DuPage County Countywide Stormwater And Flood Plain Ordinance

Adopted by the County Board of the County of DuPage, Illinois on the 24th day of September 1991.

Revised by the County Board on the 14th day of June 1994. Revisions effective the 1st day of September 1994.

Revised by the County Board on the 23rd day of April 1996. Revisions effective the 23rd day of April 1996.

Revised by the County Board on the 12th day of November 1997. Revisions effective the 1st day of February 1998.

Revised by County Board on the 22nd day of June 1999. Revisions effective the 1st day of September 1999.

Revised by the County Board on the 13th day of June 2000. Revisions effective the 13th day of June 2000.

Revised by the County Board on the 25th day of March 2003. Revisions effective the 25th day of March 2003.

Revised by the County Board on the 27th day of January 2004. Revisions effective the 27th day of January 2004.

Revised by the County Board on the 8th day of June 2004. Revisions effective the 1st day of July 2004.

Revised by the County Board on the 8th day of March 2005. Revisions effective the 8th day of March 2005.

Revised by the County Board on the 28th day of February 2006. Revisions effective the 28th day of February 2006.

i

Revised by the County Board on the 25th day of March 2008. Revisions effective the 1st day of August 2008.

Revised by the County Board on the 24th day of April 2012. Revisions effective the 25th day of April 2012.

Table of Contents

| ARTICLE I. | AUTHORITY AND PURPOSE | 1 |
|----------------|---|-----|
| ARTICLE II. | ADMINISTRATION | θ |
| ARTICLE III. | GENERAL PROVISIONS | 12 |
| ARTICLE IV. | STORMWATER MANAGEMENT CERTIFICATIONS | 16 |
| ARTICLE V. | CERTIFICATION SUBMITTALS | 26 |
| ARTICLE VI. | PERFORMANCE SECURITY and EASEMENTS | 32 |
| ARTICLE VII. | SOIL EROSION AND SEDIMENT CONTROL REQUIREMENTS | 39 |
| ARTICLE VIII. | POST CONSTRUCTION BEST MANAGEMENT PRACTICES | 43 |
| ARTICLE IX. | SITE RUNOFF CONVEYANCE, STORAGE & FIELD TILES | 46 |
| ARTICLE X. | FLOOD PLAIN MANAGEMENT | 52 |
| ARTICLE XI. | WETLANDS | 61 |
| ARTICLE XII. | BUFFERS | |
| ARTICLE XIII. | FEE-IN-LIEU PROGRAMS | |
| ARTICLE XIV. | PROHIBITED ACTS/ENFORCEMENT/PENALTIES | 77 |
| ARTICLE XV. | APPEALS | |
| ARTICLE XVI. | VARIANCES | 86 |
| | WAIVER COMMUNITIES | |
| ARTICLE XVIII. | MISCELLANEOUS PROVISIONS | 95 |
| APPENDIX A – | ACRONYMS, INITIALISMS AND DEFINITIONS | 99 |
| APPENDIX B- | PERFORMANCE STANDARDS | 113 |
| APPENDIX C- | CERTIFICATION FLOW CHARTS | 114 |
| EXHIBIT 1 | WATERSHED PLANNING AREA MAP | 119 |
| EXHIBIT 2 | LIST OF DESIGNATED FLOODWAY/FLOOD PLAIN MAPS | 120 |
| SCHEDULE A | PERMIT FEE SCHEDULE | 141 |
| SCHEDULE B | SITE RUNOFE STORAGE VARIANCE AND BMP FFF-IN-LIFU SCHEDULE | 142 |

ARTICLE I. AUTHORITY AND PURPOSE

- **15-1.** Statutory Authority
 - **15-1.A** This Ordinance shall be known, and may be cited, as the DuPage County Countywide Stormwater and Flood Plain Ordinance.
 - 15-1.B The DuPage County Stormwater Management Planning Committee (the "Committee") and the DuPage County Board promulgate this Ordinance pursuant to their authority to adopt ordinances regulating flood plain management and governing the location, width, course, and release rate of all stormwater runoff channels, streams, and basins in DuPage County, in accordance with the adopted DuPage County Stormwater Management Plan (the "Plan"). The statutory authority for this Ordinance is contained in 55 ILCS 5/ ¶¶ 5-1041, 5-1042, 5-1049, 5-1062, 5-1063, 5-1104, 5-12003, and 5-15001 et seq.; and 415 ILCS 5/43, and other applicable authority, all as amended from time to time.
 - **15-1.C** As applicable, the municipalities within DuPage County promulgate and enforce this and other relevant Stormwater Management Ordinances pursuant to 65 ILCS 5/1-2-1, 5/11-12-12, 11-30-2, 11-30-8, and 5/11-31-2.
- **15-2.** DuPage County Stormwater Management Plan. The Plan was recommended by the Committee and adopted by the DuPage County Board, after review by the appropriate agencies and public hearing, as Ordinance No. OSM-0001-89. The Plan is available for public inspection in the office of the DuPage County Clerk.
- **15-3.** Findings. The Committee and the DuPage County Board hereby find that:
 - **15-3.A** Inappropriate use of the flood plain and development have increased flood risk, flood damage, and environmental degradation; and
 - **15-3.B** It is necessary to consider stormwater management on a watershed basis: and
 - **15-3.C** DuPage County drains poorly because of flat topography and soils of low permeability; and
 - **15-3.D** The costs of increasing channel capacity are prohibitive; and
 - **15-3.E** Many land development practices upset the natural hydrologic balance of DuPage County streams; and
 - **15-3.F** Most flood damage occurs to structures developed adjacent to streams in the flood plain or floodway; and
 - **15-3.G**Wetlands represent a significant portion of the natural watershed storage in DuPage County, and wetlands play an essential role in flood storage, conveyance, sediment control, and water quality enhancement; and
 - **15-3.H** Many stormwater management facilities are not adequately maintained; and
 - **15-3.I** The authority for control of stormwater facilities is widely distributed to many entities in DuPage County; and
 - 15-3.J There are many strong local stormwater management programs; and

- **15-3.K** Inconsistent enforcement of stormwater regulations contributes to the extent and severity of flood damage.
- **15-4.** Purposes of this Ordinance
 - **15-4.A** The principal purpose of this Ordinance is to promote effective, equitable, acceptable, and legal stormwater management measures. Other purposes of this Ordinance include:
 - **15-4.A.1** Managing and mitigating the effects of urbanization on stormwater drainage throughout DuPage County; and
 - **15-4.A.2** Reducing the existing potential for stormwater damage to public health, safety, life, and property; and
 - **15-4.A.3** Protecting human life and health from the hazards of flooding and degradation of water quality; and
 - **15-4.A.4** Protecting and enhancing the quality, quantity, and availability of surface and groundwater resources; and
 - **15-4.A.5** Preserving and enhancing existing wetlands, buffers and aquatic environments, and encouraging restoration of degraded areas; and
 - **15-4.A.6** Controlling sediment and erosion in and from stormwater facilities, developments, and construction sites; and
 - **15-4.A.7** Preventing the further degradation of the quality of ground and surface waters; and
 - **15-4.A.8** Requiring appropriate and adequate provision for site runoff control, especially when the land is developed for human activity; and
 - **15-4.A.9** Requiring the design and evaluation of each site runoff control plan consistent with watershed capacities; and
 - **15-4.A.10** Encouraging the use of stormwater storage in preference to stormwater conveyance; and
 - **15-4.A.11** Lessening the taxpayers' burden for flood-related disasters, repairs to flood-damaged public facilities and utilities, and flood rescue and relief operations; and
 - **15-4.A.12** Meeting the Illinois Department of Natural Resources, Office of Water Resources' floodway permitting requirements delineated in 615 ILCS 5/18g ("An Act in Relation to the Regulation of the Rivers, Lakes and Streams of the State of Illinois"), as amended from time to time; and
 - 15-4.A.13 Making federally subsidized flood insurance available to individual communities and for property throughout the County; and
 - **15-4.A.14** Complying with the rules and regulations of the National Flood Insurance Program codified in Title 44 of the Code of Federal Regulations; and
 - **15-4.A.15** Encouraging cooperation between the County, communities, and other governmental entities with respect to flood plain and stormwater management; and
 - **15-4.A.16** Requiring cooperation and consistency in stormwater management activities within and between the units of government having stormwater management jurisdiction; and

- **15-4.A.17** Restricting future development in the flood plain to facilities that will not adversely affect the flood plain environments or adversely affect the potential for flood damage; and
- **15-4.A.18** Incorporating water quality and habitat protection measures in all stormwater management activities within DuPage County; and
- **15-4.A.19** Requiring regular, planned maintenance of stormwater management facilities; and
- **15-4.A.20** Encouraging control of stormwater quantity and quality at the most site-specific or local level; and
- **15-4.A.21** Allowing the use of simple technologies whenever appropriate and realistic, but requiring the use of more sophisticated techniques when necessary to ensure the adequacy of stormwater controls; and
- 15-4.A.22 Providing a procedure by which communities throughout the County may petition the Committee to implement and enforce the provisions of this Ordinance or an ordinance consistent with, and at least as stringent as, this Ordinance; and
- **15-4.A.23** Requiring strict compliance with and enforcement of this Ordinance.
- **15-4.B** The purposes of this Ordinance are consistent with the Plan.
- **15-4.C** The purposes of this Ordinance will be implemented by its provisions.

