

# Attachment A - Application for Development Review Checklist

Project Name: Praine Philip (Outdoor Storage Yard) Engineering Design Firm: Payne + Dolan

Checklist Items	CSM	Preliminary Plat	Final Plat	Property Survey for Bldg Permit	Storm Water Plan	Erosion Control Plan	Site, Grading, Drainage Plan	Street Plan	Utility Plan	Landscape Plan	Traffic Control Plan	Traffic Impact Analysis	Conditional Use or Home Indus.	PUD or Developer's Ag.	Minor site or Arch. Change	Conditional Use	Rezoning & Comp. Plan Change
Followed Construction Drawing Sheet Layout standards in Development Handbook						×	×	n/a	×	n/a							
Followed Development Handbook and Storm Water Ordinance standards for Erosion control plans						×											
Obtained geotechnical evaluation for storm water and pavement design					*		×	n/a	×								
Followed Development Handbook standards, and Wisconsin Administrative Code for Property Survey				n/a													
Verified proposed basement floor elevation is at least 1 foot above the highest seasonal high water table elevation				n/a													
Followed Development Handbook standards and Ordinance for Preliminary Plat		n/a															
Followed Site, Grading, and Drainage Plan design standards in Development Handbook and Storm Water Ordinance							×						n/a		n/a	n/a	×
Followed Traffic impact analysis standards in Development Handbook												n/a					
Specifications conform to current City Standard Specifications					×	×	×	n/a	×	n/a	n/a						
Followed Lighting Plan standards in Development Handbook									n/a								
Development site contains Contaminated Waste							n/a										
Followed storm water management requirements in Development Handbook, and Ordinance					×												
Site contains mapped FEMA floodplain or a local 100-year storm event high water limits							n/a										
Site contains wetlands or Natural Resource limits (ie. Primary, Secondary, Isolated , shoreland limits)							×										
CSM follows standards in Development Handbook, City Ordinance, and State Statutes	n/a																
Followed Development Handbook standards for Street plans and profiles								n/a									
Followed Development Handbook standards for utility plans and profiles									×								VANIE OF
Existing sanitary sewer lateral has been televised							n/a		n/a				n/a		n/a	n/a	n/a

Checklist Items	CSM	Preliminary Plat	Final Plat	Property Survey for Bidg Permit	Storm Water Plan	Erosion Control Plan	Site, Grading, Drainage Plan	Street Plan	Utility Plan	Landscape Plan	Traffic Control Plan	Traffic Impact Analysis	Traffic Impact Conditional Use Analysis or Home Indus.	PUD or Developer's Ag.	Minor site or Arch. Change	Conditional Use	Rezoning & Comp. Plan Change
Development Agreement needed for Public Infrastructure														n/a			
Followed Development Handbook standards for Landscape plans								10.00		n/a							
Followed Development Handbook standards, State Statures and Ordinance for Final Plat			n/a														
A-E 2.02(4): Each sheet of plans, drawings, documents, specifications and reports for architectural, landscape architectural, professional engineering, design or land surveying practice should be signed, sealed, and dated by the	n/a	в/и	n/a	×	×	×	×	n/a	×	n/a		n/a	n/a	n/a	n/a	n/a	×
32.10(e)(12.)H. A cover sheet stamped and signed by a professional engineer registered in the State of Wisconsin indicating that all plans and supporting documentation have been reviewed and approved by the engineer and certifying that they have read					×												
City, DNR, County or State Permits are needed					×		×	n/a	×		n/a						
Complete and submit Plan Sheet and Submittal Specific checklists in Development Handbook	n/a	n/a	n/a	×	×	×	×	n/a	×	n/a		n/a					
Proposed easements needed are shown.	n/a		n/a		*		×	n/a	×								
All Existing easements are shown	n/a	n/a	n/a	×	×	×	×	n/a	×	n/a			n/a	n/a	n/a	n/a	×



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# **Engineering Plan Checklist**

Attachment B (Rev 12/18)

Project Name: _	Prairie Philip (	Outdoor Storage Yard)	
Engineering & De	esign Firm: Pay	yne + Dolan	

#### **General Information**

Plans shall include the seal and signature of the Wisconsin licensed professional engineer responsible for the preparation of the construction plans on the cover sheet or on each sheet

