ITEM ORD 00-05315

VILLAGE OF DOWNERS GROVE
REPORT FOR THE VILLAGE COUNCIL MEETING
AUGUST 13, 2013 AGENDA

SUBJECT:	TYPE:	SUBMITTED BY:
Stormwater & Flood Plain Ordinance Update	Resolution ✓ Ordinance Motion Discussion Only	Nan Newlon, P.E. Director of Public Works

SYNOPSIS
An ordinance has been prepared to amend sections of the Municipal Code concerning the regulation of stormwater and floodplain impacts within the Village of Downers Grove.

STRATEGIC PLAN ALIGNMENT
The goals for 2011-2018 include *Top Quality Infrastructure.*

FISCAL IMPACT
N/A

RECOMMENDATION
Approval on the August 20, 2013 Active agenda.

BACKGROUND
In 2012, DuPage County adopted a major update and rewrite of the Countywide Stormwater & Flood Plain Ordinance. This ordinance is enforced by full-waiver communities to address local stormwater management and water quality concerns. Downers Grove is a full-waiver community. The Village adopted the updated ordinance on May 8, 2012. Based on input received from municipal engineers, the County adopted text amendments to provide clarity to some sections of the Ordinance. The Village is required to amend its code to comply with the County's updated ordinance.

The substantive changes to the Ordinance involve the indirect impacts to wetlands and the post-construction best management practices (PCBMPs). Article XIV of the County Ordinance (Section 26.1402 of the Downers Grove Municipal Code), which addresses indirect impacts, has been revised to improve flexibility for the applicant to demonstrate that the development will not cause indirect impacts to the wetland. In keeping with the rest of the Ordinance, the section has been reworded to also allow complete waiver communities the ability to use professional judgment to waive modeling requirements. The PCBMPs regulations in Article X of the County Ordinance (Sections 26.1000-1002 of the Downers Grove Municipal Code) address federal mandates under the National Pollution Discharge Elimination System (NPDES) permit. The proposed changes are intended to make it easier and less costly to achieve compliance with the PCBMP standards.

Staff was involved in the development of the updated County Ordinance and prepared necessary revisions to the Village's Stormwater & Flood Plain Ordinance to comply with the requirements of being a full-waiver community. In addition, staff included itemized requirements for the stormwater submittals in Section 26.700 to align with current practices and aligned language in the building protection requirements of Section 26.505 for structures in a flood plain or LPDA with language used in FEMA technical bulletins.

ATTACHMENTS:
Proposed Stormwater & Flood Plain Ordinance

ORDINANCE NO. _____

AN ORDINANCE AMENDING STORMWATER AND FLOOD PLAIN PROVISIONS

BE IT ORDAINED by the Village Council of the Village of Downers Grove in DuPage County, Illinois, as follows: (Additions are indicated by shading/underline; deletions by ~~strikeout~~):

Section 1. That Section 26.202 is hereby amended to read as follows:

26.202 Incorporation of Documents/Flood Insurance Rate Maps/Reference to Watershed Plans.

A. ~~This Ordinance recognizes the integrated nature of the watershed system and the need to study certain flood control alternatives and other stormwater management functions on a watershed-wide basis.~~

~~B. The following documents are hereby incorporated into and made a part of this Ordinance:~~

~~1.~~ The DuPage County Stormwater Management Plan, as now or hereafter amended.

~~2~~B. The Technical Guidance Manual for the DuPage County Countywide Stormwater and Flood Plain Ordinance, as now or hereafter amended.

~~3~~C. Any Watershed Plan or Interim Watershed Plan as now or hereafter adopted or amended in accordance with the DuPage County Countywide Stormwater and Flood Plain Ordinance. Any Watershed Plans or Interim Watershed Plans which contain specific criteria more or less stringent than the criteria established for Village-wide application in this Ordinance shall govern over the Village-wide criteria. Such watershed plans, upon their completion, approval, and proper adoption, are hereby incorporated into this Ordinance without further act of the Village Council. Watershed-specific criteria established in such Watershed Plans or Interim Watershed Plans shall be set forth in this Ordinance. The Village-wide requirements of this Ordinance shall apply in all watersheds unless superseded by specific watershed criteria.

D. Flood insurance study, DuPage County, Illinois and incorporated areas, dated December 16, 2004, and all subsequent revisions, including the following specific stream flood profiles:

1. Lacey Creek 58P - 60P

2. St. Joseph Creek and tributaries 69P - 75P, 80P-83P;

5. Prentiss Creek 61P - 64P;

E. Flood insurance rate map, DuPage County, Illinois, and incorporated areas, county number 17043C, panel numbers 0509, 0607, 0608, 0803, 0806, 0901, 0902, 0904, 0905, 0907 and 0908, dated December 16, 2004, and all subsequent revisions.

F. DuPage regulatory flood map, county number 17043C, panel numbers 0159, 0166, 0167, 0168, 0169, 0178, 0186, 0188, and 0276, dated July 7, 2010, and all subsequent revisions. (Ord. 2012-4463, 12-17-2012)

G. The Watershed Infrastructure Improvement Plan (WIIP), approved by the Village Council in September 2007, and all subsequent revisions, which identifies areas in the Village where drainage and flooding issues exist and recommends specific solutions.

H. Drainage Control Map, and all subsequent revisions, which shows the location of Localized Poor Drainage Areas (LPDAs)

Section 2. That Section 26.300SEC. is hereby amended to read as follows:

26.300SEC. Interpretation of Terms and Words.

The terms and words used in this Ordinance shall be interpreted as follows:

1. Words used in the present tense include the future tense.
2. Words used in the singular number include the plural number and words used in the plural number include the singular number.
3. The words "shall", "will", and "must" are mandatory, not permissive.
4. All distances, unless otherwise stated, shall be measured horizontally.
5. The phrases "Director" or ~~the~~ "Administrator", refer to the individual responsible for the enforcement of this Ordinance.
6. All references to “he”, “him”, "his", “she” and “her” shall be construed as gender-neutral.

Section 3. That Section 26.301 is hereby amended to read as follows:

26.301 Definitions.

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

Accessory Structure. A structure which is on the same parcel of property as a principal structure aslo referred to as an appurtenant structure, and;

(a) is subordinate to and serves a principal structure; and,
(b) is subordinate in area, extent, and purpose to the principal structure; and,
(c) contributes to the comfort, convenience, or necessity of occupants of the principal structure.

Administrator. The person designated by the Village Manager to administer the implementation and enforcement of this Ordinance.

Adverse Hydraulic Impact. An increase of 0.10’ or more to the modeled flood profile for a given storm event due to a proposed development activity.

Alternatives Analysis~~:~~. The process of comparing and evaluating two or more courses of action of the various technical aspects of a development with the intent of selecting the action that best meets the stated Basic Development Purpose, while minimizing environmental effects and costs. A practicable alternatives study should consider possible alternative sites, a reduction in the scale of the development and rearrangement of the proposed facilities. This study assesses actions such as fill site locations, partial and full avoidance of habitats, ~~and~~ restoration and enhancement of habitats and development economics.

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

Applicant. A person applying for a Stormwater Management Permit, which person must be either the owner or the developer of the land specified in the application.

Appropriate Use. The only uses of the regulatory floodway that may be considered for a Stormwater Management Permit.

Authorization. A notice issued by the County to the Village that those aspects submitted to the County for review have been found to be in compliance with this Ordinance.

Base Flood. The flood having a one percent probability of being equaled or exceeded in a given year. It is also known as the 1% chance or 100-year flood. It has been adopted by the NFIP as the basis for mapping, insurance rating, and regulating new construction. Within an LPDA it is the elevation as established by the WIIP or as approved by the Administrator.

Base Flood Elevation (BFE). The height of the base flood in relation to the North American Vertical Datum of 1988 (NAVD 88).

Basic Development Purpose. The fundamental, essential function of the proposed activity.

Best Management Practices (BMPs). Design, construction, and maintenance practices and criteria for stormwater facilities that minimize the impact of stormwater runoff rates and volume, prevent erosion, and capture pollutants.

Buffer. The predominately vegetated area with a defined width adjacent to those areas that meet the definition of wetland and waters of DuPage for the purpose of eliminating or minimizing adverse impacts to those areas. Buffer may function to:

- reduce flood flow rates, velocity and volume,
- promote bank stability, filter sediment, nutrients and other pollutants,
- insulate and moderate daily water temperatures,
- promote groundwater infiltration,
- provide habitat corridors for aquatic and terrestrial fauna and flora.

Building. A structure that is constructed or erected partially or wholly above ground and is enclosed by walls and a roof. The term "building" includes manufactured homes and includes both the above-ground and the below-ground portions of the structure. Free standing signs or structures, such as kiosks are not considered to be buildings regulated in this Ordinance.

Channel. Any river, stream, creek, brook, branch, natural or artificial depression, ponded area, lake, flowage, slough, ditch, conduit, culvert, gully, ravine, swale, wash, or natural or man-made drainageway, in or into which surface or groundwater flows, either perennially or intermittently.

Committee. ~~The~~See Stormwater ~~Management Planning~~ Committee ~~of the DuPage County Board, authorized by Public Act 85-905~~.

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

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

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

County. The County of DuPage, Illinois.

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

Critical Wetlands. Wetlands of the highest value by virtue of one or more high ranking characteristics that result in a uniquely valuable environment.

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

Department. The DuPage County Department of Economic Development and Planning, or successor department or agency.

Developer. Any person who undertakes development or certifies permits development on such person's behalf.

Development. Any activity, excavation or fill, alteration, removal of vegetation, subdivision, change in land use, or practice, undertaken by private or public entities that affects the discharge of stormwater; or any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials in flood plain, flood way, wetland, waters or buffer areas. The term "development" does not include maintenance ~~of stormwater facilities~~.

Development Site. The contiguous parcels of land under the Ownership or Control of the land owner or developer who is making Application for a Stormwater Management ~~Certification~~Permit. When the development includes subdivision of a parcel, the development site includes all land prior to subdivision. When the owner or developer controls only a portion of a larger development which has already been constructed, the Administrator may consider the larger, previously developed site as the “development site” if it was developed under a Stormwater Management Permit issued after February 15, 1992.

Director. The DuPage County Director of Stormwater Management or his or her designee. The Director of Stormwater Management shall be a ~~p~~Professional ~~e~~Engineer.

Direct Impact~~:~~. Physical impact within wetland, waters or buffer.

Drainage Control Map~~:~~. The Administrator shall prepare, and as necessary update maps, listings and other information, to be collectively known as the Drainage Control Map, setting forth regulatory flood plains and known ~~l~~Localized ~~p~~Poor ~~d~~Drainage ~~a~~Areas within the Village. The Drainage Control Map, as well as any proposed amendments, shall be submitted to the Oversight Committee for review and approval.

Dry Land. Land that is not a waters of the DuPage, which does not contain hydric soil, or can be shown through a review of historic aerial photos spanning at least 4 decades leading up to development that an area in question did not contain wetland area, but for an incidental construction activity that caused the area to become wet.

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

Environmental Scientist: A professional with a four-year degree in an earth or life science curriculum and four years of professional experience in which the scientist has spent more than 50% or their work time on wetland/environmental related tasks with an emphasis on wetland delineation, ecology, restoration and botany.

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

FEMA. The Federal Emergency Management Agency.

FEMA Map Change. Any one or more of the following: CLOMR, LOMR, LOMA, CLOMR-F, LOMR-F and physical map changes and other designations of map change as developed under the NFIP.

FHBM. A Flood Hazard Boundary Map. An official map of a community, issued by FEMA, on which the boundaries of the flood, mudslide or mudflow, or related erosion areas having special hazards have been designated as Zones A, M, or E.

Filter Barrier. A temporary barrier installed below disturbed areas to intercept and retain sediment.

Final Stabilization. A condition when all soil disturbing activities at a site has been completed and a uniform, evenly distributed perennial vegetative cover with a density of seventy-five (75) percent of the cover for unpaved areas and areas not covered by permanent structures has been established, or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

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

FIS. Flood Insurance Study. An examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations.

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

Flood Plain. The area typically adjacent to and including a body of water where ground surface elevations are at or below a specified flood elevation.

Floodproof. Additions, changes, or adjustments to structures or property that prevent the entry of flood water in order to protect property from flood damage.

Floodproofing Certificate. A form published by FEMA that is used to certify that a structure is floodproofed to a minimum one foot above the base flood elevation.

Flood Protection Elevation (FPE). The base flood elevation plus ~~one foot~~three (3) feet of freeboard. If an approved FEQ watershed plan model produces a higher elevation than the regulatory BFE, the FPE shall be the FEQ flood of record elevation plus ~~three (3) feet~~one (1) foot of freeboard.

Floodway. The channel and that portion of the flood plain adjacent to a stream or watercourse that is needed to convey the base flood without cumulatively increasing the water surface elevation more than 0.1 feet.

Floodway Conveyance. The measure of the flow carrying capacity of the floodway section and is defined using Manning's equation as,

$K = \frac{1.49}{n} AR^{2/3}$ where "n" is Manning's roughness factor,

"A" is the effective area of the cross-section, and "R" is ratio of the wetted area to the wetted perimeter.

Floristic Quality Index (FQI). A ~~Q~~quantitative measure to determine the quality of a plant community as calculated by the methodology contained in ~~Swink, F. and G. Wilhelm's~~ Plants of the Chicago Region (~~1994. 4th Edition,~~Swink, F. and G. Wilhelm. The Morton Arboretum, Lisle, Illinois).

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

IDNR-OWR. Illinois Department of Natural Resuorces - Office of Water Resources.

IEPA. Illinois Environmental Protection Agency.

Indirect Wetland Impact. A change in hydraulics or hydrology that causes a change in plant community that reduces or eliminates wetland function without directly filling or excavating wetland.

Impervious Area. Land cover that is, including, but not limited to, non-porous asphalt or asphalt sealants, non-porous concrete, roofing materials except planted rooftops designed to reduce runoff, and gravel surfaces used as roadways or parking lots. Graveled surfaces used for storage of materials may be counted only 60% impervious for purpose of Stormwater Management Calculation, provided aggregate gradation has a high porosity. Ponded water shall be considered impervious area (at its normal water elevation), but vegetated wetlands or constructed wetland basins shall not be considered impervious area. The impervious area of a development site pre-development is the maximum extent of the impervious surfaces that existed on the development site at the same time in any of the 3 -years pre-dating the date of the application.

Interim Watershed Plan. A portion of a watershed plan adopted by the County Board that does not yet contain all of the elements in Chapter 3 of the Plan.

~~**Localized Poor Drainage Area (LPDA):** An area not included within a regulatory flood plain which, based on historical information and generally accepted engineering practices and principles, has poor or otherwise inadequate drainage resulting in periods of flooding.~~

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

Land Disturbing Activities. Any manmade change to improved or unimproved real estate including, but not limited to, construction of or improvements to buildings or other structures, filling, grading, paving, excavating or demolition of buildings, structures or pavement.

Land Surveyor. A person licensed under the laws of the State of Illinois to practice land surveying.

Letter of Permission (LOP). A request for approval to proceed with an action that is believed to have met certain specified criteria as defined within the Ordinance.

Localized Poor Drainage Area (LPDA): An area, determined to meet the criteria established in Section 26.1302 of this Ordinance and shown on the Drainage Control Map, which, based on historical information and generally accepted engineering practices and principles, has poor or otherwise inadequate drainage resulting in periods of flooding.

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

LOMC. A Letter of Map Change. A Letter of Map Amendment or a Letter of Map Revision.

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

Lowest Floor. The lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usage solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor; provided, that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirement of the *Code of Federal Regulations (CFR) 44, Part 60.3.*

Maintenance. The selective removal of woody material and accumulated debris from, or repairs to, a stormwater facility so that such facility will perform the functions for which it was designed and constructed. Partial reconstruction or any resurfacing of existing roadways, walkways, trails and bicycle routes will be considered a form of maintenance.

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

Manufactured Home. A building, transportable in one or more sections, that is built on a permanent chassis and is designated for use with or without a permanent foundation when connected to the required utilities. The term "manufactured home" also includes park trailers, travel trailers, and other similar vehicles placed on a site for more than 180 consecutive days.

Minor Development. The following parameters define Minor Development. The area proposed to be disturbed by the development activities can be defined and limited in the field to three acres or less, and;

- (i) Does not involve any work within a wetland, buffer or within 100 feet of a wetland boundary; and
- (ii) Does not involve any work within a ~~mapped~~regulator flood plain or LPDA; and
- (iii) Does not involve ~~more than~~ 2,500 square feet or more of net new impervious area.

A development may also qualify as minor, with the prior concurrence of the Administrator if it exceeds 2,500 square feet of net new impervious area but does not meet the thresholds for providing site runoff storage

Minor Stormwater System. That portion of a stormwater facility consisting of street gutters, storm sewers, small open channels, swales, and similar facilities designed to convey runoff from the 10-year flood event or less.

Mitigation. Measures taken to offset negative impacts by development to wetland, buffer or flood plain areas. When a development unavoidably requires impact or loss of natural resources, that impact must be offset (compensated or mitigated) by replacing or providing substitute resources or environments. Mitigation shall take into consideration functions wetlands and buffers may provide.

Native Vegetation. Plants indigenous to northeastern Illinois as defined within *Plants of the Chicago Region* (Swink and Wilhelm. The Morton Arboretum, Lisle, Illinois).

Natural Areas Restoration Development. A development for which the basic development purpose is the restoration or creation of natural areas including streambank or shoreline restoration.

New Construction. For the purposes of determining insurance rates, structures for which the "start of construction" commenced on or after the effective date of an initial FIRM or after December 31, 1974, whichever is later, and included any subsequent improvements to such structures. For flood plain management purposes, new construction means structures for which the start of construction commenced on or after the effective date of the flood plain management regulation adopted by a community and includes any subsequent improvements to such structures.

New Impervious Areas. ~~are i~~Impervious areas ~~are~~ constructed under the set of plans associated with an application for Stormwater Management Permit.

New Manufactured Home Park. A manufactured home park for which the construction of facilities for servicing homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of flood plain management regulation adopted by a

community.

NFIP. The National Flood Insurance Program. The requirements of the NFIP are codified in Title 44 of the Code of Federal Regulations, Subchapter B.

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

Open Space Development ~~Developments~~. Developments which create only incidental amounts of impervious area, such as trails, picnic shelters or playgrounds, involve grading and vegetation removal but do not alter significantly the pattern of stormwater runoff compared to the pre-development site. Open space developments are limited to 20% impervious coverage in the With-Development Site condition.

Ordinary High Water Mark (OHWM). The line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank (scour line), shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

Oversight Committee. The Downers Grove Stormwater and Flood Plain Oversight Committee.

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

Parcel. Contiguous land under single ownership or control.

Performance Standards. A set of criteria ~~for a specified area~~ which ~~the vegetation, soils, or hydrology~~a wetland buffer natural areas development must meet in order to obtain approval as outlined in a Stormwater Management ~~Certification~~Permit.

Permanent Wetland Impact. The permanent conversion of wetland to non-wetland through direct or indirect activities.

Permit. A statement that a proposed development meets the requirements of this Ordinance.

Person. Any individual, partnership, firm, school district, company, corporation, association, joint stock company, trust, estate, unit of local government, special taxing district, public utility, political subdivision, state agency, or any other legal entity, or owner, or any legal representative, agent, or assign thereof.

Plan. The DuPage County Stormwater Management Plan, adopted by the DuPage County Board in September 1989, as amended from time to time.

Post Construction BMPs. Features or infrastructure permanently installed onsite to treat stormwater runoff for pollutants of concern and to reduce runoff volume, following construction, for the life of the development.

Practicable Alternative. A development that is available and capable of being completed after taking into consideration cost, existing technology, and logistics in light of the overall basic

development purpose. A study of practicable alternatives should consider possible alternative sites, a reduction in the scale of the development and rearrangement of the proposed facilities. This study assesses actions such as fill site locations, partial and full avoidance of habitats, and restoration and enhancement of habitats and development economics. See also **alternatives analysis.**

Pre-Development Site. On the date of application, the Pre-Development site consists of those existing site features that were either permitted or did not require permits at the time of their construction, or were constructed prior to February 15, 1992. Specifically, such features as pervious and impervious (paved or roof) surfaces, and existing drainage facilities, as well as Wetlands, flood plains/floodways, LPDAs and buffers are important pre-development site features.

Professional Engineer. A person licensed under the laws of the State of Illinois to practice professional engineering.

Professional Engineering. The application of science to the design of engineering systems and facilities, using the knowledge, skills, ability, and professional judgment developed through professional engineering education, training, and experience.

~~**Professional Engineering Practice.** The consultation on, conception, investigation, evaluation, planning, and design of, and selection of materials and methods to be used in, administration of construction contracts for or site observation of an engineering system or facility, when such consultation, conception, investigation, evaluation, planning, design, selection, administration, or observation requires extensive knowledge of engineering laws, formulae, materials, practice, and construction methods.~~

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

Record Drawings. Drawings prepared, signed, and sealed by a ~~p~~Professional ~~e~~Engineer or land surveyor representing the final "as-built" record of the actual in-place elevations, location of structures, and topography.

