



# Engineering Department

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## Stormwater Permit Application Packet

*Chapter 67 of the Walker City Code of Ordinances*

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

# City of Walker Stormwater Permit Application Packet

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## **Stormwater Contact Information**

### **Engineering Department: General #: (616) 453-6311**

Scott Conners P.E.  
City Engineer  
P: (616) 791-6792  
[sconners@walker.city](mailto:sconners@walker.city)

Rachell Nagorsen  
Engineering Programs Coordinator  
P: (616) 791-6327  
[rnagorsen@walker.city](mailto:rnagorsen@walker.city)

### **Department of Public Works: General #: (616) 791-6854**

Gary Postema  
Director of Public Works  
P: (616) 791-6868  
[gpostema@walker.city](mailto:gpostema@walker.city)

### **Kent County Drain Commission:**

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

# Stormwater Permit Application Checklist

## Required for Permit Issue:

- Complete Permit Application
- Letter of Authorization
- 1 Complete Site Plan: Hard Copy & PDF or TIF file
- Complete Stormwater Pollution Prevention Plan Checklist
- Signed/Notarized [Stormwater Management Plan & Maintenance 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 \$1000
- \$5,000 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:

Rachell Nagorsen

Engineering Programs Coordinator | Engineering Department

4243 Remembrance Rd NW | Walker, MI 49534

Phone: (616) 791-6327

Email: [Rnagorsen@walker.city](mailto:Rnagorsen@walker.city)

## Stormwater Application & Permit

<b>Stormwater Permit Approval</b> <i>(for office use only)</i>			
<b>PERMIT #</b>			
APPLICATION FEE: \$ <span style="color: red; font-weight: bold;">+\$30</span>	RECEIPT #:	DEPOSIT: \$5,000.00	RECEIPT/LOC #:
DATE PAID:			
ISSUED:	EXPIRES:	DESIGN ACCEPTED BY:  _____ <span style="float: right;">CITY ENGINEER</span>	

SITE ADDRESS: \_\_\_\_\_  
 PERMANENT PARCEL NUMBER (PPN): \_\_\_\_\_  
 SIZE OF PARCEL(S): \_\_\_\_\_ acres. DISTURBED AREA: \_\_\_\_\_ acres  
 PROJECT START DATE: \_\_\_\_\_ ESTIMATED COMPLETION DATE: \_\_\_\_\_

APPLICANT:  OWNER       AUTHORIZED AGENT *(check one)*

NAME: \_\_\_\_\_  
 ADDRESS: \_\_\_\_\_  
 CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_  
 PHONE: \_\_\_\_\_ EMAIL: \_\_\_\_\_

NAME OF PROPERTY OWNER OF RECORD, IF OTHER THAN APPLICANT:

NAME: \_\_\_\_\_  
 ADDRESS: \_\_\_\_\_  
 CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_  
 PHONE: \_\_\_\_\_ EMAIL: \_\_\_\_\_

EMERGENCY CONTACT #: \_\_\_\_\_

PERSON ONSITE RESPONSIBLE FOR EARTH CHANGE:

NAME: \_\_\_\_\_  
 COMPANY: \_\_\_\_\_  
 ADDRESS: \_\_\_\_\_  
 CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_  
 PHONE: \_\_\_\_\_ EMAIL: \_\_\_\_\_

STORMWATER OPERATOR RESPONSIBLE FOR SITE INSPECTIONS:

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

NAME: \_\_\_\_\_  
 COMPANY: \_\_\_\_\_  
 ADDRESS: \_\_\_\_\_  
 CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_  
 PHONE: \_\_\_\_\_ EMAIL: \_\_\_\_\_

Construction Site Stormwater Operator registration number assigned by Department of Environmental Quality: # \_\_\_\_\_

PROJECT SITE PLANS:

COMPANY NAME: \_\_\_\_\_  
PROFESSIONAL ENGINEER: \_\_\_\_\_  
COMPANY: \_\_\_\_\_  
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.\*

Signature: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

Print Name: \_\_\_\_\_

*\*Permit must be signed by owner or Authorized Agent.*

# 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 Stormwater Discharge Permit pursuant to Chapter 67 of the Walker Code of Ordinances. I assume final responsibility for all completed work and understand that liability arising from any unlawful earth change will be assessed against me.

\_\_\_\_\_  
Owner (Signature)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Owner (Print or Type Name)

\_\_\_\_\_  
Owners Authorized Agent (Print or Type Name)

\_\_\_\_\_  
Company Name

# Stormwater Worksheet

Project Name: \_\_\_\_\_ Location: \_\_\_\_\_

Developer/Owner: \_\_\_\_\_ Engineering Firm: \_\_\_\_\_

By (Design Engineer): \_\_\_\_\_ Date: \_\_\_\_\_

## Sensitive Areas:

Indicate on site plan and check below.

