

**Livonia Public Schools
Stormwater Management Program Plan**

**Municipal Separate Storm Sewer System (MS4)
National Pollutant Discharge Elimination System
(NPDES)
Stormwater Discharge Permit**

PERMIT NO. MI0060044

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Table of Contents

<u>1.0</u>	<u>Introduction</u>	<u>1</u>
1.1	Regulated Area	2
1.2	Outfalls & Discharge Points/ Receiving Waters	3
1.3	Enforcement Response Procedures	4
<u>2.0</u>	<u>Stormwater Management Program Plan (SWMP) Minimum Control Measures</u>	<u>5</u>
2.1	Public Involvement/Participation Program (PPP)	5
2.1.1	Public Involvement/Participation Program Objectives	5
2.1.2	Public Involvement & Participation Procedure	5
2.1.3	Public Involvement & Participation Assessment	6
2.1.4	Public Involvement & Participation Program (PPP) BMP Table	7
2.2	Public Education Program (PEP)	9
2.2.1	Public Education Program Objectives	9
2.2.2	Public Education Program Procedure	9
2.2.3	Public Education Program BMP Table	10
2.2.4	Public Education Program Effectiveness	16
2.3	Illicit Discharge Elimination Program (IDEP)	16
2.3.1	Illicit Discharge Elimination Program (IDEP) Program Objectives	16
2.3.2	Facility Site Storm Sewer System Maps and Lists	16
2.3.3	Illicit Discharge Identification & Investigation Procedure – Field Observations	17
2.3.4	Illicit Discharge Identification & Investigation Procedure – Field Screening & Source Investigation	17
2.3.5	Illicit Discharge/Connection Elimination Procedure	18
2.3.6	Illicit Discharge Regulatory Mechanism/Policy	19
2.3.7	Illicit Discharge Elimination Training	22
2.3.8	Illicit Discharge Elimination Program Effectiveness	22
2.3.9	Illicit Discharge Elimination Program – BMP Table	23
2.3.10	Polluting Materials Emergency and Spill Response Policy and Procedures	26
2.4	Construction Site Stormwater Runoff Control Program	27
2.4.1	Construction Site Stormwater Management Program Objectives	27
2.4.2	Construction Notification Procedure	27
2.4.3	Part 91 Permit	28
2.4.4	Permit by Rule Compliance	28
2.4.5	Construction Site Stormwater Management-BMP Table	30
2.5	Post Construction Stormwater Controls for New Developments & Redevelopments	32
2.5.1	Post Construction Stormwater Management Program Objectives	32
2.5.2	Post-Construction Policy and Procedure	32
2.5.3	Water Quality Treatment Standard	33
2.5.4	Channel Protection Performance Standard	34

2.5.5 Site-Specific Requirements	34
2.5.6 Site Plan Review	35
2.5.7 Long-Term Operation & Maintenance of Stormwater Controls	36
2.5.8 Post Construction Stormwater Management-BMP Table	37
2.6 Pollution Prevention & Good Housekeeping Program	39
2.6.1 Pollution Prevention & Good Housekeeping Program Objectives	39
2.6.2 Structural Control Inventory & Schedule Table	39
2.6.3 Facility Assessment & Prioritization	39
2.6.4 Storm Sewer Structure Controls Inspection & Maintenance Policy & Procedure	40
2.6.5 Structural BMP Operation & Maintenance Waste Disposal Procedures	42
2.6.6 Pollution Prevention/Good Housekeeping – Municipal Operations & Maintenance Activities	43
2.6.7 Street Sweeping Procedure, Prioritization & Schedule	45
2.6.8 Managing Vegetated Properties	48
2.6.9 Contractor Requirements & Oversight	48
2.6.10 Pollution Prevention/Good House Keeping Training	48
2.6.11 Pollution Prevention/Good Housekeeping –BMP Table	49
<u>3.0 Training</u>	<u>54</u>
3.1 Training Table	55
<u>4.0 Total Maximum Daily Load (TMDL) Restrictions</u>	<u>56</u>
4.1 What are TMDLs	56
4.2 Statewide E. coli TMDL	56
4.3 Rouge River TMDL	58
4.4 TMDL Implementation – Monitoring Plan	59
4.4.1 Sampling	59
4.4.2 Prioritized TMDL Best Management Practices	60
4.4.3 TMDL - BMP Table	62
<u>Appendices</u>	
Appendix “A”	Outfall/Discharge Point Receiving Water Table & Site Stormwater Structure Maps
Appendix “B”	Enforcement Policies and Tracking Forms
Appendix “C”	SEMCOG Poster & Illicit Discharge Poster
Appendix “D”	Inspection Field Worksheets
Appendix “E”	Property Structural Controls Inventory, Inspection, & Maintenance Schedule
Appendix “F”	Contractor Oversight & Employee Training Documentation
Appendix “G”	TMDL Sample Location Table

Stormwater Management Program Plan

1.0 Introduction

Livonia Public Schools is a public school district based in Livonia, MI that owns or operates a regulated Municipal Separate Storm Sewer System (MS4). This Stormwater Management Plan (SWMP) has been developed to retain authorization to discharge stormwater to surface waters and reduce the discharge of pollutants from the MS4 to the Maximum Extent Practicable and protect water quality. Livonia Public Schools will implement and enforce this SWMP to the Maximum Extent Practicable.

This Stormwater Management Plan commits to actions throughout the permit cycle. This SWMP includes measurable goals for Best Management Practices (BMP), focusing on the six minimum measures. Measurable goals describe the actions Livonia Public Schools will take to implement each BMP and allow Livonia Public Schools to evaluate progress toward meeting key objectives outlined in the following sections.

Livonia Public Schools owns and operates twenty-seven (27) public properties within the boundaries of the “Detroit Urbanized Area”. All Livonia Public Schools properties are within the urbanized area based on the 2010 Census data, and the facilities include:

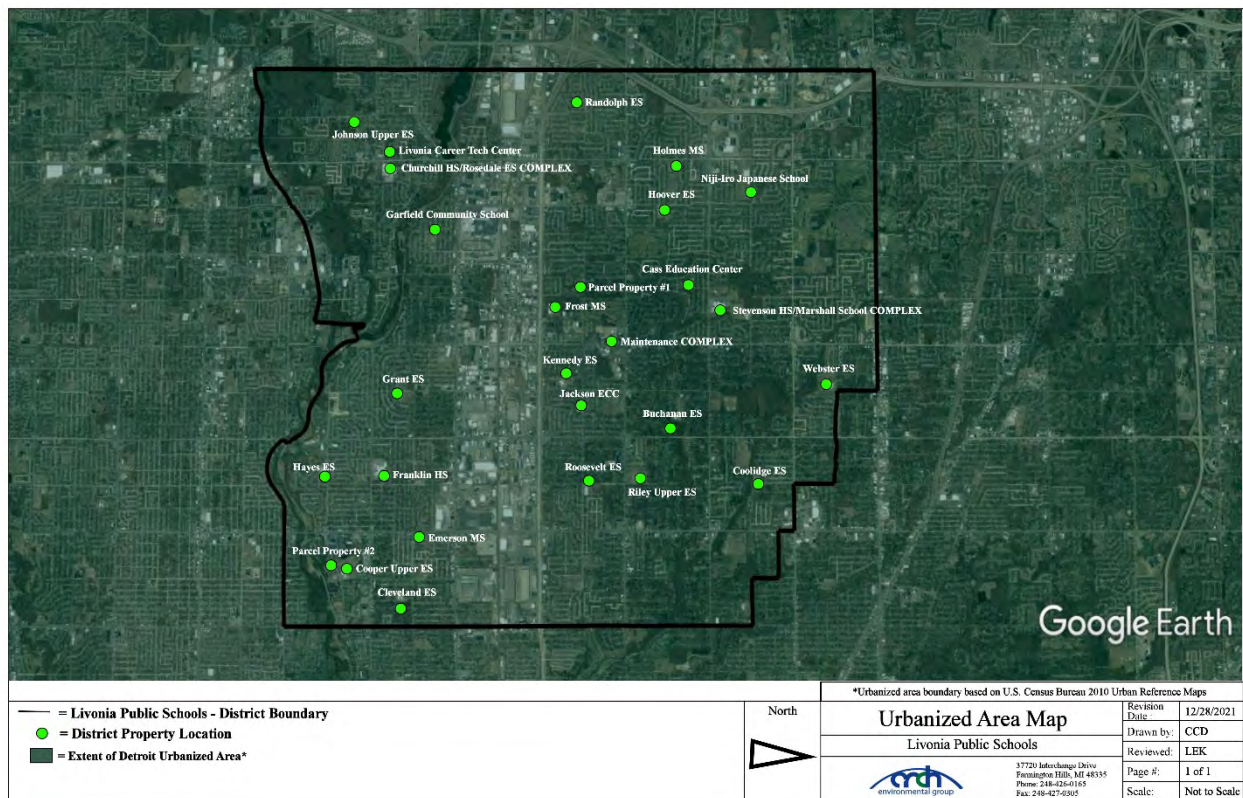
1. **Buchanan Elementary School** - 16400 Hubbard St, Livonia, MI 48154
2. **Cass Education Center** - 34633 Munger, Livonia, MI, 48154
3. **Churchill High School-Rosedale Elementary School Complex** - 8900 Newburgh Rd, Livonia, MI 48150; 36651 Ann Arbor Trail, Livonia, MI 48150
4. **Cleveland Elementary School** - 28030 Cathedral, Livonia, MI, 48150
5. **Coolidge Elementary School** - 30500 Curtis, Livonia, MI 48152
6. **Cooper Upper Elementary School** - 28550 Ann Arbor Trail, Westland, MI 48185
7. **Emerson Middle School** - 29100 W Chicago, Livonia, MI 48150
8. **Franklin High School** - 31000 Joy Rd, Livonia, MI 48150
9. **Frost Middle School** - 14041 Stark Rd, Livonia, MI 48154
10. **Garfield Community Center** - 10218 Arthur St, Livonia, MI 48150
11. **Grant Elementary School** - 9300 Hubbard St, Livonia, MI 48150
12. **Hayes Elementary School** - 30600 Louise Ct, Westland, MI 48158
13. **Holmes Middle School** - 16200 Newburgh Rd, Livonia, MI 48154
14. **Hoover Elementary School** - 15900 Levan Rd, Livonia, MI 48154
15. **Jackson Early Childhood Center** - 32025 Lyndon, Livonia, MI 48154
16. **Johnson Upper Elementary School** - 8400 N Hix Rd, Westland, MI 48185
17. **Kennedy Elementary School** - 14201 Hubbard, Livonia, MI 48154
18. **Livonia Career Technical Center** - 8985 Newburgh Rd, Livonia, MI 48150
19. **Maintenance Complex** - 15125 Farmington Rd, Livonia, MI 48154
20. **Niji-Iro Japanese School** - 36611 Curtis Rd, Livonia, MI 48152
21. **Parcel #1** - 34715 Lyndon, Livonia, MI 48154

22. **Parcel #2** - 28681 Ann Arbor Trail, Westland, MI 48185
23. **Randolph Elementary School** - 14470 Norman St, Livonia, MI 48154
24. **Riley Elementary School** - 15555 Henry Ruff Rd, Livonia, MI 48154
25. **Roosevelt Elementary School** - 30200 Lyndon, Livonia, MI 48154
26. **Stevenson High School** - 33500 Six Mile Rd, Livonia, MI 48152
27. **Webster Elementary School** - 32401 Pembroke St, Livonia, MI 48150

1.1 Regulated Area

A map identifying the urbanized area within the Livonia Public Schools urbanized area as defined by the 2010 Census is provided below in Map 1.

Map 1 – District Jurisdictional Boundary Map – Urbanized Area¹



¹ Urbanized area boundary based on U.S. Census Bureau 2010 Urban Area Reference Maps.

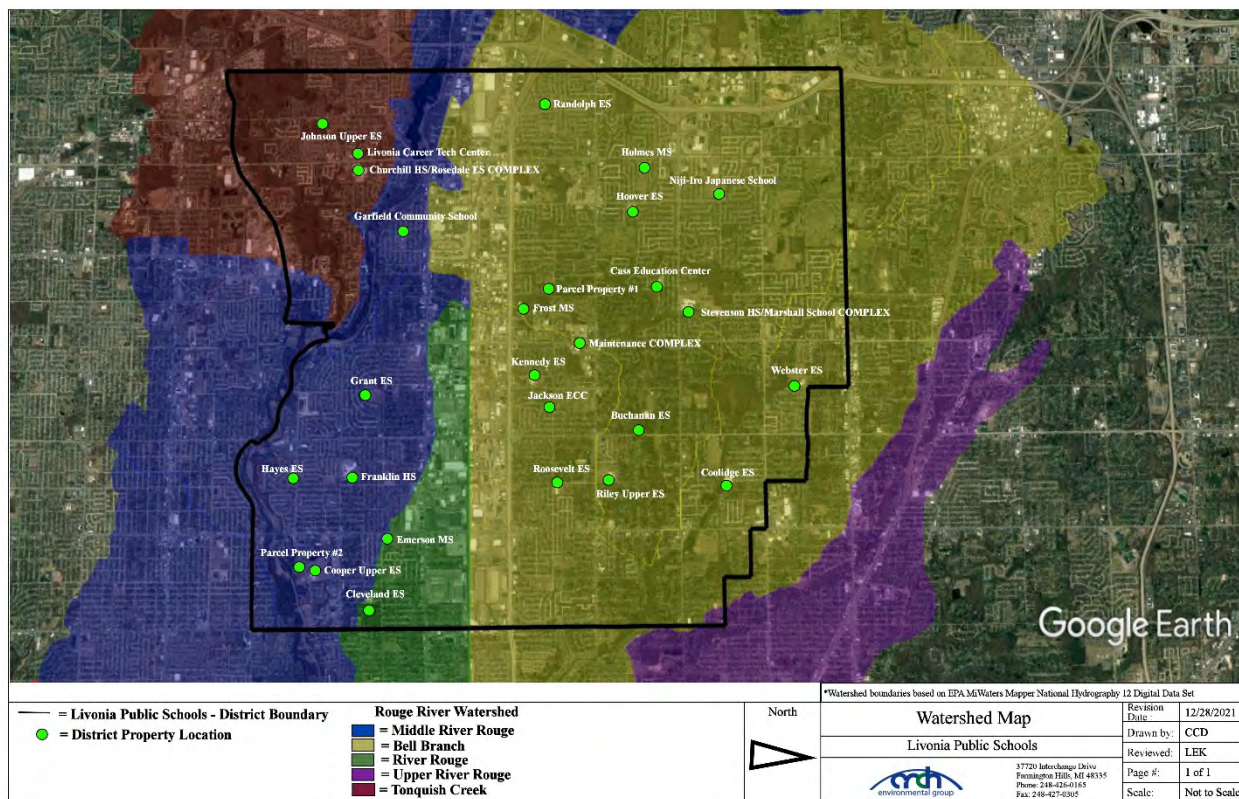
1.2 Outfalls & Discharge Points/ Receiving Waters

The permit authorizes the discharge of stormwater from municipal separate stormwater drainage systems to waters of the state from all existing outfalls or points of discharge.

Livonia Public Schools has identified outfalls that discharge directly into surface waters of the state and discharge points that discharge into other MS4 drainage systems. The Livonia Public Schools drainage system discharges directly or indirectly into the Rouge River as detailed in Map 2 below.

Livonia Public Schools has completed site specific storm sewer system maps which identify outfall and discharge point locations, discharge point source identification numbers, and receiving waters. A receiving water table and site-specific storm sewer system maps are provided in Appendix "A". Any changes to the Livonia Public Schools storm sewer system will be reflected on the storm sewer system maps and reported provided to the EGLE during progress reporting. The district watershed boundary map is provided below in the map listed as "Map 2".

Map 2 – District Watershed Map²



² Watershed boundaries based on Environmental Protection Agency MiWaters Mapper National Hydrography Dataset Mapper 12-Digit Watersheds.

1.3 Enforcement Response Procedures

The Livonia Public Schools properties are regulated as an MS4 under the NPDES Permit program. Environmental compliance staff members from Livonia Public Schools have the authority to inspect and monitor stormwater-related activities on campus and require full compliance with all stormwater permit requirements. Enforcement of Livonia Public Schools policies, procedures, and best management practices (BMPs) outlined in this SWMP is the responsibility of the Stormwater Program Manager or their designee. Any questions regarding this policy and procedure will be directed to the Stormwater Program Manager.

The primary role of the Superintendent or their designee is to ensure that the ERP is followed in a timely and consistent manner and track compliance issues and schedules. To achieve compliance, the following steps may be conducted:

1. Reviews reported violation.
2. Contact business or non-district individual responsible for the violation.
3. Ensures that compliance actions taken are consistent and timely.
4. Tracks instances of noncompliance.
5. Review compliance reports and schedules to ensure that appropriate enforcement actions are taken, and compliance goals are met.
6. Conduct follow-up inspection(s) to verify the violation has been corrected.
7. Legal action may be pursued for the most serious violations including where the response to previous enforcement actions is inadequate.

The tracking of instances of noncompliance includes the following information:

- Name
- Date
- Location of Violation (address, cross streets, etc.,)
- Business/Agency/Organization (as appropriate)
- Description of Violation
- Description of Enforcement Response
- Date Violation was Resolved

Information shall be placed into the Districts Noncompliance Enforcement Tracking Sheet.

This procedure will be reviewed on an annual basis by the Stormwater Manager for any updates. A copy of the SW Illicit Discharge Regulatory Policy is included with and an example of the Municipal Separate Storm Sewer System Noncompliance Enforcement Tracking Sheet in Appendix "B".

2.0 Stormwater Management Program Plan (SWMP) Minimum Control Measures

This SWMP has been developed to describe the Best Management Practices (BMPs) Livonia Public Schools will implement to meet the six minimum control measures and water quality requirements. The six minimum control measures include:

- **Public Participation/Involvement Program (PPP)**
To share components of the SWMP and encourage participation in its review and implementation.
- **Public Education Program (PEP)**
To promote, publicize, and facilitate education for the purpose of encouraging the public to reduce the discharge of pollutants to stormwater to the maximum extent practicable.
- **Illicit Discharge Elimination Program (IDEP)**
To detect and eliminate illicit connections and discharges to the MS4.
- **Construction Stormwater Runoff Control Program**
To augment Part 91 rules dealing with soil erosion, offsite sedimentation, and other construction-related wastes.
- **Post-Construction Stormwater Runoff Program**
To address post-construction stormwater runoff from projects that disturb one acre or more, including projects less than one acre that are part of a larger common plan of development that would disturb one acre or more.
- **Pollution Prevention/Good Housekeeping Program**
To minimize pollutant runoff to the maximum extent practicable from municipal operations that discharge stormwater to the surface waters of the state.

Each BMP includes a measurable goal, implementation schedule, and measure of assessment.

2.1 Public Involvement/Participation Program (PPP)

Engaging and empowering the public in the effort to reduce the impacts of stormwater runoff is a key element of the public involvement/participation program.

2.1.1 Public Involvement/Participation Program Objectives

1. Process for making the Stormwater Management Plan available for public inspection and comment.
2. Process for inviting public involvement and participation in the implementation of SWMP best management practices and periodic review of the SWMP.

2.1.2 Public Involvement & Participation Procedure

1. As required, the approved Stormwater Management Program (SWMP) will be made available to the public via the district website throughout the permit cycle.
2. The stormwater webpages will include contact information for public comments.
3. The public will be notified through announcements or newsletters that a copy of the SWMP is available on the district stormwater webpage.
4. A public survey has been developed and placed on the Livonia Public Schools stormwater webpage in an effort to provide input into stormwater implementation.

5. A link to a stormwater blog “Cleanwater Chronicles” has been added to the Livonia Public Schools stormwater webpage. The stormwater blog explains water quality issues and promotes opportunities for public involvement.
6. Cooperation with local watershed protection groups.

2.1.3 Public Involvement & Participation Assessment

1. Livonia Public Schools will review the public involvement & participation BMPs as part of annual SWMP review to determine level of district involvement and identify areas of improvement.

2.1.4 Public Involvement & Participation Program (PPP) BMP Table

BMP	Implementation of BMP	Timeframe	Measurable Goal	Measure of Assessment	Responsible Party
BMP #2.1.4.1 Public Notice of SWMP	Make SWMP available for public review through stormwater webpage.	Annually Throughout Permit Cycle	Public notice published in annual district wide newsletter announcing the availability of the SWMP for review, including contact information for comments.	Verify SWMP available on stormwater webpage, and track changes webpage posting of SWMP.	Livonia Public Schools
	Notification in annual district newsletter, website, or school posting to publicize updated SWMP and locations for review.			Keep copies of official SWMP posting notifications.	
	Contact information will be available on the stormwater webpages to forward comments regarding the SWMP.			Compile and track comments from the public.	
BMP #2.1.4.2 Stormwater Blog	Post link to stormwater blog on district website.	Ongoing Throughout Permit Cycle	A link to a stormwater blog established and maintained on the district stormwater webpage to assist in distributing information and updating the public on the watershed and activities.	Copies of monthly stormwater blog postings for reporting period.	Livonia Public Schools
BMP #2.1.4.3 Stormwater Education Program Survey	Post survey on district website.	Ongoing Throughout Permit Cycle	Survey posted on the stormwater webpages and link maintained throughout the permit term to assess community knowledge and provide input into stormwater implementation.	Results of completed surveys.	Livonia Public Schools
BMP #2.1.4.4 Participation Activities	Engage in environmental education activities.	Ongoing Throughout Permit Cycle	Increase in public participation in environmental activities and outreach events. Participation activities include water quality issues, stormwater management initiatives, home toxics, recycling, compost, and disposal.	Reports of participation.	Livonia Public Schools

Livonia Public Schools
Stormwater Management Program Plan (SWMP)

BMP	Implementation of BMP	Timeframe	Measurable Goal	Measure of Assessment	Responsible Party
BMP #2.1.4.5 Public Involvement & Participation Program Assessment	Evaluate the effectiveness of the public involvement program.	Annually Throughout Permit Cycle	Complete as part of annual SWMP review to determine level of district involvement and identify areas of improvement. Program activities may be adjusted based on the results of the assessment.	Copies of annual SWMP review noting any areas of needed improvement.	Livonia Public Schools

2.2 Public Education Program (PEP)

Livonia Public School's "Public Education Program (PEP)" is designed to promote, publicize, and facilitate education for the purpose of encouraging the public to reduce the discharge of pollutants into the Livonia Public Schools separate storm sewer system.

The term "Public" as referred in to in this program is defined to include all persons who could potentially affect the quality of stormwater discharges from Livonia Public Schools properties including but not limited to Livonia Public Schools faculty, staff, contractors, and students of Livonia Public Schools, as well as area residents, visitors, public employees, local businesses, industries, construction contractors and property developers. This PEP will include a variety of mechanisms and venues to provide watershed awareness and pollution prevention education throughout the Livonia Public Schools jurisdiction.

2.2.1 Public Education Program Objectives

1. Responsibility and stewardship in their watershed.
2. Inform and educate the public about the connection of the MS4 to area waterbodies and the potential impacts discharges could have on surface waters of the state.
3. Educate the public on illicit discharges and promote public reporting of illicit discharges and improper disposal of materials into the MS4.
4. Promote preferred cleaning materials and procedures for car, pavement, and power washing.
5. Inform and educate the public on the proper application and disposal of pesticides, herbicides, and fertilizers.
6. Promote proper disposal practices for grass clippings, leaf litter, and animal wastes that may enter the MS4.
7. Identify and promote the availability, location, and requirements of facilities for collection or disposal of household hazardous wastes, travel trailer sanitary wastes, chemicals, yard wastes, and motor vehicle fluids.
8. Inform and educate the public on proper septic system care and maintenance, and how to recognize system failure.
9. Promote methods for managing riparian lands to protect water quality.
10. Provide training for staff.

2.2.2 Public Education Program Procedure

Livonia Public Schools is targeting all community wide issues as high priority. No prioritization will be needed, as educational activities to ensure that all community wide issues are reached to the public. It is anticipated that during this permit a combination of educational approaches will be used to convey the individual components of the PEP. Educational mechanisms will include cooperation with the distribution or posting of community newsletters and other watershed partner literature, and event notices. Livonia Public Schools has developed and implemented a comprehensive "Stormwater Management" webpage on the district's website. Additionally, program posters, are strategically placed throughout school facilities. Copies of SEMCOG posters are provided in Appendix "C".

2.2.3 Public Education Program BMP Table

BMP Topic	Description of BMP	Timeframe	Measurable Goal & Key Messages	Measure of Assessment	Target Audience	Responsible Party
BMP #2.2.3.1 Promote public responsibility and stewardship in watershed.	Watershed website. Watershed specific website hosted by district, featuring watershed map, description of watershed, and links to watershed groups.	Ongoing Throughout Permit Cycle	Supply watershed information and promote watershed membership information. Educate the public on local water body health.	Update webpages as necessary. Confirm posting & track webpage reviews. Provide watershed membership information.	Students, faculty, and community	Livonia Public Schools
	Place SEMCOG "7 Simple Steps to Clean Water" information on stormwater webpages.		SEMCOG "7 Simple Steps to Clean Water" information and links.	Update webpages as necessary. Confirm posting & track webpage reviews.		
			Communicate with faculty regarding the resources available to reach the student audience.	Documentation of communication with faculty.		
	Publicize environmental related events through email, newsletters, or social media.	Ongoing Throughout Permit Cycle	Promote public awareness on environmental issues and increase district environmental participation.	Date, time location and name of event attended.	Students, faculty and community	
			Maintain copies of email notices (watershed announcement) of educational materials provided to district staff.			

BMP Topic	Description of BMP	Timeframe	Measurable Goal & Key Messages	Measure of Assessment	Target Audience	Responsible Party
BMP #2.2.3.2 Educate the public about the connection of the MS4 to the area waterbodies and the potential impacts discharges could have on surface waters of the state.	Posting of the training video “When it Rains, it Drains...The Stormwater Question” on the district webpage.	Ongoing Throughout Permit Cycle	Educate the public on local water bodies, water quality issues, and impacts of discharges on surface waters through visual media.	Update webpages as necessary. Confirm posting & track webpage reviews.	Students, faculty, and community	Livonia Public Schools
	Include information and links to USEPA and EGLE Stormwater information on district stormwater webpage.		Provide resources to water quality issues and impacts of discharges on surface waters.	Update webpages as necessary. Confirm posting of links & track webpage reviews.		
	SEMCOG posters placed strategically throughout the district.		Maintain three (3) various SEMCOG posters at each facility. Strategic locations include Main Office, Lounge, and Receiving Area (if available).	Annual review of postings. Number of posters placed throughout district.		
	General Stormwater Awareness Training	Ongoing Throughout Permit Cycle	Encourage teachers, administrative and support staff to watch the General Awareness Stormwater Video “When it Rains it Drains”.	Copy of sign in sheets and Agenda (if available).	Faculty	
			Post stormwater training video on stormwater webpage.	Update webpages as necessary. Confirm posting & track webpage reviews.	Students, faculty, and community	

BMP Topic	Description of BMP	Timeframe	Measurable Goal & Key Messages	Measure of Assessment	Target Audience	Responsible Party
BMP #2.2.3.3 Educate the Public on Illicit Discharges and promote public reporting of illicit discharges and improper disposal of materials into the MS4.	Publicize 24-hour environmental hot-line phone numbers and instructions for reporting spills, illicit discharges, or connections.	Ongoing Throughout Permit Cycle	Track # of calls received on hotline per year. All calls to be addressed and record outcome of calls. Goal of an overall decrease in number of illicit discharges in improper disposal of materials into MS4s.	Number of calls to the Stormwater Manager.	Students, faculty, and community	Livonia Public Schools
			Place 24-hour environmental hot-line posters throughout the district.	Promotion/ publicizing efforts; number of posters placed throughout district.		
	Pollutants & Illicit Discharges webpage; featuring information regarding sources of pollution, how pollutants cause damage, illicit discharges. How to Report/Hotline Numbers poster; describing illicit discharges and how to report illicit discharges.		Maintain illicit discharge webpage.	Update webpages as necessary. Confirm posting & track webpage reviews.		
			Place "How to spot illicit discharge/ How to Report-Hotline Numbers" posters placed in Receiving Rooms at each district facility. Goal is to have one poster at each facility.	Annual review of postings. Number of posters placed throughout district.		
	SEMOG posters placed strategically throughout the district.		Goal to maintain three (3) various SEMOG posters at each facility. Strategic locations include Main Office, Lounge, and Receiving Area (if available).	Annual review of postings. Number of posters placed throughout district.		
	The district implements an active storm drain labeling/ marking program.	Update as needed Throughout Permit Cycle	Visually making a connection of storm drains to local waterways and the impacts of dumping pollutants into these drains, increase number of staff, students and visitors who can identify the connection. Mark all drains on pervious surfaces.	Annual inventory of stenciled basins.		

BMP Topic	Description of BMP	Timeframe	Measurable Goal & Key Messages	Measure of Assessment	Target Audience	Responsible Party
BMP #2.2.3.4 Promote preferred cleaning materials and procedures for car, pavement, and power washing.	SEMCOG posters placed strategically throughout the district.	Ongoing Throughout Permit Cycle	Goal to maintain three (3) various SEMCOG posters at each facility. Strategic locations include Main Office, Lounge, and Receiving Area (if available).	Annual review of postings. Number of posters placed throughout district.	Students, faculty, and community	Livonia Public Schools
	Discontinue practice of allowing school or other private groups from holding car wash fund raising project on school property.	Annually Throughout Permit Cycle	Send reminder email notice to all school Principals, Athletic Directors regarding the policy.	Copy of annual notice.	Faculty & students	
BMP #2.2.3.5 Inform and educate the public on proper application and disposal of pesticides, herbicides, and fertilizers.	Maintain a district “Good Housekeeping” informational page on stormwater management webpages.	Ongoing Throughout Permit Cycle	Address the environmental (including water quality) and resulting from improper handling and disposal of pesticides, herbicides, and fertilizers.	Update webpages as necessary. Confirm posting & track webpage reviews.	Students, faculty, and community	Livonia Public Schools
	SEMCOG posters placed strategically throughout the district.		Goal to maintain three (3) various SEMCOG posters at each facility. Strategic locations include Main Office, Lounge, and Receiving Area (if available).	Annual review of postings. Number of posters placed throughout district.		

BMP Topic	Description of BMP	Timeframe	Measurable Goal & Key Messages	Measure of Assessment	Target Audience	Responsible Party
BMP #2.2.3.6 Promote proper disposal practices for grass clippings, leaf litter, and animal wastes that may enter into the MS4.	SEMOG posters placed strategically throughout the district.	Ongoing Throughout Permit Cycle	Goal to maintain three (3) various SEMOG posters at each facility. Strategic locations include Main Office, Lounge, and Receiving Area (if available).	Annual review of postings. Number of posters placed throughout district.	Students, faculty, and community	Livonia Public Schools
BMP #2.2.3.7 Identify and promote the availability, location, and requirements of facilities for collection and disposal of household hazardous wastes, travel trailer wastes, chemicals, and motor vehicle fluids.	Maintain a district "Household Hazardous Waste" informational page on stormwater management webpages.	Ongoing Throughout Permit Cycle	Address the environmental (including water quality) and public health effects resulting from improper handling and disposal of household hazardous waste, reduce the use of home toxics, keep citizens informed about the choices and responsibilities associated with purchasing, handling, and disposing of toxic substances. Increase the number of residents using the program to dispose of home toxics.	Update webpages as necessary. Confirm posting & track webpage reviews.	Students, faculty, and community	Livonia Public Schools
BMP #2.2.3.8 Inform and educate the public on proper septic system care and maintenance, and how to recognize system failure.	Maintain a district "Sewer Overflows and Septic Systems" informational page on stormwater management webpages.	Ongoing Throughout Permit Cycle	Educate why sewer overflows and septic systems are pollution issues. Promote proper and consistent maintenance of septic systems.	Update webpages as necessary. Confirm posting & track webpage reviews.	Students, faculty, and community	Livonia Public Schools

BMP Topic	Description of BMP	Timeframe	Measurable Goal & Key Messages	Measure of Assessment	Target Audience	Responsible Party
BMP #2.2.3.9 Promote methods for managing riparian lands to protect water quality.	Maintain a district “Riparian Zone Management” informational page on stormwater management webpages.	Ongoing Throughout Permit Cycle	Educate on why riparian zones are important, what riparian zone management is (river friendly lawn care, riparian buffer zones, stream bank stabilization, woody debris management, river maintenance). Increase number of riparian landowners who implement BMPs.	Update webpages as necessary. Confirm posting & track webpage reviews.	Students, faculty, and community	Livonia Public Schools
	Encourage teachers and students to participate in stream bank monitoring programs.		Increase awareness, inspire people to take actions that lead to better river protection at home and in their communities.	Report on schools that participated in monitoring programs.	Students and faculty	
	Include guidance and links on Stormwater webpage on native vegetation.	Ongoing Throughout Permit Cycle	Maintain a district “Native, Non-Native, & Invasive Species” and “Why Use Native Plants?” informational page on stormwater management webpages. Increase the use of native plants and encourage the use of gardens at school facilities.	Update webpages as necessary. Confirm posting & track webpage reviews.	Students, faculty, and community	Livonia Public Schools
BMP #2.2.3.10 Stormwater Education Program Effectiveness Survey	Post survey on district website	Annually Throughout Permit Cycle	A survey has been posted on the stormwater webpages and will be posted throughout the permit term to ascertain behavioral changes.	Annual results of survey.	Students, faculty, and community	Livonia Public Schools
BMP #2.2.3.11 Public Education Program Effectiveness Assessment	Summary of annual public education activities for the “Public Education” component to evaluate the effectiveness.	Annually Throughout Permit Cycle	Determine if the public education best management practices have been implemented and identify areas of improvement.	Annual SWMP review. Summary of public education activities. Survey results review.	Students, faculty, and community	Livonia Public Schools

2.2.4 Public Education Program Effectiveness

The effectiveness of the public education program will be evaluated based on progress made towards meeting the BMP objectives described above.

The District has implemented a “Watershed Awareness Survey” to be used as an evaluation. The purpose of these surveys is to provide an assessment of public understanding of issues in the watershed related to pollution from stormwater runoff. Results would be used to guide Livonia Public Schools in identifying opportunities for enhancement of the PEP. Additionally, Livonia Public Schools will conduct an annual review of the public education best management practices to determine if they have been implemented and identify areas of improvement.

2.3 Illicit Discharge Elimination Program (IDEP)

The following Livonia Public Schools Illicit Discharge Elimination Program is designed to identify, locate, prohibit, and effectively eliminate illicit discharges, including discharges of sanitary wastewaters, to the permitted separate stormwater drainage systems.

2.3.1 Illicit Discharge Elimination Program (IDEP) Program Objectives

1. Establish authority to investigate, inspect and monitor suspected illicit discharges.
2. Maintain maps of the MS4, points of discharge, and outfalls.
3. Prohibit non-stormwater discharge into the MS4.
4. Provide regular training to staff.
5. Instruct contractors to prevent dumping into the MS4.
6. Conduct routine dry weather screening.
7. Conduct source investigations if the source of an illicit discharge/connection is not identified by field screening.
8. Illicit discharge identification and elimination program performance & effectiveness.

2.3.2 Facility Site Storm Sewer System Maps and Lists

Livonia Public Schools and consultants completed storm sewer system mapping at each of the owner operated properties identified in Section 1.0 of this Stormwater Management Plan. Storm sewer system maps include detailed information of the storm sewer system, including the locations of outfalls, points of discharge, and waters of the State that receive the discharges. The maps include a unique identification number for each storm sewer location identified on the map. Latitude and longitude are also noted for outfall and points of discharge location. Storm sewer system information will be maintained and updated and reported in Progress Reports.

Outfalls are discharge points where stormwater is discharged directly to surface waters of the state. Surface waters of the state include streams, lakes, ponds, county drains, and wetlands. Outfalls can be pipes, ditches, or even sheet flow from the facility. Some facilities will have an outfall where they can manually control the discharge.

Points of Discharge are discharge points where stormwater is discharged to a municipal or private separate storm sewer system. The visual assessment will be conducted as close to the point of discharge as possible before the storm water enters the municipal or private separate storm sewer system. Points of discharge include on-site catch basins and trench drains, in-street catch basins, and conveyances to roadside ditches.

Copies of the current facility storm sewer system maps are available at the Maintenance Facility, 15125 Farmington Rd, Livonia, MI 48154. Additionally, copies of the storm sewer system maps and a list of the outfalls and points of discharge are provided in Appendix “A”.

2.3.3 Illicit Discharge Identification & Investigation Procedure – Field Observations

Livonia Public Schools will conduct field observations for 100% of all outfalls and points of discharge locations during dry weather or more expeditiously if Livonia Public Schools becomes aware of a non-stormwater discharge. Outfalls and points of discharge will be inspected by personnel trained to recognize all signs of possible illicit discharges. Dry weather screening will occur at once per permit cycle. Livonia Public Schools will conduct DWS once during this 5-year permit cycle. Preferably, each outfall and point of discharge will be inspected and evaluated following a period of at least 48-72 hours of dry weather.

The field observations will focus on visual inspection for the following:

- Outfall/point of discharge number
- Date/name of inspector
- Date of last rainfall
- Presence or absence of flow
- Presence or absence of standing water
- Water clarity and color
- Presence of oil sheen, trash and or other floatable materials
- Presence of bacterial sheen or slimes
- Excessive vegetative growth
- Odor
- Suds
- Presence of oil

❖ These characteristics are documented even if no flow is observed at the time of the inspection.

All field observations are detailed on a “Screening Inspection Log”. A copy of the Screening Inspection Log is provided in Appendix “D”.

During field observations, in instances where the storm sewer outfalls and points of discharge is submerged or is connected to another enclosed sewer, the inspector will observe the nearest upstream storm sewer location or access point. Additionally, if dry weather flow is observed and it is obvious that an illicit discharge is present and the source of the discharge is obvious, Livonia Public Schools will document the observations and the source and follow-up with applicable parties. Once a potential discharge is indicated at an outfall or point of discharge, additional inspection, field screening and source investigation activities are conducted.

2.3.4 Illicit Discharge Identification & Investigation Procedure – Field Screening & Source Investigation

At the time of the outfall or discharge point inspection, if dry weather flow is observed and the source is not obvious, the inspector who identified the discharge shall immediately conduct an upstream source investigation to determine the origin of the flow. The initial investigation includes visual and olfactory observations upstream from the outfall/point of discharge. If necessary, relevant indicator field screening or dye tracing will be conducted.

