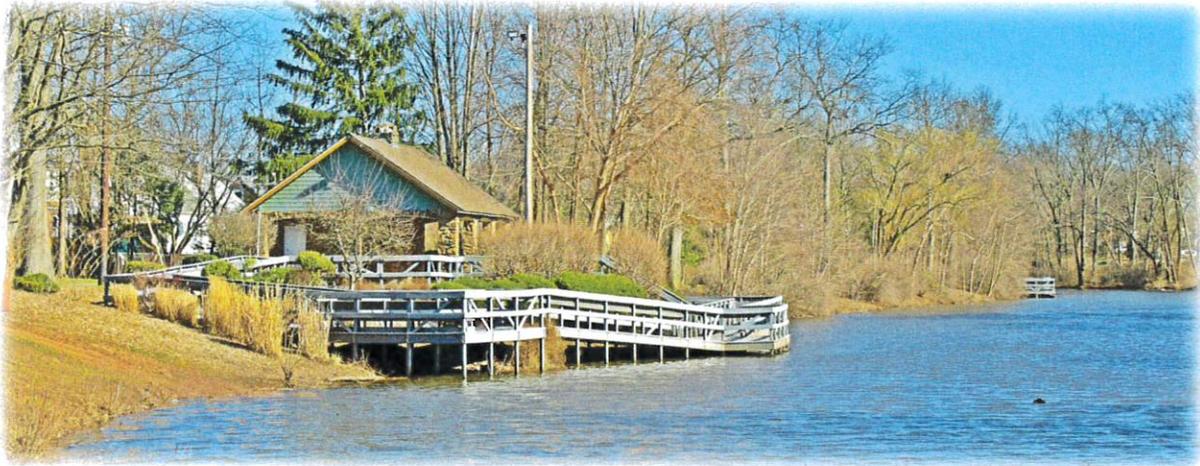


Municipal Stormwater Pollution Prevention Plan for



Middlesex Borough
Middlesex County
NJPDES #NJG0150444
Revised June 2019

PREPARED BY:



OWEN, LITTLE & ASSOCIATES, INC.
443 ATLANTIC CITY BOULEVARD
BEACHWOOD, NJ 08722


DOUGLAS F. KLEE, P.E., P.P., C.M.E. 7/25/19
DATE
NJPE LICENSE NO.: NJPE #24GE028585

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SPPP Form 1 – SPPP Team Members

All records must be available upon request by NJDEP.

Stormwater Program Coordinator (SPC)	
Print/Type Name and Title	<i>Douglas F. Klee, P.E., P.P., C.M.E., Borough Engineer</i>
Office Phone # and eMail	<i>732-244-1090 dkleee@owenlittle.com</i>
Signature/Date	
Individual(s) Responsible for Major Development Project Stormwater Management Review	
Print/Type Name and Title	<i>Robert Bucco, Jr., P.E., P.P. – Planning Board Engineer</i>
Print/Type Name and Title	<i>Robert Bucco, Jr., P.E., P.P. – Zoning Board Engineer</i>
Print/Type Name and Title	
Print/Type Name and Title	
Print/Type Name and Title	
Other SPPP Team Members	
Print/Type Name and Title	<i>Gretchen McCarthy, RMC – Public Notice Coordinator</i>
Print/Type Name and Title	<i>Barrie Palumbo, Zoning Officer</i>
Print/Type Name and Title	<i>Robert Teutsch, Public Work Supervisor</i>
Print/Type Name and Title	<i>Marcia Karrow, Borough Administration</i>

SPPP Form 2 – Revision History

All records must be available upon request by NJDEP.

	Revision Date	SPC Initials	SPPP Form Changed	Reason for Revision
1.	06/19			Update required per NJDEP Regulations
2.				
3.				
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20.				

SPPP Form 3 – Public Involvement and Participation Including Public Notice

All records must be available upon request by NJDEP.

