Year 2 Annual Report

Massachusetts Small MS4 General Permit Reporting Period: July 1, 2019-June 30, 2020

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

Unless otherwise noted, all fields are required to be filled out. If a field is left blank, it will be assumed the requirement or task has not been completed. Please ONLY report on activities between July 1, 2019 and June 30, 2020 unless otherwise requested.

Part I: Contact Information

Name (of Municipality or Organi	zation: Town o	of Medv	vay			
EPA N	PDES Permit Number: M	AR041132					
Primaı	ry MS4 Program Manag	er Contact In	format	ion			
	ne: Stephanie Carlisle			Compliance Coo	rdinator		
Street 1	Address Line 1: 45B Holl	iston Street					
Street 1	Address Line 2:						
City:	Medway	State	: MA	Zip Co	ode: 02053		
Email:	mail: scarlisle@townofmedway.org			Phor	Phone Number: (508) 321-4871		
	water Management Progo	https://www.t	ownofn	nedway.o	org/sites/medwayi	ma/files/uploads/	
Date SWMP was Last Updated: Jun 29, 2020		nent_pro	gram.pur				
If the S	SWMP is not available on	the web please	e provid	le the ph	vsical address:		

Part II: Self-Assessment

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

Impairment(<u>(s)</u>			
	⊠ Bacteria/Pathogens	☐ Chloride	□ Nitrogen	
	☐ Solids/ Oil/ Grease (H	ydrocarbons)/ Metal	s	
TMDL(s)				
In State:	☐ Assabet River Phospho	orus 🗵 Bacte	eria and Pathogen	☐ Cape Cod Nitrogen
		ed Phosphorus	☐ Lake and Pond	Phosphorus
Out of State:	☐ Bacteria/Pathogens	☐ Metals	☐ Nitrogen	☐ Phosphorus
			Clo	ear Impairments and TMDLs
Year 2 Requir		nino		
☐ Compl	leted Phase I of system map	pping		
☐ Develo	oped a written catchment in	vestigation procedu	e and added the proce	edure to the SWMP
	oped written procedures to note ion and maintenance of con			
⊠ Enclos	sed or covered storage piles	of salt or piles conta	nining salt used for de	eicing or other purposes
1 1	Developed written operations and maintenance procedures for parks and open space, buildings and facilities, and vehicles and equipment and added these procedures to the SWMP			
Develo building	oped an inventory of all per ags and facilities, and vehic	mittee owned facilit les and equipment a	ies in the categories on added this invento	of parks and open space, ry to the SWMP
☐ Compl	eted a written program for	MS4 infrastructure i	naintenance to reduce	e the discharge of pollutants
operate	oped written SWPPPs, inclued facilities: maintenance ges where pollutants are exp	arages, public works		g permittee owned or ns, and other waste handling

Optional: If you would like to describe progress made on any incomplete requirements listed above, provide any additional information, and/or if any of the above year 2 requirements could not be completed due to the impacts of COVID-19, please identify the requirement that could not be completed, any actions taken to attempt to complete the requirement, and reason the requirement could not be completed below:

1. Phase I of the system mapping is approximately 50% completed. The DPW continued mapping open channel conveyances and town-owned storm water treatment structures during Year 2, but there are more features to map. The Town has been in the process of changing its mapping platform, which has delayed the

completion of this task. The DPW is partnering with the GIS Coordinator on how to best delineate catchment areas using topography and storm water infrastructure. Interconnection locations need to be labeled.

- 2. The catchment investigation procedure is listed in the IDDE Program, but it was added to the SWMP in September 2020.
- 3. The Town requires the the submission of as-built drawings and long term O&M plans for construction sites through the MS4CD Permit, the Land Disturbance Permit, and Site Plan requirements. However, the procedure for the Conservation Commission and/or the Planning and Economic Development Board to transfer the completed plans to the DPW has not been finalized. The Town is in the process of switching to a new permitting platform and workflow procedures are still in development.
- 4. The operations and maintenance procedures for all permittee-owned facilities in the categories of parks and open space, building facilities was added as an attachment to the SWMP in September 2020.
- 6. The Compliance Coordinator is compiling the MS4 infrastructure maintenance procedures into one document that will be added as an attachment to the SWMP.
- 7. The Compliance Coordinator is writing the SWPPs for the maintenance garage, public works yard, and recycling center. The Town has also been working on a Vegetation Management Plan for parks, open spaces, and roadside maintenance. The Compliance Coordinator, Conservation Agent, and DPW Deputy Director are partnering on this task.

Annual	Rec	uirements

with State Public Notice requirements
⊠ Kept records relating to the permit available for 5 years and made available to the public
The SSO inventory has been updated, including the status of mitigation and corrective measures implemented
 This is not applicable because we do not have sanitary sewer
 This is not applicable because we did not find any new SSOs
 The updated SSO inventory is attached to the email submission
○ The updated SSO inventory can be found at the following website:
Properly stored and disposed of catch basin cleanings and street sweepings so they did not discharge to receiving waters
☑ Provided training to employees involved in IDDE program within the reporting period
□ All curbed roadways were swept at least once within the reporting period
☑ Updated outfall and interconnection inventory and priority ranking as needed
Optional: If you would like to describe progress made on any incomplete requirements listed above, provide any additional information, and/or if any of the above annual requirements could not be completed due to the impacts of COVID-19, please identify the requirement that could not be completed, any actions taken to attempt to complete the requirement, and reason the requirement could not be completed below:

Annual Requirements

Public Education and Outreach*
Annual message was distributed encouraging the proper management of pet waste, including noting any existing ordinances where appropriate
Permittee or its agents disseminated educational material to dog owners at the time of issuance or renewal of dog license, or other appropriate time
Provided information to owners of septic systems about proper maintenance in any catchment that discharges to a water body impaired for bacteria
* Public education messages can be combined with other public education requirements as applicable (see Appendix H and F for more information)
Optional: If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:
1. The Town is working on the best way to distribute educational material directly to dog owners. Dog licenses are issued and renewed through an online permitting system. The DPW planned on distributing material during the annual rabies clinic, but it was canceled due to COVID-19.
2. The DPW will partner with the Board of Health to distribute information to septic system owners regarding proper maintenance, specifically to owners in catchment areas that discharge to the Charles River, Chicken Brook, and Hopping Brook.
Phosphorus (Combination of Impaired Waters Requirements and TMDL Requirements as Applicable)
Annual Requirements
Public Education and Outreach*
Distributed an annual message in the spring (April/May) encouraging the proper use and disposal of grass clippings and encouraging the proper use of slow-release and phosphorus-free fertilizers
Distributed an annual message in the summer (June/July) encouraging the proper management of pet waste, including noting any existing ordinances where appropriate
Distributed an annual message in the fall (August/September/October) encouraging the proper disposal of leaf litter
* Public education messages can be combined with other public education requirements as applicable (see Appendix H and F for more information)
Good Housekeeping and Pollution Prevention for Permittee Owned Operations
Increased street sweeping frequency of all municipal owned streets and parking lots subject to Permit part 2.3.7.a.iii.(c) to a minimum of two times per year (spring and fall)
Potential structural BMPs
Any structural BMPs already existing or installed in the regulated area by the permittee or its agents was tracked and the phosphorus removal by the BMP was estimated consistent with Attachment 3 to Appendix F. The BMP type, total area treated by the BMP, the design storage volume of the BMP and the estimated phosphorus removed in mass per year by the BMP were documented.
○ The BMP information is attached to the email submission
○ The BMP information can be found at the following website:

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

- 1. The Town will distribute an annual message in late September 2020 encouraging the proper disposal of leaf litter.
- 2. The Town continues to build its inventory of structural BMPs and will begin tracking the phosphorus removal using attachment 3 of Appendix F.

Charles River Watershed Phosphorus TMDL

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

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

The Town updated its Stormwater Management and Land Disturbance Bylaw twice during FY20. Both updates were approved at Town Meeting and were approved by Town Counsel and the Attorney General. Changes included updates to our internal regulating authorities by clarifying said authorities jurisdiction, responsibilities, procedures, and enforcement abilities. The DPW will enforce the IDDE plan, issue MS4CD permits, and manage the long term O&M of new and redevelopments. The Conservation Commission and PEDB enforce the Land Disturbance section of the Bylaw and issue and enforce the Land Disturbance Permit requirements. Therefore, the Town meets the obligation of the legal analysis.

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

Part III: Receiving Waters/Impaired Waters/TMDL

submitted?	
•	Yes
\circ	No
If yes, describ	be below, including any relevant impairments or TMDLs:
5 waters. Both	egrated List of Waters changed Chicken Brook and Hopping Brook from Category 2 to Category a brooks have an E.coli impairment and need a TMDL. These changes have been updated in ormwater Map.

Part IV: Minimum Control Measures

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

MCM1: Public Education
Number of educational messages completed during this reporting period : 4
Below, report on the educational messages completed during this reporting period. For the measurable goal(s) please describe the method/measures used to assess the overall effectiveness of the educational program. BMP: Landscaping Best Practices: Grass Clippings and Fertilizer
Message Description and Distribution Method:
The Town posted the annual message on Facebook regarding proper lawn care and maintenance procedures. The post included a link to the Think Blue MA web page as well for additional information.
Targeted Audience: Residents
Responsible Department/Parties: DPW Operations
Measurable Goal(s):
The Facebook message reached 2,003 people and 164 people clicked to open the link.
Message Date(s): June 25, 2020
Message Completed for: Appendix F Requirements Appendix H Requirements Was this message different than what was proposed in your NOI? Yes No ○
If yes, describe why the change was made:
The message did not change, but the form of distribution changed. The Town has a very active presence on Facebook and it is the preferred method of communication in Town because it reaches a large audience and it is more cost effective than traditional printed mailings.
BMP:Proper Disposal of Pet Waste
Message Description and Distribution Method:
The Town posted two messages on Facebook regarding proper pet waste management. The first post focused on proper pet waste management in parks and on trails, which is a trending topic in Town. The second post was based on the Think Blue "Scoop the Poop" campaign, and included a link to the Think Blue MA web page.
Targeted Audience: Residents
Responsible Department/Parties: DPW Operations

I own of Medway
Measurable Goal(s):
The first Facebook message reached 3,391 people and 352 clicked open the link. The second message reached 2,847 people 133 clicked open the link.
Message Date(s): April 9, 2020. June 24, 2020.
Message Completed for: Appendix F Requirements ☐ Appendix H Requirements ⊠
Was this message different than what was proposed in your NOI? Yes No ○
If yes, describe why the change was made:
The message is the same, but the method of distribution is different than what was proposed in the NOI. Facebook posts reach a wide audience in Town and is a more cost effective method of message distribution.
BMP: Clean Water Begins with You
Message Description and Distribution Method:
The Town customized the Think Blue Massachusetts educational poster sample so that the messaging and images displayed were specific to Medway. The poster and the Think Blue Massachusetts rubber duck mascot is displayed in the DPW office and would have been displayed at the annual Medway Pride Day event, but it was canceled due to COVID-19.
Targeted Audience: Residents
Responsible Department/Parties: DPW Operations
Measurable Goal(s):
The DPW booth was staffed by the DPW Director and the DPW Compliance Coordinator who were able to answer questions about stormwater and the Town's Stormwater Management Plan.
Message Date(s): all year.
Message Completed for: Appendix F Requirements ⊠ Appendix H Requirements ⊠
Was this message different than what was proposed in your NOI? Yes ○ No ●
If yes, describe why the change was made:

Add an Educational Message

MCM2: Public Participation

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

During this reporting period, the Town revised the Stormwater Management and Land Disturbance Bylaw twice (once during the Fall Town Meeting and again during the Spring Town Meeting). The Fall Town Meeting focused on amendments to the allowable non-stormwater discharges to the MS4 and the creation of the MS4CD permit for new and existing connections to the MS4. Residents had several opportunities to comment on the changes at Board of Selectmen meetings and Finance Committee meetings. The public voted and the changes were approved at Fall Town Meeting. All Massachusetts public notice requirements were followed.

Additional changes were proposed at the Spring Town Meeting including: reducing the triggering disturbance size from one acre to 20,000 square feet, developers must comply with the updated NOAA Atlas 14 stormwater projections when constructing stormwater BMPs and comply with all Massachusetts Stormwater Standards, and the administrative team was removed as the regulating authority of the Land Disturbance permit. If a proposed project is within the Conservation Commission's jurisdiction, they will be the regulating authority of the Land Disturbance Permit. If the project is outside the jurisdiction of the Conservation Commission, the Planning Board will be the permitting authority. These changes were also brought to Spring Town Meeting and followed all Massachusetts public notice requirements. Furthermore, the SWMP is always posted on the Town website for review and comment.

Was this opportunity different than what was proposed in your NOI? Yes O No •

Describe any other public involvement or participation opportunities conducted **during this reporting period**: During this reporting period, the Town participated in Massachusetts EOEEA's Municipal Vulnerability Preparedness Program, which requires active engagement from the public on climate change planning. Based on community and key stakeholder feedback, increased intensity and frequency of storms and the threat of flooding is of high concern to residents. Focusing on stormwater management was among the top priority actions identified through the process.

MCM3: Illicit Discharge Detection and Elimination (IDDE)

MCM3. Inicit Discharge Detection and Eminimation (IDDE)
Sanitary Sewer Overflows (SSOs) Check off the box below if the statement is true.
☐ This SSO section is NOT applicable because we DO NOT have sanitary sewer
Below, report on the number of SSOs identified in the MS4 system and removed during this reporting period. Number of SSOs identified: 0 Number of SSOs removed: 0
MS4 System Mapping Below, check all that apply. The following elements of the Phase I map have been completed:

Open channel conveyances

Town of Medway	Page 10
Interconnections	
☐ Municipally-owned stormwater treatme	nt structures
	lication of all use impairments
☐ Initial catchment delineations	
Optional: Describe any additional progress you made additional status information regarding your map:	on your map during this reporting period or provide
Throughout the reporting period, the DPW has been we town-owned stormwater treatment structures, interconfeatures have been mapped to date. The Compliance Cotogether to map the initial catchment delineations; how programming needed to map the catchments. The GIS catchments. The updated water body impairments were	nections and initial catchment delineations. Thirty one coordinator and the GIS Coordinator have been working ever, there seems to be additional ArcGIS Coordinator is working on the best way to map the
Screening of Outfalls/Interconnections	
If conducted, please submit any outfall monitoring resures results should include the date, outfall/interconnection sampling, precipitation in previous 48 hours, field screen	identifier, location, weather conditions at time of
 The outfall screening data is attached to 	the email submission
○ The outfall screening data can be found	at the following website:
Below, report on the number of outfalls/interconnection	ns screened during this reporting period.
Number of outfalls screened: 20	
Catchment Investigations	
If conducted, please submit all data collected during the investigations. Also include the presence or absence of	System Vulnerability Factors for each catchment.
 The catchment investigation data is atta The catchment investigation data can be 	
The cateminent investigation data can be	round at the following website.
Below, report on the number of catchment investigation	as completed during this reporting period.
Number of catchment investigations cor	mpleted this reporting period: 1
Below, report on the percent of catchments investigated	to date.
Percent of total catchments investigated	: 1
Optional: Provide any additional information for clarity	y regarding the catchment investigations below:
During this reporting period, the Town has been updati not been completed yet. The system is nearing complet Furthermore, the Town is in the process of changing its inspections and track completed work during the Year	ion and the catchment delineations will be marked out. s work order system and will be able to schedule

IDDE Progress

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

•	The illicit discharge removal report is attached to the email submission					
0	The illicit discharge removal report can be found at the following website:					
-	on the number of illicit discharges ident g this reporting period.	ified and rem	oved, along with the volume of sewage			
	Number of illicit discharges identified:	1				
	Number of illicit discharges removed:	0				
	Estimated volume of sewage removed:	0	gallons/day			
-	v e	v	d removed to date. At a minimum, report on fective date of the permit (July 1, 2018).			
	Total number of illicit discharges ident	ified: 1				
	Total number of illicit discharges remo	oved: 0				

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

The Stormwater Management and Land Disturbance Bylaw update strengthened the Town's authority to regulate entities currently connected or seeking connection to the MS4. The MS4 Connection and Discharge (MS4CD) Permit pertains to new development seeking new connections, redevelopments seeking new connections or authorization for their current connections, and properties that have existing connections that are discovered through the IDDE program. The commercial property owner applied for an MS4CD Permit as a part of their Site Plan Review and Drainage Improvement Plan to renovate their nearly 10 acre parking lot. As a part of the MS4CD Permit rules and regulations, the DPW completed a catchment investigation on April 1, 2020 and took stormwater samples uphill and downhill (including the outfall) and at each connection point along the property. The sample results showed a high level of E.coli present at one of the connections. The Illicit Discharge Removal Report (Attachment 3) explains the situation and actions taken since the discovery.

Employee Training

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

On October 3, 2019, the DPW stormwater team was trained on MCM3: IDDE program requirements and MCM6: Pollution Prevention and Good Housekeeping. They were also trained on stormwater sampling methods and requirements in February 2020.

