

WILL COUNTY STORMWATER MANAGEMENT ORDINANCE



Effective: January 1, 2004

Latest revision 3/25/2010

WILL COUNTY STORMWATER MANAGEMENT ORDINANCE

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Amendments to the Will County Stormwater Management Ordinance

Adopted	October 17, 2002	Resolution No. 02-441
Amended	November 21, 2002	Resolution No. 02-495
Amended	June 19, 2003	Resolution No. 03-244
Amended	March 17, 2004	Resolution No. 04-87
Amended	March 25, 2010	Resolution No. 10-72

ARTICLE 1. AUTHORITY, PURPOSE AND DEFINITIONS.

Sec. 100 Statutory Authority

- 100.1 This Ordinance shall be known, and may be cited, as the Will County Stormwater Management Ordinance (the "WCSMO").
- 100.2 The Will County Board adopts this Ordinance pursuant to its authority to regulate Stormwater Management and governing the location, width, course, and release rate of all stormwater runoff channels, streams, and basins in the County, in accordance with the Will County Comprehensive Countywide Stormwater Management Plan. The statutory authority for this Ordinance is contained in 55 ILCS 5/ 5-1041, 5-1049, 5-1063, 5-1104, 5-12001 & 5-15001 et seq., 5-40001 and other applicable authority, all as amended from time to time.
- 100.3 As applicable, the Communities within the County adopt and enforce this Ordinance or in the alternative adopt and enforce a municipal ordinance that is consistent with and at least as strict as the County Ordinance. Pursuant to 55ILCS 5/5-1062, 65 ILCS 5/1-2-1, /11-12-12, 11-30-2, 11-30-8, and /11-31-2; and 615 ILCS 5/4.9, et seq., including 18g.

Sec. 101 Will County Comprehensive Countywide Stormwater Management Plan

The Will County Comprehensive Countywide Stormwater Management Plan was recommended by the Will County Stormwater Management Committee and adopted by the County Board, after review by the appropriate agencies and a public hearing by Resolution No. 98-20 on October 15, 1998. The Plan is available for public inspection in the office of the Will County Clerk.

Sec. 102 Purposes of this Ordinance

- 102.1 The principal purpose of this Ordinance is to promote effective, equitable, acceptable, and legal Stormwater Management measures by establishing reasonable rules and regulations for development. Other purposes of this Ordinance include:
- a. Managing and mitigating the effects of urbanization on stormwater drainage throughout Will County through planning, appropriate engineering practices and proper maintenance;
 - b. Protecting from, and reducing the existing potential for, loss of human life, health, safety and property from the hazards of flooding damages on a watershed basis;
 - c. Preserving and enhancing the natural hydrologic and hydraulic functions and natural characteristics of watercourses and floodplains to protect water quality, protect aquatic habitats, reduce flood damages, reduce soil erosion, provide recreational and aesthetic benefits and enhance community and economic development;
 - d. Controlling sediment and erosion in and from stormwater facilities, developments, agricultural fields, and construction sites and reducing and repairing stream bank erosion;
 - e. Requiring that planning for development provide for water resource management, taking into account natural features such as vegetation, wildlife, waterways, wetlands, and topography in order to reduce the probability that new development will create unstable conditions susceptible to erosion;
 - f. Protecting environmentally sensitive areas from deterioration or destruction by private or public actions;
 - g. Requiring appropriate and adequate provision for site runoff control, especially when the land is developed with a large amount of impervious surface;

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- h. Requiring the design and evaluation of each site Stormwater Management plan consistent with watershed capacities;
- i. Encouraging the use of stormwater storage and infiltration of stormwater in preference to stormwater conveyance;
- j. Lessening the taxpayers' burden for flood-related disasters, repairs to flood-damaged public facilities and utilities, and flood rescue and relief operations;
- k. Meeting the Illinois Department of Natural Resources-Office of Water Resources floodway permitting requirements delineated in 615 ILCS 5/18g (1992) ("An Act in Relation to the Regulation of the Rivers, Lakes, and Streams of the State of Illinois"), as amended from time to time;
- l. Making federally subsidized flood insurance available to individual Communities and for property throughout the County by fulfilling the requirements of the National Flood Insurance Program;
- m. Complying with the rules and regulations of the National Flood Insurance Program codified in Title 44 of the Code of Federal Regulations;
- n. Minimizing conflicts and incompatibilities between agricultural and urban drainage systems and maintaining agriculture as a viable and productive land use;
- o. Encouraging cooperation and consistency in Stormwater Management activities within and between the units of government having floodplain and Stormwater Management jurisdiction;
- p. Restricting future development in the floodplain to facilities that will not adversely affect the potential for flood damage;
- q. Requiring regular, planned maintenance of Stormwater Management facilities;
- r. Allowing the use of simple technologies whenever appropriate and realistic, but requiring the use of more sophisticated techniques when necessary to ensure the adequacy of stormwater controls;
- s. Providing a procedure by which Communities throughout the County may petition the Committee for authority to implement and enforce the provisions of this Ordinance;
- t. Requiring strict compliance with and enforcement of this Ordinance.

102.2 The purposes of this Ordinance are consistent with and supercede the Plan.

Sec. 103 Reference to Watershed Plans

103.1 This Ordinance recognizes the integrated nature of the watershed system and the need to study certain flood control alternatives and other Stormwater Management functions on a watershed-wide basis. A generalized process for development of watershed plans was recommended in the adopted "Will County Comprehensive Stormwater Management Plan." This process includes a public hearing review and approval by the Committee, and adoption by the County.

103.2 Individual watershed plans or interim watershed plans which recognize the unique attributes of each watershed may be prepared and periodically updated for the major watersheds, to identify management projects and establish criteria for development. These plans may also recommend changes to this Ordinance effective within the study boundary.

Watershed Plans or Interim Watershed Plans may be adopted which recommend more or less stringent criteria than the criteria in this Ordinance. When adopted by the County Board, these watershed-specific

ARTICLE 1. AUTHORITY, PURPOSE AND DEFINITIONS.

criteria established in such Watershed Plans or Interim Watershed Plans shall be set forth as Sections 105 through 117 of this Ordinance.

Sec. 104 Definitions

Within the context of this Ordinance or a Certified Community Ordinance, the following words and terms shall have the meanings set forth except where otherwise specifically indicated. Words and terms not defined shall have the meanings indicated by common dictionary definition.

Administrator. The person designated by the permitting authority to administer and enforce this Ordinance;

Administrative Violation. An administrative violation of the ordinance occurs when rules and procedures regarding permit applications and Stormwater Management permits are not followed.

Agricultural Review Advisory Committee. The Agricultural Review Advisory Committee shall be composed of at least three (3) Will County residents who live and own and operate or tenant operate at least 60 contiguous acres of farmland in Will County and Representatives appointed by the following Agencies: Will and South Cook Soil and Water Conservation District U.S.D.A., Natural Resource Conservation Service and Will County Farm Bureau. The Stormwater Management Committee will appoint these individuals in accordance with Article 3, Section 1D of the by laws. The Stormwater Committee will consider Committee member nomination recommendations from any active Will County Agricultural Not for Profit Organization.

Agricultural Subsurface Drainage. A water management technique driven by economic and safety concerns, where the rate at which surplus groundwater should be removed is determined primarily by the moisture/air requirements of the vegetation (commonly called “Tiles, “Field Tiles”, etc.)

Applicable Engineering Practice. Procedures, methods, or materials recommended in standard engineering textbooks or references as suitable for the intended purpose.

Applicant. Any Person, Firm or Governmental Agency who executes the necessary forms to procure official approval of a development or permit to carry out construction of a development from the County or appropriate Certified Local Governmental unit.

Appropriate Use. Only uses of the designated floodway that are permissible and will be considered for permit issuance. The list of permissible uses is contained in Article 4.

Base Flood. The flood having a one percent probability of being equaled or exceeded in a given year.

(BFE) Base Flood Elevation. The highest water surface elevation that can be expected during the base flood.

(BMP) Best Management Practices. A measure used to control the adverse stormwater-related effects of development. BMPs include structural devices (e.g., swales, filter strips, infiltration trenches, and detention basins) designed to remove pollutants, reduce runoff rates and volumes, and protect aquatic habitats. BMPs also include nonstructural approaches, such as public education efforts to prevent the dumping of household chemicals into storm drains.

Building. A structure that is principally above ground and is enclosed by walls and a roof. The term includes a gas or liquid storage tank, a manufactured home, mobile home or a prefabricated building. This term also includes recreational vehicles and travel trailers to be installed on a site for more than 180 days, unless fully licensed and ready for highway use.

Buffer. An area of predominantly vegetated land located adjacent to channels, wetlands, lakes or ponds for the purpose of reducing contaminants in stormwater that flows to such areas.

Bulletin 70. “Frequency Distributions and Hydroclimatic Characteristics of Heavy Rainstorms in Illinois” by Floyd Huff and James Angel of the Illinois State Water Survey (1989).

ARTICLE 1. AUTHORITY, PURPOSE AND DEFINITIONS.

Bypass Flows. Stormwater runoff or groundwater from upstream properties tributary to a property's drainage system but not under its control.

Certified Community. A Community which has met the requirements to be delegated the responsibility for ordinance enforcement as determined by the Stormwater Committee.

Channel. Any river, stream, creek, brook, branch, natural or artificial depression, ponded area, flowage, slough, ditch, conduit, culvert, gully, ravine, wash, or natural or manmade drainage way, which has a definite bed and bank or shoreline, in or into which surface, groundwater, effluent, or industrial discharges flow either perennially or intermittently.

Channel Modification. Alteration of a channel by changing the physical dimensions or materials of its bed or banks. Channel modification includes damming, rip rapping (or other armoring), widening, deepening, straightening, relocating, lining, and significant removal of bottom or woody rooted vegetation but does not include the clearing of debris or removal of trash or dredging to previously documented thalweg elevations and side slopes.

Commercial. Sale of goods to the public at large where the traffic generated warrants construction of site improvements.

Commercial Redevelopment. Development on a parcel upon which the existing condition is buildings, parking lots and infrastructure associated with commercial activities. Additions to existing buildings and new impervious surfaces added after the effective date of the Ordinance are specifically excluded from this definition.

Committee. The Will County Stormwater Management Committee.

Community. The County or any city or village within the County.

Compensatory Storage. An excavated, hydrologically and hydraulically equivalent volume of storage created to offset the loss of existing flood storage.

(CLOMA) Conditional Letter of Map Amendment. A FEMA comment letter on a development proposed to be located in, and affecting only that portion of, the area of floodplain outside the regulatory floodway and having no impact on the existing regulatory floodway or base flood elevations.

(CLOMR) Conditional Letter of Map Revision. A letter that indicates that FEMA will revise base flood elevations, flood insurance rate zones, flood boundaries, or floodways as shown on an effective FIRM or FBFM after the record drawings are submitted and approved.

COE. The United States Army Corps of Engineers.

Conservation Planning. The practices and procedures associated with the management of soil, water, plants, plant nutrients and other elements of agricultural production. Documentation of the management system shall only be as required by the NRCS or in cases of a complaint, as requested by the Administrator in response to a notification of a complaint.

Control Structure. A structure designed to limit the rate of flow that passes through the structure to a specific rate, given a specific upstream and downstream water surface elevation.

County. Will County, Illinois.

Critical Duration. The duration of a storm event that results in the greatest peak runoff.

Dam. Any obstruction, wall embankment, or barrier, together with any abutments and appurtenant works, constructed to store or divert water or to create a pool (not including underground water storage tanks).

Department. Will County Land Use Department.

Depressional Storage. The volume contained below a closed contour on a 1-foot contour interval topographic map, the upper elevation which is determined by the invert of a surface gravity outlet.

ARTICLE 1. AUTHORITY, PURPOSE AND DEFINITIONS.

Detention Basin. (Site Runoff Storage Facility) A constructed structure for the temporary storage of stormwater runoff with a controlled release rate.

Developer. A person who creates or causes a development.

Development. Any constructed change to real estate including: a) construction, reconstruction, repair, or replacement of a building or an addition to a building; b) installing a manufactured home on a site, preparing a site for a Manufactured Home, or installing a travel trailer or recreational vehicle on a site for more than 180 days. If the travel trailer or recreational vehicle is on-site for less than 180 days, it must be fully licensed and ready for highway use; c) drilling, mining, installing utilities, construction of roads, bridges or similar projects; d) construction or erection of levees, walls, fences, dams, or culverts, channel modifications, filling, dredging, grading, excavating, paving, or other non-agricultural alterations of the ground surface, storage materials, deposit of solids or liquid waste; e) any other activity of man that might change the direction, height, or velocity of flood or surface water, including extensive vegetation removal; f) plowing and cultivation and other similar agricultural practices that do not involve filling, grading or construction of levees as regulated in Section 204. The following are not considered development: maintenance of existing buildings and facilities such as reroofing or resurfacing of roads with an impervious surface when there is no increase in elevation.

Direct Discharge Sites. Parcels of land, or portions thereof, which are immediately adjacent and naturally drain directly to the banks of the Des Plaines River, Chicago Sanitary and Ship Canal, DuPage River, and Kankakee River without crossing over other private or public property.

Director. The Will County Executive or his or her designee charged with performing the duties specified in this Ordinance.

Drainage Area. The land area above a given point that may contribute runoff flow at that point from rainfall.

Effective Date. The date to be determined by the County Board.

Elevation Certificates. A form published by FEMA, or its equivalent, that is used to certify the base flood elevation and the lowest elevation of usable space to which a building has been constructed.

Ephemeral Stream. A stream whose bed elevation does not intersect the groundwater table, it carries flow only during and immediately after a runoff producing rainfall event.

Erosion. The process whereby soil is detached by the action of water or wind.

Existing Manufactured Home Park or Subdivision. A Manufactured Home Park or subdivision for which the construction of facilities for servicing the lots on which the Manufactured Homes are to be affixed (including at a minimum the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) has been completed before April 1, 1990.

Expansion to an Existing Manufactured Home Park or Subdivision. The preparation of additional sites by the construction of facilities for servicing the lots on which the Manufactured Homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

Extended Detention. A volume of runoff temporarily detained and released over a long period of time as specified in Section 203.5.

Fee-in-Lieu of Detention. A fee paid by a developer to the Permitting Authority, commensurate with the costs and fee schedules adopted by the County and/or the Certified Community based on the detention volume required for the development to meet the ordinance release rates. Rules and procedures for fee in lieu of detention are contained in Article 13 of this Ordinance.

(FEMA) Federal Emergency Management Agency. The Federal Agency and its regulations, at 44 CFR 59-79, effective as of September 29, 1989 or as amended.

ARTICLE 1. AUTHORITY, PURPOSE AND DEFINITIONS.

Flood. A general and temporary condition of partial or complete inundation of normally dry land areas from overflow of inland or tidal ways or the unusual and rapid accumulation of runoff of surface waters from any source.

(FBFM) Flood Boundary and Floodway Map. A floodplain management map issued by FEMA that depicts, based on detailed analysis, the boundaries of the base flood, the two tenth percent (0.2%) probability flood, and the floodway.

Flood Frequency. Normally expressed as a period of years, based on a percent chance of occurrence in any given year from statistical analysis, during which a flood of a stated magnitude may be expected to be equaled or exceeded. For example, the 2-year flood frequency has a fifty percent (50%) chance of occurrence in any given year. Similarly, the 100-year flood frequency has a one percent (1%) chance of occurrence in any given year.

Flood Fringe. That portion of the floodplain outside of the designated floodway.

(FHBM) Flood Hazard Boundary Map. A map issued by FEMA that is an official Community map, which depicts generalized areas of floodplains, replaced by a detailed Flood Insurance Study.

(FIRM) Flood Insurance Rate Map. A map issued by FEMA that is an official Community map, on which map FEMA has delineated both the special flood hazard areas and the risk premium zones applicable to the Community. This map may or may not depict floodways.

(FIS) Flood Insurance Study. A study of flood discharges and flood profiles for a Community, adopted and published by FEMA.

Floodplain. That land typically adjacent to a body of water with ground surface elevations at or below the base flood or the 100-year frequency flood elevation including detached special flood hazard areas, ponding areas, etc. The floodplain is also known as the special flood hazard areas (SFHA).

(FPE) Flood Protection Elevation. The elevation of the BFE plus 1 foot of freeboard for structures within the plan limits of the base flood elevation. Outside the plan limits, the water table or 100-year design water surface elevation of any adjacent stormwater facility, whichever is higher, plus 1 foot of freeboard.

Floodproof. Any combination of structural and non-structural additions, changes or adjustments to structures or property which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

Floodproofing Certificate. A form published by FEMA that is used to certify that a building has been designed and constructed to be structurally dry flood proofed to the FPE.

Floodway or Designated Floodway. The floodway includes the channel, on stream lakes, and that portion of the floodplain adjacent to a stream or channel which is needed to store and convey the critical duration 100-year frequency flood discharge with no more than a 0.1 foot increase in flood stage due to the loss of flood conveyance or storage, and no more than a 10% increase in velocities.

Floodway Conveyance. The measure of the flow carrying capacity of the floodway section and is defined using Manning's equation as, $K = \frac{1.4863 AR^{2/3}}{n}$

where "n" is Manning's roughness factor, "A" is the effective area of the cross-section, and "R" is ratio of the wetted area to the wetted perimeter.

Freeboard. An increment of height added to the BFE or 100-year design water surface elevation to provide a factor of safety for uncertainties in calculations, unknown local conditions, wave actions and unpredictable effects such as those caused by ice or debris jams.

Functional. In the context of the usage in this Ordinance, functional refers to stormwater facilities, which serve their primary purpose of meeting developed release rate requirements but do not meet all of the final design conditions. For example, a detention basin, which has been excavated but has not, had the side slopes graded, nor the final landscaping placed, may be considered "functional" as a site runoff storage facility.

ARTICLE 1. AUTHORITY, PURPOSE AND DEFINITIONS.

Good Husbandry. Generally accepted agricultural practices found in good farm management.

Groundwater. Water that is located within soil or rock below the surface of the earth. Same as subsurface water.

Groundwater Control System. A designed system which may consist of tiles, under drains, French drains, or other appropriate stormwater facilities whose purpose is to lower the groundwater table to a predictable elevation throughout the year.

Historic Structure. Any structure that is a) listed individually in the National Register of Historic Places, or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register; b) certified or preliminarily determined by the Secretary of the Interior as contributing to the historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district; c) individually listed on the State Inventory of Historic Places by the Illinois Historic Preservation Agency; d) individually listed on a local inventory of historic places that has been certified by the Illinois Historic Preservation Agency.

Hydraulics. The science and study of the mechanical behavior of water in physical systems and processes.

Hydraulically Connected Impervious Area. Hydraulically connected impervious area shall consist of those areas of concrete, asphalt and gravel surfaces along with roof tops which convey flows directly to an improved drainage system consisting of storm sewers or paved channels. Rooftops whose downspouts discharge to unpaved surfaces which are designed for the absorption and filtration of stormwater runoff shall not be considered as hydraulically connected impervious surfaces. Roadways whose primary conveyance is through open ditches and swales shall not be considered as hydraulically connected impervious surface. Roadways drained by curb and gutter and storm sewer, and driveways hydraulically connected to those roadways shall be considered as directly connected impervious surface.

Hydraulically Equivalent Compensatory Storage. Compensatory storage either adjacent to the floodplain fill or not located adjacent to the development but can be shown by hydrologic and hydraulic analysis to be equivalent to compensatory storage located adjacent to the development.

Hydrologically Disturbed. An area where the land surface has been cleared, grubbed, compacted, or otherwise modified that changes runoff, volumes, rates, or direction.

Hydrology. The science of the behavior of water, including its dynamics, composition, and distribution in the atmosphere, on the surface of the earth, and underground.

IDNR-OWR. The Illinois Department of Natural Resources, Office of Water Resources.

Impervious. Surfaces that cause the majority of rainfall to be converted to direct runoff. Asphalt, concrete and roofing systems will be considered impervious.

Industrial Redevelopment. Development on a parcel upon which the existing condition is buildings, parking lots and infrastructure associated with industrial activities. Additions to existing buildings and new impervious surfaces added after the effective date of the Ordinance are specifically excluded from consideration as Industrial Redevelopment.

Interim Watershed Plan. A regional study of a watershed which does not address the entire range of purposes, goals and objectives outlined in the Countywide Stormwater Management Plan approved by the Committee and adopted by the County.

Intermittent Stream. A stream whose bed intersects the groundwater table for only a portion of the year on the average or any stream which flows continuously for at least one month out of the year but not the entire year.

(LOMA) Letter of Map Amendment. The official determination by FEMA that a specific structure is not in a regulatory floodplain. A LOMA amends the effective FHBM, FBFM, or FIRM.

(LOMR) Letter of Map Revision. A letter from FEMA that revises base flood elevations, flood insurance rate zones, flood boundaries, or floodway as shown on an effective FHBM, FBFM, or FIRM.

ARTICLE 1. AUTHORITY, PURPOSE AND DEFINITIONS.

Lake. A natural or artificial body of water encompassing an area of two or more acres, which retains water throughout the year.

Major Stormwater System. That portion of a stormwater facility needed to store and convey flows beyond the capacity of the minor stormwater system.

Manufactured Home. A structure transportable in one or more sections, which is built on a permanent chassis and is designated for use with or without a permanent foundation when attached to the required utilities. The term Manufactured Home also includes park trailers, travel trailers, and other similar vehicles placed on site for more than 180 consecutive days. The term Manufactured Home does not include a recreational vehicle.

Manufactured Home Park or Subdivision. A parcel (or contiguous parcels) of land divided into two or more Manufactured Home lots for rent or sale.

Mass Grading. Development in which the primary activity is a change in topography affected by the movement of earth materials.

Minor Stormwater System. Shall consist of all infrastructure including curb, gutter, culverts, roadside ditches and swales, storm sewers, and sub-surface drainage systems intended to convey stormwater runoff at less than a 100-year flood frequency. The design frequency for minor stormwater systems shall be in accordance with the applicable ordinances of the local Community, or Highway Department jurisdiction.

Mitigation. Measures taken to offset negative impacts from development in wetlands or the floodplain.

(NFIP) National Flood Insurance Program. A Federal program whose requirements are codified in Title 44 of the Code of Federal Regulations.

Net Benefit in Water Quality. The institution of best management practices as part of a development that when compared to the pre-development condition can be judged to reduce downstream sediment loading or pollutant loadings.

Net Watershed Benefit. A finding that, when compared to the existing condition, the developed project will do one of the following: substantially reduce (more than 10%) downstream peak discharges; reduce downstream flood stages (more than 0.1 ft.); or reduce downstream damages to structures occurring in the pre-development condition. The demonstration of one of these conditions must be through detailed hydrologic and hydraulic analysis of watersheds on a regional scale as approved by the Administrator.

New Manufactured Home Park or Subdivision. Manufactured Home Park or Subdivision for which the construction of facilities for servicing the lots on which the Manufactured Homes are to be affixed (including at a minimum the installation of utilities, the construction of streets and either final site grading or the pouring of concrete pads) has been completed on or after April 1, 1990.

Non-riverine. Areas not associated with a stream or river such as isolated depressional storage areas, ponds and lakes.

NRCS. The United States Department of Agriculture, Natural Resources Conservation Service.

Observation Structures. Structures built on a field tile where the pipe inflow and outflow is visible upon removal of a lid.

Open Channel. A conveyance system with a definable bed and banks carrying the discharge from field tiles and surface drainage. Open channels do not include grassed swales within farm fields under agricultural production, which are ephemeral in nature.

Ordinary High Water Mark (OHWM). The point on the bank or shore up to which the presence and action of surface water is so continuous so as to leave a distinctive mark, such as by erosion, destruction or prevention of terrestrial vegetation, predominance of aquatic vegetation, or other easily recognized characteristic.

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Overland Flow Path. A design feature of the major stormwater system which carries flows in excess of the minor stormwater system design capacity in an open channel or swale, or as sheet flow or weir flow over a feature designed to withstand the particular erosive forces involved.

Oversight Committee. A Certified Community's body of officials charged by the Certified Community with overseeing variance of the Stormwater Management Ordinance within the Certified Community. The Oversight Committee may be a body of elected or appointed officials. See Section 1004.

Perennial Streams. Riverine watercourses whose thalweg generally intersects the groundwater table elevation and flows throughout the year.

Permitting Authority. The County or a Certified Community.

Plan. The Will County Comprehensive Countywide Stormwater Management Plan, adopted by the Will County Board on October 13, 1998, as amended from time to time.

Pond. A body of water of less than two acres, which retains a normal water level year round.

Primary Gravity Outlet. The outlet structure designed to meet the release rate requirements of this Ordinance.

Professional Land Surveyor. A land surveyor registered in the State of Illinois, under The Illinois Land Surveyors Act. (225 ILCS 330/1, et seq.), as amended.

Professional Engineer. An engineer registered in the State of Illinois, under The Illinois Professional Engineering Practice Act. (225 ILCS 325/1 et seq.), as amended.

Property. Contiguous land under single ownership or control.

Public Bodies of Water. All open public streams and lakes capable of being navigated by watercraft in whole or in part for commercial uses and purposes and all lakes, rivers and streams, which in their natural conditions were capable of being improved and made navigable, or that are connected with or discharge their waters into navigable lakes or rivers within, or upon the borders of the State of Illinois, together with all bayous, sloughs, backwaters, and submerged lands that are open to the main channel or body of water directly accessible thereto.

Public Flood Control Project. A flood control project, which will be operated and maintained by a public agency to reduce flood damages to existing buildings and structures, which includes a hydrologic and hydraulic study of the existing and proposed conditions of the watershed. Nothing in this definition shall preclude the design, engineering, construction or financing in whole or in part of a flood control project by persons or parties who are not public agencies.

Public Flood Easement. An easement acceptable to the appropriate jurisdictional body that meets the regulations of the OWR, the Department, and the Community, and that provides legal assurances that all areas subject to flooding in the created backwater of the development will remain open to allow flooding.

Record Drawings. Drawings prepared, signed, and sealed by a registered professional engineer or registered land surveyor representing the final "as-built" record of the actual in-place elevations, location of structures, and topography.

Recreational Vehicle or Travel Trailer. A vehicle which is: a) built on a single chassis; b) 400 square feet or less when measured at the largest horizontal projection; c) designed to be self propelled or permanently towable by a light duty truck; and d) designed primarily not for use as a permanent dwelling, but as a temporary living quarters for recreational camping travel or seasonal use.

Registered Structural Engineer. A person licensed under the laws of the State of Illinois as a structural engineer.

Regulatory Floodway. Regulatory floodways are those portions of the floodplain depicted on maps as floodway and recognized by the IDNR-OWR for regulatory purposes.

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Regulatory Floodplain. The floodplain as depicted on maps recognized by FEMA as defining the limits of the SFHA.

Retention Facility. A retention facility stores stormwater runoff without a gravity release.

River Frontage. That property that is immediately adjacent to and naturally drains directly to the Des Plaines River, Chicago Sanitary and Ship Canal, DuPage River, or Kankakee River without crossing over other private or public property.

Riverine. Related to, formed by, or resembling a channel (including creeks and rivers).

Runoff. The waters derived from melting snow or rain falling within a tributary drainage basin that exceeds the infiltration capacity of the soils of that basin.

Seasonal High Groundwater Table. The upper limits of the soil temporarily saturated with water, being usually associated with spring wetness conditions. This may be indicated by soil mottles with a Munsell color of 2 chroma or less.

Sedimentation. The process that deposits hydraulically moved soils, debris, and other materials either on other ground surfaces or in bodies of water or stormwater drainage systems.

Sediment Trap. A structure or area that allows for the temporary deposit and removal or disposal of sediment materials from stormwater runoff.

Seepage. The movement of drainable water through soil and rock.

(SFHA) Special Flood Hazard Area. An area having special flood, mudslide or mudflow, or flood-related erosion hazards, and which area is shown on an FHBM or FIRM as Zone A, AO, A1-30, AE, A99, AH, VO, V1-30, VE, V, M, or E.

Stormwater Facility. All ditches, channels, conduits, bridges, culverts, levees, ponds, natural and man-made impoundments, wetlands, riparian environment, tile, swales, sewers, or other natural or artificial structures or measures which serve as a means of draining surface and subsurface water from land.

Stormwater Management Permit. The permit issued under Article 5.

Structure. The results of a built change to the land constructed on or below the ground, including the construction, reconstruction or placement of a building or any addition to a building; installing a Manufactured Home on a site; preparing a site for a Manufactured Home or installing a travel trailer on a site for more than 180 days unless they are fully licensed and ready for highway use.

Substantial Improvement. The following three occasions, when work is performed on an existing building, is classified as a substantial improvement 1) an improvement made to a building whose cost is equal to or exceeds 50% of the buildings' market value before the improvement; 2) reconstruction or repair of a building, the cost of which equals or exceeds 50% of the market value of the building before reconstruction or repair; or 3) additions to an existing building whose cost equals or exceeds 50% of the market value of a structure, or increases the floor area by more than 20%. Note that if a building is substantially improved, then the entire building must comply with the building protection standards.

Subsurface Drainage. The removal of excess soil water to control water table levels at predetermined elevations for structural, environmental or other reasons in areas already developed or being developed for agricultural, residential, industrial, commercial, or recreational uses.

Subsurface Water. Water beneath the ground or pavement surface. Sometimes referred to as ground water or soil water.

T Factor. The T factor is the soil loss tolerance. It is defined as the maximum amount of erosion at which the quality of a soil as a medium for plant growth can be maintained. Erosion losses are estimated by Universal Soil Loss Equation (USLE) and Revised Universal Soil Loss Equation (RUSLE).

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Technical Manual. The manual adopted by the County Board, which refers to this Ordinance and provides additional explanations and examples.

Thalweg. A line along the lowest point in a channel.

Transition Section. Reaches of the stream or floodway where water flows from a narrow cross-section to a wide cross-section, or vice versa.

Usable Space. Space used for dwelling, storage, utilities, or other beneficial purposes, including without limitation basements.

Water Table. The upper limit of a free water surface in a saturated soil or underlying material.

Waters of the U.S. As defined by the United States Army Corps of Engineers in their Federal Methodology for the Regulation of Wetlands. For purposes of this Ordinance, waters of the U.S. include wetlands, lakes, rivers, streams, creeks, bogs, fens, and ponds. Waters of the U.S. do not include maintained stormwater facilities.

Watershed. All land area drained by, or contributing water to, the same stream, lake, stormwater facility, or draining to a point.

Watershed Benefit. (See Net Watershed Benefit).

Watershed Characteristics. Watershed characteristics include land use, physiology, habitat, climate, drainage system and community profile.

Watershed Plan. A study and evaluation of an individual drainage basin's stormwater management, floodplain management, water quality and flood control needs and capabilities.

Wetland. As defined in current Federal methodology recognized by the U.S. Army Corps of Engineers for regulatory purposes.

Sections 105 through 117 Reserved for Watershed and/or Interim Watershed Plans.

ARTICLE 2. REQUIREMENTS FOR STORMWATER MANAGEMENT.

Sec. 200 General Information

200.1 Other Applicable Articles

All developments shall meet the requirements specified for general stormwater development (Section 201), site runoff (Section 202), sediment and erosion control (Article 3), performance security and maintenance (Article 6).

200.2 Applicability of Site Runoff Storage Requirements (Detention)

All developments shall comply with the site runoff storage requirements provided in Section 203 of this Ordinance in which:

- a. More than two single family structures or one two-family structure are to be constructed on a site 5 or more acres in size;
- b. Multi-family or non-residential land use is to be constructed on a site more than one acre in size;
- c. Existing multi-family or non-residential land uses on a site one acre or more in size, on which new development after the effective date of this ordinance in the aggregate exceeds 25,000 s.f.;
- d. Roadway developments in rights-of-way under the ownership or control of a unit of local governments when the contiguous area of new roadway construction (excluding previously paved areas) exceeds two acres;
- e. The developer of a Commercial or Industrial Redevelopment may request that a fee-in-lieu of detention be approved provided that all of the following are demonstrated to the sole satisfaction of the Administrator:
 - i. The drainage plan will not increase existing flood damages, and
 - ii. The drainage plan provides a net benefit in water quality compared to the existing development.

The Administrator shall determine the appropriate fee to be collected as defined in Article 13, and his or her decision in the matter shall be considered final.

200.3 Exemptions From Site Runoff Storage Requirements (Detention)

Site run-off storage is not required under the following circumstances:

- a. Direct discharge industrial sites
- b. Non-Industrial direct discharge sites 160 acres or less having the following minimum river Frontage:

<u>Site Area</u>	<u>Required Frontage</u>
0 to 2 Acres	50 ft.
up to 5 Acres	100 ft.
up to 10 Acres	150 ft.
up to 40 Acres	200 ft.
up to 80 Acres	350 ft.
up to 160 Acres	500 ft.

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Sec. 201 General Stormwater Requirements

201.1 Requirements Applicable to All Development

No development shall:

- a. Result in any new or additional expense to any person other than the developer for flood protection; nor
- b. Increase flood elevations or decrease flood conveyance capacity upstream or downstream of the area under the ownership or control of the developer. This requirement shall not prohibit the removal or reduction of built obstructions to flow, such as increasing culvert capacity or lowering roadway elevations.

201.2 (RESERVED)

201.3 Building Permits

Stormwater facilities shall be functional before building permits are issued for residential and non-residential subdivision.

201.4 Single Parcel Developments

Stormwater facilities shall be functional where practicable for single parcel developments before building construction begins.

201.5 Overland Flow Paths

The development shall have an overland flow path at the downstream limit of the property that will pass the base flood flow without increasing damage to structures or property. If the upstream drainage area is less than 20 acres, the storm sewer pipe and inlet sized for the base flood can be constructed in lieu of providing an overland flow path. Overland flow paths internal to the site shall be considered as part of the major stormwater system and shall be designed for conveyance of the base flood (critical duration) and shall be a minimum of one (1) cfs per tributary acre without damage to structures.

201.6 Protection of Buildings

All usable space in new buildings or added to existing buildings hydraulically connected to a major stormwater system, site runoff storage facility, or overland flow path shall be elevated, flood proofed, or otherwise protected to at least one (1) foot above the 100-year design elevation or current FIS elevation, which ever is greater. The design elevation is the elevation associated with the design release rate as determined in Section 202.3.

201.7 Depressional Storage

The function of existing on-site depressional storage shall be preserved for both on-site and off-site tributary flows in addition to required detention. When depressional storage is removed it must be compensated for in the site runoff storage facility at a 1 to 1 ratio provided that offsite areas tributary to the existing depressional storage are routed through the site runoff storage facility. This requirement is in addition to the site runoff storage required in Section 203. The Administrator may allow the function of depressional storage to be preserved if the applicant performs detailed pre- and post-project hydrologic and hydraulic modeling to identify the effect of the depressional storage on discharges over a range of rainfall frequencies.

Sec. 202 Site Runoff Requirements

202.1 Stormwater Facility Discharges

Stormwater facilities shall be required and designed so that runoff exits the site at a point where it exited prior to the subject development and in a manner such that flows will not increase flood damage to adjacent property except when otherwise approved by the Administrator. Concentrated discharges from new developments must enter conveyance systems capable of carrying the design flow rate without increasing flood damages or maintenance costs downstream.

ARTICLE 2. REQUIREMENTS FOR STORMWATER MANAGEMENT.

202.2 Minor Stormwater System Criteria

Minor stormwater systems shall be sized to convey runoff from the tributary watershed under fully developed conditions consistent with the design requirements of the local jurisdiction.

202.3 Major Stormwater System Criteria

Major stormwater systems shall be sized to carry the base flood without causing additional flood damage.

202.4 Existing Sub-Surface and Surface Drainage Systems

Stormwater systems shall properly incorporate and be compatible with existing subsurface and surface drainage systems including agricultural systems. Designs shall not cause damage to the existing drainage system(s) or the existing adjacent or tributary land including those with agricultural uses.

The following principles and requirements shall be observed in the design:

- a. **Off-Site Outfall:** Agricultural subsurface and surface drainage systems shall be evaluated with regard to their capacity and capability to properly convey low flow groundwater and site runoff storage facility release without damage to downstream structure and land use on the adjacent property. If the outfall drain tile and surface drainage systems prove to be inadequate it will be necessary to modify the existing systems or construct new systems which will not conflict with the existing systems and will not impact the existing agricultural land use. Existing subsurface systems shall only be used with extended detention design.
- b. **On-Site:** Agricultural drainage systems shall be located and evaluated on-site. All existing on-site agricultural drain tile not serving a beneficial use shall be abandoned by trench removal prior to other development and recorded on record plans. If any existing drain tiles continue to upland watersheds the developer must maintain drainage service during construction until new sewers can be installed for a permanent connection.
- c. **Off-Site Tributary:** Existing drainage systems shall be evaluated with regard to existing capabilities and reasonable future expansion capacities. All existing tributary drain tiles shall be incorporated into the new conduits including observation structures located at the property limits, shall provide a free flow discharge and shall not allow surface runoff to enter the system.
- d. **New roadway construction** shall preserve existing sub-surface systems within the right-of-way. Inspection wells shall be placed at the right-of-way (ROW) and tiles found to not be flowing between inspection wells at the end of the construction shall be replaced.

202.5 Design Runoff Rate

Design runoff rates for conveyance may be calculated using the Rational Method.

202.6 Design Rainfall

Any design runoff rate calculation method for conveyance shall use Illinois State Water Survey Bulletin 70 based intensity-duration-frequency curves.

202.7 Stormwater System Easements

For projects involving subdivision major and minor storm water systems shall be located within easements or rights-of-way explicitly providing for public access for maintenance of such facilities. For all other projects requiring a permit, easements are required for public access for maintenance of stormwater facilities only for new construction or modifications involving components of a drainage system that conveys runoff from off-site properties. For I-2, I-3, or equivalent zoning property, the stormwater system does not have to be located within an easement or public right-of-ways. Instead, the owner's representative shall provide a signed agreement to the appropriate government entity authorizing it to enter the facility to maintain the stormwater system if the owner fails to correct any deficiencies brought to the owner's attention by the governmental entity.

202.8 Flow Depths

Maximum flow depths for new transverse stream crossings shall not exceed one foot at the crown of the road during the base flood condition. The maximum flow depth on a roadway shall not exceed 6" at the

ARTICLE 2. REQUIREMENTS FOR STORMWATER MANAGEMENT.

crown for flow parallel to the roadway. For flow over a new roadway or parallel to a new roadway the product of the flow depth (in feet) and velocity (in feet per second) shall not exceed four for the base flood condition.

202.9 Diversion of Flow to Another Watershed

Transfers of waters between watersheds (diversions) shall be prohibited except when such transfers will not violate the provisions of Section 201.1 and are otherwise lawful. Watersheds for purpose of regulation under this section shall be the major watershed divides as defined in the County Plan.

202.10 Best Management Practices Requirement

Developments shall incorporate all best management practices as may be required pursuant to the United States Clean Water Act, 33 U.S.C. " 1251 et seq., as amended.

Sec. 203 Site Runoff Storage Requirements (Detention/Extended Detention)

203.1 Release Rate

If no release rate is specified in an adopted watershed plan in accordance with Section 103, then sufficient flood storage shall be provided so that the site will not discharge at a rate greater than 0.15 cfs/acre of development during and after a rainfall event with a 100-year frequency except for sites exempted in 200.3. Unless exempted in 200.3, sites shall not discharge at a rate greater than 0.04 cfs/acre of development during and after a rainfall event with a 2-year frequency.

This area of hydrologic disturbance on the site shall be used to calculate the required site runoff storage volume. The on-site watershed area tributary to the point of discharge shall be used to calculate the allowable release rate for the site runoff storage facility, which shall be the maximum release rate allowed considering only the on-site watershed area runoff.

203.2 Design Methods

Event hydrograph routing methods or the modified rational method may be used to calculate design runoff volumes for site runoff facilities. The Methods must be HEC-1, (SCS methodology), HEC-HMS, TR-20, or TR-55 tabular method. Event methods shall incorporate the following assumptions:

- a. Antecedent moisture condition = 2; and
- b. Appropriate Huff rainfall distribution; and
- c. 24-hour duration storm with a 1% probability (100-year frequency) of occurrence in any one year as specified by Illinois State Water Survey Bulletin 70 Northeast Sectional rainfall statistics.

When the Modified Rational Method is used, rainfall statistics shall be from Illinois State Water Survey Bulletin 70 and the volume determined shall be multiplied by the following factor based on the date of final engineering approval:

- a. In the first year after the effective date of the Ordinance: 110%;
- b. In the second year after the effective date of the Ordinance: 120%;
- c. After the third year following the effective date of the Ordinance: 130%.

203.3 Existing Release Rate Less Than Allowable

For sites where the undeveloped release rate is less than the maximum release rate in Section 203.1, the developed release rate and corresponding site runoff storage volume shall be based on the existing undeveloped release rate for the development.

203.4 Downstream Water Surface Elevations

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All hydrologic and hydraulic computations must utilize appropriate assumptions for downstream water surface elevations, from low flow through the base flood elevation, considering the likelihood of concurrent flood events.

203.5 Extended Detention Requirement

The requirements of this section will apply only when an existing agricultural land use is downstream of and adjacent to a site runoff storage facility outlet. The runoff from a 0.75-inch rainfall event over the hydraulically connected impervious area of the new development shall be stored below the elevation of the primary gravity outlet (extended detention) of the site runoff storage facility. The facility may be designed to allow for evapotranspiration or infiltration of this volume into a subsurface drainage system and shall not be conveyed through a direct positive connection to downstream areas.

The hydraulically connected impervious area used in the calculation of required extended detention volume may be reduced by the Administrator if the soils are prepared to maximize infiltration and deep rooted grasses or other plants selected for their ability to promote infiltration or water absorption are planted in areas appropriately dedicated. The reduction in hydraulically connected impervious area used in the calculation shall be equal to the area of the development meeting the above soils/native planting requirement.

Subsurface drainage systems may be designed as a component of the extended detention portion of the detention basin to assist in infiltration in accordance with the following criteria:

- a. The extended detention volume shall be discharged at a rate no greater than that required to empty the calculated extended detention volume within 5 days of the storm event.
- b. No subsurface drainage pipe shall be located within 10 feet of drainage pipes directly connected to the detention basin.
- c. For purposes of meeting the maximum subsurface drainage discharge requirements, flow control orifices and weirs may be used.
- d. All design extended detention volume shall be provided above the seasonal high ground water table or the invert elevation of the groundwater control system.
- e. Farm field tile shall not be considered a subsurface drainage system.

203.6 Site Runoff Storage Facility Design Requirements

Storage facilities shall be designed and constructed with the following characteristics:

- a. The site runoff storage facility shall provide 1 (one) foot of freeboard above the design high water elevation.
- b. The storage facilities shall be accessible and easily maintained.
- c. Storage facilities shall facilitate sedimentation and catchment of floating material. Unless specifically approved by the Administrator, concrete lined low-flow ditches shall not be used in detention basins.
- d. Storage facilities shall minimize impacts of stormwater runoff on water quality by incorporating best management practices.
- e. Storage facilities shall maximize the normal flow distance between detention inlets and outlets, to the extent possible.
- f. Storage facilities shall be designed such that the existing conditions pre-development peak runoff rate from the 100-year, critical duration rainfall will not be exceeded assuming the primary restrictor is blocked.

ARTICLE 2. REQUIREMENTS FOR STORMWATER MANAGEMENT.

- g. Storage facilities with single pipe outlets shall have a minimum inside diameter of 12 inches. If design release rates necessitate a smaller outlet, structures such as perforated risers, or flow control orifices shall be used.

203.7 Site Runoff Storage Facility Requirements Within the Regulatory Floodplain

Storage facilities located within the regulatory floodplain shall:

- a. Conform to all applicable requirements specified in Article 4 of this Ordinance; and
- b. Store the required amount of site runoff to meet the release rate requirement under all stream flow and backwater conditions in the receiving stream up to the 10-year flood elevation; and
- c. Detention volume provided by enlarging existing regulatory floodplain storage without providing a structure controlling discharge (on-stream detention) will be allowed only as a variance. The applicant must demonstrate that flood damages are not increased and the development will not increase flood flows for both the 2-year and 100-year floods on the stream with developed conditions on the site; and
- d. The Administrator may approve designs which can be shown by detailed hydrologic and hydraulic analysis to provide a net watershed benefit not otherwise realized by strict application of the requirements in a through c above.

203.8 Site Runoff Storage Facility Requirements Within the Regulatory Floodway

Storage facilities located within the regulatory floodway shall:

- a. Meet the requirements for locating storage facilities in the regulatory floodplain; and
- b. Be evaluated by performing hydrologic and hydraulic analysis consistent with the standards and requirements for any adopted watershed plans; and
- c. Provide a net watershed benefit.

203.9 (RESERVED)

203.10 Off-Site Facilities

Site runoff storage facilities may be located off-site if the following conditions are met:

- a. The off-site storage facility meets all of the requirements of this Article 2; and
- b. Adequate storage capacity in the off-site facility is dedicated to the development; and
- c. The development includes means to convey stormwater to the off-site storage facility.

203.11 RESERVED

203.12 Cross-Stream Structures for Site Runoff Storage Facilities

Structures constructed across the channel to impound water to meet detention requirements shall be prohibited on any perennial stream unless part of a public flood control project with a net watershed benefit. Those streams appearing as blue on a USGS Quadrangle map shall be assumed perennial unless better data is obtained. All cross-stream structures for the purpose of impounding water to provide detention in all cases on perennial and intermittent streams must demonstrate that they will not cause short term or long-term stream channel instability.

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Sec. 204 Stormwater Requirements for Agricultural Land Use Including Croplands, Pasture Lands and Farmsteads

Applicability: Regulations under this section apply only to croplands, pasturelands, farmsteads and outbuildings associated with those agricultural practices. Compliance with the requirements of this Section 204 shall be construed as compliance with the Stormwater Ordinance for the above land uses and no further regulation under the Ordinance will apply. Any other land use, including greenhouses, nurseries, container grown plants, equestrian facilities, the sale of agricultural products to the public or where commercial activities involving the new construction of gravel or paved parking facilities or buildings whose aggregate area is 25,000 square feet or more are required to comply with all applicable sections of this Ordinance.

204.1 Conservation Planning and Performance Standards

To comply with this Section, Landowners shall practice conservation planning whose product shall be a management system, which addresses site runoff, soil erosion and sediment control, surface and subsurface drainage. Any acreage with a signed and approved NRCS Conservation Plan is exempt from the requirements of this section and the ordinance.

Applicable approved practices include:

- a. Vegetated grass waterways
- b. Contour Buffer strips
- c. Critical area planting and cover crops
- d. Terrace ridges and diversions
- e. Contour strip cropping
- f. Contour farming
- g. Crop rotation
- h. Conservation tillage and crop residue management
- i. Other standard practices for conservation planning in accordance with the N.R.C.S. Field Office Technical Guide (current edition) or as otherwise approved by the Will County N.R.C.S. District Conservationist or the Will County Agricultural Administrator.

The performance standard for conservation planning shall be a management system which will develop a set of field practices which will reduce the calculated actual soil loss to the “tolerable soil loss” (T) as calculated by the revised Universal Soil Loss Equation for the actual site conditions. Cropland tillage and resource management methods shall be consistent with the Technical Guide Notice IL-108 and shall be considered evidence of compliance with the “T” performance standard.

204.2 Drainage Practices, Requirements and Design Criteria

Drainage for agricultural purposes shall be consistent with those practices identified as appropriate for “good husbandry” given the soil types, slopes and crops. An agricultural drainage system may consist of both subsurface drainage systems and surface drainage systems. Where active Drainage Districts maintain drainage systems, they shall be consulted on surface and subsurface drainage within the District boundaries. Requirements applying to subsurface and surface drainage system shall be as follows:

- a. **Subsurface Drainage Systems:** Drain tile systems shall be maintained and constructed in accordance with subsurface drainage recommendations for the appropriate soil drainage group as specified by The Illinois Drainage Guide, University of Illinois Extension Service Circular no. 1226. Surface inlets into the subsurface drainage system shall be allowed only to maintain good husbandry. Where their use cannot be practicably avoided due to topography, they shall be installed using flow controls such as orifices and perforated risers with gravel filters and /or vegetative filters.
- b. **Surface Drainage Systems:** Surface drainage systems shall be maintained and constructed in accordance with surface drainage recommendations for the appropriate soil drainage group as specified by the Illinois Drainage Guide, University of Illinois Extension Service No. 1226. Surface drainage systems shall be built with geotechnically stable slopes and the surface when applicable shall be further stabilized utilizing the establishment of cool and warm season grass mixes as identified in Field Office Technical Guide (Illinois 108).

ARTICLE 2. REQUIREMENTS FOR STORMWATER MANAGEMENT.

- c. Buffer Strips: Open channels with a definable bed and banks shall use buffer strips in order to reduce the amount of erosion occurring from the conveyed flows as well as to help filter the runoff from the site into the waterway. Buffer strips shall be a minimum of 15 feet wide from the top of bank except where smaller widths are necessary due to site limitations and when approved by the Administrator.
- d. Agricultural drainage systems shall also comply with all regulations regarding wetlands as enforced by Federal, State, and Local agencies.

204.3 Sediment Control for Open Channels

All open channel drainage systems shall maintain practices adjacent to the open outlet channel that will reduce the transportation of sediment off-site. Runoff from agricultural fields must pass through a sediment control system prior to discharge into the open channel conveyance system. Approved sediment control systems may consist of the following:

- a. Vegetated buffer zones planted with permanent grasses appropriate for soil stabilization and filtering;
- b. Grade control structures for over fall stabilization;
- c. Sediment traps adjacent to the stream channel;
- d. Other standard practices for conservation planning in accordance with the N.R.C.S. Field Office Technical Guide (current edition) or as otherwise approved by the Will County N.R.C.S. District Conservationist or the Administrator.

204.4 Maintenance and Construction of Drainage Systems

Agricultural drainage systems shall be maintained so as to convey the expected flows for good drainage practices. The existing agricultural surface drainage systems shall not be enlarged unless such enlargement is consistent with all other sections of this Section 204. Maintenance and construction of subsurface drainage systems will not be subject to the requirements of other sections of this Ordinance except as they are regulated by other agencies. Maintenance projects by legally functioning drainage districts on existing agricultural drainage systems will not be subject to further permitting requirements under this Ordinance except as they relate to the jurisdiction of other agencies.

ARTICLE 3. SEDIMENT AND EROSION CONTROL.

Sec. 300 Sediment and Erosion Control

300.1 Site Planning

Sediment and erosion control planning shall be part of the initial site planning process. In planning the development of the site, the applicant shall consider the susceptibility of existing soils to erosion and topographic features such as steep slopes and stream corridors which must be protected to reduce the amount of sediment and erosion which occurs. Where appropriate, existing vegetation shall be protected from disturbance during construction by fencing or other means. In the planning process the applicant shall also address the following:

- a. For projects that involve phased construction, existing land cover for those areas not under current development shall be addressed. If existing land cover does not consist of an appropriate ground cover then these phases shall be planted temporarily to reduce erosion from idle land.
- b. In planning the sediment and erosion control strategy, preference shall be given to reducing erosion rather than controlling sediment. In order to accomplish this the plan must carefully consider the construction sequence of the phases so that the amount of land area exposed to erosive forces is the minimum consistent with completing construction.

300.2 Standards and Specifications

Specifications for erosion control measures shall be in accordance with the "Illinois Urban Manual" (1995) or latest edition. Sediment and erosion control planning shall be in accordance with "Procedures and Standards for Urban Soil Erosion and Sedimentation Control in Illinois" (revised July, 1988) by the Urban Committee of the Association of Illinois Soil and Water Conservation Districts (The "Green Book") Chapters 1-5. Where the Illinois Urban Manual supercedes sections of The Green Book, the Illinois Urban Manual shall prevail.

300.3 General Requirement

The runoff from disturbed areas shall not leave the development site without first passing through sediment control facilities. This requirement shall apply to all phases of construction and shall include an ongoing process of implementation of measures and maintenance of those measures during both the construction season and any construction shut down periods.

300.4 Extended Construction Shutdown Periods

The condition of the construction site for the winter shut down period shall address proper sediment and erosion control early in the fall growing season so that slopes and other bare earth areas may be stabilized with temporary and/or permanent vegetative cover. All open areas that are to remain idle throughout the winter shall receive temporary erosion control measures including temporary seeding, mulching and/or erosion control blanketing prior to the end of the fall growing season. The areas to be worked beyond the end of the growing season must incorporate soil stabilization measures that do not rely on vegetative cover such as erosion control blankets and heavy mulching.

300.5 Hydraulic and Hydrologic Design Requirements

In the hydraulic and hydrologic design of major erosion control measures (those whose tributary drainage area is greater than 3 acres) such as sediment basins and traps, diversions, and the like, the design frequency shall be commensurate with the risk of the design event being exceeded. The following design frequencies shall be regarded as minimum design frequencies for the construction period:

1. For those projects whose construction period is less than 6 months then the storm event having a 50% chance (2-year event) of being exceeded in any year shall be used for design purposes;
2. For those projects whose construction period is greater than 6 months but less than 1 year, the design frequency for major sediment basins shall be a rainfall event with a 20% (5-year event) chance of being exceeded in any one year; and
3. For those construction projects expected to last more than 1 year major sediment basins shall be designed for a rainfall event with a 10% (10-year event) chance of being exceeded in any one year.

300.6 "As-Needed" Practices on the Plans

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The sediment and erosion control plan shall designate a series of practices which shall be implemented either at the direction of the permittee or the permittee's representative on-site or at the direction of the Administrator should an inspection of the site indicate a deficiency in soil and sediment erosion control measures. As a minimum, these measures shall include the following:

- a. Sedimentation basins;
- b. Sediment traps;
- c. Diversion swales;
- d. Silt fences;
- e. Temporary seeding;
- f. Mulching;
- g. Erosion control blankets.

300.7 Sediment and Erosion Control Plan Requirements

Sediment and erosion control plans shall be in accordance with Article 5 Submittal Requirements but shall include the following;

- a. Detailed construction phasing plan identifying sediment and erosion control measures to be in place for each phase shall be submitted prior to stripping the site of existing vegetation or cover.
- b. Sediment and erosion control measures to be installed initially prior to stripping existing vegetation or mass grading shall be indicated on the plans.
- c. Permanent stabilization measures shall be indicated on a separate plan.
- d. The expected 2-year and 10-year runoff rates from all off-site areas draining into the site shall be Identified on the plan.
- e. Methods for conveying flows through the site during construction shall be indicated. These methods must include the temporary and permanent stabilization measures to be used to reduce velocity and erosion from flow through the construction zone.
- f. A maintenance schedule of each measure used shall be indicated on the plan. As a minimum, all sediment and erosion control measures on-site shall be inspected weekly and also by the applicants designee or after a one-half inch or greater rainfall event and any required repairs shall be made to keep these measures functional as designed. All repairs and modifications shall be reviewed by the Administrator or his/her designee.

300.8 Conveyance of Off-Site Flow

To the extent practicable, proposed ditches and waterways which are to convey off-site flows through the site shall be stabilized upon construction. Where new waterways are constructed they shall be stabilized to the extent practicable prior to their use to convey flood flows.

300.9 Stockpiles

Stockpiles of soil and other erodable or floatable building materials (sand, limestone, etc.) shall not be located in floodplains, overflow routes or areas subject to frequent inundation. If a stockpile is to remain in place for more than three days, then sediment and erosion control shall be provided for the stockpile.

300.10 Storm Sewer Inlets

Storm sewer inlets shall be protected with sediment trapping and/or filter control devices during construction.

300.11 Construction Dewatering

Water pumped or which is otherwise discharged from the site during construction dewatering shall be filtered and a means provided to reduce erosion.

300.12 Protection of Public/Private Roadways

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Graveled roads, access drives, parking areas of sufficient width and length, and vehicle wash down facilities, if necessary, shall be provided to prevent soils from being tracked onto public or private roadways. Any soil tracked onto a public or private roadway shall be removed before the end of each workday or sooner as directed by the Authority maintaining the roadway.

300.13 Temporary Stream Crossings

Temporary stream crossings of intermittent and perennial streams used only for and during construction shall be designed to convey a 2-year flood (minimum) or other flood event approved by the Administrator without overtopping unless a more frequent design event is allowed by the Administrator. The entire crossing shall be designed to withstand hydrodynamic forces and erosive forces up to the base flood event without washing out. Ephemeral streams may be crossed at temporary at-grade crossings provided that the crossing point is stabilized with materials resistive to the erosive forces produced by runoff from the upstream drainage area, and the design is approved by the Administrator. Temporary stream crossings shall be removed upon completion of construction activities. All temporary stream crossing shall be completely removed and the stream restored to its preconstruction condition upon completion of construction. Restoration shall incorporate appropriate vegetation consistent with the adjacent existing vegetation prior to construction or in accordance with a restoration plan approved by the Administrator.

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Sec. 400 General

This article sets forth requirements for developments within floodplains and floodways. In addition, developments in the SFHA draining more than one square mile with no designated floodway must meet IDNR-OWR III Admin Code Part 3700 Rules. References to IDNR/OWR permits or approvals in this Section shall be construed as “their designee” where a portion or all of their authority has been delegated.

Development that qualifies for any of the self-issuing statewide or regional permits administered by IDNR/OWR (Statewide Permit Nos. 1 through 14 and Regional Permit No. 3) are similarly permitted under this Article. The developer need only submit to the Administrator such information as shall show the Administrator that the development qualifies for the particular statewide or regional permit in question under the regulations established by IDNR/OWR for such permit and no further submittal need be made under this Article. All other provisions of this ordinance applicable to such development, however, continue to apply. However a permit from Will County or the Certified Community must still be issued.

All development shall meet the requirements set forth in Table 1. The table is intended only as a guide to indicate the applicable ordinance sections for development in floodplains.

Table 1. Summary of Applicable Ordinance Sections for Developments in Floodplains

When This Occurs on Development Site	All Development Must Meet the Requirements of Sections (Except as Noted)									
	401	402	402.1	402.2	402.3	402.4	403	404	405	406
Floodplains	X	e, f only	--	--	--	X	--	--	--	--
Regulatory Floodplains	X	X	X	X	X	--	X (Note 1)	--	--	Bridge & Culvert Projects
Regulatory Floodways	X	X	X	X (Note 2)	X	--	X	X	--	--
Riverine Regulatory Flood plains	X	X	X	X	X	--	--	--	X	--

Note 1. Riverine, floodplains only

Note 2. For buildings meeting appropriate use criteria

Sec. 401 Floodplain, Regulatory Floodplain, Base Flood Elevation (BFE) and Regulatory Floodway Locations

401.1 The BFE shall be delineated onto the site topography to establish the Regulatory Floodplain area limits for regulation under this Ordinance. Regulatory floodplains shall be delineated onto the site map from the current FEMA FIRM, FBFM or LOMR and include those areas of the SFHA which are not Regulatory Floodplains. Each Community, whether Certified or not, remains responsible for maintaining the effective FIS and a list of FIRM panels for their respective Communities.

401.2 The BFE shall be:

1. The elevation of the 100-year profile corresponding to the location of the development as indicated in the flood profiles in the FEMA Flood Insurance Studies listed in Appendix B (which may be updated from time to time) or
2. In the case of FEMA delineated “AH Zones” the elevation noted on the map shall be the BFE. In the case of FEMA delineated “AO Zones” the BFE shall be the depth number shown on the map

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added to the highest adjacent grade, or at least two feet above the highest adjacent grade if no depth number is provided; or

3. a. When no BFE information exists and the upstream tributary drainage area is 640 acres or greater, the BFE shall be determined using a site specific floodplain study by a Professional Engineer using appropriate hydrologic and hydraulic models as follows:
 - i. Hydrologic models: TR-20, HEC-1, HEC-HMS
 - ii. Hydraulic models: HEC-2, HEC-RAS, WSP-2
 - iii. Or a technique approved by the Administrator and the IDNR/OWR.
 - b. Where a channel has a tributary drainage area of 640 acres or more, the above analyses shall be submitted to the IDNR/OWR for concurrent approval.
 - c. For a non-riverine Regulatory Floodplain, the historic flood of record plus three feet may be used for the BFE instead of performing a detailed hydrologic and hydraulic study.
4. For floodplains that are not regulatory, are not draining more than 640 acres, and with no BFE determined, the Administrator may require a site-specific floodplain study for the purpose of establishing an FPE for the development.

401.3 The location of the Regulatory Floodway shall be as delineated on the current effective regulatory maps maintain by each Community. The location of the Regulatory Floodway boundary shall be scaled onto the site plan using references common to both the map and the plan (typically the centerlines of adjacent roadways). Where an interpretation is needed to determine the exact location of the Regulatory Floodway boundary, IDNR/OWR should be contacted.

Note: If an area of the site is located in the Regulatory Floodway that is higher than the BFE, that area is subject to the Floodway Standards of Section 404, including the appropriate use criteria, until such time as a LOMR is received from FEMA with concurrence by IDNR/OWR.

General criteria for analysis of flood elevations in the regulatory floodway are as follows.

1. The flood profiles, flows, and data in the current effective FIS must be used for analysis of the base conditions. If the study data appears to be in error or conditions have changed, FEMA and IDNR/OWR shall be contacted for approval and concurrence on the appropriate base conditions data to use. The Director shall be copied on all related correspondence.
2. If the BFE at the site of the proposed development is affected by backwater from a downstream receiving stream with a larger drainage area, the proposed development shall be shown to meet the requirements of this section with the receiving stream at both the normal water and BFEs.
3. If the applicant is informed by IDNR/OWR, local governments, or a private owner that a downstream or upstream restrictive bridge or culvert is scheduled to be removed, reconstructed, modified, or a regional flood control project is scheduled to be built, removed, constructed or modified within the next five years, the proposed development shall be analyzed and shown to meet the requirements of this section for both the existing conditions and the expected flood profile conditions when the bridge, culvert or flood control project is built, removed or modified as applicable.
4. If the appropriate use will result in a change in the Regulatory Floodway location or a change in the BFE, the applicant shall submit the information required to be issued a Conditional Letter of Map Revision (CLOMR) to IDNR/OWR and FEMA. A public notice inviting public comment on the proposed change in the BFE or location of the Regulatory Floodway will be issued by IDNR/OWR or its designee before a CLOMR is issued. Filling, grading, dredging or excavating may take place upon issuance of a conditional approval from IDNR/OWR and the Administrator. No further development activities shall take place in the existing or proposed floodplain until a

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Letter of Map Revision (LOMR) is issued by FEMA unless such activities meet all the requirements of the Section 402 of this Ordinance. The Director shall be copied on all related correspondence.

5. For those circumstances listed below and located in a Regulatory Floodway, at a minimum, the following information shall be submitted to IDNR/OWR for their review and concurrence.
 - a. Analysis of the flood profile due to a proposed bridge, culvert crossings and roadway approaches.
 - b. An engineer's determination that an existing bridge, culvert crossing or approach road is not a source of flood damage and the analysis indicating the proposed flood profile.
 - c. Alternative transition sections and hydraulically equivalent compensatory storage.
 - d. Stormwater Management Permits to local units of government for Regulatory Floodway and Floodplain development.
6. IDNR/OWR will issue permits for any IDNR/OWR projects, dams, etc. all other state, federal or WCSMC or Certified Community projects.

Sec. 402 General Performance Standards

The following general performance standards are applicable to all development in a Regulatory Floodplain. The standards of this section apply except when superseded by more stringent requirements in the subsequent sections.

- a. No development except as allowed in Section 406 shall be allowed in the Regulatory Floodplain that singularly or cumulatively creates an increase in flood stage or velocity off-site, or a damaging or potentially damaging increase in flood heights or velocity on-site or threat to public health, safety and welfare.
- b. For all projects involving a channel modification, fill, stream maintenance or a levee, the flood conveyance and storage capacity of the regulatory floodplain shall not be reduced.
- c. If the proposed development would result in a change in the Regulatory Floodplain or BFE as indicated in Appendix B, the applicant shall obtain a LOMR from FEMA. No buildings may be built in the existing or proposed Regulatory Floodplain until the LOMR receives concurrence from IDNR/OWR and is issued by FEMA and the building meets all the Building Protection Standards (Section 402.2). Proposed changes to the Regulatory Floodway delineation and the BFE must be submitted to IDNR/OWR for concurrence.
- d. If the development is located in a public body of water, as defined by IDNR/OWR (Appendix C), a permit or a waiver of a permit must also be received from IDNR/OWR.
- e. Prior to the commencement of any construction, modification or removal of a dam the developer shall obtain an IDNR/OWR Permit or letter indicating a permit is not required.
- f. For public flood control projects, the Floodplain Management standards will be considered met if the applicant can demonstrate to IDNR/OWR and WCSMC that each of the following conditions are met:
 1. Demonstrate by hydraulic and hydrologic modeling that the proposed project will not singularly or cumulatively result in increased flood heights outside the project site or demonstrate that any increases will be contained in easements for all flood events up to and including the base flood event.

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2. Demonstrate that the project will be operated and maintained by a public agency.
3. Demonstrate that the project will reduce flood damage to an existing building or structure.

These standards do not preclude the design, engineering, construction or financing, in whole or in part of a public flood control project by persons who are not public agencies.

- g. Proposals for new Subdivisions, Manufactured Home Parks, Planned Unit Developments (PUDs) and additions to Manufactured Home Park and additions to subdivisions shall include base flood or 100-year frequency flood elevation data and floodway delineations.

402.1 Public Health Protection Standards

- a. New and replacement water supply systems, wells and sanitary sewer lines may be permitted if all manholes or other aboveground openings located below the FPE are watertight.
- b. New on-site waste disposal systems, such as septic systems, are allowed in the Regulatory Floodplain only if they meet all of the following conditions:
 1. The invert of any wastewater distribution lines shall be a minimum of 2-feet above the water surface elevation of the base flow of any perennial stream;
 2. The lateral distance from a ditch, creek, or other riverine source to the wastewater distribution lines shall be a minimum of 75;
 3. The elevation of any areas which are to receive wastewater distribution shall be above the ordinary high water mark;
 4. The soil of the receiving field shall be of a type suitable for septic fields;
 5. The tank shall be placed out of the floodplain with the invert of the outlet above the BFE.
- c. New, substantially improved or replacement wastewater treatment plants shall have watertight openings for those openings located below the FPE. Such facilities should be located to avoid impairment to the facility or contamination of floodwaters during the base flood.

402.2 Building Protection Standards

The Building Protection Standards apply to all buildings located in the Regulatory Floodplain; however, it should be noted that most new and replacement buildings are not appropriate uses of the Regulatory Floodway.

- a. The lowest floor including basements of all new residential structures, substantially improved structures and additions shall be elevated up to at least the FPE. An attached garage for a structure must be elevated up to at least 0.1 feet above the BFE.
 1. If placed on fill, the top of the fill for the residential structure shall be above the FPE. The top of fill for an attached garage shall be at least 0.1 foot above the BFE. The fill shall be placed at that elevation for a distance of ten feet out from the building unless the building design is certified by a registered structural engineer to be protected from damages due to hydrostatic pressures. Additionally, the fill shall not settle below the FPE for the residential structure and not below 0.1 feet above the base flood for an attached garage, and shall be adequately protected against erosion, scour and differential settlement. The fill should not adversely affect surface drainage from or onto neighboring properties.
 2. If elevated by means of walls, pilings, or other foundation, the building's supporting structure must be permanently open to flood waters and not subject to damage by

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hydrostatic pressures of the base flood. The permanent openings shall be no more than 1 foot above existing grade, and consist of a minimum of two openings. The openings must have a total net area of not less than 1 square inch for every 1 square foot of enclosed area subject to flooding below the BFE. The lowest inside grade must match the lowest existing outside grade adjacent to the structure. The foundation and supporting members shall be anchored and aligned in relation to flood flows and adjoining structures so as to minimize exposure to known hydrodynamic forces such as current, waves, ice and floating debris. All areas below the FPE shall be constructed of materials resistant to flood damage. The lowest floor (including basement) for the residential structure and all electrical, heating, ventilating, plumbing, and air conditioning equipment and utility meters shall be located at or above the FPE. An attached garage must be elevated to at least 0.1 feet above the BFE. Water and sewer pipes, electrical and telephone lines, submersible pumps and other waterproofed service facilities may be located below the FPE. No area below the FPE shall be used for storage.

- b. The lowest floor including the basement of all new or substantially improved non-residential buildings shall be elevated at least to the FPE as described above or be structurally dry flood proofed to at least the FPE. A non-residential building may be structurally dry flood proofed (in lieu of elevation) provided that a Professional Engineer or Registered Structural Engineer shall certify that the building has been structurally dry flood proofed below the FPE and the structure and attendant utility facilities are watertight and capable of resisting the effects of the base flood. The building design shall take into account flood velocities, duration, rate of rise, hydrostatic and hydrodynamic forces, the effects of buoyancy and impacts from debris or ice. Flood proofing measures shall be operable without human intervention and without an outside source of electricity. (Levees, berms, floodwalls and similar works are not considered flood proofing for the purpose of this subsection).
- c. Manufactured Homes and recreational vehicles to be installed on a site for more than 180 days shall be at or above the FPE and shall be anchored to resist flotation, collapse, or lateral movement in accordance with the Illinois Manufactured Home Tie-Down code [(77 Ill. Adm. Code 870 1999)] as amended.
- d. Accessory structures, such as tool sheds and detached garages which are not substantial improvements on an existing single-family lot, may be constructed with the lowest floor below the FPE in accordance with the following criteria:
 1. The building shall not be used for human habitation.
 2. All areas below the FPE shall be constructed with waterproof material. Structures located in a Regulatory Floodway shall meet the Floodway Standards in Section 404.
 3. The structure shall be anchored to prevent flotation and movement.
 4. Service facilities such as electrical and heating equipment shall be elevated or flood proofed to the FPE.
 5. The building shall be no greater than 600 square feet in floor size, and be valued at less than \$7,500. The building shall meet the permanent opening criteria of Article 4, Section 402.2(a) 2.
 6. The building shall be used only for the storage of vehicles or tools and may not contain basements or other rooms, workshops, greenhouses or similar uses.

Accessory structures that do not meet all of the above criteria may be constructed if they are dry flood proofed or elevated at least ½ of one foot above the BFE.

402.3 Non-Conforming Structures

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A non-conforming structure damaged by flood, fire, wind or other disaster may be restored unless the damage meets or exceeds fifty percent (50%) of its market value before it was damaged, in which case it shall conform to the Building Protection Standards of this Ordinance.

402.4 LOMR-F

Certified Communities may utilize FEMA Technical Bulletin 10-01 for the issuance of LOMR-Fs.

Sec. 403 Compensatory Storage Volume Standards

The following standards apply within the regulatory floodplain:

- a. Hydraulically equivalent compensatory storage volume will be required for development in a riverine regulatory floodplain and shall be at least equal to the regulatory floodplain flood storage volume displaced. The storage volume displaced below the existing 10-year frequency flood elevation must be replaced below the proposed 10-year frequency flood elevation. The storage volume displaced above the 10-year existing frequency flood elevation must be replaced above the proposed 10-year frequency flood elevation.
- b. Compensatory storage volume for development in a non-riverine regulatory floodplain area that is also adjacent to a lake shall be equal to the storage volume displaced.
- c. Compensatory storage volume requirements for development in a non-riverine Regulatory Floodplain that is not adjacent to a lake shall be replaced in accordance with the requirements for the loss of depressional storage in Section 201.7.
- d. Compensatory storage areas shall be designed to drain freely and openly to the channel and shall be located adjacent to the development. This standard does not apply to non-riverine Regulatory Floodplain.
- e. A recorded covenant running with the land is required to maintain the compensatory storage volume in areas modified to provide compensatory storage volume.

Sec. 404 Floodway Standards

The only development in a Regulatory Floodway which will be allowed are appropriate uses which will not cause an increase in flood heights or velocities for all flood events up to and including the base flood. Only those appropriate uses listed below will be allowed in the regulatory floodway.

Appropriate uses do not include the construction or placement of any new structures, fill, building additions, buildings on stilts, fencing (including landscaping or planting designed to act as a fence) and storage of materials except as specifically defined below as an appropriate use. If the development is proposed for the Regulatory Floodway portion of the Regulatory Floodplain, the following standards apply in addition to the standards for the Regulatory Floodplain:

- a. Only the construction, modification, repair or replacement of the following appropriate uses will be allowed in the Regulatory Floodway:
 1. Public flood control structures and private improvements relating to the control of drainage and flooding of existing buildings, erosion, water quality or habitat for fish and wildlife;
 2. Structures or facilities relating to functionally water dependent uses such as additions, modifications, and improvements to existing wastewater treatment plants (except for additions to habitable structures on the site) and facilities and improvements relating to recreational boating (this does not include new wastewater treatment plants);
 3. Storm and sanitary sewer outfalls;

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4. Underground and overhead utilities;
 5. Recreational facilities such as playing fields, open pavilions, and trail systems including any related fencing (at least 50% open when viewed from any one direction) built parallel to the direction of flood flows;
 6. Detached garages, storage sheds, boat houses or other non-habitable structures without sanitary facilities that are accessory to existing buildings and will not block flood flows nor reduce regulatory floodway storage;
 7. Bridges, culverts and associated roadways, sidewalks and railways, required for crossing the regulatory floodway or for access to other appropriate uses in the regulatory floodway and any modification thereto;
 8. Parking lots built at or below existing grade provided that either:
 - a. The BFE is less than one foot above the proposed parking lot; or
 - b. The parking lot is accessory to short-term outdoor recreational facilities and the owner agrees to restrict access during periods of inundation and agrees to accept liability for all damage caused by vehicular access during flooding events;
 9. Regulatory floodway grading, without fill, to create a positive non-erosive slope toward a channel;
 10. Flood proofing activities to protect previously existing lawful structures including the construction of water-tight window wells, elevating structures, or the construction of flood walls or berms around residential, commercial or industrial principal structures where the outside toe of the floodwall or berm shall be no more than 10 feet away from the exterior wall of the existing structure, and, which are not considered to be substantial improvements to the structure;
 11. The repair, replacement or reconstruction of a damaged building, provided that none of the outside dimensions of the building are increased and provided that the cost of repair is less than 50% of the building's value before it was damaged. When damage is 50% or more (a substantial improvement), the activity shall conform to Section 402.2 of this Ordinance;
 12. Modifications to an existing building that would not increase the enclosed floor area of the building below the BFE and which will not block flood flows. These modifications include fireplaces, bay windows, decks, patios and second story addition. No enclosed floor areas may be built on stilts. The modifications may not singularly or cumulatively equal 50% or more of the building's market value.
- b. Additions or changes to the above list of appropriate uses must be approved by the Committee prior to the adoption by the County Board and IDNR/OWR.
 - c. All development in the Regulatory Floodway shall require a Permit from IDNR-OWR and must be in accordance with all provisions of this Ordinance.
 - d. Construction of an Appropriate Use will be considered permissible provided that the proposed project meets the following engineering and mitigation criteria and is so stated in writing with supporting plans, calculations and data prepared and signed by a Professional Engineer.
 1. All effective Regulatory Floodway conveyance lost due to the development of Appropriate Uses, other than bridge or culvert crossings or on-stream structures or dams, shall be replaced for all flood events up to and including the base flood.

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2. The following expansion and contraction ratios shall be used to determine transition sections in calculations of effective Regulatory Floodway conveyance:
 - a. Flowing water will expand no faster than at a rate of one foot horizontal for every four feet of the flooded stream's length.
 - b. Flowing water will contract no faster than at a rate of one foot horizontal for every one foot of the flooded stream's length.
 - c. Flowing water will not expand or contract faster than one foot vertical for every ten feet of flooded stream length.
 - d. All cross-sections used in the calculations shall be located perpendicular to flood flows.
 - e. Transition Sections must be used to determine the effective conveyance areas on adjacent properties.
 3. Development of an appropriate use will not result in an increase in the average channel or Regulatory Floodway velocities or stage. However, in the case of bridges or culverts or on stream structures built for the purpose of backing up water in the stream during normal or flood flows, velocities may be increased at the structure site if scour, erosion and sedimentation will be avoided by the use of rip-rap or other design measures.
- e. In the case of on-stream structures built for the purpose of backing up water during normal or flood flows, the increase in flood stage when compared to existing conditions for all storm events up to and including the base flood event shall be contained within recorded easements or the channel banks. A Dam Safety Permit or letter indicating a Dam Safety Permit is not required must be obtained from IDNR/OWR for such structures.
 - f. IDNR/OWR will issue permits for any IDNR/OWR projects, dams, etc. and for all other state, WCSMC, or Certified Community projects.

Sec. 405 Riverine Floodplain

These standards apply to Riverine Regulatory Floodplains without a Regulatory Floodway.

The Applicant shall obtain approval from IDNR/OWR for all development any portion of which is located partially or completely within the Regulatory Floodplain (without a delineated Regulatory Floodway) with a tributary drainage area of 640 acres or more.

- a. The development shall not singularly or cumulatively result in an obstruction of flood flows or potential flood damages outside the site due to an increase in flood heights, velocities, or loss of floodplain area storage.
- b. A Professional Engineer shall submit a study that demonstrates one of the following:
 1. Determine a floodway which meets the definition of a Regulatory Floodway and demonstrate that the proposed development meets the Floodway Standards in Section 404, or
 2. Determine a BFE and demonstrate that the proposed development will maintain the existing conditions conveyance, will not increase flood velocities, will not increase flood profiles and will compensate for any lost floodplain storage.

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Sec. 406 Bridge and Culvert Standards

These standards are for the reconstruction, modification or new construction of bridges, culvert crossings and roadway approaches located in the regulatory floodplain.

- a. A proposed new structure shall not result in an increase of upstream flood stages greater than 0.1 foot when compared to the existing conditions for all flood events up to and including the base flood event unless contained within the channel banks or recorded easements. The evaluation must be submitted to the IDNR-OWR for review and a permit obtained.
- b. If the proposed new structure will increase upstream flood stages greater than 0.1 foot, the applicant must contact IDNR/OWR for a Dam Safety permit or waiver. The Director shall be copied on all related correspondence.
- c. Lost regulatory floodplain storage must be replaced as required in Section 403 Compensatory Storage Volume Standards except that artificially created storage lost due to a reduction in head loss behind an existing bridge or culvert crossing shall not be required to be replaced, provided no flood damage will be incurred downstream.
- d. Velocity increases must be mitigated by use of appropriate measures to avoid scour, erosion and sedimentation at the structure.
- e. For modification or replacement of existing structures, the existing structure must first be evaluated in accordance with IDNR/OWR Rules (17 Ill. Adm. Code Part 3708) to determine if the existing structure is a source of flood damage. If the structure is a source of flood damage, the applicant's engineer shall submit justification to allow the damage to continue and evaluate the feasibility of relieving the structure's impact. Modifications or replacement structures shall not increase flood stages (0.0 feet) compared to the existing condition for all flood events up to and including the base flood event. The evaluation must be submitted to IDNR/OWR, for review and concurrence before a permit is issued. The Director shall be copied on all related correspondence.
- f. If any work is proposed in, near or over a public body of water, a permit or letter indicating a permit is not required must be obtained from IDNR/OWR.
- g. The hydraulic analysis for the backwater caused by the bridge showing the existing condition and proposed regulatory profile must be submitted to IDNR/OWR for concurrence that a CLOMR is not required.
- h. Construction vehicles shall cross-streams by the means of existing bridges or culverts. Where an existing crossing is not available, a temporary crossing that has been issued a permit or waiver by IDNR/OWR shall be constructed in which:
 1. The approach roads will be 0.5 feet or less above existing grade.
 2. The crossing will allow stream flow to pass without backing up the water above the stream bank vegetation line or above any drainage tile or outfall.
 3. The top of the roadway fill in the channel will be at least 2 feet below the top of the lowest bank. Any fill in the channel shall be non-erosive material, such as rip-rap or gravel.
 4. The access road and temporary crossings will be removed within one year after installation, unless an extension of time is granted by the Administrator.

ARTICLE 5. STORMWATER MANAGEMENT PERMIT SUBMITTAL REQUIREMENTS.

Sec. 500 General Requirements

500.1 Stormwater Management and Other Permits Required

A Stormwater Management Permit shall be required if:

- a. The development or a substantial improvement is located in the regulatory floodplain or there is regulatory floodplain within the property boundary; or
- b. The development disturbs more than one acre (43,560 square feet) of ground cover, unless the development solely involves one or more of the following:
 1. Installation, renovation, or replacement of a septic system, potable water service line, or other utility to serve an existing structure; or
 2. Excavation or removal of vegetation in rights-of-way or public utility easements for the purpose of installing or maintaining utilities not including storm sewers; or
 3. Maintenance, repair, or at grade replacement of existing lawn areas not otherwise requiring a stormwater permit under this Ordinance; or
 4. Maintenance of an existing stormwater facility, not requiring other state or federal permits or approvals.

All development shall secure all appropriate Stormwater Management related approvals, including, without limitation, an IDNR-OWR Floodway/Floodplain Construction permit, a USACOE 404 permit and an IDNR-OWR Dam Safety permit if required, from all Federal, State and Regional authorities and other appropriate Federal, State, and Regional approvals prior to the issuance of a Stormwater Management Permit for areas of a site requiring such other approvals.

500.2 Permit Review Fees

All permit fees shall be paid at the time of application. Permit fees shall be established by separate resolution of the permitting authorities. Fees may include, but are not limited to, the cost of permit administration, review and inspections prior to construction, during construction and within the permanent cover establishment period following construction.

500.3 Professional Seals and Certifications Required

- a. The design of stormwater facilities, calculations for the determination of the regulatory floodplain, or calculations of the impacts of development shall meet the standards of this Ordinance and shall be prepared, signed, and sealed by a professional engineer. The professional engineer shall provide an opinion that the technical submittal meets the criteria required by this Ordinance or the applicable certified community ordinance; and
- b. For structures (not including earth embankments) that are subject to a differential water pressure greater than 3 feet the submittal shall include evidence that the subject design has been reviewed by a qualified professional who shall, as a minimum, have registration as a Professional Engineer. Such reviews shall include stability of the structure under design conditions considering the protection of downstream life and property in the event of a failure. When directed by the Administrator the calculations submitted for such structures shall be reviewed, signed and sealed by a Registered Structural Engineer.

For projects which include earth embankments which are subjected to a differential water pressure the submittal shall include evidence that the embankment design and construction specifications are adequate for the design conditions. This review shall include consideration of the existing foundation soils for the embankment, the materials from which the embankment is to be constructed, compaction requirements for the embankment and protection of the embankment from failure due to overtopping. Construction and materials specifications for all such embankments shall be included with the plan set submittal. When

ARTICLE 5. STORMWATER MANAGEMENT PERMIT SUBMITTAL REQUIREMENTS.

directed by the Administrator, or when the impounded water pressure differential exceeds three feet, or when appropriate considering the volume impounded and water surface elevation differential to which the embankment is subjected, these calculations may be required to be reviewed, signed and sealed by a qualified Geotechnical or Structural Engineer;

- c. A topographical map of the site, record drawings, and other required drawings shall be prepared, signed, and sealed by a Professional Land Surveyor or Professional Engineer and tied to National Geodetic Vertical Datum, 1929 adjustment and any FEMA benchmarks.

Sec. 501 Duration and Revision to Permits

501.1 Permit Expiration

Permits expire December 31 of the third year following the date of permit issuance or upon expiration of state or federal permits required for Stormwater Management.

501.2 Permit Extension

If the permitted activity has been started but is not completed by the expiration date of the permit, and the permittee intends to pursue the permitted activity, then the permittee may submit a written request that the expiration date be extended. Upon receipt of such request, the Administrator may extend the expiration date in one-year increments a maximum of 3 times for permitted activities outside regulatory floodplains and floodways. Expiration dates for permitted activities in regulatory floodplains and floodways may be extended in one-year increments a maximum of 3 times provided the activity is in compliance with the then current requirements of this Ordinance or the applicable Certified Community Ordinance.

501.3 Permit Revision

If, after permit issuance, the permittee decides to revise the approved plans, the permittee shall submit revised plans to the Director or the Administrator, along with a written request for approval. If the Director or the Administrator determines that the revised plans are in compliance with the then current requirements of this Ordinance or the applicable Certified Community Ordinance, an approval of the revised plans may be issued.

Sec. 502 Required Submittals

All permit submittals shall include the material listed in the Sections noted in Table 5 for the applicable type of development, unless the submittal requirements are specifically modified by the procedure in Section 502.1.

Table 2. Permit Submittal Requirements

	Required Submittals (refer to Sections listed for specific material)						
	Section No. / Description						
	502.2	502.3	502.4	502.5	503.1	503.2	504
Application and Project Overview	Plan Set Submittal	Stormwater Submittal	Floodplain Submittal	Performance Security	Maintenance Schedule and Funding	Record Drawings	
All Requiring a Permit	X	X			X	X	X
All Developments on Sites with Floodplains	X	X		X	X	X	X
All Developments on Sites with or Adjacent to waters of the United States	X	X			X	X	X
All Applications Requesting Variances	X	X	X	If on site	X	X	X
All Requiring Detention/Retention	X	X	X		X	X	X

ARTICLE 5. STORMWATER MANAGEMENT PERMIT SUBMITTAL REQUIREMENTS.

Note: Corporations with a bond rating of “A” or higher from a major investment firm, (i.e. Standard and Poor, Moody or equivalent), would be judged to have met the long term maintenance funding requirement.

502.1 Modification of Submittal Requirements

The Administrator may, at his discretion, modify the submittal requirements on a case-by-case basis considering the size, complexity and likelihood that a development will affect the discharge of stormwater. Such modifications shall be requested and answered in writing. The Administrator’s response shall note the relevant findings, and be specific as to what submittal requirements are changed. The Director shall be copied on all related correspondence. The Administrator may not modify submittal requirements for any aspect of the development requiring state or federal permits or approvals, nor for any application in which any variance of the Permitting Authorities Ordinance is requested.

502.2 Application and Project Overview

The Applicant shall provide the following information as a minimum, on forms or in a format approved by the Administrator:

- a. The name and legal address of the owner(s) of the site and the permit applicant; and
- b. The common address, legal description, property identification number (PIN) of the site; and
- c. The name of the project, area of the site in acres, type of development; and
- d. A general narrative description of the development, existing and proposed conditions, and project planning principles considered, including Best Management Practices used; and
- e. Affidavits signed by the owner or the applicant’s authorized representative attesting to their understanding of the requirements of this Ordinance or the applicable Certified Community Ordinance and their intent to comply therewith; and
- f. A statement of opinion by a qualified person either denying or acknowledging the presence of floodplain on the development site; and
- g. Copies of other stormwater related permits or permit applications as required; and
- h. A subsurface drainage investigation report; and
- i. An engineer's estimate of probable construction cost of the stormwater facilities.

502.3 Plan Set Submittal

All applicants for a stormwater permit shall provide the following basic plan exhibits: Site Topographic Map, General Plan View Drawing, Sediment/Erosion Control Plan, and a Vicinity Topographic Map. Each exhibit may be on more than one drawing for clarity. The specific information to be included on each exhibit shall be as noted below.

- a. Site Topographic Map meeting the following requirements shall be submitted:
 1. Map scales as 1 inch = 100 feet (or less) and accurate to +/- 0.5 feet; and
 2. Existing and proposed contours on-site and within 100 feet of site; and
 3. Existing and proposed drainage patterns and watershed boundaries; and
 4. Delineation of pre-development regulatory floodplain/floodway limits; and
 5. Delineation of post-development regulatory floodplain/floodway limits; and

ARTICLE 5. STORMWATER MANAGEMENT PERMIT SUBMITTAL REQUIREMENTS.

6. Location of cross-sections and any other hydrologic/hydraulic computer modeled features; and
 7. Location of all on-site drain tiles; and
 8. Boundary of all wetlands, lakes, ponds, etc. with normal water elevation noted; and
 9. Location of all existing buildings and those to remain on the site noted; and
 10. Nearest base flood elevations; and
 11. FEMA and any site-specific benchmarks (tied to County benchmarks) used; and
 12. Highlight all contours used in the calculation of depressional storage.
- b. General Plan View Drawing meeting the following requirements shall be submitted:
1. Drawing at the same scale as the Site Topographic Map; and
 2. Existing major and minor stormwater systems; and
 3. Proposed major and minor stormwater systems; and
 4. Design details for stormwater facilities (i.e. structure and outlet work detail drawings, etc.); and
 5. Scheduled maintenance program for permanent stormwater facilities including BMP measures; and
 6. Planned maintenance tasks and schedule; and
 7. Identification of entities responsible for maintenance; and
 8. Permanent public access maintenance easements granted or dedicated to, and accepted by, a government entity; and
 9. Proposed regulatory floodplain and floodway location (with the base flood and flood protection elevations noted); and
 10. Highlight all plan areas at elevations below the 100-year high water elevation of site runoff storage facilities.
- c. Sediment and Erosion Control Plan meeting the following requirements shall be submitted:
1. Drawings at the same scale as the Site Topographic Map; and
 2. Sediment/erosion control installation measures and schedule; and
 3. Existing and proposed roadways, structures, parking lots, driveways, sidewalks and other impervious surfaces; and
 4. Limits of clearing and grading; and
 5. Floodplain/floodway locations; and
 6. Proposed buffer location, existing soil types, vegetation and land cover conditions; and
 7. List of maintenance tasks and schedule for sediment/erosion control measures.
- d. Vicinity Topographic Map meeting the following requirements shall be submitted.

ARTICLE 5. STORMWATER MANAGEMENT PERMIT SUBMITTAL REQUIREMENTS.

1. Vicinity topographic map identifying all off-site areas draining to the development and downstream to the receiving intermittent or perennial stream. (A 2' contour map is preferred at a scale readable by the reviewer but a USGS Quadrangle map is acceptable); and
2. Watershed boundaries for areas draining through or from the development; and
3. Soil types related to hydrologic soils group, vegetation and land cover affecting runoff upstream of the site for any area draining through the site; and
4. Location of development site within the major watershed(s); and
5. Show the overland flow path from the downstream end of the development to the receiving intermittent or perennial stream.

502.4 Stormwater Submittal

The stormwater submittal shall include narrative discussion and calculations to support a finding that the proposed development complies with the technical requirements of the permitting authorities ordinance. The submittal shall consist of, at a minimum, the following material.

- a. A narrative description of the existing and proposed site drainage patterns and conditions. Include description of off-site conditions, which help to identify stormwater issues considered in the design.
- b. A schedule for implementation of the site stormwater plan.
- c. On-site and off-site runoff calculations which address the following:
 1. Documentation of the procedures/assumptions used to calculate hydrologic and hydraulic conditions for sizing major and minor systems; and
 2. Cross-section data for open channels; and
 3. Hydraulic grade line and water surface elevations under design flow conditions; and
 4. Hydraulic grade line and water surface elevations under base flood flow conditions.
- d. Site Runoff Storage Calculations, which address the following:
 1. Calculation of hydraulically connected impervious area and corresponding retention volume.
 2. Documentation of the procedures/assumptions used to calculate hydrologic and hydraulic conditions for determining the allowable release rate.
 3. Documentation of the procedures/assumptions used to calculate on-site depressional storage.
 4. Documentation of the procedures/assumptions used to calculate hydrologic and hydraulic conditions for determining the storage volume.
 5. Elevation-area-storage data and calculations for site runoff storage.
 6. Elevation-discharge data, and calculations specifically related to the outlet control structure depicted in the plan Exhibits.
 7. The General Plan View Drawing of Section 502.3(b) shall indicate the areas of directly connected impervious areas and any offsetting landscaped areas as defined in Section 203.5.

ARTICLE 5. STORMWATER MANAGEMENT PERMIT SUBMITTAL REQUIREMENTS.

502.5 Floodplain Submittal

The applicant shall obtain approval from IDNR-OWR and FEMA for all new base flood and floodway determinations for those cases in which their permitting authority applies or as noted in Section 401 of this Ordinance. The Stormwater Management Permit will not be issued until such approval is received. Documentation supporting a finding that the proposed development is in compliance with Sections 400 and 401 shall be submitted with the application. At a minimum, the following material shall be submitted for approval with the application.

- a. Regulatory floodplain boundary determination:
 1. Provide source of flood profile information.
 2. Provide all hydrologic and hydraulic study information for site-specific floodplain studies, unnumbered Zone A area elevation determinations, and floodplain map revisions.
- b. Floodway hydrologic and hydraulic analyses for the following conditions:
 1. Existing conditions (land used and stream systems).
 2. Proposed conditions (land used and stream systems).
 3. Tabular summary of 100-year flood elevations and discharges for existing and proposed conditions.
 4. Calculations used for model development.
 5. Hydraulic/hydrologic computer model input/output.
- c. Floodplain fill and compensatory storage calculations for below and above 10-year flood elevation up to the base flood elevation:
 1. Tabular summary for below and above 10-year flood elevation of fill, compensatory storage, and compensatory storage ratios provided in proposed plan.
 2. Cross-sections used for the above calculations.
- d. Flood proofing Measures:
 1. Narrative discussion of flood proofing measures including material specifications, calculations, and design details, operation summary.
- e. Flood Easements when required by this Ordinance or the applicable Certified Community Ordinance.

Sec. 503 Submittals Prior to Permit Issuance

The following additional submittals as noted in Section 503.1 and 503.2 are required prior to issuance of the Stormwater Permit.

503.1 Performance Security

Performance security in accordance with Article 12 shall be required prior to permit issuance.

503.2 Maintenance Schedule and Funding

ARTICLE 5. STORMWATER MANAGEMENT PERMIT SUBMITTAL REQUIREMENTS.

A completed maintenance schedule for the Stormwater Management Facilities and Special Management Areas, in accordance with Article 6 shall be submitted along with identification of the entity responsible for maintenance and funding and back-up funding sources for maintenance in Accordance with Section 605.

Sec. 504 Record Drawings

The developer is required to submit record drawings of all permitted stormwater facilities. The record drawings shall be signed and sealed by a Professional Engineer or Professional Land Surveyor who shall state that the project as constructed is substantially in conformance with the project as permitted. The record drawings shall include calculations verifying that the volumes of detention and compensatory storage required in the permit have been provided.

Sec. 505 Issuance or Denial of Permit and Appeal of Permit Denial

The Administrator shall either issue or deny a Stormwater permit within 30 days of receiving a complete Permit application and all required submittals and fees, unless additional time is granted by both the Administrator and the Applicant. When a permit is denied, the applicant may appeal the Administrators decision to the Director provided such appeal is made in writing within 15 days of the date of the notification of denial. The Director shall render a decision to issue the Stormwater permit, issue the permit with conditions, or uphold the Administrators denial of the permit. The Director shall render his decision within 30 days of the appeal. Failure to take action shall be deemed action to uphold the permit by the Administrator.

Upon denial by the Director, the applicant may file an appeal in writing within 15 days of the denial or decision or the Communities action to the County Board.

ARTICLE 6. LONG TERM MAINTENANCE.

Sec. 600 Long-Term Maintenance

Unless maintenance responsibility has been delegated to and accepted by another qualified entity under this section, the owner shall maintain that portion of a stormwater drainage system located upon his land. With the approval of the Administrator the stormwater drainage system, or specified portions thereof, may be:

- a. Dedicated or otherwise transferred to and accepted by the permitting community or other public entity; or
- b. Conveyed or otherwise transferred to and accepted by a homeowner's association, or similar entity, the members of which are to be the owners of all of the lots or parcels comprising the development; or
- c. Conveyed to one or more persons or in one or more undivided interests to one or more persons.

Except for those portions of a stormwater drainage system to be dedicated or otherwise transferred to the permitting authority or other public entity, included in the application for a stormwater permit shall be a plan for the long-term management, operation and maintenance of the stormwater drainage system and a description of the sources of funding therefore. Amendments to the plan must be approved by the Administrator.

Sec. 601 Transfer to Permitting Authority or Other Public Entity

If any portion of the stormwater drainage system is to be dedicated or otherwise transferred to the permitting authority or other public entity under Section 600(a), appropriate easements for ingress and egress to and maintenance of such portions shall be reserved for the benefit of such entity on the final plat.

Sec. 602 Transfer to Homeowner's or Similar Association

If any portion of the stormwater drainage system is to be conveyed or otherwise transferred to a homeowner's or similar association under Section 600(b) then:

- a. Appropriate easements for ingress and egress to and maintenance of such portions shall be reserved for the benefit of such association and the permitting authority on the final plat;
- b. The association shall be duly incorporated and a copy of the Certificate of Incorporation, duly recorded, and bylaws, and any amendment to either of them, shall be delivered to the Administrator;
- c. The bylaws of the association shall, at a minimum, contain:
 - 1. A provision acknowledging and accepting the association's obligation to maintain certain portions of the stormwater drainage system as required by this ordinance;
 - 2. A mechanism for imposing an assessment upon the owners of all of the lots or parcels comprising the development sufficient, at a minimum, to provide for the maintenance of those portions of the stormwater drainage system as required by this Ordinance and the payment of all taxes levied thereon;
 - 3. A provision adopting the plan of long term maintenance set forth in the application for a Stormwater Management Permit, with approved amendments;
 - 4. A provision identifying the officer of the association responsible for carrying out the obligations imposed upon the association under this ordinance, and an obligation to inform the Administrator of the name, address and phone number of this officer and any changes thereto;
 - 5. A provision requiring the consent of the permitting authority to any amendment of the bylaws changing any of the provisions of the bylaws required by this ordinance; and
 - 6. A provision requiring the consent of the permitting authority to the dissolution of the association

ARTICLE 6. LONG TERM MAINTENANCE.

- d. Any conveyance or other instrument of transfer delivered under Section 600(b) shall include a covenant affirmatively imposing upon the association the obligations set forth in this section and the association's affirmative acceptance thereof.

Sec. 603 Conveyance to One or More Persons

If any portion of the stormwater drainage system is to be conveyed to one or more persons under Section 600(c), then:

- a. Appropriate easements for ingress and egress to and maintenance of such portions shall be reserved for the benefit of the permitting authority on the final plat;
- b. The final plat shall contain a legend imposing the maintenance obligations of this section upon the grantee and his successors in interest as a covenant running with the land and incorporating by reference the plan of long term maintenance set forth in the application for a Stormwater Management Permit, with approved amendments;
- c. The final plat shall contain a legend reserving the right of the permitting authority to enter upon the land to perform the maintenance required in this section if the owner does not do so and to place a lien against the land for the cost thereof;
- d. Any conveyance delivered under Section 600(c), and any subsequent conveyance, shall include a covenant affirmatively imposing upon the grantee the obligations, restrictions and provisions set forth in this section and the grantee's affirmative acceptance thereof.

Sec. 604 Incorporation of Maintenance Obligations in Stormwater Management Permit

The provisions of this Article shall be incorporated by reference in the Stormwater Management Permit and the applicant's acceptance of the permit shall be deemed to be the applicant's acceptance and assumption of the obligations imposed under this section. At the option of the Administrator, the Stormwater Management Permit may be recorded.

Sec. 605 Funding of Long Term Maintenance of Stormwater Facilities

As a condition of approval of any application for a Stormwater Management Permit, unless the maintenance responsibility for the stormwater drainage system to be constructed or installed in connection therewith has been accepted by a public entity, the Administrator will require assurance of long-term funding in a form found acceptable to the permitting authority. A corporation with a bond rating of "A" or higher from a major investment firm (i.e. Standard and Poor, Moody or equivalent) will be considered to have met the long-term maintenance funding requirement. Absent some other form of agreement, then the Administrator shall require the establishment of a special service area pursuant to 35 ILCS 200/27-5, et seq, either as the primary means of providing for the long term maintenance of the facilities, or as a backup vehicle in the event the entity designated by the applicant as having primary maintenance responsibility fails to adequately carry out its duties.