1. Website URL where the Stormwater Pollution Prevention Plan (SPPP) is posted online:	<i>www.middlesexboro-nj.gov (Public Works Tab)</i>
2. Date of most current SPPP:	<i>05/14/2015</i>
3. Website URL where the Municipal Stormwater Management Plan (MSWMP) is posted online:	<i>www.middlesexboro-nj.gov (Public Works Tab)</i>
4. Date of most current MSWMP:	<i>03/18/2005</i>
5. Physical location and/or website URL where associated municipal records of public notices, meeting dates, minutes, etc. are kept:	<i>www.middlesexboro-nj.gov</i>
6. Describe how the permittee complies with applicable state and local public notice requirements when providing for public participation in the development and implementation of a MS4 stormwater program:	
<p><i>For meetings where public notice is required under the Open Public Meetings Act (“Sunshine Law”, NJAC 10:4-6 et seq.), Middlesex Borough provides public notice in compliance with that regulation. Notice is provided in a local paper approved by the Borough (Home News Tribune, Star Ledger, other). In addition, all public meeting dates are provided and posted on the municipal web site.</i></p> <p><i>For the adoption of the Municipal Stormwater Management Plan and other municipal actions, Middlesex Borough complies with the public notice requirements of the Municipal Land Use Laws (NJSA 40:55-1 et seq).</i></p> <p><i>For the adoption of stormwater management ordinances and where ordinances must be read and adopted, Middlesex Borough complies with the requirements of NJSA 40:49-1 et seq.</i></p>	

SPPP Form 4 – Public Education and Outreach

All records must be available upon request by NJDEP.

- 1. Describe how public education and outreach events are advertised. Include specific websites and/or physical locations where materials are available.**

All education and outreach events are posted on the Municipal Website (www.middlesexboro-nj.gov) and may be available at the local library and Senior Center.

- 2. Describe how businesses and the general public within the municipality are educated about the hazards associated with illicit connections and improper disposal of waste.**

A local student or Public Works employee has presented a stormwater education program during a Borough Council meeting, as well as identical presentations at a local school and the Borough Library. Stormwater materials are available for public residents at each presentation.

Additionally, educational materials are made available as giveaways at annual local events such as the Borough's Hometown Day.

- 3. Indicate where public education and outreach records are maintained.**

Borough Clerk's Office.

SPPP Form 5 – Post-Construction Stormwater Management in New Development and Redevelopment Program

All records must be available upon request by NJDEP.

1. How does the municipality define 'major development'?

Any development that provides for ultimately disturbing one or more acres of land. Disturbance is the placement of impervious surface or exposure and/or movement of soil bedding or clearing, cutting or removing of vegetation.

2. Does the municipality approach residential projects differently than it does for non-residential projects? If so, how?

No

3. What process is in place to ensure that municipal projects meet the Stormwater Control Ordinance?

Licensed Engineer assures all project designs are in compliance with all applicable regulations and incorporate Best Management Practices.

4. Describe the process for reviewing major development project applications for compliance with the Stormwater Control Ordinance (SCO) and Residential Site Improvement Standards (RSIS). Attach a flow chart if available.

Applications for Major Development are submitted to the local Planning Board and Zoning Boards for review and approval. This review includes confirmation by the Board's professionals that all projects comply with the local Stormwater Control Ordinance as well as the Residential Site Improvement Standards.

5. Does the Municipal Stormwater Management Plan include a mitigation plan?

No

6. What is the physical location of approved applications for major development projects, Major Development Summary Sheets (permit att. D), and mitigation plans?

The Planning and Zoning Board office is located in the Municipal Building.