Recreational Vehicle. Any camping trailer, motor home, mini-motor home, travel trailer, truck camper and van camper as those terms are defined in the Illinois Motor Vehicle Code, or any other habitable vehicle used primarily for recreational purposes.

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

Regulatory Flood Map (RFM). The flood plain map panels maintained and published by DuPage County which reflect the current effective flood zone boundaries as shown on the FIRM and all effective Letters of Map Change issued by FEMA.

Regulatory Flood Plain. The flood plain as determined by the base flood elevation used as the basis for regulation in this Ordinance.

Regulatory Floodway. The floodway that is used as the basis for regulation in this Ordinance.

Regulatory Wetlands. All wetlands other than critical wetlands.

Repetitive Loss. Flood related damages sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each flood event, on the average, equals or exceeds twenty-five percent (25%) of the market value of the structure before the damage occurred.

Riparian Environment: Land bordering a waterway that provides habitat or amenities dependent on the proximity to water.

Roadway ~~Projects.~~ Development. A development on an essentially linear property holding including easements, not a part of a larger development project involving adjacent land holdings, and for the purpose of building a new roadway, expanding the impervious footprint of an existing roadway, or completely reconstructing an existing roadway. ~~Partial reconstruction or any resurfacing of existing roadways, walkways, trails, and bicycle routes will be considered a form of maintenance, not subject to either Site Runoff Storage or BMP provisions.~~

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

Sediment Basin. Settling ponds with pipe outlet, which have both a permanent pool (dead storage) and additional volume (live and sediment storage) component, to detain sediment-laden runoff from disturbed areas to allow sediment and debris to settle out.

Sediment Trap. A small, temporary ponding basin formed by the construction of an embankment or excavated basin to detain sediment-laden runoff from disturbed areas to allow sediment and debris to settle out.

Silt Fence. A temporary filter barrier of entrenched geotextile fabric (filter fabric) stretched across and attached to supporting posts.

Soil Scientist. A person with a four-year degree in which the core curriculum included course work in a minimum of two of the following fields: soil science, pedology, edophology, and geomorphology, and which person has a minimum of two years of field experience in classifying soils.

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

~~**Special Management Area (SMA).** Regulatory flood plains, riparian environment, wetlands, wetland buffers or localized poor drainage areas.~~

Start of Construction. The date the permit was issued provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement or other improvement was within 180 days of the permit date. The actual start date includes the first day of any land preparation, including clearing, grading, filling, or excavation. For substantial improvements, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building whether or not that alteration affects the external dimensions of the building.

Stormwater Committee. The Stormwater Management Planning Committee of the DuPage County Board, authorized by Public Act 85-905.

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

Stormwater Management Permit. A permit established by this Ordinance; and issued by the Village signifying acceptance of measures identified for proposed development to comply with this Ordinance and the Plan.

Structure. The term “structure” includes, without limitation: buildings, manufactured homes, tanks, and dams.

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

Substantial Damage. Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

Substantial Improvement. Any repair, reconstruction, rehabilitation, addition, or other improvement of a building, the cost of which improvement equals or exceeds, individually or in the aggregate, 50 percent of the fair market value of the building, determined from the equalized assessed value of the building, before the start of construction of the improvement or, if the building has been damaged, before the damage occurred. The term "cost of improvement" includes the value of volunteer labor and donated materials. The term "cost of improvement" does not, however, include either (1) any development for improvement of a building to correct existing violations of state or local health, sanitary, or safety code specifications that have been identified by the local code enforcement official and that are the minimum necessary to assure safe living conditions or (2) any alteration of a historic building that will not preclude the building's continued designation as a historic building.

Substantial Improvement Any reconstruction, rehabilitation, addition, or improvement of a structure taking place *(*pick either: “subsequent to the adoption of this ordinance”, “during the life of the building” or “during a 10-year period”)* in which the cumulative percentage of improvements equals or exceeds 50 percent of the market value of the structure before the improvement or repair is started. "Substantial Improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the building. This term includes structures which have incurred repetitive loss or substantial damage, regardless of the actual work done. The

term does not, however, include either: any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions, or any alteration of a "historic structure" listed on the National Register of Historic Places or the Illinois Register of Historic Places, provided that the alteration will not preclude the structure's continued designation as a historic structure.

Temporary Wetland Impact. A wetland impact that would result in a short-term loss of wetland function. Temporary wetland impacts do not result in a permanent conversion of wetland to non-wetland. Temporary impacts do not include relocation of wetland, or conversion of a vegetated community to open water, unless the conversion is part of an overall wetland restoration/creation program that is submitted for review and approved. Additionally, for the impact to be considered temporary, wetland soil profiles shall be able to be restored to a similar pre-disturbance condition and elevation, vegetative communities shall have the capability of being restored to same or higher quality, function; and the restoration must occur within one year of the disturbance.

Total Impervious Area. ~~is t~~The sum of the impervious area on a site.

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

USACE. United States Army Corps of Engineers.

USEPA. United States Environmental Protection Agency.

Variance. An Authorization recommended by the Oversight Committee, and granted by the Village Council, that varies certain requirements of this Ordinance in a manner in harmony with the application of the Ordinance's general purpose and intent, which variance shall be granted only in a case where there are practical difficulties or particular hardships.

Violation. Failure of a structure or other development to be fully compliant with the regulations identified by Ordinance.

Water and Sewer Improvement Development. A development to construct, replace or upgrade infrastructure to meet current IEPA requirements for public water supply or pollution control (water or sewer system improvements). This definition does not include buildings, substations, pads, parking lots ot other associated utility support facilities.

Water Quality Best Management Practices Technical Guidance. This document is a standalone guidance on file with DuPage County. The Guidance was published in March 2008.

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

Watershed Basin Committee. A technical committee established within a watershed planning area.

Watershed Benefit. A decrease in flood elevations or flood damages or an improvement in water quality, upstream or downstream of the development site.

WIIP. The Watershed Infrastructure Improvement Plan as approved by the Village Council in September 2007, and all subsequent revisions, which identifies areas in the Village where drainage and flooding issues exist and recommends specific solutions.

Watershed Plan. A plan adopted by the County for stormwater management within a watershed consistent with the requirements in Chapter 3 of the Plan.

Watershed Planning Area. That area considered in a specific watershed plan, adopted as part of the Plan.

Watershed Plan Model. The hydrologic and hydraulic model meeting the standards of the Plan and used in developing a watershed plan.

Waters of DuPage. All waters such as lakes, rivers, streams (including intermittent streams), mudflats, wetlands, sloughs, wet meadows, or natural ponds.

Tributaries of waters identified above.

For clarification, waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act (other than cooling ponds as defined in 40 CFR 123.11(m) which also meet the criteria of this definition) are not Waters of DuPage.

The following are generally not considered to be Waters of DuPage. However, the Administrator, reserves the right on a case-by-case basis to determine that a particular waterbody within these categories of waters is a Waters of DuPage.

- Drainage, irrigation and roadside ditches excavated on dry land.

- Artificially irrigated areas that would revert to upland if the irrigation ceased.

- Artificial lakes, ponds or **wetlands** created by excavating and/or diking dry land to collect and retain water and which are used exclusively for such purposes as stormwater storage, stock watering, irrigation, settling basins, or sediment traps.

- Artificial bodies of water created by excavating and/or diking dry land to retain water for primarily aesthetic reasons.

- Waterfilled depressions created in dry land incidental to construction activity and pits or quarries excavated in dry land for the purpose of obtaining fill, stone, aggregate, sand, or gravel unless and until the construction or excavation operation is abandoned for a period of 5 years or more and the resulting body of water meets the definition of waters of DuPage.

Wetlands. Areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Wetland Buffer: Area within 50 feet of a regulatory wetland boundary or 100 feet of a critical wetland boundary.

Wetland Impact. Development affecting the long term function of any wetland.

With-Development Site. The site features illustrated on the final certified plans for a development, including unchanged areas or facilities of the pre-development site.

Section 4. That Section 26.302 is hereby amended to read as follows:

26.302 Responsibility for Administration.

A. The Village Council shall determine policy related to and direct the enforcement of this Ordinance.

B. The Administrator shall have the authority and responsibility for the administration of this Ordinance. In performing his or her duties, the Administrator may delegate routine responsibilities to any named designee.

C. The Village shall remain solely responsible for its standing in the NFIP and for:

1. Maintaining records and submitting reports required for the NFIP, including elevation certificates, floodproofing certificates, and lowest floor elevations; and

2. Notifying the Director, and if required FEMA, IDNR-OWR, USACE, ~~the Illinois Environmental Protection Agency~~IEPA, and the~~ United States Environmental Protection Agency~~USEPA of any proposed amendment to this Ordinance.

Section 5. That Section 26.303 is hereby amended to read as follows:

26.303 Duties of Administrator

The duties and functions of the Administrator shall include:

A. Ensuring that copies of all stormwater related and applicable required federal, state, and regional permits or County approvals are received before work under a Stormwater Management Permit begins ; and

B. Verifying the existence of flood plain, wetlands and buffers for each application; and

C. Reviewing and issuing any permits or notices required by this Ordinance; and
D. Notifying the Director and owners of adjacent upstream, downstream, and potentially affected property, affected state and federal agencies, and watershed basin communities, and providing notice of any variance requested from the provisions of this Ordinance; and
E. Notifying the Director and all affected persons defined in Section 26.~~203D~~301 of this Ordinance of any alteration or relocation of a watercourse including application for a FEMA CLOMC and LOMC as required; and
F. Providing for periodic inspections of developments during constructions to ensure conformity with permit provisions and conditions; and
G. Investigating complaints of violations of this Ordinance; and
H. Notifying any applicant for a variance that granting the variance may result in increased rates for flood insurance; and
I. Notifying the Director and other jurisdictions of alleged violations of their permit programs; and
J. Notifying violators within regulatory flood plains that failure to comply with NFIP provisions could make them ineligible to receive flood insurance; and
K. Initiating any proceeding necessary to enforce this Ordinance; and
L. Encouraging and conducting studies, investigations, and research relating to the physical, chemical, ecological, engineering, and other aspects of stormwater management; and
M. Advise, consult and cooperate with other governmental agencies to promote the purposes of this Ordinance; and
N. Maintaining for public inspection copies of all applications and submittals, federal and state permit documents, variation documentation, FEMA CLOMC and LOMC, and all other documents required pursuant to Article VI and VII of this Ordinance; and
O. Sending copies of any application for a FEMA CLOMC and LOMC to the Director; and
P. Sending a copy of any petition or request for a variance from the terms of this Ordinance to the Committee before any such variance is approved by the Oversight Committee; except in cases where the variance from this Ordinance still meets or exceeds the requirements of the DuPage County Countywide Stormwater and Flood Plain Ordinance; and
Q. Submitting the necessary information to the Director relating to development to maintain Countywide regulatory maps and for supervision of ~~the~~this Ordinance. This includes, but is not limited to, copies of any Stormwater Management ~~Certifications~~Permits, or FEMA CLOMCs and LOMCs~~.~~; and
R. Maintaining documentation necessary on "cost of improvement" on buildings in the flood plain, relating to the substantial improvements or substantial damage requirements of this Ordinance or the NFIP~~.~~; and
~~S. Maintaining and making available to applicants a list of all adopted General Certifications; and~~
~~T. Maintaining and revising, as necessary, the Official List of Exempt Development, in accordance with the DuPage County Countywide Stormwater and Flood Plain Ordinance; and~~
~~U. Ensuring that technical reviews are completed by a Professional Engineer, meeting the requirements of the DuPage County Countywide Stormwater and Flood Plain Ordinance; and~~
~~V. Ensuring that wetland delineations and other wetland and other buffer related aspects outside the expertise of the Professional Engineer must be reviewed by an Environmental Scientist.~~

Section 6. That Section 26.400ART is hereby amended to read as follows:

26.400ART Article IV. Stormwater and Flood Plain Oversight Committee

Section 7. That Section 26.400SEC. is hereby amended to read as follows:

26.400SEC. Oversight Committee.

There is established the Stormwater and Flood Plain Oversight Committee (Oversight Committee), which shall consist of seven members appointed by the Mayor, subject to confirmation by the Village Council. Members shall be appointed for staggered terms of three (3) years each. Members shall hold office for their designated terms and until their successors have been appointed. The Mayor shall appoint a chairman of the Oversight Committee from among its members, who shall serve as the chairman for the duration of this term. The Oversight Committee may designate from among its members a secretary and such other officers as it may deem advisable.

Section 8. That Section 26.402 is hereby amended to read as follows:

26.402 Meetings, Procedures and Rules.

Meetings and proceeding of the Oversight Committee shall be subject to the following provisions:

~~a~~A. The Oversight Committee shall have regular meetings at such times and places as the Oversight Committee may designate by appropriate rule or resolution and may have special meetings called in such a manner as the Oversight Committee may designate by appropriate rule or resolution. Notice of such regular or special meetings shall be given in accordance with applicable law. All meetings of the Oversight Committee shall be public and ~~the Oversight Committee shall cause minutes thereof to be kept. Which~~ minutes shall be kept and made available to the Village Council on request.

~~b~~B. Meeting rooms of the Village shall be made available to the Oversight Committee for its meetings, subject to the general direction of the Village Manager.

~~c~~C. Subject to the provisions of this Ordinance, the Oversight Committee may adopt such rules of order and procedures for the conduct of its business as it deems necessary or appropriate.

~~d~~D. The Oversight Committee, when considering appeals or variances, may request an opinion from the Director or the Municipal Engineers Group established by the County.

Section 9. That Section 26.500ART is hereby amended to read as follows:

26.500ART Article V. General Provisions

Section 10. That Section 26.501 is hereby amended to read as follows:

26.501 Scope of Regulation.

A. This Ordinance shall apply to all development of property within the boundaries of the Village since February 15, 1992, including those under the control of any governmental entity, except State and Federal Government agencies of higher jurisdiction or authority.

B. The provisions of this Ordinance shall not apply to:

1. Structures and land uses existing as of February 15,1992, except when subsequently re-developed and except that minimum standards of the NFIP ~~will~~shall apply to all development ~~whether or not this Ordinance applies~~; and
2. Proposed developments that are listed on the Official List of Exempt Developments submitted to the County by the Village. All such developments on the list shall have met at least one of the following criteria:
    a. Building permits for such development were issued prior to February 15, 1992; or
    b. Engineering of all stormwater facilities for such development was submitted to and approved by the Village Engineer prior to February 15, 1992; or
    c. Annexation agreements or ordinances or other agreements were recorded or executed prior to February 15,1992 which specifically exempt such development from Village

ordinances codes; or

d. For other developments, contractual agreements executed prior to February 15, 1992 which specifically exempt such development from Village ordinances; or

e. Approvals resulting from judicial decrees preclude application of this Ordinance.

C. The exemption granted pursuant to Section 26.501B.2 shall extend only to the specific improvements authorized by the building permit, engineering approval, or judicial decrees, and all specific limitations agreed to in any annexation agreement or ordinance or contract shall apply. All other development not previously specifically exempted shall remain subject to the provisions of this Ordinance.

D. Plan changes which result in greater impervious coverage of the site compared to the exempted plan will be cause for the Administrator to remove the development from the Official List. Such a finding may be appealed to the Committee in accordance with Article XVIII for final decision.

E. Nonconforming structures shall not be replaced or enlarged in any manner unless such replacements or enlargements conform to the requirements of this Ordinance.

Section 11. That Section 26.504 is hereby amended to read as follows:

26.504 General Stormwater and Flood Plain Requirements.

The following general stormwater and flood plain requirements shall apply to all development.

A. Development shall not:

1. Result in unreasonable new or additional expense to any person other than the developer for flood protection or for lost environmental stream uses and functions attributable to the development; nor
2. Unreasonably increase flood elevations or decrease flood conveyance capacity upstream or downstream of the area under the ownership or control of the developer; nor
3. Pose any unreasonable new or additional increase in flood velocity or impairment of the hydrologic and hydraulic functions of streams and flood plains unless a watershed benefit is realized; nor
4. Violate any provision of this Ordinance either during or after construction; nor
5. Unreasonably or unnecessarily degrade surface or ground water quality.

B. For purposes of this Article, changes in flood elevations or changes in discharges within the limits of modeling tolerance allowed in this Ordinance shall be deemed acceptable.

C. Analysis and design of all stormwater, LPDA and flood plain facilities required for development shall:

1. Meet the standards and criteria established in the Plan and, if available, in Watershed Plans or in Interim Watershed Plans; and
2. Be consistent with techniques specified in the Watershed Plans or the Interim Watershed Plans; and
3. Site runoff storage and compensatory storage facilities shall be either constructed before, or concurrently with, general construction. The facilities shall be functional prior to or concurrent with any building construction that increases a site's total impervious area.; and
4. Stormwater facilities shall be functional before building permits are issued for a residential or non-residential subdivision.; and
5. Stormwater facilities shall be functional where practicable for single parcel developments before general construction begins.

Section 12. That Section 26.505 is hereby amended to read as follows:

26.505 Building Protection.

A. Within the boundary of the regulatory flood plain, all usable space in new buildings, or added to existing buildings, shall either be elevated, flood-proofed, or otherwise protected such that the lowest entry shall be at least three (3) feet above the nearest base flood elevation to prevent the entry of surface

stormwater. Floodproofing devices shall be operational without human intervention. If electricity is required for protection against flood damage, there shall be a backup power source which will activate without human intervention. Floodproofing measures shall be certified by a ~~p~~Professional ~~e~~Engineer.
B. Within a ~~Localized Poor Drainage Area~~LPDA, all usable space in new buildings, or added to existing buildings, shall be elevated, floodproofed or otherwise protected such that the lowest entry shall be at least three (3) feet above the nearest base flood elevation to prevent teh entry of sturface stormwater. Except on a single-family residential parcel, detached garages and accessory buildings not suitable for human dwelling shall be constructed with all new and added usable space elevated to at least one foot above the base flood elevation. Floodproofing devices shall be operational without human intervention. If electricity is required for protection against flood damage, there shall be a backup power source which will activate without human intervention. Floodproofing measures shall be certified by a Professional Engineer.
~~B~~C. In areas outside the boundary of the regulatory flood plain and LPDA, all usable space in new buildings, or added to existing buildings, shall be elevated, floodproofed, or otherwise protected to at least one foot above the adjacent base flood elevation to prevent the entry of surface stormwater. Floodproofing devices shall be operational without human intervention. If electricity is required for protection against flood damage, there shall be a backup power source which will activate without human intervention. Floodproofing measures shall be certified by a ~~p~~Professional ~~e~~Engineer.
D. All usable space in new buildings or added to existing buildings adjacent to a major stormwater system, site runoff storage facility overflow path or site runoff storage facility, shall be elevated, floodproofed, or otherwise protected to at least one foot above the design elevation to prevent the entry of surface stormwater. The design elevation is the elevation associated with the design rate as determined in Section 26.1101 and 26.1102.
E. Other building protection standards for structures that may be implemented in the floodplain and LPDA are listed in Section 26.1303.B.
F. Within an area where FEMA has issued a letter of map revision based on fill (LOMR-F) or in a LPDA, a new building or an addition to a new building may be placed on the land elevated by fill above the base flood elevation with the lowest floor below the flood protection elevation, as defined in Section 26.301, provided the structure meets the following provisions:
1. No floor level or portion of a structure that is below the regulatory flood protection elevation shall be used as habitable space or for storage of any property, materials, or equipment that might constitute a safety hazard when contacted by floodwaters. Habitable space shall be defined as any space in a structure used for living, sleeping, eating or cooking. Bathrooms, toilet compartments, closets, halls, storage rooms, laundry or utility space, and similar areas are not considered habitable space.
2. For residential and nonresidential structures, the basement floor may be placed below the regulatory flood protection elevation subject to the following standards:
a. The top of the immediate floor above any basement area shall be placed at or above the regulatory flood protection elevation.
b. Any area of the structure placed below the regulatory flood protection elevation shall meet the "reasonably safe from flooding" standards in the Federal Emergency Management Agency (FEMA) publication entitled "Ensuring that Structures Built on Fill In or Near Special Flood Hazard Areas Are Reasonably Safe From Flooding," Technical Bulletin 10-01, a copy of which is hereby adopted by reference and made part of this chapter. The applicant shall submit documentation that the structure is designed and built in accordance with either the "Simplified Approach" or "Engineered Basement Option" found in FEMA Technical Bulletin 10-01.
c. If the ground surrounding the lowest adjacent grade to the structure is not at or above the flood protection elevation, then any portion of the structure that is below the flood protection elevation must be floodproofed.

Section 13. That Section 26.600SEC. is hereby amended to read as follows:

26.600SEC. Permits.