If the origin of the flow is not identified during the visual upstream investigation, a grab sample is collected within 24 hours from the discharge for indicator field screening analysis. Indicator monitoring/field screening is the secondary tool utilized for dry weather flow without obvious indicators such as very high turbidity, strong odors, or visible discharge. Screening may include some or all of the indicator parameters:

- Temperature
- pH
- Detergents (i.e., surfactants)
- Chlorine
- Ammonia
- Turbidity
- Conductivity

Indicator parameters used to assess the dry weather flow shall be determined by the visual and olfactory observations and upstream source investigation.

Additional grab samples may be collected and delivered for external laboratory analysis, only if additional test parameters are required for the source investigation. The laboratory analysis parameters for grab samples are determined by the type of contamination suspected at the time of the source investigation.

Laboratory indicator parameters are based on EGLE guidance and as specified in the reference sources identified above. The selected laboratory parameters are:

- Fluoride
- Coliform
- E-coli
- Potassium
- Color
- Ammonia

The exact procedure for tracking the illicit discharge will depend on the particular facts of each incident. At the time of the identification of the observed dry weather flow, the flow will be tracked upstream until the source is isolated. Once the source has been isolated down to a specific site location, the work will become source confirmation. If the source is not confirmed, additional fieldwork, building evaluation, or dye testing may be necessary. Additional source investigations will be conducted within 14 days of the original observed dry weather flow.

Once the elimination of an illicit connection or illicit discharge has occurred, an elimination report detailing the corrective actions with attached work orders, photos or dye tracing results will be compiled for documentation purposes. Field inspections will continue until it can be reported that no illicit connection or discharge is present at that outfall/point of discharge.

2.3.5 Illicit Discharge/Connection Elimination Procedure

Illicit discharges and connections are identified through reporting, routine storm sewer system inspections and dry weather screening inspections. A “How to Spot Illicit Discharges” poster along with a “How to Report/Hotline Numbers” posters are placed in the receiving/custodial areas in each facility to report concerns. Livonia Public Schools goal is to evaluate all potential unauthorized or suspected illicit discharge to the municipal separate storm

sewer system (MS4) and perform any necessary notifications and reporting to the applicable agencies (i.e., EGLE, local drain commission, etc.) within the required time period(s).

Livonia Public Schools will evaluate and conduct the following actions regarding reported or observed illicit discharges/illegal dumping spills into the storm drainage system.

- Suspected discharges will be investigated within 24 hours. Livonia Public Schools will ensure enforcement actions within 7 days.
- Conduct source investigations, including applicable field screening to trace the origin of the materials within 14 days of the reported/observed illicit discharge.
 - Livonia Public Schools will follow existing spill response procedures outlined in Section 2.3.10, under Spill Response, Policy & Procedures, if required.
- Once the source has been isolated down to a specific site location, the work will become source confirmation.
- If the responsible party is identified, educate the party on the impacts of their actions, explain the stormwater requirements, and provide information regarding Best Management Practices.
- Evidence of illicit discharges traced to other MS4 jurisdictions will be provided to the responsible MS4 operator along with any collected data to assist that MS4 operator in completing their investigations to correct the illicit discharge or connection.
- Livonia Public Schools will cooperate with the MS4 operator in determining the source or type of illicit discharge and/or connection and will follow-up to ensure that appropriate action has been completed by the MS4 operator to eliminate the discharge.
- Continue inspection and follow-up activities until the illicit discharge activity has ceased.
- Document all activities utilizing the Illicit Discharge/Illegal Dumping Reporting form.

A copy of the Illicit Discharge/Illegal Dumping Reporting form is located in Appendix “B”.

Once an illicit discharge has been confirmed from a Livonia Public Schools facility, the discharge will be corrected using the most expedient method possible based on the type and configuration of the discharge or connections. Other illicit discharges or releases of polluting materials will be corrected through administrative measures including employee training, placement of signs or markings, policy revisions, or any other steps necessary to eliminate the continued release of polluting materials to the MS4.

Within 60 days of a confirmed illicit connection from a Livonia Public Schools facility, Livonia Public Schools will take steps to fix or eliminate the illicit connection. These steps include a review of corrective methods to be used to repair or eliminate the connection, determine the length of time the repair or elimination will take to complete, the cost of the elimination, the pollution potential and consider how the removal of the illicit connection will be confirmed. Corrective methods include capping, closing, or re-routing illicit connections to the sanitary sewer or other collection systems.

2.3.6 Illicit Discharge Regulatory Mechanism/Policy

The district developed a “Stormwater Management – Illicit Discharge Regulatory Policy”. This illicit discharge regulatory policy was developed as a regulatory policy for prevention of pollution from storm water runoff and to protect the quality of the waters of the State of Michigan through the regulation of non-stormwater discharges to the municipal separate storm sewer system (MS4) to the maximum extent practicable as required by federal and state law. This regulatory mechanism establishes methods for controlling the introduction of pollutants into the MS4

in order to comply with the requirements of the National Pollutant Discharge Elimination System (NPDES) permit through the Michigan Department of Environment, Great Lakes, and Energy (EGLE). The objectives of the regulatory mechanism are:

Department of Environment, Great Lakes, and Energy (EGLE). The objectives of the regulatory mechanism are:

1. To regulate the contribution of pollutants to the MS4 by stormwater discharges by any user.
2. To prohibit illicit connections and discharges into the MS4.
3. To establish authority to investigate, inspect, and monitor suspected illicit discharges.

Livonia Public Schools has a board policy resolution to direct compliance with these requirements. Livonia Public Schools updated School Board Resolution was reviewed and passed in 2022. A copy of the updated School Board Policy is provided in Appendix "B".

The Stormwater Program Manager or designee will be provided full access to all the district facilities and properties owned and operated by the district as required to inspect, investigate, and monitor suspected or confirmed illicit discharges or connections to the MS4.

This policy is posted on the district stormwater webpage. Additionally, the district stormwater webpage includes information on how to notify the district if a discharge is witnessed taking place. Finally, the "Stormwater Management – Illicit Discharge Regulatory Policy" will be emailed to district staff members. The "Stormwater Management – Illicit Discharge Regulatory Policy" is available in Appendix "B".

Illicit Discharge means any discharge to, or seepage into the separate stormwater drainage system that is not composed entirely of stormwater or uncontaminated groundwater except discharges pursuant to an NPDES permit. Illicit discharges include but are not limited to the following:

- Dumping of motor vehicle fluids
- Improper disposal of household hazardous wastes
- Grass clippings
- Leaf litter
- Pet & other animal wastes
- Unauthorized discharges of sewage
- Industrial wastes
- Restaurant wastes
- Vehicle & equipment wash waters
- Any non-stormwater waste

All activities are documented utilizing the Illicit Discharge/Illegal Dumping Reporting form.

Illicit Connection means a physical connection to the MS4 separate stormwater system that primarily conveys non-stormwater discharges other than uncontaminated groundwater into the MS4 separate storm sewer system; or a physical connection not authorized or permitted by the local authority, where a local authority requires authorization or a permit for physical connections.

Livonia Public School's policy is to eliminate all illicit connections or discharges from their facilities and restrict the discharge of polluting substances to the separate storm sewer system. The process to achieve these goals will consist

of the inspection and screening of all storm sewer systems and elimination of any improper connection from any Livonia Public Schools facility to any waterway or the municipally owned separate storm sewer system (MS4).

Prohibitions of Illicit Discharges

1. Prohibition of Illicit Discharges:
 - a. Livonia Public Schools prohibits the discharge of non-stormwater discharges into the storm drain system, including but not limited to pollutants or waters containing any pollutants.
2. The following discharges are NOT prohibited:
 - a. This policy excludes prohibitions from the discharge or flows from firefighting activities to the Livonia Public Schools MS4. Discharge or flows from firefighting activities will be addressed only if they are identified as significant sources of pollutants to surface waters of the state.
 - b. The following activities are not prohibited under this policy unless they are determined to be significant sources of pollutants to surface waters of the state:
 - Water line flushing and discharges from potable water sources.
 - Landscape irrigation runoff, lawn water runoff, and irrigation waters.
 - Diverted stream flows and flows from riparian habitats and wetlands.
 - Rising groundwater and springs.
 - Uncontaminated groundwater infiltration and seepage.
 - Uncontaminated pumped groundwater, except groundwater cleanups specifically authorized by NPDES permits.
 - Foundation drains, water from crawl space pumps, footing drains, and basement sump pumps.
 - Air conditioning condensation.
 - Waters from noncommercial car washing (runoff from family home).
 - Street wash water.
 - Dechlorinated swimming pool water from single, two, or three family residences. (A swimming pool operated by the permittee shall not be discharged to a separate storm sewer or to surface waters of the state without NPDES permit authorization from the MDEQ.)

Identifying a discharge or flow as a significant contributor is completed on a case-by-case basis and is dependent on many factors, including the type of pollutant, amount discharged, and impacts to surface waters of the state.

Prohibition of Illicit Connections

1. Improper connections in violation of this regulatory mechanism must be disconnected and redirected.
2. Illicit discharge and connections will be eliminated.
3. The construction, use, maintenance, or continued existence of illicit connections to the storm drain system is prohibited by Livonia Public Schools. This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.

2.3.7 Illicit Discharge Elimination Training

A training program is an important component of to an effective IDEP. Training is required for all employees whose job responsibilities involve illicit discharge related activities, or indicate a potential to cause, witness, or report an illicit discharge or connection. Training is discussed in detail in Section 3.0 of this SWMP.

2.3.8 Illicit Discharge Elimination Program Effectiveness

Livonia Public Schools is required to track implementation of the illicit discharge elimination program stormwater management items and evaluate its effectiveness. Documentation of these items includes documentations of actions taken to eliminate illicit discharges. The following are examples of the types of performance measures and effectiveness measures that may be used to evaluate the effectiveness of the IDEP program. The following information will be reviewed annually, and will be used to focus and modify activities to maximize environmental benefits of the plan:

- Verify the distribution of public education posters.
- Number of outfalls/discharge points screened.
- Number of illicit connections found.
- Number of illicit connections eliminated.
- Number and type of discharges that are investigated.
- Actions conducted to follow-up discharges that are identified or reported.
- Number of scheduled clean-outs and routine maintenance work conducted.

The District shall evaluate:

1. Evaluate the number of illicit discharges and determine if discharges have decreased throughout the permit cycle.
2. Evaluate if the number of reported potential discharges has increased due to improved awareness.
3. Evaluate dry weather screening monitoring data to measure changes in water quality.

2.3.9 Illicit Discharge Elimination Program – BMP Table

BMP	Description of BMP	Timeframe	Measurable Goal	Measure of Assessment	Responsible Party
BMP #2.3.9.1 Facility Storm Sewer System Maps	Provide an up-to-date storm sewer system map. The maps shall identify the storm sewer system, location of outfalls and points of discharge, and names and locations of the surface waters of the state receive the discharge.	Maps Completed in 2018. Updates Ongoing as Needed throughout Permit Cycle Within 30 days of new outfalls, discharge points, structures, and conveyances.	100% of facilities mapped, and 100% of storm sewer system updates mapped.	Maintain facility site maps at Maintenance Facility, 15125 Farmington Rd, Livonia, MI 48154.	Livonia Public Schools
				Update facility map with sewer system updates. Maintain maps for progress report submittal.	Livonia Public Schools
BMP#2.3.9.2 Enforcement	Written policy to enforce elimination of illicit discharges into MS4 owned by the Permittee.	Illicit Discharge Regulatory Policy Developed and Board Resolution Passed in 2022	Illicit Discharge Regulatory Policy developed, and Board Policy Resolution reviewed and approved by the school board.	Copy of the Illicit Discharge Regulatory Policy and Approved Board Resolution	Livonia Public Schools
				Copy of policy available on the district stormwater webpage or emailed to staff.	
BMP #2.3.9.3 Dry Weather Screening	Dry Weather Screening conducted once per permit cycle. Dry weather screening will be conducted by personnel trained to recognize all signs of possible illicit discharges.	DWS Scheduled to be completed once during the permit cycle	100% of outfalls and point of discharges inspected and evaluated following a period of 48-72 hours of dry weather. Outfalls/points of discharges re-inspected if necessary.	Maintain dry weather screening inspection logs/reports.	Livonia Public Schools

BMP	Description of BMP	Timeframe	Measurable Goal	Measure of Assessment	Responsible Party
BMP #2.3.9.4 Illicit Discharge Reporting	Eliminate illicit discharges and connections through reporting, routine storm sewer system inspections and dry weather screening inspections.	Ongoing Throughout Permit Cycle	Place “How to spot illicit discharge/ How to Report-Hotline Numbers” posters placed in Receiving Rooms at each Livonia Public Schools facility. Goal is to have one poster at each facility.	Annually verify number of posters in place throughout the district.	Livonia Public Schools
			Advertise reporting hotline on district webpage.	Track number of calls and document calls onto Illicit Discharge/Illegal Dumping Reporting form. (Appendix “B”).	
BMP #2.3.9.5 Unauthorized Discharge/ Illicit Discharge Complaint Response	The District will immediately evaluate any potential unauthorized or suspected illicit discharge to the municipal separate storm sewer system (MS4) and perform any necessary notifications and reporting to the applicable agencies (i.e., EGLE, local drain commission, etc.) within the required time period(s). This procedure is outlined in Section 2.3.10 Polluting Materials Emergency and Spill Response Policy & Procedures.	Suspected discharges will be investigated within 24 hours. Livonia Public Schools will ensure enforcement actions within 7 days.	100% of unauthorized or suspected illicit discharges evaluated (field observation, field screening, and source investigation) and eliminated.	Documentation of relevant field observations, field screening or source investigations.	Livonia Public Schools
		Within 14 days of reported suspected discharge.			
BMP #2.3.9.6 Illicit Connections	Reroute, repair, or disconnect any illicit connections.	Within 60 days of identified illicit connection	Take steps to eliminate 100% of identified illicit connections.	Work order, receipt or report detailing the illicit connection correction activities.	Livonia Public Schools
BMP #2.3.9.7 Illicit Discharge Elimination Training	Train staff on the identification and reporting of illicit discharges or improper connections and the cleanup/notification procedures for spills of polluting materials.	Once per permit cycle or during the 1 st year of employment Throughout Permit Cycle	Goal of providing illicit discharge elimination training to all maintenance, transportation, custodial and skilled trade staff who work for Livonia Public Schools. [All Stormwater Training is outlined in Section 3.0 Training]	Copy of sign in sheets and Agenda (if available).	Livonia Public Schools

BMP	Description of BMP	Timeframe	Measurable Goal	Measure of Assessment	Responsible Party
BMP #2.3.9.8 Notice of Intent to Discharge Tracer Dyes	Maintain approval from the EGLE for authorization to discharge tracer dyes in surface waters per General Rule 97 to conduct source investigations.	As needed Throughout Permit Cycle	EGLE approval to discharge tracer dyes.	Documentation of EGLE approval.	Livonia Public Schools
BMP #2.3.9.9 IDEP program Performance & Effectiveness	Review performance measures to evaluate the effectiveness of the IDEP program. Items include posting of IDEP public education posters, number of outfalls/discharge points screened, number of illicit connections found, number of illicit connections eliminated, number and type of violations investigated, and number of scheduled clean-outs and routine maintenance work conducted.	Annually Throughout Permit Cycle	Annual review of SWMP IDEP program performed. Evaluate reduced illicit discharges, increase reporting, and evaluate dry weather screening data.	Maintain copy of SWMP annual review and evaluation information for progress reporting.	Livonia Public Schools

2.3.10 Polluting Materials Emergency and Spill Response Policy and Procedures

Purpose

This policy and associated procedures have been developed to define appropriate and safe response procedures for spill or accidental releases of hazardous materials or substances at all Livonia Public School's facilities.

Policy

Only trained and authorized personnel are permitted to respond to hazardous materials incidents! Employees must be trained in the safe use of chemicals or chemical management prior to working in a lab or cleaning up minor spills. The Stormwater Program Manager will immediately report any release of any polluting materials from the MS4 to surface waters or groundwater of the state, unless a determination is made that the release is not in excess of the threshold reporting quantities in the Part 5 Rules and comply with all Federal, State, and local regulatory requirements for the management and reporting of all hazardous materials and/or waste releases.

If it is determined that the release poses a threat to the safety or the environment outside the facility or in excess of the threshold reporting quantities, the Stormwater Program Manager will report the release immediately or within 24 hours of knowledge of the release to:

- The EGLE Warren District Office at (586)-753-3700 during regular working hours.
- The 24-hour Michigan Pollution Emergency Alerting System (PEAS) at 1-800-292-4706 after working hours.

Any release of oil (includes gasoline, diesel fuel, used oil and mineral spirits) to navigable waters or adjoining shorelines will be reported to the immediately or within 24 hours of knowledge of the release to:

1. The 24-hour National Response Center (NRC) at 1-800-424-8802

The Stormwater Program Manager will maintain responsibility for monitoring any changes in regulatory requirements regarding hazardous materials and waste spills or accidental releases. This policy will be revised as necessary based upon any changes in the regulatory requirements or internal experiences. All hazardous materials spills or releases will be thoroughly investigated by the Stormwater Program Manager.

Emergency Spill Response Procedures

Each facility having the potential for the release of a hazardous material or substance shall have trained and knowledgeable staff members to respond and/or implement spill response procedures for that facility. Spill containment materials such as absorbent pigs, pads, booms, diking materials, storm drain covers, etc. are to be stored and maintained at all facilities for use by trained employees in the event of a spill or accidental release.

The following general guidelines are to be implemented as applicable in managing spills and accidental releases:

1. Minor Spill or Leak

- Attempt to contain the spill.
- Wear proper Personal Protective Equipment (PPE) while cleaning up the spill/leak.
- Notify supervisor and call Stormwater Program Manager at (734) 744-2511.

2. Major Spill or Leak

- Call the Stormwater Program Manager immediately at (734) 744-2511.

- Do not attempt to clean up the spill yourself.
- Provide clean-up/rescue personnel with appropriate Safety Data Sheets (SDS) and other important information.

Refer to sections **2.3.4 Illicit Discharge Identification & Investigation Procedure – Field Screening & Source Investigation** and **2.3.5 Illicit Discharge/Connection Elimination Procedure** for implementation timeframes.

This guidance has been developed in anticipation of potential releases of hazardous materials and substances. The procedures outlined in this guidance will only be implemented by those persons who have received sufficient training and are competent in the handling of the released material.

As appropriate, illicit discharges or releases of polluting materials will be corrected through administrative measures including employee training, placement of signs or markings, policy revisions, or any other steps necessary to eliminate the continued release of polluting materials to the MS4. The district will conduct follow-up inspections and sampling as needed to ensure that appropriate action has been completed.

2.4 Construction Site Stormwater Runoff Control Program

Livonia Public School's goal is to establish procedures for construction stormwater runoff control to meet minimum measure requirements to maximum extent practicable.

Construction refers to actions that result in a disturbance of the land, including clearing, grading, excavating, and other similar activities.

Construction-related activities are activities that support the construction project such as stockpiles, borrow areas, concrete truck washouts, fueling areas, material storage areas and equipment storage areas.

2.4.1 Construction Site Stormwater Management Program Objectives

- A. Process for notify the Part 91 Agency appropriate staff when soil or sediment is discharged to the MS4 from a construction activity.
 - The procedure shall allow for the receipt and consideration of complaints or other information submitted by the public or identified internally as it relates to construction stormwater runoff control.
- B. Procedure for when to notify the EGLE when soil, sediment, or other pollutants are discharged to the MS4.
 - Other pollutants include pesticides, petroleum derivatives, construction chemicals, and solid wastes that may become mobilized when land surfaces are disturbed.
- C. Procedure for ensuring that construction activity one acre or greater in total land disturbance obtains a Part 91 Permit.

2.4.2 Construction Notification Procedure

The EGLE certified construction stormwater operator inspector conducting site inspections will normally detect any soil or sediment entering the MS4.

In the event an inspector identified a discharge during an inspection:

1. The inspector shall document all details of the soil erosion and sedimentation control deficiency and report to the Livonia Public Schools Stormwater Manager.

2. The Livonia Public Schools Stormwater Manager (or designee) is responsible for assessing any suspected or confirmed discharge and notifying the appropriate agency.
3. Livonia Public Schools will notify the local Part 91 agency and EGLE when significant runoff of soil, sediment, or other pollutants such as pesticides, petroleum derivatives, construction chemicals, or solid wastes from the construction site discharges to the MS4 or surface waters of the state within 24 hours of discovery or as otherwise required by the issuing agency.

In the event of a public complaint:

Livonia Public Schools will track the receipt of complaints submitted by the public or noted by staff during regular course of business of soil, sediment, or other pollutants such as pesticides, petroleum derivatives, construction chemicals, and solid wastes are being discharged into the MS4.

The tracking will include:

- Name of person providing the complaint.
- Location (address or nearest cross street).
- Description of follow up (e.g., date referred to the Part 91 enforcing agency).

Livonia Public Schools will notify the Part 91 Agency, when soil, sediment, and other pollutants such as pesticides, petroleum derivatives, construction chemicals, and solid wastes are discharged into MS4.

Livonia Public Schools ensures that construction activity one acre or greater in total earth disturbance with the potential to discharge to the MS4 does obtain a Part 91 Permit and State of Michigan Permit by Rule.

2.4.3 Part 91 Permit

Livonia Public Schools will ensure that any construction activity that result in a land disturbance meeting the following criteria:

- Greater than or equal to one (1) acre, or
- Disturb less than one (1) acre that is part of a common plan of development or sale.

Will obtain a Part 91 Permit through the site plan review process with the appropriate county or municipal permitting agency.

2.4.4 Permit by Rule Compliance

Livonia Public Schools shall comply with the State of Michigan Permit by Rule (Rule 323.2190) for stormwater discharge from construction activity. Sites disturbing one (1) to five (5) acres with a point source discharge to the waters of the state receive automatic storm water coverage upon securing a SESC permit from the appropriate Part 91 recognized County Enforcing Agency, Municipal Enforcing Agency, or Authorized Public Agency (APA) under the authority of Part 91.

1. Construction sites with at least one (1) acre but less than five (5) acres of soil disturbance with a surface water discharge, must obtain a county or municipal SESC permit, and are required to follow the provisions of the Permit by Rule, but do not need to notify the EGLE of the construction activity.

2. Construction sites disturbing over five (5) acres with a point source discharge to the waters of the state must obtain a county or municipal SESC permit and submit a Notice of Coverage (NOC) and other pertinent documents and the appropriate fee to the EGLE.

Requirements of Permit by Rule include, but are not limited to:

- Weekly site inspections conducted by a Certified Construction Stormwater Operator.
- Inspection within 24 hours of a precipitation event that results in a discharge from the site by a Certified Construction Stormwater Operator.

2.4.5 Construction Site Stormwater Management-BMP Table

BMP	Description of BMP	Timeframe	Measurable Goal	Measure of Assessment	Responsible Party
BMP #2.4.5.1 Notification of Deposit during Inspection	Livonia Public Schools will notify the local part 91 agencies or EGLE when runoff from the construction site discharges significant pollutants to the MS4 or surface waters of the state within 24 hours of discovery or as otherwise required by the issuing agency. The Livonia Public Schools Stormwater Manager (or designee) is responsible for assessing any suspected or confirmed discharge and notifying the appropriate agency. (Refer to section 2.4.2)	As necessary Throughout Permit Cycle	100% discharges identified and appropriate agencies notified. Control of potential system failure.	Documentation of Construction Stormwater Operator site inspection.	Livonia Public Schools
	Track complaints submitted by the public or noted by staff during regular course of business of soil, sediment, or other pollutants such as pesticides, petroleum derivatives, construction chemicals, and solid wastes are being discharged into the MS4.			Documentation of public complaint (Name of person providing the complaint, location [address or nearest cross street] description of follow up [e.g., date referred to the Part 91 enforcing agency]).	Livonia Public Schools
BMP #2.4.5.2 Part 91 Permit	Livonia Public Schools will ensure that any construction activity that result in a land disturbance greater than or equal to one (1) acre or disturb less than one (1) acre that is part of a common plan of development or sale will obtain a Part 91 Permit through the site plan review process.	As necessary Throughout Permit Cycle	100% of permits obtained.	Copy of permit and associated soil erosion and sedimentation control plans.	Livonia Public Schools

BMP	Description of BMP	Timeframe	Measurable Goal	Measure of Assessment	Responsible Party
BMP #2.4.5.3 Permit by Rule	Construction sites between (1) acre but and five (5) acres of soil disturbance follow the provisions of the Permit by Rule, but do not need to notify the EGLE of the construction activity.	As necessary Throughout Permit Cycle	Goal of 100% of weekly and precipitation event inspection completed by certified Construction Stormwater Operator.	Copy of inspections.	Livonia Public Schools
	Construction sites disturbing over five (5) acres with a point source discharge to the waters of the state must follow provisions of the Permit by Rule and submit a Notice of Coverage (NOC) and other pertinent documents and the appropriate fee to the EGLE.		100% NOC obtained.	Copy of NOC	Livonia Public Schools

2.5 Post Construction Stormwater Controls for New Developments & Redevelopments

Post-construction storm water runoff is the storm water that would flow from a project site to the Municipal Separate Storm Sewer System (MS4) after completion of a development or redevelopment project (not during the project).

A post-construction stormwater runoff program compliance assistance document is available via the internet at https://www.michigan.gov/documents/deq/wrd-storm-MS4-ComplianceAssistance_470350_7.pdf.

2.5.1 Post Construction Stormwater Management Program Objectives

The post-construction stormwater run-off controls are necessary to maintain or restore stable hydrology in receiving waters by limiting surface runoff rates and volumes and reducing pollutant loadings from sites that undergo development or significant redevelopment.

Projects that change the existing footprint (e.g., increase impervious surface) or offer new opportunities for storm water control (e.g., reconstruction to the subbase layer with a change in underdrainage) are considered redevelopment projects.

The objects of this program and associated procedures are to:

- Develop and implement regulatory mechanisms to address post-construction stormwater runoff for new development and redevelopment projects, including preventing or minimizing water quality impacts.
- Develop and implement regulatory mechanisms for projects that disturb one or more acre, including projects less than an acre that are part of a larger common plan of development or sale and discharge into the applicants MS4.
- Ensure post construction controls to minimize water quality impacts by following water quality treatment standards.
- Require that BMPs be designed on a site-specific basis to reduce post-development total suspended solids loading.
- Procedure to meet water quality treatment and channel protection standards of new development or redevelopment projects.
- Address “hot spots”.
- Require adequate long-term O&M of BMPs by ordinance or other regulatory means.

2.5.2 Post-Construction Policy and Procedure

The district has developed a “Stormwater Management - Post-Construction Policy & Procedure” to direct compliance with these requirements. The “Stormwater Management - Post-Construction Policy & Procedure” is located in Appendix “B”.

Development and redevelopment projects on district properties are regulated under and must comply with the Livonia Public Schools individual NPDES permit for stormwater discharges, as issued by the Michigan Department of Environment, Great Lakes and Energy (EGLE). The Stormwater Management Post-Construction Policy & Procedure has been developed to provide guidance regarding responsibilities and actions to meet the NPDES permit conditions for development and redevelopment projects on Livonia Public Schools properties.

The post-construction plan for stormwater management on regulated sites **must** include:

- A minimum treatment volume standard to address water quality impacts.
- Channel protection criteria to address resource impairment resulting from flow volumes and rates.
- Review sites with known soil and/or groundwater contamination, including potential “hot spots” and evaluate the use of infiltration BMPs to meet water quality treatment and channel protection criteria to ensure that infiltration BMPs do not exacerbate existing conditions. Hot spots include areas with the potential for significant pollutant loading such as vehicle service and maintenance facilities, vehicle equipment cleaning facilities, fleet storage areas for buses, and outdoor liquid container storage.
- Drawings showing the location of stormwater control measures and the storm system.
- Details on the proposed stormwater control measures.
- Operation & Maintenance (O&M) requirements.
- Supporting information:
 - Calculations used for designing all components of the stormwater management systems.
 - Total suspended Solids (TSS) design removal rates and supporting manufacturer documentation, if applicable.
 - Geotechnical report including soil boring and infiltration test data.

The project team [Architecture, Engineering & Construction, Other Project Manager, Project Developer and/or Contractors] shall develop the post-construction stormwater management plan in accordance with this guideline and the NPDES permit.

Livonia Public Schools has developed and passed a board resolution in 2022, to direct compliance with these requirements. In addition to the board policy resolution, the following sections identify specific actions to be taken by Livonia Public Schools to ensure compliance with the applicable standards. A copy of the Livonia Public Schools Board Policy Resolution is provided in Appendix “B”.

The Stormwater Program Manager will administer and enforce the stormwater management program, including maintaining procedures, guidance, information, etc. to aid district staff and contractors in complying with the post-construction requirements for stormwater management.

2.5.3 Water Quality Treatment Standard

Livonia Public Schools goal is to include water quality treatment volume standards for each new construction or redevelopment project where the area of development or redevelopment exceeds one (1) acre. One or more of the following treatment standards will be included as part:

- 1) Treat the first one inch of runoff from the entire site, or
- 2) Treat the runoff generated from ninety percent (90%) of all runoff-producing storms for the project site.

The source of the rainfall data for the water quality treatment standard of requiring the treatment of the runoff generated from the ninety percent (90%) of all runoff-producing storms is:

- The EGLE memo dated March 24, 2006, which is available via the internet at http://www.michigan.gov/documents/deq/wrd-hsu-ninety-percent_557709_7.pdf

Treatment methods shall be designed on a site-specific basis to achieve the following:

1. A minimum of eighty percent (80%) removal of total suspended solids (TSS), as compared with uncontrolled runoff, or
2. Discharge concentrations of TSS not to exceed 80 milligrams per liter (80mg/L).

A minimum treatment volume standard is not required where site conditions are such that TSS concentrations in storm water discharges will not exceed 80mg/L.

Treatment methods shall be designed on a site-specific basis to reduce the discharge of sedimentation or TSS from the site. Such methods may include:

1. Standpipe filters in storm water detention basins
2. Sediment filter tanks
3. Catch basin sumps
4. Aqua-Swirls®
5. Treatment trains
6. Rain Gardens
7. Pervious pavement systems

2.5.4 Channel Protection Performance Standard

Livonia Public Schools understands that channel protection criteria are necessary to maintain post-development stormwater runoff volumes and peak flow rates at or below existing levels for all storms up to the 2-year, 24-hour event. "Existing Levels" means the runoff volume and peak flow rate for the last land use prior to the planned new development or redevelopment. More restrictive channel protection criteria may be utilized on a case-by-case basis, as appropriate.

Rainfall Data

The rainfall data for calculating runoff volume and peak flow rate shall be the Rainfall Frequency Atlas of the Midwest, 1992 [National Oceanic & Atmospheric Administration (NOAA) - Huff & Angel].

2.5.5 Site-Specific Requirements

Because each site has its' own special circumstances and conditions, the following BMPs will be considered as appropriate according to site conditions:

- Reduce runoff from the site to greatest extent possible (provide holding basins, divert water through grassed swales).
- Prevent spills and discharges.
- Control waste such as building materials, concrete washout, chemicals, litter, and sanitary waste.
- Phasing will be considered to limit amount of exposed soils.
- Interim soils stabilization methods are to be considered (temporary seeding, mulching etc.).
- Buffer preservation (avoid exposing soils to property limits).
- Inspection staff will be trained in the proper maintenance and operation of Soil Erosion and Silt Prevention measures.

Construction plans will be reviewed for sites with known soil and/or groundwater contamination, including potential "hot spots" and evaluate the use of infiltration BMPs to meet water quality treatment and channel protection criteria

to ensure that infiltration BMPs do not exacerbate existing conditions. Hot spots include areas with the potential for significant pollutant loading such as vehicle service and maintenance facilities, vehicle equipment cleaning facilities, fleet storage areas for buses, and outdoor liquid container storage.

Additional water quality standards or pretreatment measures may be required in addition to those included in the water quality criteria in order to remove potential pollutant loadings from entering either groundwater or surface water systems.

Pretreatment measures include:

Stormwater Hot Spots	Minimum Pre-Treatment Options
Vehicle service and maintenance facilities	<ol style="list-style-type: none"> 1. Oil/Water Separators/Hydrodynamic Devices 2. Use of Drip Pans and/or Dry Sweep Material under Vehicles/Equipment 3. Use of Absorbent Devices to Reduce Liquid Releases 4. Spill Prevention Response Program
Fleet storage areas for buses	BMPs that are part of a Spill Prevention, Control, and Countermeasure Plan.
Vehicle Fueling Stations	<ol style="list-style-type: none"> 1. Oil/Water Separators/Hydrodynamic Devices 2. Water Quality Inserts for Inlets 3. Spill Prevention Response Program
Vehicle equipment cleaning facilities	BMPs that are part of a Spill Prevention, Control, and Countermeasure plan.
Outdoor liquid container storage	Spill Prevention Response Program

2.5.6 Site Plan Review

This policy is to establish a requirement to submit a site plan for review as required by the EGLE NPDES Stormwater Discharge Permit and ensure that water quality objectives, erosion and sediment control requirements, and BMP maintenance are considered to the maximum extent practicable.

Livonia Public Schools shall evaluate proposed construction activities to determine:

- If the activity meets the criteria of a development or redevelopment project with an earth disturbance greater than or equal to 1 acre, or part of a common plan of development resulting in a development or redevelopment activity greater than or equal to 1 acre in size.
- Does the development or redevelopment project discharge to waters of the state, or to a county, city, or township MS4.

If the development or redevelopment project discharges directly to waters of the state, Livonia Public Schools shall comply with the post-construction standards outlined in this SWMP.

If the development or redevelopment project discharges to a regulated county, city, or township MS4, Livonia Public Schools shall submit the site plan for review and approval. Site plan approval by the county, city, or township of an equivalent post-construction standard ensures acceptable compliance with the Livonia Public Schools NPDES MS4 Stormwater Discharge Permit. Livonia Public Schools shall obtain and maintain a copy of the site plan approval document.

If the development or redevelopment project discharges to a county, city, or township MS4 that is not regulated or require site plan review, Livonia Public Schools shall comply with the post-construction standards outlined in this SWMP.

2.5.7 Long-Term Operation & Maintenance of Stormwater Controls

Ongoing operation and maintenance of the stormwater BMPs is a critical component of the Stormwater Management Plan. All structural and vegetative stormwater control measures installed as a requirement under this section of the permit shall include guidance for maintaining maximum design performance through long-term operation and maintenance.

- Update and revise the stormwater structural controls on facility site diagrams as identified during scheduled inspections or within 30 days following the completion a new facility or reconstruction/redevelopment site project.
- Follow long-term guidance for inspection and operation to maintain maximum design performance.
- Stormwater runoff facilities shall be maintained in good condition, in accordance with the approved storm water plan.

Trained staff or certified contractors will conduct routine inspection of all identified structural controls and complete maintenance, repair, or replacement, as necessary.

2.5.8 Post Construction Stormwater Management-BMP Table

BMP	Description of BMP	Timeframe	Measurable Goal	Measure of Assessment	Responsible Party
BMP #2.5.8.1 Regulatory Mechanism	Develop and implement regulatory mechanisms to address post-construction stormwater runoff for new development and redevelopment projects, including preventing or minimizing water quality impact.	Post-Construction Policy & Procedure Developed and Board Resolution Passed in 2022	Post-Construction Policy & Procedure developed, and Board Resolution reviewed and approved by the school board.	Copy of the Post-Construction Policy and Procedure and the Approved Board Resolution	Livonia Public Schools
	Develop and implement regulatory mechanisms for projects that disturb one or more acre, including projects less than an acre that are part of a larger common plan of development or sale and discharge into the applicants MS4.				
BMP #2.5.8.2 Post Construction Standards	Ensure post-construction channel protection standards and water quality treatment standards are met.	As necessary Throughout Permit Cycle	All development or redevelopment projects meet water quality and channel protection standards outlined in the districts SWMP or meets an equivalent post-construction standard for the township, city, or county.	Copy of calculations.	Livonia Public Schools
BMP #2.5.8.3 Site Specific	Livonia Public Schools will review construction plans for sites with known soil and/or groundwater contamination, including potential “hot spots” and evaluate the use of infiltration BMPs to meet water quality treatment and channel protection criteria.	As necessary Throughout Permit Cycle	Reduce or eliminate discharge of pollutants during construction on contaminated sites.	Documentation of additional stormwater controls.	Livonia Public Schools

BMP	Description of BMP	Timeframe	Measurable Goal	Measure of Assessment	Responsible Party
BMP #2.5.8.4 Site Plan Review	Prepare and submit a written application, including site plan for construction of storm water management systems for all new construction or redevelopment projects where the area of development or redevelopment exceeds one (1) acre.	As necessary Throughout Permit Cycle	If the development or redevelopment project discharges to a regulated county, city, or township MS4, the district shall submit the site plan for review and approval. Site plan approval by the county, city, or township of an equivalent post-construction standard ensures acceptable compliance with the districts NPDES MS4 Stormwater Discharge Permit.	Obtain and maintain a copy of the site plan approval document and copy of calculations.	Livonia Public Schools
			If the development or redevelopment project discharges directly to waters of the state, the district shall comply with the post-construction standards outlined in this SWMP.	Copy of calculations.	Livonia Public Schools
			If the development or redevelopment project discharges to a county, city, or township MS4 that is not regulated or require site plan review, <DISTRICT> shall comply with the post-construction standards outlined in this SWMP.		
BMP #2.5.8.5 Long-Term Operation & Maintenance of Stormwater Controls	All structural and vegetative stormwater control measures installed as a requirement under this section of the permit shall include guidance for maintaining maximum design performance through long-term operation and maintenance.	Within 30 days of following the completion a new facility or reconstruction/redevelopment site project. Throughout Permit Cycle	Follow long-term guidance for inspection and operation to maintain maximum design performance. Stormwater runoff facilities shall be maintained in good condition, in accordance with the approved storm water plan.	All storm sewer site maps updated. Maintain all inspection, maintenance, and repair reports conducted by staff or contractors.	Livonia Public Schools

2.6 Pollution Prevention & Good Housekeeping Program

Develop, implement, and ensure compliance through a program of operation & maintenance of BMPs, with the ultimate goal of preventing or reducing pollutant runoff to the maximum extent practicable from operation that discharge stormwater to surface waters of the state.

2.6.1 Pollution Prevention & Good Housekeeping Program Objectives

- a. Maintain an up-to-date inventory of owned facilities and stormwater structural controls.
- b. Procedure for updating and revising inventory of stormwater structural controls.
- c. Procedure for assessing each facility for the potential to discharge pollutants.
- d. Develop an SOP (SPCC) for all facilities with a high potential for pollutant runoff.
- e. Procedure identifying BMPs currently implemented or to be implemented to prevent or reduce pollutant runoff at each facility with medium and lower potential to discharge.
- f. Procedure for prioritizing of catch basins/manholes for maintenance and cleaning.
- g. Schedule for routine catch basin/manhole inspection, maintenance, and cleaning.
- h. Provide the geographic location of stormwater structures.
- i. Procedure for dewatering, storage and disposal of materials extracted from storm sewer cleaning.
- j. Procedure for inspecting and maintaining storm water controls.
- k. Procedure for new structural controls to be designed and implemented in accordance with post-construction stormwater runoff control performance standards.
- l. Best management practices for operation and maintenance activities.
- m. Procedure for street sweeping.
- n. Procedure for pesticide application.
- o. Training.
- p. Contractor requirements and oversight.