15-5. Reference to Watershed Plans

- **15-5.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.
- **15-5.B** The following six major watershed divisions, shown on Exhibit 1, are identified for detailed watershed studies:
 - **15-5.B.1** Salt Creek Watershed: and
 - **15-5.B.2** East Branch DuPage River Watershed; and
 - **15-5.B.3** West Branch DuPage River Watershed; and
 - **15-5.B.4** Sawmill Creek Watershed; and
 - **15-5.B.5** Des Plaines River Tributaries Watershed; and
 - **15-5.B.6** Fox River Tributaries Watershed.
- 15-5.C Watershed Plans or Interim Watershed Plans shall be prepared and periodically updated for these six major watersheds, to identify stormwater management projects and establish criteria for development. Interim watershed plans may also be developed for subwatersheds of the six major watersheds for purposes of addressing flood mitigation or water quality. With respect to this Ordinance, developments identified in Watershed Plans, Interim Watershed Plans, or other studies approved by the Committee and adopted by the County Board, shall be considered certifiable provided that and to the extent that the plan or study addressed certification issues.
- **15-5.D** Adopted Watershed Plans or Interim Watershed Plans which contain more specific criteria than the criteria established for Countywide

- application in this Ordinance shall govern over Countywide criteria. Such watershed plans, upon their completion, approval, and proper adoption, are hereby incorporated into this Ordinance without further act of the DuPage County Board.
- **15-5.E** Watershed specific criteria established in such Watershed Plans or Interim Watershed Plans shall be set forth as a schedule to this Ordinance.
- **15-5.F** The Countywide requirements of this Ordinance shall apply in all watersheds unless superseded by more specific watershed certification criteria.
- **15-6.** Waiver Community Enforcement Authority. Pursuant to the authority established in 55 ILCS 5/5-1062, the provisions of this Ordinance, either in part or as a whole, shall not be enforced by the County in any community located wholly or partly within the County on petition of such community and after a finding of the Committee that such community has a duly adopted stormwater management ordinance consistent with, and at least as stringent as, the Plan and this Ordinance, as they may be amended from time to time, or that such community has duly adopted the provisions of this Ordinance.
- **15-7.** Authority for Committee Action in a Waiver Community-Complaints
 - **15-7.A** The Committee may, at its discretion, direct the Department to investigate substantive complaints concerning the failure of a Waiver Community to implement or enforce its Waiver Community Ordinance.
 - 15-7.B If, after investigation and hearing pursuant to the provisions of Article XVII and Article XVIII, the Committee determines that such Waiver Community has failed in some significant way, or has repeatedly failed, to implement or enforce its Waiver Community Ordinance, then the Committee may revoke any previously granted partial or complete waiver, and the provisions of this Ordinance shall have full force and effect and shall be enforced within the boundaries of such Waiver Community by the County.
- **15-8.** Authority and Choice of Planning Jurisdiction
 - **15-8.A** Pursuant to the authority granted by 55 ILCS 5/ 5-1062(b), as amended, a community that is located in more than one county has chosen, at the time of formation of the Stormwater Management Planning Committee, and based on watershed boundaries, to participate in the stormwater management planning program of either or both of the counties.
 - 15-8.B The following communities have expressed their intent to choose to be included within the jurisdiction of the Plan and this Ordinance: Bartlett (DuPage County portion), Batavia, Bensenville, Bolingbrook, Burr Ridge, Chicago, Elk Grove Village, Hanover Park, Hinsdale, Lemont, Naperville, Oak Brook, Roselle, St. Charles, Schaumburg, Wayne, and Woodridge. The Committee shall include the above-listed communities within the scope of its planning and enforcement jurisdiction.

15-9. RESERVED

15-10. RESERVED

ARTICLE II. ADMINISTRATION

- **15-11.** Interpretation of Terms and Words
 - **15-11.A** The terms and words used in this Ordinance or in a Waiver Community Ordinance shall be interpreted as follows:
 - **15-11.A.1** Words used in the present tense include the future tense; and
 - **15-11.A.2** Words used in the singular number include the plural number and words used in the plural number include the singular number; and
 - **15-11.A.3** The words "shall", "will", and "must" are mandatory, not permissive; and
 - **15-11.A.4** All distances, unless otherwise stated, shall be measured horizontally.
 - **15-11.A.5** The phrases "Director or the Administrator", "Director, or the Administrator in a Waiver Community", or "Director, or Administrator in a Complete Waiver Community", refer to the individual responsible for the enforcement in the specific area.
 - **15-11.A.6** All references to "he", "him", "she" and "her" shall be construed as gender-neutral.
 - **15-11.B** Definitions of terms specific to this Ordinance, and a list of acronyms and initialisms are contained in Appendix A.
- **15-12.** Responsibility for Administration
 - **15-12.A** The Committee, or the Oversight Committee in a Waiver Community, shall determine policy related to and direct the enforcement of this Ordinance or the Waiver Community's Ordinance, as applicable.
 - 15-12.B The Director, or the Administrator in a Waiver Community, shall have the authority and responsibility for the administration of this Ordinance or the Waiver Community's Ordinance, as applicable. In performing his or her duties, the Director or the Administrator may delegate routine responsibilities to any named designee.
 - **15-12.C** Each community shall remain solely responsible for its standing in the NFIP and for:
 - **15-12.C.1** Maintaining records and submitting reports required for the NFIP, including elevation certificates, floodproofing certificates, and lowest floor elevations; and
 - **15-12.C.2** Notifying the Director, and if required FEMA, OWR, USACE, the Illinois Environmental Protection Agency, and the United States Environmental Protection Agency of any proposed amendment to this Ordinance or the Waiver Community's Ordinance.
- **15-13.** Duties of Director. The duties and functions of the Director shall include:
 - **15-13.A** Supervising the execution of this Ordinance; and
 - **15-13.B** Supervising the development and revision of the appendices of the Plan for Committee and County Board approval and taking such

- actions as are reasonably necessary and proper to carry out the purposes and provisions of this Ordinance; and
- 15-13.C Authorizing flood plain delineations and support documentation from Partial Waiver communities for any FEMA Map Change, which authorization may be done concurrent with submittal to OWR or its designee and FEMA; and
- **15-13.D** Developing and maintaining Countywide regulatory maps; and
- **15-13.E** Directing the application and review of complex Stormwater Management Certifications for any community that requests such assistance; and
- **15-13.F** Performing, in Non-Waiver communities, the duties which are assigned to the Administrator in Waiver communities to the extent consistent with other laws: and
- **15-13.G** Reviewing and authorizing proposed developments referred to the department in flood plain, wetlands and buffers within Partial Waiver communities: and
- **15-13.H** Keeping OWR and FEMA informed of community waiver and ordinance status within 30 days after any changes in status; and
- **15-13.I** Notifying the communities, and if required FEMA, OWR, USACE, the IEPA, and the USEPA of any amendments to the Plan or this Ordinance; and
- **15-13.J** Maintaining and making available to applicants a list of all adopted General Certifications; and
- **15-13.K** Encouraging and conducting studies, investigations, and research relating to the physical, chemical, ecological, engineering, and other aspects of stormwater management.
- **15-14.** Duties of Administrator in Waiver Community. The duties and functions of the Administrator shall include:
 - **15-14.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 Certification begins in those areas of a site under the jurisdiction of those agencies; and
 - **15-14.B** Verifying the existence of flood plain, wetlands and buffers for each application; and
 - **15-14.C** Reviewing and approving Authorizations and issuing any certifications or notices required by the Waiver Community Ordinance; and
 - 15-14.D Notifying the Director and owners of adjacent upstream, downstream, and potentially affected property, affected state and federal agencies, and watershed basin communities, and publishing a notice in a local newspaper of any variance requested from the provisions of the Waiver Community Ordinance; and
 - **15-14.E** Notifying the Director and all affected persons defined in Section 15-14.D of this Ordinance of any alteration or relocation of a watercourse including application for a FEMA CLOMC and LOMC as required; and

- **15-14.F** Providing for inspections of developments as provided in Section 15-20 of this Ordinance under the terms of the Waiver Community's Ordinance; and
- **15-14.G** Investigating complaints of violations of the Waiver Community's Ordinance; and
- **15-14.H** Notifying any applicant for a variance that granting the variance may result in increased rates for flood insurance; and
- **15-14.**INotifying the Director and other jurisdictions of alleged violations of their certification or permit programs; and
- **15-14.J** Notifying violators within regulatory flood plains that failure to comply with NFIP provisions could make them ineligible to receive flood insurance; and
- **15-14.K** Initiating any proceeding necessary to enforce the Waiver Community Ordinance; and
- **15-14.L** Encouraging and conducting studies, investigations, and research relating to the physical, chemical, ecological, engineering, and other aspects of stormwater management; and
- **15-14.M** Advise, consult and cooperate with other governmental agencies to promote the purposes of this Ordinance and the Waiver Community's Ordinance; and
- 15-14.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 IV and V of this Ordinance as directed under the Waiver Community's Ordinance; and
- **15-14.0** Sending copies of any application for a FEMA CLOMC and LOMC to the Director; and
- **15-14.P** Receiving Authorization for development in flood plains from the Director prior to Partial Waiver Community approval of any FEMA CLOMC and LOMC; and
- 15-14.Q Sending a copy of any petition or request for a variance from the terms of the Waiver Community Ordinance to the Committee before any such variance is approved by the Oversight Committee; except in cases where the variance from the Waiver Community Ordinance still meets or exceeds the requirements of this Ordinance; and
- 15-14.R Submitting the necessary information to the Director relating to development to maintain Countywide regulatory maps and for supervision of the Ordinance. This includes, but is not limited to, copies of any Stormwater Management Certifications, or FEMA CLOMC and LOMCs.
- **15-14.S** 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.
- **15-15.** Representative Capacity. In all cases when any action is taken by the Director or the Administrator, or his or her duly appointed designee, to enforce the provisions of this Ordinance or the Waiver Community's Ordinance, such action shall be taken either in the name of and on behalf of

the County or of the Waiver Community, or the people of the State of Illinois, and neither the Director nor the Administrator, or his or her designee, in so acting for the County or the Waiver Community shall be rendered personally liable.

15-16. Oversight Committee

- **15-16.A** An Oversight Committee shall be established to oversee the implementation and enforcement of the Waiver Community's Ordinance within its jurisdiction.
- **15-16.B** The corporate authorities of a community, or any representatives duly appointed by the corporate authorities, may serve as the Oversight Committee.
- **15-16.C** The Oversight Committee, when considering appeals or variances, may request an opinion from the Director or the MEG.
- **15-17.** Municipal Engineers Group. A Municipal Engineers Group (MEG) shall be established whose purpose will be to provide input to the Director for representation of communities on technical matters related to the Ordinance, recommend General Certification topics, provide educational and training opportunities, review draft General Certifications, and discuss permitting issues as they arise.
 - **15-17.A** The membership of the MEG shall consist of the Stormwater Administrators, or their designees, in each of the Communities who have opted into the DuPage County Stormwater Program. In all matters brought to the MEG for a vote, each community shall have one vote exercised by the Administrator, or their Designee.
 - **15-17.B** The MEG will adopt bylaws covering at a minimum what constitutes a quorum and notice requirements, and meeting schedule.
 - **15-17.C** Issues considered by the MEG for a vote shall be listed on the agenda sent out in advance of the regular monthly meeting.
 - **15-17.D** All votes by the MEG are advisory. Summaries of the discussions will be kept of all meetings.
- **15-18.** Stormwater Management Certification Review and County Authorization
 - 15-18.A Stormwater Management Certification Review Responsibilities in Partial Waiver Communities. When a community petitions for and is granted a Partial Waiver of Enforcement of this Ordinance, such Community shall have the authority to review and approve applications for Stormwater Management Certifications in all areas under its jurisdiction, provided that:
 - 15-18.A.1 A Partial Waiver Community shall send applications for Stormwater Management Certifications to the Director for review and "Authorization" signifying compliance with the applicable provisions of this Ordinance when a development includes: sites with wetlands on or within 100' of the development, buffers, and sites which include regulatory flood plain, with the following exceptions:
 - **15-18.A.1.a.** If the Administrator in a Partial Waiver Community believes he has the appropriate expertise to

determine that a development site does not contain a wetland, buffer or flood plain, the Administrator may make that determination. Further, the Administrator may also conclude, without obtaining authorization from the Director, that a wetland or buffer is on the development site and that it will not be impacted by the development based on information submitted by the Applicant.