SPPP Form 6 – Ordinances

Ordinance permit cite IV.B.1.b.iii	Date of Adoption	Website URL	Was the DEP model ordinance adopted without change?	Entity responsible for enforcement
1. Pet Waste permit cite IV.B.5.a.i	10/11/2008	www.middlesexboro-nj.gov	Yes	Police Dept. and Code Enforcement
2. Wildlife Feeding permit cite IV.B.5.a.ii	10/11/2005	www.middlesexboro-nj.gov	Yes	Police Dept. and Code Enforcement
3. Litter Control permit cite IV.B.5.a.iii	10/11/2005	www.middlesexboro-nj.gov	Yes	Police Dept. and Code Enforcement
4. Improper Disposal of Waste permit cite IV.B.5.a.iv	10/11/2005	www.middlesexboro-nj.gov	Yes	Police Dept. and Code Enforcement
5. Containerized Yard Waste/ Yard Waste Collection Program permit cite IV.B.5.a.v	10/11/2005	www.middlesexboro-nj.gov	Yes	Police Dept. and Code Enforcement
6. Private Storm Drain Inlet Retrofitting permit cite IV.B.5.a.vi	07/27/2010	www.middlesexboro-nj.gov	Yes	Police Dept. and Code Enforcement
7. Stormwater Control Ordinance permit cite IV.B.4.g and IV.B.5.a.vii	10/10/2006	www.middlesexboro-nj.gov	Yes	Police Dept. and Code Enforcement
8. Illicit Connection Ordinance permit cite IV.B.5.a.vii and IV.B.6.d	10/11/2005	www.middlesexboro-nj.gov	Yes	Police Dept. and Code Enforcement
9. Optional: Refuse Container/ Dumpster Ordinance permit cite IV.E.2	07/27/10	www.middlesexboro-nj.gov	Yes	Police Dept. and Code Enforcement

Indicate the location of records associated with ordinances and related enforcement actions:

Municipal Clerk's Office

All records must be available upon request by NJDEP.

SPPP Form 7 – Street Sweeping

All records must be available upon request by NJDEP.

- 1. Provide a written description or attach a map indicating which streets are swept as required by the NJPDES permit. Describe the sweeping schedule and indicate if any of the streets are swept by another entity through a shared service arrangement.**

Borough currently sweeps all streets in the Borough bi-annually. Mountain Avenue from Lincoln to William is swept monthly. No Shared Services arrangement is currently in place.

- 2. Provide a written description or attach a map indicating which streets are swept that are NOT required to be swept by the NJPDES permit. Describe the sweeping schedule and indicate if any of the streets are swept by another entity through a shared service arrangement.**

All streets are required to be swept and there is no Share Services arrangements.

- 3. Does the municipality provide street sweeping services for other municipalities? If so, please describe the arrangements.**

The Borough does not provide street sweeping service for other municipalities.

- 4. Indicate the location of records, including sweeping dates, areas swept, number of miles swept and total amount of wet tons collected each month. Note which records correspond to sweeping activities beyond what is required by the NJPDES permit, i.e., sweepings of streets within the municipality that are not required by permit to be swept or sweepings of streets outside of the municipality.**

All records are kept at the Department of Public Works. No streets are swept beyond that which are required and no streets outside the Borough are swept.

SPPP Form 8 – Catch Basins and Storm Drain Inlets

All records must be available upon request by NJDEP.

1. Describe the schedule for catch basin and storm drain inlet inspection, cleaning, and maintenance.
<i>All catch basin and storm drains are inspected, cleaned and maintained, including labels annually.</i>
2. List the locations of catch basins and storm drain inlets with recurring problems, i.e., flooding, accumulated debris, etc.
<i>No recurring problems.</i>
3. Describe what measures are taken to address issues for catch basins and storm drain inlets with recurring problems and how they are prioritized.
<i>N/A</i>
4. Describe the inspection schedule and maintenance plan for storm drain inlet labels on storm drains that do not have permanent wording cast into the design.
<i>All labels are inspected annually during inspection of the inlets themselves and replaced as needed.</i>
5. Indicate the location of records of catch basin and storm drain inlet inspections and the wet tons of materials collected during catch basin and storm drain inlet cleanings.
<i>All records are kept at the Department of Public Works</i>

SPPP Form 9 – Storm Drain Inlet Retrofitting

All records must be available upon request by NJDEP.

1. Describe the procedure for ensuring that municipally owned storm drain inlets are retrofitted.

When an existing inlet is in need of repair or a road is resurfaced, the inlet is retrofitted. 80-90% of all municipal inlets have been retrofitted.

2. Describe the inspection process to verify that appropriate retrofits are completed on municipally owned storm drain inlets.

All retrofits are inspected annually.

3. Describe the procedure for ensuring that privately owned storm drain inlets are retrofitted.

Ordinance #1768 requires that storm drain inlets on private property be retrofitted or replaced to meet the design standard as specified in the ordinance when the associated roadway is repaved, repaired, resurfaced, reconstructed or altered. Additionally, when private developments are submitted to the Planning Board/Zoning Board for approval. All existing privately owned inlets are required to be retrofitted.

