CITY OF DEARBORN

DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION PLAN REVIEW COMMENTS

The requirements for Projects; beyond one-acre of disturbance or belonging to a larger common plan of development, to comply with Michigan EGLE MS4 requirements and/or with the City of Dearborn 2022 Storm Water Management Ordinance:

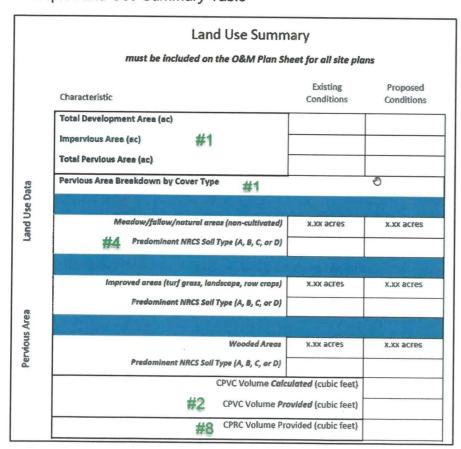
- 1-Designing the proposed storm water drainage system (size and slope) based on 10-year storm intensity equations and detention system (flood control volume) based on 100-year storm intensity equations; found in the 2021 Wayne County Manual.
- 2-Providing a pretreatment system at the inlet to the detention system which limits the peak TSS concentration to 80 mg/L or reduces the TSS concentration by 80%; to abide by First Flush Treatment Requirements for the first one-inch of rainfall. (Examples of pretreatment systems: forebays and mechanical separators).
- 3-Providing Channel Protection Rate Control (CPRC) to store and release the volume generated by a 1.9-inch storm event for a discharge duration of 48 hours and sizing the orifice in the flow control structure to be CPRC compliant.
- 4-Providing Channel Protection Volume Control (CPVC) by using infiltration BMPs to infiltrate at least the first one-inch of rainfall throughout the development.
- A credit maybe be given against the flood control volume by using CPRC volume instead to size the
 detention system; that is if the CPRC volume is greater than the flood control volume minus the
 CPVC volume.
- On the other hand; if applicable, applying for a waiver based on Poor soil conditions of the existing soils' infiltration rate (less than 0.24 inches/hour) or Prevailing groundwater levels within 2 vertical feet of the bottom of the infiltration BMP or Presence of contaminated soils in the vicinity of the proposed BMP; determined by geotechnical test and report sealed by a Michigan P.E.

Infiltration BMPs include: permeable pavers and bioretention.

- 5-Soil testing used to determine the site's soil group(s) and the soils' runoff coefficient.
- 6-Providing the long-term maintenance plan of the different entities of the property's storm water management system.
- 7-The property owner upon completion of construction must certify the storm water management system construction through a Michigan P.E., submit as-builts, and enter into a binding long-term maintenance agreement with the City, at their own expense, to document, routinely monitor and maintain the storm water management system, so it continues to operate as designed. This long-term maintenance agreement shall be recorded with the Wayne County Register of Deeds and subject to transfer to the new owner upon sale of the property (check attached template agreement). Note that the applicant shall also provide all the information listed in the succeeding page.

Permit Reporting Requirement	Reporting Guidance	
(1) Change in impervious area, pervious area by cover type, and total area by site.	This information is collected in the Land Use Summary Table.	
(2) CPVC volume provided at the site.	This information is collected in the Land Use Summary Table.	
(3) Difference between required and provided CPVC volume by site.	This is the difference between the <i>CPVC Volume Calculated</i> and <i>CPVC Volume Provided</i> in the Land Use Summary Table.	
(4) Percent of site in each Hydrologic Soil Group (Type A, B, C. D)	This information is partially collected in the Land Use Summary Table; however, the percent in EACH hydrologic soil group is required, not just the predominant soil group.	
(5) Site location in GIS polygon format.	The GIS layers representing reporting requirements #5-7 must be converted to a KML file to upload in MiWaters.	
(6) Site outfalls and points of discharge in GIS point format.	NOTE: MiWaters will not accept KMZ files. Each KML file is limited to 50 features in MiWaters. Multiple KML files may be needed based on the number of features and size of the	
(7) Site MS4 outfall drainage area in GIS polygon format, including any offsite drainage that passes through the outfall or	file. For each development or redevelopment project, reporting requirements #5-7 should be included in the same KML file.	
points of discharge.	Other formatting options may be available to meet the reporting requirements. Contact MS4 Program District Staff to discuss options.	
(8) CPRC volume provided at the site.	This information is collected in the Land Use Summary Table.	
(9) Difference between required and provided CPRC volume by site. This is the difference between the CPRC volume calculated, which is not collected in the Land Use Su Table and the CPRC Volume Provided, which is co in the Land Use Summary Table.		