YES	NO	N/A	
		X	Provide a copy of the WisDOT permit for any work in the State of Wisconsin right of way.
٥,		×	Provide a copy of the Waukesha County Department of Public Works permit for any work in right of way of Waukesha County.
X			Provide a copy of Wisconsin Department of Natural Resources Water Resources Application for Project Permits (WRAPP) for all sites greater than one acre.
		X	Provide a copy of US Army Corps of Engineers 404 permit.
		X	Provide cross access agreements for use of entrances.
		X	Provide off-site utility easements.
		×	Provide hydraulic gradeline calculations for all storm sewer pipes signed and sealed by a professional engineer licensed in the State of Wisconsin.
×			Provide a storm water management plan and calculations signed and sealed by a professional engineer licensed in the State of Wisconsin.

## **All Plan Sheets**

YES	NO	N/A	
X			Plans prepared on sheets measuring 11" high by 17" wide or no larger than 24" high by 36" wide.
		×	Sanitary Sewer, watermain and storm sewer system plans for the entire development are included.
		X	A profile view is located below a plan view on plan and profile sheets and both views are aligned by stationing whenever possible. In general, stationing is from left to right.
		X	Plan and profile sheets start and terminate at match lines.
×			The assumed bearing base, control monuments and stationing reference line(s)
X			Right-of-way limits and easement limits
X.			Edge of pavement or flange, face and back of curb
X			Name of each existing, proposed, and future roadway and any intersecting roadways
X			Lot lines, lot and block numbers
X			Addresses and names of Owners for existing parcels

×		All obstructions located within the project limits including, but not limited to: trees, signs, utilities, fences, light poles, structures, etc.
×		A note warning that underground utilities must be located by "Diggers Hotline" prior to start of construction
$\blacksquare$		Legend (relevant to each sheet) showing all special symbols, line types and hatch used
×		Title block includes at a minimum, the following information:  Name and address of engineering (design) firm and owner/developer  Date of the drawing and last revision  Scale  Plan sheet number (# of #)  Name and location description of development
X		North to the top or right of the sheet and shown by a north arrow, clearly shown without intrusion.
×		Scale of the plans 1" = 40' horizontally and 1" = 8' vertically for 11" by 17" plan sheets and 1" = 20' horizontally and 1" = 4' vertically for 22" by 34" sheets. Partial site plans have a scale of 1" = 20' or larger. The scale of details is such that the detail is clearly shown. The scale is shown with a line scale and text.
×		Existing surface objects indicated with screened lines and clearly labeled.

# **Cover Sheet**

YES	NO	N/A	
X			Project title.
X			Location Map (Proximity to two main streets minimum).
<b>X</b>			Index of all plan sheets
		X	For large or phased subdivisions, a key map of layout and phases.
×			A minimum of two (2) current SEWRPC reference benchmarks. Survey documentation of tie to Wisconsin State Plane Coordinate System, South Zone (horizontal) and City of Waukesha datum (vertical) provided. Elevations shown based on City of Waukesha datum.
×			All permanent or temporary benchmarks and elevations.
×			A description of the locations of the benchmarks; and the basis or origin of the vertical control network.
×			Date of plan preparation and applicable revision date(s)
×			The following statement: "All site improvements and construction shown on the plans shall conform to the City of Waukesha <u>Development Handbook &amp; Infrastructure Specifications</u> . Where the plans do not comply, it shall be the sole responsibility and expense of the Developer to make revisions to the plans and/or constructed infrastructure to comply."

# Roadway

YES	NO	N/A	
		×	For all new streets, a site specific geotechnical evaluation and pavement design submitted with the plans.
		×	A separate detail sheet showing typical cross-sections for each roadway standard width and cul-de-sac if applicable.

## Plan View

YES	NO	N/A	
×			The assumed bearing base, control monuments and stationing reference line along the centerline of the roadway, including cul-de-sacs.
×			At least one clearly labeled benchmark or control point per sheet.
×			Pavement and median dimensions.
		X	Final grade elevations at 25' intervals at the right-of-way including at the edge of pavement for rural sections or at the flange of curb for urban sections.
		X	Final grade elevations for cul-de-sacs at 25' intervals at the right-of-way including at the edge of pavement for rural sections or at the flange of curb for urban sections.
		×	Label all PVC's, PVT's, and PC's, PT's for vertical and horizontal curves. Radii of all intersections (edge of pavement or flange of curb, with note indicating which is referenced).
		×	Driveways for all lots adjacent to storm inlets and intersections.
		X	Sidewalks labeled and dimensioned.
×			Existing, proposed, future streets and drives labeled and dimensioned.
		X	All roadside ditch locations, flowline elevations at 50' intervals of the ditches.
K			Slope intercepts.
		X	Invert profile for 200' downstream for any existing ditches receiving flow from a proposed road or street.
X			Limits of any areas which need special stabilization techniques.
		X	Specific details of all existing connected roadways. Pavement, shoulders, ditches, curb alignment, and grades shall be shown as needed to adequately make the transition.

## **Intersection Details**

YES	NO	N/A	
		×	Radii of all intersections (edge of pavement or flange of curb, with note indicating which is referenced).
		×	Sidewalks and accessible ramps labeled and dimensioned.
		×	Right of way corner clips and sight visibility easements.
		X	Spot grades as necessary to ensure proper drainage and compliant ADA slopes.
		×	Spot grades shall be shown at end of radius for all curb and gutter and the end radius for all back of sidewalk.
		×	Drainage clarified by flow arrows, high points, sags, ridges, etc. Slope intercepts shall be clearly labeled by station, elevation to the nearest 0.1', and offset distance (left or right) from the reference line.
		×	Invert elevation of ditches (for rural roadway).
		X	Final subgrade elevation at the centerline of the street or roadway.

# **Cross Sections**

YES	NO	N/A	
		X	Right of way limits.
		本	Slope intercepts clearly labeled.
		×	Elevations to the nearest 0.01'.
		×	Offset distance (left or right) from the reference line.
		×	Final grade elevations at back of walk, face of walk, top of curb, flange elevation (edge of pavement for rural section), and the centerline of the street or roadway.
		×	Cross slope of sidewalk, terrace area, and roadway.
		<b>X</b>	Invert elevation of ditches (for rural section)



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# Site, Grading and Drainage Plan Conditional Use Permit Checklist

Attachment C (Rev 12/18)

Projec	t Name	: <u>Pr</u>	airie Philip (Outdoor Storage Yard)		
Engine	eering 8	& Desig	n Firm: Payne + Dolan		
Genera	l Requ	iremen	<u>ts</u>		
YES	NO	N/A			
X			Applicant's name		
×.			Name and location of development		
M.			Scale and north arrow		
X.			Date of original and revisions noted		
MENERA			License number and professional seal		
X	Ģ		Digital Drawings in AutoCAD format of the site layout & building plan layout		
	*		Pay impact fees		
	g Plan				
YES	NO	N/A			
		X	Contact Community Development Department		
Site Pla	te Plans				
YES	NO	N/A			
X			Dimensions of development site		
XXX			Location, footprint, and outside dimensions		
X			Existing and proposed pedestrian access points		
X			Existing and proposed vehicular access points		
X			Parking lots, driveways shown		
		X	Front, side and rear yard setbacks shown and labeled		
		X	Location, identification and dimensions of all existing or planned easements		
		X	Identification of all land to be dedicated		
X			Location, elevation, and dimensions of walls and fences		
		XX	Location of outdoor lighting with lighting design plan and calculations		
			Sign complies with City Code Book		
		X	Location of existing and proposed signs		

#### Site Access

YES	NO	N/A	
X			Legal description or certified survey of property
X			Development compatible with its zoning district
		X	Sidewalks to be shown
		X	Site entrance drive dimensions
		X,	Individual development vehicular entrances at least 125 feet apart
		X	Adjacent development share driveway where possible
		×	At least one vehicular and pedestrian access point to each adjoining site granted by cross easements
		X	Cross access to be provided with minimum paved width of 24 feet
		文	Design detail for all new public streets

# Parking/Traffic

YES	NO	N/A	
		×	5-foot wide (min) paved walkway to building entrance
		X.	7-foot parking separation from front of building
		X	Minimum parking spaces provided
		X	Service truck parking in designated service areas
		X	Parking spaces and layout dimensioned
		×	Lot paved with HMA or concrete
		X.	Handicap parking provided
		X	Minimum required stacking distance
		X	Concrete curb and gutter around parking lot

#### **Grading and Drainage Plans**

YES	NO	N/A	
×			Show existing tree lines and any obstructions (fences, structures, power poles, etc.) within the project limits.
Ď₹			All proposed lot lines and lot numbers or addresses
X			Lot line dimensions
		×	Outline of buildable areas for each lot
		X	Typical setbacks of buildable area to front, side and back lot lines
×			All existing buildings, structures and foundations
X			All existing drainage channels and watercourses
X			Emergency overflow routes
X			Drainage clarified by flow arrows, high points, sags, ridges, and valley gutters
X			Proposed retaining wall locations with top and bottom of wall elevations at key locations
		X	100-year flood plain limit (both pre-and post-project)
X			100-year storm water surface elevation
		×	Wetlands. Wetland limits labeled with bearings and distances and dimensioned to lot lines. Bearings and distances may be shown in tabulated format.

	A	All environmental corridors, & or environmentally sensitive areas as required by DNR
X		All existing and proposed easements.
¥		Existing topography of the site and all areas within 50 feet of the site shown at a one foot contour interval using City of Waukesha datum. Existing contours shown as thin, dashed screened or grey lines with a readily discernable heavier line used for the 5-foot contour intervals.
×		Proposed grading shown at a contour interval of 1 foot using City of Waukesha datum. Proposed contour lines shown as solid medium lines, with a discernible heavier line use for the 5-foot contour intervals.
	X	The yard grade and first floor elevation of proposed building and any existing buildings located within 150 feet of the parcel boundary.
	X	Proposed road(s), curb and gutter, all storm sewer grates and storm sewer manholes (or cross-culverts for open ditches). Show any off-road storm inlets and discharge locations with surface entry elevations.
X		Spot grades as necessary to ensure proper drainage and compliant ADA slopes and routing where applicable.
	×	At front setback line show a typical house shell on each lot and the proposed yard grade to the nearest tenth of a foot (assumed to be 0.7' below the top of block) for each building. Show proposed finished elevations to the nearest tenth of a foot at all lot corners and alongside lot lines adjacent to the front and back corners of the typical house. Show proposed finished elevations to the nearest tenth of a foot at high and low points along any side or back lot lines, and at high and low points if roads to demonstrate proposed drainage.
	×	The grading plan for any house that will require special design due to topography, clearly show separate grades for the garage and yard grade if extra steps are needed. Separate spot finish elevations shown for rear or side exposure or walkout.
	×	Indicate minimum finished floor elevations adjacent to floodplains, ponds, creeks/channels, etc.
	×	Proposed storm inlets shown on each grading plan. Each plan also includes specific details on all applicable retention/detention basins, ponds, overflows, etc. Separate sheets or notes as required.
X		Locations of existing and proposed streets, drives, alleys, easements, right-of-way, parking as required, vehicular and pedestrian access points, and sidewalks
		Outline of any development stages
	X	Location and details on any required emergency access roads
×		Soil characteristics
X		Existing and proposed topography shown for the site and or adjacent properties
	N N	Floodplain, shore land, environmental and wetlands shown
×		Location and dimensions of on-site storm water drainage facilities
X		Location and footprint of all existing buildings
	X	Locations and species of existing trees
		Berm detail
X		Lot grades and swales shown
		Drainage calculations provided

## **Erosion Control**

YĘS	NO	N/A	
YES			Location Map
為			Soils Survey Map
Ž Ž			Existing Land Use Mapping
*			Predeveloped Site Conditions
A			Existing contours
X			Property lines
X			Existing flow paths and direction
X X X			Outlet locations
ĬZ/			Drainage basin divides and subdivides
X			Existing drainage structures on and adjacent to the site
		X	Nearby watercourses
		X	Lakes, streams, wetlands, channels, ditches, etc.
		×	Limits of the 100-year floodplain
Ä			Practice location/layout/cross sections
×			Construction Details
X			Name of receiving waters
Ä			Site description/Nature of construction activity
X			Sequence of construction
×			Estimate of site area and disturbance area
V			Pre- and post-developed runoff coefficients
100			Description of proposed controls, including
×			Interim and permanent stabilization practices
X			Practices to divert flow from exposed soils
A			Practices to store flows or trap sediment
X			Any other practices proposed to meet ordinance
×			Existing topography of the site and all areas within 50 feet of the site shown at a one foot contour interval using City of Waukesha datum. Existing contours shown as thin, dashed screened or grey lines with a readily discernable heavier line used for the 5-foot contour intervals.
X			Proposed grading shown at a contour interval of 1 foot using City of Waukesha datum. Proposed contour lines shown as solid medium lines, with a discernible heavier line use for the 5-foot contour intervals.
			List the total disturbed acreage including offsite areas.
X			Provide free survey in accordance with City Erosion Control Ordinance
X			Proposed limits of disturbance including proposed tree cutting areas.
		X	Location and dimensions of all temporary topsoil and dirt stockpiles.
X			Location and dimensions of all appropriate best management practices (BMP).
X			Phasing of BMP's with the construction activities listed / described.
×			Schedule of anticipated starting and completion date of each land disturbing and land developing activity, including the installation of the BMP measures that are needed.
×			Location of all channels, pipes, basins or other conveyances proposed to carry runoff to the nearest adequate outlet, including applicable design assumptions and computations.

X		Areas to be sodded or seeded and mulched or otherwise stabilized with vegetation, describing the type of final vegetative cover.
X		Areas of permanent erosion control (other than vegetation).
X		Boundaries of the construction site
X		Drainage patterns/slopes after grading activities
X		Areas of land disturbance
X		Locations of structural and nonstructural controls
×		Drainage basin delineations and outfall locations

#### Optional Submittals as Determined by Review Authority

YES	NO	N/A	
		×	Traffic impact analysis
		X	Environmental impact statement
	X		Soil and Site Evaluation Report per DNR Technical Standard 1002
		X	Plot of effect of exterior illumination on site and adjacent properties
		X	Description of any unusual characteristics
		X	Street perspectives showing view corridors
		X	Historic site
		X	Economic feasibility study
		X	Contaminated Waste Site

I hereby certify that I have reviewed the City ordinances and provided one (1) full-sized set of all required information along with all the required reduced copies of plans.

Applicant's Signature:



City of Waukesha Department of Public Works 130 Delafield Street Waukesha, WI 53188 Waukesha-wi.gov

# **Stormwater Management Plan**

Attachment D (Rev 12/18)

Project Name: Prairie Philip (Outdoor Storage Yard)							
Engineer & Design Firm: Payne + Dolan							
			STORM WATER MANAGEMENT PLAN WORKSHEET				
for site p construct manage protect t land dev Stormwa calculati	olan revie ted and ment cri he safet velopmen ater Man ons, stan	ew. A Stonimplement teria, as y and he nt activity agement mped by	equires a Stormwater Management Plan to be submitted with the proposed development plans ormwater Management Plan is a document describing the storm water management practices ented within the proposed development to ensure compliance with the storm water set forth by the City of Waukesha. The purpose of a Stormwater Management Plan is to ealth of the public, property and aquatic environment from the threats due to storm water from y. The worksheet will provide a basis to the information that shall be provided when preparing a left Plan for a proposed development. This Plan shall include a set of complete plans and y a registered professional engineer.  It Plans are required as listed in City Code Book Chapter 32.06(b)				
YES	NO	N/A	Exemptions for Design and Plan Requirements				
		X	Site is associated with agricultural or sylvicultural activities				
			Design Requirements: Total Suspended Solids				
YES	NO	N/A	Boolgii Noquitomonio. Total Guoponia a Gona G				
X			Site is a New Development – 80% Reduction must be met				
	X.		Site is an Infill Development – 80% Reduction must be met				
Π,	X		Site is a Redevelopment – 40% Reduction must be met				
			Site has areas of New Development and Redevelopment				
X			Calculations for % Reduction are included in the plan (WinSLAMM input and output)				
XXX			Storm water Management Facilities to address TSS removal are designed according to Chapter 32 of the City Code Book and DNR Technical Standards – Check all that apply:  Wet Detention Basin  Bio Retention Basin  Swales  Proprietary Devices  Other (specify):				
			Design Requirements: Peak Discharge				
YES	NO	N/A					
×			Storm water Management Facilities to address Peak Discharge are designed according to Chapter 32 of City Code Book and DNR Technical Standards – Check all that apply:    X Wet Detention Basin   Bio Retention Basin   Swales   Other (specify):				
×			Downstream Capacity for 2-year, 10-year and 100-year, 24-hour design storms are met				
×			Calculations of available capacity, proportional share, and proposed utilized capacity under all design storms are included in plan				
×			Calculations of Peak Discharge are included in the plan				