4. Describe the inspection process to verify that appropriate retrofits are completed on privately owned storm drain inlets.

Deed Disclosures associated with all private developments require the property owner to maintain all retrofits. Municipal inspection of all private developments ensure all required retrofits are completed. Additionally, before a Certificate of Occupancy is issued, Inspection by the Borough will ensure private storm drains are properly retrofitted for compliance with Ordinance #1768.

SPPP Form 10 – Municipal Maintenance Yards and Other Ancillary Operations

All records must be available upon request by NJDEP.

Complete separate forms for each municipal yard or ancillary operation location.

Address of municipal yard or ancillary operation: *110 Main Street
Middlesex, NJ 08846*

List all materials and machinery located at this location that are exposed to stormwater which could be a source of pollutant in a stormwater discharge:

Raw materials – *None*

Intermediate products – *None*

Final products – *None*

Waste materials – *None*

By-products – *None*

Machinery – *None*

Fuel – *None*

Lubricants – *None*

Solvents – *None*

Detergents related to municipal maintenance yard or ancillary operations – *None*

Other – *None*

For each category below, describe the best management practices in place to ensure compliance with all requirements in permit Attachment E. If the activity in the category is not applicable for this location, indicate where it occurs.

Indicate the location of inspection logs and tracking forms associated with this municipal yard or ancillary operation, including documentation of conditions requiring attention and remedial actions that have been taken or have been planned.

1. Fueling Operations

The Municipal fueling station is located at 1200 Mountain Avenue. All records associated with fueling Operations are maintained at the Department of Public Works.

2. Vehicle Maintenance

All Municipal vehicles are maintained and logs are kept at the Public Works Department, 110 Main Street.

3. On-Site Equipment and Vehicle Washing

See permit attachment E for certification and log forms for Underground Storage Tanks.

Equipment and vehicles in need of washing are taken to the Municipal Wash Facility located at 110 Main Street.

4. Discharge of Stormwater from Secondary Containment

N/A

5. Salt and De-Icing Material Storage and Handling

Salt is store in an enclosed salt dome located behind the Municipal Building, 1200 Mountain Road. Public Works employees inspect for spilled salt at the completion of loading and unloading activities. Records and SOP's associated with salt and de-icing material storage and handling are maintained at the Public Works Department.

6. Aggregate Material and Construction Debris Storage

No aggregate materials or construction debris is stored at any Municipal facility.

7. Street Sweepings, Catch Basin Clean Out and Other Material Storage

Street sweeping and catch basin cleanout materials are stored in a 40 CY container located on a paved surface. All materials are disposed of at a licensed landfill in East Brunswick. Materials are tested every year.

8. Yard Trimmings and Wood Waste Management Sites

Middlesex Borough provides curb side pickup of leaves and brush to residents. Material is processed at a composting facility.

9. Roadside Vegetation Management

The Borough does not spray along roadsides for weed control.

SPPP Form 11 – Employee Training

All records must be available upon request by NJDEP.

- A. Municipal Employee Training:** Stormwater Program Coordinator (SPC) must ensure appropriate staff receive training on topics in the chart below as required due to job duties assigned within three months of commencement of duties and again on the frequency below. Indicate the location of associated training sign in sheets, dates, and agendas or description for each topic.

Topic	Frequency	Title of trainer or office to conduct training
1. Maintenance Yard Operations (including Ancillary Operations)	Every year	<i>SPC/Public Works Director/Employees</i>
2. Stormwater Facility Maintenance	Every year	<i>SPC/Public Works Director/Employees</i>
3. SPPP Training & Recordkeeping	Every year	<i>SPC/Public Works Director/Employees</i>
4. Yard Waste Collection Program	Every 2 years	<i>SPC/Public Works Director/Employees</i>
5. Street Sweeping	Every 2 years	<i>SPC/Public Works Director/Employees</i>
6. Illicit Connection Elimination and Outfall Pipe Mapping	Every 2 years	<i>SPC/Public Works Director/Employees</i>
7. Outfall Pipe Stream Scouring Detection and Control	Every 2 years	<i>SPC/Public Works Director/Employees</i>
8. Waste Disposal Education	Every 2 years	<i>SPC/Public Works Director/Employees</i>
9. Municipal Ordinances	Every 2 years	<i>SPC/Public Works Director/Employees</i>
10. Construction Activity/Post-Construction Stormwater Management in New Development and Redevelopment	Every 2 years	<i>SPC/Public Works Director/Employees</i>

- B. Municipal Board and Governing Body Members Training:** Required for individuals who review and approve applications for development and redevelopment projects in the municipality. This includes members of the planning and zoning boards, town council, and anyone else who votes on such projects. Training is in the form of online videos, posted at www.nj.gov/dep/stormwater/training.htm.

