

COPELAND PARK SITE IMPROVEMENTS STORMWATER REPORT

April 17, 2026

REPORT FOR:
CITY OF LA CROSSE
WISCONSIN DEPARTMENT OF NATURAL RESOURCES

FROM:
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The logo for ISG, consisting of the letters 'ISG' in a bold, sans-serif font, centered within a dark gray square.

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Introduction

This stormwater management report has been prepared to accompany the submitted plans and stormwater calculations for the Copeland Park Site Improvements in La Crosse, WI. The project will consist of a new shelter building, surface parking, walking paths, and landscaped areas. Site construction will include asphalt pavement, concrete walk, erosion control, stormwater management, and landscaping. A project location map is provided on the title sheet of the submitted plan set.

Design Standards

Stormwater management plans and calculations have been prepared to meet the City of La Crosse, Wisconsin, erosion control and stormwater management requirements in Chapter 105 and Wisconsin DNR requirements in NR 151. The disturbed area for the project is over one acre therefore it will require a Wisconsin DNR WPDES permit and meet the requirements listed in the table below.

Table 1.1: Design Criteria

	Performance Standard	Requirements
Wisconsin Department of Natural Resources NR 151	Total Suspended Solids NR 151.122	Redevelopment – 40% TSS reduction from parking areas and roads.
	Peak Discharge NR 151.123	Exempt per NR 151.123(2)(b) – Redevelopment Site.
	Infiltration NR 151.124	Exempt per NR 151.124 (3)(b)3 – Redevelopment Site.
	Protective Areas NR 151.125	N/A – No protective areas within proposed site.
	Fueling & Vehicle Maintenance NR 151.126	N/A – No fueling or vehicle maintenance areas within proposed site.
	Location NR 151.127	BMP’s will be located on site.
	Timing NR 151.128	BMP’s will be installed prior to final stabilization.
City of La Crosse Municipal Code of Ordinances Section 105-61	Total Suspended Solids Sec. 105-61(b)(4)a.	Redevelopment – 40% TSS reduction from parking areas and roads.
	Peak Discharge Sec. 105-61(b)(4)b.	N/A direct discharge to Black River.
	Safe Outlet Sec. 105-61(b)(4)c.	Safe passage of 100-year storm event
	Infiltration Sec. 105-61(b)(4)d.	Redevelopment site (exempt)
	Protective Areas Sec. 105-61(b)(4)e.	N/A – No protective areas within proposed site
	Fueling and vehicle maintenance Sec. 105-61(b)(4)f.	N/A – No fueling or vehicle maintenance areas within proposed site.
	Swale Treatment for Transportation Facilities Sec. 105-61(b)(4)f.	N/A

Existing Conditions

The proposed project is located at 1020 Copeland Park Drive, La Crosse WI, 54603. The existing site consists of an existing park shelter, access road with parking, and pavilion. The existing park shelter will be demolished as part of the building along with a portion of the access drive and portion of the

pavilion. The existing site drains to storm sewer along the northern part of the access drive which discharges to the Black River. The existing site with removals is shown within the submitted plan set.

Proposed Conditions

The proposed site will consist of a new shelter building along with a reconstructed parking lot, sidewalk paths, and landscaped areas. The area will drain to catch basins in low points that will tie into existing storm sewer that outlets to the Black River. Proposed stormwater management will consist of catch basins with sumps to provide 40% TSS reduction prior to connecting to existing storm sewer that discharges to the black river.

The watershed area and land cover characteristics are provided on the proposed grading plan included in the plan set.

Stormwater Management Summary

Temporary erosion control measures will be implemented for the proposed project prior to the start of construction. Proposed erosion control measures include silt fence, stabilized construction exit, inlet protection, erosion control mat, riprap, and a concrete washout area. Locations of the proposed BMPs along with construction activity notes are provided on the erosion control sheets. Sediment and soil loss calculations are included in the attachments. Approximate construction sequencing for the project is listed below.

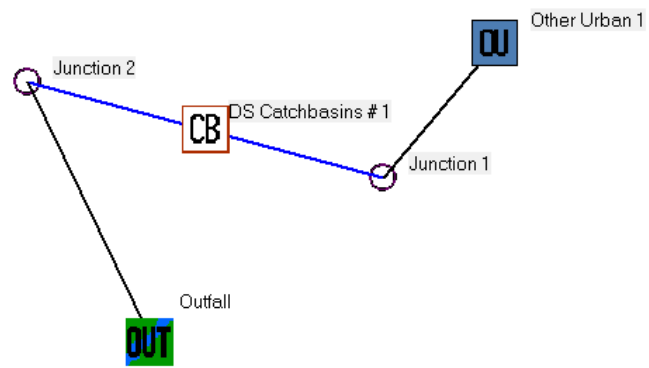
- Install temporary erosion control BMPs
- Stripping topsoil, removing existing pavement, and rough grading
- Footing excavation and backfilling
- Installation of underground utilities
- Subgrade preparation
- Construction of pavement
- Turf restoration
- Stabilization and establishment of turf
- Removal of temporary erosion control BMPs

Proposed stormwater management will include catch basins with sumps to provide TSS removal prior to connecting to existing storm sewer on site.