MCM4: Construction Site Stormwater Runoff Control

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

Number of site plan reviews completed: 10

Number of inspections completed: 63

Number of enforcement actions taken: 0

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

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

Ordinance or Regulatory Mechanism

Below, select the option that describes your ordinance or regulatory mechanism progress.

- Bylaw, ordinance, or regulations are updated and adopted consistent with permit requirements
- O Bylaw, ordinance, or regulations are updated consistent with permit requirements but are not yet adopted
- O Bylaw, ordinance, or regulations have not been updated or adopted

As-built Drawings

Describe the measures the MS4 has utilized to require the submission of as-built drawings and ensure long term operation and maintenance of completed construction sites:

As-built drawings and long term O&M plans are required with Site Plans, Land Disturbance Permits, and MS4 Connection and Discharge Permits (MS4CD Permits).

Street Design and Parking Lots Report

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

During the Year 1 reporting period, the Community and Economic Development Department revised the Site Plan Rules and Regulations to require street and parking lot designs to use green infrastructure, low impact designs or Massachusetts Stormwater Handbook BMPs to the maximum extent practicable. The revisions were approved at the Annual Fall Town Meeting (November 18, 2019). The Town did not complete a street design and parking lot assessment, but will begin the process during Year 3.

Green Infrastructure Report

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

The Community and Economic Department Department revised the Town's Site Plan Rules and Regulations to require the use of green infrastructure and low impact design in new or redeveloped sites. These revisions were approved at Fall Town Meeting (November 18, 2019). A formal report on green infrastructure in Medway has not been completed, but will be explored during Year 3.

Retrofit Properties Inventory

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

This measure was completed on June 30, 2020. The Town received a Water Management Act Grant in January 2020 to complete a infiltration feasibility assessment on town-owned properties. All town-owned properties were assessed by their hydrologic soil group, depth to seasonal high ground water, depth to soil restrictive layer, ground water recharge priority needs, impervious cover, and land use/town priorities. Based on these criteria, the properties were ranked for their ability to be retrofitted with green infrastructure. Concept designs with associated stormwater infiltration calculations and phosphorus removal calculations were created for the top five properties. The Town applied for additional grant funding to implement the concept designs. If awarded, the project would be completed in spring 2022. The report, inventory, ranking, and concept designs are available on the town web page at https://www.townofmedway.org/sites/g/files/vyhlif866/f/uploads/wma_grant.pdf

MCM6: Good Housekeeping

Catch Basin Cleaning

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

Number of catch basins inspected: 2,070

Number of catch basins cleaned: 2,055

Total volume or mass of material removed from all catch basins: 106.41 tons

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

Town of Medway			Page 14
Total number of catch basins:	2,468		
If applicable:			
Report on the actions taken if a catch basin s inspections/cleaning events:	ump is more t	han 50% full during two cons	ecutive routine
Street Sweeping			
Report on street sweeping completed during	this reporting	period using one of the three	metrics below.
• Number of miles cleaned: 17	7		
○ Volume of material removed:		[Select Units]	
Weight of material removed:		[Select Units]	
O&M Procedures and Inventory of Permi	ttee-Owned P	<u>Properties</u>	
Below, check all that apply. The following permittee-owned properties ha	ıve heen inver	ntoried:	
☐ Parks and open spaces			
□ Buildings and facilities			
The following O&M procedures for permitte	e-owned prop	erties have been completed:	
☐ Parks and open spaces			
□ Buildings and facilities			
Stormwater Pollution Prevention Plan (SV Below, report on the number of site inspection	,	es that reauire a SWPPP come	oleted during this
reporting period.	ns jor jacinine	s men require a svi 111 comp	rerea uuring mi s
Number of site inspections co	ompleted: 0		
Describe any corrective actions taken at a fac	cility with a S	WPPP:	
During FY20, the Town began constructing			is in development.

Γown of Medway	Page 15
Monitoring or Study Results Results from any other stormwater or receiving water quality monitoring or studies con reporting period not otherwise mentioned above, where the data is being used to inform permit effectiveness must be attached.	
 Not applicable The results from additional reports or studies are attached to the email s The results from additional reports or studies can be found at the follow 	
If such monitoring or studies were conducted on your behalf or if monitoring or studies entities were reported to you, a brief description of the type of information gathered or described below:	<u>-</u>
Additional Information Optional: Enter any additional information relevant to your stormwater management p during the reporting period. Include any BMP modifications made by the MS4 if not a	-
COVID-19 Impacts Optional: If any of the above year 2 requirements could not be completed due to the in please identify the requirement that could not be completed, any actions taken to attem requirement, and reason the requirement could not be completed below:	•
The impacts of COVID-19 are discussed in their corresponding sections.	
Activities Planned for Next Reporting Period Please confirm that your SWMP has been, or will be, updated to comply with all applic requirements including but not limited to the year 3 requirements summarized below. (and TMDL requirements are not listed below) Yes, I agree ✓	

- Inspect all outfalls/ interconnections (excluding Problem and Excluded outfalls) for the presence of dry weather flow

- Complete follow-up ranking as dry weather screening becomes available

Annual Requirements

- Annual report submitted and available to the public
- Annual opportunity for public participation in review and implementation of SWMP
- Keep records relating to the permit available for 5 years and make available to the public
- Properly store and dispose of catch basin cleanings and street sweepings so they do not discharge to receiving waters
- Annual training to employees involved in IDDE program
- Update inventory of all known locations where SSOs have discharged to the MS4
- Continue public education and outreach program
- Update outfall and interconnection inventory and priority ranking and include data collected in connection with the dry weather screening and other relevant inspections conducted
- Implement IDDE program
- Review site plans of construction sites as part of the construction stormwater runoff control program
- Conduct site inspection of construction sites as necessary
- Inspect and maintain stormwater treatment structures
- Log catch basins cleaned or inspected
- Sweep all uncurbed streets at least annually
- Continue investigations of catchments associated with Problem Outfalls
- Review inventory of all permittee owned facilities in the categories of parks and open space, buildings and facilities, and vehicles and equipment; update if necessary

Provide any additional details on activities planned for permit year 3 below:

During Year 3, the Town will complete the following measures:

- 1. Complete MS4 system mapping (interconnections, town-owned BMPs, and catchment areas).
- 2. Create written procedures for the transfer of as-built drawings between the Planning Department, Conservation Commission and the DPW.
- 3. Compile the MS4 infrastructure maintenance procedures into one document and add it to the SWMP.
- 4. Create SWPPPs for the maintenance garage, public works yard, and recycling center.
- 5. Create seasonal messaging for residents regarding leaf waste, snow and ice, fertilizer application, and water conservation best management practices.
- 6. Create educational material for dog owners regarding proper pet waste management.
- 7. Create brochure for septic system owners regarding proper maintenance especially for those in catchment areas that discharge to an impaired water body.
- 8. Create brochure for developers regarding construction site best management practices, erosion and sediment control, and low impact design.
- 9. Create brochure for industrial facilities regarding proper maintenance of parking lots (i.e. street sweeping, catch basin cleaning etc.) and proper waste management.
- 10. Create educational material for business, commercial, and institutional regarding proper maintenance of parking areas, proper waste disposal and storage, and sanitary sewer and drainage infrastructure maintenance.
- 11. Continue screening outfalls and catchment areas.
- 12. Complete the IDDE investigation with the private commercial property owner discussed above.
- 13. Begin the Street Design and Parking Lot Report due in Year 4.
- 14. Begin the Green Infrastructure Report due in Year 4.

- 15. Complete the Phosphorus Control Plan (PCP) funding assessment.
- 16. Begin tracking and calculating phosphorus removal at existing town-owned BMPs.
- 17. Contribute to the stakeholder discussion regarding institutional, commercial, and industrial sites and their potential residual designation status.

18. Continue to implement green infrastructure BMPs and retrofit existing facilities.

Part V: Certification of Small MS4 Annual Report 2020

40 CFR 144.32(d) Certification

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

Name:	Michael E. Boynton	Title:	Town Manager
	[Signatory may be a duly authorized representative]	Date:	

Part V: Certification of Small MS4 Annual Report 2020

40 CFR 144.32(d) Certification

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

Name:	Michael E. Boynton	Title: Town Manager
Signature	[Signatory may be a duly authorized representative]	Date: 9/93/20

Section 1: Backgrou	ınd Data							
City/Town: Medway, M	A	Street: A	lder ST	Tax Ma	p#:		Outfall ID: OF-	53-1
Owner: City	☐ State ☐	Private _	Other:	Nearest	House/Util		18	
Today's date:	16/2	٥		Time (N	/filitary):	10:	:35	
	olan 1	Dav	re	Form co	mpleted by		ve	
Temperature (°F):	10	Raint	fall (in.): Last 24 hours:	0	Lá	ast 48 hours:	0.1	
Northing:		Easting:		GPS Un	it:		GPS LMK #	4
Rim Elevation:				Invert E	levation:		'	
Elevation Datum:				Receivi	ng Water:			
Camera:			·	Photo #s	s:	Take 1 Upstream	am (head on) and 1	Downstream view
Land Use in Drainage A	rea (Check all tha	at apply):						
Industrial				☐ Oper	n Space			
Urban Residential				☐ Instit	tutional			
Suburban Residential	l			Other: _				
☐ Commercial				Known 1	Industries: _			
Notes (e.g, origin of our	tfall, if known):	4	CB'S					
Seedier 2: O-45-II D					_			
Section 2: Outfall D	MATE	DTAI	eu.	APE		DIMEN	CTONC (TNI)	CURVEROLD
TIPE							SIONS (IN.)	SUBMERGED
	RCP	☐ CMP	Circular	Single		Diameter/Dir		In Water:
N Charles A Pina	PVC	HDPE	☐ Elliptical	Double		16"		☑ Partially ☐ Fully
Closed Pipe	☐ Steel		Вох	☐ Triple				With Sediment:
	Other:		☐ Other:	Other:				☐ Partially ☐ Fully
	Concrete			I			 :	
	☐ Pavement/5	Counnar	☐ Trapezoid			Douths		
		scupper				Depth:		
Open drainage	☐ Earthen		Parabolic			Top Width: _		
	☐ rip-rap		Other:			Bottom Widtl	h:	
	Other:	_						
Flow Present?	☐ Yes	⊠ No	If No, Ski	p to Section 3	. If Yes, N	otify Town and	l continue field red	connaissance.
Flow Description (If present)	☐ Trickle	☐ Moderate	Substantial		Flow Dire	ection (If Preser	nt):	
Section 3: Sketch								
Top of the state o	8'							

(If No, Skip to Section 5)

Section 4: Physical Indicators for Flowing Outfalls Only Are Any Physical Indicators Present in the flow?

No

INDICATOR	CHECK if Present	DESCRIPTION	RELATIN	RELATIVE SEVERITY INDEX (1-3)	1-3)
Odor		☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	□ 1 – Faint	2 - Easily detected	3 – Noticeable from a distance
Color		□ Clear □ Brown □ Gray □ Yellow □ Green □ Orange □ Red □ Other:	☐ 1 – Faint colors in outfall flow	2 – Clearly visible in outfall flow	3 - Clearly visible in outfall flow
Turbidity		See severity	☐ 1 Slight cloudiness	2 - Cloudy	3 - Opaque
Floatables -Does Not Include Trash!!		Sewage (Toilet Paper, etc.) Suds Petroleum (oil sheen) Other:	☐ 1 — Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)
Section 5: Physical Indicators for Both Flowing and Nor Are physical indicators that are not related to flow present?	idicators for Bo	Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls Are physical indicators that are not related to flow present?	ction 6)		
INDICATOR	CHECK if Present	DESCRIPTION	A	COMMENTS	
Outfall Damage		Spalling, Cracking or Chipping Peeling Paint Corrosion			
Deposits/Stains		Oily Flow Line Paint Other:			
Abnormal Vegetation		☐ Excessive ☐ Inhibited			
Poor pool quality		☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:			
Pipe benthic growth		☐ Brown ☐ Orange ☐ Green ☐ Other:			
Section 6: Potential for Illicit Discharge	or Illicit Discha	rge		:	
☑ Unlikely	Potential (pres	☐ Potential (presence of two or more indicators) ☐ Suspect (one or more in	Suspect (one or more indicators with a severity of 3)	□ Obvious	

Section 7: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Q Z

Section 1: Backgro	und Data						
City/Town: Medway, M	ЛA	Street:	Ider	Tax Map #:		Outfall ID: OF-	53-2
Owner: City	State [Private [Other:	Nearest House/Ut	ility Pole #:	15	
Today's date:	4/16/	20		Time (Military):	10:	41	
Investigators:	olan.	+ 00	v e	Form completed b	y: Da	UC	
Temperature (°F):	410	Rain	fall (in.): Last 24 hours:	O I	ast 48 hours:	0.1	
Northing:		Easting:		GPS Unit:		GPS LMK #	#:
Rim Elevation:				Invert Elevation:			
Elevation Datum:				Receiving Water:			
Camera:				Photo #s: -	- Take 1 Upstr	eam (head on) and	Downstream view
Land Use in Drainage A	rea (Check all th	at apply):					
M Industrial				Open Space			
Urban Residential				☐ Institutional			
☐ Suburban Residentia	1			Other:			
☐ Commercial				Known Industries:			
Notes (e.g, origin of ou	tfall, if known):		6 CB'S	>			
Section 2: Outfall D	escription					·	
TYPE	MATE	RIAL	SH	APE	DIMEN	ISIONS (IN.)	SUBMERGED
	K RCP	☐ CMP	Circular	Single	Diameter/Di		In Water:
	□ PVC	☐ HDPE	☐ Elliptical	☐ Double	16	£1	No ☐ Partially
Closed Pipe	☐ Steel	_	Box	Triple			Fully With Sediment:
							□ No
	Other:		Other:	Other:			☐ Partially ☐ Fully
	Concrete						
	☐ Pavement/S	cupper	☐ Trapezoid		Depth:	_	
Open drainage	Earthen		Parabolic		Top Width: _		
	☐ rip-rap		Other:		Bottom Widt		
			Ouldi.		DOLLOIN WILL		
	Other:						
Flow Present?	☐ Yes	No No	If No, Skip	to Section 3. If Yes, No	otify Town and	t continue field rec	onnaissance.
Flow Description (If present)	☐ Trickle	☐ Moderate	☐ Substantial	Flow Dire	ction (If Prese	nt):	
Section 3: Sketch		-					
		***				^ \	
		X					
>			SP.11	WAY		(C)	
	2 2	1 3			Management of the gr	70	
					1	Brook	
						>	
	1	del	27				
		5.0					

Section 4: Physical Indicators for Flowing Outfalls Only
Are Any Physical Indicators Present in the flow?

Ves

Turbidity	CHECK IT Present In Inc. CHECK IT Present CHECK IT CHECK IT Present CHECK IT Present CHECK IT CHEC	Sewage Rance Sewage Cothe Clear Brow Creen Crame Creen Crame Creen Corrosion Corrosi	ancid/s ancid/	DESCRIPTION Sour Petroleum/gas Sour Gray C Red C See severity Other: Other: DESCRIPTION Yes No DESCRIPTION Peaint Other: Peal	TFTION Petroleum/gas Petroleum/gas Stad	Faint Faint colors in utfall flow Slight cloudiness vious	RELATIVE SEVERITY INDEX (1-3) 2 - Easily detected 2 - Clearly visible in 2 - Cloudy 2 - Some; indications of origin (e.g., possible suds or oil sheen) COMMENTS	1-3 3 - Noticeable from a distance 3 - Clearly visible in outfall flow 3 - Opaque 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)
Abnormal Vegetation		Excessive	Inhibited					
Poor pool quality		Odors Suds	Colors	☐ Floatables	Oil Sheen			
Pipe benthic growth		Brown	☐ Orange	Green	Other:			

Section 7: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

☐ Potential (presence of two or more indicators)

Section 6: Potential for Illicit Discharge

X Unlikely

☐ Obvious

Suspect (one or more indicators with a severity of 3)

2

Section 1: Backgro	ound Data						
City/Town: Medway,	MA	Street:	Trotter DR	, Tax Map #:		Outfall ID: OF-	54-3
Owner:	☐ State ☐	Private [Other:	Nearest House/Ut	ility Pole #:	Bridge	
Today's date:	16/20	No.		Time (Military):	10:	02	
Investigators:	Nolan	+ 1)	ave	Form completed b	y: Da	ve.	
Temperature (°F):	410	Rair	ıfall (in.): Last 24 hours:		ast 48 hours:	0.1	
Northing:		Easting:		GPS Unit:		GPS LMK	#:
Rim Elevation:				Invert Elevation:			
Elevation Datum:				Receiving Water:			
Camera:				Photo #s: -	- Take 1 Upstre	eam (head on) and	1 Downstream view
Land Use in Drainage	Area (Check all th	at apply):					
Industrial				Open Space			
☐ Urban Residential				Institutional			
Suburban Residenti	al			Other:			
☐ Commercial				Known Industries:			
Notes (e.g, origin of or	atfall, if known):	1 0	:B		•		
Section 2: Outfall D	losarintion						
TYPE	MATE	RIAL	SH	APE	DIMEN	SIONS (IN.)	SUBMERGED
	RCP	□ СМР	☐ Circular	Şingle	Diameter/Dir		In Water:
	□ PVC	☐ HDPE	☐ Elliptical	Double	10'	1	⊠ No ☐ Partially
Closed Pipe	Steel		□ Boy	☐ Triple			Fully With Sediment:
			Other: Flange	- Triple			☐ No
	Other:		Other:	☐ Other:			☐ Partially ☐ Fully
	Concrete						
	☐ Pavement/S	cupper	☐ Trapezoid		Depth:		
Open drainage	☐ Earthen		☐ Parabolic		Top Width: _		
_ open craninge			Other:		Bottom Width		
	rip-rap		Other:		Bottom widtr	1;	
	Other:	-					
Flow Present?	☐ Yes	No	If No, Skip	to Section 3. If Yes, N	otify Town and	continue field rec	onnaissance.
Flow Description If present)	☐ Trickle	☐ Moderate	☐ Substantial	Flow Dire	ction (If Presen	ıt):	
2 (1 4 1							
ection 3: Sketch							
							ļ
		1					
1 000		1					
STROV	7						[
1	1						
	1						ļ

(If No, Skip to Section 5)

Section 4: Physical Indicators for Flowing Outfalls Only
Are Any Physical Indicators Present in the flow?