It is the ultimate goal of Livonia Public Schools to prevent and reduce pollutant/contaminant runoff from Livonia Public Schools facilities to the maximum extent practicable. All BMPs are implemented at all low, medium, and high priority facilities.

2.6.2 Structural Control Inventory & Schedule Table

No prioritization will be needed, as all structures are to be inspected and maintained equally. All structural controls will have routine inspection, maintenance schedules, and long-term procedures which adequately control, to the maximum extent practicable, pollution removal and control. Structural control effectiveness will be determined based on the results of these inspections and repaired, upgraded, or replaced as indicated.

The structural Control Inventory and Schedule Table for each property are in Appendix E.

2.6.3 Facility Assessment & Prioritization

Livonia Public Schools has identified all applicant owned facilities with a discharge of stormwater to surface waters of the state, and during mapping of each facility, inventoried the number of stormwater structural controls (i.e., catch basins, detention basins, etc.) at each site. Each location was assessed to determine high, medium, and low potential to discharge pollutants to surface waters of the state.

Livonia Public Schools considered the following when assessing each facility:

- Absence of any factors,
- Presence of urban pollutants stored at the site (i.e., sediment, nutrients, metals, hydrocarbons, pesticides, fertilizers, herbicides, chlorides, trash, bacteria, or other site-specific pollutants,
- Identification of improperly stored materials,
- Potential for polluting activities to be conducted outside (i.e., vehicle washing),
- Proximity to water bodies,
- Poor housekeeping practices,
- Discharge of pollutants of concern to impaired waters.

For facilities that have a high potential to discharge pollutants to surface waters of the state, a Spill Prevention, Control, and Countermeasure (SPCC) and/or Pollution Incident Prevention Plan (PIPP) for salt storage facilities will continue to be implemented.

BMPs currently implemented by Livonia Public Schools at facilities with medium and lower potential for the discharge of pollutants to surface waters of the state include:

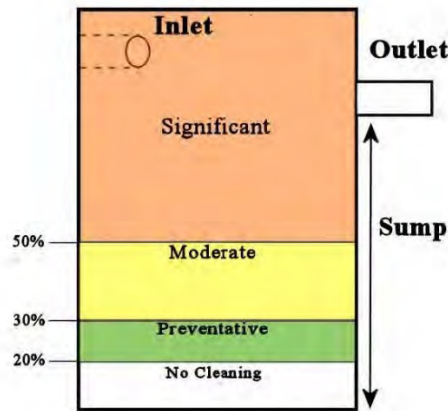
1. Good housekeeping practices,
2. Employee training,
3. Routine visual inspections,
4. Spill prevention and response.

This inventory will be updated as facilities and structural stormwater controls are added, removed, or no longer owned or operated by the applicant following routine inspections or following new construction or redevelopment projects. Priority level assessments will be revised within 30 days following the completion a new facility or reconstruction/redevelopment.

2.6.4 Storm Sewer Structure Controls Inspection & Maintenance Policy & Procedure

1. Develop a schedule for inspecting and maintaining catch basins and stormwater controls at each facility, for the reduction of pollutant runoff. A schedule is included in Appendix “E”.
2. Visually inspect all stormwater controls identified on facility maps. Inspection includes:
 - a. Structural integrity of the structure.
 - Areas of significant cracking or sinkholes.
 - b. Sediment build-up.
 - Areas with high amounts of build-up sediment. A build-up of accumulated solid material that is greater than or equal to the one-third guideline established by the EPA or between 30 and 50% of the total sump depth, as established by the EGLE³.

³ Michigan Department of Environment, Great Lakes, and Energy EGLE NPS BMP Manual – Catch Basins



- c. Color, odor, sheen, and flow.
 - d. Overall functionality and presence of erosion.
 - e. Pond evaluation.
3. Note inspection information on the inspection form. A copy of the inspection form "Structural BMP Table" is located in Appendix "D".
4. When inspecting stormwater controls, review the site for non-structural BMPs currently implemented to prevent or reduce pollutant runoff at each facility. BMPs include:
 - a. Review of "No Dumping" stencils at storm drains.
 - b. Review of catch basins/manholes cleaned.
 - c. Dumpster good housekeeping practices.
 - d. Garden, green space and signage inventories.
 - e. "SEMCOG" poster placement at facilities.
 - f. Illicit discharge reporting numbers poster placement at facilities.
 - g. "How to spot illicit discharge/ How to Report-Hotline Numbers" poster placement at facilities.
 - h. Spill kit availability at facilities.
5. Following the inspection, the stormwater controls will be prioritized for cleaning and maintenance in a timely manner. Prioritize locations based on the following:
 - Drainage structures that are designated as consistently generating the highest volumes of trash and/or debris.
 - Areas with high amounts of build-up sediment. Refer to number 2 (b) above.
 - Areas of significant erosion.
 - Areas of significant cracking or sinkholes.
6. Once the inspection is complete, the stormwater manager or designated person will review the report and determine if a work order or other item is needed to work with relevant departments or contractors to fix any problems.
7. If an illicit discharge is suspected, follow the procedure outlined in Section 2.3 Illicit Discharge Elimination Program.
8. Retain inspection forms for each stormwater structural control inspected.
9. Retain documentation regarding the scheduling or completion of the repair/maintenance if completed.
10. Debris and maintenance waste removed as part of the maintenance and/or repairs shall be disposed of in accordance with the Structural BMP Operation & Maintenance Waste Disposal procedures.

Furthermore, staff members conducting maintenance and grounds activities are provided IDEP and pollution prevention/good housekeeping training. All structural controls will have routine inspection, maintenance schedules, and long-term procedures which adequately control, to the maximum extent practicable, pollution removal and

control. Structural control effectiveness will be determined based on the results of these inspections and repaired, upgraded, or replaced as indicated. This procedure will be reviewed on an annual basis and updated as needed or 30 days following the implementation of a new stormwater structural control.

2.6.5 Structural BMP Operation & Maintenance Waste Disposal Procedures

Waste materials generated from operation, maintenance, and cleaning activities associated with storm sewer systems has typically been discharged back into the storm sewer system. This type of discharge is unauthorized per Part 31, Water Resources Protection (Part 31) of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA) and is therefore illegal. The combined solid and liquid waste stream (solid/liquid waste) from cleaning storm sewer systems is legally defined as “Liquid Industrial By-products” pursuant to Part 121, Liquid Industrial By-products (Part 121) of NREPA.

Livonia Public Schools will ensure that all waste materials generated during operation and maintenance of structural stormwater controls are properly characterized, transported, and disposed as required under State of Michigan PA 451 Part 111 (hazardous wastes), Part 121 (liquid industrial by-products), and Part 115 (solid wastes). At a minimum, the following procedures will be implemented for wastes generated from cleaning or maintaining storm sewer structural controls.

Waste Disposal Methods for Non-Contaminated Materials

Non-contaminated waste materials generated during cleaning or maintenance of storm sewer structures will be properly disposed using one of the following methods:

1. Have the waste transported to drying beds to separate the solid/liquid waste. This is usually performed at a publicly owned treatment plant or at a privately-owned permitted facility where the liquid portion of the waste stream is separated from the solids and treated.
2. Request permission from the local wastewater treatment plant operator to discharge the combined solid/liquid waste into the sanitary system. Most treatment plants will require pre-treatment prior to the discharge. All applicable local ordinance provisions must be followed.
3. When conducting catch basin maintenance activities where the above options are not available, the following methods can be used as long as there are no discharges to surface waters during dry weather conditions:
 - Conduct visual inspection to ensure the water in the sump has not been contaminated. If necessary, collect a grab sample of the water and look for signs of contamination such as visible sheen, discoloration, obvious odor, etc. If there is any doubt of the quality of the water, it will be collected into a vacuum truck and treated as Liquid Industrial By-Products under Part 121 or Part 115 of PA 451 (NREPA).
 - Using a sump pump, or any other pumping mechanism, remove the majority of water in the sump of the basin without disturbing the solid material below. Do not use pumps connected to the vacuum truck’s holding tank.
 - The clear water may then be directly discharged to one of the following:
 - Sanitary system (with prior approval from local sewer authority).
 - Curb and gutter.
 - Back into the storm sewer system as long as it is contained within the system during dry weather condition to ensure no discharge into surface water.
 - Applied to the ground adjacent to the catch basin (evenly distributed at a maximum rate of 250 gallons/acre/year).

- The remaining liquid/solid in the sump will be collected with a vacuum truck and disposed of off-site in accordance with MI P.A. 451 Parts 115 or 121.

Livonia Public Schools does not currently own or operate storm sewer cleaning or transportation equipment. If Livonia Public Schools contracts with a private contractor to transport liquids generated from cleaning of catch basins or other structures, that contractor must be registered and permitted as a Uniform Liquid Industrial By-Product Hauler under the provisions of HMTA.

Waste Disposal Methods for Contaminated Materials

Waste materials generated during operation and maintenance of storm sewer systems found or suspected to be contaminated with pollutants or hazardous substances will be characterized, packaged, marked, labeled, stored, transported, and disposed as a liquid industrial by-product under Part 121 or Part 115 of PA 451 (NREPA).

2.6.6 Pollution Prevention/Good Housekeeping – Municipal Operations & Maintenance Activities

Livonia Public Schools recognizes the importance of reducing pollutant runoff from maintenance activities. The following procedure will include an assessment of the potential activities for the potential to discharge pollutants. The assessment shall identify the pollutants that could be discharged from the applicable operation and maintenance activity and the BMPs implemented or to be implemented to prevent or reduce pollutant runoff.

PROCEDURE

Applicable operations and maintenance activities include parking lot and sidewalk maintenance, cold weather operations, vehicle washing, maintenance of vehicles, land disturbance and landscape. Bridge maintenance, right-of-way maintenance and unpaved road maintenance do not apply to Livonia Public Schools.

Roadways/Parking Lots

Maintenance: Pothole, sidewalk, curb, and gutter repair.

Possible Pollutants: Fuel, oil, sediment, concrete.

BMPs to address Pollutants:

1. Contractors and in-house staff contracted to complete for these jobs are informed of stormwater management practices to reduce pollution in stormwater.
2. Avoid mixing excess amounts of fresh concrete or cement.
3. Never dispose of washout into the street, storm drains, ditches, or creeks.
4. Stencil storm drains to prevent disposal of wash water.
5. Schedule patching, resurfacing and surface sealing during dry weather.
6. If it rains unexpectedly, take appropriate action to prevent pollution of stormwater runoff (e.g., divert runoff around work areas, cover materials).
7. Maintain pollution prevention/good housekeeping practices, which is to remove stockpiles (asphalt materials, sand, etc.) by the end of the day to a covered location. Alternatively, cover the piles if they cannot be moved.
- 8.

Process for updating assessment: Contractor or project is assessed on an ongoing basis, and problems are addresses when found.

Cold Weather Operations

Maintenance: Plowing, sanding, deicing, snow pile disposal.

Possible Pollutants: Sodium, magnesium, calcium, potassium, chloride, turbidity.

BMPs to address Pollutants:

1. Keep all deicing material covered or in waterproof containers.
2. Prevent deicer drainage to storm sewers.
3. Mechanical removal of as much snow or ice as possible prior to applying deicing chemicals.
4. Proper salt storage management.
5. Maintain application equipment per manufacturer's recommendations. Calibration is not available.

Process for updating assessment: BMPs will be assessed for effectiveness within 30 days following their addition or removal.

A Pollution Incident Prevention Plan (PIPP) has been implemented for the salt storage at the Maintenance Facility, 15125 Farmington Rd, Livonia, MI 48154. The PIPP is reviewed every three (3) years.

Vehicle Washing

Maintenance: Washing of buses, staff vehicles and maintenance equipment.

Possible Pollutants: Petroleum based wastes, metals, and nutrients.

BMPs to address Pollutants:

1. All vehicle washing and maintenance is to be performed indoors where drains connecting to the sanitary system can receive all wastes. The district has an interior bus wash on site.
2. Alternatively, vehicle washing can be performed at a commercial auto wash facility.
3. Alternatively, rinse grass from lawn care equipment on permeable (grassed) areas.
4. School car wash fundraising events will not be permitted on school grounds.

Process for updating assessment: BMPs will be assessed for effectiveness within 30 days following their addition or removal.

Vehicle Maintenance

Possible Pollutants: Petroleum based wastes, metals, and nutrients.

BMPs to address Pollutants:

1. Oil-water separators will be inspected routinely and serviced as necessary to maintain efficiency.
2. All vehicle or equipment maintenance will take place inside or away from storm drains where drains connecting to the sanitary system can receive all wastes.
3. All floor drains within maintenance garages dye tested to assure that no drains flow into the separate storm sewer system.
4. Recycle used motor oil, diesel oil, other vehicle fluids, and vehicle parts whenever possible.

Process for updating assessment: BMPs will be assessed for effectiveness within 30 days following their addition or removal.

Landscaping

Possible Pollutants: Wood chips, sediment, sand, and compost.

BMPs to address Pollutants:

1. Place temporary stockpiled material away from storm drains, and berm or cover stockpiles to prevent material releases into the storm drain. Alternatively, place stockpiles on permeable (grassed) areas.
2. Provide adequate buffer areas at stream banks.
3. Proper Storage, handling, and use of pesticides, herbicides, and fertilizers.

Process for updating assessment: BMPs will be assessed for effectiveness within 30 days following their addition or removal.

Land Disturbance

Possible Pollutants: Sediment runoff.

BMPs to address Pollutants:

1. Plan land clearing so soil is not exposed for long periods of time.
2. Place temporary stockpiled material away from storm drains, and berm or cover stockpiles to prevent material releases into the storm drain.
3. Protect against sediment flowing into drains.
4. Install sediment barriers.

Process for updating assessment: BMPs will be assessed for effectiveness within 30 days following their addition or removal.

ASSESSMENT

Pollution prevention inspections ensure that these BMPs are carried out properly. Any issues identified during the inspections will be reviewed and addressed by the Stormwater Manager.

2.6.7 Street Sweeping Procedure, Prioritization & Schedule

PRIORITIZATION

The EGLE Stormwater Discharge Permit requires a procedure for prioritizing owned streets, parking lots, and other impervious infrastructure for street sweeping based on the potential to discharge pollutants. Livonia Public Schools evaluated each facility for the presence of the following factors:

- Potential for polluting activities to be conducted outside
- Proximity to water bodies
- Traffic volume
- Land use
- Absence of any factors

PROCEDURE

Livonia Public Schools does not own or operate sweeping equipment. However, Livonia Public Schools will be proactive and undertake the following activities to reduce the potential to discharge pollutants to surface waters of the state from parking lots and other impervious infrastructures.

1. Conduct seasonal efforts to remove leaves.
2. Inspect parking lot and street areas.
3. Conduct hand sweeping of debris to prevent accumulated wastes in the spring and the fall.
4. Waste disposal areas will be kept free of litter and debris.
5. Analyze sediment, removed from an inlet cleaning if it is suspected of being contaminated with a hazardous material, prior to disposal. Sediment or materials determined to be hazardous waste will be disposed of in accordance with the Structural BMP Operation & Maintenance Waste Disposal procedures.
6. Contract out street cleaning when appropriate.

This prioritization will be updated as facilities and structural stormwater controls are added, removed, or no longer owned or operated by the applicant following routine inspections, or as traffic volume, land use or sediment and trash accumulation increases.

PRIORITIZATION LEVELS & SCHEDULE

All low, medium, and high prioritized parking lots and streets are inspected on the same schedule in an effort to reduce pollutants.

Facility Name	Priority Level of Potential Discharge* (High, Med, Low)	Street Sweeping Schedule
Buchanan Elementary School	Low	Hand Sweeping, Spring and Fall
Cass Education Center	Low	Hand Sweeping, Spring and Fall
Churchill High School/Rosedale Elementary School COMPLEX	Medium	Hand Sweeping, Spring and Fall
Cleveland Elementary School	Low	Hand Sweeping, Spring and Fall
Coolidge Elementary School	Low	Hand Sweeping, Spring and Fall
Cooper Upper Elementary School	Low	Hand Sweeping, Spring and Fall
Emerson Middle School	Low	Hand Sweeping, Spring and Fall
Franklin High School/McKinley Elementary School (closed) COMPLEX	Medium	Hand Sweeping, Spring and Fall
Frost Middle School	Low	Hand Sweeping, Spring and Fall
Garfield Community Center (Formerly Garfield Elementary School)	Low	Hand Sweeping, Spring and Fall
Grant Elementary School	Low	Hand Sweeping, Spring and Fall
Hayes Elementary School	Low	Hand Sweeping, Spring and Fall
Holmes Middle School	Low	Hand Sweeping, Spring and Fall

Facility Name	Priority Level of Potential Discharge* (High, Med, Low)	Street Sweeping Schedule
Hoover Elementary School	Low	Hand Sweeping, Spring and Fall
Jackson Early Childhood Center	Low	Hand Sweeping, Spring and Fall
Johnson Upper Elementary School	Low	Hand Sweeping, Spring and Fall
Kennedy Elementary School	Low	Hand Sweeping, Spring and Fall
Livonia Career Technical Center	Medium	Hand Sweeping, Spring and Fall
Maintenance Complex (includes Bus Garage, Warehouse, Maintenance, Building Services, Board of Education & Central Office)	High	Monthly Inspections, Hand Sweep as Needed
Niji-Iro Japanese Elementary School(Open)/Dickinson Center(Closed) COMPLEX	Low	Hand Sweeping, Spring and Fall
Parcel Property #1	Low	Hand Sweeping, Spring and Fall
Parcel Property #2	Low	Hand Sweeping, Spring and Fall
Randolph Elementary School	Low	Hand Sweeping, Spring and Fall
Riley Upper Elementary School	Low	Hand Sweeping, Spring and Fall
Roosevelt Elementary School	Low	Hand Sweeping, Spring and Fall
Stevenson High School/ Marshall School COMPLEX	Medium	Hand Sweeping, Spring and Fall
Webster Elementary School	Low	Hand Sweeping, Spring and Fall

*If required, following inspections indicating higher traffic volume, land use or sediment and trash accumulation at all low, medium, and high prioritized parking lots and streets, the District shall contract a commercial street sweeping company.

DISPOSAL

If a commercial street sweeper is contracted to clean a parking lot and street areas for Livonia Public Schools, the street sweeping activities are subject to the solid waste requirements. Solid waste must be managed under Part 115 requirements. Dispose of the solid waste in a licensed landfill. The contractor hired to do the street sweeping is responsible for proper disposal of the waste material. The contracted sweeping will not be completed when streets are wet, so dewatering of the collected debris will not be required.

2.6.8 Managing Vegetated Properties

Livonia Public Schools has established this policy to prevent or reduce pollutant runoff from vegetated land:

1. Livonia Public Schools requires all contracted personnel who participate in the application of pesticides, to will be trained and licensed by the State of Michigan under the Commercial Pesticide Application Certification Program for relevant categories as applicable, to prevent or reduce pollutant runoff from vegetated land.
2. Whenever practicable, an integrated pest management technique will be implemented.

2.6.9 Contractor Requirements & Oversight

Livonia Public Schools requires contractors to comply with pollution prevention and good housekeeping BMPs. Livonia Public Schools will perform the following activities for applicable contractors and projects to comply with all pollution prevention and good housekeeping BMPs as appropriate and comply with pollution as well as provide oversight to ensure compliance:

- Contractor Notification
- Contractor Training
- Pre-project Meeting/Review
- Periodic Inspections

Prior to conducting work, contractors shall be provided a “Stormwater Contractor Oversight Record” form. This will allow the district to review stormwater compliance with contractors hired to perform municipal operation and maintenance activities and to obtain signatures. The “Stormwater Contractor Oversight Record” form is located in Appendix “F”.

2.6.10 Pollution Prevention/Good House Keeping Training

A training program is an important component to effective pollution prevention. Training is required for all employees whose job responsibilities involve municipal or maintenance activities. Training is discussed in detail in Section 3.0 of this SWMP.

2.6.11 Pollution Prevention/Good Housekeeping –BMP Table

BMP	Description of BMP	Timeframe	Measurable Goal	Measure of Assessment	Responsible Party
BMP #2.6.11.1 Structural Control Inventory	Provide an up-to-date inventory of the number of stormwater structural controls for each facility's (i.e., catch basins, detention ponds). Update facilities potential to discharge pollutants (high, medium, low) following the update.	Updated as needed within 30 days following the completion a new facility or development/ redevelopment. Ongoing Throughout Permit Cycle	100% of stormwater structural controls inventoried.	Maintain list of inventories and potential to discharge priority level. Submit updated list with progress report, noting if priority levels have changed.	Livonia Public Schools
BMP #2.6.11.2 SPCC development & implementation (SOP)	Develop a "Spill Prevention, Control, and Countermeasure (SPCC)" for maintenance, transportation, and storage facilities/Implement policies & procedures.	Developed & Implemented Ongoing Throughout Permit Cycle	SPCC completed and 100% of inspections implemented.	Copy of SPCC and copy of inspections.	Livonia Public Schools
BMP #2.6.11.3 Stormwater Structural Control Inspections	Visually inspect stormwater controls identified on facility maps.	Annually Throughout Permit Cycle	Routine schedule implemented and inspections reviewed by stormwater manager.	Maintain inspection forms/reports.	Livonia Public Schools
BMP #2.6.11.4 Review for BMP's Implemented	While inspecting stormwater controls, review the site for BMPs currently implemented to prevent or reduce pollutant runoff at each facility, such as storm drain stencils, garden areas, areas cleaned, areas repaired, SEMCOG poster placement, Illicit discharge education posters, and spill kits.	Annually Throughout Permit Cycle	Annual inspections completed and reviewed by stormwater manager.	Documentation of inspection findings (number of posters, number of spill kits, inventory of gardens, pictures of stencils, pictures of spill kits).	Livonia Public Schools

BMP	Description of BMP	Timeframe	Measurable Goal	Measure of Assessment	Responsible Party
BMP #2.6.11.5 Prioritization of Storm Sewer Locations for Maintenance & Cleaning	Following the inspection, the stormwater controls will be prioritized for cleaning and maintenance. Prioritize locations based on: (1) drainage structures that are designated as consistently generating the highest volumes of trash and/or debris, (2) areas with high amounts of build-up sediment, (3) areas of significant cracking or sinkholes.	Annually Throughout Permit Cycle	Prioritization locations identified.	Copy of prioritization.	Livonia Public Schools
BMP #2.6.11.6 Cleaning & Maintenance (Catch Basin/ Manhole Cleaning)	Livonia Public Schools will ensure that cleaning of the catch basins/manholes occur, and all waste materials generated during operation and maintenance of structural stormwater controls are properly characterized, transported, and disposed as required under State of Michigan PA 451 Part 111 (hazardous wastes), Part 121 (Liquid Industrial By-Products), and Part 115 (solid wastes).	Once per permit cycle Or More often if prioritized due to a build-up of accumulated solid material that is greater than or equal to the one-third guideline outlined in the Storm Sewer Structure Controls Inspection & Maintenance Policy & Procedure	Cleaning completed once per permit cycle or more often if build-up of accumulated solid material reaches the action level per the procedure in section 2.6.4. All waste disposed of as required.	Copies of Waste Manifests.	Livonia Public Schools
BMP #2.6.11.7 Roadways & Parking Lots	Storm drains stenciled to prevent disposal of wash water into storm drains.	As needed Throughout Permit Cycle	Storm drain stencils inspected and maintained as need.	Copy of work order. Photos of stenciling.	Livonia Public Schools
BMP #2.6.11.8 Cold Weather Operations	Proper salt storage management. Maintain storage bags/equipment in good working condition and maintain application equipment per manufacturer's recommendations.	Ongoing Throughout Permit Cycle	Continue proper salt storage and management as previously implemented.	Copy of SPCC comprehensive inspection report.	Livonia Public Schools

BMP	Description of BMP	Timeframe	Measurable Goal	Measure of Assessment	Responsible Party
BMP #2.6.11.9 Vehicle Washing	All vehicle washing and maintenance is to be performed indoors where drains connecting to the sanitary system can receive all wastes. Alternatively, vehicle washing can be performed at a commercial auto wash facility.	Ongoing Throughout Permit Cycle	100 % of applicable staff trained on were to wash vehicles.	Copy of sign-in sheets and Agenda (if available).	Livonia Public Schools
	Alternatively, rinse grass from lawn care equipment on permeable (grassed) areas.		100 % of applicable staff trained on were to wash vehicles.	Copy of sign-in sheets and Agenda (if available).	
	School car wash fundraising events will not be permitted on school grounds.		Notice sent to staff regarding policy.	Copy of e-mail or policy.	
BMP #2.6.11.10 Vehicle Maintenance	All floor drains within maintenance garages dye tested to assure that no drains flow into the separate storm sewer system.	Throughout Permit Cycle	100% of floor drains inspected.	Copy of inspection report.	Livonia Public Schools
	Oil-water separators will be inspected routinely and serviced as necessary to maintain efficiency.	Annually Throughout Permit Cycle	Oil-water separators cleaned and functioning properly.	Copy of invoices or shipping papers.	
	Recycle used motor oil, diesel oil, other vehicle fluids, and vehicle parts whenever possible.	As needed Throughout Permit Cycle	Reduction in amount of disposed material and amount of material shipped for off-site disposal.	Copy of invoices or shipping papers.	
BMP #2.6.11.12 Land Disturbance	Place temporary stockpiled material away from storm drains, and berm or cover stockpiles to prevent material releases into the storm drain. Protect against sediment flowing into drains.	As needed Throughout Permit Cycle	100 % of applicable staff trained.	Copy of sign-in sheets and Agenda (if available).	Livonia Public Schools

BMP	Description of BMP	Timeframe	Measurable Goal	Measure of Assessment	Responsible Party
BMP #2.6.11.13 Street Sweeping	Conduct hand sweeping in the parking lots/roadways in the spring and fall.	Spring & Fall Throughout Permit Cycle	Inspections completed.	Copy of work order or schedule.	Livonia Public Schools
	Street sweeping conducted by a professional sweeping company.	As needed Throughout Permit Cycle		Copy of invoice or disposal documentation.	
BMP #2.6.11.14 Vegetated Properties (Pesticides)	Livonia Public Schools requires all contracted personnel who participate in the application of pesticides will be trained and licensed by the State of Michigan under the Commercial Pesticide Application Certification Program for relevant categories as applicable, to prevent or reduce pollutant runoff from vegetated land.	Ongoing Throughout Permit Cycle	Application of pesticides will only be completed by trained and licensed applicators.	Documentation of in-house staff license or copy of contractor receipt.	Livonia Public Schools
BMP #2.6.11.15 Contractor Oversight	Livonia Public Schools requires contractors to comply with pollution prevention and good housekeeping BMPs. Livonia Public Schools will complete contractor notification, pre-project meeting and periodic inspections to provide oversight to ensure compliance.	As needed Throughout Permit Cycle	Contractors trained and informed of pollution prevention and good housekeeping techniques.	Copy of sign-in sheets, pre-project meeting notes or inspections.	Livonia Public Schools & Contractors/ Vendors
	Prior to conducting work, contractors shall be provided a "Stormwater Contractor Oversight Record" form.				
BMP #2.6.12.16 Training	Pollution prevention and good housekeeping training.	Once per permit cycle or during the 1 st year of employment Throughout Permit Cycle	Goal of providing training to maintenance staff who work for Livonia Public Schools. [All Stormwater Training is outlined in Section 3.0 Training]	Copy of sign-in sheets and Agenda (if available).	Livonia Public Schools

BMP	Description of BMP	Timeframe	Measurable Goal	Measure of Assessment	Responsible Party
BMP #2.6.12.17 Pollution Prevention & Good Housekeeping Activities Effectiveness Review	Summary of annual activities for the “Pollution Prevention and Good Housekeeping”.	Annually Throughout Permit Cycle	Annual review of SWMP performed. Maintain copy of SWMP annual review. Determine the level of district involvement and identify areas of improvement.	Maintain copy of SWMP annual review and evaluation information for progress reporting.	Livonia Public Schools

3.0 Training

Livonia Public Schools will provide education and training for applicable employees and contractors using a variety of methods depending on their specific job function. At a minimum, all applicable Livonia Public Schools employees will be required to have general awareness training on the topics included in the PEP. All applicable Livonia Public Schools employees will be required to attend or otherwise obtain general awareness training at least once per permit cycle or during the 1st year of employment.

Livonia Public Schools has implemented a comprehensive staff training program based on each employee's participation and responsibilities under this program. The employee training program is categorized in three (3) separate levels summarized as follows:

LEVEL I TRAINING-General Awareness Training

Level I training is encouraged for all district employees, parents, and students. General Awareness training is provided in the form of an 11-minute video produced by Arch Environmental Group titled, **"When it Rains, It Drains...The Stormwater Question"**. This video is also available on the stormwater webpage.

LEVEL II TRAINING-General Awareness, Pollution Prevention & Good Housekeeping, and Illicit Discharge Reporting

Level II training is required for all employees whose job responsibilities involve illicit discharge related activities, or indicate a potential to cause, witness, or report an illicit discharge or connection. This training includes the previously described video as well as a review of the district's Stormwater Management Program Plan and instruction on identification and notification of illicit discharges or connections. This training is provided to applicable transportation, maintenance, custodial, and food service employees.

LEVEL III TRAINING-Maintenance and Storage Facility Stormwater Pollution Prevention Plans, Lawn Maintenance, and Structural Control Inspection, Maintenance, and Repair Training

Level III training is provided in the form of videos, PowerPoint presentations, and hands-on training. This training is provided to district supervisors, maintenance, and lawn service staff.

LEVEL IV (CONTRACTORS) – Contractor Training/Oversight

Contractors employed by Livonia Public Schools to conduct activities with a potential to impact water quality. Prior to conducting work, contractors shall be provided a "Stormwater Contractor Oversight Record" form.

3.1 Training Table

BMP	Description	Measurable Goal	Target Audience	Timeframe
I General Awareness Training	Encourage teachers, administrative and support staff to watch the General Awareness Stormwater Video “When it Rains it Drains”.	Maintain on district website and Record attendance with sign-in sheets. Livonia Public Schools will retain records of trainings for future review regarding SWMP.	Teachers, administrative and support staff.	Ongoing Throughout Permit Cycle
II IDEP & PPGH Training	General Awareness, Pollution Prevention & Good Housekeeping, and Illicit Discharge Elimination Program	Record attendance with sign-in sheets for each training session. Livonia Public Schools will retain records of trainings for future review regarding SWMP.	In-house custodial, maintenance, transportation, and food service employees.	Required once during permit cycle current employees and during the 1 st year of employment for new employees. Throughout Permit Cycle
III Routine Storm Sewer Inspection Training	Train appropriate employees how to conduct a storm sewer system inspection.	Record attendance with sign-in sheets for each training session. Livonia Public Schools will retain records of trainings for future review regarding SWMP.	District supervisors, in-house maintenance, and lawn service staff.	As Needed Throughout Permit Cycle
IV Contractor Training/ Oversight	Stormwater specific training for on-site contractors.	Utilize a “Stormwater Contractor Oversight Record” form to review stormwater compliance with contractors hired to perform municipal operation and maintenance activities and to obtain signatures. Obtain records of training for future review of the SWMP.	Contractors employed by Livonia Public Schools to conduct activities with a potential to impact water quality.	Required at the time of employment. Throughout Permit Cycle

4.0 Total Maximum Daily Load (TMDL) Restrictions

4.1 What are TMDLs

When a lake or stream fails to meet federal water quality standards, the Clean Water Act requires that a “Total Maximum Daily Load (TMDL)” limit be developed. Studies are completed to determine the sources impacting the water body and to develop goals so that the water body can meet the applicable standards.

A TMDL describes the process used to determine how much of a particular pollutant a lake or stream can assimilate and sets pollution reduction targets for the water body.

Livonia Public Schools will review and prioritize BMPs currently implemented or to be implemented during the permit cycle to make progress toward achieving the pollutant load reduction requirement in each TMDL identified. TMDLs assigned the discharges for Livonia Public Schools are described in the below sections.

4.2 Statewide E. coli TMDL

The Statewide **E. coli** TMDL was approved by the United States Environmental Protection Agency (USEPA) on July 29, 2019. This TMDL addresses all surface waters (inland lakes, Great Lakes, streams, rivers, wetlands, and beaches) in the state of Michigan that are impaired by E. coli. The goal of the TMDL is to identify problem areas, address sources of E. coli statewide, and provide guidance to restore these waters.

The targets in this TMDL are concentrations of E. coli per 100 milliliters (mL) of water, set equal to Michigan’s Water Quality Standard (WQS) for recreation (described in Section 3). This target is easier to understand and communicate than a load-based target, which would vary by water body, and is also easier to measure with limited resources.

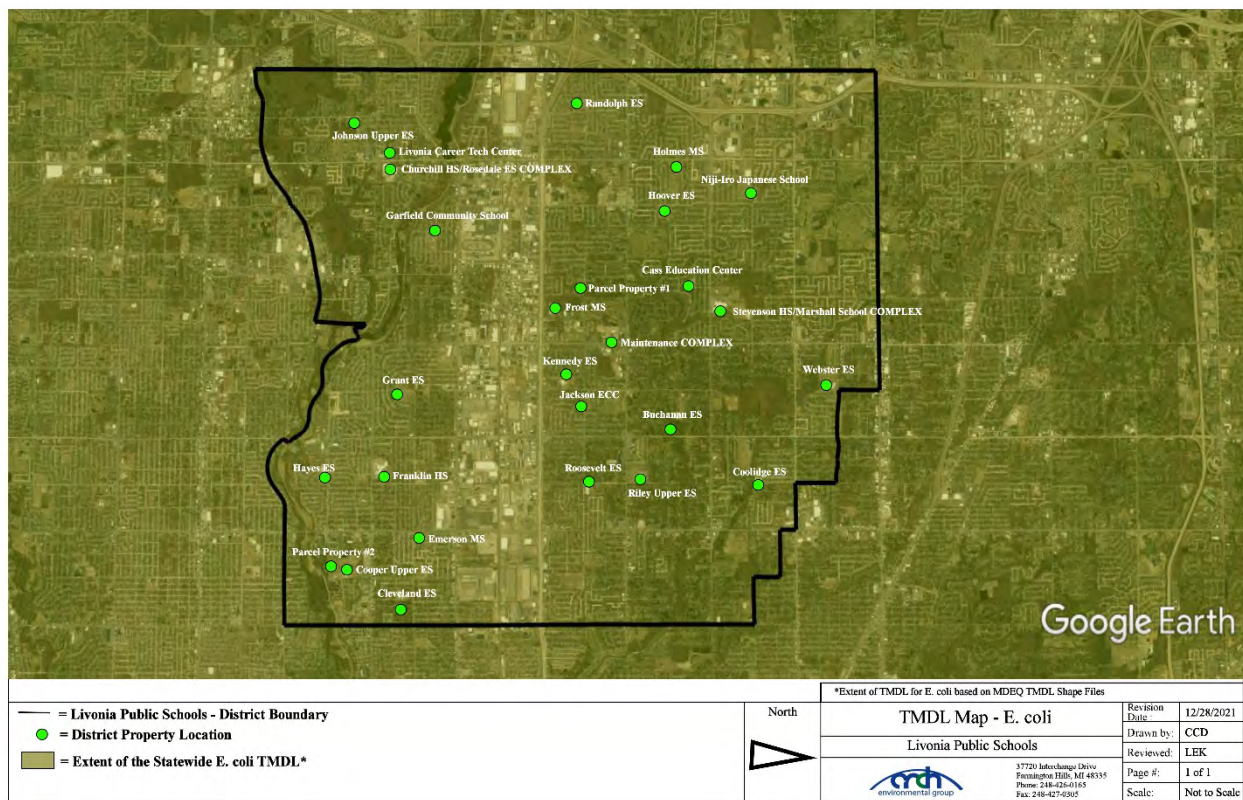
Each District facility was evaluated for the Statewide E. coli TMDL applicability using the Michigan Department of Environment, Great Lakes, and Energy TMDL Watershed Screening Tool. The following District facilities discharge stormwater either directly or indirectly to watersheds included within the Statewide TMDL boundaries as identified in Map 3 below:

1. Buchanan Elementary School
2. Cass Education Center
3. Churchill High School-Rosedale Elementary School Complex
4. Cleveland Elementary School
5. Coolidge Elementary School
6. Cooper Upper Elementary School
7. Emerson Middle School
8. Franklin High School
9. Frost Middle School
10. Garfield Community Center
11. Grant Elementary School
12. Hayes Elementary School
13. Holmes Middle School
14. Hoover Elementary School
15. Jackson Early Childhood Center
16. Johnson Upper Elementary School

Livonia Public Schools
Stormwater Management Program Plan (SWMP)

17. Kennedy Elementary School
18. Livonia Career Technical Center
19. Maintenance Complex
20. Niji-Iro Japanese School
21. Parcel #1 (34715 Lyndon, Livonia, MI 48154)
22. Parcel #2 (28681 Ann Arbor Trail, Westland, MI 48185)
23. Randolph Elementary School
24. Riley Elementary School
25. Roosevelt Elementary School
26. Stevenson High School
27. Webster Elementary School

Map 3 – Total Maximum Daily Load Map⁴



⁴ Total maximum daily load boundaries based on Michigan Department of Environment, Great Lakes, and Energy Shapefiles.