(Check all that apply)

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> Waterbodies             | <input type="checkbox"/> Rivers and Streams              | <input type="checkbox"/> Floodplains          |
| <input type="checkbox"/> Riparian                | <input type="checkbox"/> Wetlands                        | <input type="checkbox"/> Woodlands            |
| <input type="checkbox"/> Sand Dunes              | <input type="checkbox"/> Natural Drainage Ways           | <input type="checkbox"/> Steep/Erodible Soils |
| <input type="checkbox"/> Susceptible Groundwater | <input type="checkbox"/> Threatened & Endangered Species |   |

## Special Site Considerations:

(Check all that apply)

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> Hot Spot<br>Activity: _____ | <input type="checkbox"/> Coldwater Stream<br>Name: _____ | <input type="checkbox"/> Policy Watershed<br>Name: _____ |
|--|--|--|

## 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 (subject to availability—Development Agreement required).
- Alternative Approach: Extended Detention (submit Engineer's Certification available on the next page).

## Flood Control:

Required for all sites.

(Check all that apply)

- Standard release rate (0.13 cfs/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 reduction of runoff and onsite retention. The following site constraints preclude meeting the channel protection standard through volume control:

(Check all that apply)

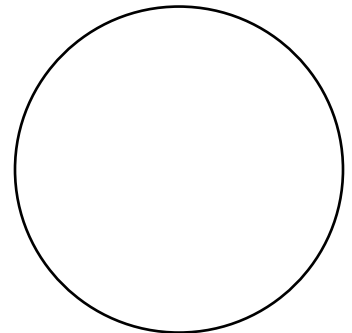
- Poorly draining soils (< 0.24 inches per hour infiltration capacity; typically HSG C and D).
- Part 201 and Part 213 sites, and areas of soil or groundwater contamination.
- High groundwater, or the potential of mounded groundwater to impair other uses.
- Wellhead protection areas.
- Bedrock.
- Other: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

\_\_\_\_\_  
(Printed Name)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(PE license no.)



*Seal*

# Stormwater Review Checklist

*To be Completed & Signed by Applicant*

Provided/  
Satisfactory

*Comments*

## General

- |   |       |       |
|---|-------|-------|
| 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. Identification 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 <b>and</b> proposed land surface contours (minimum 2.0-foot contour interval referenced to a national datum). | _____ | _____ |
| 14. No slopes greater than 1 on 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 Design 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 post-development 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 stormwater 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 Basins**

- 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:**

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

Print Name: \_\_\_\_\_

## Stormwater Asbuilt Certification

City of Walker  
Engineering Department  
4243 Remembrance Rd NW  
Walker, MI 49544  
(616) 453-6311

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*(Print Clearly or Type):*

Permit # \_\_\_\_\_

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

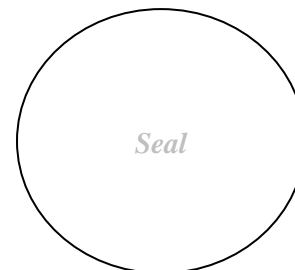
\_\_\_\_\_  
Michigan Registration #

\_\_\_\_\_  
Company Address

\_\_\_\_\_  
Date

\_\_\_\_\_  
City/State/Zip

\_\_\_\_\_  
Telephone #



**Please Note: Digital Asbuilts are required to be submitted to the City of Walker.**

# Underground Detention Certification

Project Name:

Final Inspection Date:

Underground 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

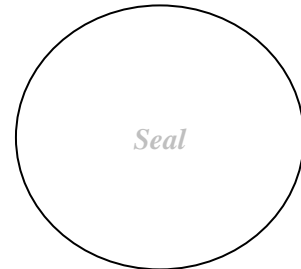
\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Michigan Registration #

\_\_\_\_\_  
Company Address

\_\_\_\_\_  
Email Address

\_\_\_\_\_  
City/State/Zip



## Inspection Checklist

<b>(Required)</b> Were photos taken during construction to document installation? Please attach.	YES / NO
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.?	YES / NO
Were inspection ports installed per plan?	YES / NO
Has post construction maintenance been completed (i.e. inlets/outlets cleared, accumulated sediment/trash/debris removed, etc.)?	YES / NO
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. <i>Attach additional pages if needed.</i>	YES / NO
_____ _____ _____	