- **15-18.A.1.b.** The Administrator in a Partial Waiver Community may review, without submittal to the County, applications for developments on sites that contain regulatory flood plain/floodway where no impact to the portion of the site containing regulatory flood plain/floodway is proposed. The Administrator may also review site specific flood plain determinations, and developments in the flood plains, for drainage areas less than 640 acres where no floodway has been designated.
- 15-18.A.2 Those applications for development where the Administrator has submitted the application to the County for Authorization may, after the Director authorizes the application for development, issue the Stormwater Management Certification if the application meets the requirements of this Ordinance or the Waiver Community's Ordinance, as applicable.
- 15-18.B Stormwater Management Certification Review Responsibilities in a Complete Waiver Community. When a Community petitions for and is granted a Complete Waiver of Enforcement of this Ordinance, such Community shall review and certify, signifying compliance with this Ordinance all applications for development under all provisions of the Ordinance within the boundaries of its jurisdiction.
- 15-18.C Stormwater Management Certification Review Responsibilities in a Non-Waiver Community. When a Community does not petition for Waiver of Enforcement of this Ordinance, such Community shall have applications reviewed and certified by the Director, signifying compliance with this Ordinance under all provisions of the Ordinance within the boundaries of the Community.
- responsibility for supervision of the review of all aspects of a Stormwater Management Certification Application under the jurisdiction of this Ordinance rests with the Administrator, however the Administrator shall ensure that technical reviews are under the supervision of a Professional Engineer meeting the requirements of Section 15-127.D.1.a and 15-127.D.1.b for Complete Waiver Communities and Section 15-127.D.2. for Partial Waiver Communities. The Administrator will also utilize, as the situation requires, the appropriate experts who must meet the requirements of Sections 15-127.D.1.c and 15-127.D.1.d for a Complete Waiver Community or Section 15-127.D.2.b for a Partial Waiver Community to review those

aspects of the development lying outside of the Professional Engineer's area of expertise in accordance with the following:

- 15-18.D.1 In a Partial Waiver Community the Professional Engineer may utilize a person with expertise in plant ecology for design review and construction observation of PCBMP installations which rely upon vegetation for water quality or runoff volume reduction. The Professional Engineer may utilize a soil scientist or geotechnical engineer, or other person with significant applicable soils expertise for PCBMP installations which rely on infiltration for water quality improvement and volume reduction. The Professional Engineer will coordinate review comments on an application with those of the County on the same development.
- 15-18.D.2 In a Complete Waiver Community, the reviewing Professional Engineer shall provide a written opinion that the proposed development meets the minimum requirements of this Ordinance. Wetland delineation and other wetland or buffer related aspects outside the expertise of the Professional Engineer must be reviewed by an Environmental Scientist employed by the community in accordance with Section 15-127.D.1.c who shall provide a written opinion on those matters within their area of expertise that the proposed development meets the minimum requirements of this Ordinance.
- **15-18.D.3** In a non-waiver community, the Director, or his designee, will determine the appropriate individuals to review the application and coordinate review comments.

15-19. RESERVED

15-20. Required Inspections

- **15-20.A** Any development constructed pursuant to a Stormwater Management Certification shall be subject to periodic inspections by the Director or the Administrator during construction to ensure conformity with certification provisions and conditions.
- 15-20.B Unless otherwise provided by a valid and enforceable intergovernmental agreement, the Department shall inspect and monitor the construction and maintenance of mitigation measures prepared pursuant to Articles XI and XII of this Ordinance for all mitigated wetlands and buffers authorized by a Stormwater Management Certification in a Non-Waiver or Authorization in a Partial Waiver Community.

15-21. RESERVED

15-22. RESERVED

ARTICLE III. GENERAL PROVISIONS

- **15-23.** Scope of Regulation
 - 15-23.A This Ordinance, or the applicable Waiver Community Ordinance, shall apply to all development of property within the boundaries of the County since February 15, 1992, including those under the control of any governmental entity, except State and Federal Government agencies of higher jurisdiction or authority.
 - **15-23.B** The provisions of this Ordinance, or the applicable Waiver Community Ordinance, shall not apply to:
 - **15-23.B.1** Structures and land uses existing as of February 15,1992, except when re-developed and except that minimum standards of the NFIP will apply to all development whether or not this Ordinance applies; and
 - 15-23.B.2 Proposed developments that are listed on the Official List of Exempt Developments submitted by each community. All such developments on the list shall have met at least one of the following criteria:
 - **15-23.B.2.a.** Building permits for such development were issued prior to February 15, 1992; or
 - **15-23.B.2.b.** Engineering of all stormwater facilities for such development was submitted to and approved by the community engineer prior to February 15, 1992; or
 - **15-23.B.2.c.** Annexation agreements or ordinances or other agreements were recorded or executed prior to February 15,1992 which specifically exempt such development from community codes; or
 - **15-23.B.2.d.** For other developments, contractual agreements executed prior to February 15, 1992 which specifically exempt such development from community codes; or
 - **15-23.B.2.e.** Approvals resulting from judicial decrees preclude application of this Ordinance.
 - **15-23.C** The exemption granted pursuant to Section 15-23.B.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 or the applicable Waiver Community Ordinance.
 - **15-23.D** Plan changes which result in greater impervious coverage of the site compared to the exempted plan will be cause for the Director or Administrator to remove the development from the Official List. Such a finding may be appealed to the Committee in accordance with Article XV for final decision.
 - **15-23.E** Nonconforming structures shall not be replaced or enlarged in any manner unless such replacements or enlargements conform to the requirements of this Ordinance or the applicable Waiver Community Ordinance.

15-24. Official Lists of Exempt Developments

- **15-24.A** Each revision to the Official List of Exempt Developments shall be approved by an official action of the corporate authorities of the community, and shall be acknowledged in writing by the Director on behalf of the Committee.
- 15-24.B The Committee may challenge any revision of an Official List of Exempt Developments submitted by a community within 60 days after proper submission of such list or revision. The Committee shall state in writing its reasons for rejection of any development as not being in accordance with the provisions of Section 15-23.B.2 of this Ordinance.
- **15-24.C** The community may add a development to, or delete a development from, the Official List of Exempt Developments if an applicant shows that the criteria listed in Section 15-23.B.2 of this Ordinance have been met or if the community has determined that the criteria listed in Section 15-23.B.2 of this Ordinance have not been met.
- 15-24.D Prior to resubmitting its Official List of Exempt Development to the Committee deleting a development, the community resubmitting such list with such deletion shall notify the affected owner or developer of such deletion in writing and provide such owner or developer an opportunity to respond to the community.

15-25. Interpretation

- 15-25.A This Ordinance and the Waiver Community Ordinances shall be liberally construed to protect the health, welfare, safety, and the environment of the residents of the County and to effectuate the purposes of this Ordinance and the Waiver Community Ordinances and the enabling legislation.
- **15-25.B** Nothing contained in this Ordinance, or the Waiver Community Ordinances, shall be deemed to consent to, license, permit to locate, construct, or maintain any structure, site, facility or operation, or to carry on any trade, industry, occupation, or activity.
- **15-25.C** When provisions of this Ordinance, or any Waiver Community Ordinance, differ from any other applicable statute, law, ordinance, regulation, or rule, the more stringent provision shall apply.
- 15-25.D The provisions of this Ordinance and the Waiver Community Ordinances are cumulative and shall be considered additional limitations on all other laws and ordinances previously approved or that may hereafter be approved and that concern any subject matter included in this Ordinance or any Waiver Community Ordinance.
- **15-25.E** Interpretation of technical provisions of this Ordinance shall be made by the Director, or the Administrator in a Waiver Community who may also consult the MEG for an advisory opinion.

15-26. Warning and Disclaimer of Liability

15-26.A The degree of flood protection provided by this Ordinance or any Waiver Community Ordinance is considered reasonable for regulatory purposes and is based on engineering experience and scientific methods of study.

- **15-26.B** Increased flooding may result from causes beyond the control of the County or any community.
- **15-26.C** This Ordinance and the Waiver Community Ordinances do not, therefore, imply that areas outside the delineated flood plain or permitted land uses within the delineated flood plain will be free from flooding and associated damages.
- 15-26.D Neither this Ordinance nor any Waiver Community Ordinance shall be construed or applied in any manner to create liability on the part of or a cause of action against the County, any community, or any elected official, officer, agent, or employee thereof, for any flood damage resulting from reliance on the provisions of this Ordinance or any Waiver Community's Ordinance or from reading or interpreting any map that is part of this Ordinance or any Waiver Community Ordinance.
- **15-27.** General Stormwater and Flood Plain Requirements. The following general stormwater and flood plain requirements shall apply to all development.
 - **15-27.A** Development shall not:
 - **15-27.A.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
 - **15-27.A.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
 - **15-27.A.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
 - **15-27.A.4** Violate any provision of this Ordinance or any applicable Waiver Community Ordinance either during or after construction; nor
 - **15-27.A.5** Unreasonably or unnecessarily degrade surface or ground water quality.
 - **15-27.B** For purposes of this article, changes in flood elevations or discharges within the limits of modeling tolerance allowed in this Ordinance shall be deemed acceptable.
 - **15-27.C** Analysis and design of all stormwater and flood plain facilities required for development shall:
 - **15-27.C.1** Meet the standards and criteria established in the Plan and, if available, in Watershed Plans or in Interim Watershed Plans; and
 - **15-27.C.2** Be consistent with techniques specified in the Watershed Plans or the Interim Watershed Plans; and
 - **15-27.C.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.

15-28. Building Protection

- 15-28.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 one foot 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 professional engineer.
- 15-28.B 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 design elevation to prevent the entry of surface stormwater. The design elevation is the higher elevation of either Article X or the elevation associated with the design rate as determined in Section 15-81.B.2.
- **15-28.C** Other building protection standards for structures that may be implemented in the flood plain are listed in Section 15-81.B in Article X.