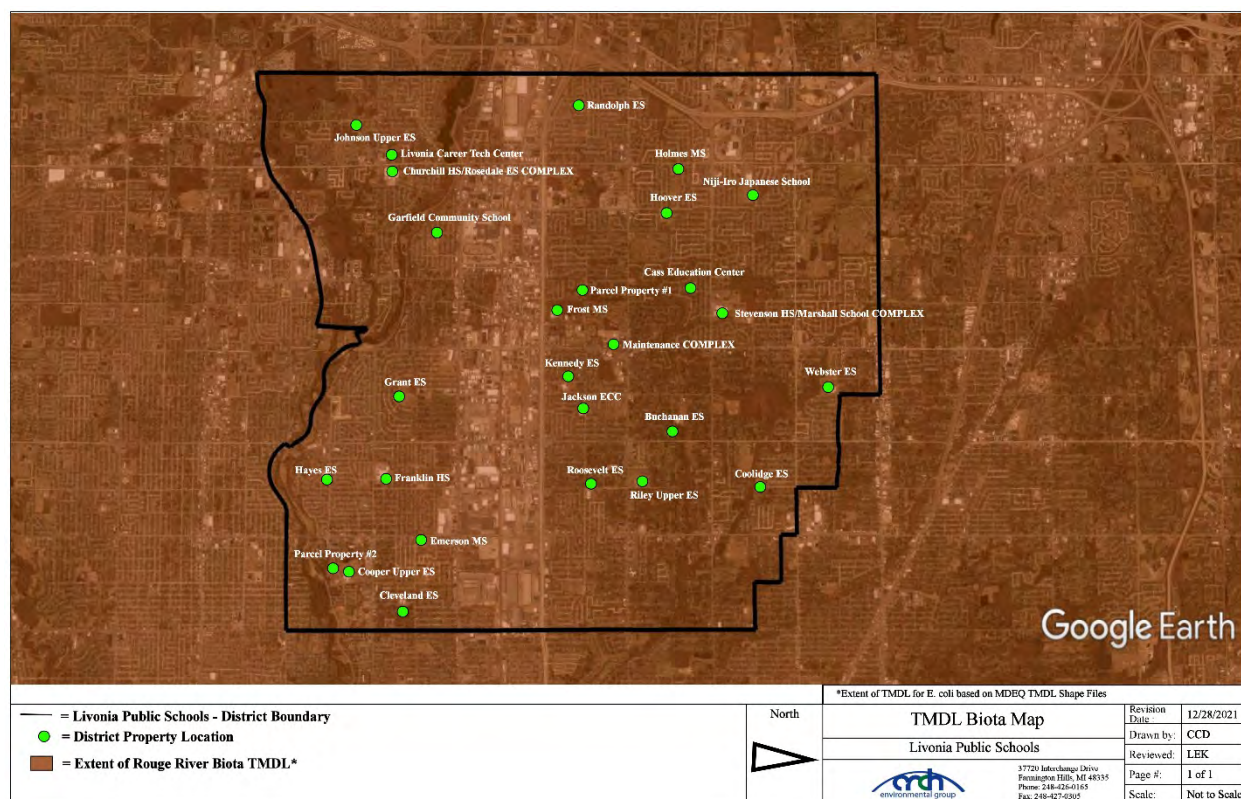
4.3 Rouge River TMDL

The Rouge River was placed on the Section 303(d) list for **biota (sedimentation/siltation)**. The Rouge River was placed on the list for biota due to poor macroinvertebrate and fish community levels. Surveys conducted indicated that lack of habitat along with siltation/sedimentation were the predominate issues.

The following District facilities discharge stormwater either directly or indirectly within the Rouge River TMDL boundaries as identified in Map 4 below:

1. Buchanan Elementary School
2. Cass Education Center
3. Churchill High School-Rosedale Elementary School Complex
4. Cleveland Elementary School
5. Coolidge Elementary School
6. Cooper Upper Elementary School
7. Emerson Middle School
8. Franklin High School
9. Frost Middle School
10. Garfield Community Center
11. Grant Elementary School
12. Hayes Elementary School
13. Holmes Middle School
14. Hoover Elementary School
15. Jackson Early Childhood Center
16. Johnson Upper Elementary School
17. Kennedy Elementary School
18. Livonia Career Technical Center
19. Maintenance Complex
20. Niji-Iro Japanese School
21. Parcel #1 (34715 Lyndon, Livonia, MI 48154)
22. Parcel #2 (28681 Ann Arbor Trail, Westland, MI 48185)
23. Randolph Elementary School
24. Riley Elementary School
25. Roosevelt Elementary School
26. Stevenson High School
27. Webster Elementary School

Map 4 – Total Maximum Daily Load Map⁵



4.4 TMDL Implementation – Monitoring Plan

4.4.1 Sampling

1. The Part 4 Water Quality Standards for E. coli is 1,000 counts per 100 ml for outfall monitoring. If the monitoring results conducted in the initial round of TMDL monitoring identify that the districts are implementing are effective at making progress toward achieving the TMDL pollutant load reduction requirement, then a second round of monitoring (within the same permit cycle) is not required.
2. To determine compliance with the Biota TMDL samples collected from designated outfall/discharge points will be analyzed for total suspended solids (TSS). The EPA's, Industrial Stormwater Monitoring and Sampling Guide benchmark standard for TSS is less than or equal 100 mg/L for outfall monitoring. If the monitoring results conducted in the initial round of TMDL monitoring identify that the districts are implementing are effective at making progress toward achieving the TMDL pollutant load reduction requirement, then a second round of monitoring (within the same permit cycle) is not required.
3. If a TMDL is being attained outfall discharge point monitoring will not be conducted.

⁵ Total maximum daily load boundaries based on Michigan Department of Environment, Great Lakes, and Energy Shapefiles.

4.4.2 Prioritized TMDL Best Management Practices

The below lists stormwater BMPs that are targeted to improve water quality impairments associated by the TMDL.

E. COLI/BIOTA

1. Livonia Public Schools will use its website to provide the public with information regarding pet waste (SEMCOG links). Additionally, SEMCOG pet waste posters are placed at various school buildings.
2. Livonia Public Schools will prohibit illicit discharges, inspect, and monitor suspected illicit discharges, and enforce elimination of the illicit discharges and connections.
3. Livonia Public Schools has reviewed all facilities for cross-connections between the sanitary and storm sewer systems.
4. Livonia Public Schools will conduct hand sweeping in the parking lots/roadways in the spring and fall.
5. Livonia Public Schools has established programs for soil erosion and sediment control from new or redevelopment construction. Such developments require permits and inspections for practices to keep exposed soils on site or controlled from runoff.
6. Livonia Public Schools has implemented routine visual inspections of stormwater structural controls.
7. Livonia Public Schools will remove excessive sediments from structural sediment removal systems to maintain the maximum designed performance. Sediments will be disposed of offsite in accordance with Parts 115 or 121.

ALL TMDLs

1. Livonia Public Schools will continue to use its website to provide the public information regarding local TMDL issues (phosphorous, E. coli, biota, and dissolved oxygen TMDL Best Management Practice).
2. Livonia Public Schools will continue to educate staff, faculty, and students using various venues including the **“Seven Simple Steps to Clean Water”** program educational materials developed by the various watershed groups specifically related to these issues on the stormwater management webpage.
3. The district has implemented an Illicit Discharge Regulatory Policy.
4. The district has implemented a Post-Construction Policy and Procedure.
5. The district has implemented an Enforcement Response Procedure.
6. Adequately maintains vegetation around stormwater facilities, ditches, and ponds.
7. Provide training to applicable staff and confirm training from contractors including restrictions on the use of phosphorous containing fertilizers, soaps, cleaners, and other chemicals that could impact the separate storm drain system.

Procedure

Prioritization of BMPs is based on Livonia Public Schools targeted TMDL pollutants. Priority is given to BMPs that reduce E. coli and address water quality for biota. If the monitoring results conducted in the initial round of TMDL monitoring identify that the districts are implementing are effective at making progress toward achieving the TMDL pollutant load reduction requirement, then a second round of monitoring (within the same permit cycle) is not required.

Assessment

The EGLE Stormwater Discharge Permit Application requires a monitoring plan for assessing the effectiveness of the BMPs currently being implemented, or to be implemented, in making progress toward achieving the TMDL pollutant load reduction requirement. Monitoring shall be specifically for the pollutant identified in the TMDL. Monitoring may include wet weather outfall/discharge point monitoring and dry-weather screening. A summary of the monitoring results and conclusions related to TMDLs will be provided during progress reporting.

Livonia Public Schools will conduct the following for applicable TMDLs:

1. The goal is to collect samples from at least 50% of the outfall/discharge points at facilities associated with the TMDL. An effort will be made to sample water quality parameters during a representative (i.e., >0.25" and <1.5") wet weather event over a 24-hour period, and within 30 to 60 minutes of the start of the wet weather event in order to capture the first flush. Monitoring shall be specifically for the pollutant identified in the TMDL. TMDL Sample locations are located in Appendix "G".
2. The results of the sampling will be assessed and summarized in a brief assessment report to be shared with the public if requested.
3. Based on a review of the sampling results, BMP implementation will be reviewed for effectiveness and BMPs may be updated or revised to ensure progress toward achieving TMDL pollutant load reductions.

4.4.3 TMDL - BMP Table

BMP	Description of BMP	Timeframe	Measurable Goal	Measure of Assessment	Responsible Party
BMP #4.5.2.1 Webpage	The District will use its website to provide the public with information regarding pet waste (SEMCOG links). Additionally, SEMCOG pet waste posters are placed at various school buildings.	Ongoing Throughout Permit Cycle	Posters placed throughout Livonia Public Schools facilities.	Maintain links on webpage. Maintain copies of webpage review.	Livonia Public Schools
	The District will continue to use its website to provide the public information regarding local TMDL issues (E. coli and biota (TSS) TMDL Best Management Practice).		Material available on webpages.		
BMP #4.5.2.2 Outfall Monitoring	Select outfall/discharge points at facilities associated with the TMDL will be monitored. An effort will be made to sample water quality parameters during a representative wet weather event over a 24-hour period, and within 30 to 60 minutes of the start of the wet weather event in order to capture the first flush. Monitoring shall be specifically for the pollutant identified in the TMDL.	Once per Permit Cycle Throughout Permit Cycle. Second Round as Needed based on Initial Results	The goal is to collect samples from at least 50% of the outfall/points of discharge at facilities associated with the TMDL.	Copy of inspection paperwork and sample results.	Livonia Public Schools
BMP #4.5.2.3 Effectiveness Review	The results of the sampling will be assessed for the effectiveness of the BMPs currently being implemented for TMDL pollutant load reduction and summarized in an assessment report.	Once per Permit Cycle Throughout Permit Cycle	Report available for public review if requested.	Assessment report completed.	Livonia Public Schools

Appendix “A”

Outfall/Discharge Point Receiving Water Table & Site Stormwater Structure Maps

Receiving Waters Table

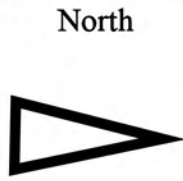
Livonia Public Schools				
FACILITY	OUTFALL/ DISCHARGE POINT	POINT OF DISCHARGE/ OUTFALL	RECEIVING WATERS	WATERSHED
Buchanan Elementary School	BCN-04.OP.OF	Surface Waters of the State	Bell Branch	Rouge
	BCN-05.OP.OF	Surface Waters of the State	Bell Branch	Rouge
	BCN-16.SCC.OF	Surface Waters of the State	Bell Branch	Rouge
	BCN-20.CB.DP	City of Livonia MS4	Bell Branch	Rouge
	BCN-24.OP.OF	Surface Waters of the State	Bell Branch	Rouge
Cass Elementary School	CAS-05.CB.DP	City of Livonia MS4	Bell Branch	Rouge
Churchill High School-Rosedale Elementary School Complex	CHS-20.CB.DP	City of Livonia MS4	Tonquish Creek	Rouge
	CHS-41.MH.DP	City of Livonia MS4	Tonquish Creek	Rouge
	CHS-78.MH.DP	City of Livonia MS4	Newburgh Lake	Rouge
	CHS-79.MH.DP	City of Livonia MS4	Newburgh Lake	Rouge
Cleveland Elementary School	CVD-01.CB.DP	City of Livonia MS4	Ashcroft Sherwood Drain	Rouge
	CVD-02.CB.DP	City of Livonia MS4	Ashcroft Sherwood Drain	Rouge
	CVD-04.CB.DP	City of Livonia MS4	Ashcroft Sherwood Drain	Rouge
	CVD-06.CB.DP	City of Livonia MS4	Ashcroft Sherwood Drain	Rouge
	CVD-07.CB.DP	City of Livonia MS4	Ashcroft Sherwood Drain	Rouge
	CVD-09.CB.DP	City of Livonia MS4	Ashcroft Sherwood Drain	Rouge
Coolidge Elementary School	CLG-05.OP.OF	Surface Waters of the State	Rouge River	Rouge
	CLG-15.OP.OF	Surface Waters of the State	Rouge River	Rouge
Cooper Upper Elementary School	CPR-01.CB.DP	City of Livonia MS4	Middle Rouge River	Rouge
	CPR-26.OP.OF	Surface Waters of the State	Middle Rouge River	Rouge
	CPR-29.SCC.DP	City of Livonia MS4	Middle Rouge River	Rouge
Emerson Middle School	EMS-22.MH.DP	City of Livonia MS4	Middle Rouge River	Rouge
	EMS-25.CB.DP	City of Livonia MS4	Middle Rouge River	Rouge
	EMS-26.CB.DP	City of Livonia MS4	Middle Rouge River	Rouge
Franklin High School-McKinley Elementary School Complex (McKinley Closed)	FHC-01.CB.DP	City of Livonia MS4	Middle Rouge River	Rouge
	FHC-03.CB.DP	City of Livonia MS4	Middle Rouge River	Rouge
	FHC-40.CB.DP	City of Livonia MS4	Middle Rouge River	Rouge
	FHC-49.MH.DP	City of Livonia MS4	Middle Rouge River	Rouge
	FHC-60.CB.DP	City of Livonia MS4	Middle Rouge River	Rouge
Frost Middle School	FRO-11.MH.DP	City of Livonia MS4	Bell Branch	Rouge
Garfield Elementary School	GFD-03.CB.DP	City of Livonia MS4	Middle Rouge River	Rouge
	GFD-04.CB.DP	City of Livonia MS4	Middle Rouge River	Rouge
	GFD-05.CB.DP	City of Livonia MS4	Middle Rouge River	Rouge
	GFD-10.OP.DP	City of Livonia MS4	Middle Rouge River	Rouge
	GFD-15.CB.DP	City of Livonia MS4	Middle Rouge River	Rouge
Grant Elementary School	GRT-01.MH.DP	City of Livonia MS4	Middle Rouge River	Rouge
	GRT-09.MH.DP	City of Livonia MS4	Middle Rouge River	Rouge
	GRT-40.MH.DP	City of Livonia MS4	Middle Rouge River	Rouge
	GRT-45.CB.DP	City of Livonia MS4	Middle Rouge River	Rouge
Hayes Elementary School	HES-01.CB.DP	City of Livonia MS4	Middle Rouge River	Rouge
	HES-09.MH.DP	City of Livonia MS4	Middle Rouge River	Rouge
Holmes Middle School	HMS-25.CB.DP	City of Livonia MS4	Bell Branch	Rouge
	HMS-26.CB.DP	City of Livonia MS4	Bell Branch	Rouge
	HMS-28.MH.DP	City of Livonia MS4	Bell Branch	Rouge

Receiving Waters Table

Livonia Public Schools				
FACILITY	OUTFALL/ DISCHARGE POINT	POINT OF DISCHARGE/ OUTFALL	RECEIVING WATERS	WATERSHED
Hoover Elementary School	HVR-03.MH.OF	City of Livonia MS4	Bell Branch	Rouge
	HVR-13.CB.DP	City of Livonia MS4	Bell Branch	Rouge
	HVR-14.CB.DP	City of Livonia MS4	Bell Branch	Rouge
Jackson Early Childhood Center	JEC-07.SCC.DP	City of Livonia MS4	Bell Branch	Rouge
	JEC-14.MH.DP	City of Livonia MS4	Bell Branch	Rouge
Johnson Upper Elementary School	No Discharge Points			
Kennedy Elementary School	KNY-01.MH.DP	City of Livonia MS4	Bell Branch	Rouge
Livonia Career Technical Center	LCT-03.MH.DP	City of Livonia MS4	Middle Rouge River	Rouge
Maintenance Complex	LMC-03.MH.DP	City of Livonia MS4	Bell Branch	Rouge
Niji-Iro Japanese Elementary School-Dickinson Center Complex (Dickinson Closed)	JDC-09.SCC.OF	Surface Waters of the State	Rouge River	Rouge
	JDC-17.SCC.OF	Surface Waters of the State	Rouge River	Rouge
	JDC-19.CB.DP	City of Livonia MS4	Bell Branch	Rouge
	JDC-29.CB.DP	City of Livonia MS4	Bell Branch	Rouge
	JDC-30.CB.DP	City of Livonia MS4	Bell Branch	Rouge
Parcel Property #1	No Discharge Points			
Parcel Property #2	No Discharge Points			
Randolph Elementary School	RAN-05.MH.DP	City of Livonia MS4	Bell Branch	Rouge
Riley Upper Elementary School	RLY-06.MH.DP	City of Livonia MS4	Bell Branch	Rouge
	RLY-12.OP.DP	City of Livonia MS4	Bell Branch	Rouge
Roosevelt Elementary School	RVT-02.CB.DP	City of Livonia MS4	Bell Branch	Rouge
	RVT-09.MH.DP	City of Livonia MS4	Bell Branch	Rouge
	RVT-16.MH.DP	City of Livonia MS4	Bell Branch	Rouge
	RVT-18.CB.DP	City of Livonia MS4	Bell Branch	Rouge
	RVT-19.CB.DP	City of Livonia MS4	Bell Branch	Rouge
Stevenson High School-Marshall School Complex	SHS-09.OP.OF	Surface Waters of the State	Bell Branch	Rouge
	SHS-44.SCC.OF	Surface Waters of the State	Bell Branch	Rouge
	SHS-51.SCC.OF	Surface Waters of the State	Bell Branch	Rouge
	SHS-58.SCC.OF	Surface Waters of the State	Bell Branch	Rouge
	SHS-62.MH.OF (Buried)	Surface Waters of the State	Bell Branch	Rouge
	SHS-65.OP.OF	Surface Waters of the State	Bell Branch	Rouge
Webster Elementary School	WBR-11.MH.DP	City of Livonia MS4	Rouge River	Rouge

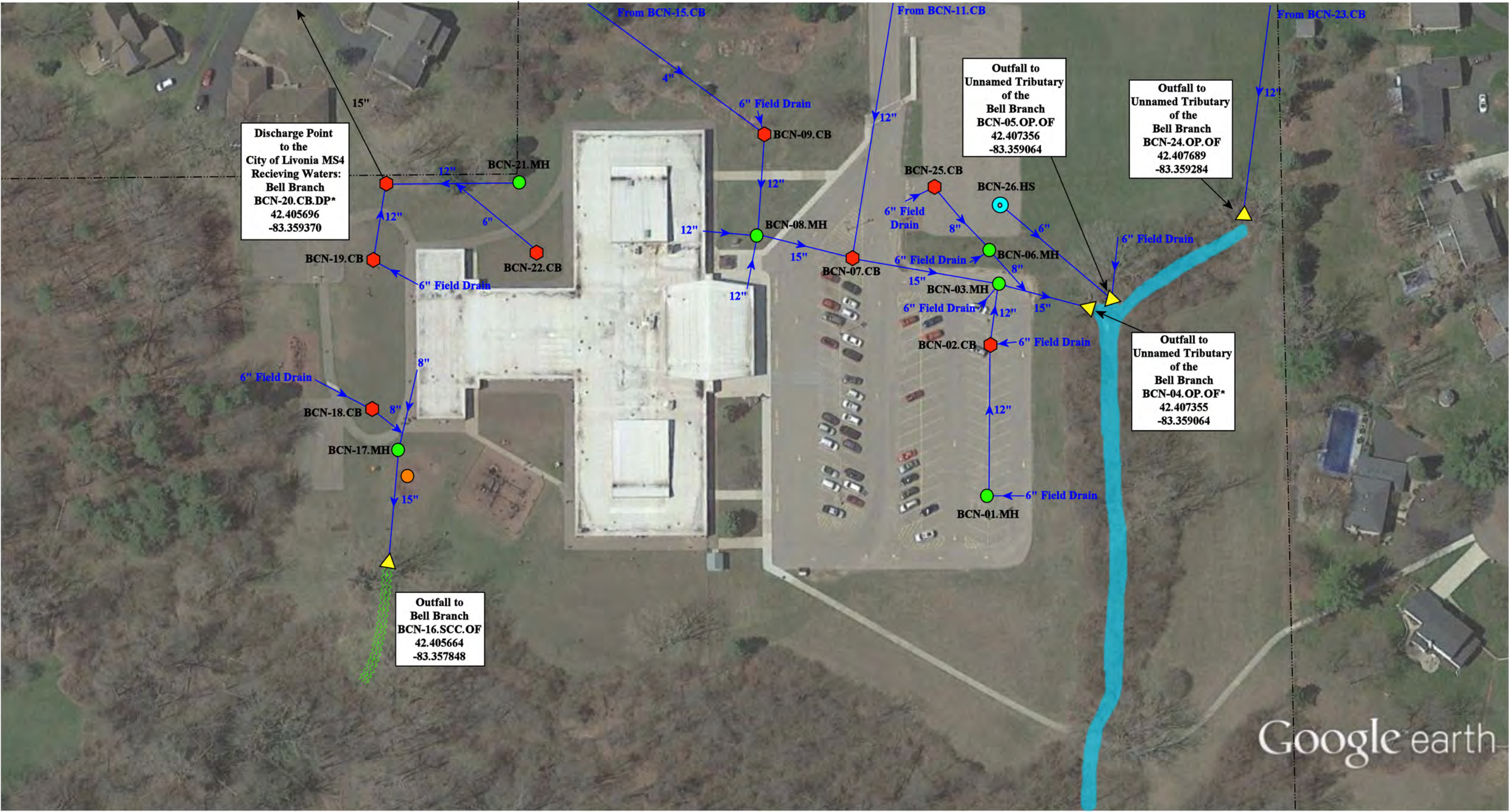


- | | | | |
|---------------|----------------------|--------------------------|---------------------------------------|
| = Catch Basin | = Infiltration Basin | = Buried Structure | = Stream |
| = Manhole | = Open Pipe Outlet | = Stabilized Outlet | = Swale/Stormwater |
| = Basin Drain | = Drainage Receptor | = Flow Splitter | = Conveyance Channel |
| = Offsite MS4 | = Trench Drain | = Hydrodynamic Separator | = Freshwater Forrested/ Shrub Wetland |
| = Sanitary | = Property Lines | | |

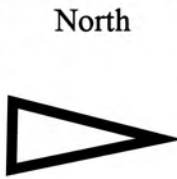


16400 Hubbard St. Livonia, Michigan 48154		Revision Date :	6/9/2022
Buchanan Elementary School		Drawn by:	BJZ
Livonia Public Schools		Reviewed:	LNK
		Page #:	1 of 3
		Scale:	Not to Scale

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Farmington Hills, MI 48335
Phone: 248-426-0165
Fax: 248-427-0305



- | | | | |
|---------------|----------------------|--------------------------|---------------------------------------|
| = Catch Basin | = Infiltration Basin | = Buried Structure | = Stream |
| = Manhole | = Open Pipe Outlet | = Stabilized Outlet | = Swale/Stormwater Conveyance Channel |
| = Basin Drain | = Drainage Receptor | = Flow Splitter | = Freshwater Forrested/Shrub Wetland |
| = Offsite MS4 | = Trench Drain | = Hydrodynamic Separator | |
| = Sanitary | = Property Lines | | |

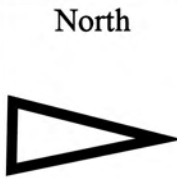



16400 Hubbard St. Livonia, Michigan 48154		Revision Date :	6/9/2022
Buchanan Elementary School		Drawn by:	BJZ
Livonia Public Schools		Reviewed:	LNK
		Page #:	2 of 3
		Scale:	Not to Scale

37720 Interchange Drive
Farmington Hills, MI 48335
Phone: 248-426-0165
Fax: 248-427-0305



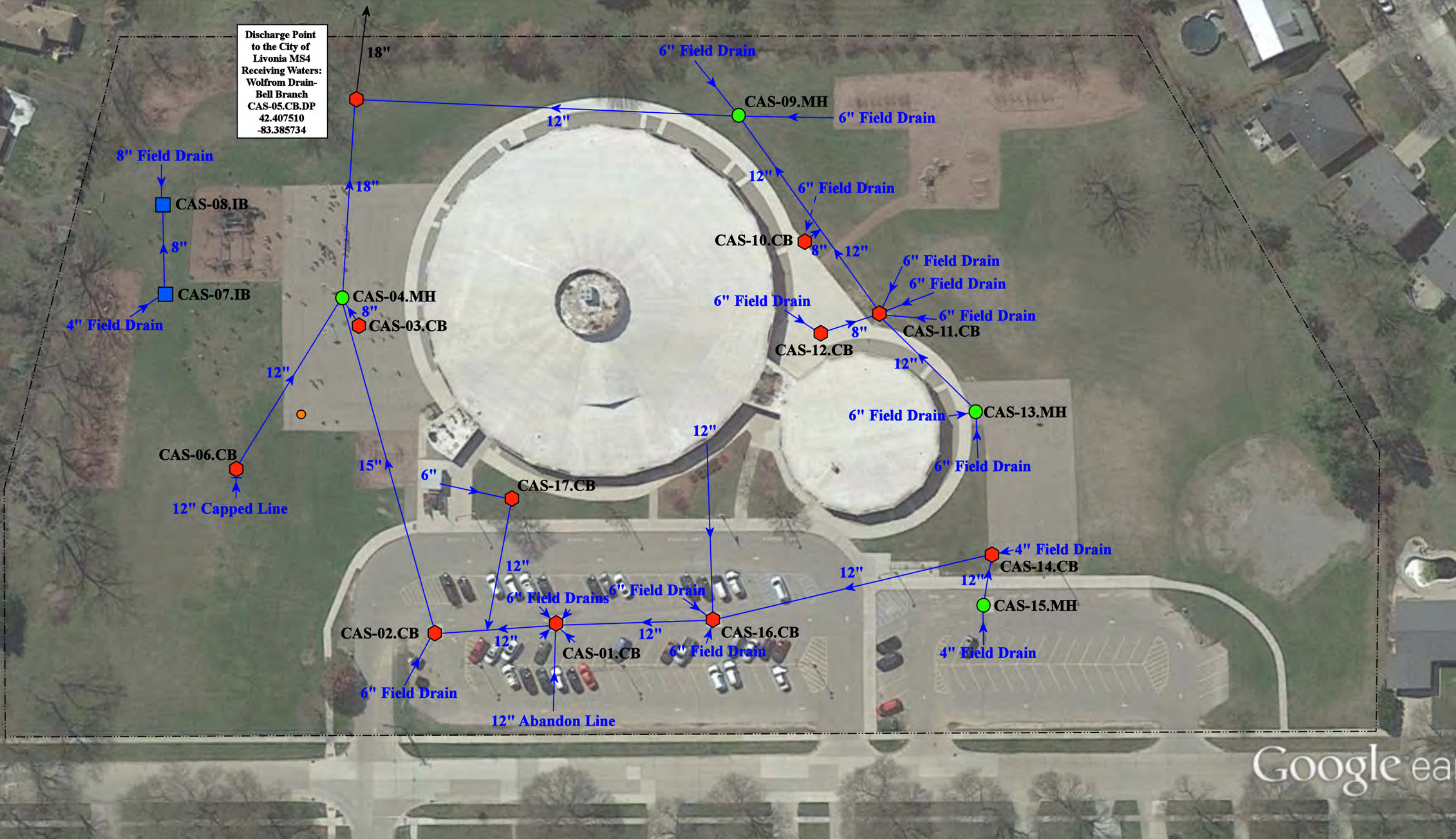
- | | | | |
|---------------|----------------------|--------------------------|---------------------------------------|
| = Catch Basin | = Infiltration Basin | = Buried Structure | = Stream |
| = Manhole | = Open Pipe Outlet | = Stabilized Outlet | = Swale/Stormwater Conveyance Channel |
| = Basin Drain | = Drainage Receptor | = Flow Splitter | = Freshwater Forrested/ Shrub Wetland |
| = Offsite MS4 | = Trench Drain | = Hydrodynamic Separator | |
| = Sanitary | = Property Lines | | |



16400 Hubbard St. Livonia, Michigan 48154		Revision Date :	6/9/2022
Buchanan Elementary School		Drawn by:	BJZ
Livonia Public Schools		Reviewed:	LNK
		Page #:	3 of 3
		Scale:	Not to Scale

37720 Interchange Drive
Farmington Hills, MI 48335
Phone: 248-426-0165
Fax: 248-427-0305

Discharge Point
to the City of
Livonia MS4
Receiving Waters:
Wolfrom Drain-
Bell Branch
CAS-05.CB.DP
42.407510
-83.385734

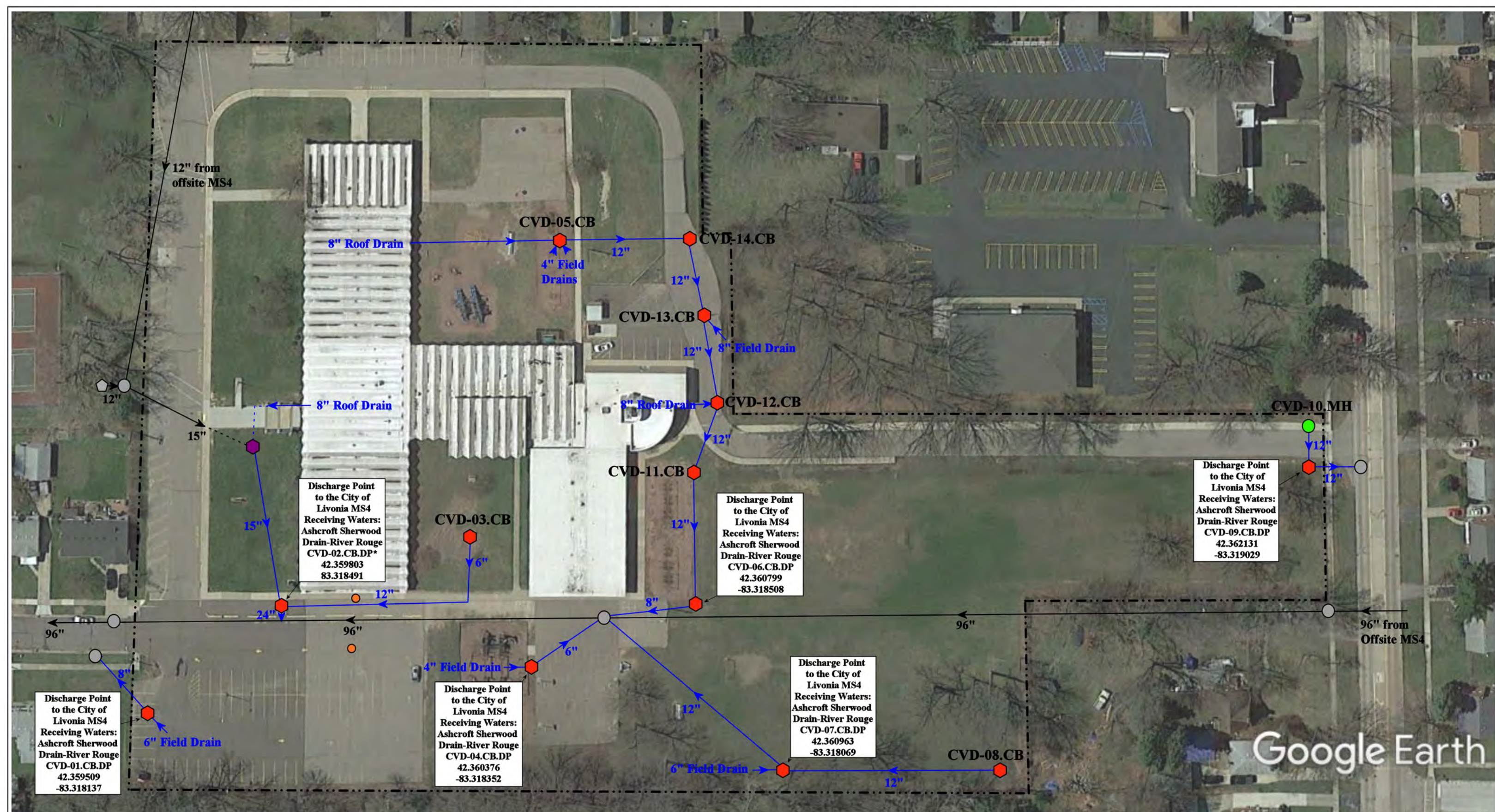






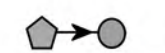



Google earth

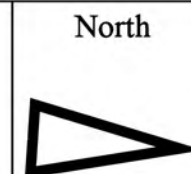
= Catch Basin	= Infiltration Basin	= Buried Structure	= Pond/Basin
= Manhole	= Open Pipe Outlet	= Stabilized Outlet	= Swale/Stormwater
= Basin Drain	= Drainage Receptor	= Flow Splitter	= Conveyance Channel
= Offsite MS4	= Trench Drain	= Hydrodynamic Separator	= Underground Detention System
= Sanitary	= Property Lines		



34633 Munger, Livonia, Michigan 48154		
<div>Cass Educational Center</div> <div>Livonia Public Schools</div> <div></div>	Revision Date :	07/22/2022
	Drawn by:	BJK
	Reviewed:	LNK
	Page #:	1 of 1
<div>37720 Interchange Drive Farmington Hills, MI 48335 Phone: 248-426-0165 Fax: 248-427-0305</div>		Scale: Not to Scale



- | | | |
|---|---|--|
|  = Catch Basin |  = Sanitary |  = TMDL Sampling Location |
|  = Manhole |  = City of Livonia MS4 |  = Assumed connections |
|  = Possible Buried Structure |  = Property Boundary | |



28030 Cathedral St, Livonia, Michigan 48150

Cleveland Elementary School

Livonia Public Schools

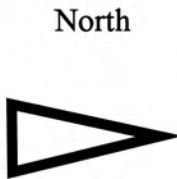


37720 Interchange Drive
Farmington Hills, MI 48335
Phone: 248-426-0165
Fax: 248-427-0305

Revision Date :	09/20/2021
Drawn by:	BJZ
Reviewed:	LK
Page #:	1 of 1
Scale:	Not to Scale



- | | | |
|---|---|--|
|  = Manhole |  = Stormwater Conveyance Channel |  = Sanitary |
|  = Catch Basin |  = Open Pipe Outlet |  = TMDL Sampling Location |
|  = Trench Drain |  = City MS4 |  = Infiltration Basin |



30500 Curtis, Livonia, Michigan 48152

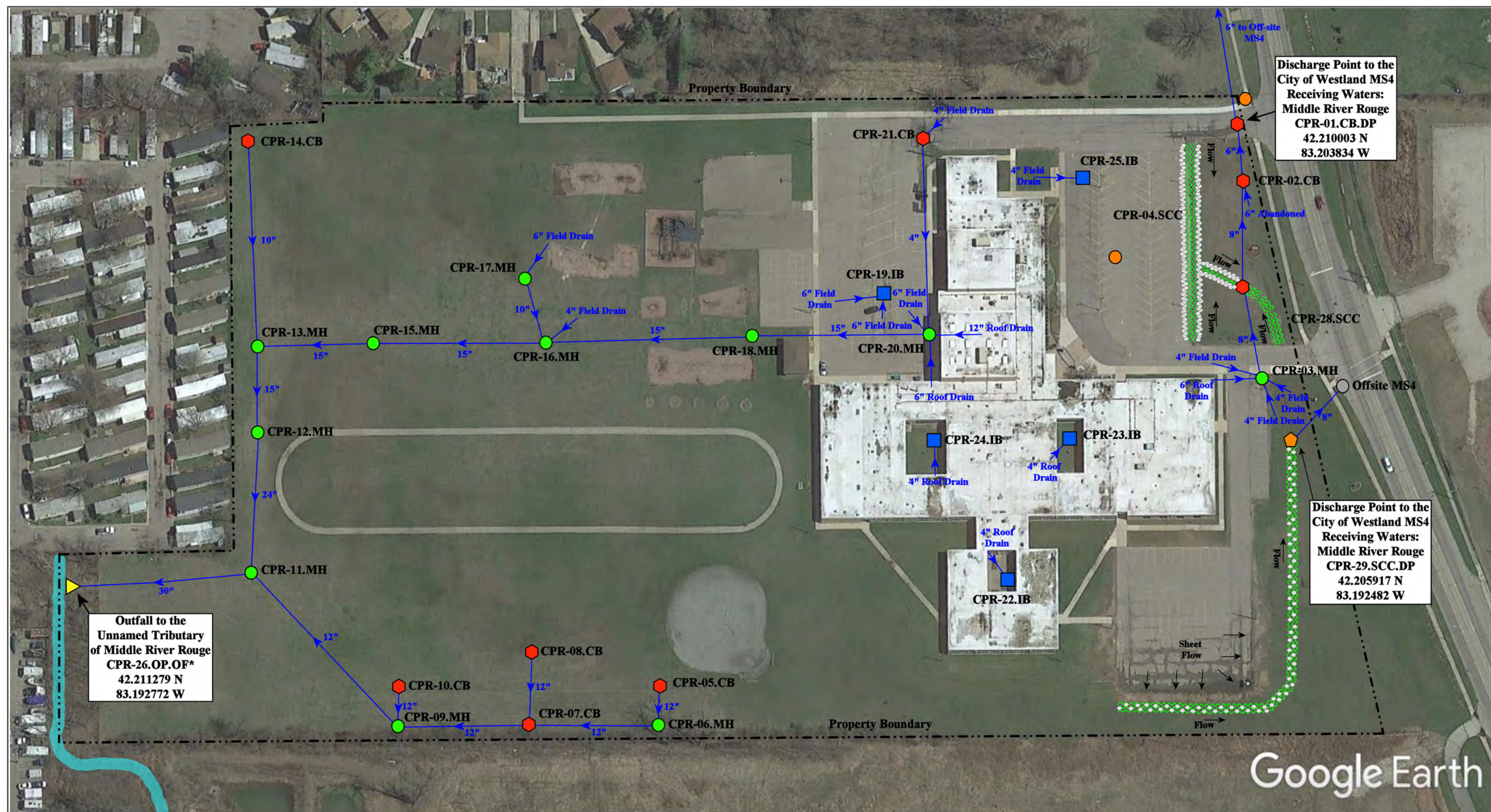
Coolidge Elementary School

Livonia Public Schools

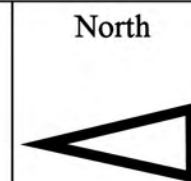



37720 Interchange Drive
Farmington Hills, MI 48335
Phone: 248-426-0165
Fax: 248-427-0305

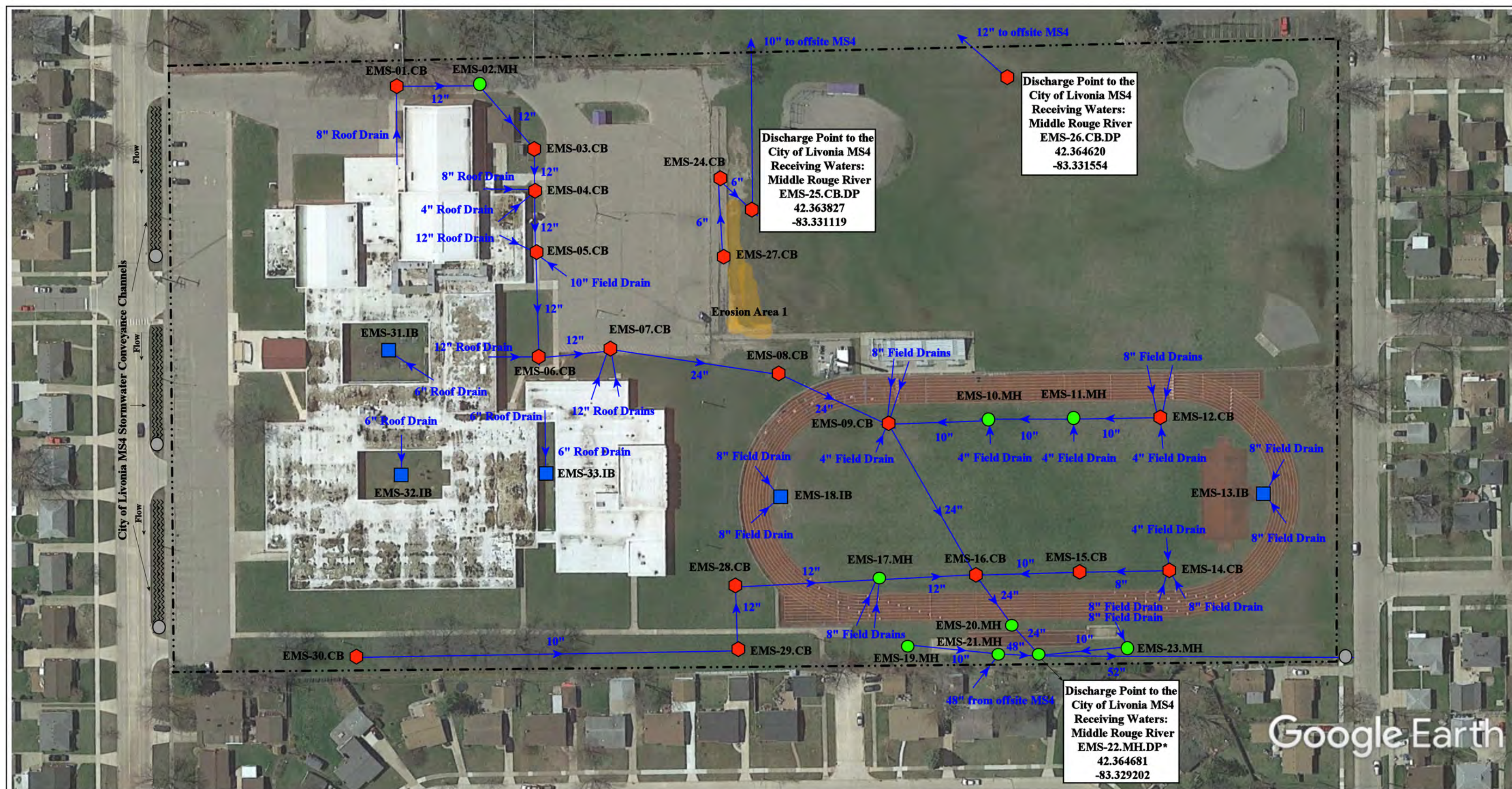
Revision Date :	1/10/2019
Drawn by:	SB
Reviewed:	LK
Page #:	1 of 1
Scale:	Not to Scale



