

STORMWATER MANAGEMENT PERMIT CHECKLIST

Engineering Department
1115 S. Main Street
West Bend, WI 53095
Phone: 262-335-5130



PROJECT INFORMATION

Applicant Name: _____

Name of Development: _____

Location of Development: _____

APPLICABILITY

Do the following apply to your site?

Y N

- Residential development requiring a subdivision plat or certified survey map
- Multi-family residential development or planned unit development not requiring a certified survey map
- Development other than residential
- Runoff from development will exceed the available capacity of receiving watercourse or drainage facility or cause undue erosion
- Development will increase flood stages one-tenth of a foot (0.10') or more, significantly increase water pollution, or otherwise adversely affect property or the public health, safety or welfare
- Development includes new public or private roads to be constructed
- Development ultimately results in the addition of impervious surfaces of 20,000 square feet or greater in total area, including smaller sites that are part of a common plan of development
- Development ultimately results in one acre or more in total land disturbance

If **any** of the above items apply, your project is subject to the City of West Bend Stormwater Management Code requirements, and a Storm Water Management Permit will need to be obtained.

If **none** of the above items apply, submit the completed Applicability Checklist, along with a proposed site plan and brief narrative describing the project, to the Engineering Department. The Engineering Department will then review the submittal and make a final determination if a Storm Water Management Permit will need to be obtained.

STORM WATER MANAGEMENT PERMIT CHECKLIST

The following checklist must be completed by the Applicant and included with the SWM Permit submittal.

Applicant

City

I = Included
NA = Not Applicable

OK = Acceptable
REV = Revisions or further information required

Submittal Requirement	Applicant			City	
	I	NA	Location in Report/Plan	OK	REV
Storm Water Management Report					
Introduction	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Name of development</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Narrative describing project & summary of storm water design intent</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Project Location</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Street address (if assigned)</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Tax Key number</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Legal description of property</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Location Map</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Total site area (square feet)</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Total area analyzed in SWMP (sq ft)</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Existing Conditions	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Narrative describing existing drainage patterns of the area analyzed (the site & off-site contiguous areas draining onto, through, and from the site)</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>NRCS Soils Map with Types & HSGs</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Soil Boring Location Map & Logs</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Existing Conditions Exhibit (24"x36" size)</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Scale not less than 1" = 100'</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Topography & drainage network of area analyzed (max 2-ft contours)</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Subwatershed boundaries</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Subwatersheds named E1, E2, E3, E4, etc.</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Subwatershed HSGs</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Subwatershed curve numbers</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Subwatershed Tc paths (indicate elevations at the beginning & end of each segment for all Tt paths)</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Flow path for all storm water conveyance sections</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Lakes, streams, wetlands, channels, ditches, or other watercourses on or in proximity of analyzed area</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Limits of 100-year floodplain, flood fringe, and wetland boundaries</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Watercourses within ¼ mile downgradient of the site that may affect or be affected by runoff</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Location of wells & wellhead protection areas delineated pursuant to NR 811.16</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Hydrology analysis for each subwatershed</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Curve number calculations</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Time of concentration calculations</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Volume and peak discharge rate computations for 1-, 2-, 10-, and 100-year 24-hour storm events</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Existing Conditions Summary Table</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

