

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



Town of Acushnet 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

Acushnet IDDE Report

Illicit Discharge Detection and Elimination Field Work during May 10 through May 13

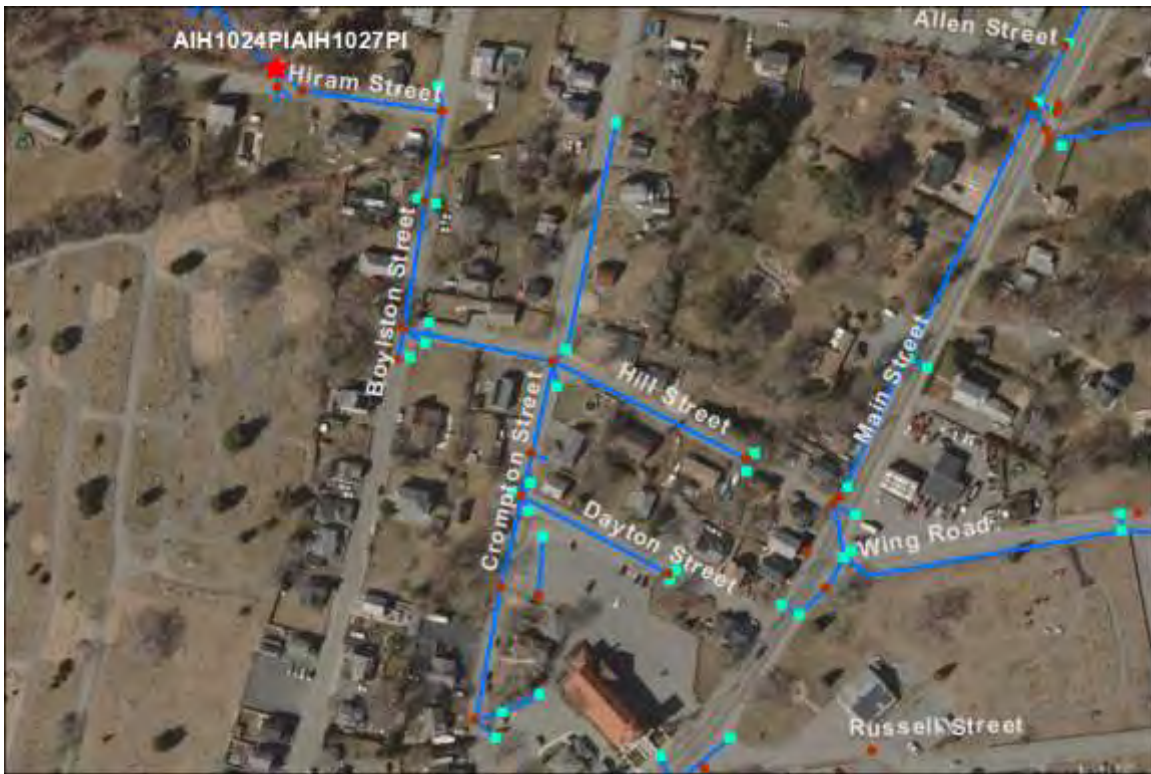
This report summarizes the findings from the Buzzards Bay Stormwater Collaborative discharge investigation under the 2021 MassDEP Stormwater Investigation Trailer grant. A total of 14 storm drain networks were examined for illicit connections. Each storm drain network is a collection of connected structures 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 in most areas; and there were several sump pump and yard drain connections to catchbasins.

The data collected was used to update the Buzzards Bay National Estuary Program stormwater GIS. Despite the extensive mapping of the Acushnet 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, if present, 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 flowing directly into the Acushnet River or a tributary of the Acushnet River. Below are the observations made for each of the 14 storm drain systems. Each drain system is referenced by the facility ID of the outfall pipe and street name.



