2020 ANNUAL REPORT

General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4)

Registration No. GSM000082

for

Town of Southington, CT 75 Main Street Southington, Connecticut



Prepared By:



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MS4 General Permit Town of Southington 2020 Annual Report Existing MS4 Permittee Permit Number GSM000082 January 1, 2020 – December 31, 2020 Primary MS4 Contact: Jim Grappone, Assistant Town Engineer, 860-276-6231, grapponej@southington.org

This report documents Town of Southington's efforts to comply with the conditions of the MS4 General Permit to the maximum extent practicable (MEP) from January 1, 2020 to December 31, 2020 (reporting period).

Part I: Summary of Minimum Control Measure Activities

1. PUBLIC EDUCATION AND OUTREACH (Section 6 (a)(1) / page 19)

| ВМР | Status | Activities in current reporting period | Measurable goal | Department / Person Responsible | Due | Date completed/ projected | Additional details |
|----------------------|----------|--------------------------------------------|---------------------|------------------------------------|-------------|---------------------------------|--------------------|
| 1-1 Implement public | On-going | Continued to develop and update the | Number of | Engineering/James | Jul 1, 2018 | Jun 1, 2018 | |
| education and | | Town's website | volunteers/projects | Grappone | | On-going | |
| outreach | | (<u>http://www.Southington.org</u>) with | | | | | |
| | | pertinent information concerning | | | | | |
| | | stormwater/urban runoff and its effects | | | | | |
| | | on the environment. | | | | | |
| | | Continued to partner with | | | | | |
| | | environmental advocacy organizations, | | | | | |
| | | such as the Quinnipiac River Association | | | | | |
| | | (QRWA), Save the Sound, Southington | | | | | |
| | | Land Trust and Open Space Committee. | | | | | |

| ВМР | Status | Activities in current reporting period | Measurable goal | Department / Person Responsible | Due | Date completed/ projected | Additional details |
|--------------------------------------------------------------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|------------------|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| 1-2 Address education/ outreach for pollutants of concern | Complete | Town Clerk handing out brochure on picking up pet waste "Here's The Scoop, Pick Up After Your Pet" to residents. Trout Release in Meriden assisted by QRWA Homeowner's Guide to Maintaining Septic Systems which is produced by the US EPA Terracycle program was not completed in 2020 due to COVID restrictions. | 1000 brochures distributed Educate Southington Middle School students on the environment Raise awareness for pollutants of concern Raise recycling awareness | Engineering/Town Clerk John Duffy (PreK-12 Science Curriculum Coordinator) Health Department Southington Land Trust | Jul 1, 2018 | Jul 1, 2018 On-going | The brochures were sent out with annual registration notices "Do Your Part – Be Septic Smart!" brochure given |
| 1-3 Integrate water quality into school curriculum | In progress | Planning a water unit for Grade 6. Focus on runoff, the difference between point and non-point pollution and the actions that homeowners can take to minimize impacts from runoff. | Educate students on common stormwater topics, pollution prevention, and water quality topics | Engineering/James Grappone/Southington Public Schools/John Duffy | Not Specified | On-going | In addition, water quality education is incorporated in high school during the school year under the Environmental Science Program |

1.2 Describe any Public Education and Outreach activities planned for the next year, if applicable.

- The Town will continue to provide the public with information on the impacts to stormwater discharges.
- The Town will continue to update the Stormwater webpage.
- The Town will continue to coordinate with school officials to determine feasibility of program with Quinnipiac River Watershed Association involving environmental educational tours and activities for the high school and elementary school.

1.3 Details of activities implemented to educate the community on stormwater

| Program Element/Activity | Audience (and number of people reached) | Topic(s) covered | Pollutant of Concern addressed (if applicable) | Responsible dept. or partner org. |
|--------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|---------------------------------------------------|
| Earth Date Clean-up (Annual in April) | General Public | Removal of Debris on the Rails to Trails and Novick's Orchard Open Space. | Litter | Southington Land Trust |
| Quinnipiac River Clean-up | Land Trust Members and their families | Removal of Debris in the Quinnipiac River | Debris – furniture, pipes, carpets, tarps, computer monitors | QRWA with support from the Southington Land Trust |
| Terracycle Event | General Public | Recycling | Recycling of packaging and personal care items | Southington Land Trust |
| Stormwater Management Program website was created | General Public | Implementation of the MS4 General Permit | All | Engineering Department |
| Links "river pollutants and solutions here" and "Current Threats to the Quinnipiac River" were added to the Stormwater website | General Public | These links provide access to the Quinnipiac River Watershed Association and the Quinnipiac River webpage, which contain information regarding threats and solutions to river pollution. | All | Engineering Department |
| Links to various stormwater programs were added to the Stormwater website | General Public | All | All | Engineering Department |

2. PUBLIC INVOLVEMENT/PARTICIPATION (Section 6(a)(2) / page 21)

| BMP | Status | Activities in current reporting period | Measurable goal | Department / Person Responsible | Due | Date completed/ projected | Additional details |
|----------------------------------------------------------------------|-----------|------------------------------------------------------|-----------------|---------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|--------------------|
| 2-1a Final Stormwater Management Plan publically available | Completed | Completed registration and General Permit for SMP | | Public Works/Director | Apr 3, 2017 | May 17, 2017 | |
| 2-1b Comply with public notice requirements for Annual Reports | On-going | Published public notice | | Public Works/Director | Annual Report - Feb 15, 2021 Annual Report Available - Feb 15, 2021 | Notice for Annual Report - 8/19/2021 & 10/4/2021 Draft Annual Report Available - 10/4/2021. | |

2.2 Describe any Public Involvement/Participation activities planned for the next year, if applicable.

- Continue to comply with the public notice and review requirements for Annual Reports.
- Continue to reach out to local organizations, such as QRWA, Southington Serves, Southington Community Services, Activate Southington, Scout Troops that may want to participate in the review and implementation of the SMP.

2.3 Public Involvement/Participation reporting metrics

| Metrics | Implemented | Date | Posted |
|----------------------------------------------------------|-------------|---------------------------------------------------|------------------------------------------------------------------------|
| Availability of the Stormwater Management Plan to public | Yes | 5/17/17 | www.southington.org/departments/engineering_department/stormwater_info |
| Availability of Annual Report announced to public | Yes | 2020 Report Announced 8/19/2021 & 10/4/2021 | www.southington.org/departments/engineering_department/stormwater_info |