- = Catch Basin
- = Manhole
- = Infiltration Basin
- = Open Pipe Outlet
- = Sanitary
- = Stormwater Conveyance Channel
- = Rip Rap
- = TMDL Sampling Location
- = Drainage Receptor




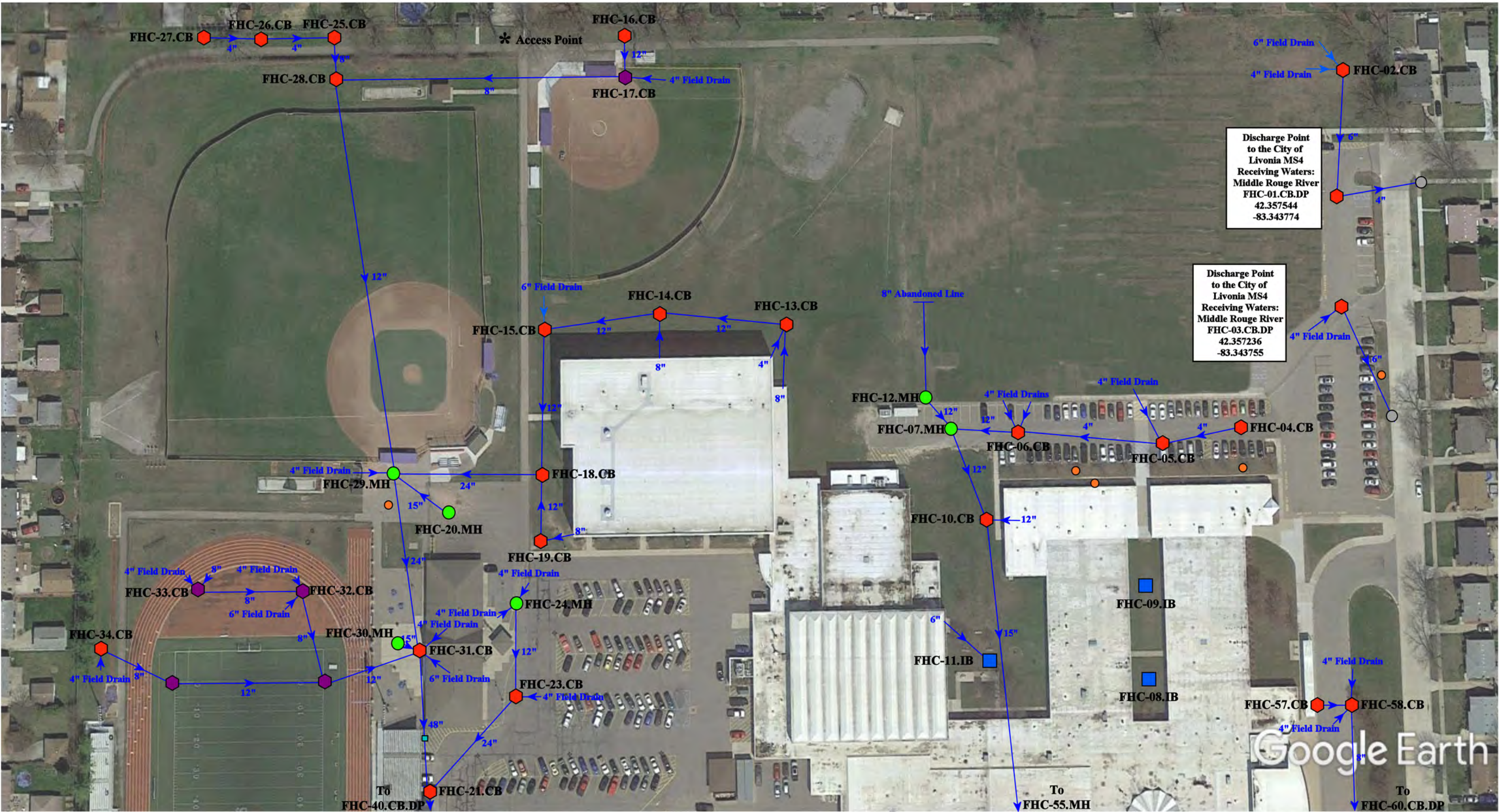
28550 Ann Arbor Trail, Westland, Michigan 48185		
Cooper Upper Elementary School		Revision Date : 01/23/2020
Livonia Public Schools		Drawn by: JP
		Reviewed: LK
		Page #: 1 of 1
		Scale: Not to Scale
37720 Interchange Drive Farmington Hills, MI 48335 Phone: 248-426-0165 Fax: 248-427-0305		





















- = Catch Basin
- = Manhole
- = Infiltration Basin
- = City of Livonia MS4
- = TMDL Sampling Location
- = Erosion Area




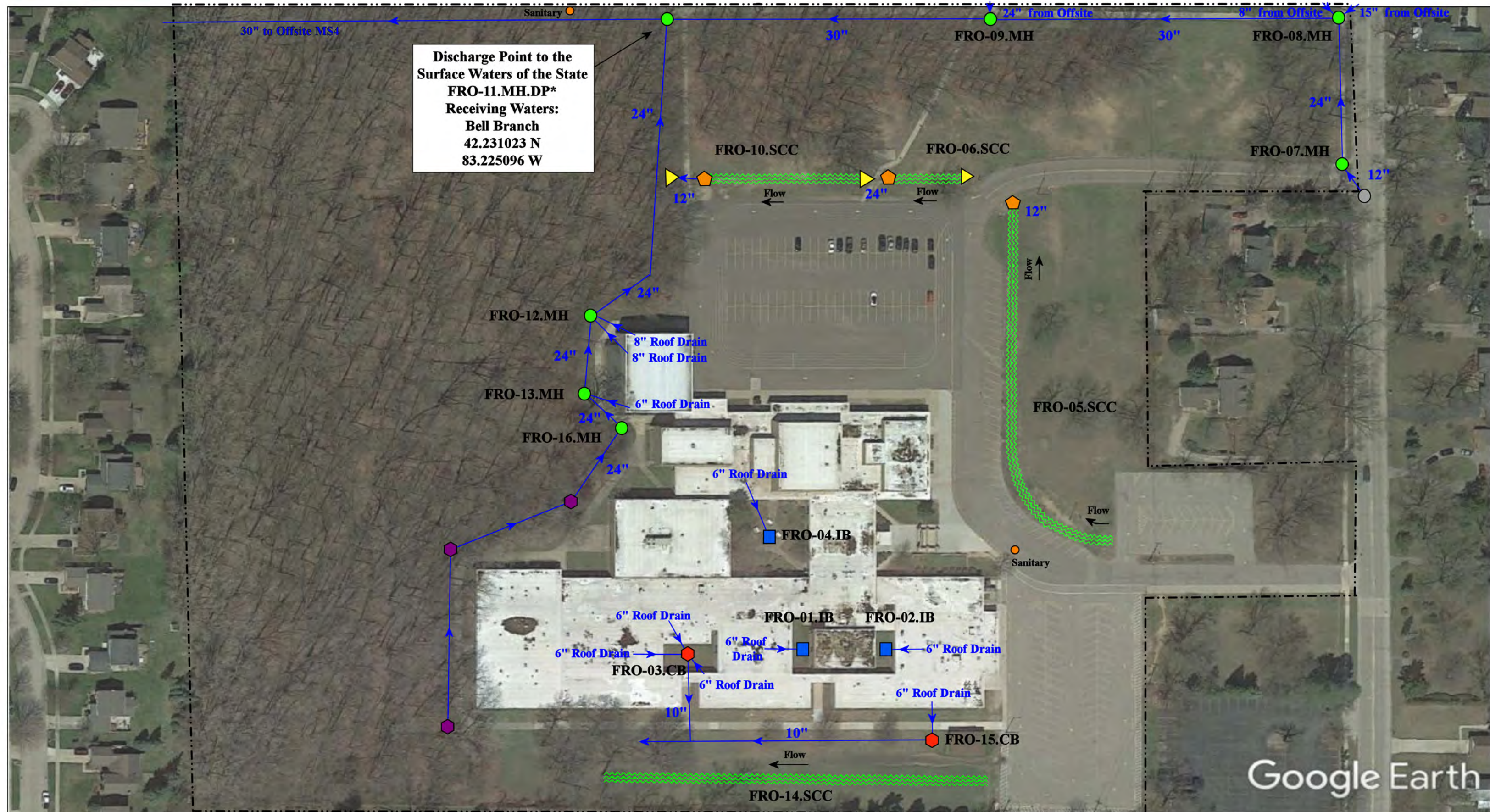
29100 West Chicago, Livonia, Michigan 48150		
Emerson Middle School		Revision Date : 08/13/2021
Livonia Public Schools		Drawn by: AP
 environmental group		Reviewed: LK
		Page #: 1 of 1
		Scale: Not to Scale
37720 Interchange Drive Farmington Hills, MI 48335 Phone: 248-426-0165 Fax: 248-427-0305		



31000 Joy Road/ 9101 Hillcrest Drive, Livonia, MI 48150			
Franklin High School/ McKinley Elementary School COMPLEX			
Livonia Public Schools			
		Revision Date :	07/22/2022
		Drawn by:	BJK
		Reviewed:	LNK
		Page #:	1 of 2
		Scale:	Not to Scale

 = Catch Basin	 = Infiltration Basin	 = Buried Structure	 = Pond/Basin
 = Manhole	 = Open Pipe Outlet	 = Stabilized Outlet	 = Swale/Stormwater Conveyance Channel
 = Basin Drain	 = Drainage Receptor	 = Flow Splitter	 = Underground Detention System
 = Offsite MS4	 = Trench Drain	 = Hydrodynamic Separator	
 = Sanitary	 = Property Lines		

North




- | | | |
|----------------------|---------------------|--------------------------|
| = Catch Basin | = Open Pipe Outlet | = City of Livonia MS4 |
| = Infiltration Basin | = Drainage Receptor | = TMDL Sampling Location |
| = Manhole | = Buried Structure | |



14041 Stark Rd. Livonia, MI 48154

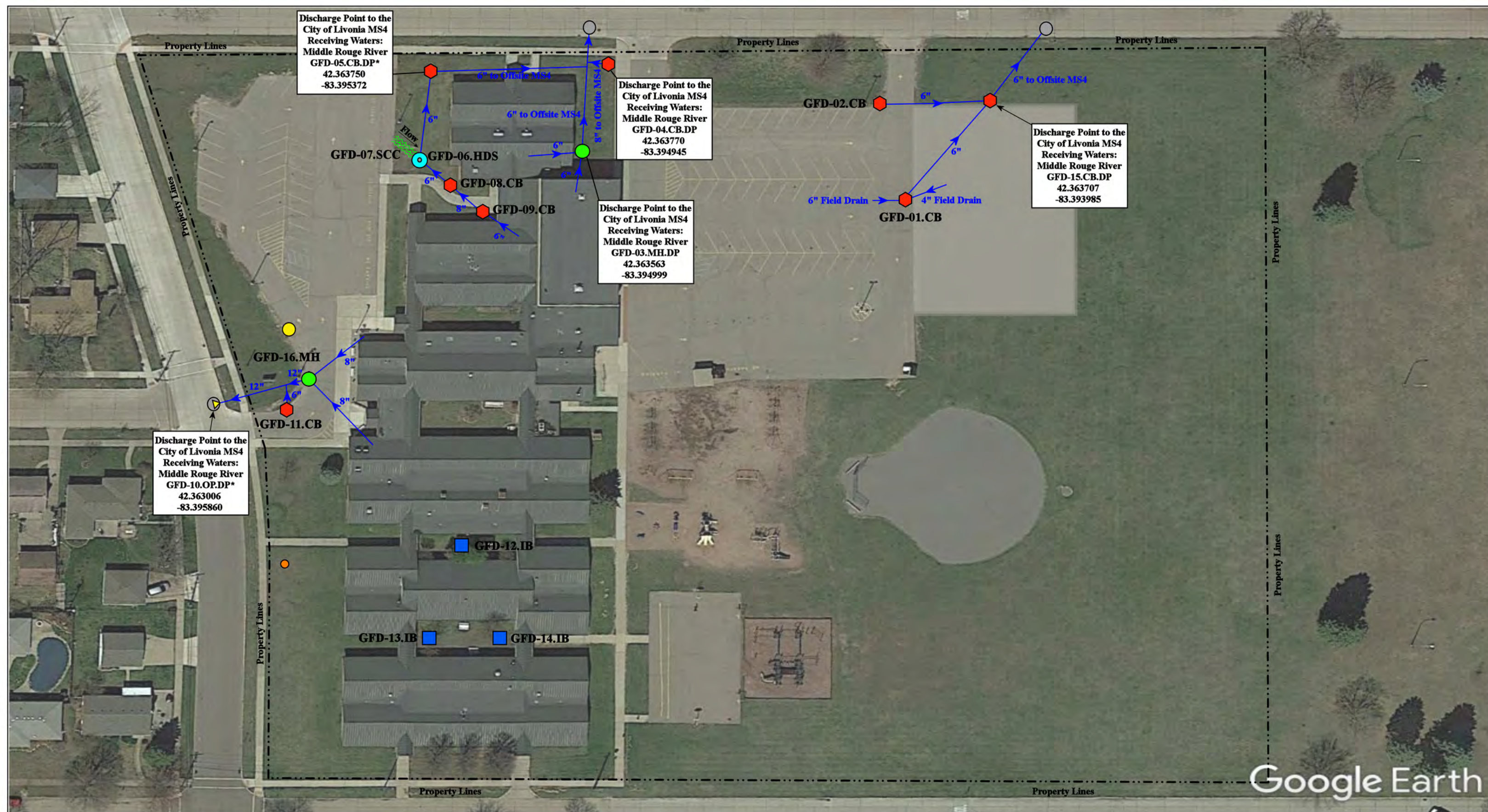
Frost Middle School

Livonia Public Schools



37720 Interchange Drive
Farmington Hills, MI 48335
Phone: 248-426-0165
Fax: 248-427-0305

Revision Date :	07/08/2020
Drawn by:	AP
Reviewed:	LE
Page #:	1 of 1
Scale:	Not to Scale



Google Earth

- | | | | |
|-----------------|------------------------|----------------------------------|---|
| ● = Catch Basin | ■ = Infiltration Basin | ● = Water Main | ● = Pond/Basin |
| ● = Manhole | ▲ = Open Pipe Outlet | ● = Stabilized Outlet | ≡ = Swale/Stormwater Conveyance Channel |
| ● = Basin Drain | ● = Drainage Receptor | ● = Flow Splitter | ● = Hydrodynamic Separator |
| ● = Offsite MS4 | — = Trench Drain | ● = Underground Detention System | |
| ● = Sanitary | - - - = Property Lines | | |



10218 Arthur St. Livonia, MI 48150

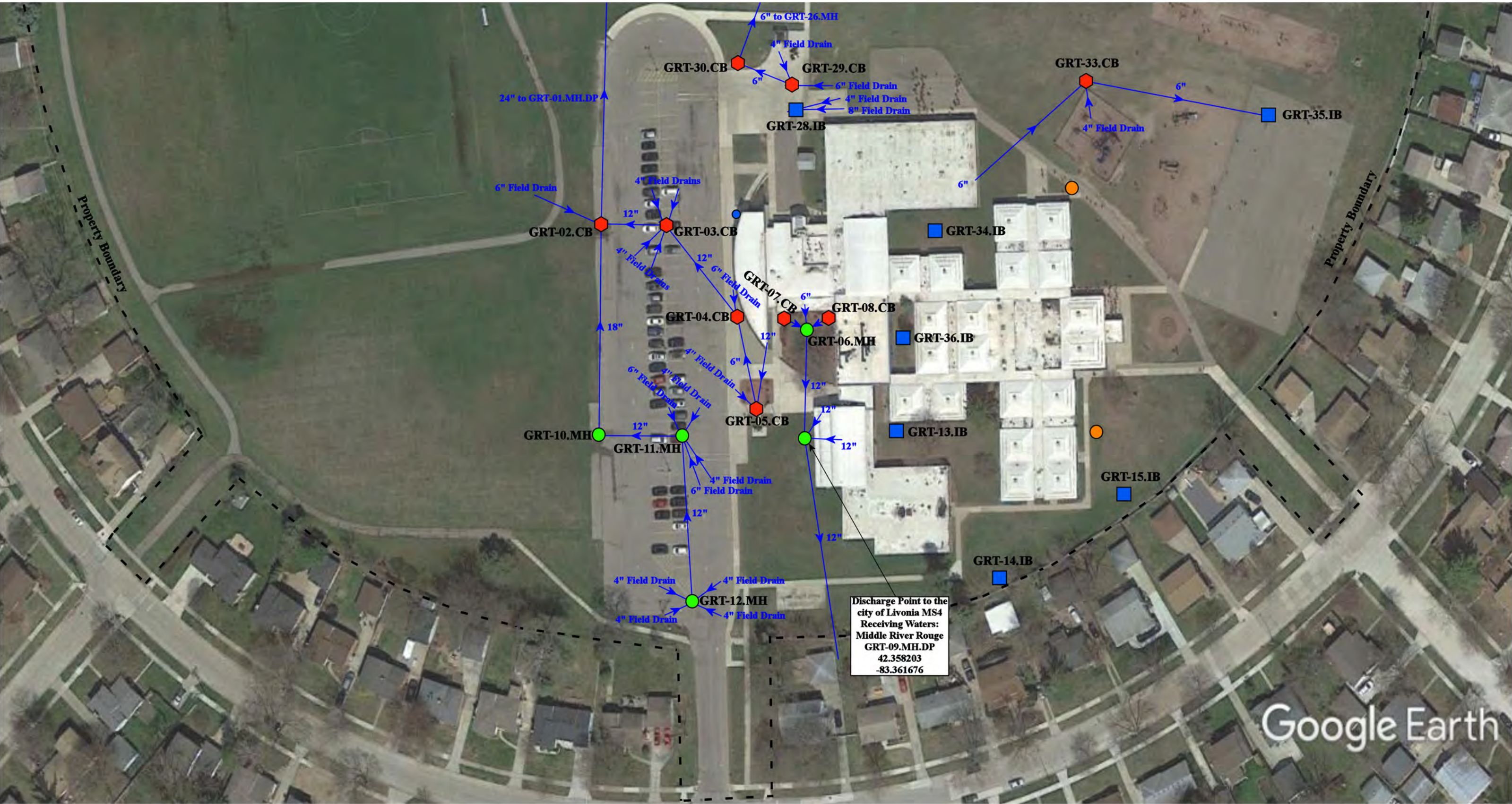
Garfield Community Center

Livonia Public Schools



37720 Interchange Drive
Farmington Hills, MI 48335
Phone: 248-426-0165
Fax: 248-427-0305

Revision Date :	06/21/2022
Drawn by:	WM
Reviewed:	EG
Page #:	1 of 1
Scale:	Not to Scale

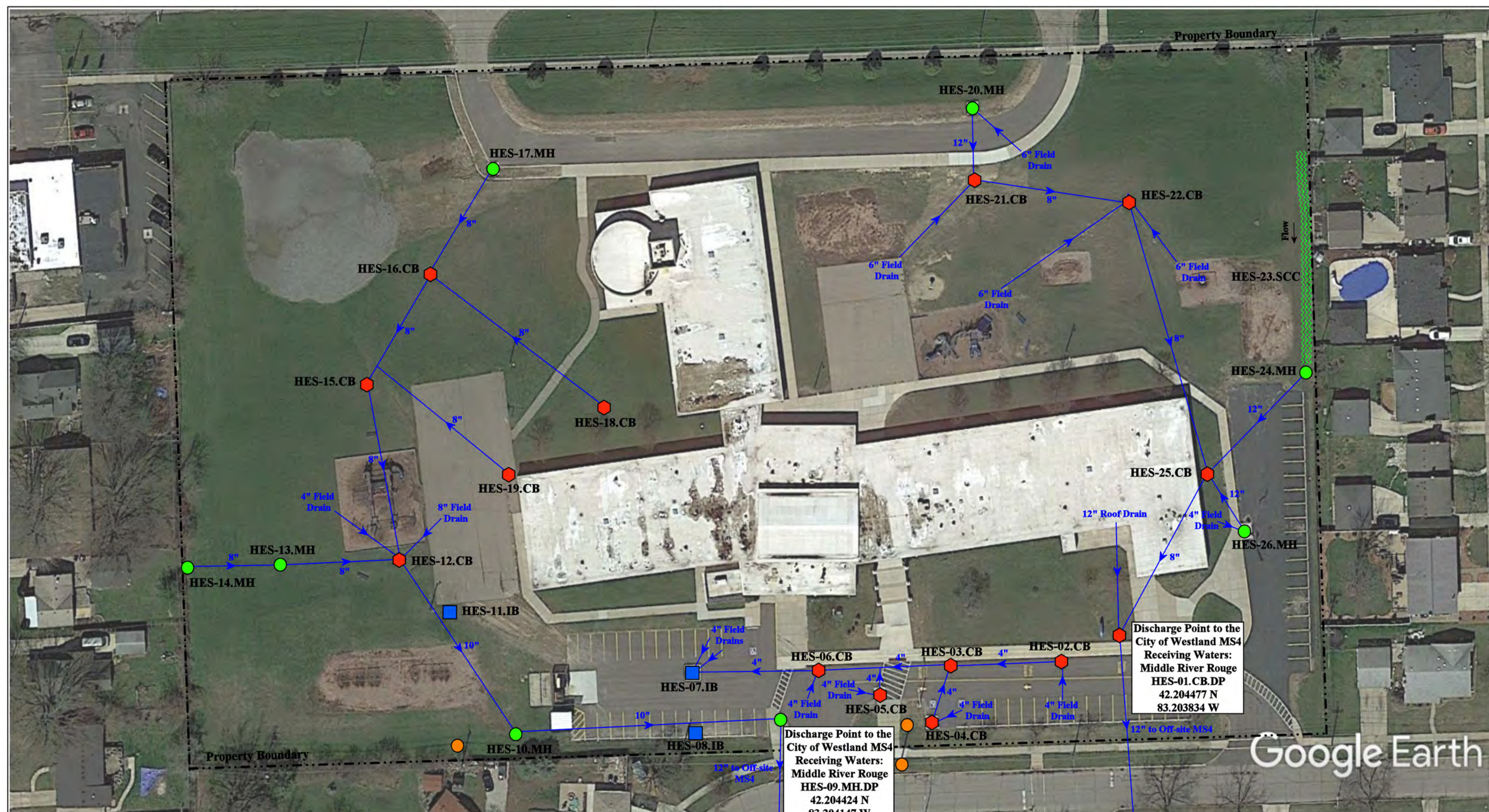


- | | | | |
|---------------|----------------------|--------------------------|--------------------------------|
| = Catch Basin | = Infiltration Basin | = Buried Structure | = Pond/Basin |
| = Manhole | = Open Pipe Outlet | = Stabilized Outlet | = Swale/Stormwater |
| = Basin Drain | = Drainage Receptor | = Flow Splitter | = Conveyance Channel |
| = Offsite MS4 | = Trench Drain | = Hydrodynamic Separator | = Underground Detention System |
| = Sanitary | = Property Lines | | |



9300 Hubbard St., Livonia, Michigan 48150		
Grant Elementary School		Revision Date : 06/21/2022
Livonia Public Schools		Drawn by: JP
		Reviewed: LK
		Page #: 1 of 2
		Scale: Not to Scale

37720 Interchange Drive
Farmington Hills, MI 48335
Phone: 248-426-0165
Fax: 248-427-0305



- = Catch Basin
- = Manhole
- = Infiltration Basin

- = Sanitary
- = Stormwater Conveyance Channel



30600 Louise Court, Westland, Michigan 48185

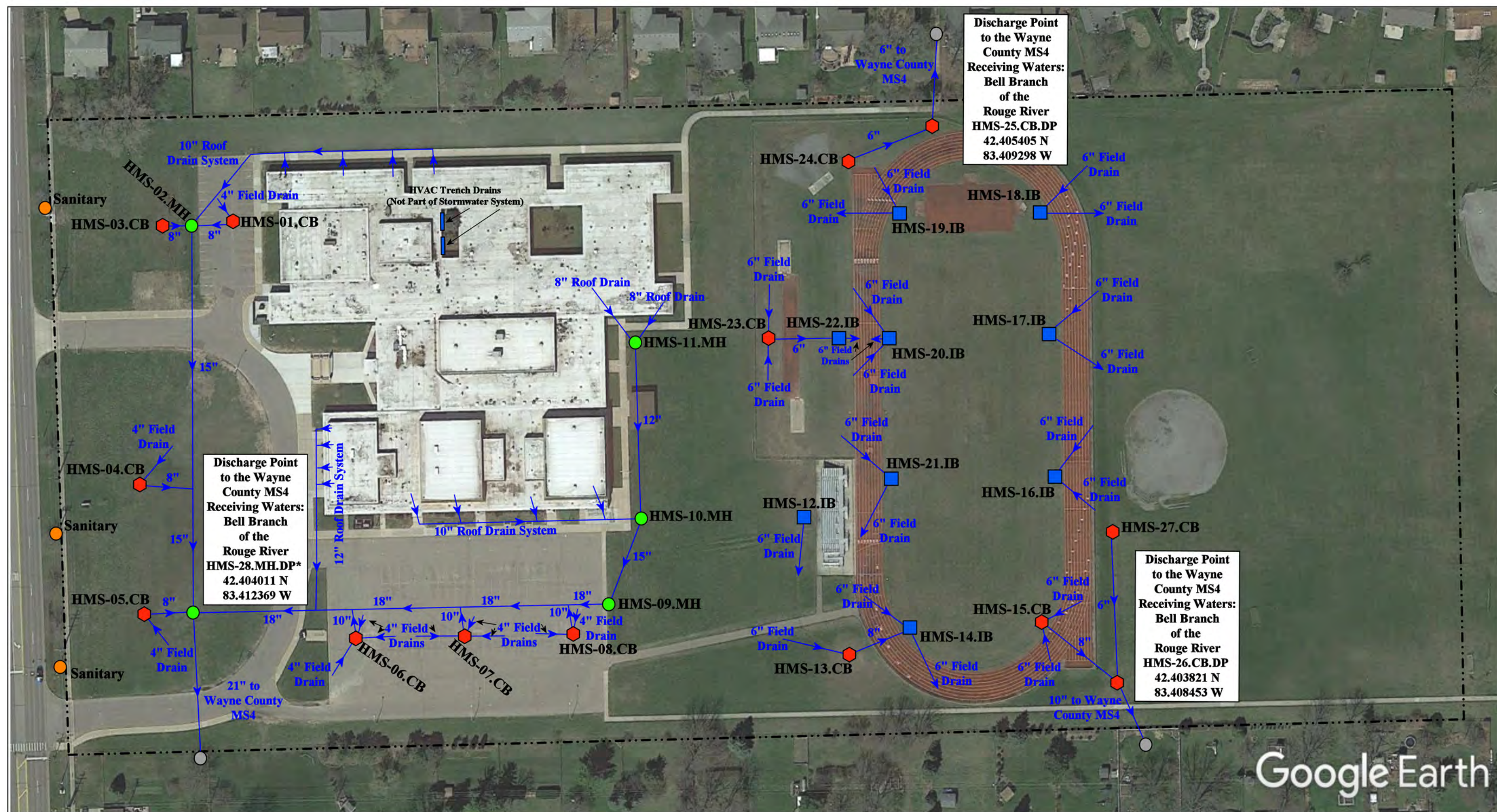
Hayes Elementary School

Livonia Public Schools




37720 Interchange Drive
Farmington Hills, MI 48335
Phone: 248-426-0165
Fax: 248-427-0305

Revision Date :	1/8/2019
Drawn by:	JP
Reviewed:	LK
Page #:	1 of 1
Scale:	Not to Scale

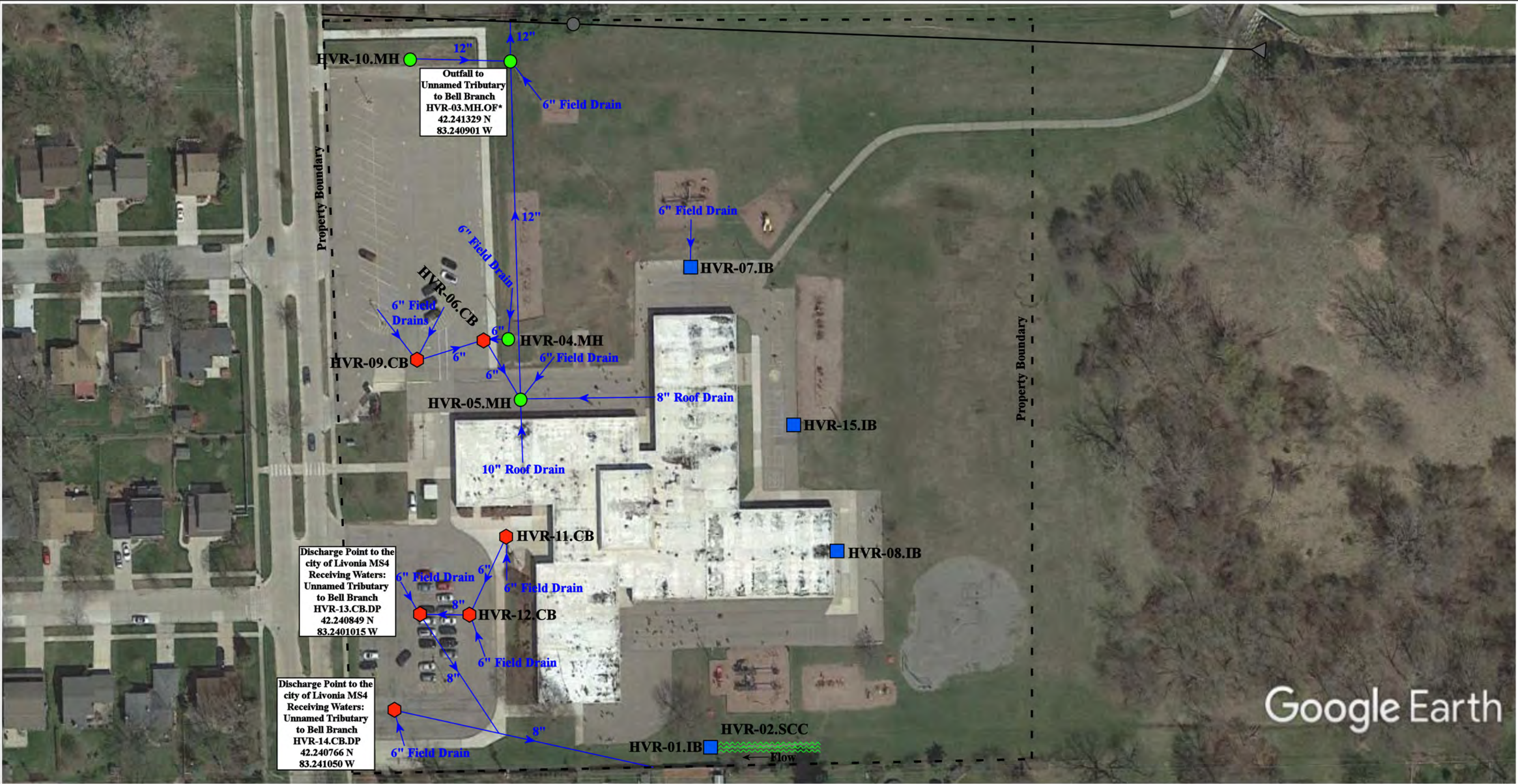


- = Catch Basin
- = Manhole
- = Infiltration Basin
- = Wayne County MS4
- = TMDL Sampling Location



16200 Newburgh Road, Livonia, Michigan 48154		
Holmes Middle School		Revision Date : 09/30/2019
Livonia Public Schools		Drawn by: AK
		Reviewed: AP
		Page #: 1 of 1
		Scale: Not to Scale

