

**The Buzzards Bay Stormwater Collaborative
Illicit Discharge Investigation Trailer**



Town of Mattapoisett Report

July 2021

MassDEP MS4 Municipal Assistance Grant Program 2020-2021

Collaborative Partners: Massachusetts Maritime Academy, Buzzards Bay National Estuary Program and the municipalities of Bourne, Wareham, Marion, Mattapoisett, Fairhaven, Acushnet, Dartmouth, and Westport.

Report Prepared by: Kevin Bartsch, Buzzards Bay National Estuary Program and Maura Flaherty, Massachusetts Maritime Academy

Mattapoisett IDDE Report

Illicit Discharge Detection and Elimination Field Work during April 26 through April 29 with follow-up the week of July 19.

This report summarizes the findings from the Buzzards Bay Stormwater Collaborative discharge investigation under the 2021 MassDEP Stormwater Investigation Trailer grant. A total of 18 storm drain networks were examined for illicit connections. Each storm drain network is a collection of connected structures that discharge to one point and is referred to by the facility ID of the outfall pipe. Each network is a reflection of the stormwater catchment in which the structures collect stormwater and runoff. The purpose of an IDDE is to detect illicit connections that do not comply with the MS4 permit for stormwater discharges. There were no illicit connections detected in the observed storm drain networks. The storm drain issues found are minor and itemized in this report with recommendations of possible actions to address.

Within the networks surveyed, each structure was opened by the DPW and inspected for evidence of illicit connections. Any indications of odors, unusual colors, excessive trash or debris, sheens, suds, or structural issues were recorded. Each pipe entering the structure was recorded for size, type, and invert from the rim. Dry weather flow and standing water in the structure were also recorded. Direction to adjacent structures were verified and pipes with no apparent connection were checked with a camera or other method to best determine the situation. In areas with potential for a sewer cross connection the camera was used to inspect the pipe.

Some general observations for all the catchments visited: catchbasins are well maintained and clean but a few had some debris accumulation; roadways and sidewalks were clean of pet waste; and there were several sump pump and yard drain connections to catchbasins. This investigation identified at least one interconnection between the town drainage and state drainage systems at the intersection of Railroad Avenue and Route 6. Another interconnection is suspected at the intersection of Main Street and Route 6.

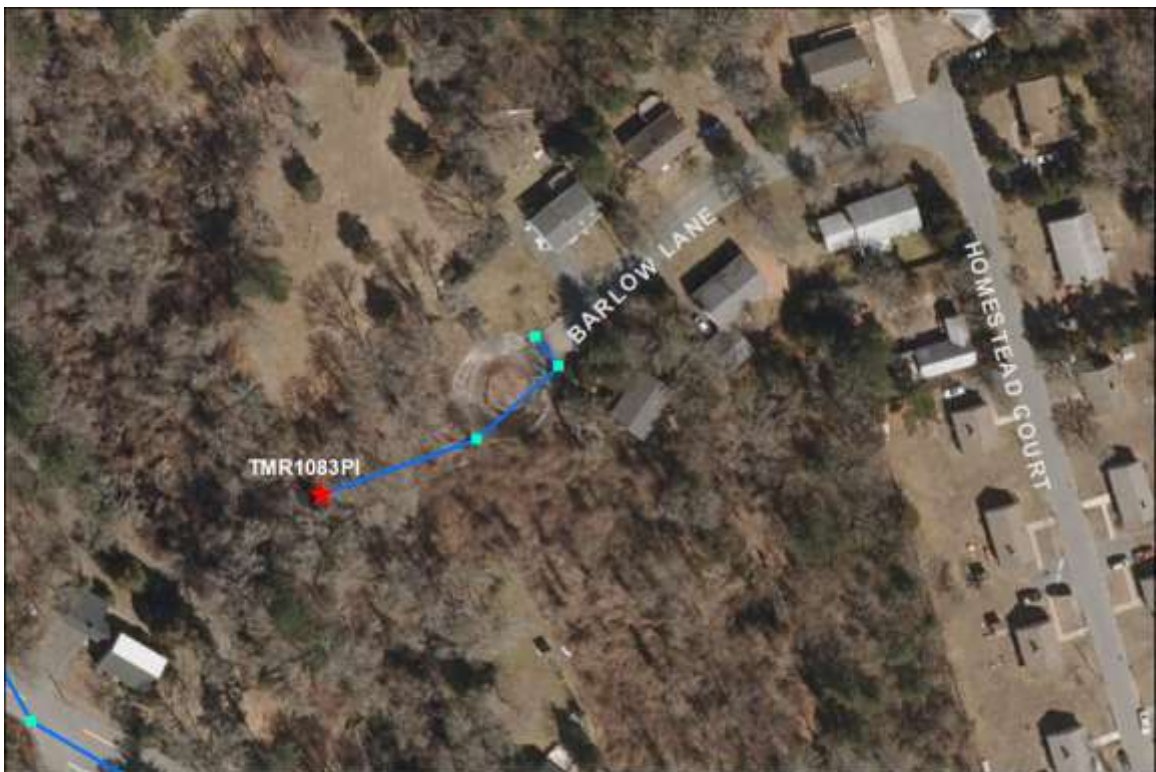
A difficult investigation area is the drainage at the intersection of Church and Main Streets. There is a buried culvert that connects some of the structure pipes and this presents high potential for illicit connections. A different type of camera is required for a covered culvert of this nature. Additional work in this area should be done.