3. ILLICIT DISCHARGE DETECTION AND ELIMINATION (Section 6(*a*)(3) and Appendix B / page 22)

| ВМР | Status | Activities in current reporting period | Measurable goal | Department / Person Responsible | Due | Date completed/ projected | Additional details |
|-------------------------------------------------------------------------------------|-------------|-----------------------------------------------------------------------------------------------------------------|-----------------------------------------|-------------------------------------------------------------------------------------------|-------------|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3-1 Develop written IDDE program | In progress | Town is in process of completing written IDDE program using the CT IDDE program template. | Develop written plan of IDDE program | Public Works, Planning & Zoning Commission, Conservation Commission/Directors | Jul 1, 2018 | December 2021 | The plan will be added as an appendix to the Planning & Zoning Regulations |
| 3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas | Complete | The list of outfalls to be investigates for all impaired water bodies has been mapped and field verified. | Inspect all outfalls | Public Works/Director | Jul 1, 2019 | Substantially Complete Jul 1, 2019 On-going | During the summer of 2018 with the assistance of two interns, the Town did initial screening & evaluation of dry weather flow at 1100 outlet locations. The Town will continue to update its mapping as new information is gathered. |

| ВМР | Status | Activities in current reporting period | Measurable goal | Department / Person Responsible | Due | Date completed/ projected | Additional details |
|--------------------------------------------------------------------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|------------------|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3-3 Implement citizen reporting program | Complete | The Town of Southington's Engineering website encourages citizens to report illicit discharges through a "Report Stormwater and Erosion Complaint" function. | Promote citizen reporting of illicit discharges into the Town's storm drainage systems | Public Works James. A Grappone, P.E. | Jul 1, 2017 | April 2018 | Complaints are emailed to Public Works/Engineering |
| 3-4 Establish legal authority to prohibit illicit discharges | In progress | The Town has a draft illicit Discharge Ordinance which will be adopted by all major Boards and Commissions | Ordinance adopted and included in Code and Aquifer Protection/Zoning regulations | Town Council, Planning & Zoning Commission, Conservation Commission/Directors | Jul 1, 2018 | December 2021 | Public hearing and/or informational meeting will need to take place before the respective Boards and Commissions adopt the ordinance. |
| 3-5 Develop record keeping system for IDDE tracking | Completed | The Town hired Barton & Loguidice to take initial screenings at 34 outfalls to impaired water bodies. 16 of these outfalls were noted discharging. | Create and maintain a reliable system for recording stormwater issues and tracking illicit discharges. | Public works/Director | Jul 1, 2017 | July 1, 2019 On-going | Investigation data will be collected on a tablet and uploaded onto the Town's GIS layer |
| 3-6 Address IDDE in areas with pollutants of concern | Not started | | | | Not specified | | |

3.2 Describe any IDDE activities planned for the next year, if applicable.

- Finalize written IDDE Program
- Post IDDE Program to the Stormwater Management Program webpage and include link in next year's Annual Report
- Continue updating the MS4 outfall and system mapping
- Work towards finalizing legal authority to prohibit illicit discharges
- Continue to maintain master IDDE tracking spreadsheet
- Investigate illicit discharges in areas with pollutants of concern

3.3 List of citizen reports of suspected illicit discharges received during this reporting period.

| Date of Report | Location / suspected source | Known or suspected cause / Responsible party | Corrective measures planned and completed |
|----------------|-----------------------------|------------------------------------------------------------|--------------------------------------------------------------------|
| 2/10/20 | South End Rd | Received an email stating a clogged pipe on South End Road | TOS agreed this is in TOS ROW and requested our highway department |
| | | behind McDonald's. | to address. They will have the pipe jetted. |

| Date of Report | Location / suspected source | Known or suspected cause / Responsible party | Corrective measures planned and completed |
|----------------|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4/13/20 | Hillcrest Orchard | Received email stating issued at Hillcrest subdivision. There is little to almost no erosion and sediment control. Many lots are under construction with no protection to neighbors or our catch basins and drainage systems. An entire wood area is flooded with muddy waters from the development. On the downhill side there's also a retention pond with silty outflow coming from the engineered retention pond which is going downhill into neighbors properties and directly into our catch base of system on Blatchley Road. | TOS is aware of these issues and Engineering dept had coordinated with Planning dept to inspect potential trouble spots. Last week silt fences were up in critical areas adjacent to wetlands. Since curbing was installed over the past few months, runoff had been kept to a minimum. With the 1.5" + rainfall in a short period of time it appears certain areas have become inundated. The detention ponds are doing their job, as the best they can do is "minimize" the discoloration of sediment laden waters, as required by the State of CT. TOS will follow up with the developers to ensure the trouble spots are addressed. |
| 4/21/20 | 136 Curtiss St | Ongoing problem of an illegal car wash in the building located at 136 Curtiss Street. Sediment, waste and a chemical trail is clearly visible walking toward the canal. Everything is flowing untreated into the sewers. The washing includes both cars and semi-trucks on a consistent basis. | TOS forwarded this complaint to the supervisor of our Field Inspection Group at DEEP. TOS have had ongoing enforcement matters relating to zoning at this site for some time. |
| 4/21/20 | Hillcrest Orchards | Complaint from a homeowner in the Hillcrest subdivision, stating that the streets are not being kept clean from construction debris. | TOS requested the contractor sweep the streets. |
| 6/15/20 | 87 Harvest Ln | A neighbor called concerned that the folks at 87 Harvest Lane are possibly pumping chlorinated pool water into the storm drain in the street. He said there is a blue hose running from their back yard, discharging water that is causing white stains by the storm drain. | TOS sent inspector to the property to address. |
| 10/13/20 | 89 Ruy Ln | Complaint from resident on Ruy Lane stating they were again flooded out today by Hillcrest due to their lack of E&S controls and failure to stabilize the site. There is only a tiny temp. sediment trap in the corner that abuts our subdivision and all the water from that triangle piece from their closest road runs along both sediment fences and point discharges into his upgradient neighbor's yard, then his. He is also concerned with long term stormwater management and not sure where they plan to discharge roof leaders on the rear lot closest to the neighbor. | TOS P&Z evaluated the site and noted that there was sediment laden runoff evidence on neighboring properties and clear evidence of a section of failed silt fencing during yesterday's storm event. This isn't the first time that we have received complaints about lack of effective stormwater management. We have another potential high impact storm event in the forecast for this Friday, thus we find that an emergency action is warranted before the event. The first action should be to construct an oversize sediment trap along the toe of the slope in front of the existing silt fence to retain the volume of stormwater necessary to prevent overtopping of silt fencing. The second action should be to prevent soil erosion of exposed slopes both by water and wind transport. P&Z working with Engineering Department for their guidance on what is necessary to prepare for this upcoming storm event and what needs to be done as move toward colder weather. Developer met with TOS and formulated a remediation plan for the problem on Lot 30 as well as an independent monitoring system for future Erosion control. This will be implemented immediately. |

| Location | Date and duration of occurrence | Discharge to MS4 or surface water | Estimated volume discharged | Known or suspected cause / Responsible party | Corrective measures planned and completed | Sampling data (if applicable) |
|---------------------|---------------------------------------|-----------------------------------------|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| 72 Homesdale Ave | 1/7/20 | No | 1-50 gal | Homeowner reported sewage in their basement. | TOS responded to the call, used vac truck to release the blockage. I'm going to submit the bypass report. WPC stall gave owner a list of companies to call for cleanup. Looking to have Granite evaluate this street for lining. | |
| Maple Street | 1/23/20 | Νο | N/A | TOS have contractor working on Maple Street between Mark Drive and Route 10 replacing 140' of sewer main that collapsed. The affected neighbors have been notified and as of now there have been no backups. The WPCA has been notified and the on-call operators are on deck with the vac truck if needed. Pipe collapsed because one of the buildings that was connected to the main that was being lined had an injector pump, therefore causing the lining to push back and cause the main to collapse. | Service has been restored. Approximately 150' of sewer main was replaced. TOS determined the cause of the liner collapse and have taken steps to prevent a reoccurrence. | |
| 48 Berkley Ave | 1/29/20 | Νο | 1-50 gal | Homeowner at 48 Berkley Avenue reported she has a sewer backup into her cleanout in the basement. The resident mentioned that there was about an inch of water in their basement. It looks like grease was the cause of the blockage. | TOS responded and found this issue ended up being a blockage in our main. Staff cleared the blockage and left a yellow card for homeowner listing cleanup companies. | |
| 284 Summer St | 3/16/20 | No | 1-50 gal | Homeowner called the plant to report a sewer backup after they ran two loads of laundry. | Granite lined that main around Feb 10th and after review of the videos, it was determined that the lateral was not cut out. Brian Marek dug up the line and reconnected the lateral. | |
| 90 Sunset Ridge | 4/14/20 | No | 1-50 gal | WPC was contacted with report of a sewer backup in the home. TOS went to the location and noticed that the main was surcharged. Staff reported that the backup was caused by the storm. | A combination of the rain, debris (bricks) in the downstream invert . There is a slight offset due to the pipe transitioning from PVC to AC. We need to decide if this section should replaced by Marek. also noticed heavy debris in MH 450-1. There's another video with heavy infiltration right after the drop. Seems to be a lot of issues with this line. We will have Beetle video the entire shed after we video the road projects. | |