			Design Requirements: Infiltration
YES	NO	N/A	
X			Hydraulic Soil Type:
-			☐ Soil Type A Proceed
			☐ Soil Type B – Proceed
			✗ Exemption or Exclusion – Provide documentation
	×		Site and Soil Evaluation Report per DNR Technical Standard 1002
		X	Low Imperviousness. Ex: low density residential parks, cemeteries
			Post-Development Infiltration Performance Standards:
			☐ Up to 40% Connected Impervious Surface
			☐ 90% of Pre-Development Infiltration volume met
			☐ 1% of site – Maximum Effective Infiltration Area
		X	Medium Imperviousness. Ex: Medium and high density residential, multi-family,
·		,	industrial, institutional, office park.
			Post-Development Infiltration Performance Standards:
			□ 40%-80% Connected Impervious Surface
			☐ 75% of Pre-Development Infiltration volume met
			☐ 2% of site – Maximum Effective Infiltration Area
		X	High Imperviousness. Ex: commercial strip malls, shopping centers, commercial
			downtowns
			Post-Development Infiltration Performance Standards:
			☐ Greater than 80% Connected Impervious Surface
			☐ 60% of Pre-Development Infiltration volume met
			☐ 2% of site – Maximum Effective Infiltration Area
		X	Site has parking lots and new road construction:
			☐ Pretreatment included
			☐ 10% Infiltration of the runoff from the tow-year, 24-hour design storm with
			Type II Distribution
		X	Calculations of Infiltration Volumes are included in the plan and model input and
	[ <u>-</u>		output (WinSLAMM) Exclusions for Infiltration:
		×	☐ Tier 1 Industrial Facility
			☐ Storage and Loading Areas of Tier 2 Industrial Facility
			☐ Fueling and Vehicle Maintenance Facility
			l
			☐ Areas within 1,000 feet up gradient of Karst Features
			☐ Areas within 100 feet downgradient of Karst Features
			☐ Areas with < 3 feet of separation from bottom of Infiltration System to
			seasonal high groundwater or top of bedrock (does not prohibit roof runoff)
			☐ Areas with runoff from industrial, commercial and institutional parking lots and roads with < 5 feet separation from bottom of infiltration system to
			elevation of seasonal high groundwater or top of bedrock
			☐ Areas within 400 feet of community water system well
			☐ Areas within 100 feet of private well
			☐ Areas where contaminants of concern (defined by NR720.03(2) are present
			in the soil through which infiltration will occur)
		{	☐ Area where soil does not meet any of the following characteristics between
			bottom of infiltration system and seasonal high groundwater and top of
			bedrock:
			☐ At least 3-foot soil layer with 20% fines or greater
			☐ At least 5-foot soil layer with 10% fines or greater