Example Land Use Summary Table



POST-CONSTRUCTION STORMWATER MAINTENANCE AGREEMENT

THIS AGREEMENT is made and entered into on this day of	, 20, by and
between the City of Dearborn, a Michigan municipal corporation, with its princi	pal offices located
at 16901 Michigan Ave., Dearborn, Michigan 48126 (hereinafter referred t	to as "City"), and
the owner(s) of the property located at	
with principal offices located at	,
(hereinafter referred to as "Owner").	

[Property Owner's Name], as "Owner(s)" of the property described above and in more detail in Exhibit A, and in accordance with Dearborn Code of Ordinances Chapter 19, Article V, Secs. 19-208 – 19-224 (hereinafter referred to as "Ordinance"), and any subsequent amendments, agrees to monitor and maintain the stormwater control systems on the subject property in accordance with approved plans and conditions, and pursuant to the terms and conditions of the Ordinance. The Owner further agrees to the terms stated in this document to ensure that the stormwater control system continues serving the intended function in perpetuity.

This Agreement includes the following exhibits:

- Exhibit A: Legal description of the real estate for which this Agreement applies ("Property")
- Exhibit B: Location map(s) showing the location of the Property and an accurate location of the stormwater control system.
- Exhibit C: Long-term Maintenance Plan that prescribes those activities that must be carried out to maintain compliance with this Agreement.

Through this Agreement, the Owner(s) agree to the following terms and conditions:

1. Easements and rights-of-way: The Owner(s), at its expense, shall secure from any affected owners of land all easements and releases of rights-of-way necessary for utilization of the stormwater control system identified in Exhibit B and shall record them with the Wayne County Register of Deeds. These easements and releases of rights-of-way shall not be altered, amended, vacated, released or abandoned without prior written approval of the City.

- 2. Responsibility for installation, maintenance, and repair: The Owner(s) shall be solely responsible for the installation, maintenance, and repair of the stormwater control system, drainage easements, and associated landscaping identified in Exhibit B in accordance with the Maintenance Plan in Exhibit C.
- 3. <u>Alterations to stormwater control system</u>: No alterations or changes to the stormwater control system identified in Exhibit B shall be permitted unless they are deemed to comply with the Ordinance and this Agreement, and are approved in writing by the City Engineer.
- 4. Right of entry for inspections; required maintenance or repairs: The City Engineer or their designee is authorized to access the property as necessary to conduct inspections of the stormwater control system or drainage easements to ascertain compliance with the Ordinance, this Agreement, and the activities prescribed in Exhibit C. Upon written notification by the City or their designee of required maintenance or repairs, the Owner(s) shall complete the specified maintenance or repairs within a reasonable time frame determined by the City. The Owner(s) shall be responsible for any costs related to any maintenance or repairs deemed necessary by the City. The Owner(s) shall be liable for the failure to undertake any maintenance or repairs so that the public health, safety and welfare shall not be endangered nor the road improvement damaged.
- 5. Liability for City repairs; cost recovery: If the Owner(s) does not keep the stormwater control system in reasonable order and condition, or complete maintenance activities in accordance with the Plan contained in Exhibit C, or the reporting required in paragraph 3 above, or the required maintenance and repairs under paragraph 4 above within the specified time frames, the City is authorized, but not required, to perform the specified inspections, maintenance or repairs in order to preserve the intended functions of the stormwater control system and prevent the system or any failures of the system from becoming a threat to public health, safety, general welfare or the environment. In the case of an emergency, as determined by the City, no notice shall be required prior to the City performing emergency maintenance or repairs. The Owner(s) shall be responsible for any costs incurred for inspections, maintenance or repairs pursuant to this paragraph. The City may levy the costs and expenses of such inspections, maintenance or repairs plus a ten percent (10%) administrative fee against the Owner(s). The City at the time of entering upon said stormwater control system for the purpose of maintenance or repair may file a notice of lien in the office of the Wayne County Register of Deeds upon the property affected by the lien. If said costs and expenses are not paid by the Owner(s), the City may pursue the collection of same through appropriate court actions.
- 6. <u>Conveyance of easement</u>: The Owner(s) hereby conveys to the City an easement over, on and in the property described in Exhibit A for the purpose of access to the stormwater control system for the inspection, maintenance and repair thereof, should the Owner(s) fail to properly inspect, maintain and repair the system.
- 7. Recording: The Owner(s) agrees that this Agreement shall be recorded and that the land described in Exhibit A shall be subject to the covenants and obligations contained herein, and this agreement shall bind all current and future owners of the property.