3.4 Provide a record of illicit discharges occurring during the reporting period and SSOs occurring July 2012 through end of reporting period.

| Location | Date and duration of occurrence | Discharge to MS4 or surface water | Estimated volume discharged | Known or suspected cause / Responsible party | Corrective measures planned and completed | Sampling data (if applicable) |
|--------------------|---------------------------------------|-----------------------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| 24 Minthal Dr | 5/27/20 | No | N/A | Susan called to report a sewer issue she is having. She did contact a plumber to come out and take a look. Upon the plumber's inspection he popped the manhole in the main and he said it looked to be flowing slowly. | TOS responded Staff checked the line and reported that there was "dried asphalt creating a dam" in the line. They removed the material and the line is flowing fine now. | |
| 61 Pinecrest Dr | 7/31/20 | No | N/A | Louise has had issues in the past with the line that runs through her back yard getting clogged and she can hear a weird sound when it starts to happen. She called this morning to let us know that she can hear that sound again. | TOS responded and reported the line was surcharged and they cleared the blockage. | |
| 105 Woodland Dr | 11/19/20 | No | 1-50 gal | Received a call from the homeowners at 105 Woodland Drive, they have sewage coming out of the shower in the basement of their home. | TOS responded to the call and reported that this was an issue with our sewer main. They jetted the line and gave the resident the list of companies for cleanup. | |
| 11 Chestnut St | 12/4/20 | No | N/A | Rob called regarding a sewer issue he is having at his property. He said that with all this rain he noticed that the sinks are backing up and that the clean-out cap had water dripping from it. He tried to open the clean-out so he could snake the line but he said there was so much pressure he thought he better not. | TOS responded and reported this ended up being an issue with our main. Homeowner mentioned that there wasn't any damage to his property. I told him to check his drains again and we will return if there is still an issue. There seemed to be quite a bit of sand/dirt in the line that caused the restriction. Staff also mentioned they noticed a lot of wipes in the line also. | |
| 46 Berkley Ave | 12/23/20 | No | 1-50 gal | A sewer backup was reported at 46 Berkeley Drive. TOS Staff jetted the main and reported that roots were the cause of the blockage. Staff gave the resident the list of companies for cleanup. I believe damages were minimal. Staff jetted this segment a few weeks earlier on 11/10/2020. We are going to install a manhole monitor on the street to give us an early indication of possible issues | Staff jetted this segment a few weeks earlier on 11/10/2020. We are going to install a manhole monitor on the street to give us an early indication of possible issues. | |

3.5 Briefly describe the method used to track illicit discharge reports, responses to those reports, and who was responsible for tracking this information.

• Illicit discharge reports as well as other stormwater and erosion related issues/concerns are received by the Department of Public works. The information is put into Municity (permit and complaint tracking system) and stored in a database. The DPW administrative assistant and/or engineer reviewing the report have the ability to generate a work request via email to investigate and follow through on resolving the issue reported.

3.6 Provide a summary of actions taken to address septic failures using the table below.

| Location and nature of structure with failing septic systems | Actions taken to respond to and address the failures | Impacted waterbody or watershed, if known |
|--------------------------------------------------------------|------------------------------------------------------|-------------------------------------------|
| 55 Reussner Rd | Repaired | |
| 1543 Mt Vernon Rd | Repaired | |
| 26 Pennywise Ln | Repaired | |
| 73 South Plains Rd | Repaired | |
| 160 DeFashion St | Repaired | |
| 864 Marion Ave | Repaired | |
| 55 Hidden Hills Dr | Repaired | |
| 246 Gwen Rd | Repaired | |
| 185 East Mountain Dr | Repaired | |
| 168 East St | Repaired | |
| 56 Valley View Dr | Repaired | |
| 65 Meeker Dr | Repaired | |
| 51 Lowery Dr | Repaired | |
| 1407 Mt Vernon Rd | Repaired | |
| 110 Burning Tree Rd | Repaired | |
| 1037 Shuttle Meadow Rd | Repaired | |
| 31 Cider Mill Rd | Repaired | |
| 35 Foley Dr | Repaired | |
| 150 Hitchcock Rd | Repaired | |
| 1520 Mt Vernon Rd | Repaired | |
| 10 Washington Dr | Repaired | |
| 330 Belleview Ave | Repaired | |
| 564 Shuttle Meadow Rd | Repaired | |
| 88 Defashion St | Repaired | |
| 55 Melissa Ct | Repaired | |
| 577 Woodruff St | Repaired | |
| 71 West St | Repaired | |
| 426 Lazy Ln | Repaired | |
| 212 Westwood Rd | Repaired | |
| 45 Hawthrone Dr | Repaired | |
| 120 Ciccolella Ct | Repaired | |
| 105 Pattonwood Dr | Repaired | |
| 17 Orchard Ln | Repaired | |

| Location and nature of structure with failing septic systems | Actions taken to respond to and address the failures | Impacted waterbody or watershed, if known |
|--------------------------------------------------------------|------------------------------------------------------|-------------------------------------------|
| 413 Dunham St | Repaired | |
| 58 Doral Ln | Repaired | |
| 225 Pratt St | Repaired | |
| 120 S End Road | Repaired | |
| 65 Union St | Repaired | |
| 160 DeFashion St | Repaired | |
| 1225 Shuttle Meadow Rd | Repaired | |
| 507 Meriden-Waterbury Tpke | Repaired | |

3.7 IDDE reporting metrics

| Metrics | | |
|----------------------------------------------------------------------|------|--|
| Estimated or actual number of MS4 outfalls | 1104 | |
| Estimated or actual number of interconnections | 124 | |
| Outfall mapping complete | 95% | |
| Interconnection mapping complete | 95% | |
| System-wide mapping complete (detailed MS4 infrastructure) | 90% | |
| Outfall assessment and priority ranking | TBD | |
| Dry weather screening of all High and Low priority outfalls complete | 100% | |
| Catchment investigations complete | 0% | |
| Estimated percentage of MS4 catchment area investigated | 0% | |

3.8 Briefly describe the IDDE training for employees involved in carrying out IDDE tasks including what type of training is provided and how often is it given (minimum once per year).