Any person proposing a development shall obtain a Stormwater Management Permit, or the development must fit all conditions of a General Certification (Section 26.602), or if applicable, obtain a Letter of Permission (Section 26.601) unless the development meets the criteria of Section 26.6000A orone of the following criteria of Section 26.600~~.A or Section 26.600~~.B.

A. The development is:

1. On a Development Site that does not include flood plain, LPDA, wetlands or buffers; and
2. The development does not add ~~more than~~ 2,500 square feet or moreof net new impervious area compared to the pre-development conditions~~,~~; or
3. Does not include ~~more than~~ 500 square feet or more of land disturbing activities~~.~~; or

B. The Development Site does not include wetlands, buffers or flood plains and consists solely of one or more of the following:

1. Cultivation, conservation measures or gardening; or
2. Installation, renovation or replacement of a septic system, potable water service line, or other utility to serve an existing structure; or
3. Excavation or removal of vegetation in rights-of-way or public utility easements for the purpose of installing or maintaining utilities; or
4. Maintenance, repair or at grade replacement of existing lawn areas not otherwise requiring a Stormwater Permit under this Ordinance.

Section 14. That Section 26.601 is hereby amended to read as follows:

26.601 Letters of Permission.

The Administrator shall have the option of issuing a "Letter of Permission" in lieu of a Stormwater Management Permit. A Letter of Permission may be issued for developments that can be determined, based on review of the applicants proposed plans, available documents, site inspection and judgment, to be limited in scope and complexity and fit the definition, for "Minor Development". The applicant may propose that certain submittal requirements be waived for those developments approved for processing as a Letter of Permission, provided that the request is in writing and in advance of the submittal, and the request is approved in writing by the Administrator. The applicant, and if applicable, their ~~his~~ design professionals, must affirm that all calculations are in accordance with standard engineering practice and have been checked for accuracy of calculation and are in compliance with the requirements of this Ordinance. The Applicant shall remain responsible for any errors in calculation or application of engineering methodology.

A. The following are the potential modifications to submittal requirements in the form of "waiving submittal" that may be considered.

1. Supporting calculations for simple soil erosion and sediment control plans, if the development is not subject to NPDES permitting;
2. Routine backup calculations such as time of concentration, runoff curve number~~,~~ and storm sewer design calculations;
3. Copies of maps such as soils maps.
4. Other supporting calculations when the results used in the design appear to the Administrator to be within the norms of engineering practice.

B. The following are not eligible to be "waived for submittal"

1. Construction plans complete with all details, including soil erosion and sediment control plan must be submitted by the applicant~~ and cannot be waived~~.
2. Development Securities in the amounts and forms defined in this Ordinance, record exhibits and maintenance easements may be reduced or waived if adequate other securities are required under other building permit requirements such that the Administrator is reasonably assured that the

intent of those provisions in this Ordinance is carried out.
C. Decisions made on behalf of the Village made by the Administrator with regard to Letters of Permission applicability and submittal requirements are by permission to the applicant.
D. The Letter of Permission will serve in all respects as the Stormwater Management Permit, with the same duration, and may be combined with a General Certification for the parts of the development to which a General Certification might be applicable.
E. A Letter of Permission cannot be used to substantively change the technical standards of this Ordinance.

Section 15. That Section 26.602 is hereby amended to read as follows:

26.602 General Certifications.
A. The Administrator ~~in a Waiver Community,~~ may issue General Certifications, which when adopted by the Stormwater Committee, County Board, and Oversight Committee and when found applicable to the particular circumstances of a development, will serve as the Stormwater Management ~~Certification~~Permit for the development activity, or a portion of the development activity. General Certifications may provide clarification or interpretation of technical requirements and are intended to address common and generally low impact developments, reducing submittal requirements, design costs and the public burden to apply for ~~Certification~~permit and review in such development cases. The applicant may be required to make a submittal and pay review fees, as described in ~~the General Certification or in the Community's fee schedule~~Section 26.612. As long as the applicant abides by the Special Conditions, as described in the General Certification, then the development will be considered as having obtained a Stormwater Management ~~Certification~~Permit.
B. General Certifications are authorized for one year and shall be automatically renewed annually unless action is taken to change the certification within sixty (60) days of expiration. An applicant who relied on a General Certification shall have one year from the date of reauthorization to complete the development under the terms of the General Certification as it read at the time the General Certification was issued. Any denial of a General Certification shall be in writing.

Section 16. That Section 26.603 is hereby amended to read as follows:

26.603 Datum.
All topographic maps or exhibits, and record drawings shall be tied to the North American Vertical Datum of 1988 (NAVD 88) of the National Spatial Reference System (NSRS) as maintained by the United States National Geodetic Survey (NGS). The methods used by an Illinois Professional Land Surveyor to establish NAVD 88 elevations shall achieve a national NSRS vertical network accuracy of 0.15 of a U.S. Survey foot (5 centimeters) or better to be in compliance with FEMA requirements, as specified in the FEMA document "*Guidelines and Specifications for Flood Hazard Mapping Partners*" dated April 2003. The surveyor shall use one of the following two methods to achieve vertical network accuracy.
A. Establish vertical geodetic control at the site using a combination of Global Navigation Satellite System (GNSS) measured ellipsoid heights and calculated orthometric heights using the most current available version of DuPage County, Illinois Local Geoid Model. GNSS derived ellipsoid heights shall be determined by processing GPS field measurements through the National Geodetic Survey (NGS) Global Positional System (GPS) Online Positioning System – Rapid Static service (OPUS-RS). The surveyor shall provide to the County a copy of the OPUS-RS report. It is recommended that the surveyor use the DuPage County GPS Continuously Operating Reference Station (CORS) network and Ellipsoid Height Accuracy Estimate Tool for any GNSS ellipsoid height measurement surveying work.
B. Establish vertical geodetic control at the site by differential leveling surveying using NGS specifications for Third-Order vertical surveys. All vertical leveling must be measured relative to at least

two NSRS vertical geodetic control monuments of Second-Order or better accuracy. The surveyor shall provide to the County a list of the two or more NGS Second-Order vertical geodetic control monuments used during the leveling survey.

Section 17. That Section 26.604 is hereby amended to read as follows:

26.604 Requirements for Applicants to use Professional Engineers and Surveyors.

Calculations for the design of stormwater facilities, determination of the regulatory flood plain, or calculations of the impact of the development shall be prepared, signed and sealed by a Professional Engineer or Professional Land Surveyor~~, as~~ when they are legally entitled to sign. Structures which are subject to a differential water pressure head of greater than three (3) feet ~~or more~~ shall be designed under the supervision of a Licensed Structural Engineer, who shall sign and seal the design plans and calculations. Topographic exhibits and record drawings may alternatively be signed and sealed by a Professional Land Surveyor.

Section 18. That Section 26.608 is hereby amended to read as follows:

26.608 Community developments.

A community must obtain a permit from IDNR-OWR, or their designee, prior to issuance of a Stormwater Management ~~Certification~~Permit for any community development that falls under the jurisdiction of IDNR-OWR~~.~~ unless the development qualifies for and meets the special conditions of an IDNR-OWR General, Regional or Statewide permit, then no special approval correspondence from IDNR-OWR will be required.

Section 19. That Section 26.610 is hereby amended to read as follows:

26.610 Permit Application Requirements and Submittals.

The specific applicable technical requirements and the extent of documentation required to be submitted may vary depending on existing conditions of the development site. The Applicant shall combine the separate "submittals" referenced in each article into a single application package of materials. Unless superseded by application under either a General Certification or a Letter of Permission, or the Administrator specifically allows a modification of the submittal requirements in writing, the following shall guide the determination that an application for Stormwater Management Permit is complete.

A. Stormwater Submittal. All developments requiring a Stormwater Management Permit are required to submit the information required ~~for Minimum Submittal~~in (Section 26.700.~~B~~A). The requirement for Record Drawings (Section 26.700.B) applies to all developments that construct stormwater facilities, or include wetland, buffer or flood plain onsite. Unless the development fits the definition of Minor Development, the plans and calculations listed in Section 26.700.C will also be required (as relevant to the specific development).

B. Maintenance Plan. When the development includes construction of a Site Runoff Storage Facility or Post Construction Best Management Practices, a maintenance plan specifying tasks and frequency shall be submitted.

C. The provisions of Section 26.801 shall apply to all developments except:

1. Developments classified as Minor Developments~~"~~; or
2. Developments which do not include site stormwater storage facilities and which do not include any Best Management Practices with a design drainage area greater than 1-acre.

D. Performance Security. Performance Security in accordance with Section 26.800 may be combined into a single instrument and is required as follows.

1. Development Security or a Stormwater Bond,in accordance with Section 26.800.B, is required for

all developments requiring a Stormwater Management Permit. ~~which are not minor developments, and which include construction of a Site Runoff Storage Facility (Article XI), more than 200 feet of Storm Sewer, or a Best Management Practice (Article X) designed to serve more than 1-acre of drainage area.~~

2. Erosion and Sediment Control Security in accordance with Section 26.800.C is required for any development disturbing more than 1-acre, or which disturbs the bed and banks of a channel draining more than 100-acres, or when an Erosion and Sediment Control Plan is required because of impact to Wwetlands ~~or ,~~ Bbuffers or flood plains.
3. A Natural Area, Wetland and Buffer Mitigation Area Security shall be posted per Section 26.800.D. Whenever a natural area is being restored or a ~~W~~wetland of ~~B~~buffer is impacted and mitigated, unless mitigation is provided by fee-in-lieu.

E. Soil Erosion and Sediment Control. All developments must provide both temporary and permanent Soil Erosion and Sediment Control; however, plans for these measures must be submitted for review only where the development is required to obtain a Stormwater Management Permit (Section 26.600). Developments required to make application may obtain a Letter of Permission (Section 26.601), even if it is not a Minor Development, as long as no other aspect of the development requires review under Articles X, XI, XIII or XIV. All other applications shall include the following based on area of land disturbance of the proposed development:

1. If the land disturbance is less than 1 acre and does not disturb the bed and banks of a channel draining more than 100- acres, and the development does not involve impact to buffer or wetland or flood plain, and is not part of a larger common plan, then the submittal shall be per Section 26.70~~1~~3.B.
2. If the land disturbance is one 1-acre or greater or disturbs the bed or banks of a channel draining more than 100-acres, or the development includes impact to buffers or wetlands or flood plains, then the requirements of Sections 26.703.C and 26.703.D shall apply.

F. Post Construction Best Management Practices. When the impervious coverage of the development site is increased by 2,500 square feet or more compared to the pre-development site, then PCBMPs, designed in accordance with Section 26.1000 through ~~26.26.1004~~26.1003, are required and submittals, in accordance with Section 26.702, are required with the Application, unless one of the exceptions or exclusions listed in Section~~s~~ 26.1000 applies.

G. Flood Plains, LPDAs and Floodways. All developments shall check the requirements of Section 26.1301 to determine if a flood plain or LPDA exists on a ~~D~~development site. If a flood plain or LPDA does exist on the ~~D~~development site, a BFE shall be established as outlined in Section 26.1301C and shall be drawn on the site topographic map. If the proposed work is outside of the BFE, there shall be no additional requirements from Article XIII that need to be met. Applicants shall determine if floodway exists following Section 26.1301.D. For ~~D~~developments that involve work within the flood plain or, where there is floodway within the disturbed area, the flood plain and floodway shall be delineated on the site plan.

1. For Developments within the flood plain, document that Section 26.1302 requirements are being met with a narrative and appropriate calculations, modeling, cross-sections and plans.
2. For Developments within the floodway, document that Section 26.1303 requirements are being met with a narrative and appropriate calculations, modeling, cross-sections and plans per Section 26.704.

H. Wetlands. Stormwater Management Permits are required for developments where the area being disturbed, or developed, is within 100 feet of a wetland located either on-site or off-site. The application shall include the following.

1. A wetland delineation and report will be required unless the wetland is determined to be greater than 100 feet away from the development's limit of disturbance, and Section 26.1400.A and 26.1400.B is applied with the concurrence of the Administrator.
2. If the development's proposed limit of disturbance is within 100 feet of a wetland, then,

a. A wetland delineation and report will be required Section 26.1400, unless the wetland has clearly defined boundaries and there are no proposed wetland or buffer direct impacts or indirect wetland hydrologic impacts that exceed the thresholds found in Section 26.1402.
b. If there are direct impacts to the wetland, then the wetland submittal in accordance with Section 26.701 will be required.
c. If the thresholds ~~for checking for indirect impacts are exceeded (Section 26.1402), and the Administrator requests~~development will cause an indirect impact to a wetland, an indirect impact analysis ~~it~~ shall be included in the Wetland Submittal.
d. If the development has a direct or indirect permanent wetland impact a hydrologic analysis of the mitigation area (Section 26.1403.L) and a maintenance and monitoring plan (Section 26.1403.M) are required to be submitted, unless Fee in Lieu of mitigation is provided.

I. Buffers. Direct impacts to buffers (Section 26.1500) will require a Buffer Submittal in accordance with Section 26.701.

Section 20. That Section 26.612 is hereby amended to read as follows:

26.612 Fees.

A review and inspection fee schedule for Stormwater Management Permits ~~as~~shall be set forth in Administrative Regulation entitled "User-Fee, License and Fine Schedule". In cases where the Village requests an Authorization review by the County, these fees shall be set forth in the DuPage County Countywide Stormwater and Flood Plain Ordinance, Appendix A. Any fee-in-lieu that is part of the conditions for issuance must be paid prior to issuance of the permit.

Section 21. That Section 26.611 is hereby amended to read as follows:

26.611 Special Cases of Development.

Special Cases of Development shall have differing submittal or, technical standards than other developments, as summarized in Table 1.

	FLOOD PLAIN/ LPDA STANDARDS	POST CONSTRUCTION BEST MANAGEMENT PRACTICES	SITE RUNOFF STORAGE
ROADWAY DEVELOPMENT	26.1303.D.4 26.1304	#2,500 S.F. NET NEW IMPERVIOUS 26.1000.A	ONLY SITE RUNOFF STORAGE 26.1101.B
BRIDGE AND CULVERT MODIFICATION	26.1303.A.3.d 26.1304.A.6, .D, .E, .F	EXEMPT 26.1000.A	EXEMPT 26.1101.C.1
STREAMBANK STABILIZATION	26-1304.~~D.3~~C.2	EXEMPT 26.1000.~~C~~A	EXEMPT 26.1101.C.2
NAUTRAL AREA RESTORATION		EXEMPT 26.1000.~~C~~A	EXEMPT 26.1101.C.3

WETLAND MITIGATION SITE		EXEMPT 26.1000.~~C~~A	EXEMPT 26.1101.C.4
WETLAND MITIGATION BANK		EXEMPT 26.1000.~~C~~A.4	EXEMPT 26.1101.C.4
TRAILS, BIKEWAYS, PEDESTRIAN WALKWAYS	26.1303.A.~~3~~2.b 26.1303.A.~~3~~2.c 26.1304.A.6	EXEMPT (MEETING CONDITIONS) 26.1000.~~D~~A.5	EXEMPT 26.1101.C.5
OPEN SPACE DEVELOPMENT	26.1304.A.5 26.1304.A.9	26.1000 >2,500 S.F. NET NEW IMPERVIOUS	ONLY SITE RUNOFF STORAGE 26.1101.B
WATER AND SEWER IMPROVEMENT DEVELOPMENT	26.1303.C.3 26.1304.A.3, 4	EXEMPT 26.1000.~~F~~A.7	EXEMPT 26.1101.C.6

Table 1 Note: Referenced Ordinance Sections apply to the Special Cases of Development.

Section 22. That Section 26.613 is hereby amended to read as follows:

26.613 Release of Performance Security and Easements.

The record drawings requirements of Sections 26.700.B and the applicable requirements of Section 26.801 will also be required to be satisfied prior to the release of the remaining development securities in Section 26.800.

Section 23. That Section 26.614 is hereby amended to read as follows:

26.614 Duration and Revision to Permits and Authorizations.

A. Permits expire one (1) year from the date of issuance. If the permitted activity has been started but is not completed by the expiration date of the permit, and the permit holder intends to pursue the permitted activity, then the permit holder must submit a written request that the expiration date be extended. Upon receipt of such request, the Administrator may extend the expiration date in maximum increments of one (1) for permitted activities, provided the activity is in compliance with the then current requirements of this Ordinance. Expiration dates for permitted activities within wetlands and buffers may be extended provided that an updated delineation shows no significant change in wetland boundary or classification.
B. If, after permit issuance, the permit holder decides to revise the approved plans, the permit holder shall submit revised plans to the Administrator, along with written request for approval by the expiration date. If the Administrator determines that the revised plans are in compliance with the then current requirements of this Ordinance, an approval of the revised plans will be issued.
C. No activity by the Applicant in the form of a resubmittal or follow-through on outstanding issues required for permit in the 12 month period following the date of the last correspondence from the Administrator, pertaining to the Application, will be cause for considering the application withdrawn,

Section 24. That Section 26.700SEC. is hereby amended to read as follows:

26.700SEC. Stormwater Submittals.

~~A. Minimum Submittal. Unless one of the following is specifically waived with documentation by the Administrator, or the development is eligible for permit by a General Certification or Letter of Permission, a minimum Stormwater Submittal shall be required for all developments requiring a Permit. The following constitutes a minimum Stormwater Submittal:~~

~~1. The name and legal address of the applicant and of the owner of the land; and~~

~~2. The common address and legal description of the site where the development will take place; and~~

~~3. Affidavits signed by the land owner and the developer attesting to their understanding of the requirements of this Ordinance and their intent to comply therewith, including the submittal of a record drawing in accordance with Section 26.700.B; and~~

~~4. A listing of all other required stormwater related permits, a brief description of how the other permits apply to the development, and when requested by the Administrator, complete copies of the applications for the permits; and~~

~~5. A statement of opinion by a qualified professional either acknowledging or denying the presence of flood plain in accordance with Section 26.1301, wetlands in accordance with Section 26.1400, and buffers in accordance with Section 26.1500; and~~

~~6. A standard engineering scaled drawing depicting any proposed major stormwater facilities on a topographic map depicting any offsite upstream drainage area and the characteristics of the downstream facilities receiving discharge from the development.~~

~~7. An exhibit at standard engineering scale is also required that is used as the basis to determine the extent of existing impervious area, proposed developed impervious area, and extent of area to be disturbed in the construction of the development.~~

~~B. Upon completion of the stormwater facilities, a record drawing signed and sealed by either a Professional Engineer or a Professional Land Surveyor depicting the as-constructed size, rim and inverts elevations of pipes, stormwater structures and culverts, and contours and flood storage volumes of all required basins of the major and minor stormwater systems. An informational note acknowledging the presence of on-site wetlands, buffers flood plains and PCBMPs with drainage areas 1 acre or greater shall be recorded against the title to alert all future owners and shall reference the Stormwater Management Permit number.~~

~~C. Documentation supporting permit compliance. The following items will be submitted to demonstrate and support that the application for Permit is in compliance with this Ordinance. The Administrator may approve, in writing, an application without some or all of these items based on the extent and complexity of the development. All plans and drawings shall be at standard engineering scale.~~

~~1. A scaled plan or plans illustrating the major and minor conveyance system, including:~~

~~2. Size, type, length and inverts of conveyance structures including drainage pipes, culverts, manholes, catch basins, inlets, and drain tiles.~~

~~3. A scaled exhibit illustrating the impervious area of the site prior to the certification along with a calculation of the percentage of the site that is impervious.~~

~~4. A scaled exhibit illustrating the proposed impervious surfaces of the development.~~

~~5. Calculations of the percentage of impervious surfaces after complete construction of the proposed development.~~

~~6. Scaled plans illustrating the location of and details for site runoff storage.~~

~~7. Calculations that establish the required site runoff storage volume along with calculations confirming that the proposed plan achieves either the site runoff storage or the modified site runoff storage.~~

~~8. When site runoff storage special is required, calculations demonstrating the specified post development discharges have not exceeded the predevelopment values.~~

A. Drainage Plan. All developments that include between five hundred (500) square feet and one thousand five hundred (1,500) square feet of land disturbing activities shall require the submittal and approval of a drainage plan indicating the direction of existing and proposed stormwater flow on the site. If the development site is located within or adjacent to a flood plain, LPDA or wetland, a Grading and

Site Restoration Plan may be required. Other information, as necessary and as determined by the Administrator, may be required to verify compliance with this ordinance.

B. Grading and Site Restoration Plan. All developments that include more than 1500 square feet of land disturbing activities shall require the submittal and approval of a grading and site restoration plan. The Administrator, may approve, in writing, an application without some or all of the following items based on the extent and complexity of the development or the development is eligible for permit under a General Certification or Letter of Permission. The following constitutes a Grading and Site Restoration Plan submittal:

1. A standard engineering scaled drawing that includes or addresses:
   a. The name and legal address of the applicant and of the owner of the land.
   b. The common address and legal description of the site where the development will take place.
   c. Site drainage showing the existing and proposed grades for a particular parcel and for adjoining properties (affected) with a minimum of one foot (1') contour intervals in sufficient detail to clearly indicate drainage flows.
   d. Extent of existing impervious area, proposed developed impervious area, itemized calculations of the total net new impervious area, and extent of area to be disturbed in the construction of the development.
   e. Cross-sections of drainage swales, including one at each window well, as applicable.
   f. Foundation elevation, including the top of foundation and any openings below top of the foundation on all new or existing structures or portions thereof.
   g. Any proposed PCBMPs, minor and major stormwater facilities using topography and spot elevations and depicting any offsite upstream drainage area and the characteristics of the downstream facilities receiving discharge from the development.
   h. Size, type, length and inverts of conveyance structures including drainage pipes, culverts, manholes, catch basins, inlets, and drain tiles
   i. The parcel drainage shall be designed to flow away from the top of foundations. Storm water being directed to the side yard of the parcel shall be directed into a formed drainage swale, having a minimum slope of two percent (2%) and a maximum slope of five percent (5%). In the event that conditions dictate that some parts of the lot be higher than the structure foundation, the grading must show specific drainage configurations for the parcel specifying that all drainage is to be directed to flow away from the foundation. At a minimum, spot grades shall be shown along the foundation and at all window well, their rims and and adjacent grade. Cross-section shall be provided for all swales, at a minimum at all window wells or other constrictions. A note shall be added that all swales shall be constructed of sod, subject to Village approval.
   j. Construction and work such as walkways, driveways, parking lots, landscaping or any structure shall be installed so that the construction of same will not interfere with drainage. All sidewalks, driveways, parking lots, patios and other flat work shall be at an elevation relative to the foundation wall so that water will drain away from the structure on all sides and off the lot in a manner which will provide reasonable freedom from erosion and permanently pocketed surface water.
   k. The flow from off site tributary areas that are tributary to an intermittent stream or overflow route that must pass through the parcel must be identified on the grading plan and must be designed in such a way to adequately handle the flow of all water to accommodate a 100-year storm frequency.
   l. All overflow routes for the 100-year storm and for accumulated storm water runoff from several lots or from off site catchment areas must be clearly designated on the grading

plan with the total width of the flow route contained within an easement for drainage purposes)

m. The location of, and direction of, any sump pump or downspout discharge onto the site from the subject property and from adjoining properties. Note if the discharge will splash to grade or show any associated piping. The distance between the discharge and the property line shall be maximized and any piped dis charge must terminate no closer than 20 feet from the downstream property line.

n. The distance between the property and any regulatory floodplain or LPDA, including as necessary the base flood elevation.

o. The following Erosion Control Notes shall be added to the site plan.

(1) The sediment and erosion control devices shall be functional before any land is disturbed on the site.

(2) Stockpiles of soil shall not be located within any drainageways, floodplains, wetlands, buffers or LPDAs.

(3) Sediment and erosion control shall be provided for any soil stockpile if it is to remain in place for more than three days including a double row of silt fence.

(4) Properties from the site shall be protected from erosion if the volume, velocity, sediment load, or peak flow rates of stormwater runoff are temporarily increased during construction.

(5) Storm sewer inlets shall be protected with sediment trapping or filter control devices during construction.

(6) The surface of stripped areas shall be permanently or temporarily protected from soil erosion within fifteen days after final grade is reached. Stripped areas that will remain undisturbed for more than fifteen days after initial disturbance shall be protected from erosion.

(7) Water pumped or otherwise discharged from the site during construction dewatering shall be filtered.

(8) A stabilized construction entrance shall be provided to prevent the deposition of soil onto public or private roadways. Any soil reaching a public or private roadway shall be removed before the end of each workday.

(9) All temporary erosion control measures necessary to meet the requirements of the Village of Downers Grove Stormwater and Flood Plain Ordinance shall be kept operational and maintained continuously throughout the period of land disturbance until permanent sediment and erosion and control measures are operational.

p. Any additional information as necessary to show compliance with the Downers Grove Municipal Code.

2. Affidavits signed by the land owner and the developer attesting to their understanding of the requirements of this Ordinance and their intent to comply therewith, including the submittal of a record drawing in accordance with Section 26.700.B; and

3. A listing of all other required stormwater related permits, a brief description of how the other permits apply to the development, and when requested by the Administrator, complete copies of the applications for the permits; and

4. A statement of opinion by a qualified professional either acknowledging or denying the presence of flood plain in accordance with Section 26.1301, wetlands in accordance with Section 26.1400, and buffers in accordance with Section 26.1500; and

5. A statement from the applicant acknowledging that all stormwater submittals shall be made available for inspections and copying by the County, not withstanding any exemption from inspection and copying for such materials under the Freedom of Information Act, upon with written request of either the applicant, any subsequent owner of the subject property, or any governmental unit having planning or

drainage jurisdiction within one and one half (1 and ½) mile of the subject property.

C. As-Built Drawings. Upon completion of stormwater facilities, a record drawing signed and sealed by either a Professional Engineer or a Professional Land Surveyor depicting the as-constructed size, rim and inverts elevations of pipes, stormwater structures and culverts, and contours and flood storage volumes of all required basins of the major and minor stormwater systems. An informational note acknowledging the presence of on-site wetlands, buffers flood plains and PCBMPs with drainage areas 1 acre or greater shall be recorded against the title to alert all future owners and shall reference the Stormwater Management Permit number.

D. Final Grading and Site Restoration Plan. All developments shall require the submittal and approval of a final grading and site restoration plan.supporting permit compliance. The following items will be submitted to demonstrate and support that the application for Permit is in compliance with this Ordinance. The Administrator may approve, in writing, an application without some or all of these items based on the extent and complexity of the development. All plans and drawings shall be at standard engineering scale:
1. A scaled plan or plans illustrating the major and minor conveyance system, including:
2. Size, type, length and inverts of conveyance structures including drainage pipes, culverts, manholes, catch basins, inlets, and drain tiles.
3. A scaled exhibit illustrating the impervious area of the site prior to the certification along with a calculation of the percentage of the site that is impervious.
4. A scaled exhibit illustrating the proposed impervious surfaces of the development.
5. Calculations of the percentage of impervious surfaces after complete construction of the proposed development.
6. Scaled plans illustrating the location of and details for site runoff storage.
7. Calculations that establish the required site runoff storage volume along with calculations confirming that the proposed plan achieves either the site runoff storage or the modified site runoff storage.
8. When site runoff storage special is required, calculations that demonstrate the specified post development discharges have not exceeded the predevelopment values.
9. Scaled plans illustrating the location of a details for any required compensatory storage and supporting calculations,
10. Site drainage showing the as-built grades with a minimum of one foot (1') contour intervals in sufficient detail to clearly indicate drainage flows.
11. Top of foundation elevations of all new structures and spot grades adjacent to the foundations of all new structures.
12. Stoops outside of doorways and window well locations, rim elevations, and the adjacent grade.
13. An accurate as-built location of and details for any PCBMPs, including location of all utilities.
14. Sump Pump discharge location, discharge path, and the location, size, and material of any associated piping.
15. Downspout location, discharge path, and the location, size, and material of any associated piping.
16. All existing and proposed improvements within the right-of-way, including sanitary and water mains and service locations.

Section 25. That Section 26.701 is hereby amended to read as follows:

26.701 Wetland and Buffer Impact Submittals.

A. The submittal shall include all the following information unless the Administrator concludes otherwise in accordance with Section 26.1400.

1. A complete wetland delineation report prepared in accordance with the Federal Methodology. The report shall also contain the following.

a. Completed USACE wetland delineation data forms.
b. Aerial photograph, or other exhibit, clearly showing wetland boundaries, location of wetland delineation data points, and offsite wetlands within 100' of the property.
c. A narrative describing the physical characteristics and size of each onsite wetland and buffer including a floristic inventory list, calculated mean C and quality index (FQI) calculated for each onsite wetland area.
d. Representative photos of each wetland and its associated buffer.
e. Copies of the below listed information shall be provided:
(1) Floristic Inventory List
(2) NRCS DuPage County Soil Survey map with legend identifying any mapped hydric soils.
(3) IDNR Threatened and Endangered Species consultation (EcoCAT).
(4) National Wetland Inventory Map.
(5) DuPage County Wetland Inventory Map.
(6) DuPage County Regulatory Flood Plain Map and Flood Insurance Rate Map.
(7) Site Location map with approximate scale.

2. For critical wetland impacts, complete an alternatives analysis in accordance with Section 26.1401.B.
3. For impacts to regulatory wetland/waters of DuPage greater than 0.1 acre total surface area, or Corps of Engineers jurisdictional waters or wetland, complete an alternative analysis in accordance with Section 1401.~~D~~C.

B. ~~Indirect of~~ USACE Jurisdictional Wetland. If a USACE jurisdictional wetland will be impacted, a copy of a Letter of No Objection, General, Regional or Individual Permit shall be provided prior to issuance of the Stormwater Management ~~Certification~~Permit, unless the Director or Administrator concludes otherwise. In which case, the ~~Certification~~Permit can be conditioned to state that such work may not commence within or adjacent to the waters of the United States or wetland until receipt of the necessary USACE authorization.

C. The following support documentation is required to be submitted. The Administrator may waive the requirement to provide some or all of the following support documentation when considering the complexity and extent of the proposed development and its impact:

1. Wetland delineation plan view that includes a depiction of the buffer limits (Section 26.1500).
2. Statement indicating the date of the wetland boundary verification and OHWM verification.
3. Indirect impact determination. When required, documentation including: subarea watershed map and hydrologic calculations with a table summarizing results in accordance with the analysis in Section 26.1402 is required.
4. Development narrative shall include the following applicable items:
a. Description of the functions of the impacted wetland or buffer, and how the impacts will be mitigated.
b. Historic aerials, if available, to document the previous site conditions or the extent of farmed wetland.
c. Description of mitigation method, location, and ratios.
d. Description of mitigation area and plan objectives.
e. Description of management practices. The document shall include clarification that prescribed burns and herbicide applications must be performed by trained/licensed personnel under the proper permits.
f. Performance standards.
g. Reporting requirements.
h. Hydrology monitoring methodology and goals.
i. Implementation schedule.
j. Native species list with quantities, size of stock, seeding rate and/or plug spacing.

k. Planting specifications and soil handling.
l. Cost estimate to include installation, management, monitoring, and reporting as anticipated to meet performance standards.

5. Plan view drawings and details, where applicable:
   a. Existing and proposed topography.
   b. Delineated wetland and waters of DuPage OHWM boundary to a sub meter accuracy or better.
   c. Buffer boundary.
   d. Location of impacts to wetland and buffer.
   e. A table shall be provided on the plans listing the total acreage of the existing wetland and buffer areas, and the proposed impact and mitigation areas. These calculated areas should also be graphically highlighted.
6. Wetland and buffer mitigation plan, if applicable, shall contain the following information:
   a. Delineate and label planting and seeding zones.
   b. Delineate and label mitigation and enhancement zones.
   c. Existing and proposed topography.
   d. Planting methodology and soil handling.
   e. Proposed wetland and buffer boundaries.
   f. Native species list including size of stock, quantity, seed rate, and spacing of plugs.
   g. Woody planting locations, if any.
   h. Signage or physical barrier locations.
   i. Monitoring well locations, if installed.
   j. Permanent transect locations and photo-documentation points for monitoring, if required.
   k. Maintenance and ~~M~~monitoring plan with performance standards.

Section 26. That Section 26.702 is hereby amended to read as follows:

26.702 Post Construction Best Management Practice Submittal.

The Post Construction Best Management Practice (PCBMP) submittal shall include:

A. A discussion documenting compliance with the requirements of Article X.

B. A listing and discussion of all PCBMPs to be used.

C. Supporting calculations documenting compliance with the ~~Volume Control~~volume reduction BMP requirements.

D. For manufactured PCBMPs, the manufacturer documentation to support pollutant removal rates shall be supplied.

E. A BMP specific planting/seeding plan for all areas to be vegetated which shall include:

1. Identified locations for all plantings (e.g., lawn, upland prairie, wet prairie, etc.), seeding and planting specifications and methodology~~; and~~.
2. A schedule for installation~~; and~~.
3. Proposed maintenance and monitoring provisions~~, and~~.
4. An opinion of probable cost to construct the BMPs.

Section 27. That Section 26.703 is hereby amended to read as follows:

26.703 Soil Erosion and Sediment Control Submittal Requirements.

A. Developments that only require approval of the soil erosion and sediment control provisions of this Ordinance and do not require approval for any other aspect of this Ordinance shall be reviewed and processed as a Letter of Permission (LOP). To be eligible for a LOP, in addition to the requirements of this Ordinance, the applicant must certify that he is aware of the design requirements of the IEPA NPDES ILR10 permit and certify that the plan meets those requirements.

B. For developments with less than one acre of land disturbance that are not part of a larger common plan, a qualified designer shall certify that the development meets the soil erosion and sediment control design criteria found in Article IX have been met. However, formal submittal of the information under Section 26.703.D is unnecessary unless the Administrator requests demonstration of compliance with these provisions.
C. For developments that disturb one or more acres of land area, or will disturb less than one acre of land, but are part of a larger common plan that will ultimately disturb one or more acre land area, the applicant shall prepare and provide a copy of a SWPPP in accordance with the requirements of Illinois Environmental Protection Agency General NPDES Permit No. ILR 10, Part IV.D.1.a-f (Contents of Plan), Part IV.D.2.a-d (Controls), Part IV.D.3 (Maintenance) and Part IV.D.4.a-f (Inspections). The plan prepared for the SWPPP may be submitted as the SESC Plan for the development.
D. If the SESC plan does not appear adequate to comply with the design requirements of Article IX, in the opinion of the Administrator, then the Administrator may require submittal of any or all of the following to demonstrate the plan's compliance. Site maps which indicate:

1. One foot contours with delineated sub-basins; and~~,~~
2. Approximate slopes anticipated before and after major grading activities; and~~,~~
3. Locations where vehicles enter or exit the site and, controls to prevent offsite sediment tracking areas, and concrete washout controls and procedures, limits of soil disturbance, and the location of major structural and nonstructural controls identified in the plan~~,~~; and
4. The location of areas where stabilization practices are expected to occur~~,~~; and
5. Surface waters (including wetlands), and locations where stormwater is discharged to a surface water; and
6. Developments that will extend through winter shall provide a description of winter specific soil erosion and sediment control measures to be implemented.
7. A description of the nature of the construction activity or demolition work; and
8. A description of the intended sequence of major activities which disturb soils for major portions of the site (e.g., clearing, grubbing, excavation, grading) construction stabilization schedule~~.~~; and
9. An estimate of the total area of the site, and the total area of the site that is expected to be disturbed by excavation, grading, or other activities~~;~~.

Section 28. That Section 26.704 is hereby amended to read as follows:

26.704 Submittal Requirements for Development in the Regulatory Flood Plain

Developments located in the regulatory flood plain shall, at a minimum, provide the following:

1. A copy of the effective FIRM, RFM, and DFIRM (if available) drawn to scale and showing the limits of the regulatory flood plain, regulatory floodway, and the boundaries of the development site. If available, a FIRMette should be made for the development site. A FIRMette is a full-scale section of a FEMA FIRM) that is created through FEMA's website.
2. Engineering calculations and designs that demonstrate the proposed development meets the flood plain requirements of this Ordinance. All calculations and designs shall be prepared, signed, and sealed by a ~~p~~Professional ~~e~~Engineer.
3. A topographical map of the development site, showing the boundaries of the development site and the limits of the existing and proposed conditions Zone A regulatory flood plain and regulatory floodway.
4. The applicant shall obtain and provide copies of all required local, state, and federal permits prior to approval for a Stormwater Management Permit.

Section 29. That Section 26.800SEC. is hereby amended to read as follows:

26.800SEC. Performance Security.

A. General Security Requirements.

1. As security to the Village for the performance by the developer of the developer's obligations to complete the construction of any stormwater facilities required by the Stormwater Management Permit, to ensure that such stormwater facilities function as designed after construction, to pay all costs, fees, and charges due from the developer pursuant to this Ordinance, and to otherwise faithfully perform the developer's undertakings pursuant to this Ordinance, the developer shall, prior to issuance of a Stormwater Management Permit and in accordance with Section 26.610.D, post performance security and grant easements as hereafter described.
2. The developer shall bear the full cost of securing and maintaining the securities required by this Article and in accordance with 26.610D.
3. Performance Security required by this Article may be posted in the form of one or more surety instruments as the Administrator, deems appropriate for the proposed development.
4. The developer shall grant the Village a temporary easement which authorizes, but does not obligate, the Village to access the development site to perform or complete any act or work the developer is required to do by the Stormwater Management Permit which may include; (i) the construction of any required stormwater facilities; (ii) restoration and/or mitigation of natural areas, wetlands and buffers; (iii) installation and maintenance of soil erosion control; (iv) planting or removal of vegetation; and (v) any other maintenance or monitoring. The term for such easements shall be of sufficient duration as necessary to allow the Village to perform and satisfactorily complete any activity or work for which the developer/certificate holder has posted security under this Article.

B. Development Security

1. A development security shall be posted and shall include:
   a. A schedule, agreed upon by the developer and the Administrator, for the completion of the construction of any stormwater facilities required by the permit; and
   b. An irrevocable letter of credit, cash bond or such other adequate security as the Administrator may approve, in an amount equal to not less than one hundred ten percent (110%) of the estimated probable cost to complete the construction of any stormwater facilities required by the Stormwater Management Permit, which estimated probable cost shall be approved by the Administrator or an amount established by the Administrator for development on a single family residential parcel as set forth in Administrative Regulation entitled "User-Fee, License and Fine Schedule"; and
   c. A statement signed by the applicant granting the Administrator the right to draw on the security and the right to enter the development site to complete required work in the event that work is not completed according to the work schedule; and
   d. A statement signed by the applicant that the applicant shall indemnify the Village for any additional costs incurred attributable to concurrent activities of or conflicts between the applicant's contractor and the Village's remedial contractor at the site.
2. The security required by this Section 26.800.B shall be maintained and renewed by the applicant, and shall be held in escrow by the Administrator until the conditions set forth in Section ~~2600.B.3~~26.800.B.3 and Section 26.801 or other applicable provision are satisfied.
3. After approval of record drawings and final inspection of any constructed stormwater facilities by the Administrator, not more than ninety percent (90%) of the security provided for in this Section 26.800.B or other applicable provision may be released. A minimum of ten percent (10%) of the security shall be retained after completion of construction of such stormwater facilities, for a period of time not less than one (1) year, to ensure the satisfactory performance of such stormwater facilities. The remaining ~~D~~development ~~S~~security shall be released after the Administrator verifies, by an inspection performed not sooner than one-year following the final construction inspection, that such stormwater facilities function as provided for in the certification.

C. Soil Erosion and Sediment Control Security

1. If a soil erosion and sediment control security is required pursuant to Section 26.610.D.2 of this Ordinance, such a security shall include:
   a. An irrevocable letter of credit, or such other adequate security as the Administrator shall approve, in an amount equal to not less than one hundred ten percent (110%) of the estimated probable cost to install and maintain the erosion and sediment control measures, which estimated probable cost shall be approved by the Administrator; and
   b. A statement signed by the applicant granting the Administrator, as applicable, the right to draw on the security and the right to enter the development site to complete erosion and sediment control measures in the event that such measures are not installed and maintained according to the established schedule.
2. The security required by Section 26.800.C shall be maintained and renewed by the applicant, and shall be held in escrow by the Administrator, as applicable, until the conditions set forth in ~~this~~ Sections 26.800C.~~3~~2 and 26.801. After establishment of vegetation, removal of all sediment from stormwater facilities unless designed otherwise, and final inspection and approval by the Administrator, as applicable, one hundred percent (100%) of the erosion and sediment control security shall be released.

D. Natural Area Restoration, Wetland and Buffer Mitigation Area Security

1. Natural area restoration or wetland and buffer mitigation area security, in accordance with Section 26-610.D.3 shall be posted and shall include:
   a. A schedule, agreed upon by the developer and the Administrator, for the completion of a natural area restoration development or completion of wetland or buffer mitigation development; and
   b. An irrevocable letter of credit, or other such adequate security as the Administrator may approve, in an amount equal to, not less than, one hundred ten percent (110%) of the estimated probable cost to plant, maintain and monitor all vegetated areas and/or complete the restoration or mitigation development for the agreed upon maintenance and monitoring period as required by the permit. The estimated probable cost shall be approved by the Administrator; and
   c. A statement signed by the applicant granting the Administrator the right to draw on the security and the right to enter the development site to complete the work in the event that work is not completed according to the work schedule; and
   d. A statement signed by the applicant that the applicant shall indemnify the Village for any additional costs incurred attributable to concurrent activities of, or conflicts between, the applicant's contractor and the Village's remedial contractor at the site.
2. The security required by Section 26.800.D shall be maintained and renewed by the applicant, and shall be held in escrow by the Administrator until the conditions set forth in this Section 26.800D.4 and Section 26.801, or other applicable provision are satisfied.
3. The natural area restoration or wetland and buffer mitigation areas security may be reduced at the discretion of the Administrator as conditions are met, but must not be less than one hundred ten (110%) of the estimated probable cost to continue to meet all conditions or other applicable provisions.
4. After approval by the Administrator, not more than ninety percent (90%) of the security provided for in this Section 26.800.D, or other applicable provision may be released. A minimum of ten percent (10%) of the security shall be retained for the length of the required monitoring period, which period shall not be less than one (1) year from the completion of the initial restoration or mitigation activities, to ensure the satisfactory establishment of any vegetated areas required by the certification.~~.~~

E. Letters of Credit

1. Letters of credit posted pursuant to Section 26.800B, C and D of this Ordinance shall be in a form

satisfactory to the Administrator.

2. Each letter of credit shall be from a lending institution: (a) acceptable to the Administrator (b) having capital resources of at least ten million dollars ($10,000,000), or such other amount acceptable to the Administrator; (c) with an office in the Chicago Metropolitan Area; and, (d) insured by the Federal Deposit Insurance Corporation.
3. Each letter of credit shall, at a minimum, provide that:
   a. It shall not be canceled without the prior written consent of the Administrator; and
   b. It shall not require the consent of the developer prior to any draw on it by the Administrator; and
   c. If at any time it will expire within forty-five (45) or any lesser number of days, and if it has not been renewed, and if any applicable obligation of the developer for which its security remains uncompleted or is unsatisfactory, then the Administrator may, without notice and without being required to take any further action of any nature whatsoever, call and draw down the letter of credit and thereafter either hold all proceeds as security for the satisfactory completion of all such obligations or employ the proceeds to complete all such obligations and reimburse the Village for any and all costs and expenses, including legal fees and administrative costs, incurred by the Village, as the Administrator shall determine.
4. If at any time the Administrator determines that the funds remaining in the letter of credit are not, or may not be, sufficient to pay in full the remaining unpaid cost of all stormwater facility construction or erosion and sediment control measures, then, within ten (10) days following a demand by the Administrator, the developer shall increase the amount of the letter of credit to an amount determined by the Administrator to be sufficient to pay such unpaid costs. Failure to so increase the amount of the security shall be grounds for the Administrator to draw down the entire remaining balance of the letter of credit.
5. If at any time the Administrator determines that the bank issuing the letter of credit is without capital resources of at least ten million dollars ($10,000,000), is unable to meet any federal or state requirement for reserves, is insolvent, is in danger of becoming any of the foregoing, or is otherwise in danger of being unable to honor such letter of credit at any time during its term, or if the Administrator otherwise reasonably deems the bank to be insecure, then the Administrator shall have the right to demand that the developer provide a replacement letter of credit from a bank satisfactory to the Administrator. Such replacement letter of credit shall be deposited with the Administrator not later than ten (10) days following such demand. Upon such deposit, the Administrator shall surrender the original letter of credit to the developer.
6. If the developer fails or refuses to meet fully any of its obligations under this Ordinance, then the Administrator may, in his or her discretion, draw on and retain all or any of the funds remaining in the letter of credit. The Administrator thereafter shall have the right to take any action he or she deems reasonable and appropriate to mitigate the effects of such failure or refusal, and to reimburse the Village from the proceeds of the letter of credit for all of its costs and expenses, including legal fees and administrative expenses, resulting from or incurred as a result of the developer's failure or refusal to fully meet its obligations under this Ordinance . If the funds remaining in the letter of credit are insufficient to repay fully the Village for all such costs and expenses, and to maintain a cash reserve equal to the required letter of credit during the entire time such letter of credit should have been maintained by the developer, then the developer shall, upon demand of the Administrator therefore, immediately deposit with the Administrator such additional funds as the Administrator determines are necessary to fully repay such costs and expenses and to establish such cash reserve.

Section 30. That Section 26.801 is hereby amended to read as follows:

26.801 Long-Term Access for Maintenance and Inspections.

A. Access to privately-owned land for inspection and maintenance of site runoff storage facilities, major stormwater system, compensatory storage facilities, and storm sewers covered by the permit shall be through a grant of easement in a form approved by the e Administrator. Other instruments may be accepted by the Administrator, provided that the access and maintenance rights granted runs with the land and survives title transfers.

B. Subdivision site runoff storage areas, compensatory storage facilities, major stormwater system and storm sewers not already located in dedicated rights-of-way or easements, shall be located either: (i) on a parcel granted or dedicated to, and accepted by, a public entity; or, (ii) on a parcel, or parcels, conveyed by plat as undivided equal interests to each lot in the subdivision or otherwise conveyed or dedicated to conservation or land preservation entities approved by the Administrator.

C. When title to the land underlying site runoff storage areas and storm sewers is conveyed in undivided equal interests to the owner(s) of each of the lots within the subdivision the following apply:

1. A covenant shall appear on the face of the plat of subdivision, and on each deed conveying ownership of a subdivision lot, which states that title to such site runoff storage facilities and storm sewers shall be held in undivided equal interests by each lot owner within the subdivision~~; and.~~
2. A covenant shall appear on the face of the plat of subdivision, and on each deed conveying ownership of the subdivision lots, which states that in the event the Village having easement rights under Section 26.801.A exercises its right to perform maintenance to such subdivision runoff storage facilities and storm sewers, that the Village may lien each lot within the subdivision for the costs of any maintenance work performed.
3. An owners' association may be established to provide for the maintenance of the facilities, payment of property taxes, and the assessment and collection of owner dues or fees to fund said activities. Such associations shall be duly incorporated and the property owners' association's declaration of covenants and bylaws shall be recorded against the title for all lots in that subdivision~~; and~~.

D. When title to the land underlying the site runoff storage areas and storm sewers are located on privately-owned land not falling within the scope of Section 26-801.C, the following shall apply:

1. The applicant shall reserve an easement for access for maintenance and inspection purposes to Village having drainage and, or, stormwater management jurisdiction over the property; and
2. The applicant shall record a covenant against title stating that in the event the Village having easement rights under Section 26-801.A exercises its right to perform maintenance to site runoff storage facilities and storm sewers on that property, ~~that~~ may lien the property for the costs of any maintenance work performed.

Section 31. That Section 26.900SEC. is hereby amended to read as follows:

26.900SEC. Soil Erosion and Sediment Control General Requirements.

A. Soil erosion and sediment control features shall be considered as part of any development's initial site planning process. Soil erosion and sediment control related measures are required to be constructed and maintained for any land disturbance activity. The following factors shall be addressed:

The susceptibility of the existing soils to erosion;
Existing native and mature vegetation;
Existing natural or established drainage ways;
The natural contours of the land;
Development phasing;
Emphasis first on erosion control, then sediment control;
Winter shutdown.

B. Temporary erosion and sediment control measures shall be functional ~~and~~, consistent with this Article

of the Ordinance and the NPDES Stormwater Permit in effect prior to land disturbance activities, and remain in effect until permanent erosion control is established.
C. Soil disturbance shall be conducted in a manner that minimizes erosion. Areas of the development site that will not be graded shall be protected from construction traffic or other disturbance until stabilization of the disturbed areas has been completed.
D. Soil stabilization measures shall include the use of temporary or permanent measures.
E. Within fifteen (15) days of establishing final grade, all soil disturbing activities at the site must be completed and a uniform, evenly distributed perennial vegetative cover with a density of seventy-five (75) percent of the cover for unpaved areas and areas not covered by permanent structures has been established, or equivalent permanent stabilization measures (such as the use of mulch or geotextiles) have been employed.

Section 32. That Section 26.901 is hereby amended to read as follows:

26.901 Soil Erosion and Sediment Control Plan Design Criteria.

A. Channels and adjoining properties shall be protected from erosion and sedimentation. Where concentrated flow leaves a development site, effective energy dissipation shall be placed onsite at discharge locations.
B. Erosion control blanket shall be required on all interior site runoff storage facilities side slopes between normal water level and high water level.
C. Erosion control blanket to be placed in wetland or buffer shall be 100% biodegradable, unless an alternative material is approved by the Administrator. This requirement does not include turf reinforcement mats or other structural materials necessary for high erosion or scour areas.
D. Land disturbance activities in streams shall be avoided, where possible. If disturbance activities are unavoidable, the following requirements shall be met:

1. Temporary stream crossings shall be constructed of non-erosive material.
2. The time and area of disturbance of a stream shall be kept to a minimum. The stream, including bed and banks, shall be restabilized within 48 hours after channel disturbance is completed.

E. Soil erosion and sediment control measures shall be placed where there is a potential for erosion and sized appropriately for the tributary drainage area, and disturbed areas draining less than one acre shall, at a minimum, be protected by a filter barrier (including filter fences, which at a minimum, meet the applicable sections of the AASHTO Standard Specification 288-00, or equivalent control measures) to control all off-site runoff from disturbed areas. The filter barrier shall be designed in accordance with the following:

1. The use of straw bales as a filter barrier or ditch check is prohibited.
2. Silt fences can be used to intercept sheet flow only. Silt fences cannot be used as velocity checks in ditches or swales, nor can they be used where they will intercept concentrated flows.
3. Ditch checks shall be constructed using non-erodible materials or prefabricated devices. Straw or hay bales are not acceptable.
4. Reinforced silt fences (normal silt fence reinforced with woven wire fencing) can be used to intercept sheet flow runoff from disturbed areas greater than one acre.
5. All undisturbed wetland, flood plain, LPDA, waters and buffer areas shall, at a minimum, have a barrier of protection. The barrier shall be placed at the limits of soil disturbance ~~or a minimum of one (1) foot outside the wetland, waters and buffer areas where an approved impact is taking place consisting of either~~and consist of:
    a. A dual row of silt fence, and a row of orange construction fence~~, or~~.
    b. A dual silt fence barrier, with one of the fences being of high visibility material.
    c. Alternative practices offering comperable protection to ~~avoid impact~~wetland, flood plain, LPDA, waters and buffer areas may be used to prevent impact where applicable. ~~Fencing~~

~~should be placed a minimum of one foot outside the delineated boundary. Additional soil erosion and sediment control measures may be required to adequately protect these sites.~~

d. Additional soil erosion and sediment control measures may be required to adequately protect these sites.

F. Disturbed areas with drainage areas of one (1) acre or greater but fewer than five (5) acres shall, at a minimum, be protected by a sediment trap or equivalent control measure at a point downslope of the disturbed area.

G. Disturbed areas with drainage areas ~~more than~~of five (5) acres or greater, shall, at a minimum, be protected by a sediment basin, in accordance with ~~15-59.H~~26.90 H, with a perforated filtered riser pipe or equivalent control measure at a point downslope of the disturbed area.

H. Sediment basins shall have both a permanent pool (dead storage) and additional volume (live storage) with each volume equal to the runoff amount of a 2-year, 6-hour event over the onsite hydrologically disturbed tributary drainage area to the sediment basin. The available sediment volume below normal water level, in addition to the dead storage volume, shall be sized to store the estimated sediment load generated from the site over the duration of the construction period. For construction periods exceeding one (1) year, the one (1) year sediment load and a sediment removal schedule may be submitted. If the site runoff storage basin for the proposed development condition of the site is used for sediment basin, the above volume requirements will be explicitly met. Until the site is finally stabilized, the basin permanent pool of water shall meet the above volume requirements and have a filtered perforated riser protecting the outflow pipe.

I. Pumping sediment laden water into any stormwater facility that is not designated to be a sediment control measure, sediment trap, ~~drainageway, or offsite area~~or sediment basin either directly or indirectly without filtration is prohibited.

J. Water removed from traps, basins and other water holding depressions or excavations must first pass through a sediment control or filtration device. When dewatering devices are used, discharge locations shall be protected from erosion. Discharges shall be routed through an effective sediment control measure (e.g., sediment trap, sediment basin or other appropriate measure).

K. All discharges to undisturbed area, stabilized area or watercourse shall be designed at a non-erosive velocity corresponding to the soil and vegetative cover of the undisturbed area.

L. All storm sewers, storm drain inlets and culverts that are, or will be functioning during construction shall be protected by sediment control measures. The sediment and erosion control measures shall be maintained until the site is stabilized.

M. A stabilized construction entrance of aggregate underlain with filter cloth, or graveled road, or access drive, or parking area of sufficient width and length, and/or vehicle wash down facilities, shall be provided to prevent soil from being tracked or deposited onto public or private roadways. Any soil reaching a public or private roadway shall be removed immediately, or as warranted, and transported to a controlled sediment disposal area.

N. All temporary and permanent stormwater conveyance channels, including ditches, swales, diversions, and the outlets of all channels and pipes shall be designed and constructed to withstand velocities that have the potential to cause damage or soil erosion.

O. Earthen embankments with constructed side slopes steeper than 3H:1V must be constructed with appropriate stabilization as approved by the Administrator.

P. Temporary diversions shall be constructed, as necessary, to direct all runoff through an effective sediment control measure (e.g., sediment trap, sediment basin or other appropriate measure).

Q. To the extent possible, soil stockpile locations shall be shown on the soil erosion and sediment control plan.

R. Soil stockpiles shall not be located in a drainageway, flood plain area, LPDA or a designated buffer, unless otherwise approved, under specific conditions to be established by the Administrator.

S. Stockpiles to remain in place more than three days shall be provided with soil erosion and sediment control measures, including a double row of silt fence or approved equivalent.

T. The applicant shall provide adequate receptacles for the deposition of all construction debris generated during the development process. The applicant shall not cause, or permit, the dumping, depositing, dropping, throwing, blowing, discarding or leaving of construction material debris upon or into any development site, channel, pond, lake, wetland, buffer or waters of DuPage County. The applicant shall maintain the development site free of uncontrolled construction debris. Construction site operators shall implement appropriate soil erosion and sediment control, and control waste such as, discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste that may cause adverse impacts to water quality.

U. All temporary erosion and sediment control measures shall be removed within thirty (30) days after final stabilization is achieved. Trapped sediment and other disturbed soils resulting from temporary measures shall be properly disposed of prior to permanent stabilization.

V. Design criteria, standards and specifications for erosion and sediment control shall be taken from one of the following sources:

1. Handbooks: Standards and specifications contained in The Illinois Urban Manual, as amended, DuPage Appendix E Water Quality Best Management Practices Technical Guidance Manual and the IDOT Standard Specifications for Road and Bridge Construction.
2. Other design criteria, standards and specifications, provided prior written approval is obtained from the Administrator or Director.

W. Applicant with land disturbing activities greater than one (1) acre shall provide a statement acknowledging that the site complies with the IEPA NPDES ILR10 permit, if applicable.

Section 33. That Section 26.1000SEC. is hereby amended to read as follows:

26.1000SEC. Post Construction Best Management Practices.

A. PCBMPs (Post Construction Best Management Practices), ~~a term that also includes VCBMPs (Volume Control Best Management Practices),~~ are required ~~on-site~~ to treat the stormwater runoff for pollutants of concern and reduce runoff volume for all developments ~~with 2,500 square feet or more net new impervious area compared to pre-development conditions~~, with the exceptions and exclusions noted below. Upon a documented finding by the Administrator that providing ~~either~~ PCBMPs ~~or VCBMPs on-site~~ is impractical, then ~~a~~the appropriate PCBMP fee-in-lieu shall be paid by the applicant in lieu of providing ~~on-site~~full or partial PCBMPs ~~or VCBMPs~~. On-site PCBMPs ~~or VCBMPs~~ are waived for the following developments:

~~A.~~1. When comparing the impervious area of the pre-development site to the with-development impervious area of the same development site, excluding any areas of the development site which PCBMPs have already been provided and maintained, and the net new impervious area is less than 2,500 square feet in the aggregate since April 23, 2013; or

2. The development is limited to the resurfacing of an existing roadway or reconstruction of an existing roadway with less than 2,500 square feet ~~or less~~ of net new impervious area per quarter mile being added compared to the pre-development condition or the replacement of an existing culvert or bridge; or ~~is limited to the resurfacing or reconstruction of an existing roadway or the replacement of an existing culvert or bridge that drains to an appropriately sized and functional PCBMP; or~~

~~B~~3. The development is a Regional Stormwater Management Development or a Flood Control development which are also considered to be PCBMPs; or

~~C~~4. The development is a stream bank stabilization, natural area restoration, or wetlands mitigation bank development, or off-site wetland mitigation which in itself is considered a PCBMP; or

~~D~~5. The development is limited to the construction, or re-construction, of a pedestrian walkway/bike path, in which the pedestrian walkway/bike path shall not exceed sixteen (16) feet in width, including shoulders; and is being constructed for general public use; or

~~E~~6. The development is limited to the modification of an existing stormwater management facility to incorporate Best Management Practices which in itself is considered PCBMPs; or

~~F~~7. The development is a Water or Sewer Improvement Development~~.~~; or
~~G~~8. The development is limited to construction or maintenance of an underground or overhead utility conduit or line, with supports and appurtenances.
~~H~~B. The following are ~~excluded~~prohibited from the ~~requirements to provide~~providing on-site ~~VCBMPs, but are required to pay an equivalent PCBMP fee-in-lieu if the requirement to provide~~ infiltration PCBMPs~~, or VCBMPs, is not already waived in Sections 26.1000.A-G~~.

1. Fueling and vehicle maintenance areas.
2. Areas within four hundred (400) feet of a known community water system well as specified, or within one hundred (100) feet of a known private well, for runoff infiltrated from commercial, industrial and institutional land uses. The applicant shall use their best efforts to identify such zones from available information sources, which include the Illinois State Water Survey, IEPA, USEPA, DuPage County Health Department and the local municipality or water agency.
3. Areas where contaminants of concern, as identified by the USEPA or the IEPA prior to development, are present in the soil through which infiltration would occur. For sites with a No Further Remediation (NFR) letter from the USEPA or IEPA, the applicant shall determine whether or not structural barriers are part of the mitigation strategy and account for such measures in the design.
4. ~~Linear utility developments. This exception does not include buildings, substations, pads, parking lots or other associated utility support facilities.~~
5. ~~Development in soils classified as Hydrologic Soils Group A by the NRCS.~~
6. 5. Developments over soils with the seasonably high groundwater table within two (2) feet of the surface.

Section 34. That Section 26.1001 is hereby amended to read as follows:

26.1001 Post Construction Best Management Practices Design Criteria.

A. PCBMPs shall provide volume and pollutant control using one of the following practices:
1. Infiltration of 1.25 inches for all new impervious surfaces; or
2. Native vegetated wetland bottom site runoff storage basin; or
3. PCBMPs not constructed pursuant to Sections 26.1001A.1 or 26.1001A.2 shall be constructed in accordance with 26.1001C.

B. Design criteria may be taken from the DuPage Appendix E Water Quality Best Management Practices Technical Guidance Manual or approved equivalent.

C. If the practices listed under Sections 26.1001A.1 or 26.1001A.2 are not utilized, then volume control and pollutant control shall be provided separately for all new impervious surfaces in accordance with the following criteria:

~~A~~1. The required ~~VCBMP~~ volume control shall be calculated as the product of the new impervious area ~~and the rainfall depth of~~ 1.25 ~~inches~~.inch rainfall event. No abstrations are taken on the rainfall depth.

~~1~~2. The volume calculated ~~for VCBMP~~ shall be subtracted from any volume of site runoff storage that is also required.

~~2. The VCBMP shall be designed with sufficient volume to store the calculated volume.~~

~~3. The preferred method of discharge from the VCBMP facility is through an infiltration or evapotranspiration facility. Where soils are inappropriate for infiltration, a means of positive conveyance, such as a perforated drain, may be used provided that the VCBMP does not draw down in less than 48 hours. The underdrain may not be set with an invert below the midline of the trench or other excavation~~

~~4. A minimum 4" perforated drain shall be used where volumes are very small and conveyance designs become impractical to implement, even if that causes drawdown times to be less than 48 hours.~~

~~B. The design of the facility will be such that runoff from impervious surfaces is captured, with a preference for those impervious surfaces used by automobiles, if an element of the overall development.~~

D. A control structure or underdrain, may be used, provided that the draw down time is between 48 and

96 hours.

~~C~~E. When a trench or other excavation is used, the expected void space (typically no greater than 36%) within the uniformly graded stone, sand or aggregate portion of the fill material may be included in the volume calculation. Silt sized particles (1/16 mm) or smaller may not be used to complete this calculation. The design shall incorporate measures to protect the void space from long term deposition of fine sediments. If testing is completed on samples of the proposed fill material which indicates a higher level of porosity, the applicant may submit the analysis completed on the material along with the storage calculations.

~~D~~F. The bottom/invert of the trench shall be set above the ~~expected groundwater elevation~~seasonally high water table.

Section 35. That Section 26.1002 is hereby amended to read as follows:

26.1002 Post Construction Best Management Practices.

~~PCBMPS are required on-site to treat the identified pollutants of concern in runoff from newly constructed impervious surfaces in a development.~~ Applicants shall identify the pollutants of concern that may be generated by the proposed development from the following list: Total Suspended Soils (TSS), Metals~~,~~ and Oils~~,~~; and Nutrients consisting of nitrogen and phosphorous. ~~Applicants shall design the combination of onsite VCBMPs and PCBMPs to store any required volume and treat the identified pollutants of concern. P~~roposed PCBMPs shall only be required to treat those pollutants identified and agreed to by the Director or Administrator.

Section 36. That Section 26.1003 is hereby amended to read as follows:

26.1003 Reserved.

~~**Pollutant Removal**.~~

~~The following VCBMPs are considered to be effective at pollutant removal, provided that they are designed to also treat the pollutants of concern:~~

~~A. Constructed wetlands, or~~

~~B. Wet or wetland bottom site runoff storage basins, or~~

~~C. Vegetated compensatory flood storage ponds, or~~

~~D. Infiltration ponds or trenches, with vegetative surfaces, with or without an underdrain system.~~

~~E. Vegetated swales with infiltration capability, with or without an underdrain system.~~

~~F. Other VCBMPs that can be demonstrated to be effective at treating the pollutants of concern.~~

Section 37. That Section 26.1004 is hereby amended to read as follows:

26.1004 Off-Site Requirements.

Required ~~VCBMPs or~~ PCBMPs for a development may be located off-site as part of a regional stormwater device, practice or system, but must be within the same major watershed as the development as defined in Section _____.

Section 38. That Section 26.1100SEC. is hereby amended to read as follows:

26.1100SEC. Site Runoff Conveyance Requirements.

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

B. Major storm water systems shall be sized to carry the base flood without causing additional property damage.

C. Design runoff rates shall be calculated by methodologies in general use for such purposes at the time of application. Stormwater facilities draining more than 5-acres shall use event hydrograph methods. The Administrator may specify certain design tools and methodologies to be used within the respective community.
D. Any design runoff rate method shall use Illinois State Water Survey Bulletin 71 northeast sectional rainfall statistics, or for continuous simulations, the National Oceanic and Atmospheric Administration continuous rainfall record from 1949 to present at the Wheaton gage, and shall calculate flow from all tributary area upstream of the point of design. Facilities with a tributary area over 100-acres will be required to perform critical duration analysis and use the highest peak discharge for conveyance design, testing events up to a 24-hour duration.
E. Maximum flow depths at the crown of a roadway or the edge of pavement at the high side of a super elevated roadway shall not exceed six inches during the base flood condition. This requirement does not apply to the at-grade repair, resurfacing or in-kind replacement of a roadway existing prior to the effective date of this Ordinance.
F. Transfers of waters between the major planning watersheds shall be prohibited except when such transfers will not violate the provisions of Section 26.504A.
G. Stormwater facilities for runoff upstream of flood protection facilities shall provide for conveyance or storage of flood waters without increased potential for damage to real or personal property during base flood conditions.

Section 39. That Section 26.1101 is hereby amended to read as follows:

26.1101 Site Runoff Storage.

Site runoff storage facilities, consisting of site runoff storage and a control structure with an emergency overflow shall be required for all developments.
A. The following cases or special conditions represent exceptions to providing site runoff storage:
1. When comparing the impervious area of the pre-development development site as it existed as of February 15, 1992 to the with-development impervious area of the same development site, excluding any areas of the development site for which detention has already been provided, and the impervious area has not increased by a minimum of 25,000 sq. ft cumulatively of permitted development; or
2. comparing the highest percentage of impervious area of the same development site in the 3-years immediately prior to the date of the Stormwater Management Permit application to the with-development impervious area the percentage will decrease by a minimum of five percent (5%); or
3. The with-development impervious area of the same development site is less than or equal to ten percent (10%); or
4. The development is strictly limited to a roadway development intended for public use, and the with-development Impervious Area is less than 25,000 square feet compared to pre-development conditions.

B. When the development is either a Roadway Development or an Open Space Development, which are "Special Cases of Development" as noted in Section 26.611, then only "Site Runoff Storage Special" is required. Site Runoff Storage Special shall be only that volume of site runoff storage required such that pre-development peak discharges for the 2-year, 24-hour duration and the 100-year, 24-hour duration rainfall events are not increased.
C. The following "Special Cases of Development" are not required to provide Site Runoff Storage or "Site Runoff Storage, Special":
1. Bridge and culvert modification, repair, and replacement developments; or.
2. Streambank stabilization developments; or
3. Natural area restoration developments; or
4. Wetland mitigation sites and wetland mitigation banks; or

5. Trails, bikeways and pedestrian walkways that shall not exceed sixteen (16) feet in width, including shoulders; and are constructed for general public use; or
6. Water and sewer improvement developments and all underground utilities.

D. When site runoff storage is required, it will be calculated as a volume utilizing the following development parameters and procedures.

1. The area for which site runoff storage is to be calculated will be the limits of grading or land cover disturbance, or a combination, whichever encompasses the greatest area of the development site, and will also include any ~~impervious~~development area for which site stormwater storage was deferred in Section 26.1101.A.1.
2. The runoff characteristics of the area will be indexed by calculating a representative hydrologic parameter. This parameter will be the NRCS Curve Number unless the Administrator approves the use of some other generally accepted engineering practice.
3. The design rainfall depth and duration will be the 100-year, 24-hour duration ISWS Bulletin 71 rainfall depth. Sectional statistics and rainfall distributions by Huff appropriate for a 100-year, 24-hour event shall be used unless some other rainfall and distribution is approved by the Administrator.
4. For purposes of calculating the required volume, a control structure shall be assumed that limits the peak runoff from the site to 0.10 cfs/acre for the disturbed area.
5. For sites less than five (5)-acres in area, the unit area site runoff storage nomograph from the Northeastern Illinois Planning Commission (now known as Chicago Metropolitan Agency for Planning CMAP) publication *"Investigation of Hydrologic Methods for Site Design in Northeastern Illinois"* (Dreher and Price, 1991) will be considered an acceptable calculation methodology for determining the volume of site runoff storage required in lieu of modeling.
6. For sites five (5) acres or greater ~~than 5 acres~~, a hydrologic model that produces a runoff hydrograph shall be utilized, and the runoff hydrograph routed through a basin which provides sufficient storage such that the combination of control structure and runoff storage volume limits the discharge to the allowable peak runoff. The calculated volume is then the required site runoff storage volume. This volume may be reduced by any volume control BMP (see Article X) volume if such a volume is required, and is then referred to as the Modified Required Site Runoff Storage Volume.
7. On development sites that ~~may~~ have an existing site runoff storage facility, the volume of site runoff storage required, for a proposed development shall not be less than the volume on-site pre-development, regardless of the provisions of this section.

E. The details of the design of a site runoff storage facility, which includes a Site runoff storage control structure in accordance with Section 26.1102 (sideslopes, depths, etc.), will be in accordance with this Ordinance~~s~~.

F. If a development is granted a variance with respect to the required site runoff storage volume, then the applicant shall pay a fee-in-lieu of site runoff storage per Section 26.1600.

G. Small areas of the disturbed area of a development site (less than five percent (5%) cumulatively) that are impractical to drain to a site runoff storage facility (backslopes of landscaping berms for example) may be allowed to drain off-site without routing through a site runoff storage facility provided that the areas are primarily vegetated and contain only incidental amounts of impervious surfaces such as sidewalks, utility appurtenances, or trails. Such areas do not "penalize" the allowable release rate by subtracting the anticipated 100-year discharge from these areas from the release rate, but may not be included in the area used for calculating the allowable release rate.

Section 40. That Section 26.1106 is hereby amended to read as follows:

26.1106 Drainage Tile Modification.

~~Modifications to drainage tiles~~.

A. Any modification of a drainage tile shall comply with the Illinois Drainage Code. For the purpose of determining compliance with this provision, a modification to a drainage tile shall:

1. Preserve the existing tile system's drainage characteristics; and
2. Drain tiles located wholly on property under the control of the developer may be removed or disabled provided that such removal does not cause additional flood damages; and
3. Drain tiles may be discharged as surface flow within a development site provided that no obstruction to the predicted flow from offsite areas will occur, and the general provisions of Section 26.504.A are not violated; and
4. Development designs may only utilize, where practical and approved by the Administrator, outflow locations with an existing drain tile leaving the development site with the permission of downstream landowners unless the tile is owned and maintained by the Village; and
5. A subsurface connection to the tile shall be constructed as a low flow outlet. A surface outlet shall be designed for the development site outflows based on the assumption the downstream tile will cease to function; and
6. Drain tiles shall be replaced or intercepted and connected to the proposed stormwater management system or a storm sewer bypass, which system or bypass shall be of an equivalent size and capacity. The capacity shall be determined by either the capacity of the existing tile flowing full, in its original condition, or the existing downstream capacity, whichever is more restrictive. A flow restrictor structure shall be required as necessary to achieve the capacity requirements.
7. Drain tile systems disturbed by development activities shall be reconnected unless the approved drainage plan provides otherwise; and

B. Existing, replaced or re-routed tiles within a development site shall be treated as part of the minor drainage system. The type, size, location and inverts shall be shown on the record drawings of the development and any further modification to such tiles, or the repair or removal of damaged tiles, shall require the approval of the Administrator.

C. When subsurface ~~D~~drainage ~~T~~tiles are detected on a pre-development site the applicant shall submit the following:

1. A subsurface drainage inventory including the locations of identified drainage tiles by means of slit trenching and other appropriate methods performed by a qualified subsurface drainage consultant. Any drain tile lines damaged during the investigation shall be repaired to their previous working status.
2. A topographical map of the development site showing:
    a. Location of and depth of each slit trench ~~and identified~~ to correspond with the tile investigation report and surveyed points where the tile was field staked at approximately 50 foot intervals; and
    b. Location of each drain tile with a flow direction arrow, tile size and any connection to adjoining properties; A summary of the tile investigation report showing trench identification number, tile size, material and quality, percentage of the tile filled with water, percentage of restrictions caused by silting, depth of ground cover, and working status; and
    c. The qualifications of the person or firm conducting tile location investigation.

D. Replacement of downstream drain tiles shall be required if the development site depends on those tiles for stormwater conveyance or water surface elevation control. Replacement of the downstream drain tiles is not required if a maintainable outlet for the site exists or is installed. Drainage tiles may be maintained, replaced or repaired for agricultural land use when undertaken in compliance with NRCS approved farming practices without requiring Stormwater Management ~~Certification~~Permit.

Section 41. That Section 26.1107 is hereby amended to read as follows:

26.1107 Requirements for Development within Localized Poor Drainage Areas.

Any development in an area identified on the drainage control map as a ~~localized poor drainage area~~LPDA shall comply with the provisions of this Ordinance to the same extent as property within a regulatory flood plain, except as provided for under Articles VII and VIII of this Ordinance.

Section 42. That Section 26.1200ART is hereby amended to read as follows:

26.1200ART Article XII. Reserved.

Section 43. That Section 26.1200SEC. is hereby amended to read as follows:

26.1200SEC. Reserved.

~~**Special Management Areas.**~~

~~1. Special management areas include regulatory flood plains, localized poor drainage areas, wetlands, wetland buffers and riparian environments. Requirements for determining regulatory flood plains are specified in Section 26.1301 of this Ordinance. Requirements for delineating wetlands are specified in Section 26.1400 of this Ordinance. Requirements for determining riparian environments are specified in Section 26.1500 of this Ordinance.~~

~~2. Any development in the regulatory flood plain shall comply with the requirements of Article XIII of this Ordinance in addition to the requirements of Section 26.305 of this Ordinance.~~

~~3. Any development in wetlands shall comply with the requirements of Article XIV of this Ordinance in addition to the requirements of Section 26.305 of this Ordinance.~~

~~4. All developers shall submit the documents specified in Article VII of this Ordinance to verify compliance with the requirements of this Ordinance.~~

~~5. All developers shall grant the Administrator consent to record against the title of the property an informational note stating that a permit to build in a special management area has been granted. The informational note shall be printed on the face of the plat or other recorded document or shall be separately recorded if the project is a single lot development.~~

Section 44. That Section 26.1301 is hereby amended to read as follows:

26.1301 Determination of Regulatory Flood Plain, Base Flood Elevation (BFE), LPDA and Regulatory Floodway.

A. ~~When all of the following conditions have been met, the~~ Within the floodplain, the BFE for purposes of establishing the low opening on new construction of buildings shall be taken from the higher of BFEs established by the current regulatory profile or elevations established and published by the Director~~. Compensatory storage will be based on the current regulatory model. The conditions are~~which meet the following conditions:

1. The Director certifies that adequate review and quality control has been performed on the hydrologic/hydraulic modeling, and BFEs have been established using acceptable methodology~~.~~; and
2. The Director notifies an affected community within the studied reach and makes available to that community working input files for the hydrologic/hydraulic model~~.~~; and
3. The Director publishes notice that the model will be used for the purpose of regulating new building construction.

B. For LPDAs, the BFE for purposes of establishing the low opening on new construction of buildings shall be taken from the WIIP.

C. The BFE for purposes of establishing compensatory storage will be based on the current regulatory model as determined in 26.1301E.

D. If neither elevation identified in this section has been established, then the BFE shall be determined in accordance with 26.1301E.2.

~~B. Any developer proposing development shall identify the boundaries and elevation of the regulatory flood plain, the boundaries of the regulatory floodway, and the boundaries and elevation of the localized poor drainage areas.~~

~~1. The Administrator shall prepare, and as necessary update, a listing to be known as the Drainage Control Map which shall include the following as applicable within the boundaries of the Village:~~

~~a. OWR studies adopted as State Regulatory Maps; and~~

~~b. Flood Insurance Studies (dated November 16, 1981), Flood Insurance Rate Maps (dated October 18, 1988), and Flood Boundary and Floodway Maps (dated April 15, 1981) all published by FEMA; and~~

~~c. Localized Poor Drainage Areas.~~

~~2. Any development located within the regulatory flood plain as listed in the Drainage Control Map may require approval from OWR or its designee or FEMA or both. The Drainage Control Map includes approved OWR and FEMA studies and maps used for insurance and flood plain management purposes.~~

~~3. The regulatory floodway shall be designated by OWR or its designee and is shown on the Drainage Control Map. If a floodway is not designated on the Drainage Control Map, then the regulatory floodway shall be deemed to be the regulatory flood plain.~~

~~4. The regulatory floodway may be redesignated by a project specific flood plain study and shall require approval from the Department and OWR or its designee, and a CLOMR or LOMR from FEMA.~~

~~C~~E. The regulatory BFE shall be taken as the one percent (1%) chance storm established from flood plain studies that have been completed and adopted by FEMA as the regulatory flood plain. When a BFE has not been adopted by FEMA as regulatory, the following hierarchy of flood plain studies shall be used to determine the BFE:

1. Flood Plain studies that have been published by the Director in accordance with ~~15-80.A~~Section 26.1301.A.
2. If no regulatory flood plain study or model published by the Director is available and the development includes a channel with a tributary area ~~greater than~~ 100 acres or greater or a depressional storage area with ~~greater than~~ 20 acres or greater of tributary area, a site specific flood plain study shall be required and the BFE shall be determined using FEMA-accepted models and methodology. If the chosen model is not FEQ, the BFE shall be based on the critical duration.

D. Where a channel has a tributary drainage area equal to or greater than 640 acres, the site specific floodplain study completed ~~in~~per Section 26.1301~~B~~E.2 shall be submitted to IDNR-OWR for approval or other designee.

E. The regulatory floodway shall be as delineated on the maps listed in Section 26.202. Where interpretation is required to determine the exact location of the regulatory floodway, IDNR-OWR shall be contacted or their designee.

F. If a floodway is not designated on the maps and the tributary area is ~~greater than~~ one (1) square mile or greater, IDNR-OWR Part 3708 rules shall apply. If a floodway is not designated on the maps and the tributary area is less than one (1) square mile, then the regulatory flood plain shall have no designated floodway.

G. The Flood Protection Elevation (FPE) is ~~the BFE plus three (3) foot of freeboard~~as defined in Section 26.301.

Section 45. That Section 26.1302 is hereby amended to read as follows:

26.1302 Localized Poor Drainage Area (LPDA).

~~Localized Poor Drainage Areas~~LPDAs shall be designated where all of the following criteria are met, and shall be included on the Drainage Control Map:
A. LPDA limits coincide with or encompass at least one closed elevation contour (1-foot increments) that represents a depression on a topographic map or survey;
B. LPDA limits are not confined solely to a public right-of-way served by an adequate drainage system (including overflow) where building setbacks are a minimum of ten (10) feet from the right-of-way;
C. LPDA limits are not confined to publicly-owned property natural areas where development is restricted (e.g. Maple Grove Forest Preserve, Lyman Woods, Belmont Prairie);
D. LPDA tributary area limits are not confined to a single undeveloped parcel with an adequate drainage system (including overflow);
E. LPDA limits are not mostly contained within regulatory flood plain as shown on the FIRM;
F. Tributary area is equal to or greater than three (3) acres, based on a delineation from the DuPage County topographic map or other topographic survey with higher accuracy;
G. LPDA and associated overflow routes are not confined to adequate recorded stormwater management easements where all adjacent structures are protected to required flood protection elevations ~~under the current Stormwater and Flood Plain~~as specified in this Ordinance;
H. The area contained by the base flood elevation contour, as determined by the best available information and accepted by the Administrator, shall represent the regulatory boundary of the ~~Localized Poor Drainage Area~~LPDA. These elevations shall be published in the WIIP.

Section 46. That Section 26.1303 is hereby amended to read as follows:

26.1303 Regulatory Flood Plain and Localized Poor Drainage Area Development Performance Standards.

A. *General Performance Standards*

1. No development activity within the flood plain or LPDA shall result in an adverse hydraulic impact to upstream or downstream properties.
2. ~~Any removal, replacement, or modification of stormwater facilities that has an adverse hydraulic impact shall provide a watershed benefit. For developments that provide a watershed benefit through water quality improvements, compensatory storage shall be required to mitigate for any potential increases in flows or flood elevations. All structures and their associated low entry elevations within the created backwater of the existing stormwater facility shall be identified.~~
3. Proposed developments that meet the following criteria shall be exempt from the hydrologic and hydraulic modeling requirements set forth in the Ordinance:
    a. A development that is located in the regulatory flood plain but is located entirely outside of the regulatory floodway, provided the development meets the compensatory storage requirements of Section 26.1303.D.
    b. The construction of an at-grade pedestrian path located within the regulatory floodway, provided the proposed development meets the following requirements which results in a development that does not increase the BFE:
        1. The development must have an at-grade intention, with a reasonable balance of cut and fill at each cross-section based on the judgment of the Director. Net cut over the length of the development is acceptable where a balance of cut and fill at every cross-section cannot be achieved.
        2. The maximum width of the proposed path is sixteen (16) feet of traveled lane, including shoulders.
    c. The construction of a public safety feature, such as a pedestrian bridge railing or a guard rail for a roadway, provided the proposed construction of a public safety feature does not result in a loss of ten percent (10%) or more of the existing conveyance cross-sectional area.

d. Developments replacing culverts with a hydraulically equivalent culvert(s).

e. A development that is located in an LPDA and is providing the compensatory storage requirements.

4. ~~In accordance with FEMA and State regulations, a~~ A CLOMR shall be required for any development that either: (1) revises the regulatory floodway boundary or (2) encroaches upon a floodplain ~~without an established floodway~~ and causes ~~an~~a specified increase ~~of 0.1 feet or more~~ in the BFE, in accordance with FEMA and State regulations.

5. In accordance with NFIP Regulations, a building permit shall not be issued for construction in the SFHA until a LOMR is issued by FEMA unless the building meets the building protection standards in Section 26.1303.B. A building permit for a compliant structure can be issued without a LOMC.

6. A copy of an application for a LOMC to remove a property from the SFHA including all the required information, calculations, and documents shall be submitted to the Village concurrent with the application to FEMA or ~~IDNR-~~OWR or its designee.

7. In areas outside the regulatory floodway but within the flood plain, maximum flow depths on new parking lots that are used for permanent parking shall not exceed one foot during the base flood condition and shall be designed for protection against physical flood damages. Parking areas that are used solely for the purpose of overflow, temporary, or short-term parking may allow flood depths greater than one foot. Parking in areas below the base flood elevation shall be clearly posted with Flood Hazard signs.

B. *Building Protection Standards*

1. If a proposed building is located in a SFHA or LPDA, all new construction and substantial improvements shall (i) be designed (or modified) and adequately anchored to prevent flotation, collapse, or lateral movement of building resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy. (ii) be constructed with materials resistant to flood damage, (iii) be constructed by methods and practices that minimize flood damages, and (iv) be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding. Existing buildings that have not incurred substantial damage or meet the substantial improvement criteria may also be modified based on the above criteria. All construction below the FPE shall be of flood resistant materials and conform to provisions in FEMA/FIA Technical Bulletin 2. All electrical, heating, ventilation, air conditioning, plumbing, and other appliances shall be located above the FPE. Storage of materials shall be in accordance with Section 26.1303C.1, which states that there can be no storage of certain listed materials below the FPE.

2. New construction or substantial improvements of residential buildings within a SFHA or LPDA shall have the lowest floor, including basement, elevated to at least the FPE and that the fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement and which are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered ~~p~~Professional ~~e~~Engineer or ~~a~~Architect or meet or exceed the following minimum criteria: A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than one foot above grade. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters. Adequate drainage shall be provided.

3. New construction and substantial improvements of non-residential buildings within a SFHA or LPDA shall (i) have the lowest floor, including basement, elevated to at least the FPE or, (ii) together with attendant utility and sanitary facilities be designed so that below the ~~BFE~~FPE the

building is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. Where a non-residential structure is intended to be made watertight below the ~~BFE~~FPE, (i) a registered ~~p~~Professional e~~E~~ngineer or ~~a~~Architect shall develop and/or review structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice for meeting the applicable provisions of 44CFR60.3 and (ii) a record of such certificates which includes the specific elevation (in relation to sea level) to which such buildings are floodproofed shall be maintained by the official designated by the community under 44CFR59.22.

4. Manufactured homes that are placed or substantially improved within the SFHA on sites (i) outside of a manufactured home park or subdivision, (ii) in a new manufactured home park or subdivision, (iii) in an expansion to an existing manufactured home park or subdivision, or (iv) an existing manufactured home park or subdivision on which a manufactured home has incurred substantial damage as the result of a flood be elevated on a permanent foundation such that the lowest floor of the manufactured homes to at least the ~~BFE~~FPE, be securely anchored to an adequately anchored foundation system to resist floatation, collapse and lateral movement in accordance with the rules and regulations for the Illinois Mobile Home Tie-Down Act issued pursuant to 77 Ill. Adm. Code 870, provide adequate access and drainage and if pilings are used for elevation, applicable design and construction standards for pilings shall be met.
5. Manufactured homes to be placed in an existing manufactured home park or subdivision within the SFHA not subject to the provisions of Section 26.1303B.4 shall be elevated so that either (i) the lowest floor of the manufactured home is at least the ~~BFE~~FPE, or (ii) the manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and be securely anchored to an adequately anchored foundation system to resist floatation, collapse, and lateral movement accordance with the rules and regulations for the Illinois Mobile Home Tie-Down Act issued pursuant to 77 Ill. Adm. Code 870, provide adequate access and drainage and if pilings are used for elevation, applicable design and construction standards for pilings shall be met.
6. Recreational vehicles placed on sites within a SFHA be either (i) be on the site for any period not exceeding any aggregate of ten (10) days (which may or may not be consecutive) within any period of thirty (30) consecutive days, (ii) be fully licensed and ready for highway use, or (iii) meet the permit requirements of 44CFR60.3(b)(1) and the elevation and anchoring requirements of Section 26.1303.B.4, (iv) and in compliance with provisions found in Section 28.1408 of the Zoning Ordinance. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by a quick disconnect type utilities and security devices, and has no permanently attached additions.
7. Accessory structures such as detached garages and sheds may be constructed within a SFHA and LPDA if they meet all of the following criteria:
    a. Must be non-habitable, used for the storage of vehicles and tools, and cannot be modified later into another use.
    b. Shall be located outside of the regulatory floodway.
    c. Shall be on a single lot and be accessory to an existing principal building on the same lot.
    d. When the floor of an accessory structure is belw the BFE, t~~T~~he walls of the accessory structure shall include openings to allow floodwater to enter the structure from the adjacent grade to the BFE~~FPE. For a detached garage, this applies to three sides of the garage. Floodwater~~ The location of the openings ~~should be sized according to~~and the size of each opening shall be in accordance with FEMA Technical Bulletin 1.
    e. All electrical, heating, ventilation, air conditioning, plumbing, and other appliances, or fixed mechanical or electrical devices shall be located above the FPE.
    f. The detached garage must be less than fifteen thousand dollars ($15,000) in market value

or replacement cost, whichever is greater, or less than five hundred and seventy six (576) square feet ~~(24' X24')~~in size.

g. Shall be anchored to resist floatation and overturning.

h. All flammable or toxic materials (gasoline, paint, insecticides, fertilizers, etc.) shall be stored above the FPE.

i. All construction below the FPE shall be of flood resistant materials.

C. *Public Health Protection Standards*

1. Temporary or permanent storage in the flood plain of the following are prohibited unless elevated or floodproofed to one foot above the base flood elevation:
   a. Items susceptible to flood damage; or
   b. Unsecured buoyant materials or materials that may cause off-site damage including bulky materials, flammable liquids, chemicals, explosives, pollutants, or other hazardous materials; or
   c. Landscape wastes.
2. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.
3. Sanitary sewer systems shall be designed to eliminate infiltration or inflow of flood waters and minimize discharge of sewage.

D. *Compensatory Storage Volume Standards*

1. Any placement of fill, structures, or other materials above grade in the flood plain shall require compensatory storage equal to at least 1.5 times the volume of flood plain storage displaced. The storage shall be provided incrementally using one of the following methods: i) between the 0 - 10-year and the 10 - 100-year flood recurrence intervals; or ii) an approved equivalent, at a minimum 1:1 ratio~~, respectively~~. The remaining 0.5:1 required storage ratio can be provided at any elevation below the BFE. Compensatory storage for fill in ~~depressional storage areas~~ LPDAs shall be provided non-incrementally at a ratio of 1:1. Grading in wetland, floodplain, LPDA, or buffer areas shall be done in such a manner that the existing flood plain or stormwater storage is maintained at all times. Compensatory storage is not required for flood protection of existing buildings within the flood plain or LPDA for flood plain or stormwater volume displaced by the building and within the area of ten (10) feet adjacent to the building; or
2. For areas where there is no defined regulatory floodway and a tributary drainage area less than 640 acres, the compensatory storage requirements set forth in Section 26.1303.D.1 shall be waived for developments that meet either of the following criteria:
   a. The cross-sectional flood plain area, as defined by cross-sections through the development site, is not reduced by more than 0.5% at any one cross-section~~.~~; or
   b. The total fill volume does not exceed two hundred (200) cubic feet.
3. Existing flood storage that is lost due to channel modification shall require compensatory storage at a 1:1 ratio.
4. Flood Plain fill resulting from public roadway developments shall require incremental compensatory storage at a 1:1 ratio.
5. Any removal, replacement, or modification of stormwater facilities that has an adverse hydraulic impact shall provide a watershed benefit and shall require compensatory storage to mitigate for any potential increases in flow or Flood elevations. All structures and their associated low entry elevations within the created backwater of the existing stormwater facility shall be identified

Section 47. That Section 26.1304 is hereby amended to read as follows:

26.1304 Regulatory Floodway Performance Standards.

A. In the regulatory floodway, all of the requirements of this Article shall apply to any proposed development, and only the following appropriate uses shall be considered for permits:

1. Flood control structures, dikes, dams and other public works or private improvements relating to the control of drainage, flooding or erosion or water quality or habitat for fish or wildlife;
2. Structures or facilities relating to the use of, or requiring access to, the water or shoreline, such as pumping and treatment facilities, and facilities and improvements related to recreational boating, commercial shipping and other functionally dependent uses;
3. Storm and sanitary sewer outfalls;
4. Underground and overhead utilities;
5. Recreational facilities such as playing fields and trail systems including any related fencing built parallel to the direction of flood flows;
6. Bridges, culverts, roadways, sidewalks, and railways, and any modification thereto;
7. Regulatory floodway regrading, without fill, to create a positive slope toward a watercourse;
8. Floodproofing activities to protect existing structures such as, but not limited to, constructing water tight window wells, and elevating, without enlarging the footprint;
9. In-ground swimming pools, without fill.

B. Hydrologic and hydraulic impacts of proposed developments located in the regulatory floodway shall be evaluated using one of the appropriate models as described in the following hierarchy:

1. FEMA approved Flood Plain study model.
2. Watershed Plan Models or models published by the Director.
3. Development specific model using FEMA-accepted methodology.

C. If the hydrologic and hydraulic impacts of developments located in the regulatory floodway are to be evaluated using FEQ, the following modeling guidelines shall apply:

1. ~~Only~~ FEQ models that have been submitted to or approved by FEMA or FEQ models that have been published by the Director shall be used. ~~No~~Any other FEQ models should be considered for use in the certification of a proposed development.
2. Developments consisting wholly of stream bank stabilization will not require the use of the FEQ model provided that the cut and fill portions of the development are balanced is at the discretion of the Director.
3. Use of the FEQ model to evaluate hydrologic and hydraulic impacts to wetlands will only be required for wetland areas that are located within the 100-year recurrence interval flood plain, where the existing FEQ model is the regulatory model.
4. Evaluation of the results of the FEQ model will use the following thresholds to determine no adverse impact. In evaluating FEQ results, it is understood that the term “increases” as used below constitutes a numeric model tolerance and shall not be understood to endorse increasing flood flows or flood elevations.
    a. There will be no increase in elevation for any storm event greater than 0.1 feet. If this threshold is exceeded, the applicant shall prepare a trend analysis to show if there are any consistent frequency (depth and duration) of storm events that cause impacts greater than 0.1 feet. If there are no trends determined, then outliers with 0.25 feet or less shall be acceptable. If a trend is discernible, the development shall be reevaluated to avoid adverse impacts within the determined trend. A trend is considered three (3) or more events within 0.5 feet of depth that show increases greater than 0.1 feet.
    b. No increase in flow greater than ten percent (10%).
    c. No increase in velocity greater than ten percent (10%), unless there is either protection to prevent erosion or evidence that the proposed velocity will be non-erosive.

D. All developments shall preserve effective floodway conveyance such that there will be no increases in 100-year flood elevations, flows, or floodway velocity, unless any such increases are contained in a public flood easement and a watershed benefit is provided. Increases in flood elevations of 0.1 feet or less associated with bridge and culvert construction are allowable, in accordance with ~~IDNR~~ OWR Part 3700 and 3708 rules.

E. Transition sections within the regulatory floodway are required for the calculation of effective

conveyance including the modification and the replacement of existing bridge and culvert structures, or to compensate for lost conveyance for other appropriate uses. The following ratios shall be used to calculate transition sections:

1. Water will expand no faster than one foot horizontal for every four (4) feet of flooded stream length.
2. Water will contract no faster than one foot horizontal for every one (1) foot of flooded stream length.
3. Water will not expand or contract faster than one foot vertical for every ten (10) feet of flooded stream length.

F. For bridge and culvert replacements within the regulatory floodway where a hydraulic analysis of the flood plain is required, a separate floodway analysis shall not be required provided that the pre- and post-construction BFE is not increased based on the hydraulic analysis of the flood plain.

G. For proposed developments that require a floodway construction permit, the County has been delegated the authority to issue floodway construction permits on behalf of ~~IDNR~~ OWR. However, a permit application must still be submitted to ~~IDNR~~ OWR. The County does not have delegated authority for specific types of permitting, including:

1. Permitting of developments undertaken by federal or state agencies including those that are funded, planned, or designed by federal or state agencies.
2. Permitting of developments undertaken by the Department, including those in which the Department is involved in the planning or design.
3. Permitting of jurisdictional dams.
4. Permitting of work in public bodies of water, as defined by ~~IDNR~~ OWR.
5. State approval of new or revised regulatory floodway limits or regulatory flood profiles.
6. State certification of flood discharges.
7. State approval of BFE determinations where no regulatory BFE's currently exist and the drainage area of the watercourse is one square mile or greater.

Section 48. That Section 26.1400SEC. is hereby amended to read as follows:

26.1400SEC. Requirements for Wetland Delineation.

A. The following should be completed as part of an onsite procedure, unless the Administrator concludes otherwise. The decision shall be based on review of available ~~engineering and mapping~~ resources, current or prior site knowledge, a site visit, or staff recommendations, or the results of Section 26-1400.B.1. The basis for the decision shall be documented and placed in the development file.

B. The boundaries, extent, hydrology, function and quality of all wetland areas on the subject property shall be determined by an Environmental Scientist in accordance with the Federal wetland delineation methodology. All development site wetland boundaries shall be demarcated in the field and verified by an Environmental Scientist representing the Village. Verified wetland boundaries are valid for two years after the date of verification.

1. If an Environmental Scientist confirms that no wetlands are present on or within 100 feet of the development site, the Administrator shall document those findings.
2. If wetlands or waters are determined to be present, a delineation report shall be prepared documenting boundaries, extent, function, and quality of wetland, waters and buffers in compliance with all methodologies and definitions set forth in this Ordinance.

C. The boundaries, extent, hydrology, function, and quality of all wetland areas on sites in agricultural production shall be determined by an Environmental Scientist in accordance with the current methodology. Agricultural areas that have been abandoned for five (5), or more, consecutive years shall be delineated in accordance with the current Federal wetland delineation methodology authorized under Section 404 of the Clean Water Act.

D. The approximate location, extent, and relative quality of off-site wetlands within one hundred (100)

feet of the development shall be identified by using the first of the following documents or procedures applicable at the time of delineation:

1. Site specific delineation according to the procedures specified in accordance with the Federal wetland delineation methodology.
2. Wetland signatures identifiable from historic and current aerial photography, as determined by an Environmental Scientist.
3. DuPage County Wetland Inventory Maps.
4. US Fish and Wildlife Service, National Wetland Inventory Maps.
5. Wetlands identified in Interim Watershed Plans.
6. Wetlands identified in Watershed Plans.

E. Wetlands shall be classified as either critical or regulatory based on the evaluation of the entire wetland complex. Critical wetland status shall be assigned to those wetlands that have been determined to satisfy one of the following Sections 26-1400.E.1 through 26.1400.E.5, below.

1. Calculate the wetland Qualitative Value using the Modified Michigan Department of Natural Resources Method. A score of 5 or higher will be considered a Critical wetland. Alternatively, the mean rated wildlife quality (MRWQ) can be calculated using the Ludwig Wildlife Habitat Evaluation Method. A score of 8 or higher will be considered Critical wetland. If both methods are completed, the MRWQ shall prevail.
2. The plant community within the wetland is determined to have a native floristic quality index (nFQI) of 20 or higher during a single growing season assessment or a native mean C-value of 3.5 or greater, as calculated by the Swink & Wilhelm methodology.
3. The wetland is known to be inhabited by a State listed threatened or endangered species based on the consultation with the Illinois Department of Natural Resources.
4. An evaluation of the wetland completed in accordance with current United States Fish and Wildlife Service review procedure that confirms the presence or use by listed threatened or endangered species.
5. If the wetland is identified as a critical wetland in the County's wetland inventory, confirmation of the Critical status shall be completed through an evaluation of Sections 26-1400.E.1 through 26.1400.E.5, above. If the wetland evaluation does not confirm a critical status, the wetland shall be considered “regulatory” for purposes of this Ordinance.

Section 49. That Section 26.1401 is hereby amended to read as follows:

26.1401 Requirements for Development Affecting Wetlands.

A. Development affecting wetlands may not occur without a permit, or letter of permission if applicable.

B. Development proposing to affect critical wetlands must demonstrate through an alternatives analysis that the presence of critical wetlands precludes all economic use of the entire parcel, and that no practicable alternative to wetland modification exists, and that the proposed development represents the least damaging alternative while still achieving the basic development purpose. If the impact is determined to be allowable, the impacted area shall be mitigated in accordance with Section 26.1403.

C. Development proposing to affect a regulatory wetland must demonstrate through an alternatives analysis that the proposed development represents the least damaging alternative while still achieving the basic development purpose. If the impact is determined to be allowable, the impacted area shall be mitigated in accordance with Section 26.1403. The following exception applies:

1. The Administrator shall waive the requirement for completion of a Alternatives Analysis or the need to provide wetland mitigation for developments proposing, in the aggregate, 0.10 acre or less direct impact to wetlands provided:
    a. the wetland(s) is regulatory; and
    b. none of the wetland(s) to be impacted is over 0.1 acres in size; and
    c. the wetland(s) to be impacted are not jurisdictional under the USACE; and

d. the wetland(s) to be impacted are located entirely within the development's platted lot(s), and
e. There will be no indirect impacts to remaining wetland area(s), and
f. The wetland(s) to be impacted are not part of a wetland mitigation development, and
g. The impact i~~i~~s in line with the basic development purpose.

D. Development proposing to temporarily affect a regulatory wetland is allowable provided the impacted wetland is restored pursuant to Section 26.1403.D.

E. Vegetative Maintenance within wetland may be allowed through issuance of a Letter of Permission under the following conditions. A written description of the development goals, objectives and management plan must be provided for approval to the Administrator. ~~a~~As long as the development does not require Stormwater Management Permit for any other aspect of the development, the Administrator may issue a Letter of Permission to allow the maintenance activity.

Section 50. That Section 26.1402 is hereby amended to read as follows:

26.1402 Indirect Impacts to Wetlands.

A. The applicant must demonstrate that the development or hydraulic alteration will not cause an indirect wetland impact ~~with~~unless one of the following exceptions~~.~~ apply:

1. The w~~W~~etland occur at or below the OHWM of a waterway on which the hydraulics will not be changed; or
2. The development is a ~~S~~streambank stabilization ~~developments.~~; or
3. The Administrator concurs that there is no potential for adverse impact.

~~B. The following requirements apply to a development or alteration to a hydraulic structure where there is the potential for hydrologic changes to a regulatory wetland.~~

~~1. Existing wetlands within 100 feet of the limit of disturbance of a proposed development that have in whole or part topography that is sensitive to change in runoff volume, or if greater than 20% of the wetland's tributary watershed will be developed, shall be evaluated for potential changes in surface hydrology due to development, unless the Administrator concludes otherwise. If there is no potential for change then the Administrator shall not require an evaluation.~~

~~C. Increases or decreases in maximum depth of more than 3 inches, or changes in duration greater than 48 hours above existing high water for the rainfall events as defined in Section 26.1403.E shall be considered an indirect impact. The Administrator can, based on a review of the submitted information, determine that proposed impacts outside of the above limits will not affect the existing plant communities, and therefore, would not be considered an indirect impact.~~

B. A development or hydraulic alteration is consiered to have an indirect impact if one of the following limitations are exceeded:

1. An Increase or decrease in the high water level of more than 3 inches in the 2.03 inch, 2.51 inch, and 3.04 inch, twenty-four (24) hour rainfall events; or
2. Changes in the wetland's draw down time resulting in an increase or decrease of greater than 48 hours from the peak elevation to the normal water level. The draw down times must be calculated for the 2.03 inch, 2.51 inch, and 3.04 inch, twenty-four (24) hour rainfall event for both the existing and proposed conditions; or
3. An increase in the duration of inundation of more than 20% from existing to proposed conditions for the 5.51 and 7.58 inch, twenty-four (24) hour rainfall event. A minimum increase of 48 hours is allowed for these storm events.

D. When the dominant plant community or wetland type is known to be sensitive to relatively small changes in depth and duration of inundation (e.g., sedge meadow, vernal pool), then ~~an analysis of depth and duration of inundation shall be required before such an impact is certified. (Section 26-1402.E.3)~~ the thresholds as outlined in Section 26.1402.B may be reduced by the Administrator.

~~E. The review of the evaluation of indirect impacts for a development is limited to the following analysis, unless the wetland meets the condition described in Section 26.1402.D. The applicant shall develop a sub-watershed model using a model sensitive to land cover changes as they affect surface runoff for rainfall events of 0.5 inches, 1.5 inches and 3.0 inches for the twenty-four (24) hour rainfall event. An Soil Conservation Service curve number analysis will be accepted provided:~~

~~1. The distinction between directly connected impervious areas and unconnected impervious areas is in accordance with TR-55 methodology. Unconnected impervious areas may be part of a composite curve numbers, but directly connected impervious areas draining to the wetlands must be modeled separately to define runoff in the smaller rainfall events required. Directly connected impervious areas draining through BMPs which promote infiltration may also be part of the composite curve number analysis.~~

~~2. The model area shall be the existing and proposed area draining directly to the wetlands. The applicant need not model either groundwater to the wetland, or flooding of the wetland from adjacent streams unless the development proposes to significantly change the stage/discharge relationship of the existing wetland. The existing conditions model shall reflect the current land cover, soils, wetland storage and discharge characteristics in the sub-watershed prior to development. The proposed conditions model shall be the existing conditions model with land cover and soils changes reflecting the proposed development.~~

~~3. The runoff-volume sensitive topographic feature, identified in Section 26.1402.D, shall be represented in a stage-storage-discharge relationship under pre-development conditions and if any fill or grading or other alteration is proposed within the topographic feature, and then a proposed stage/storage/discharge relationship shall also be developed.~~

~~4. The applicant shall model rainfall events of 0.5, 1.5 and 3.0 inches for twenty-four (24) hour rainfall events under existing and proposed conditions and calculate the total volume of runoff to and including the area of the wetland. For purposes of this comparison, that the entire volume is assumed to be present in the wetland at the beginning of routing, and the depth and duration of flooding shall be compared between existing and proposed conditions. If the 3.0 inch rainfall volume does not cause a closed or restricted depression to completely fill, then the applicant shall also model an event of greater rainfall depth such that the volume of runoff produced will be greater than the spillover elevation of the depression. The maximum rainfall event that must be considered is 7.58 inches. For those elevations of a closed depression without a positive outlet, only the change in elevation limitation applies.~~

Section 51. That Section 26.1403 is hereby amended to read as follows:

26.1403 Wetland Mitigation Requirements.

A. Mitigation for wetland impacts shall take place in the same watershed planning area as the affected wetland. For the purpose of Section 26.1403, the three watershed planning areas are defined as the Salt Creek (including the Des Plaines River and Sawmill Creek), East Branch DuPage River and West Branch DuPage River, as shown on Exhibit 1. If mitigation is not practicable within the same watershed, the Administrator may allow out of watershed mitigation, following a request in writing by the applicant. The designs and analyses of all wetland mitigation measures shall meet the applicable standards of the Plan.

