org

Responsibilities: Coordinate and implement all facets of the SWPP plan, including: ensuring that all inspections are conducted; employees are trained and familiar with the plan contents; training and inspection records are kept up to date; making the plan and general permit available to other team members; correct any plan or facility deficiencies that may become evident in the future; and notify Cardinal of any changes that would warrant updates to the plan.

Member:	Robert Flemming	Title:	Highway Superintendent
	Telephone (office): (203) 563-0152		
Telephone (mobile): (203) 943-1067			
	Email: flemming.bob@wiltonct.o	rg	

Responsibilities: Ensure that all Town of Wilton Highway Department employees on duty are familiar with this plan, as well as the ERP; be a responsible person in charge to make sure all spills are cleaned up promptly and reported.

Responsibilities: Ensure that all Town of Wilton Highway Department employees on duty are familiar with this plan, as well as the ERP; be a responsible person in charge to make sure all spills are cleaned up promptly and reported.

3.0 <u>POTENTIAL POLLUTANT SOURCES</u>

3.1 Site Map

On October 13, 2017, Cardinal personnel toured the 238 Danbury Road property in order to document current site conditions. The Town of Wilton provided Cardinal an existing base map sketch from 2017 showing property boundaries, onsite structures and pertinent site features. Figure 2 – Site Plan is included in Appendix A of this plan. Figure 3 – Site Plan depicts contours and the three (3) main onsite drainage areas on the Public Works property. The drainage areas are described as follows:

- Drainage Area 1: This 5.2-acre area drains south to the DPW Garage and Storage Yard from high points located to the north (woodlands and residential properties), as well as collecting runoff from the Garage's northeast roof area and from the Storage Yard. As shown on the enclosed Existing Site Plan (Appendix A), stormwater runoff ultimately drains into six (6) drywells located to the north and east of the DPW Garage. There is no point source discharge from this area, which is underlain by permeable gravel. When the capacity of the drywells and surrounding gravel is exceeded, subsurface flow migrates east into lower lying areas north of Maple Street. Highway department personnel have never observed sheet flow to the west, during storms with increased rainfall. This drainage area collects runoff from 1.05 acres (or approximately 61%) of the total 1.71 acres of Public Works facilities on the Town Hall site.
- Drainage Area 2: This 3.4-acre sub-basin collects drainage from the areas shown on the aerial maps, which largely consists of portions of the DPW Garage roof, Annex roof, Fire Headquarters roof, and Salt Storage roof; the Police Headquarters roof; and adjacent parking areas. (Note that the northern half of the Salt Storage roof sheet flows generally north and west into the adjacent woods and cemetery). The drainage system shown on the Existing Drainage System plan directs flow into the underground concrete galley system located south of the Police Headquarters. Flow that is not infiltrated or detained by the Area 2 galley system flows westward via a 15" pipe, through sub-watersheds 3 and 4, and ultimately into the ConnDOT's stormwater collection system along Route 7. This drainage area collects runoff from 0.49 acre (or approximately 29%) of the total 1.71 acres of Public

Works facilities on the Town Hall site.

• <u>Drainage Area 3</u>: This 1.4-acre sub-basin collects drainage from the areas shown on the aerial maps, which include woodlands to the south and the southern portion of the DPW Garage and Fire Headquarters roofs, along with adjacent paved areas. The drainage system shown on the Existing Drainage System plan directs flow into the underground concrete galley system located west of the Fire Headquarters. (This galley system is actually located in sub-watershed 4, but runoff is piped to it from sub-watershed 3.) Flow that is not infiltrated or detained by the Area 3 galley system flows northwest via a 15" pipe, through sub-watershed 4, and ultimately into ConnDOT's stormwater collection system along Route 7. This drainage area collects runoff from 0.16 acre (or approximately 9%) of the total 1.71 acres of Public Works facilities on the Town Hall site.

A drainage analysis of the Public Works Facility was performed by the Town of Wilton in support of the need to prepare this registration and is included in Appendix A.

3.2 Additional Site Map Requirements by Sector

The Public Works Facility is a Transportation and Public Works facility, and would be considered a Sector G classification, per the CTDEEP definitions. This sector requires that all street sweeping areas, catch basin cleanout storage areas, aircraft de-icing areas, and storage areas for liquid deicing and anti-icing materials be indicated on the site plan. The Town does not conduct aircraft de-icing or utilize liquid de-icing materials. The salt and sand/salt mixture storage locations are depicted on Figure 2. In addition, according to Town of Wilton personnel, street sweepings from municipal streets and the site, as well as catch basin sediments, are not managed at the Public Works Facility.

3.3 Inventory of Exposed Materials & Summary of Potential Pollutant Sources

Materials that are stored and/or handled at the site that have the potential to be exposed to stormwater are listed in Table 1. This list includes the type of material stored, the method and storage location, the stormwater outfall location, the associated pollutants, and the control measures utilized to minimize exposure of the material to stormwater. This table should be

updated if additional materials are stored at the site in order to keep the plan current. If new materials are added or altered, then the Town must make a determination if the materials will adversely impact the quality of stormwater runoff at the site. In addition, the Town must also implement any necessary storage controls prior to bringing the new materials to the site.

The following subsections describe each potential pollutant source area on the Town of Wilton Public Works Facility property.

3.3.1 Loading & Unloading Operations

<u>Maintenance Garage</u>

The following materials have the potential to be loaded and/or unloaded at the maintenance garage building and have the potential to be pollution sources:

- Detergent and cleaners used for various purposes including hand soaps, vehicle and equipment cleaners, bathroom cleaning products, window and glass cleaning products, and all-purpose cleaning products.
- Antifreeze/coolants, motor oils, petroleum-based lubricants, transmission fluid, brake fluid, and hydraulic oil used in Town equipment and vehicles.
- Windshield washer fluid for Town vehicles.
- Waste oil and anti-freeze from vehicle and equipment maintenance that are stored in two (2) separate aboveground storage tanks (AST) located outside of the Maintenance Garage (building). The tanks are protected from the elements by a roofed enclosure. The waste oil and antifreeze are manually carried to the AST's from inside the building.
- Fuel oil deliveries to the 1,000-gallon UST located along the western exterior of the building.
- Paints used for pavement markings, signs, and vehicle touchups.
- Mineral spirits and cleaners used for degreasing and cleaning parts and tools.
- Gasoline and diesel fuel deliveries to a 5,000 and 10,000-gallon gasoline UST and a 10,000- gallon diesel fuel UST located to the north of the building.
- Pump-outs of the 1,000-gallon oil-water separator tank located along the western exterior of the building.

The vehicle maintenance fluids, paints, and various types of cleaners are stored and utilized within the interior of the maintenance garage. The only time they would be exposed to potential stormwater is during deliveries to the building. The maintenance garage is equipped with spill control equipment and emergency spill kits in the event of a spill. In addition, the maintenance garage has an interior floor drain system that discharges to an oil-water separator tank connected to the Town's sewer. All fluids that enter the floor drain system are completely contained and not discharged to the ground or surface waters in any way. Equipment and vehicle washing is not conducted outside of the maintenance garage. Any equipment and vehicle washing are conducted within the maintenance garage so that the runoff is collected and stored within the oil-water separator and eventual discharge to the Town's sewer system. Stormwater from this area encompasses Drainage Area 1, and potential pollutants associated with activities within the area include oil and grease and phosphorus. Parts cleaning is done within the building. Wash-off pollutants and cleaning fluid are self-contained within the equipment. This equipment is periodically serviced and drained by an outside contractor: Safety-Kleen, Pittsburgh, Pennsylvania.

3.3.2 Roof Areas

None of the buildings situated on the Town of Wilton Public Works Facility have process roof vents that would discharge to the roof and become potential stormwater contaminants.

3.3.3 Outdoor Storage Activities

Maintenance Garage Fuel Tanks/Pumps

The Public Works Department's diesel and gasoline pumps are located adjacent to and north of the building's exterior. The pumps have an emergency shut-off button located on the northern exterior of the building that will shut down all pumps when depressed. The area surrounding the pumps is paved with asphalt with a top apron of concrete (immediately above the tanks). The Town maintains spill control equipment and kits in the area of the maintenance garage, adjacent to the fuel pumps. Stormwater from this area encompasses Drainage Area 1, and potential pollutants associated with activities within the area include oil and grease. All three UST's and appurtenances are inspected visually once a month and tightness tested annually. Their cathodic

protection is also tested yearly. Inspections are performed by an outside contractor: Crompco, LLC, Plymouth Meeting, Pennsylvania.

The gasoline, diesel, and heating oil USTs receive deliveries from licensed fuel transporting companies. These companies are required to have emergency spill equipment and kits immediately available in the event of a release. In addition, the Town of Wilton maintenance garage is equipped with additional spill control equipment and kits in the event of a release during fuel deliveries. The Town of Wilton also has an ERP and tank monitoring program in place that requires routine inspections of all USTs in addition to the required spill kits adjacent to each location. Stormwater from the diesel / gasoline UST area encompasses Drainage Area 1, and stormwater from the heating oil UST area encompasses Drainage Area 3. Potential pollutants associated with activities within the area include oil and grease.

Maintenance Garage AST's

The waste oil AST, anti-freeze AST and oil-water separator UST are routinely pumped out by a licensed contractor. The Town maintains spill control equipment and kits in the vicinity of these tanks in the event of a release. In addition, the Town of Wilton has an ERP in place that requires routine inspections of all ASTs in addition to the required spill kits adjacent to each location. Stormwater from the oil water separator UST, waste oil AST and anti-freeze AST encompasses Drainage Area 3. Potential pollutants associated with activities within the area include oil and grease, suspended solids and metals.

Salt & Sand Storage Piles

The Town of Wilton stores all sand / salt mixture used for deicing of its roadways within the salt storage building. All salt and winter sand are completely covered by this building and are mixed within the building. At no time is any material exposed to weather allowing for stormwater to carry it off through onsite drainage. The floor of the storage building is impermeable (concrete). Stormwater from this area encompasses Drainage Area 2. Potential pollutants (although highly unlikely) associated with activities within the area include salt, suspended solids, metals, and phosphorus.

Vehicle & Equipment Storage Area

Vehicles of Town employees, as well as vehicles awaiting maintenance are parked in the area adjacent to the north and east of the maintenance garage. The Town stores various pieces of equipment including snowplows, spreaders, loader and backhoe buckets, storage boxes and trailers, and various other road maintaining equipment in the area east of the garage. In addition, there are piles of corrugated pipe, concrete blocks and bricks on pallets, concrete pipe sections, and concrete drainage boxes in this area. A portion of this area for vehicle parking is paved with asphalt; however, a majority of the area utilized for equipment storage is unpaved. Vehicles and equipment parked in these areas for prolonged periods should have spill pans beneath them to catch any potential petroleum-based drippings. Stormwater from this area encompasses Drainage Area 1, and potential pollutants associated with activities within the area include oil and grease.

Dumpsters

Dumpsters for the Public Works Facility as well as all facilities within the Government complex are situated adjacent to the Salt Storage Building. All of the dumpsters are equipped with covers and drain plugs, and were covered at the time of the site visit on October 13, 2017. The dumpsters are routinely emptied by licensed waste haulers for offsite disposal. Stormwater from the Town's dumpster area encompasses Drainage Area 2. Potential pollutants associated with activities within the area include suspended solids.

3.3.4 Outdoor Manufacturing or Processing Activities

No manufacturing or processing activities occur at the Public Works property.

3.3.5 Dust or Particulate Generating Processes

Dusts and particulates may be generated during the mixing of sand and salt as well as during the loading of the sand/salt mixture into Town trucks. Sand and salt are periodically mixed with a pay-loader inside the Salt Storage Building as well as loading of trucks.

3.3.6 Onsite Waste Disposal Practices

No wastes are disposed of on the Town of Wilton Public Works property.

3.4 Spills & Leaks

There have been no reportable or recorded spills or leaks of 5-gallons or greater of petroleum products and/or toxic or hazardous substances at the facility in the last three years. Any spills or leaks of 5- gallons or greater that occur on the site will be recorded using the form provided in Appendix B of this plan.

3.5 Presence of Non-Stormwater Discharges

On October 13, 2017, Cardinal personnel visually inspected the Public Works Facility to determine if any non-stormwater discharges were occurring at the site. The site inspection included observations of the storm drain system, review of available facility mapping, and discussion with Town of Wilton Public Works officials. By definition allowable non- stormwater discharges include the following:

- landscape irrigation or lawn watering
- uncontaminated groundwater discharges such as pumped groundwater, foundation drains, water from crawl space pumps and footing drains
- discharges of uncontaminated air conditioner or refrigeration condensate
- water sprayed for dust control or at a truck load wet-down station
- naturally occurring discharges such as rising groundwater, uncontaminated groundwater infiltration, springs, and flows from riparian habitats and wetlands.

The site inspection activities indicated that the Town maintenance garage has a floor drain system that discharges to an oil water separator and public sewer. This tank is routinely pumped out by a licensed contractor for offsite disposal and does not result in the discharge of oil or water to the subsurface

3.6 <u>Impaired Waters</u>

The Norwalk River is the surface water body that would receive potential stormwater discharge runoff from the Public Works site. The Norwalk River is classified as a Class" B" surface water body and the CTDEEP's Impaired Waters Monitoring Requirements Table and indicates that this is an "impaired waterbody". Based upon activities conducted at the Public Works site, it is not expected that stormwater would be exposed to mercury. Stormwater monitoring for nitrogen in

the form of nitrate and total Kjeldahl nitrogen shall be conducted in accordance with the requirements of the General Permit.

4.0 STORMWATER CONTROL MEASURES

4.1 Good Housekeeping

Utilizing good housekeeping practices at the Public Works site will reduce/eliminate any potential adverse impacts to stormwater. The following good housekeeping practices shall be continued / implemented at the Public Works property:

- Outdoor vehicle and equipment washing is not permitted. All Town vehicles and equipment shall be washed inside of the maintenance garage where the resulting rinse water flows from the floor drains, through the oil water separator before discharging to the public sewer system.
- All Town vehicles and equipment shall be maintained in good working order. Town vehicle and equipment maintenance shall be conducted inside the maintenance garage.
- All hydraulic equipment shall be maintained in good working order, and any drips shall be cleaned up promptly.
- Drip pans shall be utilized when changing fluids on Town vehicles and equipment. They shall also be utilized beneath spigots and fill pipes on drums, oil containers, and waste oil/antifreeze tanks within the maintenance garage and recycling shed.
- Drip pans or pads shall be utilized underneath all vehicles and power equipment stored for prolonged periods in the Vehicle and Material Storage Area.
- When transferring fluids in the maintenance garage, funnels shall be utilized to minimize drips and spills.
- All fueling areas, UST fill locations, and ASTs shall be inspected for leaks and spills on a regular basis.
- All secondary containment units associated with onsite ASTs shall be maintained free of liquids and inspected on a regular basis. If liquids are present within any secondary containment units, they shall be removed immediately to a proper storage container or tank.
- Oily wastes shall be kept separate from other wastes, especially those containing solvents. Dirty rags shall be properly stored in the covered storage container

located in the maintenance garage.

- Containers containing flammable liquids shall be stored inside flammable storage cabinets to the extent possible. Containers containing gasoline, diesel, oil, or other flammable liquids shall be inspected regularly to ensure that they are sound and not leaking.
- Liquid and dry material storage shall be kept in specific indoor areas with proper containment and separation of potentially volatile materials.
- Waste materials and stock shall be stored inside or within an enclosed storage container such as a trailer or storage box. If it becomes necessary to temporarily store stock and waste outside, that shall be placed on a raised surface, such as a pallet, and covered with a tarp to avoid contact with stormwater.
- Do not store drums (empty, full, open, or closed) or used pallets outdoors or uncovered.
- The onsite parking and storage areas shall be kept clean and orderly at all times. These areas shall be inspected on a regular basis to determine if any vehicles or equipment are leaking. Any leaks shall be terminated and cleaned up.
- All spills occurring onsite shall be promptly reported to member of the Pollution Prevention Team and shall be terminated and cleaned up immediately. Any spill control equipment and materials utilized to clean up a release shall be replaced and restocked immediately.
- The onsite catch basins and swales will be regularly inspected, properly maintained, and cleaned as needed to maintain proper sediment removal from stormwater.
- Keep dust collection areas clean, sweep the site regularly, and clean up all trash.

