

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



Town of Westport Report

August 2022

MassDEP MS4 Municipal Assistance Grant Program 2020-2021

MassDEP MS4 Municipal Assistance Grant Program 2021-2022

**Stormwater Investigation Contract between the Town of Westport
and the Massachusetts Maritime Academy FY2022**

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

Westport IDDE Report

Illicit Discharge Detection and Elimination Field Work during the spring of 2021 and the spring of 2022.

This report summarizes the findings from the Buzzards Bay Stormwater Collaborative discharge investigation under the 2021 MassDEP Stormwater Investigation Trailer grant, the 2022 MassDEP Stormwater Investigation Trailer grant, and the Stormwater Investigation FY22 contract between the town of Westport and the Massachusetts Maritime Academy. A total of 102 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 reflects the stormwater catchment in which the structures collect stormwater and runoff. The purpose of an IDDE is to detect issues that do not comply with the MS4 permit for stormwater discharges. As partners with the town, this report is an internal document for informational purposes only. It includes recommendations of possible actions to address identified issues.

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. Additionally, a few water samples were collected and analyzed for various parameters.

Some general observations for all the catchments visited: catchbasins are well maintained and clean; roadways and sidewalks are mostly free of pet waste; there are certain neighborhoods with excessive lawn fertilization; the public that stopped by to chat are generally concerned for the environment.

One of most significant observations observed under the 2021 MassDEP grant investigation process were numerous interconnections between the town stormwater drainage system and the state stormwater drainage system along Route 6. Another observation was multiple sump pump connections found in several catchbasins. Sump pumps and yard drains are acceptable under the MS4 permit and local policy provided that only groundwater is pumped into the storm drain network. Most sump pump connections were not running so no samples could be collected. There were a few catchbasins that had sump pumps and grey standing water in the sump. High surfactants results came back for water samples taken at two of these catchbasins. There is a possibility of an illicit connection at these basins however there is also the possibility residents had just washed their cars. Follow up testing is recommended at both locations. An outreach effort on proper use of sump pumps is also recommended. This could be done with a newspaper editorial as a cost effect approach to appeal to individuals willing to correct their own illicit connections. Other sump pump issues would need to be addressed on a case-by-case basis when discovered.

Similar observations were discovered under the 2022 MassDEP grant and the FY22 town contract. However, the most significant observations this round were the discovery of two suspected illicit connections. These connections both appeared to be illicit connection between a washer machine and a catchbasin. The first location of a suspected illicit connection is in the catchbasin in front of house #15 on Maddison Court. The second location is at the catchbasin just before house #9 on University Drive. The suspected illicit connection is coming from the backside of house #725 off the adjacent Sanford Road. Further action by the town of Westport is necessary. More details on these connections are in the report below.

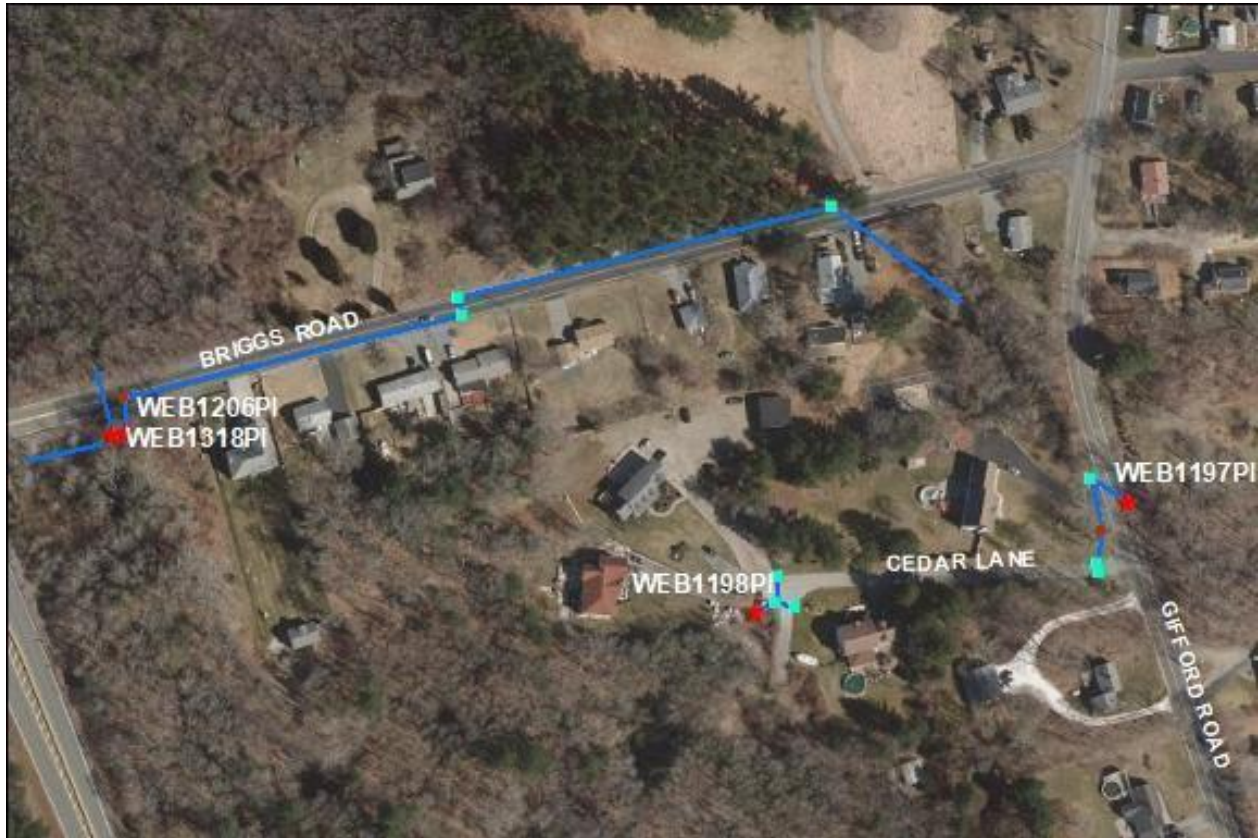
The data collected was used to update the Buzzards Bay National Estuary Program stormwater GIS. Despite the extensive mapping of the Westport drain network that we started with before the investigation, there were opportunities for some corrections and additions while going through the investigation process connecting pipes. 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. Issues and recommendations are included in the text below each map.

Below are the observations made for each of the 102 storm drain networks. Each drain system is referenced by the facility ID of the outfall pipe.



WEB1161PI- Zulmiro Drive: no issues found; discharge pipe not found. The pipe leaving the manhole at point A does not connect to the manhole nearby in the strip mall parking lot. Further investigation is

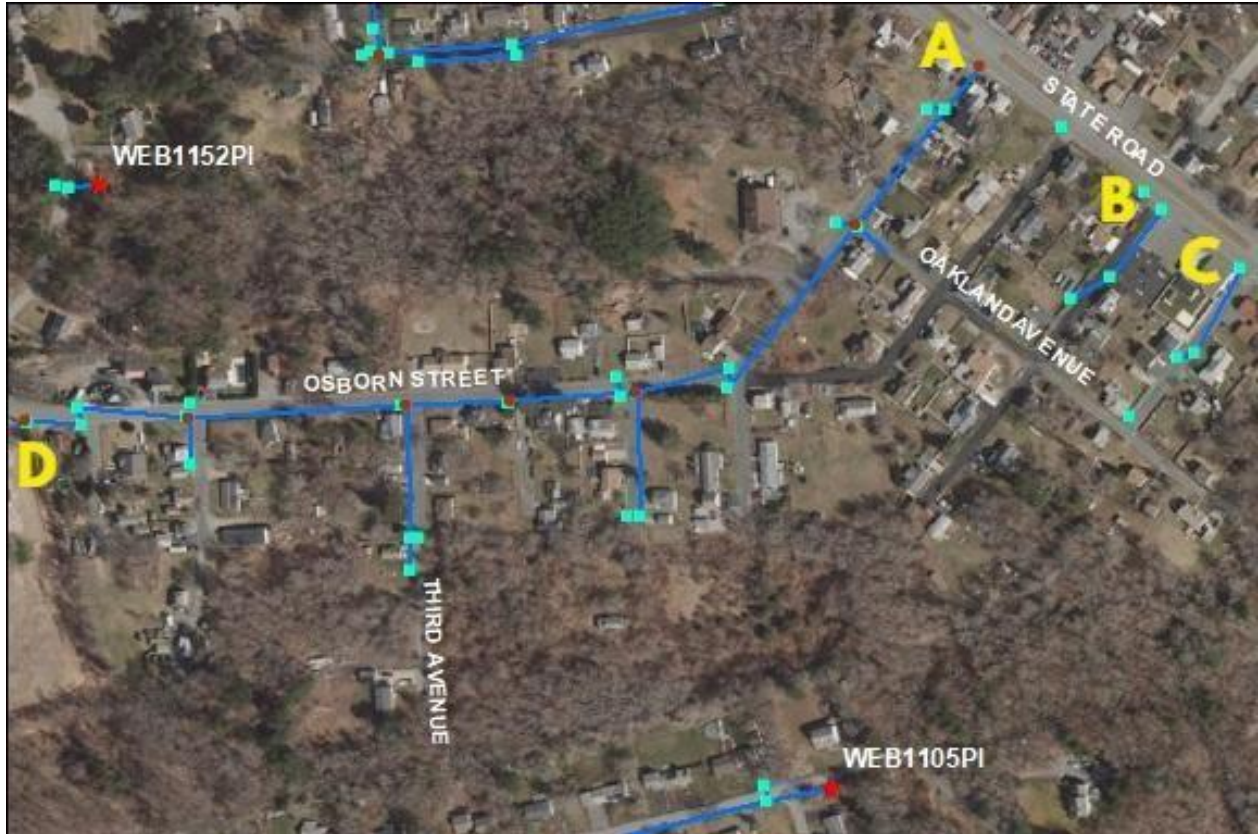
needed to determine where the pipe discharges. Point B at the strip mall and point C on East Briggs Road show interconnections between the town and state stormwater drainage systems.



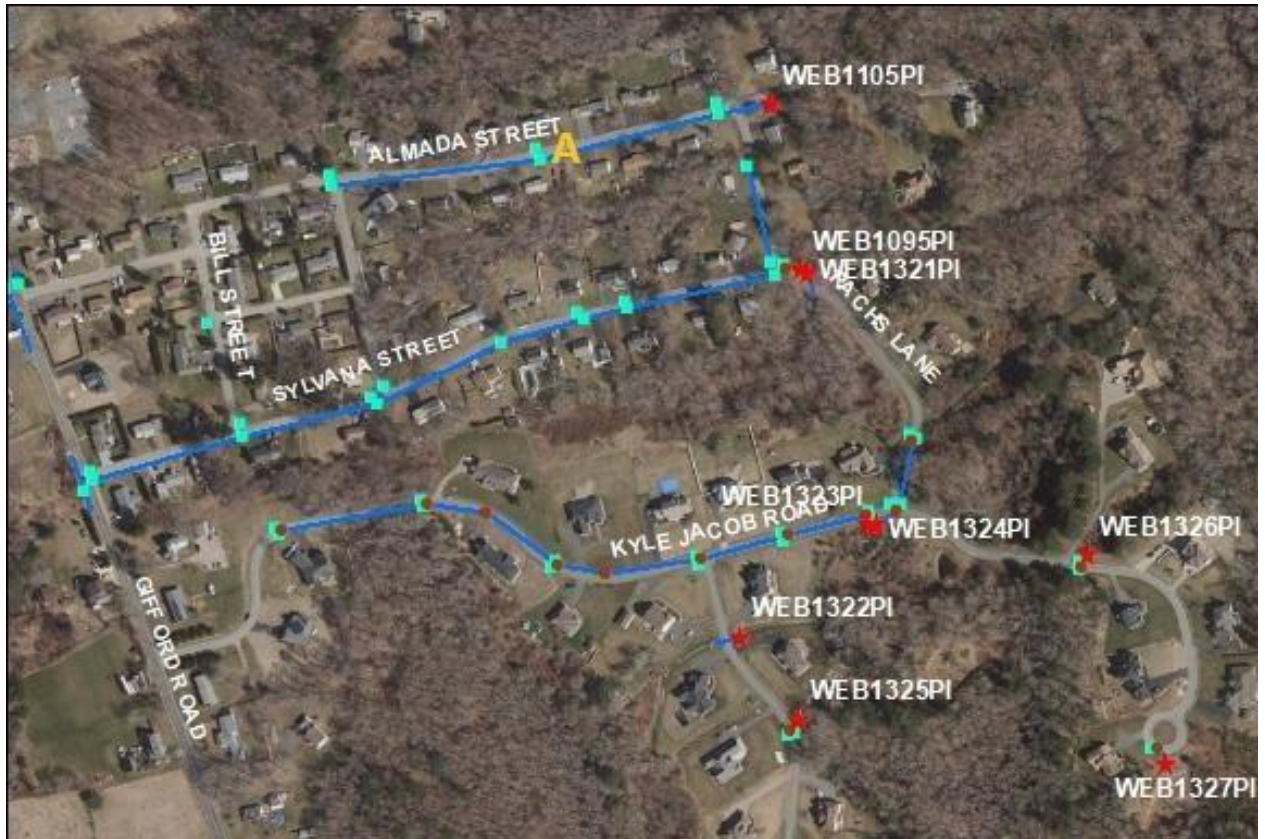
WEB1318PI (culvert) and WEB1206PI (outfall) - Briggs Road: No issues found. WEB1197P and WEB1198PI - Cedar Lane: No Issues found; catchbasins need cleaning.



Infiltration Catchbasins not connected to drainage system along County Street. There is a buried manhole at the intersection of County Street and Maple Street. The discharge point for Maple Street is not clear. At point A, pipe leaves the catchbasin, its destination needs further investigation.



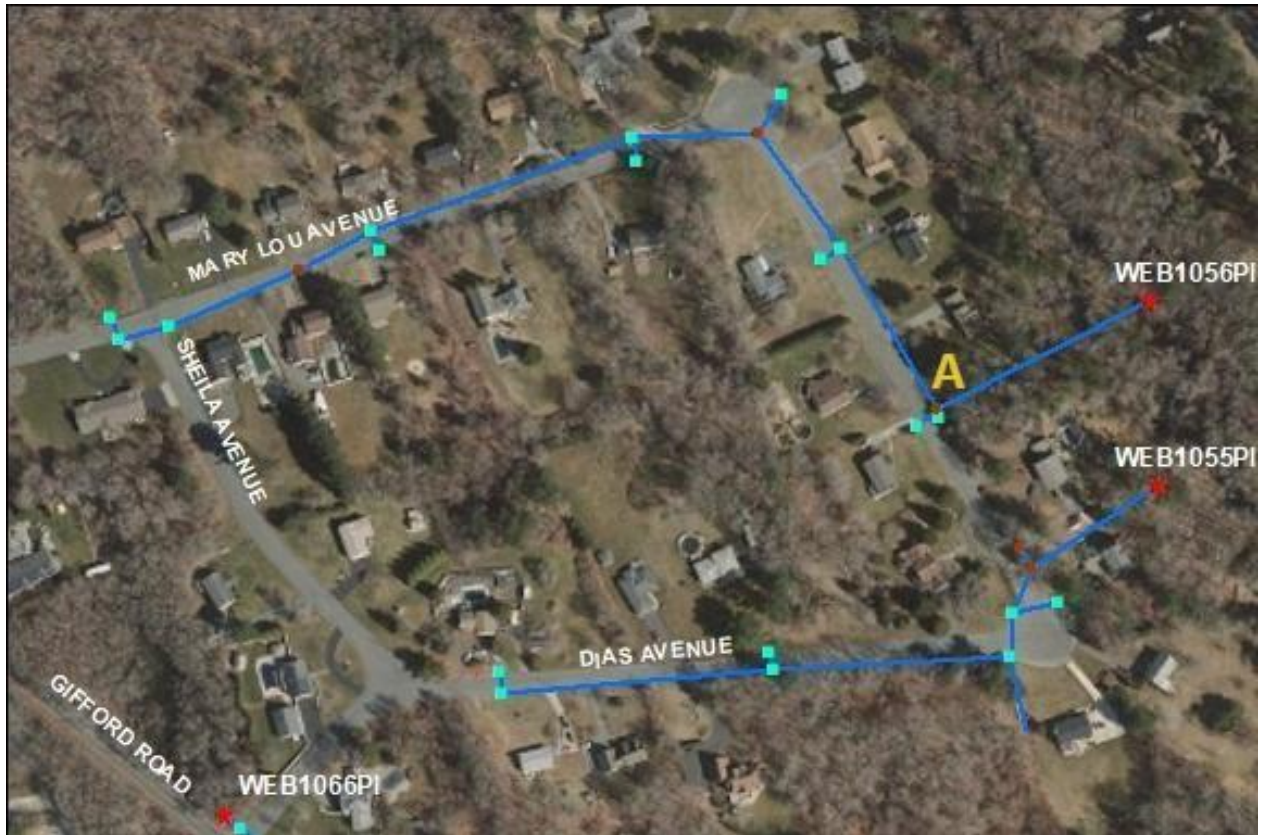
WEB1152PI - Celtic Drive: Minor issues found. Interconnections between the town's stormwater network and the state's network found at point A at Arlington Avenue, point B at Glenwood Avenue, and point C at Elmwood Avenue. Sump pump found at point D on Fifth Avenue. Water sample tested here had high levels of surfactants. Recommend a BOH or other appropriate authority inspection. Third Avenue reports flooding.



WEB1105PI - Almada Street: No issues found. Catchbasin in front of 44 Almada Street (point A) has significant green growth on and around pipe entering basin. Indicates pipe is constantly flowing but no sign of illicit. Source of flow is unknown. WEB1095PI - Sylvana Street: No issues found. WEB1323PI, WEB1324PI, WEB1326PI, and WEB1327PI - Kyle Jacobs Road: No issues found. WEB1322PI and WEB1324PI - Mellissa Beth Way: No Issues found. WEB1321PI - Rachs Lane: No Issues found. Several outfalls listed here were newly discovered and were inventoried.