Calculation summary

Water quality calculations have been completed by utilizing the design data and the WinSLAMM Version 10.5.0 computer modeling system. This was used to provide an analysis of the reduction in total suspended solids. Results show a total TSS removal of 40.08% using suitable parameters for the project area when compared to no controls. The WinSLAMM model shows that the proposed conditions meet the requirements of NR 151.122 and City of La Crosse Chapter 105 to reduce total suspended solids for the redeveloped lot from the parking areas by 40% compared to no controls. The WinSLAMM model overview, inputs, and outputs can be found in the attachments.

The proposed site is owned and maintained by the City of La Crosse, therefore a maintenance agreement will not be required.



Data file name: S:\Projects\33000 PROJ\33900-33999\33916 Copeland Park Improvements-La Crosse WI\33916 Practice Groups\33916 Civil-Survey\Civil Calcs\33916 WinSLAMM Version 10.5.0

Rain file name: C:\WinSLAMM Files\Rain Files\WisReg - Minneapolis MN 1959.RAN

Particulate Solids Concentration file name: C:\WinSLAMM Files\10.1 WI_AVG01.pscx

Runoff Coefficient file name: C:\WinSLAMM Files\WI_SL06 Dec06.rsvx

Residential Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std

Institutional Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std

Commercial Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std

Industrial Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std

Other Urban Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std

Freeway Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std

Apply Street Delivery Files to Adjust the After Event Load Street Dirt Mass Balance: False

Pollutant Relative Concentration file name: C:\WinSLAMM Files\WI_GEO03.ppdx

Source Area PSD and Peak to Average Flow Ratio File: C:\WinSLAMM Files\NURP Source Area PSD Files.csv

Cost Data file name:

Seed for random number generator: -42

Study period starting date: 01/02/59 Study period ending date: 12/28/59

Start of Winter Season: 12/02 End of Winter Season: 03/12

Date: 04-17-2026 Time: 11:14:27

Site information:

LU# 1 - Other Urban: Other Urban 1 Total area (ac): 2.608

1 - Roofs 1: 0.080 ac. Flat Connected PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

13 - Paved Parking 1: 0.277 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

31 - Sidewalks 1: 0.279 ac. Disconnected Normal Sandy PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

45 - Large Landscaped Areas 1: 1.972 ac. Normal Sandy PSD File: C:\WinSLAMM Files\NURP.cpz Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

Control Practice 1: Catchbasin Cleaning CP# 1 (DS) - DS Catchbasins # 1

1. Fraction of area served by catchbasins (acres) = 1.00
 2. Number of catchbasins = 3
 3. Average sump depth below catchbasin outlet invert (feet) = 1.5
 4. Depth of sediment in catchbasin sump at beginning of study period (ft) = 0
 5. Typical outlet pipe diameter (ft) = 1
 6. Typical outlet pipe Mannings n = 0.013
 7. Typical outlet pipe slope (ft/ft) = 0.005
 8. Typical catchbasin sump surface area (square feet) = 28.3
 9. Total catchbasin depth (feet) = 4.5
 10. Inflow hydrograph peak to average flow ratio = 3.8
 11. Leakage rate through sump bottom (in/hr) = 0
 12. Catchbasin Critical Particle Size File Name: Not needed - calculated by program
 13. Catchbasin cleaning frequency: 5
- Catchbasin Flow Bypass Data
1. Maximum flow to in-line sump (cfs) = 9999

SLAMM for Windows Version 10.5.0
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Cost Data file name:

Seed for random number generator: -42
Study period starting date: 01/02/59 Study period ending date: 12/28/59
Start of Winter Season: 12/02 End of Winter Season: 03/12
Model Run Start Date: 01/02/59 Model Run End Date: 12/28/59
Date of run: 04-17-2026 Time of run: 11:15:36
Total Area Modeled (acres): 2.608
Years in Model Run: 0.99

	Runoff Volume (cu ft)	Percent Runoff Volume Reduction	Particulate Solids Conc. (mg/L)	Particulate Solids Yield (lbs)	Percent Particulate Solids Reduction
Total of all Land Uses without Controls:	24345	-	115.4	175.4	-
Outfall Total with Controls:	24344	0.00%	69.17	105.1	40.08%
Annualized Total After Outfall Controls:	24682			106.6	