4.2 <u>Vehicle & Equipment Washing</u>

Any vehicle or equipment washing that is conducted onsite occurs inside the Town maintenance garage. Floor drains in the maintenance garage are plumbed to a 1,000-gallon oil water separator. The Town of Wilton contracts with EGC Environmental Service of North Branford, Connecticut to pump out the oil water separator for proper disposal. At a minimum, this tank is pumped out on a yearly basis. No other vehicle or equipment washing areas are permitted or conducted onsite.

4.3 Floor Drains

As stated in the previous subsection, the maintenance garage has floor drains that are connected to an oil water separator. The oil water separator is connected to the Town's sanitary sewer.

4.4 Roof Areas

No roof areas were identified that would be subject to drippings, dust or particulates from exhausts or vents, or other sources of pollution. The only types of vents present on the building's roofs consist of wind driven airflow vents and vents associated with the heating systems. The maintenance garage has an exhaust vent for vehicle tail pipe emissions, which is located on the garage's sidewall.

4.5 <u>Minimize Exposure</u>

Section 3.3 of this plan discusses the potential stormwater pollution impacts at the Public Works property. The Town of Wilton is implementing best management practices to minimize and eliminate opportunities for stormwater impacts. These practices are also discussed in Section 3.3 of this plan. In addition, the Town shall be implementing additional measures in the future that will help minimize and eliminate stormwater impacts. An estimated schedule of completion for these activities is included in Appendix C of this plan. The Town shall implement the following actions for the Public Works Facility to minimize and eliminate stormwater impacts:

- Repair all catch basins to make sure stormwater properly flows into each basin.
- Sweep Public Works area of the site annually or as needed.
- Clean sediment traps / sumps in catch basins to reduce the potential for sediments
- Maintain all drywells to ensure proper operation.
- Install secondary containment for AST's

4.6 Sediment & Erosion Control

Sediment and erosion controls at the Public Works site shall conform to the 2002 Connecticut

Guidelines for Soil Erosion and Sediment Control, as well as the 2004 Connecticut Stormwater Quality Manual. The control of sediment transport by stormwater runoff is imperative in reducing/eliminating contamination of water bodies by stormwater.

Approximately 40% of the site is paved with asphalt, except for the areas along the southern and eastern property boundaries, and in the northeast corner. In some areas (e.g. Vehicle and material storage area), there are no curbs along the pavement edges to allow for sheet flow runoff onto the unpaved areas. The edges of the unpaved areas are covered by stable vegetation and are flat, and are therefore not subject to significant erosion. If sediment buildup or erosion is noted during the inspections, then additional control measures such as silt fences, hay bales, or other structural controls shall be implemented.

The onsite catch basins have sediment sumps that are cleaned out, at a minimum, on an annual basis. The catch basins are routinely inspected to determine if more frequent sediment removal is warranted.

4.7 <u>Management of Runoff</u>

Stormwater runoff at the Public Works Facility is managed as described in section 3.1 of this report. The majority of site drainage is directed to underground infiltration chambers. Any surface flow that exceeds the capacity of the underground system of chambers will discharge into a drainage system that connects to the drainage system in Danbury Road (Route 7). This system eventually discharges to the Norwalk River

All areas are routinely inspected to ensure that sedimentation buildup is not occurring. Additional stormwater management measures shall be evaluated and implemented if warranted by inspections and stormwater quality testing.

4.8 <u>Preventative Maintenance</u>

Preventive measures through maintenance and inspections are a critical component in stormwater quality management. Section 5.0 of this plan describes the minimum inspection frequencies that must be conducted at the Public Works facility. Areas to be inspected and maintained include the following:

- catch basins
- stormwater outfalls and drainage swales
- vehicle and equipment storage and maintenance areas
- dumpsters
- fueling areas, USTs and ASTs
- secondary containment and waste storage areas
- roof gutters and discharges

Any sediment buildups shall be removed as needed, and any noted spills shall be immediately cleaned up.

4.9 Spill Prevention & Response Procedures

The Town of Wilton has a written Emergency Response Plan (ERP) (dated December 30, 2016) to address policies and measures to mitigate impacts of a release at the Public Works Facility. A copy of the ERP is maintained at the Public Works maintenance garage and all Town of Wilton Public Works employees working at the Public Works property shall be familiar with the requirements discussed in the ERP.

4.10 Employee Training

The Town of Wilton shall implement a stormwater management-training program for all Town Public Works employees, including the Pollution Prevention Team members listed in Section 2.3, working at the Public Works Facility. The training will address the contents of this SWPPP, including good housekeeping measures and best management practices utilized to reduce and eliminate stormwater impacts, spill response procedures (per the Town's ERP), material management practices, preventative maintenance routines, and roles of the Pollution Prevention Team members. Employees will be encouraged to participate and provide input as to ways to mitigate stormwater impacts at the site.

All new hires will be trained within 90 days of employment and at least once per year thereafter. Training shall be conducted or supervised by a member of the Pollution Prevention Team, or other qualified person. Employee training records shall be documented and maintained on the form enclosed in Appendix D of this plan.

Members of the Pollution Prevention Team shall meet at least once per year to discuss the contents and effectiveness of the SWPPP and the employee-training program in order to address any deficiencies that may need to be resolved.

4.11 <u>Non-Stormwater Discharges</u>

The Town of Wilton shall implement an inspection schedule to ensure that new non-stormwater discharges do not occur at the site in the future. The inspection shall be conducted on a quarterly basis and shall consist of visually inspecting the site during dry weather to observe if any non-stormwater discharges are occurring, especially in the salt and sand storage areas and swales. The inspection of catch basin structures shall also be conducted during dry weather to ensure that the structures are sound and free of defects.

4.12 Solid De-icing Material Storage

The Town of Wilton has a covered salt storage structure located to the north of the maintenance garage. The Salt Storage Building was constructed in 1989 and consists of a reinforced concrete perimeter wall (10+'-high) covered with a wood roof and an impermeable concrete floor. The building covers 9,700 square feet and is not heated.

The Public Works property is situated within a GA classified groundwater area, but not within an aquifer-protected area. The site is connected to the Aquarion public water distribution system and there are no drinking water wells situated within 250 feet of any onsite salt storage area. In addition, based upon a review of the current FEMA flood maps, the onsite areas utilized for de- icing material storage are not situated within the 100-year floodplain.

The Town has procedures and policies previously discussed in Section 3.3 for sand and salt mixing, as well as ensuring that all de-icing materials are properly covered.

4.13 Discharges to Impaired Waters

The Town of Wilton Public Works property does not discharge stormwater to an impaired water body.

4.14 Sites Discharging to Municipal Separate Storm Sewer Systems

The Town of Wilton Public Works property does not discharge to a Municipal Separate Storm Sewer System (MS4). Therefore, there are no additional MS4 requirements.

4.15 Additional Control Measures Required by Sector

The Town of Wilton Public Works Facility would be considered a Sector G (Transportation and Public Works) facility. As such, stormwater control measures for vehicle and equipment storage, fueling areas, vehicle and equipment cleaning and maintenance; employee training and de- icing material storage must be discussed in this SWPPP. Control measures for all of the other listed activities are discussed in previous sections of this SWPPP.

5.0 **INSPECTIONS**

The General Permit requires that two types of inspections be conducted on the Town of Wilton Public Works Facility: Semi-Annual Inspections and monthly Routine Inspections. The purpose of the inspections is to ensure that management practices and control measures documented in Section 4.0 of this plan are being implemented correctly and effectively. In addition, the inspections will aid in determining if changes to stormwater management are needed.

5.1 <u>Semi-Annual Inspections</u>

The Wilton Public Works property shall be inspected by at least one member of the Pollution Prevention Team identified in Section 2.3 of this SWPPP on a semi-annual basis. This comprehensive site inspection shall be conducted during the months of April and October during a rain event, if possible. The inspector(s) shall review the following documents prior to starting the semi-annual inspection:

- the current SWPPP and site plan(s)
- all Routine Inspection reports for the year
- all visual monitoring reports for the year
- all analytical stormwater monitoring for the year
- any other available documentation such as maintenance records, spill reports for the year

A Semi-Annual Inspection Form that details the items to be covered during the inspection is included in Appendix E of this plan. The form will assist the inspector in completing the semi-annual inspections, and it must be signed by the Wilton Director of Public Works to ensure that any recommended actions by the inspector are acknowledged and pursued. The completed Semi-Annual Inspection Forms must be kept on record at the Public Works property for a minimum of five (5) years.

5.2 <u>Routine Inspections</u>

At a minimum, routine inspections of the Public Works Facility must be completed on a monthly basis. If possible, the monthly inspections shall be made during a rainfall/precipitation event. A

Routine Inspection Form that details the items to be covered during the inspection is included in Appendix E of this plan. The form will assist the inspector in completing the routine monthly inspections, and the completed forms must be kept on file with a copy of the SWPPP.

6.0 <u>SCHEDULES & PROCEDURES FOR MONITORING</u>

The General Permit requires both visual and analytical testing of the one stormwater dischargesampling site designated at the Public Works Facility during a "measurable storm event", which is a precipitation event that produces actual discharge from the site via the outfalls. Typically, stormwater grab samples shall be collected during the first thirty (30) minutes of the outfall discharges. If it is not possible to collect the samples within the first thirty minutes of discharge, the sample must be collected as soon as possible after, and documentation of why it was not possible to take the samples within the first thirty minutes must be made and kept with this plan. At least seventy-two (72) hours must have elapsed since the previous measurable storm event in order to collect appropriate stormwater samples.

The location of the sample location is depicted in Figure 2 – Site Plan, which is included in Appendix A of this plan. The sample location is a manhole near the underground gallery system that collects runoff from Drainage Area 2.

If the Town of Wilton is unable to collect the appropriate stormwater samples, the Town must properly document the inability. In the case of the inability to collect the semi-annual samples, the Stormwater Monitoring Report (SMR) shall be submitted with the notation of "no discharge" and an explanation of the limitations restricting the sample collection. Acceptable reasons for not collecting a sample include the absence of a 72-hour period of dry weather, the absence of a rain event that produces a stormwater discharge, the absence of a discharge from a specific monitoring point, or safety considerations preventing access to a stormwater discharge location. The timing of a rain event is not an acceptable reason for failure to collect a sample, unless it precludes the analysis of a parameter within the acceptable laboratory holding time (i.e. the laboratory is closed for a holiday).

The following subsections describe the schedules and procedures for completing the required quarterly and semi-annual monitoring

6.1 <u>Visual Monitoring - Ouarterly</u>

The General Permit requires that once per quarter, a visual assessment of the proposed stormwater

outfall locations is conducted by a member of the Pollution Prevention Team during a rainfall event. Quarters begin on January 1, April 1, July 1, and October 1. The visual monitoring will be conducted by collecting a stormwater sample from the referenced manhole in a clean, clear glass or plastic container. The stormwater sample shall be visually inspected for the following items:

- color
- odor
- clarity
- floating solids
- settled solids
- suspended solids
- foam
- oil sheen
- other obvious indicators of pollution

Appendix F contains the Visual Monitoring Form that will assist the Pollution Prevention Team Member responsible for completing the quarterly visual monitoring. The completed Visual Monitoring Forms shall be kept on file at the Public Works garage along with this plan. The forms do not require submission to the DEEP, unless specifically requested.

6.2 General Monitoring Requirements – Semi-Annual

The General Permit requires that stormwater samples be collected from the designated manhole on a semi- annual for the periods between October 1 to March 31, and April 1 to September 30 of each year. This semi-annual monitoring can be conducted concurrently with the quarterly Visual Monitoring samples. For the semi-annual sampling, the Town of Wilton (or its Consultant) shall contract with a State-certified laboratory to conduct the required stormwater monitoring analyses for the duration of the General Permit. Prior to the collection of the stormwater samples, the Town of Wilton shall determine if Pollution Prevention Team Members or contracted laboratory personnel shall collect the appropriate stormwater samples. Arrangements with the laboratory shall be made prior to a storm event to provide the appropriate sampling containers, labels, coolers, and chains of custody for proper stormwater collection. In addition, courier service or sample dropoff/pick-ups should be scheduled with the contracted laboratory in order to maintain the proper sampling holding times.

6.3 <u>Standard Monitoring Parameters – Semi-Annual</u>

A General Monitoring Form is enclosed in Appendix F of this plan, which includes the field observations that must be recorded for each semi-annual stormwater monitoring event. For the first two years of the implementation of this plan, the stormwater samples shall be analyzed for the following parameters:

- Chemical Oxygen Demand (COD)
- Total Oil & Grease (O & G)
- pH*
- Total Suspended Solids (TSS)
- Total Phosphorus
- Total Kjeldahl Nitrogen (TKN)
- Nitrate as Nitrogen
- Total Copper
- Total Lead
- Total Zinc
- Aquatic Toxicity (daphnia pulex) 1 sample per calendar year
- * In addition, one rainfall sample from each storm event shall also be collected and analyzed for pH. Instead of laboratory analysis, the rainfall pH can be measured in the field utilized a calibrated pH meter or test strips, and a clean, unpreserved sample container.

The laboratory results and completed General Monitoring Form from the semi-annual stormwater sampling event will be submitted along with the required Stormwater Monitoring Report (SMR) to the DEEP. Failure to conduct the appropriate monitoring and submit the SMR within 90 days of sample collection would be considered a violation of the General Permit that is subject to enforcement, including penalty.

6.4 <u>Standard Monitoring Benchmarks</u>

The following are the benchmark concentrations for the standard stormwater monitoring

SWPPP

parameters:

Parameter	Benchmark Concentration
• Chemical Oxygen Demand (COD)	75 mg/L
• Total Oil & Grease (O & G)	5.0 mg/L
• pH	5-9
• Total Suspended Solids (TSS)	90 mg/L
Total Phosphorus	0.4 mg/L
• Total Kjeldahl Nitrogen (TKN)	2.3 mg/L
Nitrate as Nitrogen	1.1 mg/L
Total Copper	0.059 mg/L
Total Lead	0.076 mg/L
Total Zinc	0.16 mg/L
Aquatic Toxicity	No Benchmark

The benchmark concentrations are utilized in order to determine if modifications to the Public Works stormwater management control measures require modification. If the average of the first four sampling event results exceeds a benchmark concentration, then the Town must evaluate its stormwater control measures. In addition, if after the first sampling event, if one or more sample results make an exceedance of a benchmark concentration mathematically certain, then the Town must evaluate its stormwater control measures. These evaluations must be conducted within 120 days of the benchmark concentration exceedance(s) and must include corrective actions and updates to this plan. If benchmark concentration averages are not exceeded, then the Town may discontinue monitoring for that parameter for the duration of the permit.

6.5 Sector Specific Monitoring & Benchmarks

Additional monitoring requirements for the Public Works property (Sector G – Transportation and Public Works Facilities) include the following:

- Chloride
- Cyanide

These parameters are required due to the site being a public works maintenance garage with solid de-icing material storage. Neither of these parameters have an associated benchmark concentration nor can they be suspended from the stormwater sampling analyses after two years.

6.6 Additional Monitoring of Discharges to Impaired Waters

The Town of Wilton Public Works Facility does not discharge stormwater to an impaired water body.

6.7 <u>Sector Specific Effluent Limitations</u>

The Town of Wilton Public Works Facility does not belong to a Sector that requires any numeric effluent limitations mandated by the EPA.

6.8 <u>Record-Keeping of Implemented Activities</u>

This plan requires that several types of forms, inspection reports, and monitoring records be kept and maintained with a copy of the plan. These additional documents may be required for review by DEEP inspection personnel and include the following:

- Permit records, including a copy of the general permit registration form, a copy of the general permit, and any correspondence from the DEEP.
- Spill records
- Employee training records
- Maintenance records
- Inspection records including routine facility inspections, quarterly reports, and comprehensive semi-annual site inspection reports
- Monitoring records including data collection forms, laboratory results, and SMRs.
- Corrective action records including any corrective actions and follow-up activities conducted to demonstrate compliance with the permit.