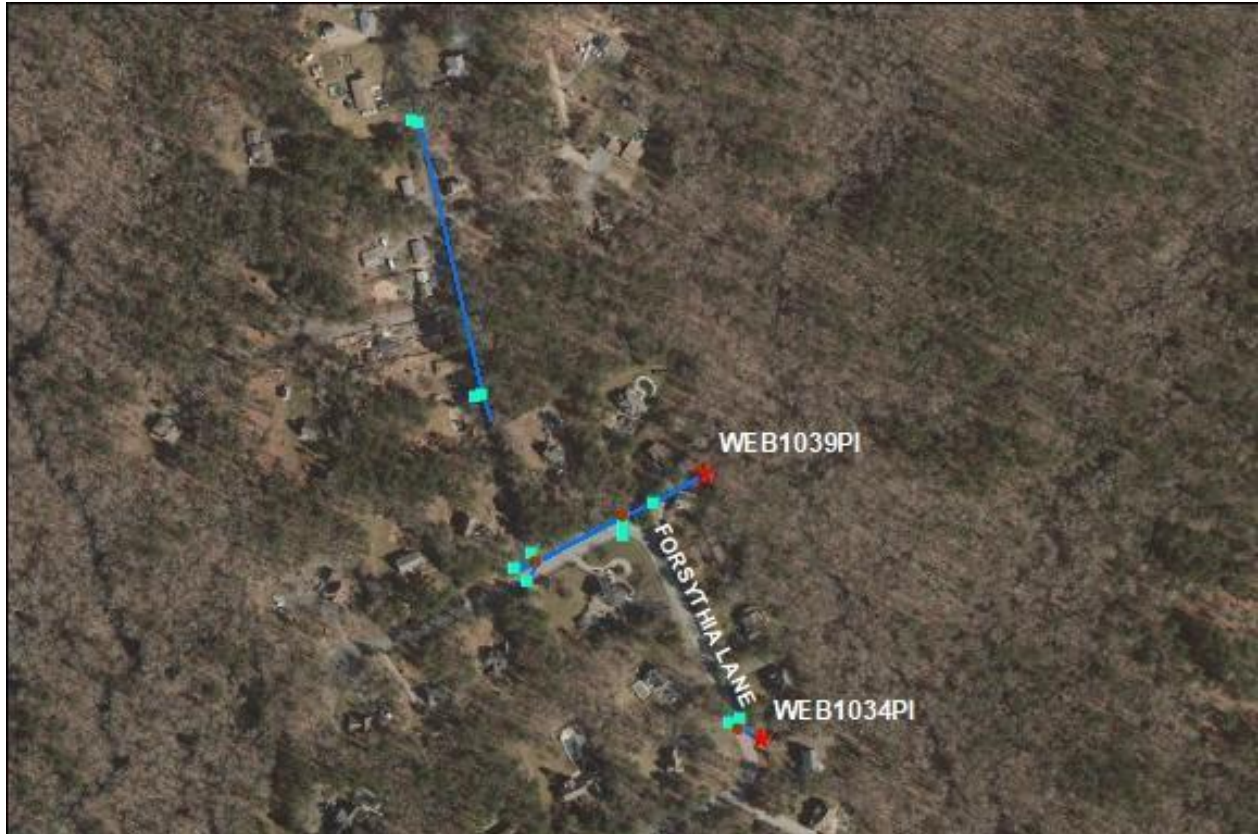
WEB1074PI - Steven Avenue, WEB1071PI - James Avenue, and WEB1062PI - Andrea Court: No issues found. The stormwater manholes on Andrea Court are labeled "SEWER".



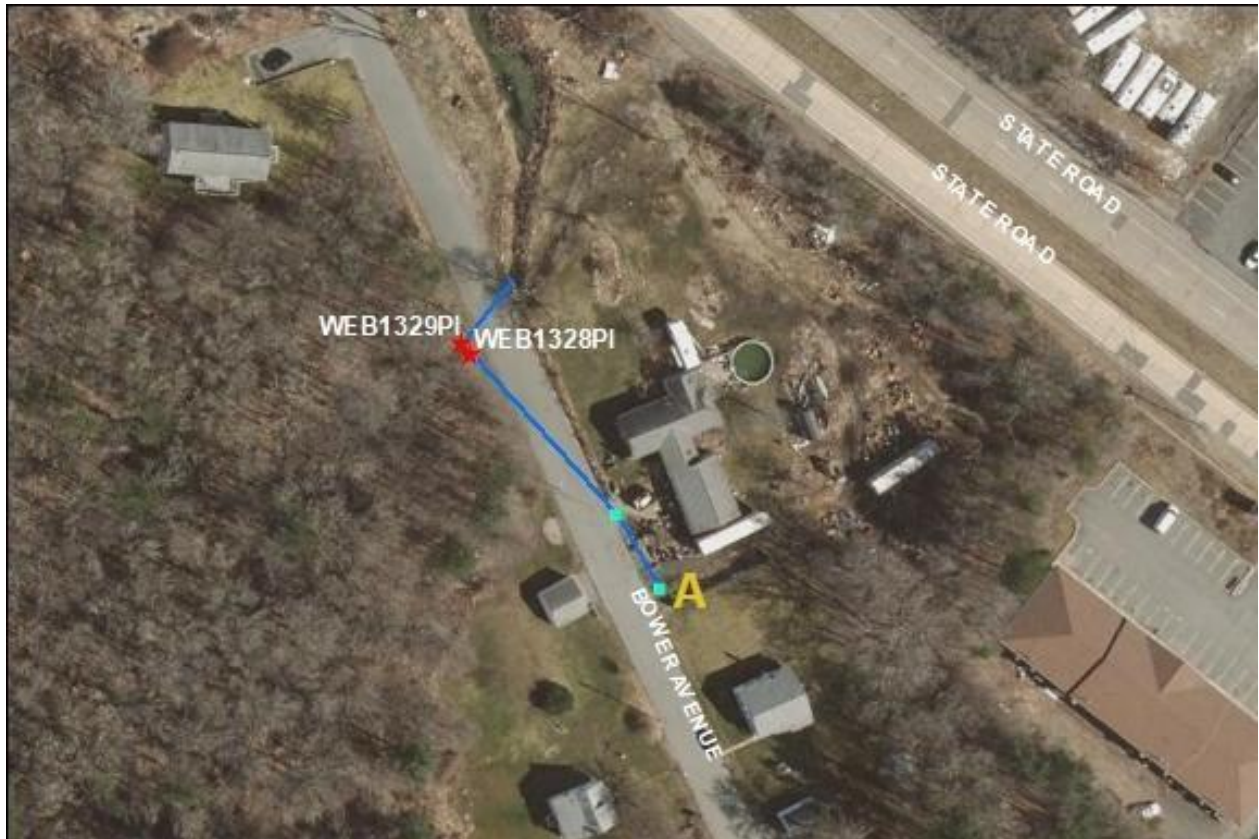
WEB1056PI and WEB1055PI - Brookside Ave: No issues found. At point A an unknown pipe enters manhole. Camera was deployed and could not reach destination. Further investigation is required.
WEB1066PI - Dias Avenue: No issues found.



WEB1028PI and WEB1038PI - Fieldstone Drive: No issues found. WEB1050PI - Forsythia Lane: Manhole at point A is sinking and repairs are recommended.



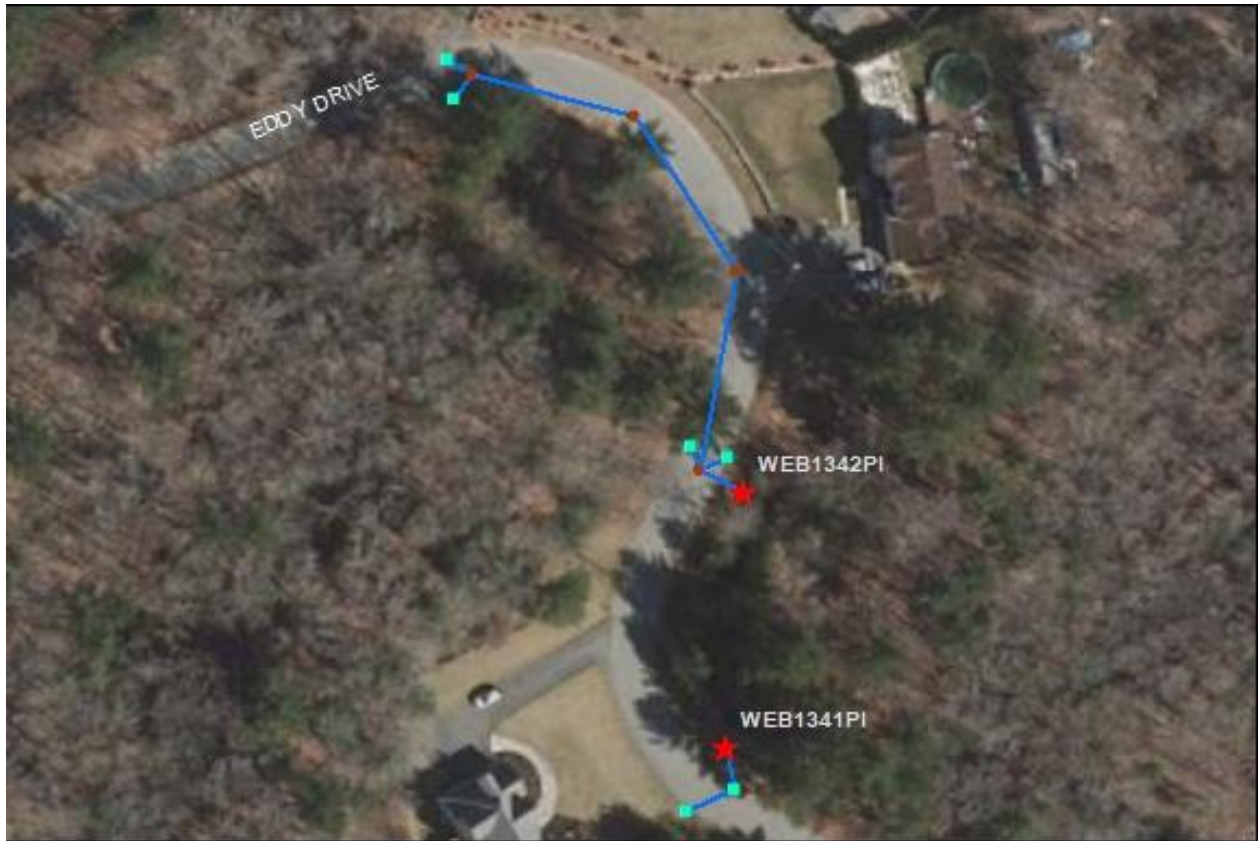
WEB1034PI - Forsythia Lane: No Issues found. Catchbasins on Center Street are infiltration basins, destination of pipe leaving last catchbasin unknown. Further investigation required.



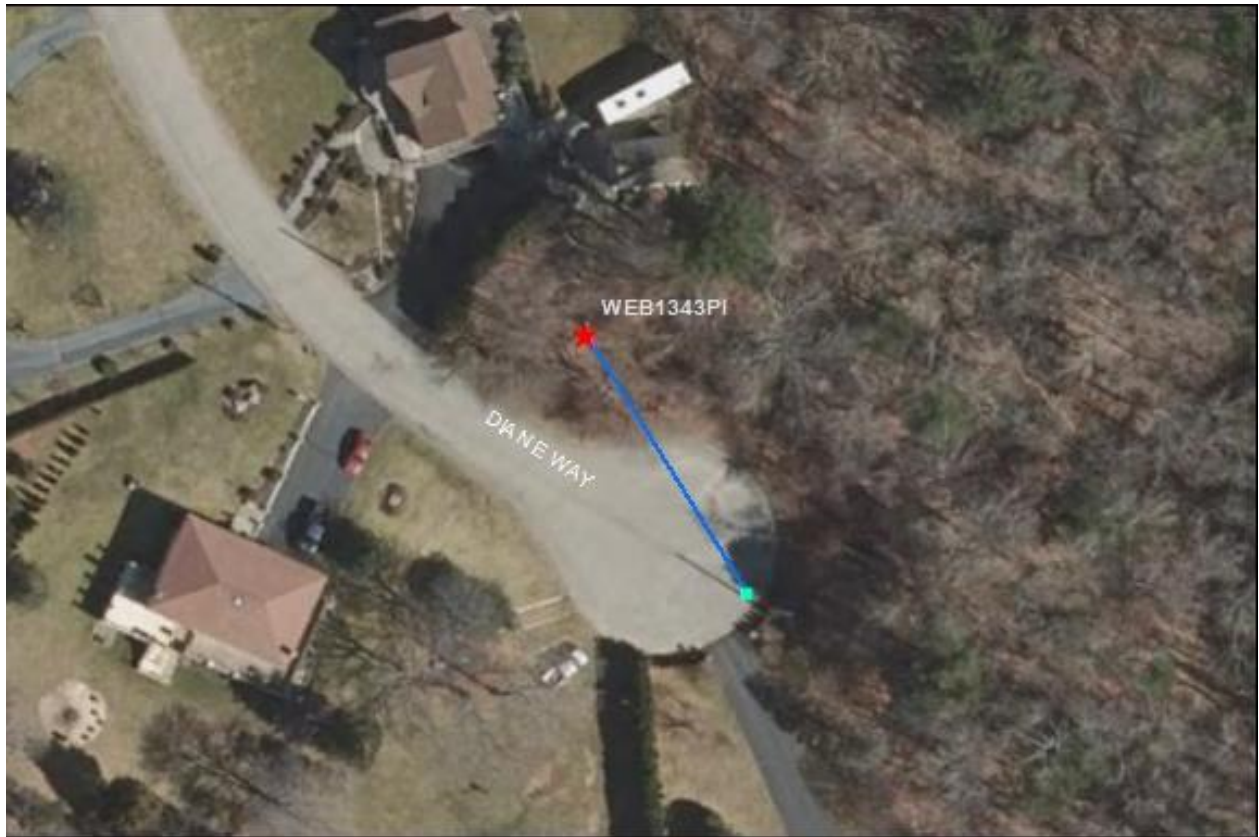
WEB1329PI and WEB1328PI - Bower Avenue: Potential Issue Found. At point A, catchbasin had grey water. Surfactants results came back high. Catchbasins are on a gravel driveway. Most likely from car washing however sump pump connection is present; recommend follow-up surfactant test.



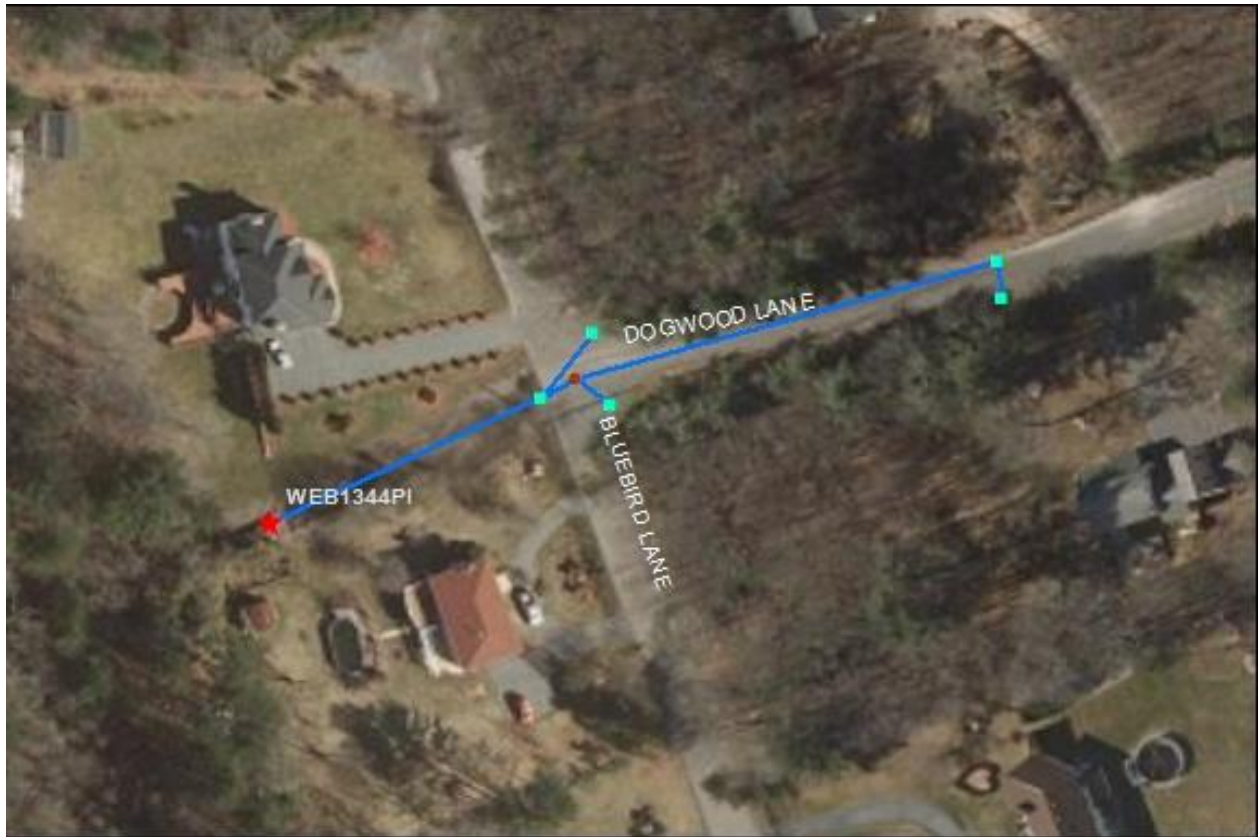
WEB1330PI and WEB1331PI - Union Avenue: Potential issues found. At point A catchbasin had grey standing water. Surfactant and Nitrates results were high. Sump pump present. Most likely from car washing; recommend follow-up surfactant test. At point B, pipe left catchbasin in direction of culvert. Road work was in process. Outfall for catchbasin needs to be inventoried.