• The Illicit Discharge Detection and Elimination (IDDE) employee training program was held at the same time as our annual training for MS4 and review of the Stormwater Pollution Prevention Plan for Highway/Parks (March 9, 2020) and the Water Pollution Control Facility (October 1, 2020). Topics covered are examples of an illicit discharge (sanitary waste water, vehicle wastewater, oil, gas, grease, laundry wash water, automotive fluids and paints) and that any unusual discharge of odor, discoloration, suds, sheen and dry weather flow should be reported to a supervisor.

4. CONSTRUCTION SITE RUNOFF CONTROL (Section 6(a)(4) / page 25)

| ВМР | Status | Activities in current reporting period | Measurable goal | Department / Person Responsible | Due | Date completed/ projected | Additional details |
|---------------------------------------------------------------------------------------------------------------------------------------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4-1 Implement, upgrade, and enforce land use regulations or other legal authority to meet requirements of MS4 general permit | On-going | Implemented a change in the zoning regulations that allows for less required parking areas for new developments; therefore, reducing the amount of impervious area. | Continually update stormwater regulations in the Land Use documents | Planning & Zoning, Conservation Commission, IW/Directors | Jul 1, 2019 | Jul 1, 2019 On-going | The Town has established a "zero increase" in peak flow runoff (storage up to the 25 year storm event) in the regulations for new site plans and subdivisions |
| 4-2 Develop/ Implement plan for interdepartmental coordination in site plan review and approval | Complete | Zoning and building permits are tracked using Municity Software Permit System | Permitting System tracking | Planning, Engineering, Health, Fire, Building departments/dept. Directors | Jul 1, 2017 | Jul1, 2017 | Very good coordination exists between all development departments for technical review. Comments are tracked by the Planning Department. |
| 4-3 Review site plans for stormwater quality concerns | On-going | Engineering and Planning conduct comprehensive site plan/subdivision plan reviews that incorporate proper stormwater controls and BMP's to prevent impacts to water quality. | Permitting System tracking | Engineering, Planning/Directors | Jul 1, 2017 | Jul 1, 2017 On-going | The Town executes a standard Stormwater Connection Agreement with any property who makes a direct connection to the MS4. |
| 4-4 Conduct site inspections | On-going | Engineering & Planning conduct site inspections during installation of public improvements as well as during land disturbances. | | Planning, Engineering, Health, Fire, Building/Department heads | Jul 1, 2017 | Jul 1, 2017 On-going | The purpose of the Town's routine inspections is to assess the adequacy of the installation, maintenance, operation and repair of construction and post- construction control measures and enforcement. |
| 4-5 Implement procedure to allow public comment on site development | Complete | The Town follows all State of CT Public hearing requirements on applications for P&Z, Subdivision, IW, etc. | Receipt of Green-cards for hearing notices. | P&z, Conservation, IW/Directors | Jul 1, 2017 | Jul 1, 2017 | The Town follows up on all public comments received during and after the public hearings. |

| BMP | Status | Activities in current reporting period | Measurable goal | Department / Person Responsible | Due | Date completed/ projected | Additional details |
|----------------------------------------------------------------------------------------------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------------|--------------|---------------------------------|-----------------------------------------------------------------------------------|
| 4-6 Implement procedure to notify developers about DEEP construction stormwater permit | Complete | Amount of disturbed area is verified with each application. If the total disturbed area is five or more acres, a "Stormwater and Dewatering Wastewaters from Construction Activities" general permit is required by CT DEEP. | Items of checklist review | Planning/Engineering/Directors | July 1, 2017 | July 1, 2017 | This is an on-going process and the Town will make changes as necessary. |

4.2 Describe any Construction Site Runoff Control activities planned for the next year, if applicable.

- Update the Town of Southington's Stormwater regulations, as necessary, to comply with the MS4 requirements.
- Continue to review all design plans for regulation consistency.
- Continue to follow all State public notice and hearing requirements and follow up on all comments and complaints received.
- Routine inspection of active construction sites are being performed.
- Implement a checklist for inspector's use when visiting construction sites.

5. POST-CONSTRUCTION STORMWATER MANAGEMENT (Section 6(*a*)(5) / page 27)

| ВМР | Status | Activities in current reporting period | Measurable goal | Department / Person Responsible | Due | Date completed / projected | Additional details |
|-------------------------------------------------------------------------------------------------------------------------------------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|----------------------------------------------------------------------|-------------|----------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| 5-1 Establish and/or update legal authority and guidelines regarding LID and runoff reduction in site development planning | On-going | Current Zoning and Subdivision regulations including the Conservation Plan of Development include the use of LID for land use design | Full adoption of LID. Regulations to reduce impervious coverage. | Public works, P&Z, Conservation Commission, IW/Director | Jul 1, 2021 | December 2021 | Need to establish legal authority provisions |
| 5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects | On-going | Staff reviewed of Zoning & subdivision regulations to determine possible modifications to better match the requirement of the 2017 General Permit | The adoption of a LID ordinance. | Public Works, Zoning Enforcement/Directors of each department. | Jul 1, 2019 | Jul 1, 2019 On-going | The Town has a Zero increase in runoff (ZIRO) guideline in the Zoning/subdivision regulations since 2005. |
| 5-3 Identify retention and detention ponds in priority areas | Complete | All detention ponds are mapped on the GIS drainage layer | Complete list including inspections & ranking of all basins | Public Works/Director | Jul 1, 2019 | Jul 1, 2019 | |

| ВМР | Status | Activities in current reporting period | Measurable goal | Department / Person Responsible | Due | Date completed / projected | Additional details |
|------------------------------------------------------------------------------------------------------|----------|--------------------------------------------------------------------------------------|--------------------------------------------------|------------------------------------------------------------------------------|------------------|----------------------------------|------------------------------------------------------------------------------------------------|
| 5-4 Implement long- term maintenance plan for stormwater basins and treatment structures | On-going | The Town performs annual inspections and removes accumulated sediment, as necessary. | Complete list of all these structures. | Public Works/Director | Jul 1, 2019 | Jul 1, 2019 | The Town is reviewing current procedures and will improve for compliance with MS4 GP. |
| 5-5 DCIA mapping | On-going | Town is in the process of analyzing DCIA from mapping provided by UConn Clear. | Calculate DCIA | Public Works/Director | Jul 1, 2020 | Nov 15, 2019 | The Town will develop & maintain DCIA within the MS4 priority area. |
| 5-6 Address post- construction issues in areas with pollutants of concern | On-going | The Town performs routine inspections and follow-up on complaints received | Prioritize areas subject to erosion and sediment | Engineering/Planning/Health Department – Directors of each department. | Not specified | On-going | |

5.2 Describe any Post-Construction Stormwater Management activities planned for the next year, if applicable.

- Continue to enforce runoff reduction requirements for development and redevelopment projects.
- Expand on data collection for all Town owned detention/retention ponds and underground stormwater treatment structures. The database will also include inspection and maintenance records.
- Continue updating the DCIA mapping, as necessary.

5.3 Post-Construction Stormwater Management reporting metrics

| Metrics | | |
|-----------------------------------------------------------|---------------|----------------------------------|
| Baseline (2012) Directly Connected Impervious Area (DCIA) | 410.48 acres | acres |
| DCIA disconnected (redevelopment plus retrofits) | 0 ac / 3.4 ac | acres this year / acres total |
| Retrofit projects completed | 9 | # |
| DCIA disconnected | 0% / 0.83% | % this year / % total since 2012 |
| Estimated cost of retrofits | Unknown | \$ |
| Detention or retention ponds identified | 160 | # total |

5.4 Briefly describe the method to be used to determine baseline DCIA.

The Town used the baseline DCIA method process from CT NEMO website.