7.0 <u>CERTIFICATIONS</u>

7.1 Non-Stormwater Discharge Certification

"I certify that in my professional judgment, the stormwater discharge from the site consists only of stormwater, or of stormwater combined with wastewater authorized by an effective permit issued under Section 22a-430 or Section 22a-430b of the Connecticut General Statutes, including the provisions of this general permit, or of stormwater combined with any of the following discharges provided they do not contribute to a violation of water quality standards:

- · Landscape irrigation or lawn watering;
- Uncontaminated groundwater discharges such as pumped groundwater, foundation drains, water from crawl space pumps and footing drains;
- Discharges of uncontaminated air conditioner or refrigeration controls;
- Water sprayed for dust control or at a truck load wet-down station;
- Naturally occurring discharges such as rising groundwater, uncontaminated groundwater infiltration (as defined at 40CFR 35.2005(2)), springs, and flows from riparian habitats and wetlands.

This certification is based on testing and/or evaluation of the stormwater discharge from the site. I further certify that all potential sources of non-stormwater at the site, a description of the results of any test and/or evaluation for the presence of non-stormwater discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the on-site drainage points that were observed during the test have been described in detail in the Stormwater Pollution Prevention Plan prepared for the site. I further certify that no interior building floor drains exist unless such floor drain connection has been approved and permitted by the commissioner or otherwise authorized by a local authority for discharge as domestic sewage to sanitary sewer. I am aware that there may be significant penalties for false statements in this certification, including the possibility of fine and imprisonment for knowingly making false statements."

Signature Gary J. Giroux

Date

Sr. Engineer

Title

Name (Printed)

7.2 <u>Professional Engineer Certification</u>

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in the submitted information may be punishable as a criminal offense, in accordance with Section 22a-6 of the Connecticut General Statutes, pursuant to Section 52a- 157b of the Connecticut General Statutes, and in accordance with any other applicable statute.

I certify that this permit registration is on complete and accurate forms as prescribed by the commissioner without alteration of the text.

I also certify under penalty of the law that I have read and understand all conditions of the General Permit for the Discharge of Stormwater Associated with Industrial Activity effective October 1, 2011, that all conditions for eligibility for authorization under the General Permit are met, all terms and conditions of the General Permit are being met for all discharges which have been initiated and are the subject of this registration, and that a system is in place to ensure that all terms and conditions of this General Permit will continue to be met for all discharges authorized by this General Permit at the site. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowingly making false statements."

Signature V	C 12/7/17 Date MO. 11477 MTC
Gary J. Giroux	Sr. Engineer
Name (Printed)	Title

7.3 Facility Certification

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in the submitted information may be punishable as a criminal offense, in accordance with Section 22a-6 of the General Statutes, pursuant to Section 53a-1 57b of the General Statutes, and in accordance with any other applicable statute."

Signature

12/11/17.

Michael Ahern

Name (Printed)

Interim Manager of Public Works

Title

TABLES

Table 1 – Inventory of Exposed Materials & Summary of Potential Pollutant Sources Town of Wilton - Department of Public Works 238 Danbury Road Wilton, Connecticut

Activity/Exposed Material	Location of Activity/Material	Associated Drainage Area Number	Associated Pollutants	Method of Storage/Extent of Exposure	Description of Storage (Tank type,size,etc.)	Control Measures used to Minimize Exposure	Location & Description of Structural or Non-Structural Measures to Control Pollutants/Treatment Devices to Treat Stormwater Runoff
Loading & Unloading Operations	Maintenance Garage	DA-1	Oil, Grease, Gasoline & Phosphorus	Stored inside Maintenance Garage or UST's	Deisel UST - 10,000 gal Gasoline UST - 5,000 &10,000 gal	Spill control equipment & kits available. Inspections conducted on tanks. UST's inspected monthly and tested yearly by an outside contractor.	Stormwater discharge to onsite underground dry wells
Loading & Unloading Operations	Maintenance Garage	DA-3	Oil, Grease, Anti-Freeze & Metals	Stored outside Maintenance Garage in AST's	Waste Oil AST - 400 gal, Anti-freeze AST - 275 gal	AST's are inside a roofed enclosure. Spill control equipment & kits available. Inspections conducted on tanks	Stormwater discharge to onsite underground galleys
Loading & Unloading Operations	Salt Storage Bldg.	DA-2	Salt, Suspended Solids, Metals & Phosphorus	Salt, Sand & Salt/Sand Mixture within covered bldg	1,000-2,000 tons of total material	All products are completely covered within bldg with impermeable floor	No stormwater discharge
Town of Wilton Vehicle, Equipment & Material storage Area	East of Maintenance Building	DA-1	Oil & Grease	Vehicles and Equipment parked on and materials on gravel surface	Not Applicable	Spill control equipment & kits available. Inspections conducted. Drip pans utilized as needed.	Stormwater discharge to onsite underground dry wells
Dumpsters	Outside Salt Storage Bldg.	DA-2	Suspended Solids	Stored on Pavement	Size Varies	Dumpsters are covered when not in use and have drain plugs.	Stormwater discharge to onsite underground galleys

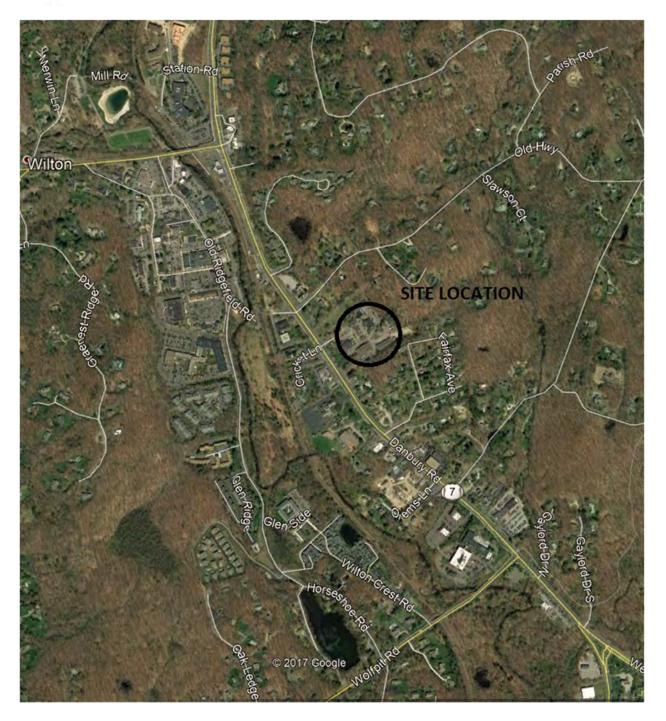
APPENDIX A

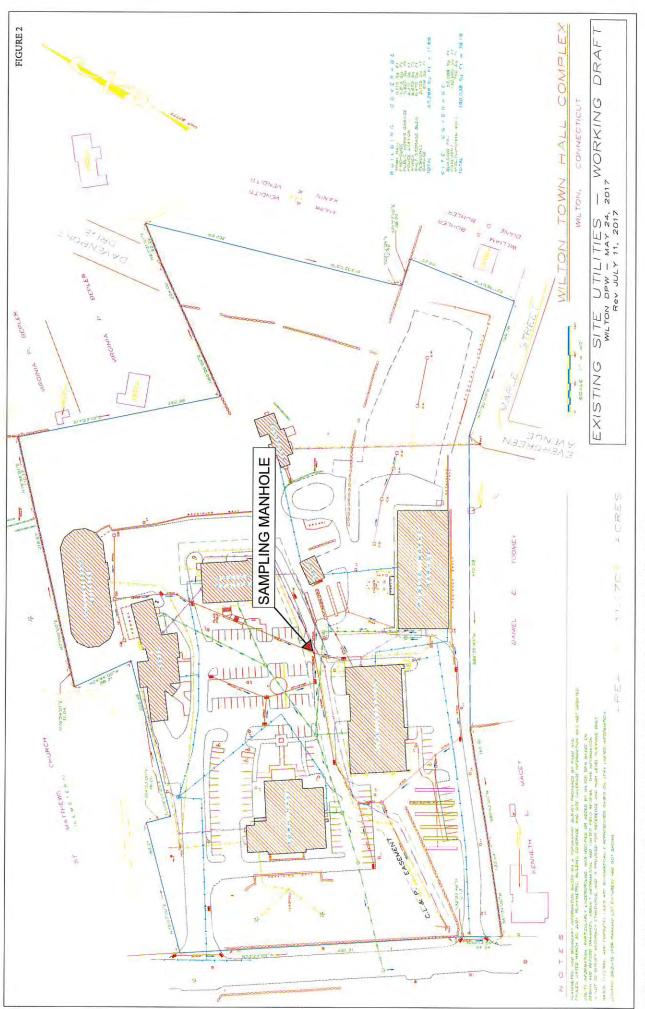
Miscellaneous Items

Figure 1 – General Location Plan Figure 2 – Site Plan Figure 3 – Drainage Areas / Contours Water Quality Classification Map Watershed Basin Identification Map Impaired Waters Monitoring Table (partial) FEMA Natural Diversity Database Emergency Response Plan Drainage Report (by Town of Wilton)

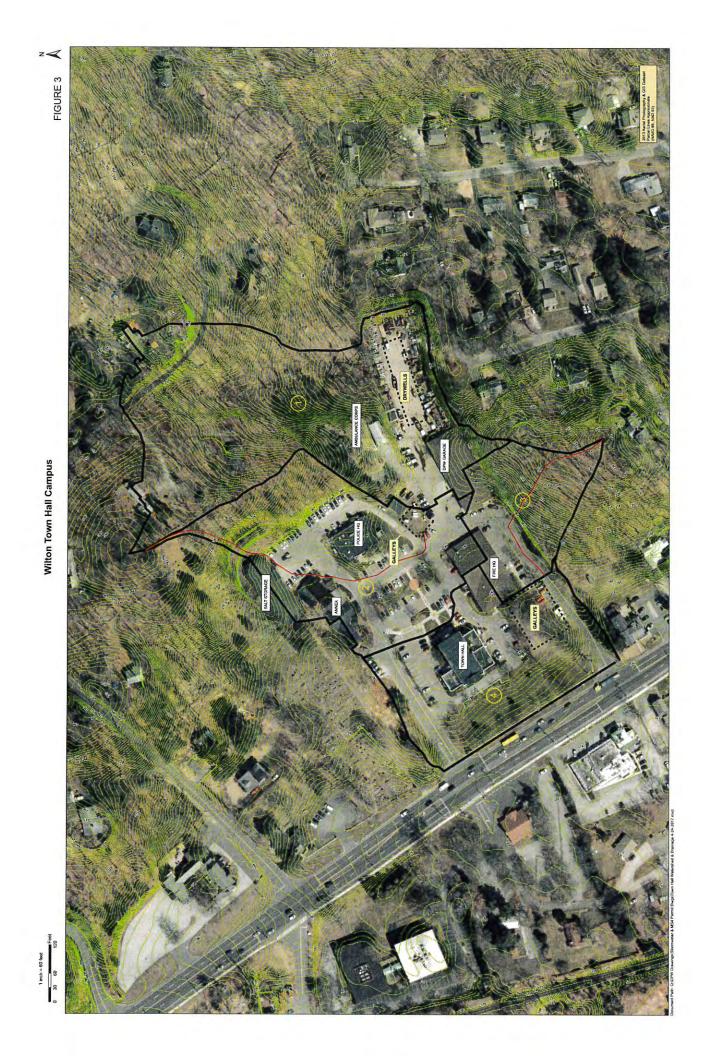
FIGURE 1





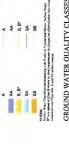


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WATER QUALITY CLASSIFICATIONS WILTON, CT

SURFACE WATER QUALITY CLASSES



GROUND WATER QUALITY CLASSES Area of Col GA (while lackground) GA, GAAs GA, GAA may not meel to GB GB

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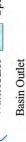
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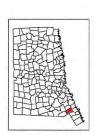


Surface Water Flow Direction v

The table provides statistics for each subregional basin. Shown are the areas of the basin within the town, the percentage for that area, and the percent of the town covered by each basin.

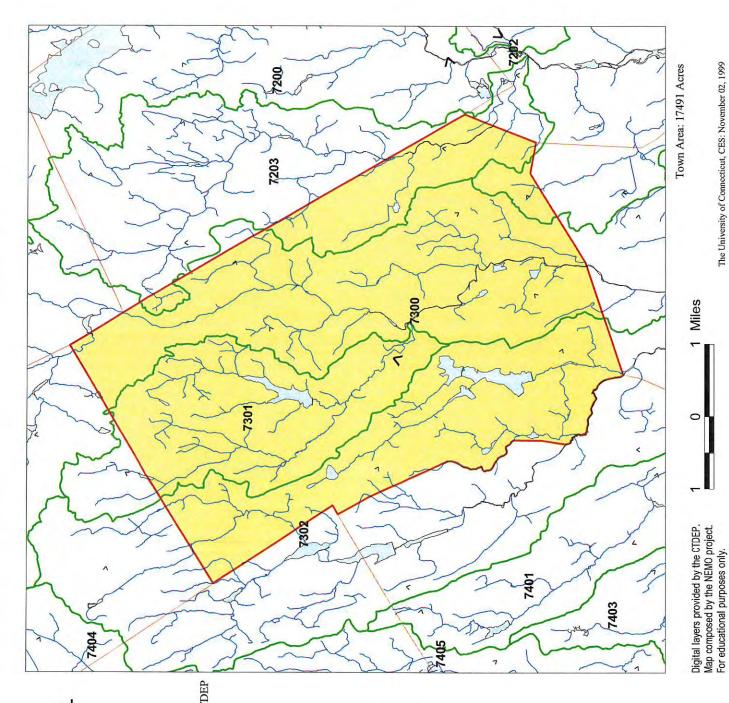
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7200	318.81	1.0	1.8
7203	1777.93	23.3	10.2
7300	6609.70	31.7	37.8
7301	4046.03	86.1	23.1
7302	4738.78	32.9	27.1



The University of Connecticut, CES: November 02, 1999





Impaired Waters Monitoring Table General Permit for the Discharge of Stormwater Associated With Industrial Activity, Effective October 1, 2011