Ves

			\Box	gui			10			T		T			_
(1-3)	3 – Noticeable from a	3 – Clearly visible in	T 3 - Omegue	3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating	sanitary materials)										
RELATIVE SEVERITY INDEX (1-3)	2-Easily detected	2 - Clearly visible in outfall flow	72-Cloudy	2 – Some; indications of origin (e.g., possible suds or oil	succity		COMMENTS							3)	
RELAT	□ 1 – Faint	1 - Faint colors in outfall flow	1 - Slight cloudiness			(9 uo								licators with a severity of 3	
DESCRIPTION	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	See severity	Sewage (Toilet Paper, etc.) Suds Petroleum (oil sheen) Other:		Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls Are physical indicators that are not related to flow present?	PITON	Spalling, Cracking or Chipping	□ Oily □ Flow Line □ Paint □ Other:	☐ Excessive ☐ Inhibited	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	□ Brown □ Orange □ Green □ Other:		Potential (presence of two or more indicators) Suspect (one or more indicators with a severity of 3)	
Present						dicators for Bot that are not rela	CHECK If Present						r Illicit Dischar	Potential (prese	
INDICATOR	Odor	Color	Turbidity	Floatables -Does Not Include Trash!!		Section 5: Physical Indicators for Both Flowing and Nor Are physical indicators that are not related to flow present?	INDICATOR	Outfall Damage	Deposits/Stains	Abnormal Vegetation	Pcor pool quality	Pipe benthic growth	Section 6: Potential for Illicit Discharge	☐ Unlikely ☐	

Section 7: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Section 1: Backg	round Data							
City/Town: Medway	, MA	Street: A	der ST.	Tax N	ſap #;		Outfall ID: OF-	63-1
Owner: 🔀 Cit	ty State [Other:	Neare	st House/Uti	lity Pole #:	23	
Today's date:	1/16/20		-			10:14	_	
Investigators:	olan +	Dave		Form	completed by	. Dav	e	
Temperature (°F):	40°		ıfall (in.): Last 24 h			ast 48 hours:	.01	
Northing:		Easting:		GPS U	Init:		GPS LMK	#:
Rim Elevation:				Invert	Elevation:			
Elevation Datum:				Receiv	ing Water:			
Camera:				Photo	#s:	Take 1 Upstre	am (head on) and	1 Downstream view
Land Use in Drainage	e Area (Check all th	nat apply):						
☑ Industrial				□Ор	en Space			
☐ Urban Residential				☐ Inst	itutional			
☐ Suburban Residen	tial			Other:		-		-14-
Commercial				Known	Industries: _			
Notes (e.g, origin of	outfall, if known):	4 C	B'S					
Section 2: Outfall	Description	-						
TYPE		ERIAL		SHAPE		DIMENS	SIONS (IN.)	SUBMERGED
	⋉ RCP	□ СМР	Circular	K Single		Diameter/Din		In Water:
	□ PVC	☐ HDPE	☐ Elliptical	☐ Double		12"		⋈ No
Closed Pipe								☐ Partially ☐ Fully
	☐ Steel		☐ Box	☐ Triple				With Sediment:
	Other:		Other:	Other:				☐ Partially☐ Fully
	☐ Concrete					-		
	☐ Pavement/S	Scupper	☐ Trapezoid		j	Depth:		
		, and the	☐ Parabolic		1	. —		
Open drainage	Earthen					Top Width:		
	☐ rip-rap		Other:]	Bottom Width	-	
	Other:							
Flow Present?	☐ Yes	⊠No	If No,	Skip to Section 3	. If Yes, No	tify Town and	continue field rec	connaissance.
Flow Description (If present)	☐ Trickle	☐ Moderate	Substantial		Flow Direc	tion (If Present	t):	
Section 3: Sketch					<u></u>			
section 5: Sketch		- 12 R	ock			.2		
,	69	TKIT!	•					
(The said							
	Alder	ST						
	Alder							

(If No, Skip to Section 5)

Section 4: Physical Indicators for Flowing Outfalls Only
Are Any Physical Indicators Present in the flow?
\[\text{\tint{\text{\tint{\text{\tinte\ta}\text{\texi}\text{\text{\text{\text{\text{\text{\text{\text{\texi\text{\text{\texit{\text{\texi\texi{\texi{\texi{\text{\texi{\texi{\texi{\texicte\texi{\tex{

INDICATOR	CHECK If		DESCRIPTION	TION	REL	RELATIVE SEVERITY INDEX (1-3)	1-3)
Odor		Sewage Sulfide	☐ Rancid/sour ☐ Petroleum/gas ☐ Other:	roleum/gas	1 – Faint	2 - Easily detected	3 - Noticeable from a distance
Color		Clear	☐ Brown ☐ Gray ☐ Orange ☐ Red	ay Yellow d Dother:	1 - Faint colors in outfall flow	2 - Clearly visible in outfall flow	3 – Clearly visible in outfall flow
Turbidity			See severity	rity	☐ 1 – Slight cloudiness	2-Cloudy	3 - Opaque
Floatables -Does Not Include Trashi!		Sewage (Toilet Paper,	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	ds her:	☐ 1 — Few/slight; origin not obvious	2 - Some; indications of origin (e.g., possible suds or oil sheen)	3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating samifary materials)
Section 5: Physical Indicators for Both Flowing and Non-Flowing Are physical indicators that are not related to flow present?	dicators for B	oth Flowing an lated to flow pre	1-Flowing (Outfalls S	ion 6)		
INDICATOR	CHECK If Present		DESCRIPTION	NOT		COMMENTS	
Outfall Damage		Spalling, Cri	Spalling, Cracking or Chipping Corrosion	☐ Peeling Paint			
Deposits/Stains		Oily Flow Line	w Line Paint	Other:			
Abnormal Vegetation		☐ Excessive ☐	Inhibited				
Poor pool quality		Odors Suds	Colors Floata	Floatables Oil Sheen Octher:			

Section 6: Potential for Illicit Discharge

Obvious ☐ Suspect (one or more indicators with a severity of 3) ☐ Potential (presence of two or more indicators) X Unlikely

Other

☐ Green

Orange

☐ Brown

Pipe benthic growth

Section 7: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

TRASH

Section 1: Backgrou	nd Data										
City/Town: Medway, M.	A	Street: A	des.	ST	Tax Map #: Outfall ID: OF- 63-2						
Owner: City	☐ State ☐	Private	Other:		Nearest	Nearest House/Utility Pole #: 22					
Today's date:	16 2	0_			Time (Military): / 0 : / 6						
Investigators: No		The state of the s	12		Form completed by: Dave						
Temperature (°F):	00	Rainf	all (in.): La	st 24 hours:	0						
Northing:		Easting:			GPS Un	GPS Unit: GPS LMK #:					
Rim Elevation:					Invert El	Invert Elevation:					
Elevation Datum:					Receivin	g Water:					
Camera:					Photo #s	:	Take 1 Upstro	earn (head on) and	Downstream view		
Land Use in Drainage Ar	ea (Check all th	at apply):									
▼ Industrial					Open	Space					
Urban Residential					Instit	utional					
☐ Suburban Residential					Other:						
☐ Commercial	mmercial					Known Industries;					
Notes (e.g, origin of out	fall, if known):	a	CB	5							
Section 2: Outfall De	escription										
TYPE		ERIAL		SH	APE		DIMEN	ISIONS (IN.)	SUBMERGED		
	RCP	□ СМР	Circular		☐ Single		Diameter/Di		In Water:		
	□ PVC	☐ HDPE	☐ Elliptica	ıl	☐ Double		12	11	☐ No ☑ Partially		
Closed Pipe	☐ Steel		Вох		☐ Triple				Fully With Sediment:		
									☐ No		
	Other:		Other: _		Other: _				☐ Partially ☐ Fully		
	☐ Concrete							 .			
	Pavement/	Scupper	☐ Trapezo	id			Depth:				
Open drainage	☐ Earthen		☐ Paraboli	r			Top Width:				
	-						_				
	☐ rip-rap		Other: _				Bottom Wid	ın:			
	Other:										
Flow Present?	☐ Yes	⊠ No		If No, Ski	p to Section 3	. If Yes, N	otify Town an	id continue field re	connaissance.		
Flow Description (If present)	☐ Trickle	☐ Moderate	e ☐ Subst	antial		Flow Dire	ection (If Pres	ent):			
Section 3: Sketch											
			1 all	191							
					0.15						
The state of the s				611	V I	antend .					
and the state of t	Manager of the speech	UNIVERSITY CO	Parket and Street or	1938		The state of the s					
A Company of the Comp											
		-	6-	1							
7_7	- interest		Sharpen								
	1 1	en alex			-						

Section 4: Physical Indicators for Flowing Outfalls Only Are Any Physical Indicators Present in the flow? Yes (If No. Skip to Section 5)	DESCR	□ Sewage □ Rancid/sour □ Petroleum/gas □ 1 - Faint □ 2 - Easily detected □ 3 - Noticeable from a distance	□ Clear □ Brown □ Gray □ Yellow □ 1 – Faint colors in outfall flow □ 2 – Clearly visible in outfall flow □ 3 – Clearly visible in outfall flow	□ See severity □ 1 - Slight cloudiness □ 2 - Cloudy □ 3 - Opaque	Sewage (Toilet Paper, etc.) ☐ Suds ☐ 1 – Few/slight; origin ☐ 2 – Some; indications ☐ 3 - Some; origin clear of origin (e.g., obvious oil sheen, suds, or floating sheen, suds, or floating sheen)	Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls Are physical indicators that are not related to flow present?	:X if DESCRIPTION COMMENTS	Spalling, Cracking or Chipping Peeling Paint Corrosion] Oily Flow Line Paint Other.] Excessive Inhibited	Odors Colors Oil Sheen Colors Other:] □ Brown □ Orange □ Green □ Other:	Discharge	Potential (presence of two or more indicators)
Outfalls Only Tes No	DESCR		☐ Brown ☐ Orange	See severity	, etc.)	Both Flowing and Non-Flowing Outfalls related to flow present?		Spalling, Cracking or Chipping Corrosion	☐ Flow Line ☐ Paint		Colors	Orange	charge	e of two or more indicators)
al Indicators for	CHECK If Present					al Indicators for cators that are not	CHECK if Present			ion		th	tial for Illicit Disc	☐ Potential (r
Section 4: Physical Indicators for Flowing Are Any Physical Indicators Present in the flow?	INDICATOR	Odor	Color	Turbidity	Floatables -Does Not Include Trash!!	Section 5: Physic Are physical indic	INDICATOR	Outfall Damage	Deposits/Stains	Abnormal Vegetation	Poor pool quality	Pipe benthic growth	Section 6: Potential for Illicit Discharge	M Unlikely

Section 7: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

TRASH

Section 1: Backgro	und Data					
City/Town: Medway, M	ſA	Street:	Noord	Tax Map #:	Outfall ID: OF	
Owner: City	State		Other:	Nearest House/Ut	ility Pole#: House 4	:5
Today's date:	116/20			Time (Military):	11:16	
Investigators: N	+ 400	Dave) Maries	Form completed b	y: Dave	
Temperature (°F):	13°	Rain	fall (in.): Last 24 hours	: <u>I</u>	ast 48 hours:	
Northing:		Easting:		GPS Unit:	GPS LMK	#:
Rim Elevation:				Invert Elevation:		
Elevation Datum:				Receiving Water:		
Camera:				Photo #s: -	- Take 1 Upstream (head on) and	1 1 Downstream view
Land Use in Drainage A	rea (Check all tha	t apply):				
☐ Industrial				Open Space		
☐ Urban Residential				☐ Institutional		
Suburban Residential	I			Other:		
☐ Commercial				Known Industries:		- Tri drawn (m. 1944)
Notes (e.g, origin of our	tfall, if known):	12	C73'S 1	inlet tro	m retention	
Section 2: Outfall De	escription					
ТҮРЕ	MATE	RIAL	SH	APE	DIMENSIONS (IN.)	SUBMERGED
	RCP	□ СМР	Circular	Single	Diameter/Dimensions:	In Water:
	□ PVC	☐ HDPE	☐ Elliptical	☐ Double	16"	No ☐ Partially
Closed Pipe	Steel		Box	☐ Triple		Fully With Sediment:
	Other:		Other:	Other:		☐ No ☐ Partially
	Outer		Omer.	CJ Outer.		Fully
	☐ Concrete					
	☐ Pavement/So	cupper	☐ Trapezoid		Depth:	
Open drainage	☐ Earthen		☐ Parabolic		Top Width:	
C Open dramage			-			
	□ гір-гар		Other:		Bottom Width:	
	☐ Other:	.				
	Olici.					
Flow Present?	Yes Yes	□ No	If No, Ski	p to Section 3. If Yes, N	otify Town and continue field re	connaissance.
Flow Present? Flow Description (If present)	X Yes	□ No		1	ntify Town and continue field rection (If Present):	connaissance.
Flow Description (If present)	X Yes			1	ction (If Present):	econnaissance.
Flow Description (If present)	X Yes			1	ction (If Present):	econnaissance.
Flow Description (If present) Section 3: Sketch	Yes Trickle	☐ Moderate		1		econnaissance.
Flow Description (If present) Section 3: Sketch	Yes Trickle	☐ Moderate		1	ction (If Present):	econnaissance.
Flow Description (If present) Section 3: Sketch	X Yes	☐ Moderate	M Substantial	Flow Dire	ction (If Present):	econnaissance.
Flow Description (If present) Section 3: Sketch	Yes Trickle	☐ Moderate	M Substantial	Flow Dire	ction (If Present):	connaissance.
Flow Description (If present) Section 3: Sketch	Yes Trickle	☐ Moderate	M Substantial	Flow Dire	ction (If Present):	econnaissance.
Flow Description (If present) Section 3: Sketch	Yes Trickle	☐ Moderate	M Substantial	1	ction (If Present):	connaissance.

Section 4: Physical Indicators for Flowing Outfalls Only
Are Any Physical Indicators Present in the flow?