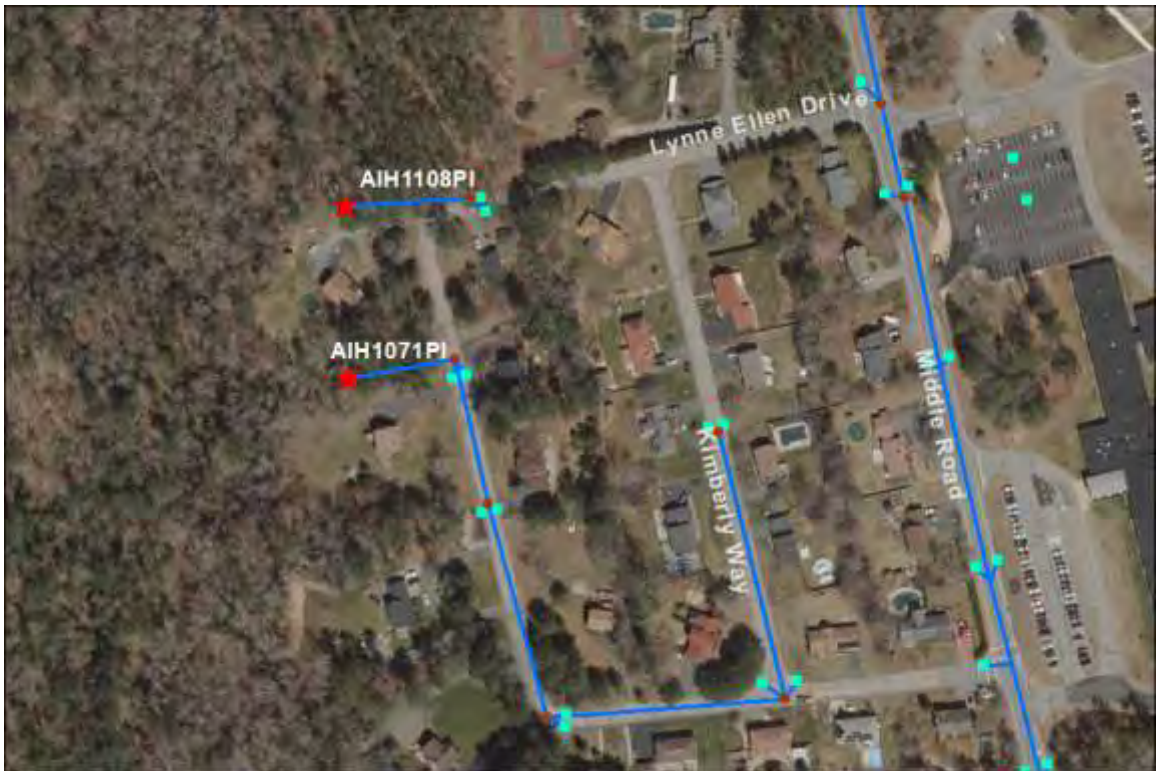
AIH1024PI and AIH1027PI – Hiram Street: no issues found; AIH1024PI has two storm pipes of undetermined origin; further investigation recommended; at the intersection of Boylston and Hill Streets, one broken catchbasin grate and one broken manhole frame were observed.