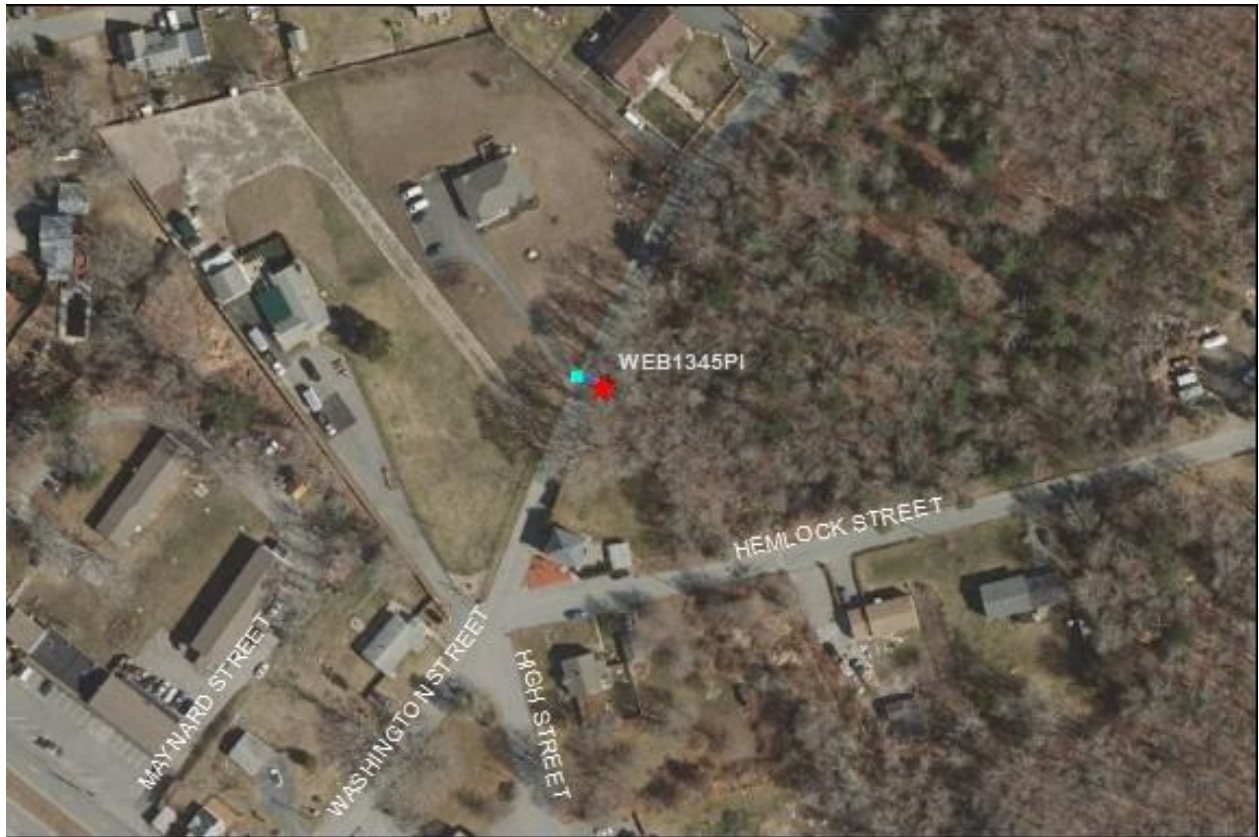
WEB1342PI and WEB1341PI- Eddy Drive: No issues found. Outfalls were inventoried.



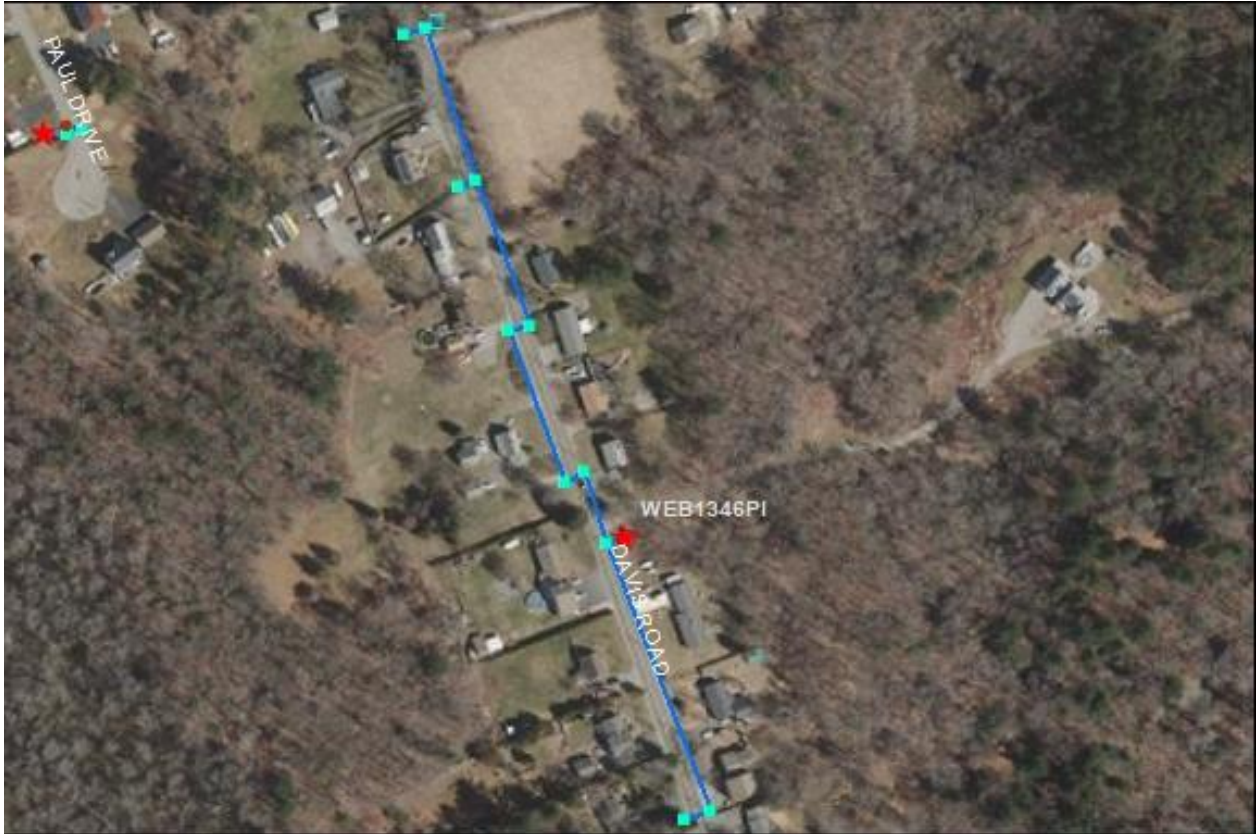
WEB1342PI- Diane Way: No issues found. Outfall was inventoried.



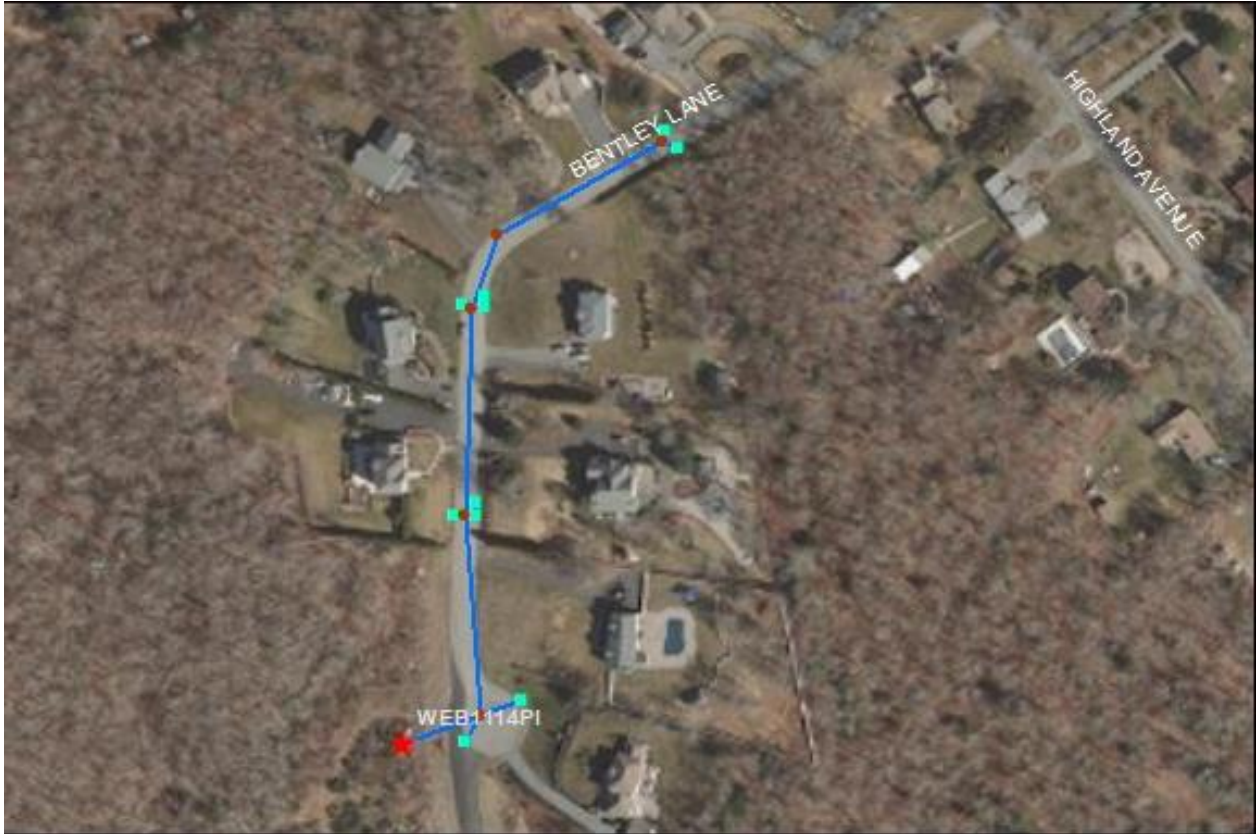
WEB1344PI- Bluebird Lane: No issues found. Outfall was inventoried.



WEB1345PI- Washington Street: No issues found. Outfall was inventoried.



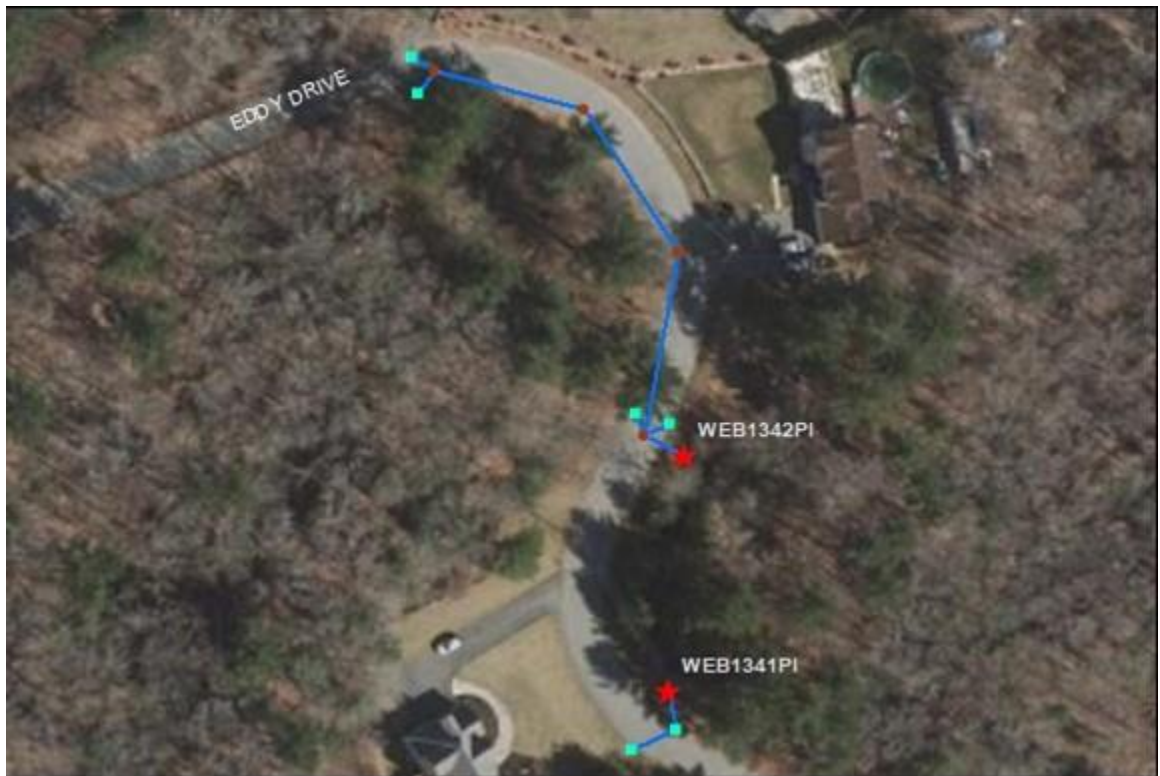
WEB1346PI- Davis Road: No issues found. Outfall was inventoried.



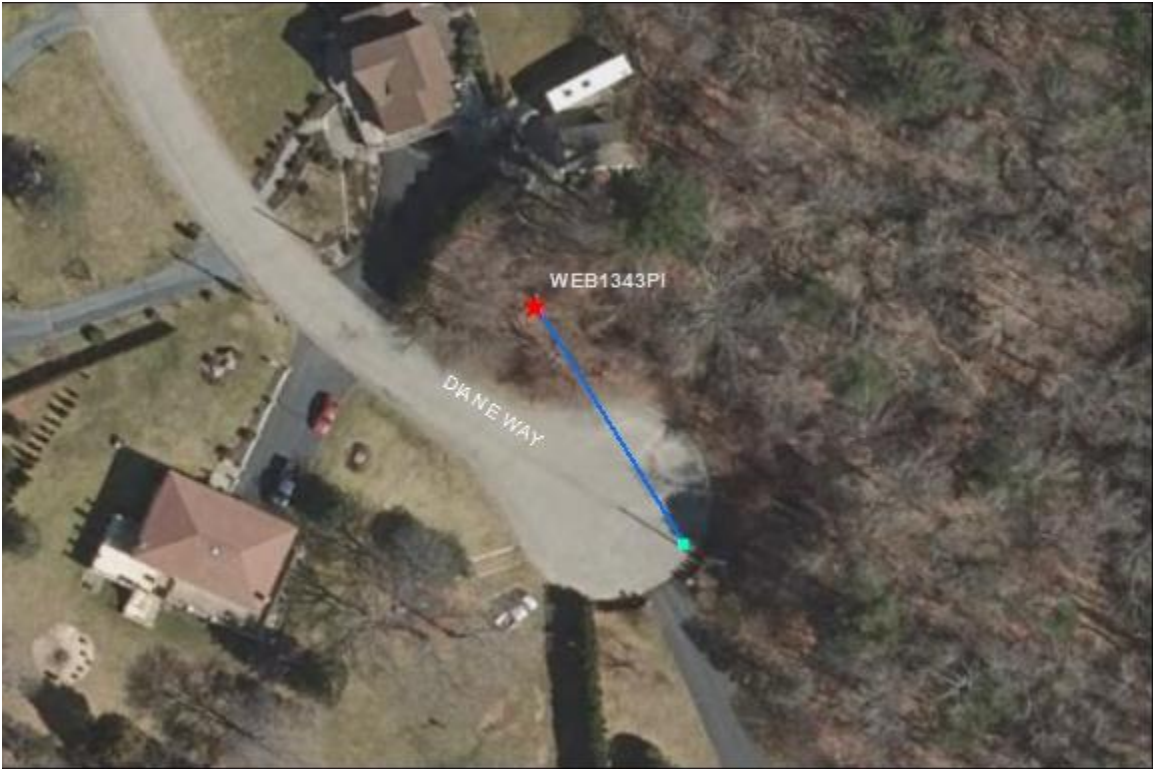
WEB114PI- Bentley Lane: No issues found.



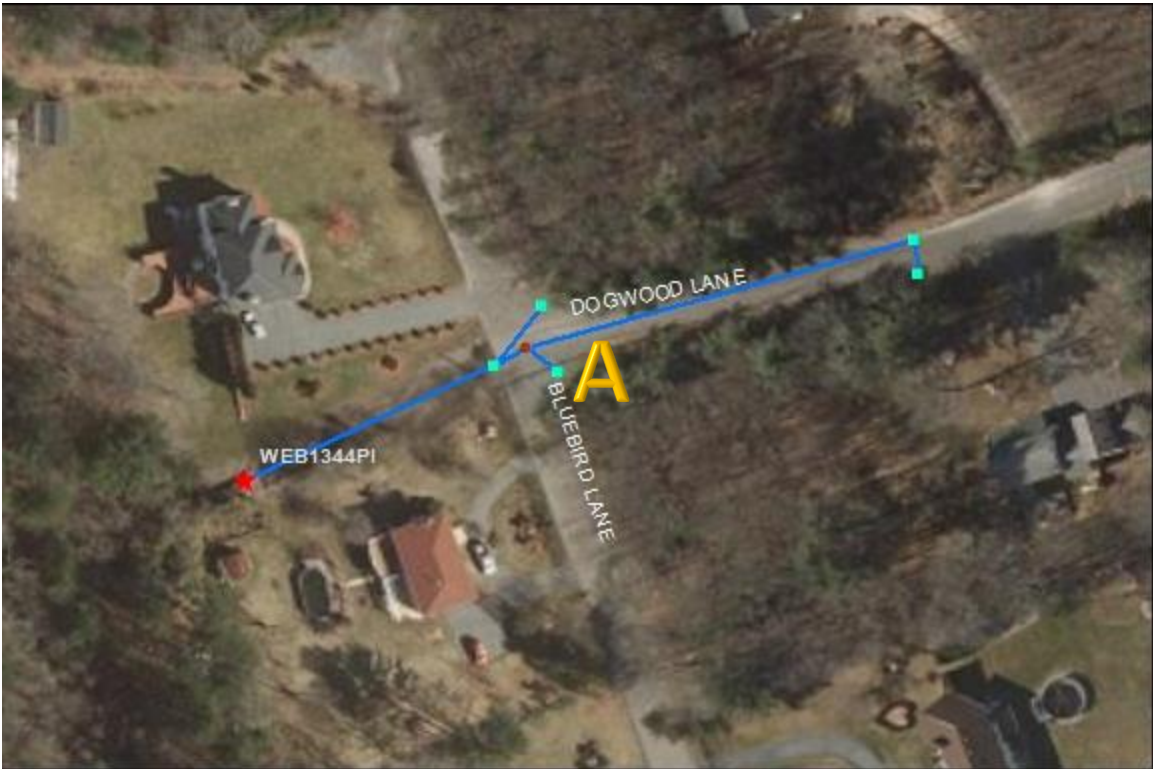
WEB1347PI- Westview Drive: No issues found.