YES	NO	N/A	
X			Exemptions for Infiltration:
•			Areas where infiltration rate < 0.6 inches/hour
			☐ Parking Areas and Access Roads less than 5,000 square feet for commercial
			and industrial
			☐ Redevelopment Post-Construction Sites
			☐ Infill Development < 5 acres
			☐ Infiltration during periods when soil on the site is frozen
			☐ Roads in commercial, industrial and institutional land uses
		_	☐ Arterial Roads in Residential land uses
		X	Storm water Management Facilities to address Infiltration are designed according to
<u> </u>	_	-	Chapter 32 of the City Code Book and DNR Technical Standards – Check all that
			apply:
			□ Bioretention Basin (1004)
			☐ Infiltration Basin (1003)
			☐ Infiltration Trench (1007)
			☐ Permeable Pavement (1008)
			☐ Rain Garden (1000)
			☐ Other (specify):
			Design Requirements: Protective Areas
YES	NO	N/A	
		×	Impervious areas are outside protective area. If not, provide a written explanation.
		×	Land disturbing activities are within a protective area. If <b>Yes</b> , check all that apply:
			☐ If no impervious area is within protective area, adequate sod or self-sustaining
			vegetative cover of 70% or greater shall be established.
			☐ Adequate sod or self-sustaining vegetative cover is sufficient for bank stability,
			maintenance of fish habitat and filtering of pollutants from upslope overland
	and the same of th		flow areas under sheet flow conditions.
			☐ Non-Vegetative materials are employed on the bank as necessary to prevent
			erosion (steep slopes, high velocity areas).
		內	Best Management Practices are located within the protective area – Check all that
			apply:
			□ Filter Strips
			☐ Swales
			☐ Wet Detention Basins
			☐ Other (specify):
		A	Non-Applicable Areas Apply:
			☐ Structures that cross or access surface water (boat landing, bridge, culvert)
	}		☐ Structures constructed in accordance with Section 59.692(1v) Wisconsin
			Statutes:
			☐ Post-Construction Runoff does not enter surface water except to the extent
	<u> </u>		that vegetative groundcover necessary for bank stability
VEC	∐ NΩ	BI/A	Design Requirements: Fuel and Maintenance Facilities
YES	NO	N/A	Are Fuel and Maintenance Facilities on the Site?
		8	
	凵	7	Are Best Management Practices designed to reduce petroleum within runoff (no visible sheen)?

		De	sign Requirements: Swale Treatment for Transportation Facilities
YES	NO	N/A	
		×	Does the site use swales for runoff conveyance and pollutant removal for transportation facilities? If <b>Yes</b> , must have the following:  Groundcover:  Uvegetated
			☐ Non-Vegetated where appropriate to prevent erosion or provide runoff treatment (riprap, check dams)
			Swale Velocity Control:
:			☐ Swale is 200 feet or more in length with a velocity no greater than 1.5 feet per second for the two-year, 24-hour design storm or two-year storm with duration equal to time of concentration
			☐ Swale is 200 feet or more in length with velocity > 1.5 feet per second then velocity is reduced to maximum extent practicable. Written explanation stating why requirement of > 1.5 feet per second cannot be met
		×	Exemptions Apply:  Average Daily Vehicles > 2,500 and initial surface water of the state that runoff directly enters is any of the following:
			☐ An outstanding resource of water (ORW)
			☐ An exceptional resource water (ERW)
			☐ Water is listed in Section 303(d) of the Federal Clean Water Act and is identified as impaired in whole or in part due to non-point source impacts
			☐ Water where targeted performance standards are developed under NR 151.004 of the Wisconsin Administrative Code to meet water quality standards
			Plan Requirements
YEŞ	NO	N/A	
×			Provide permit application form, including contact information (name, address, telephone number) for the landowner, developer, land operator, certified project engineering, responsible party for installation of storm water management practices, responsible party for long-term maintenance of the storm water management practices.
X			Legal Description of proposed development.
X			Narrative describing the proposed development.
X			Brief summary of Design Criteria and methods used for development of Storm Water Management Practices.
×			Storm Water Management Maintenance Agreement shall be included with the Storm Water Management Plan (see Storm Water Management Maintenance Agreement template for additional information required).
X			Certification by a Wisconsin registered professional engineer.
			Financial Guarantee.