Proposed Conditions	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Narrative describing proposed drainage patterns of the area analyzed (the site & off-site contiguous areas draining onto, through, and from the site)</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Explanation of provisions that preserve & use natural topography & land cover features to minimize changes in peak flow runoff rates and volumes to surface waters and wetlands.</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Explanation of any restrictions on SWM measures in analyzed area imposed by wellhead protection plans.</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Proposed Conditions Exhibit (24"x36"size)</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Scale not less than 1" = 100'</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Topography & drainage network of area analyzed (max 2-ft contours)</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Subwatershed boundaries</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Subwatersheds named P1, P2, P3, P4, etc.</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Subwatershed HSGs</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Subwatershed curve numbers</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Subwatershed Tc paths (indicate elevations at the beginning & end of each segment for all Tt paths)</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Flow path for all storm water conveyance sections</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Lakes, streams, wetlands, channels, ditches, or other watercourses on or in proximity of analyzed area</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Limits of 100-year floodplain, flood fringe, and wetland boundaries</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Watercourses within ¼ mile downgradient of the site that may affect or be affected by runoff</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Location of wells & wellhead protection areas delineated pursuant to NR 811.16</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Grading & Storm Sewer Exhibit (24"x36" size)</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Existing (dashed) & proposed (solid) contours at maximum 2-ft interval</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>On-site storm sewer with pipe materials, diameters, lengths, and invert elevations at each end, with structures numbered</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Ditch locations, cross-sections, and stabilization</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Pond details showing contours, inlet & outlet structures, outfall capacities, normal water surface elevation, emergency spillway design detail, infiltration areas, etc.</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Storage basin table indicating surface area in sq ft for chosen elevations within the basin.</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Hydrology analysis for each subwatershed</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Curve number calculations</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Time of concentration calculations</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Volume and peak discharge rate computations for 1-, 2-, 10-, and 100-year 24-hour storm events with detention</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Proposed Conditions Summary Table</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Velocity calculations in all ditches & at storm outfalls with specific proposed cross-sections and stabilization measures based on velocity.</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>For each subwatershed, peak discharge from proposed development less than or equal to peak discharge from existing site for 1-, 2-, 10-, and 100-year 24-hour storm events.</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Estimated starting and completion dates for the construction of SWM measures.</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>If public storm sewer or a connection to public storm sewer is proposed, include a capacity analysis demonstrating flow to the pipe vs. pipe capacity for the 10- and 100-yr 24-hour storm events, including at each catch basin structure (inlet capacity and amount of water left flowing on the surface).</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

Total Suspended Solids Removal Requirements	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Outline requirements of NR 151.122</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>If exempt/not applicable, provide section of NR 151 outlining exemption</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Development complies with NR 151.122</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Narrative describing compliance</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Calculations, model input, etc. included demonstrating compliance</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>If reqs of NR 151.122 cannot be achieved, provide site specific explanation</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Infiltration Requirements	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Outline requirements of NR 151.124</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>If exempt/not applicable, provide section of NR 151 outlining exemption</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Development complies with NR 151.124</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Narrative describing compliance</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Pre-treatment measures included</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Calculations, model input, etc. included demonstrating compliance</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>If reqs of NR 151.124 cannot be achieved, provide site specific explanation</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Protective Area Requirements	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Outline requirements of NR 151.125</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>If exempt/not applicable, provide section of NR 151 outlining exemption</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Development complies with NR 151.125</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Narrative describing compliance</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Exhibit identifying impervious surfaces or BMPs to demonstrate proximity to protective area.</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Explanation of BMPs located within protective areas</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Fueling & Vehicle Maintenance Areas	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Outline requirements of NR 151.126</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>If exempt/not applicable, provide section of NR 151 outlining exemption</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Development complies with NR 151.126</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Narrative describing compliance</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Special details or exhibits provided</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Consistent with SEWRPC Planning Report No. 173 – A Stormwater Management Plan for the City of West Bend	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Operations & Maintenance Plan					
Operations & Maintenance Plan provided covering all proposed BMPs	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>BMPs meet operations & maintenance requirements of DNR technical standards, if available</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Alternate Requirements					
Alternate requirements per City Engineer	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Maintenance Agreement					
Draft Maintenance Agreement	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Identification of SWM facilities & areas served</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Schedule of maintenance activities</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Inspection schedule & checklist</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Identification of parties responsible for maintenance and inspections</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

<i>Authorization for City Engineer to access property to conduct inspections</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Provisions stipulating that the owner shall submit inspection reports and maintenance records at least annually.</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Provisions stipulating that the responsible party will correct deficiencies upon notice by the City Engineer within a designated timeframe.</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Authorization for the City Engineer to perform corrective actions identified if responsible party fails to do so, and shall charge back the costs associated with this work.</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
General Submittal					
Submittal stamped by P.E.	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Hard copies	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>SWM Report & Plan Set</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Operations & Maintenance Plan</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Draft Maintenance Agreement</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Completed Permit Application</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Completed SWM Checklist</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Electronic copies	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>SWM Report & Plan Set</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Operations & Maintenance Plan</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Draft Maintenance Agreement</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Completed Permit Application</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<i>Completed SWM Checklist</i>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
WinSLAMM files	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Application fee (\$50.00)	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

Applicant Signature

City Reviewer

Name

Name

Date

Date

City Reviewer Notes:
