Stormwater Permit Application Checklist

Items listed below must be completed for permit issuance:

- ☐ Permit Application - Page 1
- ☐ Letter of Authorization - Page 2 *(if applicable)*
- ☐ One (1) FINAL Site Plan Set: Hard Copy & PDF or TIF file
- ☐ Stormwater Standards Worksheet - Page 3
- ☐ Engineer's Certification for Use of Alternative Approach to Channel Protection form *(if applicable)* - Page 4
- ☐ Certified Stormwater Narrative **with** LGROW spreadsheet **or** other supplemental drainage calculation packages
- ☐ Signed & notarized Stormwater Maintenance Agreement with **complete** and **accurate** exhibits.
- ☐ Recording Fee for Maintenance Agreement
  - ☐ $30 for all sites
- ☐ Permit Fee
  - ☐ $400 3 acres or less
  - ☐ $500 At least 3 acres, but less than 5 acres
  - ☐ $700 At least 5 acres, but less than 10 acres
  - ☐ $1,000 10 acres or more
- ☐ Escrow: Letter of Irrevocable Credit (see template for reference), Certified Check, or Cash Deposit
  - ☐ $5,000 for all sites
- ☐ Acquire Soil Erosion & Sedimentation Control Permit *(if applicable)*
- ☐ Date of Planning Commission Approval and Conditions *(if applicable)*
  Date: _____

NOTE TO APPLICANTS: Refer to supplemental forms section at the end of this packet and submit all relevant documentation for the site.

PERMITTING CONTACT

Kailey Hoving
Engineering Programs Coordinator | Engineering Department
Phone: (616) 791-6327
khoving@walker.city

Engineering Department
4243 Remembrance Road NW
Walker, MI 49534
P: (616) 791-6327
Mon-Fri 7am-3:30pm

SW
Rev. 12/2025

Date Application Received

STORMWATER PERMIT APPLICATION

Site Address:	Parcel #:
Name of Project:	Size of Parcel:
Project Start Date:	Project End Date:

APPLICANT INFORMATION ☐ AUTHORIZED AGENT* ☐ LANDOWNER

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

LANDOWNER ON RECORD (If other than applicant)

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

CONTRACTOR/STORMWATER OPERATOR

Inspections are to be conducted once a week and within 24 hours of each rain event.

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

PROJECT SITE PLANS

Professional Engineer:			
Company Name:			
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

#PSW	Application Accepted By:	Date:

STORMWATER PERMIT

LETTER OF AUTHORIZATION

This form is only to be submitted if a party other than the owner is applying for the stormwater permit.

SITE ADDRESS: _____

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 responsiblity for all completed work and understand that liability arising from any unlawful earth change will be assessed against me.

_____ _____

Owner (Signature) *Date*

_____

Owner (Please Print or Type)

_____ _____

Owner's Authorized Agent (Signature) *Date*

_____

Owner's Authorized Agent (Please Print or Type)

_____

Company Name

Stormwater Standards Worksheet

Details on this worksheet to be provided by the stormwater design engineer to convey the proposed stormwater design meets ALL criteria as specified in ***Part III, Stormwater Management Requirements*** *of the Walker Stormwater Standards Manual.*

Project Name: _____ **Location:** _____

Developer/Owner: _____ **Date:** _____

Design Engineer: _____ **Company:** _____

Sensitive Areas:
Indicate on site plan and check below.

- ☐ Waterbodies (lakes & ponds)
- ☐ Riparian Areas
- ☐ Sand Dunes
- ☐ Susceptible Groundwater Supplies
- ☐ Threatened & Endangered Species Habitats
- ☐ Floodplains (and flood prone areas)
- ☐ Woodlands
- ☐ Soils & Topography (erodible, steep)
- ☐ Rivers & Streams
- ☐ Wetlands
- ☐ Natural Drainage Ways

Special Site Considerations:

Hot Spot Activity: _____ Coldwater Stream Name: _____ Policy Watershed 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 make onsite retention impossible:

- ☐ Off-site Mitigation (subject to availability)
- ☐ Payment-in-lieu (subject to availability - Development Agreement required)
- ☐ Alternative Approach: Extended Detention **(submit Engineer's Certification)**

Flood Control:
Required for all sites.