If the establishment of a special service area is required, the Administrator shall make consider and approve a good faith estimate by the applicant of the tax rate required to produce a tax to be levied upon all taxable property within the area, sufficient for the long term maintenance of the facilities and submit the same to the permitting authority which shall incorporate such rate into its enactment of the ordinances necessary for the establishment of the area. The ordinances to be enacted by the permitting authority shall be substantially in the form set forth in Appendix F.

On or before August 1 of each year thereafter, the Administrator shall submit to the permitting authority a good faith estimate of the amount of tax required to be levied upon all taxable property within the area for the next fiscal year for the continued maintenance of the stormwater drainage system.

ARTICLE 7. ENFORCEMENT AND PENALTIES.

Sec. 700 Inspection and Maintenance Authority

Pursuant to the authority granted by 55 ILCS 5/5-1104 and 5-1062, the County may, after 30 days notice to the owner or occupant, enter upon any lands or waters within the County for the purpose of inspecting and/or maintaining stormwater facilities or causing the removal of any obstruction to an affected watercourse.

Sec. 701 Required Inspections

Any development constructed pursuant to a Stormwater Management Permit shall be subject to periodic inspections by the Administrator, Director or their designee to ensure conformity with permit provisions and conditions.

Sec. 702 Offenses

Any person who violates, disobeys, omits, neglects, refuses to comply with, or resists the enforcement of any provision of this ordinance (“ordinance violation”) or any requirement or condition in any permit issued pursuant to this ordinance (“permit violation”), and, in the case of a permit violation, fails to correct such violation, omission or neglect, or cease such disobedience, refusal or resistance after notice and reinspection as provided in Sec. 702.1 below, shall be guilty of an offense under this ordinance.

702.1 Permit Violation – Notice

Whenever the Administrator or Director determines that a permit violation exists, he shall give notice of the violation in the manner prescribed in Section 1006 to the permittee. Such notice shall state the nature of the violation and fix a date not less than 10 days after the date of the notice when the site will be reinspected.

Sec. 703 Offenses – Penalties: Remedies

1. Any person found guilty of an offense under this ordinance shall pay a civil fine in an amount not less than \$25 and not more than \$750. Each calendar day during which such violation continues to exist shall constitute a separate offense. Where monetary penalties are imposed for violations of Section 204 by regional, state or federal agencies, the amount of these other agency fines will be offset against the monetary penalties for violation of this ordinance.
2. In addition to any fine imposed under 703.1, the Administrator or the Director may revoke any Stormwater Management Permit issued to such person.
3. In addition to any fine imposed under Subsection 703.1 or action taken under Subsection 703.2, the Administrator or the Director may issue an order requiring the suspension of any further work on the site. Such stop-work order shall be in writing, shall indicate the reason for its issuance, and shall specify the action, if any, required to be taken in order to resume work. One copy of the stop-work order shall be posted on the site in a conspicuous place and one copy shall be delivered in the manner prescribed in Section 1006 to the permittee, if any, or if none, to the person in whose name the site was last assessed for taxes as disclosed by the records of the Supervisor of Assessments.
4. In the enforcement of this ordinance, the Administrator or the Director may bring any action, legal or equitable, including an action for injunctive relief that may be necessary.

Sec. 704 Violations of Section 204

ARTICLE 7. ENFORCEMENT AND PENALTIES.

An Advisory Committee, called the "Agricultural Review Advisory Committee", shall be appointed by the WCSMC. The Committee shall be comprised of 3 members actively farming 60 or more contiguous acres in Will County. The Committee will also include representatives of the Soil and Water Conservation District, the Natural Resources Conservation Service and the Farm Bureau.

All complaints and ordinance violations related to Section 204 shall be reviewed by the Agricultural Review Advisory Committee, who shall render an opinion to the WCSMC on the validity of the complaint, remedies, and penalties to be imposed.

ARTICLE 8. GENERAL PROVISIONS.

Sec. 800 Scope of Regulation

This ordinance applies to all development within the County, including that under the control of any governmental entity, agency, or authority. A certified community undertaking development in the regulatory floodway, or regulatory floodplain where no regulatory floodway has been designated, shall obtain a permit from IDNR-OWR prior to issuance of a stormwater management permit. All units of local government shall obtain stormwater management permits from the permitting authority within whose boundaries the development is located.

Sec. 801 Exemptions

- a. This ordinance does not apply to:
 - 1. Development which has been substantially completed before the effective date of the Ordinance; and
 - 2. Development, which has been determined to be exempt by the permitting authority.
- b. Nonconforming structures shall not be replaced or enlarged in any manner unless such replacement or enlargement conforms to the requirements of this ordinance.

Sec. 802 Community's list of proposed exempt developments

- a. The County or a Community may place a development or industrial site on its list of exempt Developments only if:
 - 1. A site specific stormwater plan, master plan, or a regional master plan has been submitted and substantially approved by the Community engineer; or
 - 2. A contractual agreement, specifically exempting the development from the stormwater regulations of the Community, was entered into before the effective date of the ordinance.
- b. A Community's list of exempt developments shall be adopted by an official action of the corporate authorities of the Community. Prior to taking such action, the Community shall publish in accordance with Section 1007, a notice in substantially the following form:

On [date], at [time], the [corporate authorities] of the [type of community] of [community] will consider and take formal action with respect to the approval of the following list of developments proposed as exempt from the provisions of the Will County Stormwater Management Ordinance, adopted by the Will County Board on October 17, 2002. Any person wishing to do so, may attend the meeting and be heard prior to the [corporate authorities] taking such action.

[List of proposed exempt developments]

- c. At any time before January 1, 2004, upon similar notice and by similar official action, a Community may revise the list by adding or deleting developments there from. If a development is to be deleted from the list, an additional notice shall be served in the manner set forth in Section 1006 upon the affected developer. Revisions to the list shall be submitted to the Director. After January 1, 2004, the list may not be changed without review and recommendation by the Committee, which shall be forwarded to the County Board for approval.

ARTICLE 8. GENERAL PROVISIONS.

Sec. 803 Interpretation

- a. This ordinance shall be liberally construed to protect the health, welfare, safety, and the environment of the residents of the County and to effectuate the purposes of this ordinance and the enabling legislation.
- b. Nothing in this ordinance shall be deemed to consent to, license, permit to locate, construct, or maintain any structure, site, facility or operation, or to carry on any trade, industry, occupation, or activity.
- c. When provisions of this ordinance differ from any other applicable law, statute, ordinance, rule or regulation, the more stringent provision shall apply.
- d. The provisions of this ordinance are cumulative of all other laws, statutes, ordinances, rules and regulations which relate to the subject matter hereof and, except as otherwise expressly provided herein, nothing in this ordinance shall be construed as a limitation upon the application or enforcement of any such law, statute, ordinance, rule or regulation. To the greatest extent possible, the provisions of this ordinance shall be construed to be consistent with the provisions of such other laws, statutes, ordinances, rules or regulations, and with each other, to the end that all such provisions may be given their fullest application.

Sec. 804 Warning and disclaimer of liability

- a. The degree of flood protection provided by this ordinance is considered reasonable for regulatory purposes and is based upon engineering experience and scientific methods of study. Increased flooding may result from causes beyond the control of any governmental authority. This ordinance does not, therefore, guarantee that areas outside the floodplain or permitted land uses within the floodplain will be free from flooding and associated damages.
- b. Nothing in this ordinance shall be construed or applied in any manner to create liability on the part of or a cause of action against the County, any municipality or other governmental authority, or any elected official, or any officer, agent, or employee of any of the foregoing, or any certified review specialist for any flood damage resulting from reliance on the provisions of this ordinance.

Sec. 805 Choice of planning jurisdiction

Pursuant to 55 ILCS 5/5-1062 (b), a community that is located in more than one county may choose, at the time of the formation of the Committee, and based upon watershed boundaries, to participate in the stormwater management planning program of either or both of the counties. The Committee shall include such community within the scope of its planning and enforcement jurisdiction unless the community provides evidence of its participation or intent to participate in the stormwater management-planning program of another county.

Sec. 806 Violations

- a. It shall be unlawful for any person to undertake any development without first securing a stormwater management permit as required by this ordinance.
- b. It shall be unlawful for any person to violate, disobey, omit, neglect and refuse to comply with, or resist enforcement of any provision of this ordinance or any condition of a stormwater management permit.

Sec. 807 Severability

ARTICLE 8. GENERAL PROVISIONS.

- a. The several provisions of this ordinance shall be severable in accordance with the following rules:
 - 1. If any court of competent jurisdiction shall adjudge any provision of this ordinance to be invalid, such judgment shall not affect any other provision of this ordinance.
 - 2. In any court of competent jurisdiction shall adjudge to be invalid the application of any provision of this ordinance, to a particular parcel of land, a particular structure, or a particular development, such judgment shall not affect the application of said provision to any other land, structure or development.

Sec. 808 Amendments

No amendment to this ordinance may be passed without a public hearing first being held before the Land Use & Zoning Committee of the Will County Board upon notice as provided in Section 1007.

Sec. 809 Effective Date

This Ordinance shall take effect for all purposes, and its effective date shall be January 1st, 2004.

ARTICLE 9. VARIANCES.

Sec. 900 Purpose

In order to provide a narrowly circumscribed means by which relief may be granted when strict compliance with the requirements of this ordinance is impossible or impracticable, variances from the specific provisions of this ordinance may be granted according to the standards set forth in this Article.

Sec. 901 Application for Variance

An application for a variance, signed by the owner or developer of the development to which it relates, shall be filed with the administrator. No application for a variance will be accepted for filing unless it relates to a previously or contemporaneously filed application for a stormwater management permit. Applications for a variance shall be filed in such number of duplicate copies as the administrator may designate by administrative order. No action will be taken on an application for a variance unless it and the corresponding application for a stormwater management permit to which it relates are complete as determined by the Administrator. The administrator shall send a copy of the complete application to the Director and to all other certified communities within the same watershed. Applications for a variance need not be made upon any specific form, but shall contain the information set forth in **Table 901**.

Table 901 – Application for Variance

An application for variance shall set forth

1. The common addresses and legal descriptions of all lands comprising the development;
2. The names and addresses of all owners of record of the legal title of all lands comprising the development;
3. If title to any of the land comprising the development is held in trust, the names and addresses of all beneficiaries of the trust;
4. The names and addresses of the developers of the land, if different from the owner;
5. The names and addresses of all consultants retained by the developer in connection with the application for a variance;
6. The names and addresses of all property owners within 250 feet of the development;
7. The specific feature or features of the development that require a variance;
8. The specific provision of this ordinance from which a variance is sought and the precise extent of the variance there from;
9. A statement of the characteristics of the development that prevent compliance with the provisions of this ordinance;
10. A statement that the variance requested is the minimum variance necessary to permit the development;
11. A statement as to how the variance requested satisfies the standards set forth in Section 904 of this ordinance;

Sec. 902 Application Fee

With the filing of the application for a variance, the applicant shall pay the fee prescribed by a separate act of the permitting authorities.

Sec. 903 Public Hearing

ARTICLE 9. VARIANCES.

When the application is complete, the Administrator will so notify the applicant and will schedule a public hearing on the application before the Land Use or Oversight Committee as applicable. Not more than 30 nor less than 15 days before the hearing, notice of the hearing shall be sent by first class mail, postage prepaid, to the applicant, to the Director, to all property owners within 250 feet of the development as disclosed in the application, and to each Certified Community within the same watershed as the development and to the Committee. Within the same time period, notice of the hearing shall be published at least once in a newspaper published within the Certified Community having jurisdiction over the application, or within the county if the county has jurisdiction over the application. If no newspaper is published within the Certified Community, then the notice shall be published in a newspaper with a general circulation within the Certified Community, which is published in the County. The notices given under the section shall set forth the common name, address and legal description of the development and a brief description of the variance is requested.

Sec. 904 Granting of Variances

904.1 The Land Use or Oversight Committee shall not recommend nor shall the County Board or Corporate Authority grant a variance for a project from the provisions of this ordinance unless the variance is consistent with the purpose of this Ordinance (Section 102) and meets the following standards based upon substantial evidence submitted at the hearing:

- a. The variance will not increase measurably the probability of flood damage to insurable structures.
- b. The variance requested is the minimum required considering each of the following statements of underlying intent of this ordinance and there are no means other than the requested variance by which the alleged hardships can be avoided or remedied to a degree sufficient to permit the reasonable continuation of the development:
 1. Detention of stormwater shall also contribute to the improvement of the quality of stormwater runoff.
 2. The volume of detention storage provided in open air vegetated facilities is maximized consistent with other land use site constraints including zoning requirements essential for the proposed development.
 3. Conveyance of stormwater from the project shall not increase peak discharges from existing offsite conveyance facilities beyond design capacity for any storm event from the 2-year to the 100-year flood frequency.
 4. High quality natural areas shall be preserved on the site, including without limiting the generality of the foregoing, stands of native trees, existing wetlands, natural floodplain storage or other valuable environmental and biological resources.
- c. The variance is not requested solely for the purpose of increasing the density of the development nor impervious areas on the site.
- d. The variance is not requested solely as a result of economic hardship.
- e. If applicable, the variance is required due to unique, natural topographical features of the site.
- f. The applicant's circumstances are not self-imposed.

904.2 No variance shall be granted for any development in the regulatory floodway, the effect of which would be to create regulation less restrictive than the federal or state minimum standards applicable to development in such areas.

904.3 When a variance would lessen the degree of flood surface runoff protection to any structure, the administrator shall notify the applicant that the variance, if granted, may result in increased rates for flood insurance.

ARTICLE 9. VARIANCES.

Sec. 905 Recommendations

- 905.1 The Administrator or his or her designee shall review the application for a variance and present his or her written recommendations to the Land Use or Oversight Committee at the public hearing.
- 905.2 Not more than 45 days after the close of the hearing, the Land Use or Oversight Committee shall forward the application with its written recommendations to the County Board or Corporate Authorities. The written recommendations of the Land Use Committee, when forwarded, shall be accompanied by written findings of fact with respect to each of the considerations set forth in Section 904 with citations to the evidence taken at the public hearing.

Sec. 906 Decision

The County Board or Corporate Authorities shall grant the variation, grant the variation with modifications or conditions, or deny the variation in writing within 45 days after receipt of the written recommendations of the Land Use or Oversight Committee; but in the event the County Board or Corporate Authorities do not act as aforesaid then the application is denied.

Sec. 907 Conditions

- 907.1 A variance less than or different from that requested may be granted when the record supports the applicant's right to some relief, but not to the relief requested.
- 907.2 In granting a variance, the County Board or Corporate Authorities may impose such specific conditions and limitations concerning any matter relating to the purposes and objectives of this ordinance on the applicant as may be necessary or appropriate.
- 907.3 Whenever any variance is granted subject to any condition or limitation to be met by the applicant, upon meeting such conditions, the applicant shall file evidence to that effect with the Administrator.

ARTICLE 10. ADMINISTRATION.

Sec. 1000 Responsibility for Administration

- a. The County Board shall determine policy related to this ordinance.
- b. The Director and Administrator shall administer this ordinance. In performing their duties, the Director and the Administrator may delegate and oversee enforcement of responsibilities to any named designee.
- c. Each community shall remain solely responsible for its standing in the National Flood Insurance Program, including:
 1. The maintenance of all records and the submission of all reports required for eligibility in the program, including elevation certificates, flood proofing certificates, and lowest floor elevations; and
 2. The notification of the Director, FEMA and IDNR-OWR of any proposed amendment to this ordinance.

Sec. 1001 Duties of Director

The Director shall:

- a. Supervise the enforcement of this ordinance;
- b. Supervise the development, revision and implementation of the Plan for approval by the Committee and the County Board;
- c. Supervise the review of complex stormwater management permits for any community that requests such assistance;
- d. Notify all of the communities in the County, FEMA, IDNR-OWR, USACOE, the Illinois Environmental Protection Agency, and the United States Environmental Protection Agency of any amendments to the Plan or to this ordinance.
- e. Review variance requests for the Committee.
- f. Assume the duties of the Administrator for the unincorporated County and non-certified Communities.

Sec. 1002 Duties of Administrator

The Administrator shall:

- a. Receive a listing of all required federal, state, regional and County permit applications filed for the project prior to issuing a permit under this ordinance for areas covered by other stormwater related jurisdictions. The Administrator may request copies of the stormwater related permit applications;
- b. Ascertain whether any floodplains/floodways exist on any site which is the subject of an application for a permit under this ordinance and whether or not any new development is within the SFHA;
- c. Review permit applications and determine whether to issue or deny permits;
- d. Ensure that the required notice of an application for a variance has been given in accordance with Section 1006 and 1007;

ARTICLE 10. ADMINISTRATION.