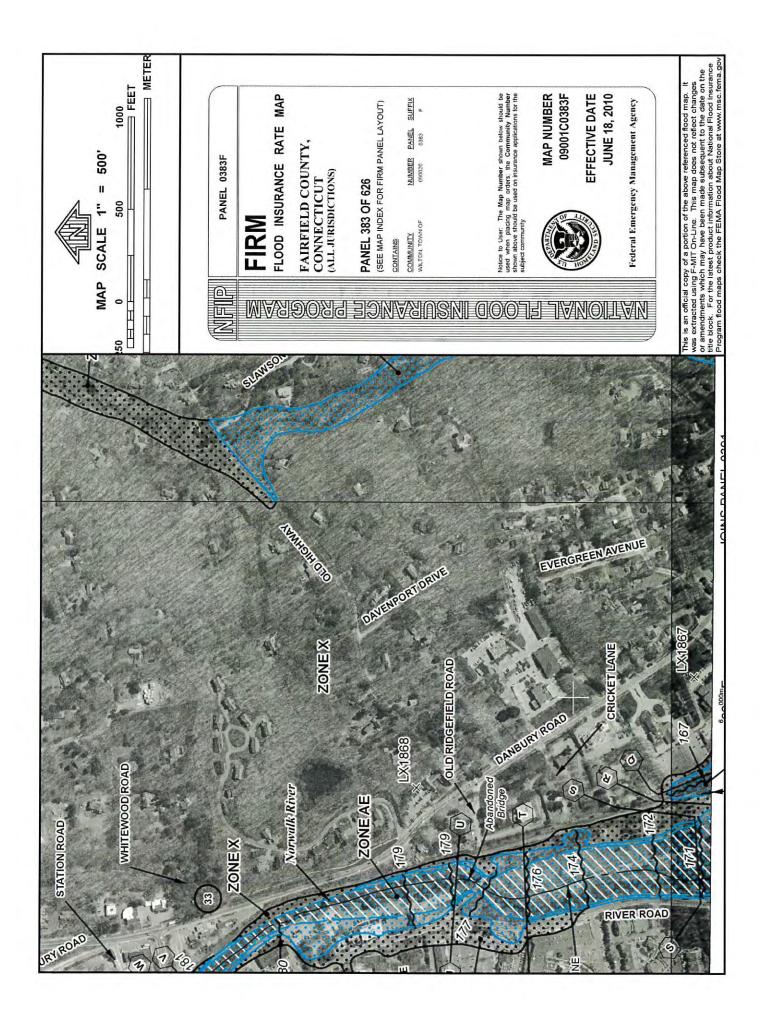
Waterbody ID or	Waterbody	Impaired		Approved	Impaired Waters	
305B (D	Name	Designated Use	Pollutant	TMDL ?	Monitoring	Frequency
CT7105-00_05	Pequonnock River	Recreation	Escherichia coli	Yes	Escherichia coli	annually unless notified by CTDEEP
CT7105-01_01	West Branch Pequonnock River	Recreation	Escherichia coli	Yes	Escherichia coli	annually unless notified by CTDEEP
CT7106-00_01	Rooster River-01	Recreation	Escherichia coli	Yes	Escherichia coli	Annually unless notified by CTDEEP
CT7107-00_01	Cricker Brook (Fairfield)-01	Recreation	Escherichia coli	No	Escherichia coli	annually unless notified by CTDEEP
CT7108-00_02a	Mill River (Fairfield / Easton)-02a	Recreation	Escherichia coli	Yes	Escherichia coli	Annually unless notified by CTDEEP
CT7108-00_02b	Mill River (Fairfield / Easton)-02b	Recreation	Escherichia coli	Yes	Escherichia coli	Annually unless notified by CTDEEP
CT7108-05_02	Unnamed tributary, Easton Reservoir (Snow Farm)-02	Habitat for Fish, Other Aquatic Life and Wildlife	Cause Unknown	No	None	n/a
CT7109-00_01	Sasco Brook-01	Habitat for Fish, Other Aquatic Life and Wildlife	Cause Unknown	No	None	n/a
CT7109-00_01	Sasco Brook-01	Recreation	Escherichia coli	Yes	Escherichia coli	Annually unless notified by CTDEEP
CT7109-00_02	Sasco Brook-02	Recreation	Escherichia coli	Yes	Escherichia coli	Annually unless notified by CTDEEP
CT7109-00-trib_01	Unnamed tributary, Sasco Brook (Westport)-01	Recreation	Escherichia coli	No	Escherichia coli	annually unless notified by CTDEEP
CT7109-00-trib_01	Sasco Brook / Great Brook	Recreation	Escherichia coli	Yes	Escherichia coli	annually unless notified by CTDEEP
CT7109-02_01	Sasco Brook / Unnamed Tributary	Recreation	Escherichia coli	Yes	Escherichia coli	annually unless notified by CTDEEP
CT7109-06_01	Sasco Brook / Great Brook	Recreation	Escherichia coli	Yes	Escherichia coli	annually unless notified by CTDEEP
CT7109-06_02	Sasco Brook / Great Brook	Recreation	Escherichia coli	Yes	Escherichia coli	annually unless notified by CTDEEP
CT7200-20-trib_02	Unnamed tributary Hawleys Brook-02	Habitat for Fish, Other Aquatic Life and Wildlife	Other flow regime alterations	No	None	n/a
CT7200-22_01	Saugatuck River / Beaver Brook	Recreation	Escherichia coli	Yes	Escherichia coli	annually unless notified by CTDEEP
CT7200-24_01	Saugatuck River / Kettle Creek	Recreation	Escherichia coli	Yes	Escherichia coli	annually unless notified by CTDEEP
CT7200-26_01	Saugatuck River / Poplar Plain Brook	Recreation	Escherichia coli	Yes	Escherichia coli	annually unless notified by CTDEEP
CT7201-00_01	Little River (Redding)-01	Recreation	Escherichia coli	No	Escherichia coli	annually unless notified by CTDEEP
CT7203-04_01	West Branch Saugatuck River / Cobbs Mill Brook	Recreation	Escherichia coli	Yes	Escherichia coli	annually unless notified by CTDEEP
CT7300-00_01	Norwalk River-01	Habitat for Fish, Other Aquatic Life and Wildlife	Cause Unknown	No	None	n/a
CT7300-00_01	Norwalk River-01	Habitat for Fish, Other Aquatic Life and Wildlife	Sedimentation/ Siltation	No	Total Suspended Solids	monitor for this parameter as already specified in the General Permit unless notified by CTDEEP
10 00-001	Norwalk River-01	Doctortion	Escherichia coli	V	Escharishia sali	Annually unless notified by CTDEEP

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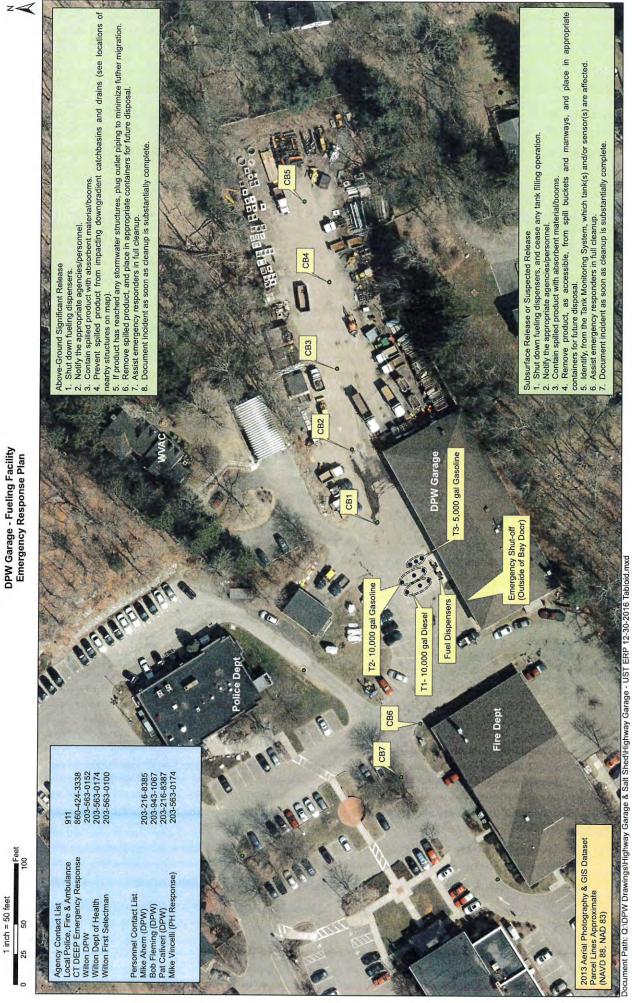
Impaired Waters Monitoring Table General Permit for the Discharge of Stormwater Associated With Industrial Activity, Effective October 1, 2011

Waterbody ID or	Waterbody	Impaired		Approved	Impaired Waters	
305B ID	Name	Designated Use	Pollutant	TMDL?	Monitoring	Frequency
CT7300-00_02	Norwalk River-02	Recreation	Escherichia coli	Yes	Escherichia coli	Annually unless notified by CTDEEP
CT7300-00_03a	Norwalk River-03a	Recreation	Escherichia coli	Yes	Escherichia coli	Annually unless notified by CTDEEP
CT7300-00_03b	Norwalk River-03b	Recreation	Escherichia coli	Yes	Escherichia coli	Annually unless notified by CTDEEP
CT7300-00_04	Norwalk River-04	Recreation	Escherichia coli	Yes	Escherichia coli	Annually unless notified by CTDEEP
CT7300-00_05	Norwalk River-05	Recreation	Escherichia coli	Yes	Escherichia coli	Annually unless notified by CTDEEP
CT7300-02_01	Ridgefield Brook-01	Recreation	Escherichia coli	Yes	Escherichia coli	Annually unless notified by CTDEEP
CT7300-02_02	Ridgefield Brook-02	Habitat for Fish, Other Aquatic Life and Wildlife	Cause Unknown	No	None	n/a
CT7300-02_02	Ridgefield Brook-02	Recreation	Escherichia coli	Yes	Escherichia coli	Annually unless notified by CTDEEP
CT7301-00_01	Comstack Brook (Wilton)-01	Recreation	Escherichia coli	No	Escherichia coli	annually unless notified by CTDEEP
CT7302-00_01	Silvermine River-01	Recreation	Escherichia coli	Yes	Escherichia coli	Annually unless notified by CTDEEP
CT7302-00_02	Silvermine River		Escherichia coli	Yes	Escherichia coli	annually unless notified by CTDEEP
CT7302-13_trib_01	Unnamed tributary Belden Hill Brook- 01	Habitat for Fish, Other Aquatic Life and Wildlife	Chlorine	Yes	Chlorine	annually unless notified by CTDEEP
CT7401-00_01	Fivemile River	Recreation	Escherichia coli	Yes	Escherichia coli	annually unless notified by CTDEEP
CT7401-00_02	Fivemile River	Recreation	Escherichia coli	Yes	Escherichia coli	annually unless notified by CTDEEP
CT7401-00_02	Fivemile River (New Canaan)-02	Habitat for Fish, Other Aquatic Life and Wildlife	Cause Unknown	No	None	n/a
CT7401-00_03	Fivemile River	Recreation	Escherichia coli	Yes	Escherichia coli	annually unless notified by CTDEEP
CT7401-00_03	Fivemile River (New Canaan)-03	Habitat for Fish, Other Aquatic Life and Wildlife	Cause Unknown	No	None	n/a
CT7401-02_01	Fivemile River / Unnamed Tributary	Recreation	Escherichia coli	Yes	Escherichia coli	annually unless notified by CTDEEP
CT7401-05_01	Fivemile River / Holy Ghost Father's Brook	Recreation	Escherichia coli	Yes	Escherichia coli	annually unless notified by CTDEEP
CT7401-06_01	Fivemile River / Keelers Brook	Recreation	Escherichia coli	Yes	Escherichia coli	annually unless notified by CTDEEP
CT7401-07_01	Fivemile River / Unnamed Tributary to Keelers Brook	Recreation	Escherichia coli	Yes	Escherichia coli	annually unless notified by CTDEEP
CT7403-00_01	Noroton River-01	Habitat for Fish, Other Aquatic Life and Wildlife	Cause Unknown	No	None	n/a
CT7403-00_02	Noroton River-02	Habitat for Fish, Other Aquatic Life and Wildlife	Cause Unknown	No	None	e/u
CT7405-00 01	Rippowam River-01	Habitat for Fish, Other Aquatic Life and Wildlife	Cause Unknown	Ŋ	None	

26 of 46



Vatural Diversity Data Base	The second secon	FIL
Areas	Redding	
WILTON, CT	Ridgefield	
June 2017	i i i i i i i i i i i i i i i i i i i	AXX.
& Significant Natural Communities		
Town Boundary		3
NOTE: This map shows general locations of State and Federal Listed Species and Significant Natural Communities. Information on listed species is collected and compiled by the Natural Diversity Data Base (NDDB) from a number of data sources. Exact locations of species have been buffered to produce the general locations. Exact locations of species and communities occur somewhere in the shaded areas, not necessarily in the center. A new mapping format is being employed that more accurately models important riparian and aquatic areas and eliminates the need for the upstream/downstream searches required in previous versions.		The second
This map is intended for use as a preliminary screening tool for conducting a preliminary screening tool for conducting a To use the may, locate the project boundaries and any additional affected areas. If the project is within a shaded area there may be a potential conflict with a listed species. For more information, complete a Request for		
Natural Diversity Data Base State Listed Species Review form (DEP-APP-007), and submit it to the NDDB along with the required maps and information. More detailed instructions are provided with the request form on our website.		Detter
www.ct.gov/deep/nddbrequest		K
Use the CTECO Interactive Map Viewers at www.cteco.uconn.edu to more precisely search for and locate a site and to view aerial imagery with NDDB Areas.	New Canaan	A A
QUESTIONS: Department of Energy and Environmental Protection (DEEP) 79 Elim St., Hartford CT 06106 Phone (860) 424-3011		130
Connecticut Department of Energy & Environmental Protection Bureau of Natural Resources Wildlife Division	0 0.5 1 Morwalk	z



WILTON PUBLIC WORKS DEPARTMENT

(203) 563-0152



TOWN HALL ANNEX 238 Danbury Road Wilton, Connecticut 06897

August 9, 2017

Karen Abbott Connecticut Department of Energy and Environmental Protection Materials Management and Compliance Assurance - WPED 79 Elm Street, 2nd Floor Hartford, CT 06106-5127

Re: Stormwater Notice of Violation – Wilton Public Works Dept NOV No. F NOV WR SW 17409

Dear Ms. Abbott:

Based on our review of the site drainage and infiltration systems and the General Permit for the Discharge of Stormwater Associated with Industrial Activity, it does appear that a portion of the Public Works Department facility on the Town Hall site requires registration per the referenced Notice of Violation. Our review is summarized below, followed by a compliance schedule.

Existing Site

The referenced Public Works facilities are located on the Town Hall property, along with other Town departmental buildings, as shown on the enclosed aerial maps entitled Wilton Town Hall Campus in Appendix A. The Public Works facilities include the DPW Garage, the vehicle fueling area, a storage yard located east of the garage, and the Salt Storage building. The Town Hall property totals 11.17 acres, and the Public Works components comprise approximately 1.71 acres or 15% of the overall property.

Watersheds and Drainage Patterns

The 13.2-acre Town Hall site watershed was divided into four (4) sub-watersheds as shown on the enclosed aerial maps in Appendix A (a second Campus map with topography is also included for reference). Sub-watersheds 1, 2, and 3 contain Public Works facilities, and are discussed below. Sub-watershed 4 drains westward from the Town Hall area.

 <u>Sub-Watershed 1</u> – This 5.2-acre area drains south to the DPW Garage and Storage Yard from high points located to the north (woodlands and residential properties), as well as collecting runoff from the Garage's northeast roof area and from the Storage Yard. As shown on the enclosed Existing Site Drainage plan (Appendix A), stormwater runoff ultimately drains into six (6) drywells located to the north and east of the DPW Garage. There is no point source discharge from this area, which is underlain by permeable gravel. When the capacity of the drywells and surrounding gravel is exceeded, subsurface flow migrates east into lower lying areas north of Maple Street. Highway department personnel have never observed sheet flow to the west, during storms with increased rainfall. This drainage area collects runoff from 1.05 acres (or approximately 61%) of the total 1.71 acres of Public Works facilities on the Town Hall site.

<u>Sub-Watershed 2</u> – This 3.4-acre subbasin collects drainage from the areas shown on the aerial maps, which largely consists of portions of the DPW Garage roof, Annex roof, Fire Headquarters roof, and Salt Storage roof; the Police Headquarters roof; and adjacent parking areas. (Note that the northern half of the Salt Storage roof sheet flows generally north and west into the adjacent woods and cemetery.) The drainage system shown on the Existing Drainage System plan directs flow into the underground concrete galley system located south of the Police Headquarters. Flow that is not infiltrated or detained by the Area 2 galley system flows westward via a 15" pipe, through sub-watersheds 3 and 4, and ultimately into the ConnDOT's stormwater collection system along Route 7.

We routed the 100-year design storm through this subbasin using available data, and the 100-year runoff exceeded the storage and infiltrative capacity of the galley system and upstream storage. See Appendix B for the results (using the TR-55 procedure) and related back-up. This drainage area collects runoff from 0.49 acre (or approximately 29%) of the total 1.71 acres of Public Works facilities on the Town Hall site.