(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

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

I am the Design Engineer for _____

Name of Project

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: _____

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

(Seal)

Supplemental Forms & Manual References

APPLICANTS: If the proposed stormwater design utilizes **Underground Detention** or a **Water Quality Device**, submit the appropriate corresponding forms found in this section of the application packet. The **As-Built Certification Form** is required at the time of as built submission. Reference pages from the Stormwater Standards Manual are also included.

Included in this section:

Stormwater As-Built Certification Form

Underground Detention Certification & Inspection Form

Water Quality Device Worksheet

Water Quality Device - BMP Design Criteria

Alternative Approach Flow Chart

Summary of Stormwater Management Requirements

Table 1 - Minimum Required Stormwater Standards

STORMWATER AS-BUILT CERTIFICATION

In order to keep the City of Walker's Regional Geographic Information System (REGIS) updated with the most curent information, ***digital stormwater as-builts are required*** *to be submitted to the City of Walker Engineering Department with this form and all other corresponding documentation.*

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.**

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

(Seal)

Underground Detention Certification

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

Permit Number: _____

Project Name: _____

Project Location: _____

Underground Detention Manufacturer: _____

Final Inspection Date: _____

	YES	NO
(Required) Were photos 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 been 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)*	☐	☐

_____ *Design Engineer Name*

_____ *Michigan Registration #*

_____ *Signature*

_____ *Date*

_____ *Company Name*

_____ *Company Address*

_____ *City/State/Zip*

_____ *Phone #*

(Seal)

Water Quality Device Worksheet

Fill out this form if a water quality unit/manufactured treatment device is proposed for the development. See page 57 of Appendix 3 in the Stormwater Standards Manual for specific design specifications.

Manufacturer:
Unit and Model:

10 YR Peak Flow: _____ cfs
Water Quality Flow: _____ cfs
Proposed TSS Removal Efficiency*: _____ %

*Use same value as LGROW Design Spreadsheet

Third Party Testing Results of Proposed Unit

Flow Rate WQD is rated for: _____ cfs
Removal Efficiency 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

O. Water Quality Device

1. Summary

Description:	Stormwater treatment provided in a prefabricated unit, also known as a Manufactured Treatment Device (MTD).
Application:	Practical for small sites and drainage areas.
Types:	Oil and grit separator; Hydrodynamic separator; Baffle box.
Pretreatment Required:	No. This BMP can provide pretreatment and spill containment
Maintenance Plan:	Yes.
Calculation Credits:	
Volume Reduction:	None.
Rate Reduction:	None.
Water Quality:	Count volume routed through BMP.

2. Sizing Calculations

a. Water quality devices shall be sized for water quality and pretreatment.

b. Calculate the design water quality flow rate. Refer to Part 3 section “Calculating Storage Volumes and Release Rates, Water Quality.”

c. Select water quality device unit/model based on manufacturer’s recommendations.

d. When the device is used to provide spill containment, the minimum spill containment volume shall be provided between the normal water level and the entrance of the outlet pipe to capture a slug pollutant load from an accidental spill of toxic materials.

3. Design Requirements

a. Configuration

(1) The geometry of the water quality device shall promote the trapping of sediment, oils and floatables.

(2) The water quality device shall be designed to prevent surcharging in pipes upstream of the device.