15-29. RESERVED

ARTICLE IV. STORMWATER MANAGEMENT CERTIFICATIONS

- **15-30.** Stormwater Management Certifications. Any person proposing a development shall obtain a Stormwater Management Certification, or the development must fit all conditions of a General Certification (Section 15-32), or if applicable, obtain a Letter of Permission (Section 15-31) unless the development meets one of the following criteria of Section 15-30.A or Section 15-30.B. A flowchart for determining if a Stormwater Management Certification is required is included as a guide in Appendix C.
 - **15-30.A** The development is:
 - **15-30.A.1** On a Development Site that does not include flood plain, wetlands or buffers; and
 - **15-30.A.2** The development does not add more than 2,500 square feet of net new impervious area compared to the predevelopment conditions, or
 - **15-30.A.3** Does not include more than 5,000 square feet of land disturbing activities.
 - **15-30.B** The Development Site does not include wetlands, buffers or flood plains and consists solely of one or more of the following
 - **15-30.B.1** Cultivation, conservation measures or gardening; or
 - **15-30.B.2** Installation, renovation or replacement of a septic system, potable water service line, or other utility to serve an existing structure; or
 - **15-30.B.3** Excavation or removal of vegetation in rights-of-way or public utility easements for the purpose of installing or maintaining utilities; or
 - **15-30.B.4** Maintenance, repair or at grade replacement of existing lawn areas not otherwise requiring a Stormwater Certification under this Ordinance.
- 15-31. Letters of Permission. The Administrator, or the Director in Non-Waiver Communities, shall have the option of issuing a "Letter of Permission" in lieu of a Stormwater Management Certification. 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 or the Director in a Non-Waiver Community. The applicant, and if applicable 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.
 - **15-31.A** The following are the potential modifications to submittal requirements in the form of "waiving submittal" that may be considered.

- **15-31.A.1** Supporting calculations for simple soil erosion and sediment control plans, if the development is not subject to NPDES permitting;
- **15-31.A.2** Routine backup calculations such as time of concentration, runoff curve number, storm sewer design calculations;
- **15-31.A.3** Copies of maps such as soils maps.
- **15-31.A.4** Other supporting calculations when the results used in the design appear to the Administrator to be within the norms of engineering practice.
- **15-31.B** The following are not eligible to be "waived for submittal"
 - **15-31.B.1** Construction plans complete with all details, including soil erosion and sediment control plan must be submitted by the applicant and cannot be waived.
 - **15-31.B.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 or Director in a Non-Waiver Community is reasonably assured that the intent of those provisions in this Ordinance is carried out.
- **15-31.C** Decisions made on behalf of the Community made by the Administrator or Director with regard to Letters of Permission applicability and submittal requirements are by permission to the applicant.
- **15-31.D** The Letter of Permission will serve in all respects as the Stormwater Management Certification, 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.
- **15-31.E** A Letter of Permission cannot be used to substantively change the technical standards of this Ordinance.
- **15-32.** General Certifications. The Director, or 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 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 and review 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. 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.
 - **15-32.A** Types of developments for General Certifications drafts will be recommended by the MEG, who may refer them to a committee of the

- MEG or County staff. The Director will present the General Certification to the Stormwater Committee for those General Certifications with countywide applicability. When initiated by an Administrator, the Administrator shall obtain a recommendation from the Director, who will also refer it to the MEG for a recommendation. Any General Certification may be used by any community. A General Certification must be adopted by the community for use in that community or by the County Board for applicability Countywide.
- 15-32.B General Certifications are authorized for one year and shall be automatically renewed annually unless action is taken to change the certification within 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.
- 15-33. 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.
 - 15-33.A Establish vertical geodetic control at the site using a combination of 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 NGS 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 CORS network and Ellipsoid Height Accuracy Estimate Tool for any GNSS ellipsoid height measurement surveying work.
 - 15-33.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.
- **15-34.** 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 they are legally entitled to sign. Structures which are

- subject to a differential water pressure head of three 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.
- **15-35.** Requirements for Applicants to use Environmental Scientist. When required, all determinations regarding the absence or presence of wetlands on the development site or within one hundred (100) feet from the development site shall be performed by an Environmental Scientist (Section 15-85.B), unless the Director or Administrator concludes and documents otherwise in accordance with Section 15-85.A.
- **15-36.** Professional Engineer statement with application. Unless waived by the Community or by General Certification, a Professional Engineer under the employment of the applicant shall provide a statement rendering an opinion that the development meets the minimum criteria for stormwater management in accordance with this Ordinance, or the applicable Waiver Community Ordinance.
- 15-37. Other Agency Approvals. No work may begin on a site in those areas under the jurisdiction of any other stormwater authority until the authority's permits or approvals have been obtained. Failure to obtain a permit from other required stormwater related jurisdictions will invalidate an issued Stormwater Management Certification. When 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.
- **15-38.** Community developments. A community must obtain a permit from IDNR-OWR, or their designee, prior to issuance of a Stormwater Management Certification for any community development that falls under the jurisdiction of IDNR-OWR.
- **15-39.** IDNR-OWR reserved review. For development within the regulatory floodway, the following calculations or analyses shall be submitted to and approved by IDNR-OWR or its designee prior to issuance of a Stormwater Management Certification:
 - **15-39.A** Flood damage analysis for the replacement or modification of existing bridges or culverts;
 - **15-39.B** Hydraulic analysis of new, modified or replacement bridges or culverts;
 - **15-39.C** Analyses of alternate transition sections from those required in Section 15-82.E. of this Ordinance; and
 - **15-39.D** Analyses of hydrologically and hydraulically equivalent storage.
 - **15-39.E** Any embankment or structure meeting IDNR-OWR's definition of a dam, including areas outside the regulatory floodway.

- 15-40. Certification 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 Director or Administrator specifically allows a modification of the submittal requirements in writing, the following shall guide the determination that an application for Stormwater Certification is complete.
 - 15-40.A Stormwater Submittal. All developments requiring a Stormwater Certification are required to submit the information required for Minimum Submittal (Section 15-47.A). The requirement for Record Drawings (Section 15-47.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 15-47.C will also be required (as relevant to the specific development).
 - **15-40.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.
 - **15-40.C** The provisions of Section 15-55 shall apply to all developments except:
 - **15-40.C.1** Developments classified as Minor Developments"; or
 - **15-40.C.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.
 - **15-40.D** Performance Security. Performance Security in accordance with Section 15-54 may be combined into a single instrument and is required as follows.
 - 15-40.D.1 Development Security in accordance with Section 15-54.B. is required for all developments which are not minor developments, and which include construction of a Site Runoff Storage Facility (Article IX), more than 200 feet of Storm Sewer, or a Best Management Practice (Article VIII) designed to serve more than 1-acre of drainage area.
 - **15-40.D.2** Erosion and Sediment Control Security in accordance with Section 15-54.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 Wetlands or Buffers.
 - **15-40.D.3** A Natural Area, Wetland and Buffer Mitigation Area Security shall be posted per Section 15-54.D. Whenever a natural area is being restored or a Wetland of Buffer is impacted and mitigated, unless mitigation is provided by fee-in-lieu.

- 15-40.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 Certification (Section 15-30). Developments required to make application may obtain a Letter of Permission (Section 15-31), even if it is not a Minor Development, as long as no other aspect of the development requires review under Articles VIII, IX, X or XI. All other applications shall include the following based on area of land disturbance of the proposed development:
 - **15-40.E.1** If the land disturbance is less 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, and is not part of a larger common plan, then the submittal shall be per Section 15-50.B.
 - **15-40.E.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, then the requirements of Sections 15-50.C and 15-50.D shall apply.
- **15-40.F** Post Construction Best Management Practices. When the impervious coverage of the development site is increased by 2,500 square feet compared to the pre-development site then PCBMPs designed in accordance with Section 15-63 through Section 15-67 are required and submittals in accordance with Section 15-49 are required with the Application, unless one of the exceptions or exclusions listed in Sections 15-63 applies.
- 15-40.G Flood Plains and Floodways. All developments shall check the requirements of Section 15-80 to determine if flood plain exists on a Development site. Chart 3 is included in Appendix C as a guide. If flood plain does exist on the Development site, a BFE shall be established as outlined in Section 15-80.A and shall be drawn on the site topographic map. If the datum for the BFE determination is different from the site topographic map datum, the appropriate conversion factor shall be used. The DuPage County developed conversion factors from NGVD29 to NAVD88 per watershed, shall be used when appropriate. If the proposed work is outside of the BFE, there shall be no additional requirements from Article X that need to be met. Applicants shall determine if floodway exists following Section 15-80.D. For 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.
 - **15-40.G.1** For Developments within the flood plain, document that Section 15-81 requirements are being met with a narrative and appropriate calculations, modeling, cross-sections and plans.
 - **15-40.G.2** For Developments within the floodway, document that Section 15-82 requirements are being met with a narrative and appropriate calculations, modeling, cross-sections and plans per Section 15-51.

- **15-40.H** Wetlands. A flowchart is included in Appendix C as a guide. Stormwater Management Certifications 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.
 - 15-40.H.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 15-18.A.1.a is applied by the Administrator in a Partial Waiver Community, or with the concurrence of the Administrator in a Full Waiver Community, or the Director in a Non-Waiver Community.
 - **15-40.H.2** If the development's proposed limit of disturbance is within 100 feet of a wetland, then,
 - **15-40.H.2.a.** A wetland delineation and report will be required (Section 15-85), 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 15-87.
 - **15-40.H.2.b.** If there are direct impacts to the wetland, then the wetland submittal in accordance with Section 15-48 will be required.
 - **15-40.H.2.c.** If the thresholds for checking for indirect impacts are exceeded (Section 15-87), and the Administrator of Director requests an indirect impact analysis it shall be included in the Wetland Submittal.
 - **15-40.H.2.d.** If the development has a direct or indirect permanent wetland impact a hydrologic analysis of the mitigation area (Section 15-88.L) and a maintenance and monitoring plan (Section 15-88.M) are required to be submitted, unless Fee in Lieu of mitigation is provided.
- **15-40.**IBuffers. See also the flowchart in Appendix C. Direct impacts to buffers (Section 15-92) will require a Buffer Submittal in accordance with Section 15-48.
- **15-41.** Special Cases of Development. Special Cases of Development shall have differing submittal or, technical standards than other developments, as summarized in Table 1.

