

# DuPage County Countywide Stormwater and Flood Plain Ordinance

## Stormwater Submittal Checklist - 5/22/2002

Date:	Reviewer:	Stormwater Permit No.:
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Tab 1				Project Overview (Sec. 15-148)	
Applicant	Reviewer			Requirement	Reviewer Comments
Check if provided	Check if required	Check if provided	Status (A/NA/R)		
				Completed Stormwater Permit Application	
				Copy of a completed Joint Application form with transmittal letters to the appropriate agencies if the development is in a special management area (Tab 3B, 4, 5).	
				Narrative description of development, existing conditions, and proposed impacts on stormwater, wetland, riparian and flood plain.	
				USGS map showing project location.	
				FIRM showing development location	
				FEQ map showing development location.	
				County wetland map showing development location	
				NRCS map (DuPage County Soil Conservation Service Map) showing development location.	
				Estimate of Probable Cost to construct stormwater facilities.	

Name of Applicant: \_\_\_\_\_

Name of Reviewer: \_\_\_\_\_

Signature of Applicant: \_\_\_\_\_

Signature of Reviewer: \_\_\_\_\_

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

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

**Tab 2A**

**Stormwater Submittal (Sec. 15-149)**

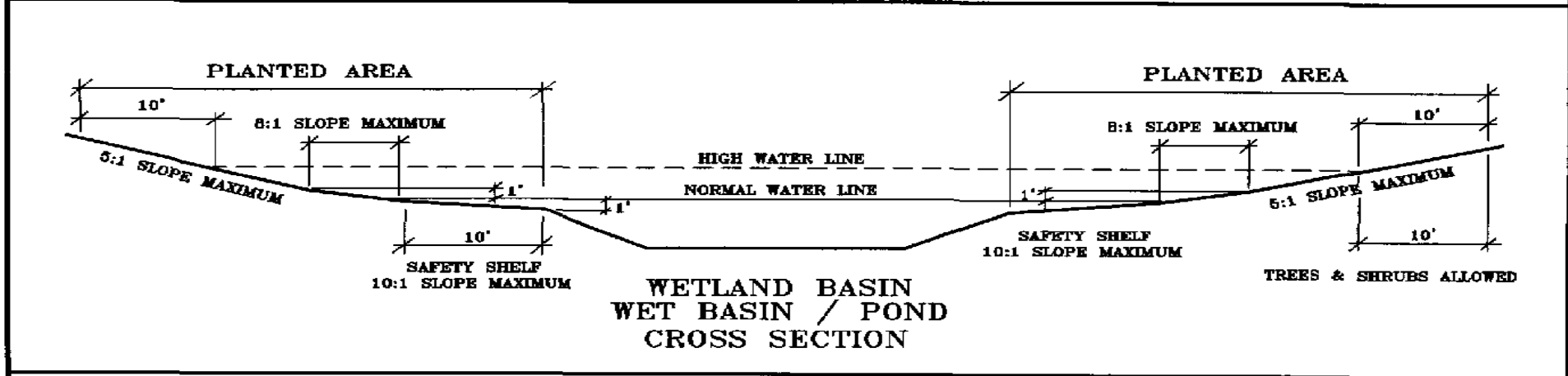
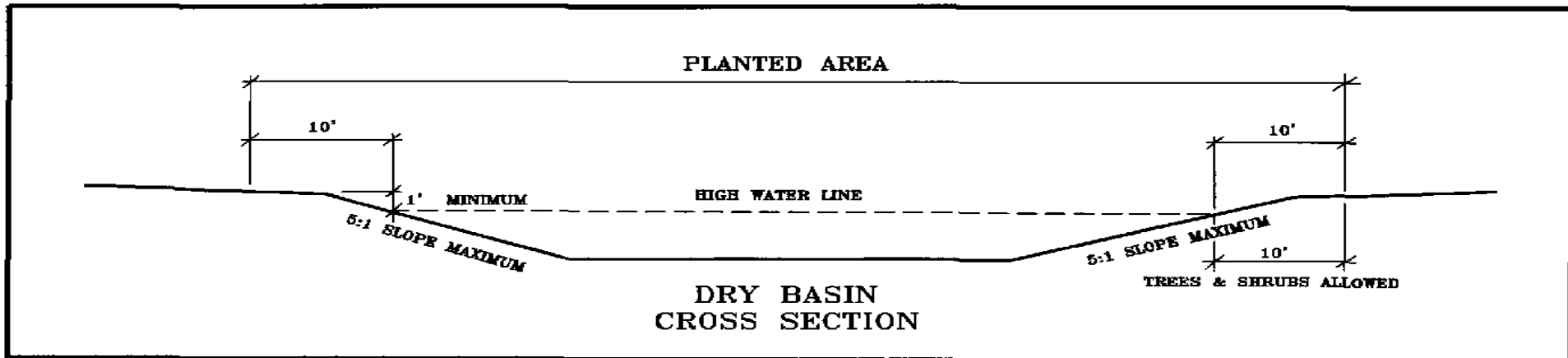
Applicant	Reviewer			Requirement	Reviewer Comments
Check if provided	Check if required	Check if provided	Status (A/NA/R)		
				Site topographic map - see requirements in Tab 6.	
				General plan View Drawing of existing and proposed site conditions - see requirements in Tab 6.	
				Design details for stormwater facilities - see requirements in Tab 6.	
				Schedule for implementation of the site stormwater plan.	
				Site runoff calculations - required for subdivisions and non-residential developments:	
				Documentation of the procedures/assumptions used to calculate hydrologic and hydraulic conditions for sizing major and minor systems.	
				Profile drawings of major and minor stormwater systems.	
				Cross-section data for open channels	
				Hydraulic grade line and water surface elevations under design conditions.	
				Hydraulic grade line and water surface elevations under base flood conditions.	
				Narrative describing off-site conditions - see requirements in Tab 6.	
				Sediment and erosion control plan - see requirements in Tab 6.	
				Design details for proposed sediment and erosion control details - see requirements in Tab 6.	
				Copy of written opinion, when applicable, from the Soil and Water Conservation District.	
				Best Management Practice Information:	
				Narrative description on the type and function of best management practices that are incorporated into the site design.	
				BMP Design Criteria [e.g., (1)soil type, vegetation, and land cover conditions (2) contributory drainage area (3) sizing and effectiveness calculations, etc.]	
				Scheduled maintenance program for stormwater facilities - see requirements in Tab 7.	

**Tab 2B**

**Stormwater Submittal (Sec. 15-149)**

Applicant	Reviewer			Requirement	Reviewer Comments
Check if provided	Check if required	Check if provided	Status (A/NA/R)		
				Site Storage Runoff Calculations:	
				Documentation of the procedures/assumptions used to calculate hydrologic and hydraulic conditions for determining the allowable release rate. This is required if natural storage exists in the pre-development condition.	
				Documentation of the procedures/assumptions used to calculate hydrologic and hydraulic conditions for determining the storage volume.	
				Elevation-area-storage data.	
				Elevation-discharge data.	
				Best Management Practice Information: (wetland /dry basins and wet basins preferred over dry basins)	
				Narrative description on the type and function of best management practices that are incorporated into the site storage design.	
				BMP Design Criteria [e.g., (1)soil type and vegetation (2) sizing and effectiveness calculations, etc.]	
				Plan View Drawing of existing and proposed site conditions - place in Tab 6.	
				Maintenance requirements - place in Tab 7.	

Applicant	Reviewer			Requirement	Reviewer Comments
Check if provided	Check if required	Check if provided	Status (A/NA/R)	(Unincorporated Projects Only)	
				<b>All Stormwater Basins Require Native Landscaping:</b>	
				The bottom and side slopes of dry basins to ten (10) horizontal feet beyond the high water line.	
				The side slopes of wetland basins, wet basins or ponds from the normal water line to ten (10) feet beyond the high water line.	
				Permanently submerged or saturated areas providing conditions conducive to growth of wetland species.	
				10:1 Slope - Safety Shelf planting area (Ponds and Wetland Basins) 10 foot wide minimum.	
				8:1 Slope - One foot above normal water elevation (Ponds and Wetland Basins) 8 foot wide minimum.	
				5:1 Slope - Maximum all other planting areas (All Basins) 10 foot beyond high water line.	
				One foot of clean non-compact topsoil in all planting areas.	
				Written specifications / maintenance procedures.	
				Grading Plan: Native landscape area outline and slope ratios labeled - place in Tab 6.	
				Easement: Landscape perpetual maintenance language - place in Tab 7.	



**NATIVE PLANTING AREA FOR STORMWATER BASINS  
PER DU PAGE COUNTY BUILDING CODE SECTION 8-129.9.**

**Tab 3A**

**Flood Plain Submittal (Sec. 15-150)**

Applicant	Reviewer			Requirement	Reviewer Comments
Check if provided	Check if required	Check if provided	Status (A/NA/R)		
				Regulatory flood plain boundary determination:	
				Provide source of flood profile information.	
				Provide all hydrologic and hydraulic study information for site-specific flood plain studies, unnumbered Zone A area elevation determinations, and flood plain map revisions.	
				Flood plain fill and compensatory storage calculations:	
				Flood plain fill and compensatory storage calculations.	
				Tabular summary of fill, compensatory storage, and compensatory storage ratios provided in proposed plan.	
				Substantial Improvement Calculations.	
				Floodproofing Measures:	
				Narrative discussion of flood proofing measures including material specifications, calculations, design details, operation summary, etc.	
				Plan view drawing of flood proofing measures - place in Tab 6.	
				Flood Easements when required by the countywide ordinance or local jurisdiction.	

**Tab 3B**

**Flood Plain Submittal - Floodway (Sec. 15-150)**

Applicant	Reviewer			Requirement	Reviewer Comments
Check if provided	Check if required	Check if provided	Status (A/NA/R)		
				Floodway hydrologic and hydraulic analysis description and assumptions.	
				Plan View drawings showing location of cross-sections and any other modeled features.	
				Floodway hydrologic and hydraulic analyses for the following conditions:	
				Existing watershed conditions (land use and stream system) without development.	
				Future watershed conditions (land use and stream system) without development.	
				Existing watershed conditions (land use and stream system) with development.	
				Future watershed conditions (land use and stream system) with development.	
				Tabular summary of existing and future analyses for existing and proposed conditions.	
				Calculations necessary for model development.	

**Tab 4**

**Wetland Submittal (Sec. 15-151)**

Applicant	Reviewer			Requirement	Reviewer Comments
Check if provided	Check if required	Check if provided	Status (A/NA/R)		
				Narrative overview of wetland(s) type, size, and function(s) currently performed (include photographs).	
				Wetland Delineation Plan View Drawing - place in Tab 6.	
				Completed USCOE data sheets according to USCOE Federal Manual 1987.	
				Narrative overview of wetland impact(s) and proposed mitigation.	
				Narrative description of avoidance and minimization measures taken, and justification for wetland impact(s) for all on-site wetlands.	
				Characterization of on-site wetland(s) as either critical or regulatory with the following support calculations:	
				Stormwater storage volume to tributary basin runoff volume calculations or other acceptable documentation .	
				Floristic study using the mean rated quality (MRQ) or natural area rated index (NARI) assessment.	
				Wildlife quality assessment using the Modified Michigan Department of Natural Resources Method (MDNR) or mean rated wildlife quality (MWRQ) assessment.	
				Wetland Mitigation Report:	
				Narrative description of the wetland mitigation plan and the function(s) the mitigation will replace.	
				Narrative description of the existing and proposed hydroperiod with supporting data and proposed management of hydrology.	
				Proposed vegetative list for each community type with associated acreage.	
				Narrative on the proposed management of hydric soils (i.e. source, classification, depth, etc.)	
				Proposed wildlife habitat measures and management.	
				Wetland Mitigation Plan View Drawing - place in Tab 6.	
				Wetland Mitigation Maintenance and Monitoring Plan - place in Tab 7.	
				If requesting participation in the County Wetland Banking Program provide a narrative in support of the request.	

**Tab 5**

**Riparian Environment Submittal (Sec. 15-152)**

Applicant	Reviewer			Requirement	Reviewer Comments
Check if provided	Check if required	Check if provided	Status (A/NA/R)		
				Narrative overview of riparian impacts and mitigation.	
				Inventory of the makeup of the riparian area and the functions of the riparian environment.	
				Riparian Plan View Drawing - place in Tab 6.	
				Maintenance and Monitoring Plan - place in Tab 7.	

**Tab 6**

**Maps (Sec. 15-149, 15-150, 15-151)**

Applicant	Reviewer			Requirement	Reviewer Comments
Check if provided	Check if required	Check if provided	Status (A/NA/R)		
				Site Topographic Map:	
				Map scales at 1 inch = 100 feet (or less) and accurate to +/- 0.5 feet.	
				Existing and proposed contours on-site and within 100 feet of site.	
				Delineation of pre-development regulatory flood plain/floodway limits.	
				Delineation of post-development regulatory flood plain/floodway limits.	
				Location of all wetlands, lakes, ponds, etc. with normal water elevation noted.	
				Location of all buildings on or near the site.	
				Identification of lowest floor and lowest point of entry for each building within 100 feet of the development.	
				Identification of floodproofing elevation for each structure (if appropriate).	
				Drawings signed and sealed by a L.S. or P.E.	
				General Plan View Drawing of existing and proposed site conditions:	
				Existing major and minor stormwater systems.	
				Proposed major and minor stormwater systems.	

				Existing wetland location.	
				Proposed wetland mitigation.	
				Existing roadways, structures, parking lots, driveways, sidewalks and other impervious surfaces.	
				Proposed roadways, structures, parking lots, driveways, sidewalks and other impervious surfaces.	
				Map scales at 1 inch = 100 feet (or less) and accurate to +/- 0.5 feet.	
				Nearest base flood elevations.	
				DuPage County Survey Control Network benchmark.	
				FEMA Control Survey benchmark.	
				Professional Engineer seal and signature.	
				Structural Engineer seal and signature if any structure is subject to more than three differential water pressure head.	
				Design details for stormwater facilities (i.e. structure and outlet work detail drawings, etc.).	
				Vicinity Topographic Map:	
				Vicinity topographic map covering entire area upstream of the development site and downstream to a suitable hydraulic boundary condition.	
				The County 2' contour map is preferred at a scale readable by the reviewer.	
				Watershed boundaries for areas draining through or from the development.	
				Soil types, vegetation and land cover affecting runoff upstream of the site for any area draining through the site.	
				Location of development site within the watershed planning area.	
				Plan drawings and details of flood proofing measures.	
				Sediment and Erosion Control Plan View Information:	
				Narrative description of planned construction activities, hydrologic conditions, soils types, erosion control measures, and planned maintenance.	

				Existing contours with drainage patterns and watershed boundaries.	
				Existing soil types, vegetation and land cover conditions.	
				Proposed contours with location of drainageways and sediment and erosion measures.	
				Proposed soil types, vegetation and land cover conditions.	
				Limits of clearing and grading.	
				Sediment/erosion control installation measures.	
				List of maintenance tasks.	
				Schedule for placement and maintenance of soil stabilization and sediment trapping facilities.	
				Maintenance tasks performance schedule.	
				Design details for proposed sediment/erosion control facilities and measures.	
				Wetland Delineation Plan View Drawing:	
				Aerial exhibit showing the wetland delineation, data points, photopoints, and existing flow paths.	
				Location of offsite contiguous wetland.	
				Existing and proposed tributary areas to all wetlands.	
				Wetland Mitigation Plan View Drawing:	
				Wetland delineation and buffer area.	
				Proposed mitigation design showing communities and associated acreages.	
				Existing and proposed boundaries of the area(s) tributary to all on-site wetlands.	
				Identify and locate wetland impact(s) and mitigation area(s).	
				Table of existing wetland and buffer areas (acres), impacts (acres), mitigation (acres) and mitigation ratios.	
				Wetland consultant and date of delineation.	
				Riparian Plan View Drawing:	
				Landscape plan of the flood plain.	

**Tab 7**

**Maintenance (Sec. 15-149, 15-150, 15-151)**

Applicant	Reviewer			Requirement	Reviewer Comments
	Check if required	Check if provided	Status (A/NA/R)		
				Scheduled maintenance program for stormwater facilities including BMP measures (Tab 2 & 2A):	
				Planned maintenance tasks and schedule.	
				Identification of persons responsible for maintenance.	
				Permanent public access maintenance easements granted or dedicated to, and accepted by, a government entity.	
				Wetland Mitigation Maintenance and Monitoring Plan (Tab 4):	
				Narrative description of the maintenance and monitoring requirements for wetland hydrology, vegetation, soils, and habitat.	
				Schedule for maintenance, monitoring, and reporting.	
				Success criteria for wetland hydrology, vegetation, soils, and habitat on an annual basis.	
				Identification of responsible person(s) for short term and long term maintenance.	
				Identification of dedicated long term funding source(s).	
				Permanent public access maintenance easements granted or dedicated to, and accepted by, a government entity.	

**Tab 8**

**Security (Sec. 15-176)**

Applicant	Reviewer			Requirement	Reviewer Comments
Check if provided	Check if required	Check if provided	Status (A/NA/R)		
				Estimate of Probable Cost to construct stormwater facilities.	
				Development security:	
				Schedule for the completion of stormwater facilities.	
				Irrevocable letter of credit for 110% of estimated probable cost to construct the stormwater facilities.	
				Right to draw on the security statement - signed by the holder of the security.	
				Right to enter the development site to complete required work that is not completed according to schedule.	
				Indemnification statement - signed by developer.	
				Sediment and erosion control security:	
				Irrevocable letter of credit for 110% of estimated probable cost to install sediment and erosion control facilities.	
				Right to draw on the security statement - signed by the holder of the security.	
				Right to enter the development site to complete required work that is not installed and maintained according to schedule.	
				Letter of Credit Requirements:	
				Statement that indicates that the lending institution capital resources at least \$10,000.00 or as authorized.	
				Lending institution has an office location within the Chicago Metropolitan Area.	
				Lending institution is insured by the Federal Deposit Insurance Corporation.	
				Allows Administrator to withdraw without consent of developer.	
				Allows Administrator to withdraw within 45 days of expiration date.	

**Tab 9**

**Variance (Sec. 15-236)**

Applicant	Reviewer			Requirement	Reviewer Comments
Check if provided	Check if required	Check if provided	Status (A/NA/R)		
				Completed Stormwater Permit Application and all required submittals.	
				Completed variance petition including all information identified in Section 15-236.7.a.-l.	
				Statement as to how the variance sought satisfies the standards in Section 15-236.10. Address each condition separately.	