Yes

Are Any Physical Indicators Present in the flow? INDICATOR CHECK if	CHECK IF	e flow? \(\text{Yes} \)	No (If No. S	(If No, Skip to Section 5)			
	Present				RELA	RELATIVE SEVERITY INDEX (1-3)	1-3)
Odor		Sewage Sulfide	☐ Rancid/sour ☐ Petroleum/gas ☐ Other:	um/gas	1 – Faint	2 - Easily detected	3 - Noticeable from a
Color		Clear Crear	☐ Brown ☐ Gray ☐ Orange ☐ Red	☐ Yellow ☐ Other:	☐ 1 – Faint colors in outfall flow	2 – Clearly visible in outfall flow	3 - Clearly visible in
Turbidity			See severity		1 - Slight cloudiness	2-Cloudy	3 - Onsone
Floatables -Doss Not include Trash!!		Sewage (Toitet Paper, etc.)	Paper, etc.) Suds heen) Other:		☐ 1 – Few/slight; origin not obvious	2 – Some; indications of origin (e.g., possible suds or oil	3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating
Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls Are physical indicators that are not related to flow present?	dicators for B	oth Flowing and Nated to flow presen	Con-Flowing Outfalls	ls (HNo Skin to Section 6)	in 6)		ज्वामत्वात्रे मात्राद्धायात्रे
INDICATOR	CHECK if Present				6	COMMENTS	
Outfall Damage		Spalling, Cracking or Chipping		Peeling Paint			
Deposits/Stains		Oily Flow Line	Paint	Other:			
Abnormal Vegetation		Excessive Inl	☐ Inhibited				
Poor pool quality		Odors Co	☐ Colors ☐ Floatables ☐ Excessive Algae	Oil Sheen			
Pipe benthic growth		☐ Brown ☐ Orange	ange	Other:			

Section 7: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

☐ Potential (presence of two or more indicators)

Section 6: Potential for Illicit Discharge

X Unlikely

Obvious

☐ Suspect (one or more indicators with a severity of 3)

Other:

Green

Orange

OF 55-4

- 1. Temperature- 55.8 F
- 2. PH- 7.93
- 3. Conductivity- 595ps/cm
- 4. TDS- 419 ppm
- 5. Salinity- .30 ppt
- 6. Detergent- .25
- 7. Chlorine
 - a. Free- 0
 - b. Total- 0
- 8. Ammonia-.25

Section 1: Backgrou	nd Data						
City/Town: Medway, Ma	Α	Street: Lo	vering	-Tax Map #:		Outfall ID: OF-	21-9
Owner: 🔀 City	State _	Private 🔲	Other:	Nearest House/U		3 Lovering	Pole 46
Today's date: 5	/13/2	2020		Time (Military):	10:3	3	/
Investigators:	olan	/ Dav	<u>e</u>	Form completed	by: Da	ve	
Temperature (°F): 5	4 3	Rainf	all (in.): Last 24 hours:	0	Last 48 hours:	٥	•
Northing:		Easting:		GPS Unit:		GPS LMK #	:
Rim Elevation:				Invert Elevation:			
Elevation Datum:				Receiving Water	4		
Camera:				Photo #s:	Take 1 Upstr	eam (head on) and 1	Downstream view
Land Use in Drainage A	rea (Check all th	at apply):					
Industrial				Open Space			
Urban Residential				Institutional			
Suburban Residential				Other:			
☐ Commercial				Known Industrie	s:		
Notes (e.g, origin of out	fall, if known):	6 C	R			***************************************	
		0 0	0				
Section 2: Outfall De	escription						
TYPE		ERIAL	SH	IAPE		NSIONS (IN.)	SURNERGED
	RCP		☐ Circular	Single	Diameter/D	imensions:	In Water:
	□ PVC	HDPE	☐ Elliptical	☐ Double	12	-	☐ Partially
Closed Pipe	☐ Steel		Вох	☐ Triple			☐ Fully With Sediment:
	Other:		☐ Other:	☐ Other:			✓ No ☐ Partially
							☐ Fully
	☐ Concrete			\$2			
	Pavement/	Scupper	☐ Trapezoid		Depth:	_	
Open drainage	☐ Earthen		☐ Parabolic		Top Width:		
	☐ rip-rap		☐ Other:		Bottom Wid	lth:	
	Other:						
Flow Present?	₩ Yes	□ No	If No. Sk	ip to Section 3. If Yes,	Notify Town or	rd continue field rec	
Flow Description (If present)	Trickle	☐ Moderate			virection (If Pres		
Section 3: Sketch							
, \							
			\times	_	<u></u>		72
			2	1			
1		grand to	= 1				
)	1	7 3					
1	1 0	Brook		1			1
1	2		V.	1	111		- 1
			N/	- 1	1 /		I
(1					2	10W ->

		- 2	

Section 4: Physical Indicators for Flowing Outfalls Only Are Any Physical Indicators Present in the flow? Yes No (If No, Skip to Section 5)
INDICATOR Present DESCRIPTION RELATIVE SEVERITY INDEX (1-3)
Odor Sewage
Color Clear Clear Clarry Critical Color Clearly visible in Clearly visible in Clearly visible in Color Clearly visible in Clearly visible in Color Clearly visible in Color Clearly visible in Color Clearly visible in Color
Turbidity
Flosiables -Does Not Include Trash!! A Sowage (Toilet Paper, etc.) Suds I - Few/slight; origin of origin (e.g., obvious oil sheen) Other: not devious Sheen, suds or oil samitary materials)
Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls Are physical indicators that are not related to flow present? Yes No (If No. Skip to Section 6)
INDICATOR CHECK IF DESCRIPTION COMMENTS
Outfall Demage
Deposits/Stains
Abnormal Vegetation
Poor pool quality
Pipe bratthic growth Brown Change Coren Cother:
Section 6: Potential for Illicit Discharge
☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious
Section 7: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Page 2 of 2

		••

OF 21-9

- 1. Temperature- 48.38 F
- 2. PH- 6.95
- 3. Conductivity- 215 ps/cm
- 4. TDS- 153 ppm
- 5. Salinity- 0 ppt
- 6. Detergent- .25
- 7. Chlorine
 - a. Free- 0
 - b. Total- 0
- 8. Ammonia- 0

Section 1: Backgro City/Town: Medway, M		Street:		57 Tax Map #:		Outfall ID: OF-	2	1	1
Owner: City			OURTING Other:	Nearest House/Uti	lity Dole #:	House.	# S		-
Today's date: 4	7 . 1		J Ollier.	Time (Military):	Inty Fole #.		**		
Investigators: #	/ /	1	^	Form completed b	n 12	40			
Temperature (°F):	JON T	Day	fall (in.): Last 24 hours:		ast 48 hours:	o.1			
Northing:	7!	Easting:	IIII (III). IIIII I 110000	GPS Unit:	EST TO ECONO.	GPS LMK #	<u> </u>		
Rim Elevation:				Invert Elevation:					
Elevation Datum:				Receiving Water:					
Camera:					Take 1 Upstro	eam (head on) and	1 Downstre	am viev	
Land Use in Drainage A	rea (Check all the	at apply):	****						
☐ Industrial				Open Space					
Urban Residential				☐ Institutional					
Suburban Residential	I			Other:					
☐ Commercial				Known Industries:					
Notes (e.g, origin of ou	tfall, if known):	2	CB'S						
Section 2: Outfall De	escription								
TYPE	MATE	RIAL	SHA	APE	DIMEN	SIONS (IN.)	SUB	MERGI	ED
	RCP	□ СМР	Circular	Single	Diameter/Dia		In Water		
	☐ PVC	☐ HDPE	☐ Elliptical	☐ Double	13	2 11		No Partially	,
Closed Pipe	☐ Steel		Вох	☐ Triple			With Sed	Fully	
	Other:		Other:	☐ Other:	i				,
	Olici.		Other.					Fully	
	Concrete	_							
☐ Pavement/Scupper ☐ Trapezoid ☐ Depth:									
Open drainage	☐ Earthen		☐ Parabolic		Top Width: _				
— ·	rip-rap		Other:		Bottom Widtl				
				Marin Saraghtonica	Dottom Wide	u			
	П очь								
	Other:							<u> </u>	
Flow Present?	Other:	_ No	If No, Skip	o to Section 3. If Yes, No	ntify Town and	l continue field rec	onnaissand	e	
Flow Present? Flow Description (If present)		□ No □ Moderate	If No, Skip ☐ Substantial		ntify Town and		onnaissand	<u> </u>	
Flow Description	Yes						onnaissand	ce.	

Section 4: Physical Indicators for Flowing Outfalls Only Are Any Physical Indicators Present in the flow?	Indicators for Floators Present in the	owing Outfal	lls Only s KNo	(If No. Ski	(If No. Skip to Section 5)				
INDICATOR	CHECK If Present		DESCR	DESCRIPTION		REL	RELATIVE SEVERITY INDEX (1-3)	(1-3)	
		Common				100000000000000000000000000000000000000			
Odor		L SCWage	☐ remeio/sour ☐	☐ Petroleum/gas	ias	J			
]	□ Sulfide	Other:			☐ 1 — Faint	2 - Easily detected	3 - Noticeable from a	
		- C						AATTIN CITY	_
Color				Cray	∏ Yellow	1 - Faint colors in	200		
]	Green	Orange	☐ Red	Other:	outfall flow	outfall flow	☐ 3 – Clearly visible in	
Turbidity								MOIT HIND	_
farmount]		See	See severity		☐ 1 — Slight cloudiness	2-Cloudy	3 - Onamie	_
Floatables								onkado o [_
-Does Not Include		□ Sewage (☐ Sewage (Tollet Paper, etc.)	Suds		1 1 - Few/slight: origin	L 2 - Some; indications	2 - Some; origin clear	-
Trash!!	I	Petroleum (oil sheen)		Other:		not obvious	nossible suds or oil	(e.g., obvious oil	_
							sheen)	sneen, suds, or floating	_
							DILOCHI)	Sanitary materials)	-

	COMMENTS						
iection 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls are physical indicators that are not related to flow present?	1	Spalling, Cracking or Chipping Peeling Paint Corrosion	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	☐ Excessive ☐ Inhibited	Odors Colors Ploatables Oil Shen Suds Excessive Algae Other:	☐ Brown ☐ Orange ☐ Green ☐ Other:	
dicators for that are not r	CHECK if Present						
ection 5: Physical In re physical indicators	INDICATOR	Outfall Damage	Deposits/Stains	Abnormal Vegetation	Poor pool quality	Pipe benthic growth	

Section 6: Potential for Illicit Discharge

☐ Suspect (one or more indicators with a severity of 3) ☐ Potential (presence of two or more indicators) X Unlikely

☐ Obvious

Section 7: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

>

OF 21-11

- 1. Temperature- 43.7 F
- 2. PH-8.81
- 3. Conductivity- 227 ps/cm
- 4. TDS- 1.59 ppm
- 5. Salinity- 1.10 ppt
- 6. Detergent-.50
- 7. Chlorine
 - a. Free- 0
 - b. Total- 0
- 8. Ammonia- .25

			d.

Section 1: Backgrou	nd Data							
City/Town: Medway, M/	A	Street:	ali ST	·Tax Mar		•		- 48-1
Owner: K City	State	Private 🔲	Other:			y Pole #:	13	By Bridge
	3/2021			Time (M	(ilitary):		4. AM	
Investigators: No/	an. Da	ve		Form co	mpleted by:	Da	ve	
Temperature (°F): 4	6°	Rainf	all (in.): Last 24 hour	s: O	Las	t 48 hours:	0	•
Northing:		Easting:		GPS Uni	it:		GPS LMI	K#:
Rim Elevation:				Invert El	evation:			
Elevation Datum:				Receivin	g Water:			
Сатиста:				Photo #s	 1	Cake 1 Upstr	eam (head on) an	nd 1 Downstream view
Land Use in Drainage Ar	ea (Check all th	at apply):						
☐ Industrial				Open	Space			
Urban Residential				☐ Instit	utional			
Suburban Residential				Other: _				
☐ Commercial				Known I	industries:			
Notes (e.g, origin of out	fall, if known):	H C B'S	+ Brook				· · · · ·	
		1000						
Section 2: Outfail De	escription							
TYPE	MAT	ERIAL	S	HAPE		DIME	nsions (in.)	SUBMERGED
	RCP	☑ CMP	⊠ Circular			Diameter/D		In Water:
	□ PVC	☐ HDPE	☐ Elliptical	☐ Double		12		☑ Partially
Closed Pipe	☐ Steel		☐ Box	☐ Triple	i			Fully With Sediment:
	Other:		☐ Other:	Other:				I No □ Partially
								☐ Fully
	☐ Concrete							
	Pavement/	Scupper	☐ Trapezoid			Depth:	_	
Open drainage	Earthen		☐ Parabolic			Top Width:		
-	☐ rip-rap		Other:		:	Bottom Wid	ith:	
						201021 111		
	Other:							
Flow Present?	⊠ Yes	☐ No	If No, S	kip to Section 3.	. If Yes, No	tify Town as	rd continue field	reconnaissance.
Flow Description (If present)	☐ Trickle	Moderate	Substantial		Flow Direct	tion (If Pres	ent): Fast	•
Section 2. Shotch							-	
Section 3: Sketch	D. H. S. N			}		C. 1.	Profi	
10	of view					2106	Prote	É
(l.						
)	1)						
	\ 	{					and the same of th	
}	2 3					-		
}	Brook	4		1	_	1		
{	1-1-1-	}		1		1		
		1		1				1

Outfall 48-1

Are Any Physical Indicators Present in the flow? Yes	iors Present in th	e flow? Yes No (If No, Skip to Section 5)			
INDICATOR	CHECK If Present	DESCRIPTION	ren	(6-7) Xerone alphaes aallyts	(6-1)
Odor		☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	1-Faint	2 - Easily detected	3 - Noticeable from a distance
Cdor	0	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	1- Faint colors in outfall flow	2 - Clearly visible in outfall flow	3 - Clearly visible in outfall flow
Turbidity	0	See severity	☐ 1-Slight cloudiness	2-Cloudy	□3 – Opaque
Floeiables -Does Net Include Trash!!	0	☐ Sewage (Toilet Paper, etc.) ☐ Sads ☐ Petroleum (oil sheen) ☐ Other:	☐ 1- Few/slight; origin not divious	2 – Some; indications of origin (e.g., possible suds or oil sheen)	3 - Some; origin clear (c.g., obvious oil sheen, suds, or ficating sanitary materials)
Section 5: Physical Indicators for Both Flowing and No. Are physical indicators that are not related to flow present?	adicators for B	Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls Are physical indicators that are not related to flow present? Yes X No (If No, Skip to Section 4)	ection ()		
IMPERIOR	CHECK If Present	DESCRIPTION		COMMENTS	
Oulfall Damage		☐ Spalling, Cracking or Chipping ☐ Pocling Paint ☐ Corrosion			
Deposits/Stains	0	Oily Flow Line Paint Other:			
Abnormal Vegetation		☐ Excessive ☐ Inhibited			
Poor sool quality	0	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:			
Pipe beathic growth	0	☐ Brown ☐ Orange ☐ Green ☐ Other:			<u>.</u>
Section 6: Petcatial for Hilicit Discharge	for Illicit Disch				
🔯 Unlikely	Potential (pr	Potential (presence of two or more indicators)	Suspect (one or more indicators with a severity of 3)	(3) 🗌 Obvious	

Section 7: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)? $N^{\mathcal{O}}$

OF 48-1

- 1. Temperature- 46.76 F
- 2. PH- 7.2
- 3. Conductivity- 363 ps/cm
- 4. TDS- 257 ppm
- 5. Salinity- .20 ppt
- 6. Detergent- .25
- 7. Chlorine
 - a. Free- 0
 - b. Total- 0
 - p. Total- u
- 8. Ammonia-0

		12

Section 1: Backgro	und Data						
City/Town: Medway, 1	MA	Street: A	Ider ST	Tax Map #;		Outfall ID: OF-	54-7
Owner: City	☐ State ☐		Other:	Nearest House/Ut	ility Pole #:	Bridge	or Pole 10 1
Today's date: 4	16/20	Notice to the second	•	Time (Military):	10:53		
Investigators:	lan +	Dave	9	Form completed b	y Dave	and the second	
Temperature (°F):	410	Rain	fall (in.): Last 24 hours:	O 1	ast 48 hours:	0.1	
Northing:		Easting:		GPS Unit:		GPS LMK #	:
Rim Elevation:				Invert Elevation:			
Elevation Datum:				Receiving Water:			
Camera:				Photo #s:	- Take 1 Upstrean	n (head on) and 1	Downstream view
Land Use in Drainage /	Area (Check all th	at apply):					
✓ Industrial				Open Space			
Urban Residential				☐ Institutional			
☐ Suburban Residentia	al			Other:			
☐ Commercial				Known Industries:			
Notes (e.g, origin of or	ntfall, if known):	2	CB'S				
Santian 2. Ones							
Section 2: Outfall D TYPE	MATE	RIAL	SH	APE	DIMENSI	ONS (IN.)	SUBMERGED
	⊠ RCP		☐ Circular	Single	Diameter/Dime		In Water:
	□PVC	— ☐ HDPE	☐ Elliptical	Double		r [#]	∑No ☐ Partially
Closed Pipe		[] HDFE			1 2		☐ Fully
	Steel		Box	☐ Triple		i	With Sediment: No
	Other:		Other: Flange	☐ Other:			☐ Partially ☐ Fully
	☐ Concrete						
	☐ Pavement/S	cupper	☐ Trapezoid		Depth:		
Open drainage	☐ Earthen		Parabolic		Top Width:		
_ open aramage	rip-rap		Other:		Bottom Width:		
			Culer.		Bottom widm.		
	Other:						
Flow Present?	☐ Yes	X No	If No, Skip	to Section 3. If Yes, N	otify Town and co	ontinue field reco	nnaissance.
Flow Description (If present)	☐ Trickle	☐ Moderate	☐ Substantial	Flow Dire	ection (If Present):		
Section 3: Sketch							
Section 5. Secton		2.20		· · · · · · · · · · · · · · · · · · ·		Č -	ream
					1 7		I CAM
							1
							7
				2	((1	
	The same			The state of the s		1	
	/	3	stream		Flan	(80)	
			S(4)(1)(S)(1)(1)		1 F100		1

Section 4: Physical Indicators for Flowing Outfalls Only Are Any Physical Indicators Present in the flow?	Indicators for Floators Present in the	owing Outfall	s Only (If No, Skip to Section 5)			
INDICATOR	CHECK If Present		DESCRIPTION	REL	RELATIVE SEVERITY INDEX (1-3)	1-3)
Odor		☐ Sewage	☐ Rancid/sour ☐ Petroleum/gas	1 - Faint	2 - Easily detected	3 – Noticeable from a
						distance
Color		Clear	☐ Brown ☐ Gray ☐ Yellow	1 - Paint colors in	[1]	
	1	☐ Green	Orange Red Other:	outfall flow	outfall flow	☐ 3 — Clearly visible in outfall flow
Turbidity			See severity	1 1 Climbt alandinan		
				La Langut cloudiness	□ 2 − Cloudy	☐ 3 — Opaque
Floatables -Does Not Include		Sewage (T	☐ Sewage (Toilet Paper, etc.) ☐ Suds	1 - Few/slight: origin	2 - Some; indications	3 - Some; origin clear
Trash!!]	☐ Petroleum (oil sheen)	(oil sheen)	not obvious	possible suds or oil	(e.g., obvious oil sheen, suds, or floating
					sheen)	sanitary materials)