- 8. <u>Sale, transfer, or lease of Property</u>: The Owner(s) agrees in the event that the Property is sold, transferred, or leased to provide information to the new owner, operator, or lessee regarding proper inspection, maintenance and repair of the stormwater control system. The information shall accompany the first deed transfer and include Exhibits A, B and C and this Agreement. The transfer of this information shall also be required with any subsequent sale, transfer or lease of the Property.
- 9. <u>Effective date of Agreement</u>: The Owner(s) agree that the rights, obligations and responsibilities hereunder shall commence upon execution of this Agreement.
- 10. <u>Authority</u>: The parties whose signatures appear below hereby represent and warrant that they have the authority and capacity to sign this agreement and bind the respective parties hereto.
- 11. <u>Indemnity and hold harmless</u>: The Owner(s), its agents, representatives, successors and assigns shall defend, indemnify and hold the City harmless from and against any claims, demands, actions, damages, injuries, costs or expenses of any nature whatsoever, hereinafter "Claims," fixed or contingent, known or unknown, arising out of or in any way connected with the design, construction, use, maintenance, repair or operation (or omissions in such regard) of the stormwater control system, including any appurtenances, connections and attachments thereto which are the subject of this Agreement. This indemnity and hold harmless shall include any costs, expenses and attorney fees incurred by the City in connection with such Claims or the enforcement of this Agreement.
- 12. Choice of law and severability: This Agreement will be governed and controlled in all respects by the laws of the State of Michigan, including interpretation, enforceability, validity and construction. The parties submit to the jurisdiction and venue of the Circuit Court for Wayne County, State of Michigan, or, if original jurisdiction can be established, the United States District Court for the Eastern District of Michigan, Southern Division, with respect to any action arising, directly or indirectly, out of this Agreement or the performance or breach of this Agreement. The parties stipulate that the venues referenced in this Agreement are convenient and waive any claim of nonconvenience.

Whenever possible, each provision of this Agreement will be interpreted in a manner as to be effective and valid under applicable law. However, if any provision of this Agreement or the application of any provision to any party or circumstance shall be prohibited by or invalid under applicable law, that provision shall be ineffective to the extent of the prohibition or invalidity without invalidating the remainder of the provisions of this Agreement or the application of the provision to other parties and circumstances.

13. Owner(s) emergency contact: In the event of an emergency, as determined by the City, the Owner(s) can be reached at the following: [Emergency contact info; phone and email]

14. <u>Notice</u> . Any action required to be given or which may be given to a party to this Agreement shall be sent in writing, by personal delivery, by certified mail (return receipt requested), or overnight mail at the following addresses:
If to the Owner:
[OWNER(s) NAME AND ADDRESS]
If to the City:
Dearborn Public Works
Attn: City Engineer
2951 Greenfield Rd.
Dearborn, MI 48126
With a copy to:
Corporation Counsel
16901 Michigan Avenue, Suite 14
Dearborn, MI 48126
N WITNESS THEREOF, the Owner(s) and City have executed this Agreement on thislay of, 20
FOR THE OWNER(S):
By (print)
Signature
Title
Notary Public
County of Michigan
My Commission Expires On:

FOR THE CITY OF DEARBORN:	
By (print)	
Signature	
Title	
Notary Public	
County of Michigan	
My Commission Expires On:	
WHEN RECORDED RETURN TO:	
Corporation Counsel	
16901 Michigan Avenue, Suite 14	
Dearborn, MI 48126	

Exhibit A - Legal Description (Sample)

The following description and reduced copy map identifies the land parcel(s) affected by this Agreement.

[Note: An example legal description is shown below. This exhibit must be customized for each site, including the minimum elements shown. It must include a reference to a Subdivision Plat, Certified Survey number; or Condo-minimum Plat, and a map to illustrate the affected parcel(s).]