B. Mitigation for permanent wetland impacts shall be provided as follows:

1. Three to one (3:1) for permanent development impacts within critical wetlands.
2. One and one half to one (1.5:1) for permanent development impacts within regulatory wetlands,
3. Natural area restoration developments shall provide wetland mitigation for permanent wetland impacts at a minimum proportional rate of one to one (1:1).
4. Developments that contain both development and restoration components shall mitigate at the ratios listed above applicable to each type of impact.

5. If a wetland mitigation area is disturbed prior to acceptance, the impact shall be mitigated at a one to one (1:1) rate. Restoration of the impacted area can constitute fulfillment of the one to one requirement. If a wetland mitigation area is impacted following acceptance, the impact must be mitigated at the appropriate critical or regulatory proportional rate.
6. In order to be eligible for credit, the mitigation must meet the performance standards referenced by the ~~stormwater certification~~Stormwater Management Permit.

C. The Administrator may allow partial mitigation credit for the following, provided that wetland creation for permanent wetland impacts does not fall below a 1:1 ratio. A credit may not be counted twice.

1. Enhancement or restoration of an existing wetland will be credited at a ratio of 0.5:1.
2. Enhancement, restoration, or creation of buffer will be credited at a ratio of 0.25:1.

D. Temporary wetland impacts shall be restored in place. The disturbed area must be returned to its original contour and general soil profile, be restored to a comparable wetland community type, and exhibit an FQI no lower than that of the original wetland in accordance with the approved performance standards. The Administrator shall make a determination as to whether the proposed impacts will be considered temporary.

E. The applicant may request an alternative community type, if the development is part of a natural area restoration development, and documentation is provided describing the restoration plan and goals.

F. Mitigation for depressional storage lost within wetlands shall be provided in accordance with Section 26.1303.D of this Ordinance.

G. Wetland creation shall only take place within areas that are currently non-wetland.

H. Development or the removal of native vegetation in the existing wetland shall be initiated only after a plan has been approved and adequate securities are provided as specified in Article VIII of this Ordinance.

I. Wetland mitigation areas shall incorporate native, non-invasive species and be designed to duplicate or improve the hydrologic and biologic function of the original wetland.

J. A native buffer is required to protect the mitigation wetland from surrounding land uses. Buffers shall be 100' for mitigation adjacent to critical wetland and 50' adjacent to regulatory wetland, unless the Administrator concludes otherwise.

K. Evaluation of Wetland Hydrology for Mitigation. Hydrology for wetland mitigation shall be evaluated by the applicant to establish the depth and duration of inundation and soil saturation for the wetland plant community design. The applicant shall identify the sources of wetland hydration including surface runoff, groundwater and overbank flooding.

L. ~~The review of the evaluation of wetland hydrology for wetland mitigation is limited to the following analysis. The applicant shall develop a sub-watershed model using a model sensitive to land cover changes as they affect surface runoff for rainfall events of 0.5 inches, 1.5 inches and 3.0 inches. SCS curve number analysis will be accepted provided:~~

~~1.~~ Applicants shall submit hydrology information for the proposed wetland suitable migration area to demonstrate ~~wetland~~ sustainability using the best available data based on the proposed plant community.

~~2. The distinction between directly connected impervious areas and unconnected impervious areas is maintained in accordance with TR-55. Unconnected impervious areas may be part of a composite curve numbers, but directly connected impervious areas draining to the wetlands must be modeled separately to define runoff in the smaller rainfall events required. Directly connected impervious areas draining through BMPs which promote infiltration may also be part of the composite curve number.~~

~~3. The model area shall be the existing and proposed area draining directly to the wetland mitigation. The existing conditions model shall reflect the current land cover and soils in the sub watershed prior to development, and the proposed conditions model shall be the existing conditions model with land cover and soils changes reflecting the proposed development.~~

~~4. The runoff-volume sensitive topographic feature shall be represented in a stage-storage-discharge relationship under pre-development conditions and if any fill or grading or other alteration is proposed within the topographic feature, and then a proposed stage/storage/discharge relationship shall also be developed.~~

~~5. The applicant shall model rainfall events of 0.5 inches, 1.5 inches and 3.0 inches under existing and proposed conditions and calculate the total volume of runoff to and including the area of the wetland. For purposes of this comparison, it shall be assumed that the entire volume is present in the wetland at the beginning of routing, and the depth and duration of flooding shall be compared between existing and proposed conditions. If the 3.0 inch rainfall volume does not cause a closed depression to completely fill, then the applicant shall also model an event of greater rainfall depth such that the volume of runoff produced will be greater than the spillover elevation of the depression. The maximum rainfall event that must be considered is 7.58 inches. For those elevations of a closed depression without a positive outlet, only the change in elevation limitation applies.~~

~~6. The applicant shall evaluate the groundwater flow and elevation if the proposed wetland mitigation intersects the seasonal high or apparent water table.~~

~~7. The applicant shall evaluate the effect of overbank flooding on the wetland mitigation when adjacent to a stream.~~

M. The Mitigation must meet permit requirements and associated performance standards, and shall undergo a maintenance and monitoring period as required in the Stormwater Management Permit.

1. Upon inspection, if the mitigation meets permit requirements and performance standards during or at the end of the monitoring period, the Administrator shall issue regulatory signoff.
2. If the permit requirements are met early and it appears that the cessation of the maintenance and monitoring period will not jeopardize the area's continuing compliance, the Administrator may consider granting early signoff when requested
3. If the mitigation area is not considered a success within the approved monitoring period, additional measures shall be required to bring the site into compliance.

N. Mitigation is considered separate from other development components, and requires a performance security be established in accordance with Article VIII for the completion of the mitigation development.

O. The permit holder shall provide annual monitoring reports documenting progress towards meeting the approved performance standards. The monitoring reports shall include relevant data and observations during the growing season and shall be submitted no later than January 31st of the following year until performance standards are met and accepted.

P. If property ownership is changed during the management and monitoring period, the applicant shall provide formal written notification to the Administrator. The notification shall contain complete contact information including permit number(s), owner(s) names(s), street address(es), phone number(s) (office, fax, mobile), email address(es), etc. The permit holder must notify the future owners(s) of their obligations regarding permit conditions and maintenance and monitoring requirements for the subject development as they relate to the Stormwater Management Permit and to submit written confirmation from the receiving party accepting these responsibilities.

Q. Development within or affecting a wetland begun prior to authorization under this Ordinance, or other unauthorized impact to a wetland, shall presume the wetland was critical and provide mitigation at a 3:1 replacement ratio, and shall be processed in one of the following two ways:

1. If the unauthorized wetland impact can be considered a temporary impact, the Administrator may process the resolution of this violation outside of the normal certification program, through preparation of a Letter of Permission which would be countersigned by the Applicant committing them to specific site restoration and management requirements and timeframes.
2. If the unauthorized wetland impact cannot be considered a temporary wetland impact, the applicant shall enter into a formal Stormwater Management Permit process, and meet all requirements of the Ordinance.

Section 52. That Section 26.1500SEC. is hereby amended to read as follows:

26.1500SEC. Identification of Buffers.

A. Buffer areas for wetlands shall extend from the edge of the delineated wetland. Buffer for those portions of a non-wetland waters of DuPage shall extend from the ordinary high water mark (OHWM):

1. A property may contain a buffer area that originates from another property.
2. Buffer widths for wetland shall be as follows:
   a. one hundred (100) feet for critical wetlands, except as noted in Section C, below.
   b. fifty (50) feet for regulatory wetlands, except as noted in Section C, below

B. Buffer for non-wetland waters of DuPage shall be a minimum width of fifteen (15) feet and a maximum width matching the regulatory flood plain. Width shall be determined as follows for the following situations:

1. Where there is no regulatory flood plain study, and the drainage area is over one hundred (100) acres, then the required site specific BFE study in Section 26.1301 will define a 100-year flood elevation for the site and that elevation shall be used to set the buffer width, except as noted in Section C, below.
2. Waters of DuPage which have a drainage area of less than one hundred (100) acres and no flood study has been performed will have a buffer of fifteen (15) feet from the OHWM, except as noted in Section C, below.
3. For purposes of regulation under this Ordinance, the applicant may choose to accept the 100-year flood plain limit as the buffer, or he may submit documentation addressing the buffer functions and request ~~the Administrator's or Director's concurrence~~ that a narrowerbuffer limit between the 100-year flood plain and ~~fifteen (15)~~one hundred (100) feet from OHWM ~~is appropriate~~should be allowed by the Administrator, in accordance with this Section.

C. Buffer does not include impervious non-vegetated surfaces, permanent structures or buildings. In addition, non-wetland waters of DuPage County buffer does not include maintained lawn or associated maintained landscape plantings within the limits of the 100 year flood plain that are more than fifty (50) feet from the limits of the waters.

Section 53. That Section 26.1501 is hereby amended to read as follows:

26.1501 Development Affecting a Buffer.

A. Vegetative Maintenance within buffer may be allowed through issuance of a Letter of Permission under the following conditions:

1. A written description of the development goals, objectives and management plan must be provided for approval to the Administrator. ~~a~~As long as the development does not require Stormwater Management Permit for any other aspect of the development, the Administrator may issue a Letter of Permission to allow the maintenance activity~~;~~.
2. The maintenance activity will result in an enhancement of the buffer functions in accordance with 26.1501D.
3. Maintained lawn or landscape planting beds have limited buffer function and may be replaced in kind.

B. Development of buffer, or a reduction in width, function, or the removal of native vegetation, shall not occur without mitigation.

1. Mitigation for buffer impact does not require one for one replacement of the area impacted. Replacement of impacted function takes precedent over replacement of area.
2. Impacts to buffers shall consider the effectiveness of the natural functions and mitigate those functions to the extent practicable.

C. Buffer mitigation design shall incorporate native, non-invasive species and be designed to duplicate or

improve the hydrologic and biologic function of the original buffer unless documentation is provided to support establishment of alternative communities. When native plantings are required as part of a mitigation development, the plantings shall be native to Northeastern Illinois as defined by *Plants of the Chicago Region.*

D. Buffer mitigation shall meet certification requirements, associated performance standards, and shall undergo a maintenance and monitoring period, as required in the Stormwater Management ~~Certification~~Permit. Performance Standards are found in Appendix B. Applicants may choose to use the Performance Standards found in Appendix B, or the Applicant may prepare and submit individualized site specific standards for review and approval.

1. Upon inspection, if the buffer mitigation meets certification requirements and performance standards during or at the end of the monitoring period, the Administrator shall issue regulatory signoff.
2. If the buffer mitigation area is not considered a success within the approved monitoring period, additional measures shall be required to bring the site into compliance.

E. Development affecting a wetland buffer shall be initiated only after a mitigation plan has been approved and adequate securities are provided as specified in Article VIII of this Ordinance.

F. Mitigation is considered separate from other development components, and requires a performance security be established in accordance with Article VIII for the completion of the mitigation development.

G. The permit holder shall provide annual monitoring reports documenting progress towards meeting the approved performance standards. The Administrator may require the permit holder to undertake remedial action to bring the area into compliance with the mitigation plan. The monitoring reports shall include relevant data and observations taken during the growing season and shall be submitted no later than January 31st of the following year until performance standards are met and accepted.

H. If property ownership is changed during the management and monitoring period, the applicant shall provide formal written notification to the Administrator. The notification shall contain complete contact information including permit number(s), owner(s) name~~s~~(s), street address(s), phone number(s) (office, fax, mobile), email address(s), etc. The permit holder must notify the future owners(s) of their obligations regarding permit conditions and maintenance and monitoring requirements for the subject development as they relate to the Stormwater Management Permit and to submit written confirmation from the receiving party accepting these responsibilities.

I. Features of a naturalized stormwater management system, such as stormwater structures, infiltration trenches, vegetated swales, filter strips, site runoff storage ponds~~,~~and compensatory storage areas, may be within the buffer area, provided the system is set back to a minimum of fifty percent (50%) of the required buffer width and the buffer functions, if impacted, are mitigated.

J. Access through buffer areas shall be allowed, when necessary, for maintenance purposes.

Section 54. That Section 26.1601 is hereby amended to read as follows:

26.1601 Post Construction BMP Fee-in-Lieu Program

A. With the approval of the Administrator and provided the conditions of Section 26.1000 apply, the applicant may be allowed or required to pay a PCBMP fee-in-lieu payment. Payment into a PCBMP fee-in-lieu program shall be made prior to the issuance of a Stormwater Management Permit. ~~For purposes of this section, payment of a VCBMP Fee-in-lieu is interchangeable with payment of PCBMP fee-in-lieu.~~

B. Until the Village adopts a PCBMP fee-in-lieu program it shall participate in the County's program where:

1. PCBMP fee-in-lieu payment shall be made to the appropriate Fee-in-lieu program. A BMP fee-in-lieu payment shall be calculated by applying the adopted fee schedule, that identifies reasonable and rational cost to construct and maintain similar PCBMPs for those areas of the development that remain without effective PCBMP treatment. ~~water quality treatment. For VCBMP, fee-in-lieu payment of $500 per 1,000 square feet of net new impervious area shall be made to the~~

~~County.~~

2. PCBMP ~~and VCBMP~~ funds collected shall be separately accounted for in watershed planning area accounts. Funds shall be used in the same watershed planning areas as collected solely to design, construct, and maintain water quality or runoff volume reduction improvements. Funds may not be used to fulfill obligations required by the Ordinance.
3. The program administrator shall provide accounting on an annual basis of all funds deposited in each watershed planning account and shall account for each fund on a first-in, first-out basis.
4. Each authority administering a fee-in-lieu program may prioritize and allocate funds on an annual basis within each watershed planning area account. Communities may make a request to the Committee by March 30th of each year for funds within the watershed planning accounts for uses as identified in Section 26.1601.B.2.
5. All PCBMP fee-in-lieu payments shall be refunded to the person who paid the fee, or to that person's successor in interest, in accordance with Section 26.1600.B.6, when the program administrator fails to encumber that development's fees collected within ten (10) years of the date on which such fees were collected.
6. Refunds shall be made provided that the appropriate party files a petition with the program administrator within one (1) year from the date on which such fees are required to be encumbered.

C. Development in the Village shall participate in the Village's PCBMP fee-in-lieu program where the Village Council has adopted a program that is consistent with Section 26.1601.B. The Village may adopt its own fee schedule and designate off-site facilities. Funds collected in a Village program shall be used within the Village. The Village's accounting records shall be made available to the Committee upon request.

Section 55. That Section 26.1704 is hereby amended to read as follows:

26.1704 Requirements for Immediate Remedial Action.

Whenever the Administrator determines that a violation has a temporary impact to a flood plain, wetland, buffer or ~~BMP~~PCBMP, which may be corrected, abated, or removed, in whole or in part, or where the adverse effects of the violation can be ameliorated by immediate action, the Administrator may authorize the violator, in writing, to perform remedial action at the violation site without certification:

A. Unauthorized wetland impacts that are intended to be permanent are required to proceed through the normal Stormwater Permit process to determine if the impact will be allowed to remain, or

B. Remedial action may include, as the Administrator deems appropriate for the situation, the following:

1. Removal of fill or other materials from the impacted area; and
2. The area, and/or volume of fill or material removal, the manner of such removal and method of disposal for such fill or material; and
3. A restoration and/or mitigation plan for the impacted area setting forth performance standards, management and monitoring requirements as necessary, and implementation schedule.

C. When the Administrator authorizes remedial action under this Section, such remedial acts shall:

1. Focus of the restoration of floristic communities and function of the impacted area; and
2. Undergo a minimum of one year of management and monitoring, when applicable, to verify successful restoration. Failure to achieve the performance standards established as part of a restoration or mitigation plan shall result in additional years of management and monitoring being required.

D. In all cases the Administrator shall document the nature of violation and the basis for his determination that the impact was temporary.

Section 56. That Section 26.1705 is hereby amended to read as follows:

26.1705 Revocation and Suspension of Permits.

A. The Administrator may revoke a Stormwater Management Permit under any of the following circumstances:

1. When the application, plans, or other supporting documents submitted by the applicant reflect a false statement or misrepresentation as to material fact; or
2. The development violates any relevant local, State, or Federal requirement.

~~B. The Administrator may revoke a Stormwater Management Permit under any of the following circumstances:~~

~~1~~3. When the security, access rights or covenants posted by the permit holder do not comply with the requirements of this Ordinance.

Section 57. That Section 26.1707 is hereby amended to read as follows:

26.1707 Fines

A. Any person who violates, disobeys, omits, neglects, or refuses to comply with, or who resists enforcement of, any provision of this Ordinance, or any condition in any permit issued pursuant to this Ordinance shall be subject to a fine not less than seventy-five dollars ($75.00) nor in excess of seven-hundred fifty dollars ($750.00) for each offense. Each calendar day a violation continues to exist shall constitute a separate offense.

B. For the purposes of Section 26.1706, the owner, any occupant, ~~or~~ the developer and/or any contractor doing development work on the land shall be jointly and severally liable for any violation of this Ordinance.

C. The Oversight Committee, shall request the Village Attorney to prosecute such action as a petty offense pursuant to 730 ILCS 5/5-1-17 (1992); as hereafter amended; or according to other appropriate authority in law or in equity.

Section 58. That Section 26.1709 is hereby amended to read as follows:

26.1709 Legal and Equitable Relief.

In the enforcement of this Ordinance, the Administrator shall have the authority to institute, or cause to be instituted, in the name of the Village any and all actions, legal or equitable, including appeals, ~~that~~which are required for the enforcement of this Ordinance.

Section 59. That Section 26.1800SEC. is hereby amended to read as follows:

26.1800SEC. Right to Appeal.

A. Any person directly aggrieved by any decision, order, requirement, or determination of the Administrator made pursuant to an interpretation of this Ordinance shall have the right to appeal such action to the Oversight Committee; provided, however, that all decisions made by the Administrator pursuant to Article XVIII of this Ordinance shall be final and not appealable, except as otherwise specifically provided in this Article.

B. Every applicant for an appeal shall notify the Oversight Committee in writing of the decision being appealed, which notice shall include a short, plain statement containing the reasons why the decision is being appealed and how the applicant has been directly aggrieved by the action taken. Concurrently with the filing of an appeal, the applicant shall furnish the Village with a list of the names and addresses of the owners of record of the property which is the subject of such application; and, a list of all persons to whom the latest general real estate tax bills were sent for all property situated within two hundred and fifty (250) feet of the subject property; and a filing fee as set forth in Administrative Regulation entitled "User-Fee, License and Fine Schedule".

C. Upon receipt of such a notice of appeal, the Oversight Committee shall set a date for a public hearing before the Oversight Committee. Such public hearing shall commence not fewer than fourteen (14) days not more than sixty (60) days after the date on which a properly prepared notice of appeal was received. The applicant shall be promptly notified of the public hearing date.
D. A public hearing shall be set, noticed, and conducted by the Oversight Committee in accordance with the provisions of Section 26.2000 of this Ordinance.
E. The Oversight Committee shall decide the appeal within sixty (60) days after the conclusion of the public hearing. All decisions on appeals shall be in writing and shall include a statement of the reasons for the decision. The failure of the Oversight Committee to act within sixty (60) days shall be deemed to be a decision denying the appeal.
F. A party may appeal the decision of the Oversight Committee to the Village Council by filing a notice thereof in the form required by Section 26.1800.B of this Ordinance with the Village Council within fourteen (14) days after the date of decision by the Oversight Committee. Failure to properly file such notice shall render final the decision of the Oversight Committee.
G. Within thirty-five (35) days after receipt of a properly prepared and filed notice of appeal, the Village Council shall without further hearing, affirm, reverse, or modify the decision of the Oversight Committee. The failure of the Village Council to act within thirty-five (35) days shall be deemed to be a final decision of that body denying the appeal and affirming the decision of the Oversight Committee.
H. The decision of the Village Council shall in all instances be considered a final decision.

Section 60. That all ordinances or parts of ordinances in conflict with the provisions of this ordinance are hereby repealed.

Section 61. That this ordinance shall be in full force and effect from and after its passage and publication in the manner provided by law.

_____
Mayor

Passed:
Published:
Attest:_____
Village Clerk