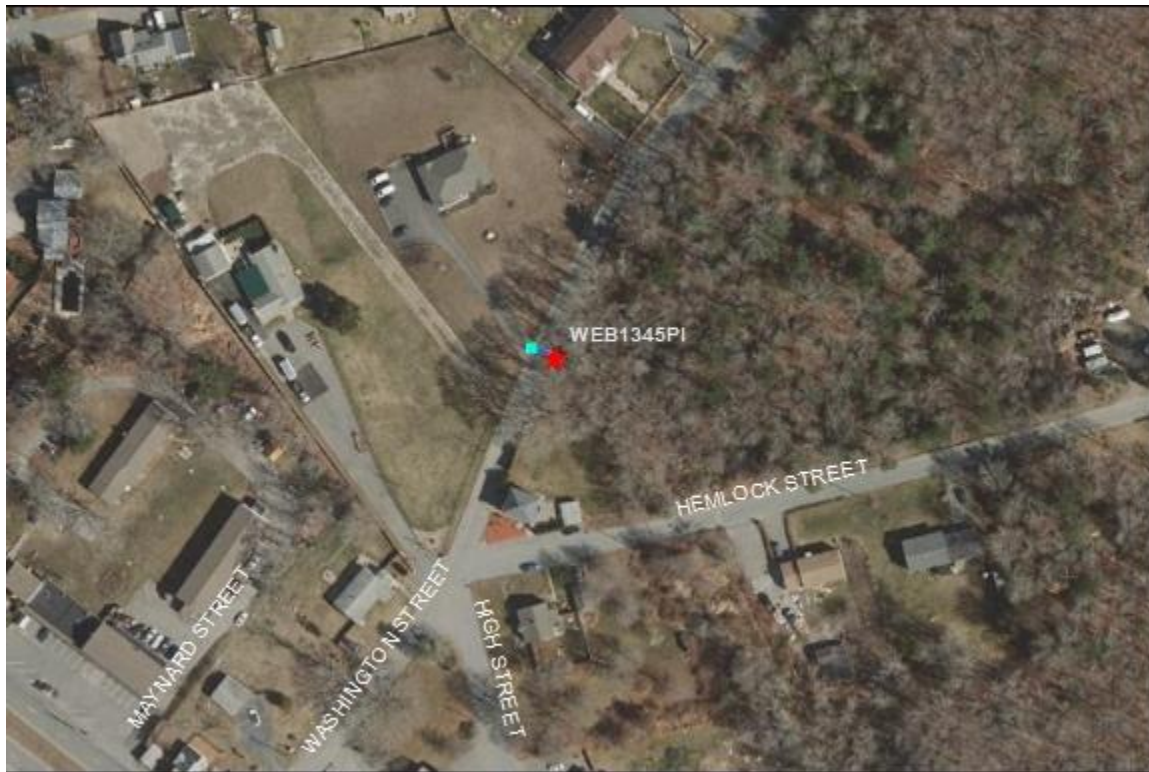
WEB1342PI and WEB1341PI- Eddy Drive: No issues found. Outfalls were inventoried.



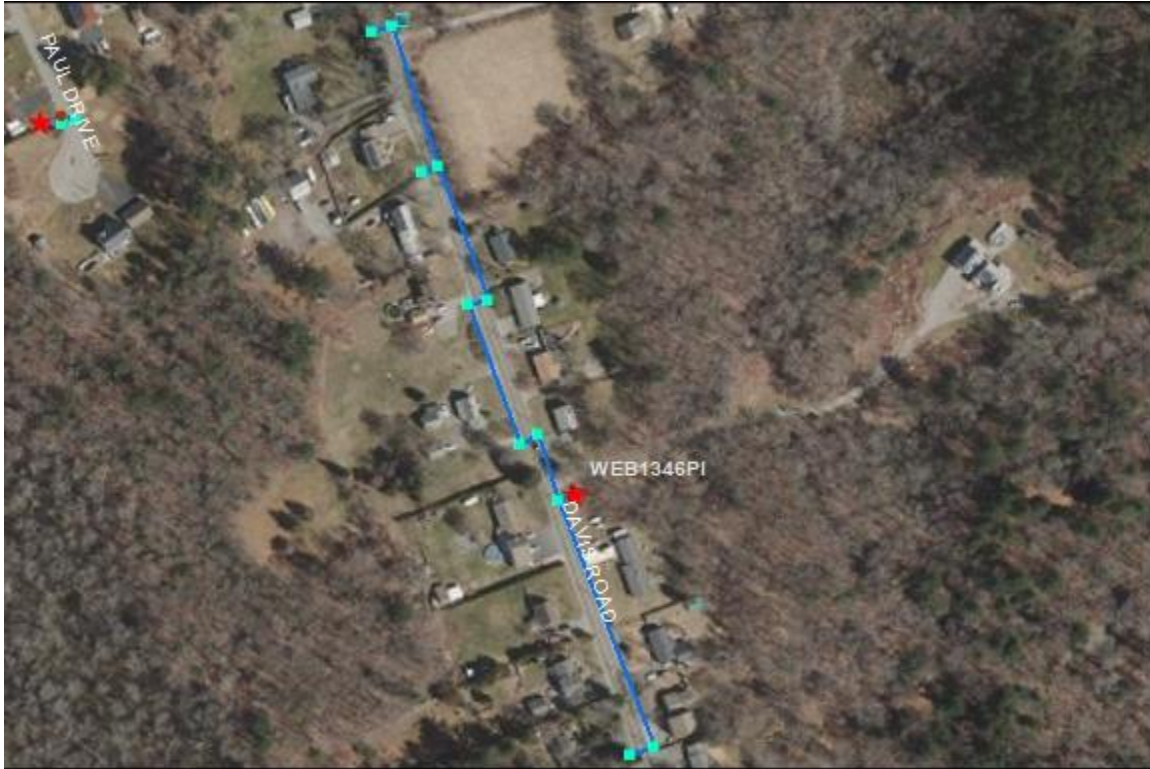
WEB1343PI- Diane Way: No issues found. Outfall was inventoried.



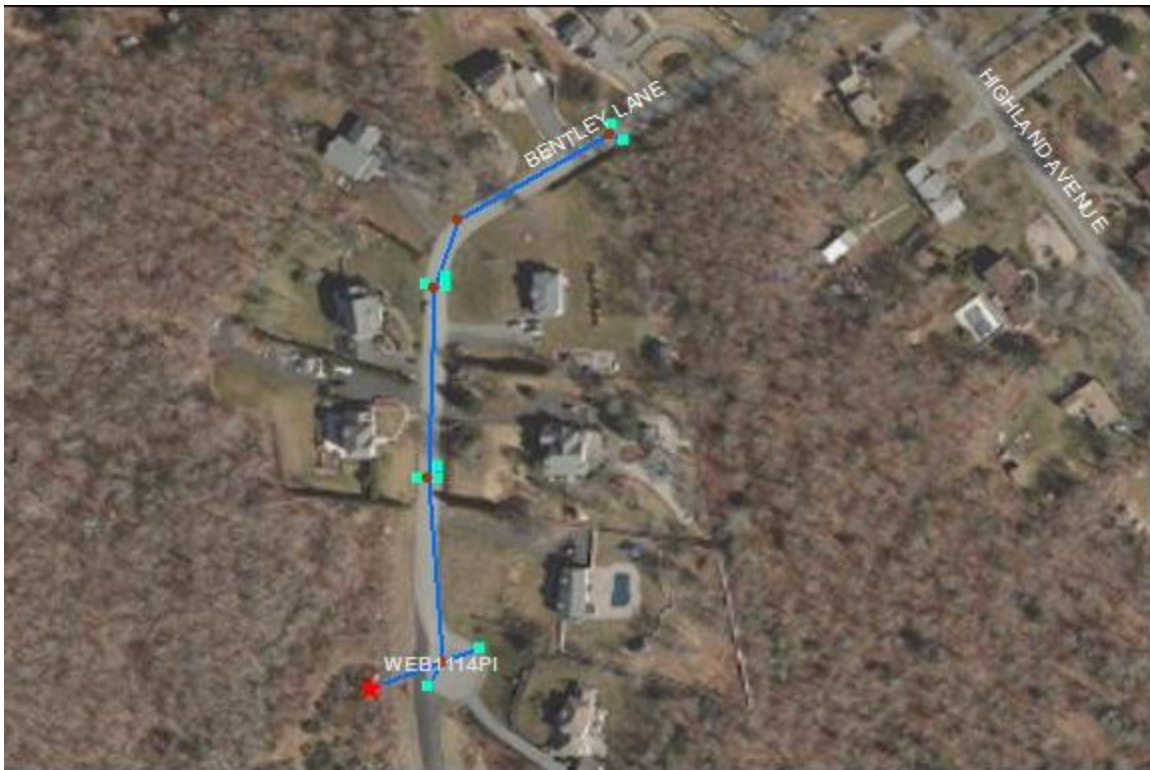
WEB1344PI- Bluebird Lane: No significant issues found. Outfall was inventoried. At point A the catchbasin has begun to sink. Preventative work by the town is suggested.



WEB1345PI- Washington Street: No issues found. Outfall was inventoried.



WEB1346PI- Davis Road: No issues found. Outfall was inventoried.



WEB114PI- Bentley Lane: No issues found.



WEB1348PI and WEB1349PI- Susan Drive and Christine Drive: No significant issues found. Lots of baggies with dog waste inside catch basins all over the neighborhood. Educational outreach is suggested.



WEB1195PI and WEB1185PI- Eddy Drive: No issues found.



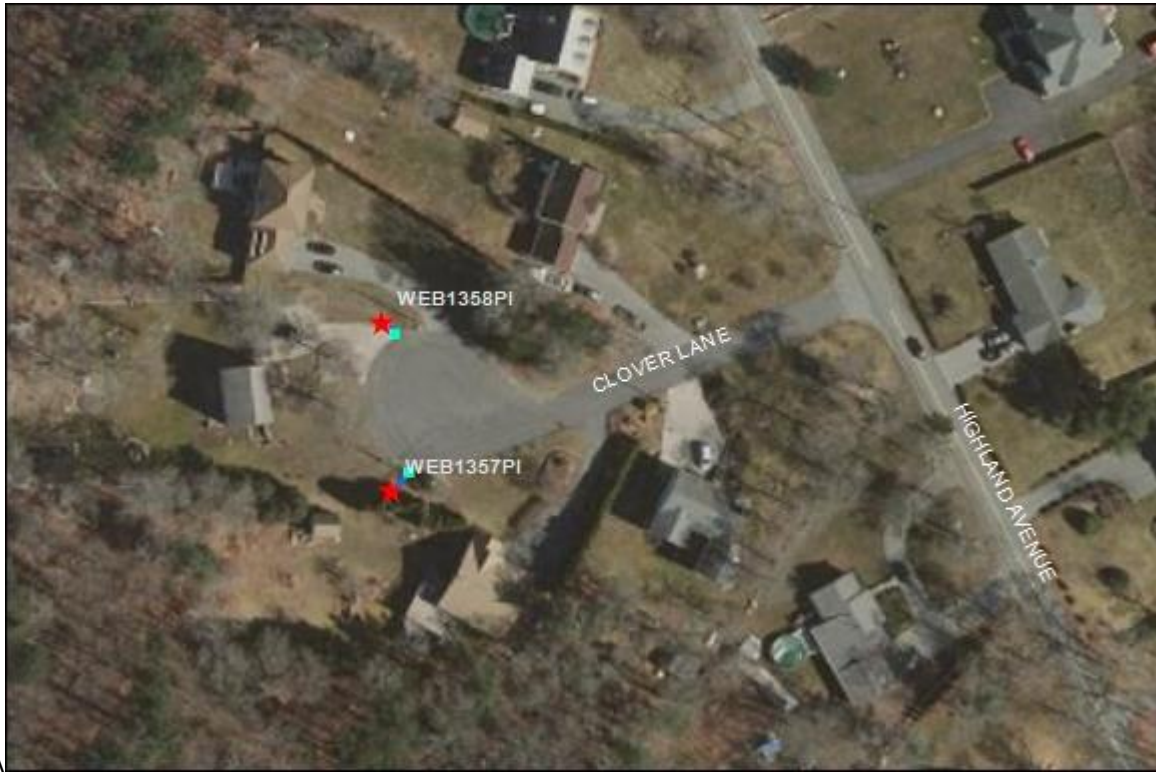
WEB1350PI, WEB1351PI, and WEB1352PI- Romano Village Drive and Paul Drive: No major issues found. At point A small holes are forming around catchbasin. Preventative work by the town is suggested. At point B an excessive number of cigarettes found along the area immediate to the outfall near house #14 on Romano Village Drive.



WEB1353PI- Davis Road: No issues found.



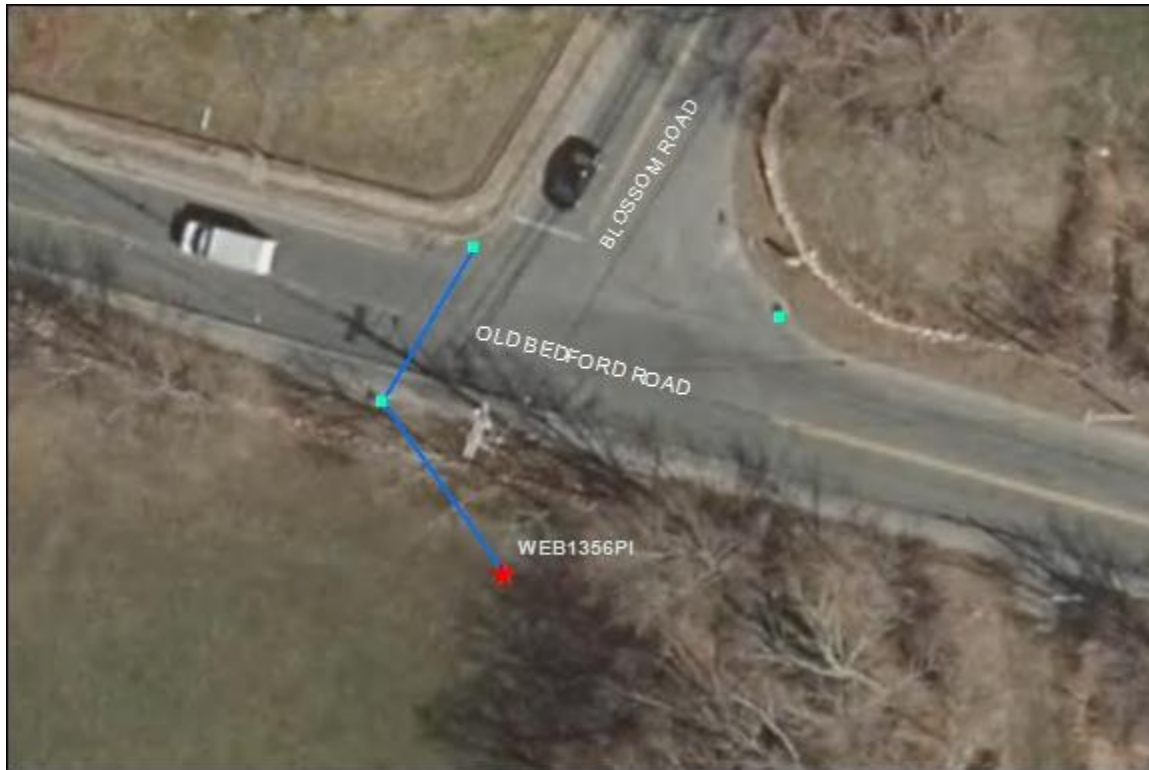
Cleveland Street and Monroe Street: No significant issues found. Two 6" PVC pipes enter basin at point A, both are extremely clogged. No outfall pipes were observed exiting any of the catchbasins.



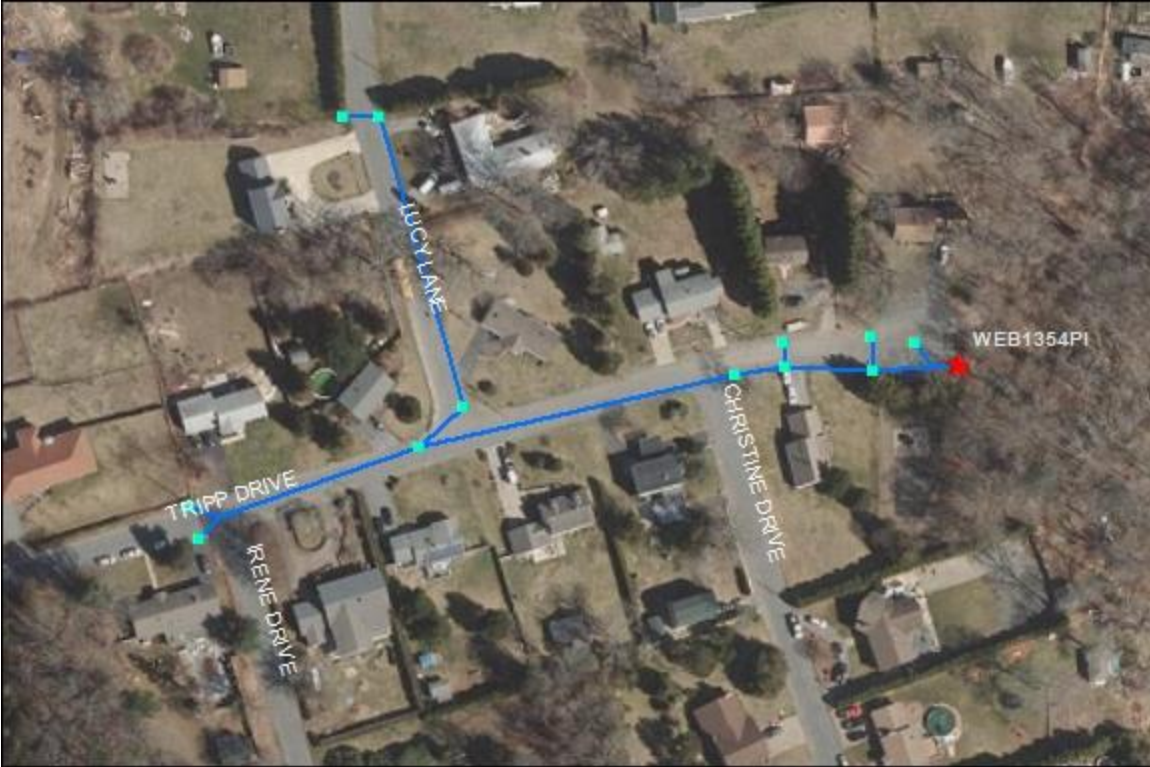
WEB1358PI and WEB1357PI- Clover Lane: No issues found.



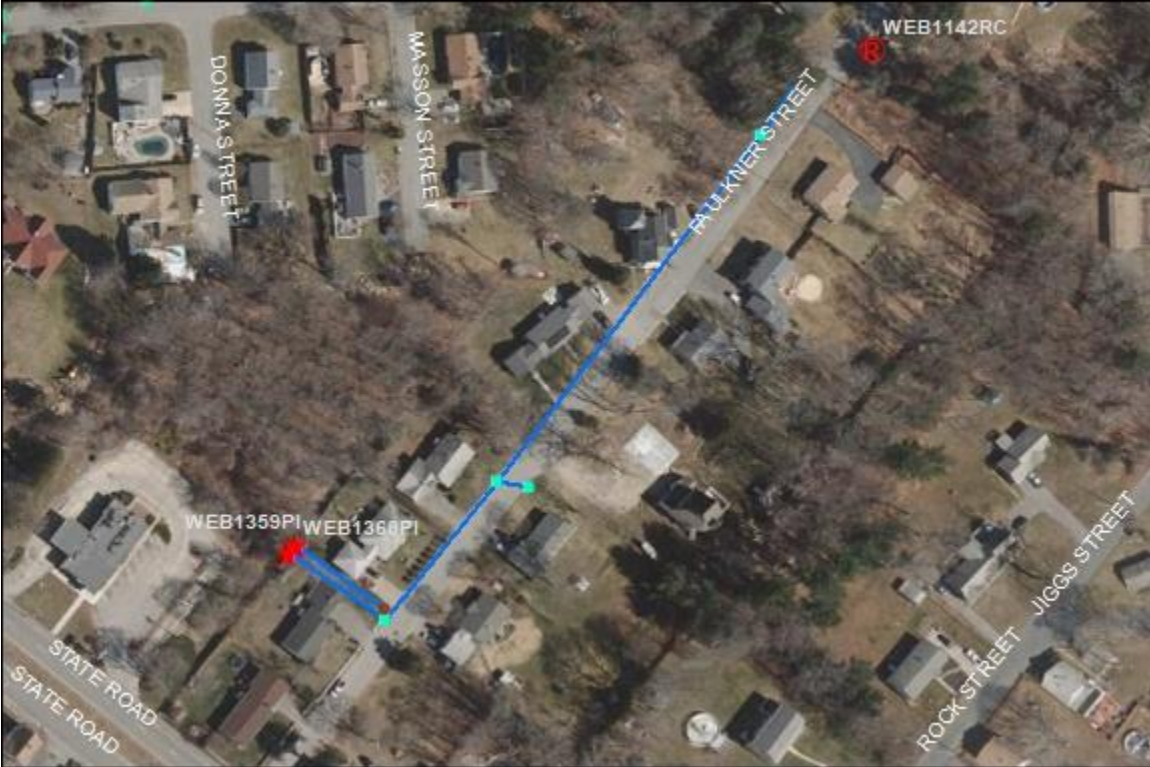
Idola Street: No significant issues found. At point A cooked crawfish were found dumped in the basin. At point B a pipe enters the catch basin. Its origin is unknown. Further investigation is recommended.



WEB1356PI- Old Bedford Road: No issues found. Outfall inventoried.



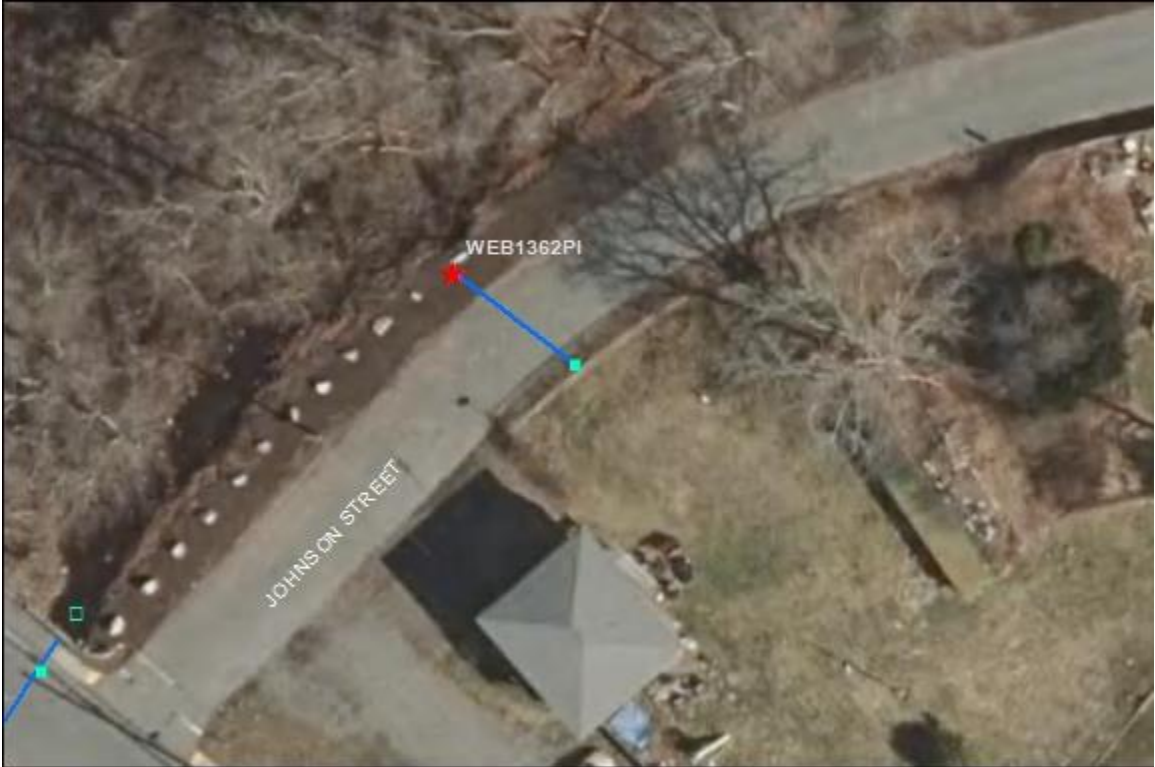
WEB1354PI- Tripp Drive and Lucy Lane: No significant issues found. There were multiple catchbasins with very light covers.



WEB1359PI and WEB1360PI- Faulkner Street: No issues found.



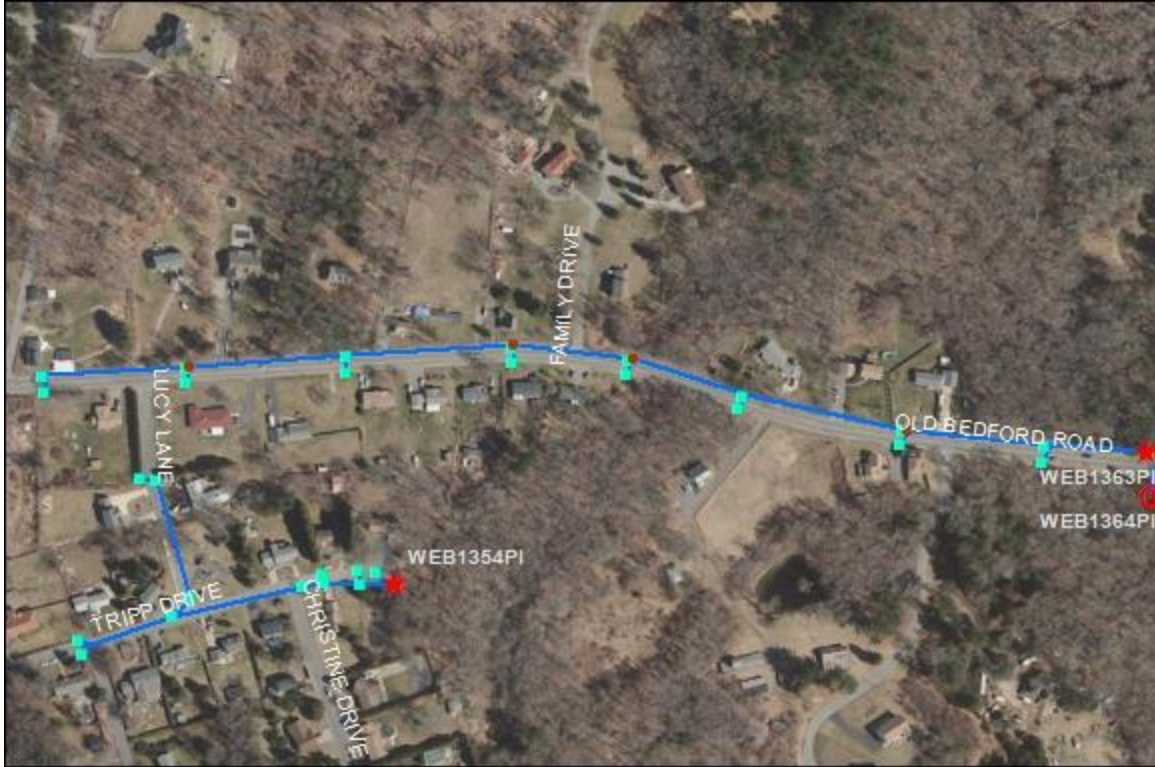
WEB1361PI- Pine Street and Presidents Street: No issues found. Pipes not shown have been blocked intentionally from catchment.



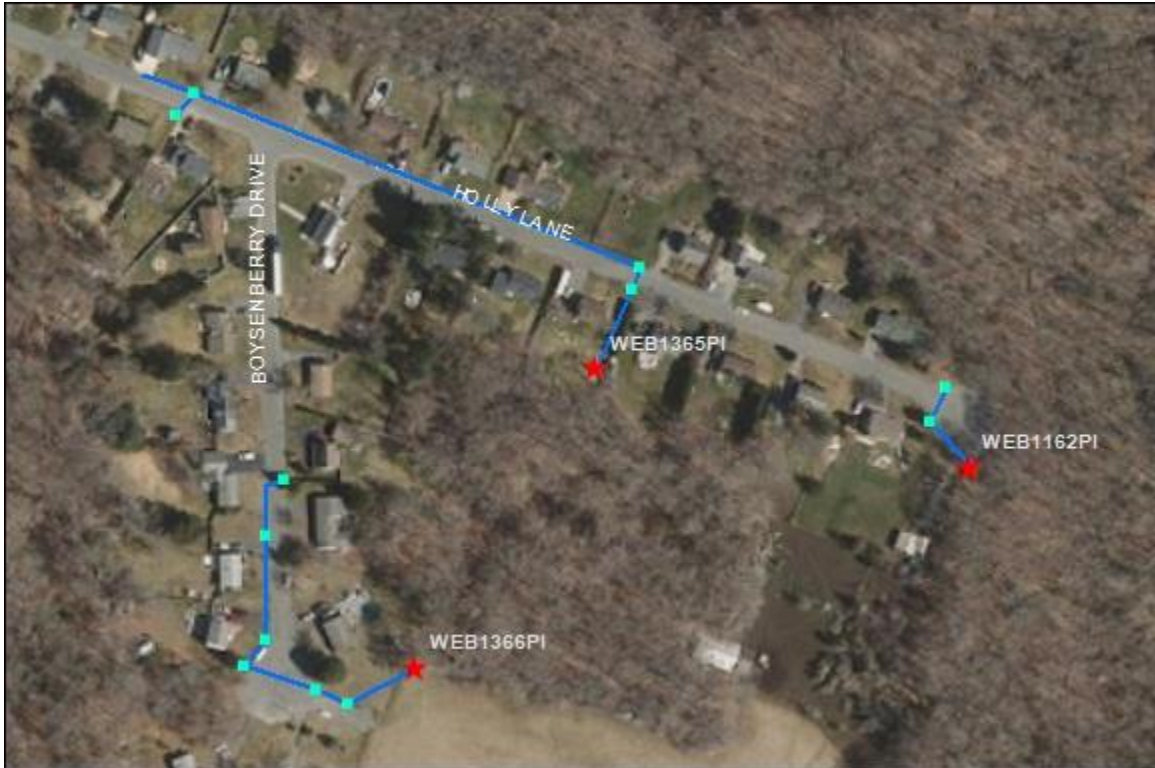
WEB1362PI- Johnson Street: No issues found.



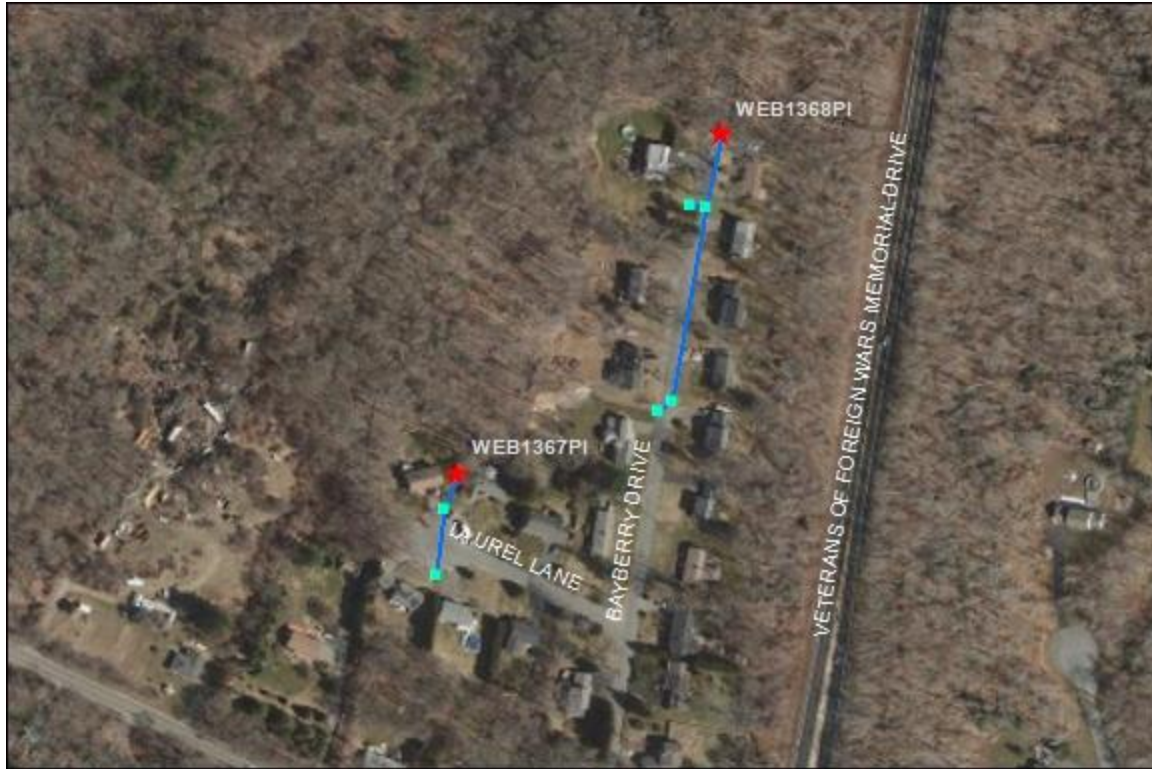
WEB1192PI- Old Bedford Road: No issues found. At point A two interconnections are shown between the town of Dartmouth and the Town of Westport. At point B, the catchbasin is beginning to sink. Preventative work by the town is suggested.



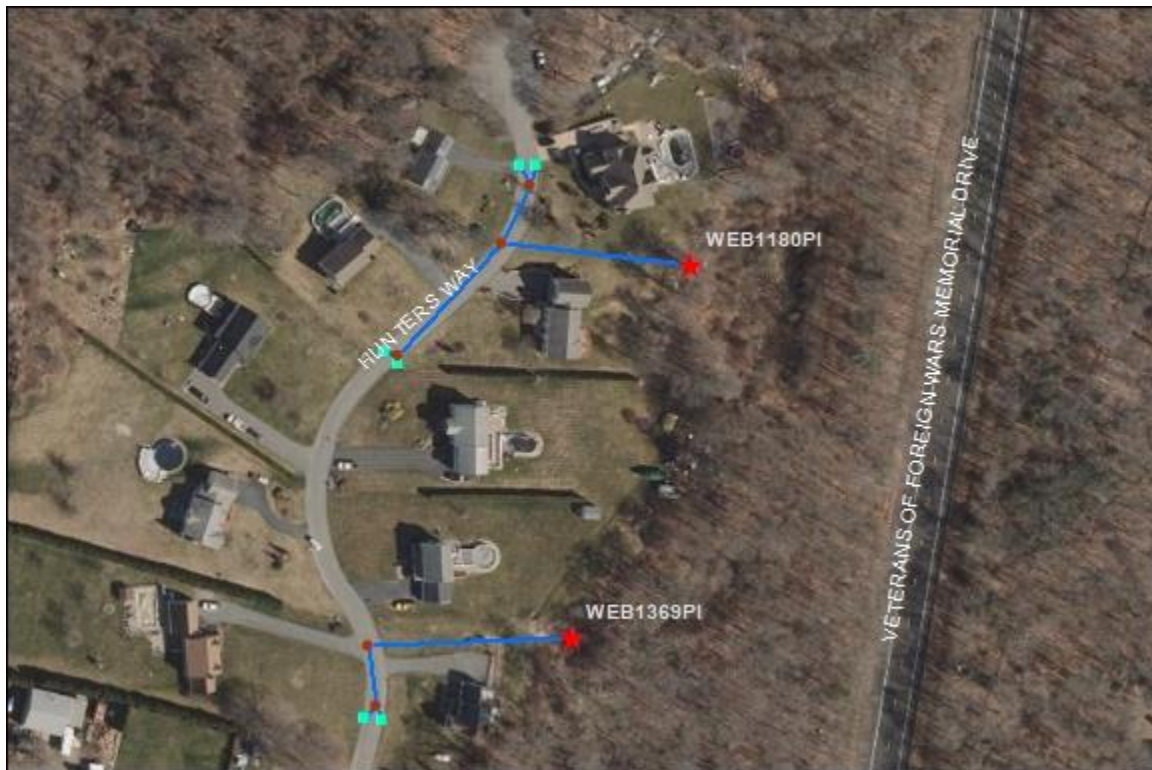
WEB1363PI and WEB1364PI- Old Bedford Road: No issues found.



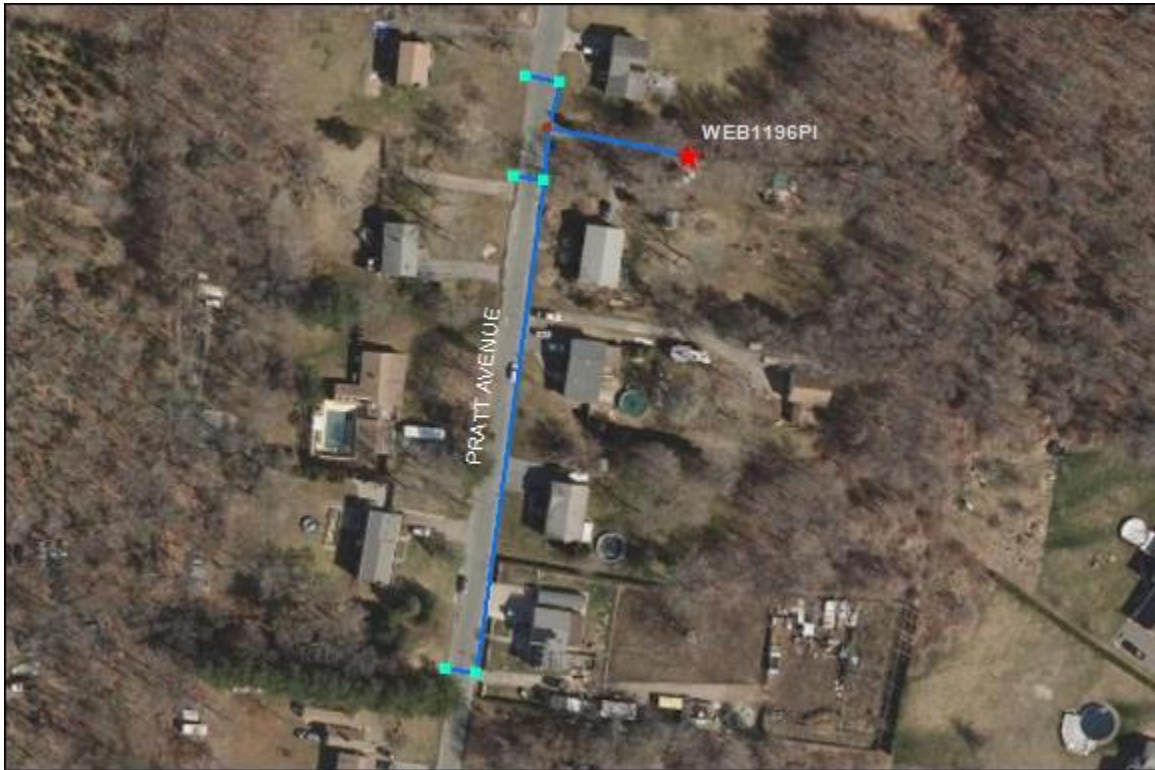
WEB1366PI, WEB1365PI, and WEB1162PI- Boysenberry Drive and Holly Lane: No issues found. Outfalls inventoried.



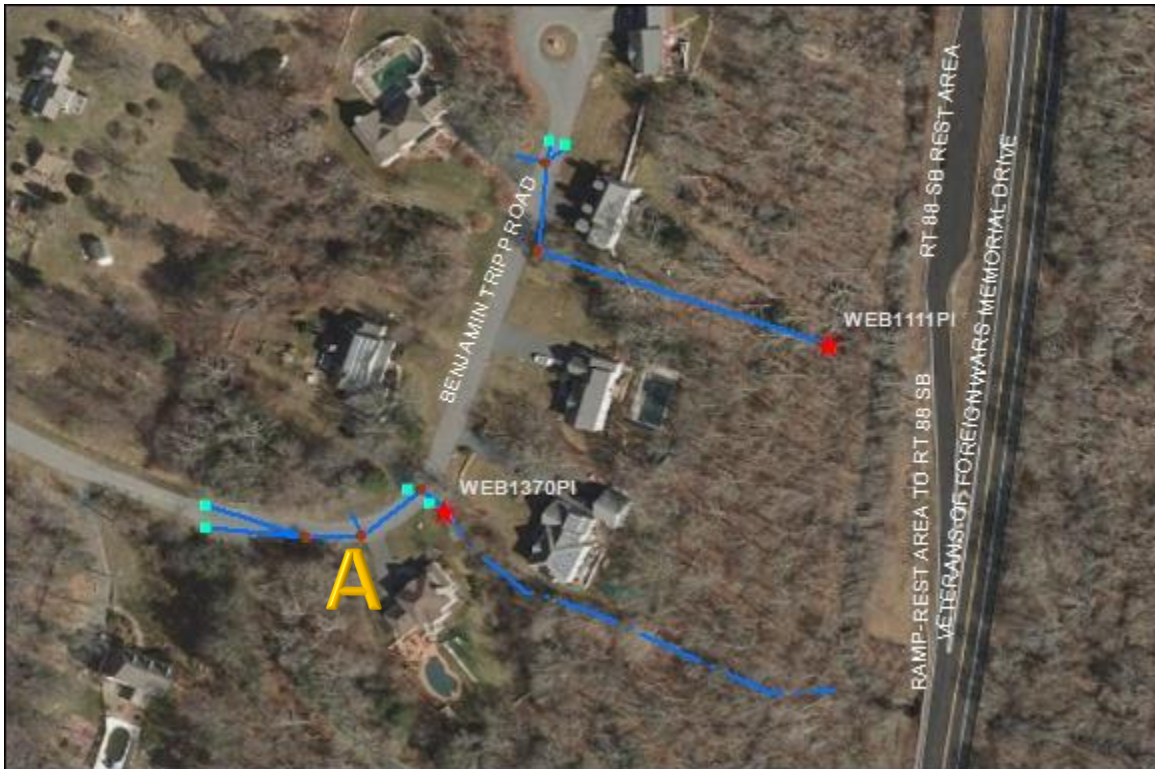
WEB1367PI and WEB1368PI- Laurel Lane and Bayberry Drive: No issues found.



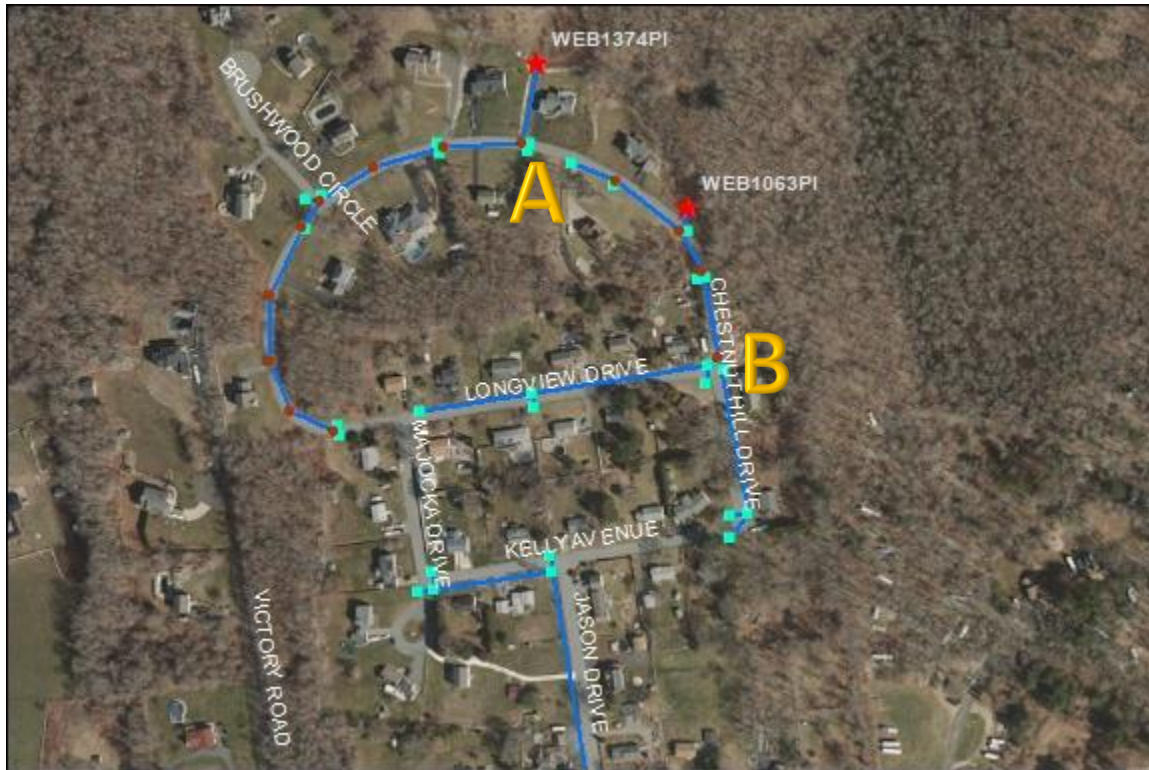
WEB1180PI and WEB1369PI- Hunters Way: No issues found.



WEB1196PI- Pratt Avenue: No issues found.



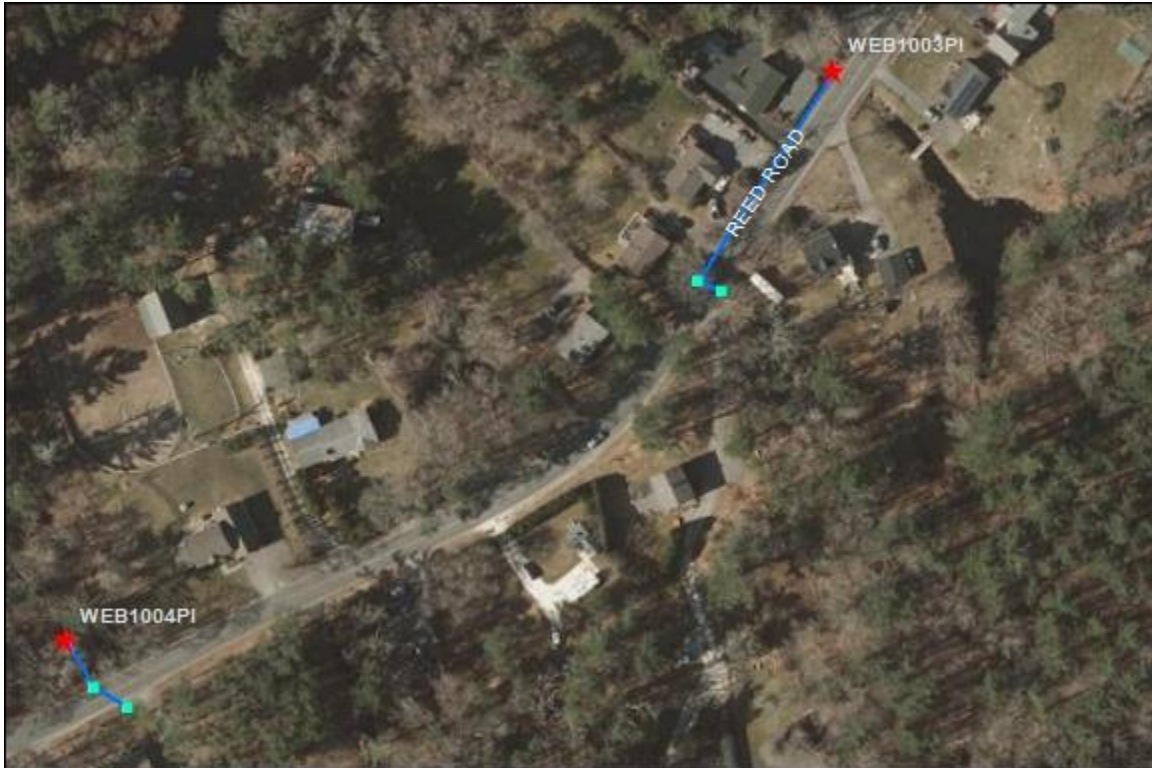
WEB1111PI and WEB1370PI- Benjamin Tripp Road: The pipe entering the manhole at point A has an unknown origin. Further investigation is recommended.



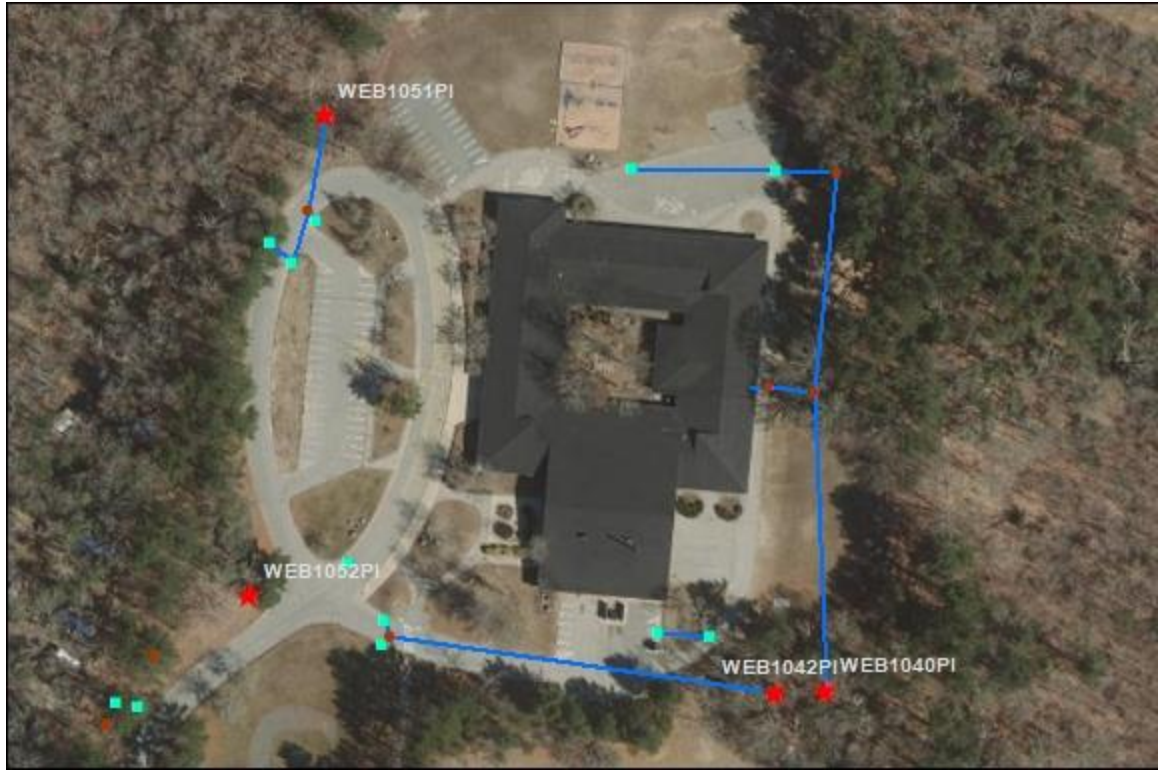
WEB1374PI and WEB1063PI- Chestnut Hill Drive: No significant issues found. At point A the catchbasin is slightly sunken. At point B, the bricks inside the catchbasin have begun to crumble. Preventative work is suggested.



Green Street-No issues found.



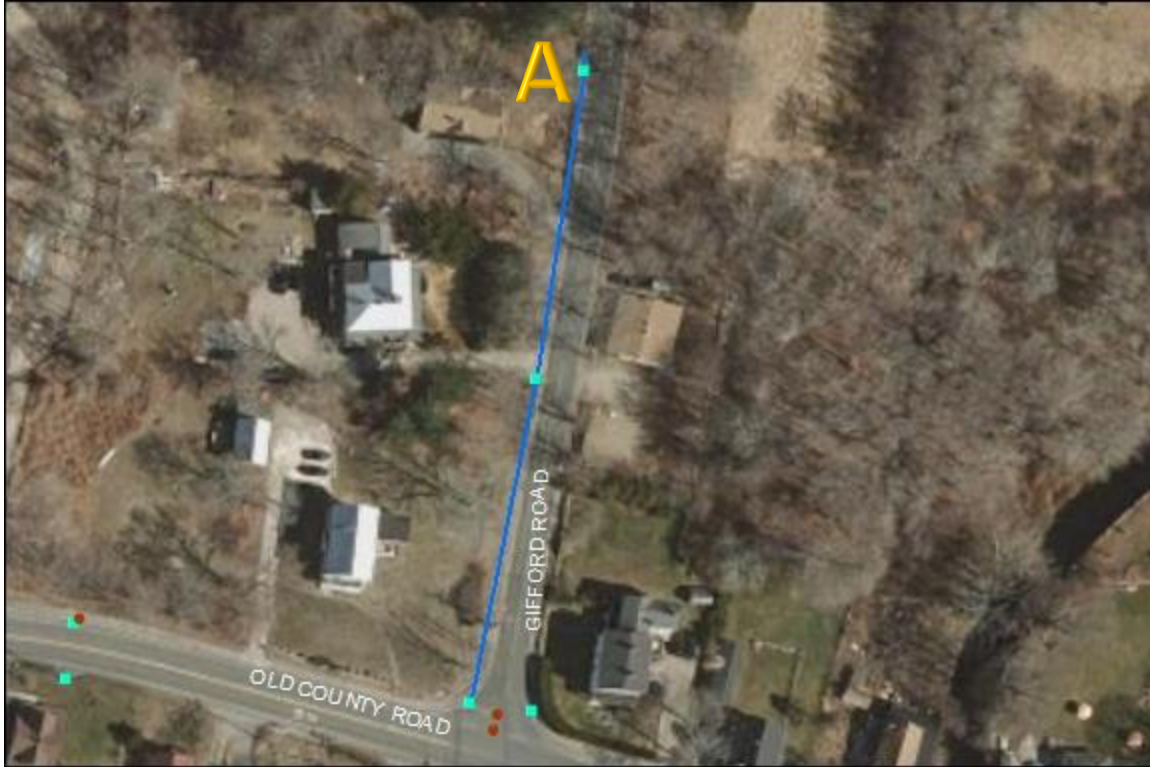
WEB1004PI and WEB1003PI- Reed Road: No issues found.



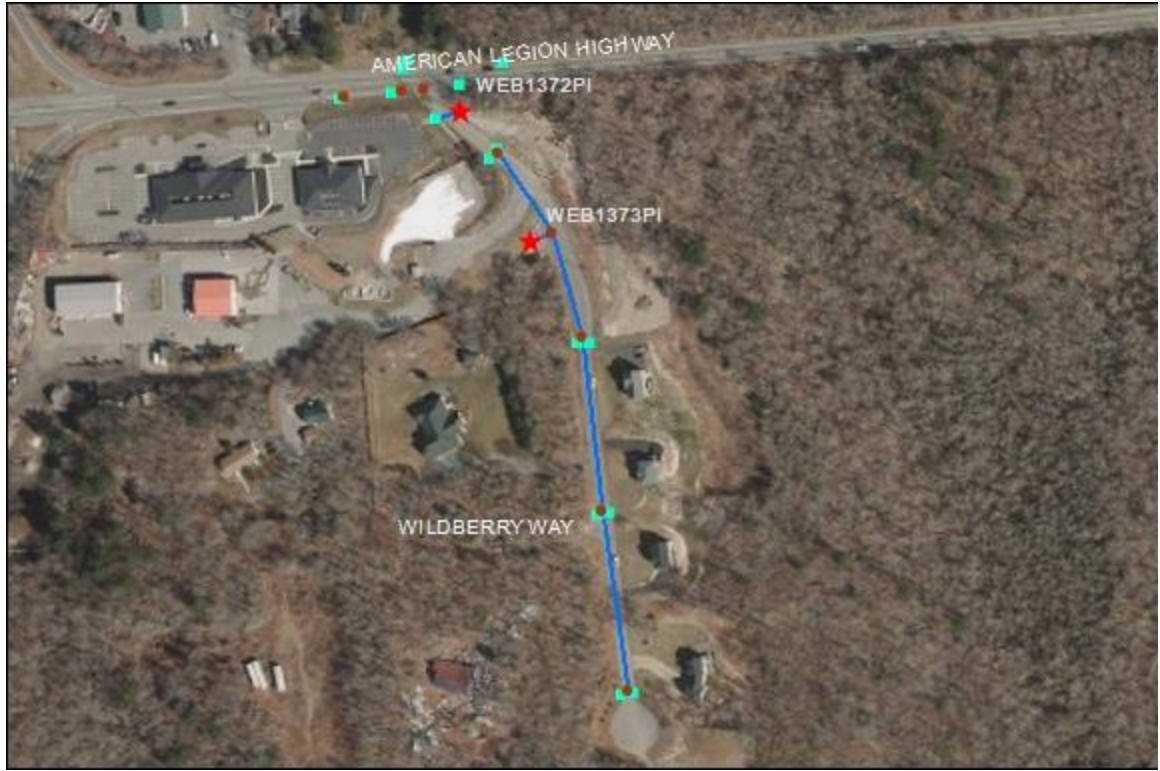
WEB1051PI, WEB1042PI, and WEB1040PI- Westport Elementary School: No issues found.



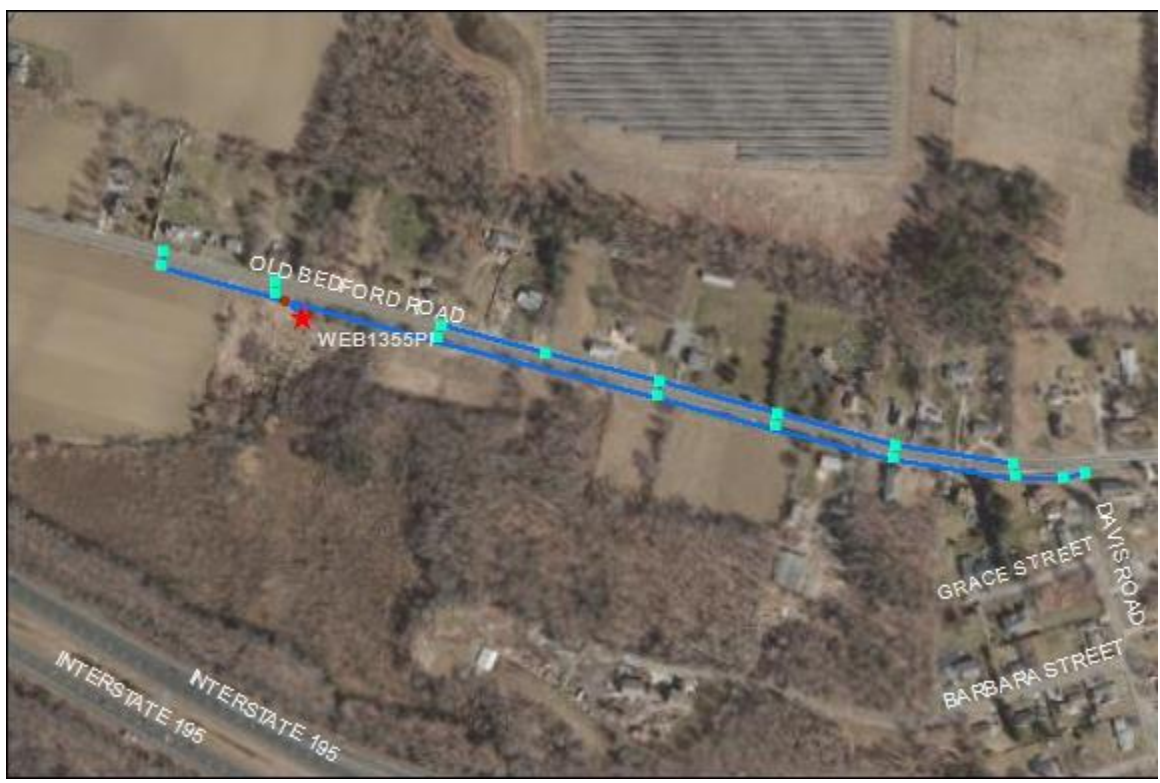
WEB1371PI and WEB1314PI- Gifford Road: No significant issues found. At point A, a pipe enters the catchbasin its origin is unknown. Further investigation is recommended.



Gifford Road: At point A, a pipe enters the catchbasin. Its origin is unknown. Further investigation is recommended. The catchment continues to Old County Road and discharges into the Westport River. A police detail will be needed to investigate Old County Road.



WEB1373PI- Wildberry Way: No issues found.



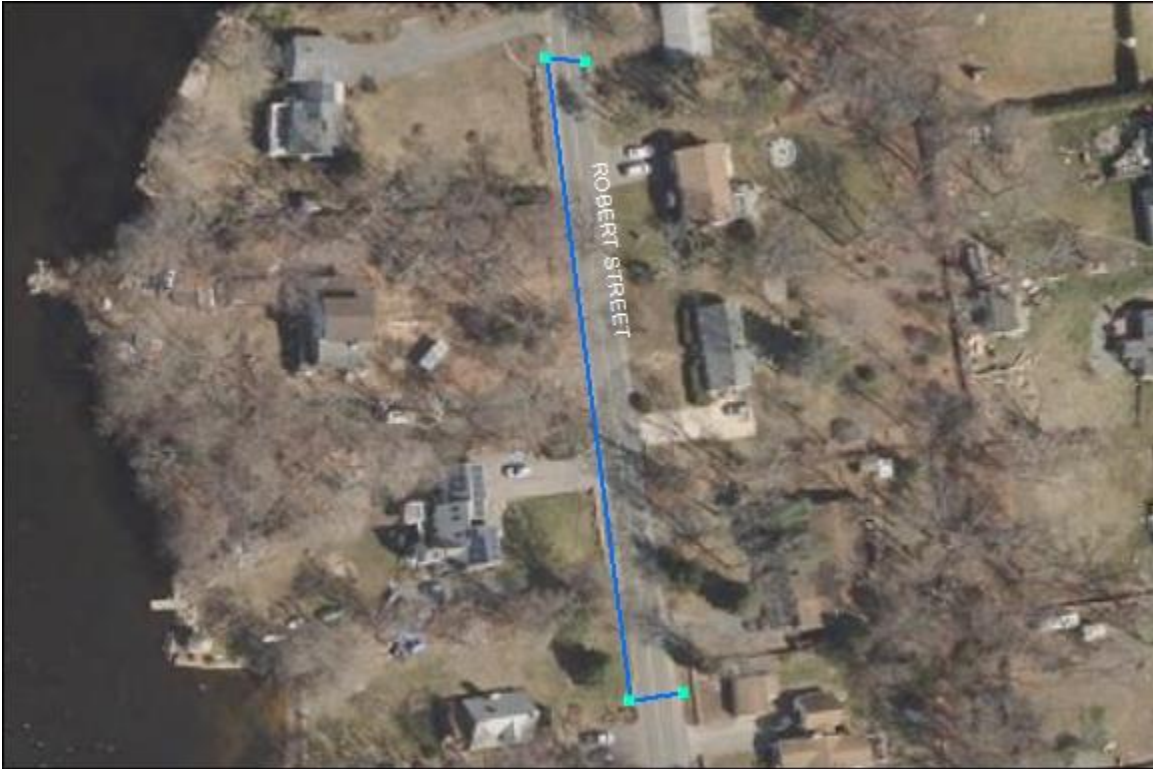
WEB1355PI- Old Bedford Road: No issues found.



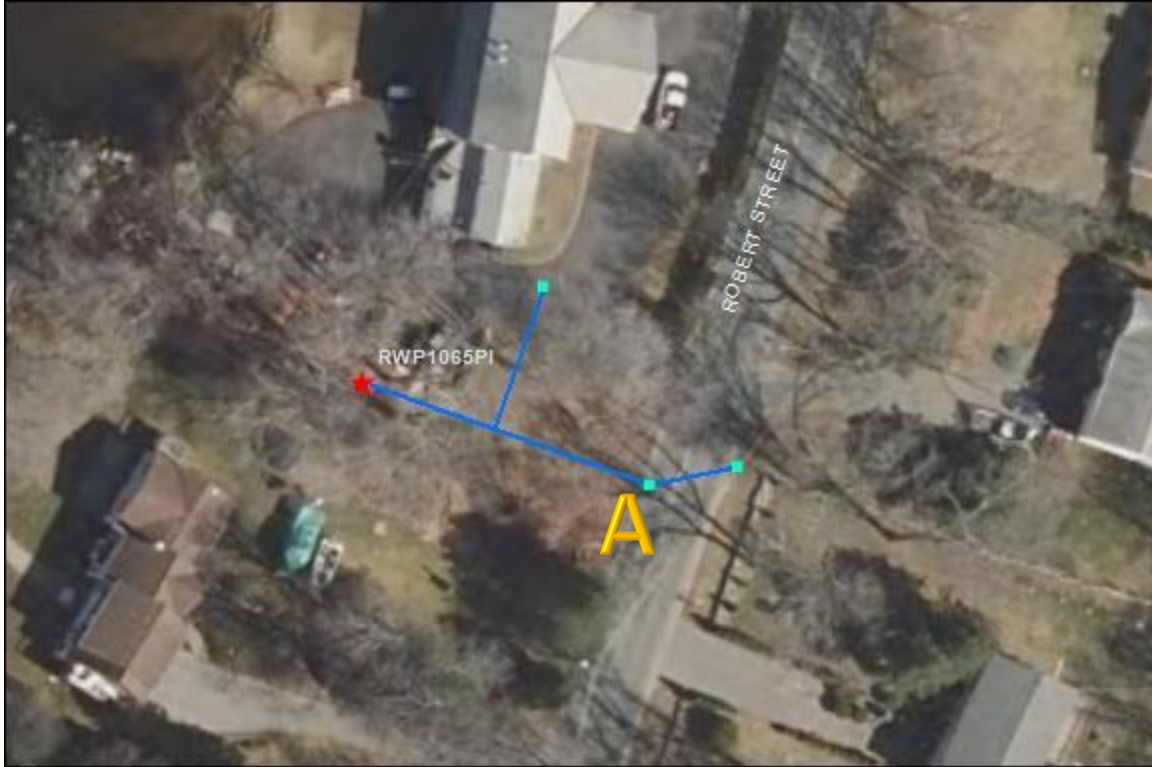
RWP1067PI- Granada Drive: At point A, the catchbasin is caving in. Further attention by the town is strongly recommended.



RWP1066PI- Robert Street and Daniel Drive: No significant issues found. At point A the catchbasin is beginning to sink. Preventative measures recommended.



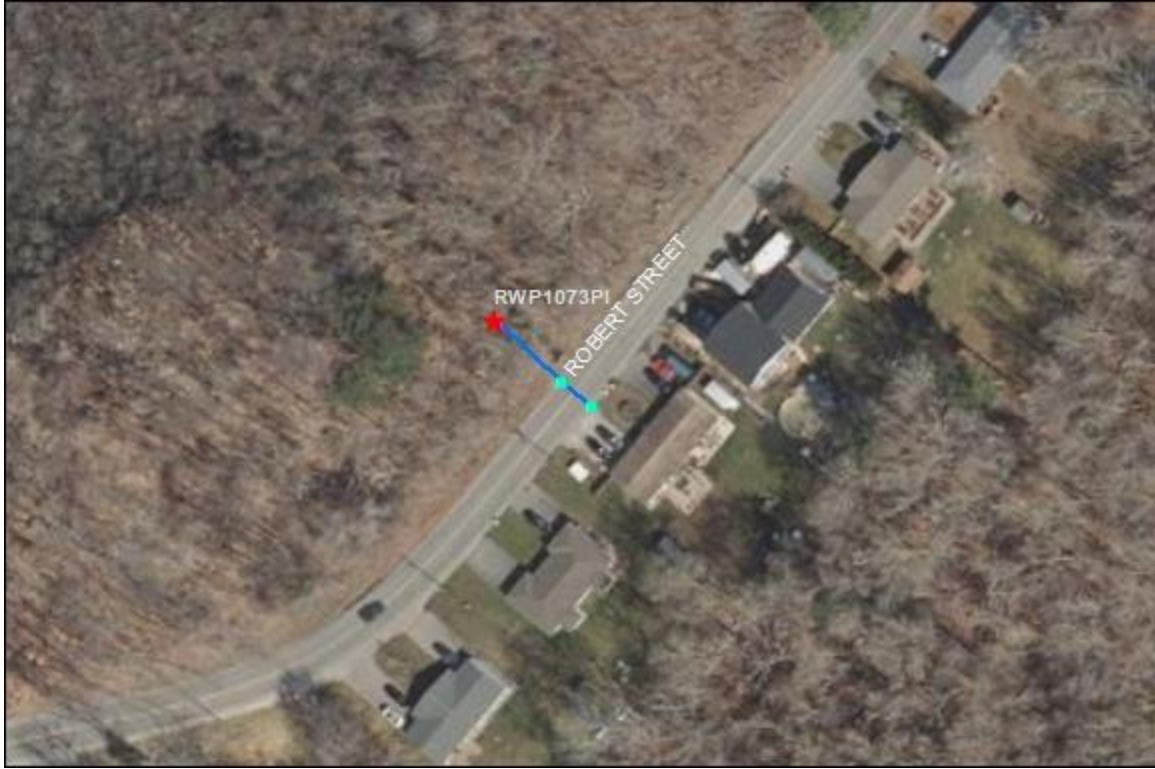
Robert Street- No issues found.



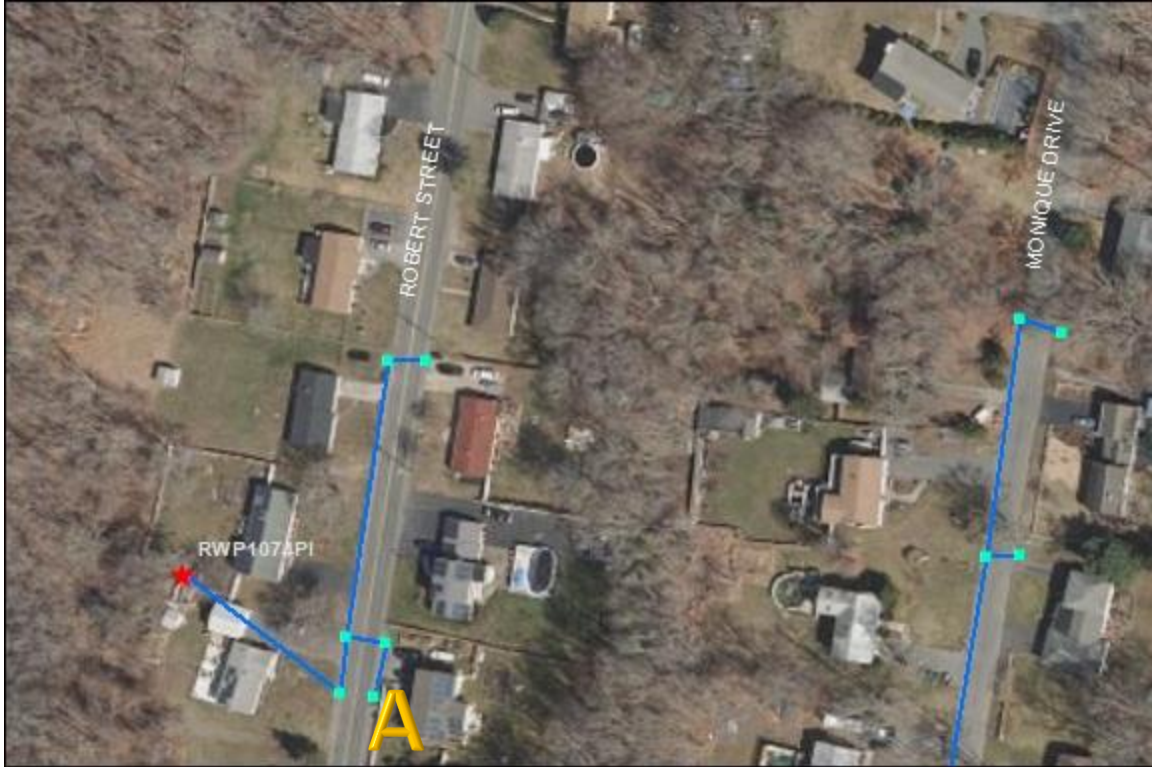
RWP1065PI- Robert Street- No significant issues found. At point A the catchbasin is starting to sink. Preventive measures are recommended.



RWP1072PI: No issues found. Outfall was inventoried.



RWP1073PI- Robert Street: No issues found.



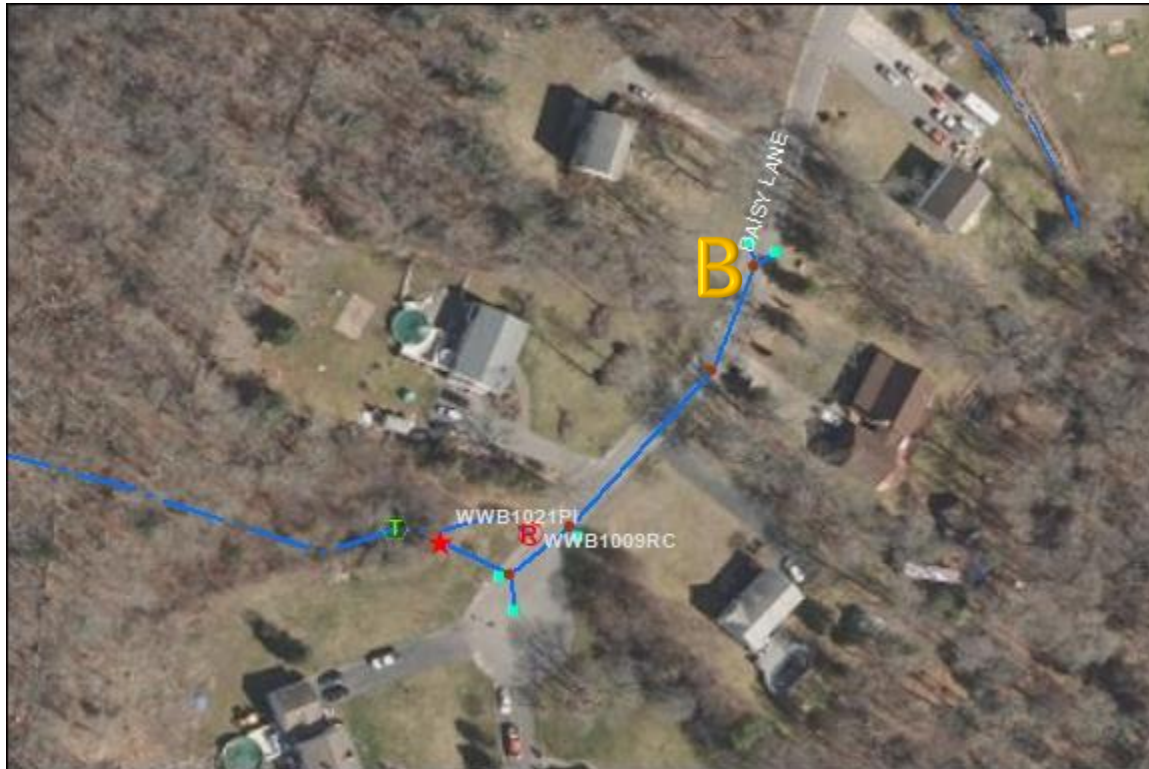
RWP1074PI and RWP1064PI- Robert Street, Keith Drive, and Monique Drive: At point A and B the bricks making up the catchbasins' walls are crumbling or missing. Further attention is strongly recommended.



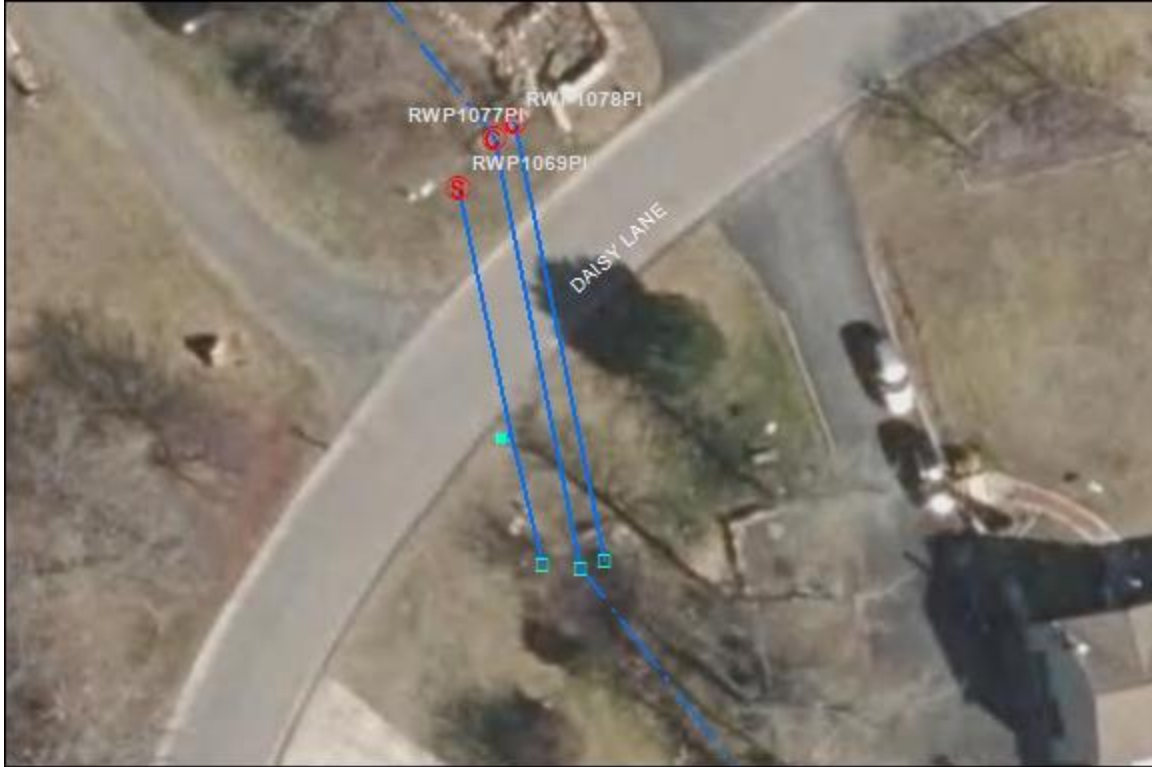
RWP1076PI-Robert Street: No issues found. A twelve-inch metal pipe was observed entering the catchbasin at point A. Its origin is unknown. Further investigation is suggested. Outfall was inventoried.



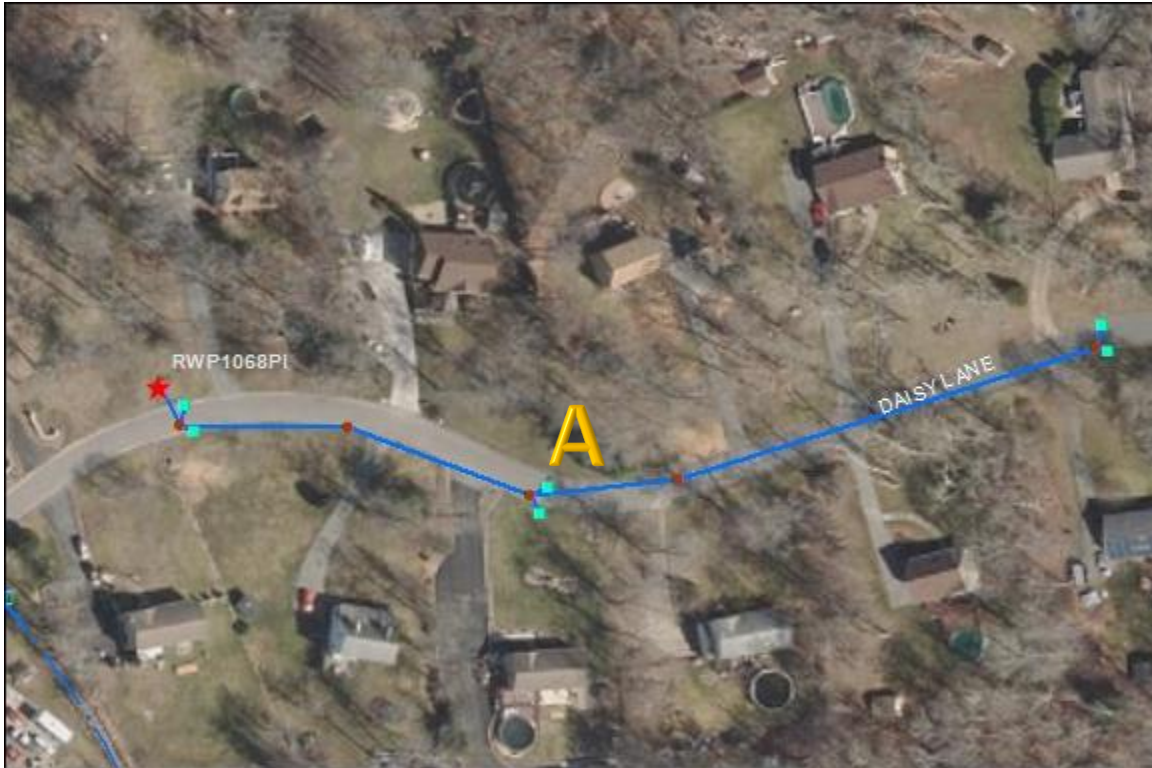
WEB1377PI- Madison Court: SUSPECTED ILLICIT CONNECTION. At point A the catchbasin was full of white suds. It is believed that the source is a 4" PVC pipe coming from the direction of house #15 on Madison Court. Further action is NECESSARY. At point B there are two incoming pipes, one from the North and one from the East, both with unknown origins. Further investigation is recommended.



WWWB1021PI and WWWB1009RC- Daisy Lane: No significant issues. Manhole at point B is cracked. A replacement is recommended.



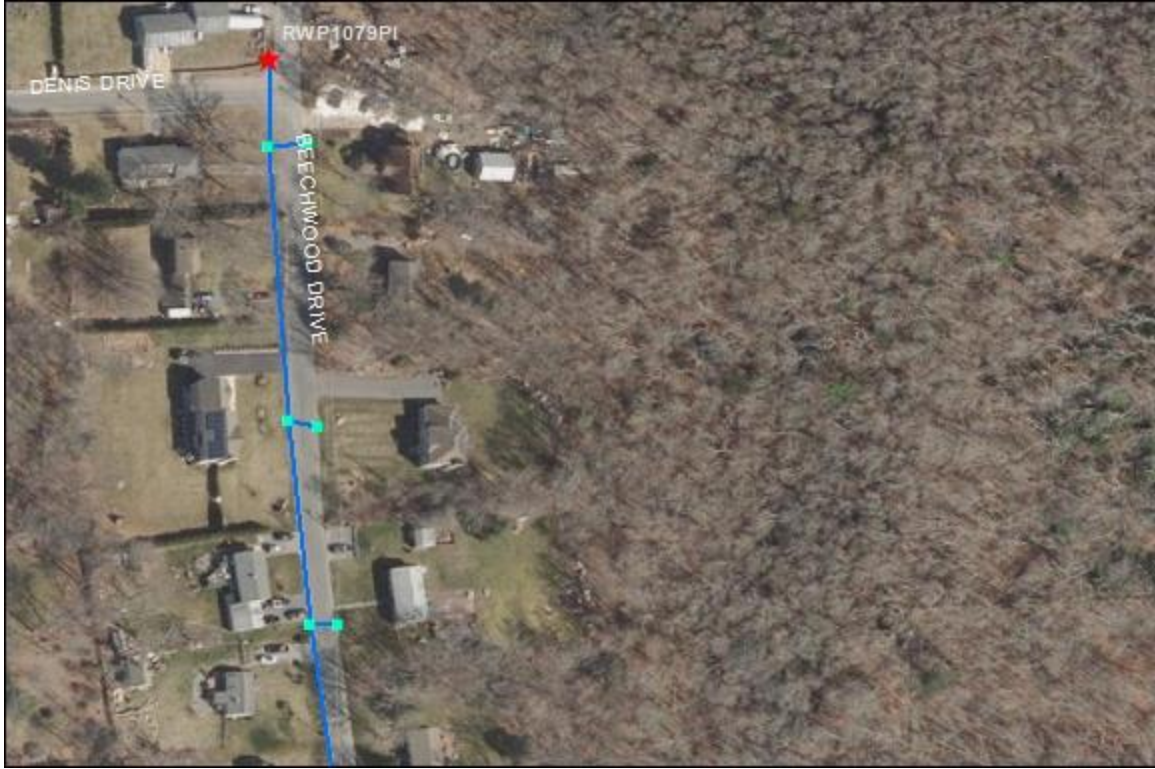
RWP1069PI, RWP1077PI, and RWP1078PI- Daisy Lane: No issues found.



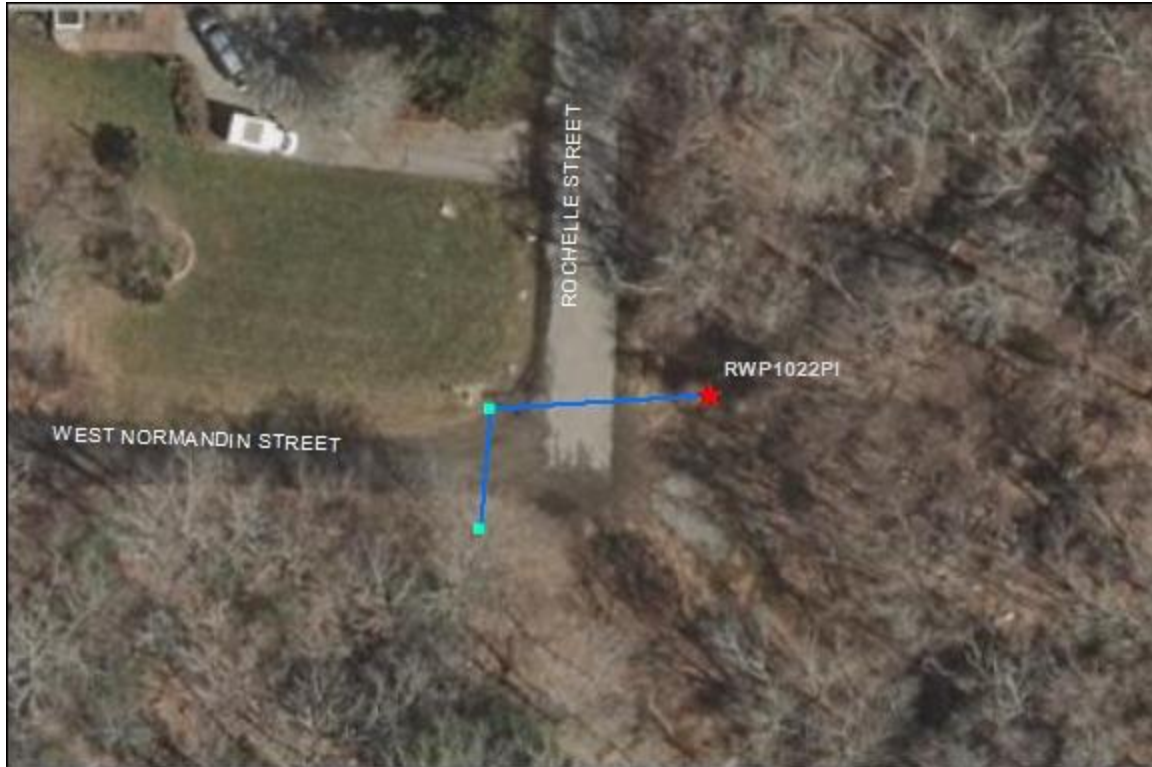
RWP1068PI- Daisy Lane: No significant issues found. At point A, the catchbasin is beginning to sink. Preventative measures are recommended.



WEB1310PI, WEB1284PI, WEB1290PI, and WEB1213RC- R Drive: At point A the area around the catchbasin has sunken significantly. Further attention is strongly recommended. At point B a pipe enters the catchbasin its origin is unknown. Further investigation is recommended.



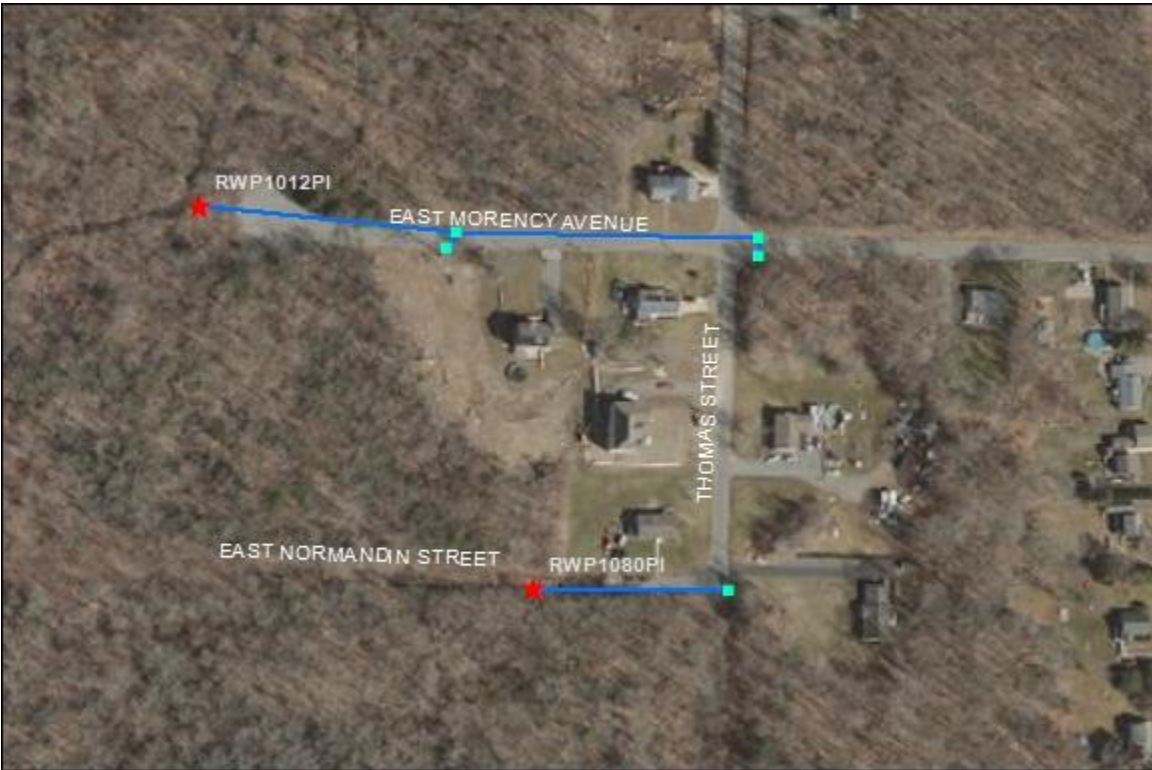
RWP1079PI- Beachwood Drive: No issues found.



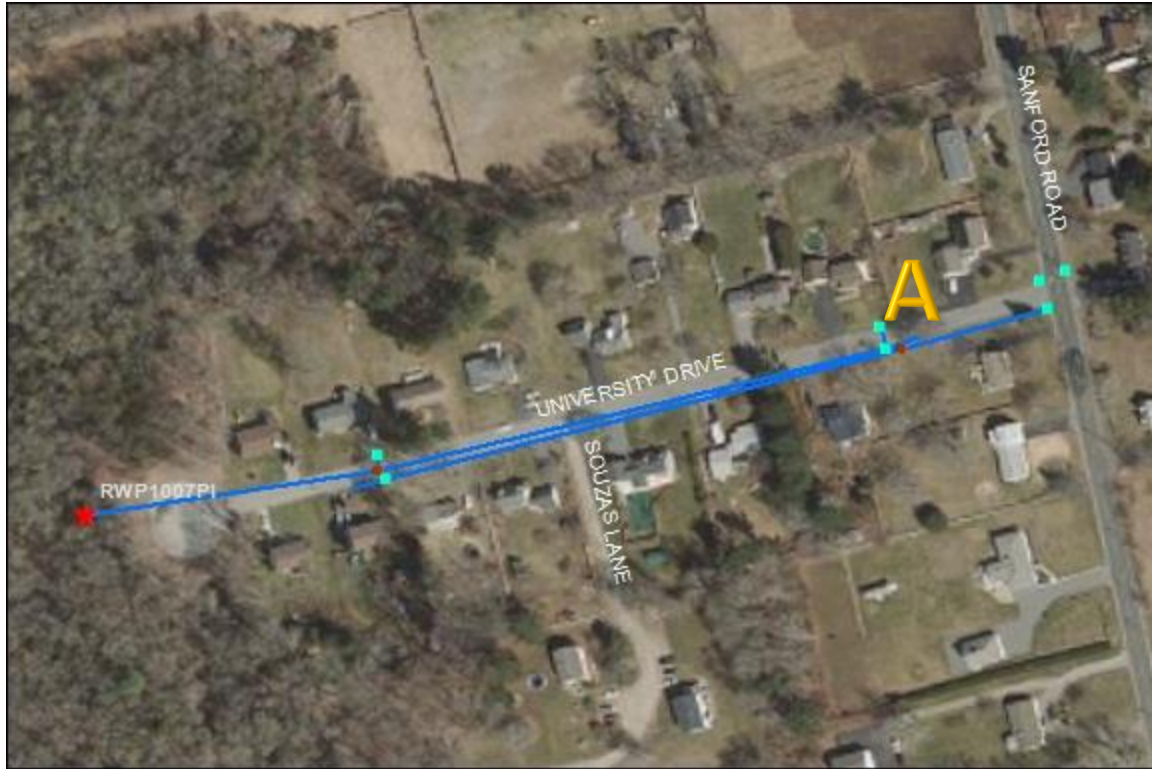
RWP1022PI- West Normandin Street- No issues found.



RWP1023PI- Beaulieu Street: No issues found. At point A, a 15" metal pipe enters the catchbasin. Its origin is unknown. Further investigation is suggested.



RWP1012PI and RWP1080PI- East Morency Avenue and East Normandin Street: No issues found.



RWP1007PI- University Drive: SUSPECTED ILLICIT CONNECTION. At point A the catchbasin was full of white suds. It is believed that the source is a 4" HDPE pipe coming from the direction of house #725 off the adjacent Sanford Road. Further action by the town is NECESSARY.