or more	e site m	naps at	Characteristics for Pre/Post Development conditions shall be delineated by one (1) a scale of not less than one (1") inch equals two hundred (200") feet. The map(s)
YES	NO NO	N/A	mum, the following information:
	<del> </del>	<del> </del>	Site Location and Legal Description.
<u>×</u>			-
X			Pre-developed and revised topography by contours related to USGS survey datum or other datum approved by City. The topographic contours of the site shall not exceed 2 feet. The topography shall extend at minimum 100 feet outside the site boundaries to show runoff patterns onto, through and from the site.
		X	One hundred (100) year Floodplain boundary, shore land, environmental corridors, and wetland boundaries shall be delineated if applicable
		×	All lakes, streams, and other water bodies illustrated on map shall be named as defined on a USGS 7.5 minute topographic map.
			Predominant Soil Types and Hydraulic Soil Group Classifications per NRCS
		X	Coordinates of all manhole and inlets with reference to two nearest reference point monuments which shall be Section or ¼ Section corners.
X			Location, capacity, and dimensions/details of on-site Pre-developed and Post-developed storm water management facilities such as, but not limited to, the following: manholes, pipes, curbs, gutters, curb inlets, filter strips, swales, detention basins, curb cuts, and drainage gates.
×			Location, extent, detailed drawings, typical cross sections and slope ratios of all pre- developed and post-developed storm water retention and detention areas and drainage ways – list inlet/outlet elevations, permanent water surface elevation, high water surface elevation, and emergency spillway elevation, if applicable.
À	.0		Location and Elevations at top and bottom of pre-developed and post-developed buildings and structures.
A			Locations and names of pre-developed and post-developed streets and intersections and the location of parking lots, sidewalks, bike paths and impervious surfaces (excluding single family residences). Map(s) shall clearly differentiate pre-developed and post-developed surfaces.
\$			Delineation and dimensions of all pre-developed and post-developed property boundaries, easements, right-of-way, building setbacks, maintenance easements, and other restrictions.
<b>X</b>			Pre-developed and post-developed land use boundaries, including cover type and condition.
×			Post-developed land use cover totals for Impervious and Pervious areas as well as permanent water surface area of all storm water management facilities.
¥			Delineation of pre-developed and post-developed watershed and sub-watershed boundaries used in determination of Peak flow discharges and discharge volumes from the site. (If the watershed extends beyond the site boundaries, a separate watershed map can be supplied).
\Z			Location of the pre-developed and post-developed discharge points.
A			Pre/Post developed directional Flow Paths used to calculate existing/proposed time of concentrations.
2			Location of the Emergency Overland Flow.
		A	Location of any Regional Treatment Options (if applicable).
×			Identify all pre-developed land cover features, such as, natural swales, natural depressions, native soil infiltrating capacity and natural groundwater recharge areas.
		X	Location of any protective areas within the site.
		X	Location of wells located within 1,200 feet of pre-developed and post-developed Storm Water Detention Basins, Infiltration Basins, or Infiltration Trenches.
		×	Delineation of Wellhead protection areas defined under NR 811.16
		•	

	T	T	ated in the checklist under Design Requirements:
YES	NO	N/A	Pre-developed and post-developed watershed, sub-watersheds, and land use areas
×			(acres, watershed shall be delineated by property lines).
NZ′			Pre-developed and post-developed impervious areas (acres).
X			Pre-developed and post-developed Runoff Curve Numbers.
Z Z			Pre-developed and post-developed Time of Concentration.
À			Pre-developed and post-developed peak flows for the 2-year, 10-year and 100-year, 24-hour storm events for each discharge point.
Ą			Total suspended solids removal computations to show compliance.
¥			Design computations for the runoff volume of the pre-developed and post-developed conditions to show compliance with the infiltration requirements.
<b>V</b>			Design computations for all storm water drainage facilities such as, but not limited to, inflow/outflow rates, hydrographs, water surface elevations, outlet design computations, runoff discharge volume, velocities, and stage/storage data.
		A	Design computations for the 10-year Rational Method flows for all proposed storm conveyance systems.
		A	Computation of the available downstream capacity flowing full, overflow level of ditches and the top of the upstream end of the pipe for any culverts.
		文	Computation of the downstream capacity using the 5-year rational storm.
		À	Tail water analysis included in storm water design for 2-year, 10-year and 100-year storm events.
Á			Design computations to illustrate compliance with pollutant loading criteria (Storm Water Quality Management practices) with pre- and post-storm water management facilities.
Ø			Narrative describing all assumptions that were deemed appropriate for design.
×			Explanation of provisions to preserve and use natural topography and land cover features.
		X	Explanation of restrictions on Storm Water Management practices by wellhead protection plans (if applicable).
	X		Results of investigations of soil and groundwater required for installation of Storm Water Management practices.
		X	Impact assessment results on Wetland Functional Values (if applicable).
X			Storm Water Management practices installation schedule.
	×		Cost estimate for the construction, operation and maintenance of each Storm Water Management practice.
		¥	Any additional information that the City, or designee, may need to evaluate the impacts of the storm water discharge quality and quantity on the existing area and existing utilities.