The data collected was used to update the Buzzards Bay National Estuary Program stormwater GIS. Despite the extensive mapping of the Mattapoisett drain network that the team started with before the investigation, there were opportunities for many corrections and additions while going through the investigation process. Updated maps depicting the inspected networks are included below. Red stars indicate outfall pipes, light blue squares show catchbasins, brown circles show drain manholes, and blue lines show connecting pipes. Drainage interconnections are shown as red circles filled with yellow. Issues found within the network are annotated. Issues and recommendations are included in the text below each map.

The areas inspected were the drain networks located in the watershed of Tub Mill Brook with the exception of Upland Way and Hitching Post Road. Below are the observations made for each of the 18 storm drain systems. Each drain system is referenced by the facility ID of the outfall pipe and street name.



TMR1076PI – Mendell Road: no issues found; note that vehicle washing in front of the DPW garage will enter this system, recommend avoiding the use of detergents and address spill prevention. TMR1077PI – Acushnet Road: no issues found; the pipes from both directions enter into the culvert for Tub Mill Brook.



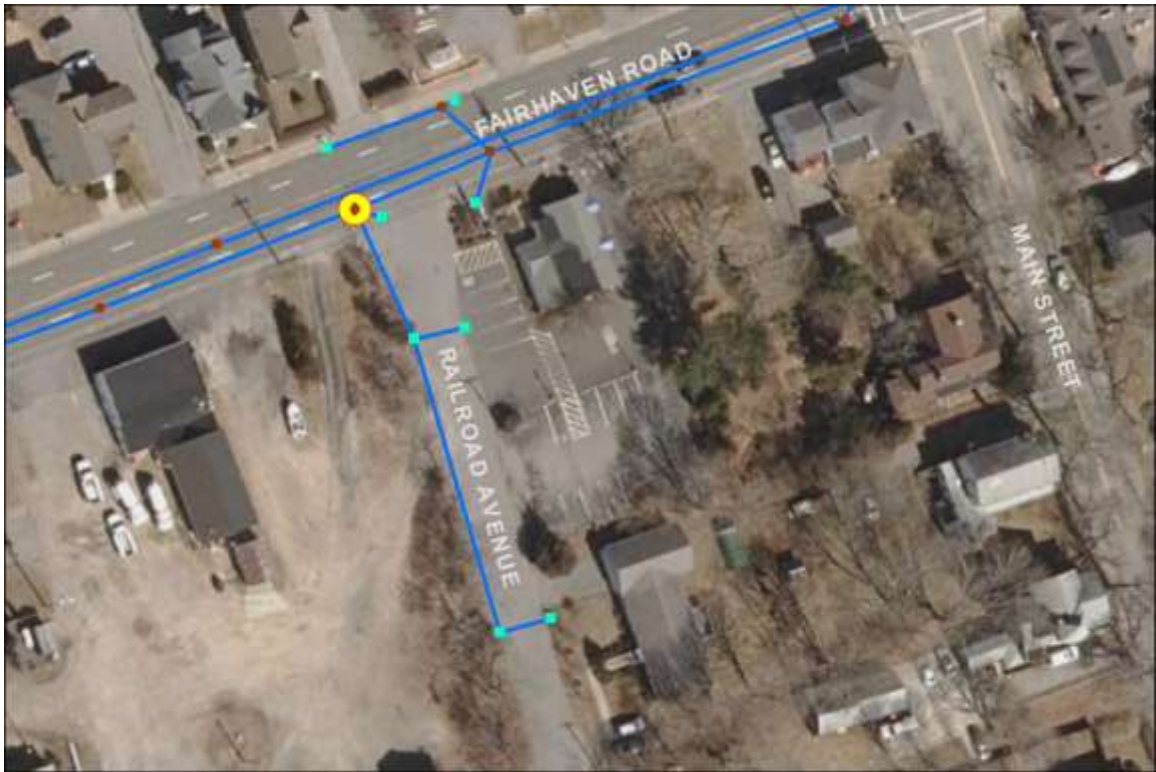
TMR1083PI – Barlow Lane: private road; outfall pipe could not be found; structures are in poor condition; recommend that the owner be compelled to repair structures.