Within 6 months of commencing duties, watch *Asking the Right Questions in Stormwater Review Training Tool*. Once per term thereafter, watch at least one of the online DEP videos in the series available under Post-Construction Stormwater Management. Indicate the location of records documenting the names, video titles, and dates completed for each board and governing body member.

The training of elected and appointed individuals who review and approve applications for development and redevelopment projects in Middlesex Borough is ongoing. All information is available within the Clerk, Planning Board and Zoning Board Offices.

C. **Stormwater Management Design Reviewer Training:** All design engineers, municipal engineers, and others who review the stormwater management design for development and redevelopment projects on behalf of the municipality must attend the first available class upon assignment as a reviewer and every five years thereafter. The course is a free, two-day training conducted by DEP staff. Training dates and locations are posted at www.nj.gov/dep/stormwater/training.htm. Indicate the location of the DEP certificate of completion for each reviewer.

The Borough, Planning and Zoning Board Engineers have completed the required training and maintain their own NJDEP Certificate of Completion Records.

SPPP Form 12 – Outfall Pipes

All records must be available upon request by NJDEP.

- 1. Mapping: Attach an image or provide a link to the most current outfall pipe map. Maps shall be updated at the end of each calendar year.**

Note that ALL maps must be electronic by 21 Dec 2020 via the DEP's designated electronic submission service. For details, see http://www.nj.gov/dep/dwq/msrp_map_aid.htm.

- 2. Inspections: Describe the outfall pipe inspection schedule and indicate the location of records of dates, locations, and findings.**

Outfall pipes are inspected annually. During inspections, the outfall is evaluated for illicit discharges and stream scouring. All records are kept at the Department of Public Works

- 3. Stream Scouring: Describe the program in place to detect, investigate and control localized stream scouring from stormwater outfall pipes. Indicate the location of records related to cases of localized stream scouring. Such records must include the contributing source(s) of stormwater, recommended corrective action, and a prioritized list and schedule to remediate scouring cases.**

Scouring inspections are conducted annually and records are kept at Department of Public Works.

No scouring is currently occurring.

4. **Illicit Discharges: Describe the program in place for conducting visual dry weather inspections of municipally owned or operated outfall pipes. Record cases of illicit discharges using the DEP's Illicit Connection Inspection Report Form (www.nj.gov/dep/dwq/tier_a_forms.htm) and indicate the location of these forms and related illicit discharge records.**

Note that Illicit Connection Inspection Report Forms shall be included in the SPPP and submitted to DEP with the annual report.

Visual dry weather inspection for illicit connections are conducted annually and records are kept at Department of Public Works.

No illicit discharges have been detected.

If a dry weather flow is observed, additional physical information would be collected and an investigation would be conducted. An Illicit Connection Inspection Report Form would also be completed to assist with the determination of the dry weather flow source.

SPPP Form 13 – Stormwater Facilities Maintenance

All records must be available upon request by NJDEP.

- 1. Detail the program in place for the long-term cleaning, operation and maintenance of each stormwater facility owned or operated by the municipality.**

Only inlets, piping and outfalls are Municipally owned and are inspected annually. Records are kept at the Department of Public Works.

- 2. Detail the program in place for ensuring the long-term cleaning, operation and maintenance of each stormwater facility NOT owned or operated by the municipality.**

The Borough Zoning Officer maintains a list of stormwater facilities not owned by Middlesex Borough. These facilities are inspected and deficiencies brought to the attention of the owner/operator. Follow-up inspections are conducted to insure compliance.