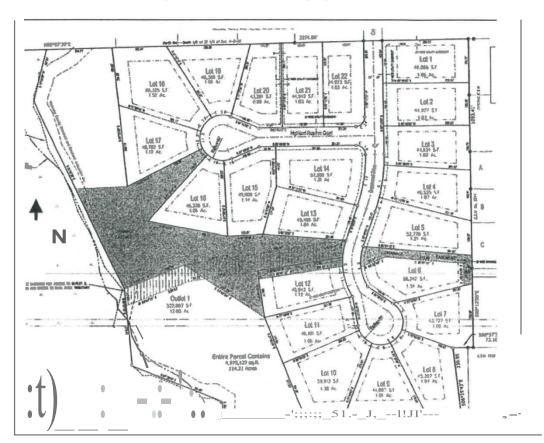
Project Identifier: Huron Preserve

Subdivision Acres: 40

Date of Recording: October 22, 2006

Map Produced by: ABC Engineering, P.O. Box 20, Green Oak Twp., MI

Legal Description: Lots 1 through 22 of Huron Preserve Subdivision, located in the Southwest Quarter (SW 1/4) of Section 4, Township 8N, Range 19E (Green oak Township) Livingston County, Michigan. [If no land division is involved, enter legal description as described on the property title here.]



Huron Preserve Subdivision

<u>Drainage Easement Restrictions</u>: Shaded area on map indicates a drainage easement for stormwater collection, conveyance, and treatment. No buildings or other structures are allowed in these areas. No grading or filling is allowed that may interrupt stormwater flows in any way. See Exhibit C for specific maintenance requirements for stormwater management practices within this area. See subdivision plat for details on location.

Exhibit B - Location Map (Sample)

Stormwater Management Practices Covered by this Agreement

[An example location map and the minimum elements that must accompany the map are shown below. This exhibit must be customized for each site. Map scale must be sufficiently large enough to show necessary details.]

The stormwater management practices covered by this agreement are depicted in the reduced copy of a portion of the construction plans, as shown below. The practices include on wet detention basin, two forebays, two grass swales (conveying stormwater to the forebays) and all associated pipes, earthen berms, rock chutes, and other components of these practices. All of the noted stormwater management practices are located within a drainage easement in Outlot 1 of the subdivision plat as noted in Exhibit A.

Subdivision Name: Huron Preserve Subdivision

Stormwater Practices: Wet Detention Basin #1, forebays (2), grass swales (2)

Location of Practices: All that part of Outlot 1, bounded and described in Figure G.l: [If no land division is involved, enter a metes and bounds description of the easement area.]

Titleholders of Outlot 1: Each Owner of Lots 1 through 22 shall have equal (1/22) undividable interest in Outlot 1 [For privately owned stormwater management practices, the titleholder(s) must include all new parcels that drain to the stormwater management practice.]

Figure G.l
Plan View of Stormwater Practices

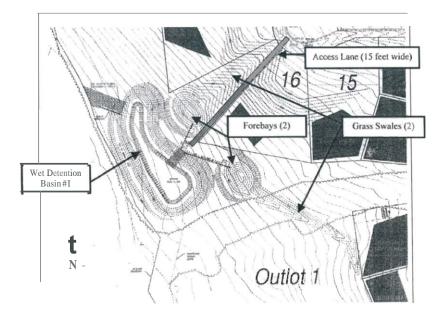


Exhibit C • Stormwater Practice Maintenance Plan (Sample)

This exhibit explains the basic function of each of the stormwater practices listed in Exhibit B and provides the minimum specific maintenance activities and frequencies for each practice. The maintenance identified by the Owner should follow the maintenance activities listed in this manual, if applicable. Vehicle access to the stormwater practices is shown in Exhibit B. Any failure of a stormwater practice that is caused by lack of maintenance will subject the Owner(s) to enforcement of the provisions listed in the Agreement by the [Community] .

The exhibit must be customized for each site. The minimum elements of this exhibit include: a description of the drainage area and the installed stormwater management practices, a description of the specific maintenance activities for each practice which should include in addition to specific actions:

- Employee training and duties,
- Routine service requirements,
- · Operating, inspection and maintenance schedules, and
- · Detailed construction drawings showing all critical components and their elevations.

References

Charter Township of Canton, Stormwater FACILITIES MAINTENANCE AGREEMENT.

Charter Township of Green Oak, AGREEMENT FOR MAINTENANCE OF STORMWATER MANAGEMENT PRACTICES