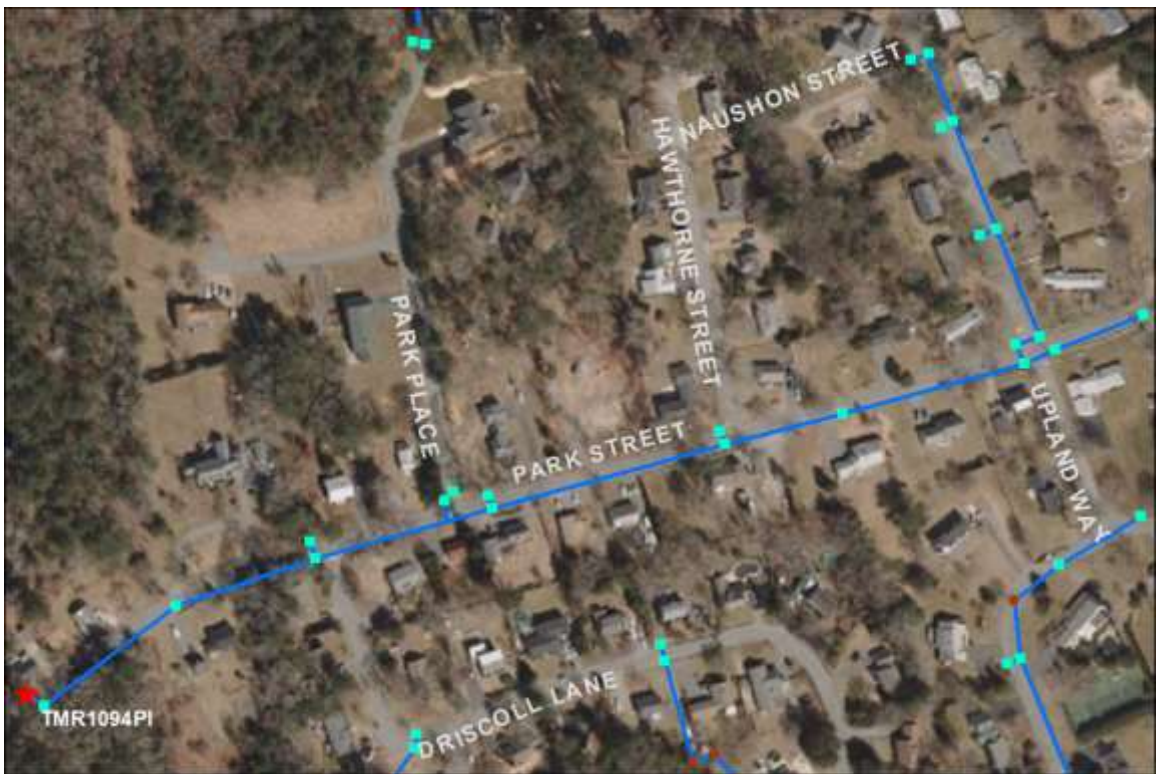
TMR1102PI and TMR1281PI – Park Place: no issues found; the system includes structures to retain high flows; the outfall was recently moved to accommodate the construction of another home; some catchbasins in this area require cleaning.