Sub-Watershed 3 – This 1.4-acre subbasin collects drainage from the areas shown on the aerial maps, which include woodlands to the south and the southern portion of the DPW Garage and Fire Headquarters roofs, along with adjacent paved areas. The drainage system shown on the Existing Drainage System plan directs flow into the underground concrete galley system located west of the Fire Headquarters. (This galley system is actually located in sub-watershed 4, but runoff is piped to it from sub-watershed 3.) Flow that is not infiltrated or detained by the Area 3 galley system flows northwest via a 15" pipe, through sub-watershed 4, and ultimately into ConnDOT's stormwater collection system along Route 7. We routed the 100-year design storm through this subbasin using available data, and the 100-year runoff did not exceed the storage and infiltrative capacity of the galley system and upstream storage. See Appendix C for the results (using the TR-55 procedure) and related back-up. This drainage area collects runoff from 0.16 acre (or approximately 9%) of the total 1.71 acres of Public Works facilities on the Town Hall site.

General Permit Requirements and Applicability

The General Permit requires registration for stormwater associated with industrial activity (as defined within the permit) that discharges from a point source to surface water or to a storm sewer system. The stormwater from this point source must be directly related to manufacturing, processing, or material storage at an industrial activity. If the stormwater is discharged entirely to groundwater (i.e. no surface discharge up to a 100-year, 24-hour rainfall event), then registration is not required. We have summarized our review of each Public Works sub-watershed, below, relative to the General Permit.

- <u>Sub-Watershed 1</u> As sub-watershed 1 discharges entirely to groundwater up to a 100year, 24-hour rainfall event, there is no point source discharge to a stormwater system or surface water. *Registration not required*.
- <u>Sub-Watershed 2</u> We cannot (with available data and using the TR-55 methodology) demonstrate that sub-watershed 2 discharges entirely to groundwater up to the 100-year, 24-hour rainfall event. *Registration is required.*
- <u>Sub-Watershed 3</u> As sub-watershed 3 discharges entirely to groundwater up to a 100year, 24-hour rainfall event, there is no point source discharge to a stormwater system or surface water. *Registration not required.*

Compliance Schedule

The following schedule includes the steps needed to complete the permit registration.

- RFP Process & Engage Consultant
- SWPPP Preparation
- Submit Registration & SWPPP

September 11, 2017 October 18, 2017 October 30, 2017

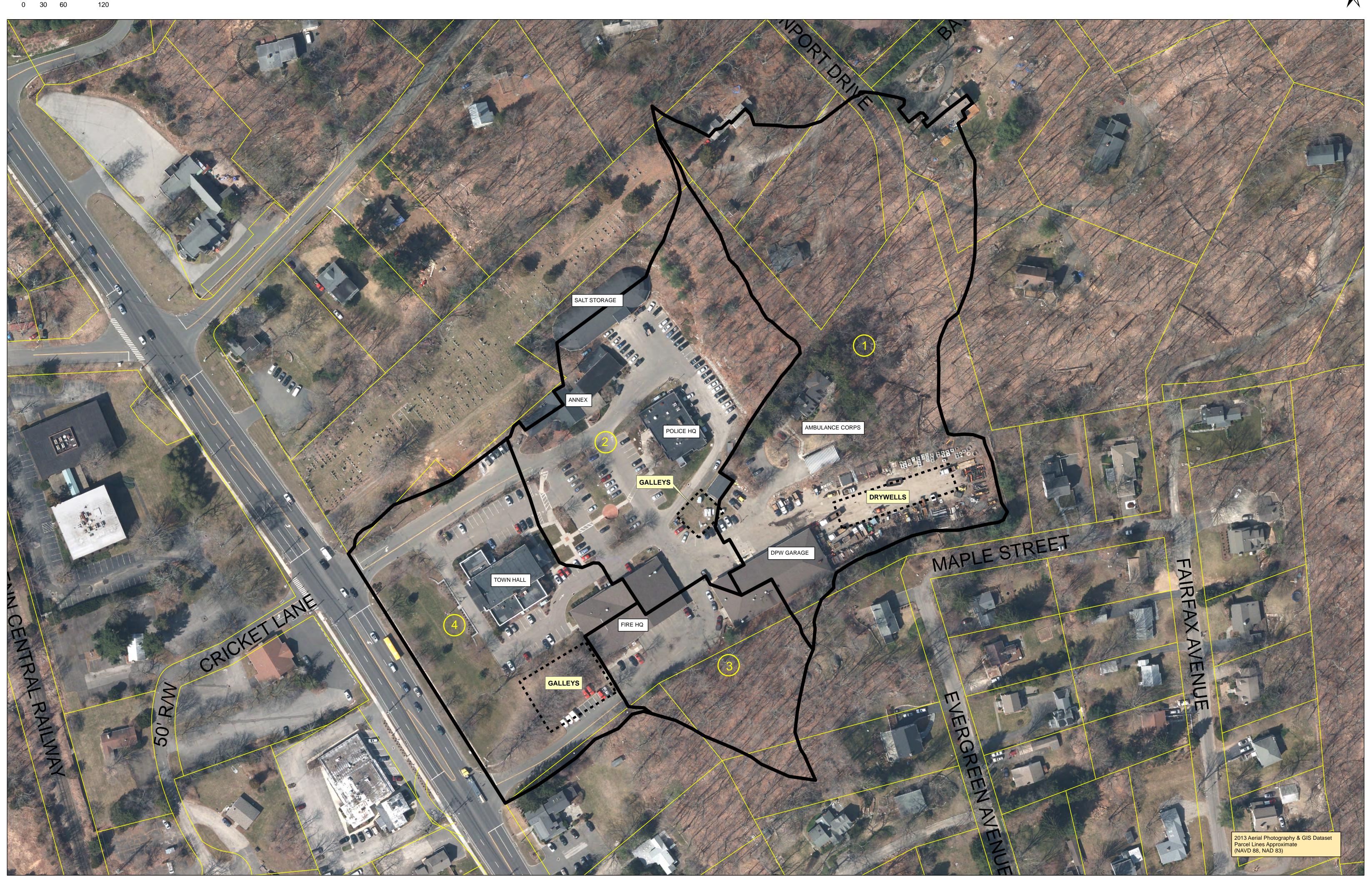
If you have any questions, please do not hesitate to contact our office.

Very Truly Yours,

Michael S. Ahern, P.E. Field Engineer

cc: Lynne Vanderslice, First Selectman

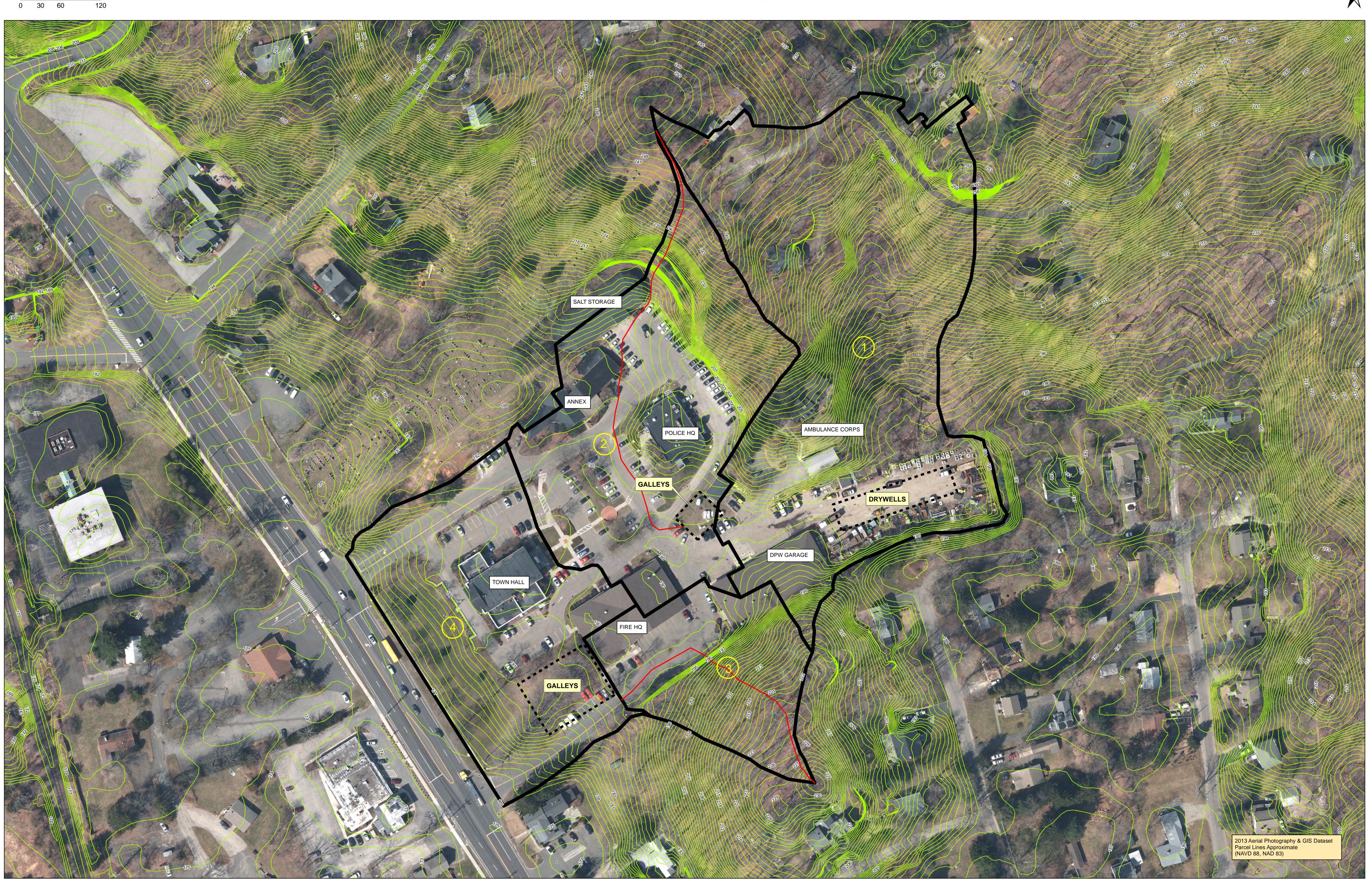
APPENDIX A



Document Path: Q:\DPW Drawings\Stormwater & MS4 Permit Dwgs\Town Hall Watershed & Drainage 4-24-2017.mxd

1 inch = 60 feet

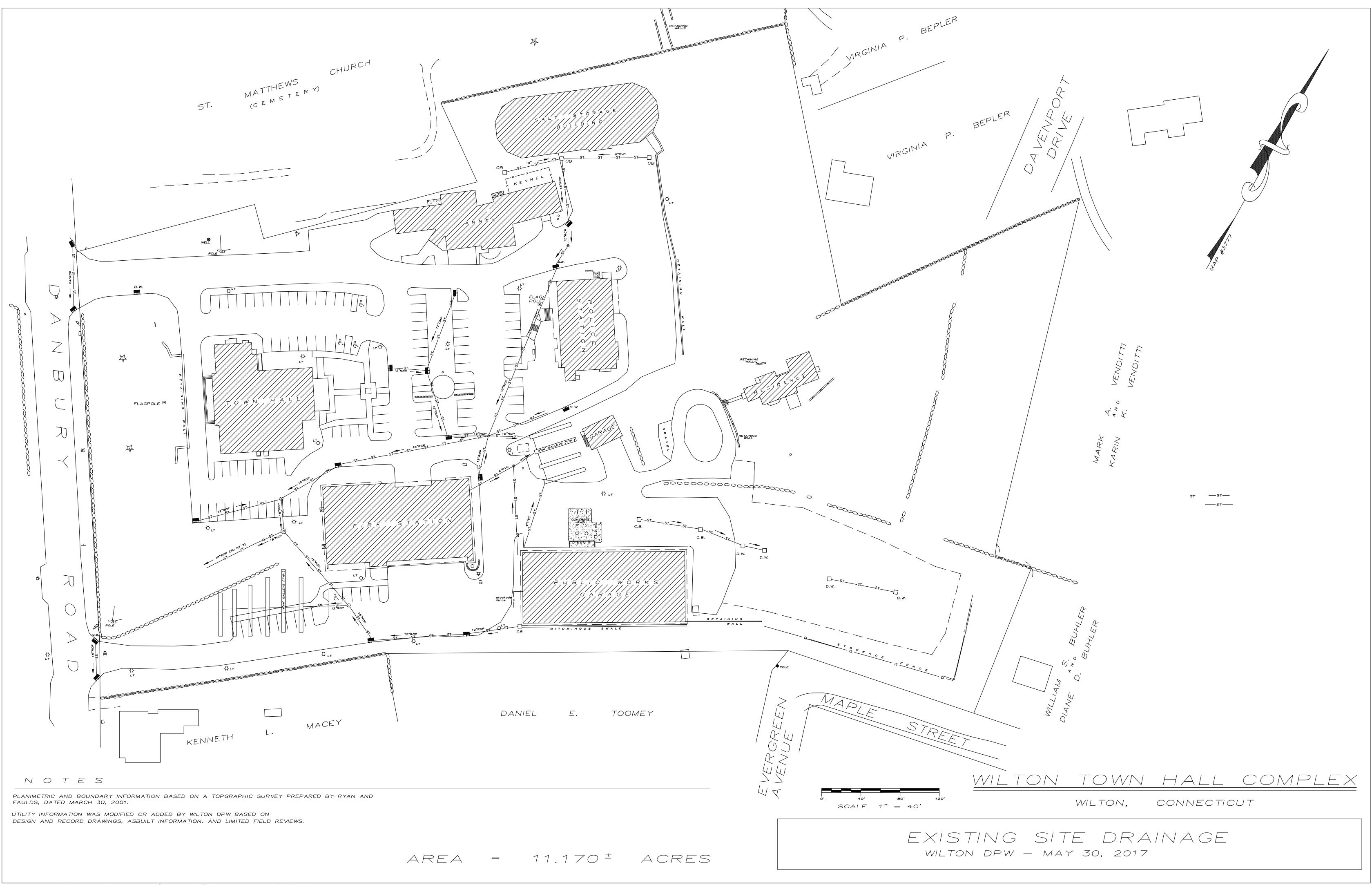
Wilton Town Hall Campus



Document Path: Q:\DPW Drawings\Stormwater & MS4 Permit Dwgs\Town Hall Watershed & Drainage 4-24-2017.mxd