Constitution	COMMENIS				
INDICATOR CHECK IF DESCRIPTION DESCRIPTION	Spalling, Cracking or Chipping Peeling Paint Corrosion	□ Oily □ Flow Line □ Paint □ Other:	□ Excessive □ Inhibited	Odors Colors Ploatables Oil Sheen Suds Excessive Algae Other:	□ Brown □ Orange □ Green □ Other:
CHECK IF					
INDICATOR	Outfall Damage	Deposits/Stains	Abnormal Vegetation	Poor pool quality	Pipe benthic growth

Section 6: Potential for Illicit Discharge

Suspect (one or more indicators with a severity of 3)	
(presence of two or more indicators)	
Potential	
Vnlikely	

☐ Obvious

Section 7: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

NO - TRASH

Section 1: Backgro	und Data					
City/Town: Medway, N	ЛA	Street:	urtis LN.	Tax Map #:	Outfall ID: OF-	4-1
Owner: City	☐ State	Private [Other:	Nearest House/U		rtis LN
Today's date:	5/13/	90		Time (Military):	10:54	
Investigators:	0/01/	Dou	C.	Form completed l	y: Dave	
Temperature (°F):	55	Rain	fall (in.): Last 24 hours	: 0 1	ast 48 hours:	_
Northing:		Easting:		GPS Unit:	GPS LMK	#:
Rim Elevation:				Invert Elevation:		
Elevation Datum:				Receiving Water:		
Camera:				Photo #s:	- Take 1 Upstream (head on) and	1 Downstream view
Land Use in Drainage A	rea (Check all th	at apply):				
☐ Industrial				Open Space		
Urban Residential				☐ Institutional		
Suburban Residentia	1			Other:		
Commercial				Known Industries:		
Notes (e.g, origin of ou	tfall, if known):	4	CBIC	<u> </u>		-
C 41	• 4					
Section 2: Outfall D TYPE	escription	RIAL	SH	APE	DIMENSIONS (IN.)	SUBMERGED
	▼ RCP	☐ CMP	☐ Circular	Single	Diameter/Dimensions:	In Water:
	□PVC	☐ HDPE	☐ Elliptical	Double	15"	No ☐ Partially
Closed Pipe						☐ Fully
X Constant of	☐ Steel		Box	Triple		With Sediment:
	Other:		Other: Flange	Other:		Partially Fully
	Concrete			,		
	☐ Pavement/S	cunner	☐ Trapezoid		Depth:	
П О 1 і		oupper				
Open drainage	Earthen		Parabolic		Top Width:	
	☐ rip-rap		Other:		Bottom Width:	
	Other:	_				
Flow Present?	☐ Yes	DKN0	If No, Ski	o to Section 3. If Yes, N	otify Town and continue field re	connaissance.
Flow Description (If present)	☐ Trickle	☐ Moderate	☐ Substantial	Flow Dire	ection (If Present):	
Section 3: Sketch	R				1	
TOP	View				Side VIEW	
			1	1		
				1		
	I.					
T-			ľ	. 1-		I
				1	_	
Part of the second	and other a			I	Retent	100
	Approximate of the second			1	Retent	ion

(If No, Skip to Section 5)

Section 4: Physical Indicators for Flowing Outfalls Only Are Any Physical Indicators Present in the flow?

INDICATOR	CHECK If Present		DESCRIPTION	REL	RELATIVE SEVERITY INDEX (1-3)	(1-3)
Odor		Sewage Sulfide	☐ Rancid/sour ☐ Petroleum/gas ☐ Other:	1 – Faint	2 - Easily detected	3 – Noticeable from a distance
Color		Clear Green	□ Brown □ Gray □ Yellow □ Orange □ Red □ Other:	1 - Faint colors in outfall flow	2 – Clearly visible in outfall flow	3 – Clearly visible in
Turbidity			See severity	1 - Slight cloudiness	2-Cloudy	3 - Onaggie
Floatables -Does Not Include Trash!!		Sewage (Toilet Paper	 □ Sewage (Toilet Paper, etc.) □ Petroleum (oil sheen) □ Other: 	☐ 1 ~ Few/slight; origin not obvious	2 - Some; indications of origin (e.g., possible suds or oil sheen)	3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating
Section 5: Physical Indicators for Both Flowing and Non-Flowing Are physical indicators that are not related to flow present?	ndicators for B s that are not re	Soth Flowing ar	nd Non-Flowing Outfalls cesent? Yes KNo (If No, Skip to Section 6)	tion 6)		
INDICATOR	CHECK if Present		DESCRIPTION		COMMENTS	
Outfall Damage		Spalling, Cr.	Spalling, Cracking or Chipping			
Deposits/Stains		Oily Flow Line	ow Line Paint Other:			
Abnormal Vegetation		☐ Excessive [Inhibited			
Poor pool quality		Odors Suds	☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Excessive Algae ☐ Other:			

Section 7: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)? $\,\,NO\,$

☐ Potential (presence of two or more indicators)

Section 6: Potential for Illicit Discharge

X Unlikely

□ Obvious

 \square Suspect (one or more indicators with a severity of 3)

Other:

☐ Green

Orange

☐ Brown

Pipe benthic growth

Section 1: Backgrou	nd Data						0 101177 07	201
City/Town: Medway, M.			elmar		-Tax Map #:		Outfall ID: OF-	
Owner: SCity			Other:		Nearest House/Utili			9 Delmar
		90			Time (Military):	9 00		
Investigators: No	lon +	Dave			Form completed by:	Dav		
Temperature (°F):	00	Rainf	all (in.): Last 24 ho	ours:	O La	st 48 hours:	٥	•
Northing:		Easting:			GPS Unit:		GPS LMK #	
Rim Elevation:					Invert Elevation:			
Elevation Datum:					Receiving Water:			· · -
Camera:					Photo #s:	Take 1 Upstr	eam (head on) and 1	Downstream view
Land Use in Drainage A	rea (Check all ti	nat apply):						
☐ Industrial					Open Space			
Urban Residential					Institutional			
Suburban Residentia	l				Other:			
☐ Commercial					Known Industries:			
Notes (e.g., origin of ou	tfall, if known):	14	CBIS					
		1 /						
Section 2: Outfall D	escription						<u>.</u>	
TYPE	MAT	ERIAL		SHA	PE	DIME	nsions (In.)	SUBMERGED
-	⊠ RCP	☐ CMP	☑ Circular	ļ	Single	1	imensions:	In Water:
	□ PVC	☐ HDPE	☐ Elliptical	I	☐ Double	18		☑ Partially
Closed Pipe	☐ Steel		Box		☐ Triple			With Sediment:
	Other:		☐ Other:	lı	☐ Other:			✓ No ☐ Partially
								☐ Fully
	☐ Concrete							
	☐ Pavement	Scupper	☐ Trapezoid		777	Depth:		
Open drainage	Earthen		☐ Parabolic			Top Width:		
-	☐ rip-rap		☐ Other:			Bottom Wie	ith:	
	Other:							
Flow Present?			7.0 hr.	Quite.	to Castion 2 Id Van N	odfi Tour -	ud coutlings fleid se	
Flow Description	⊠ Yes	□ No		, skip	to Section 3. If Yes, N			
(If present)	Trickle	Moderate	Substantial		Flow Dire	ection (If Pres	ent): Sout	h
Section 3: Sketch								
AND ALL DESCRIPTION OF THE PARTY OF THE PART	TOP Vie	2.10)			<u>-</u>			
	FOP Vie	AMP	1					
	743				(7		
						-		
HEADWALL					<i>F</i>		2 2	7
HENDWALL	2				-		RCP	
	RC							
		HMC			1	1	7	DrainMonpole
	()-1	יורוכ			1	(1	Maria.

Section 4: Physical Indicators for Flowing Outfalls Only by Any Physical Indicators Present in the flow?	dicators for Fluors Present in the	nwing Outfalls Only flow? Yes No (If No, Skip to Section 5)		Outfall 30-1	30-1
INDICATOR	CHECK IF	DESCRI		RELATIVE SEVERITY INDEX (1-3)	(1-3)
Odor		Suiffide Other:	□ 1- Faint	2 - Easily detected	☐ 3 — Noticeable from a distance
Color		☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 - Faint colors in outfall flow	2 - Clearly visible in outfall flow	3 Clearly visible in outfall flow
Turbidity	0	See severity	☐ 1 – Slight cloudiness	☐2 Cloudy	□3Opaque
Floatables -Does Not Include Trash!!	0	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1-Few/slight; origin not obvious	2 - Some; indications of origin (e.g., possible sads or oil sheen)	(c.g., obvious oil sheen, suds, or floating sanitury materials)
Section 5: Physical Indicators for Both Flowing and Non Are physical indicators that are not related to flow present?	idicators for Bost that are not rel	Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls Are physical indicators that are not related to flow present? \square Yes \square No $(IfNo, Skip to Section 6)$	ction 6)		
INDICATOR	CHECK If Present	DESCRIPTION		COMMENTS	
Outfall Demage	0	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion			
Deposits/Stains		Oily Flow Line Paint Other:			
Abnormal Vegetation		☐ Excessive ☐ Inhibited			
Poor pool quality	0	☐ Odors ☐ Colors ☐ Flordables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:			
Pipe benthic growth		□ Brown □ Orange □ Green □ Other:			
Section 6: Potential for Illicit Discharge	or Illicit Disch	1 PC			
🛛 Unlikely	Potential (pre	☐ Potential (presence of two or more indicators) ☐ Suspect (one or more in	Suspect (one or more indicators with a severity of 3)	of 3) 🔲 Obvious	
Section 7: Any Non-	Illicit Discharge	Section 7: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?	NO		



OF 30-1

- 1. Temperature- 50 F
- 2. PH- 7.18
- 3. Conductivity- 428 ps/cm
- 4. TDS- 302 ppm
- 5. Salinity- .20 ppt
- 6. Detergent- .25
- 7. Chlorine
 - a. Free- 0
 - b. Total- 0
- 8. Ammonia- 0



	nd Data			· · · · · · · · · · · · · · · · · · ·			6 0
City/Town: Medway, MA			aIT WAY	-Tax Map #:		tfall ID: OF-	8-3
Owner: Z City	☐ State ☐	Private	Other:	Nearest House/Utili		1 Fairw	AN
Today's date: 5	13/2	020		Time (Military):			
Investigators: No	100/	Dave		Form completed by:	Dai	1e	
Temperature (°F): 50	S °	Rainf	all (in.): Last 24 hours:	C> La	st 48 hours:	0	•
Northing:		Easting:		GPS Unit:		GPS LMK #:	
Rim Elevation:				Invert Elevation:			
Elevation Datum:				Receiving Water:	<u> </u>		
Camera:				Photo #s:	Take 1 Upstream	(head on) and 1	Downstream view
Land Use in Drainage Are	ea (Check all th	at apply):					
☐ Industrial				Open Space			
Urban Residential				☐ Institutional			
Suburban Residential				Other:			
Commercial				Known Industries:			
Notes (e.g, origin of out	fall, if known):		a CB's -	Stream			
Section 2: Outfall De	ecription						
TYPE		ERIAL	SHA	APE	DIMENSI	DNS (IN.)	SUBMERGED
	RCP	☐ CMP	Circular	Single	Diameter/Dimer	nsions:	In Water:
	□PVC	HDPE	☐ Elliptical	☐ Double	18"		Partially
Closed Pipe	☐ Stee!		Вох	☐ Triple			Fully With Sediment:
			Other: Flange	Other:			No
			III () that F / fa N/91 ()	I I Other:	1		Partially
	Other:		Outer, press / C				☐ Fully
	Concrete	<u>.</u>	Outer				Li Fully
			☐ Trapezoid	-1	Depth:		Li Fully
☐ Open drainage	☐ Concrete			.1	Depth:		Li Fully
☐ Open drainage	Concrete Pavement/ Earthen		☐ Trapezoid		1	_	Li Fully
☐ Open drainage	Concrete Pavement/ Earthen rip-rap		☐ Trapezoid	=1	Top Width:	_	Li Fully
	Concrete Pavement/ Earthen rip-rap Other:	Scupper	☐ Trapezoid ☐ Parabolic ☐ Other:	=	Top Width:Bottom Width: _		
Flow Present?	Concrete Pavement/ Earthen rip-rap		☐ Trapezoid ☐ Parabolic ☐ Other:	o to Section 3. If Yes, N	Top Width: Bottom Width: orify Town and co	ontinue field rec	onnaissance.
	Concrete Pavement/ Earthen rip-rap Other:	Scupper	☐ Trapezoid ☐ Parabolic ☐ Other:	o to Section 3. If Yes, N	Top Width:Bottom Width: _	ontinue field rec	onnaissance.
Flow Present? Flow Description (If present)	Concrete Pavement/ Earthen rip-rap Other:	Scupper	☐ Trapezoid ☐ Parabolic ☐ Other:	o to Section 3. If Yes, N	Top Width: Bottom Width: orify Town and co	ontinue field rec	onnaissance.
Flow Present? Flow Description (If present) Section 3: Sketch	Concrete Pavement/ Earthen rip-rap Other:	Scupper No	☐ Trapezoid ☐ Parabolic ☐ Other:	o to Section 3. If Yes, No.	Top Width: Bottom Width: orify Town and co	ontinue field rec	onnaissance.
Flow Present? Flow Description (If present) Section 3: Sketch	Concrete Pavement/ Earthen rip-rap Other: Yes Trickle	Scupper No	☐ Trapezoid ☐ Parabolic ☐ Other:	o to Section 3. If Yes, No.	Top Width: Bottom Width: outfy Town and co	ontinue field rec	onnaissance.
Flow Present? Flow Description (If present) Section 3: Sketch	Concrete Pavement/ Earthen rip-rap Other: Yes Trickle	Scupper No	☐ Trapezoid ☐ Parabolic ☐ Other:	o to Section 3. If Yes, No.	Top Width: Bottom Width: outfy Town and concein (If Present):	ontinue field rec	onnaissance.
Flow Present? Flow Description (If present) Section 3: Sketch	Concrete Pavement/ Earthen rip-rap Other: Yes Trickle	Scupper No	☐ Trapezoid ☐ Parabolic ☐ Other:	o to Section 3. If Yes, No.	Top Width: Bottom Width: outfy Town and co	ontinue field rec	onnaissance.
Flow Present? Flow Description (If present) Section 3: Sketch	Concrete Pavement/ Earthen rip-rap Other: Yes Trickle	Scupper No	☐ Trapezoid ☐ Parabolic ☐ Other:	o to Section 3. If Yes, No.	Top Width:Bottom Width: orify Town and concion (If Present):	mainue field rec	onnaissance.
Flow Present? Flow Description (If present) Section 3: Sketch	Concrete Pavement/ Earthen rip-rap Other: Yes Trickle	Scupper No	☐ Trapezoid ☐ Parabolic ☐ Other:	o to Section 3. If Yes, No.	Top Width: Bottom Width: outfy Town and concein (If Present):	mainue field rec	onnaissance.
Flow Present? Flow Description (If present) Section 3: Sketch	Concrete Pavement/ Earthen rip-rap Other: Yes Trickle	Scupper No	☐ Trapezoid ☐ Parabolic ☐ Other:	o to Section 3. If Yes, No.	Top Width:Bottom Width: orify Town and concion (If Present):	mainue field rec	onnaissance.