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

| | FLOOD PLAIN/ FLOODAY (Note these Sections) | POST CONSTRUCTION BEST MANAGEMENT PRACTICES | SITE RUNOFF STORAGE |
|--|---|---|---|
| ROADWAY DEVELOPMENT | 15-81.A.3 15-81.D.4 | 15-63.A (EXISTING) >2,500 S.F. NET NEW IMPERVIOUS OR 15-62 (NEW) | ONLY SITE RUNOFF STORAGE (SPECIAL) 15-72.C.1 |
| BRIDGE AND CULVERT MODIFICATION | 15-81.A.3, A.3.c, A.3.d 15-82.A.6, 15-82.D.4, 15-82.E, 15-82.G | EXEMPT 15-63.A | EXEMPT 15-72.C.2 |
| STREAMBANK STABILIZATION | 15-82.D.3 | EXEMPT 15-63.C | EXEMPT 15-72.C.3 |
| NAUTRAL AREA RESTORATION | | EXEMPT 15-63.C | EXEMPT 15-72.C.4 |
| WETLAND MITIGATION SITE | 15-82.D.5 | EXEMPT 15-63.C | EXEMPT 15-72.C.5 |
| WETLAND MITIGATION BANK | 15-82.D.5 | EXEMPT 15-63.C | EXEMPT 15-72.C.5 |
| TRAIL DEVELOPMENT, BIKEWAY, PEDESTRIAN WALKWAY | 15-81.A.3.b 15-81.A.3.c | EXEMPT 15-62.D (MEETING CONDITIONS) | EXEMPT 15-72.C.6 |
| OPEN SPACE DEVELOPMENT | 15-82.A.5 15-81.B.3.f 15-82.A.9 | 15-63 >2,500 S.F. NET NEW IMPERVIOUS | ONLY SITE RUNOFF STORAGE (SPECIAL) 15-72.C.7 |
| WATER AND SEWER IMPROVEMENT DEVELOPMENT | 15-81.C.2 15-81.C.3 | EXEMPT 15-63.F | EXEMPT 15-72.C.8 |

TABLE 1: SPECIAL CASES OF DEVELOPMENT

- **15-42.** Fees for Certification and Authorization by the County and other fees.
 - **15-42.A** A review and inspection fee schedule for Stormwater Management Certifications in Non-Waiver Communities, and for authorization reviews performed by the County on behalf of Waiver communities, is attached to this Ordinance as Schedule A and by this reference incorporated into this Ordinance.
 - **15-42.B** All certification review and inspection fees for development in Non-Waiver Communities, and in those areas of review undertaken by the County in Partial Waiver Communities, shall be payable to the department.
 - **15-42.C** Waiver Communities may set certification review and inspection fees or set up escrow accounts for payment of review costs for developments within their jurisdictions.
 - **15-42.D** All stormwater management review fees shall be paid at the time directed by the Administrator or Director.
 - **15-42.E** Any fee-in-lieu that is part of the conditions for issuance must be paid prior to issuance of the certification.
- **15-43.** Release of Performance Security and Easements. The record drawings requirements of Sections 15-47.B and 15-55 will also be required to be satisfied prior to the release of the remaining development securities in Section 15-54.
- **15-44.** Duration and Revision to Certifications and Authorizations. Certifications expire December 31st of the third year from the date of Certification.
 - 15-44.A If the certified activity has been started but is not completed by the expiration date of the certification, and the certification holder intends to pursue the certified activity, then the certification holder must submit a written request that the expiration date be extended. Upon receipt of such request, the Director or the Administrator may extend the expiration date in maximum increments of three years for certified activities, provided the activity is in compliance with the current requirements of this Ordinance or the applicable Waiver Community Ordinance. Expiration dates for Certified activities within wetlands and buffers may be extended provided that an updated delineation shows no significant change in wetland boundary or classification.
 - 15-44.B If, after certification issuance, the certification holder decides to revise the approved plans, the certification holder shall submit revised plans to the Director or the Administrator, along with written request for approval by the expiration date. If the Director or the Administrator determines that the revised plans are in compliance with the then current requirements of this Ordinance or the applicable Waiver Community Ordinance, an approval of the revised plans will be issued.
 - **15-44.C** No activity by the Applicant in the form of a resubmittal or follow-through on outstanding issues required for Certification in the 12 month period following the date of the last correspondence from the

Director, or Administrator, pertaining to the Application, will be cause for considering the application withdrawn,

15-45. RESERVED

15-46. RESERVED

ARTICLE V. CERTIFICATION SUBMITTALS

- 15-47. Stormwater Submittals
 - 15-47.A Minimum Submittal. Unless one of the following is specifically waived with documentation by the Director or the Administrator in a Waiver Community, or the development is eligible for certification by a General Certification or Letter of Permission, a minimum Stormwater Submittal shall be required for all developments requiring certification. The following constitutes a minimum Stormwater Submittal, unless modified by Waiver Community Ordinance:
 - **15-47.A.1** The name and legal address of the applicant and of the owner of the land; and
 - **15-47.A.2** The common address and legal description of the site where the development will take place; and
 - **15-47.A.3** Affidavits signed by the land owner and the developer attesting to their understanding of the requirements of this Ordinance or the applicable Waiver Community Ordinance and their intent to comply therewith, including the submittal of a record drawing in accordance with Section 15-47.B; and
 - **15-47.A.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 Director or the Administrator, complete copies of the applications for the permits; and
 - **15-47.A.5** A statement of opinion by a qualified professional either acknowledging or denying the presence of flood plain in accordance with Section 15-80, wetlands in accordance with Section 15-85, and buffers in accordance with Section 15-92; and
 - **15-47.A.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.
 - 15-47.A.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.
 - 15-47.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 Certification number.

- 15-47.C Documentation supporting certification compliance. The following items will be submitted to demonstrate and support that the application for Certification is in compliance with this Ordinance. The Administrator or Director 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.
 - **15-47.C.1** A scaled plan or plans illustrating the major and minor conveyance system, including:
 - **15-47.C.2** Size, type, length and inverts of conveyance structures including drainage pipes, culverts, manholes, catch basins, inlets, and drain tiles.
 - **15-47.C.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.
 - **15-47.C.4** A scaled exhibit illustrating the proposed impervious surfaces of the development.
 - **15-47.C.5** Calculations of the percentage of impervious surfaces after complete construction of the proposed development.
 - **15-47.C.6** Scaled plans illustrating the location of and details for site runoff storage.
 - **15-47.C.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.
 - **15-47.C.8** When site runoff storage special is required, calculations demonstrating the specified post development discharges have not exceeded the predevelopment values.
- **15-48.** Wetland and Buffer Impact Submittals.
 - **15-48.A** The submittal shall include all the following information unless the Director or Administrator concludes otherwise in accordance with Sections 15-18.A.1.a or 15-85.A.
 - **15-48.A.1** A complete wetland delineation report prepared in accordance with the Federal Methodology. The report shall also contain the following.
 - **15-48.A.1.a.** Completed USACE wetland delineation data forms.
 - **15-48.A.1.b.** Aerial photograph, or other exhibit, clearly showing wetland boundaries, location of wetland delineation data points, and offsite wetlands within 100' of the property.
 - **15-48.A.1.c.** A narrative describing the physical characteristics and size of each onsite wetland and buffer including a floristic inventory list, calculated mean C and floristic quality index (FQI) calculated for each onsite wetland area.
 - **15-48.A.1.d.** Representative photos of each wetland and its associated buffer.

- **15-48.A.1.e.** Copies of the below listed information shall be provided:
 - **15.48.A.1.e.1.** Floristic Inventory List
 - **15.48.A.1.e.2.** NRCS DuPage County Soil Survey map with legend identifying any mapped hydric soils.
 - **15.48.A.1.e.3.** IDNR Threatened and Endangered Species consultation (EcoCAT).
 - **15.48.A.1.e.4.** National Wetland Inventory Map.
 - **15.48.A.1.e.5.** DuPage County Wetland Inventory Map.
 - **15.48.A.1.e.6.** DuPage County Regulatory Flood Plain Map and Flood Insurance Rate Map.
 - **15.48.A.1.e.7.** Site Location map with approximate scale.
- **15-48.A.2** For critical wetland impacts, complete an alternatives analysis in accordance with Section 15-86.B.
- **15-48.A.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 15-86.D.
- 15-48.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, unless the Director or Administrator concludes otherwise. In which case, the Certification 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.
- **15-48.C** The following support documentation is required to be submitted. The Administrator or Director 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:
 - **15-48.C.1** Wetland delineation plan view that includes a depiction of the buffer limits (Section 15-92).
 - **15-48.C.2** Statement indicating the date of the wetland boundary verification.
 - **15-48.C.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 15-87 is required.
 - **15-48.C.4** Development narrative shall include the following applicable items:
 - **15-48.C.4.a.** Description of the functions of the impacted wetland or buffer, and how the impacts will be mitigated.
 - **15-48.C.4.b.** Historic aerials, if available, to document the previous site conditions or the extent of farmed wetland.

- **15-48.C.4.c.** Description of mitigation method, location, and ratios.
- **15-48.C.4.d.** Description of mitigation area and plan objectives.
- **15-48.C.4.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.
- **15-48.C.4.f.** Performance standards.
- **15-48.C.4.g.** Reporting requirements.
- **15-48.C.4.h.** Hydrology monitoring methodology and goals.
- **15-48.C.4.i.** Implementation schedule.
- **15-48.C.4.j.** Native species list with quantities, size of stock, seeding rate and/or plug spacing.
- **15-48.C.4.k.** Planting specifications and soil handling.
- **15-48.C.4.I.** Cost estimate to include installation, management, monitoring, and reporting as anticipated to meet performance standards.
- **15-48.C.5** Plan view drawings and details, where applicable:
 - **15-48.C.5.a.** Existing and proposed topography.
 - **15-48.C.5.b.** Delineated wetland and waters of DuPage boundary to a sub meter accuracy or better.
 - 15-48.C.5.c. Buffer boundary.
 - 15-48.C.5.d. Location of impacts to wetland and buffer.
 - **15-48.C.5.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.
- **15-48.C.6** Wetland and buffer mitigation plan, if applicable, shall contain the following information:
 - **15-48.C.6.a.** Delineate and label planting and seeding zones.
 - **15-48.C.6.b.** Delineate and label mitigation and enhancement zones.
 - **15-48.C.6.c.** Existing and proposed topography.
 - **15-48.C.6.d.** Planting methodology and soil handling.
 - **15-48.C.6.e.** Proposed wetland and buffer boundaries.
 - **15-48.C.6.f.** Native species list including size of stock, quantity, seed rate, and spacing of plugs.
 - **15-48.C.6.g.** Woody planting locations, if any.
 - **15-48.C.6.h.** Signage or physical barrier locations.
 - **15-48.C.6.i.** Monitoring well locations, if installed.
 - **15-48.C.6.j.** Permanent transect locations and photo-documentation points for monitoring, if required.
 - **15-48.C.6.k.** Maintenance and Monitoring plan with performance standards.
- **15-49.** Post Construction Best Management Practice Submittal. The Post Construction Best Management Practice (PCBMP) submittal shall include:

- **15-49.A** A discussion documenting compliance with the requirements of Article VIII.
- **15-49.B** A listing and discussion of all PCBMPs to be used.
- **15-49.C** Supporting calculations documenting compliance with the Volume Control BMP requirements.
- **15-49.D** For manufactured PCBMPs, the manufacturer documentation to support pollutant removal rates shall be supplied.
- **15-49.E** A BMP specific planting/seeding plan for all areas to be vegetated which shall include:
 - **15-49.E.1** Identified locations for all plantings (e.g., lawn, upland prairie, wet prairie, etc.), seeding and planting specifications and methodology; and
 - **15-49.E.2** A schedule for installation; and
 - **15-49.E.3** Proposed maintenance and monitoring provisions, and
 - **15-49.E.4** An opinion of probable cost to construct the BMPs.
- **15-50.** Soil Erosion and Sediment Control Submittal Requirements.
 - 15-50.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.
 - 15-50.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 VII have been met. However, formal submittal of the information under Section 15-50.D. is unnecessary unless the Director or Administrator requests demonstration of compliance with these provisions.
 - 15-50.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.
 - **15-50.D** If the SESC plan does not appear adequate to comply with the design requirements of Article VII, in the opinion of the Administrator or Director, then the Administrator or Director may require submittal of any or all of the following to demonstrate the plan's compliance. Site maps which indicate:
 - **15-50.D.1** One foot contours with delineated sub-basins and,
 - **15-50.D.2** Approximate slopes anticipated before and after major grading activities,

- **15-50.D.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,
- **15-50.D.4** The location of areas where stabilization practices are expected to occur,
- **15-50.D.5** Surface waters (including wetlands), and locations where stormwater is discharged to a surface water; and
- **15-50.D.6** Developments that will extend through winter shall provide a description of winter specific soil erosion and sediment control measures to be implemented.
- **15-50.D.7** A description of the nature of the construction activity or demolition work:
- **15-50.D.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.
- **15-50.D.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;
- **15-51.** Submittal Requirements for Development in the Regulatory Flood Plain
 - **15-51.A** Developments located in the regulatory flood plain shall, at a minimum, provide the following:
 - 15-51.A.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.
 - **15-51.A.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 professional engineer.
 - **15-51.A.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.
 - **15-51.A.4** The applicant shall obtain and provide copies of all required local, state, and federal permits prior to approval for a Stormwater Management Certification.
- **15-52.** RESERVED
- **15-53.** RESERVED

ARTICLE VI. PERFORMANCE SECURITY and EASEMENTS

15-54. Performance Security

15-54.A General Security Requirements.

- 15-54.A.1 As security to the County or the Waiver Community for the performance by the developer of the developer's obligations to complete the construction of any stormwater facilities required by the Stormwater Management Certification, 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 or the applicable Waiver Community Ordinance, and to otherwise faithfully perform the developer's undertakings pursuant to this Ordinance or the applicable Waiver Community Ordinance, the developer shall, prior to issuance of a Stormwater Management Certification and in accordance with Section 15.40.D, post performance security and grant easements as hereafter described.
- **15-54.A.2** The developer shall bear the full cost of securing and maintaining the securities required by this Article VI in accordance with Section 15-40.D.
- **15-54.A.3** Performance Security required by this Article VI may be posted in the form of one or more surety instruments as the Director, or Administrator, deems appropriate for the proposed development.
- **15-54.A.4** Public bodies shall not be required to post Performance Security under this Article VI for development activities which involve construction, improvement, relocation or demolition work paid for in whole or in part with public funds.
- 15-54.A.5 The developer shall grant the County, or Waiver Community, a temporary easement which authorizes, but does not obligate, the County, or Waiver Community, to access the development site to perform or complete any act or work the developer is required to do by the Stormwater Certification 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 County, or Waiver Community, to perform and satisfactorily complete any activity or work for which the developer/certificate holder has posted security under this Article VI.
- **15-54.B** Development Security
 - **15-54.B.1** A development security shall be posted and shall include:
 - **15-54.B.1.a.** A schedule, agreed upon by the developer and the Director or the Administrator, for the completion of

- the construction of any stormwater facilities required by the certification; and
- **15-54.B.1.b.** An irrevocable letter of credit, or such other adequate security as the Director or the Administrator may approve, in an amount equal to not less than one hundred ten percent (110%) of the estimated probable cost to complete the construction of any stormwater facilities required by the Stormwater Management Certification, which estimated probable cost shall be approved by the Director or the Administrator; and
- **15-54.B.1.c.** A statement signed by the applicant granting the Director or the Administrator the right to draw on the security and the right to enter the development site to complete required work in the event that work is not completed according to the work schedule; and
- **15-54.B.1.d.** A statement signed by the applicant that the applicant shall indemnify the community and the Department for any additional costs incurred attributable to concurrent activities of or conflicts between the applicant's contractor and the community's or Department's remedial contractor at the site.
- **15-54.B.2** The security required by this Section 15-54.B shall be maintained and renewed by the applicant, and shall be held in escrow by the Director or the Administrator until the conditions set forth in this Section 15-54.B.2 and Section 15-55 or other applicable provision are satisfied.
- 15-54.B.3 After approval of record drawings and final inspection of any constructed stormwater facilities by the Director or the Administrator, not more than ninety percent (90%) of the security provided for in this Section 15-54.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 Development Security shall be released after the Director or 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.
- **15-54.C** Soil Erosion and Sediment Control Security
 - **15-54.C.1** If a soil erosion and sediment control security is required pursuant to Section 15-40.D.2 of this Ordinance, such a security shall include:
 - **15-54.C.1.a.** An irrevocable letter of credit, or such other adequate security as the Director or the Administrator shall approve, in an amount equal to not less than one hundred ten percent (110%) of the estimated probable cost to install and maintain the erosion and sediment

- control measures, which estimated probable cost shall be approved by the Director or the Administrator; and
- **15-54.C.1.b.** A statement signed by the applicant granting the Director or the Administrator, as applicable, the right to draw on the security and the right to enter the development site to complete erosion and sediment control measures in the event that such measures are not installed and maintained according to the established schedule.
- **15-54.C.2** The security required by this Section 15-54.C shall be maintained and renewed by the applicant, and shall be held in escrow by the Director or the Administrator, as applicable, until the conditions set forth in Sections 15-54.C.3 and 15-55 are satisfied.
- **15-54.C.3** After establishment of vegetation, removal of all sediment from stormwater facilities unless designed otherwise, and final inspection and approval by the Director or the Administrator, as applicable, one hundred percent (100%) of the erosion and sediment control security shall be released.
- **15-54.D** Natural Area Restoration, Wetland and Buffer Mitigation Area Security
 - **15-54.D.1** Natural area restoration or wetland and buffer mitigation area security, in accordance with Section 15-40.D.3 shall be posted and shall include:
 - **15-54.D.1.a.** A schedule, agreed upon by the developer and the Director or the Administrator, for the completion of a natural area restoration development or completion of wetland or buffer mitigation development; and
 - 15-54.D.1.b. An irrevocable letter of credit, or other such adequate security as the Director or the Administrator may approve, in an amount equal to, not less than, one hundred ten percent (110%) of the estimated probable cost to 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 certification. The estimated probable cost shall be approved by the Director or the Administrator; and
 - **15-54.D.1.c.** A statement signed by the applicant granting the Director or the Administrator the right to draw on the security and the right to enter the development site to complete the work in the event that work is not completed according to the work schedule; and
 - **15-54.D.1.d.** A statement signed by the applicant that the applicant shall indemnify the community and the Department for any additional costs incurred attributable to concurrent activities of, or conflicts between, the applicant's contractor and the community's or Department's remedial contractor at the site.

- **15-54.D.2** The security required by Section 15-54.D shall be maintained and renewed by the applicant, and shall be held in escrow by the Director or the Administrator until the conditions set forth in Section 15-54.D.4 and Section 15-55, or other applicable provision are satisfied.
- **15-54.D.3** The natural area restoration or wetland and buffer mitigation areas security may be reduced at the discretion of the Director or 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
- **15-54.D.4** After approval by the Director or the Administrator, not more than ninety percent (90%) of the security provided for in this Section 15-54.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..
- **15-54.E** Letters of Credit
 - **15-54.E.1** Letters of credit posted pursuant to Section 15.54.B, C and D of this Ordinance shall be in a form satisfactory to the Director or the Administrator, as applicable.
 - 15-54.E.2 Each letter of credit shall be from a lending institution:

 (a) acceptable to the Director or the Administrator, as applicable, (b) having capital resources of at least ten million dollars (\$10,000,000), or such other amount acceptable to the Director or the Administrator; (c) with an office in the Chicago Metropolitan Area; and, (d) insured by the Federal Deposit Insurance Corporation.
 - **15-54.E.3** Each letter of credit shall, at a minimum, provide that:
 - **15-54.E.3.a.** It shall not be canceled without the prior written consent of the Director or the Administrator; and
 - **15-54.E.3.b.** It shall not require the consent of the developer prior to any draw on it by the Director or the Administrator; and
 - 15-54.E.3.c. If at any time it will expire within 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 Director or the Administrator may, without notice and without being required to take any further action of any nature whatsoever, call and draw down the letter of credit and thereafter either hold all proceeds as security for the satisfactory completion of all such obligations or employ the proceeds to complete all such obligations and reimburse the County or the Waiver Community for any and all costs and expenses, including legal fees and

- administrative costs, incurred by the County or the Waiver Community, as the Director or the Administrator shall determine.
- 15-54.E.4 If at any time the Director or the Administrator determines that the funds remaining in the letter of credit are not, or may not be, sufficient to pay in full the remaining unpaid cost of all stormwater facility construction or erosion and sediment control measures, then, within ten (10) days following a demand by the Director or the Administrator, the developer shall increase the amount of the letter of credit to an amount determined by the Director or the Administrator to be sufficient to pay such unpaid costs. Failure to so increase the amount of the security shall be grounds for the Director or the Administrator to draw down the entire remaining balance of the letter of credit.
- 15-54.E.5 If at any time the Director or the Administrator determines that the bank issuing the letter of credit is without capital resources of at least ten million dollars (\$10,000,000), is unable to meet any federal or state requirement for reserves, is insolvent, is in danger of becoming any of the foregoing, or is otherwise in danger of being unable to honor such letter of credit at any time during its term, or if the Director or the Administrator otherwise reasonably deems the bank to be insecure, then the Director or the Administrator shall have the right to demand that the developer provide a replacement letter of credit from a bank satisfactory to the Director or the Such replacement letter of credit shall be Administrator. deposited with the Director or the Administrator not later than ten (10) days following such demand. Upon such deposit, the Director or the Administrator shall surrender the original letter of credit to the developer.
- 15-54.E.6 If the developer fails or refuses to meet fully any of its obligations under this Ordinance or the applicable Waiver Community Ordinance, then the Director or the Administrator may, in his or her discretion, draw on and retain all or any of the funds remaining in the letter of credit. The Director or the Administrator thereafter shall have the right to take any action he or she deems reasonable and appropriate to mitigate the effects of such failure or refusal, and to reimburse the County or the Waiver Community from the proceeds of the letter of credit for all of its costs and expenses, including legal fees and administrative expenses, resulting from or incurred as a result of the developer's failure or refusal to fully meet its obligations under this Ordinance or the applicable Waiver Community Ordinance. If the funds remaining in the letter of credit are insufficient to repay fully the County or the Waiver Community for all such costs and expenses, and to maintain a cash reserve equal to the required letter of credit during the entire time such letter of credit should have been maintained by the

developer, then the developer shall, upon demand of the Director or the Administrator therefore, immediately deposit with the Director or the Administrator such additional funds as the Director or the Administrator determines are necessary to fully repay such costs and expenses and to establish such cash reserve.

