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Ron Kinsinger  Kankakee County Homebuilders Association
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Steve Marion  Kankakee County Homebuilders Association
Bob Voss  Village of Herscher

Administrative and Technical Assistance Staff

Mike VanMill, AICP  Kankakee County Planning Department
Brian Billingsley, AICP  Kankakee County Planning Department
Kent Sims  NRCS
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SECTION ONE
GENERAL PROVISIONS

Section One, Article I. – Authority, Purpose, Abbreviations & Definitions

A. Introduction
These Regulations provide for the regulation of matters relative to the management of storm water within the jurisdiction and its extraterritorial jurisdiction to provide no adverse impact on neighboring property owners. Its provisions include, but are not limited to, regulating drainage installations and improvements, requiring the preservation and enhancement of certain natural environmental features, requiring the installation of drainage improvements in developments, regulating uses, maintenance, and activities in floodplains and flood hazard areas, requiring permits, payment of fees and assurances of completion, and providing for inspections and control of work. The requirements, standards and specifications herein provided, and as written and illustrated in the current technical manual, are in addition to any other applicable legal requirements.

B. Authority

1. This ordinance shall be known, and may be cited, as the Kankakee County Stormwater Management Ordinance.

2. Kankakee County adopts this ordinance pursuant to its authority to regulate stormwater management and govern the location, width, course, and release of all stormwater runoff channels, streams, and basins in the County, and in accordance with the Kankakee County Comprehensive Countywide Stormwater Management Plan. The statutory authority for this ordinance is contained in 55 ILCS 5/5-1041, 5-1042, 5-1043, 5-1049, 5-1062.2, 5-1063, 5-1104, 5-12003, 5-15001 et seq., 415 ILCS 5/43, the Federal Water Pollution Control Act including Sec. 402(p) (commonly known as the Clean Water Act), the Federal Register, and other applicable authority, all as amended from time to time.

3. As applicable, the municipalities within the County may adopt and enforce this ordinance pursuant to 55 ILCS 5/5-1062.2, 65 ILCS 5/1-2-1, 11-12-12, 11-30-2, 11-30-8, and 615 ILCS 5/5, et seq., including 5/18g.

C. Purposes

1. To maintain and improve the quality of water impacted by the storm drainage system within the jurisdiction.

2. To promote and protect the public health, safety and general welfare of the citizens from the hazards of flooding.

3. To create a set of fair and consistent standards that will facilitate desirable and sustainable development.
4. To protect and conserve the natural resources.

5. To preserve property values by protecting new and existing buildings and improvements to buildings from damage due to stormwater flow.

6. To assure that new developments and redevelopments do not increase flood or drainage hazards to others, or create unstable conditions susceptible to erosion.

7. To preserve the natural characteristics of stream corridors in order to moderate flood and stormwater impacts and to protect water quality.

8. To prevent the discharge of contaminated stormwater runoff and illicit discharges from industrial, commercial, residential, and construction sites into the storm drainage system.

9. To promote public awareness of the hazards involved in the improper discharge of trash, yard waste, lawn chemicals, pet waste, wastewater, oil, petroleum products, cleaning products, paint products, hazardous waste, sediment and other pollutants into the natural and man-made storm drainage system.

10. To encourage recycling of used motor oil and safe disposal of other hazardous consumer products.

11. To facilitate compliance with state and federal standards and permits by owners of construction sites within the jurisdiction.

12. To enable the jurisdiction to comply with all current federal and state laws and regulations applicable to the National Pollutant Discharge Elimination System (NPDES) permitting requirements for stormwater discharges and prepare for future requirements.

13. To prevent additional disruption of the economy and governmental services due to stormwater and flood drainage.

14. To protect the public from the degradation of water quality on a watershed basis and enhance the quantity and quality of potable groundwater and surface water supplies.

15. To protect the quantity and quality of wetlands.

16. To require the design and evaluation of each site stormwater management plan to be consistent with watershed capacities.

17. To require regular, planned maintenance of stormwater management facilities.

18. To encourage cooperation and consistency in stormwater management activities between units of government having floodplain and stormwater jurisdiction.
19. To lessen the taxpayer’s burden for flood related disasters, repairs to flood damaged public facilities and utilities, and flood rescue and relief operations.

20. To restrict development and building to facilities that will not adversely affect the potential for flood damage.

21. To require appropriate and adequate provision for site runoff control, especially when the land is developed with a large amount of impervious surface.

D. **Abbreviations**

The following abbreviations when used in this Ordinance shall have the designated meanings:

- BMP – Best Management Practices
- BFE - Base Flood Elevation
- CFR – Code of Federal Regulations
- CWA - Clean Water Act
- FEMA – Federal Emergency Management Agency
- FIRM - Flood Insurance Rate Map
- HHW – Household Hazardous Waste
- IDNR - Illinois Department of Natural Resources
- IDPH – Illinois Department of Public Health
- EPA - U.S. Environmental Protection Agency
- IEPA – Illinois Environmental Protection Agency
- MS4 – Municipal Separate Storm Sewer System
- NPDES – National Pollutant Discharge Elimination System
- NRCS – Natural Resources Conservation Service (formerly SCS)
- SCS - Soil Conservation Service (now NRCS)
- SWCD – Soil and Water Conservation District
- SWP3 – Storm Water Pollution Prevention Plan
- USACE - US Army Corps of Engineers
- USDA – U.S. Department of Agriculture
- USEPA – U.S. Environmental Protection Agency

E. **Definitions**

Unless a provision explicitly states otherwise, the following terms and phrases as used in this Ordinance, shall have the meanings hereinafter designated.

1. **Adverse Impacts** are any negative impact on plant, soil, air or water resources affecting quality and quantity and their beneficial uses including recreation, aesthetics and aquatic habitat.

2. **Agricultural Practices** are normal farming, silviculture and ranching activities such as gardening, plowing, seeding, cultivating, harvesting for the production of food, fiber, forest products, nursery stock and livestock. Maintenance of agricultural drain tiles, irrigation and drainage ditches, farm roads and other access areas for farm vehicles and equipment use.
are also included. These practices shall not include grading, filling or draining floodprone areas with greater than 100 acres of tributary area or a regulatory wetland.

3. **Applicant** is 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 new development, additions or reconstruction of structures, or re-development from the jurisdiction.

4. **Appropriate Official** is the Kankakee County Planning Director or his/her designee.

5. **Base Flood Elevation** (BFE) is the elevation shown on the Flood Insurance Rate Map for Zone AE, AH, A1-A30, AR, AR/A, AR/AE, AR/A1-A30, AR/AH, AR/AO, that indicates the water surface elevation resulting from a flood that has a 1% chance of equaling or exceeding that level in any given year.

6. **Best Management Practices (BMPs)** here refers to management practices and methods to control pollutants in stormwater. BMPs are of two types: “source controls” (nonstructural) and “treatment controls” (structural.) Source controls are practices that prevent pollution by reducing potential pollutants at their source, before they come into contact with stormwater. Treatment controls partially remove pollutants from stormwater. The selection, application and maintenance of BMPs must be sufficient to prevent or reduce the likelihood of pollutants entering the storm drainage system. Specific BMPs may be imposed by the jurisdiction and are discussed further in Section 3.

7. **Buffer** is an area of predominately vegetated land to be left open adjacent to channels, wetlands, lakes, ponds, or other surface waters for the purpose of eliminating or minimizing adverse effects to such areas, stabilizing banks, reducing contaminants, including sediments, in stormwater that flows to such areas.

8. **Building Official** is the officer or other designated authority charged with the administration and enforcement of the building codes and regulations.

9. **Building Permit** is a permit issued by the jurisdiction for the construction, erection or alteration of a structure or building and the related ground and surface preparation prior to and after completion of construction, erection or alteration of a structure or building.

10. **Certify or Certification** means formally attesting that the specific inspections and tests were performed, and that such inspections and tests comply with the applicable requirements of this Ordinance.

11. **Channel** is any defined river, stream, creek, brook, natural or artificial depression, ponded area, on-stream lake or impoundment, abandoned mine, flowage, slough, ditch, conduit, culvert, gully, ravine, wash, or natural or manmade drainageway, that has a definite bed and bank or shoreline, in or into which surface or groundwater flows, either perennially or intermittently.
12. **Channel Modification** is the alteration of a channel by changing the physical dimensions or materials of its bed or banks. Channel modification includes damming, riprapping (or other armoring), filling, widening, deepening, straightening, relocating, lining, and significant removal of bottom or woody rooted vegetation.

13. **Clearing** is any activity, which removes the natural vegetative ground cover.

14. **Commercial** means pertaining to any business, trade, industry, or other activity engaged in for profit.

15. **Compensatory Storage** shall be considered hydraulically equivalent when it maintains the existing storage capacity between the normal water level and ten-year high water level and between the ten year high water level and the 100-year high water level.

16. **Conduit** is any channel, pipe, sewer or culvert used for the conveyance or movement of water, whether open or closed.

17. **Construction Site** means any location where clearing, grading, excavation, filling, or other construction activity occurs.

18. **Contaminated** means containing harmful quantities of pollutants.

19. **Contractor** means any person or firm performing or managing construction work at a construction site, including any construction manager, general contractor or subcontractor. Also includes, but is not limited to, earthwork, paving, building, plumbing, mechanical, electrical or landscaping contractors, and material suppliers delivering materials to the site.

20. **Control Structure** is a structure designed to control the rate of flow that passes through the structure, given a specific upstream and downstream water surface elevation.

21. **County** is the County of Kankakee, Illinois.

22. **Dam** is defined by the IDNR.

23. **Detention Basin** is a facility constructed or modified to provide for the temporary storage of stormwater runoff and the controlled release of this runoff at a prescribed rate during and after a flood or storm.

24. **Development** is any manmade change to real estate or property, including:

   a. The division or subdivision of any duly recorded parcel of property.
   b. Construction, reconstruction or placement of a building or any addition to a building valued at more than one thousand dollars ($1000).
   c. Installation of 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 per year.
d. Construction of roads, bridges, or similar projects.
e. Redevelopment of a site.
f. Filling, dredging, grading, clearing, excavating, paving drilling, mining or other non-agricultural disturbance of a ground surface.
g. Storage of materials or deposit of solid or liquid waste.
h. Any other activity that might alter the magnitude, frequency, direction, or velocity of stormwater flows from a property.

25. **Discharge** means any addition or releases of any pollutant, stormwater or any other substance whatsoever into storm drainage system.

26. **Discharger** means any person who causes, allows, permits, or is otherwise responsible for, a discharge, including, without limitation, any owner of a construction site or industrial facility.

27. **Domestic Sewage** means untreated sewage originating primarily from kitchen, bathroom and laundry sources, including waste from food preparation, dishwashing, garbage grinding, toilets, baths, showers and sinks.

28. **Drainage Plan** is a plan, including engineering drawings and supporting calculations, which describes the existing stormwater drainage system and environmental features, including grading, as well as proposed alterations or changes to the drainage system and environment of a property. The jurisdiction may require that a Drainage Plan include upstream and downstream (offsite) drainage features, if it is found that the development would be impacted by these offsite features.

29. **Dry Bottom Detention Basin** is a facility designed to drain after temporary storage of stormwater flows and to normally be dry between runoff events.

30. **Earthwork** means the disturbance of soils on a site associated with clearing, grading, or excavation activities.

31. **Erosion** is the general process whereby soil or earth is moved by rainfall, flowing water, wind or wave action.

32. **Event** is a short duration hydrologic occurrence, such as a period of rainfall or elevated streamflow, that is brief in duration allowing certain hydrologic components, such as evaporation and arrival times of rainfall, to be neglected. A storm event is normally limited to ten days or less.

33. **Excavation** is any act by which organic matter, earth, sand, gravel, rock or any other similar material, is cut into, dug, quarried, uncovered, removed, displaced, re-located or bulldozed and shall include the conditions resulting from such actions.

34. **Facility** means any building, structure, installation, process, or activity from which there is or may be a discharge of a pollutant.
35. **Fertilizer** means a substance or compound that contains an essential plant nutrient element in a form available to plants and is used primarily for its essential plant nutrient element content in promoting or stimulating growth of a plant or improving the quality of a crop, or a mixture of two or more fertilizers.

36. **Fill** is any act by which earth, sand, gravel, rock, or any other material, is deposited, placed, replaced, pushed, dumped, pulled, transported or moved by man to a new location and shall include the conditions resulting therefrom.

37. **Floodplain** means those lands within the jurisdiction that are subject to inundation by the base flood. The floodplains of the jurisdiction are generally identified as such on the Flood Insurance Rate Maps of the jurisdiction prepared by FEMA.

38. **Garbage** means putrescible animal and vegetable waste materials from the handling, preparation, cooking, or consumption of food, including waste materials from markets, storage facilities, and the handling and sale of produce and other food products.

39. **Grading** is the excavation or fill or any combination thereof and shall include the conditions resulting from any excavation or fill.

40. **Groundwater** means any water residing below the surface of the ground or percolating into or out of the ground.

41. **Harmful Quantity** means the amount of any substance that the appropriate official determines will cause an adverse impact to storm drainage system or will contribute to the failure of the jurisdiction to meet the water quality based requirements of the NPDES permit for discharges from the regulated MS4.

42. **Hazardous Substance** means any substance listed in Table 302.4 of 40 CFR Part 302.

43. **Hazardous Waste** means any substance identified or listed as a hazardous waste by the EPA pursuant to 40 CFR Part 261.

44. **Household Hazardous Waste (HHW)** means any material generated in a household (including single and multiple residences) that would be classified as hazardous pursuant to the Illinois EPA.

45. **Hydraulically Equivalent** is compensatory storage maintains the existing storage capacity between the normal water level and the ten-year high water level and between the ten year high water level and the 100-year high water level.

46. **Hydrograph** is a graph or tabulation showing for a given location on a stream or conduit, the flow rate with respect to time.

47. **Hydrograph Method** This method estimates runoff volume and runoff hydrographs for the points of interest by generating hydrographs for individual subareas, combining them, and
routing them through channels, floodplains, and reservoir structures. Factors such as rainfall depth and temporal distribution, rainfall abstractions, time of concentration, land use characteristics, storage volumes and travel time are included.

48. **Illegal Discharge** See “Illicit Discharge” below.

49. **Illicit Connection** means any drain or conveyance, whether on the surface or subsurface, which allows an illicit discharge to enter the storm drainage system.

50. **Illicit Discharge** means any discharge to the storm drainage system that is prohibited under this Ordinance.

51. **Impervious Surface** is that area of property that is covered by materials other than soil and vegetation and that has no intended capacity to absorb stormwater or does not readily absorb or retain water, including but not limited to parking lots, roadways, driveways, sidewalks, patios, tennis courts, roofs and other structures.

52. **Industrial Waste** (or commercial waste) means any wastes produced as a by-product of any industrial, institutional or commercial process or operation, other than domestic sewage.

53. **Infiltration** is the passage or movement of water into the soil.

54. **Jurisdiction** means the jurisdiction of Kankakee County, IL.

55. **Lot** is an individual platted parcel in an approved subdivision.

56. **Major Drainage System** is that portion of a drainage system needed to store and convey flows beyond the capacity of the minor drainage system. Major Drainage System components include, but are not limited to, detention ponds, dams, roadway culverts, bridges, medium or large open channels, large (trunk) storm sewers and natural overland paths. Major Drainage System components are to be designed to safely convey the 100-year recurrence interval storm event.

57. **Mechanical Fluid** means any fluid used in the operation and maintenance of machinery, vehicles and any other equipment, including lubricants, antifreeze, petroleum products, oil and fuel.

58. **Minor Drainage System** is that portion of a drainage system designed for the convenience of the public. It consists of street gutters, storm sewers, small open channels, and swales and, where manmade, is to be designed to safely convey the 10-year recurrence interval storm discharge.

59. **Mitigation** is when the prescribed controls are not sufficient and additional measures are required to offset the development, including those measures necessary to minimize the negative effects which stormwater drainage and development activities might have on
the public health, safety and welfare. Examples of mitigation include, but are not limited to compensatory storage, soil erosion and sediment control, channel restoration and wetland creation, enhancement, and restoration.

60. **Mobile Commercial Cosmetic Cleaning** (or mobile washing) means power washing, steam cleaning, and any other method of mobile cosmetic cleaning, of vehicles and/or exterior surfaces, engaged in for commercial purposes or related to a commercial activity.

61. **Municipal Separate Storm Sewer System (MS4)** means the public system of conveyances, including roads, streets, curbs, gutters, ditches, inlets, drains, catch basins, pipes, tunnels, culverts, channels, detention basins and ponds owned and operated by the jurisdiction and designed or used for collecting or conveying stormwater, and not used for collecting or conveying sanitary sewage.

62. **Natural** are conditions existing prior to agricultural development resulting from physical, chemical, and biological processes without intervention by man.

63. **Natural Drainage** consists of channels formed in the existing surface topography of the earth prior to or after changes made by unnatural causes.

64. **National Pollutant Discharge Elimination System (NPDES)** is the name of the surface water quality program authorized by Congress as part of the 1987 Clean Water Act. This is the EPA’s program to control the discharge of pollutants to the waters of the United States (see 40 CFR 122.2 as amended).

65. **NPDES Permit** means a permit issued by the IEPA that authorizes the discharge of pollutants to Waters of the United States, whether the permit is applicable to an individual, group, or general area-wide basis.

66. **Notice of Violation** means a written notice detailing any violations of this Ordinance and any action expected of the violators.

67. **Oil** means any kind of oil in any form, including, but not limited to: petroleum, fuel oil, crude oil, synthetic oil, motor oil, cooking oil, grease, sludge, oil refuse, and oil mixed with waste.

68. **One Hundred-Year Event** is a rainfall, runoff, or flood event having a one percent (1%) probability of being equaled or exceeded in any given year.

69. **Owner** means the person or entity who owns a facility, part of a facility, or land. This includes contiguous lots or parcels of land owned in part or whole by the same property owner.

70. **Parcel** is a contiguous lot or tract of land under single ownership. A lot or tract of land is land intended as a unit for the purpose of development or transfer of ownership.
71. **Peak Flow** is the maximum rate of stormwater flow, for a given storm event, at a given point in a channel or conduit.

72. **Permittee** is any person to whom a building permit or a grading and drainage permit is issued.

73. **Person** means any individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, governmental entity, or any other legal entity; or their legal representatives, agents, or assigns, including all federal, state, and local governmental entities.

74. **Pesticide** means a substance or mixture of substances intended to prevent, destroy, repel, or migrate any pest.

75. **Pet Waste (or Animal Waste)** means excrement and other waste from domestic animals.

76. **Petroleum Product** means a product that is obtained from distilling and processing crude oil and that is capable of being used as a fuel or lubricant in a motor vehicle or aircraft, including motor oil, motor gasoline, gasohol, other alcohol blended fuels, aviation gasoline, kerosene, distillate fuel oil, and #1 and #2 diesel.

77. **Pollutant** means any substance attributable to water pollution, including but not limited to rubbish, garbage, solid waste, litter, debris, yard waste, pesticides, herbicides, fertilizers, pet waste, animal waste, domestic sewage, industrial waste, sanitary sewage, wastewater, septic tank waste, mechanical fluid, oil, motor oil, used oil, grease, petroleum products, antifreeze, surfactants, solvents, detergents, cleaning agents, paint, heavy metals, toxins, household hazardous waste, small quantity generator waste, hazardous substances, hazardous waste, soil and sediment.

78. **Pollution** means the alteration of the physical, thermal, chemical, or biological quality of, or the contamination of, any water that renders the water harmful, detrimental, or injurious to humans, animal life, plant life, property, or public health, safety, or welfare, or impairs the usefulness or the public enjoyment of the water for any lawful or reasonable purpose.

79. **Positive Drainage** is provision for overland paths for all areas of a property including depressional areas that may also be drained by storm sewer.

80. **Potable Water** means water that has been treated to drinking water standards and is safe for human consumption.

81. **Private Drainage System** means all privately or publicly owned ground, surfaces, structures or systems, excluding the regulated MS4, that contribute to or convey stormwater, including but not limited to, roofs, gutters, downspouts, lawns, driveways, pavement, roads, streets, curbs, gutters, ditches, inlets, drains, catch basins, pipes,
tunnels, culverts, channels, detention basins, ponds, draws, swales, streams and any ground surface.

82. **Release** means to dump, spill, leak, pump, pour, emit, empty, inject, leach, dispose or otherwise introduce into the storm drainage system.

83. **Retention Basin or Facility** is a facility constructed or modified to store stormwater runoff without release except by means of infiltration and evaporation and without a positive flow outlet.

84. **Rubbish** means non-putrescible solid waste, excluding ashes, that consist of: (A) combustible waste materials, including paper, rags, cartons, wood, excelsior, furniture, rubber, plastics, yard trimmings, leaves, and similar materials; and (B) noncombustible waste materials, including glass, crockery, tin cans, aluminum cans, metal furniture, and similar materials that do not burn at ordinary incinerator temperatures (1600 to 1800 degrees Fahrenheit).

85. **Runoff** is water derived from melting snow or rainfall within a tributary drainage basin that exceeds the infiltration capacity of the soils of that basin.

86. **Sanitary Sewage** means the domestic sewage and/or industrial waste that is discharged into the jurisdiction sanitary sewer system and passes through the sanitary sewer system to the jurisdiction sewage treatment plant for treatment.

87. **Sanitary Sewer** means the system of pipes, conduits, and other conveyances which carry industrial waste and domestic sewage from residential dwellings, commercial buildings, industrial and manufacturing facilities, and institutions, whether treated or untreated, to the jurisdiction sewage treatment plant (and to which stormwater, surface water, and groundwater are not intentionally admitted).

88. **Sediment** means soil, sand, minerals, or other debris that has been disturbed or eroded and transported by water, wind, gravity, or tracked by equipment tires.

89. **Sedimentation** is the process that deposits soils, debris, and other materials either on other ground surfaces or in bodies of water or stormwater drainage systems.

90. **Septic Tank Waste** means any domestic sewage from holding tanks such as vessels, chemical toilets, campers, trailers, septic tanks and aerated tanks.

91. **Shall** means mandatory; **may** means discretionary.

92. **Site** means the land or water area where any facility or activity is physically located or conducted, including adjacent land used in connection with the facility or activity.

93. **Slope Disturbance Line** is the line that delineates relatively level building areas from areas where slopes exceed 7 percent (7%) and where special precautions must be taken.
94. Small Quantity Generator Waste means any hazardous waste generated by a small quantity generator as defined by the IEPA.

95. Solid Waste means any garbage, rubbish, refuse and other discarded material, including solid, liquid, semisolid, or contained gaseous material, resulting from industrial, municipal, commercial, construction, mining or agricultural operations, and residential, community and institutional activities.

96. State means the State of Illinois.

97. Storm Drainage System means all surfaces, structures and systems that contribute to or convey stormwater, including private drainage systems, the MS4, surface water, groundwater, Waters of the State and Waters of the United States.

98. Storm Sewer is a closed conduit for conveying collected stormwater.

99. Stormwater means runoff resulting from precipitation and snowmelt.

100. Storm Water Pollution Prevention Plan (SWP3) means a document that describes the Best Management Practices to be implemented at a site, to prevent or reduce the discharge of pollutants.

101. Stream is any river, creek, brook, branch, flowage, ravine, or natural or man-made drainageway that has a definite bed and banks or shoreline, in or into which surface or groundwater flows, either perennially or intermittently.

102. Stripping is any activity that removes the vegetative surface cover including tree removal, by spraying or clearing, and storage or removal of topsoil.

103. Subdivision Development includes activities associated with the platting of any parcel of land into two or more lots and includes all construction activity taking place thereon.

104. Surface Water means water bodies and any water temporarily residing on the surface of the ground, including wetlands, lakes, reservoirs, rivers, ponds, streams, puddles, channelized flow and runoff.

105. Swale is a low lying or depressed area and often wet stretch of land that carries water mainly during rainstorms or snow melts by conveying stormwater from one point to another.

106. Time of Concentration is the elapsed time for stormwater to flow from the most hydraulically remote point in a drainage basin to a particular point of interest in that watershed.

107. Two-Year Event is a runoff, rainfall, or flood event having a fifty percent (50%) probability of being equaled or exceeded in any given year.
108. **Uncontaminated** means not containing harmful quantities of pollutants.

109. **Used Oil (or Used Motor Oil)** means any oil that as a result of use, storage, or handling, has become unsuitable for its original purpose because of impurities or the loss of original properties.

110. **Utility Agency** means private utility companies, jurisdiction departments or contractors working for private utility companies or jurisdiction departments, engaged in the construction or maintenance of utility distribution lines and services, including water, sanitary sewer, storm sewer, electric, gas, telephone, television and communication services.

111. **Wastewater** means any water or other liquid, other than uncontaminated stormwater, discharged from a facility.

112. **Water of the State (or water)** means any groundwater, percolating or otherwise, lakes, bays, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, marshes, inlets, canals, inside the territorial limits of the State, and all other bodies of surface water, natural or artificial, navigable or non-navigable, and including the beds and banks of all water courses and bodies of surface water, that are wholly or partially inside or bordering the State or inside the jurisdiction of the State.

113. **Waters of the United States** means all waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and the flow of the tide; all interstate waters, including interstate wetlands; all other waters the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce; all impoundments of waters otherwise defined as waters of the United States under this definition; all tributaries of waters identified in this definition; and any waters within the federal definition of “Waters of the United States” at 40 CFR Section 122.2; but not including any waste treatment systems, treatment ponds, or lagoons designed to meet the requirements of the Federal Clean Water Act.

114. **Watershed** is all land area drained by, or contributing water to, the same channel, lake, marsh, stormwater facility, groundwater or depressional area.

115. **Wet Bottom Detention Basin** is a detention facility designed to maintain a permanent pool of water after the temporary storage of stormwater runoff.

116. **Wetland** is an area that is inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, under normal conditions, a prevalence of vegetation adapted for life in saturated soil conditions.

117. **Wetland Detention Basin** is a detention facility designed with all or a portion of its bottom area as a wetland.
118. **Yard Waste** means leaves, grass clippings, tree limbs, brush, soil, rocks or debris that result from landscaping, gardening, yard maintenance or land clearing operations.
Section One, Article II – Prohibited Actions

A. Surface Water
Surface water shall be allowed to travel its existing or natural course unless changes are allowed by means of a Grading and Drainage Permit or grading and drainage plans approved by the appropriate official (70 ILCS 605/Sec. 1/Art. 2).

B. Easements
No buildings or permanent structures, including impervious surfaces, may be placed wholly or in part within an easement that has been granted for drainage facilities of any type or access thereto, including agricultural drainage conduit, without the written approval of the appropriate official or easement holder; provided, however, streets, sidewalks and driveways may be allowed to cross easements by the shortest possible route, provided that other requirements are met.

C. Obstruction of Watercourse
It shall be unlawful for any person to cause or maintain any obstruction within a watercourse or drainage facility of any type, except as may be specifically authorized by this Ordinance.

D. Discharge
No person shall release or cause to be released into the storm drainage system any discharge that is not composed entirely of uncontaminated stormwater, except as allowed in listed exemptions of this Ordinance.

E. Exempted Discharges
The following discharges are exempt from the regulations in this Ordinance:

1. Water line and fire hydrant flushing.
2. Landscape and lawn watering.
3. Rising ground waters.
4. Uncontaminated ground water exfiltration, infiltration, or seepage.
5. Uncontaminated pumped ground water.
6. Discharges from potable water sources (de-chlorinated or de minimus discharge only).
7. Uncontaminated foundation drains.
8. Air conditioning condensate.
10. Springs and seeps.
11. Water from crawl space pumps.
12. Footing drains.
13. Water from individual car washing on properties zoned residential.
14. Routine external building wash-down which does not use detergents.
15. Natural flows from riparian habitats and wetlands.
17. Residual street wash water.
18. Discharges or flows from fire fighting activities.
20. Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed).

F. Contaminated Discharge
Notwithstanding the listed exemptions of this section, any discharge shall be prohibited by this Ordinance if the discharge in question has been determined by the appropriate authority to be contaminated by a harmful quantity of pollutants to the storm drainage system.

The construction, use, maintenance or continued existence of illicit connections to the storm drainage system is prohibited. This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.

G. Line Connect
No person shall connect a line conveying sanitary sewage, domestic sewage or industrial waste, to the storm drainage system, or allow such a connection to continue.

H. Interference
No person shall interfere with Best Management Practices (BMPs) implemented pursuant to this Ordinance.
Section One, Article III. – Requirements For Certain Discharges

A. Private Drainage System Maintenance
The owner of any private drainage system shall maintain the system in accordance with applicable permits to prevent or reduce the discharge of pollutants. This maintenance shall include, but is not limited to, sediment removal, bank erosion repairs, maintenance of vegetative cover, and removal of debris from pipes and structures.

B. Cleaning of Paved Surfaces Required
The owner of any paved parking lot, street or drive shall clean the pavement as required to prevent the buildup and discharge of pollutants. The visible buildup of mechanical fluid, waste materials, sediment or debris is a violation of this Ordinance. Paved surfaces shall be cleaned by dry sweeping, wet vacuum sweeping, collection and treatment of wash water or other methods in compliance with this Ordinance. This section does not apply to pollutants discharged from construction activities, which are otherwise specified.

C. Mobile Commercial Cosmetic Cleaning Operations
Mobile commercial cosmetic cleaning operations shall not discharge to the storm drainage system in violation of this Ordinance.

D. Maintenance of Equipment
Any leak or spill related to equipment maintenance in an outdoor, uncovered area shall be contained to prevent the potential release of pollutants. Vehicles, machinery and equipment must be maintained to reduce leaking fluids.

E. Materials Storage
In addition to other requirements of this Ordinance, materials shall be stored to prevent the potential release of pollutants. The uncovered, outdoor storage of unsealed containers of hazardous substances is prohibited.

F. Pet Waste
Pet waste shall be disposed of as solid waste or sanitary sewage in a timely manner, to prevent discharge to the storm drainage system.

G. Pesticides, Herbicides, Insecticides, Fungicides and Fertilizers
Pesticides, herbicides, insecticides, fungicides, and fertilizers shall be applied in accordance with manufacturer recommendations and applicable laws. There shall be no excessive application.

H. Prohibition on Use of Pesticides, Herbicides, Insecticides and Fungicides Banned from Manufacture
Use of any pesticide, herbicide, insecticide or fungicide, the manufacture of which has been either voluntarily discontinued or prohibited by the U.S. or Illinois Environmental Protection Agency, or any Federal, State or jurisdiction regulation is prohibited.
I. **Open Drainage Channel Maintenance**

Every person owning or occupying property through which an open drainage channel passes shall keep and maintain that part of the drainage channel within the property free of trash, debris, excessive vegetation and other obstacles that would pollute, contaminate, or retard the flow of water through the drainage channel. In addition, the owner or occupant shall maintain existing privately owned structures adjacent to a drainage channel, so that such structures will not become a hazard to the use, function, or physical integrity of the drainage channel. Physical modifications to the drainage channel, other than those necessary to remove debris and other obstacles, are prohibited without a Grading and Drainage Permit and the other applicable permits.

J. **Release Reporting and Cleanup**

Any person responsible for a known or suspected release of materials which are resulting in or may result in illegal discharges to the storm drainage system shall take all necessary steps to ensure the discovery, containment, abatement and cleanup of such release.

In the case of environmental emergencies involving oil or hazardous materials releases, fish kills caused by pollutants, or public water supplies immediately contact the Illinois EPA office of Emergency Response at (217) 782-7860 and the National Response Center at (800) 424-8802 or (202) 267-2675.

This is in addition to other legal reporting requirements. Hazardous waste releases shall be avoided.

K. **Authorization to Adopt and Impose Best Management Practices**

Kankakee County may adopt and impose requirements identifying Best Management Practices (BMPs) for any activity, operation, or facility, which may cause a discharge of pollutants to the storm drainage system. Where specific BMPs are required, every person undertaking such activity or operation, or owning or operating such facility shall implement and maintain these BMPs at their own expense.
Section One, Article IV. – Inspections and Plan Modifications

A. Inspections
The Kankakee County Planning Director or his/her designee shall make periodic site visits and shall notify the Grading and Drainage Permit holder in the event that the work fails to comply with the requirements of this Ordinance. The notification of any deficiencies in the work or violations of this Ordinance shall be posted at the site and mailed to the owner of the site and permit holder by ordinary mail. Failure to issue a stop work order shall not be deemed consent by the jurisdiction to continue work nor acceptance of deficiencies nor violations.

The owner of the site shall notify the appropriate official:

1. Two (2) working days prior to the start of any land disturbing activities.
2. Upon completion of installation of sediment and runoff control measures (including perimeter controls and diversions), prior to proceeding with any other earth disturbance or grading.
3. After stripping and clearing.
4. After rough grading.
5. After seeding and landscaping deadlines.
6. After final stabilization and landscaping and prior to removal of temporary sediment controls.

B. Special Precautions
If at any stage of the grading of any development site the County Planning Director or his/her designee determines by site visit that the nature of the site is such that further work authorized by an existing permit is likely to imperil any property, public way, stream, lake, wetland, or drainage structure, the County shall require, as a condition of allowing the work to be done, that such reasonable special precautions to be taken as is considered advisable to avoid the likelihood of such peril. "Special precautions" may include, but shall not be limited to, a more level exposed slope, construction of additional drainage facilities, berms, terracing, compaction, or cribbing, installation of plant materials for erosion control, and recommendations of Certified Professional in Erosion and Sediment Control (CPESC) or registered Professional Engineer which may be made requirements for further work.

On large developments or where unusual site conditions occur, the owner shall submit a schedule to be approved by the Planning Director or his/her designee that shall specify the starting and completion times of required activity or may require that the operations be conducted in specific stages so as to ensure completion of protective measures or devices prior to the advent of seasonal conditions.
Where it appears that storm damage may result because the grading on any development site is not complete, work shall be stopped and the Grading and Drainage Permit holder required to install temporary structures or take such other measures as may be required to protect adjoining property or the public safety.

C. Amendment of Plans
Any significant amendments to grading plans or stormwater pollution prevention plans shall be submitted to the appropriate official of the jurisdiction and shall be processed and approved or disapproved in the same manner as the original plans. Any significant field modifications made without prior approval shall be a direct violation of this Ordinance.
**Section One, Article V. – Responsibility**

A. **Applicant**
   The applicant for a Grading and Drainage Permit shall not be relieved of any responsibility for damage to persons or property otherwise imposed by law.

B. **Jurisdiction**
   Kankakee County, the County Planning Director or his/her designee, or County agents, will not be made liable for such damage, by (1) the issuance of a Grading and Drainage Permit under this Ordinance, (2) compliance with the provisions of that Grading and Drainage Permit or conditions attached to it by the Planning Director or his/her designee (3) failure of the County to observe or recognize hazardous or unsightly conditions, (4) failure of County officials to recommend denial or to deny a Grading and Drainage Permit, (5) exemptions from Grading and Drainage Permit requirements of this Ordinance, or (6) failure to inspect.

   Kankakee County shall take into account storm and flood hazards, to the extent they are known or can be determined, in all official actions related to land management, land use and land development or redevelopment as required in the floodplain ordinance of Kankakee County.

   Kankakee County is not responsible for work stop/start, methods, or job safety.
Section One, Article VI. – Maintenance of Drainage Facilities

Kankakee County or other appropriate local unit of government will maintain those drainage facilities that are on public land and have been dedicated and accepted for maintenance or stipulated by agreement for maintenance by the jurisdiction. All other drainage facilities, when located on other than public property, shall be the responsibility of the owner of the property on which they exist or the owner of the drainage facility, regardless of whether or not dedicated easements exist over said facilities.

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and appropriate quality assurance procedures.

Abandonment and alteration, either structural or operational, of all facilities and systems shall occur only following application and issuance of a permit.

Operation and maintenance checklists in Appendix C shall be used to determine maintenance needs.
Section One, Article VII. – Enforcement

A. Procedures for Receipt and Consideration of Information by the Public
Kankakee County shall establish and publicize procedures for receipt and consideration of information regarding non-compliance of provisions in this Ordinance.

B. Right of Entry and Sampling
1. Whenever the Kankakee County Planning Director or his/her designee has cause to believe that there exists, or potentially exists, in or upon any premises any condition which constitutes a violation of this Ordinance, the said County official shall have the right to enter the premises at any reasonable time to determine if the discharger is complying with all requirements of this article. In the event that the owner or occupant refuses entry after a request to enter has been made, the jurisdiction is hereby empowered to seek assistance from a court of competent jurisdiction in obtaining such entry.

2. The Planning Director or his/her designee shall have the right to set up on the property of any discharger to the storm drainage system such devices that are necessary to conduct sampling of discharges.

C. Notice of Violation
Whenever an authorized enforcement person determines that a person has violated or failed to meet a requirement of this Ordinance, said County official will order compliance by written Notice of Violation to the responsible person and property owner. Posting the written notice on the property will constitute written notice. A copy of the Notice of Violation will be mailed by ordinary mail to the address of the responsible person and, if different than the responsible person, property owner according to the records of the Kankakee County Assessor’s Office.

The Notice of Violation shall include:

1. The name of the responsible person and property owner.

2. The date and location of the violation.

3. A description of the violation.

4. Actions that must be taken by the responsible person to remedy the violation.

5. The deadline within which the required actions must be completed.

6. Enforcement actions that may be taken by the jurisdiction.

7. Notice date.

8. Any person receiving a Notice of Violation may file a written appeal the Notice to the appropriate official within fifteen (15) days of the Notice date. The Planning Director or
his/her designee will affirm, modify or rescind the Notice in writing, within 15 days of the date of the appeal. If the recipient of a Notice of Violation is dissatisfied with the outcome of the appeal to the appropriate official, the appeal process outlined in Section One, Article 9, of this Ordinance will be followed.

D. Action without Notice of Violation
Enforcement actions identified in this Ordinance can be made by Kankakee County when necessary to stop an actual or threatened discharge that presents or may present imminent danger to the environment or property or to the health or welfare of persons or to the storm drainage system.

E. Enforcement Actions
Any person who fails to comply with or appeal a Notice of Violation, or fails to comply with an appeal decision of the appropriate authority, will be subject to one or more of the following enforcement actions:

1. Stop Work Order. The Planning Director or his/her designee may issue a stop work order to the owner and contractors on a construction site, by posting the order at the construction site and distributing the order to all jurisdiction departments whose decisions may affect any activity at the site. Unless express written exception is made, the stop work order shall prohibit any further construction activity at the site and shall bar any further inspection or approval necessary to commence or continue construction or to assume occupancy at the site. A Notice of Violation shall accompany the stop work order, and shall define the compliance requirements.

2. Abatement of an Illicit Connection. The Planning Director or his/her designee may order jurisdiction representatives to terminate an illicit connection. Any expense related to such abatement by jurisdiction representatives shall be fully reimbursed by the property owner.

3. Abatement of a Violation on Private Property. When a property owner is not available, not able or not willing to correct a violation, the Planning Director or his/her designee may order County representatives or agents to enter private property to take any and all measures necessary to abate the violation. It shall be unlawful for any person, owner, agent or person in possession of any premises to refuse to allow Kankakee County representatives to enter upon the premises for these purposes. Any expense related to such abatement by County representatives shall be fully reimbursed by the property owner.

4. Recovery of Costs. Within thirty (30) days after abatement by jurisdiction representatives, the Planning Director or his/her designee shall notify the property owner of the costs of abatement, including administrative costs, and the deadline for payment. The property owner may appeal the recovery costs as outlined in Section One, Article 9 of this Ordinance.

5. Termination of Utility Services. After lawful notice to the customer and property owner concerning the proposed disconnection, the Planning Director or his/her designee shall have the authority to order the disconnection of jurisdiction water, sanitary sewer and/or sanitation services, upon a finding by the County that the disconnection of utility services
will remove a violation of this Ordinance that poses a public health hazard or environmental hazard.

6. **Criminal Prosecution.** Any person who violates or continues to violate a prohibition or requirement of this Ordinance shall be liable to criminal prosecution to the fullest extent of the law, and shall be subject to criminal penalties.

**F. Criminal Penalties**

Any person violating this Ordinance shall, upon an adjudication of guilt or a plea of no contest, be fined a maximum of $1,000. Each separate day on which a violation is committed or continues shall constitute a separate offense.

Violations of this Ordinance by any person or entity shall be guilty of a petty offense.

**G. Other Legal Action**

Notwithstanding any other criminal or civil remedies or procedures available to the County, if any person violates this Ordinance, the Kankakee County States Attorney may commence an action for appropriate legal and equitable relief including damages and court costs. The States Attorney may seek an emergency preliminary or permanent injunction or both which restrains or compels the activities on the part of the discharger.

**H. Abrogation and Greater Restrictions**

This Ordinance is not intended to repeal, abrogate or impair any existing easements, covenants, or deed restrictions. Where this Ordinance and other ordinance, easements, covenants, or deed restrictions conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

**I. Separability**

The provisions and sections of this Ordinance shall be deemed separable and the invalidity of any portion of this Ordinance shall not affect the validity of the remainder.
Section One, Article VIII. – Implementation

This Ordinance is effective upon passage with the following exceptions:

A. Subdivision Improvements
   The requirements for obtaining a Grading and Drainage Permit are waived if the preliminary plat of a subdivision was approved by the appropriate authority prior to the passage of this Ordinance. All other requirements of the Ordinance shall remain in effect.

B. Non-Subdivision Improvements Requiring a Building Permit
   The requirements for obtaining a Grading and Drainage Permit for non-subdivision related improvements requiring a building are waived for the duration of the building permit if the building permit was issued prior to the passage of this Ordinance. All other requirements of the Ordinance shall remain in effect.

C. Improvements that Previously Did Not Require a Permit
   The requirements for obtaining a Grading and Drainage Permit for construction that did not require a permit prior to passage of this Ordinance are waived for a period of one (1) year if the construction commenced prior to the passage of this Ordinance. All other requirements of the Ordinance shall remain in effect.
Section One, Article IX. – Variances and Appeals

Kankakee County, after a public hearing, may: 1) Determine and vary the requirements and regulations of this Ordinance in harmony with their general purpose and intent, where the appropriate entity makes written findings of fact in accordance with the standards herein after prescribed and further, find that there are practical difficulties or particular hardships in the way of carrying out the strict letter of requirements and regulations of this Ordinance and 2) Uphold, modify or overrule the decision of the Planning Director or his/her designee.

A written application for a variance from the requirements of this Ordinance or an appeal of a decision by the a County official shall be filed within thirty (30) days of the time when a reasonably prudent person should have become aware of the need or when owner, contractor, lessee, or operator was first made aware of the need for the variance or the decision of the appropriate official. The application shall fully state the grounds of the request and the facts relied upon by the applicant. Said application for a variance shall be verified by an Illinois Licensed Engineer. Each application shall be filed with the Planning Director or his/her designee or the Planning Department. The Planning Director or his/her designee will review and transmit recommendations to the appropriate entity, which shall review such recommendations prior to granting or denying the variance.

Minutes of the hearing process shall be recorded and written findings shall be made on each of the criteria and made public for all variance decisions, and shall be filed with the County Clerk. The costs of the hearing shall be born by the applicant.

A. Variances

The County Board’s Planning, Zoning, and Agriculture Committee shall not vary the requirements and regulations of this Ordinance unless evidence is presented that prove that:

1. The land in question is of such shape or size or is affected by such physical conditions or is subject to such title limitations or record, that it is impossible or impractical for the applicant to comply with all of the requirements of this Ordinance and

2. The granting of the variance will not be detrimental to the public welfare, environment or injurious to other property in the vicinity of the subject property and is unique to the subject site and not generally applicable to other properties in the County.

3. The Planning, Zoning, and Agriculture (PZA) Committee shall hold a public hearing on each application for variance within thirty (30) days after receipt of the application for a variance. The applicant of the variance shall notify all adjoining property owners by certified mail, return receipt requested, no later than five (5) prior to the hearing date. Said notice shall include contact information, the time, date, and place of the hearing, and reason for the variance request. The official has the authority to require additional property owners to be notified, if he/she deems it appropriate and necessary. Within thirty (30) days after the public hearing, the PZA Committee shall approve the variance with the conditions it deems necessary, disapprove the variance or take other such action as appropriate.
4. Post construction site peak runoff rate control for sites discharging directly to the Kankakee River are unnecessary because: (1) no adverse flooding impacts would potentially be created by increased peak runoff rates along the conveyance between the project site and the River and (2) increased peak runoff rates will not potentially contribute to adverse ecological impacts, including water quality degradation by either artificial or natural mechanisms or by stream erosion. This exemption does not relieve the property owner from constructing and maintaining a sediment trapping BMP following Illinois Urban Manual criteria during construction and a permanent detention facility meeting requirements in this Ordinance.

B. Appeals
Kankakee County shall consider each application for modification to the decision of the Planning Director or his/her designee at a public meeting within thirty (30) days after the appeal application is received by the County. Within thirty (30) days after the public meeting, PZA Committee shall uphold, modify or overrule the decision of the appropriate official.
SECTION TWO
CONSTRUCTION SITE RUNOFF CONTROL

Section Two, Article I. – General Requirements for All Construction Sites

A. Responsible Entity
The owner of a site with construction activity meeting the requirements of a Grading and Drainage Permit shall be responsible for compliance with the requirements of this Ordinance.

B. Waste Disposal
Solid waste, industrial waste, yard waste and any other pollutants or waste on any construction site shall be controlled through the use of BMPs. Waste or recycling containers shall be provided and maintained by the owner or contractor on construction sites where there is the potential for release of waste. Uncontained waste that may blow, wash or otherwise be released from the site is prohibited.

C. Ready-Mixed Concrete
Ready-mixed concrete, or any materials resulting from the cleaning of vehicles or equipment containing or used in transporting or applying ready-mixed concrete, shall be contained on construction sites for proper disposal. Release of these materials to any elements of the storm drainage system is prohibited.

D. Soil Erosion and Sediment Control
Appropriate BMPs such as silt fences, diversions, sediment traps, or other appropriate sediment or runoff control measures shall be implemented to prevent the release of sediment from construction sites prior to the commencement of grading activities. Disturbed areas should be minimized, disturbed soil shall be protected and stabilized and construction entrances shall be managed to prevent sediment tracking onto adjacent roadways. Excessive sediment tracked onto public streets shall be removed immediately. Disturbed areas shall be stabilized with approved vegetative measures within fourteen (14) calendar days following the end of active disturbance or redisturbance. All temporary soil erosion and sediment control BMPs shall remain in place, and be fully maintained, until the establishment of permanent vegetation throughout the construction site at which time they shall be removed within thirty (30) days. Consideration shall be given to environmentally sensitive areas based on slope, soil type, vegetation and proximity to a water body.

E. Continued Compliance
Upon completion of permitted construction activity on any site, the property owner and subsequent property owners will be responsible for continued compliance with the requirements of this Ordinance, in the course of maintenance, reconstruction or any other construction activity on the site.

F. Rights Reserved
Kankakee County reserves the right to require any non-agricultural construction development activity, regardless of disturbed area or type of activity, to comply with this
Ordinance if it is determined to be the cause of or a contributor to an existing or potential erosion, sediment, or stormwater impact.
Section Two, Article II. – Grading and Drainage Permit Requirements

A. Permit Exceptions
Except as exempted below, no person shall commence construction prior to obtaining the appropriate Grading and Drainage Permit as defined below. The Planning Director or his/her designee will issue Grading and Drainage Permits.

In order to preclude inappropriate phasing of developments to circumvent the intent of this Ordinance, when a proposed development activity will occur on a lot or parcel of land that has contiguous lots or parcels of lands owned by the same property owner, then the criteria as defined in this section will be applied to the total land area compiled from aggregate ownership parcels.

A Grading and Drainage Permit shall not be required for the following:

1. Any construction activity below the minimum thresholds for a Class 1 Grading and Drainage Permit.

2. Agricultural practices, including the implementation of conservation measures included in a farm conservation plan approved by the Natural Resources Conservation Service.

B. Class 1 Grading and Drainage Permit
All construction except single-family residential and duplexes that meets one of the following thresholds shall require a Class 1 grading and Drainage Permit:

1. Any construction that will require a variance to an existing rule or regulation regarding coverage or impervious surface including the addition of an impervious surface area (i.e., streets, roof, patio or parking area or any combination thereof) greater than 500 square feet and less than 10,000 square feet requires a Class 1 Grading and Drainage Permit.

2. Any land disturbing activity on the sloping side of the slope disturbance line, but does not otherwise require a Class 2 Grading and Drainage Permit.

3. Construction of one or more single-family dwellings or duplexes that is/are constructed as part of a subdivision development or on an individual parcel without an approved neighborhood drainage plan or Storm Water Pollution Prevention Plan.

4. Any land disturbing activity (i.e., clearing, grading, stripping, excavation, fill, or any combination thereof) that will affect an area in excess of 5000 square feet, unless the activity solely consists of:
   a. The installation, renovation or replacement of a septic system, potable water service line or other utility serving an existing structure.
   b. The excavation or removal of vegetation in right-of-way or public utility easements for the purpose of installing or maintaining utilities.
c. The maintenance, repair or at grade replacement or existing lawn areas not otherwise requiring a stormwater permit under this ordinance.

d. The maintenance or an existing stormwater facility, not requiring other state or federal permits or approvals.

5. Any land disturbing activity that will affect an area in excess of 500 square feet if the activity is within 25 feet of a lake, pond, stream, or wetland; or

6. Excavation, fill, or any combination thereof that will exceed 100 cubic yards.

7. The issuance of a Grading and Drainage Permit shall constitute an authorization to do only that work which is described on the approved site plan. A Class 1 Grading and Drainage Permit shall be valid for one (1) year after the date of issuance.

C. Class 1 Grading and Drainage Permit Application Forms
A completed application form for Class 1 Grading and Drainage Permit shall include:

1. Name(s), address(es) and telephone number(s) of the owner and developer of the site, the contractor(s) and of any consulting firm retained by the applicant identifying the principal contractor.

2. Certification that all construction covered by the Grading and Drainage Permit will be undertaken in compliance with Section Two, Article I (General requirements for All Construction Sites) of this Ordinance.

3. A site plan created with the use of a worksheet available from Kankakee County Soil and Water Conservation District or other suitable methods acceptable to the Appropriate Authority showing the amount of impervious area being created and BMPs to be implemented. For Class 1 Permits, stormwater detention calculations may be required with the site plan.

4. An application fee as set forth in Section Five of this Ordinance.

D. Class 2 Grading and Drainage Permit
Any construction that meets one of the following thresholds shall require a Class 2 Grading and Drainage Permit:

1. Any construction that will include the addition of an impervious surface area (i.e., streets, roof, patio or parking area or any combination thereof) greater than 10,000 square feet.

2. Any land disturbing activity (i.e., clearing, grading, stripping, excavation, fill, or any combination thereof) that will affect an area greater than one acre (43,560 square feet).
E. Application Form

A completed application form shall include the following as applicable:

1. Name(s), address(es) and telephone number(s) of the owner and developer of the site, the contractor(s) and of any consulting firm retained by the applicant identifying the principal contractor.

2. Certification that any land clearing, construction, or development involving the movement of earth shall be in accordance with the plans approved upon issuance of the permit.

3. An application fee as set forth in Section Five of this Ordinance.

4. A faithful performance bond or bonds, letter of credit, or other improvement security satisfactory to the States Attorney in an amount deemed sufficient by the Planning Director or his/her designee to cover all costs of improvements, landscaping, maintenance of improvements and landscaping, and soil erosion and sediment control measures for such period as specified by the jurisdiction and engineering and inspection costs to cover the cost of failure or repair of improvements installed on the site on a form acceptable to the County. (See sample in Appendix A). Upon satisfactory completion of the improvements, the documented security would be void.

5. The following information shall be submitted for both existing and proposed property conditions for all applicable developments: a topographic survey of the property at one-foot (1) contours (or one-half foot contours for relatively flat areas where additional detail will be required to review drainage designs) unless otherwise specified or approved by the Planning Director or his/her designee to a consistent vertical datum specified by the County; and an existing drainage and proposed drainage plan for the property and one hundred (100) feet surrounding the property at a scale of not more than one hundred (100) feet to one (1) inch, and including the following (unless otherwise specified by the Planning Director or his/her designee):

   a. Property boundary, dimensions, and approximate acreage.
   
   b. Building setback lines.
   
   c. All existing and proposed structures and sizes.
   
   d. Square feet of existing and proposed impervious surface.
   
   e. All existing, or proposed easements.
   
   f. All existing, observed, or proposed water or monitoring well head locations.
   
   g. All existing, observed, or proposed watermains.
h. All sanitary or combined sewer lines and septic systems.

i. The banks and centerline of streams and channels.

j. Shoreline of lakes, ponds, and detention basins with normal water level elevation.

k. Location, size and slope of stormwater conduits and drainage swales.

l. Detention facilities showing inlet and outlet locations and details.

m. Roads, streets and associated stormwater inlets including finished grades.

n. Base flood elevation, flood fringe, and regulatory floodway.

o. A vicinity map showing the relationship of the site to its general surroundings at a scale of not greater than two thousand (2,000) feet to one (1) inch (1:24,000).

p. Title, scale, north arrow, legend, seal of Licensed Professional Engineer, date, and name of person preparing plans.

q. Subwatershed boundaries within the property.

r. Offsite areas draining to property, including entire offsite drainage boundary(ies).

s. Depressional storage areas, including non-jurisdictional wetlands.

t. Inventoryed farm drains and tiles.

u. Soil classifications.

6. The following certifications and design statements shall be provided:

a. Basis of design for the final drainage system components.

b. A statement giving any applicable engineering assumptions and calculations.

c. Design calculations and other submittals as required by this Ordinance, including flow rates and velocities at critical points in the drainage system.

d. A statement of certification of all drainage plans, calculations, and supporting data by a Professional Engineer Licensed in the state of Illinois.

7. A depiction of environmental features of the property and immediate vicinity including the following:

a. The limits of wetland areas.
b. The location of trees greater than eight (8) inches in diameter, taken at 4.5 ft dbh in areas to be disturbed.

c. Any designated natural areas or prime farmland so designated by the Federal, State, or County government.

d. Any proposed environmental mitigation features.

e. Location and dimensions of a stream buffer area (if required by local jurisdiction).

f. Base flood elevation, flood fringe, and regulatory floodplains.

g. Observed abandoned mines.

8. Any and all local, state or federal maps delineating floodplains, floodways, or 100-year frequency flood elevation shall be annotated to reflect the proposed change.

9. Conditional approval by FEMA or other regulatory agencies of the proposed changes in the FIRM map.

10. Engineering calculations and data supporting all proposed plans. Hydrologic analysis shall be completed in accordance with Section Three, Article II (Hydrologic Design Criteria) of this Ordinance. Detention system design shall be completed in accordance with Section Three, Article III (Detention System Design Criteria) of this Ordinance.

11. If the project involves modification of a channel with an upstream watershed exceeding 200-acres, the following information shall be submitted:

   a. A discussion of the purpose and need for the proposed work.

   b. Discussion of the practicability of using alternative locations or methods to accomplish the purpose of the proposed work.

   c. Analysis of the impacts of the proposed project, considering cumulative effects on flood storage and the physical and biological conditions of the body of water affected.

   d. Hydraulic analysis of the channel modifications, including pre- and post-project base flood elevations.

   e. Additional information as required by this Ordinance.

12. Storm Water Pollution Prevention Plan (SWP3) prepared in accordance with Section 4 of this Ordinance.
F. **Submittal, Review, Approval, and Periodic Visits**

A completed application shall be submitted to the Kankakee County Planning Department for review and approval. County officials may periodically follow up during consideration.

1. **Submittal.** The completed application shall be submitted with the building permit application where work is related to construction of a new building or building addition. The completed application shall be submitted with the final engineering plans and specifications or subdivision improvement plans where work is related to the development and subdivision of land. Kankakee County should be consulted regarding application submittal for other types of work requiring a Grading and Drainage Permit.

2. **Review/Approval.** Each application for a Grading and Drainage Permit shall be reviewed and acted upon according to the following procedures.

   a. The Planning Director or his/her designee may provide a written evaluation to the applicant regarding the adequacy and effectiveness of the proposal to address the provisions of this Ordinance. The Planning Director or his/her designee may retain the services of an independent professional to perform this evaluation. Kankakee County may assess a fee for this evaluation. The County may assess a fee for this evaluation service as set forth in Section Five of this Ordinance.

   b. The Planning Director or his/her designee may provide the applicant with general guidelines and information concerning the design criteria, installation and maintenance procedures and other information regarding best management practices recommended under the provisions of this Ordinance.

   c. The Planning Director or his/her designee shall confirm the applicant has filed a Notice of Intent (NOI) with the IEPA for construction site activity and has submitted appropriate permit fees.

   d. Approval of a Grading and Drainage Permit shall not be considered effective unless the following approvals have been obtained if applicable:

      i. Land use regulations, such as zoning and subdivision regulations, that apply to the development have been approved by the County where applicable.

      ii. A building permit issued by the County’s building official where applicable.

      iii. The proposed earth moving is coordinated with any overall development program previously approved by the County for the area in which the site is permitted.

      iv. All other relevant federal, state, and local permits controlling the proposed work.

   e. After review of the application and required submissions if it is found to be in conformance with the provisions of this Ordinance, the Planning Director or his/her designee shall either:

      i. Approve the Grading and Drainage Permit, or
ii. Approve the Grading and Drainage Permit subject to such reasonable conditions as may be necessary to secure substantially the objectives of this Ordinance, or

iii. Disapprove the Grading and Drainage Permit, indicating the deficiencies and the procedure for submitting a revised application and/or submission.

f. Failure of the Planning Director or his/her designee to act on an original or revised application within sixty (60) days of receipt shall authorize the applicant to proceed in accordance with the plans as filed and in compliance with the regulations contained herein, unless such time is extended by agreement between the appropriate official and the applicant. Pending preparation and approval of a revised plan, development activities may be allowed to proceed in accordance with conditions established by the Planning Director or his/her designee.

3. Periodic Site Visits. The Kankakee County Planning Director or his/her designee may conduct periodic site visits to observe construction or conduct field meetings with the applicant and his/her contractor(s) as follows:

a. The County may require a pre-construction meeting with the applicant or designated agent to review implementation of Grading and Drainage Permit.

b. The County may conduct period onsite observations during the active construction phases or development projects to determine whether site development is in compliance with the approved Grading and Drainage Permit.

c. After construction has been completed the County may visit the site to determine whether permanent site stabilization has been achieved and identify operation and maintenance needs.

d. The County shall prepare correspondence as needed regarding the effectiveness (or corrective measures needed) or adequacy of soil erosion and sediment control measures.

G. Other Agency Permits and Reviews

1. The acquisition of any and all permits shall be the sole responsibility of the applicant. Copies of the permit applications, permits, and correspondence shall be provided with the application. The granting of a Grading and Drainage Permit under these regulations shall in no way affect the owner’s responsibility to obtain the approval required by any other statute, ordinance or code, or to meet the requirements of other jurisdiction ordinances and regulations, including but not limited to:

a. Building or other relevant permits of Kankakee County;

b. Permits in accordance with Sections 401 and 404 of the Clean Water Act; 33 U.S.C. Section 1251, including any joint permit application requirements (e.g., Floodway Construction Permit form IDNR-OWR);
c. Permits in accordance with Section 106 of the National Historic Preservation Act;

d. Permits required under Section 10 of the Rivers and Harbors Act;

e. Permits required by the Illinois Department of Natural Resources, Office of Water Resources in accordance with the Rivers, Lakes and Streams Act, 615 ILCS 5/18, 23, 23(a) and 29(a), and consistent with any applicable regulations including those found at 17 Ill. Adm. Code Parts 3700, 3702, and 3704;

f. A Natural Resources Information (NRI) report prepared by the Kankakee County SWCD under Section 22.02a of the Soil and Water Conservation Districts Act, 70 ILCS Par. 405/1 et.seq.;

g. Any reviews required by the Farmland Preservation Act, 505 ILCS 75/6;

h. Any reviews required by the Illinois Groundwater Protection Act, 415 ILCS;

i. Any permits that may be required by the Illinois Environmental Protection Act, 415 ILCS 5/12 et.seq. including any permits under National Pollutant Discharge Elimination System (NPDES) Permit (e.g. ILR10 and ILR 40 permits) and 401 Water Quality Certification through the Illinois Environmental Protection Agency, Division of Water Pollution Control, 415 ILCS 5/12 (f);

j. Any reviews required by the Threatened and Endangered Species Act, 16 USC 1531 et.seq.;

k. Any reviews required by the Illinois Endangered Species Protection Act, 520 ILCS 10/11;

l. Conditional Letter of Map Revision, 44 CFR 60;

m. Approval/permit from local Flood Insurance Program community;

n. Any reviews by the Illinois Interagency Wetland Policy Act of 1989. 20 ILCS 830/1; and,

o. Illinois Natural Areas Preservation Act, 525 ILCS 30/17.

2. Any work involving the construction, modification or removal of a dam as defined herein, per 92 Ill. Adm. Code 702 (Rules for Construction of Dams), shall require an IDNR/OWR Dam Safety Permit or a letter stating that a permit is not required, prior to permit being issued by the Kankakee County.

3. Any development involving work in waters of the United States, including wetlands and streams as identified and regulated by the U.S. Army Corps of Engineers, shall require permits or sign-offs from the Corps prior to the issuance of a jurisdiction permit.
4. Confirmation of compliance or exemption from all applicable entities requiring permits or reviews shall be provided by the applicant to the County.
H. Permit Limitations

1. The issuance of a Grading and Drainage Permit shall constitute an authorization to do only that work which is described or illustrated on the application for the permit or on the plans and specifications approved by Kankakee County.

2. The issuance of a permit or the approval of drawings and specifications shall not be construed to be a permit for, nor an approval of, any violation of or deviation from the provision of these Regulations or any other ordinance, law, rule, or regulation.

3. The issuance of a permit, based upon drawings and specifications, shall not prevent the County from thereafter requiring the correction of errors in said drawings and specifications or from stopping unlawful construction operations being carried on thereunder.

4. The Grading and Drainage Permit shall be valid until the completion date noted in the permit. The Planning Director or his/her designee may grant an extension if relevant design and construction standards have not changed and if in the appropriate official’s opinion, the work approved under the permit does not unduly adversely affect the health, safety and general welfare of the public. Otherwise, a new permit shall be acquired before work is started or continued. The Planning Director or his/her designee may require modification of the soil erosion and sediment control plan to prevent any increase in erosion or off-site sediment runoff resulting from any extension.

I. Revocation of Permits

1. The Planning Director or his/her designee may revoke a permit:

   a. Where there has been any false or inaccurate statement or misrepresentation as to a material fact in the application or plans on which the permit was based.

   b. When work is performed contrary to the provisions of the application or plans on which the permit is based.

   c. When the County becomes aware that all required permits and reviews have not been obtained.

2. When a permit is revoked, the Planning Director or his/her designee shall inform the permittee, in writing, of the specific steps the permittee must take in order to have the permit reissued.

3. It shall be unlawful to continue any work authorized by a permit after revocation of that permit until that permit is reissued or until a new permit is issued.

4. In cases where the permittee wishes to appeal the decision of the Planning Director or his/her designee, the appeal process outlined in Section One, Article IX will be followed.
An appeal shall stay all proceedings in furtherance of the action appealed from unless the Planning Director or his/her designee certifies to the County Board’s Planning, Zoning, and Agriculture Committee, after the notice of the appeal has been filed with him, that by reason of facts stated in the certificate a stay would, in his opinion, cause imminent peril to life or property.

J. **Retention of Plans**

Plans, specifications, and reports for all site developments shall be retained by the Planning Director or his/her designee as required by Illinois Statute.
SECTION THREE
POST CONSTRUCTION RUNOFF CONTROL

Section Three, Article I. – Best Management Practices Hierarchy

In the preparation of site design and drainage plans for a development, the applicant shall evaluate and implement, where practicable, site design features that minimize the increase in runoff volumes and rates from the site. The applicant’s drainage plan submittal shall include site design features that are consistent with the following hierarchy:

A. Preserving Regulatory Floodplains, Flood Prone and Wetland Areas
B. Minimizing Impervious Surfaces on the Property
C. Utilizing Storm Water Wetlands, Grassed Swales and Vegetated Filter Strips
D. Infiltrating Runoff On-Site
E. Providing Stormwater Retention Facilities
F. Providing Wet Bottom or Wetland Detention Facilities
G. Providing Dry Detention Facilities
H. Constructing Storm Sewers
I. Protecting Water Quality Through Multiple Uses
Section Three, Article II. – Hydrologic Design Criteria

A. Release Rates
The drainage system for new developments or redevelopments meeting the requirements of a Class 2 Grading and Drainage Permit shall be designed to control the peak rate of discharge from the total property under development for the two year and one hundred- (100) year, storm events. The allowable release rates for the two design storms are as follows:

<table>
<thead>
<tr>
<th>Event frequency</th>
<th>Maximum release rate (cfs/acre)</th>
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<tbody>
<tr>
<td>2-year</td>
<td>0.04</td>
</tr>
<tr>
<td>100-year</td>
<td>0.15</td>
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</table>

If it is determined by the County that the downstream (receiving) storm drainage system may not safely convey the allowable release rate(s), the release rate(s) shall be lowered such that the receiving system can safely handle the detention pond discharge. The applicant may be required to provide documentation that downstream capacity is adequate and erosion prevention measures will be installed.

B. Storm Drainage System Design and Evaluation
The following criteria should be used in evaluating and designing the storm drainage system. The design will provide capacity to convey the ten (10) year peak flow in the minor drainage system and an overland flow path to convey the one-hundred (100) year peak flow (major drainage system) for flows in excess of the design capacity. The storm drainage system shall not result in cross connections between different storm drainage systems unless no other alternative exists.

C. Design Methodologies
Minor conveyance systems may be designed using the Rational Formula. The Rational Formula may also be used in sizing the major drainage system for sites up to ten acres. Runoff hydrograph methods as described in this Ordinance must be used for major drainage systems with greater than ten (10) acres of drainage area.

D. Positive Drainage
All developments must be provided an overland flow path that will pass the one hundred (100) year flow (assuming the minor drainage system is not functioning) within designated drainage easements or the public right-of-way with a freeboard of at least one (1) foot. Overland flow paths shall be provided drainage easements unless the flow is contained in the public right-of-way.

E. Freeboard
All habitable structures shall have one-foot of freeboard during the 100-year flood event. Other structures do not require a freeboard. All structures are subject to the Flood Hazard Area Control Ordinance.

F. Methods for Generating Runoff Hydrographs
Runoff hydrographs shall be developed incorporating the following assumptions of rainfall amounts and antecedent moisture.
1. **Rainfall.** Unless a continuous simulation approach to drainage system hydrology is used, all design rainfall events shall be based on the ISWS – Bulletin 70 rainfall distributions.
   
a. Unless a continuous simulation approach to drainage system hydrology is used, all design rainfall events shall be based on the Illinois State Water Survey’s Bulletin 70.
   
b. The first quartile point rainfall events shall be used for the design and analysis of conveyance systems with a duration of less than twelve hours.
   
c. The third quartile point rainfall distributions shall be used for the design and analysis of detention basins and conveyance systems with a duration greater than 12 and less than or equal to 24 hours.
   
d. The fourth quartile distribution shall be used in the design and analysis of systems with durations greater than 24 hours.
   
e. When Huff’s Distribution is used a critical duration analysis is required.
   
f. The SCS Type II distribution may be used as an alternative with antecedent moisture condition II.

2. **Rainfall Recurrence Interval.** The design rainfall recurrence interval shall be set by the design application as follows:

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<tbody>
<tr>
<td>Detention</td>
<td>100 year</td>
</tr>
<tr>
<td>Emergency Overflow Routing</td>
<td>100 year</td>
</tr>
<tr>
<td>Bridges</td>
<td>100 year</td>
</tr>
<tr>
<td>Swales, Ditches, and Culverts – Minor</td>
<td>10 year</td>
</tr>
<tr>
<td>Swales, Ditches, and Culverts – Major</td>
<td>100 year</td>
</tr>
<tr>
<td>Storm Sewers</td>
<td>10 year</td>
</tr>
</tbody>
</table>

Local, IDNR, or IDOT design criteria may govern.

G. **Culvert, Road and Driveway Crossings**

Sizing of culvert crossings shall consider entrance and exit losses as well as tailwater conditions on the culvert. Furthermore, exit velocity calculations shall also be required for all culvert crossings and erosion protection shall be provided where exit velocities exceed 4 fps.

H. **Vegetated Filter Strips and Swales**

To effectively filter stormwater pollutants and promote infiltration of runoff, sites should be designed to maximize the use of vegetated filter strips and swales. These BMPs shall be designed to follow criteria in the Illinois Urban Manual. Whenever practicable, runoff from impervious surfaces should be directed onto filter strips and swales comprised of native grasses and forbs before being routed to a storm sewer or detention basin.
I. Maintenance Considerations

It should be noted that many BMPs require regular maintenance in order to function adequately throughout their design life. Design provisions shall be made to minimize long-term maintenance requirements. In some situations, specific BMPs may be rejected if projected maintenance requirements cannot be met by either the property owner or the jurisdiction.

The stormwater drainage system shall be designed to minimize and facilitate maintenance. Use of native vegetation is strongly encouraged to reduce maintenance, increase wildlife habitat, and to provide other benefits. Wet basins shall be provided with alternate outflows, which can be used to completely drain the pool for sediment removal where on-site topography allows. Pumping may be considered if drainage by gravity is not feasible. Pre-sedimentation basins shall be included, where feasible, for localizing sediment deposition and removal. Site access for heavy equipment shall be provided.

Long-term maintenance also shall include the routine removal of excessive trash and debris and the removal of obstructions from the basin outlet structure. Periodic removal of accumulated sediment (e.g., from swales and settling basins) also shall be done to maintain the function and aesthetics of stormwater facilities. At a minimum, sediment shall be removed from trapping devices whenever one foot or more of sediment has accumulated in the basin bottom. Naturally landscaped areas of detention and drainage facilities shall be maintained via controlled burning every one to three years, as needed to control invasive weeds. Where controlled burning is not feasible or allowed, mowing and/or selective herbicide applications shall be performed as needed on an annual basis. All turfed areas shall be mowed on a regular basis to maintain grass height as established by the jurisdiction.

A maintenance plan for the ongoing maintenance of all stormwater management system components including wetlands is required prior to plan approval. The plan shall include:

1. Maintenance tasks.
2. The party responsible for performing the maintenance tasks.
3. Descriptions of all permanent public or private access maintenance easements and overland flow paths, and compensatory storage areas.
4. A description of dedicated sources of funding for the required maintenance.

J. Provisions for Agricultural Drainage

The applicant shall submit a subsurface drainage inventory for Class 2 Grading and Drainage Permits. The inventory shall locate existing farm and storm drainage tiles by appropriate methods performed by a qualified individual. All existing drain tile lines damaged during the investigation shall be repaired.
1. The applicant shall provide a topographical map of the development site per Section II. The name, address, and phone number of person or firm conducting tile location investigation shall be included on this map. The inventory shall include, but not limited to:
   a. Proof of notification to adjacent landowners.
   b. Aerial photographs.
   c. Proof of notification with any active drainage districts.
   d. Consultation with NRCS/SWCD.

2. Information collected during the drainage investigation shall be used to design and develop a stormwater management system that is appropriate for the development and connecting tile lines on adjoining properties.

3. Existing easements for any agricultural drainage systems located underneath areas that will be developed shall be preserved. If no such easement exists, an easement shall be dedicated for access and maintenance as provided for in this Ordinance.

4. All agricultural drainage systems that serve upstream areas outside of the development and that are located underneath areas that will be developed shall be replaced with non-perforated conduit or otherwise protected to prevent root blockage. The existing drainage district system may remain in place with the approval of the appropriate entity.

5. Agricultural drainage systems that, due to development, will be located underneath streets, driveways, and other paved areas as allowed by this Ordinance, shall be replaced with conduits meeting the County’s standard specifications, as needed to prevent the collapse of the agricultural drainage conduit.

6. Agricultural drainage systems shall be relocated within the development area when required by the County Planning Director or his/her designee. Such relocation shall maintain sufficient slope and capacity to prevent sedimentation and to prevent an increase in scouring or structural damage to the conduit provided however the relocated system shall not be required to exceed the existing slope or capacity of the existing tile. If the system is not under the authority of a drainage district, the County shall consider the interests of those landowners who are served by the system when drainage systems are relocated.

7. Field tile systems disturbed during the process of development shall be reconnected by those responsible for their disturbance unless the approved drainage plan includes provisions for these.

8. Connection of agricultural tiles to stormwater systems shall be discouraged. Where tiles are being connected to these stormwater systems or at points of ingress or egress from the development sites, observation structures or similar maintenance and inspection access structures shall be installed.
9. The development design may utilize, when an easement is granted from the adjoining downstream property owner and where the existing system has adequate capacity and structural integrity, outflow locations that have an existing tile leaving the development site. A subsurface connection to the tile shall be constructed as the primary low flow outlet. A secondary surface outlet shall be designed for outflows exceeding the tile capacity and as a backup system if the downstream tile ceases to function.

10. Surface outflows onto adjoining properties not into a defined channel shall be designed to release as sheet flow using level spreader trenches or alternative designs as approved by the Planning Director or his/her designee.

K. **Channel Modifications**

Channel modification is acceptable if the purpose is to restore natural conditions and improve water quality. The proposed development activity may involve a channel modification for other purposes if it can meet the following criteria:

1. Water quality and other natural functions, including aquatic life, would be improved by the modification or the impacts are offset by the replacement of an equivalent degree of natural resource values.

2. The activity has been planned and designed and will be constructed in a way which will minimize its adverse impacts on the natural conditions of the stream, aquatic life, or body of water affected.

3. Channel modifications will NOT result in an increase in the base flood elevation or flow velocities. If necessary, hydraulic calculations shall be provided which detail the pre- and post-development 100-year high water elevations and flow velocities.

Channels, modified or not, shall follow Section Three, Article II (Maintenance Considerations) and for planning and long term maintenance and establish a three-year short-term maintenance program to ensure proper establishment of vegetation.
Section Three, Article III. – Design Standards

Developments initiating implementation after the adoption of this Ordinance will use the temporary detention of stormwater runoff from the site to meet release rates as required in this Ordinance and shall follow the following criteria. Implementation is defined by the County in Section One, Article VIII of this Ordinance.

A. Referenced Standards
Design standards for detention basin design and construction may also be required to comply with the provisions of the following.

4. The Subdivision and Zoning Ordinances of the jurisdiction.

B. Detention Storage Requirements
The design storage to be provided in the detention basin shall be based on the need to restrict the runoff from the 2-year and 100-year events to the allowable release rates while providing a minimum of one (1) vertical foot of freeboard for the 100-year event. All detention basin storage shall be computed using Hydrograph Methods utilizing reservoir routing (also called modified pools or level pool) or equivalent method as described by this Ordinance.

For facilities with less than five acres of tributary area all onsite, the nomograph relating Detention Volume vs. Percent Impervious (Appendix F) shall be used to calculate the volume of site runoff storage required.

C. Waiver of Requirements

1. The requirement for stormwater detention and release rate does not apply when:
   a. The development is in accord with the approved site plan and is on a lot in a subdivision for which detention is otherwise provided in accordance with this Ordinance.
   b. The development is on a lot or parcel in a subdivision for which detention was provided and approved prior to the effective date of this Ordinance.
   c. The requirement for stormwater detention and release rate shall be waived by the appropriate jurisdiction official when he/she determines it is in the best interest of the
jurisdiction to require fee in lieu of detention as described in Section Three, Article III, N.

D. Ownership
Detention basins are owned and maintained by the property owner (often a Homeowner’s Association) unless otherwise described by this Ordinance or indicated by the appropriate jurisdiction official. Property developers shall contact the Kankakee County Planning Department to inquire about the ownership and maintenance responsibility of existing regional detention basins which may affect the development.

E. Maintenance and Repair Responsibilities

1. Detention basins and associated inflow and outflow systems are maintained by the property owner absent any specific legal agreement to the contrary.

2. Maintenance agreements may be required at the option of the Planning Director or his/her designee to define parties responsible for the maintenance of detention basins.

3. The detention basin owner shall be responsible for the following items:
   a. An annual report on the detention basin condition, using the checklist provided in Appendix C, shall be submitted to the Planning Director or his/her designee.
   b. At five (5) year intervals, the basin shall be inspected by a professional engineer registered in the State of Illinois. A report of this inspection shall be submitted to the Planning Director or his/her designee within sixty (60) days of the inspection. The inspection shall include an evaluation of the items in the checklist included in Appendix C. An annual report is not required the year the five-year report is due.
   c. Detention basin owners shall notify subsequent owners of their maintenance responsibilities and transfer basin maintenance records to the party with active maintenance responsibility.
   d. These requirements shall be effective only for facilities constructed after the passage of this ordinance.

F. General Basin Design Requirements

1. Erosion Control. Temporary and permanent erosion control shall be required for all detention basins in accordance with this Ordinance.

2. Verification and Final Approval.
   a. Erosion protection shall be inspected by the owner or the owner’s representative throughout the project duration.
b. Detention basin storage volume shall be verified to the satisfaction of the Planning Director or his/her designee through as-built surveys or other means.

c. Inflow, outflow and emergency overflow elevations and configurations shall be verified through as-built surveys.

d. Final vegetative cover and permanent erosion control shall be inspected for completeness of cover.

e. The basin will receive final approval upon fulfillment of b, c, and d above, and any and all other requirements or agreements with the jurisdiction. The anniversary date of maintenance and repair reporting will be recorded as such.

f. All basins must receive final approval within ninety (90) days of the substantial completion as determined by the Planning Director or his/her designee of any of the following:

i. The first phase (as shown on approved plans) of construction of public utilities and roadways in any approved Subdivision project. Detention structures for the ultimate development area must be constructed during the first phase of the project, and approved at its completion unless otherwise agreed to by the County. The detention structures must then be maintained and repaired in conformance with this Ordinance, during future construction phases.

ii. Parking areas, floor slabs and/or other impervious areas (as shown on approved plans, and not including sidewalks) for work on an individual lot requiring an individual permit under this Ordinance. Phased construction will be treated as in the above case.

iii. Mass earthwork or rough grading, if no other phased construction is scheduled to be started within one hundred eighty (180) days.

g. Failure to receive final approval as required will be considered a violation of this Ordinance.

h. Final approval of the basin shall not constitute acceptance by the County for dedication nor completion of this Ordinance’s maintenance requirements.

3. **Infiltration Practices.** To effectively reduce runoff volumes, the use of infiltration practices including basins, trenches, and permeable pavement are encouraged. The Illinois Urban Manual contains criteria for the design and use of these practices. An appropriate sediment control device shall be provided to remove coarse sediment from stormwater flows before they reach infiltration basins or trenches. Engineering calculations demonstrating infiltration rates shall be included with the application.
4. **Side Slopes.** Side slopes of detention basins and open channels shall not be steeper than four (4) to one (1) (horizontal to vertical) – certain types of basins have different requirements as defined by this Ordinance. Detention basin side slopes above normal pool shall be designed with permanent erosion protection consisting of suitable vegetation or other permanent finish. Topsoil must be provided per specific basin type design criteria (see paragraph G, H, and I). Permanent erosion protection shall be aesthetically suitable to the development or existing surrounding land use.

5. **Overflow Structures.** All stormwater detention basins shall be provided with an overflow structure capable of safely passing flows in excess of 100 year event at a stage not exceeding one foot above high water level. The top of the lowest foundation grade in the vicinity of the detention basin shall be two-feet above high water level. The design flow rate of the overflow structure shall be equivalent to the one hundred (100) year peak inflow rate. Weirs, dams and specialized outflows shall be designed by a Professional Engineer registered in the State of Illinois.

6. **Detention Basin Outlet Design.**

   a. Where the outlet discharges directly to a channel, it is not necessary to consider backwater effects, however the overflow structure shall be placed at least one-foot above the 100-year frequency high-water level of the channel.

   b. Detention basin outlets shall be constructed of reinforced concrete pipe(s) with a minimum inside diameter of twelve (12”) inches. Further restriction to flow may be provided by a restrictor plate placed upstream of the outlet. This may be achieved by constructing a concrete wall with a “Restrictor Manhole”. The orifice opening in the restrictor plate shall have a minimum diameter of four (4”) inches. More specialized designs shall be required when release rates require restriction that cannot be achieved by the minimum allowed four (4”) diameter orifice opening. The more specialized design shall include provisions to minimize clogging and that tend to self clean the restriction. Use of a slotted riser pipe may be considered. However, the riser pipe may be considered. However, the riser pipe must be protected from damage due to mowing, weather, and other possible impacts.

7. **Other Design Requirements.**

   a. Bubble up outlets, pumped outlets and other active control structures are prohibited.

   b. Temporary erosion techniques shall be used as required to ensure a full stand of cover vegetation in minimum time.

8. **Location Requirements.**

   a. Detention basins and their one hundred (100) year design high water shall be contained within platted lots or easements dedicated for drainage purposes.
b. Detention basin lots shall have adequate access for maintenance purposes. Exceptions may be made for infill development.

c. A twenty (20) foot minimum setback shall be required from all property lines to the normal pool elevation which is considered to be the elevation of the water level at the permanent depth of the wet basin pool rather than the temporary depth during drainage events.

d. A twelve (12) foot minimum setback shall be required from all property lines to one-foot above the high water level.

9. **Accommodating Flows from Upstream Tributary Areas.** Stormwater runoff from area tributaries to the property shall be considered in the design of the property's drainage system. Flows from upstream areas that are not to be detained should be routed around the basin being provided for the site being developed.

10. **Upstream Areas Not Meeting Ordinance Requirements.** When there are areas not meeting the storage and release rates of this Ordinance, tributary to the applicant's property, the following steps shall be followed:

   a. The applicant shall compute the storage volume needed for his/her property using the release rates and procedures described in this Ordinance.

   b. Areas tributary to the applicant's property, not meeting the storage and release rate requirements of this Ordinance, shall be identified.

   c. Using the areas determined above plus the applicant's property area, total storage and release rates needed for the combined properties shall be computed using the release rates and procedures described in this Ordinance. If tributary areas are not developed, a reasonable fully developed land cover, based on local zoning, shall be used for the purposes of computing storage.

   d. Once the necessary combined storage is computed the jurisdiction may choose to pay for over-sizing the applicant's detention basin to accommodate the regional flows. The applicant's responsibility will be limited to the storage for his property as computed above. If regional storage is selected by the jurisdiction, the jurisdiction will work with the applicant to implement the requirements of this Ordinance. If regional storage is rejected by the County, the applicant shall bypass all tributary area flows around and not through the applicant's basin whenever practicable as determined by the Planning Director or his/her designee. If the applicant must route upstream flows through his/her basin and the upstream areas exceed one-square mile in size, the applicant must meet the provisions of On-Stream Detention in this Ordinance and applicable IDNR requirements.

11. **Upstream Areas Meeting Ordinance Requirements.** When there are areas which meet the storage and release rate requirements of this Ordinance, tributary to the applicant's
property, the upstream flows shall be bypassed around and not through the applicant's detention basin if this is the only practicable alternative as determined by the Planning Director or his/her designee. Storage needed for the applicant's property shall be computed as described in this Ordinance. However, if the County decides to route tributary area flows through an applicant's basin, the final design stormwater releases shall be based on the combined total of the applicant's property plus tributary areas. It must be shown that at no time will the runoff rate from the applicant's property exceed the allowable release rate for his/her property alone.

12. Early Completion of Detention Facilities. Where detention or retention is to be used as part of the drainage system for a property, they shall be constructed as the first element of the initial earthwork program unless otherwise agreed to by the County. Any eroded sediment captured in these facilities shall be removed by the applicant on a regular basis and before project completion in order to maintain the design volume of the facilities.

13. Farmland Impacts. All detention basin construction shall examine potential impacts to adjacent agricultural land and shall address measures that will be implemented to eliminate such impacts and comply with other relevant permitting.

G. Wet Bottom Detention Basin Design
Wet bottom detention basins shall be designed to remove stormwater pollutants, to be safe, to be aesthetically pleasing, and as much as feasible to be available for recreational use.

1. Wet Bottom Basin Depths. Wet bottom basins shall be at least four feet deep, excluding near-shore zones and safety ledges. If fish habitat is to be provided, the basin depth shall be at least ten (10) feet deep over twenty-five (25%) percent of the bottom area to prevent winterkill.

2. Wet Bottom Basin Shoreline Slopes. The side slopes of wet bottom basins shall not be steeper than ten to one (10 to 1) horizontal to vertical from one foot above the normal pool stage to at least one-foot below the normal pool stage. Slopes below a depth of 8 feet are permitted to be two to one (2 to 1). Other slopes shall be no steeper than four to one (4 to 1).

Appropriate soil conditions shall be provided in this shoreline zone. First, compaction of both subsoil and topsoil shall be minimized (i.e., to less than 275 psi). Where subsoil compaction cannot be avoided, it should be disked to a depth of 6-8 inches with a chisel plow before spreading topsoil. Second, a suitable uncompacted topsoil, at a minimum thickness of one foot shall be spread to provide a suitable growing medium for aquatic plants. Coarse soils with minimal clay content and a high organic content are recommended.

Upper slopes of detention basins (higher than one foot above normal stage and including the upstream side of the embankment) should be no steeper than 4:1. Flatter slopes (i.e., 5:1) are preferred to enhance plant establishment and to facilitate long-term maintenance.

3. Safety Ledge. All wet detention basins shall have a level safety ledge per Appendix D.
4. **Permanent Pool Volume.** The minimum permanent pool volume in a wet bottom basin at normal depth shall be equal to the runoff volume from its watershed for the two (2) year, twenty-four (24) hour event.

5. **Wet Bottom Basin Inlet and Outlet Orientation.** The distance between detention inlets and outlets shall be maximized. Inlets and outlets shall be at opposite ends of the basin providing that the orientation does not create undue hardship based on topography or other natural constraints. Designers are encouraged to use baffles or berms in the basin bottom to prevent short-circuiting of low flows.

6. **Shoreline Vegetation:** Water tolerant native vegetation shall be used to landscape the shorelines of wet detention facilities. The selected plants and planting methods shall conform to the soils, hydrology, and water quality conditions present in such facilities, with plants being tolerant of highly variable hydrologic conditions and degraded water quality (e.g., high turbidity and salinity content). Plant selection should conform to the guidance in the Native Plant Guide for Stream and Stormwater Facilities in Northeastern Illinois (NRCS et al, 1997) which is hereby adopted by reference.

Native vegetation is recommended, but not required, for side slopes (higher than one foot above normal stage) of all detention facilities.

7. **Soil Permeability.** Wet bottom basin design shall include an evaluation of soil permeability. A basin liner shall be included in the design if needed to ensure water retention to normal pool elevation.

**H. Wetland Detention Basin Design**

In addition to the other requirements of this Ordinance, wetland basins shall be designed to remove stormwater pollutants, to be safe, to be aesthetically pleasing and as much as feasible to be available for multiple uses.

1. **Wetland Basin Grading.** The side slopes of wetland basins (from one foot above the normal pool stage to at least one foot below the normal pool stage) and the basin bottom shall not be steeper than 10 to 1 (horizontal to vertical). Steeper slopes are permitted in settling basins and open water zones near the basin outlet.

   Appropriate soil conditions shall be provided in this shoreline zone. First, compaction of both subsoil and topsoil shall be minimized (i.e., to less than 275 psi). Where subsoil compaction cannot be avoided, it should be worked to a depth of 6-8 inches before spreading topsoil. Second, a suitable uncompacted topsoil, at a minimum thickness of one foot shall be spread to provide a suitable growing medium for aquatic plants. Coarse soils with minimal clay content and a high organic content are recommended.

   Upper slopes of detention basins (higher than one foot above normal stage) should be no steeper than 4:1. Flatter slopes (i.e., 5:1) are preferred to enhance plant establishment and to facilitate long-term maintenance.
2. **Wetland Vegetation**: Water tolerant native vegetation shall be used to landscape the shorelines and bottoms (non-open water areas) of wetland detention facilities. The selected plants and planting methods shall conform to the soils, hydrology, and water quality conditions present in such facilities, with plants being tolerant of highly variable hydrologic conditions and degraded water quality (e.g., high turbidity and salinity content). Plant selection should conform to the guidance in the Native Plant Guide for Stream and Stormwater Facilities in Northeastern Illinois (NRCS et al, 1997) which is hereby adopted by reference.

Native vegetation is recommended, but not required, for side slopes (higher than one foot above normal stage) of all detention facilities.

I. **Dry Detention Basin Design**

In addition to the other requirements of this Ordinance, dry basins shall be designed to remove stormwater pollutants, to be safe, to be aesthetically pleasing and as much as feasible to be available for multiple uses.

1. **Dry Basin Drainage**. Dry basins shall be designed so that eighty percent (80%) of their bottom area may have standing water no longer than seventy-two (72) hours for any runoff event less than the one hundred (100) year event. Grading plans shall clearly distinguish the portion of the basin bottom that may have standing water for greater than 72-hours. Underdrains directed to the outlet may be used to accomplish this requirement.

2. **Minimum Bottom Slope**. Dry bottom basins shall have two percent (2%) minimum bottom slopes or underdrain systems as approved by the jurisdiction Engineer, where possible. Where two percent (2%) minimum bottom slope is not possible, proper native vegetation should be considered consistent with the Native Plant Guide.

3. **Soil Conditions**. Appropriate soil conditions shall be provided in the basin. First, compaction of both subsoil and topsoil shall be minimized (i.e., to less than 275 psi). Where subsoil compaction cannot be avoided, it should be worked to a depth of 6-8 inches before spreading topsoil. Second, a suitable uncompacted topsoil, at a minimum thickness of one foot shall be spread to provide a suitable growing medium for plants. Coarse soils with minimal clay content and a high organic content are recommended.

4. **Velocity Dissipation**. Velocity dissipation measures shall be incorporated into dry basin designs to minimize erosion at inlets and outlets and to minimize resuspension of pollutants.

5. **Dry Basin Inlet and Outlet Orientation**. Dry basin inlet and outlet orientation shall be the same as for wet bottom detention basin

6. **Temporary Sediment Trap**. A sediment trap shall be constructed at each major inlet to a dry basin during construction. The temporary sediment trap shall be designed in accordance with criteria in the Illinois Urban Manual.
J. **On-Stream Detention**

On-stream detention basins are discouraged but will be considered if they provide regional public benefits and if they meet the other provisions of this Ordinance with respect to water quality and control of the two (2) year and one-hundred (100) year, critical duration events from the property.

1. If on-stream detention is used in watersheds larger than 200-acres, the applicant will use hydrologic and hydraulic modeling to demonstrate that the design will not increase the flood levels for any properties upstream or downstream of the property.

2. Impoundment of the stream as part of on-stream detention shall:
   
a. Require the implementation of an effective non-point source management program utilizing best management practices for run-off and sediment reduction. This program is necessary to prevent direct discharge to the stream.
      
i. Best Management Practices (BMPs) for runoff reduction consistent with the hierarchy for Minimization of Runoff Volumes and Rates as defined in this Ordinance.

      ii. Two year, 24 hour detention/sedimentation basins for all development consistent with the criteria of temporary Sediment Trap in the Illinois Urban Manual.

      iii. A program to control nonpoint sources at the source for prior developments constructed without appropriate stormwater BMPs.

   b. Include a design for appropriate bank stabilization measures, based on flow velocity calculations, and a pre-sedimentation basin.

   c. Comply with other relevant permitting and/or ordinances.

3. Impoundment of the stream as part of on-stream detention shall not:

   a. Prevent the migration of indigenous fish species, which require access to upstream areas as part of their life cycle, such as for spawning.

   b. Cause or contribute to the degradation of water quality or stream aquatic habitat.

   c. Involve any stream channelization or the filling of wetlands.

   d. Increase base flood elevations or high water levels of any adjacent land.
K. Protection of Wetlands, Rivers, Streams, Lakes, Ponds, and Depressional Storage Areas

Wetlands, rivers, streams, lakes and ponds shall be protected from damaging modifications and adverse changes in runoff quality and quantity associated with land developments. In addition to the other requirements of this Ordinance, the following requirements shall be met for all developments whose drainage flows into wetlands, rivers, lakes or ponds:

1. Detention in Wetlands, Rivers, Streams, Lakes or Ponds. Existing wetlands, rivers, lakes, or ponds shall not be modified for the purposes of stormwater detention unless it is demonstrated that the proposed modifications will maintain or improve their habitat and ability to perform beneficial functions and shall comply with other relevant permitting. Existing storage and release rate characteristics of wetlands, rivers, lakes, ponds, or other depressional storage areas shall be maintained and the volume of detention storage provided to meet the requirements of this section shall be in addition to this existing storage.

2. Sediment Control. The existing wetlands, rivers, lakes or ponds shall be protected during construction and as further regulated in Section Three, Article IV of this Ordinance.

3. Alteration of Drainage Patterns. Site drainage patterns shall not be altered to substantially decrease or increase the existing area tributary to wetlands, rivers, lakes or ponds. Drainage patterns shall not be altered by development to direct runoff offsite to other than natural drainage outlets existing prior to development.

4. Detention/Sedimentation. All runoff from the development shall be routed through a preliminary detention/sedimentation basin designed to capture the two (2) year, twenty-four (24) hour event and hold it for at least twenty-four (24) hours, before being discharged to the wetland, river, lake or pond. This basin shall be constructed before property grading begins and shall be maintained throughout the construction process. In addition, the BMP hierarchy defined in Section Three, Article I should be followed to minimize runoff volumes and rates being discharged to the wetland, river, stream, lake or pond, and as further regulated in Article II and Article IV of this Section.

5. Vegetated Buffer Strip. A buffer strip of at least twenty-five (25) feet in width, vegetated with native plant species, shall be maintained or restored around the periphery of a wetland, river, stream, lake or pond. The selected plants and planting methods shall conform to the soils, hydrology, and water quality conditions present in such facilities, with plants being tolerant of highly variable hydrologic conditions and degraded water quality (e.g., high turbidity and salinity content). Plant selection shall conform to the guidance in the native plant guide for stream and stormwater facilities in NE Illinois (NRCS et al, 1997) which is hereby adopted by reference.

L. Parking Lot Detention

If allowed by the governing jurisdiction, the maximum stormwater ponding depth in any parking area shall not exceed six (6) inches for more than four (4) hours. Parking layout shall
be designed such that handicap parking spaces are outside the design flood limits of the parking lot.

M. **Rooftop Detention**
Rooftop storage of excess stormwater shall be designed and constructed to meet with the County building code.

N. **Fee in Lieu of Detention**

1. For the purpose of satisfying the requirements for stormwater detention or compensatory storage for a development or redevelopment on a property for which detention or compensatory storage was not previously provided, a fee in lieu of detention or compensatory storage may be assessed against the development prior to the issuance of a permit. Fees shall be calculated to establish the property’s fair share of costs to provide detention or compensatory storage for the watershed or drainage basin in which the property exists. The cost figures used for detention shall be actual costs for detention or compensatory storage being provided by contract or estimated costs for planned detention or compensatory storage facilities approved by the appropriate jurisdiction official. All revenues received through such fees shall be used for no purpose other than defraying public costs associated with providing regional detention or compensatory storage facilities.

2. The jurisdiction also may require a fee for each acre/foot of detention needed in lieu of the applicant building a basin on site, provided the property will discharge stormwater into existing or proposed detention facilities with added capacity for the additional runoff.

O. **Cooperative Detention**
The County will consider joint detention facilities developed through cooperative efforts that comply with all requirements of this Ordinance.
SECTION FOUR
STORMWATER POLLUTION PREVENTION PLAN (SWP3)

A. General

1. The area disturbed shall be assumed to include the entire property area unless the applicable plans specifically exclude certain areas from disturbance.

2. The owner bears the responsibility for implementation of the SWP3 and notification of all contractors and utility agencies on the site.

3. SWP3’s must be provided for all phases of development, including sanitary sewer construction, storm drainage system construction, waterline, street and sidewalk construction, general grading and the construction of individual homes. The Class 2 Grading and Drainage Permit holder will not be required to provide an SWP3 for the activities of utility agencies.

4. The County may use the Illinois Department of Transportation (IDOT) system of compliance that is outlined in the Bureau of Design and Environment (BDE) design manual.

5. The subsequent owners of individual lots in a subdivision with an approved SWP3 bears the responsibility for continued implementation of the approved SWP3’s for all construction activity within or related to the individual lot, excluding construction managed by utility agencies.

B. Requirements for Utility Construction

1. Utility companies shall be responsible for compliance with the requirements of this Ordinance.

2. Utility companies shall develop and implement Best Management Practices (BMPs) to prevent the discharge of pollutants on any site of utility construction within the jurisdiction. Disturbed areas shall be minimized, disturbed soil shall be managed and construction site entrances shall be managed to prevent sediment tracking. Sediment tracked onto public streets shall be removed immediately by the utility agency.

3. Prior to entering a construction site, utility agencies shall obtain a copy of any SWP3’s for the project from the owner. Any disturbance to BMPs resulting from utility construction shall be repaired immediately by the utility company in compliance with the SWP3.

C. Required Documentation

A Class 2 Grading and Drainage Permit requires the execution and record maintenance of the following forms and reports (see also the Erosion Control Plan Action Matrix, NPDES Action Matrix - IDOT). The most current version of the standard forms from the Illinois Department of Transportation and the Illinois Environmental Protection Agency (IEPA) shall be used. The
approved project erosion control documents shall be kept on file at the construction site or at a nearby field office and must be made available to the general public upon request.

1. A Storm Water Pollution Prevention Plan (SWP3) shall be prepared. The applicant may use the IDOT SWP3 Template except that the Illinois Urban Manual, latest amended, shall be referenced in lieu of IDOT Standard Specifications for Road and Bridge Construction.

2. A Contractor Certification Statement (CCS) shall be completed prior to the start of construction by the contractor responsible for erosion control. The applicant may use the IDOT CCS Template (form BDE 2342a). The Grading and Drainage Permit holder shall provide the contractor responsible for erosion control with a copy of the IEPA NPDES statewide permit ILR10.

3. A Notice of Intent (NOI) shall be filed at least 30 days prior to the start of construction and shall be prepared by the Grading and Drainage Permit holder (the original sent by certified mail to the IEPA with transmittal copy to the appropriate jurisdiction official, and a copy kept in the project erosion control file). See Appendix E.

4. A NPDES / Erosion Control Inspection Report (ECIR) shall be prepared by the Grading and Drainage Permit holder on a weekly basis and after any 1/2-inch rainfall (to be kept in project erosion control file). The applicant may use the current IDOT ECIR template (BC 2259).

5. An Incidence of Non-Compliance (ION) and corrective action shall be filed by the Grading and Drainage Permit holder within five (5) working days of the incident (the original sent by certified mail to the IEPA with transmittal copy to the Planning Director or his/her designee and a copy kept in the project erosion control file). See Appendix E.

6. A Notice of Termination (NOT) shall be filed upon final stabilization of erosion (minimum 70% viable vegetative growth) by the Grading and Drainage Permit holder (the original sent by certified mail to the IEPA with transmittal copy to the Planning Director or his/her designee and a copy kept in the project erosion-control file). See Appendix E.

D. Applicability and Guidelines

1. It is the responsibility of the Grading and Drainage Permit holder to prepare and maintain documentation to meet the NPDES permit requirements for private grading and construction projects.

2. The Planning Director or his/her designee shall be given immediate access to all required project NPDES documents.

3. All notices sent to the IEPA shall be copied to the Planning Director or his/her designee.

E. Referenced Standards

Design standards for soil erosion and sediment control shall comply with the most current provisions of the USEPA regulations, IEPA regulations, IDOT Erosion Control/NPDES
guidelines and the latest amended “Illinois Urban Manual”, prepared by the United States Department of Agriculture, Natural Resources Conservation Service, unless otherwise stated by this Ordinance.

The preparation of stormwater pollution prevention plans shall follow the requirements of this Ordinance and the procedures outlined in the latest edition of the “Illinois Procedures and Standards for Urban Soil Erosion and Sediment Control” (commonly known as the “Greenbook”), which is hereby incorporated into this Ordinance by reference.

Practice standards and specifications for measures outlined in the stormwater pollution prevention plan shall follow the requirements of this Ordinance and be as least as protective as criteria in the latest edition of the “Illinois Urban Manual: A Technical Manual Designed for Urban Ecosystem and Enhancement”, which is hereby incorporated into this Ordinance by reference.

In instances where BMPs are not included in the Illinois Urban Manual, design criteria found in IDOT standard specifications or other reference manuals may be used with the approval of the County.

F. General Erosion and Sediment Control Design Features
The following principles shall apply to all construction undertaken under the authorization of a Class 2 Grading and Drainage Permit.

1. New development or redevelopment shall be designed to limit the potential for erosion.

2. Special precautions shall be taken to protect highly erodable areas and watercourses, lakes, ponds, wetlands, and other natural resources.

3. Special precautions shall be taken to prevent damages resultant from any necessary development activity within or adjacent to any stream, lake, pond or wetland. Preventive measures shall reflect the sensitivity of these areas to erosion and sedimentation.

4. The area of disturbance onsite at any one time shall be limited to 20-acres. An additional 20-acres (a maximum of 40-acres of disturbance at any one time) may be stripped in order to balance cut and fill onsite. No additional area may be open without permission of the Administrator until the previously disturbed areas have been temporarily or permanently stabilized. All disturbed areas shall be stabilized within 14 days of final grading or when left idle for more than seven days. Maintained haul roads and the area of sediment basins, site runoff storage facilities and any permanently stabilized areas are excluded from this limitation.

5. Sediment basins or traps, filter barriers, diversions, and any other appropriate sediment or runoff control measures shall be installed prior to site clearing and grading and maintained to remove sediment from run-off waters from land undergoing development.

6. In the design of erosion control facilities and practices, aesthetics and the requirements of continuing maintenance must be considered.
7. Provisions shall be made to accommodate the increased run-off caused by changed soil and surface conditions during and after development. Drainageways should be designed so that their final gradients and the resultant velocities and rates of discharge will not create additional erosion on-site or downstream.

8. Permanent vegetation and structures shall be installed and functional as soon as practical during development. Disturbed areas shall be stabilized with approved permanent measures within seven (7) calendar days following the end of active disturbance or redisturbance consistent with the following criteria:

   a. Appropriate permanent stabilization measures shall include seeding, mulching, sodding, with non-vegetative measures as a last resort.

   b. Areas having slopes greater than twelve percent (12%) shall be stabilized with sod, mat, or blanket in combination with seeding or equivalent.

9. Those areas being converted from agricultural purposes to other land uses shall be vegetated with an appropriate protective cover prior to development.

10. All waste generated as a result of site development activity shall be properly disposed of and shall be prevented from being carried off the site by either wind or water.

11. All construction sites shall provide measures to prevent sediment from being tracked onto public or private roadways.

12. All temporary soil erosion and sediment control practices shall be maintained to function as intended until the contributing drainage area has been permanently stabilized at which time they shall be removed within thirty (30) days after final site stabilization.

G. Materials and Construction Notes
Materials and construction notes for BMPs shall be at least as protective as criteria in the Illinois Urban Manual. In instances where BMPs are not included in the Illinois Urban Manual, criteria found in IDOT standard specifications or other reference manuals may be used with approval of the County.

H. Site Evaluations
Use Appendix C - Storm water inspection checklists developed by Illinois Environmental Protection Agency.

I. Soil Grading and Drainage Plan Requirements
A soil grading and drainage plan, including a narrative shall be submitted showing all measures necessary to meet the objectives of this Ordinance throughout all phases of construction. The development of a soil grading and drainage plan shall follow the requirements of this Ordinance and the procedures in the latest edition of the "Illinois Urban Manual" which is hereby incorporated into this Ordinance by reference. The County may waive specific requirements for the content of submissions upon finding that the
information submitted is sufficient to show that the work will comply with the objectives and principles of this Ordinance. Permanent soil erosion and sediment control features needed at the completion of any development site shall be included in the submittal.

The submitted soil grading and drainage plan shall include:

1. **Mapping and Descriptions.** The existing and proposed erosion and sediment control features of the property and immediate vicinity including:
   a. Items as required for the Grading and Drainage permit as required in Section II, Article II.E.5 and 7.
   b. Location of the slope disturbance line and special precautions to be taken in any areas disturbed on the slope side of the slope disturbance line.
   c. Location and description of the soil erosion and sediment control measures to be employed during construction.
   d. The predominant soil types on the site, their location, and their limitations for the proposed use as defined by the U.S.D.A. Natural Resources Conservation Service (NRCS).
   e. Location and description, including standard details, of all sediment control measures and specifics of sediment basins and traps, including outlet details.
   f. Location and description (specification) of all soil stabilization and erosion control measures.
   h. Location and description of all runoff control measures, including diversions, waterways, and outlets.

2. Larger sites, at the discretion of the appropriate jurisdiction official, and those requiring a Stormwater Pollution Prevention Plan (SWP3), may also require the following:
   a. Location and description of methods to prevent tracking of sediment off-site including construction entrance details, as appropriate.
   b. Description of dust and traffic control measures.
   c. Provisions for maintenance of control measures, including type and frequency of maintenance, easements, and estimates of the cost of maintenance.
   d. Identification (name, address, and telephone) of the person(s) or entity which will have legal responsibility for maintenance of soil erosion and sediment control structures and measures during development and after development is completed.
J. **Site Development Requirements**

On-site sediment control measures, as specified by the following criteria, shall be constructed as specified in the referenced handbooks, and functional prior to initiating clearing, grading, stripping, excavating or fill activities on the site.

1. For new developments or re-developments of more than one (1) acre but less than five (5) acres, a temporary sediment trap or equivalent control measure shall be constructed at the downslope point of the disturbed area. Temporary sediment traps shall be designed in accordance with the Illinois Urban Manual.

2. For new developments or re-developments of greater than five (5) acres, a temporary sediment basin or equivalent control measure shall be constructed at the downslope point of the disturbed area. Temporary sediment basins shall be designed in accordance with the technical reference manual.

3. To the extent possible or as otherwise regulated in this Ordinance all desirable trees eight (8) inches in diameter (measured at 4.5 ft. dbh) and larger shall be protected for their present and future value for erosion protection and other environmental benefits. Trees that have been selected for preservation shall be protected following criteria in the Illinois Urban Manual prior to the beginning of any clearing, grading, stripping, excavation, or filling of the site. A "No" construction zone shall be established and marked at the perimeter of the dripline of each tree which is to be preserved.

4. Stormwater conveyance channels, including ditches, swales, and diversions, and the outlets of all channels and pipes shall be designed and constructed as regulated in this Ordinance. All constructed or modified channels shall be stabilized within forty-eight (48) hours, consistent with the following standards and as required in the referenced handbooks:
   a. For grades up to four percent (4%), seeding in combination with mulch, erosion blanket, or an equivalent control measure shall be applied. Sod or erosion blanket or mat shall be applied to the bottom of the channel.
   b. For grades of four to eight percent (4-8%), sod or an equivalent control measure shall be applied in the channel.
   c. For grades greater than eight percent (8%), rock, riprap, or an equivalent control measure shall be applied over filter fabric or other type of soil protection, or the grade shall be effectively reduced using drop structures.

5. Land disturbance activities in stream channels shall be avoided, where possible, or as regulated this Ordinance. If disturbance activities are unavoidable, the following requirements shall be met.
   a. Construction vehicles shall be kept out of the stream channel to the maximum extent practicable. Where construction crossings are necessary, temporary crossings shall be constructed of non-erosive material, such as riprap or gravel.
b. The time and area of disturbance of stream channels shall be kept to a minimum. The stream channel, including bed and banks, shall be stabilized within 48 hours after channel disturbance is completed, interrupted, or stopped.

c. Whenever channel relocation is necessary, the new channel shall be constructed under dry conditions and fully stabilized before flow is diverted, incorporating meanders, pool and riffle sequence, and riparian planting.

6. Storm sewer inlets and culverts shall be protected by sediment traps or filter barriers meeting accepted design standards and specifications.

7. Soil storage piles containing more than ten (10) cubic yards of material shall not be located with a downslope drainage length of less than fifty (50) feet to a roadway, drainage channel, or abandoned mine. Filter barriers, including straw bales, filter fence, or equivalent, shall be installed immediately surrounding the perimeter of the pile.

8. If dewatering devices are used, discharge locations shall be protected from erosion. All pumped discharges shall be routed through appropriately designed sediment traps or basins, or equivalent and shall not be deposited into an abandoned mine.

9. Each site shall have graveled (or equivalent) entrance roads, access drives, and parking areas of sufficient length and width to prevent sediment from being tracked onto public or private roadways. Any sediment reaching a public or private road shall be removed by shoveling or street cleaning (not flushing) before the end of each workday and transported to a controlled sediment disposal area.
APPENDIX A

Sample Letters of Credit and Performance Bonds
APPENDIX C

Inspection Checklists

#1 – Grading and Drainage Permit Application Form
#2 – Operation and Maintenance Plan Checklist
#3 – Annual Inspection Form
APPENDIX D

Typical Detention Basin Cross-Sections

#1 – Wet Bottom Detention Basin
#2 – Wetland Detention Basin
#3 – Dry Bottom Detention Basin
APPENDIX E

Application Forms

#1 - SWPPP Form
#2 - NOI Form
#3 - ION Form
#4 - NOT Form
APPENDIX F

Detention Volume vs. Percent Impervious Chart