- e. Notify an applicant for a variance that such variance may result in increased rates for flood insurance;
- f. Notify the Director of an application for a variance CLOMR or LOMR;
- g. Provide for inspections of developments as required by this ordinance;
- h. Investigate complaints of violations of this ordinance within his or her community;
- i. Notify violators within regulatory floodplains that failure to comply with the provisions of the National Flood Insurance Program could make them ineligible to receive flood insurance;
- j. Initiate any proceeding necessary to enforce this ordinance within his or her community;
- k. Advise, consult and cooperate with other governmental agencies to promote the purposes of this ordinance;
- l. Maintain copies of all applications and submittals, federal and state permits, variances, CLOMR, LOMR, CLOMA, LOMA and all documentation associated with any of the foregoing for public inspection;
- m. Maintain documentation and data on the cost of any improvement to a structure in the floodplain in order to enforce the provisions of this ordinance pertaining to substantial improvements to such structures;
- n. Notify adjacent communities in writing 30 days prior to issuing a permit for the alteration or relocation of a watercourse.

Sec. 1003 Representative Capacity

In all cases when any action is taken by the Director or the Administrator, or his or her duly appointed designee, to enforce the provisions of this ordinance, such action shall be taken either in the name of the County or the certified community as the case may be, and neither the Director nor the Administrator, nor his or her designee, in so acting shall be rendered personally liable.

Sec. 1004 Oversight Committee

The corporate authorities of each community within the County shall establish an oversight committee to oversee the implementation and enforcement of this ordinance within its jurisdiction and to perform the duties assigned to the oversight committee in this ordinance. The oversight committee may be comprised of the corporate authorities or any committee thereof, plan commission, zoning board of appeals, or other existing body, or the corporate authorities may, according to their own rules and procedures, establish a separate oversight committee. The Land Use Committee shall act as the oversight committee for the County.

Sec. 1005 Non-Certified Communities

The Director may delegate the duties of the Administrator for Non-Certified Communities. The County may designate an Oversight Committee in these Non-Certified Communities.

Sec. 1006 Service

ARTICLE 10. ADMINISTRATION.

Unless otherwise provided herein, service of any notice or instrument under this ordinance may be made upon any person in one of the following manners:

- a. By Certified Mail/Return Receipt Requested, Postage prepaid & addressed to the address then on file for such person, if any, or if none, to such person's last known address; or
- b. By any method prescribed under the Illinois Code of Civil Procedure.

Sec. 1007 Publication

Unless otherwise provided herein, publication of any notice or other instrument under this ordinance shall be made by publishing such notice or other instrument once in a newspaper published within the community having jurisdiction over the matter to which the publication relates (or, if no newspapers published within the Community then a newspaper published in the County and having a general circulation within the Community), such publication being not less than fifteen or more than thirty days before the hearing or other event to which the publication relates.

ARTICLE 11. CERTIFIED COMMUNITY ENFORCEMENT.

Sec. 1100 Authority

Pursuant to Section 5-1062 of the Counties Code (55 ILCS 5/5 –1062 (1996), the provisions of this Ordinance shall not be enforced by the County in any Certified Community.

Sec. 1101 Petition for Certification and Waiver of Enforcement

Any community that desires to enforce the provisions of this Ordinance within its borders shall file a petition for certification and waiver of enforcement (“petition for certification”), on or before January 1, 2004. After January 1, 2004, petitions for such certification may be filed during the month of June of each year.

Sec. 1102 Filing and Contents of Petition for Certification

A petition for certification shall be filed with the Director. The petition need not be on any particular form but, at a minimum, shall set forth and be accompanied by:

- a. The agreement of the corporate authorities of the community to adopt, if certified, the provisions of this ordinance by reference;
- b. The community’s plan for the implementation and enforcing of this Ordinance, including proposed staffing;
- c. The agreement of the corporate authorities of the community to include in any new annexation agreement a provision requiring every other party to the agreement to affirmatively agree to comply with the provisions of this Ordinance as amended from time to time;
- d. The agreement of the corporate authorities of the community that the community will be bound by the rules and procedures of the Committee by which certification is granted or revoked and county jurisdiction is reasserted over the enforcement of this ordinance within the boundaries of the Community;
- e. The list of projects to which this Ordinance or some portion of this Ordinance do not apply (grand fathered projects) pursuant to the requirements of Article 8.

Sec. 1103 Committee Consideration of Petition for Certification

The Committee shall consider each properly filed petition for certification at a regular or special meeting called for such purpose not later than 60 days after the filing of the petition. The meeting may be continued from time to time. The Committee may adopt rules for the taking of evidence and conduct of such meetings.

Sec. 1104 Standards for Grant of Petition

Upon a finding of the committee that the community has complied with Sections 1101 and 1102, that the community’s plan for the implementation and enforcement of this ordinance is reasonably feasible, the Committee shall grant the petition for certification. The Committee’s decision shall be in writing, and shall specify the reasons for granting or denying the petition

Sec. 1105 Certified Community Records

1105.1 Every certified community shall maintain adequate records of every Stormwater Management Permit issued and every variance granted under this ordinance for development within its borders.

ARTICLE 11. CERTIFIED COMMUNITY ENFORCEMENT.

- 1105.2 Every certified Community shall retain record drawings of all structures erected or constructed pursuant to a Stormwater Management Permit issued or variance granted by such community.
- 1105.3 The records of each Certified Community maintained under this Ordinance may be periodically inspected by the Department.
- 1105.4 Every Certified Community shall report annually to the Director on forms provided by the Department regarding Stormwater Management Permits issued in the preceding year.

Sec. 1106 Committee Review of Enforcement by a Certified Community

The Committee shall periodically review the implementation and enforcement of this Ordinance by each Certified Community.

Sec. 1107 Investigations; Complaints

- 1107.1 The Director upon his own initiative or at the request of any person may conduct an investigation into a Certified Community's implementation and enforcement of this Ordinance. Such investigation may include, without limitation, making an inspection of all relevant records maintained by the Community and making field inspections of relevant developments, structures, or stormwater facilities. If, upon such investigation, the Director determines that the Community has failed in some significant way, or has repeatedly failed, to implement or enforce this Ordinance, then he shall prepare a report of his findings along with a complaint for the revocation or partial revocation of the Community's Certification and then file the same with the Committee. The complaint shall contain a short and plain statement describing how the Certified Community has failed in some significant way, or has repeatedly failed, to implement or enforce this Ordinance.
- 1107.2 Upon receipt of a written complaint, the Committee shall serve a copy thereof along with a copy of the report of the Director upon the Community named therein. A copy of the complaint and report shall also be sent to IDNR-OWR, FEMA, all Communities within the same watershed, and to any person who has requested an investigation of the Community's enforcement of this Ordinance by the Director within 6 months immediately preceding the filing of the complaint. The Community may file a written answer to the complaint within 30 days after being served.

Sec. 1108 Hearing on Complaint

The Committee shall conduct a hearing on the complaint not less than 45 nor more than 90 days after service of the complaint upon the Community. Notice of the hearing shall be given to the Community. The hearing may be continued from time to time. The Committee may adopt rules for the taking of evidence and conduct of such hearings.

Sec. 1109 Committee Decision

Within 30 days of the conclusion of the hearing, the Committee shall recommend to the County Board what action to be taken which may include whether or not to revoke in whole or in part the Certification of the Community. The recommendation of the Committee shall be in writing and shall include the specific findings and conclusions supporting its determination. The County Board shall decide appropriate remedies, and shall take any actions necessary to implement the remedies. A copy of the decision County Boards and order, if any, shall be served upon the Community. The decision of the County Board to revoke the Certification of the Community is final, subject only to the right of the community to reapply for certification at or after such time as the County shall specify in its order of revocation.

ARTICLE 12. PERFORMANCE SECURITY.

Sec. 1200 General Security Requirements

1200.1 As security to the County or the Certified Community for the performance by the developer of the developer's obligations to complete the construction of any stormwater facilities required by the Stormwater Management Permit, to pay all costs, fees and charges due from the developer pursuant to the permitting authorities of this Ordinance and to otherwise faithfully perform the developer's undertakings pursuant to this Ordinance or the applicable Certified Community Ordinance, the developer shall, prior to issuance of a Stormwater Management Permit:

- a. Post a development security as provided in Section 1201 of this Ordinance; and
- b. Post a sediment and erosion control security as provided in Section 1202 of this Ordinance, if a sediment and erosion control plan is required pursuant to Section 502 of this Ordinance.

1200.2 The developer shall bear the full cost and responsibility of securing and maintaining the securities required by this Section.

Sec. 1201 Development Security

1201.1 A development security shall be posted and shall include:

- a. A schedule, agreed upon by the developer and the Director or the Administrator, for the completion of the construction of any stormwater facilities required by the permit; and
- b. An irrevocable letter of credit, or such other adequate security as the Director or the Administrator may approve, in an amount equal to not less than one hundred ten percent (110%) of the estimated probable cost to complete the construction of any stormwater facilities required by the Stormwater Management Permit, which estimated probable cost shall be prepared by a Registered Professional Engineer and shall be approved by the Director or the Administrator. A corporations with a bond rating of "A" or higher from a major investment firm (i.e. Standard and Poor, Moody or equivalent) would be deemed to have adequate credit worthiness and thus is not required to post a Letter of Credit for projects that are not required to be located in public easements; and
- c. A statement signed by the applicant granting the Director or the Administrator the right to draw on the security and the right to enter the development site to complete required work in the event that work is not completed according to the work schedule; and
- d. A statement signed by the applicant that the applicant shall indemnify the Community and the Department for any additional costs incurred attributable to the concurrent activities of or conflicts between the applicant's contractor and the Community or Department's remedial contractor at the site.

1201.2 The security required by this Section shall be maintained and renewed by the applicant, and shall be held in escrow by the Director or the Administrator until the conditions set forth in this Section or other applicable provisions are satisfied.

1201.3 The Administrator may approve periodic reductions in the letter of credit based on progress of construction. However, not more than 90% of the security provided for in this section may be released prior to approval of record drawings and final inspection. A minimum of ten percent (10%) of the security shall be retained for a period of time not to exceed one year after completion of construction of all stormwater facilities required by the permit.

ARTICLE 12. PERFORMANCE SECURITY.

Sec. 1202 Sediment and Erosion Control Security

- 1202.1 If a sediment and erosion control plan is required pursuant to Section 502 of this Ordinance, then a sediment and erosion control security shall be required. Such a security shall include:
- a. An irrevocable letter of credit, or such other adequate security as the Director or the Administrator shall approve, in an amount equal to not less than one hundred ten percent (110%) of the estimated probable cost to install and maintain the sediment and erosion control measures, which estimated probable cost shall be approved by the Director or the Administrator; and
 - b. A statement signed by the applicant granting the Director or the Administrator, as applicable, the right to draw on the security and the right to enter the development site to complete sediment and erosion control measures in the event that such measures are not installed and/or maintained according to the established schedule.
- 1202.2 The security required by this Section shall be maintained and renewed by the applicant, and shall be held in escrow by the Director or the Administrator, as applicable, until the conditions set forth in this Section are satisfied.
- 1202.3 After completion of construction, establishment of vegetation, removal of all sediment from stormwater facilities, and final inspection and approval by the Director or Administrator, as applicable, one hundred percent (100%) of the sediment and erosion control security shall be released.

Sec. 1203 Letters of Credit

- 1203.1 Letters of credit posted pursuant to Sections 1200, 1201 and 1202 of this Ordinance shall be in a form satisfactory to the Director or the Administrator, as applicable.
- 1203.2 Each letter of credit shall be from a lending institution: (a) acceptable to the Director or the Administrator, as applicable; (b) having capital resources of at least ten million dollars (\$10,000,000), or such other amount acceptable to the Director or the Administrator; (c) with an office in the Chicago Metropolitan Area; and (d) insured by the Federal Deposit Insurance Corporation.
- 1203.3 Each letter of credit shall, at a minimum, provide that:
- a. It shall not be canceled without the prior written consent of the Director or the Administrator; and shall not expire without written notification of the Director or Administrator at least 45 days prior to expiration, and
 - b. It shall not require the consent of the developer prior to any draw on it by the Director or the Administrator; and
 - c. If at any time it will expire within 45 or any lesser number of days, and if it has not been renewed and the renewal submitted to the Director or the Administrator, and if any applicable obligation of the developer for which its security remains uncompleted or is unsatisfactory, then the Director or the Administrator may, without notice and without being required to take any further action of any nature whatsoever, call and draw down the letter of credit and thereafter either hold all proceeds as security for the satisfactory completion of all such obligations or employ the proceeds to complete all such obligations and reimburse the County or the Certified Community for any and all costs and expenses, including legal fees and administrative costs, incurred by the County or the Certified Community, as the Director or the Administrator shall determine.
- 1203.4 If at any time the Director or the Administrator determines that the funds remaining in the letter of credit are not, or may not be, sufficient to pay in full the remaining unpaid cost of all stormwater facility construction or sediment and erosion control measures, then, within ten (10) days following a demand by the Director or the Administrator, the developer shall increase the amount of the letter of credit to an amount determined by the Director or the Administrator to be sufficient to pay such unpaid costs. Failure

ARTICLE 12. PERFORMANCE SECURITY.

to so increase the amount of the security shall be grounds for the Director or the Administrator to draw down the entire remaining balance of the letter of credit.

- 1203.5 If at any time the Director or the Administrator determines that the bank issuing the letter of credit is without capital resources of at least ten million dollars (\$10,000,000), is unable to meet any federal or state requirement for reserves, is insolvent, is in danger of becoming any of the foregoing, or is otherwise in danger of being unable to honor such letter of credit at any time during its term, or if the Director or the Administrator otherwise reasonably deems the bank to be insecure, then the Director or the Administrator shall have the right to demand that the developer provide a replacement letter of credit from a bank satisfactory to the Director or the Administrator. Such replacement letter of credit shall be deposited with the Director or the Administrator not later than ten (10) days following such demand. Upon such deposit, the Director or the Administrator shall surrender the original letter of credit to the developer.
- 1203.6 If the developer fails or refuses to meet fully any of its obligations under this Ordinance or the applicable Certified Community Ordinance, then the Director or the Administrator may, in his or her discretion, draw on and retain all or any of the funds remaining in the letter of credit. The Director or the Administrator thereafter shall have the right to take any action he or she deems reasonable and appropriate to mitigate the effects of such failure or refusal, and to reimburse the County or the Certified Community from the proceeds of the letter of credit for all of its costs and expenses, including legal fees and administrative expenses, resulting from or incurred as a result of the developer's failure or refusal to fully meet its obligations under this Ordinance or the applicable Certified Community Ordinance. If the funds remaining in the letter of credit are insufficient to repay fully the County or the Certified Community for all such costs and expenses, and to maintain a cash reserve equal to the required letter of credit during the entire time such letter of credit should have been maintained by the developer, then the developer shall, upon demand of the Director or the Administrator therefore, immediately deposit with the Director of the Administrator such additional funds as the Director or the Administrator determines are necessary to fully repay such costs and expenses and to establish such cash reserve.

ARTICLE 13. FEE-IN-LIEU OF ON-SITE DETENTION.

Sec. 1300 Fee-in-Lieu of On-Site Detention

1300.1 The Director or the Administrator may require the payment of a fee-in-lieu of on-site detention to fulfill all or part of the on-site detention requirement for a development. Fee-in-lieu of on-site detention shall be the lesser of:

- a. The fee computed for each acre-foot or part thereof of detention required and approved in accordance with the procedures and schedules as approved and adopted by the County or the Certified Community; or
- b. The estimated construction cost, as approved by the County or the Certified Community of the applicant's proposed and approved on-site detention, including land costs.

1300.2 The following fee-in-lieu of detention procedures apply to communities with adopted procedures for requiring and collecting fee-in-lieu of revenues for detention requirements:

- a. The Director or the Administrator may require, or the applicant may submit, a written request for the payment of a fee-in-lieu of on-site detention to fulfill all or part of the on-site detention requirement in accordance with Section 200.2 a request for fee-in-lieu of on-site detention shall be either rejected or approved within forty five (45) days of the written request unless additional engineering studies are required.
- b. Approval of a request for fee-in-lieu of on-site detention on a development site shall be determined by the Director or the Administrator.
- c. A fund will be maintained by the Certified Community or the County for Non-Certified Communities for each of the major watersheds for the purpose of identifying and controlling all revenues and expenses related to stormwater drainage services resulting from fee-in-lieu of on-site detention approvals. All monies collected for fee-in-lieu of on-site detention shall be deposited in these funds and may only be used for purposes related to stormwater management as noted in Section 1300.2(d).
- d. Fee-in-lieu of on-site detention revenues from development site may be used to plan, design or construct an upgrade to existing or future stormwater management systems if the upgrade is consistent with a basin plan, floodplain study or stormwater system improvement that has been approved by the County for Non-Certified Communities or the community elected board of officials in a Certified Community.