		ſ



DESCRIPTION	ALLVIRA	E SEVERITY INDEX (1-5	3)
☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas			3 - Noticeble from a
☐ Sulfide ☐ Other:			distance
□ Clear □ Brown □ Gray □ Yellow	1 1 - Paint colors in	-	3 - Clearly wigible in
☐ Green ☐ Orange ☐ Red ☐ Other:	outfail flow	of American	outfall flow
See severity	☐ 1- Slight cloudiness ☐ 2		3 - Opaque
Sewage (Toilet Paper, etc.) Suds Petroleum (oil sheen) Other:	1- Few/slight; origin		3 - Some; origin clear (c.g., obvious cil sheen, suds, or float
		sneen)	samary materials)
NOTE			
☐ Spalling, Cracking or Chipping ☐ Pecking Paint ☐ Corrosion		COMMENTS	
☐ Oily ☐ Flow Line ☐ Paint ☐ Other:		COMMENTS	
☐ Excessive ☐ Inhibited		COMMENTS	
		COMMENTS	
		COMMENTS	
☐ Colors ☐ Floatables ☐ Exocastive Algae		COMMENTS	
☐ Colors ☐ Floatables ☐ Excessive Algae ☐ Green		COMMENTS	
	DESCRIPTION BE Rancid/sour Petroleum/ga Brown Gray Brown Gray Brown Gray Gray Gray Gray Conange Red See severity Gray See severity Gray See severity By See severity Gray See severity See severity	Sewage Rancid/sour Petroleum/gas Salfide Other: Clear Brown Gray Yellow Green Orange Red Other: See severity See severity I - Faint colors in outfall flow Sewage (Toilet Paper, etc.) Suds Petroleum (oil sheen) Other: I - Few/slight; origin not divious	DESCRIPTION RELATIVE SEVERITY INDEX (1) Out Petroleum/gas

Page 2 of 2

OF 8-3

- 1. Temperature- 49.46 F
- 2. PH- 6.05
- 3. Conductivity- 182.9 ps/cm
- 4. TDS- 126 ppm
- 5. Salinity- 0 ppt
- 6. Detergent- .25
- 7. Chlorine
 - a. Free- 0
 - b. Total- 0
- 8. Ammonia- 0

		*;	

	nd Data			<u>_</u>						
City/Town: Medway, MA	A	Street: 5 FZ	en Vall	ey	-Tax Map	_		Outfall ID: OF-	23-3	
		Private	Other:		Nearest H	ouse/Utili		#14 Green	Valley	
Today's date:	5/13/	2020			Time (Mil	litary):	13:0			
Investigators:	»lan	1 Do	ve		Form com	pleted by:	カ	ave		
Temperature (°F): 5	7 " '	Rainf	all (in.): Last 24 h	ours:	0	La:	st 48 hours:	0	•	
Northing:		Easting:			GPS Unit:	<u> </u>		GPS LMK #:		
Rim Elevation:					Invert Ele	vation:	1			
Elevation Datum:			· .		Receiving	Water:				
Camera: Photo #s: Take 1 Upstream (head on) and 1 Downstream view										
Land Use in Drainage Ar	ea (Check all tha	at apply):								
☐ Industrial ☐ Open Space										
Urban Residential					☐ Institu	tional				
Suburban Residential					Other:					
Commercial					Known In	dustries: _				
Notes (e.g, origin of out	fall, if known):		14	C 1	B'S 5					
					0 0 2					
Section 2: Outfall De	escription									
ТҮРЕ	MATE	RIAL		SHA	PE		DIME	ISIONS (IN.)	SUBMERGED	
	⊠ RCP	☐ CMP	[X Circular		☐ Single		Diameter/D	imensions:	in Water:	
1	□ PVC	☐ HDPE	☐ Elliptical	- [□ Double		24		Partially	
Closed Pipe	☐ Steel		☐ Box	- 1	☐ Triple				☐ Fully With Sediment:	
	Other:		Other:	l l	☐ Other:				✓ No ☐ Partially	
						_	ŀ		☐ Fully	
	☐ Concrete									
	☐ Concrete ☐ Pavement/S	Scupper	☐ Trapezoid		17		Depth:			
Open drainage	_	Scupper	☐ Trapezoid		15		Depth:			
Open drainage	☐ Pavement/S	Scupper	Parabolic		(5)		Top Width:			
☐ Open drainage	Pavement/S Earthen rip-rap	Scupper			it.					
	☐ Pavement/S ☐ Earthen ☐ rip-rap ☐ Other:		Parabolic Other:	<i>α</i> 4:	15		Top Width:	th:		
Flow Present?	Pavement/S Earthen rip-rap	No	Parabolic Other:	o, Skip	to Section 3.	If Yes, No	Top Width:	th: nd continue field rec		
	☐ Pavement/S ☐ Earthen ☐ rip-rap ☐ Other:		Parabolic Other:	o, Skip			Top Width:	th:		
Flow Present? Flow Description (If present)	☐ Pavement/S ☐ Earthen ☐ rip-rap ☐ Other:	No	Parabolic Other:	o, Skip			Top Width: Bottom Wid	th: nd continue field rec		
Flow Present? Flow Description (If present) Section 3: Sketch	☐ Pavement/S ☐ Earthen ☐ rip-rap ☐ Other: ☐ Yes ☐ Trickle	□ No Moderate	Parabolic Other:	o, Skip		Flow Dire	Top Width: Bottom Wid orify Town and	th: ad continue field rec		
Flow Present? Flow Description (If present) Section 3: Sketch	☐ Pavement/S ☐ Earthen ☐ rip-rap ☐ Other:	□ No Moderate	Parabolic Other:	o, Skip		Flow Dire	Top Width: Bottom Wid	th: ad continue field rec		
Flow Present? Flow Description (If present) Section 3: Sketch	☐ Pavement/S ☐ Earthen ☐ rip-rap ☐ Other: ☐ Yes ☐ Trickle	□ No Moderate	Parabolic Other:	o, Skip		Flow Dire	Top Width: Bottom Wid oriffy Town and ction (If Prese	th: ad continue field rec		

Section 7: Any Non-I	☑ Unlikely	Section 6: Petential for Illicit Discharge		Pine benthic arount		Abnormal Veschalion	Denosits/Stains		INDICATOR	Section 5: Physical Indicators for Both Flowing and Nor Are physical indicators that are not related to flow present?		-Does Not Include Trash!!		Turbidity	Color	COOL		TROTCATOR	Are Any Physical Indica
llicit Discharge	Potential (pre	or Illicit Disch			ן ו			Present	CHECKIF	ndicators for B	:		[J (-			Present	ndicators for l
Section 7: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?	Potential (presence of two or more indicators) Suspect (one or more i	arge	Green Other:	□ Excessive Alg	ave Limbered	3	mosion committee or culphing	Spalling Cracking or Chinaire		Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls Are physical indicators that are not related to flow present? Yes XINO (If No. Skip to Section 6)		Sewage (Toilet Paper, etc.) Suds Petroleum (oil sheen) Other:	See severity	Red	Clear Brown Gray Cycllow		Sewage Rancid/sour Petroleum/see	MOTATION	Are Any Physical Indicators Fresent in the flow? Yes No (If No. Skip to Section 5)
20	Suspect (one or more indicators with a severity of 3)									ion 0		☐ 1- Few/slight; origin not dvious	☐ 1-Slight cloudiness	outfall flow		☐ 1—Paint	- Caron		
	3) Dovious							COMMENTS			sheen)	2 - Some; indications of origin (e.g., possible suds or oil	2 Cloudy	2-Clearly visible in outfall flow		2 - Easily detected	WITH THE SEASON A TANDET (T-3)		Outtall 23-3
											samitary materials)	3 - Some; erigin clear (e.g., obvious oil sheen, suds or floating	3 - Opaque	3 - Clearly visible in outfall flow	distaince	☐ 3 – Noticable from a	1-3)		3-3

OF 23-3

- 1. Temperature- 52.16 F
- 2. PH- 7.60
- 3. Conductivity- 453 ps/cm
- 4. TDS- 322 ppm
- 5. Salinity- .20 ppt
- 6. Detergent- .25
- 7. Chlorine
 - a. Free- 0
 - b. Total-0
- 8. Ammonia- .25

	72			

Section 1: Backgroun	IQ Data	,			· Outfull II		\ 1 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
City/Town: Medway, MA			ering	-Tax Map #:	Outlan II		21-8 8 Lovering		
Owner:		Oth	ner:		y Pole #: Pole 46		s wer ing		
Today's date: 5	13/20			Time (Military): / 0 00					
	1 -11.0	UE		Form completed by:		d			
Temperature (°F): 5	3°	Rainfali (in.): Last 24 hours:	O Las	t 48 hours:		•		
Northing:	Easti	ng:		GPS Unit:	GPS	LMK#:			
Rim Elevation:				Invert Elevation:	<u> </u>				
Elevation Datum:				Receiving Water:					
Camera: Photo #s: Take 1 Upstream (head on) and 1 Downstream view									
Land Use in Drainage Are	ea (Check all that apply	/):							
Industrial				Open Space					
Urban Residential				Institutional					
Suburban Residential				Other:					
☐ Commercial				Known Industries: _					
Notes (e.g., origin of out	fall, if known): /	~ 5	3 + Bra	ola					
	- 1	<u> </u>	> 1 1010						
Section 2: Outfall De	scription								
TYPE	MATERIAL		SH	APE	DIMENSIONS (IN.)	SUBMERGED		
	IX RCP □	CMP 🗵	Circular	Single	Diameter/Dimensions:		In Water: ☐ No		
1	□PVC □ I	IDPE	Elliptical	☐ Double	30"		R Partially		
☑ Closed Pipe	☐ Steel		Вох	☐ Triple			☐ Fully With Sediment:		
`	Other:	-	Other:	Other:			No ☐ Partially		
							☐ Fully		
	☐ Concrete								
	☐ Pavement/Scuppe	r] Trapezoid	•	Depth:				
Open drainage	☐ Earthen] Parabolic		Top Width:				
	☐ rip-rap		Other:		Bottom Width:				
	☐ Other:								
			ه ستو پیدوری	- 4- N-4 2 PATT - 1-	alfo Tanga and a said	. 4 - 1 - 1 - 1			
Flow Present?	X Yes	□ No	If No, Ski	to Section 3. If Yes, No		_	nhausidaes.		
Flow Description (If present)	☐ Trickle 💢 N	Aoderate	☐ Substantial	Flow Dire	ction (If Present):	iouth			
				-					
Section 3: Sketch			/ /						
1			1/						
	1		1 X						
	3 + 1		~/	Torquist and the second					
			1						
	71 :		1 1	To the second					
	2 4			1-4					
	\$ 3,					Broo	$ls \rightarrow$		
*	Brook y					0100	25.0		
10	P View	<u>-</u>				<u></u> .	Page 1 of		
} E	11 WIEW								

		6

Section 4: Physical Indicators for Flowing Are Any Physical Indicators Present in the flow?	dicators for Flors Present in the	Section 4: Physical Indicators for Flowing Outfalls Only Are Any Physical Indicators Present in the flow? [] Yes [X] No (If No, Skip to Section 5)		Outfall 21-8	8
INDICATOR	CHECK IF	DESCR	RP	relative severity index (1-3)	1-3)
Odor		☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1—Paint	2 - Easily detected	3 - Noticeable from a distance
Color		☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ ☐ ☐Other:	☐ 1- Paint colors in outfall flow	2 - Clearly visible in outfall flow	3 - Clearly visible in outfall flow
Turbidity		See severity	☐ 1—Slight cloudiness	2 Cloudy	☐ 3 — Opeque
Floatables -Does Not Include Trash!!		☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	l-Few/slight; origin not devious	2 - Some; indications of origin (e.g., possible suds or oil sheen)	3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)
Section 5: Physical Indicators for Both Flowing and Non Are physical indicators that are not related to flow present?	dicators for B	Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls Are physical indicators that are not related to flow present? Yes No	ection 6)		
INDICATOR	CHECK IF	DESCRIPTION		COMMENTS	
Outfall Damage		☐ Spalling, Cracking or Chipping ☐ Pecking Paint ☐ Corrosion			
Deposits/Stains		Oily Flow Line Paint Other:			
Abnormal Vegetation		☐ Excessive ☐ Inhibited			
Poor pool quality		☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:			
Pipe benthic growth		☐ Brown ☐ Orange ☐ Green ☐ Other:			:
Section 6: Potential for Illicit Discharge	for Illicit Disch	81ge			
🛭 Unlikely	Potential (pro	Potential (presence of two or more indicators)	indicators with a severity of 3)	of 3) 🔲 Obvious	i.
Section 7: Any Non-	illicit Discharg	Section 7: Any Non-Hitcit Discharge Concerns (e.g., trash or needed infrastructure repairs)?	NO		

		ę

OF 21-8

- 1. Temperature- 49.46 F
- 2. PH- 5.9
- 3. Conductivity- 87.1 ps/cm
- 4. TDS- 61.5 ppm
- 5. Salinity- 0 ppt
- 6. Detergent- 0
- 7. Chlorine
 - a. Free- 0
 - b. Total- 0
- 8. Ammonia- 0

			A 18
	36		
5:			

Section 1: Backgr	ound Data					1	
City/Town: Medway,	MA	Street: L	over in a	Tax Map #:		Outfall ID: OF-	21-10
Owner: KCity	State [Private [Other:	Nearest House	/Utility Pole #:	House #	- 8 8
Today's date:	4/16/	20		Time (Military	1): 14		
Investigators:	olan +	Dav		Form complete	ed by:) ave	
Temperature (°F):	40°	Rain	fall (in.): Last 24 hours:	0	Last 48 hours:	0.1	
Northing:		Easting:		GPS Unit:		GPS LMK #	# :
Rim Elevation:				Invert Elevation			
Elevation Datum:				Receiving Wat			
Camera:				Photo #s:	Take 1 Upstr	eam (head on) and	1 Downstream view
Land Use in Drainage	Area (Check all th	at apply):					
☐ Industrial				Open Space	0		
Urban Residential				Institutiona	1		
Suburban Resident	ial			Other:			
Commercial				Known Industr	ies:		
Notes (e.g, origin of	outfall, if known):		6 00	'5			
Section 2: Outfall	Description						
TYPE	MATE	RIAL	SH	APE	DIMEN	ISIONS (IN.)	SUBMERGED
	RCP	☐ CMP	Circular	Single	Diameter/Di		In Water:
	☐ PVC	HDPE	☐ Elliptical	☐ Double	36		□ No ☑ Partially
Closed Pipe	☐ Steel		Вох	☐ Triple			Fully With Sediment:
`	Other:		☐ Other:	Other:			☐ No ☐ Partially
	Culci.						Fully
	☐ Concrete						
	☐ Pavement/S	Scupper -	☐ Trapezoid		Depth:	-	
☐ Open drainage	☐ Earthen		☐ Parabolic		Top Width:		
Open dramage					Bottom Wid		
	☐ rip-rap		Other:		Bottom wid	ш	
	Other:						
Flow Present?	Yes Yes	☐ No	If No, Ski	p to Section 3. If Ye	s, Notify Town an	d continue field rec	connaissance.
Flow Description (If present)	Trickle	Moderate	Substantial	Flow	Direction (If Prese	ent): Sout	h
Section 3: Sketch		£					
Section 5. Sketch		1	14	A		*	
		\$5°	pox				
		į "	1				

(If No, Skip to Section 5)

Section 4: Physical Indicators for Flowing Outfalls Only
Are Any Physical Indicators Present in the flow?

Yes X No

(1-3)	3 - Noticeable from a	3 - Clearly visible in	Outrain 170W	3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating	sanitary materials)						
RELATIVE SEVERITY INDEX (1-3)	2-Easily detected	2 – Clearly visible in outfall flow		2 - Some; indications of origin (e.g., possible suds or oil	SHCCII)		COMMENTS				
REL	□ 1 – Faint	☐ 1 — Faint colors in outfall flow	1 - Slight cloudiness	☐ 1 – Few/slight; origin not obvious		ion 6)					
DESCRIPTION	□ Scwage □ Rancid/sour □ Petroleum/gas □ Other:	lear Brown Gray Yellow reen Orange Red Orther:	See severity	□ Sewage (Toilet Paper, etc.) □ Suds □ Petroleum (oil sheen) □ Other:		Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls Are physical indicators that are not related to flow present?		Spalling, Cracking or Chipping	☐ Flow Line ☐ Paint ☐ Other:	ssive [Inhibited	s Colors Ploatables Oil Sheen Excessive Algae
CHECK if Present		D Clear				ators for Both Flo t are not related to	CHECK if Present	&°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°	dio 🗆	□ Excessive	Odors
INDICATOR	Odor	Color	Turbidity	Floatables -Does Not Include Trash!!		Section 5: Physical Indicators for Both Flowing and Non Are physical indicators that are not related to flow present?	IMDICATOR	Outfall Damage	Deposits/Stains	Abnormal Vegetation	Poor pool quality

Section 6: Potential for Illicit Discharge

□ Obvious ☐ Suspect (one or more indicators with a severity of 3) ☐ Potential (presence of two or more indicators) X Unlikely

Other:

Green

Orange

Brown

Pipe benthic growth

Section 7: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

NO

OF 21-10

- 1. Temperature- 43.7 F
- 2. PH- 6.6
- 3. Conductivity- 219 ps/cm
- 4. TDS- 154 ppm
- 5. Salinity- .10 ppt
- 6. Detergent- .75
- 7. Chlorine
 - a. Free- 0
 - b. Total- 0
- 8. Ammonia-0

			d

Section 1: Backgroun	d Data					O-4611 TD: OE	22 1				
City/Town: Medway, MA			en Valley	Tax Map #:		Outfall ID: OF-	en valley				
Owner:	State	Private	Other:	Nearest House/Utilit		# 16 016	er valley				
Today's date:	5/13/2	080		Time (Military):	1327	<u> </u>					
	lan	Dave		Form completed by:		ve					
Temperature (°F):	o° '	Rainft	all (in.): Last 24 hours:	O Las	st 48 hours:	()					
Northing:		Easting:		GPS Unit:		GPS LMK#:	<u> </u>				
Rim Elevation:				Invert Elevation:							
Elevation Datum:				Receiving Water:							
Camera:				Photo #s:	Take 1 Upstres	um (head on) and 1	Downstream view				
Land Use in Drainage Are	a (Check all th	at apply):									
☐ Industrial				Open Space							
Urban Residential				Institutional							
X Suburban Residential				Other:			<u>-</u>				
☐ Commercial				Known Industries: _							
Notes (e.g, origin of out	fall, if known):	4	C 13'S								
Section 2: Onticl De							-				
Section 2: Outfall De		ERIAL	SHA	LPE .	DIMEN	SIONS (IN.)	SUBMERGED				
	X RCP	☐ CMP	⊠ Circular	Single	Diameter/Dir	mensions:	In Water:				
	□PVC	HDPE	Elliptical	Double			☐ No ☐ Partially				
☑ Closed Pipe			Box	☐ Triple		_	Fully With Sediment:				
and decrease a sha				Other: Other: Other: Partially							
	Steel			_							
				_							
				_			Partially				
	Other:			_	Depth:	-	Partially				
	Other:		Other:	_	Depth: Top Width:		Partially				
Open drainage	☐ Other: ☐ Concrete ☐ Pavement ☐ Earthen		☐ Other: ☐ Trapezoid ☐ Parabolic	_	Top Width: _	<u> </u>	Partially				
	Concrete Pavement		Other:	_	-	<u> </u>	Partially				
☐ Open drainage	Concrete Pavement Earthen rip-rap Other:	/Scupper	☐ Other:	Other:	Top Width: _ Bottom Width	h:	Partially Pulty				
☐ Open drainage Flow Present?	Concrete Pavement Earthen rip-rap Other:		☐ Other:	Other:	Top Width: Bottom Width otify Town and	h:d continue field rec	Partially Pulty				
☐ Open drainage	Concrete Pavement Earthen rip-rap Other:	/Scupper	☐ Other: ☐ Trapezoid ☐ Parabolic ☐ Other:	Other:	Top Width: _ Bottom Width	h:d continue field rec	Partially Pully Pully Ornaissance.				
☐ Open drainage Flow Present? Flow Description	Concrete Pavement Earthen rip-rap Other: Yes	/Scupper	☐ Other: ☐ Trapezoid ☐ Parabolic ☐ Other: If No, Skip	Other:	Top Width: Bottom Width otify Town and	h:i continue field reco	Partially Pully Pully Ornaissance.				
☐ Open drainage Flow Present? Flow Description (If present)	Concrete Pavement Earthen rip-rap Other: Yes	/Scupper	☐ Other: ☐ Trapezoid ☐ Parabolic ☐ Other: If No, Skip	Other:	Top Width: Bottom Width otify Town and	h:i continue field reco	Partially Pully Pully Ornaissance.				
Copen drainage Flow Present? Flow Description (If present) Section 3: Sketch	Concrete Pavement Earthen rip-rap Other: Yes	/Scupper	☐ Other: ☐ Trapezoid ☐ Parabolic ☐ Other: If No, Skip	Other:	Top Width: Bottom Width otify Town and ction (If Preser	h:i continue field reco	Partially Pully Pully Ornaissance.				
Copen drainage Flow Present? Flow Description (If present) Section 3: Sketch	Concrete Pavement Earthen rip-rap Other: Yes	/Scupper	☐ Other: ☐ Trapezoid ☐ Parabolic ☐ Other: If No, Skip	Other:	Top Width: Bottom Width otify Town and ction (If Preser	h:i continue field reco	Partially Pully Pully Ornaissance.				
Copen drainage Flow Present? Flow Description (If present) Section 3: Sketch	Concrete Pavement Earthen rip-rap Other: Yes	/Scupper	☐ Other: ☐ Trapezoid ☐ Parabolic ☐ Other:	Other:	Top Width: Bottom Width otify Town and ction (If Preser	h:i continue field reco	Partially Pully Pully Ornaissance.				
Copen drainage Flow Present? Flow Description (If present) Section 3: Sketch	Concrete Pavement Earthen rip-rap Other: Yes	/Scupper	☐ Other: ☐ Trapezoid ☐ Parabolic ☐ Other: If No, Skip	Other:	Top Width: Bottom Width otify Town and ction (If Preser	h:i continue field reco	Partially Pully Pully Ornaissance.				
Copen drainage Flow Present? Flow Description (If present) Section 3: Sketch	Concrete Pavement Earthen rip-rap Other: Yes	/Scupper	☐ Other: ☐ Trapezoid ☐ Parabolic ☐ Other: If No, Skip	Other:	Top Width: Bottom Width otify Town and ction (If Preser	h:i continue field reco	Partially Pully Pully Ornaissance.				
Copen drainage Flow Present? Flow Description (If present) Section 3: Sketch	Concrete Pavement Earthen rip-rap Other: Yes	/Scupper	□ Other: □ Trapezoid □ Parabolic □ Other: If No, Skip □ Substantial	Other:	Top Width:Bottom Width outfy Town and ection (If Present	h: d continue field rec	Partially Pully Pully Properties of the second se				

Section 7: Any Non-III	E) Clauredy	Section 6: Petential for Illicit Discharge	The comments Broaden	Pine beathic seconds	D	Abnormal Vegetation	Deposits/Stains	Outfall Damage		Are physical indicators that are not related to flow present? THEOREM CHECK IF	Section 5: Physical In	-Does Not Include Trash!!	Floatables	Turbidity	Color		Odor	INDICATOR	Section 4: Physical Indicat
icit Discharge	rotential (pre	r Illicit Discha		2 C	1				Present	CHECK IF								CHECKIF	ndicators for I
Section 7: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?	rotential (presence of two or more indicators) Suspect (one or more	NGO CONTRACTOR OF THE CONTRACT	☐ Brown ☐ Orange ☐ Green ☐ Other:				Oily Flow Line Point Other:	Spalling, Cracking or Chipping Pecking Paint Corrosion	DESCRIPTION			Petroleum (oil sheen) Other:	Campa (Trains	See severity	Groce Grange Red Coher		Sewage Rancid/sour Petroleum/an		Section 4: Physical Indicators for Flowing Outfails Only Are Any Physical Indicators Present in the flow? Yes X No W.No. Shin to Section S.
0 >	Suspect (one or more indicators with a severity of 3)									ction 8		☐ !- Few/slight; origin	LI 1- Slight cloudiness		3 i	□ I- Paint □	RELAT		
	☐ Obvious								COMMENTS		sneen)	2 Some; indications of origin (e.g., possible suds or oil	2 - Cloudy	AOH PENNO	2 - Clearly visible in	2 - Easify detected	RELATIVE SEVERITY INDEX (1-3)		
											sanitary materials)	3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating	□3 – Opaque	outfall flow	3 - Clearly visible in	3 - Noticeble from a distance	(1-3)		

.

OF 23-1

- 1. Temperature- 51.8 F
- 2. PH- 6.81
- 3. Conductivity- 1105 ps/cm
- 4. TDS- 785 ppm
- 5. Salinity- .50 ppt
- 6. Detergent- .25
- 7. Chlorine
 - a. Free- 0
 - b. Total- 0
- 8. Ammonia- 0

Section 1: Backgro	und Data						
City/Town: Medway, N	//A	Street: 61	cenvoller	Tax Map #:	<u> </u>	Outfall ID: OF-	23-2
Owner: K City	☐ State ☐	Private [Other:	Nearest House/U	ility Pole #:	#30	0 0
Today's date: 5	113/20			Time (Military):	1401	15	
Investigators:	1) 0 0 1		ave	Form completed l	y: Do	ve-	
Temperature (°F):	600	Rain	fall (in.): Last 24 hour	s: G	Last 48 hours:	0	
Northing:		Easting:		GPS Unit:		GPS LMK	#:
Rim Elevation:				Invert Elevation:			
Elevation Datum:				Receiving Water:	···		
Camera:				Photo #s:	- Take 1 Upstre	am (head on) and	1 Downstream view
Land Use in Drainage A	rea (Check all the	at apply):					
☐ Industrial				Open Space			
☐ Urban Residential				☐ Institutional			
Suburban Residentia	1			Other			
☐ Commercial							
Notes (e.g, origin of ou	tfall, if known):		1 201	Known Industries:			
			6 CB'	>			
Section 2: Outfall D	escription						
TYPE	MATE	RIAL.	SI	IAPE	DIMEN	SIONS (IN.)	SUBMERGED
	Z (RCP	☐ CMP	Circular	Single	Diameter/Dir		In Water:
	□PVC	☐ HDPE	☐ Elliptical	☐ Double			☐ No
☑ Closed Pipe	☐ Steel		Box	☐ Triple			Partially Fully
	Other:		Other:				With Sediment:
	Cuses.		Other:	Other:			Partially Pully
	☐ Concrete					· · · · · · · · · · · · · · · · · · ·	
	☐ Pavement/Sc	upper	Trapezoid		Depth:		
Open drainage	☐ Earthen		☐ Parabolic		Top Width:		
	☐ rip-rap		☐ Other:			_	
	☐ Other:				Bottom Width	:	
F1							
Flow Present?	☐ Yes	No.	If No, Ski	p to Section 3. If Yes, No	otify Town and	continue field rece	Analmence.
Flow Description [If present)	Trickle	☐ Moderate	☐ Substantial	Flow Dire	ction (If Present	t):	
ection 3: Sketch							
	of View)					
	1						ļ
	9			_			ŀ
		入	1				
S. Lagrand			1				
		1				And the last of th	
<i>F</i>				1	and the second		the state of the s

Section 4: Physical Indicators for Flowing Are Any Physical Indicators Present in the flow?	licators for Fi ers Present in the	Section 4: Physical Indicators for Flowing Outfalls Only . Are Any Physical Indicators Present in the flow? Yes X No (If No, Skip to Section 5)	Out 7611	カーとな	
INDICATOR	CHECK IF	DESCR		RELATIVE SEVERITY INDEX (1-3)	1-3)
Odor		☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1- Faint	2 - Easily detected	3 – Noticeable from a distance
Color		☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ ☐ Coher:	☐ 1 – Faint colors in outfall flow	2 - Clearly visible in outfall flow	3 - Clearly visible in outfall flow
Turbidity		See severity	1 - Slight cloudiness	☐2—Cloudy	3 - Opaque
Floatables -Does Not include Trash!!		☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ I – Few/slight; origin not abvious	2 - Some; indications of origin (e.g., possible suds or oil sheen)	3 - Some; origin clear (e.g., obvious oil sheen, suds, or float sanitary materials)
Section 5: Physical Indicators for Both Flowing and Non Are physical indicators that are not related to flow present?	dicators for Both	Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls Are physical indicators that are not related to flow present? Yes No (If No, Skip to Section 6)	ection 6)		
INDICATOR	CHECK If Present	DESCRIPTION		COMMENTS	
Outfall Damage	٥	Spalling, Cracking or Chipping Pecling Paint Corrosion			
Deposits/Stains		☐ Oily ☐ Flow Line ☐ Paint ☐ Other:			
Abnormal Vegetation		☐ Excessive ☐ Inhibited			
Poor pool quality	0	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:			
Pipe benthic growth		☐ Brown ☐ Orange ☐ Green ☐ Other:			
Section 6: Potential for Illicit Discharge	or Illicit Disch	arge			
X Unlikely □	Potential (pro	Potential (presence of two or more indicators) Suspect (one or more	Suspect (one or more indicators with a severity of 3)	of 3) 🔲 Obvious	
Section 7: Any Non-II	licit Discharg	section 7: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?	20		:



Section 1: Backgro	und Data			Lord			
City/Town: Medway, I	ΛA	Street: H	folliston 3	Tax Ma	ap #:	Outfall ID:	*
Owner: City	☐ State ☐	Private [Other:	Neares	t House/Utility Po	le#: #189	Holliston ST
Today's date: 5	11312	080		Time (I	Military):	15	
Investigators:	Volan	1 DOU	e.	Form c	ompleted by:	Dave	
Temperature (°F):	5	Rain	fall (in.): Last 24 hours:	G	Last 48	hours: 💸	
Northing:		Easting:		GPS U	nit:	GPS L	.MK.#:
Rim Elevation:				Invert E	Elevation:		
Elevation Datum:				Receivi	ng Water:		
Camera:				Photo #	s: Take	1 Upstream (head on)	and 1 Downstream view
Land Use in Drainage	rea (Check all th	at apply):					
☐ Industrial				Оре	n Space		
Urban Residential				☐ Insti	tutional		
Suburban Residentia	1			Other: _			
Commercial				Known	Industries:		_
Notes (e.g, origin of or	utfall, if known):	<u>.</u>	2 621		11+4-11	Dammes	with leave
110000 (0.5, 01.5 01			3 CB!	2	14.0N 0 C	area	
Section 2: Outfall D	escription						
TYPE	MATE	RIAL	SH	APE		DIMENSIONS (IN	.) SUBMERGED
	▼ RCP	□ СМР	☐ Circular	Single		neter/Dimensions:	In Water:
	□PVC	HDPE	☐ Elliptical	☐ Double		15 /	☐ No ☐ Partially
Closed Pipe	☐ Steel	_	Вох	☐ Triple			☐ Fully With Sediment:
			Other: Flance				│ □ No
	Other:		Other: 3 server	Other:			☐ Partially ☐ Fully
	Concrete			,			
	☐ Pavement/S	laumnar	☐ Trapezoid		Dent	h;	
_		oupper					
Open drainage	☐ Earthen		Parabolic		-	Width:	
	☐ rip-rap		Other:		Botto	om Width:	
	Other:	_					
Flow Present?	☐ Yes	☐ No	If No, Ski	p to Section 3	. If Yes, Notify T	own and continue fie	ld reconnaissance.
Flow Description (If present)	☐ Trickle	☐ Moderate	: Substantial		Flow Direction (If Present):	
ection 3: Sketch							
	TOP VIE	eW.	1		Pr	ofile	
, \	1				*	***************************************	
	a de la companya de l						
/ /				1			
	S-1				A PART AND		
	3		[e-shifteen yn Haddings o'r		
			1				
			ļ				

Section 4: Physical Indicators for Flowing Outfalls Only Are Any Physical Indicators Present in the flow?	Indicators for Flo	wing Outfall	s Only (If No. Skip to Section 5)			
INDICATOR	CHECK If Present	-	DESCRIPTION	REL	RELATIVE SEVERITY INDEX (1-3)	1-3)
Odor	_	Sewage Sulfide	Rancid/sour Petroleum/gas	□ 1 – Faint	2 - Easily detected	3 – Noticeable from a
Color		Clear	☐ Brown ☐ Gray ☐ Yellow ☐	1 - Faint colors in	2 - Clearly visible in	unatarice
E]	Green	Orange Red Oother:	outfall flow	outfall flow	outfall flow
r urbidity			See severity	☐ 1 – Slight cloudiness	2-Cloudy	3 - Opaque
Floatables -Does Not Include Trash!!		Sewage (Toilet Paper,	etc.) 🔲 Suds 🗖 Other:	\square 1 – Few/slight; origin not obvious	2 – Some; indications of origin (e.g., possible suds or oil	3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating
					sheen)	sanitary materials)

	COMMENTS						
Are physical indicators that are not related to flow present?		Spalling, Cracking or Chipping Pecling Paint Corrosion	Oily Plow Line Paint Other.	☐ Excessive ☐ Inhibited	Odors Colors Floatables Oil Sheen Suds Excessive Algae Other:	☐ Brown ☐ Orange ☐ Green ☐ Other:	
licators for Bo that are not rel	CHECK If Present						
Section 5: Physical Independent	INDICATOR	Outfall Damage	Deposits/Stains	Abnormal Vegetation	Poor pool quality	Pipe benthic growth	

☐ Suspect (one or more indicators with a severity of 3)

