Engineering Department

Stormwater Permit Application Packet

Chapter 67 of the City of Walker Code of Ordinances

4243 Remembrance Rd NW
Walker, MI 49534
Phone: (616) 453-6311

City of Walker
Stormwater Permit Application Packet

Stormwater Contact Information

Engineering Department General Phone: (616) 791-6296

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Kent County Drain Commission

1500 Scribner Ave NW
Grand Rapids, MI 49504
P: (616) 623-7910 F: (616) 632-7915
drain-info@kentcounty.org

SOIL EROSION & SEDIMENTATION CONTROL PERMIT CHECKLIST

REQUIRED FOR PERMIT ISSUANCE:

- ☐ Completed Permit Application
- ☐ Letter of Authorization
- ☐ One (1) Complete Site Plan: Hard Copy & PDF or TIF file
- ☐ Complete Stormwater Pollution Prevention Plan Checklist
- ☐ Water Quality Device Worksheet (*if applicable)*
- ☐ Signed/Notarized Stormwater Management Plan & Maitenance Agreement
- ☐ Recording Fee: $30.00
- ☐ Permit Fee
  - ☐ 3 acres or less $400
  - ☐ At least 3 acres, but less than 5 acres $500
  - ☐ At least 5 acres, but less than 10 acres $700
  - ☐ 10 acres or more $1,000
- ☐ $5000.00 Escrow: Letter of Irrevocable Credit, Check, or Cash Deposit
- ☐ Acquire Soil Erosion & Sedimentation Control Permit if required

TO CLOSE PERMIT:

- ☐ Site Complete & Vegetated
- ☐ Underground Detention Certification (if applicable)
  *Photos are **required** at time of installation*
- ☐ Submission of Asbuilt Certification(s)
- ☐ Submission of Digital Stormwater Asbuilt(s)
  Deposit refunded upon permit closure

Forms and Applications can be found at:
City of Walker Engineering Department: Stormwater Design Standards for Development

PROGRAM CONTACT

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Engineering Department
4243 Remembrance Road NW
Walker, MI 49534
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SW

AS OF 08/2023

Date Stamp

STORMWATER PERMIT APPLICATION

Site Address:		Parcel #:	
Size of Parcel(s):	acres	Disturbed Area:	acres
Date Project Will Begin:		Est. Completion Date:	

APPLICANT INFORMATION ☐ AUTHORIZED AGENT* ☐ LANDOWNER

Name:			
Address:	City:	State:	Zip:
Phone:	Email:		

OWNER ON RECORD (If other than applicant)

Landowners(s):			
Address:	City:	State:	Zip:
Phone:	Email:		
Emergency Contact:		Phone:	

STORMWATER OPERATOR RESPONSIBLE FOR SITE INSPECTIONS

Inspections are to be conducted once a week and within 24 hours of each rain event. Submit copies to the City of Walker Engineering Department.

Name:	Company Name:		
Address:	City:	State:	Zip:
Phone:	Email:		
Construction Site Stormwater Operator Registration #:			

PROJECT SITE PLANS

Company Name:			
Professional Engineer:			
Address:	City:	State:	Zip:
Phone:	Email:		

*I (we) affirm that the above information is accurate and that I (we) will conduct the above described earth change in accordance with Chapter 67 of the City of Walker Code of Ordinances**

Landowner's Signature | Print Name | Date

Authorized Agent's Signature* | Print Name | Date

**Authorized Agent must have a written statement from the landowner authorizing them to secure a permit in the landowner's name*

FOR OFFICE USE ONLY

Approved By:	Date Issued:	Escrow:
Approval Date:	Date Expired:	

#SW

Permit Fee

Inspection Fee

Receipt #:	
Received:	

Stormwater Discharge Permit
Letter of Authorization

NAME OF PROJECT: _____

LOCATION OF PROJECT: _____

PERMANENT PARCEL #: _____

As owner of the property described above, I authorize the person indicated below to act on my behalf for the purpose of this application for a soil erosion and sediment control permit pursuant to Part 91 of 1994 PA 451, as amended and Article VI Chapter 34 of the City of Walker, Code of Ordinances. I assume final responsibility for all earth change work and understand that liability arising from any unlawful earth change will be assessed against me.

_____ _____

Owner (Signature) *Date*

_____ _____

Owner (Please Print or Type) *Date*

_____ _____

Owner's Authorized Agent (Please Print or Type) *Date*

_____

Company Name

Stormwater Worksheet

Project: _____ Location: _____
Developer/Owner: _____ Engineering Firm: _____
Design Engineer: _____ Date: _____

Sensitive Areas:
Indicate on site plan and check below.
(Check all that apply)

- ☐ Waterbodies
- ☐ Riparian
- ☐ Sand Dunes
- ☐ Susceptible Groundwater
- ☐ Rivers & Streams
- ☐ Wetlands
- ☐ Natural Drainage Ways
- ☐ Threatened & Endangered Species
- ☐ Floodplains
- ☐ Woodlands
- ☐ Steep/Erodible Soils

Special Site Considerations:
(Check all that apply)

- ☐ Hot Spot
- ☐ Coldwater Stream
- ☐ Policy Watershed

Activity/Name(s): _____

Water Quality:
Required for all sites.