b. Emergency Overflow

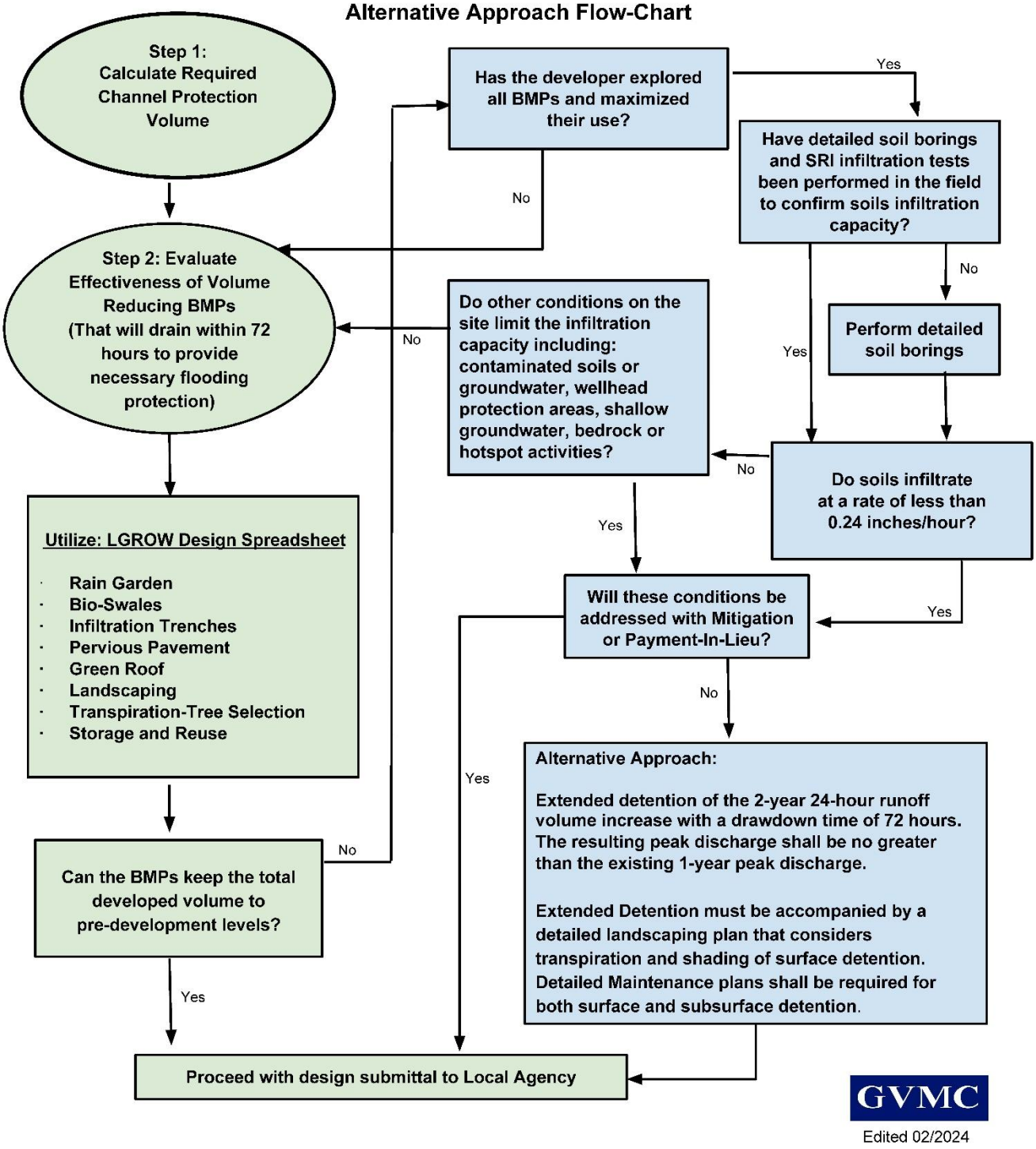
(1) A bypass overflow shall be designed to convey the 10-year peak discharge to prevent release of trapped sediments and pollutants.

(2) The outlet from the overflow shall not be submerged under normal conditions.

c. Materials

(1) Catch basin inserts (inlet filters) are not accepted as a post-construction BMP.