TMR1087PI and TMR1081PI – Driscoll Lane: no issues found; the two manhole junctions shown behind homes have concrete covers and could not be inspected; several sump pump drains were observed but none were flowing; the ground water flow at outfall TMR1081PI was tested for detergents but none were detected.



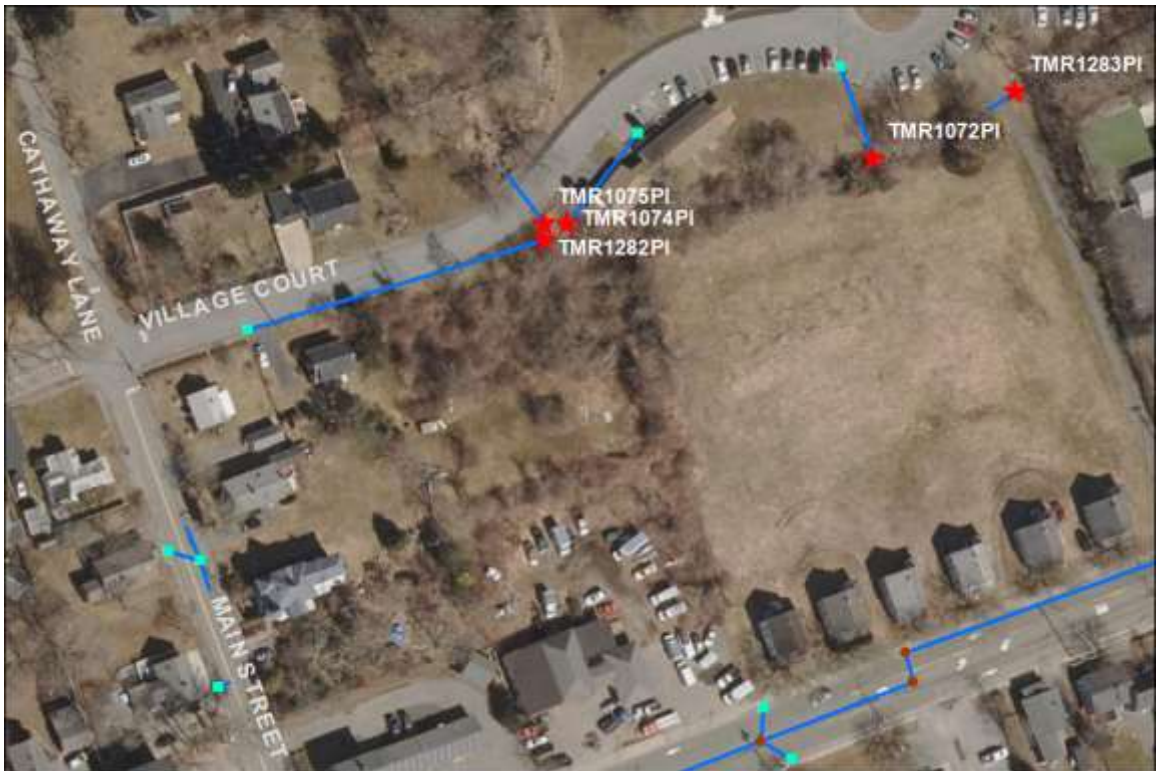
Railroad Avenue: no issues found; the activities to the West could be industrial and impact these catchbasins; recommend testing sumps for evidence of oil; these structures drain to an interconnection on Route 6.