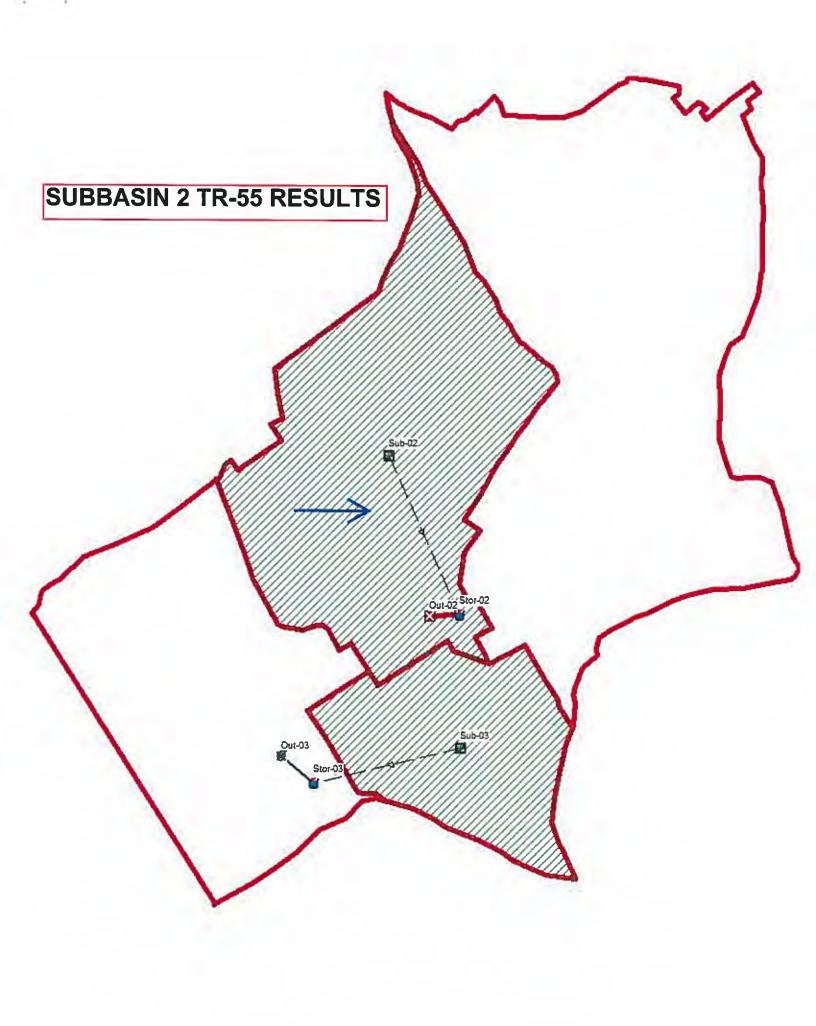
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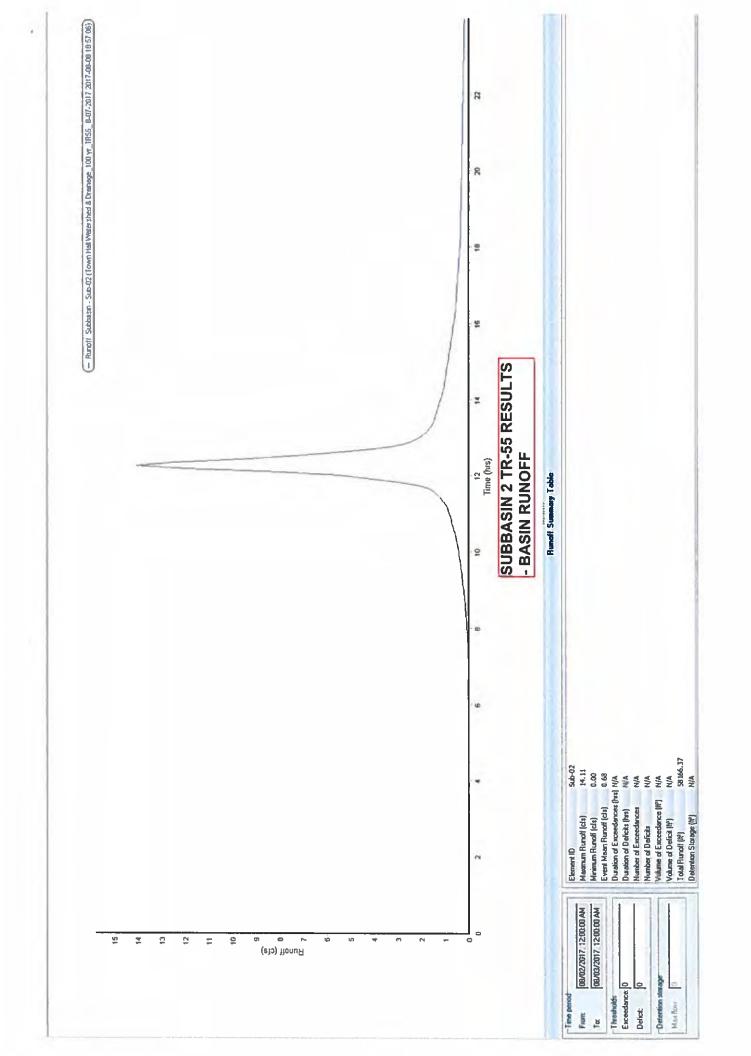
Wilton Town Hall Campus

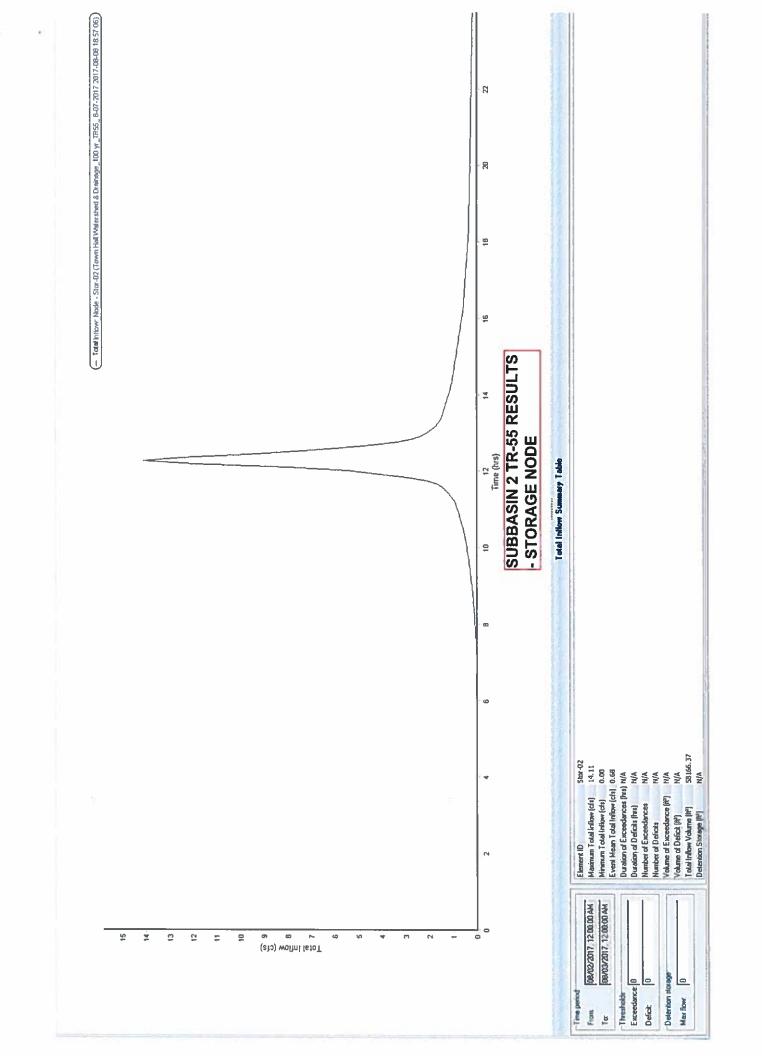


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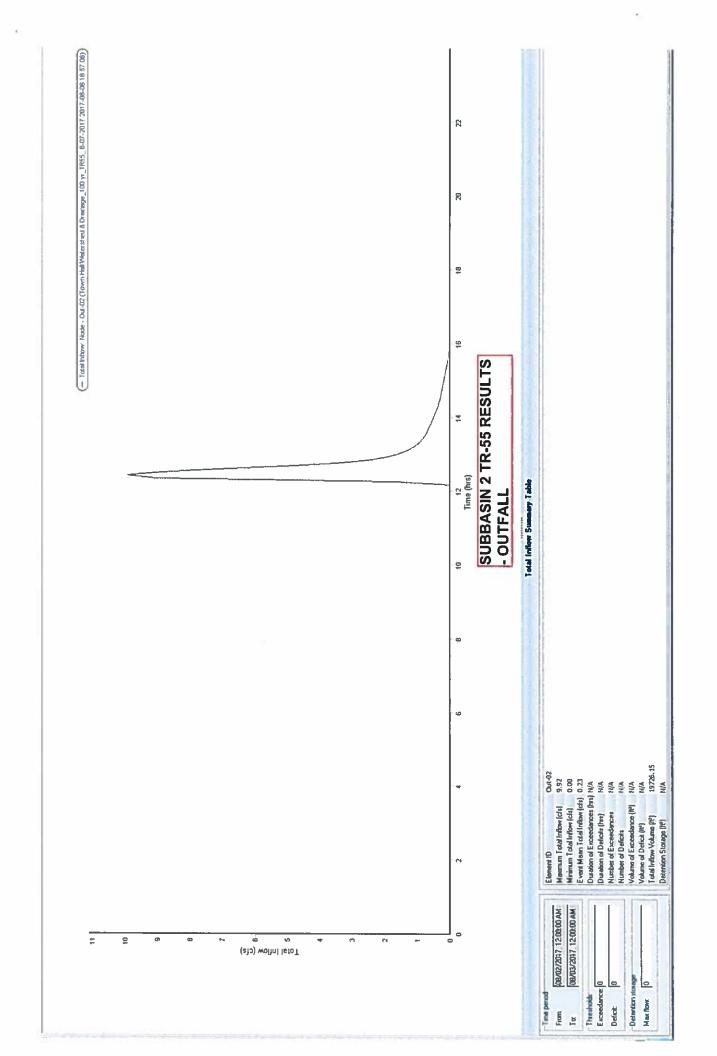
APPENDIX B

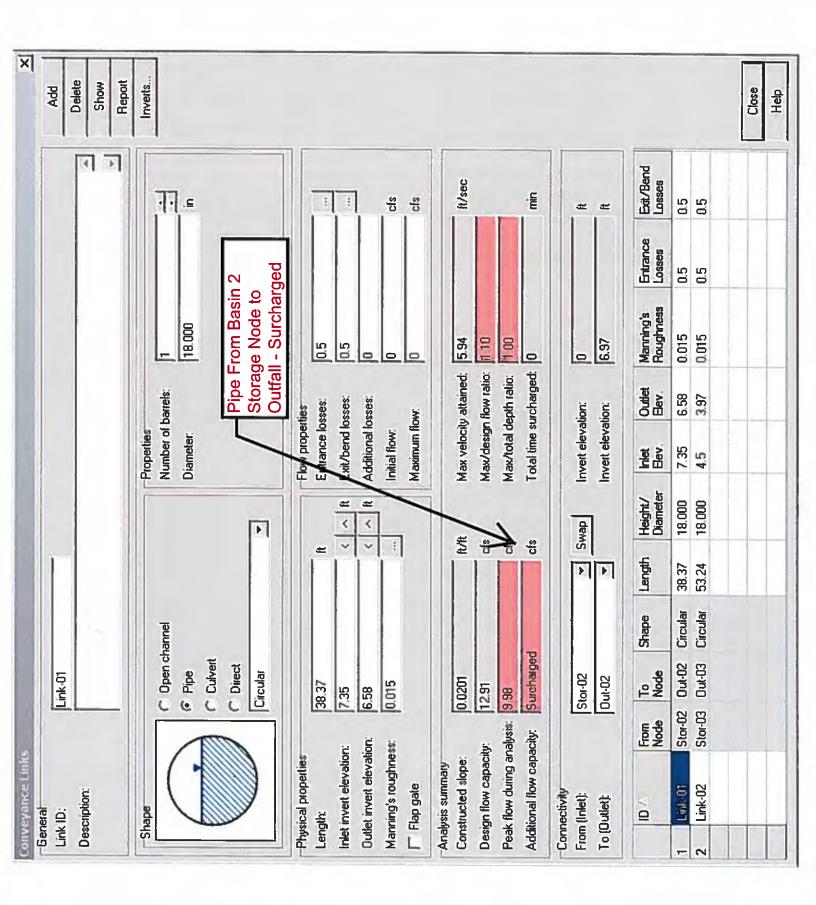






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	neral		-		110250+-5	sical properti			Delete
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					Мая	imum elev.:	7.35	ft	Show
De	scription:				l				Report
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Flo	w properties				FStor	age shape			<u>_</u>
	ernal inflows: INC)			Тур		Functional	Ŧ	
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	nded area: 0			R ²		onent:	0		
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	iltration ype					No.			
1.0	No exfiltration				Exfilt	ration rate:	21	in/l	hr
0				-					
5	Above elev.:	0		ft					
An	alysis summary								
	x water depth:	7.35		ft	Peak	k inflow:	14.11	cís	
Ма	x water elevation:	7.35		R	Max	flooded ove	rflow: 13.29	cís	
To	al flooded vol.:	5.55		ac-in		l time floode	and the second se	min	- 1
_		-					1		
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-	01.00	Elev.	Elev.		itial	Area	Туре		
1	Stor-02	0	7.35	0	and the second second second	0	Functional	At all elev.	
2	Stor-03	0 (* ****	4.5	0	ar y - ar the South Anna Anna Anna Anna	0	Functional	At all elev.	-
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Autodesk® Storm and Sanitary Analysis 2016 - Version 11.1.55 (Build 1) ------***** Project Description *********** File Name Town Hall Watershed & Drainage_100 yr_TR55_ 8-07-2017.SPF ***** Analysis Options Flow Units cfs Subbasin Hydrograph Method. SCS TR-55 Time of Concentration..... SCS TR-55 Link Routing Method Hydrodynamic Storage Node Exfiltration.. Constant rate, free surface area Starting Date AUG-02-2017 00:00:00 Ending Date AUG-03-2017 00:00:00 Report Time Step 00:05:00 ******* Element Count ********* Number of rain gages 2 Number of subbasins 2 Number of nodes 4 Number of links 2 ***** Raingage Summary ************ Data Data Recording Type Interval Gage ID Source min
 Rain Gage-01
 100yr-24hr
 CUMULATIVE
 6.00

 Rain Gage-02
 100yr-24hr
 CUMULATIVE
 6.00
 ****** Subbasin Summary *********** Subbasin Total ID Area acres Sub-02 3.37 Sub-03 1.43 ******** Node Summary Node Element Invert Maximum Ponded External ID Type Elevation Elev. Area Inflow ft ft ft²
 Out-02
 OUTFALL
 6.97
 8.47
 0.00

 Out-03
 OUTFALL
 3.97
 5.47
 0.00

 Stor-02
 STORAGE
 0.00
 7.35
 0.00

 Stor-03
 STORAGE
 0.00
 4.50
 0.00

tink Summary						
Link ID	From Node	To Node	Element Type	Length ft	* 6	Manning's Roughness
Link-01 Link-02	Stor-02 Stor-03	Out-02 Out-03	CONDUIT CONDUIT		1.0000	0.0150 0.0150

Cross Section	n Summary					
Link	Shape	Depth/	Width	No. of	Cross	Full Flow
Design ID Flou		Diameter		Barrels	Sectional	Hydraulic
Flow					Area	Radius
Capacity		ft	ft		ft²	ft
cfs					16	10
Link-01 9.10	CIRCULAR	1.50	1.50	1	1.77	0.38
Link-02 9.10	CIRCULAR	1.50	1.50	1	1.77	0.38
*********	****	Volume	Dooth			
	ity Continuity	acre-ft	Depth inches			
Surface Runo	itation ff	2.923 0.180	7.312 0.451			
Continuity E	rror (%)	-0.001				
Flow Routing		Volume acre-ft	Volume Mgallons			
	low	0.000	0.000			
	flow	0.000	0.000			
	ed Volume Volume	0.000	0.000			
	rror (%)	0.676	0.000			
Composite Cu	rve Number Comput	ations Report				
Subbasin Sub	-02					
Soil/Surface				Area (acres)	Soil Group	CN
IMPERVIOUS				1.78		98.00
WOODS				0.88	в	55.00
LAWN&LANDSCA Composite Ar	PED ea & Weighted CN			0.71 3.37	В	61.00 78.97
Subbasin Sub-						
				2 - 0 - 2	Coll.	
				Area	Soil	

```
Soil/Surface Description
                                                         (acres) Group
                                                                                     CN
•

        0.54
        B
        98.00

        0.86
        B
        55.00

        0.03
        B
        61.00

        1.43
        71.31

IMPERVIOUS
WOODS
LAWN&LANDSCAPE
Composite Area & Weighted CN
SCS TR-55 Time of Concentration Computations Report
Sheet Flow Equation
_____
        Tc = (0.007 * ((n * Lf)^{0.8})) / ((P^{0.5}) * (Sf^{0.4}))
        Where:
        Tc = Time of Concentration (hrs)
        n = Manning's Roughness
        Lf = Flow Length (ft)
        P = 2 yr, 24 hr Rainfall (inches)
        Sf = Slope (ft/ft)
Shallow Concentrated Flow Equation
        V = 16.1345 * (Sf^0.5) (unpaved surface)
V = 20.3282 * (Sf^0.5) (paved surface)
        V = 15.0 * (Sf^0.5) (grassed waterway surface)
V = 10.0 * (Sf^0.5) (nearly bare & untilled surface)
        V = 9.0 * (Sf^0.5) (cultivated straight rows surface)
        V = 7.0 * (Sf^0.5) (short grass pasture surface)

V = 5.0 * (Sf^0.5) (woodland surface)
        V = 2.5 * (Sf^0.5) (forest w/heavy litter surface)
        Tc = (Lf / V) / (3600 sec/hr)
        Where:
        Tc = Time of Concentration (hrs)
        Lf = Flow Length (ft)
        V = Velocity (ft/sec)
        Sf = Slope (ft/ft)
Channel Flow Equation
        V = (1.49 * (R^{(2/3)}) * (Sf^{(0.5)}) / n
        R = Aq / Wp
        Tc = (Lf / V) / (3600 sec/hr)
        Where:
        Tc = Time of Concentration (hrs)
        Lf = Flow Length (ft)
        R = Hydraulic Radius (ft)
        Aq = Flow Area (ft<sup>2</sup>)
        Wp = Wetted Perimeter (ft)
          = Velocity (ft/sec)
        v
        Sf = Slope (ft/ft)
        n = Manning's Roughness
------
Subbasin Sub-02
------
```