- 3. Indicate the location(s) of the Stormwater Facilities Inspection and Maintenance Logs listing the type of stormwater facilities inspected, location information, inspection dates, inspector name(s), findings, preventative and corrective maintenance performed.**

All Inspection and Maintenance Logs are kept at the Department of Public Works.

Note that maintenance activities must be reported in the annual report and records must be available upon request. DEP maintenance log templates are available at http://www.nj.gov/dep/stormwater/maintenance_guidance.htm (select specific logs from choices listed in the Field Manuals section).

Additional Resources: The NJ Hydrologic Modeling Database contains information and maps of stormwater management basins. To view the database map, see <https://hydro.rutgers.edu>. To download data in an Excel format, see https://hydro.rutgers.edu/public_data/.

SPPP Form 14 – Total Maximum Daily Load Information

All records must be available upon request by NJDEP.

- 1. Using the Total Maximum Daily Load (TMDL) reports provided on www.nj.gov/dep/dwq/msrp-tmdl-rh.htm, list adopted TMDLs for the municipality, parameters addressed, and the affected water bodies that impact the municipality's MS4 program.**

Total Maximum Daily Loads for Fecal Coliform to Address 48 Streams in the Raritan Water Region

Fecal Coliform-2003: Green Brook, Bound Brook

Fecal Coliform – 2003: Raritan R downstream of Green BK/Bound BK, includes Cuckels Bl, Duckes BK, Middle Bk

Total Maximum Daily Load for Mercury Impairments based on Concentration in Fish Tissue Caused Mainly by Air Deposition to address 122 HUC 14s Statewide

Mercury-2010: Bound Brook (below fork at 74d 25m 15s)

Mercury-2010: Raritan R Lwr (I-287 Piscatway-Millstone)

Total Maximum Daily Load Report for the Non-Tidal Raritan River Basin Addressing Total Phosphorus, Dissolved Oxygen, pH and Total Suspended Solids Impairments.

Total Suspended Solids-2016: Ambrose Brook (below Lake Nelson)

Total Suspended Solids-2016: Bound Brook (below fork t 74d 25m 15s)

Total Suspended Solids-2016: Green Brook (Bound Bk to N Plainfield Gage)

Total Suspended Solids-2016: Green Brook (below Bound Brook)

Total Suspended Solids-2016: Raritan R Lwr (I-287 Piscatway-Millstone)

Applicable Lake TMDLs: None

Applicable Shellfish TMDLs: None

- 2. Describe how the permittee uses TMDL information to prioritize stormwater facilities maintenance projects and to address specific sources of stormwater pollutants.**

The Borough of Middlesex is committed to the reduction and elimination of pollutants from reaching adjacent water ways through better stormwater management planning and design and on replacing or retrofitting existing stormwater management infrastructure. Additionally, TMDL information is utilized to direct and enhance enforcement of local ordinances, as well as direct the location of BMP's to address potentially contaminated stormwater runoff.

SPPP Form 15 – Optional Measures

All records must be available upon request by NJDEP.