6. POLLUTION PREVENTION/GOOD HOUSEKEEPING (Section 6(a)(6) / page 31)

| ВМР | Status | Activities in current reporting period | Measurable goal | Department / Person Responsible | Due | Date completed/ projected | Additional details |
|------------------------------------------------------------------------------------------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|------------------|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| 6-1 Develop/implement formal employee training program | On-going | Parks/Highway/Treatment Plant employees received annual industrial Stormwater and M54 training. Town conducts additional training in street sweeping, catch basin cleaning and repairing, retrofitting of the stormwater system. | Continue to ensure that all town employees are educated to recognize pollutant sources, prevent or reduce pollutant runoff from municipal operations, and implement erosion and sedimentation and stormwater controls to meet the requirements of the Permit. | Public Works/Director | Jul 1, 2017 | On-going | Barton & Loguidice and Tighe & Bond Engineers performed training on 3/9/20 (Parks/Highway) and 10/1/20 (Treatment Plant) |
| 6-2 Implement MS4 property and operations maintenance | On-going | Under the Industrial General Permit, the Town's Bulky Waste and Garage properties are being maintained. Stormwater samples are being done by B&L and submitted to CT DEEP. Parks and trails are being inspected and maintained throughout the year. | Identify and evaluate town buildings and facilities whose operations may impact stormwater runoff and provide operation maintenance recommendations for each facility. Maintain all Town owned properties in accordance with MS4 GP | Public Works, Town Facilities Managers/Directors, Parks & Recreation Commission, Conservation Commission | Jul 1, 2018 | Jul 1, 2018 On-going | The Town continues reviewing current practices and looking for areas for optimization. |
| 6-3 Implement coordination with interconnected MS4s | On-going | The Town has shared GIS information with New Britain, Bristol, Plainville & Cheshire. The Town has begun researching and identifying interconnections with DOT systems. | Map and identify all interconnected MS4's | Public Works/Director | Not specified | On-going | |
| 6-4 Develop/implement program to control other sources of pollutants to the MS4 | Completed | Town has implemented a pesticide/fertilizer application policy as well as Standard Operating Procedures for snow management. | Develop and implement a program to control the contribution of pollutants to the MS4 from commercial, industrial, municipal, institutional or other facilities. | Public works/Director | Not specified | On-going | The dog park and the paved linear trail have pet waste disposal signs and trash receptacles that regularly get emptied. |

| ВМР | Status | Activities in current reporting period | Measurable goal | Department / Person Responsible | Due | Date completed/ projected | Additional details |
|-------------------------------------------------------------------------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|------------------|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6-5 Evaluate additional measures for discharges to impaired waters* | In progress | Outfalls were identified with high potential to contributing bacteria and they will be reviewed for dog park, parks with open waters and sites with failing septic systems. | On Town-owned or operated lands with a high potential to contribute bacteria, the Town will develop, fund, implement, and prioritize a retrofit or source management program to correct the problem(s). | Public Works/Director | Not specified | On-going | |
| 6-6 Track projects that disconnect DCIA | In progress | A table was created for tracking disconnected DCIA. On-going additions to the table. | Annually track the total acreage of DCIA that is disconnected from the MS4 as a result of redevelopment or retrofit p | Public Works/director | Jul 1, 2017 | Jul 1, 2017 On-going | Town is looking into more grant opportunities with Save the Sound for rain garden projects that would disconnect roof drains from the drainage system. |
| 6-7 Implement infrastructure repair/ rehab program | In progress | The Town is in the process of reviewing its programs to repair and rehabilitate its infrastructure in a timely manner to reduce or eliminate the discharge of pollutants | Continue a program to identify MS4 structures to repair, rehabilitate, or upgrade to reduce or eliminate the discharge of pollutants into water bodies | Public Works/Director | Jul 1, 2021 | December 2021 On-going | The Town continues reviewing current practices and looking for areas for optimization. |
| 6-8 Develop/implement plan to identify/ prioritize retrofit projects | In progress | The Town is reviewing opportunities for redevelopment projects. | Develop a Retrofit Project Plan to identify and prioritize potential DCIA disconnection projects. | Public Works/Director | Jul 1, 2020 | December 2021 | In 2021, the Town will continue efforts to identify and prioritize potential projects for the Retrofit Program to the maximum extent practicable. |
| 6-9 Implement retrofit projects to disconnect 2% of DCIA | In progress | The Town is reviewing credit for previously approved projects. | Implement retrofit projects | Public Works/Director | Jul 1, 2022 | Jul 1, 2022 | In 2021, the Town will continue efforts to identify and prioritize potential projects for the Retrofit Program to the maximum extent practicable. |

| ВМР | Status | Activities in current reporting period | Measurable goal | Department / Person Responsible | Due | Date completed/ projected | Additional details |
|------------------------------------------------------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|------------------------------------|-------------|---------------------------------|-------------------------------------------------------------------------------------------------|
| 6-10 Develop/ implement street sweeping program | Complete | All streets and Town maintained parking lots were cleaned and swept in the spring following the winter maintenance activities. Public Building Parking Lots and Municipal Parking Lots are included in this program. School Parking Lots are done by a private contractor. Bid out by the Board of Education every winter. | Continue annual street sweeping program to mitigate sediment and debris on Town roads and properties. | Public Works/Director | Jul 1, 2017 | Jul 1, 2017 On-going | The Town continues reviewing current practices and looking for areas for optimization. |
| 6-11 Develop/ implement catch basin cleaning program | Complete | Catch basins were inspected and cleaned out, as necessary, to the maximum extent practicable. | Continue current maintenance program in accordance with the Permit. | Public Works/Director | Jul 1, 2020 | Jul 1, 2017 On-going | The Town continues reviewing current practices and looking for areas for optimization. |
| 6-12 Develop/ implement snow management practices | Complete | Road salt is used to treat Town roads rather than a sand mixture. To mitigate wetland impact, snow banks/piles were transferred to a bulky waste site. | Continue current snow management practices in accordance with the Permit. | Public Works/Director | Jul 1, 2018 | Jul 1, 2018 On-going | The Town continues reviewing current practices and looking for areas for optimization. |

6.2 Describe any Pollution Prevention/Good Housekeeping activities planned for the next year, if applicable.

- Continue to conduct annual MS4 training events.
- Continue to review MS4 property and operations maintenance practices and look for areas for optimization.
- Continue street sweeping, catch basin cleansing and snow management practices.
- Continue to reduce pesticide application rates on Town owned MS4 properties.
- Continue MS4 interconnection coordination with neighboring Towns and the State.
- Continue tracking projects that disconnect DCIA.