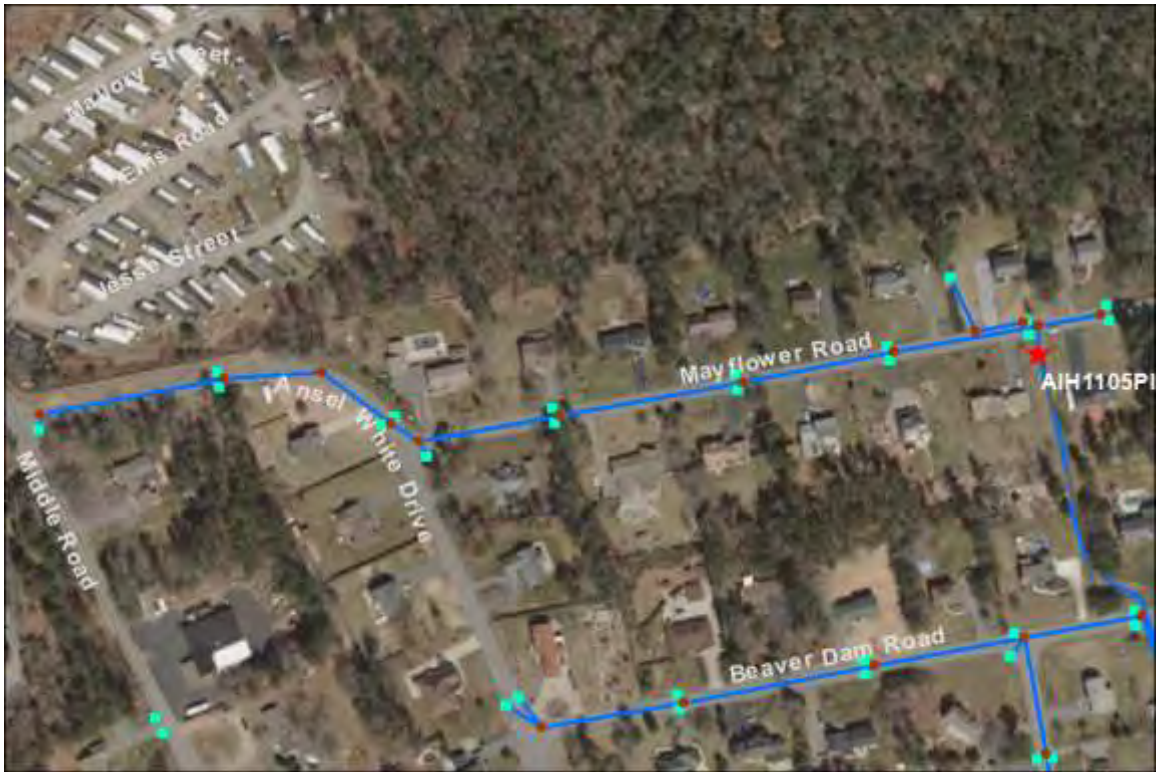
River Street: no issues found; AIH1025PI services Guillotte Street and drains through the park; AIH1023PI is a simple culvert; AIH1022PI appears to drain only two catchbasins on Slocum Street.



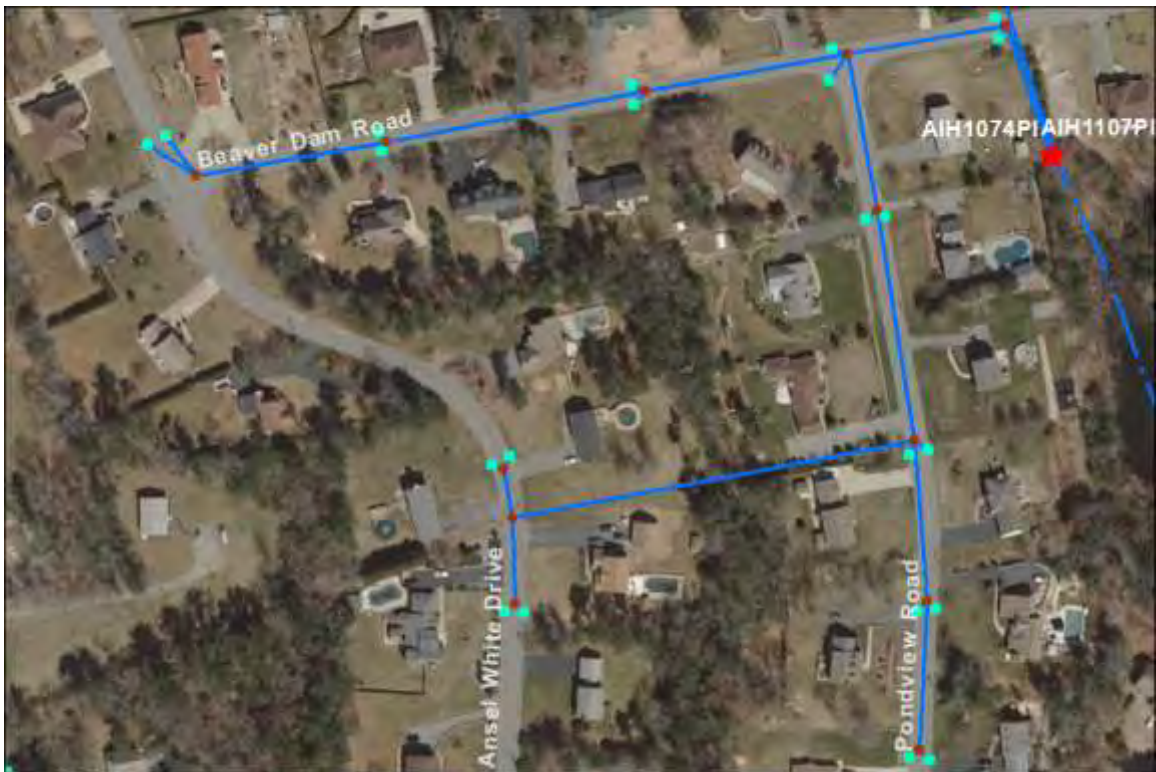
AIH1020PI – Titlelist Drive: no issues found; additional structures are shown on engineering drawings; follow-up field work recommended.



AIH1108PI and AIH1071PI – Lynne Ellen Drive: no issues found.



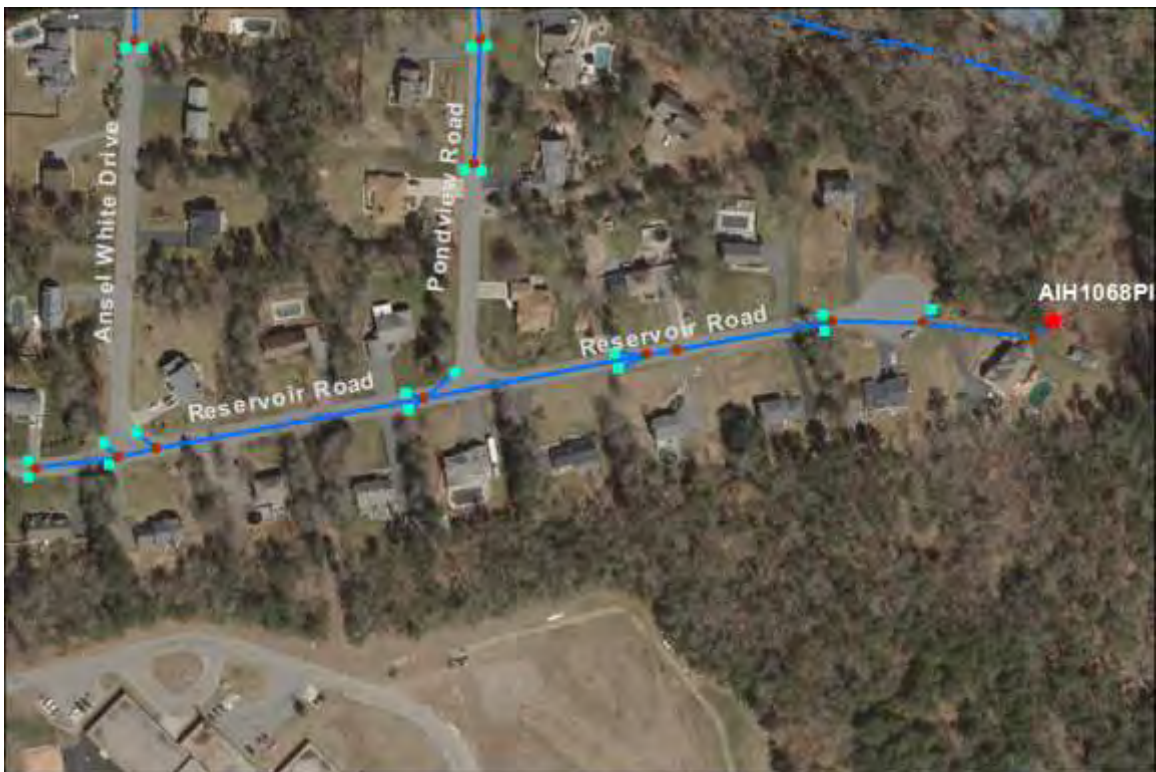
AIH1105PI – Mayflower Road: no issues found.



AIH1074PI (outfall) and AIH1107PI (culvert) – Beaver Dam Road: no issues found.



AIH1073PI and AIH1106PI – Waterfall Road: no issues found; the catchbasin at marked location A contained cloudy water; the sump water did not test positive for bacteria or detergent contamination; suspect suspended solids from local construction activity; no further action recommended.



AIH1068PI –Reservoir Road: no issues found.