Sheet	Flow	Computations	

1.4.2

с		Subarea A	Subarea B	Subarea
0.00	Manning's Roughness:	0.80	0.00	
0.00	Flow Length (ft):	100.00	0,00	
	Slope (%):	6.70	0.00	
0.00	2 yr, 24 hr Rainfall (in):	3.30	3.30	
3.30	Velocity (ft/sec):	0.07	0.00	
0.00	Computed Flow Time (minutes):	22.70	0.00	

Shallow Concentrated Flow Computations

с		Subarea A	Subarea B	Subarea
0.00	Flow Length (ft):	200,00	390.00	
0.00	Slope (%):	17.00	2.40	
	Surface Type:	Forest	Paved	
Unpaved	Velocity (ft/sec):	1.03	3.15	
0.00	Computed Flow Time (minutes):	3.24	2.06	
0.00				

Total TOC (minutes): 14.00

Subbasin Sub-03

Sheet Flow Computations

с		Subarea A	Subarea B	Subarea
	Manning's Roughness:	0.80	0.00	
0.00	Flow Length (ft):	100.00	0.00	
0.00	Slope (%):	6.50	0.00	
0.00	2 yr, 24 hr Rainfall (in):	3.30	3.30	
3.30	Velocity (ft/sec):	0.07	0.00	
0.00	Computed Flow Time (minutes):	22.98	0.00	
Shallow	Concentrated Flow Computations			
с		Subarea A	Subarea B	Subarea
0.00	Flow Length (ft):	170.00	150.00	
0.00	Slope (%):	20,00	0.67	

Unpaved	Surface Type:	Forest	Paved	
0.00	Velocity (ft/sec):	1.12	1.66	
0.00	Computed Flow Time (minutes):	2.53	1.51	
		apz=\$202022222222232		

Total TOC (minutes):

13.51

Subbasin Runoff Summary

.

- 20

Subbasin ID	Total Precip in	Total Runoff in	Peak Runoff cfs	Weighted Curve Number	Conc days	Time of entration hh:mm:ss
Sub-02	7.20	4.76	14.12	78.970	0	00:14:00
Sub-03	7.20	3.93	5.02	71.310	0	00:13:30

Node Depth Summary

Node ID	Average Depth Attained	Maximum Depth Attained	Maximum HGL Attained		of Max Irrence	Total Flooded Volume	Total Time Flooded	Retention Time
	ft	ft	ft	days	hh:mm	acre-in	minutes	hh:mm:ss
Out-02 Out-03 Stor-02 Stor-03	0.00 0.00 2.55 0.10	0.00 0.00 7.35 1.71	6.97 3.97 7.35 1.71	0 0 0 0	00:00 00:00 12:14 12:43	0 0 5.55 0	0 0 201 0	0:00:00 0:00:00 0:00:00 0:00:00 0:00:00

```
Node Flow Summary
```

Node ID	Element Type	Maximum Lateral Inflow cfs	Peak Inflow Cfs	Peak Occu	ime of Inflow rrence hh:mm	Maximum Flooding Overflow cfs	Fl	f Peak ooding rrence hh:mm
Out-02 Out-03 Stor-02 Stor-03	OUTFALL OUTFALL STORAGE STORAGE	0.00 0.00 14.11 5.01	0.00 0.00 14.11 5.01	0 0 0 0	00:00 00:00 12:15 12:15	0.00 0.00 13.29 0.00	0	12:15

Storage Node Summary

		-				
Storage Node ID	Maximum	Maximum	Time of Max	Average	Average	Maximum

Maximum Time Exfiltration		Ponde		nded	1	Ponded	Ponded	Ponded S	torage 1	Node
Rate	Rate	Volum	e Vo	lume	1	Volume	Volume	Volume	Out	flow
		Volume 1000 ft 1000 ft'		(8)	days	hh:mm	1000 ft'	(8)		cfs
Stor-02 14.80 (0:00:00	11.29 38.35		100	0	12:14	3.913	35	(0.00
Stor-03	0:00:00	4.77	3	38	0	12:43	0.283	2	(0.00
1+20	5.00.00	20.20	0							
Outfall Loa	ading Su	ummary								
Outfall Noo	de ID	Flow Frequency (%)	Average Flow cfs	Pe Infl c	ak ow fs					
Out-02 Out-03		0.00 0.00	0.00	0. 0.	00 00					
System		0.00	0.00							
Link ID		Element					h Peak Fl			 tio o
latio of		l Reported Type	Peak	Flow V	elocity	/ Facto	r duri	ng F	'low Ma	aximu
aximum low Surchai		Condition	Occurr	ence A	ttained	Ŀ	Analys	is Capac	ity /I	Desig
epth mir	-		-	h : mm			с с		cfs	Flo
Link-01		CONDUIT						00 9		
.00 Link-02 .00		CONDUIT	0 0	0:00	0.00) 1.0	0 0.	00 9	.10	0.0
Highest Flo	ow Insta	ability Inde:	xes							
WARNING 117 ode invert e	elevatio									cream
levation.	Assu	umed conduit	outlet i	nvert e	levatio	on equal	to downstr	eam node in	vert	

elevation. WARNING 005 : Minimum slope used for Conduit Link-01. WARNING 005 : Minimum slope used for Conduit Link-02.

Autodesk Storm and Sanitary Analysis

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Analysis began on: Wed Aug 09 12:53:31 2017 Analysis ended on: Wed Aug 09 12:53:32 2017 Total elapsed time: 00:00:01

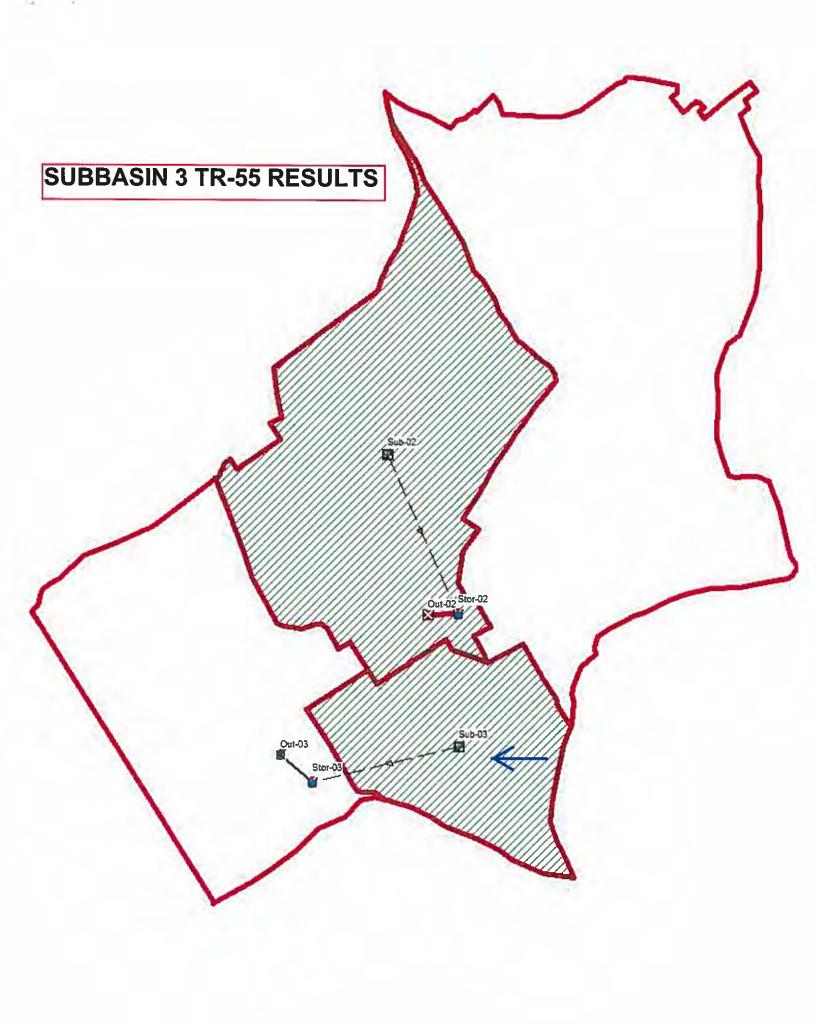
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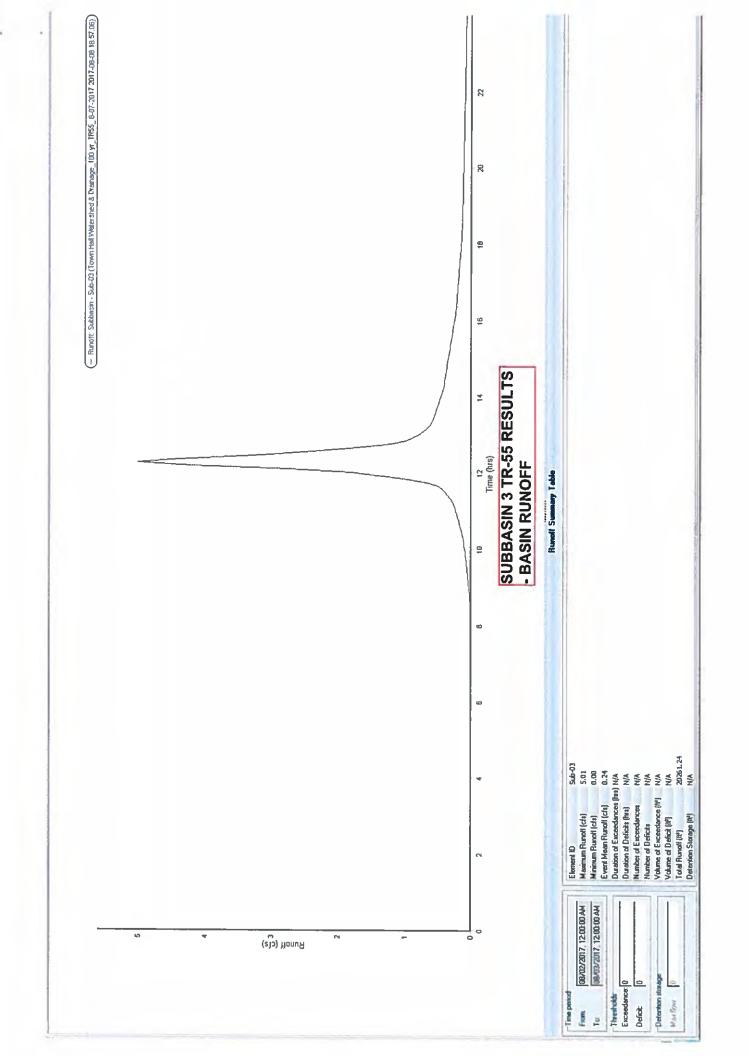
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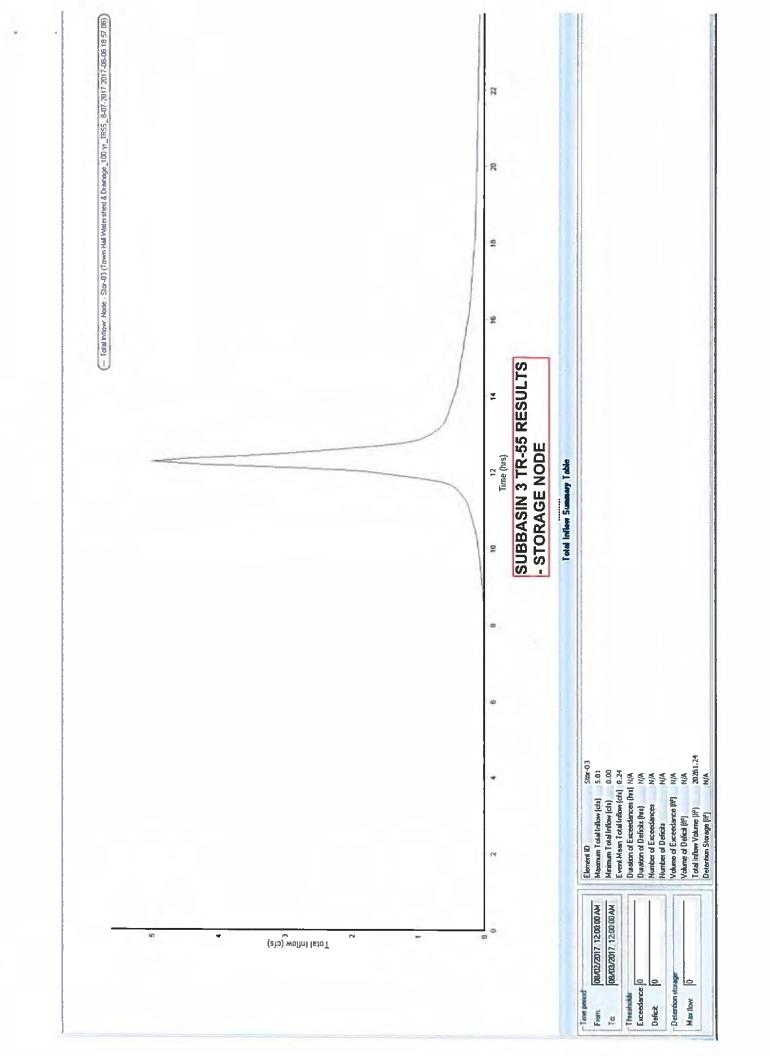
RASIN 2 - STORMWATER GALLEY VOLUMES	ER GALLEY VOLUMES					M				
					Input Data					
¥			\uparrow		Gailey Volume Stone Base	8 11	475 gal 1 ft	JO	63.51 cf	l đ
				←	Stone Cover	u	1 ft			
L	A	12" stone base	7	à	Stone Width Sides	n	2 ft			
		12" stone cover)	•	Stone Width Ends	u	2 ft			
	2' Stone - all sides	all sides		\rightarrow	Void Ratio	H	0.40			
<u>_</u>	4415		7							
	(11 - 4' X 4' Galleys)	lleys)								
Svetem Volume										
System Former	44 Galleve X	63.5 cf per Gallev	allev						2,794.3 cf	3 cf
Stone Bace		48 ft long	×	1 ft thick x		4 rows	×	0.40	614.4 cf	a cí
Stone Cover	8 ft wide 🔍 x	48 ft long	×	1 ft thick x		4 rows	×	0.40		a cf
Stone Sides	2 ft wide x		×	4 ft thick x		8 sides	×	0.40	1,126.4 cf	1 cf
Stone Ends		8 ft long	×	4 ft thick x		8 ends	×	0.40 =	204.8 cf	8 cf
							Total		= 5,354.3 cf	3 cf
Additional Volume										
Connecting Pipes	12 in diam	e	36 If						= 28.	28.3 cf
Upstream Pipes	12 in diam	0	40 If					16		31.4 cf
thostream Pipes	15 in diam	Ø	340 If					u		o ct
Unstream CBs	10 CBs	e	64 cf ea	each				n	= 640.0 cf) cf
Upstream MHs	2 MHs	0	6 ft (H)	& 4	4 ft (Diam)					7 cf
Area of Ponding	18,690 sf	×	0.25 ft av	avg height				11	4,672.5 cf	
							Total	11	5,939.9 cf	e cf
							Gran	Grand Total	11,294.2 cf	2 cf