Channel Protection:
Required for surface water discharges.
(Check all that apply)

- ☐ Onsite Retention (must be considered first and foremost)

If site conditions preclude onsite retention:

- ☐ Off-site Mitigation (subject to availability)
- ☐ Payment-in-lieu (subjuct to availability - Development Agreement required)
- ☐ Alternative Approach: Extended Dtenetion (submit Engineer's Certification available on next page)

Flood Control:

Required for all site.

(Check all that apply)

- ☐ Standard release rate (0.13cfs/acre)
- ☐ Alternate release rate allowed (describe):
- ☐ 100-year storm detention for developed site

(Check one)

- ☐ Emergency Overflow Routes available and identified on site plan
- ☐ No acceptable Emergency Overflow Routes (detention/retention sized for 2 times the flood control volume; storm sewer may be required to be upsized to 100-year design)

Engineer's Certification for Use of Alternative Approach for Channel Protection:

I am the Design Engineer for _____
and certify that I have followed the LGROW Alternative Approach Flowchart, and maximized the use of BMPs to meet the channel protection volume standard through ruction of runoff and onsite retention. The following site constraints preclude meeting the channel protection standard through volume control:

(Check all that apply)

- ☐ Poorly draining soils (<0.24 inches per hour infiltration capacity; typically HSG C and D)
- ☐ Part 201 and Part 213 sites, and areas of soil or groundwater contamination
- ☐ High groundwater, or the potential of mounded groundwater to impair other uses
- ☐ Wellhead protection areas
- ☐ Bedrock
- ☐ Other: _____

_____ _____

Printed Name *Date*

_____ _____

Signature *Date*

(Seal)

Water Quality Device (WQD)

Third Party Testing Summary and Specifications

Fill out this form if a water quality unit/manufactured treatment device is proposed for the development. See page 51 of Appendix 3 in the Stormwater Standards Manual for more specific design specifications.

Manufacturer:
Unit and Model:

10 YR Peak Flow: _____ cfs
Water Quality Flow: _____ cfs
Proposed TTS Removal Efficiancy*: _____ %

*Use same value as LGROW Design Spreadsheet

Third Party Testing Results of Proposed Unit

Flow Rate WQD is rated for: _____ cfs
Removal Efficiancy at the flow rate: _____ %

Has the proposed WQD been tested for the proposed configuration?

_____ YES _____ NO

Scour Testing

Has scour testing been performed?

_____ YES _____ NO

Scour CFS Results: _____ cfs

Is the scour CFS greater than full flow pipe capacity into the WQD?

_____ YES _____ NO

If "NO" is checked above, is a bypass pipe provided to prevent scour?

_____ YES _____ NO

Stormwater Review Checklist

To be Completed & Signed by Applicant

General

		Comments
1. Project or plat name	☐	
2. Location Map	☐	
3. Proprietor's name, address, phone number, and e-mail address	☐	
4. Engineer/Architect/Surveyor's name, address, phone number, and e-mail address	☐	
5. North arrow and scale (scale is **required** to be 1 inch = 100 feet or larger)	☐	
6. Project or plat boundary	☐	
7. Indentification of all adjoining parcels by address	☐	
8. Lot dimensions (scaled or computed)	☐	
9. Lot numbers (individual addresses if a Plat, PUD, or Site Condo)	☐	
10. Building setback lines	☐	

Topographical

11. Existing buildings (label those under construction with address and proposed lowest foundation opening elevations)	☐	
12. Existing and proposed roads (name, ROW width, and type of surface)	☐	

13. Existing **and** proposed land surface contours (minimum 2.0 foot countour interval referenced to a national datum) ☐ _____

14. No slopes greater than 1 or 3 without structural improvements ☐ _____

15. Available soils data, soil boring logs, and locations (include ground elevation and water table information) ☐ _____

Drainage

16. Offsite watershed areas (with boundaries and acreage to be shown in drainage calcs) ☐ _____

17. Existing creeks, streams, ditches, and other surface drainage ways. ☐ _____

18. All existing storm sewer and structures (with proper labeling of type, size, invert elevation, and ownership). ☐ _____

19. County, municipal, MDOT, and private drains (permission required to connect). ☐ _____

20. Proposed drainage systems (clearly identify all open and enclosed portions, size, inverts, grade, and proposed ownership). ☐ _____

21. 100 year established or localized floodplain contour (if applicable). ☐ _____

22. Wetland boundaries with determination date and company. ☐ _____

23. Existing and proposed utilities. ☐ _____

24. Proposed stormwater detention/infiltration basins. ☐ _____

25. Site's stormwater runoff discharge location (including roof water). ☐ _____

26. All soil erosion controls shown on the plan. ☐ _____

Stormwater Drainage Calculation Package

27. On-site sewers designed for 10-year storm event. ☐ _____

28. Flood protection from 100-year storm event. ☐ _____

29. Provide minimum basement elevations. ☐ _____

30. A topographic map with site delineated in relation to watershed. ☐ _____

31. Calculations of peak discharge for a range of storms up to and including the 100-year storm for any natural water courses and/or county drains passing through the proposed development, including area of upstream watershed ☐ _____