Lower Grand River Organization of Watersheds MS4 Stormwater Ordinance Committee
Alternative Approach Flow-Chart



I. SUMMARY

The following stormwater management requirements comply with the City's Stormwater Ordinance and NPDES MS4 permit and shall apply to all new and redevelopments in the City of Walker:

1. Protection. The design process shall begin by identifying environmentally sensitive areas located on the site and laying out the site to maximize protection of the sensitive areas.
2. Source Controls. Non-structural BMPs shall be used for protection of environmental sensitive areas on the site, and to reduce the amount of stormwater runoff.
3. Runoff Controls. Stormwater runoff shall be managed onsite structural BMPs to protect both water resources and real property. Stormwater standards are summarized in **Table 1**. Higher standards may be required for sites that discharge to areas with known issues.
4. Offsite Stormwater Management Options. Regional stormwater management facilities are encouraged where regional facilities may provide off-site mitigation to meet channel protection performance standards.
5. Watershed Policy Statements. Specific stormwater management policies may be established for identified watersheds and are required to be met in addition to these minimum standards (**Appendix 2**).
6. Adequate Outlet: The design maximum release rate, volume or concentration of stormwater discharged from a site shall not exceed the capacity of the downstream stormwater infrastructure or cause impairment to the offsite receiving area.
7. BMP Design. BMPs must be designed to meet the minimum criteria provided. BMPs selected to meet the water quality treatment standard must also be shown to reduce total suspended solids (TSS) in stormwater runoff by at least 80% or to a concentration of no greater than 80 mg/L (refer to **Table 3**).
8. Groundwater. The highest known groundwater elevation and extent of mounding from infiltration BMPs shall be determined to ensure no adverse impacts internal and external to the development.
9. Soils. Test pits or soil borings and field permeability testing are required for most structural BMPs to determine soil classification, depth to groundwater, infiltration rates, and the presence of other site constraints.
10. Restrictive Covenants. Plats and site condominium developments must incorporate specific requirements for lot grading, minimum floor and opening elevations, footing drains, private easements for side yard drainage, and individual soil erosion and sedimentation control (SESC) permits.
11. Operation and Maintenance. Stormwater BMPs must be designed to allow for operation and maintenance, demonstrated in the review submittals. A maintenance agreement between the Developer and the City is required for private stormwater management systems. A maintenance plan and compliance tracking is required as part of the maintenance agreement.

Table 1 – Minimum Required Stormwater Standards

Standard/Where Required	Criteria
Water Quality "first flush" All sites.	Treat the runoff generated from 1 inch of rain over the project site (i.e. the 90% annual nonexeedance storm) through BMPs designed to reduce post-development TSS loadings by 80%, or achieve a discharge concentration not to exceed 80 mg/L. Treatment may be provided through settling (permanent pool or detention), filtration or infiltration, absorption, or chemical/mechanical treatment.
Channel Protection Surface water discharges.	The post-development runoff rate and volume shall not exceed the pre-development rate and volume for all storms up to and including the 2-year, 24-hour storm. Retention of the volume increase is required. Where site conditions preclude infiltration (onsite and offsite), an alternative approach may be allowed consistent with the flowchart in Part 1: Extended Detention of the 2-year 24-hour runoff volume increase with a drawdown time of 72 hours. The resulting peak discharge shall be no greater than the existing 1-year peak discharge.
Flood Control All sites; unless exception is allowed.	Collection and conveyance: Design storm sewers and swales for the 10-year storm, and open channels for the 25-year storm. Detention and Retention: Store runoff from the 100-year storm with a maximum release rate of 0.13 cfs per acre. Overflow Routes for Extreme Flood: Identify overflow routes and the extent of high water levels for the 100-year flood to ensure no adverse impacts offsite or internal to the site. Where overland flow routes do not exist, a dual 100-year capacity storm sewer shall be constructed and detention/retention basins shall be increased in size to store a total of 2 times the flood control volume.
Pretreatment Refer to **Table 3**.	Forebay volume equal to 15% of water quality volume (required for detention/retention basins); Vegetated Filter Strip; Vegetated Swale; Water Quality Device.
Hotspot Industrial and commercial land uses in **Table 2**; Part 201 and Part 213 sites.	Isolate transfer and storage areas to minimize need for treatment. Pretreatment BMP with impermeable barrier above groundwater and provisions for the capture of oil, grease, and sediments. Minimum spill containment volume: 400 gallons.
Coldwater Streams	Incorporate strategies to promote groundwater recharge and/or reduce temperature of surface discharge water.