37720 Interchange Drive
Farmington Hills, MI 48335
Phone: 248-426-0165
Fax: 248-427-0305



🔴 = Catch Basin

🟢 = Manhole

🟦 = Infiltration Basin

🌊 = Stormwater Conveyance Channel

🔵 = Tributary to Wolfram Drain of Bell Branch

* = TMDL Sampling Location

North



15900 Levan Road, Livonia, Michigan 48154

Hoover Elementary School

Livonia Public Schools



37720 Interchange Drive
Farmington Hills, MI 48335
Phone: 248-426-0165
Fax: 248-427-0305

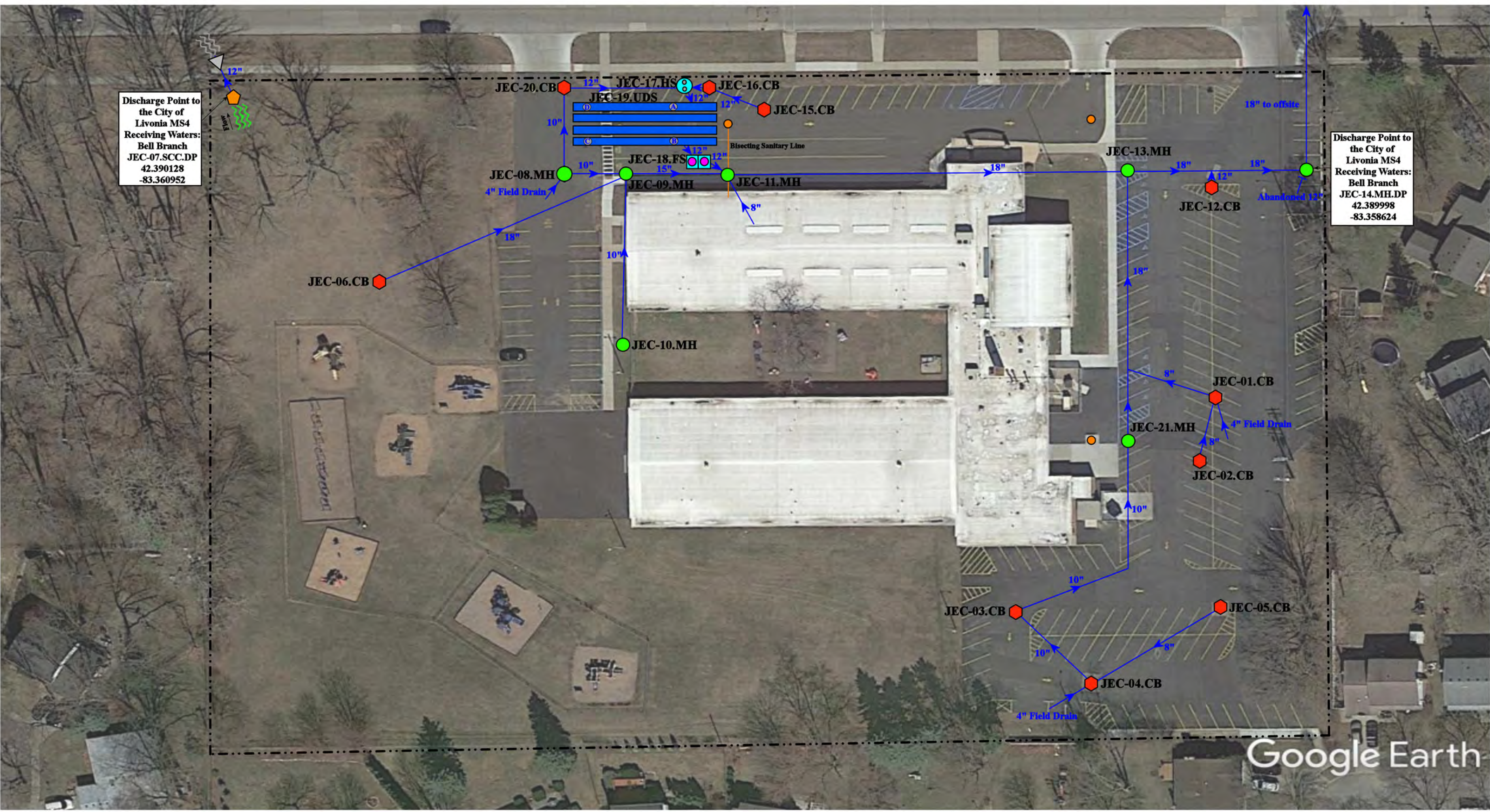
Revision Date : 02/04/2020

Drawn by: JP

Reviewed: LK

Page #: 1 of 1

Scale: Not to Scale

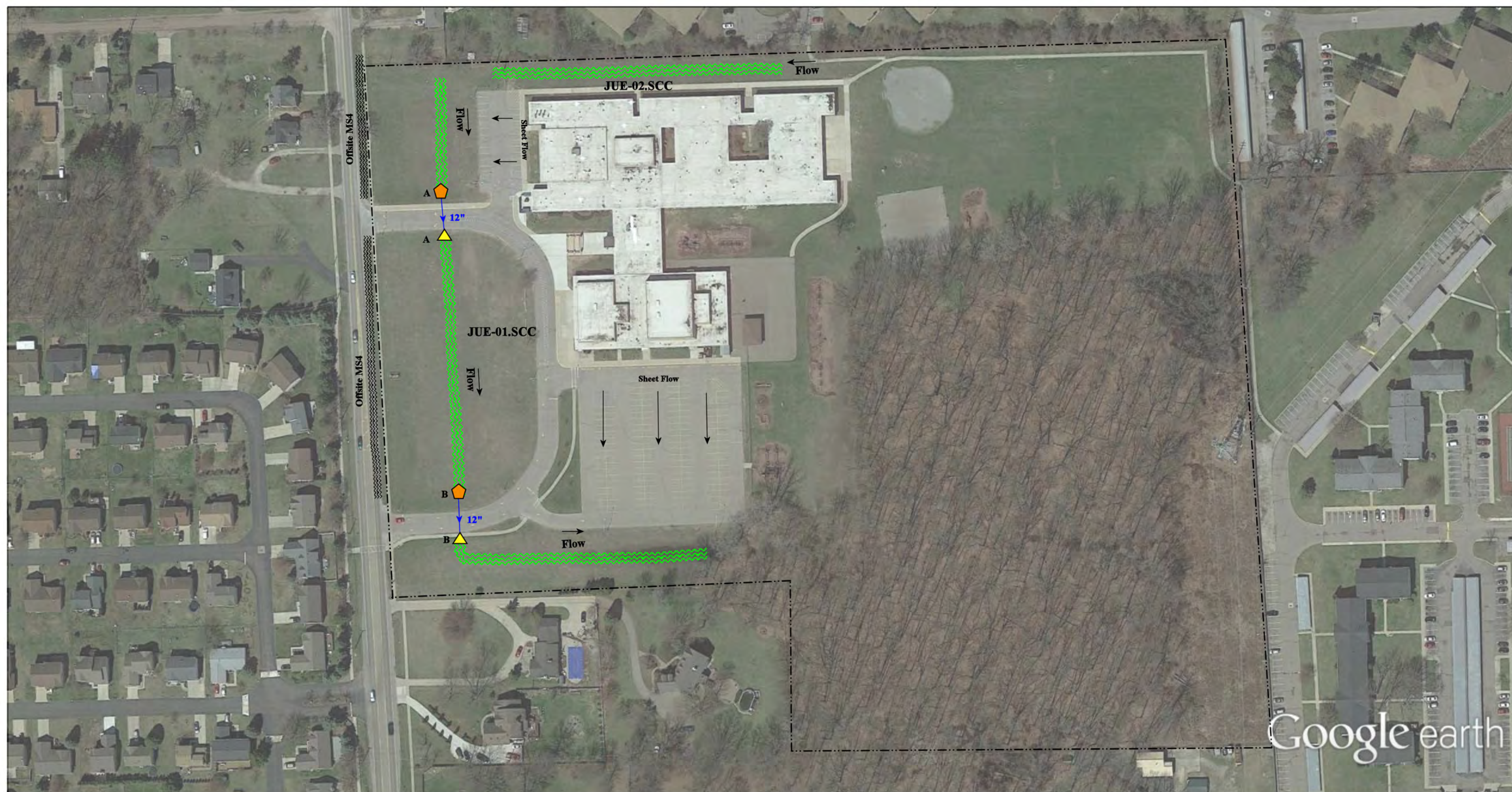


= Catch Basin	= Infiltration Basin	= Buried Structure	= Pond/Basin
= Manhole	= Open Pipe Outlet	= Stabilized Outlet	= Swale/Stormwater
= Basin Drain	= Drainage Receptor	= Flow Splitter	= Conveyance Channel
= Offsite MS4	= Trench Drain	= Hydrodynamic Separator	= Underground Detention System
= Sanitary	= Property Lines		



32025 Lyndon, Livonia, MI 48154		Date:	06/21/22
Jackson Early Childhood Center		Drawn by:	WM
Livonia Public Schools		Reviewed:	EL
		Page #:	1 of 1
		Scale:	Not to Scale

37720 Interchange Drive
Farmington Hills, MI 48335
Phone: 248-426-0165
Fax: 248-427-0305



 = Stormwater Conveyance Channel

 = Property Boundaries

 = Open Pipe Outlet

 = Drainage Receptor

North



8400 Hix, Westland, MI 48185

Johnson Upper Elementary School

Livonia Public Schools



37720 Interchange Drive
Farmington Hills, MI 48335
Phone: 248-426-0165
Fax: 248-427-0305

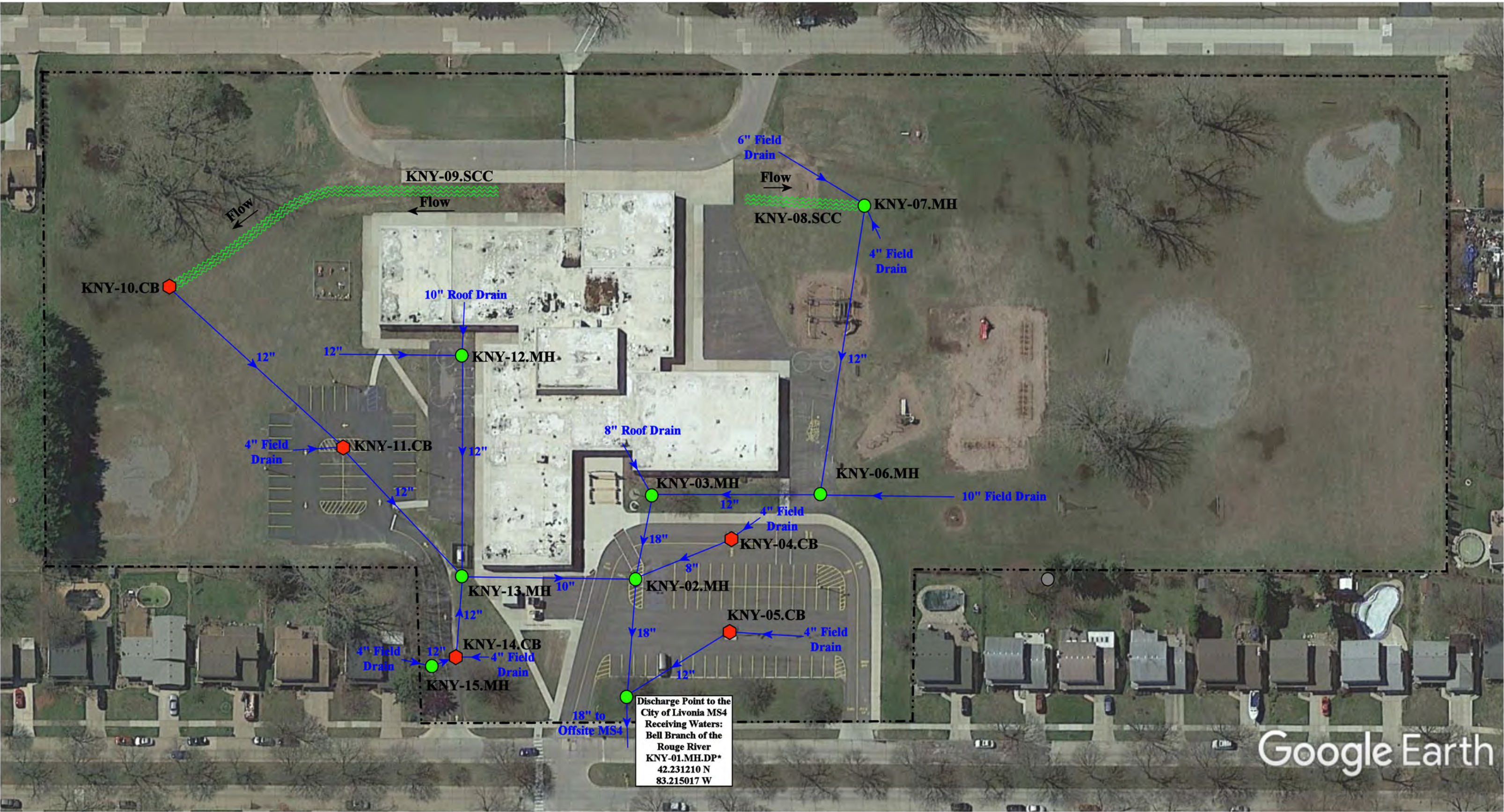
Revision
Date : 09/05/2018

Drawn by: AP

Reviewed: JP

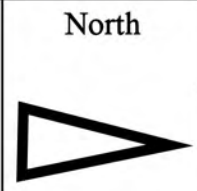
Page #: 1 of 1


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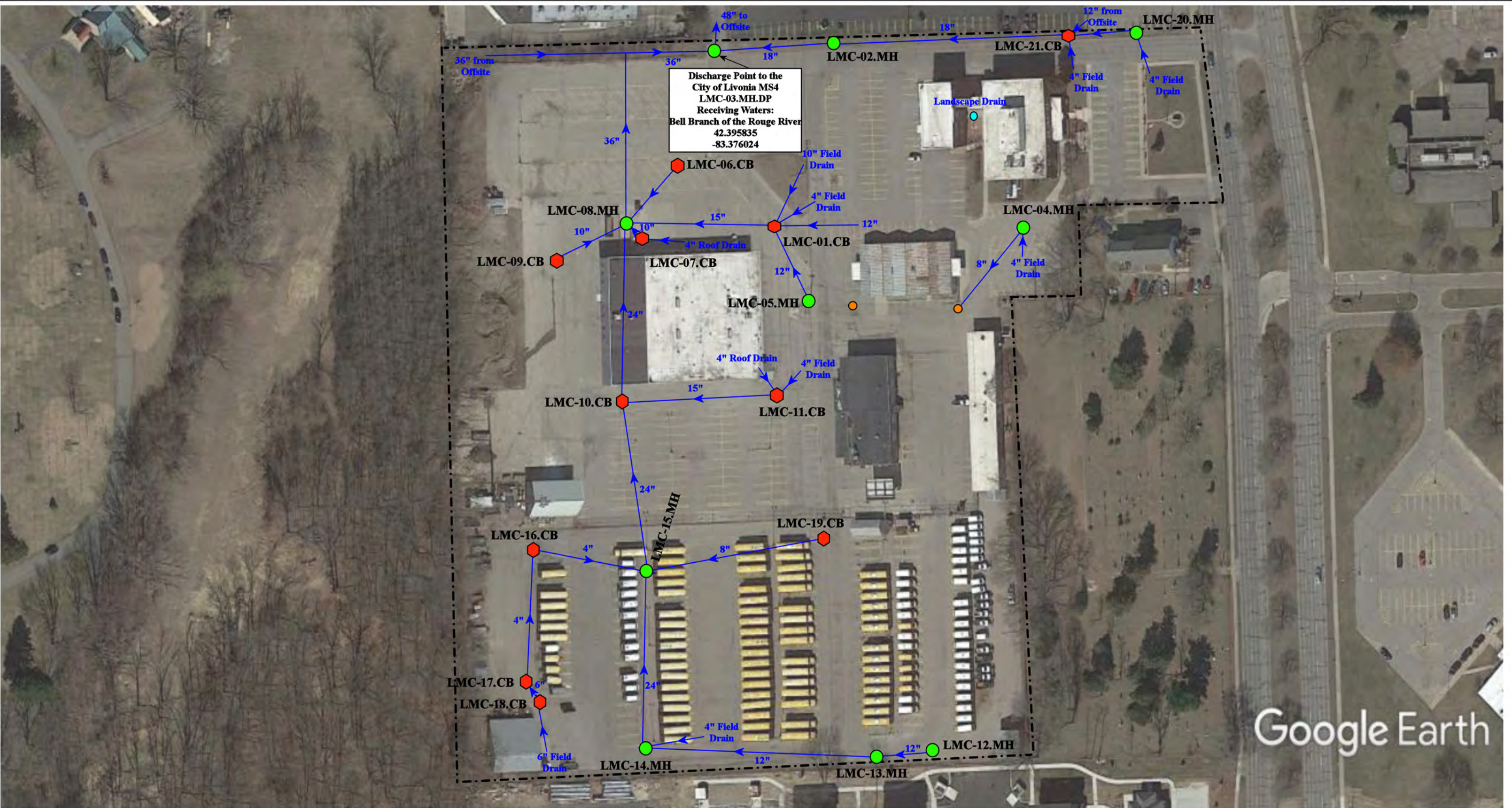


Google Earth

- = Manhole
- = Catch Basin
- - - = Property Boundary
- ≡ = Stormwater Conveyance Channel
- = City of Livonia MS4
- * = TMDL Sampling Location




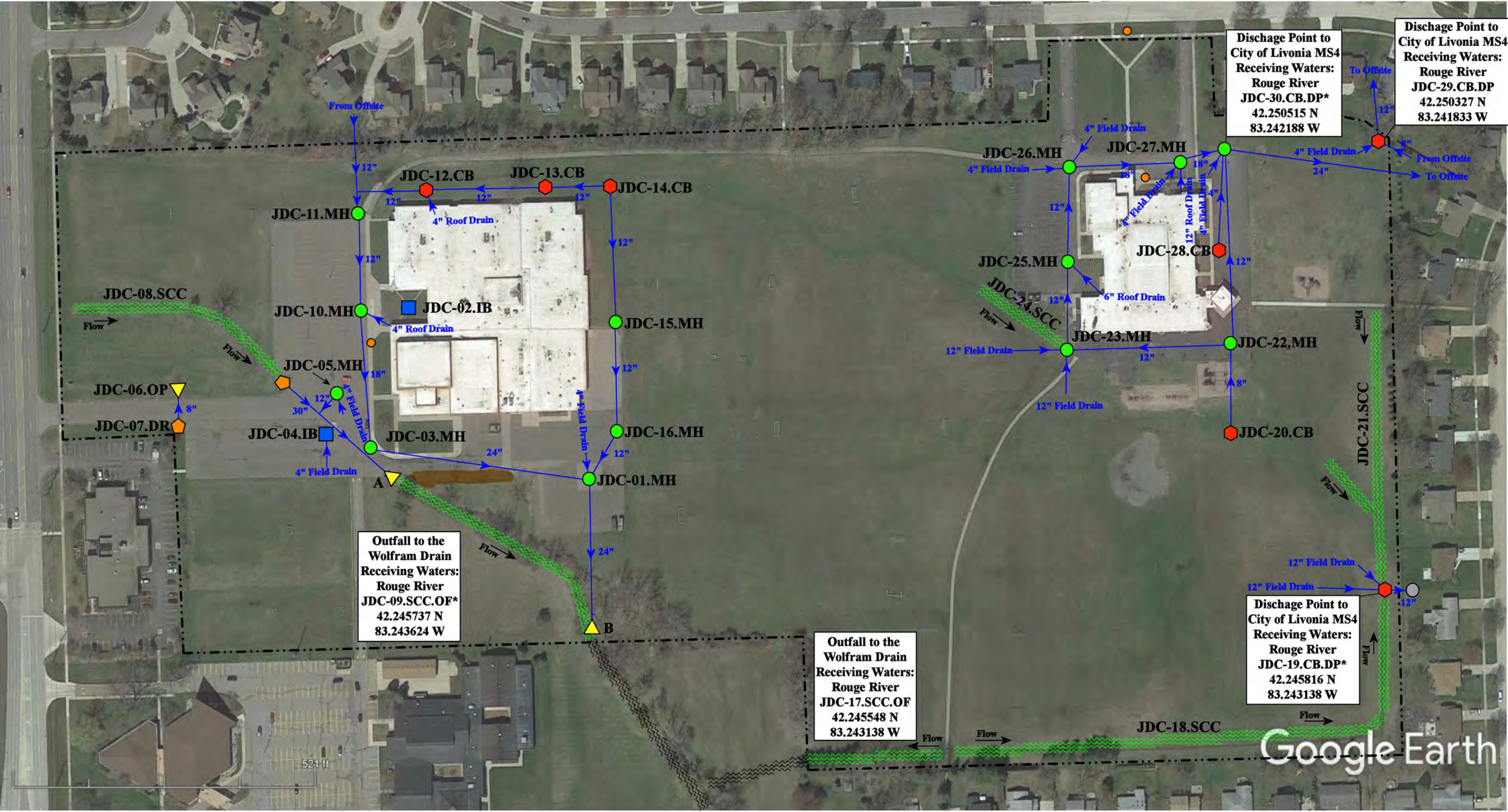
14201 Hubbard Street, Livonia, Michigan 48154		
Kennedy Elementary School		Revision Date : 09/30/2019
Livonia Public Schools		Drawn by: JP
		Reviewed: LK
		Page #: 1 of 1
		Scale: Not to Scale
37720 Interchange Drive Farmington Hills, MI 48335 Phone: 248-426-0165 Fax: 248-427-0305		



-  = Catch Basin
-  = Manhole
-  = Property Lines
-  = Sanitary Sewer




15125 Farmington Road, Livonia, Michigan 48154		
Maintenance Complex		Revision Date : 11/10/2020
		Drawn by: JK
Livonia Public Schools		Reviewed: KD
	37720 Interchange Drive Farmington Hills, MI 48335 Phone: 248-426-0165 Fax: 248-427-0305	Page #: 1 of 1
		Scale: Not to Scale



- | | | |
|----------------------|---------------------|---------------------------------|
| = Manhole | = Drainage Receptor | = Sanitary Sewer |
| = Catch Basin | = Open Pipe Outlet | = TMDL Sampling Location |
| = Infiltration Basin | = Offsite MS4 | = Stormwater Conveyance Channel |
| | | = Erosion Area |




36611 Curtis Road, Livonia, MI 48152			Revision Date :	09/24/2019
Niji-Iro Elementary and Dickinson Center			Drawn by:	AS
Livonia Public Schools			Reviewed:	AP
 37720 Interchange Drive Farmington Hills, MI 48335 Phone: 248-426-0165 Fax: 248-427-0305			Page #:	1 of 1
			Scale:	Not to Scale

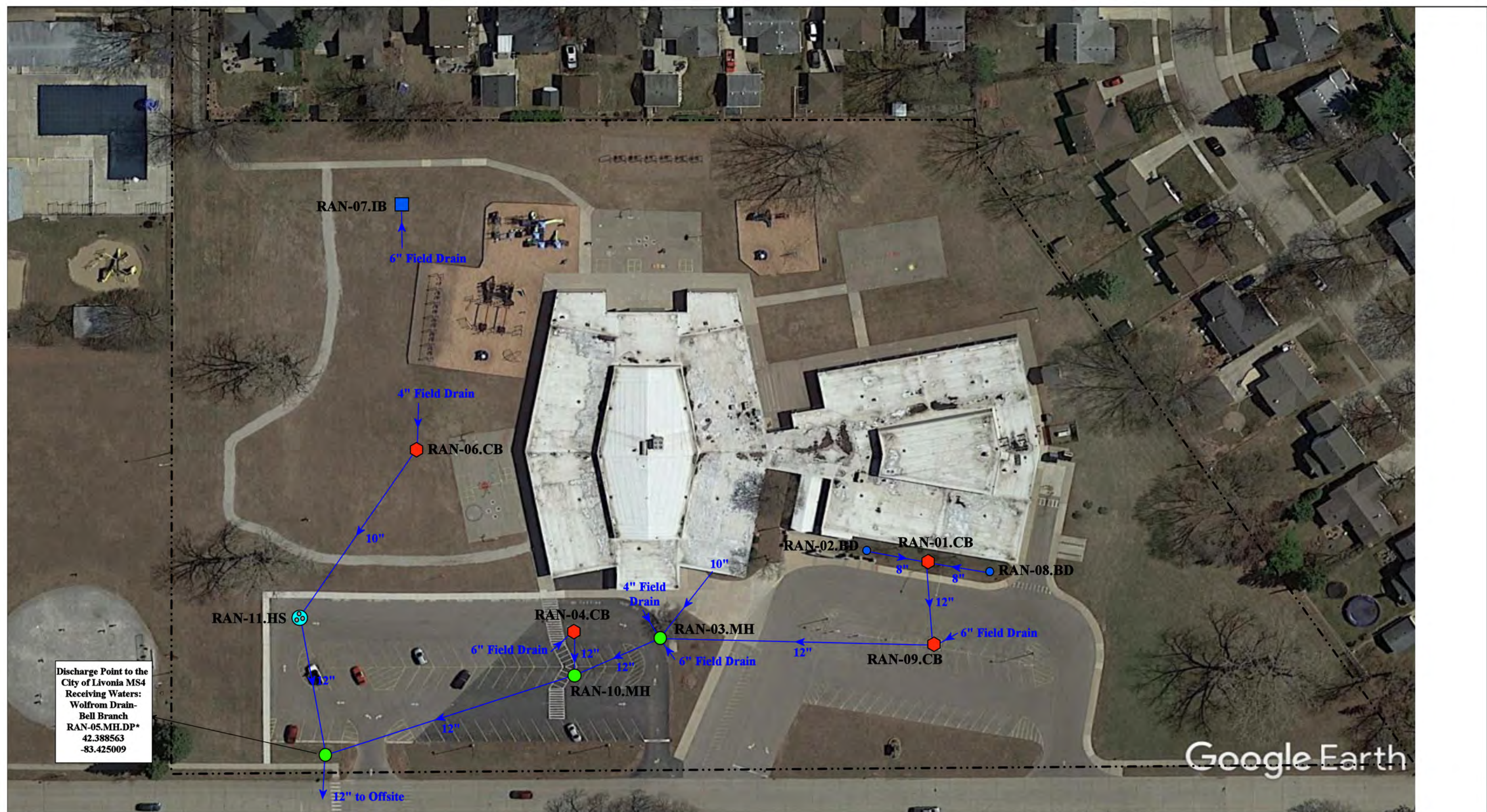


- | | | | |
|---------------|----------------------|--------------------------|--------------------------------|
| = Catch Basin | = Infiltration Basin | = Buried Structure | = Pond/Basin |
| = Manhole | = Open Pipe Outlet | = Stabilized Outlet | = Swale/Stormwater |
| = Basin Drain | = Drainage Receptor | = Flow Splitter | = Conveyance Channel |
| = Offsite MS4 | = Trench Drain | = Hydrodynamic Separator | = Underground Detention System |
| = Sanitary | = Property Lines | | |



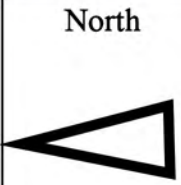
34715 Lyndon Street, Livonia MI 48154			Revision Date :	01/03/2022
Parcel # 1			Drawn by:	EMB
Livonia Public Schools			Reviewed:	LEK
			Page #:	1 of 1
			Scale:	Not to Scale

37720 Interchange Drive
Farmington Hills, MI 48335
Phone: 248-426-0165
Fax: 248-427-0305

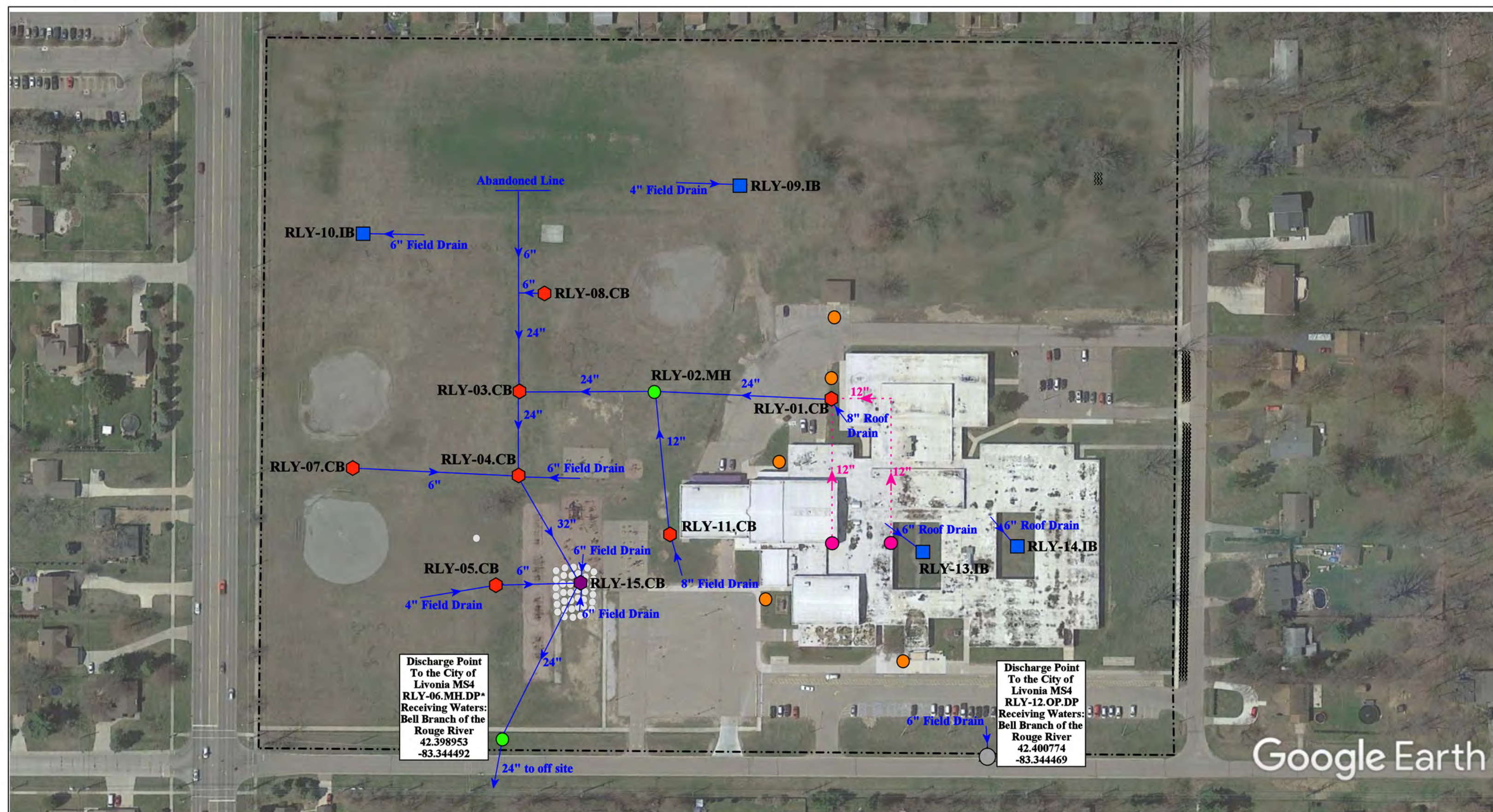


Discharge Point to the
City of Livonia MS4
Receiving Waters:
Wolfom Drain-
Bell Branch
RAN-05.MH.DP*
42.388563
-83.425009

= Catch Basin	= Infiltration Basin	= Buried Structure	= Pond/Basin
= Manhole	= Open Pipe Outlet	= Stabilized Outlet	= Swale/Stormwater Conveyance Channel
= Basin Drain	= Drainage Receptor	= Flow Splitter	= Underground Detention System
= Offsite MS4	= Trench Drain	= Hydrodynamic Separator	
= Sanitary	= Property Lines		



14470 Norman St., Livonia, Michigan 48150	
Randolph Elementary School	
Livonia Public Schools	
	37720 Interchange Drive Farmington Hills, MI 48335 Phone: 248-426-0165 Fax: 248-427-0305
Revision Date:	06/21/2022
Drawn by:	BJZ
Reviewed:	LK
Page #:	1 of 1
Scale:	Not to Scale



- = Catch Basin
- = Manhole
- = Infiltration Basin
- = Buried Strcture

- = Rip Rap
- = Sanitary
- = City of Livonia MS4
- = Property Boundary

- = Sump Pump
- = Sump line
- = TMDL Sampling Locations

North



15555 Henry Ruff Street, Livonia, Michigan 48154

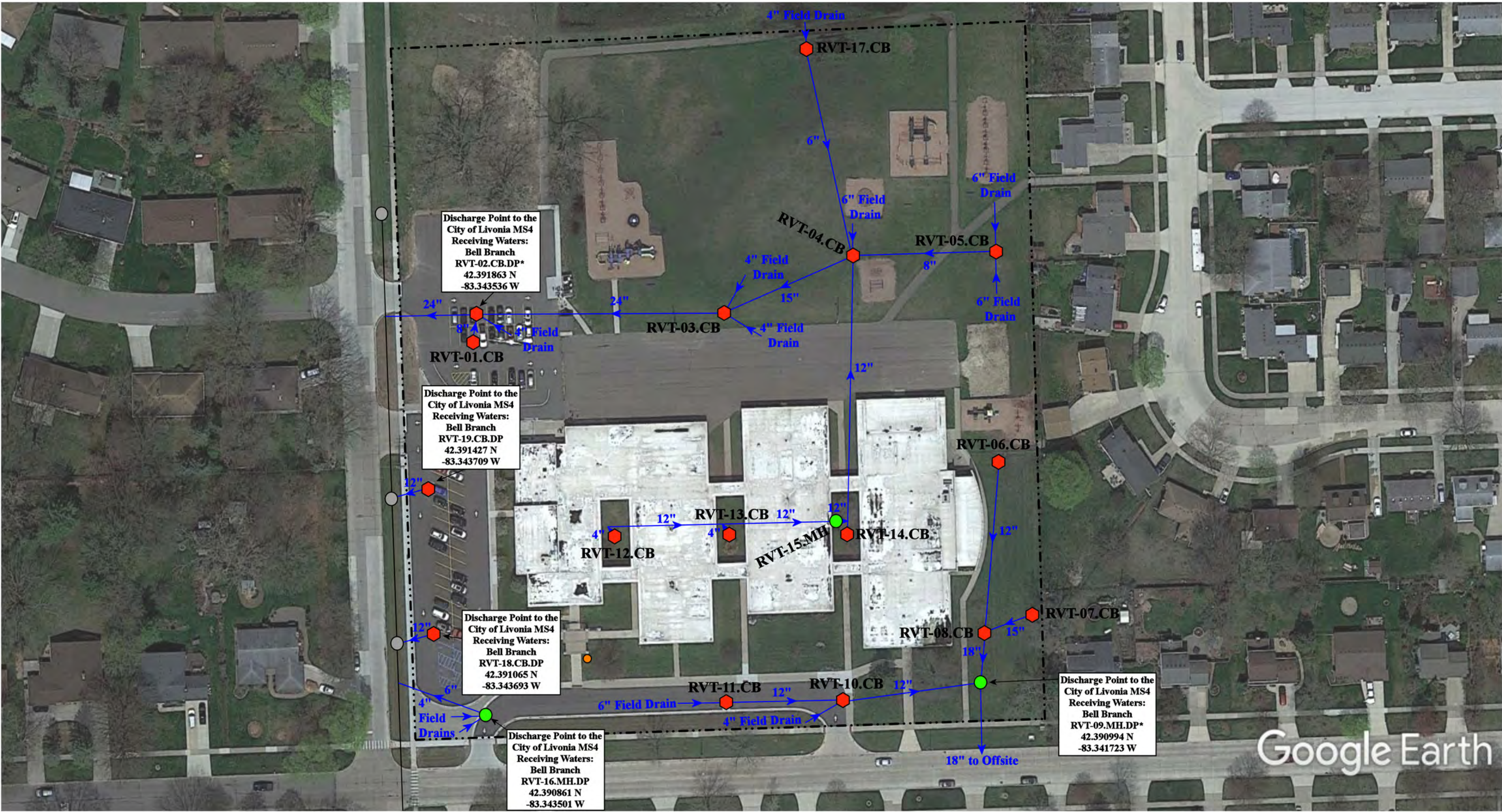
Riley Upper Elementary School


Livonia Public Schools






37720 Interchange Drive
Farmington Hills, MI 48335
Phone: 248-426-0165
Fax: 248-427-0305


Revision Date :	12/07/21
Drawn by:	MRW
Reviewed:	BJK
Page #:	1 of 1
Scale:	Not to Scale




-  = Catch Basin

 = Manhole

 = Sanitary
-  = TMDL Sampling Location

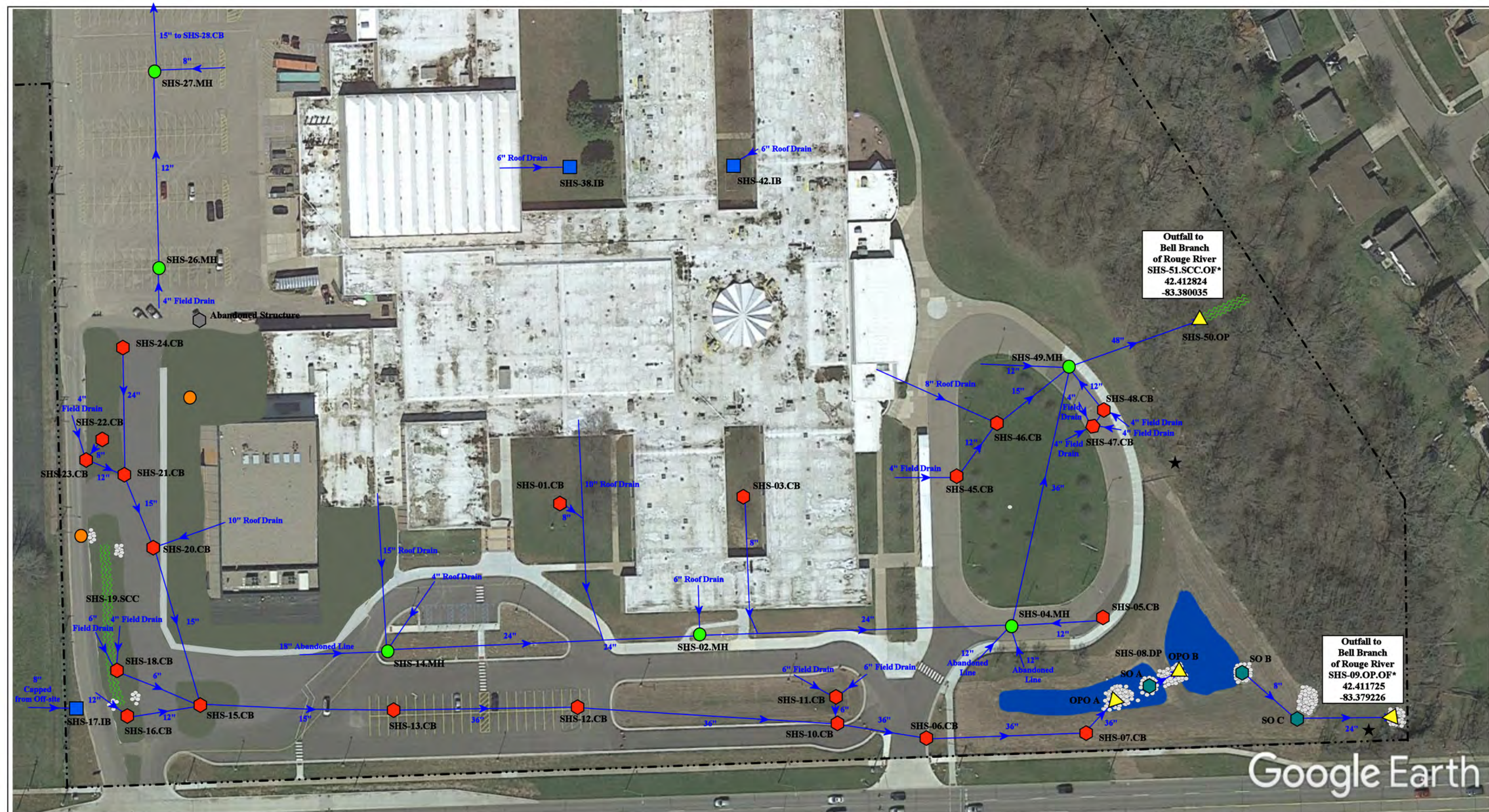
 = Buried City of Livonia MS4

 = Property Line



30200 Lyndon, Livonia, Michigan 48154		
Roosevelt Elementary School		Revision Date : 07/28/2020
Livonia Public Schools		Drawn by: KD
		Reviewed: CD
		Page #: 1 of 1
		Scale: Not to Scale


37720 Interchange Drive
Farmington Hills, MI 48335
Phone: 248-426-0165
Fax: 248-427-0305

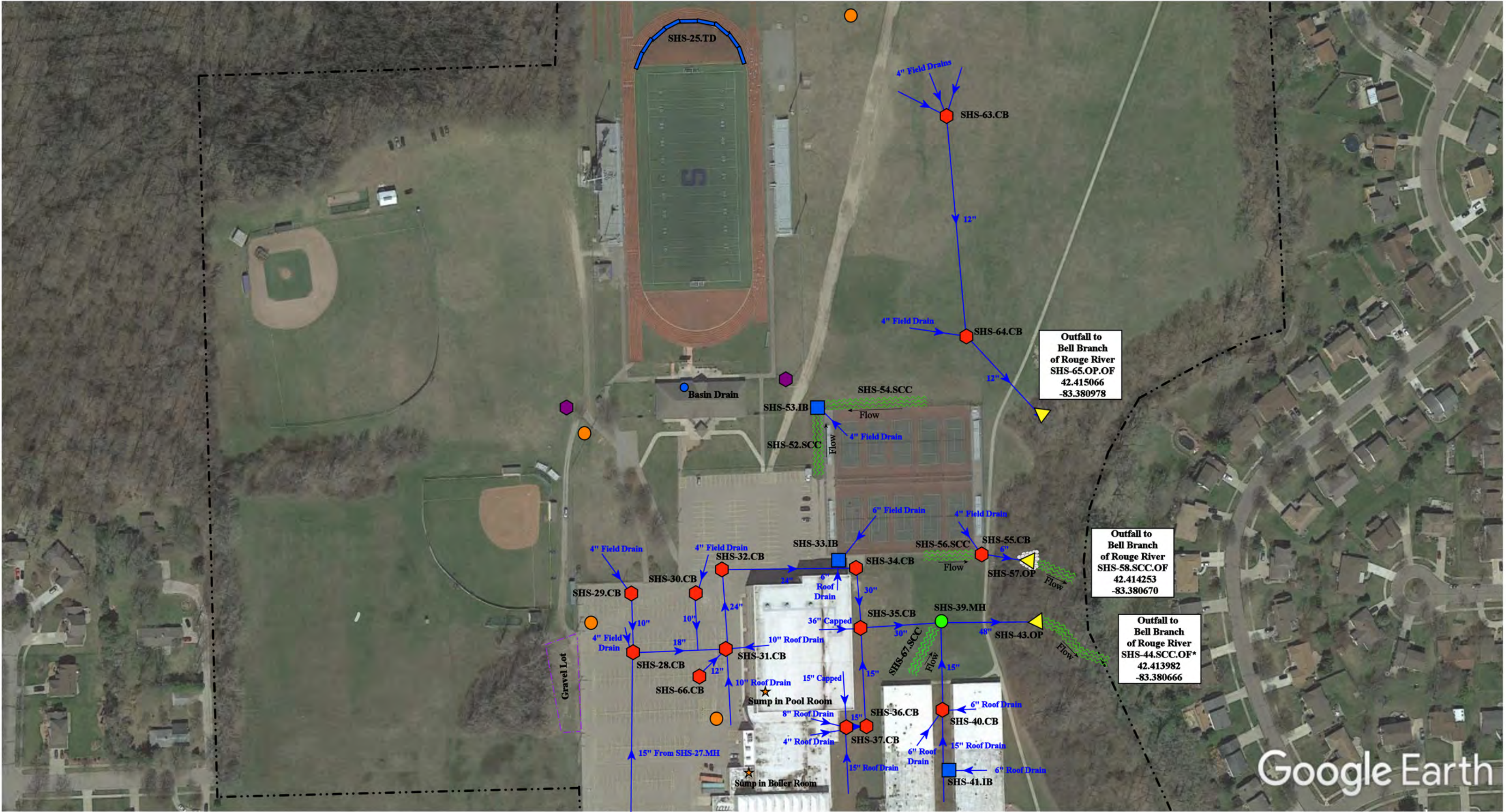


- ⬡ = Catch Basin
- = Manhole
- = Infiltration Basin
- ▲ = Open Pipe Outlet
- = Stabilized Outlet
- = Sanitary Sewer
- ⬢ = Rip Rap
- ~~~~~ = Stormwater Conveyance Channel
- ~~~~~ = Detention Pond
- = Property Boundary

- ★ = Access Point
- * = TMDL Sampling Location




33500 West 6 Mile Road & 33901 Curtis Road, Livonia, Michigan 48152		
Stevenson High School Campus (Stevenson High School & Former Marshall Elementary School/The Learning Tree)		Revision Date : 01/11/2022
Livonia Public Schools		Drawn by: CMJ
 <div> 37720 Interchange Drive Farmington Hills, MI 48335 Phone: 248-426-0165 Fax: 248-427-0305 </div>		Reviewed: EMB
		Page #: 1 of 3
		Scale: Not to Scale



- 🔴 = Catch Basin
- 🟢 = Manhole
- 🔵 = Infiltration Basin
- 🟡 = Open Pipe Outlet
- 🟠 = Sanitary Sewer
- ★ = Sump Pump
- = Trench Drain
- 🜔 = Domestic Water Structure

- 🟢 = Stormwater Conveyance Channel
- = Property Boundary
- 🜔 = Rip Rap
- * = TMDL Sampling Location




33500 West 6 Mile Road & 33901 Curtis Road, Livonia, Michigan 48152			
Stevenson High School Campus (Stevenson High School & Former Marshall Elementary School/The Learning Tree)		Revision Date :	01/11/2022
Livonia Public Schools		Drawn by:	CMJ
 37720 Interchange Drive Farmington Hills, MI 48335 Phone: 248-426-0165 Fax: 248-427-0305		Reviewed:	EMB
		Page #:	2 of 3
		Scale:	Not to Scale



- = Manhole
- = Sanitary Sewer
- = Buried Structure
- - - = Property Boundary



33500 West 6 Mile Road & 33901 Curtis Road, Livonia, Michigan 48152			
Stevenson High School Campus (Stevenson High School & Former Marshall Elementary School/The Learning Tree)		Revision Date :	01/11/22
Livonia Public Schools		Drawn by:	CMJ
		Reviewed:	EMB
		Page #:	3 of 3
		Scale:	Not to Scale
37720 Interchange Drive Farmington Hills, MI 48335 Phone: 248-426-0165 Fax: 248-427-0305			

Appendix “B”

Enforcement Policies and Tracking Forms

District Illicit Discharge/Illegal Dumping Reporting Form
Livonia Public Schools

Date:_____ Time_____

Inspectors:_____

I. ORIGIN OF REPORT

1. Describe the reason for conducting the investigation.

- | | |
|---|---|
| <input type="checkbox"/> Illicit Discharge Inspection (Routine) | <input type="checkbox"/> Facility Staff |
| <input type="checkbox"/> Citizen Complaint | |
| <input type="checkbox"/> Other _____ | |

II. SOURCE

1. Describe location of source of discharge (company name, address, cross streets, physical features, etc.)

2. Describe the Source:

- | | |
|--|--|
| <input type="checkbox"/> Residential | <input type="checkbox"/> Transportation Facility |
| <input type="checkbox"/> Construction Site | <input type="checkbox"/> Custodial |
| <input type="checkbox"/> Other _____ | |

3. Facility of the Source:_____

III. TYPE

1. Describe the type of material discharged:

- | | |
|--|---|
| <input type="checkbox"/> Sanitary Leak/Spill | <input type="checkbox"/> Paint Discharge |
| <input type="checkbox"/> Dumpster Discharge | <input type="checkbox"/> Cleaning Discharge |
| <input type="checkbox"/> Unhardened Cement Discharge | <input type="checkbox"/> Paint Discharge |
| <input type="checkbox"/> Vehicle Repair | <input type="checkbox"/> Vehicle Washing |
| <input type="checkbox"/> Grey Water Discharge | <input type="checkbox"/> Landscape Material Dumping |
| <input type="checkbox"/> Cooling Water Discharge | <input type="checkbox"/> Allowable Discharge |
| <input type="checkbox"/> Other _____ | |

Provide Additional Information:_____

2. Other Sources:

- | |
|---|
| <input type="checkbox"/> Illicit Connection |
| <input type="checkbox"/> Construction Site |
| <input type="checkbox"/> Other _____ |

IV. FOLLOW-UP AND ENFORCEMENT ACTIVITIES

1. Describe Corrective Actions:_____

2. Describe Enforcement Action:

- | | |
|---|---|
| <input type="checkbox"/> None/Incident Resolved | <input type="checkbox"/> Verbal Notice |
| <input type="checkbox"/> Administrative Action | <input type="checkbox"/> Cleaning Discharge |

3. Date Resolved:_____

4. Responsible Party

Signature:_____

Municipal Separate Storm Sewer System Noncompliance Enforcement Tracking
Livonia Public Schools
Permit No. MI0059883

Report Number	Name	Date	Location of Violation	Business/ Organization	Description of Violation	Description of Enforcement Response	Compliance Schedule Date	Date Violation Resolved
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								

Stormwater Management – Illicit Discharge Regulatory Policy

Livonia Public Schools

Permit Number: MI0059883

Issue date: October 1, 2022

This illicit discharge regulatory policy was developed as a regulatory policy for prevention of pollution from storm water runoff and to protect the quality of the waters of the State of Michigan through the regulation of non-stormwater discharges to the municipal separate storm sewer system (MS4) to the maximum extent practicable as required by federal and state law. This regulatory mechanism establishes methods for controlling the introduction of pollutants into the MS4 in order to comply with the requirements of the National Pollutant Discharge Elimination System (NPDES) permit through the Michigan Department of Environment, Great Lakes, and Energy (EGLE). The objectives of the regulatory mechanism are:

1. To regulate the contribution of pollutants to the MS4 by stormwater discharges by any user.
2. To prohibit illicit connections and discharges into the MS4.
3. To establish authority to investigate, inspect, and monitor suspected illicit discharges.

District properties include all Livonia Public Schools properties.

Illicit Discharge means any discharge to, or seepage into the separate stormwater drainage system that is not composed entirely of stormwater or uncontaminated groundwater except discharges pursuant to an NPDES permit.

Illicit Connection means a physical connection to the MS4 separate stormwater system that primarily conveys non-stormwater discharges other than uncontaminated groundwater into the MS4 separate storm sewer system; or a physical connection not authorized or permitted by the local authority, where a local authority requires authorization or a permit for physical connections.

Prohibitions of Illicit Discharges

1. Prohibition of Illicit Discharges:
 - a. Livonia Public Schools prohibits the discharge of non-stormwater discharges into the storm drain system, including but not limited to pollutants or waters containing any pollutants.
 - b. No person shall throw, drain, or otherwise discharge, cause, or allow others under its control to throw, drain, or otherwise discharge into the MS4 any pollutants or waters containing any pollutants, other than stormwater.
2. The following discharge is **not prohibited**:
 - a. This policy excludes prohibitions from the discharge or flows from firefighting activities to the Livonia Public Schools MS4. Discharge or flows from firefighting activities will be

addressed only if they are identified as significant sources of pollutants to surface waters of the state.

- b. The following activities are **not prohibited** under this policy unless they are determined to be significant sources of pollutants to surface waters of the state:
- Water line flushing and discharges from potable water sources.
 - Landscape irrigation runoff, lawn water runoff, and irrigation waters.
 - Diverted stream flows and flows from riparian habitats and wetlands.
 - Rising groundwater and springs.
 - Uncontaminated groundwater infiltration and seepage.
 - Uncontaminated pumped groundwater, except groundwater cleanups specifically authorized by NPDES permits.
 - Air conditioning condensation.

Prohibition of Illicit Connections

1. The construction, use, maintenance, or continued existence of illicit connections to the MS4 is prohibited.
2. This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.
3. A person is considered to be in violation of this regulatory mechanism if the person connects a line conveying sewage to the MS4 or allows such a connection to continue.
4. Improper connections in violation of this regulatory mechanism must be disconnected and redirected.
5. Illicit discharge and connections will be eliminated immediately.

Enforcement

The District Stormwater Program Manager will administer and enforce the stormwater management program, including investigate, inspect, and monitor suspected illicit discharges or illicit connections.

If you witness or think a discharge is taking place, please contact the Livonia Public Schools at (734) 744-2511.

Stormwater Management - Post-Construction Policy & Procedure

Livonia Public Schools

Permit Number: MI0059883

Issue date: October 1, 2022

Applies To: As required by the National Pollutant Discharge Elimination System (NPDES) permit for Livonia Public Schools, the scope of this Guideline includes all development and redevelopment projects on District properties that involve either:

- a. earth disturbance of one (1) acre or greater,
OR
 - b. earth disturbance of less than one (1) acre, but which are part of a larger common plan of development or sale that would disturb one (1) acre or more.
-

Post-Construction Requirements Policy Statement

Livonia Public Schools development and redevelopment projects on District property are regulated under and must comply with the Livonia Public Schools NPDES permit for stormwater discharges, as issued by the Michigan Department of Environment, Great Lakes and Energy (EGLE). The Stormwater Management Post-Construction Requirements Guideline has been developed to provide guidance regarding responsibilities and actions to meet the NPDES permit conditions for development and redevelopment projects on district owned properties.

Post-Construction Plan for Stormwater Management

The post-construction plan for stormwater management on regulated sites **must** include:

- A minimum treatment volume standard to address water quality impacts.
- Channel protection criteria to address resource impairment resulting from flow volumes and rates.
- Review sites with known soil and/or groundwater contamination, including potential “hot spots” and evaluate the use of infiltration BMPs to meet water quality treatment and channel protection criteria to ensure that infiltration BMPs do not exacerbate existing conditions. Hot spots include areas with the potential for significant pollutant loading such as vehicle service and maintenance facilities, vehicle equipment cleaning facilities, fleet storage areas for buses, and outdoor liquid container storage.
- Drawings showing the location of stormwater control measures and the storm system.
- Details on the proposed stormwater control measures.
- Operation & Maintenance (O&M) requirements.
- Supporting information
 - Calculations used for designing all components of the stormwater management systems.
 - Total Suspended Solids (TSS) design removal rates and supporting manufacturer documentation, if applicable.

- Geotechnical report including soil boring and infiltration test data.

The project team [Architecture, Engineering & Construction, Other Project Manager, Project Developer and/or Contractors] shall develop the post-construction stormwater management plan in accordance with this guideline and the NPDES permit.

Water Quality Treatment Volume Standard

The minimum treatment volume standard **must** be either:

- a. Treat the first one (1) inch of runoff from the entire site.
- OR**
- b. Treat the runoff generated from ninety percent (90%) of all runoff-producing storms for the project site, as summarized in MDEQ's memo dated March 24, 2006
https://www.michigan.gov/documents/deq/wrd-hsu-ninety-percent_557709_7.pdf

Total Suspended Solids

The treatment methods must be designed on a site-specific basis to achieve the following:

- a. A minimum of eighty percent (80%) removal of total suspended solids (TSS), as compared with uncontrolled runoff.
- OR**
- b. Discharge concentrations of TSS not to exceed 80 milligrams per liter (80mg/L).

A minimum treatment volume standard is not required where site conditions are such that TSS concentrations in storm water discharges will not exceed 80mg/L.

Channel Protection Criteria

The channel protection criteria must maintain post-development site runoff volume and peak flow rate at or below existing levels for all storms up to the 2-year, 24-hour event. "Existing levels" means the runoff volume and peak flow rate for the last land use prior to the planned new development or redevelopment. More restrictive channel protection criteria may be utilized on a case-by-case basis, as appropriate.

Site Plan Review

This policy is to establish a requirement to submit a site plan for review as required by the EGLE NPDES Stormwater Discharge Permit and ensure that water quality objectives, erosion and sediment control requirements, and BMP maintenance are considered to the maximum extent practicable.

Livonia Public Schools shall evaluate proposed construction activities to determine:

- If the activity meets the criteria of a development or redevelopment project with an earth disturbance greater than or equal to 1 acre, or part of a common plan of development resulting in a development or redevelopment activity greater than or equal to 1 acre in size.
- Does the development or redevelopment project discharge to waters of the state, or to a county, city, or township MS4.

If the development or redevelopment project discharges directly to waters of the state, Livonia Public Schools shall comply with the post-construction standards outlined in this SWMP.

If the development or redevelopment project discharges to a regulated county, city, or township MS4, Livonia Public Schools shall submit the site plan for review and approval. Site plan approval by the county, city, or township of an equivalent post-construction standard ensures acceptable compliance with the Livonia Public Schools NPDES MS4 Stormwater Discharge Permit. Livonia Public Schools shall obtain and maintain a copy of the site plan approval *document*.

If the development or redevelopment project discharges to a county, city, or township MS4 that is not regulated or require site plan review, Livonia Public Schools shall comply with the post-construction standards outlined in this SWMP.

Operations & Maintenance Plans

All structural and vegetative stormwater control measures installed as a requirement under this section of the permit shall include a plan for maintaining maximum design performance through long-term operation and maintenance.

Enforcement

The Livonia Public Schools Stormwater Program Manager will administer and enforce the stormwater management program, including maintaining procedures, guidance, information, etc. to aid district staff and contractors in complying with the post-construction requirements for stormwater management.

Stormwater Management - Construction Runoff Procedure

Applies To: As required by the National Pollutant Discharge Elimination System (NPDES) permit for the District, the scope of this Guideline includes all development and redevelopment projects on District properties that involve either:

- a. Earth disturbance of one (1) acre or greater
OR
 - b. Earth disturbance of less than one (1) acre, but which are part of a larger common plan of development or sale that would disturb one (1) acre or more
OR
 - c. Earth disturbance within 500 feet of a lake or stream
-

Construction Requirement Statement

Development and redevelopment projects on District property are regulated under and must comply with the NPDES permit for stormwater discharges, as issued by the Michigan Department of Environment, Great Lakes and Energy (EGLE). The Stormwater Management Construction Runoff Procedure has been developed to provide guidance regarding responsibilities and actions to meet the NPDES permit conditions for development and redevelopment projects on district owned properties.

Construction Plan for Stormwater Management

*The construction stormwater runoff control program on regulated sites **must** include:*

- The procedure to notify the Part 91 Agency, or appropriate staff (if the permittee is a Part 91 Agency), when soil or sediment is discharged to the permittee's MS4 from a construction activity.
- The procedure to notify the Department when soil, sediment, or other pollutants are discharged to the permittee's MS4 from a construction activity.
- The procedure for ensuring that construction activity one (1) acre or greater in total earth disturbance with the potential to discharge to the permittee's MS4 obtains a Part 91 permit or is conducted by an approved Authorized Public Agency, as appropriate.
- The procedure to advise the landowner or recorded easement holder of the State of Michigan Permit by Rule (R 323.2190 of the Part 21 Rules promulgated pursuant to Part 31 of the NREPA).

Notification Procedure

The EGLE certified construction stormwater operator inspector conducting site inspections will normally detect any soil or sediment entering the MS4.

In the event an inspector identified a discharge during an inspection:

1. The inspector shall document all details of the soil erosion and sedimentation control deficiency and report to the District Stormwater Manager.
2. The District Stormwater Manager (or designee) is responsible for assessing any suspected or confirmed discharge and notifying the appropriate agency.
3. The District will notify the local Part 91 agency and EGLE when significant runoff of soil, sediment, or other pollutants such as pesticides, petroleum derivatives, construction chemicals, or solid wastes from the construction site discharges to the MS4 or surface waters of the state within 24 hours of discovery or as otherwise required by the issuing agency.

In the event of a public complaint:

The District will track the receipt of complaints submitted by the public or noted by staff during regular course of business of soil, sediment, or other pollutants such as pesticides, petroleum derivatives, construction chemicals, and solid wastes are being discharged into the MS4.

The tracking will include:

- Name of person providing the complaint.
- Location (address or nearest cross street).
- Description of follow up (e.g., date referred to the Part 91 enforcing agency).

The District will notify the Part 91 Agency, when soil, sediment, and other pollutants such as pesticides, petroleum derivatives, construction chemicals, and solid wastes are discharged into MS4.

The District ensures that construction activity one acre or greater in total earth disturbance with the potential to discharge to the MS4 does obtain a Part 91 Permit and State of Michigan Permit by Rule.

Part 91 Compliance

The District will ensure that any construction activity that result in a land disturbance within 500 feet of a lake or stream, land disturbance greater than or equal to one (1) acre, or land disturbance less than one (1) acre that is part of a common plan of development or sale will obtain a Part 91 Permit through the appropriate county or municipal permitting agency. The minimum Part 91 requirements include:

- a. A copy of the Soil Erosion and Sedimentation Control (SESC) Permit.
- b. A copy of the associated Soil Erosion and Sedimentation Control (SESC) Plans.

Permit by Rule Compliance

The District shall comply with the State of Michigan Permit by Rule (Rule 323.2190) for stormwater discharge from construction activity. Sites disturbing one (1) to five (5) acres with a point source discharge to the waters of the state receive automatic storm water coverage upon securing a SESC permit from the appropriate Part 91 recognized County Enforcing Agency, Municipal Enforcing Agency, or Authorized Public Agency (APA) under the authority of Part 91.

1. Construction sites with at least one (1) acre but less than five (5) acres of soil disturbance with a surface water discharge, must obtain a county or municipal SESC permit, and are required to follow the provisions of the Permit by Rule, but do not need to notify the EGLE of the construction activity.
2. Construction sites disturbing over five (5) acres with a point source discharge to the waters of the state must obtain a county or municipal SESC permit and submit a Notice of Coverage (NOC) and other pertinent documents and the appropriate fee to the EGLE.

The minimum requirements of Permit by Rule include, but are not limited to:

- a. Weekly site inspections conducted and documented by a Certified Construction Stormwater Operator.
- b. Documented inspection within 24 hours of a precipitation event that results in a discharge from the site by a Certified Construction Stormwater Operator.

Enforcement

The District Stormwater Program Manager will administer and enforce the stormwater management program, including maintaining procedures, guidance, information, etc. to aid district staff and contractors in complying with the construction stormwater runoff control requirements for stormwater management.

**Livonia Public Schools
Board of Education
Resolution in Support of Stormwater Management Plan**

WHEREAS Livonia Public Schools owns and operates facilities within the boundaries of the “Detroit” urbanized area which discharges stormwater through a municipal separate storm sewer system (MS4) to surface waters of the State of Michigan; and

WHEREAS The Michigan Department of Environment, Great Lakes, and Energy maintains oversight and regulatory authority for compliance with the terms and conditions of the NPDES Municipal Separate Storm Sewer System discharge permit; and

WHEREAS Livonia Public Schools has applied for and received permit coverage to discharge stormwater from Livonia Public Schools facilities to the MS4; and

WHEREAS Livonia Public Schools agrees to comply with the NPDES Municipal Separate Storm Sewer System discharge permit requirements, and

WHEREAS Livonia Public Schools has developed a Stormwater Management Program Plan (SWMP) outlining the policies, procedures, and best management practices to be employed by the district to comply with the permit requirements, and

WHEREAS the conditions of the NPDES Municipal Separate Storm Sewer System discharge permit require Livonia Public Schools to develop policies and procedures that prohibit illicit discharges to their stormwater system and to implement appropriate enforcement procedures and actions to detect and eliminate such illicit discharges, and

WHEREAS Livonia Public Schools agrees to prohibit the discharge of non-stormwater discharges into the storm drain system, including but not limited to pollutants or waters containing any pollutants, and

WHEREAS Livonia Public Schools agrees to eliminate illicit discharges and illicit connections, and

WHEREAS Livonia Public Schools agrees to prohibit the construction, use, maintenance or continued existence of illicit connections to the storm drain system. This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection, and

WHEREAS Livonia Public Schools agrees to obtain a Part 91 permit from the appropriate state, county, or local governmental soil erosion permitting agency for new development and redevelopment projects that disturb one or more acres, and

WHEREAS Livonia Public Schools agrees to obtain a construction site permit from the local municipality or other governing unit for new development and redevelopment projects that disturb one or more acres, and

WHEREAS Livonia Public Schools agrees to inspect, operate, and maintain structural controls for the purpose of reducing pollutant contribution, control runoff, and decrease or eliminate stream bank erosion due to stormwater runoff, and

WHEREAS Livonia Public Schools agrees to comply with the requirements of the State of Michigan Permit (Rule 323.2190) for stormwater discharge from construction activity

THEREFORE, be it resolved that the Livonia Public Schools Board of Education is highly committed to practicing sound environmental principals including the reduction of pollutants to surface waters though discharges of stormwater. The Board hereby approves and instructs the district Superintendent to enforce the above listed policies and procedures for illicit discharge elimination, control of stormwater runoff and long-term operation and maintenance of structural controls as part of the overall Livonia Public Schools Stormwater Management Program Plan

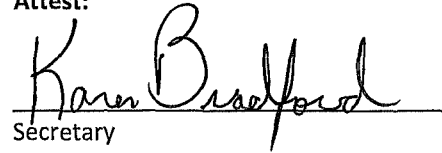
Duly passed and approved by the Livonia Public Schools Board of Education, Wayne County, Michigan this 28th day of November 2022.

Approved:

A handwritten signature in cursive script, appearing to read "C. Allen Br", written over a horizontal line.

President

Attest:

A handwritten signature in cursive script, appearing to read "Karen Bradford", written over a horizontal line.

Secretary

Appendix “C”

SEMOG Posters & Illicit Discharge Poster

How to Spot Illicit Discharges

Sanitary Sewer Discharge

Observations:

- Sanitary Debris
- Staining on pipe
- Heavy Foam
- Gray or Discolored Water
- Odors (sewage, chlorine, rotten eggs and detergents)



Illegal Dumping, Spills, or Floor Drain

Connection Observations:

- Oily Sheen
- Trash, non-sanitary debris
- Petroleum odors
- Stained sediment, rocks, and vegetation
- Vehicle bay washout



Agricultural Runoff, Fertilizers, or Sanitary Sewer Waste Observations:

- Algae growth at or near outlet
- Heavy vegetation at or near outlet



What to Report

- **Spills and Contamination to lakes, river and streams**
District Stormwater Coordinator, MDEQ, Environmental Health Department, Drain Commissioner's Office
- **Suspicious dumping or discharges from pipes**
District Stormwater Coordinator, MDEQ, Environmental Health Department, Drain Commissioner's Office
- **Sewage on the ground or in surface water**
District Stormwater Coordinator, Environmental Health Department
- **Large number of dead fish in waterways**
District Stormwater Coordinator, MDEQ, Environmental Health Department
- **Failing or leaking septic systems**
District Stormwater Coordinator, Environmental Health Department
- **Construction site soil erosion to waterways**
District Stormwater Coordinator, local SESC Enforcing Agency
- **Polluted runoff from storage piles/dumpsters entering waterways**
District Stormwater Coordinator, Environmental Health Department, Drain Commissioner's Office

Important Numbers

Emergency Call 9-1-1

- Pollution Emergency Alerting System (PEAS) **1-800-292-4706**
- 24 Hour Spill Hot Line – Arch Environmental Group **1-248-522-2821**

Non-Emergency

- School District Contact Number
- DEQ Environmental Assistance Center **1-800-662-9278**
- Eaton County Drain Commissioner **1-800-292-4706**
- Genesee County Drain Commissioner **1-810-732-2940**
- Livingston County Department of Public Health **1-517-546-9858**
- Macomb County Public Works **1-877-679-4357**
- Oakland County Water Resources **1-248-858-0958**
- Washtenaw County Drain Commissioner **1-724-222-6860**
- Wayne County Department of the Environment **1-888-223-2363**

Remember, you're not just washing your car

Our Water. Our Future.



Ours to Protect



Practice good car care

Did you know there are over four million vehicles in Southeast Michigan? **Practicing good car care helps protect our lakes and streams.**

How? Storm drains and roadside ditches lead to our lakes and streams. So, if motor fluids or dirty water from washing our cars are washed or dumped into the storm drain, it pollutes our local waterways.

What can you do? Simple. **Keep your car tuned and fix leaks** promptly, **recycle used motor oil** and other fluids, **take your car to the carwash or wash your car on the grass.**

Find out more at www.semcog.org.

Brought to you by the Southeast Michigan Partners for Clean Water.

Support provided by SEMCOG, the Southeast Michigan Council of Governments (313-961-4266) and the Rouge River National Wet Weather Demonstration Project.

Remember, you're not just fertilizing your lawn

Our Water. Our Future.



Fertilize sparingly and caringly

Storm drains found in our streets and yards empty into our lakes and streams. So, **when we fertilize our lawn we could also be fertilizing our lakes and streams**. While fertilizer is good for our lawn, it's bad for our water. Fertilizer in our lakes and streams causes algae to grow.

Algae can form large blooms and uses up oxygen that fish need to survive. With 1.5 million homes in Southeast Michigan, all of us need to be aware of the far-reaching effects of our lawn care practices.

What can you do? Simple. Use a **no or low phosphorus fertilizer**, select a **slow release** fertilizer where at least half of the nitrogen is water insoluble (check the ingredients on the label), keep fertilizer away from lakes, streams, and storm drains, and **sweep excess fertilizer** back onto your lawn. Not only will our lakes and streams thank you, but so will your pocketbook!

Find out more at www.semcog.org.

Brought to you by the Southeast Michigan Partners for Clean Water.

Support provided by SEMCOG, the Southeast Michigan Council of Governments (313-961-4266) and the Rouge River National Wet Weather Demonstration Project.

Seven Simple Steps to Clean Water

Our Water. Our Future.



1. Help keep pollution out of storm drains

2. Fertilize sparingly and carefully

3. Carefully store and dispose of household cleaners, chemicals, and oil

4. Clean up after your pet

5. Practice good car care

6. Choose earth friendly landscaping

7. Save water

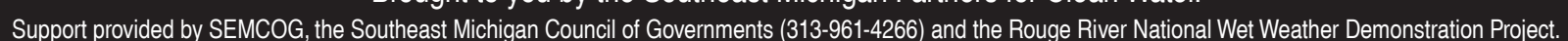
Our Water. Our Future. Ours to Protect.

Find out more at www.semcog.org.

Brought to you by the Southeast Michigan Partners for Clean Water.

Support provided by SEMCOG, the Southeast Michigan Council of Governments (313-961-4266) and the Rouge River National Wet Weather Demonstration Project.

Ours to Protect



Remember, you're not just getting rid of weeds and pests

Our Water. Our Future.



Ours to Protect



Choose earth-friendly landscaping

Did you know you can **protect your kids, pets, and the environment** from the harmful effects of herbicides & pesticides by choosing earth-friendly landscaping? These chemicals wash off our lawns and gardens into our storm drains, which lead to our lakes and rivers.

What can you do? Simple.

Spot treat for specific pests and weeds or remove by hand. Mulch around plants. **Water your lawn only when it needs it.** Attract butterflies and birds by **adding plants that are native to Southeast Michigan.**

Find out more at www.semcog.org.

Brought to you by the Southeast Michigan Partners for Clean Water.

Support provided by SEMCOG, the Southeast Michigan Council of Governments (313-961-4266) and the Rouge River National Wet Weather Demonstration Project.

Remember, you're not just walking the dog

Our Water. Our Future.



Ours to Protect



Clean up after your pet

Did you know that pet waste has bacteria that makes our lakes and rivers unsafe for swimming and other recreational activities?

That happens when **pet waste left on sidewalks or yards gets washed into storm drains**

or roadside ditches that lead directly to our lakes and rivers.

What can you do? Simple.

No matter where you are **dispose of your pet's waste promptly** in the toilet or trash.

Find out more at www.semcog.org.

Brought to you by the Southeast Michigan Partners for Clean Water.

Support provided by SEMCOG, the Southeast Michigan Council of Governments (313-961-4266) and the Rouge River National Wet Weather Demonstration Project.

Remember, it ALL drains to our lakes and rivers

Our Water. Our Future.



Ours to Protect



Keep pollution out of storm drains

Storm drains and roadside ditches lead to our lakes and streams. **So, any oil, pet waste, leaves, or dirty water from washing your car or other outside activities** that enters a storm drain gets into our lakes and streams.

How can you help? Simple. **Use a broom instead of a hose** to clean your driveway. Keep leaves, grass clippings, and trash away from the storm drain, and **never dump motor oil, pet waste, or dirty, soapy water** down the storm drain.
Remember, only rain in the drain!

Find out more at www.semco.org.

Brought to you by the Southeast Michigan Partners for Clean Water.

Support provided by SEMCOG, the Southeast Michigan Council of Governments (313-961-4266) and the Rouge River National Wet Weather Demonstration Project.

Appendix “D”

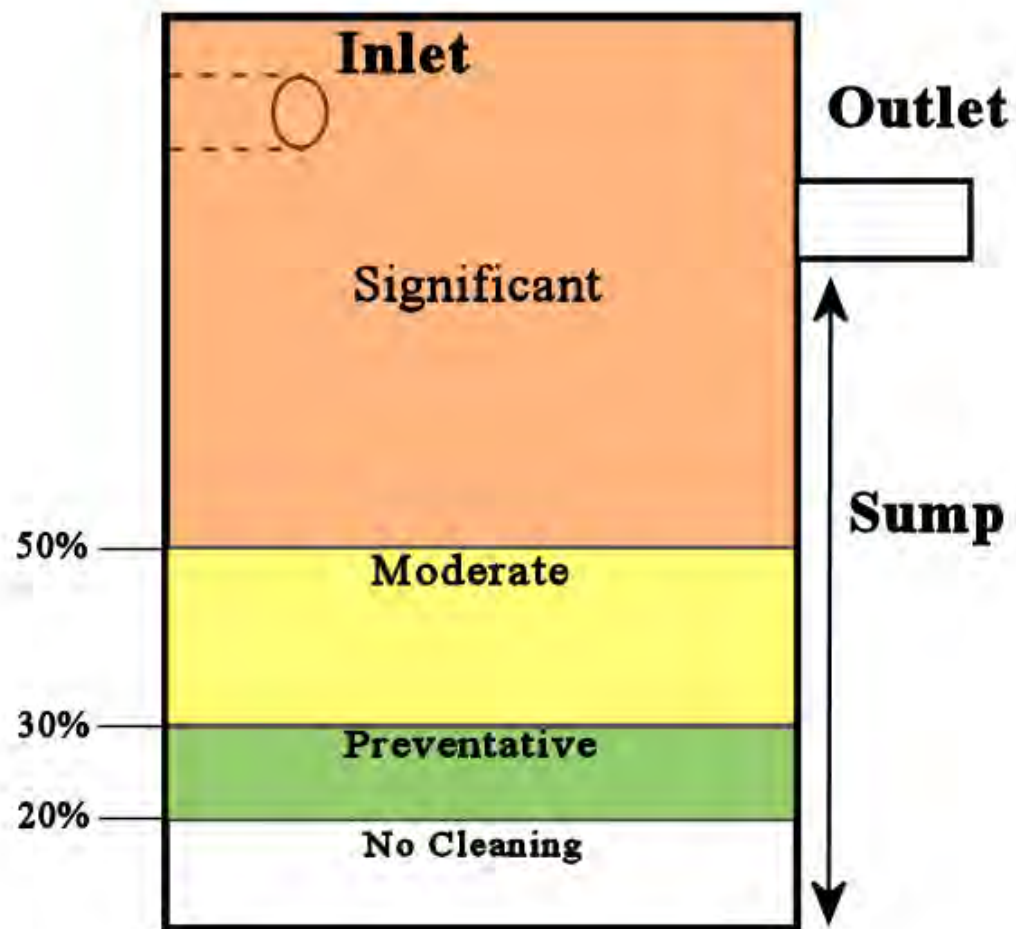
Inspection Field Worksheets

Routine Storm Sewer System Inspection Table

Building:		
Inspectors:		

Client:	
Start Date:	
Inspection Type:	

[illegible]



Routine Storm Sewer System Inspection Table

Building:	"School/Location"	
Inspectors:	"Inspectors Name"	

Client:	"School District"	
Start Date:	"Start Date"	"End Date"
Inspection Type:	"Routine Storm Sewer Inspection or other"	

ID #	Type	Inspected	Standing Water	Color	Odor	Structure Staining	Suds	Oil Sheen	Bacterial Sheen	Sewage	Algae	Slimes	Abnormal Vegetation	Flow Observed	Velocity of Flow	Color of Flow	Blockages	Erosion	Needs Cleaning?	Structural Issues	Structural Trend	Stenciled
"Storm Structure ID" Ex. ADM-01.CB(ADM represents building such as Admin, 01=number of structure, and CB=structure type.	Type of Structure (Catch Basin, Manhole, Pond, Swale, Pipe, etc.)	Was it inspected this round. (Yes or No)	Was there standing water in the structure? (Yes or No)	What color is the standing water if present? (Clear, Cloudy, Brown, White, etc.)	Does the basin have a noticeable odor? (Yes or No)	Is there staining on the interior of the structure? (Yes or No) This could be staining caused by a current illicit discharge, remnants of a past illicit discharge, or natural staining from iron oxidizing bacteria etc.	Are there suds present in the structure (organic suds - caused by aeration/natural causes, soapy suds, or no)	Is there oil sheen present on the water surface in the structure? (Significant - indicative of an illicit discharge, OR No)	Is there bacterial sheen on water surface of the structure? (Yes or No) - We ask this to confirm that a sheen in a photo was bacterial instead of oil.	Is evidence of sewage present in water in structure? (toilet paper, poo, etc.) - (Yes or No)	Is Algae growth present in the structure? (Yes or No)	Are there slimes present in the structure? (Yes or No)	Is there abnormal veg. growth in structure? (Yes or No)	Was there water flow observed in the structures pipes? (No, Trickle(light flow), Intermittent(Indicative of a sump), or continuous(usually occurs during/after a rain event))	What is the estimated velocity of the water flow if present? (N/A, Trickle, slow, moderate, or substantial) Substantial occurs during or after a rain event.	What is the color of the flow within the structure? (N/A, Brown, Yellow, Clear, Cloudy, etc.) Used to be sure there is no evidence of illicit activities during or after rain events.	Are any pipes blocked? (Yes or No) This would be evident if there was a visible blockage in a pipe OR if the water level in the structure is high.	Is there erosion occurring around the structure? (Yes or No)	Does the structure have sediment build-up in the sump or bottom? (Significant - for 50% full sump depth below outpipe or higher, moderate - for 30% to 50% sump depth below outpipe, preventative - for 20% to 30% sump depth, OR no cleaning for below 20%. Or Cleaned)	Are there any issues with the structure itself and how severe is it? - This could be for cracking on the interior/exterior, sink holes, erosion, etc. (Significant, Moderate, Preventative, or None, Repaired-since last inspection, or Partial Repair)	If there is a structural issue, is the structural issue worsening since the previous inspection? (Stable - appears the same/hasn't worsened, Improving - appears better/usually for a repair or for erosion lessening, OR deteriorating - the condition has worsened)	Does the structure have a "No Dumping - Drains to River" stencil in place? (No - means it needs one, Yes - it has one, Update - it has one, but it is fading, OR N/A - the structure is in the grass)

Pond Inspection Form

Building: <input style="width: 90%;" type="text"/>	Client: <input style="width: 90%;" type="text"/>
Inspectors: <input style="width: 50%;" type="text"/> <input style="width: 50%;" type="text"/>	
Date of Inspection: <input style="width: 100%;" type="text"/>	
Structure Information:	
Structure ID: <input style="width: 150px;" type="text"/>	Number of Inlet(s) (OP): <input style="width: 150px;" type="text"/>
Pond Type: <input style="width: 150px;" type="text"/>	Number of Outlet(s) (DR): <input style="width: 150px;" type="text"/>
Age of Pond: <input style="width: 150px;" type="text"/>	Number of Stabilized Outlets (SO): <input style="width: 150px;" type="text"/>
Inlet(s)/Outlet(s) (OP/DR) Observations:	
Are there any structural issues with the inlet(s)/outlet(s) (OP/DR)? <input style="width: 150px;" type="text"/>	Structural Comments: <input style="width: 300px;" type="text"/>
Is there excess sediment buildup at the inlet(s)/outlet(s) (OP/DR)? <input style="width: 150px;" type="text"/>	Are the inlet(s)/outlet(s) (OP/DR) below the water level? <input style="width: 220px;" type="text"/>
Are the inlet(s)/outlet(s) (OP/DR) accessible or overgrown with vegetation? <input style="width: 300px;" type="text"/>	
Pond Structure Observations:	
Is there grass along the sides of the pond cut between 4" and 9"? <input style="width: 150px;" type="text"/>	Is there excess vegetation along the sides of the pond (not grass)? <input style="width: 150px;" type="text"/>
Are there signs of erosion along the side slopes, berms and/or emergency spillway? <input style="width: 150px;" type="text"/>	Is there evidence of animal burrows around the sidewalls of the pond? <input style="width: 150px;" type="text"/>
Pond Vegetation Observations:	
How much emergent vegetation is present in the pond bottom? <input style="width: 150px;" type="text"/>	Vegetation Comments: <input style="width: 300px;" type="text"/>
Is emergent vegetation made up of native or invasive species? <input style="width: 150px;" type="text"/>	Is there decomposing vegetation or organic matter decaying on the pond bottom? <input style="width: 70px;" type="text"/>
General Pond Observations:	
Is the pond free of trash/other debris? <input style="width: 150px;" type="text"/>	Types of trash/debris present: <input style="width: 150px;" type="text"/>
General Comments: <input style="width: 600px;" type="text"/>	

Pond Inspection Table Description

ID #	Enter structure ID
Type	Select from the following options: Retention Pond, Detention Pond, Retention Basin, Detention Basin
Inspected	Select Yes or No. If unable to inspect the structure, please make a comment under "General Comments" as to why you could not inspect the structure
Approximate Age of the Pond	This can be found using the history function in Google Earth for the site. Remember, this is an approximate age determination. We are interested in this information because pond life spans are between 15 and 20 years
Number of Inlet(s) (OP)	Select the number of inlet pipe(s) from the drop down menu
Number of Outlet(s) (DR)	Select the number of outlet pipe(s) from the drop down menu
Number of Stabilized Outlet(s) (SO)	Select the number of stabilized outlet(s) from the drop down menu
Are there any structural issues with the inlet(s)/outlet(s) (OP/DR)?	Examples include detached pipes, missing riprap around the inlet(s), missing stone around DR, etc. Select one of the following options: None, Preventative, Moderate, Significant, or Repaired. Preventative = beginning signs of deterioration Moderate = signs of deterioration present but does not hinder the function of the structure Significant = deterioration has hindered the function of the structure as it was designed
Structural Comments	Describe the structural issues observed
Is there excess sediment buildup at the inlet(s)/outlet(s) (OP/DR)?	Examples include pipes that are buried under sediment or sediment levels higher than the bottom of the inlet(s)/outlet(s)
Are the inlet(s)/outlet(s) (OP/DR) below the water level?	This could be a sign that the MS4 is backed up causing water to back up into the pond. If you suspect that, please investigate if that is the case. If the MS4 is not backed up, this could be a sign that the pond is not functioning as designed
Are the inlet(s)/outlet(s) (OP/DR) accessible or overgrown with vegetation (native or invasive)?	Overgrown vegetation at the inlet(s)/outlet(s) can prevent water from freely flowing in/out of the structure
Is the grass along the sides of the pond cut between 4" and 9"?	This is an ideal height range of grass around the pond to stabilize the sidewalls of the pond and to prevent erosion around the side walls of the pond
Is there excess vegetation along the sidewalls of the pond (not grass)?	Does the area look overgrown and unkempt? Select from the following options: Yes or No
Are there signs of erosion along the side slopes, berms and/or emergency overflow?	Select from the following options: Yes or no
Is there evidence of animal burrows around the sidewalls of the pond?	Select from the following options: Yes or No. Animal burrows can destabilize the sidewalls of the pond
How much emergent vegetation is present in the pond bottom?	Select from the following options: 0%-25%, 25%-50%, or 50%-100%. Use your best judgement to determine this percentage. Ideally, the pond bottom should be made up of around 25% emergent vegetation Emergent Vegetation Definition: Aquatic plants that grow with their roots under water but their leaves and stems above the surface of the water
Is emergent vegetation made up of native or invasive species (phragmites or purple loosestrife)?	See reference page in the Pond Inspection Reference page for photos of Phragmites and Purple Loosestrife to see if it is present.
Vegetation Comments	If there are invasive species present, please write which ones are present
Is there vegetation or organic matter decaying on the pond bottom?	Select from the following options: Yes, No, or Unknown. If you can tell, great, this could have impact on DO or could cause flow issues through the pond
Is the pond free of trash/other debris?	Select from the following options: Yes or No. This can include trash/inorganic debris or organic material (like grass clippings, leaves, etc.)
Types of trash/debris present	Select from the following options: Trash, Natural Debris (organic material) or N/A
General Comments	Please add any other comments that you feel are important to note about the pond condition

Stream Bank Inspection Table

Client:				Stream Name:		
Inspectors:				Site :		
				Date:		
Weather in the past 24 hours:				Current Weather:		
Field Analysis:						
Upstream Turbidity:		NTU	Upstream Temperature:		Upstream pH:	
Downstream Turbidity:		NTU	Downstream Temperature:		Downstream pH:	
Physical Characterization:						
<u>In-Stream Characteristics</u>			<u>Streambank & Channel Characteristics</u>			
Pools:	N/A		Depth of Run:			Stream Erodible Soils:
Runs:	N/A		Depth of Pool(s):			Bank Modifications:
Riffles:	N/A		Width of Stream:			Condition of Bank:
Stream Bed Features:			Stream Velocity:			Bank Slope:
% of Embedded Bottom:			Vegitative Cover:			
Organic Materials:			Shape of Channel:			
Large Wooded Debris:			<u>Additional Comments:</u> <div style="border: 1px solid black; height: 80px; margin-top: 5px;"></div>			
Water Appearance:						
Water Odor:						
<u>Watershed / Biological Characteristics:</u>			<u>Stream Photos:</u>			
Wildlife Around Stream:						
Fish In Stream:						
Aquatic Plants in Stream:						
Extent of Alge :						
Potential Stream Impact:						

Screening Inspection Log

Building:		Client:			
Inspectors:		Date			
		Inspection Type:			

Structure Information:					
ID Number:		Structure Type		Lat:	
Discharge Point/Outfall:		Location:			
Outfall Dimensions					

Observations:					
Standing Water Characteristics		Flow Characteristics		Maintenance	
Standing Water:		Flow Observed:		Cleaning:	
Color:		Source of Flow:		Blockages	
Odor:		Velocity of Flow:		Structural Issues	
Suds:		Color of Flow:		Structural Trend	
Staining:		Flow Odor		Stenciling:	
Oil Sheen:		Additional Comments:			
Sewage:					
Bacterial Sheen:					
Floatables:					
Slimes:					
Abnormal Growth:					

Sample ID And Information		Field Analysis:	Results:	Units:	Initials:	Photo ID:
Sample Collected?		pH:		pH units		
Permit Cycle:		Temperature:		Celsius		
Last Rain Event:		Surfactants:		mg/L		
Current Weather:		Ammonia:		mg/L		
Screening Location Type:		Chlorine:		mg/L		
Other Screening Activities		Turbidity:		NTU		
Conducted:		Conductivity:		uohm/cm		
Outfall Characterization:		Equipment Calibration:				
Sample sent to Lab:		Date:	Cal. By:			

TMDL Screening Inspection Log

Building:			Client:		
Inspectors:			Date		
			Inspection Type:		

Structure Information:					
ID Number:		Structure Type		Lat:	
Type:		Location:			
Outfall Dimensions					

Observations:					
Standing Water Characteristics			Flow Characteristics		
Standing Water:		Flow Observed:			
Color:		Source of Flow:			
Odor:		Velocity of Flow:			
Suds:		Color of Flow:			
Staining:		Flow Odor			
Oil Sheen:		Additional Comments:			
Sewage:					
Bacterial Sheen:					
Algae:					
Slimes:					
Abnormal Growth:					

Sample ID And Information	Lab Analysis:	Results:	TMDL Threshold:	Units:	Photo ID:
Sample ID:	pH:		6.5 - 9	pH units	
Time Collected:	Temperature:		N/A	Celsius	
Last Rain Event:	E. coli:		1000	CFU per 100mL	
Current Weather:	Total Phosphorus:		Watershed Dependent	ug/L	
Screening Location Type:	Total Suspended Solids:		Watershed Dependent	mg/L	
Total Rainfall (Inches):	Dissolved Oxygen:		Watershed Dependent	mg/L	
	Other:				
Outfall Characterization:					
Sample sent to Lab:					

SOIL EROSION AND SEDIMENTATION CONTROL (SESC)**INSPECTION REPORT****DEPARTMENT OF MANAGEMENT AND BUDGET
INFRASTRUCTURE SERVICES, DESIGN AND CONSTRUCTION DIVISION**

Second Floor, Stevens T. Mason Building

P.O. Box 30026, Lansing, Michigan 48909

This report is required to document soil erosion and sedimentation control on State of Michigan projects. (Authority: Part 91, PA 451)

REPORT NUMBER	SESC PERMIT NUMBER	REPORT DATE		PERIOD (FROM WHEN - TO WHEN)
INDEX NUMBER(S)	AGENCY NUMBER	FILE NUMBER	CONTRACT NUMBER	DEPARTMENT/UNIVERSITY/COLLEGE
PROJECT NAME				
CONTRACTOR				
PROFESSIONAL				

A. REASON FOR INSPECTION: ☐ Regular Inspection ☐ Post-Rain Event Inspection (explain below)☐ Weekly ☐ Daily

B. CURRENT WEATHER CONDITIONS:

☐ Sunny ☐ Cloudy ☐ Partly Cloudy ☐ Windy Temperature _____Precipitation: ☐ Rain ☐ Snow ☐ Sleet ☐ Hail Other (explain) _____

C. DESCRIBE SEVERE WEATHER (if applicable):

D. DESCRIBE WEATHER CONDITIONS SINCE LAST INSPECTION (Date of Last Inspection _____):

E. ARE THE CONTROLS INSTALLED ACCORDING TO THE PLANS AND SPECIFICATIONS? ☐ Yes ☐ No (Describe):
F. ARE THE CONTROLS IN PLACE FUNCTIONING PROPERLY? ☐ Yes ☐ No (Describe):
G. ARE THE CONTROLS BEING PROPERLY MAINTAINED? ☐ Yes ☐ No (Describe):

H. INDICATE THE SESC CONTROLS IN PLACE ON SITE (According to the DMB SESC Keying System):

Best Management Practice	Present (check)	Number or Lin Ft of Controls	Best Management Practice	Present (check)	Number or Lin Ft of Controls
Erosion Controls:			Erosion/Sediment Controls:		
(E1) Selective Grading & Shaping	<input type="checkbox"/>		(ES31) Check Dam	<input type="checkbox"/>	
(E2) Grubbing Omitted	<input type="checkbox"/>		(ES32) Stone Filter Berm	<input type="checkbox"/>	
(E3) Slope Roughening & Scarification	<input type="checkbox"/>		(ES33) Filter Rolls	<input type="checkbox"/>	
(E4) Terraces	<input type="checkbox"/>		(ES34) Sand Fence	<input type="checkbox"/>	
(E5) Dust Control	<input type="checkbox"/>		(ES35) Dewatering	<input type="checkbox"/>	
(E6) Mulch	<input type="checkbox"/>		(ES36) Diversion Dike/Berm	<input type="checkbox"/>	
(E7) Temporary Seeding	<input type="checkbox"/>		(ES37) Diversion Ditch	<input type="checkbox"/>	
(E8) Permanent Seeding	<input type="checkbox"/>		(ES38) Cofferdam/Sheet Pilings	<input type="checkbox"/>	
(E9) Mulch Blankets	<input type="checkbox"/>		(ES39) Streambank Biostabilization	<input type="checkbox"/>	
(E10) Sodding	<input type="checkbox"/>		(ES40) Polymers	<input type="checkbox"/>	
(E11) Vegetated Channels	<input type="checkbox"/>		(ES41) Wattles	<input type="checkbox"/>	
(E12) Rip Rap	<input type="checkbox"/>		Sediment Controls:		
(E13) Gabion Walls	<input type="checkbox"/>		(S51) Silt Fence	<input type="checkbox"/>	
(E14) Energy Dissipator	<input type="checkbox"/>		(S52) Catch Basin Sediment Guard	<input type="checkbox"/>	
(E15) Temporary Slope Drain	<input type="checkbox"/>		(S53) Stabilized Construction Access	<input type="checkbox"/>	
(E16) Slope Drain	<input type="checkbox"/>		(S54) Tire Wash	<input type="checkbox"/>	
(E17) Cellular Confinement Systems	<input type="checkbox"/>		(S55) Sediment Basin	<input type="checkbox"/>	
(E18) Plastic Sheets	<input type="checkbox"/>		(S56) Sediment Trap	<input type="checkbox"/>	
(E19) Temporary Drainageway/ Stream Crossing	<input type="checkbox"/>		(S57) Vegetated Buffer/Filter Strip	<input type="checkbox"/>	
(E20) Temporary Bypass Channel	<input type="checkbox"/>		(S58) Inlet Protection Fabric Drop	<input type="checkbox"/>	
(E21) Live Staking	<input type="checkbox"/>		(S59) Inlet Protection Fabric Fence	<input type="checkbox"/>	
OTHER	<input type="checkbox"/>		(S60) Inlet Protection Stone	<input type="checkbox"/>	

I. WHAT CORRECTIVE ACTIONS SHOULD BE TAKEN BY THE CONTRACTOR?

J. BY WHAT DATE MUST THESE ACTIONS BE IMPLEMENTED: _____

K. OBSERVATIONS / COMMENTS:

Signature of Inspector

Date

cc:

Appendix “E”

Property Structural Controls Inventory, Inspection, & Maintenance Schedule

Livonia Public Schools – Buchanan Elementary School

Structural Control Inventory, Inspection, & Maintenance Schedule

Facility	Priority Level of Potential Discharge (High, Medium, Low)	Type of Structural Control	Number of Controls	Inspection/Maintenance Schedule
Buchanan Elementary School 16400 Hubbard Livonia, MI 48154	Low	Catch Basin/Manholes	21	Inspect Annually, Clean Once per Permit Cycle or if Build-Up of Accumulated Solid Material is Between 30 and 50% of the Total Sump Depth.
		Open Pipe Outlet	4	Inspect Annually, Maintain as Needed
		Stormwater Conveyance Channel	1	Inspect Annually, Maintain as Needed
		Hydrodynamic Separator	1	Inspect Annually, Maintain as Needed

Livonia Public Schools – Cass Educational Center

Structural Control Inventory, Inspection, & Maintenance Schedule

Facility	Priority Level of Potential Discharge (High, Medium, Low)	Type of Structural Control	Number of Controls	Inspection/Maintenance Schedule
Cass Educational Center 34633 Munger Livonia, MI, 48154	Low	Catch Basin/Manholes	15	Inspect Annually, Clean Once per Permit Cycle or if Build-Up of Accumulated Solid Material is Between 30 and 50% of the Total Sump Depth.
		Infiltration Basin	2	Inspect Annually, Maintain as Needed

Livonia Public Schools – Churchill High School-Rosedale Elementary School Complex

Structural Control Inventory, Inspection, & Maintenance Schedule

Facility	Priority Level of Potential Discharge (High, Medium, Low)	Type of Structural Control	Number of Controls	Inspection/Maintenance Schedule
Churchill High School 8900 Newburgh Road Livonia, MI 48150 Rosedale Elementary School COMPLEX 36651 Ann Arbor Trail Livonia, MI 48150	Medium	Catch Basin/Manholes	73	Inspect Annually, Clean Once per Permit Cycle or if Build-Up of Accumulated Solid Material is Between 30 and 50% of the Total Sump Depth.
		Infiltration Basin	1	Inspect Annually, Maintain as Needed
		Underground Detention System	2	Inspect Annually, Maintain as Needed
		Basin Drains	5	Inspect Annually, Maintain as Needed
		Stormwater Conveyance Channels	2	Inspect Annually, Maintain as Needed
		Trench Drain	2	Inspect Annually, Maintain as Needed

Livonia Public Schools – Cleveland Elementary School
Structural Control Inventory, Inspection, & Maintenance Schedule

Facility	Priority Level of Potential Discharge (High, Medium, Low)	Type of Structural Control	Number of Controls	Inspection/Maintenance Schedule
Cleveland Elementary School 28030 Cathedral Livonia, MI 48150	Low	Catch Basin/Manholes	14	Inspect Annually, Clean Once per Permit Cycle or if Build-Up of Accumulated Solid Material is Between 30 and 50% of the Total Sump Depth.

Livonia Public Schools - Coolidge Elementary School

Structural Control Inventory, Inspection, & Maintenance Schedule

Facility	Priority Level of Potential Discharge (High, Medium, Low)	Type of Structural Control	Number of Controls	Inspection/Maintenance Schedule
Coolidge Elementary School 30500 Curtis Livonia, MI 48152	Low	Catch Basin/Manholes	11	Inspect Annually, Clean Once per Permit Cycle or if Build-Up of Accumulated Solid Material is Between 30 and 50% of the Total Sump Depth.
		Open Pipe Outlet	2	Inspect Annually, Maintain as Needed
		Infiltration Basin	1	Inspect Annually, Maintain as Needed
		Stormwater Conveyance Channel	1	Inspect Annually, Maintain as Needed
		Trench Drain	2	Inspect Annually, Maintain as Needed

Livonia Public Schools – Cooper Upper Elementary School

Structural Control Inventory, Inspection, & Maintenance Schedule

Facility	Priority Level of Potential Discharge (High, Medium, Low)	Type of Structural Control	Number of Controls	Inspection/Maintenance Schedule
Cooper Upper Elementary School 28550 Ann Arbor Trail Westland, MI 48185	Low	Catch Basin/Manholes	20	Inspect Annually, Clean Once per Permit Cycle or if Build-Up of Accumulated Solid Material is Between 30 and 50% of the Total Sump Depth.
		Open Pipe Outlet	1	Inspect Annually, Maintain as Needed
		Drainage Receptor	1	Inspect Annually, Maintain as Needed
		Infiltration Basin	5	Inspect Annually, Maintain as Needed
		Stormwater Conveyance Channel	3	Inspect Annually, Maintain as Needed
		Stream Bank	1	Inspect Annually, Maintain as Needed

Livonia Public Schools – Emerson Middle School

Structural Control Inventory, Inspection, & Maintenance Schedule

Facility	Priority Level of Potential Discharge (High, Medium, Low)	Type of Structural Control	Number of Controls	Inspection/Maintenance Schedule
Emerson Middle School 29100 W. Chicago Livonia, MI 48150	Low	Catch Basin/Manholes	28	Inspect Annually, Clean Once per Permit Cycle or if Build-Up of Accumulated Solid Material is Between 30 and 50% of the Total Sump Depth.
		Infiltration Basin	5	Inspect Annually, Maintain as Needed

Livonia Public Schools – Franklin High School

Structural Control Inventory, Inspection, & Maintenance Schedule

Facility	Priority Level of Potential Discharge (High, Medium, Low)	Type of Structural Control	Number of Controls	Inspection/Maintenance Schedule
Franklin High School 31000 Joy Road Livonia, MI 48150	Medium	Catch Basin/Manholes	48	Inspect Annually, Clean Once per Permit Cycle or if Build-Up of Accumulated Solid Material is Between 30 and 50% of the Total Sump Depth.
		Open Pipe Outlet	4	Inspect Annually, Maintain as Needed
		Infiltration Basin	5	Inspect Annually, Maintain as Needed
		Detention Basin	2	Inspect Annually, Maintain as Needed
		Stormwater Conveyance Channel	1	Inspect Annually, Maintain as Needed
		Hydrodynamic Separator	1	Inspect Annually, Maintain as Needed
		Stabilized Outlet	2	Inspect Annually, Maintain as Needed
		Basin Drains	1	Inspect Annually, Maintain as Needed

Livonia Public Schools – Frost Middle School

Structural Control Inventory, Inspection, & Maintenance Schedule

Facility	Priority Level of Potential Discharge (High, Medium, Low)	Type of Structural Control	Number of Controls	Inspection/Maintenance Schedule
Frost Middle School 14041 Stark Livonia, MI 48154	Low	Catch Basin/Manholes	9	Inspect Annually, Clean Once per Permit Cycle or if Build-Up of Accumulated Solid Material is Between 30 and 50% of the Total Sump Depth.
		Open Pipe Outlet	3	Inspect Annually, Maintain as Needed
		Drainage Receptor	3	Inspect Annually, Maintain as Needed
		Infiltration Basin	3	Inspect Annually, Maintain as Needed
		Stormwater Conveyance Channel	4	Inspect Annually, Maintain as Needed

Livonia Public Schools – Garfield Community Center

Structural Control Inventory, Inspection, & Maintenance Schedule

Facility	Priority Level of Potential Discharge (High, Medium, Low)	Type of Structural Control	Number of Controls	Inspection/Maintenance Schedule
Garfield Community Center 10218 Arthur Livonia, MI 48150	Low	Catch Basin/Manholes	10	Inspect Annually, Clean Once per Permit Cycle or if Build-Up of Accumulated Solid Material is Between 30 and 50% of the Total Sump Depth.
		Open Pipe Outlet	1	Inspect Annually, Maintain as Needed
		Infiltration Basin	3	Inspect Annually, Maintain as Needed
		Stormwater Conveyance Channel	1	Inspect Annually, Maintain as Needed
		Hydrodynamic Separator	1	Inspect Annually, Maintain as Needed

Livonia Public Schools – Grant Elementary School

Structural Control Inventory, Inspection, & Maintenance Schedule

Facility	Priority Level of Potential Discharge (High, Medium, Low)	Type of Structural Control	Number of Controls	Inspection/Maintenance Schedule
Grant Elementary School 36105 Marquette Street Westland, MI 48185	Low	Catch Basin/Manholes	39	Inspect Annually, Clean Once per Permit Cycle or if Build-Up of Accumulated Solid Material is Between 30 and 50% of the Total Sump Depth.
		Infiltration Basin	8	Inspect Annually, Maintain as Needed
		Stormwater Conveyance Channel	1	Inspect Annually, Maintain as Needed

Livonia Public Schools – Hayes Elementary School

Structural Control Inventory, Inspection, & Maintenance Schedule

Facility	Priority Level of Potential Discharge (High, Medium, Low)	Type of Structural Control	Number of Controls	Inspection/Maintenance Schedule
Hayes Elementary School 30600 Louise Westland, MI 48158	Low	Catch Basin/Manholes	22	Inspect Annually, Clean Once per Permit Cycle or if Build-Up of Accumulated Solid Material is Between 30 and 50% of the Total Sump Depth.
		Infiltration Basin	3	Inspect Annually, Maintain as Needed
		Stormwater Conveyance Channel	1	Inspect Annually, Maintain as Needed

Livonia Public Schools – Holmes Middle School

Structural Control Inventory, Inspection, & Maintenance Schedule

Facility	Priority Level of Potential Discharge (High, Medium, Low)	Type of Structural Control	Number of Controls	Inspection/Maintenance Schedule
Holmes Middle School 16200 Newburgh Livonia, MI 48154	Low	Catch Basin/Manholes	19	Inspect Annually, Clean Once per Permit Cycle or if Build-Up of Accumulated Solid Material is Between 30 and 50% of the Total Sump Depth.
		Infiltration Basin	9	Inspect Annually, Maintain as Needed

Livonia Public Schools – Hoover Elementary Schools

Structural Control Inventory, Inspection, & Maintenance Schedule

Facility	Priority Level of Potential Discharge (High, Medium, Low)	Type of Structural Control	Number of Controls	Inspection/Maintenance Schedule
Hoover Elementary School 15900 Levan Livonia, MI 48154	Low	Catch Basin/Manholes	10	Inspect Annually, Clean Once per Permit Cycle or if Build-Up of Accumulated Solid Material is Between 30 and 50% of the Total Sump Depth.
		Infiltration Basin	4	Inspect Annually, Maintain as Needed
		Stormwater Conveyance Channel	1	Inspect Annually, Maintain as Needed

Livonia Public Schools – Jackson Early Childhood Center

Structural Control Inventory, Inspection, & Maintenance Schedule

Facility	Priority Level of Potential Discharge (High, Medium, Low)	Type of Structural Control	Number of Controls	Inspection/Maintenance Schedule
Jackson Early Childhood Center 32025 Lyndon Livonia, MI 48154	Low	Catch Basin/Manholes	17	Inspect Annually, Clean Once per Permit Cycle or if Build-Up of Accumulated Solid Material is Between 30 and 50% of the Total Sump Depth.
		Drainage Receptor	1	Inspect Annually, Maintain as Needed
		Stormwater Conveyance Channel	1	Inspect Annually, Maintain as Needed
		Underground Detention System	1	Inspect Annually, Maintain as Needed
		Flow Splitter	1	Inspect Annually, Maintain as Needed
		Hydrodynamic Separator	1	Inspect Annually, Maintain as Needed

Livonia Public Schools – Johnson Upper Elementary School

Structural Control Inventory, Inspection, & Maintenance Schedule

Facility	Priority Level of Potential Discharge (High, Medium, Low)	Type of Structural Control	Number of Controls	Inspection/Maintenance Schedule
Johnson Upper Elementary School 8400 Hix Westland, MI 48185	Low	Open Pipe Outlet	2	Inspect Annually, Maintain as Needed
		Drainage Receptor	2	Inspect Annually, Maintain as Needed
		Stormwater Conveyance Channel	2	Inspect Annually, Maintain as Needed

Livonia Public School – Kennedy Elementary School

Structural Control Inventory, Inspection, & Maintenance Schedule

Facility	Priority Level of Potential Discharge (High, Medium, Low)	Type of Structural Control	Number of Controls	Inspection/Maintenance Schedule
Kennedy Elementary School 14201 Hubbard Livonia, MI 48154	Low	Catch Basin/Manholes	13	Inspect Annually, Clean Once per Permit Cycle or if Build-Up of Accumulated Solid Material is Between 30 and 50% of the Total Sump Depth.
		Stormwater Conveyance Channel	2	Inspect Annually, Maintain as Needed

Livonia Public Schools – Livonia Career Technical Center

Structural Control Inventory, Inspection, & Maintenance Schedule

Facility	Priority Level of Potential Discharge (High, Medium, Low)	Type of Structural Control	Number of Controls	Inspection/Maintenance Schedule
Livonia Career Technical Center 8985 Newburgh Road Livonia, MI 48150	Medium	Catch Basin/Manholes	11	Inspect Annually, Clean Once per Permit Cycle or if Build-Up of Accumulated Solid Material is Between 30 and 50% of the Total Sump Depth.
		Drainage Receptor	2	Inspect Annually, Maintain as Needed
		Infiltration Basin	1	Inspect Annually, Maintain as Needed
		Basin Drain	1	Inspect Annually, Maintain as Needed

Livonia Public Schools – Maintenance Complex

Structural Control Inventory, Inspection, & Maintenance Schedule

Facility	Priority Level of Potential Discharge (High, Medium, Low)	Type of Structural Control	Number of Controls	Inspection/Maintenance Schedule
Maintenance (includes Bus Garage, Warehouse, Maintenance, Building Services, Board of Education & Central Office) Complex 15125 Farmington Road, Livonia, Michigan 48154	High	Catch Basin/Manholes	20	Inspect Annually, Clean Once per Permit Cycle or if Build-Up of Accumulated Solid Material is Between 30 and 50% of the Total Sump Depth.
		Landscape Drain	1	Inspect Annually, Maintain as Needed

Livonia Public School - Niji-Iro Japanese Elementary School

Structural Control Inventory, Inspection, & Maintenance Schedule

Facility	Priority Level of Potential Discharge (High, Medium, Low)	Type of Structural Control	Number of Controls	Inspection/Maintenance Schedule
Niji-Iro Japanese Elementary School (Open) 36611 Curtis Road Livonia, MI 48152 Dickinson Center (Closed) COMPLEX 18000 Newburgh Rd Livonia, MI 48152	Low	Catch Basin/Manholes	20	Inspect Annually, Clean Once per Permit Cycle or if Build-Up of Accumulated Solid Material is Between 30 and 50% of the Total Sump Depth.
		Open Pipe Outlet	3	Inspect Annually, Maintain as Needed
		Drainage Receptor	2	Inspect Annually, Maintain as Needed
		Infiltration Basin	2	Inspect Annually, Maintain as Needed
		Stormwater Conveyance Channel	5	Inspect Annually, Maintain as Needed

Livonia Public Schools – Randolph Elementary School

Structural Control Inventory, Inspection, & Maintenance Schedule

Facility	Priority Level of Potential Discharge (High, Medium, Low)	Type of Structural Control	Number of Controls	Inspection/Maintenance Schedule
Randolph Elementary School 14470 Norman St. Livonia, MI 48154	Low	Catch Basin/Manholes	7	Inspect Annually, Clean Once per Permit Cycle or if Build-Up of Accumulated Solid Material is Between 30 and 50% of the Total Sump Depth.
		Infiltration Basin	1	Inspect Annually, Maintain as Needed
		Basin Drain	2	Inspect Annually, Maintain as Needed
		Hydrodynamic Separator	1	Inspect Annually, Maintain as Needed

Livonia Public Schools – Riley Upper Elementary School

Structural Control Inventory, Inspection, & Maintenance Schedule

Facility	Priority Level of Potential Discharge (High, Medium, Low)	Type of Structural Control	Number of Controls	Inspection/Maintenance Schedule
Riley Upper Elementary School 15555 Henry Ruff Livonia, MI 48154	Low	Catch Basin/Manholes	10	Inspect Annually, Clean Once per Permit Cycle or if Build-Up of Accumulated Solid Material is Between 30 and 50% of the Total Sump Depth.
		Open Pipe Outlet	1	Inspect Annually, Maintain as Needed
		Infiltration Basin	4	Inspect Annually, Maintain as Needed

Livonia Public Schools – Roosevelt Elementary School
Structural Control Inventory, Inspection, & Maintenance Schedule

Facility	Priority Level of Potential Discharge (High, Medium, Low)	Type of Structural Control	Number of Controls	Inspection/Maintenance Schedule
Roosevelt Elementary School 30200 Lyndon Livonia, MI 48154	Low	Catch Basin/Manholes	19	Inspect Annually, Clean Once per Permit Cycle or if Build-Up of Accumulated Solid Material is Between 30 and 50% of the Total Sump Depth.

Livonia Public Schools – Stevenson High School Campus

Structural Control Inventory, Inspection, & Maintenance Schedule

Facility	Priority Level of Potential Discharge (High, Medium, Low)	Type of Structural Control	Number of Controls	Inspection/Maintenance Schedule
Stevenson High School 33500 Six Mile Road Livonia, MI 48152 The Learning Tree 33901 Curtis Road Livonia, MI 48152	Medium	Catch Basin/Manholes	44	Inspect Annually, Clean Once per Permit Cycle or if Build-Up of Accumulated Solid Material is Between 30 and 50% of the Total Sump Depth.
		Open Pipe Outlet	7	Inspect Annually, Maintain as Needed
		Basin Drain	1	Inspect Annually, Maintain as Needed
		Infiltration Basin	6	Inspect Annually, Maintain as Needed
		Detention Basin	1	Inspect Annually, Maintain as Needed
		Stormwater Conveyance Channel	6	Inspect Annually, Maintain as Needed
		Stabilized Outlet	3	Inspect Annually, Maintain as Needed

Livonia Public Schools – Webster Elementary School

Structural Control Inventory, Inspection, & Maintenance Schedule

Facility	Priority Level of Potential Discharge (High, Medium, Low)	Type of Structural Control	Number of Controls	Inspection/Maintenance Schedule
Webster Elementary School 32401 Pembroke Livonia, MI 48150	Low	Catch Basin/Manholes	13	Inspect Annually, Clean Once per Permit Cycle or if Build-Up of Accumulated Solid Material is Between 30 and 50% of the Total Sump Depth.
		Infiltration Basin	1	Inspect Annually, Maintain as Needed
		Hydrodynamic Separator	1	Inspect Annually, Maintain as Needed

Appendix “F”

Contractor Oversight & Employee Training Documentation



IDEP/PPGH STORMWATER TRAINING RECORD

Client

Livonia Public Schools
Permit No. MI0059883

Location**Date**

Illicit Discharge Elimination Program (IDEP): Training on techniques for identifying illicit discharges and connections, Training on procedures for reporting, responding to, and eliminating an illicit discharge or connection and the proper enforcement response.

Pollution Prevention & Good Housekeeping: Training on BMPs that are important such as good housekeeping, spill response, materials storage and handling, landscape maintenance, street maintenance, fleet maintenance, and garages.

Employee Name**Employee Signature****Job Title/Department**

_____	_____	_____
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_____	_____	_____

Instructor Name**Instructor Signature**

Arch Environmental Group, Inc.
248-426-0165

LIVONIA PUBLIC SCHOOLS

STORMWATER CONTRACTOR OVERSIGHT RECORD

Livonia Public Schools shall implement the procedure requiring contractors hired by the District to perform municipal operation and maintenance activities that comply with the District pollution prevention and good housekeeping program and contractor oversight to ensure compliance with the District National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Storm Water Discharge Permit, Section A. Limitations and Monitoring Requirements, #7 Contractor Requirements and Oversight.

1. Identify the potential pollutant-generating activities and pollutants expected to be exposed to stormwater.
2. Describe the location where the potential pollutant-generating activities will occur.
3. Identify the person responsible for implementing the pollution prevention practice or practices for each pollutant-generating activity.

Please initial each line of the procedure.

_____ Prevent and respond to leaks, spills and other releases;

_____ Prevent the discharge of spilled and leaked fuels and chemicals from vehicle fueling and maintenance activities;

_____ Prevent the discharge of soaps, solvents, detergents, and wash water from construction materials, including the clean-up of stucco, paint, form release oils, and curing compounds. Collection and proper disposal in a manner to prevent contact with stormwater and prevent discharge of these pollutants.

_____ Minimize the discharge of pollutants from vehicle and equipment washing, wheel wash water and other types of washing (e.g., locating activities away from surface waters and stormwater inlets or conveyance and directing wash waters to sediment basins or traps, using filtration devices such as filter bags or sand filters or using similarly effective controls);

_____ Direct concrete wash water into a leak-proof container or leak-proof settling basin. The container or basin shall be designed so that no overflows can occur due to inadequate sizing or precipitation. Hardened concrete wastes shall be removed and disposed of in a manner consistent with the handling of other construction wastes. Liquid concrete wastes shall be removed and disposed of in a manner consistent with the handling of other construction wash waters and shall not be discharged to surface waters;

_____ Minimize the discharge of pollutants from storage, handling, and disposal of construction products, materials and wastes including (i) building products such as asphalt sealants, copper flashing, roofing materials, adhesives, concrete admixtures; (ii) pesticides, herbicides, insecticides, fertilizers, and landscape materials; and (iii) construction and domestic wastes such as packaging materials, scrap construction materials, masonry products, timber, pipe and electrical cuttings, plastics, Styrofoam, concrete, and other trash or building materials;

_____ Prevent the discharge of fuels, oils, and other petroleum products, hazardous or toxic wastes, and sanitary wastes.

_____ Report any other discharge from the potential pollutant-generating activities not addressed above to Livonia Public Schools.

Name of Business

Business Representative

Date

Appendix “G”

TMDL Sample Location Table

TMDL Sample Locations

Livonia Public Schools				
Facility	Point of Discharge	Receiving Waters	Watershed	Parameter
Buchanan Elementary School	BCN-04.OP.OF	Bell Branch	Rouge	E. coli and Biota
	BCN-20.CB.DP	Bell Branch	Rouge	E. coli and Biota
Cass Elementary School	CAS-05.CB.DP	Bell Branch	Rouge	E. coli and Biota
Churchill High School-Rosedale Elementary School Complex	CHS-41.MH.DP	Tonquish Creek	Rouge	E. coli and Biota
	CHS-79.MH.DP	Newburgh Lake	Rouge	E. coli and Biota
Cleveland Elementary School	CVD-02.CB.DP	Middle Rouge River	Rouge	E. coli and Biota
Coolidge Elementary School	CLG-05.OP.OF	Bell Branch	Rouge	E. coli and Biota
Cooper Upper Elementary School	CPR-26.OP.OF	Middle Rouge River	Rouge	E. coli and Biota
Emerson Middle School	EMS-22.MH.DP	Middle Rouge River	Rouge	E. coli and Biota
Franklin High School-Mckinley Elementary School Complex (Mckinley Closed)	FHC-40.CB.DP	Middle Rouge River	Rouge	E. coli and Biota
	FHC-49.MH.DP	Middle Rouge River	Rouge	E. coli and Biota
	FHC-60.CB.DP	Middle Rouge River	Rouge	E. coli and Biota
Frost Middle School	FRO-11.MH.DP	Bell Branch	Rouge	E. coli and Biota
Garfield Elementary School	GFD-05.CB.DP	Middle Rouge River	Rouge	E. coli and Biota
	GFD-10.OP.DP	Middle Rouge River	Rouge	E. coli and Biota
Grant Elementary School	GRT-01.MH.DP	Middle Rouge River	Rouge	E. coli and Biota
	GRT-40.MH.DP	Middle Rouge River	Rouge	E. coli and Biota
Hayes Elementary School	HES-09.MH.DP	Middle Rouge River	Rouge	E. coli and Biota
Holmes Middle School	HMS-28.MH.DP	Bell Branch	Rouge	E. coli and Biota
Hoover Elementary School	HVR-03.MH.OF	Bell Branch	Rouge	E. coli and Biota
Jackson Early Childhood Center	JEC-14.MH.DP	Bell Branch	Rouge	E. coli and Biota

TMDL Sample Locations

Livonia Public Schools				
Facility	Point of Discharge	Receiving Waters	Watershed	Parameter
Johnson Upper Elementary School	No Discharge Points			
Kennedy Elementary School	KNY-01.MH.DP	Bell Branch	Rouge	E. coli and Biota
Livonia Career Technical Center	LCT-03.MH	Middle Rouge River	Rouge	E. coli and Biota
Maintenance Complex	LMC-03.MH.DP	Bell Branch	Rouge	E. coli and Biota
Niji-Iro Japanese Elementary School-Dickinson Center Complex (Dickinson Closed)	JDC-09.SCC.OF	Wolfrom Drain	Rouge	E. coli and Biota
	JDC-19.CB.DP	Bell Branch	Rouge	E. coli and Biota
	JDC-30.MH.DP	Bell Branch	Rouge	E. coli and Biota
Parcel Property #1	No Discharge Points			
Parcel Property #2	No Discharge Points			
Randolph Elementary School	RAN-05.MH.DP	Bell Branch	Rouge	E. coli and Biota
Riley Upper Elementary School	RLY-06.MH.DP	Bell Branch	Rouge	E. coli and Biota
Roosevelt Elementary School	RVT-02.CB.DP	Bell Branch	Rouge	E. coli and Biota
	RVT-09.MH.DP	Bell Branch	Rouge	E. coli and Biota
Stevenson High School-Marshall School Complex	SHS-09.OP.OF	Bell Branch	Rouge	E. coli and Biota
	SHS-44.SCC.OF	Bell Branch	Rouge	E. coli and Biota
	SHS-51.SCC.OF	Bell Branch	Rouge	E. coli and Biota
Webster Elementary School	WBR-11.MH.DP	Middle Rouge River	Rouge	E. coli and Biota