32. Normal, design and 100-year water elevations, including overland flow routes shown on the topographic map. ☐ _____

33. Drainage area map that clearly shows subcatchment boundaries, acreages, and flow paths of tributary areas to each point of discharge from the development, including tributary areas originating outside of the development. Also identify tributary areas to inlets, culverts, and other stormwater BMPs ☐ _____

34. Documentation and/or calculations required to demonstrate an adequate outlet, including the sizes and locations of upstream and downstream culverts serving drainage routes into and out of the development site. ☐ _____

35. Calculations of stormwater rates and volumes for each point of discharge or treatment train for pre-development and postdevelopment conditions for the design storms. ☐ _____

36. BMP design calculations. ☐ _____

37. Groundwater mounding calculations (when required). ☐ _____

38. Design summary report, including at a minimum: description of storwmater management plan for the site, identified contributing areas with land cover types, soils and runoff coefficients, times-of-concentration, runoff volumes, peak discharges, design high water levels, sewer hydraulic grade line, required storage volumes, and volumes provided. ☐ _____

39. Sealed by Professional Engineer on company letterhead with date performed. ☐ _____

Projects Impacting County Drains

40. Refer to Kent County Drain Commission for requirements and approval. ☐ _____

Detention/Infiltration Base

41. Required volume/release rate. ☐ _____

42. Adequate volume provided. ☐ _____

43. Side slopes including surface treatments. ☐ _____

44. Overflow spillway & emergency overflow floodway. ☐ _____

45. Hydraulic calculations for transfer or outlet pipe. ☐ _____

46. Outlet control structure detail (scaled with hydraulic information matching calculations). ☐ _____

47. Minimum basement floor elevations & minimum building opening elevations established. ☐ _____

48. Underground detention storage details (if applicable). Plans must indicate inspection ports and that system will be inspected during installation. ☐ _____

Easements

49. Existing and proposed utility easements (labeled with dimensions, purpose, and easement recipient). ☐ _____

50. Existing and proposed drainage easements. ☐ _____

51. Offsite drainage easements or right-of-way. ☐ _____

52. Existing and proposed access to the property and drainage structures. ☐ _____

Maintenance

53. Identification of the agency, association, or private party proposed to assume ownership of the drainage system (including the detention and/or infiltration basins). ☐ _____

54. Identified access routes for trucks and maintenance equipment, including fences and gates. ☐ _____

55. Proper siting of BMPs for accessibility. ☐ _____

56. Design of BMP elements to minimize amount of maintenance required (e.g. filters on small orifices, etc.). ☐ _____

57. Design details to illustrate maintenance features (e.g. removable grates or rails, locks, access platforms, etc.). ☐ _____

Fee

58. Permit fee. ☐ _____

59. Recording fee. ☐ _____

I certify that the Stormwater Pollution Prevention Plan being submitted has been reviewed using this checklist:

_____ _____

(Print Name) *(Date)*

_____

(Signature)

Stormwater Asbuilt Certification

Print Clearly or Type

Permit Number: _____
Project Name: _____
Project Location: _____

Select One:

☐ I hereby certify that all components of this stormwater management system have been built in accordance with the approved plans and specifications.

☐ There are deviations from the approved plans. I certify that the changes will not have any effect on design by producing any addition to flow, rate, velocity of storm water, or frequency and level of high water mark. The changes are listed on the plan in red and itemized in the attached narrative.

Name	*Signature*
Company Name	*Michigan Registration #*
Company Address	*Date*
City/State/Zip	*Phone #*

(Seal)

Note: Digital Asbuilts are <u>required</u> to be submitted to the City of Walker

Underground Detention Certification

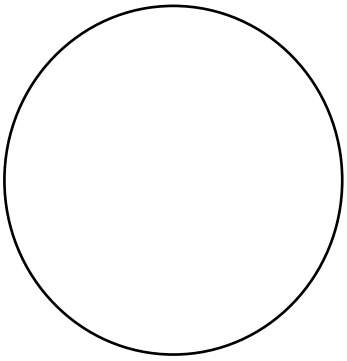
Project Name: _____

Final Insp. Date: _____

UG Detention Manufacturer: _____

I hereby certify that all components of the underground detention system have been built in accordance with the approved plans and specifications.

Name	*Signature*
Company Name	*Michigan Registration #*
Company Address	*Date*
City/State/Zip	*Phone #*



(Seal)

Inspection Checklist

	YES	NO
(Required) Were photes taken during construction to document installation? Please attach.	☐	☐
Is the facility located on the site according to the approved plans with respect to distances from ROW, curb lines, parking areas, sidewalks, structures, etc.?	☐	☐
Were inspection ports installed per plan?	☐	☐
Has post construction maintenance bene completed (i.e. inlets/outlets cleared, accumulated sediment/trash/debris removed, etc?)	☐	☐
Is there evidence of geotechnical failure, structural problems, or poor construction methods (slope failure, concrete failure, poorly compacted dam, poorly grouted or separating pipes)? If yes, explain. *(Attach additional pages if needed)*	☐	☐