6.3 Pollution Prevention/ Good Housekeeping reporting metrics

| Metrics | |
|------------------------------------------|-----------------------------------------------------|
| Employee training provided for key staff | 3/9/20 (Parks/Highway) 10/1/20 (Treatment Plant) |
| Street sweeping | |
| Curb miles swept | ~400 miles |
| Volume (or mass) of material collected | ~550 tons |

| Catch basin cleaning | |
|--------------------------------------------------------------------------------------------------|------------------------------------------|
| Total catch basins in priority areas | 5,667 |
| Total catch basins | 6,853 |
| Catch basins inspected | 163 |
| Catch basins cleaned | 163 |
| Volume (or mass) of material removed from all catch basins | ~59 tons |
| Volume removed from catch basins to impaired waters (if known) | Unknown |
| Snow management | |
| Type(s) of deicing material used | Rock salt & magnesium chloride treated |
| | rock salt |
| Total amount of each deicing material applied | ~236 tons rock salt |
| | ~2,952 tons treated rock salt |
| Type(s) of deicing equipment used | Dump trucks with automated spreaders |
| Lane-miles treated | ~413 miles |
| Snow disposal location | 623 Old Turnpike Road |
| Staff training provided on application methods & equipment | Yes, On-going throughout fall and winter |
| Municipal turf management program actions (for permittee properties in basins with N/P | |
| impairments) | |
| Reduction in application of fertilizers (since start of permit) | 170 lbs reduced from 2019 to 2020 |
| Reduction in turf area (since start of permit) | 0.5 acres reduced from 2019 to 2020 |
| Lands with high potential to contribute bacteria (dog parks, parks with open water, & sites with | |
| failing septic systems) | |
| Cost of mitigation actions/retrofits | Unknown |

6.4 Catch basin cleaning program

Provide any updates or modifications to your catch basin cleaning program

The Town of Southington Department of Public Works personnel performed visual inspections of catch basins throughout Town to determine which areas were most in need of cleaning. These observations, in conjunction with anticipated road projects, provide direction on which quadrant of the Town will be cleaned in a given year. The remaining quadrants of Town will be targeted in subsequent years.

6.5 Retrofit program

Briefly describe the Retrofit Program identification and prioritization process, the projects selected for implementation, the rationale for the selection of those projects and the total DCIA to be disconnected upon completion of each project.

In 2021, the Town will continue to work on identifying and prioritizing potential projects for the Retrofit Program to the maximum extent practicable.

Describe plans for continuing the Retrofit program and how to achieve a goal of 1% DCIA disconnection in future years.

In 2021, the Town will continue to work on identifying and prioritizing potential projects for the Retrofit Program to the maximum extent practicable.

Describe plans for continuing the Retrofit program beyond this permit term with the goal to disconnect 1% DCIA annually over the next 5 years.

In 2021, the Town will continue to work on identifying and prioritizing potential projects for the Retrofit Program to the maximum extent practicable.

Part II: Impaired waters investigation and monitoring

1. Impaired waters investigation and monitoring program

1.1 Indicate which stormwater pollutant(s) of concern occur(s) in your municipality or institution.

Nitrogen/ Phosphorus 🛛 Bacteria 🖾 Mercury 🗌 Other

Other Pollutant of Concern

1.2 Describe program status.

Discuss 1) the status of monitoring work completed, 2) a summary of the results and any notable findings, and 3) any changes to the Stormwater Management Plan based on monitoring results.

1) Wet weather samples were collected from 49 of 85 total outfalls that discharge to impaired waters corresponding to 58% completed.

2) 27 outfalls sampled exceeded pollutant thresholds and require follow-up investigation.

3) Based on the results of the samples collected the top six (6) worst outfalls have been selected and will be sampled in 2021.

2. Screening data for outfalls to impaired waterbodies (Section 6(i)(1) / page 41)

2.1 Screening data collected under 2017 permit

| Outfall ID | Sample Date | Latitude | Longitude | Turbidity at Outfall (NTU) | Turbidity Upstream (NTU) | E. Coli (col/100mL) | Lab | Investigation Required |
|------------|----------------|------------|-------------|----------------------------------|--------------------------------|------------------------|---------|---------------------------|
| OF-110-5 | 9/25/2018 | 41.6125985 | -72.8796627 | 6.42 | 2.17 | | Phoenix | NO |
| OF-110-6 | 9/25/2018 | 41.6125910 | -72.8793097 | 6.8 | 2.21 | | Phoenix | NO |
| OF-137-13 | 12/28/2018 | 41.6337395 | -72.8552509 | 9.9 | 1.19 | | Phoenix | YES |
| OF-170-1 | 9/25/2018 | 41.6042801 | -72.8825591 | 7.02 | 17.6 | | Phoenix | NO |
| OF-170-2 | 9/25/2018 | 41.6043029 | -72.8826533 | 6.94 | 16.68 | | Phoenix | NO |
| OF-220-3 | 9/25/2018 | 41.6469879 | -72.8712885 | 2.59 | 0.73 | 1440 | Phoenix | YES |
| OF-220-4 | 12/28/2018 | 41.6481933 | -72.8691601 | 0.25 | 2.72 | | Phoenix | NO |
| OF-220-5 | 12/28/2018 | 41.6481143 | -72.8689917 | 1.1 | 2.8 | | Phoenix | NO |
| OF-226-2 | 6/18/2019 | 41.5929468 | -72.8476617 | | | 1670 | Phoenix | YES |
| OF-24-1 | 6/18/2019 | 41.5934893 | -72.8858710 | 9.89 | 3.21 | 9000 | Phoenix | YES |
| OF-250-3 | 6/18/2019 | 41.5975956 | -72.8862296 | 3.71 | 1.88 | 4880 | Phoenix | YES |
| OF-250-6 | 6/18/2019 | 41.5989042 | -72.8856834 | 4.5 | 2.53 | 3260 | Phoenix | YES |
| OF-250-7 | 9/25/2018 | 41.5993821 | -72.8854859 | 8.18 | 8.95 | | Phoenix | NO |
| OF-26-2 | 6/18/2019 | 41.5732944 | -72.8669540 | | | 2480 | Phoenix | YES |
| OF-273-13 | 6/18/2019 | 41.5595194 | -72.8736833 | | | 4610 | Phoenix | YES |
| OF-273-4 | 9/25/2018 | 41.5698507 | -72.8734671 | 1.07 | 1.81 | 3970 | Phoenix | YES |
| OF-273-6 | 9/25/2018 | 41.5697454 | -72.8732725 | 1.46 | 1.44 | 211 | Phoenix | YES |
| OF-274-1 | 6/18/2019 | 41.6008165 | -72.8848318 | 21.6 | 4.01 | 2910 | Phoenix | YES |
| OF-274-2 | 6/18/2019 | 41.6021435 | -72.8842510 | 7.14 | 3.79 | 19900 | Phoenix | YES |
| OF-274-5 | 6/25/2019 | 41.6031841 | -72.8834120 | 0 | 0.96 | | Phoenix | YES |
| OF-279-1 | 6/18/2019 | 41.5995434 | -72.8852986 | 7.5 | 1.89 | 14100 | Phoenix | YES |
| OF-290-1 | 6/18/2019 | 41.5924982 | -72.8510273 | | | 1440 | Phoenix | YES |
| OF-302-2 | 12/28/2018 | 41.6426579 | -72.8533152 | 1.34 | 9.4 | | Phoenix | NO |
| OF-302-3 | 12/18/2018 | 41.6425098 | -72.8531356 | | 0.86 | | Phoenix | NO |
| OF-307-2 | 9/25/2018 | 41.5673879 | -72.8764145 | 1.63 | 2.61 | 457 | Phoenix | YES |
| OF-307-3 | 9/25/2018 | 41.5667859 | -72.8771880 | 6.76 | 2.72 | 2610 | Phoenix | YES |
| OF-312-1 | 9/25/2018 | 41.6395115 | -72.8816729 | 1.64 | 5.17 | | Phoenix | NO |