WILTON TOWN HALL PROPERTY - WATERSHED ANALYSIS

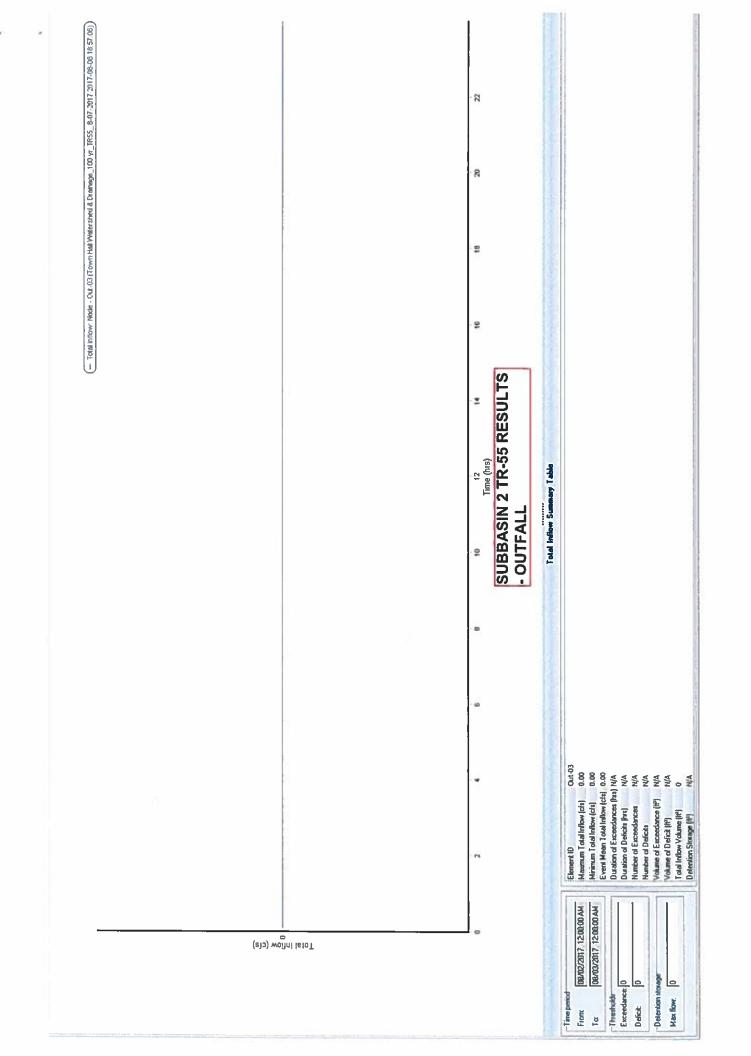
APPENDIX C







	age Nodes neral	the countries	-		sical propertie	25		
	orage node ID:	Stor-03		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ert elevation:		ft	Delete
		1	Limmer and the	31-	imum elev.:		ft	Show
_	F							Report
De	scription:							
-								
	w properties			- 1 28.02	age shape		former,	
	1	10		Тур		Functional		
		0				2784	ft²	
W9	SEL initial:)		ft Coe	fficient	0.0		
Po	nded area:)		ft ^e Exp	onent:	0		
E٧	aporation loss: ()		Stor	age curve:		T	
Ex	iltration							
	уре			Exfilt	ration rate:	21	in/hr	
 No exfiltration At all elevations 								
6	Above elev.:	0		1 C C C C C C C C C C C C C C C C C C C	Excess S	_		
		1-				in Basin		
An	alysis summary				Storage	Noue		
Ma	x water depth:	1.71		Peal	k inflow:	5.01	cfs	
Ma	x water elevatio	n: 1.71		ft Max	flooded over	flow: 0.00	cfs	
To	al flooded vol.:	0		ac-in Tota	l time flooded	i: O	min	
	and a	T. C. C.	L	1	1	1		
	ID 🖄	invert Elev.	Max. Elev.	WSEL Initial	Ponded Area	Storage Type	Exfiltration	
	Stor-02	0	10	0	0	Functional	At all elev.	
2	Stor-03	0	4.5	0	0	Functional	At all elev.	
								Close



			WILTO	N TOWN H	ALL PROPERTY -	<u>WILTON TOWN HALL PROPERTY - WATERSHED ANALYSIS</u>						
BASIN 3 STORMWATER GALLEY VOLUMES	ER GALLEY VOLUMES					Input Data						
¥		58 LF avg —		\uparrow		Galley Volume Stone Base	a u	475 gal 1 ft	l or		63.51 cf	
					~	Stone Cover	U	1 ft				
L 	V V	4' wide 13	12" stone base	≂^ ↓	ōo	Stone Width Sides	a .	2 ft 2				
	`		12 th stone cover			Stone Width Ends	n	И 7				
	2.2	stone - all s	2 2' Stone - all sides		→	Void Ratio	u	0.40				
د	54	Ed I E ave	1									
4	(81 - 4'	(81 ⁻ 4' X 4' Galleys)	(s)	-								
Svstem Volume												1
Gallave	R1 Gallevs	×	63.5 cf per Gallev							u	5,144.1 cf	
Stone Base	8 ft wide	: ×	58 ft long	×	1 ft thick	×	6 rows	×	0.40	ы	1,113.6 cf	
Stone Cover	8 ft wide	: ×	58 ft long	×	1 ft thick x	×	6 rows	×	0.40	н	1,113.6 cf	
Stone Sides	2 ft wide	×	54 ft long	×	4 ft thick x		12 sides	×	0.40		2,073.6 cf	
Stone Ends	2 ft wide	×	8 ft long	×	4 ft thick x		12 ends	×	0.40	u	307.2 cf	
								<u>1</u>	Total =		9,752.1 cf	Г
]				1
Additional Volume											01 E 2	T
Connecting Pipes	12 in diam	liam		104 lf						11	0 0.TO	
Upstream Pipes	15 in diam	liam	0	185 lf						0	770.4 CT	
Upstream CBs	3 CBs		0	64 cf e	each					(1	192.0 cf	
Upstream MHs	1 MHs	s	0	6 ft (H)	త	4 ft (Diam)				11	75.4 cf	
Area of Ponding	13,820 sf			0.16 ft a	avg height					u.	2,211.2 cf	
								2	Total	ม	2,787.1 cf	П
								ច	Grand Total		12,539.2 cf	

WILTON TOWN HALL PROPERTY - WATERSHED ANALYSIS

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APPENDIX B

Record of Spills & Leaks

<u>Spills & Leaks</u>

List in the following table any spills and leaks of 5-gallons or more of petroleum products, or toxic or hazardous substances. Use the back side or an additional sheet if more room is needed.

Date (MM/DD/YY)	Check	c One	Location	Type of Material	Quantity	Source	Reason	Response Procedures	Corrective Measures Taken
(MM/DD/YY)	Spill	Leak	Location	Type of Wateria	Qualitity	Source	Reason	Response i foccuties	
									1

<u>Spills & Leaks</u>

List in the following table any spills and leaks of 5-gallons or more of petroleum products, or toxic or hazardous substances. Use the back side or an additional sheet if more room is needed.

Date	Chec	k One	Location	Town of Material	Oracutita	Source	Reason	Response Procedures	Corrective Measures Taken
Date (MM/DD/YY)	Spill	Leak	Location	Type of Material	Quantity	Source	Keason	Response Procedures	Corrective Measures Taken
-						-			
								l	

APPENDIX C

Implementation Plan Schedule

Appendix C - Implementation Plan Schedule

Town of Wilton Public Works 238 Danbury Road Wilton, Connecticut

Ac	tivity	Estimated Date of Completion	Actual Date of completion
a.	Repair all catch basins to make sure stormwater properly flows into each basin	November 2018	
b.	Inspect sediment traps/sumps in catch basins to reduce the potential for sediments entering the drainage system. Remove sediment.	November 2018	
c.	Sweep Pubic Works Area of the site annually or as needed	November 2018	
d.	Maintain/Repair all dry wells to ensure satisfactory operation	November 2018	
e.	Install secondary containment for AST's	November 2018	

APPENDIX D

Employee Training Records

New Employee Training Form

Stormwater Pollution Prevention Plan Town of Wilton Public Works 238 Danbury Road Wilton, Connecticut

I have attended the new employee training session and have read and understand the Public Works facility Stormwater Pollution Prevention Plan

Topics:_____

Employee Signature	Employee Printed Name	Training Date	Instructor

New Employee Training Form

Stormwater Pollution Prevention Plan Town of Wilton Public Works 238 Danbury Road Wilton, Connecticut

I have attended the new employee training session and have read and understand the Public Works facility Stormwater Pollution Prevention Plan

Topics:_____

Employee Signature	Employee Printed Name	Training Date	Instructor

Record of Annual Employee Training Form

Stormwater Pollution Prevention Plan Town of Wilton Public Works 238 Danbury Road Wilton, Connecticut

I have attended the annual employee training session and have read and understand the Public Works facility Stormwater Pollution Prevention Plan

Topics:_____

Briefing Date:_____

Instructor(s):_____

Employees in Attendance (please print):

Record of Annual Employee Training Form

Stormwater Pollution Prevention Plan Town of Wilton Public Works 238 Danbury Road Wilton, Connecticut

I have attended the annual employee training session and have read and understand the Public Works facility Stormwater Pollution Prevention Plan

Topics:_____

Briefing Date:_____

Instructor(s):_____

Employees in Attendance (please print):

Record of Annual Employee Training Form

Stormwater Pollution Prevention Plan Town of Wilton Public Works 238 Danbury Road Wilton, Connecticut

I have attended the annual employee training session and have read and understand the Public Works facility Stormwater Pollution Prevention Plan

Topics:_____

Briefing Date:_____

Instructor(s):_____

Employees in Attendance (please print):

	г —

APPENDIX E

Site Inspection Forms

Routine Inspection Form - Monthly

Town of Wilton – Public Works Property 238 Danbury Road Wilton, Connecticut

This form must be filled out completely by a Pollution Prevention Team Member. The form must be signed by the inspector and must be kept with the SWPPP copy at the Public Works garage.

The inspection should be done during a rainfall event if possible to properly document conditions at the site.

Area	YES	NO	Comments
Maintenance Garage			
Evidence of spills or leaks inside building			
Evidence of spills or leaks outside building			
Gasoline & diesel fuel pumps in good working order			
Floor Drains/Oil Water Separator functioning properly			
Waste oil AST & containment pit in good working order			
Catch Basins			
Functioning Properly			
Sediment buildup observed			
Filled with trash or other debris			
Vehicle, Equipment & Material Storage Area			
Evidence of spills or leaks			
Dumpster			
Dumpster covered & drain plug(s) in place			
Stromwater Outfalls			
Evidence of spills or leaks			
Clear of debris and sediment buildup			

Name of Inspector:	 Title:
Inspector Signature:	 Date:

Weather:

Semi-Annual Inspection Form

Town of Wilton – Public Works Property 238 Danbury Road Wilton, Connecticut

This form must be filled out completely by a Pollution Prevention Team Member. The form must be signed by the inspector and the Director of Public Works, and must be kept with the SWPPP copy at the Public Works garage or Main Office.

The inspection should be done during a rainfall event to properly document conditions at the site. The inspector should have the current SWPPP, as well as the site plan (Figure 2 in the SWPPP). Prior to starting the inspection, the inspector should review the year's previous inspection reports, visual monitoring reports, analytical stormwater monitoring, maintenance records, and spill reports. Note any and all issues that may cause pollution.

Name of Inspector:		Title:
Date:		
Weather:		
Inspection Areas:	<u>Maintenance Garage</u> :	
(Circle One)	Evidence of spills or leaks inside building:	Yes / No
	Floor drains filled with debris:	Yes / No
	Interior spill kits need replenishing:	Yes / No
	Any new storage areas inside or outside of building:	Yes / No
	Evidence of spills or leaks outside building:	Yes / No
	Gasoline & diesel fuel pumps & USTs in need of repair:	Yes / No
	Fuel pump area spill kits need replenishing:	Yes / No
	Oil water separator tank in need of pump-out:	Yes / No
	Waste oil AST or containment pit need pump-out:	Yes / No
	Heating oil UST in need of repair:	Yes / No
	Roof drains in need of repair:	Yes / No

If answered Yes to any item above, please explain below. If additional space is needed, please use the back of this sheet:

Observations/Comments:

Actions	Taken/F	Recommended:
---------	---------	--------------

	Salt Storage Building:	
Circle One)	Evidence of spills or leaks inside building:	Yes / No
	Interior spill kits need replenishing:	Yes / No
	Any new storage areas inside or outside of building:	Yes / No
	Evidence of spills or leaks outside building:	Yes / No
-	tem above, please explain below. If additional space is need	-

Used Oil & Antifreeze Area:

(Circle One)	Evidence of spills or leaks in area:	Yes / No
	Spill kits need replenishing:	Yes / No
	Waste Oil AST area requires cleanup	Yes / No
	Anti-freeze AST area needs cleanup:	Yes / No
	Evidence of spills or leaks outside of area:	Yes / No

If answered Yes to any item above, please explain below. If additional space is needed, please use the back of this sheet:

Observations/Comments:	 	 	
Actions Taken/Recommended:			

Catch Basins:

(Circle One)	Catch basins in need of repairs:	Yes / No
	Areas need sweeping:	Yes / No
	Sediment needs to be removed from sumps:	Yes / No
	Debris or litter needs to be removed:	Yes / No

If answered Yes to any item above, please explain below. If additional space is needed, please use the back of this sheet:

Observations/Comments:______

Vehicle, Equipment & Material Storage Area – Eastern Portion of Property:

	(Circle One)	Evidence of spills or leaks:	Yes / No
		Any new storage areas:	Yes / No
Potential l	eaking equipment & stored vehicl	es <u>not</u> underlain by drip pans:	Yes / No
	Soil an	d/or asphalt piles not covered by tarps:	Yes / No
If answer	red Yes to any item above, please	explain below. If additional space is needed, j	please use the back of this sheet:
	Observations/Comments:		
	Actions Taken/Recommended:		
		Public Works Dumpster:	
	(Circle One)	Dumpster is <u>not</u> covered:	Yes / No
		Drain plug(s) <u>not</u> installed:	Yes / No
16			

If answered Yes to any item above, please explain below. If additional space is needed, please use the back of this sheet:

Observations/Comments:

Stormwater Outfalls

(Circle One)	Evidence of spills or leaks:	Yes / No	
	Any new discharges observed:	Yes / No	
	Any sheen or foaming observed:	Yes / No	
	Sediment buildup observed in swale:	Yes / No	
	Trash or litter observed in swale:	Yes / No	
	Evidence of soil erosion:	Yes / No	
Observations/Comments:			
Actions Taken/Recommend	ed:		
Based upon the results of th	is inspection the SWPPP needs revision(s):	Yes / No	
If yes, please contact Pollut	ion Prevention Team Leader at (203) 563-0152.		
dersigned acknowledge review	ving the contents of this form in regards to the co	mprehensive inspection that was conduc	cted at

The undersigned acknowledge reviewing the contents of this form in regards to the comprehensive inspection that was conducted at the Public Works property. Any problems that were noted must be addressed immediately in order to prevent stormwater pollution.

Inspector	Signature:

Date:_____

Public Works Director Signature:_____

Date:_____

APPENDIX F

Site Monitoring Forms

Town of Wilton – Public Works Garage 238 Danbury Road – Wilton, Connecticut

Visual Monitoring Form - Ouarterly Collection

Sample Location	Sample Site 1
Dae/Time Sample Collected:	
Snow or Ice Melt in Sample (yes/no)	
Sample Name:	

	1	
Color:	Odor:	Clarity:
Floating Solids?	Settled Solids?	Suspended Solids?
Foam?	Oil Sheen?	Other indications of Pollution?
roam:	Oli Sheeli:	Other indications of Foliation:

Notes:

Town of Wilton – Public Works Garage 238 Danbury Road – Wilton, Connecticut

General Monitoring Form

Sample Location:	Sample Site 1
Date/Time Sample Collected:	
Snow or Ice Melt in Sample: (yes/no)	
Sampler Name:	

Date of Previous Storm Event:	
Rainfall pH (if measured in field)	
Laboratory Name:	

Notes: