



Student interns inspecting Tar Heel Road East detention basin

**Hamilton Township (Mercer County)
Stormwater Basin Assessment Summary
Past Priority Addendum (Year 5B)**

Developed by the Rutgers Cooperative Extension Water Resources Program
Funded by Hamilton Township, Mercer County, New Jersey

November 27, 2019

Acknowledgements

The Hamilton Township (Mercer County) Stormwater Basin Assessment Summary (Year 5) has been produced by the **Rutgers Cooperative Extension (RCE) Water Resources Program**.

Funding for this project was generously provided by the **Township of Hamilton, Mercer County, New Jersey** and in part by the **New Jersey Agricultural Experiment Station** through the United States Department of Agriculture.

Introduction

During the summer of 2019, the Rutgers Cooperative Extension (RCE) Water Resources Program continued the assessment of Hamilton Township's stormwater management basins with a goal to reassess the basins owned by the township and reassess the basins that were determined to be high priority for addressing problems in the previous reports. This report is split into two volumes to provide Hamilton Township with a document that only includes basins owned by the township and maintain clarity between the two sets of basins. This volume includes reassessments of all the basins that were deemed high priority in previous reports and are not owned by Hamilton Township.

These assessments are needed to determine the overall state of existing stormwater infrastructure and to identify structural and maintenance problems. These regular inspections are also required by the New Jersey Department of Environmental Protection (NJDEP). Maintenance and inspection records must be submitted by the township for municipally owned basins, and the municipality must also submit evidence that privately owned basins are conducting regular maintenance and inspections as well. The goal of this volume is to show Hamilton's effort to follow up on previous assessments to ensure problems identified have been addressed by owners of the high priority basins, those that either had damaged outlet structures, standing water, or other major issues that needed to be addressed. Basins designated as priority in this report should be addressed by requesting that owners of the basins conducted the recommended maintenance.

A web tool built through the Epicollect App was used for identifying and recording key issues occurring within the existing stormwater basins. Year 5 efforts focused on using the same criteria as used in previous years to identify key structural integrity issues, maintenance deficiencies, and overall functionality of the reassessed basins within the township.

During August 2019, staff and students conducted assessments of 99 basins throughout Hamilton Township (Figure 1). Some basins with inadequate data were revisited in the fall of 2019. Of these basins, 49 were municipally owned, and an additional 50 were identified as high priority in previous reports. Those identified as high priority either had damaged outlet structures, standing water, or other major issues that needed to be addressed. Of the 50 basins, one was identified as not being a true basin as it is just an area that is not draining well, but should still be addressed.

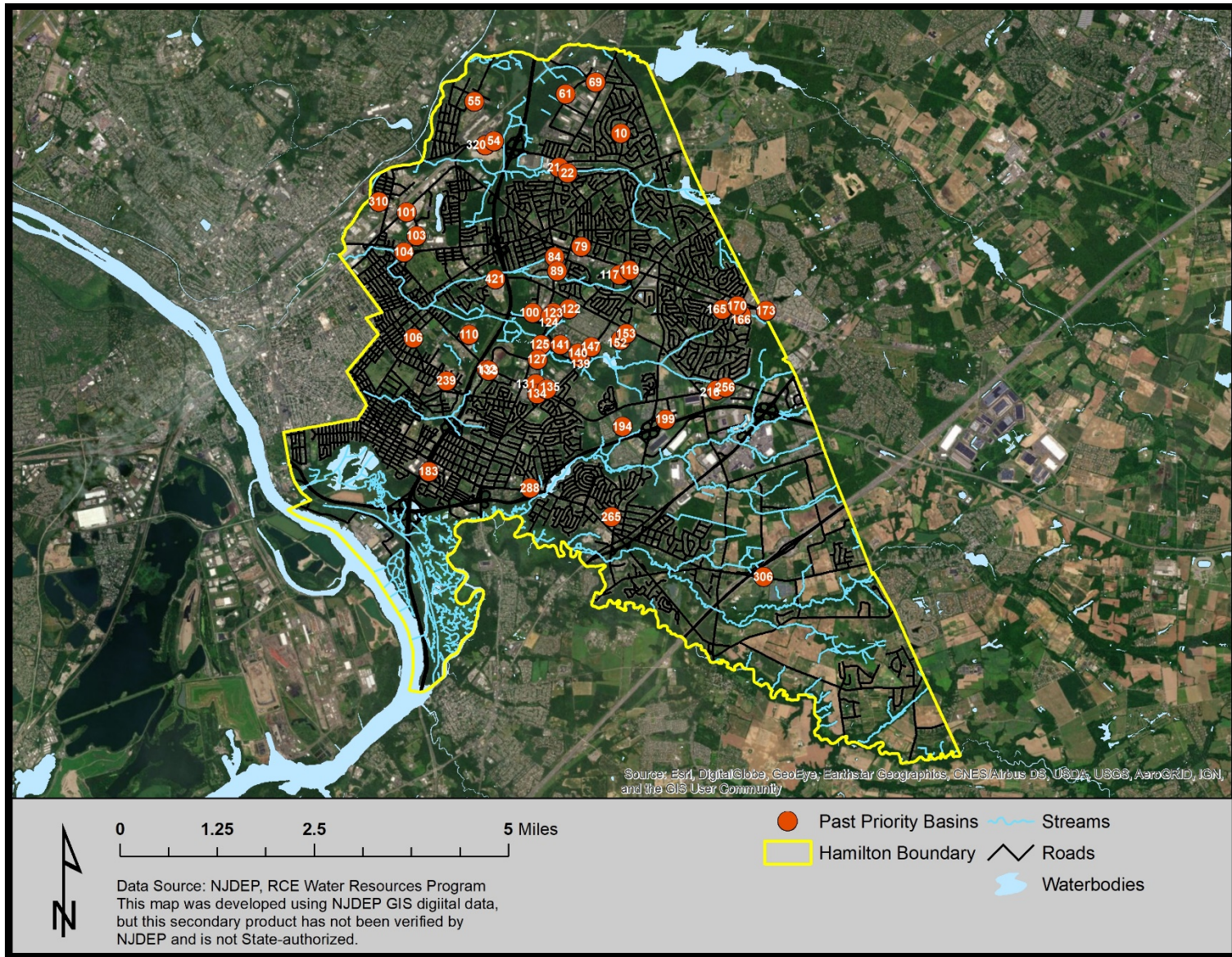


Figure 1: Past priority basins evaluated during 2019

Findings

Upon completion of the field visits and assessments, RCE Water Resources Program staff and students compiled the collected data to generate maps using geographic information system (GIS) databases highlighting results and locating priority basins in need of maintenance, repair, and further investigation. Each map is accompanied by a list of the basins identified in the map.

Basins That Require Cleaning or Maintenance

This map (Attachment 2A/2B) identifies stormwater basins that have components that need to be cleaned or maintained. Debris, leaves, trash, sediment, and/or grass clippings may be preventing the facility from functioning properly. The work needed to get the facility fully operational should be minimal. Site visits noted that little or no routine maintenance is being done at the facility, and/or vegetation and debris have compromised the integrity of the system. More effort is needed to ensure the facility is operating effectively, and a routine maintenance program should be implemented to keep the system functioning.

Basins That Require Repair

This map (Attachment 2C) identifies stormwater basins that have structural components that are broken, deteriorated, and/or missing. Major repairs are those that cause the system to no longer function as designed and may be a safety hazard. Immediate action is needed to make the facility operational and safe. Minor repairs are those that impede the functionality somewhat, but not completely. Action should be taken as quickly as possible to avoid further deterioration of the structure.

Basins with Standing Water

This map (Attachment 2D) identifies stormwater basins where evidence of standing water was noted during the site visit. Standing water in basins for a period longer than 72 hours after a storm event can present a serious health risk. Immediate action should be taken to further investigate these basins and determine the reason for water to remain in the systems. It is anticipated that repairs will be necessary in many of these facilities to drain and to ensure that the facility functions properly. This is divided into whether the basin has major ponding which poses a significant problem, ponding in the low flow channel, and other minor ponding identified in inlets, outlets, or other areas.

Priority Basins

This map (Attachment 2E) identifies stormwater basins where multiple issues were noted during the site visit. Basins were categorized from no priority, with a score of one (not shown on map), to high priority, with a score of four, to organize the severity of repairs and maintenance needed. It is likely that multiple actions will be needed to get those facilities with a score of four fully operational and functioning as designed.

Basins Suitable for Water Quality and Infiltration Retrofits

This map (Attachment 2F) identifies stormwater basins where simple, cost-effective modifications to the facility could be made to increase the basin's ability to capture, filter, and infiltrate runoff during smaller storm events to protect water quality and promote groundwater recharge. Basins were selected in areas where available soils data indicate that infiltration is possible. When considering bioretention retrofits to improve infiltration (Map 2F), certain slope requirements must be achieved to ensure proper functionality. The soil groups can only be A and B for proper infiltration to occur. In addition, bioretention areas must be at least two (2) feet from the seasonal high water table. Areas of concern would be considered areas with a slope higher than 5%, hydrologic soil groups C and D, and depth to seasonal high groundwater table less than two (2) feet. Refer to the "Hamilton Township Soil Suitability for Stormwater BMPs" report for more precise information regarding soil categorization.

Summary and Conclusions

As the assessment process of the infrastructure network of Hamilton Township progresses forward, notable adverse trends among the stormwater management basins have become apparent. Proper corrective action to rectify these issues among the basins, especially those that pose high risk for failure or have potential negative effects on the health, safety, and welfare of residents should be taken by the township. Of the 50 past priority basins assessed, 14 remain medium to high priority sites. This means many of the basins have improved from previous assessments, but some still require attention. Notable repeated observations during the assessment include sedimentation and vegetation restricted low flow channels which leads to standing water. These channels could be cleared, but a long term solution would be to remove these low flow channels and replace them

with stone lined channels or vegetated swales. A similar observation was excessive sediment accumulation near the inlet and outlet structures. These areas should be regularly cleared to ensure the low flow orifice and pipes are not clogged or filled with sediment. Another common observation was outlets and inlets being covered in vegetation. These areas need to be cleared of vegetation to maintain function and accessibility to the key parts of the basin infrastructure. Furthermore, educating the community on the vital role of stormwater management should be integrated into the repair and maintenance process of these basins. It is also important to remain observant for any opportunities where improvements can be made to increase infiltration rates and safeguard water quality.

Next Steps

Detention basins can often be improved upon with simple retrofits or alterations that improve the basin's ability to remove nonpoint source pollutants in a cost-effective manner. While improving water quality is a major goal associated with retrofits, increasing detention times and groundwater recharge rates will reduce runoff volumes entering local waterways, thereby reducing localized flooding. During the assessment process, staff and interns identified detention basins suitable for retrofits. These retrofit opportunities include reduced mowing, establishing meadows, removing low flow channels, naturalizing, and retrofitting into infiltration basins. These opportunities are highlighted in the assessment summaries in Attachment 3.

Attachment 1: Stormwater Basin Inspection Checklist



Hamilton Township Stormwater Infrastructure Assessment Program Stormwater Basin Inspection Checklist



GENERAL INFORMATION		Site ID:
Name(s) person inspecting the basin:		Date:
Location Address and Cross Streets:	Watershed:	
Name of Creek, Stream, or area into which the basin discharges:	Property Owner / Tax Parcel Block & Lot:	
Contact information:		
STRUCTURAL COMPONENTS		
Basin description, size and depth:	Is the basin accessible to maintain? Yes / No Is it maintained: Mowed, clear of woody plants, inlet/outlet blockages?	
Number of inlets:	Outlet diameter:	

GENERAL OBSERVATIONS	YES	NO	NOTES/REMARKS
1) Any reports on the basin not functioning?			
2) Are there any unauthorized or malfunctioning structures in the basin?			
3) Are there concrete low flow channels. Is the water entering the basin directly exiting the basin outlet without coming in contact with the basin bottom soil and vegetation?			
4) Is there standing water or evidence of standing water in the basin?			
INLET/S			
1) Signs of breakage, damage, corrosion or rusting of inlet structure/pipe?			
2) Debris or sediment accumulation in or around the inlet clogging the inlet opening/pipe?			
3) Signs of erosion, scour or gullies; rock or vegetation above or around the inlet structure?			
4) Tree roots, woody vegetation growing close to or through the inlet structure or a situation impacting the structure's integrity?			
5) If the inlet has a pretreatment structure (trash rack, forebay) is it filled w/ debris or sediment?			
BASIN			
1) Accumulation of debris or litter within basin?			
2) Exposed dirt or earth visible, are there areas without vegetation or where turf is damaged?			
3) Excess sediment accumulation in the basin?			
4) Basin walls/embankment eroded, slumping, caved or being undermined?			

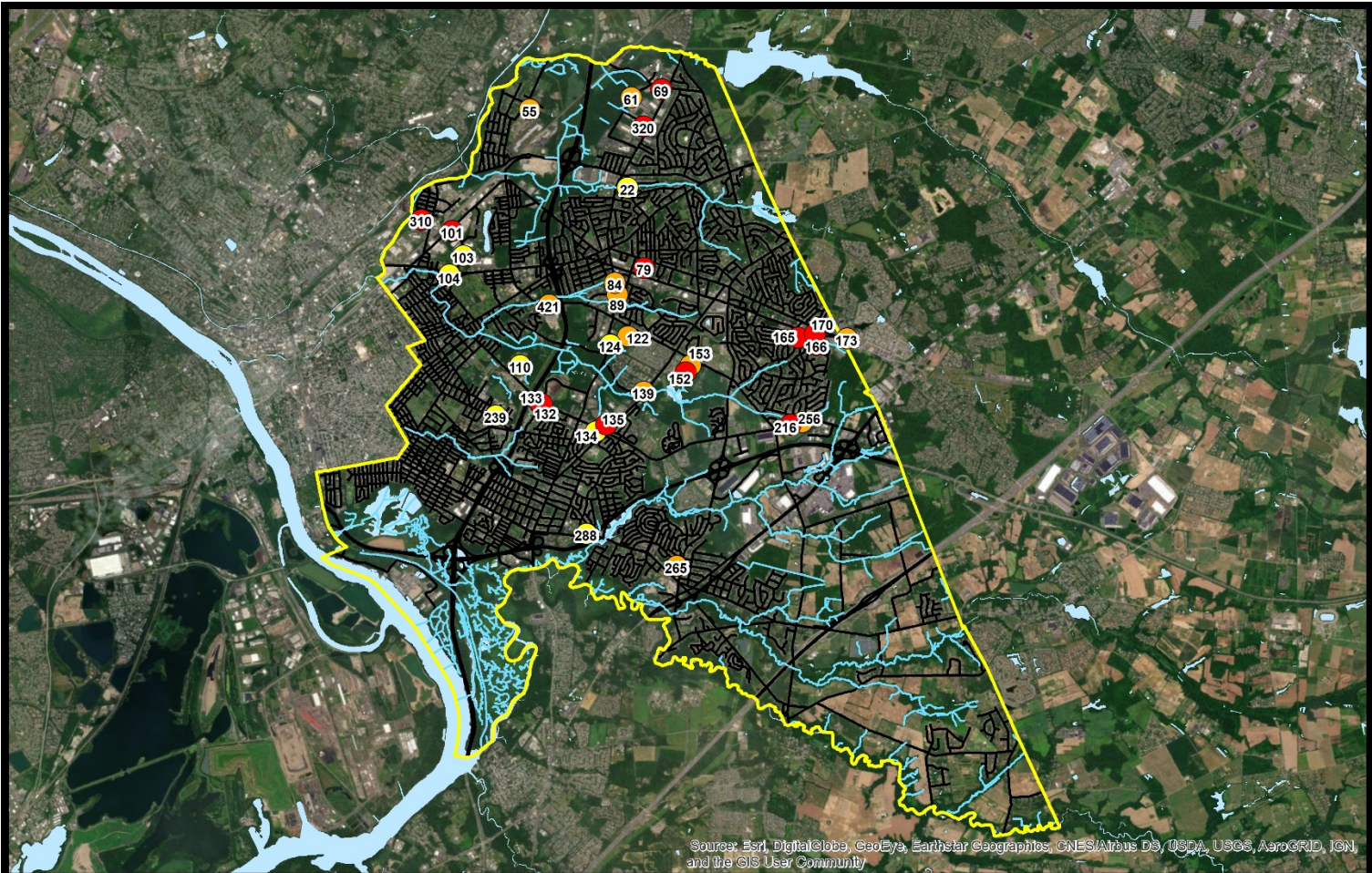


Hamilton Township Stormwater Infrastructure Assessment Program Stormwater Basin Inspection Checklist



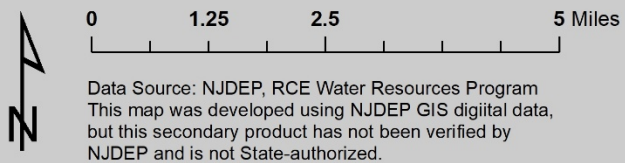
OUTLET	YES	NO	NOTES/REMARKS
1) Breakage, damage, corrosion or rusting to outlet pipe or conveyance?			
2) Signs of erosion, scour or gullies; rock or vegetation above or around the outlet structure?			
3) Debris or sediment accumulation in or around the outlet pipe (i.e. debris or sediment)?			
4) Accumulation of debris or litter in or around outlet?			
5) Tree roots or woody vegetation impacting the outlet or causing potential damage to the structure?			
SECONDARY/EMERGENCY OVERFLOW SPILLWAY			
1) Are pipes, conduits, or conveyances free of debris, clogs and in good condition? (i.e. no visible cracks, breakage slumping)			
2) Large tree or root growth close to pipes or conveyances with the potential to crack structure or impede flow?			
3) Signs of erosion, scour or gullies; rock or vegetation above or around the spillway?			
BASIN OUTFALL AREA			
1) Signs of stormwater exiting the basin in an uncontrolled manner over or through wall or berm?			
2) Signs of erosion, scour or gullies; rock or vegetation at or down slope of the outfall?			
RECOMMENDATIONS FOR WATER QUALITY IMPROVEMENTS			
1) Reduce mowing 2) Plant buffers 3) Establish meadows 4) Retrofit with infiltration structures or other strategies 5) Other			
SUMMARY AND NOTES: Identify unique characteristics and/or opportunities			

Attachment 2A/2B: Past Priority Basins that Require Cleaning or Maintenance



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Past Priority Basins: Cleaning and Maintenance

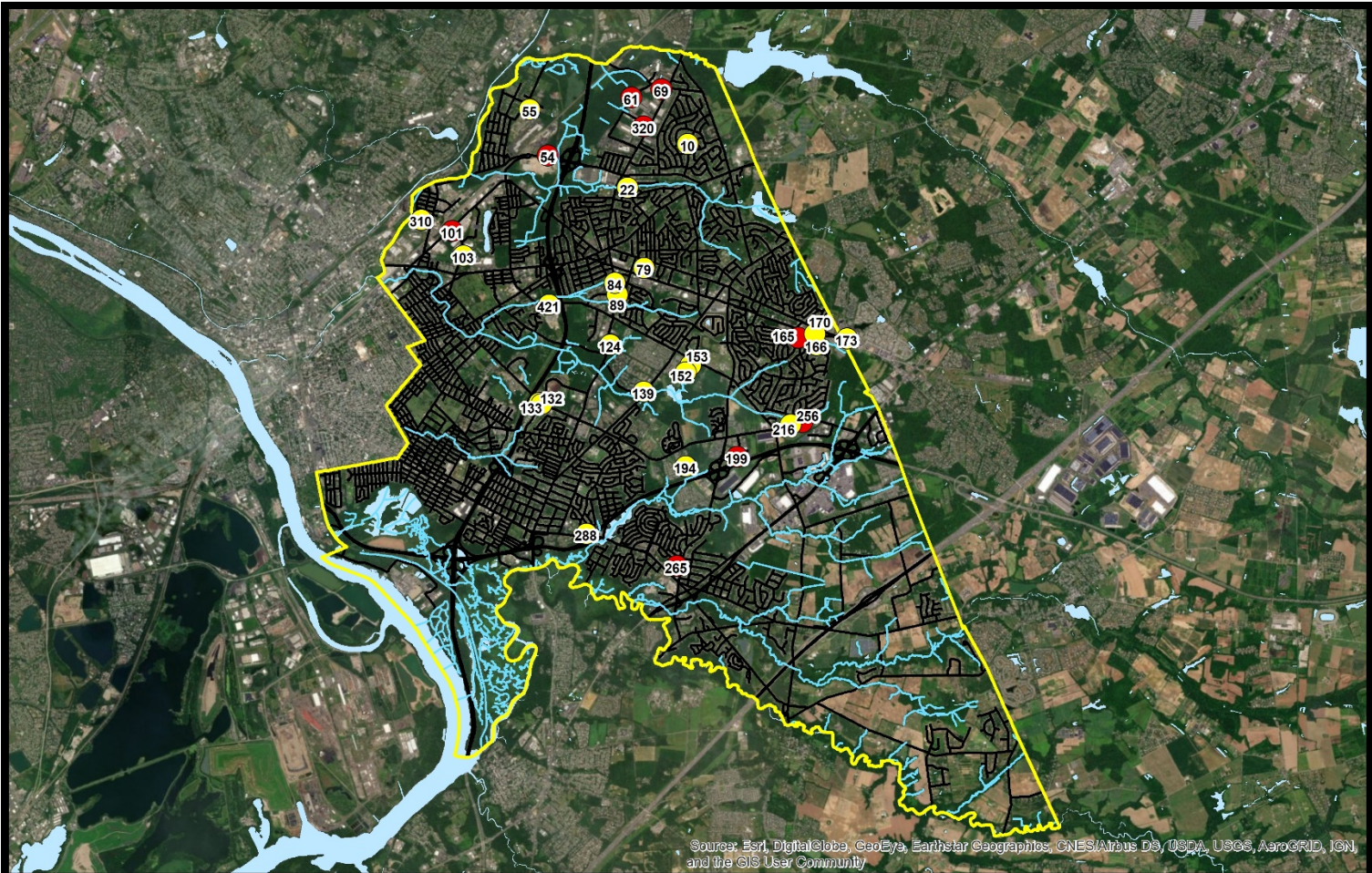


Data Source: NJDEP, RCE Water Resources Program
 This map was developed using NJDEP GIS digital data,
 but this secondary product has not been verified by
 NJDEP and is not State-authorized.

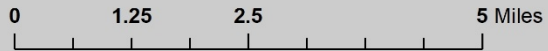
- Cleaning and maintenance needed
- Routine maintenance required
- Routine cleaning needed
- Hamilton Boundary
- Roads
- Streams
- Waterbodies

Basin ID	Basin Type	Condition	Overall Priority
69	Infiltration	Cleaning and maintenance needed	4
79	Detention	Cleaning and maintenance needed	2
101	Detention	Cleaning and maintenance needed	3
132	Detention	Cleaning and maintenance needed	1
133	Detention	Cleaning and maintenance needed	1
135	Detention	Cleaning and maintenance needed	1
152	Detention	Cleaning and maintenance needed	2
165	Detention	Cleaning and maintenance needed	4
166	Detention	Cleaning and maintenance needed	3
170	Detention	Cleaning and maintenance needed	3
216	Detention	Cleaning and maintenance needed	2
310	Detention	Cleaning and maintenance needed	3
320	Detention	Cleaning and maintenance needed	3
55	Detention	Routine maintenance required	1
61	Detention	Routine maintenance required	3
84	Infiltration	Routine maintenance required	2
89	Detention	Routine maintenance required	1
122	Detention	Routine maintenance required	2
139	Detention	Routine maintenance required	2
153	Detention	Routine maintenance required	2
173	Detention	Routine maintenance required	3
256	Detention	Routine maintenance required	4
265	Detention	Routine maintenance required	2
421	Other	Routine maintenance required	2
22	Detention	Routine cleaning needed	2
103	Detention	Routine cleaning needed	2
104	Detention	Routine cleaning needed	1
110	Infiltration	Routine cleaning needed	1
124	Detention	Routine cleaning needed	3
134	Detention	Routine cleaning needed	2
239	Detention	Routine cleaning needed	1
288	Detention	Routine cleaning needed	3

Attachment 2C: Past Priority Basins that Require Repair



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



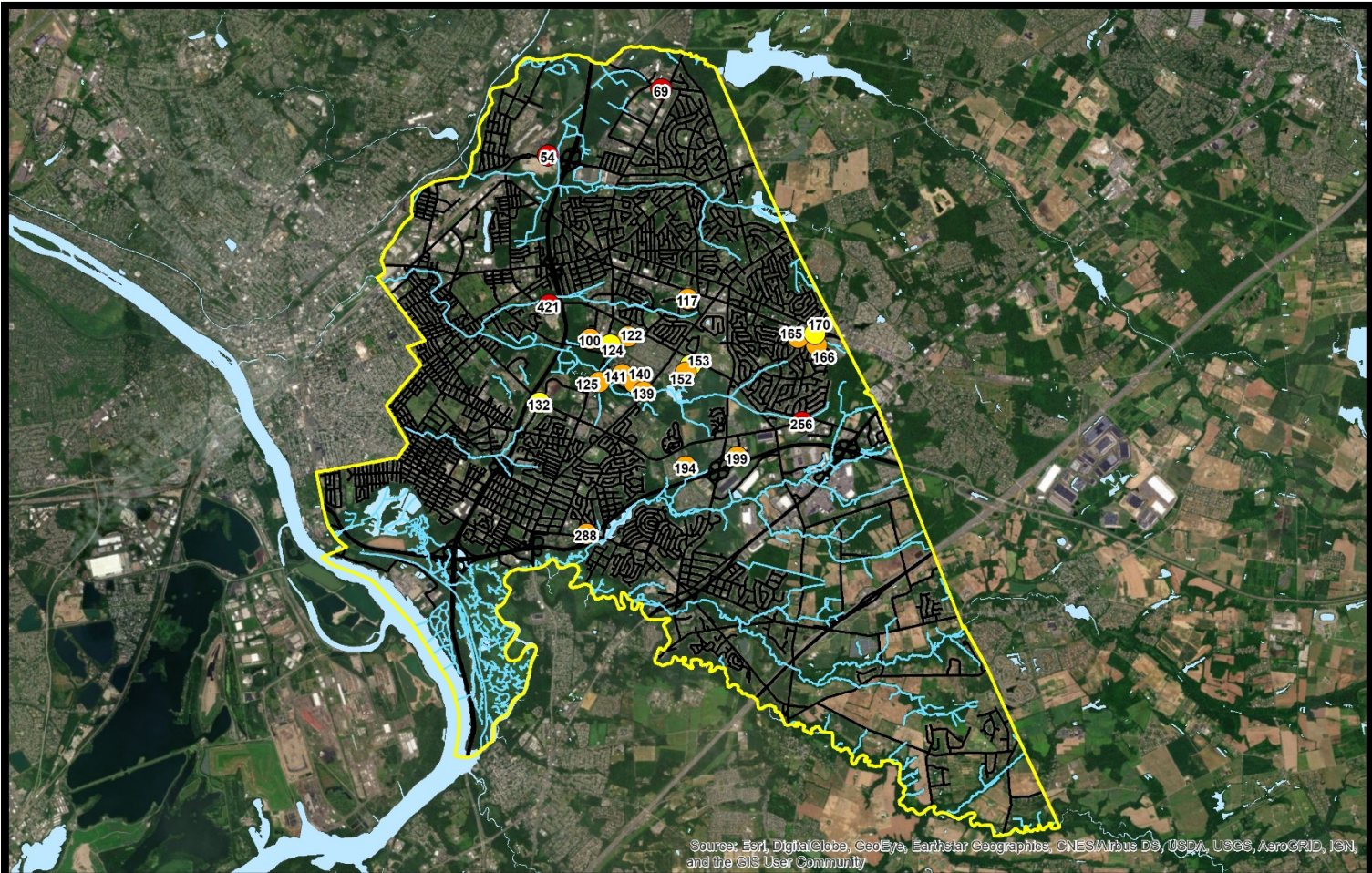
Data Source: NJDEP, RCE Water Resources Program
 This map was developed using NJDEP GIS digital data, but this secondary product has not been verified by NJDEP and is not State-authorized.

Past Priority Basins: Repair

- major repair
- minor repair
- Hamilton Boundary
- Roads
- Streams
- Waterbodies

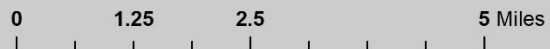
Basin ID	Basin Type	Repair	Overall Priority
54	Detention	major repair	3
61	Detention	major repair	3
69	Infiltration	major repair	4
101	Detention	major repair	3
165	Detention	major repair	4
199	Detention	major repair	3
256	Detention	major repair	4
265	Detention	major repair	2
320	Detention	major repair	3
10	Detention	minor repair	1
22	Detention	minor repair	2
55	Detention	minor repair	1
79	Detention	minor repair	2
84	Infiltration	minor repair	2
89	Detention	minor repair	1
103	Detention	minor repair	2
124	Detention	minor repair	3
132	Detention	minor repair	1
133	Detention	minor repair	1
139	Detention	minor repair	2
152	Detention	minor repair	2
153	Detention	minor repair	2
166	Detention	minor repair	3
170	Detention	minor repair	3
173	Detention	minor repair	3
194	Detention	minor repair	1
216	Detention	minor repair	2
288	Detention	minor repair	3
310	Detention	minor repair	3
421	Other	minor repair	2

Attachment 2D: Past Priority Basins With Standing Water



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Past Priority Basins: Standing Water

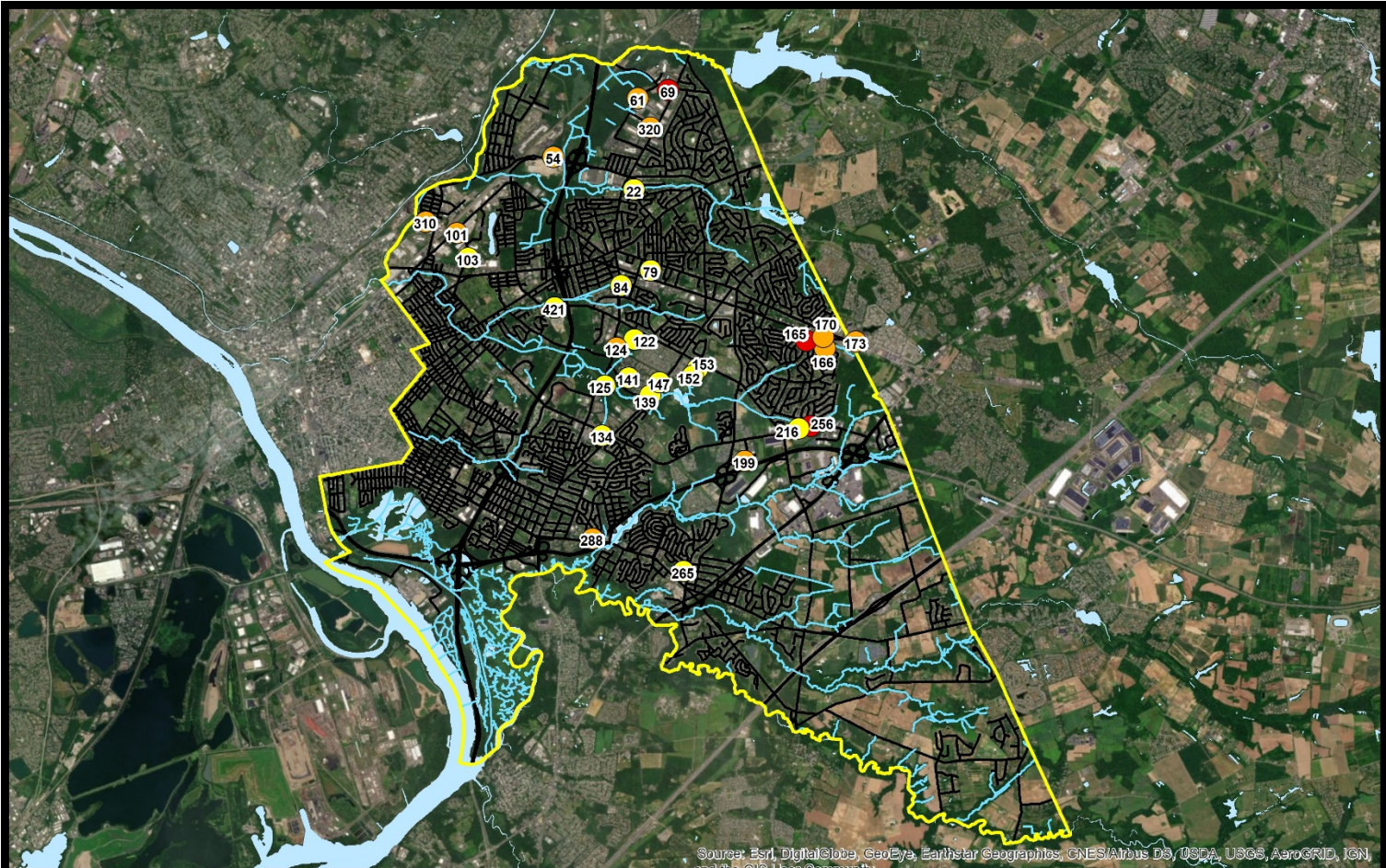


Data Source: NJDEP, RCE Water Resources Program
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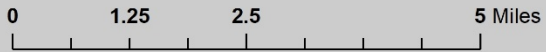
- Major Ponding
- Low Flow Channel
- Other Minor
- Hamilton Boundary
- Roads
- Streams
- Waterbodies

Basin ID	Basin Type	Standing Water	Overall Priority
54	Detention	Major Ponding	3
69	Infiltration	Major Ponding	4
256	Detention	Major Ponding	4
421	Other	Major Ponding	2
100	Detention	Low Flow Channel	1
117	Detention	Low Flow Channel	1
122	Detention	Low Flow Channel	2
125	Detention	Low Flow Channel	2
139	Detention	Low Flow Channel	2
140	Detention	Low Flow Channel	1
141	Detention	Low Flow Channel	2
152	Detention	Low Flow Channel	2
165	Detention	Low Flow Channel	4
166	Detention	Low Flow Channel	3
194	Detention	Low Flow Channel	1
199	Detention	Low Flow Channel	3
288	Detention	Low Flow Channel	3
124	Detention	Other Minor	3
132	Detention	Other Minor	1
153	Detention	Other Minor	2
170	Detention	Other Minor	3

Attachment 2E: Past Priority Basins, New Priority



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN



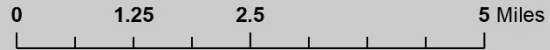
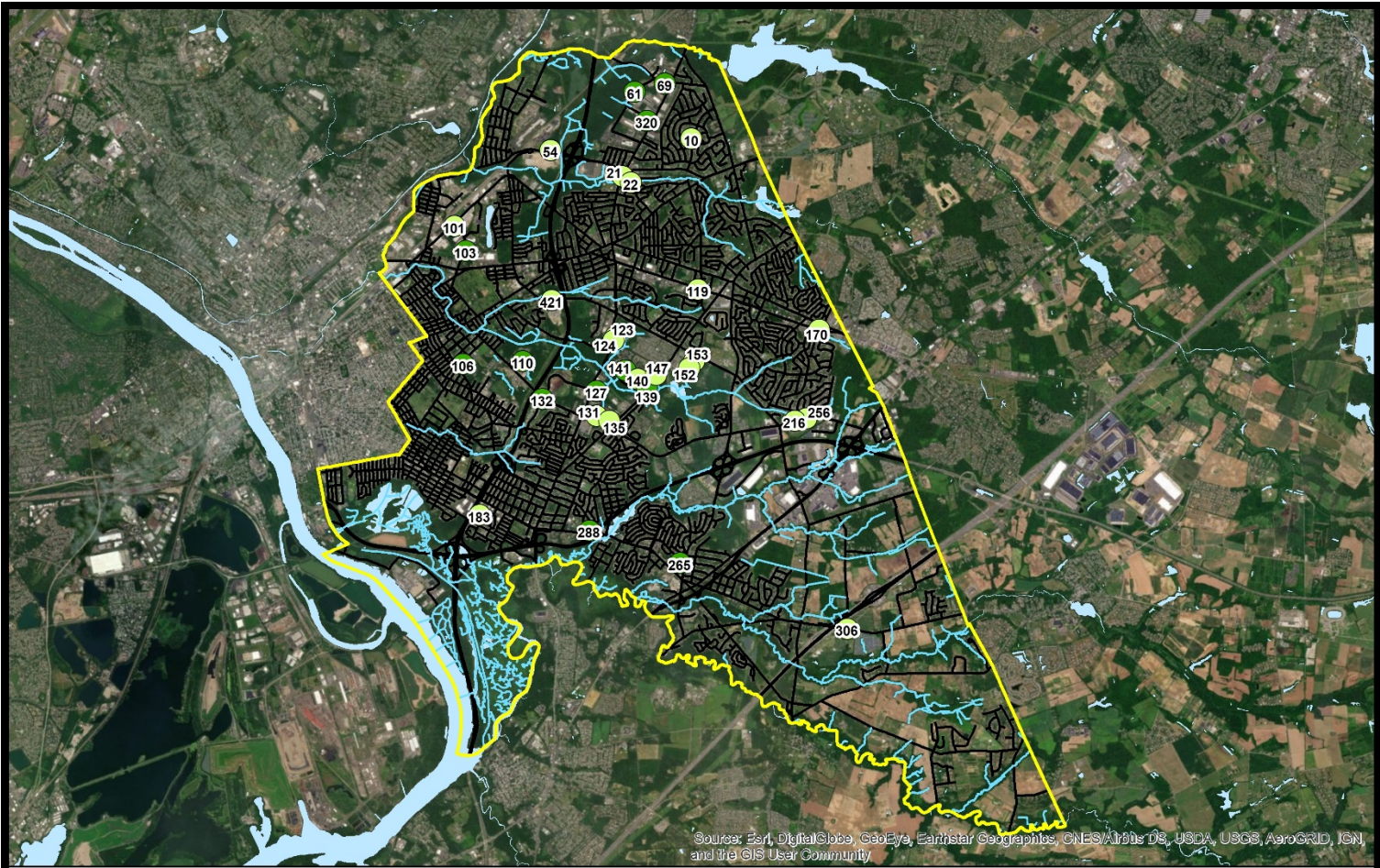
Data Source: NJDEP, RCE Water Resources Program
 This map was developed using NJDEP GIS digital data,
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Past Priority Basins: New Priority

- High Priority (4)
- Medium Priority (3)
- Low Priority (2)
- Hamilton Boundary
- Roads
- Streams
- Waterbodies

Basin ID	Basin Type	Overall Priority
69	Infiltration	4
165	Detention	4
256	Detention	4
54	Detention	3
61	Detention	3
101	Detention	3
124	Detention	3
166	Detention	3
170	Detention	3
173	Detention	3
199	Detention	3
288	Detention	3
310	Detention	3
320	Detention	3
22	Detention	2
79	Detention	2
84	Infiltration	2
103	Detention	2
122	Detention	2
125	Detention	2
134	Detention	2
139	Detention	2
141	Detention	2
147	Detention	2
152	Detention	2
153	Detention	2
216	Detention	2
265	Detention	2
421	Other	2

Attachment 2F: Past Priority Basins Suitable for Retrofits



Data Source: NJDEP, RCE Water Resources Program
 This map was developed using NJDEP GIS digital data,
 but this secondary product has not been verified by
 NJDEP and is not State-authorized.

Past Priority Basins: Infiltration Retrofit

- Highly Suitable for infiltration retrofit
- Suitable for infiltration retrofit
- ▭ Hamilton Boundary
- ▬ Roads
- ~ Streams
- ☪ Waterbodies

Basin ID	Basin Type	Retrofit Suitability	Overall Priority
61	Detention	Highly Suitable for infiltration retrofit	3
69	Infiltration	Highly Suitable for infiltration retrofit	4
103	Detention	Highly Suitable for infiltration retrofit	2
106	Detention	Highly Suitable for infiltration retrofit	1
110	Infiltration	Highly Suitable for infiltration retrofit	1
127	Detention	Highly Suitable for infiltration retrofit	1
132	Detention	Highly Suitable for infiltration retrofit	1
139	Detention	Highly Suitable for infiltration retrofit	2
141	Detention	Highly Suitable for infiltration retrofit	2
265	Detention	Highly Suitable for infiltration retrofit	2
288	Detention	Highly Suitable for infiltration retrofit	3
320	Detention	Highly Suitable for infiltration retrofit	3
10	Detention	Suitable for infiltration retrofit	1
21	Detention	Suitable for infiltration retrofit	1
22	Detention	Suitable for infiltration retrofit	2
54	Detention	Suitable for infiltration retrofit	3
101	Detention	Suitable for infiltration retrofit	3
119	Infiltration	Suitable for infiltration retrofit	1
123	Detention	Suitable for infiltration retrofit	1
124	Detention	Suitable for infiltration retrofit	3
131	Detention	Suitable for infiltration retrofit	1
135	Detention	Suitable for infiltration retrofit	1
140	Detention	Suitable for infiltration retrofit	1
147	Detention	Suitable for infiltration retrofit	2
152	Detention	Suitable for infiltration retrofit	2
153	Detention	Suitable for infiltration retrofit	2
170	Detention	Suitable for infiltration retrofit	3
183	Detention	Suitable for infiltration retrofit	1
216	Detention	Suitable for infiltration retrofit	2
256	Detention	Suitable for infiltration retrofit	4
306	Infiltration	Suitable for infiltration retrofit	1
421	Other	Suitable for infiltration retrofit	2

Attachment 3: Stormwater Basin Assessments



- | ID# | Location |
|------|----------------------------------|
| 10. | 634 Paxson Ave |
| 21. | 3161 Quakerbridge Rd |
| 22. | 3111 Quakerbridge Rd |
| 40. | 442 Wegner Ave (nonexistent) |
| 54. | 700 Sloan Ave |
| 55. | American Metro Blvd |
| 57. | 1 Electronics Dr |
| 58. | 1 Electronics Dr |
| 61. | 21 Thomas J Rhodes Industrial Dr |
| 69. | 133 Youngs Rd |
| 79. | 630 New Jersey 33 |
| 84. | 2333 Whitehorse Mercerville Rd |
| 89. | 2239 Whitehorse Mercerville Rd |
| 100. | 18-26 Lamont Ave |
| 101. | E State St and Sculptors Way |
| 103. | 130 Sculptors Way |
| 104. | 1475 Nottingham Way |
| 106. | Leonard Ave and Newkirk Ave |
| 110. | Nottinghill Ln |
| 117. | 949 RT-33 |
| 119. | 989 RT-33 |
| 122. | 1991 Klockner Rd |
| 123. | 1715 Whitehorse Mercerville Rd |
| 124. | 1673 Whitehorse Mercerville Rd |
| 125. | 1407 Whitehorse Mercerville Rd |
| 127. | 1323 Whitehorse Mercerville Rd |

- | ID# | Location |
|------|------------------------------------|
| 131. | 1702 Kruser Rd |
| 132. | 1305 Kruser Rd |
| 133. | 1305 Kruser Rd |
| 134. | 1763 Kruser Rd |
| 135. | 1134 Whitehorse Hamilton Square Rd |
| 139. | 1580 Whitehorse Hamilton Square Rd |
| 140. | Lehavre Ct |
| 141. | Cheverny Ct |
| 147. | 1746 Whitehorse Hamilton Square Rd |
| 152. | 63 Hamilton Health Pl |
| 153. | Hamilton Health Pl & Klockner Rd |
| 165. | Limewood Dr and RT-33 |
| 166. | Innocenzi Dr and Great Oak Rd |
| 170. | 4265 RT-33 |
| 173. | 1027 Washington Blvd |
| 183. | 61 Meredith Rd |
| 194. | 314 Mowat Cr |
| 199. | 160 Commerce Way |
| 216. | 2631 Kruser Rd |
| 239. | 154 Turnbull Ave |
| 256. | 2631 Kuser Rd |
| 265. | 211 Yardville Hamilton Square Rd |
| 306. | 1040 Yardville Allentown Rd |
| 310. | 5 1st Avenue |
| 320. | 720 Sloan Avenue |
| 421. | 1325 Klockner Road |

2019
Hamilton Township
Stormwater Basin Assessment
Past Priority Basins

Hamilton Township
Stormwater Basin Assessment

10. University Heights Elementary School

Address:
634 Paxson Ave
Hamilton Township, NJ 08619



Hamilton Township
Stormwater Basin Assessment

10. University Heights Elementary School

Address:
634 Paxson Ave
Hamilton Township, NJ 08619



Sediment accumulation in the inlet



Outlet structure



Looking north along basin bottom

2012 Notes:

- Sediment accumulation in front of inlet restricting flow of water
- Outlet orifice is clogged with sediment and debris
- Outlet has signs of breakage and woody vegetation growth

Hamilton Township
Stormwater Basin Assessment

10. University Heights Elementary School

Address:
634 Paxson Ave
Hamilton Township, NJ 08619



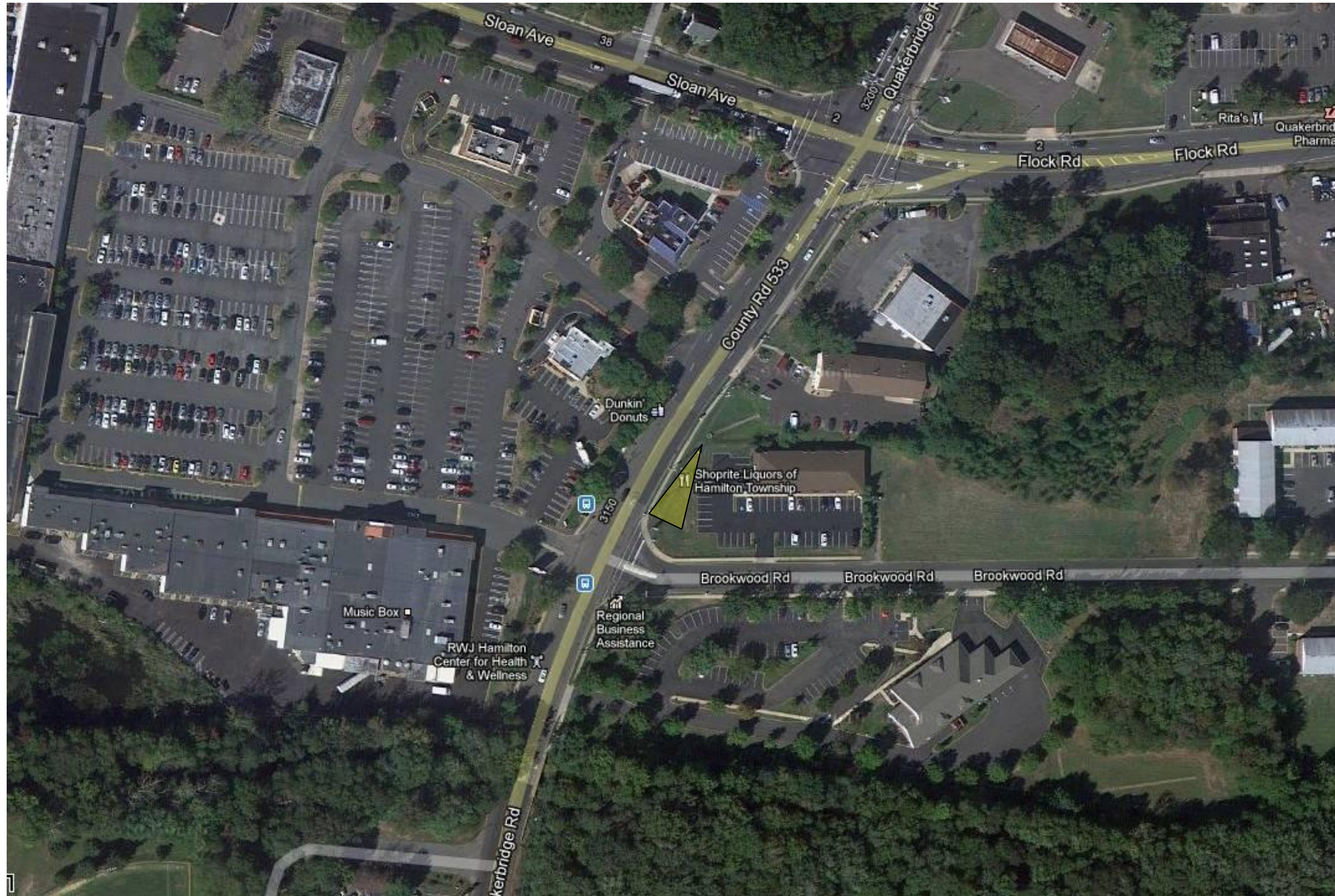
2019 Notes:

- Large detention basin with a single inlet and outlet near the street
- Clear debris near the inlet and outlet
- Basin could be naturalized as an outdoor classroom space

Hamilton Township
Stormwater Basin Assessment

21. ShopRite Liquors of Hamilton Basin

Address:
3161 Quakerbridge Road
Mercerville, NJ 08619



Hamilton Township
Stormwater Basin Assessment

21. ShopRite Liquors of Hamilton Basin

Address:
3161 Quakerbridge Road
Mercerville, NJ 08619



Erosion at inlet



Damaged outlet



Damaged inlet



Basin bottom looking north

2012 Notes:

- Curb cuts (inlets) are damaged with erosion evident
- Outlet has structural damage and erosion

Hamilton Township
Stormwater Basin Assessment

21. ShopRite Liquors of Hamilton Basin

Address:
3161 Quakerbridge Road
Mercerville, NJ 08619

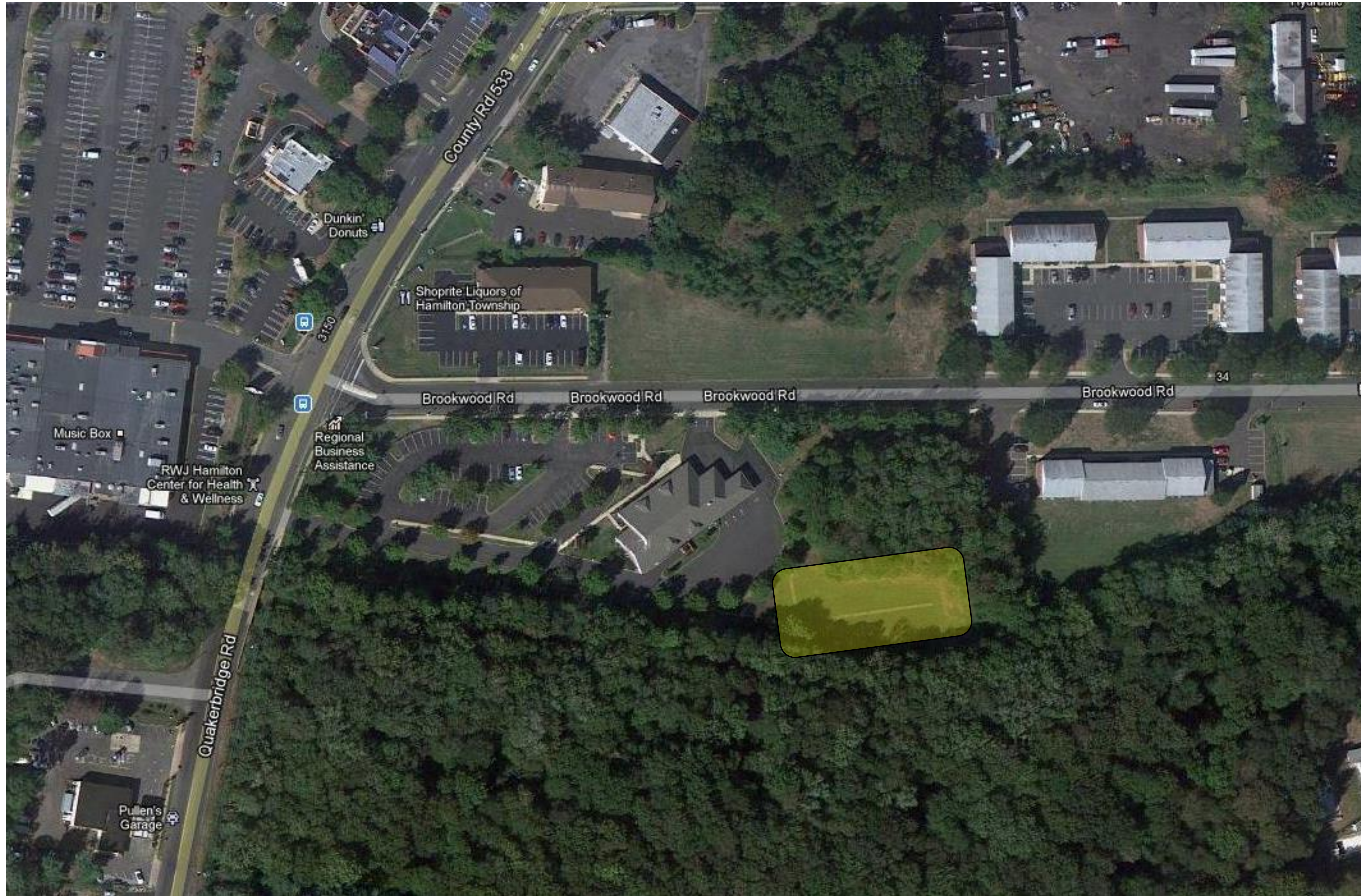


2019 Notes:

- Large grass basin with outflow
- Grate added around outlet structure, but still could use repairs
- Erosion problem from parking lot still present

Hamilton Township
Stormwater Basin Assessment
22. PNC Bank Basin

Address:
3111 Quakerbridge Road
Trenton, NJ 08619



Hamilton Township
Stormwater Basin Assessment
22. PNC Bank Basin

Address:
3111 Quakerbridge Road
Trenton, NJ 08619



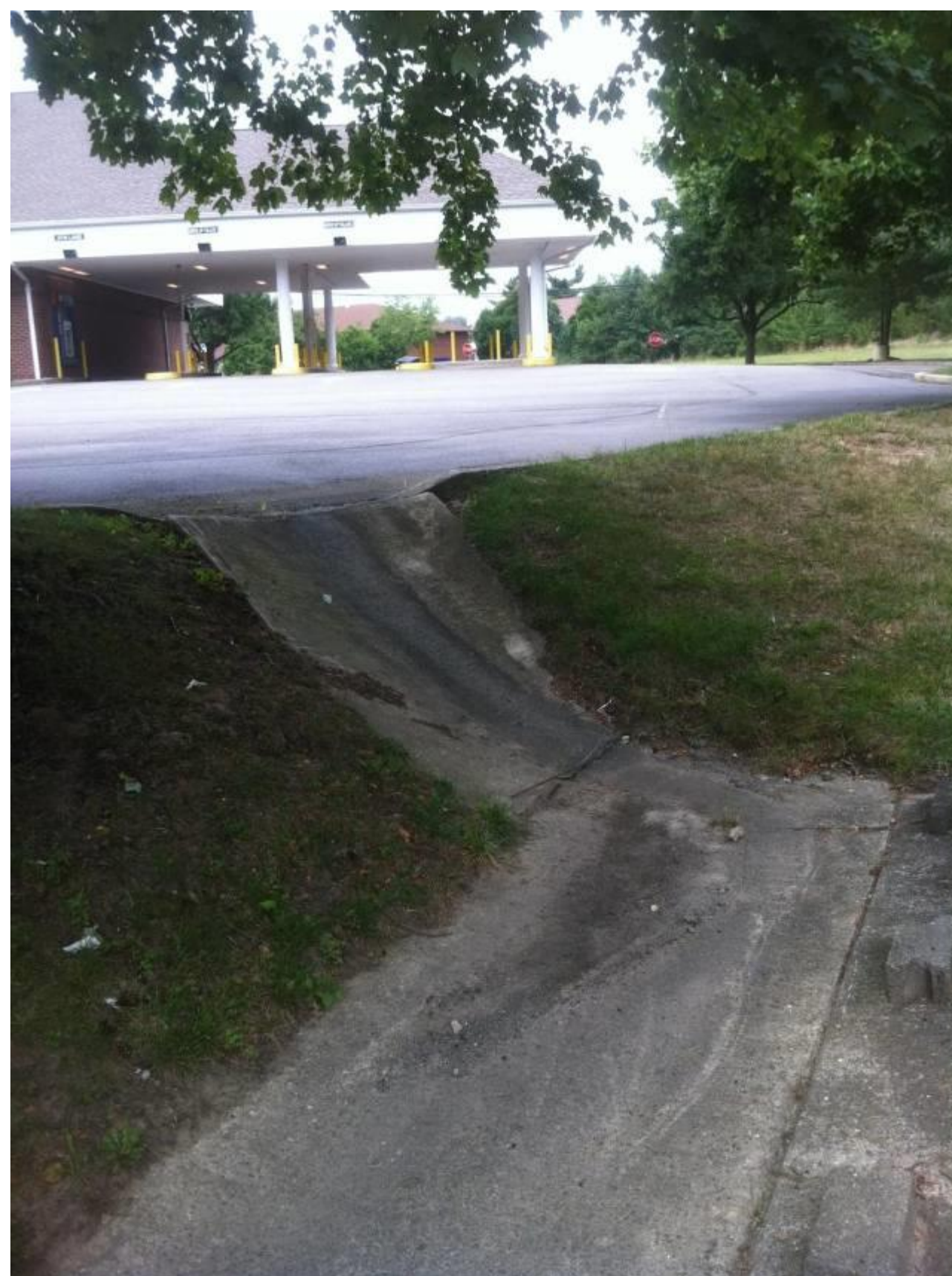
Basin bottom looking east



Sediment in low flow channel



Damaged outlet



Curb cut inlet

2012 Notes:

- Excess sediment accumulation in low flow channels
- Outlet has structural damage
- Discharges directly to Miry Run

Hamilton Township
Stormwater Basin Assessment
22. PNC Bank Basin

Address:
3111 Quakerbridge Road
Trenton, NJ 08619



2019 Notes:

- Basin overall is in good condition
- Significant sediment buildup in low flow channel with grass growing over, resulting in standing water in low flow channels
- Potential retrofit by removing low flow channels to promote infiltration or naturalizing into a meadow with reduced mowing

Hamilton Township
Stormwater Basin Assessment

54. Sloan Ave Empty Lot Commercial Basin

Address:
700 Sloan Ave
Hamilton Township, NJ 08619



Hamilton Township
Stormwater Basin Assessment

54. Sloan Ave Empty Lot Commercial Basin

Address:
700 Sloan Ave
Hamilton Township, NJ 08619



Outlet structure



Inlet – curb cut



Clogged curb cut, ponding



Basin bottom looking north

2012 Notes:

- Inlets have signs of breakage, signs of erosion and debris/sediment accumulation blocking the flow of water
- Standing water in basin

Hamilton Township
Stormwater Basin Assessment

54. Sloan Ave Empty Lot Commercial Basin

Address:
700 Sloan Ave
Hamilton Township, NJ 08619



2019 Notes:

- Severe standing water in parking lot, clear curb cut inlet to allow flow of water into the basin
- Establish meadow among grasses

Hamilton Township
Stormwater Basin Assessment
55. American Metro Blvd Basin

Address:
Basin Rd and American Metro Blvd
Hamilton Township, NJ 08619



Hamilton Township
Stormwater Basin Assessment
55. American Metro Blvd Basin

Address:
Basin Rd and American Metro Blvd
Hamilton Township, NJ 08619



Basin bottom looking southwest



Inlet



Outlet structure missing grate



Clogged outlet orifice

2012 Notes:

- Inlets and outlet have excess sediment accumulation obstructing flow
- Standing water in low flow channel and basin bottom
- Outlet has structural damage and missing grate

Hamilton Township
Stormwater Basin Assessment
55. American Metro Blvd Basin

Address:
Basin Rd and American Metro Blvd
Hamilton Township, NJ 08619



2019 Notes:

- Some signs of soil erosion by inlet
- Low flow channels can be removed to promote more infiltration

Hamilton Township
Stormwater Basin Assessment
57 & 58. Electronics Dr Commercial Basins

Address:
Electronics Drive
Hamilton Township, NJ 08619



**Did not assess due to limited accessibility

Hamilton Township
Stormwater Basin Assessment

61. FedEx World Center Commercial Basin

Address:
21 Thomas J Rhodes Industrial Drive
Hamilton Township, NJ 08619



Hamilton Township
Stormwater Basin Assessment

61. FedEx World Center Commercial Basin

Address:
21 Thomas J Rhodes Industrial Drive
Hamilton Township, NJ 08619



Inlet and rip rap protection



Clogged outlet structure



Inlet



Ponding in front of outlet

2012 Notes:

- Outlet has structural damage, significant debris/sediment accumulation obstructing flow
- Woody vegetation growth in and around basin
- Excessive ponding in front of outlet in entire south end of basin
- Significant mosquito population

Hamilton Township
Stormwater Basin Assessment

61. FedEx World Center Commercial Basin

Address:
21 Thomas J Rhodes Industrial Drive
Hamilton Township, NJ 08619



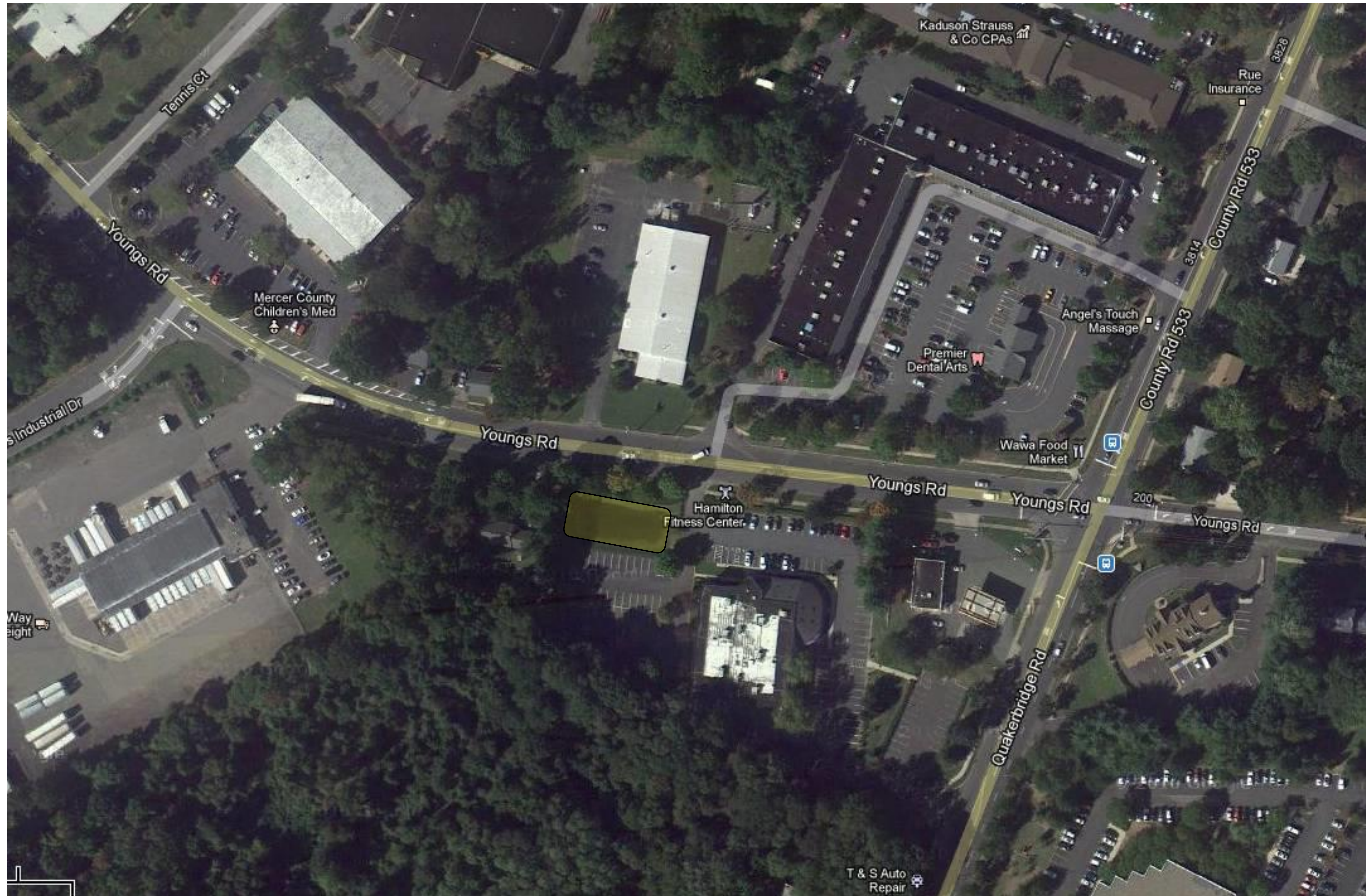
2019 Notes:

- Portion of basin near outlet appears to have significant sediment accumulation as low flow is buried and covered with sediment
- Basin partly naturalized with primarily herbaceous and some woody vegetation
- Remove low flow channel to promote infiltration in upper portions of basin

Hamilton Township
Stormwater Basin Assessment

69. Hamilton Fitness Center Basin

Address:
133 Youngs Road
Hamilton Township, NJ 08619



Hamilton Township
Stormwater Basin Assessment
69. Hamilton Fitness Center Basin

Address:
133 Youngs Road
Hamilton Township, NJ 08619



Inlet with sediment accumulation



Outlet structure



Clogged inlet



Ponding in basin bottom

2012 Notes:

- Standing water in basin
- Excess sediment accumulation in front of inlets obstructing flow of water
- Debris and pine needles clogging outlet orifice

Hamilton Township
Stormwater Basin Assessment

69. Hamilton Fitness Center Basin

Address:
133 Youngs Road
Hamilton Township, NJ 08619

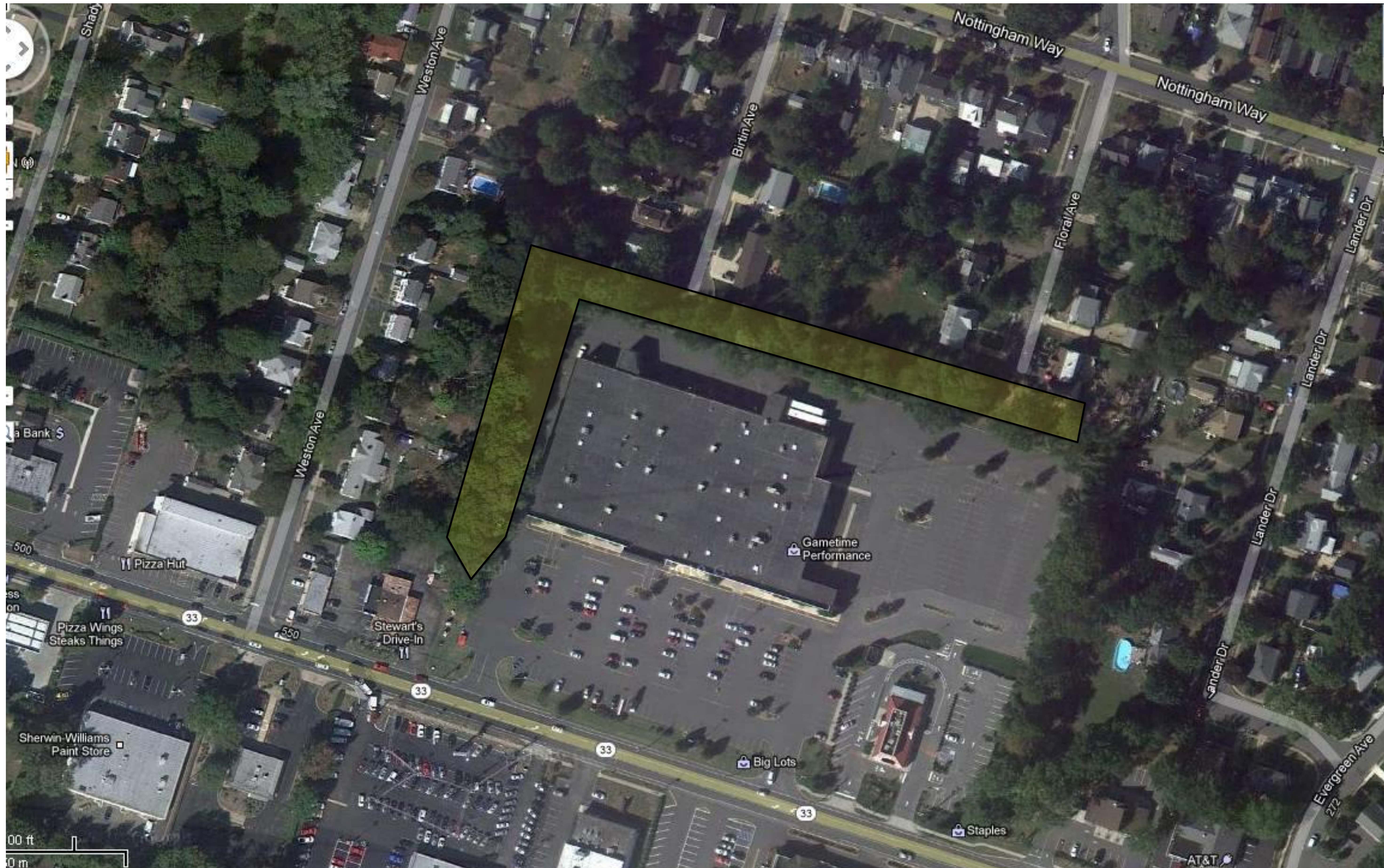


2019 Notes:

- Large ponding about a foot deep likely formed due to poor infiltration and an outlet set to high.
- Investigation should be done to determine what is causing this ponding that has been seen in both years this basin was assessed

Hamilton Township
Stormwater Basin Assessment
79. Big Lots Basin

Address:
630 New Jersey 33
Hamilton Township, NJ 08619



Hamilton Township
Stormwater Basin Assessment
79. Big Lots Basin

Address:
630 New Jersey 33
Hamilton Township, NJ 08619



Rip rap and trash at dead end leading to basin



Litter and debris accumulation



Ponding in basin bottom

2012 Notes:

- Crates and shopping carts in basin
- Standing water in basin bottom
- Sediment and litter accumulation in basin, inlets and outlet
- Woody vegetation growth around outlet
- Exposed soil in and around basin embankment

Hamilton Township
Stormwater Basin Assessment
79. Big Lots Basin

Address:
630 New Jersey 33
Hamilton Township, NJ 08619



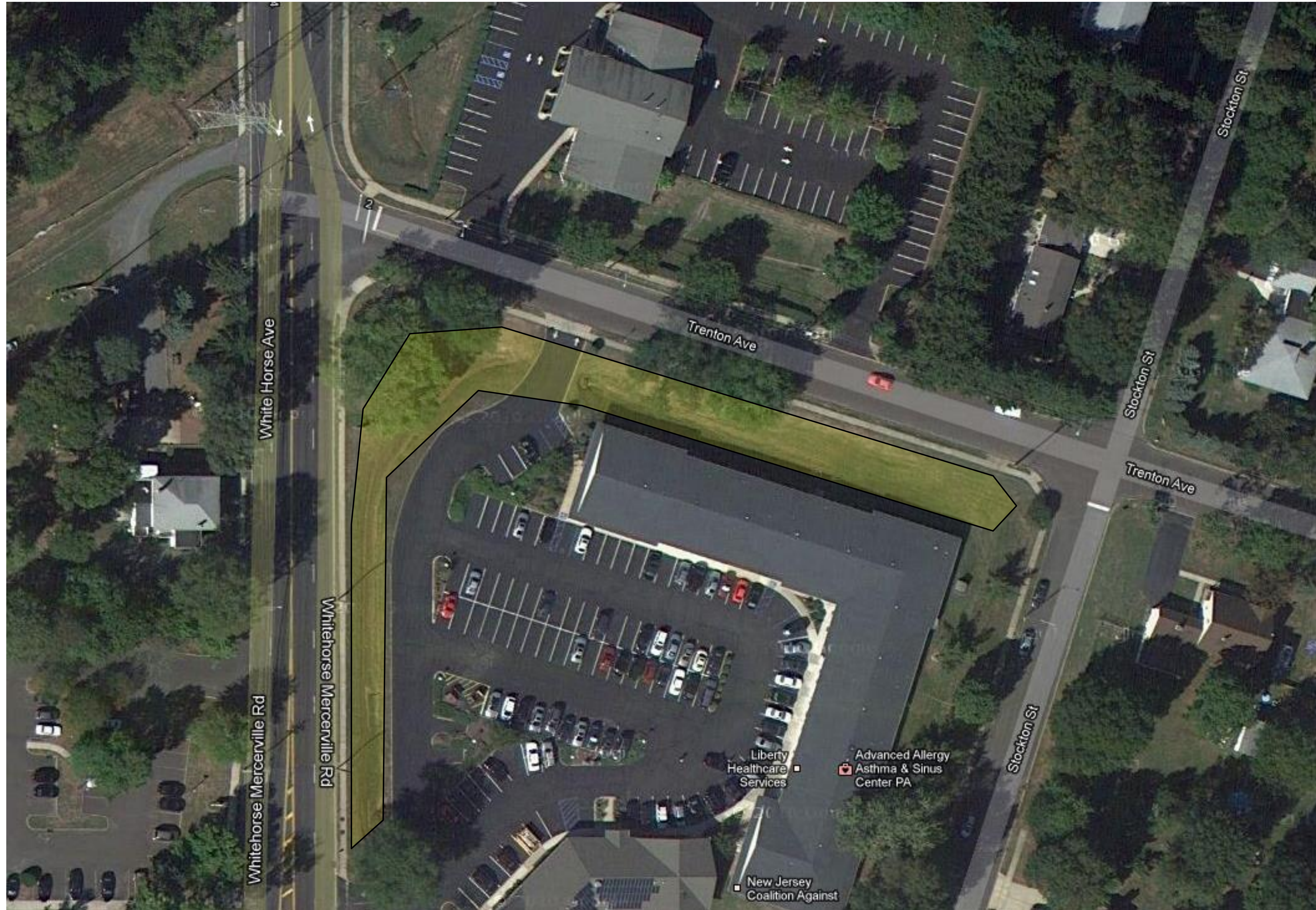
2019 Notes:

- Basin behind the building leading into a wooden area
- Recommend cleaning out location

Hamilton Township
Stormwater Basin Assessment

84. Advanced Allergy Asthma & Sinus Center Basin

Address:
2333 Whitehorse Mercerville Road
Hamilton Township, NJ 08619



Hamilton Township
Stormwater Basin Assessment

84. Advanced Allergy Asthma & Sinus Center Basin

Address:
2333 Whitehorse Mercerville Road
Hamilton Township, NJ 08619



Eastern basin bottom



Clogged inlet



Western basin bottom



Outlet

2012 Notes:

- Sediment accumulation at inlet and outlet
- Exposed soil in basin bottom
- Outlet has structural damage

Hamilton Township
Stormwater Basin Assessment

84. Advanced Allergy Asthma & Sinus Center Basin

Address:
2333 Whitehorse Mercerville Road
Hamilton Township, NJ 08619



2019 Notes:

- Basin has 2 inlets, some erosion appears to be caused by them
- Naturalize with herbaceous plants and add stone near inlets to control erosion

Hamilton Township
Stormwater Basin Assessment

89. Derma Laser Centers Basin (#1)

Address:
2239 Whitehorse Mercerville Road
Mercerville, NJ 08619



Hamilton Township
Stormwater Basin Assessment

89. Derma Laser Centers Basin (#1)

Address:
2239 Whitehorse Mercerville Road
Mercerville, NJ 08619



Basin bottom looking west



Outlet structure



Inlet pipe

2012 Notes:

- Standing water in inlet
- Accumulation of litter, sediment and debris AT outlet, inlet and basin bottom
- Exposed soil in basin bottom
- Evidence of erosion in front of inlet
- Inlet shows evidence of deterioration

Hamilton Township
Stormwater Basin Assessment
89. Derma Laser Centers Basin (#1)

Address:
2239 Whitehorse Mercerville Road
Mercerville, NJ 08619



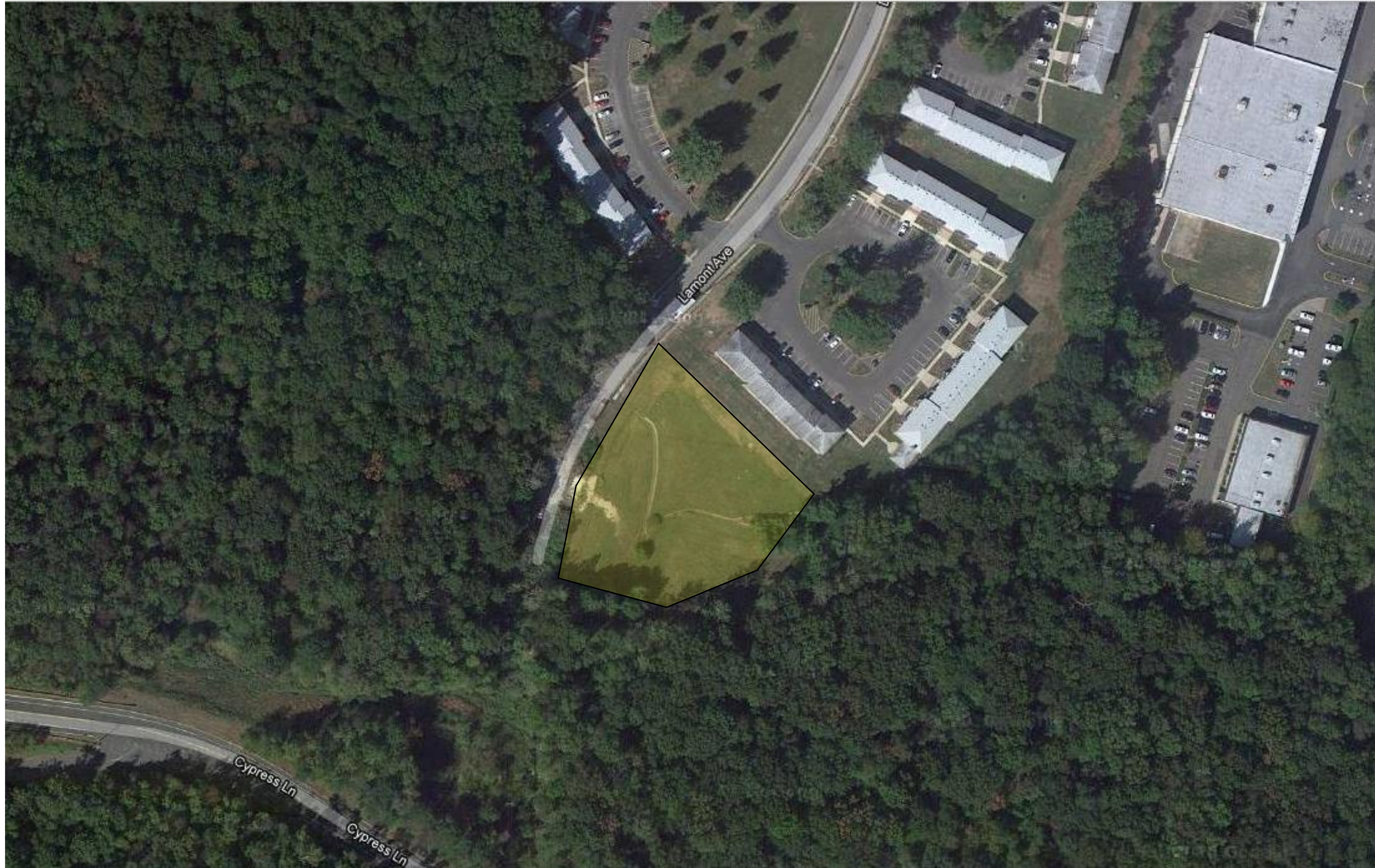
2019 Notes:

- Small basin with one inlet
- Inlet still appears damaged and may need repair
- Naturalize basin with herbaceous plants

Hamilton Township
Stormwater Basin Assessment

100. Lamont Ave Commercial Basin

Address:
Lamont Ave
Trenton, NJ 08619



Hamilton Township
Stormwater Basin Assessment

100. Lamont Ave Commercial Basin

Address:
Lamont Ave
Trenton, NJ 08619



Inlet covered by plant growth



Outlet structure obstructed with litter



Slumping/failing basin embankment



Basin bottom looking northwest

2012 Notes:

- Sediment, debris and litter accumulation at inlets and outlet
- Excess sediment accumulation and standing water in low flow channel with algae growth
- Northwestern basin embankment slumping/failing
- Evidence of deterioration at inlets
- Woody vegetation growth around outlet
- Basin outfall area shows evidence of erosion

Hamilton Township
Stormwater Basin Assessment

100. Lamont Ave Commercial Basin

Address:
Lamont Ave
Trenton, NJ 08619



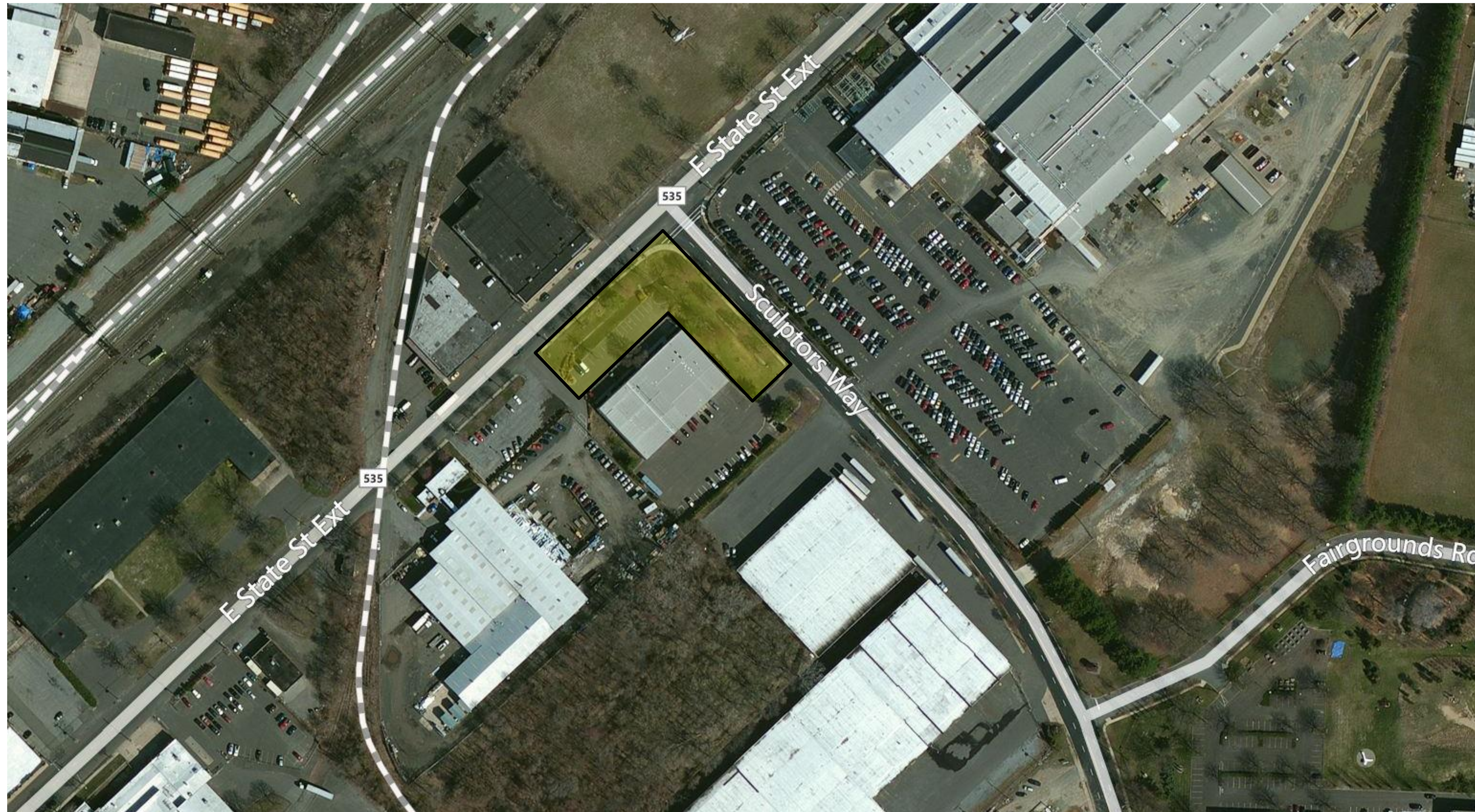
2019 Notes:

- Well naturalized basin
- Some oil observed leaking in about halfway down the channel

Hamilton Township
Stormwater Basin Assessment

101. Daddi's Martial Arts Detention Basin

Address:
E State St and Sculptors Way
Trenton, NJ 08619



Hamilton Township Stormwater Basin Assessment

101. Daddi's Martial Arts Detention Basin

Address:
E State St and Sculptors Way
Trenton, NJ 08619



Basin bottom looking northwest



Exposed roots near eastern inlet



Invasive ground cover



Outlet structure

2013 Notes:

- There is excess sediment accumulated and standing water in the low flow channel
- There is erosion near the eastern inlet exposing roots
- Outlet structure is surrounded by excess sediment and erosion
- Invasive ground cover is out-competing turf in some areas

Hamilton Township
Stormwater Basin Assessment

101. Daddi's Martial Arts Detention Basin

Address:
E State St and Sculptors Way
Trenton, NJ 08619



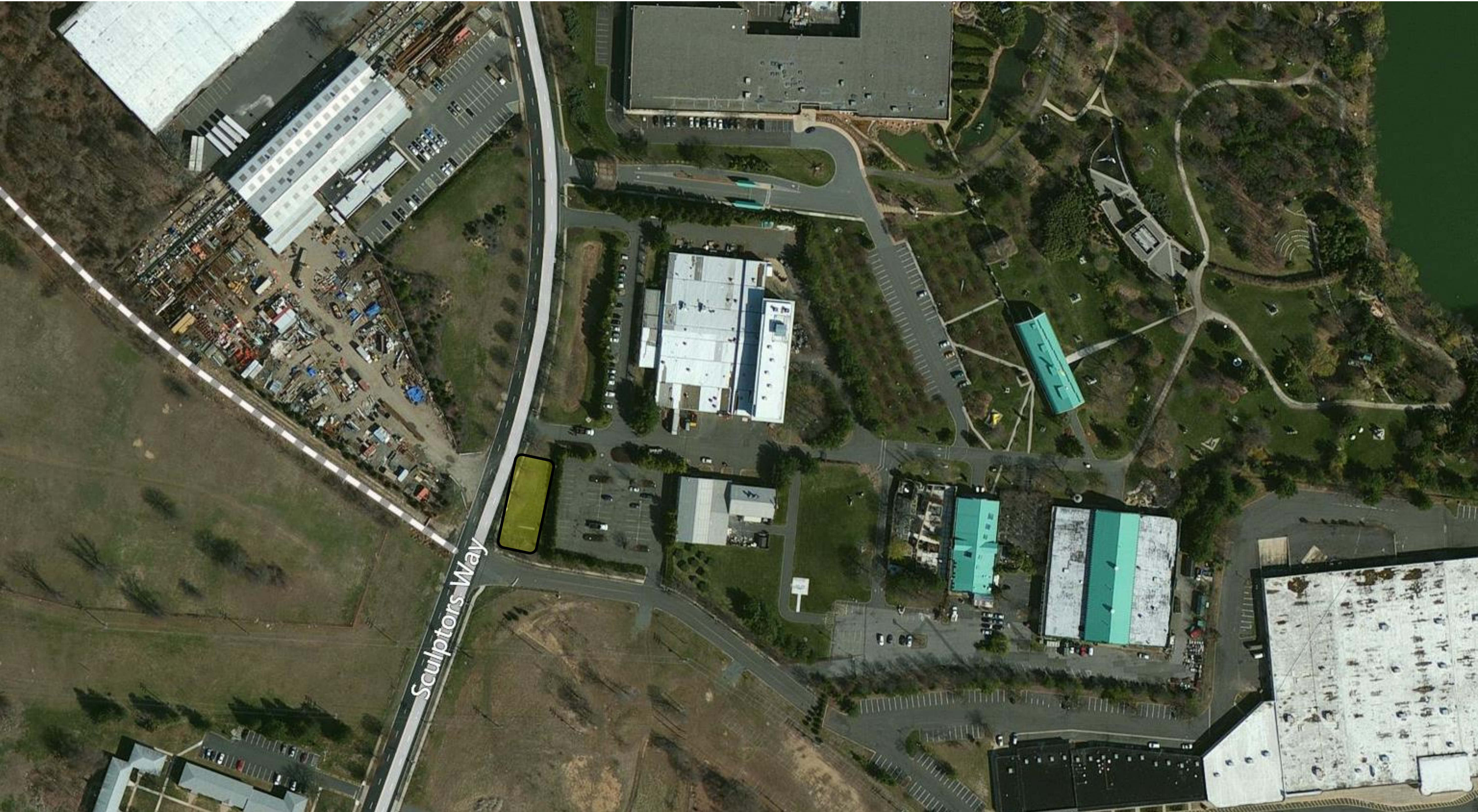
2019 Notes:

- Sediment buildup and soil erosion present in basin especially near outlet structure
- Outlet appear to be of old design, could be replaced for better management
- Low flow channels could be removed to promote more infiltration

Hamilton Township
Stormwater Basin Assessment

103. Sculptors Way Detention Basin (b)

Address:
130 Sculptors Way
Trenton, NJ 08619



Hamilton Township
Stormwater Basin Assessment

103. Sculptors Way Detention Basins (b)

Address:
130 Sculptors Way
Trenton, NJ 08619



Basin bottom looking west



Outlet structure with slumping and breakage



Inlet structure breakage

2013 Notes:

- There is excess sediment accumulated and standing water in the low flow channel
- Outlet low flow orifice is clogged with sediment
- Outlet has some breakage and slumping around base
- Inlet has breakage

Hamilton Township
Stormwater Basin Assessment
103. Sculptors Way Detention Basins (b)

Address:
130 Sculptors Way
Trenton, NJ 08619



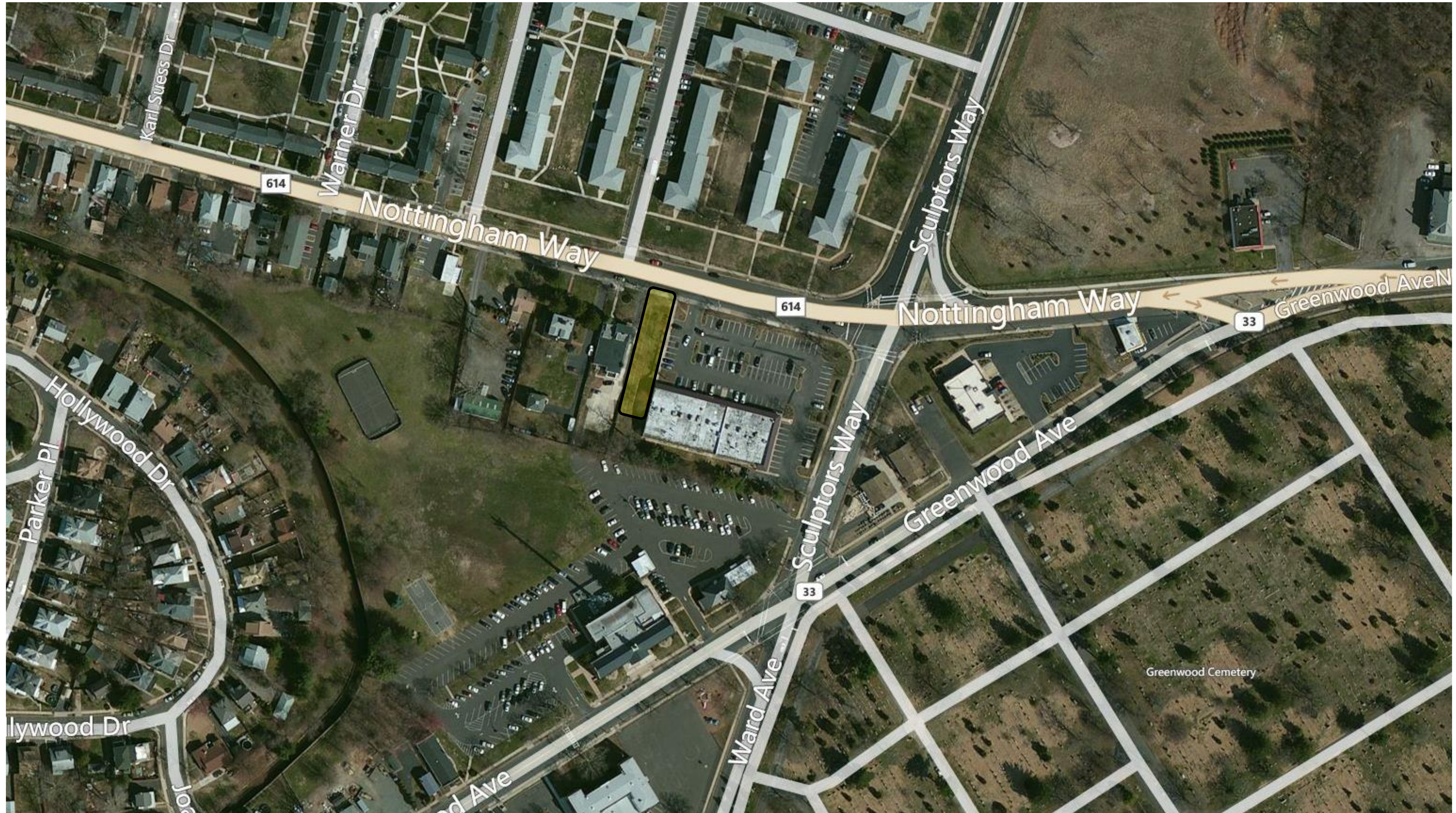
2019 Notes:

- Basin in overall good condition
- Outlet structure has some structural damage with water flowing under the low flow orifice, repair suggested to ensure it is operating as intended
- Low flow channel could be removed to allow more infiltration
- Naturalization by reducing mowing would provide additional benefits

Hamilton Township
Stormwater Basin Assessment

104. Clean Machine Laundromat Detention Basin

Address:
1475 Nottingham Way
Trenton, NJ 08609



Hamilton Township
Stormwater Basin Assessment

104. Clean Machine Laundromat Detention Basin

Address:
1475 Nottingham Way
Trenton, NJ 08609



Severe erosion in swale inlet



Basin bottom looking north



Outlet structure

2013 Notes:

- Swale that conveys water from parking lot to basin has severe erosion
- There is excess sediment accumulated and standing water in the low flow channel
- Outlet has some breakage and low flow orifice is clogged

Hamilton Township
Stormwater Basin Assessment

104. Clean Machine Laundromat Detention Basin

Address:
1475 Nottingham Way
Trenton, NJ 08609



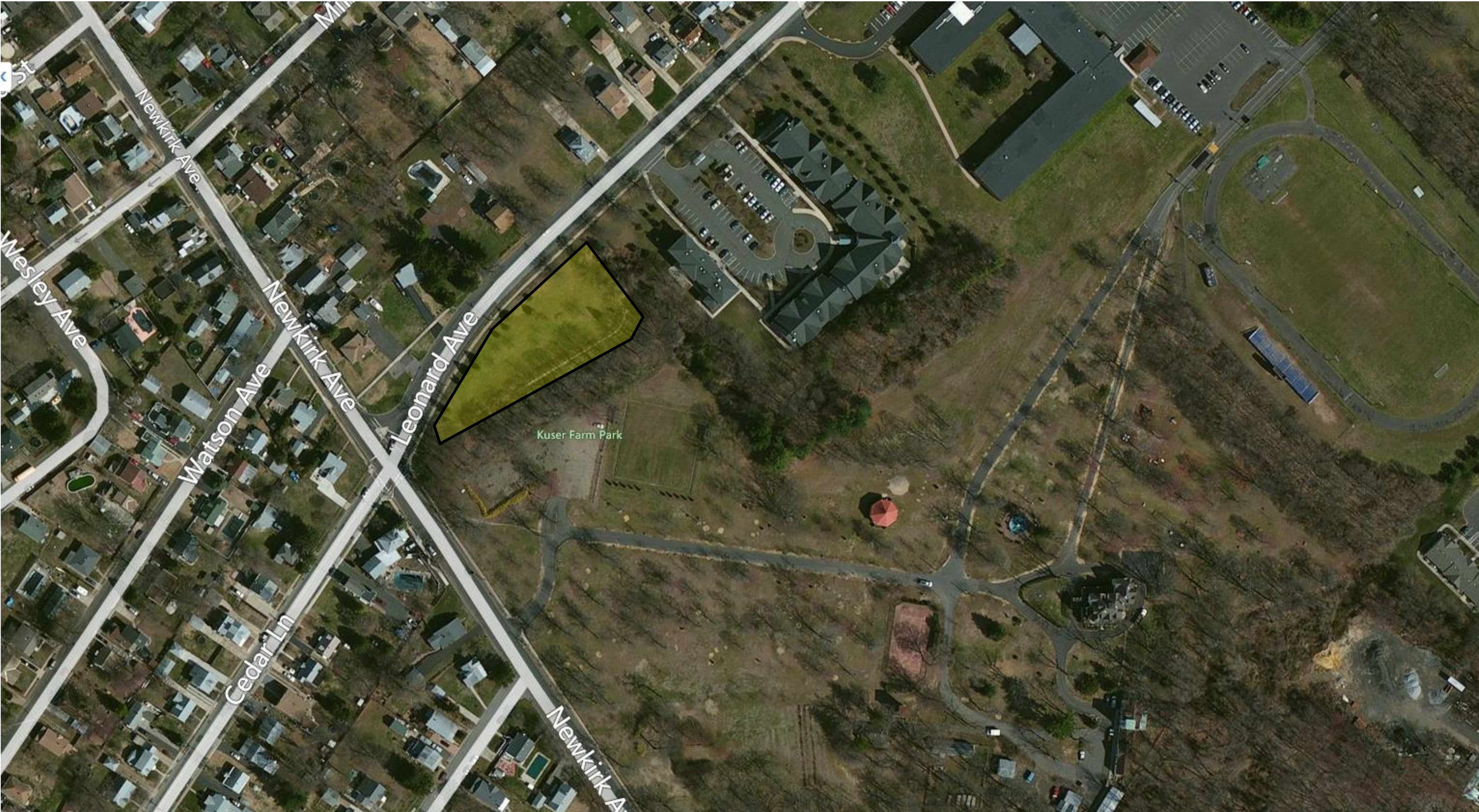
2019 Notes:

- Basin overall in good condition
- Significant amounts of trash present in basin
- Lot flow channel can be removed and replaced with stone channel to promote infiltration

Hamilton Township
Stormwater Basin Assessment

106. Kuser Farm Park Detention Basin

Address:
Leonard Ave and Newkirk Ave
Trenton, NJ 08610



Hamilton Township
Stormwater Basin Assessment
106. Kuser Farm Park Detention Basin

Address:
Leonard Ave and Newkirk Ave
Trenton, NJ 08610



Outlet structure



Severe ponding in basin



Plant growth around inlet

2013 Notes:

- Excessive plant growth surrounding inlet
- There is excess sediment accumulated and standing water in the low flow channel
- Outlet has some breakage and low flow orifice is clogged
- Excessive standing water in basin

Hamilton Township
Stormwater Basin Assessment
106. Kuser Farm Park Detention Basin

Address:
Leonard Ave and Newkirk Ave
Trenton, NJ 08610



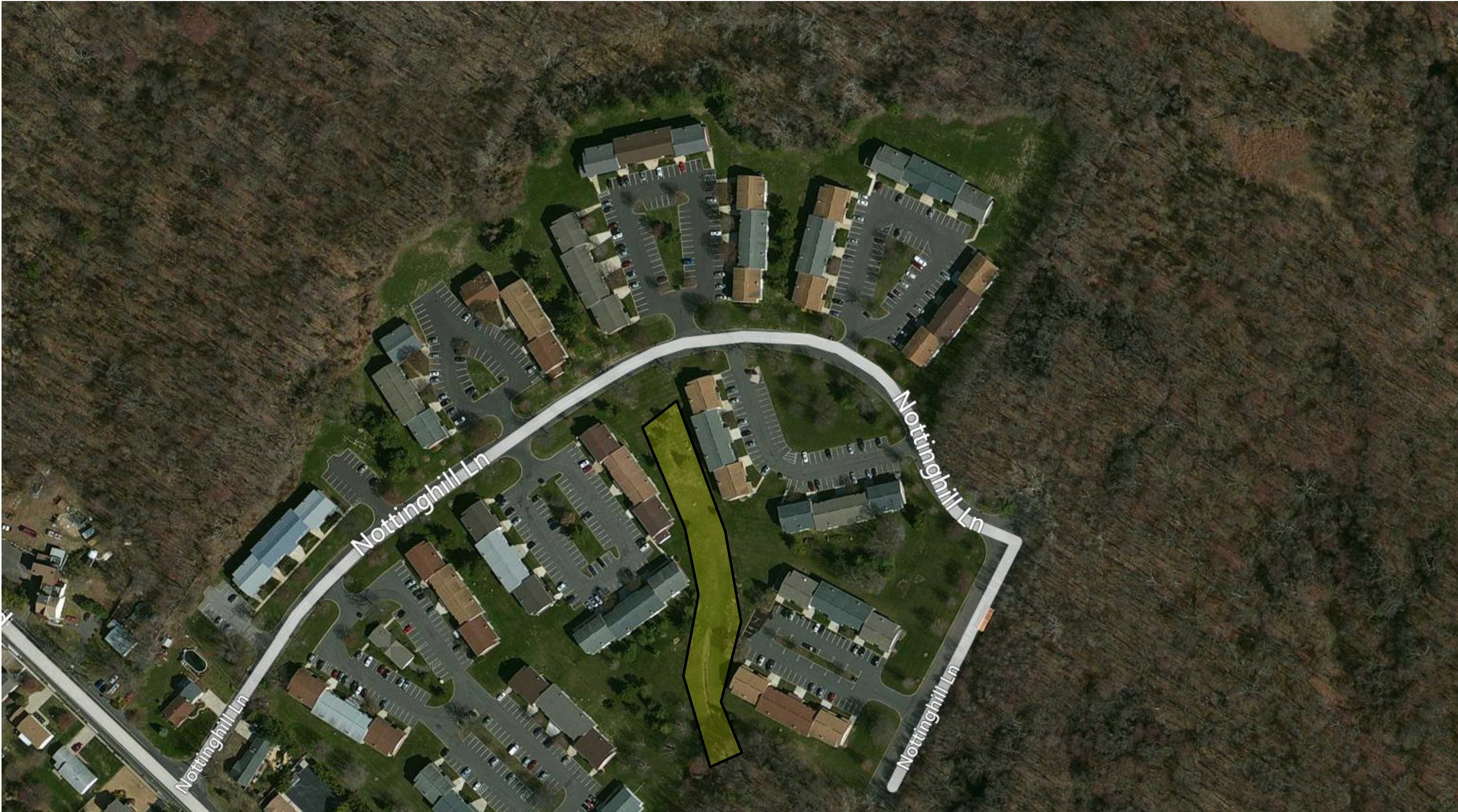
2019 Notes:

- Basin is well maintained
- No signs of standing water or sediment accumulation seen in previous assessment
- Low flow channel could be removed to manage stormwater better in smaller storms

Hamilton Township
Stormwater Basin Assessment

110. Nottingham Lane Detention Basin (a)

Address:
Nottingham Ln
Trenton, NJ 08619



Hamilton Township
Stormwater Basin Assessment

110. Nottinghill Lane Detention Basin (a)

Address:
Nottinghill Ln
Trenton, NJ 08619



Outlet grate



Basin bottom looking north



Water exiting through hole

2013 Notes:

- Basin intercepts a natural stream
- Water is exiting through cracks in the sides of the outlet rather than the grate
- Water is exiting through a hole in the ground before reaching the outlet

Hamilton Township
Stormwater Basin Assessment

110. Nottingham Lane Detention Basin (a)

Address:
Nottingham Ln
Trenton, NJ 08619



2019 Notes:

- Rock channel has a small amount of sediment and erosion that could be cleaned up
- Vegetation should be removed from rough channel
- Area around channel can be naturalized with herbaceous plants

Hamilton Township
Stormwater Basin Assessment

117. Acme Detention Basin

Address:
949 RT-33
Trenton, NJ 08690



Hamilton Township
Stormwater Basin Assessment

117. Acme Detention Basin

Address:
949 RT-33
Trenton, NJ 08690



Excessive growth around outlet structure



Breakage on northeastern inlet



Excess sediment in low flow channel



Basin bottom looking east

2013 Notes:

- There is excess sediment accumulated and standing water in the low flow channel
- There is excessive woody growth around the outlet and slumping at the base
- Most northeastern inlet has breakage that is exposing reinforcement

Hamilton Township
Stormwater Basin Assessment
117. Acme Detention Basin

Address:
949 RT-33
Trenton, NJ 08690



2019 Notes:

- Some vegetation growing within low flow channel
- Clean buildup in low flow channel
- Opportunity to remove low flow channel and replace with rock channel to help deal with standing water issues

Hamilton Township
Stormwater Basin Assessment

119. Chase Bank Detention Basin

Address:
989 RT-33
Trenton, NJ 08690



Hamilton Township
Stormwater Basin Assessment
119. Chase Bank Detention Basin

Address:
989 RT-33
Trenton, NJ 08690



Outlet with excess mulch



Western inlet clogged with leaves



Basin bottom looking west

2013 Notes:

- Outlet low flow orifice is clogged with mulch from landscaped features
- Western inlet is clogged with leaves

Hamilton Township
Stormwater Basin Assessment
119. Chase Bank Detention Basin

Address:
989 RT-33
Trenton, NJ 08690



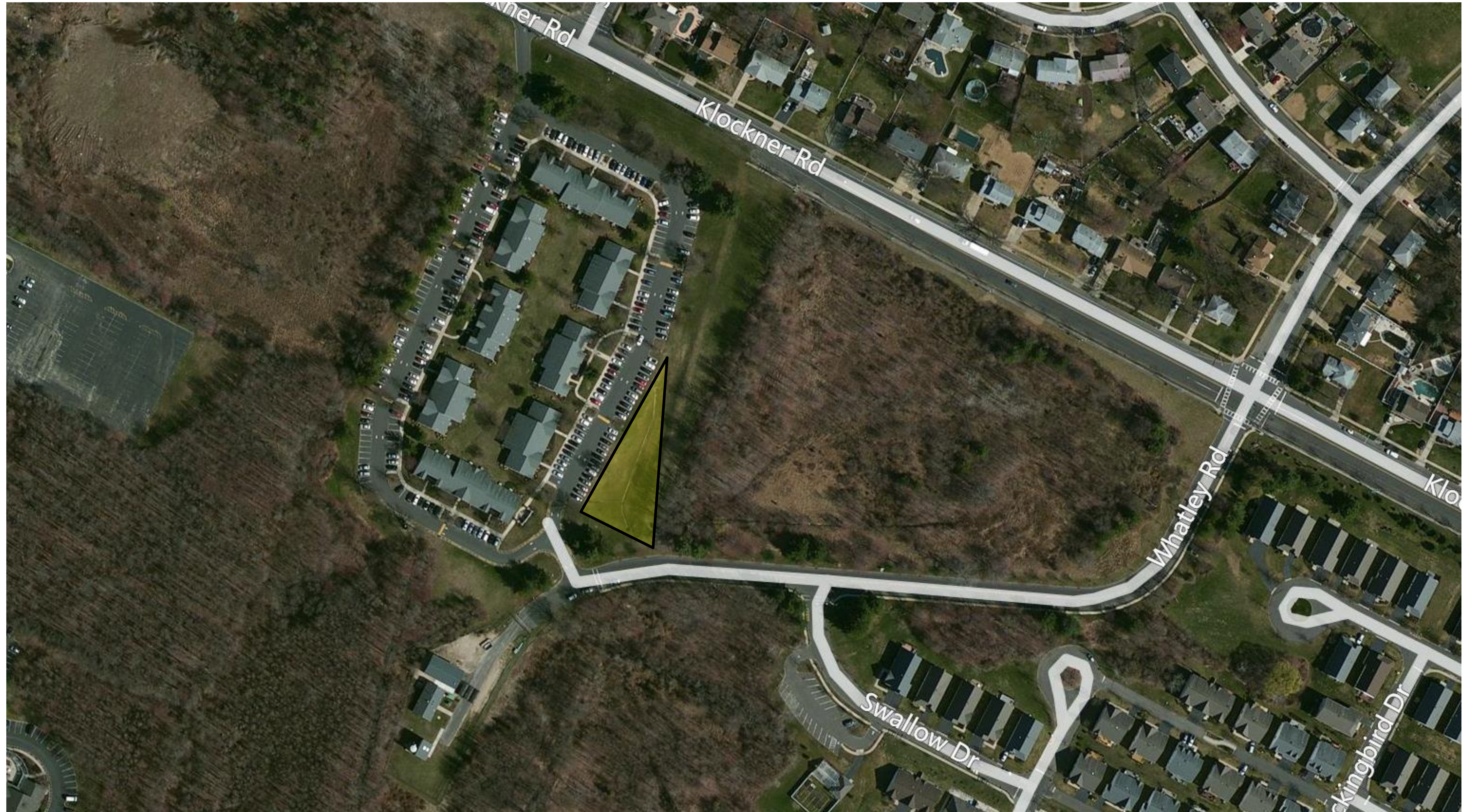
2019 Notes:

- Basin overall in well maintained condition
- Basin partly naturalized with woody plants

Hamilton Township
Stormwater Basin Assessment

122. Hamilton Cardiology Associates Detention Basin

Address:
1991 Klockner Rd
Trenton, NJ 08619



Hamilton Township
Stormwater Basin Assessment

122. Hamilton Cardiology Associates Detention Basin

Address:
1991 Klockner Rd
Trenton, NJ 08619



Outlet structure



Basin bottom looking south



Bare spot on eastern embankment

2013 Notes:

- Outlet has minor cracks
- There is excess sediment accumulated and standing water in the low flow channel
- There is excess sediment accumulated in the outlet low flow orifice
- Eastern embankment has a large bare spot

Hamilton Township
Stormwater Basin Assessment

122. Hamilton Cardiology Associates Detention Basin

Address:
1991 Klockner Rd
Trenton, NJ 08619



2019 Notes:

- Basin has two inlets and low flow channel
- Some standing water present in the low flow channel
- Opportunity to remove low flow channel and replace with stone channel to help with standing water issues

Hamilton Township
Stormwater Basin Assessment

123. Whitehorse Professional Building Detention Basin

Address:
1715 Whitehorse Mercerville Rd
Trenton, NJ 08619



Hamilton Township
Stormwater Basin Assessment

123. Whitehorse Professional Building Detention Basin

Address:
1715 Whitehorse Mercerville Rd
Trenton, NJ 08619



Erosion around northeastern inlet



Rip-rap blocking low flow orifice



Erosion around southeastern inlet



Basin bottom looking northeast

2013 Notes:

- Curb cut inlets have severe erosion
- Outlet low flow orifice is blocked by rip-rap
- Outlet structure has minor cracks in parging that should be monitored

Hamilton Township
Stormwater Basin Assessment

123. Whitehorse Professional Building Detention Basin

Address:
1715 Whitehorse Mercerville Rd
Trenton, NJ 08619



2019 Notes:

- Three curb cuts leading into the basin
- Low flow outlet blocked by riprap, should be redistributed

Hamilton Township
Stormwater Basin Assessment

124. Clare Bridge Detention Basin

Address:
1673 Whitehorse Mercerville Rd
Trenton, NJ 08619



Hamilton Township
Stormwater Basin Assessment
124. Clare Bridge Detention Basin

Address:
1673 Whitehorse Mercerville Rd
Trenton, NJ 08619



Concrete deterioration on eastern inlet



Clogged outlet low flow orifice



Basin bottom looking south



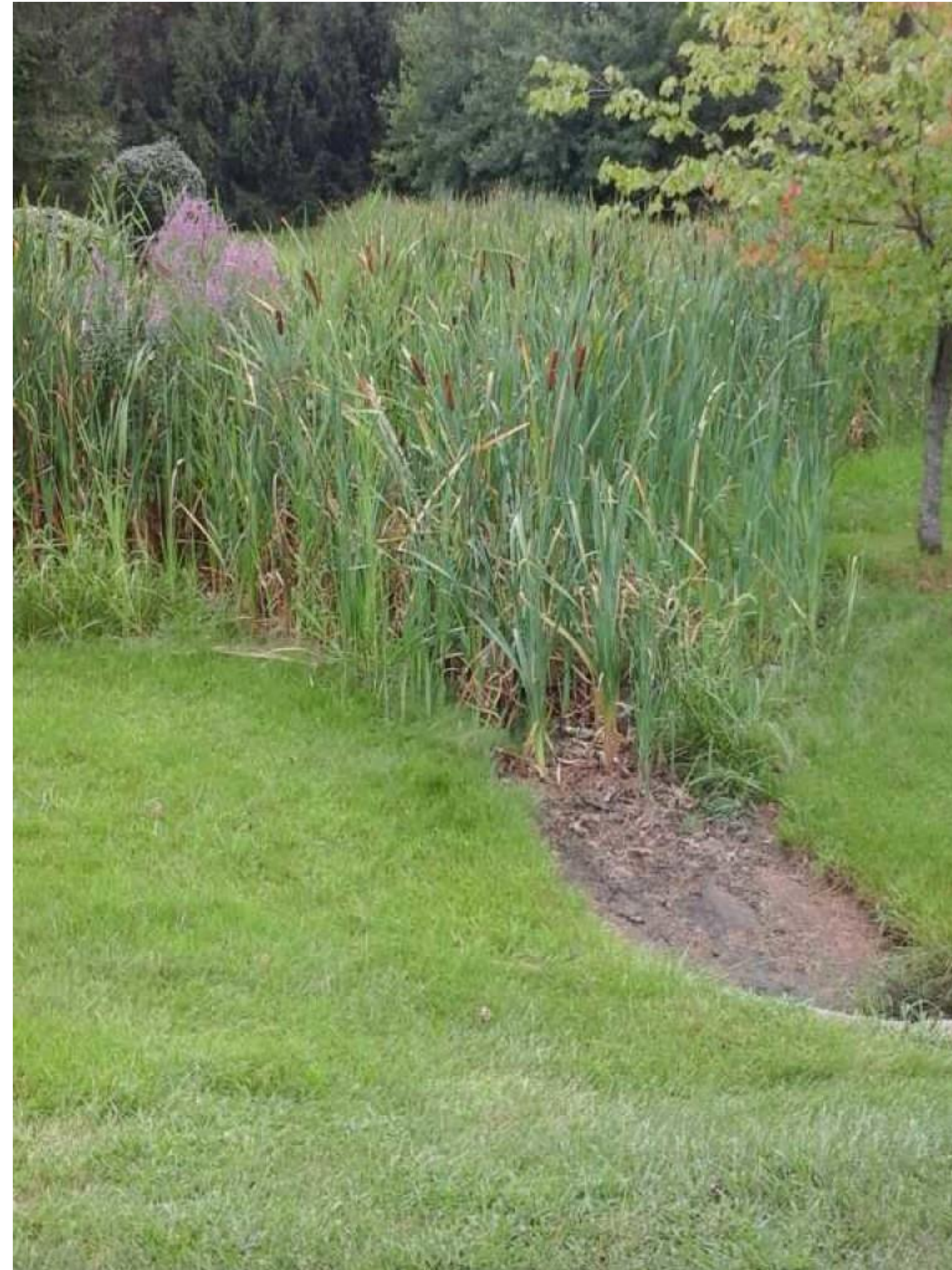
Bare and muddy southern section of basin

2013 Notes:

- Most eastern inlet has concrete deterioration with reinforcement showing
- There is excess sediment and leaves accumulated in the low flow channel and outlet orifice causing excessive ponding
- Southern end is primarily bare and muddy

Hamilton Township
Stormwater Basin Assessment
124. Clare Bridge Detention Basin

Address:
1673 Whitehorse Mercerville Rd
Trenton, NJ 08619



2019 Notes:

- Basin looks to be in better condition than 2013 overall
- Basin center allowed to naturalize, appears to have reduced some issues, low flow channel should be removed from a proper naturalization
- Clean oil existing in inlet with standing water under it

Hamilton Township
Stormwater Basin Assessment

125. Capital Health Detention Basin

Address:
1407 Whitehorse Mercerville Rd
Trenton, NJ 08619



Hamilton Township
Stormwater Basin Assessment
125. Capital Health Detention Basin

Address:
1407 Whitehorse Mercerville Rd
Trenton, NJ 08619



Basin bottom looking north



Outlet structure



Algal growth in low flow channel

2013 Notes:

- Standing water with algal growth in low flow channel
- Outlet has some breakage and the low flow orifice is crudely cut out, needs a restrictor plate
- Outlet has a metal plate bolted on top of the emergency overflow, this should be replaced with a grate

Hamilton Township
Stormwater Basin Assessment
125. Capital Health Detention Basin

Address:
1407 Whitehorse Mercerville Rd
Trenton, NJ 08619

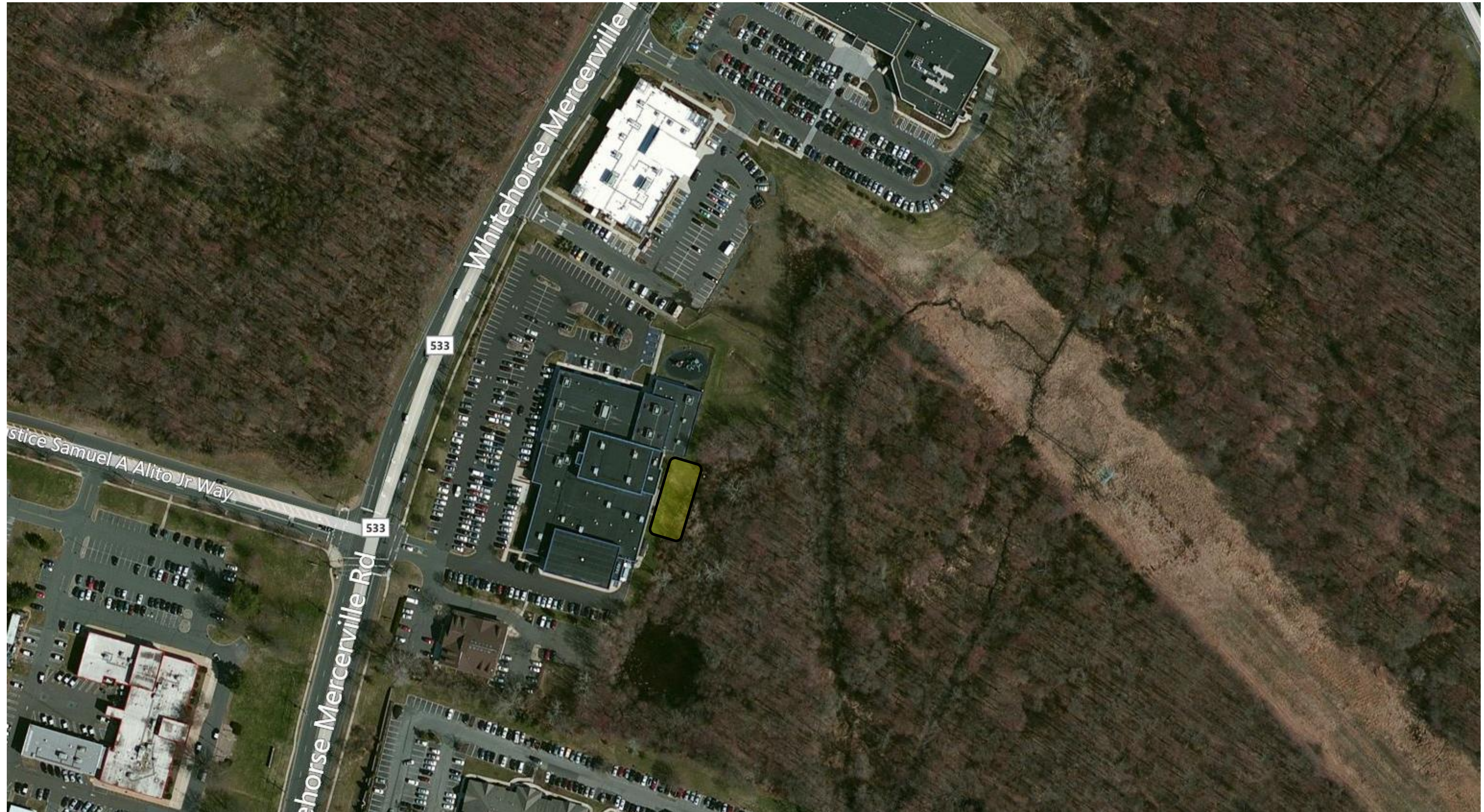


2019 Notes:

- Two inlets with low flow channel
- Standing water in low flow channel
- Opportunity to remove low flow channel to remove standing water issues
- Naturalize with herbaceous plants

Hamilton Township
Stormwater Basin Assessment
127. YMCA Detention Basin (b)

Address:
1323 Whitehorse Mercerville Rd
Trenton, NJ 08619



Hamilton Township
Stormwater Basin Assessment
127. YMCA Detention Basin (b)

Address:
1323 Whitehorse Mercerville Rd
Trenton, NJ 08619



Outlet structure



Basin bottom looking northeast



Erosion in front of inlet

2013 Notes:

- There is excess sediment accumulated and standing water in the low flow channel
- There are signs of erosion around headwall inlets
- There is groundwater intrusion that is causing a continuous flow
- Excessive plant growth around southern inlet and the outlet structure

Hamilton Township
Stormwater Basin Assessment
127. YMCA Detention Basin (b)

Address:
1323 Whitehorse Mercerville Rd
Trenton, NJ 08619



2019 Notes:

- Two inlets with low flow channel
- Standing water in low flow channel
- Opportunity to remove low flow channel to remove standing water issues
- Naturalize with herbaceous plants

Hamilton Township
Stormwater Basin Assessment

131. Tile Shop Detention Basin

Address:
1702 Kruser Rd
Trenton, NJ 08690



Hamilton Township
Stormwater Basin Assessment
131. Tile Shop Detention Basin

Address:
1702 Kruser Rd
Trenton, NJ 08690



Area where basin discharges to woods



Basin bottom looking northeast



Ponding with algae growth

2013 Notes:

- Small pond with excessive algae growth
- Not able to find inlets or outlets, discharges to wooded area
- Water is stagnant, potential for mosquito breeding

Hamilton Township
Stormwater Basin Assessment
131. Tile Shop Detention Basin

Address:
1702 Kruser Rd
Trenton, NJ 08690



2019 Notes:

- Area appears to have been recently cleared and cleaned out
- No standing water observed
- Continue to monitor to ensure alterations have resolved issues
- Basin could be naturalized with herbaceous plants

Hamilton Township
Stormwater Basin Assessment

132 & 133. Princeton Women's Services Detention Basins

Address:
1305 Kruser Rd
Trenton, NJ 08619



Hamilton Township Stormwater Basin Assessment

132 & 133. Princeton Women's Services Detention Basins

Address:
1305 Kruser Rd
Trenton, NJ 08619



Overgrown outlet



Basin #133 looking north



Erosion and breakage at inlet



Basin #132 looking northwest

2013 Notes:

- Basin 132 and 133 are tied together
- Curb cut inlets have breakage along asphalt and concrete slabs
- Outlets in both basins are overgrown and are clogged with debris and sediment

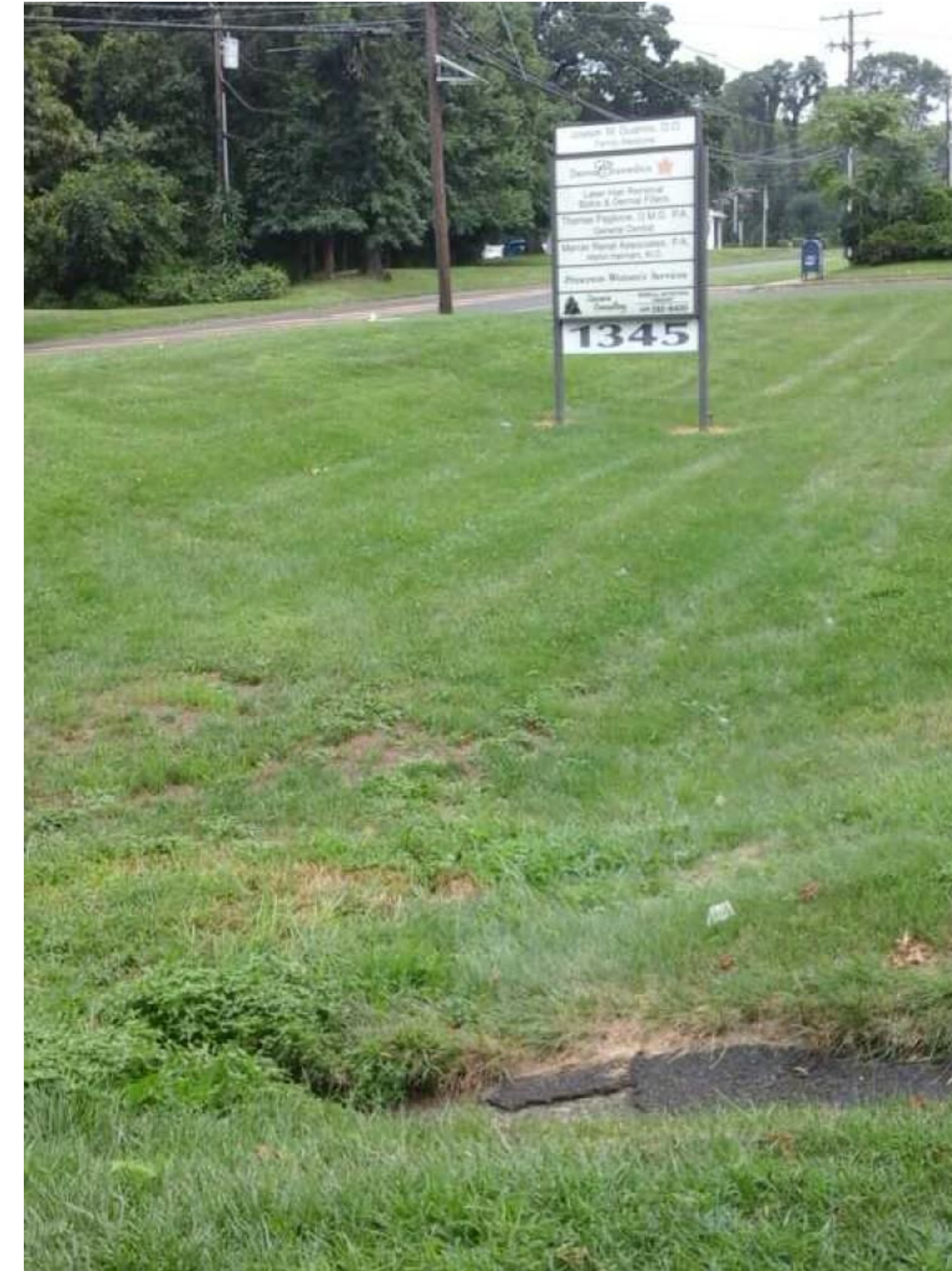
Hamilton Township
Stormwater Basin Assessment

132 & 133. Princeton Women's Services Detention Basins

Address:
1305 Kruser Rd
Trenton, NJ 08619



Basin #132



Basin #133

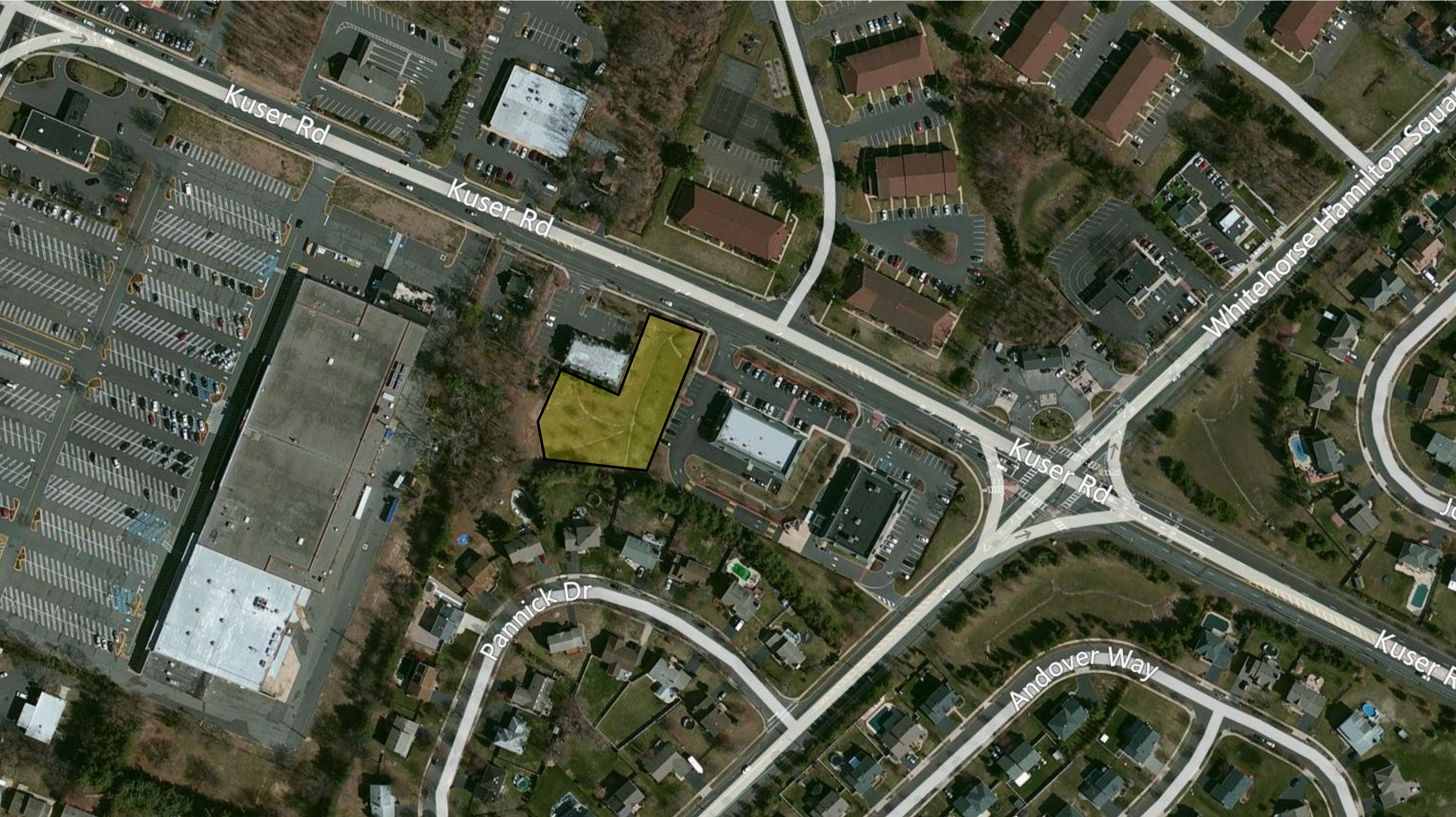
2019 Notes:

- Areas do not appear to have a proper outlet structure and were built before 1979, so areas may just be for conveyance
- Naturalize area with herbaceous plants
- Convert to proper detention basin system for better stormwater management

Hamilton Township
Stormwater Basin Assessment

134. Monro Muffler Detention Basin

Address:
1763 Kruser Rd
Trenton, NJ 08619



Hamilton Township
Stormwater Basin Assessment
134. Monro Muffler Detention Basin

Address:
1763 Kruser Rd
Trenton, NJ 08619



Overgrown southern inlet



Sediment accumulation in low flow channel



Outlet structure



Basin bottom looking north

2013 Notes:

- There is excess sediment accumulated in the low flow channel
- Southern inlet has erosion in surrounding rip rap and is overgrown on the west side
- The northeastern inlet has concrete deterioration on its Flared End Section (FES) and the northwestern inlet has rip rap restricting the flow of water
- The outlet low flow orifice is clogged with sediment, the primary weir could use a trash rack to prevent failures

Hamilton Township
Stormwater Basin Assessment
134. Monro Muffler Detention Basin

Address:
1763 Kruser Rd
Trenton, NJ 08619



2019 Notes:

- Low flow channel largely filled with sediment
- Either clear low flow channels or replace with rock channel

Hamilton Township
Stormwater Basin Assessment
135. TD Bank Detention Basin

Address:
1134 Whitehorse Hamilton Square Rd
Trenton, NJ 08690



Hamilton Township
Stormwater Basin Assessment
135. TD Bank Detention Basin

Address:
1134 Whitehorse Hamilton Square Rd
Trenton, NJ 08690



Outlet structure



Basin bottom looking northeast



Inlet structure

2013 Notes:

- The basin has standing water, excess sediment accumulation, and areas of exposed earth
- The inlet has breakage and gulying
- The outlet low flow orifice is clogged with sediment and debris

Hamilton Township
Stormwater Basin Assessment
135. TD Bank Detention Basin

Address:
1134 Whitehorse Hamilton Square Rd
Trenton, NJ 08690



2019 Notes:

- Grass clippings in basin clogging low flow orifice
- Naturalize with herbaceous plants

Hamilton Township
Stormwater Basin Assessment
139. Care One Detention Basin

Address:
1580 Whitehorse Hamilton Square Rd
Trenton, NJ 08690



Hamilton Township
Stormwater Basin Assessment
139. Care One Detention Basin

Address:
1580 Whitehorse Hamilton Square Rd
Trenton, NJ 08690



Inlet structure



Basin bottom looking northwest



Outlet structure

2013 Notes:

- Standing water in basin bottom with algal growth
- Trash rack for outlet structure is broken off
- Outlet low flow orifice is clogged with sediment and leaves, restricting the flow of water
- The inlets have some breakage and debris accumulation restricting the flow of water

Hamilton Township
Stormwater Basin Assessment
139. Care One Detention Basin

Address:
1580 Whitehorse Hamilton Square Rd
Trenton, NJ 08690



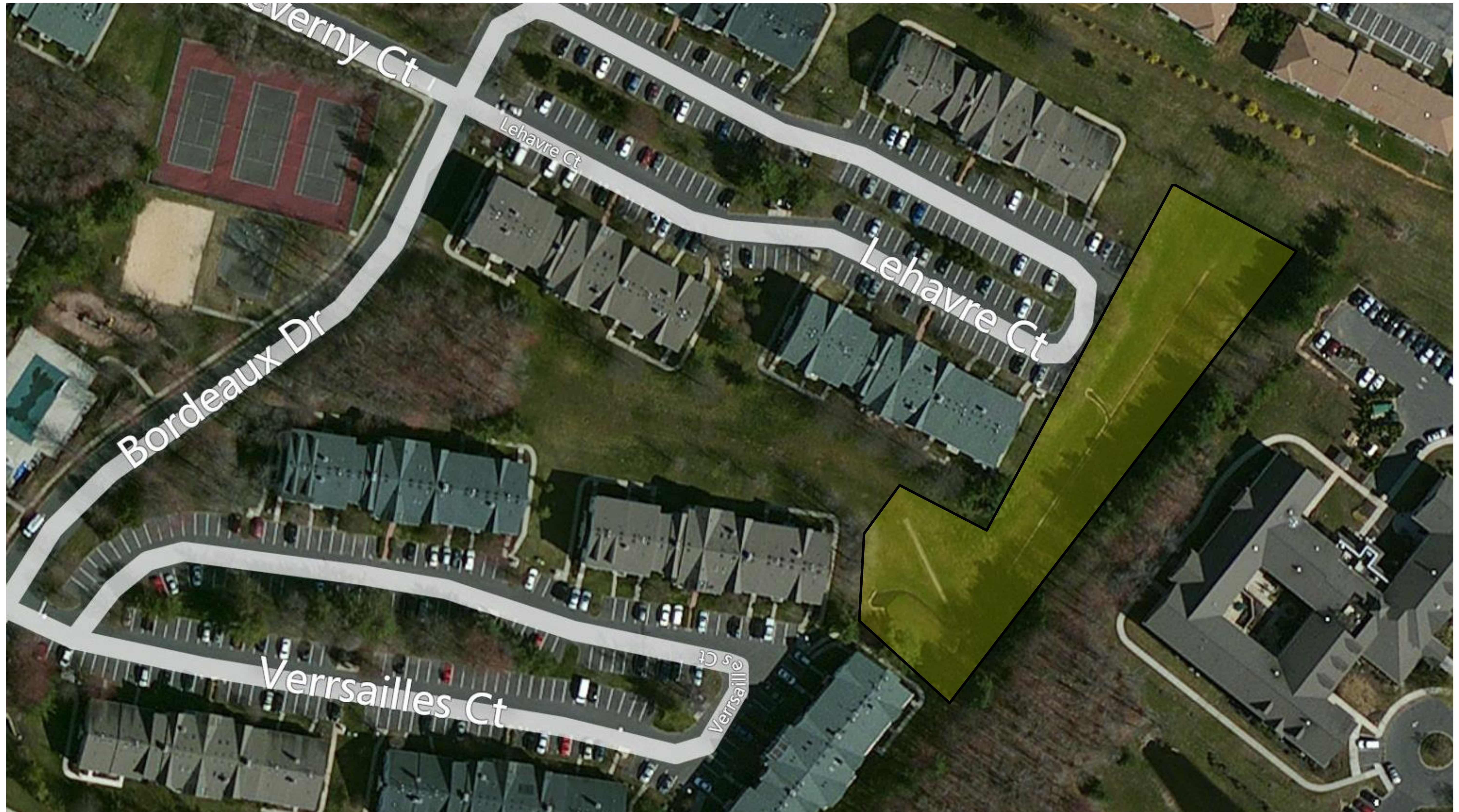
2019 Notes:

- Severe standing water problem observed in previous assessment not observed
- Low flow channel has significant sediment build up and vegetation leading to standing water in the channel
- Opportunity to remove replace channel with stone to allow more infiltration in small storm events

Hamilton Township
Stormwater Basin Assessment

140. Lehavre Court Residential Detention Basin

Address:
Lehavre Ct
Trenton, NJ 08690



Hamilton Township
Stormwater Basin Assessment

140. Lehavre Court Residential Detention Basin

Address:
Lehavre Ct
Trenton, NJ 08690



Excess sediment in low flow channels



Slumping behind outlet structure



Sediment accumulated in front of inlet



Outlet structure

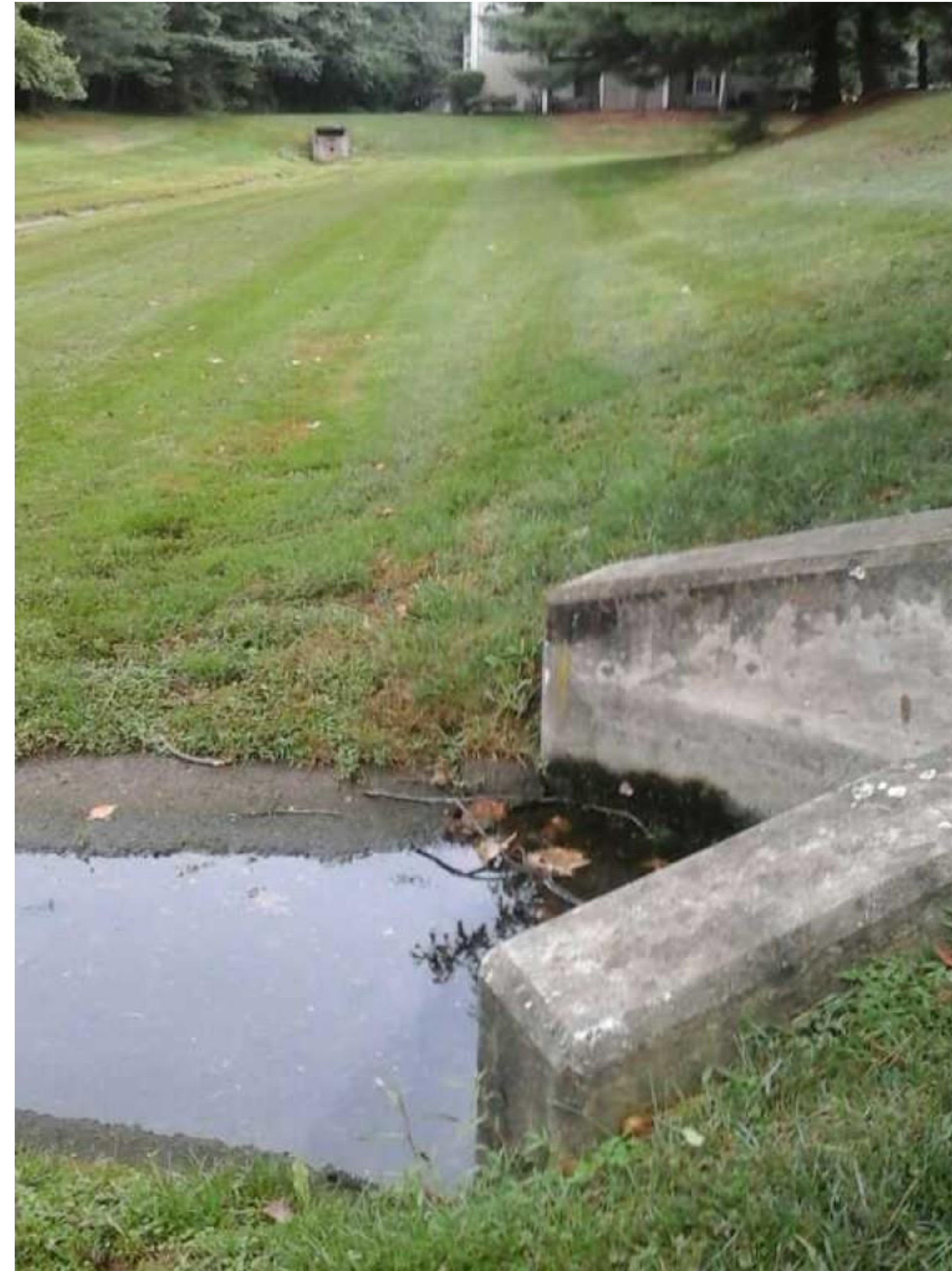
2013 Notes:

- There is excess sediment accumulated in the low flow channel, in front of inlets, and in the outlet low flow orifice
- There is slumping at the base of the outlet structure
- There is groundwater intrusion in northern end of basin resulting in a continuous flow of water

Hamilton Township
Stormwater Basin Assessment

140. Lehavre Court Residential Detention Basin

Address:
Lehavre Ct
Trenton, NJ 08690



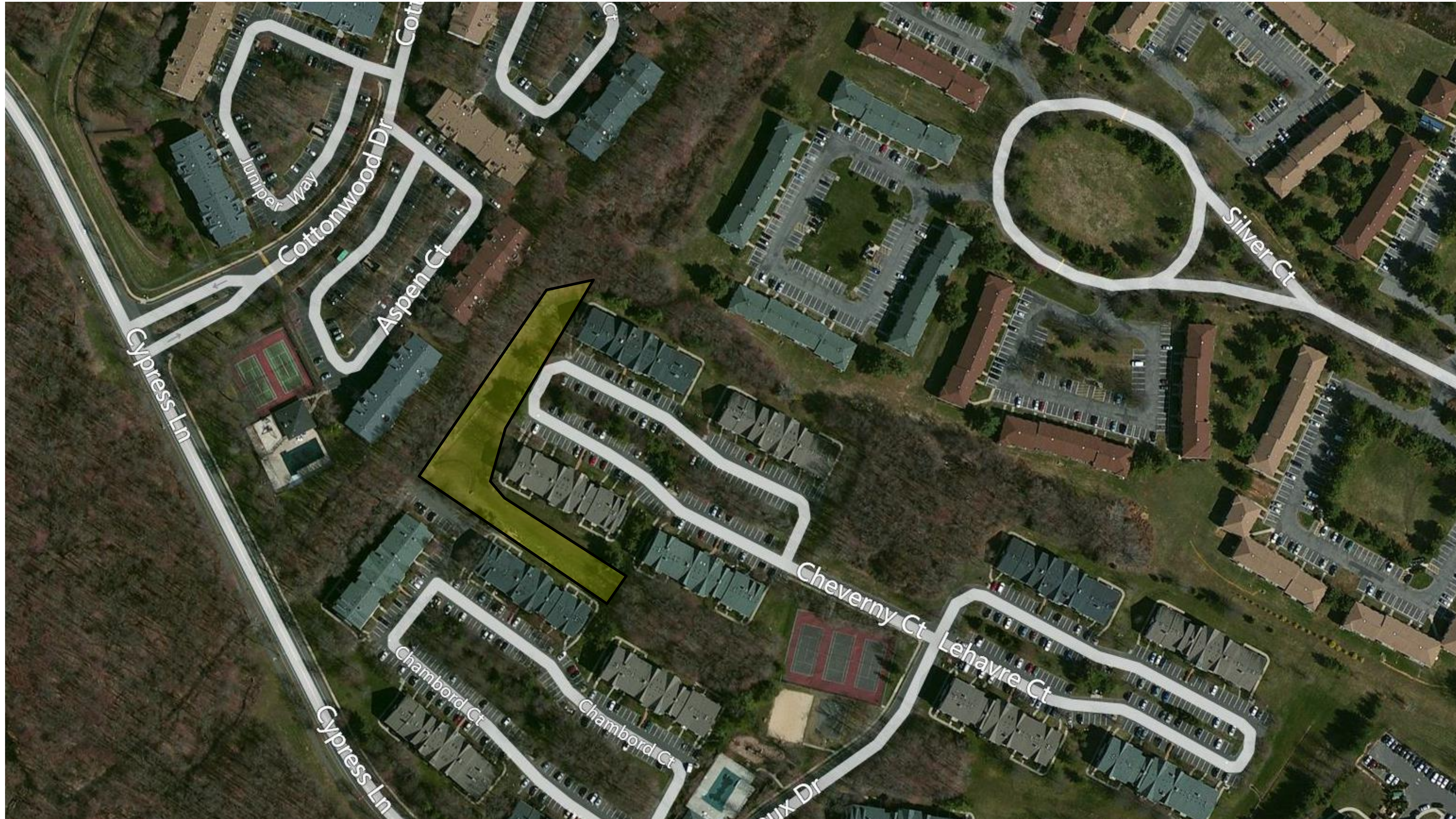
2019 Notes:

- Well maintained and mowed basin
- Some standing water in low flow channel
- Opportunity to naturalize and incorporate a stone channel

Hamilton Township
Stormwater Basin Assessment

141. Cheverny Court Residential Detention Basin

Address:
Cheverny Ct
Trenton, NJ 08690



Hamilton Township
Stormwater Basin Assessment

141. Cheverny Court Residential Detention Basin

Address:
Cheverny Ct
Trenton, NJ 08690



Sediment accumulated in front of outlet



Basin bottom looking southeast



Excess sediment in low flow channel

2013 Notes:

- There is excess sediment accumulated and standing water in the low flow channel
- There are tread marks in the basin bottom
- Outlet low flow orifice is clogged with sediment, restricting the flow of water
- The inlets have grass clippings and sediment restricting the flow of water

Hamilton Township
Stormwater Basin Assessment

141. Cheverny Court Residential Detention Basin

Address:
Cheverny Ct
Trenton, NJ 08690



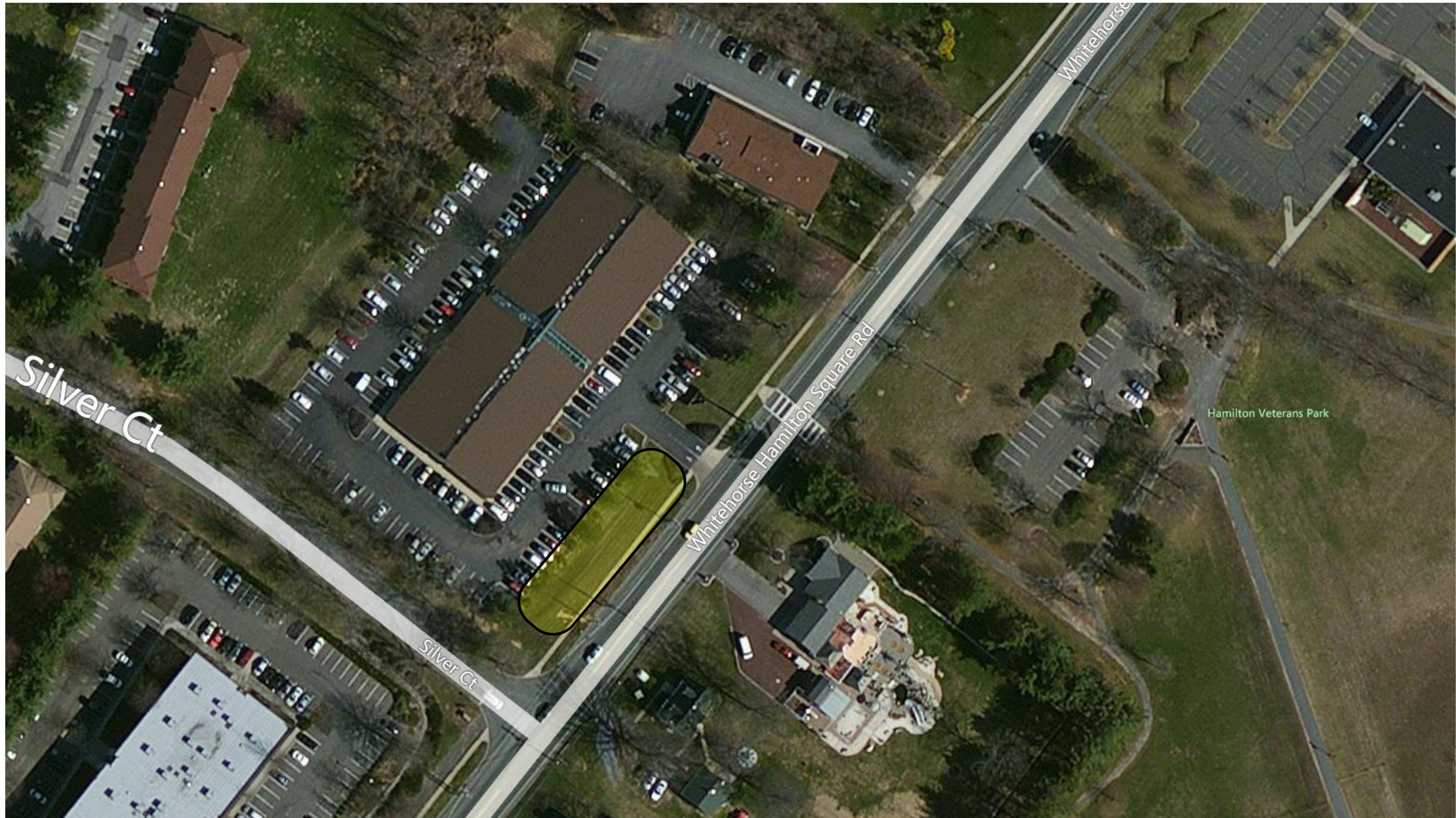
2019 Notes:

- Significant standing water in low flow channel likely caused by blockages in the low flow orifice at the outlet
- Clear outlet structure and replace low flow with stone channel to allow infiltration

Hamilton Township
Stormwater Basin Assessment

147. Campus Eye Group Detention Basin

Address:
1746 Whitehorse Hamilton Square Rd
Trenton, NJ 08690



Hamilton Township
Stormwater Basin Assessment

147. Campus Eye Group Detention Basin

Address:
1746 Whitehorse Hamilton Square Rd
Trenton, NJ 08690



Outlet pipe



Erosion at curb cut inlet



Basin bottom looking north

2013 Notes:

- The basin allows infiltration of stormwater
- Curb cut inlet has severe erosion and breakage
- Outlet pipe has breakage, there is debris and rip rap restricting the flow of water and woody tree growth in proximity of outlet

Hamilton Township
Stormwater Basin Assessment

147. Campus Eye Group Detention Basin

Address:

1746 Whitehorse Hamilton Square Rd
Trenton, NJ 08690



2019 Notes:

- Basin built between 1979-1997, so it may not be a proper detention basin
- Some erosion from parking lot inlet
- Area can be naturalized with herbaceous plants or retrofitted to a proper detention system

Hamilton Township
Stormwater Basin Assessment

152. RWJ University Hospital Detention Basin (b)

Address:
63 Hamilton Health Pl
Trenton, NJ 08690



Hamilton Township
Stormwater Basin Assessment

152. RWJ University Hospital Detention Basin (b)

Address:
63 Hamilton Health Pl
Trenton, NJ 08690



Standing water in low flow channels



Southern inlet structure



Outlet structure



Basin bottom looking southwest

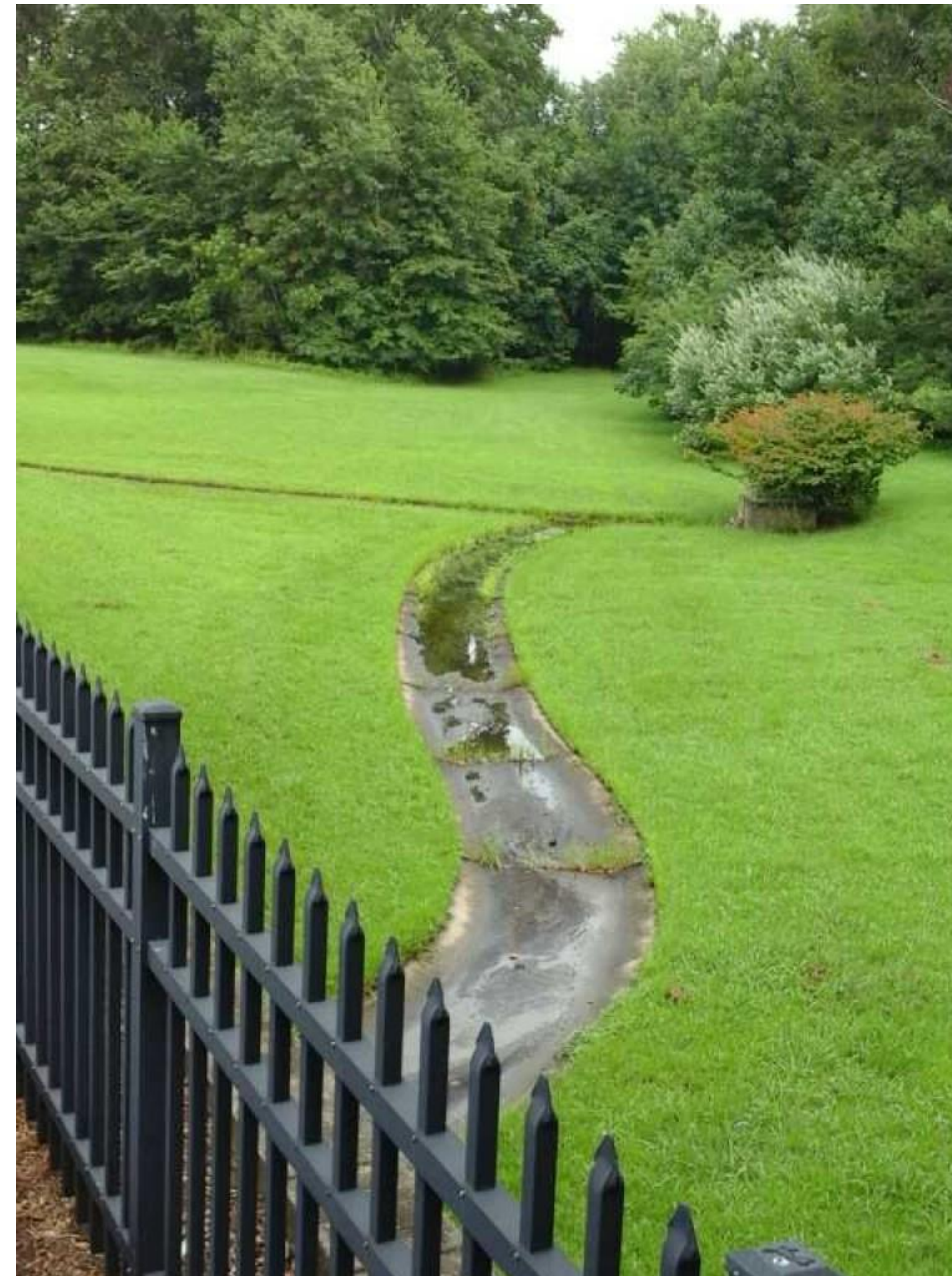
2013 Notes:

- There is excess sediment accumulated and standing water in the low flow channels with algal growth
- Outlet structure has excessive plant growth around it and the low flow orifice is severely clogged, restricting the flow of water
- The southern inlet has some cracks and breakage

Hamilton Township
Stormwater Basin Assessment

152. RWJ University Hospital Detention Basin (b)

Address:
63 Hamilton Health Pl
Trenton, NJ 08690



2019 Notes:

- Conditions appears somewhat improved from the conditions in 2013
- Sediment needs to be removed from the low channel as it is restricting flow
- Opportunity to replace low flow channel with rock channel

Hamilton Township
Stormwater Basin Assessment

153. Cancer Institute of NJ Detention Basin

Address:
Hamilton Health Pl & Klockner Rd
Trenton, NJ 08690



Hamilton Township
Stormwater Basin Assessment
153. Cancer Institute of NJ Detention Basin

Address:
Hamilton Health Pl & Klockner Rd
Trenton, NJ 08690



Outlet structure



Slumping behind outlet



Exposed earth alongside low flow channel



Basin bottom looking south

2013 Notes:

- There is sediment, debris, and leaves accumulated in the low flow channel with standing water, predominately in front of the outlet structure
- Outlet low flow orifice is severely clogged with sediment and leaves
- There is slumping around the base of the outlet structure
- There are areas of exposed earth adjacent to the low flow channels

Hamilton Township
Stormwater Basin Assessment
153. Cancer Institute of NJ Detention Basin

Address:
Hamilton Health Pl & Klockner Rd
Trenton, NJ 08690



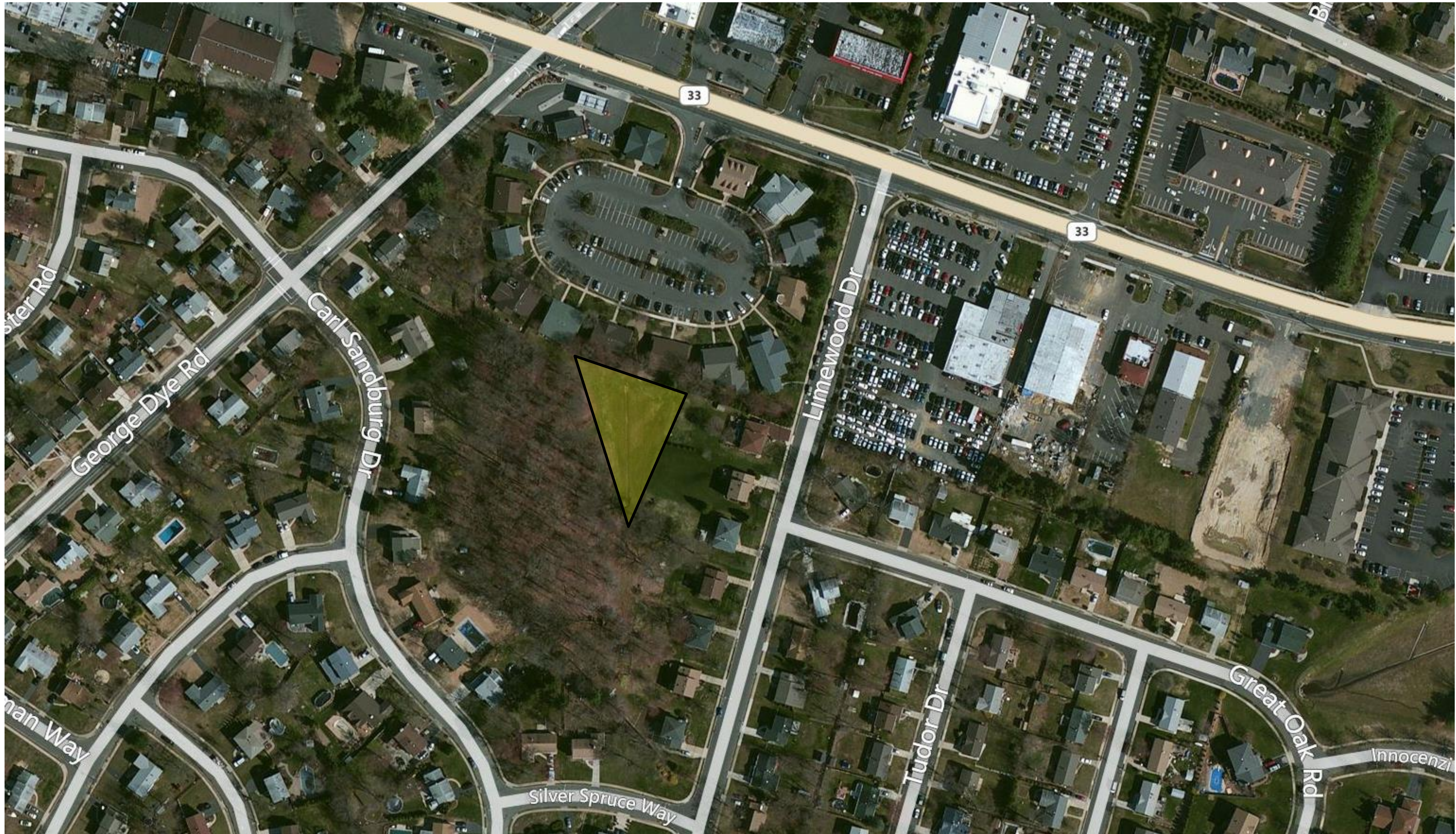
2019 Notes:

- There is sediment build up in the basin that should be removed
- Naturalize with herbaceous plants

Hamilton Township
Stormwater Basin Assessment

165. Limewood Drive Residential Detention Basin

Address:
Limewood Dr and RT-33
Trenton, NJ 08690



Hamilton Township Stormwater Basin Assessment

165. Limewood Drive Residential Detention Basin

Address:
Limewood Dr and RT-33
Trenton, NJ 08690



Basin bottom looking south



Erosion in basin bottom



Outlet structure in need of replacement

2013 Notes:

- Outlet structure is in need of replacement; there is excessive erosion and excessive sediment accumulated around it
- There is standing water in the low flow channel and basin bottom

Hamilton Township
Stormwater Basin Assessment

165. Limewood Drive Residential Detention Basin

Address:
Limewood Dr and RT-33
Trenton, NJ 08690



2019 Notes:

- Outlet concrete structure is in need of replacement, there is some sheen on surface of water and brown sediment on bottom present in concrete flow channel.
- Opportunity to also replace low flow channel with stone to allow more infiltration

Hamilton Township
Stormwater Basin Assessment

166 & 167. Innocenzi Drive Residential Detention Basins

Address:
Innocenzi Dr and Great Oak Rd
Trenton, NJ 08690



Hamilton Township Stormwater Basin Assessment

166. Innocenzi Drive Residential Detention Basin (a)

Address:
Innocenzi Dr and Great Oak Rd
Trenton, NJ 08690



Basin bottom looking northeast



Stream connecting to low flow channel



Southeastern inlet



Outlet structure

2013 Notes:

- The basin intercepts a stream from the east that doesn't seem planned
- There is excess sediment accumulated in the low flow channel near the southeastern inlet and in front of the outlet
- The outlet has some cracking and the trash rack is held open by crates

Hamilton Township
Stormwater Basin Assessment

166. Innocenzi Drive Residential Detention Basin (a)

Address:
Innocenzi Dr and Great Oak Rd
Trenton, NJ 08690



2019 Notes:

- Large basin with 4 inlets
- Large vegetation growth around the low flow channel and inlets creating standing water in low flow channel
- Maintain inlets and outlets areas
- Clear low flow channels to stop standing water or replace with stone channel

Hamilton Township
Stormwater Basin Assessment

170. The Shoppes at Nottingham Pointe Detention Basin (b)

Address:
4265 RT-33
Trenton, NJ 08690



Hamilton Township
Stormwater Basin Assessment

170. The Shoppes at Nottingham Pointe Detention Basin (b)

Address:
4265 RT-33
Trenton, NJ 08690



Two western inlets



Basin bottom looking southwest



Basin bottom looking west



Inlet and outlet structures

2013 Notes:

- There is excess sediment accumulated in front of all inlets
- There is ponding in front of the outlet structure that is caused by a clogged trash rack

Hamilton Township
Stormwater Basin Assessment

170. The Shoppes at Nottingham Pointe Detention Basin (b)

Address:
4265 RT-33
Trenton, NJ 08690

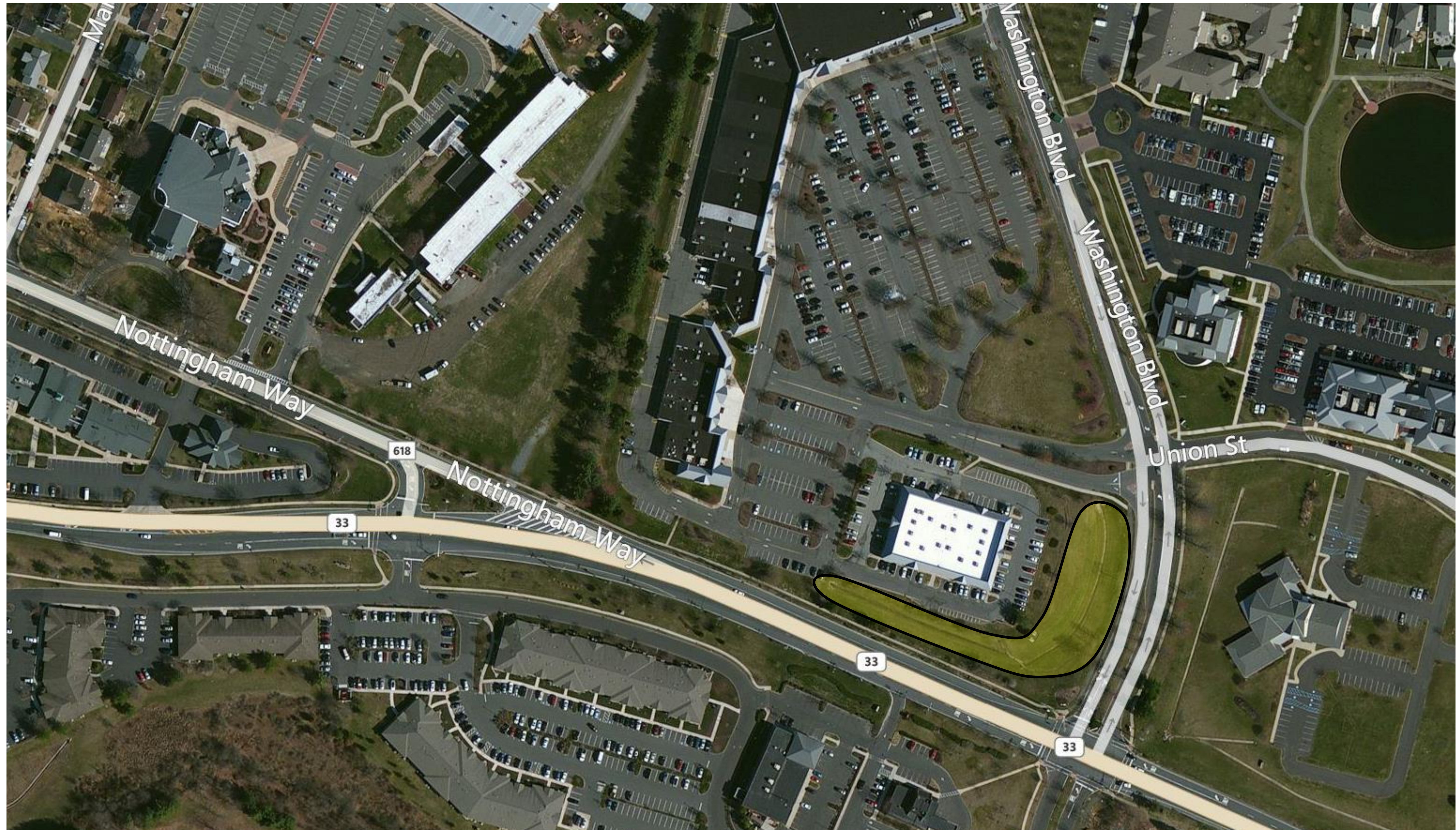


2019 Notes:

- Outlet to basin is clogged with leaves and debris. Inlet number five for this from Route 33 has standing water. Mosquitoes present at time of inspection October 30
- Clear outlet and repair inlet five to allow remove the standing water issue

Hamilton Township
Stormwater Basin Assessment
173. Foxmoor Detention Basin

Address:
1027 Washington Blvd
Trenton, NJ 08691



Hamilton Township
Stormwater Basin Assessment
173. Foxmoor Detention Basin

Address:
1027 Washington Blvd
Trenton, NJ 08691



Inlet and low flow covered in sediment



Inlet filled with sediment



Outlet structure



Basin bottom looking east

2013 Notes:

- There is excess sediment accumulated in some of the inlets and in the low flow channel to the point that the some of the channel is no longer visible
- The outlet has some breakage and cracks in parging; the structure should be repaired or replaced

Hamilton Township
Stormwater Basin Assessment
173. Foxmoor Detention Basin

Address:
1027 Washington Blvd
Trenton, NJ 08691



2019 Notes:

- Five inlets with low flow channel
- Low flow channel has been cleared since last assessment, but some sediment has accumulated again and some minor standing water present
- Clean out concrete flow channels and repair outlet structure that is still damaged from last assessment

Hamilton Township
Stormwater Basin Assessment

183. Meredith Road Residential Basins

Address:
61 Meredith Rd
Hamilton Township, NJ 08610



Hamilton Township
Stormwater Basin Assessment

183. Meredith Road Residential Basins



Low flow channel



Low flow channel looking east

Address:
61 Meredith Rd
Hamilton Township, NJ 08610



Outlet

2014 Notes:

- Reports of system not functioning
- Sediment and a fallen tree in low flow channel
- Japanese knotweed growing near outlet

Hamilton Township
Stormwater Basin Assessment

183. Meredith Road Residential Basins

Address:
61 Meredith Rd
Hamilton Township, NJ 08610



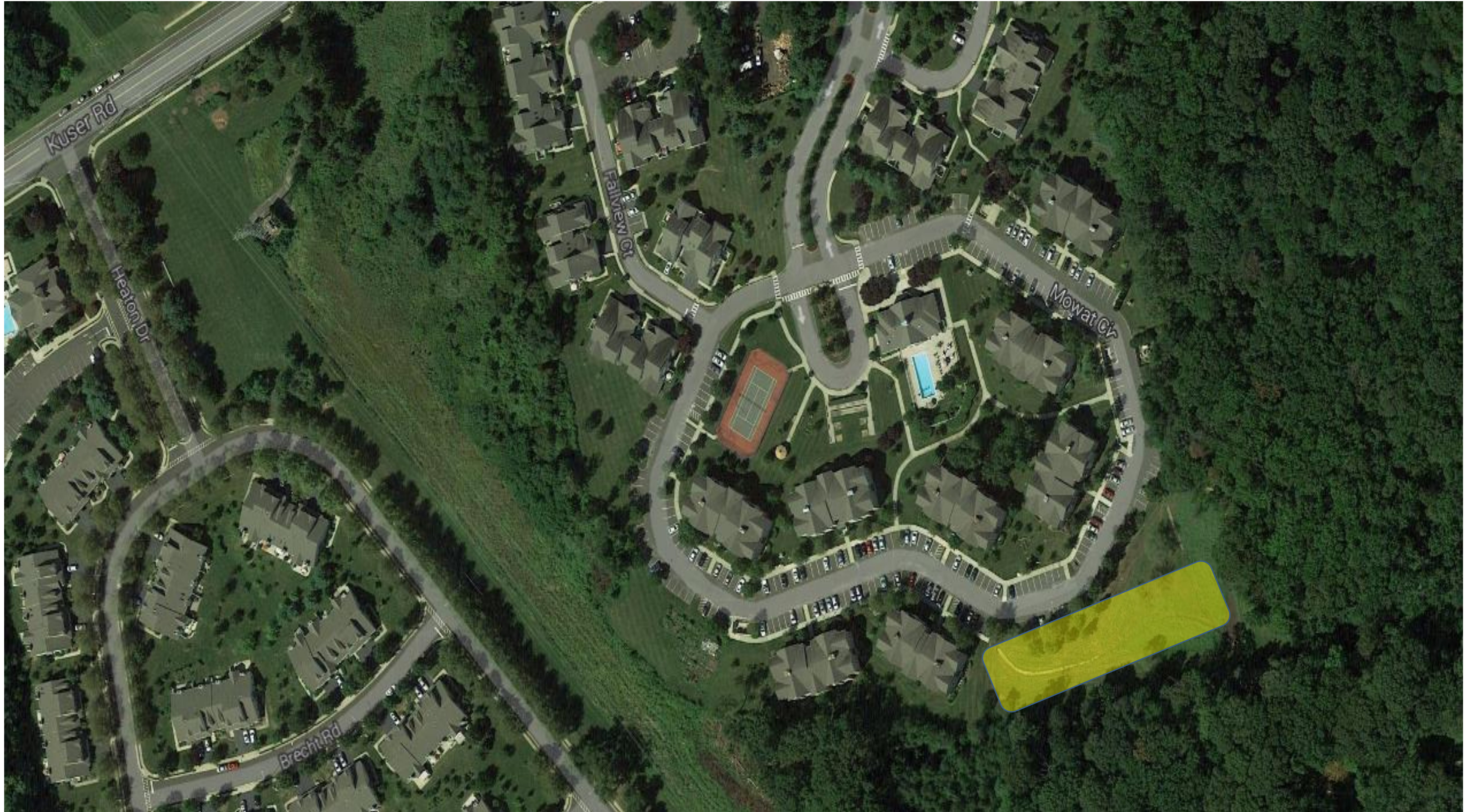
2019 Notes:

- Channel slightly overgrown with Jewel Weed, a beneficial native
- Clear out channel, inlets, and outlet to maintain access

Hamilton Township
Stormwater Basin Assessment

194. Mowat Circle Residential Basin

Address:
314 Mowat Cr
Hamilton Township, NJ 08690



Hamilton Township
Stormwater Basin Assessment
194. Mowat Circle Residential Basin

Address:
314 Mowat Cr
Hamilton Township, NJ 08690



Low flow channel



Front view of outlet



Side view of outlet

2014 Notes:

- Excessive sediment in low flow channel and basin bottom
- Trash rack broken and placed inside outlet structure
- Area near outlet has strong odor

Hamilton Township
Stormwater Basin Assessment
194. Mowat Circle Residential Basin

Address:
314 Mowat Cr
Hamilton Township, NJ 08690



2019 Notes:

- Two inlets leading into a outlet by low flow channel
- Basin heavily remediated from previous assessment, appears to be in good condition
- Remove low flow channel for stone channel
- Naturalize with herbaceous plants to help with erosion of banks

Hamilton Township
Stormwater Basin Assessment

199. Commerce Way Commercial Basin

Address:
160 Commerce Way
Hamilton Township, NJ 08610



Hamilton Township
Stormwater Basin Assessment
199. Commerce Way Commercial Basin

Address:
160 Commerce Way
Hamilton Township, NJ 08610



Basin bottom looking southwest



Standing water in low flow channel



2014 Notes:

- Outlet orifice is clogged due to excess debris, litter, and sediment
- Outlet structure has cracks and breakage
- Ponding water in basin bottom
- One inlet has exposed wire due to erosion

Hamilton Township
Stormwater Basin Assessment

199. Commerce Way Commercial Basin

Address:
160 Commerce Way
Hamilton Township, NJ 08610



2019 Notes:

- Severe standing water in low flow channels caused by outlet structure that needs maintenance
- Remove low flow channel for rock channel
- Plant native herbaceous plants to help naturalize

Hamilton Township
Stormwater Basin Assessment

216. Richard C. Crockett Middle School Detention Basin

Address:
2631 Kruser Rd
Hamilton Township, NJ 08691



Hamilton Township
Stormwater Basin Assessment

216. Richard C. Crockett Middle School Detention Basin

Address:
2631 Kruser Rd
Hamilton Township, NJ 08691



Inlet



Inlet



Degraded outlet structure

2014 Notes:

- Overgrown/excess sediment in low flow channel and near inlets
- Excess sediment accumulated in basin bottom
- Exposed wire and standing water inside outlet structure
- Excessive debris accumulated near outlet structure

Hamilton Township
Stormwater Basin Assessment

216. Richard C. Crockett Middle School Detention Basin

Address:
2631 Kruser Rd
Hamilton Township, NJ 08691



2019 Notes:

- Detention basin with large erosion and sediment build up
- Repair and maintain the area by removing unwanted plants and sediment
- Replace low flow channel with stone to allow infiltration

Hamilton Township
Stormwater Basin Assessment

239. Adam's Party Rental Detention Basin

Address:
154 Turnbull Ave
Hamilton Township, NJ 08610



Hamilton Township
Stormwater Basin Assessment
239. Adam's Party Rental Detention Basin

Address:
154 Turnbull Ave
Hamilton Township, NJ 08610



Severe ponding in basin



Obstructed inlet



Overgrown curbcut



Eroded swale bottom

2014 Notes:

- Outlet structure is clogged with debris and sediment
- Inlet pipe has excessive sediment accumulation and overgrown turf
- Curb-cut leading to basin from parking lot is eroded and overgrown
- Swale bottom leading to basin is eroded

Hamilton Township
Stormwater Basin Assessment
239. Adam's Party Rental Detention Basin

Address:
154 Turnbull Ave
Hamilton Township, NJ 08610

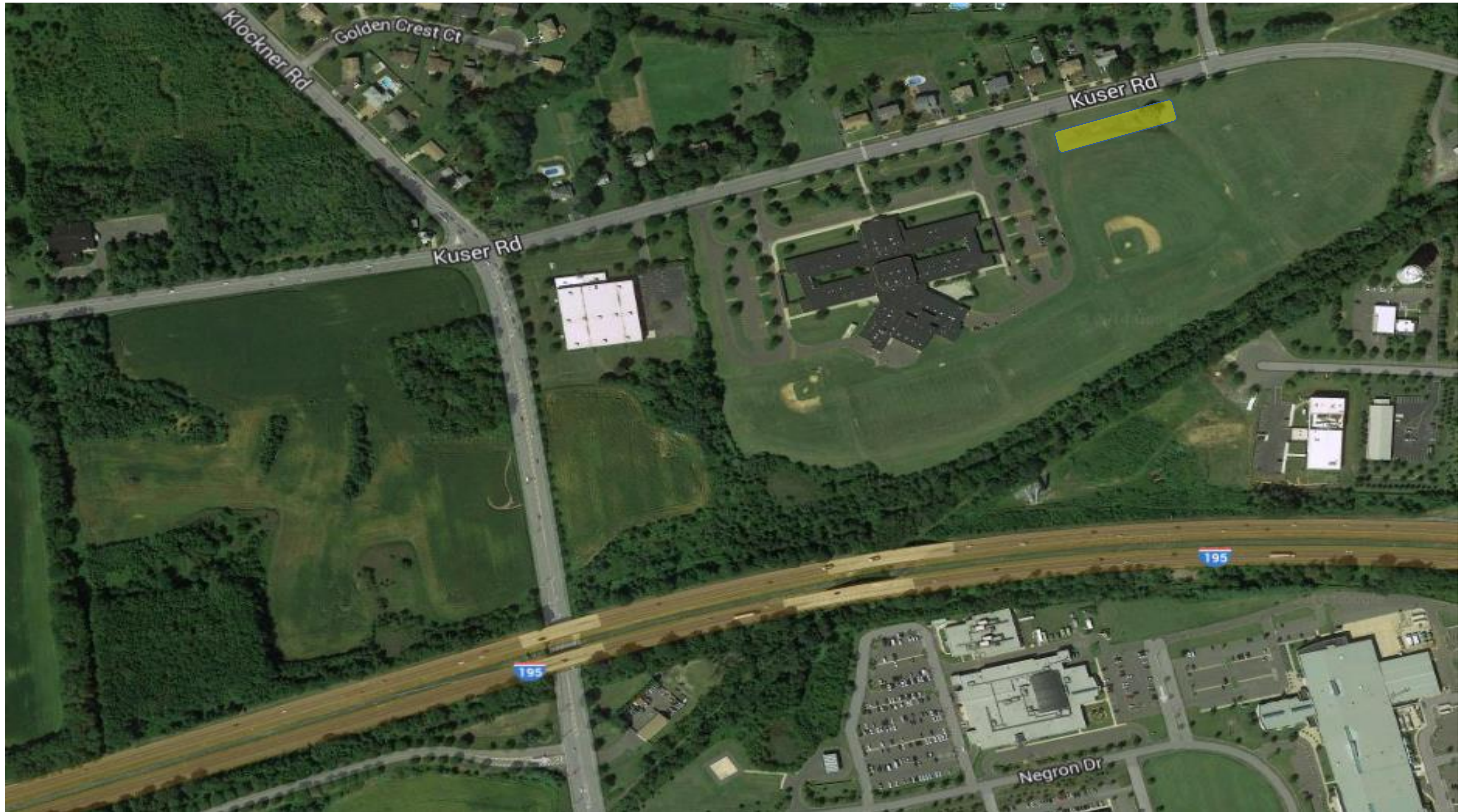


2019 Notes:

- Basin is in overall conditions, no clear signs of prolonged standing water seen in previous assessment
- Outlet is severely clogged with leaf litter

Hamilton Township
Stormwater Basin Assessment
256. Crocket Middle School Detention Basin

Address:
2631 Kuser Rd
Hamilton Township, NJ 08691



Hamilton Township
Stormwater Basin Assessment
256. Crocket Middle School Detention Basin

Address:
2631 Kuser Rd
Hamilton Township, NJ 08691



Overview of Basin



Outlet

2014 Notes:

- Outlet structure is clogged with sediment and debris
- Standing water in the basin bottom
- Outlet structure is missing secondary spillway grate

Hamilton Township
Stormwater Basin Assessment
256. Crocket Middle School Detention Basin

Address:
2631 Kuser Rd
Hamilton Township, NJ 08691

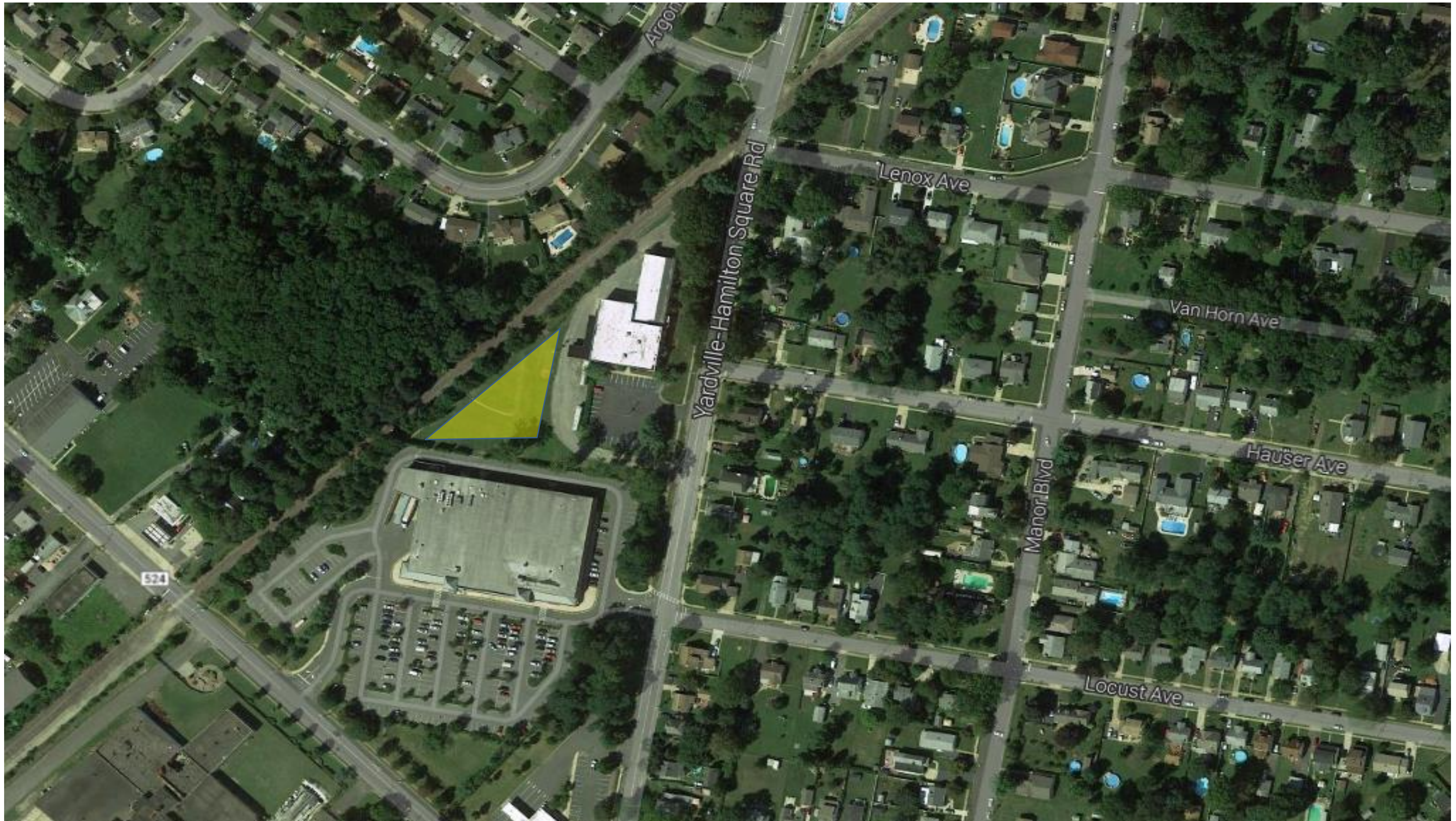


2019 Notes:

- Basin has large volume of water remaining, unimproved from the previous assessment
- Outlet structure is not working properly, needs repair/redesign
- Look at adding soil remediation to convert to an infiltration basin

Hamilton Township
Stormwater Basin Assessment
265. JEK Building Detention Basin

Address:
211 Yardville Hamilton Square Rd
Hamilton Township, NJ 08620



Hamilton Township
Stormwater Basin Assessment
265. JEK Building Detention Basin

Address:
211 Yardville Hamilton Square Rd
Hamilton Township, NJ 08620



Basin overview



Outlet



Inlet

2014 Notes:

- Inlet and outlet structure are overgrown with turf grass
- Sediment accumulating in low flow channel
- Outlet is dated and structurally deteriorated

Hamilton Township
Stormwater Basin Assessment
265. JEK Building Detention Basin

Address:
211 Yardville Hamilton Square Rd
Hamilton Township, NJ 08620



2019 Notes:

- Sediment buildup in outlet area, cover to portion of outlet catch basin is not attached
- Outlet is outdated and could be retrofitted to a more modern design to allow better stormwater management
- Remove low flow channels to provide infiltration and naturalize with herbaceous plants

Hamilton Township
Stormwater Basin Assessment
306. Saint James Church

Address:
1040 Yardville Allentown Rd.
Hamilton Township, NJ 08691



Hamilton Township
Stormwater Basin Assessment
306. Saint James Church

Address:
1040 Yardville Allentown Rd.
Hamilton Township, NJ 08691



Outlet



Overview of basin



Eastern portion of basin

2014 Notes:

- One common pipe conveys stormwater from eastern basin to western basin
- Standing water noted in basin bottom
- Invasive weeds and excessive sediment accumulation in basin bottom
- Eroding outlet pipe
- Emergency spillway leads to a vegetated swale

Hamilton Township
Stormwater Basin Assessment
306. Saint James Church

Address:
1040 Yardville Allentown Rd.
Hamilton Township, NJ 08691



2019 Notes:

- Looks like someone took the steps to retrofit this into an infiltration basin since the low flow outlet pipe is sealed
- Naturalized with herbaceous and woody vegetation recently compared to aerial
- Basin in good condition and naturalized, no recommendations

Hamilton Township
Stormwater Basin Assessment

310. Sirius XM Radio Basin

Address:
5 1st Avenue
Hamilton Township, NJ 08610



Hamilton Township
Stormwater Basin Assessment

310. Sirius XM Radio Basin

Address:
5 1st Avenue
Hamilton Township, NJ 08610



Overview of basin



Outlet

2017 Notes:

- Low flow channels had standing water present and stagnant
- Outlet structure may need to be replaced in near future
- Woody plants growing near outlet structure
- Stone lined channel can be used to replace low flow channel

Hamilton Township
Stormwater Basin Assessment

310. Sirius XM Radio Basin

Address:
5 1st Avenue
Hamilton Township, NJ 08610



2019 Notes:

- Basin is not well maintained, lots of trash
- Make sure inlets and outlets are clear of vegetation
- Low flow channel has sediment accumulation and sign of standing water
- Replace low flow channel with stone channel to allow more infiltration

Hamilton Township
Stormwater Basin Assessment

320. Hamilton Train Station Basin

Address:
720 Sloan Avenue
Hamilton Township, NJ 08610



Hamilton Township
Stormwater Basin Assessment
320. Hamilton Train Station Basin



Address:
720 Sloan Avenue
Hamilton Township, NJ 08610



Overview of basin



Outlet



Erosion of inlet

2017 Notes:

- Sediment and litter inside and surrounding outlet
- Erosion of all inlet structures
- Retrofit low flow channels with stone channels and reduce mowing to allow for better infiltration

Hamilton Township
Stormwater Basin Assessment
320. Hamilton Train Station Basin

Address:
720 Sloan Avenue
Hamilton Township, NJ 08610



2019 Notes:

- Basin inlets have significant erosion to concrete structure as seen in previous assessment
- Outlet severely clogged with grass and sediment
- Low end of basin appears to have significant sediment accumulation
- Maintenance and repair suggested to address issues
- Potential retrofit by removing low flow channels with stone channels to promote infiltration

Hamilton Township
Stormwater Basin Assessment
421. Industrial Basin

Address:
1325 Klockner Road
Hamilton Township, NJ 08610



Hamilton Township
Stormwater Basin Assessment
421. Industrial Basin

Address:
1325 Klockner Road
Hamilton Township, NJ 08610



Overview of basin



Inlet pipe from road



Standing water

2017 Notes:

- Standing water present
- Basin near environmental clean up site
- Amend soil to improve infiltration and reduce standing water
- Plant with woody vegetation to improve infiltration

Hamilton Township
Stormwater Basin Assessment
421. Industrial Basin

Address:
1325 Klockner Road
Hamilton Township, NJ 08610



2019 Notes:

- Does not appear to be a true basin, just a bad ponding area
- Establish meadow system to promote better infiltration