□ Obvious

Section 7: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)? NO

City/Town: Medway, MA Street Evergree Tax Map #: Outfall ID: OF # 8 - 1	City/Town: Medway, N		Street: Fu	(Faren)	Tax Map #:	Outfall ID: OF-	48-16
Today's date: 4 1 20 Time (Military): 0 4 5 4 7 7 Investigators: No a b + Dave Form completed by: Dave Temperature (*F): 37			Private	Other:	Nearest House	/Utility Pole #: /55 Mar N 13	1 Pale 65"
Tremperature (°F) 3 7 8 Rainfall (in.): Last 24 hours: Last 48 hours: GPS LMK #:	Today's date:	11/20			Time (Military	0: 09 45 900	
Rainfall (in.): Last 24 hours: Last 48 hours: Northing: Basting: GPS Unit: GPS LMK #:	Investigators: Na		ave		Form complete	ed by: Dave	
Northing: Easting: GPS Unit: GPS LMK #:		370		all (in.): Last 24 hours		Last 48 hours:	
Elevation Datum: Receiving Water: Camera:	Northing:		Easting:		GPS Unit:	GPS LMK	#:
Photo #s:	Rim Elevation:	-			Invert Elevation	on:	
Land Use in Drainage Area (Check all that apply): Industrial	Elevation Datum:				Receiving Wat	ter:	
Industrial	Camera;				Photo #s:	Take 1 Upstream (head on) and	1 Downstream view
Urban Residential ☐ Commercial ☐ Commercial ☐ Commercial ☐ Commercial ☐ Commercial ☐ Commercial ☐ Commercial ☐ Commercial ☐ Commercial ☐ Commercial ☐ Commercial ☐ Commercial ☐ Commercial ☐ Counties: ☐ PVC ☐ HDPE ☐ Elliptical ☐ Double ☐ Double ☐ Double ☐ Partially ☐ Pully ☐ Steel ☐ Box ☐ Triple ☐ Other: ☐ Other: ☐ Other: ☐ Other: ☐ Other: ☐ Double ☐ Partially ☐ Pully ☐ Pully ☐ Partially ☐ Pully ☐ Concrete ☐ Parabolic ☐ Concrete ☐ Parabolic ☐ Trapezoid ☐ Depth: ☐ Top Width: ☐ Parabolic ☐ Top Width: ☐ Double ☐ Trip-rap ☐ Other: ☐ Other: ☐ Double ☐ Trip-rap ☐ Other: ☐ Double ☐ Trip-rap ☐ Other: ☐ Depth: ☐ Top Width: ☐ Depth: ☐ Top Width: ☐ Depth: ☐ Top Width: ☐ Double ☐ Trip-rap ☐ Other: ☐ Double ☐ Trip-rap ☐ Other: ☐ Double ☐ Trip-rap ☐ Other: ☐ Depth: ☐ Top Width: ☐ Depth: ☐ Depth: ☐ Top Width: ☐ Depth: ☐ Dept	Land Use in Drainage	Area (Check all th	at apply):				
Suburban Residential Other: Commercial Known Industries: Notes (e.g., origin of outfall, if known):	☐ Industrial				Open Spac	e	
Commercial Known Industries: Notes (e.g.,, origin of outfall, if known):	Urban Residential				☐ Institutions	al	
Commercial Known Industries:	Suburban Residenti	al			Other:		
Notes (e.g., origin of outfall, if known): Section 2: Outfall Description	,						
TYPE MATERIAL SHAPE DIMENSIONS (IN.) SUBMERGED RCP	<u> </u>	utfall if Iraanun):			- INIOWA INCOS	1105.	
TYPE MATERIAL SHAPE DIMENSIONS (IN.) SUBMERGED Comp	Notes (e.g, origin of o	ditali, li kilowii).					
TYPE MATERIAL SHAPE DIMENSIONS (IN.) SUBMERGED RCP	Section 2: Outfall I	Description					_
Closed Pipe PVC			ERIAL	SI	HAPE	DIMENSIONS (IN.)	SUBMERGED
Closed Pipe		⊠ RCP	☐ CMP	☐ Circular	Single	Diameter/Dimensions:	
Closed Pipe Steel Box Triple Other: Other: Other: Other: Triple Partially Fully Concrete Pavement/Scupper Trapezoid Parabolic Top Width: Bottom Width: Bottom Width: Sediment: Top Width: Fully Flow Present? Yes No If No, Skip to Section 3. If Yes, Notify Town and continue field reconnaissance. Flow Description If present) Flow Direction (If Present):		ПРУС	☐ HDPE	☐ Elliptical	☐ Double	49"	
Other: Ot	Closed Pipe						☐ Fully
Concrete Pavement/Scupper Trapezoid Parabolic rip-rap Other: Other: Bottom Width: Flow Present? Yes No If No, Skip to Section 3. If Yes, Notify Town and continue field reconnaissance. Flow Description (If present) Flow Direction (If Present):							✓ No
□ Pavement/Scupper □ Trapezoid □ Depth: □ Copen drainage □ Earthen □ Parabolic □ Top Width: □ rip-rap □ Other: □ Other: □ Other: □ Other: Bottom Width: □ Flow Present? ☑ Yes □ No If No, Skip to Section 3. If Yes, Notify Town and continue field reconnaissance. Flow Description (If present) □ Trickle □ Moderate ☑ Substantial Flow Direction (If Present):		Other:		Cther:	Other:		Fully
□ Pavement/Scupper □ Trapezoid □ Depth: □ Copen drainage □ Earthen □ Parabolic □ Top Width: □ rip-rap □ Other: □ Other: □ Other: □ Other: Bottom Width: □ Flow Present? ☑ Yes □ No If No, Skip to Section 3. If Yes, Notify Town and continue field reconnaissance. Flow Description (If present) □ Trickle □ Moderate ☑ Substantial Flow Direction (If Present):		☐ Concrete	···				
☐ Open drainage ☐ Earthen ☐ Parabolic ☐ Top Width: ☐ Bottom Width: ☐ Other: ☐ Other: ☐ Other: ☐ How Present? ☐ Yes ☐ No If No, Skip to Section 3. If Yes, Notify Town and continue field reconnaissance. Flow Description (If present) ☐ Trickle ☐ Moderate ☑ Substantial ☐ Flow Direction (If Present):			/C	Transport		Denth:	
☐ rip-rap ☐ Other: ☐ Bottom Width: ☐ Other: ☐ No			/Scupper	_			
☐ Other: ☐ No If No, Skip to Section 3. If Yes, Notify Town and continue field reconnaissance. Flow Description (If present) ☐ Trickle ☐ Moderate ☐ Substantial Flow Direction (If Present):	Open drainage	☐ Earthen					
Flow Present?		☐ rip-rap		☐ Other:		Bottom Width:	
Flow Description (If present) Trickle Moderate Substantial Flow Direction (If Present):		Other:					
Flow Description (If present)	Flow Present?	✓ Yes	□ No	If No, S	kip to Section 3. If Y	Yes, Notify Town and continue field t	econnaissance.
		☐ Trickle	☐ Moderate	e Z Substantial	Flov	w Direction (If Present):	
Section 3: Sketch							·····································
	ection 3: Sketch	-				- Action Property	
					4	B E	
48 "						The same of the sa	
48"					F /		
48 11				1	Section with the second		
48"				· Jest Miles			

(If No, Skip to Section 5)

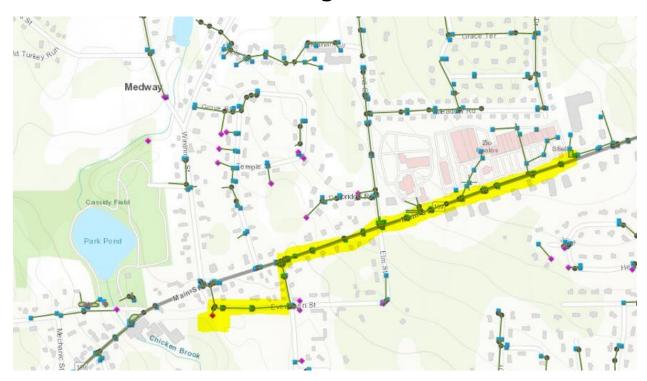
Section 4: Physical Indicators for Flowing Outfalls Only Are Any Physical Indicators Present in the flow?

OF 48-16

- 1. Temperature-47 F
- 2. PH- 7.36
- 3. Conductivity- 783 ps/cm
- 4. TDS- 558 ppm
- 5. Salinity- .30 ppt
- 6. Detergents- .25
- 7. Chorine
 - a. Total- 0
 - b. Free- 0
- 8. Ammonia- 0

		2	

Proposal for Medway Plaza Stormwater Connections and Testing Locations



Highlighted yellow represents the stormwater path from Medway Plaza to outfall.

Legend

Blue square = catch basin Green line = pipe network Black circle = drain manhole Purple diamond = outfall

The image above is from the Town's Drainage System map on ArcGIS Online. The outfall locations are geolocated. Catch basin and manhole points were manually entered using data from available engineering plans including the Route 109 Redevelopment plans and the Medway Plaza plans dated September 7, 2019. In addition, the drainpipe lines were entered manually based on topography and Highway Division staff field knowledge. All points were verified by Highway Division Right-of-Way Supervisor. The stormwater flow path was deduced from these sources.

We propose testing at the following 14 locations:

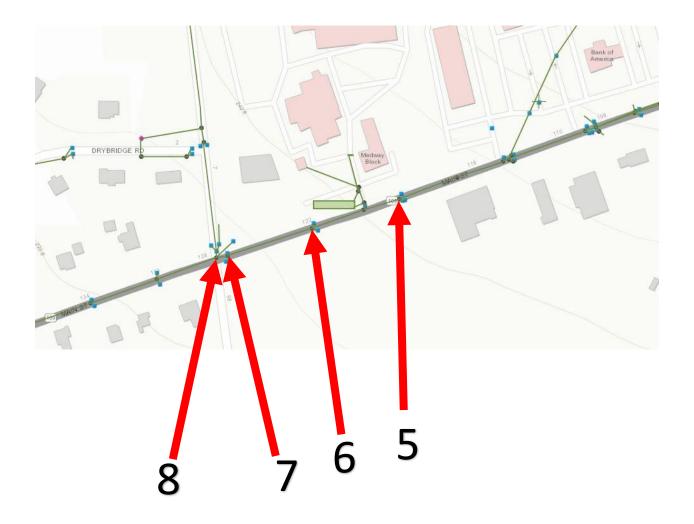


Location 1: Topographical peak. Test this location to determine stormwater composition before it interacts from Medway Plaza's discharge.

Location 2: Medway Plaza direct connection to MS4. Test at manhole (verify ROW at this location).

Location 3: Medway Plaza direct connection to MS4. Catch basin in plaza connects to Town's catch basin on Route 109. Test at manhole.

Location 4: Medway plaza direct connection to MS4. Test at manhole.

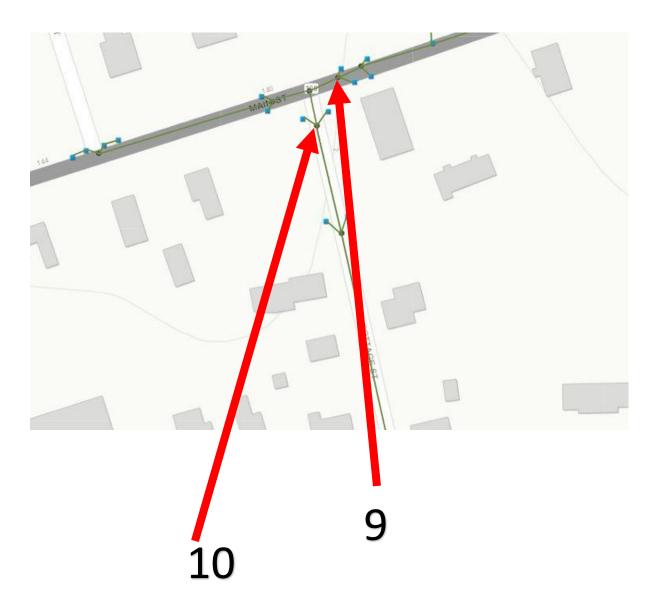


Location 5: Test at manhole before Medway Block.

Location 6: Test at manhole after Medway Block.

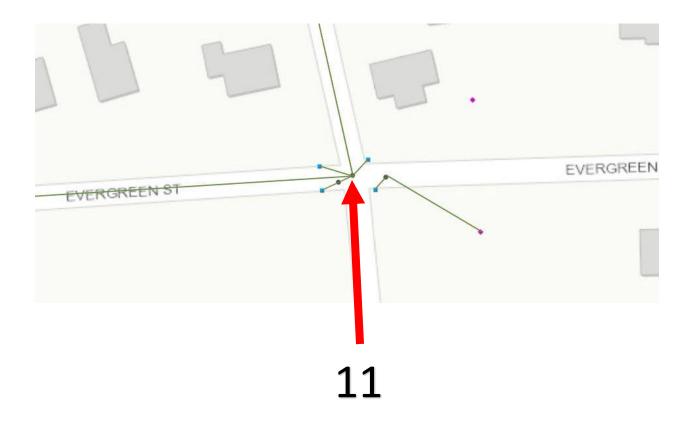
Location 7: Test at manhole before the connection with Pond Street.

Location 8: Test at manhole after connection with Pond Street.

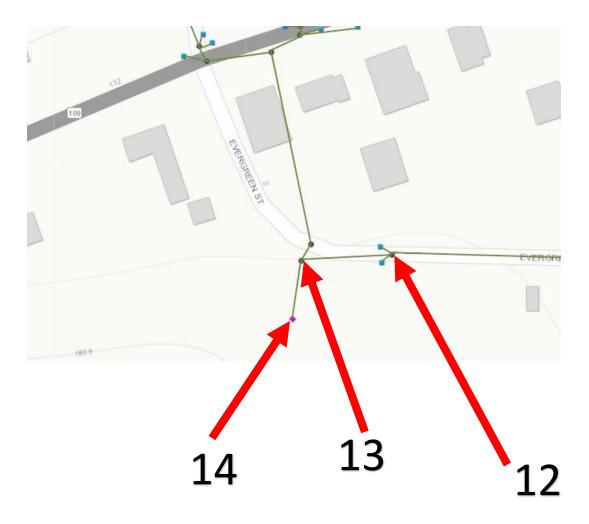


Location 9: Last location before connection with stormwater from other catchment area. Test at manhole.

Location 10: First location with combined catchment areas. Test at manhole.



Location 11: Additional location. Test at manhole that collects stormwater from the three catch basins.



Location 12: Last location before connecting with new catchment area. Test at manhole.

Location 13: First location with combined catchment areas. Test at manhole.

Location 14: Outfall for the Medway Plaza catchment area. Test at outfall.

Stormwater Testing Parameters

Manholes - Stormwater testing shall include:

- E.Coli
- Total Phosphate
- Cadmium, Copper, Lead, Zinc
- Total Petroleum Hydrocarbons

<u>Outfall – Stormwater testing shall include</u>:

- E.Coli
- Total Phosphate
- Cadmium, Copper, Lead, Zinc
- Total Petroleum Hydrocarbons (TPH)
- Temperature
- Salinity
- Conductivity
- Chlorine
- Ammonia
- Surfactants

Bring E.coli, total phosphate, Cadmium/Copper/Lead/Zinc, and TPH samples to R. I. Analytical Laboratories in Hudson, Massachusetts within 6-8 hours of sampling.

Tel: 800-937-2580

Screening and Sampling Equipment

<u>Testing</u>	Equipment:
	Ammonia test strips
	Chlorine test strips
	Surfactant test kit
	Conductivity, pH, salinity, and temperature meter
Camplin	og oguinment
	Nan of comple legations
	Map of sample locations Cliphograd (if not using tablet)
	Clipboard (if not using tablet)
	Sample bottles (pre-labeled and verified on site)
	Data sheets Chair of Control of Secretary And the RRW Control of Secretary Secre
	Chain of Custody forms (return a copy to the DPW Compliance Coordinator.)
	De-ionized water for cleaning sample containers
	Hand sanitizer or wet wipes
	Sample pole
	Pen and/or permanent marker
	Label tape
Ш	Paper towels
Transpo	ort equipment
	Cooler
	Ice for samples
Taala	
Tools	Flack links and /an land allows
	Flashlight and/or headlamp
	Manhole hook
	Shovel Problem on nick
	Pry bar or pick
	Measuring tape
Ш	Traffic cones
Persona	al Protection Equipment
	Nitrile gloves
	Safety glasses
	Safety vests
	Waders or knee-high rubber boots



TOWN OF MEDWAY COMMONWEALTH OF MASSACHUSETTS

Medway Department of Public Works 45B Holliston Street Medway, MA 02053 Phone (508) 533-3275 Fax (508) 321-4985

Department of Public Works

<u>Director</u>

David D'Amico

<u>Deputy Director</u> Peter Pelletier

RE: Illicit Discharge Removal Report

As a part of the MS4CD Permit Application review, the DPW implemented its catchment investigation procedure on April 1, 2020. Dry weather flow was present at a few locations in the catchment area and the DPW collected stormwater samples in order to trace any contamination back "between two manholes." The Town received the results and determined that there was an illicit discharge (E.coli) coming from the commercial property. Since its discovery the Town has worked extensively with the property owner, legal teams on both sides, and engineering teams on both sides to identify the source of the contamination and remove it.

The property owner disputed the results from the stormwater testing conducted by the DPW during dry and wet weather conditions that showed high levels of E.coli. Dry weather testing occurred on April 1, 2020 and wet weather testing occurred on June 11, 2020. The DPW ordered a cease and desist on June 17, 2020 and required the property owner to trace their system to identify the source of contamination. If the source was not removed by July 17, 2020, the DPW was prepared to plug their connections to the Town's MS4 to prevent further contamination. At that time, the property owner was still disputing the sampling results and denying any issue. Therefore, in order to avoid an injunction, the DPW and property owner agreed to conduct wet weather sampling simultaneously so the results could not be disputed.

Testing occurred on August 17, 2020, and the results from both parties showed that E.coli was present. The DPW established a new deadline for the property owner to find and remove the source of contamination (September 17, 2020). The property owner's engineer conducted a camera investigation on September 4, 2020 and did not find any cross connections; however, they did find that part of the pipeline was collapsed, and another section was blocked with sediment. On September 8, 2020 the line was cleaned, and a camera investigation is being scheduled. On September 15, 2020 the property owner's legal team acknowledged that they need to replace the collapsed section of pipe; however, they would prefer to do so when they redo their parking lot. The DPW denied this request because the parking lot renovation is a part of a separate action item that involves the MS4CD Permit and Site Plan Approval. The DPW will not approve a MS4CD permit with connection that has a known contaminant entering the Town's MS4.

The planned corrective action includes additional camera investigation if the section of pipes that were missing, and additional sampling at catch basins along the drain line to determine the origin of the contamination. If it is determined that the source of contamination is from surface runoff, then the DPW will require a more robust O&M plan demonstrating how the property owner will implement good housekeeping practices.