| Outfall ID | Sample Date | Latitude | Longitude | Turbidity at Outfall (NTU) | Turbidity Upstream (NTU) | E. Coli (col/100mL) | Lab | Investigation Required |
|------------|----------------|------------|-------------|----------------------------------|--------------------------------|------------------------|---------|---------------------------|
| OF-322-4 | 6/18/2019 | 41.5725744 | -72.8669837 | | | 6130 | Phoenix | YES |
| OF-355-1 | 9/25/2018 | 41.6410539 | -72.8544266 | 2.84 | 12.67 | | Phoenix | NO |
| OF-362-1 | 12/28/2018 | 41.6421404 | -72.8530585 | 0.76 | 9.2 | | Phoenix | NO |
| OF-373-1 | 9/25/2018 | 41.6281419 | -72.8547848 | 3.99 | 3.23 | | Phoenix | NO |
| OF-373-2 | 12/28/2018 | 41.6281795 | -72.8545357 | 0.75 | 9.2 | | Phoenix | NO |
| OF-373-3 | 6/25/2019 | 41.6279144 | -72.8544707 | 6.09 | 0.41 | >24200 | Phoenix | YES |
| OF-391-4 | 6/18/2019 | 41.5927549 | -72.8578598 | | | 2100 | Phoenix | YES |
| OF-394-1 | 9/25/2018 | 41.5663374 | -72.8772964 | 3.38 | 1.4 | 2280 | Phoenix | YES |
| OF-404-13A | 9/25/2018 | 41.5648070 | -72.8832425 | 1.63 | 11.2 | 404 | Phoenix | YES |
| OF-406-2 | 9/25/2018 | 41.6322984 | -72.8561304 | 51.1 | 53.8 | | Phoenix | NO |
| OF-429-6 | 9/25/2018 | 41.6285516 | -72.8545188 | 16.6 | 12.27 | | Phoenix | NO |
| OF-432-2 | 12/28/2018 | 41.6264588 | -72.8520709 | 0.34 | 9.45 | | Phoenix | NO |
| OF-432-3 | 6/25/2019 | 41.6268014 | -72.8521203 | 0 | 0 | 161 | Phoenix | YES |
| OF-432-4 | 12/28/2018 | 41.6268297 | -72.8523531 | 54.7 | 9.45 | | Phoenix | YES |
| OF-44-1 | 9/25/2018 | 41.5701514 | -72.8706327 | 2.73 | 2.32 | >24200 | Phoenix | YES |
| OF-477-1 | 6/18/2019 | 41.5739981 | -72.8665649 | | | 2280 | Phoenix | YES |
| OF-63-6 | 9/25/2018 | 41.6134802 | -72.8780096 | 5.78 | 4.54 | | Phoenix | NO |
| OF-76-1 | 12/28/2018 | 41.6477605 | -72.8621129 | 0.94 | 2.22 | | Phoenix | NO |
| OF-76-2 | 12/28/2018 | 41.6477976 | -72.8620392 | 1.11 | 2.22 | | Phoenix | NO |
| OF-8-1 | 9/25/2018 | 41.5777287 | -72.8974598 | 3.26 | 3.12 | | Phoenix | NO |
| OF-83-1 | 6/18/2019 | 41.5983017 | -72.8858356 | 12.1 | 3.15 | 15500 | Phoenix | YES |

2.2 Credit for screening data collected under 2004 permit

If any outfalls to impaired waters were sampled under the 2004 MS4 permit, that data can count towards the monitoring requirements under the modified 2017 MS4 permit. Complete the table below to record sampling data for any outfalls to impaired waters under the 2004 MS4 permit.

| Outfall | Latitude / Longitude | Sample date | Parameter | Results | Name of Laboratory | Follow-up required? * |
|---------|-------------------------|----------------|-----------|---------|-----------------------|-----------------------|
| N/A | | | | | | |

3. Follow-up investigations (Section 6(i)(1)(D) / page 43)

Provide the following information for outfalls exceeding the pollutant threshold.

| Outfall ID | Status of drainage area investigation | Control measure to address impairment |
|-----------------|--------------------------------------------|---------------------------------------|
| It is anticinat | ed that this will be initiated during 2021 | |

It is anticipated that this will be initiated during 2021.

4. Prioritized outfall monitoring (Section 6(i)(1)(D) / page 43)

Once outfall sampling has been completed for at least 50% of outfalls to impaired waters, identify 6 of the highest contributors of any pollutants of concern. Begin monitoring these outfalls on an annual basis by July 1, 2020.

| | Latitude / Longitude | Sample Date | Parameter(s) | Results | Name of Laboratory (if used) |
|----------------|-------------------------|----------------|------------------------|---------------------------|------------------------------|
| It is anticipa | ated that this | will be conduc | ted annually, starting | g prior to June 30, 2021. | |

Part III: Additional IDDE Program Data

1. Assessment and Priority Ranking of Catchments data (Appendix B (A)(7)(c) / page 5)

Provide a list of all catchments with ranking results (DEEP basins may be used instead of manual catchment delineations).

| 1. Catchment ID | 2. Category | 3. Rank |
|-----------------------------|-----------------------------------------|------------------------|
| This table is in progress a | and it is anticipated that it will be c | completed during 2021. |

2. Outfall and Interconnection Screening and Sampling data (Appendix B (A)(7)(d) / page 7)

2.1 Dry weather screening and sampling data from outfalls and interconnections

Provide sample data for outfalls where flow is observed. Only include Pollutant of concern data for outfalls that discharge into stormwater impaired waterbodies.

Table 2.1a – Non-Impaired Waterbody Samples

| Outfall ID | Sample Date | Latitude | Longitude | Ammonia (mg/L) | Chlorine (mg/L) | Conductivity (umhos/cm) | Salinity (g/kg) | Temp (oC) | MBAs (mg/L) | E. Coli (col/100ml) | Lab | Investigation Required |
|------------|----------------|-------------|--------------|-------------------|--------------------|----------------------------|--------------------|--------------|----------------|------------------------|---------|---------------------------|
| | | | | | | | | | | | | • |
| OF-179-3 | 9/18/2019 | 41.5757309 | -72.87587364 | 0 | 0.11 | 460 | 0.213 | 6.7 | 0.25 | 10 | Phoenix | NO |
| OF-227-2 | 7/9/2019 | 41.5667228 | -72.85978946 | 0 | 0.04 | 516 | 0.22 | 18.1 | 0.25 | 144 | Phoenix | NO |
| OF-28-1 | 7/9/2019 | 41.57042271 | -72.8996247 | 0 | 0.06 | 674 | 0.316 | 19.7 | 0.25 | 17300 | Phoenix | NO |
| OF-28-4A | 7/9/2019 | 41.57115767 | -72.91325791 | 0 | 0.01 | 453 | 0.211 | 17.2 | 0.25 | <10 | Phoenix | NO |
| OF-33-14 | 7/9/2019 | 41.57174201 | -72.90127825 | 0 | 0.06 | 1280 | 0.612 | 20.9 | 0.25 | 122 | Phoenix | NO |
| OF-342-1 | 9/26/2019 | 41.58687156 | -72.87550711 | 0.25 | 0.04 | 495 | 0.213 | 26.3 | 0 | 41 | Phoenix | NO |
| OF-383-1 | 7/9/2019 | 41.56630127 | -72.85762074 | 0 | 0.03 | 465 | 0.213 | 16.3 | 0.25 | 20 | Phoenix | NO |
| OF-398-1 | 7/9/2019 | 41.56468392 | -72.87093454 | 0 | 0.02 | 482 | 0.213 | 15.5 | 0.25 | <10 | Phoenix | NO |
| OF-400-2 | 7/9/2019 | 41.56075619 | -72.86038117 | 0 | 0.03 | 615 | 0.172 | 21.3 | 0.25 | 487 | Phoenix | NO |
| OF-400-3 | 7/9/2019 | 41.56188774 | -72.86023584 | 0 | 0.04 | 635 | 0.298 | 19.8 | 0.25 | 450 | Phoenix | NO |