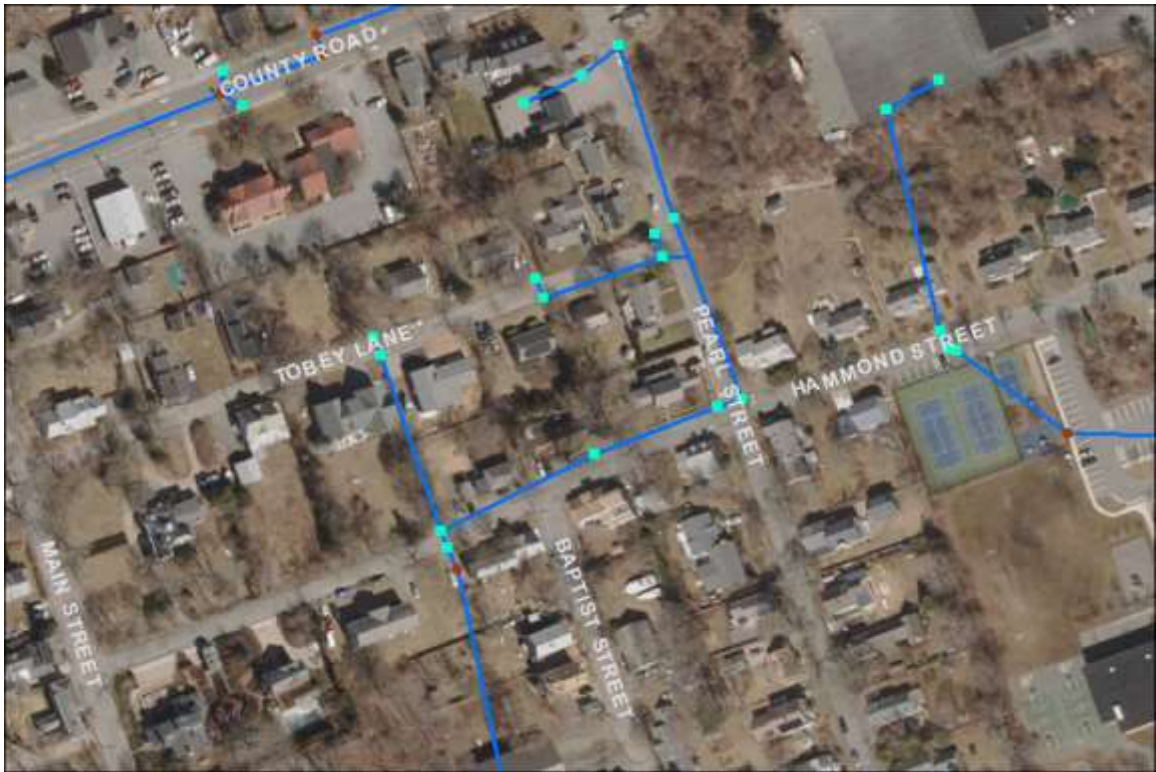
TMR1094PI – Park Street: no issues found; this large network drains into a channel at 17 Park Street and will also drain into the wetland across the street; the wetland flows in the direction of the channel when no storm flow is present.



TMR1092PI (culvert) and TMR1284PI (outfall) – Park Street: no issues found; the boat yard appears to drain into this system; several dead-end pipes observed that are perhaps installed for future drain expansion.



Housing Authority at Village Court: no issues found; TMR1075PI and TMR1283PI are simple culverts; TMR1074PI and TMR1072PI drain one catchbasin each; TMR1282PI could not be found; Main Street may connect to Route 6.



TMR1058PI – Main Street: no issues found; this is an extensive network and cumulates into a covered culvert with several pipes entering that cross Main Street; catchbasins on Church and Baptist Streets require cleaning.



Upland Way and Hitching Post Road: no issues found; blocked pipes were reported and an attempt to jet the obstruction was made; the source of the problem is a poorly installed bend in the pipe at the location marked A; this storm drain network continues South across route 6 and then to the Bay; there may be a state interconnection at Route 6; this investigation stopped at Hitching Post Road.