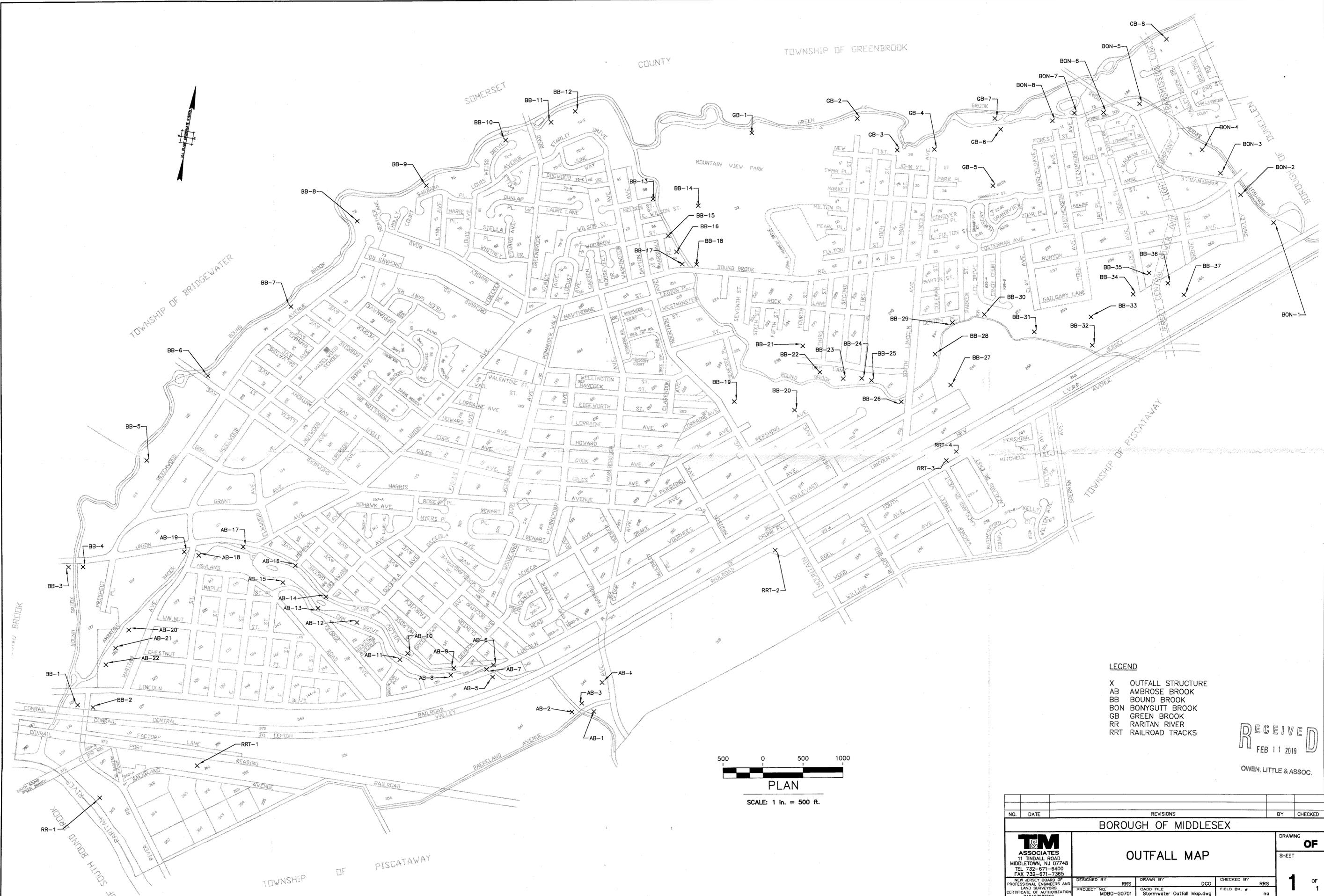
1. Describe any Best Management Practice(s) the permittee has developed that extend beyond the requirements of the Tier A MS4 NJPDES permit that prevents or reduces water pollution.

None

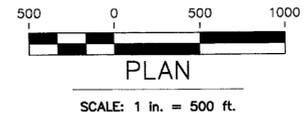
2. Has the permittee adopted a Refuse Container/Dumpster Ordinance?

Yes, adopted 07/22/2010

ATTACHMENT 1 - OUTFALL MAP



- LEGEND**
- X OUTFALL STRUCTURE
 - AB AMBROSE BROOK
 - BB BOUND BROOK
 - BON BONYGUTT BROOK
 - GB GREEN BROOK
 - RR RARITAN RIVER
 - RRT RAILROAD TRACKS



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FEB 11 2019
OWEN, LITTLE & ASSOC.

NO.		DATE		REVISIONS		BY		CHECKED	
BOROUGH OF MIDDLESEX									
OUTFALL MAP									
DRAWING		OF		SHEET		1		OF	
<p>T&M ASSOCIATES 11 TINDALL ROAD MIDDLETOWN, NJ 07748 TEL 732-671-6400 FAX 732-671-7365</p>		DESIGNED BY		DRAWN BY		CHECKED BY		<p>NEW JERSEY BOARD OF PROFESSIONAL ENGINEERS AND SURVEYORS CERTIFICATE OF AUTHORIZATION 245627827006</p>	
PROJECT NO.		MBO-00701		GADD FILE		Stormwater Outfall Map.dwg		FIELD BK. #	
		RRS		CCO		RRS		na	