Table 2.1a – Non-Impaired Waterbody Samples

| Outfall ID | Sample Date | Latitude | Longitude | Ammonia (mg/L) | Chlorine (mg/L) | Conductivity (umhos/cm) | Salinity (g/kg) | Temp (oC) | MBAs (mg/L) | E. Coli (col/100ml) | Lab | Investigation Required |
|------------|----------------|-------------|--------------|-------------------|--------------------|----------------------------|--------------------|--------------|----------------|------------------------|---------|---------------------------|
| OF-408-2 | 7/9/2019 | 41.56247041 | -72.85676655 | 0.25 | 0.04 | 370 | 0.279 | 16 | 0.5 | 2100 | Phoenix | NO |
| OF-527-1 | 7/9/2019 | 41.57156721 | -72.90013719 | 0 | 0.14 | 884 | 0.412 | 16.8 | 0.25 | 441 | Phoenix | NO |
| OF-66-16 | 9/18/2019 | 41.61428905 | -72.86580545 | 0 | 0.04 | 69.1 | 0.0323 | 8.6 | 0.5 | 74 | Phoenix | NO |
| OF-8-3 | 9/18/2019 | 41.57867901 | -72.89857857 | 0 | 0.03 | 1143 | 0.559 | 9.9 | 0.5 | <10 | Phoenix | NO |

Table 2.1b – Impaired Waterbody Samples

| | | | | | | Turbidity | | |
|---------|-----------|-----------|------------|-------------|---------------|-----------|---------|---------------|
| Outfall | Sample | | | E. Coli | Turbidity at | Upstream | | Investigation |
| ID | Date | Latitude | Longitude | (col/100ml) | Outfall (NTU) | (NTU) | Lab | Required |
| OF-24-1 | 9/18/2019 | 41.593489 | -72.885871 | <10 | 2.89 | 2.12 | Phoenix | NO |
| OF-44-1 | 7/9/2019 | 41.570151 | -72.870633 | 8660 | | | Phoenix | YES |

2.2 Wet weather sample and inspection data

Provide sample data for outfalls and key junction manholes of any catchment area with at least one System Vulnerability Factor. You may also attach a lab report with the same data rather than copying it to this table.

| Outfall / Interconnection ID | Latitude / Longitude | Sample date | Ammonia | Chlorine | Conductivity | Salinity | E. coli or Enterococcus | Surfactants | Water Temp | Pollutant of concern | |
|------------------------------------|-------------------------|----------------|------------|----------|--------------|----------|----------------------------|-------------|------------|----------------------|--|
| It is anticipated th | at this will be | e initiated du | ring 2021. | | | | | | | | |

3. Catchment Investigation data (Appendix B (A)(7)(e) / page 9)

3.1 System Vulnerability Factor Summary

For those catchments being investigated for illicit discharges (i.e. categorized as high priority, low priority, or problem) document the presence or absence of System Vulnerability Factors (SVF). If present, report which SVF's were identified.

| Outfall ID | Receiving Water | System Vulnerability Factors |
|---------------|------------------------------------------|-------------------------------------|
| This table i | s in progress and it is anticipated that | t it will be completed during 2021. |

Where SVFs are:

- 1. History of SSOs, including, but not limited to, those resulting from wet weather, high water table, or fat/oil/grease blockages.
- 2. Sewer pump/lift stations, siphons, or known sanitary sewer restrictions where power/equipment failures or blockages could readily result in SSOs.
- 3. Inadequate sanitary sewer level of service (LOS) resulting in regular surcharging, customer back-ups, or frequent customer complaints.
- 4. Common or twin-invert manholes serving storm and sanitary sewer alignments.
- 5. Common trench construction serving both storm and sanitary sewer alignments.
- 6. Crossings of storm and sanitary sewer alignments.

- 7. Sanitary sewer alignments known or suspected to have been constructed with an underdrain system;
- Sanitary sewer infrastructure defects such as leaking service laterals, cracked, broken, or offset sanitary infrastructure, directly piped connections between storm drain and sanitary sewer infrastructure, or other 8. vulnerability factors identified through Inflow/Infiltration Analyses, Sanitary Sewer Evaluation Surveys, or other infrastructure investigations.
- 9. Areas formerly served by combined sewer systems.
- 10. Any sanitary sewer and storm drain infrastructure greater than 40 years old in medium and densely developed areas.
- 11. Widespread code-required septic system upgrades required at property transfers (indicative of inadequate soils, water table separation, or other physical constraints of the area rather that poor owner maintenance).
- 12. History of multiple local health department or sanitarian actions addressing widespread septic system failures (indicative of inadequate soils, water table separation, or other physical constraints of the area rather that poor owner maintenance).

3.2 Key junction manhole dry weather screening and sampling data

| Key Junction Manhole ID | Latitude / Longitude | Screening / Sample date | Visual/ olfactory evidence of illicit discharge | Ammonia | Chlorine | Surfactants |
|-------------------------------|--------------------------|----------------------------|-------------------------------------------------------|---------|----------|-------------|
| It is anticipated the | at this will be initiate | ed during 2021. | | | | |

3.3 Wet weather investigation outfall sampling data

| Outfall ID | Latitude / Longitude | Sample date | Ammonia | Chlorine | Surfactants | |
|------------------------------------------------------------|-------------------------|-------------|---------|----------|-------------|--|
| It is anticipated that this will be initiated during 2021. | | | | | | |

3.4 Data for each illicit discharge source confirmed through the catchment investigation procedure

| Discharge location | Source location | Discharge description | Method of discovery | Date of discovery | Date of elimination | Mitigation or enforcement action | Estimated volume of flow removed |
|------------------------------------------------------------|-----------------|-----------------------|---------------------|----------------------|---------------------|----------------------------------|-------------------------------------|
| It is anticipated that this will be initiated during 2021. | | | | | | | |

It is anticipated that this will be initiated during 2021.

Part IV: 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 this document or its attachments may be punishable as a criminal offense, in accordance with Section 22a-6 of the Connecticut General Statutes, pursuant to Section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute."

| Chief Elected Official or Principal Executive Officer | Document Prepared by | |
|------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|---|
| Print name: Mark J. Sciota Town Manager Signature / pate: 11/10/ | Print name: T.J. Therriault, EIT, CDT Barton & Loguidice, LLC Signature / Date: T.S. Therriault 11/5/202: | 1 |
| Sciotam@southington.org | Email: tjt@bartonandloguidice.com | |