- **15-55.** Long-Term Access for Maintenance and Inspections.
 - 15-55.A Access to privately-owned land for inspection and maintenance of site runoff storage facilities, compensatory storage facilities, and storm sewers covered by the certification shall be through a grant of easement in a form approved by the Director, or the Administrator. Other instruments may be accepted by the Director, or Administrator, provided that the access and maintenance rights granted runs with the land and survives title transfers.
 - **15-55.B** Subdivision site runoff storage areas, compensatory storage facilities and storm sewers not already located in dedicated rights-ofway 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 Director, or the Administrator.
 - **15-55.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:
 - **15-55.C.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
 - 15-55.C.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 governmental unit having easement rights under Section 15-55.A exercises its right to perform maintenance to such subdivision runoff storage facilities and storm sewers, that governmental unit may lien each lot within the subdivision for the costs of any maintenance work performed; and
 - 15-55.C.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
 - **15-55.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 15-55.C, the following shall apply:

- **15-55.D.1** The applicant shall reserve an easement for access for maintenance and inspection purposes to any governmental unit having drainage and, or, stormwater management jurisdiction over the property; and
- **15-55.D.2** The applicant shall record a covenant against title stating that in the event the governmental unit having easement rights under Section 15-55.A exercises its right to perform maintenance to site runoff storage facilities and storm sewers on that property, that governmental unit may lien the property for the costs of any maintenance work performed.

15-56. RESERVED

15-57. RESERVED

ARTICLE VII. SOIL EROSION AND SEDIMENT CONTROL REQUIREMENTS

15-58. Soil Erosion and Sediment Control General Requirements

- 15-58.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:
 - **15-58.A.1** The susceptibility of the existing soils to erosion
 - **15-58.A.2** Existing native and mature vegetation
 - **15-58.A.3** Existing natural or established drainage ways
 - **15-58.A.4** The natural contours of the land
 - **15-58.A.5** Development phasing
 - **15-58.A.6** Emphasis first on erosion control, then sediment control.
 - **15-58.A.7** Winter shutdown
- **15-58.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.
- **15-58.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.
- **15-58.D** Soil stabilization measures shall include the use of temporary or permanent measures.
- 15-59. Soil Erosion and Sediment Control Plan Design Criteria
 - **15-59.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.
 - **15-59.B** Erosion control blanket shall be required on all interior site runoff storage facilities side slopes between normal water level and high water level.
 - 15-59.C Erosion control blanket to be placed in wetland or buffer shall be 100% biodegradable, unless an alternative material is approved by the Director or Administrator. This requirement does not include turf reinforcement mats or other structural materials necessary for high erosion or scour areas.
 - **15-59.D** Land disturbance activities in streams shall be avoided, where possible. If disturbance activities are unavoidable, the following requirements shall be met:
 - **15-59.D.1** Temporary stream crossings shall be constructed of non-erosive material.
 - **15-59.D.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.
 - **15-59.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:

- **15-59.E.1** The use of straw bales as a filter barrier or ditch check is prohibited.
- **15-59.E.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.
- **15-59.E.3** Ditch checks shall be constructed using non-erodible materials or prefabricated devices. Straw or hay bales are not acceptable.
- **15-59.E.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.
- **15-59.E.5** All undisturbed wetland, 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:
 - **15-59.E.5.a.** A dual row of silt fence, and a row of orange construction fence, or
 - **15-59.E.5.b.** A dual silt fence barrier, with one of the fences being of high visibility material.
 - **15-59.E.5.c.** Alternative practices to avoid impact may be used 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.
 - **15-59.E.5.d.** Additional soil erosion and sediment control measures may be required to adequately protect these sites.
- **15-59.F** Disturbed areas with drainage areas of one (1) acre or but fewer than 5 acres shall, at a minimum, be protected by a sediment trap or equivalent control measure at a point downslope of the disturbed area.
- **15-59.G** Disturbed areas with drainage areas more than 5 acres, shall, at a minimum, be protected by a sediment basin, in accordance with 15-59.H, with a perforated filtered riser pipe or equivalent control measure at a point downslope of the disturbed area.
- 15-59.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 1 year, the 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.
- **15-59.**IPumping sediment laden water into any stormwater facility that is not designated to be a sediment trap, drainageway, or offsite area either directly or indirectly without filtration is prohibited.
- 15-59.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).
- **15-59.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.
- **15-59.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.
- **15-59.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.
- **15-59.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.
- **15-59.0** Earthen embankments with constructed side slopes steeper than 3H:1V must be constructed with appropriate stabilization as approved by the Director or the Administrator.
- **15-59.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).
- **15-59.Q** To the extent possible, soil stockpile locations shall be shown on the soil erosion and sediment control plan.
- **15-59.R** Soil stockpiles shall not be located in a drainageway, flood plain area or a designated buffer, unless otherwise approved, under specific conditions to be established by the Director or Administrator.
- **15-59.S** Stockpiles to remain in place more than three days shall be provided with soil erosion and sediment control measures.

- 15-59.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.
- **15-59.U** All temporary erosion and sediment control measures shall be removed within 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.
- **15-59.V** Design criteria, standards and specifications for erosion and sediment control shall be taken from one of the following sources:
 - 15-59.V.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.
 - **15-59.V.2** Other design criteria, standards and specifications, provided prior written approval is obtained from the Administrator or Director.
- **15-59.W** Applicant with land disturbing activities greater than 1 acre shall provide a statement acknowledging that the site complies with the IEPA NPDES ILR10 permit, if applicable.
- **15-60.** Inspection. Inspections, remedial work, and record keeping for all soil erosion and sediment control related work shall be performed and documented by the applicant in accordance with the requirements of Illinois Environmental Protection Agency General NPDES Permit No. ILR 10 for sites that fall within that jurisdiction.
- **15-61.** RESERVED
- **15-62**. RESERVED

ARTICLE VIII. POST CONSTRUCTION BEST MANAGEMENT PRACTICES

- 15-63. PCBMPs, a term that also includes VCBMPs, are required on-site to treat 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 Director or Administrator that providing either PCBMPs or VCBMPs on-site is impractical, then a PCBMP fee-in-lieu shall be paid by the applicant in lieu of providing on-site PCBMPs and VCBMPs. On-site PCBMPs or VCBMPs are waived for the following developments:
 - **15-63.A** The development is limited to the resurfacing or reconstruction of an existing roadway with 2,500 square feet or less of net new impervious area per quarter mile being added compared to the predevelopment 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
 - **15-63.B** The development is a Regional Stormwater Management Development or a Flood Control development which are also considered to be PCBMPs; or
 - **15-63.C** 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
 - **15-63.D** 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
 - **15-63.E** 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
 - **15-63.F** The development is a Water or Sewer Improvement Development.
 - **15-63.G** The development is limited to construction or maintenance of an underground or overhead utility conduit or line, with supports and appurtenances.
 - **15-63.H** The following are excluded from the requirements to provide on-site VCBMPs, but are required to pay an equivalent PCBMP fee-in-lieu if the requirement to provide PCBMPs, or VCBMPs, is not already waived in Sections 15-63.A-G.
 - **15-63.H.1** Fueling and vehicle maintenance areas.
 - 15-63.H.2 Areas within 400 feet of a known community water system well as specified, or within 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.

- 15-63.H.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.
- **15-63.H.4** Linear utility developments. This exception does not include buildings, substations, pads, parking lots or other associated utility support facilities.
- **15-63.H.5** Development in soils classified as Hydrologic Soils Group A by the NRCS.
- **15-63.H.6** Developments over soils with the groundwater table within 2 feet of the surface.
- **15-64.** Volume Control Best Management Practices.
 - **15-64.A** The required VCBMP volume shall be calculated as the product of the new impervious area and the rainfall depth generated from a 1.25" rainfall event occurring over a two (2) hour period. No abstractions are taken on the rainfall depth.
 - **15-64.A.1** The volume calculated for VCBMP shall be subtracted from any volume of site runoff storage that is also required.
 - **15-64.A.2** The VCBMP shall be designed with sufficient volume to store the calculated volume.
 - 15-64.A.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
 - **15-64.A.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.
 - **15-64.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.
 - 15-64.C 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.

- **15-64.D** The bottom/invert of the trench shall be set above the expected groundwater elevation.
- 15-65. 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, 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. Proposed PCBMPs shall only be required to treat those pollutants identified and agreed to by the Director or Administrator.
- **15-66.** The following VCBMPs are considered to be effective at pollutant removal, provided that they are designed to also treat the pollutants of concern:
 - **15-66.A** Constructed wetlands, or
 - **15-66.B** wet or wetland bottom site runoff storage basins, or
 - **15-66.C** Vegetated compensatory flood storage ponds, or
 - **15-66.D** Infiltration ponds or trenches, with vegetative surfaces, with or without an underdrain system.
 - **15-66.E** Vegetated swales with infiltration capability, with or without an underdrain system.
 - **15-66.F** Other VCBMPs that can be demonstrated to be effective at treating the pollutants of concern.
- **15-67.** 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. The 6 major watershed divisions within the County are identified in Section 15-5.B.
- **15-68.** RESERVED
- **15-69.** RESERVED
- **15-70.** RESERVED

ARTICLE IX. SITE RUNOFF CONVEYANCE, STORAGE & FIELD TILES

- **15-71.** Site Runoff Conveyance Requirements
 - **15-71.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.
 - **15-71.B** Major storm water systems shall be sized to carry the base flood without causing additional property damage.
 - 15-71.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 Director in a Non-Waiver Community or the Administrator in a partial or Complete Waiver Community may specify certain design tools and methodologies to be used within the respective community.
 - 15-71.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.
 - **15-71.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 replacement of a roadway existing prior to the effective date of this Ordinance.
 - **15-71.F** Transfers of waters between the major planning watersheds shall be prohibited except when such transfers will not violate the provisions of Section 15-27.A.
 - **15-71.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.
- **15-72.** 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.
 - **15-72.A** The following cases or special conditions represent exceptions to providing site runoff storage:
 - 15-72.A.1 When comparing the impervious area of the predevelopment 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

- 15-72.A.2 When 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 Certification application to the with-development impervious area the percentage will decrease by a minimum of 5%; or
- **15-72.A.3** The with-development impervious area of the same development site is less than or equal to 10%; or
- **15-72.B** When the development is either a Roadway Development or an Open Space Development, which are "Special Cases of Development" as noted in Section 15-41, 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.
- **15-72.C** The following "Special Cases of Development" are not required to provide Site Runoff Storage or "Site Runoff Storage, Special":
 - **15-72.C.1** Bridge and culvert modification, repair, and replacement developments; or.
 - **15-72.C.2** Streambank stabilization developments; or
 - **15-72.C.3** Natural area restoration developments; or
 - **15-72.C.4** Wetland mitigation sites and wetland mitigation banks; or
 - **15-72.C.5** Trails, bikeways and pedestrian walkways; or
 - **15-72.C.6** Water and sewer improvement developments and all underground utilities.
- **15-72.D** When site runoff storage is required, it will be calculated as a volume utilizing the following development parameters and procedures.
 - **15-72.D.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 area for which site stormwater storage was deferred in Section 15-72.A.1.
 - **15-72.D.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.
 - 15-72.D.3 The design rainfall depth and duration will be the 24-hour duration ISWS Bulletin 71 rainfall depth. Sectional statistics and rainfall distributions by Huff appropriate for a 24-hour event shall be used unless some other rainfall and distribution is approved by the Administrator.
 - **15-72.D.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.
 - **15-72.D.5** For sites less than 5-acres in area, the unit area site runoff storage nomograph from the Northeastern Illinois

- Planning Commission (now known as 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.
- 15-72.D.6 For sites 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 VIII) volume if such a volume is required, and is then referred to as the Modified Required Site Runoff Storage Volume.
- **15-72.D.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.
- 15-72.E The details of the design of a site runoff storage facility, which includes a site runoff storage control structure in accordance with Section 15-73 (sideslopes, depths, etc.), will be in accordance with any applicable ordinances of the Waiver Community or in the unincorporated County, those of the County.
- **15-72.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 15-97.
- 15-72.G Small areas of the disturbed area of a development site (less than 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.

15-73. Site Runoff Storage Control Structures

- **15-73.A** A site runoff storage facility requires a control structure to meet the peak runoff rate requirements. Its design will be as follows, unless an alternate design meeting the intent to provide site runoff storage of a determined volume is approved by the Administrator.
 - **15-73.A.1** The structure shall be designed so that within the elevation range at which the site runoff storage volume is provided, the calculated discharge from the structure equals

- the product of 0.10 cfs/acre multiplied by the disturbed site area, assuming a free discharge.
- 15-73.A.2 An overflow conveyance system shall also be designed to convey a minimum of 1-cfs/acre multiplied by the entire upstream drainage area without damaging any buildings on site with overbank flooding, and shall discharge at the same location as where water leaves the site pre-development. This location may be modified by the Administrator. This conveyance shall begin operation at the elevation at which the site runoff storage volume is met. If more than 100-acres drains to the emergency overflow then the overflow is part of the major drainage system and it also falls under the provisions of Article X.
- 15-73.B For locations draining more than 10 acres, but less than 100-acres, the combination of control structure, site runoff storage and overflow conveyance shall be tested in a with-development hydrologic model and the design shall be further modified by adding additional site runoff storage, as necessary so that the pre-development site 2-year and 100-year, 24-hour duration peak discharges are not increased compared to the with development site condition.
- 15-73.C For site runoff storage facilities with a tributary area 100 acres or greater at the control structure, in addition to the above requirements, the combination of control structure, site runoff storage and overflow conveyance shall not exceed the pre-development site peak discharge in a 2-yr or 100-yr rainfall event of critical duration up to a 24-hour duration.
- 15-73.D Unless approved by the Director or the Administrator, all site runoff storage control structure designs shall operate without human intervention and when requiring electric power, shall have at least two independent and flood resistant sources of power.
- **15-74.** Storage facilities located within the regulatory flood plain shall:
 - **15-74.A** Conform to all applicable requirements specified in Article X of this Ordinance; and
 - **15-74.B** Store the required site runoff under all stream flow and backwater conditions up to the base flood elevation; and
 - **15-74.C** Not allow design release rates to be exceeded under any stream elevation less than the base flood elevation.
- **15-75.** Storage facilities located within the regulatory floodway shall:
 - **15-75.A** Meet the requirements for locating storage facilities in the regulatory flood plain; and
 - **15-75.B** Be evaluated by performing hydrologic and hydraulic analysis consistent with the standards and requirements for Watershed Plans; and
 - **15-75.C** Provide a watershed benefit.
- **15-76.** Storage facilities may be located off-site if the following conditions are met:

- **15-76.A** The off-site storage facility meets all of the requirements of this Article IX: and
- **15-76.B** Adequate storage capacity in the off-site facility is dedicated to the development; and
- **15-76.C** The development includes provisions to convey stormwater to the off-site storage facility.
- **15-77.** Modifications to drainage tiles.
 - **15-77.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:
 - **15-77.A.1** Preserve the existing tile system's drainage characteristics; and
 - **15-77.A.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
 - **15-77.A.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 15-27.A are not violated; and
 - 15-77.A.4 Development designs may only utilize, where practical and approved by the Director or 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 a unit of government; and
 - 15-77.A.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
 - **15-77.A.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.
 - **15-77.A.7** Drain tile systems disturbed by development activities shall be reconnected unless the approved drainage plan provides otherwise; and
 - 15-77.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 Director or the Administrator.
 - **15-77.C** When subsurface Drainage Tiles are detected on a predevelopment site the applicant shall submit the following:

- **15-77.C.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.
- **15-77.C.2** A topographical map of the development site showing:
 - **15-77.C.2.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
 - **15-77.C.2.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
 - **15-77.C.2.c.** The qualifications of the person or firm conducting tile location investigation.
- 15-77.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.

15-78. RESERVED

15-79. RESERVED

ARTICLE X. FLOOD PLAIN MANAGEMENT

- **15-80.** Determination of Regulatory Flood Plain, Base Flood Elevation (BFE), and Regulatory Floodway
 - 15-80.A When all of the following conditions have been met, 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:
 - **15-80.A.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.
 - **15-80.A.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.
 - **15-80.A.3** The Director publishes notice that the model will be used for the purpose of regulating new building construction.
 - 15-80.B The regulatory BFE shall be taken as the 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:
 - **15-80.B.1** Flood Plain studies that have been published by the Director in accordance with Section 15-80.A.
 - 15-80.B.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 a depressional storage area with greater than 20 acres 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.
 - **15-80.C** Where a channel has a tributary drainage area greater than 640 acres, the site specific floodplain study completed in Section 15-80.B.2 shall be submitted to IDNR-OWR for approval or other designee.
 - **15-80.D** The regulatory floodway shall be as delineated on the maps listed in Exhibit 2. Where interpretation is required to determine the exact location of the regulatory floodway, IDNR-OWR shall be contacted or their designee.
 - 15-80.E If a floodway is not designated on the maps in Exhibit 2 and the tributary area is greater than one square mile, IDNR-OWR Part 3708 rules shall apply. If a floodway is not designated on the maps in Exhibit 2 and the tributary area is less than one square mile, then the regulatory flood plain shall have no designated floodway.
 - **15-80.F** The Flood Protection Elevation (FPE) is the BFE plus one foot of freeboard.

- **15-81.** Regulatory Flood Plain Development Performance Standards
 - **15-81.A** General Performance Standards
 - **15-81.A.1** No development activity within the flood plain shall result in an adverse hydraulic impact to upstream or downstream properties.
 - 15-81.A.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.
 - **15-81.A.3** Proposed developments that meet the following criteria shall be exempt from the hydrologic and hydraulic modeling requirements set forth in the Ordinance:
 - **15-81.A.3.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 15-81 D.
 - **15-81.A.3.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:
 - 15.81.A.3.b.1. The development must have an atgrade 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.
 - **15.81.A.3.b.2.** The maximum width of the proposed path is sixteen (16) feet of traveled lane, including shoulders.
 - **15-81.A.3.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 10% or more of the existing conveyance cross-sectional area.
 - **15-81.A.3.d.** Developments replacing culverts with a hydraulically equivalent culvert(s).
 - **15-81.A.4** In accordance with FEMA and State regulations, 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 increase of 0.1 feet or more in the BFE.

- **15-81.A.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 15-81.B. A building permit for a compliant structure can be issued without a LOMC.
- **15-81.A.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 Department and Waiver Community concurrent with the application to FEMA or IDNR-OWR or its designee.
- 15-81.A.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.

15-81.B Building Protection Standards

- If a proposed building is located in a SFHA, all new 15-81.B.1 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 15-81.C.1, which states that there can be no storage of certain listed materials below the FPE.
- **15-81.B.2** New construction or substantial improvements of residential buildings within a SFHA shall have the lowest floor 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 professional engineer or 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.

- New construction and substantial improvements of non-15-81.B.3 residential buildings within a SFHA shall (i) have the lowest floor elevated to at least the FPE or. (ii) together with attendant utility and sanitary facilities be designed so that below the BFE 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, (i) a registered professional engineer or 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.
- 15-81.B.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, 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 III. 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.
- **15-81.B.5** Manufactured homes to be placed in an existing manufactured home park or subdivision within the SFHA not subject to the provisions of Section 15-81.B.4 shall be elevated so that either (i) the lowest floor of the manufactured home is at least the BFE, 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.
- 15-81.B.6 Recreational vehicles placed on sites within a SFHA be either (i) be on the site for fewer than 180 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 15-81.B.4. 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.
- **15-81.B.7** Accessory structures such as detached garages and sheds may be constructed within a SFHA if they meet all of the following criteria:
 - **15-81.B.7.a.** Must be non-habitable, used for the storage of vehicles and tools, and cannot be modified later into another use.
 - **15-81.B.7.b.** Shall be located outside of the regulatory floodway.
 - **15-81.B.7.c.** Shall be on a single lot and be accessory to an existing principal building on the same lot.
 - **15-81.B.7.d.** The walls of the accessory structure shall include openings to allow floodwater to enter the structure from the adjacent grade to the FPE. For a detached garage, this applies to three sides of the garage. Floodwater openings should be sized according to FEMA Technical Bulletin 1.
 - **15-81.B.7.e.** All electrical, heating, ventilation, air conditioning, plumbing, and other appliances, or fixed mechanical or electrical devices shall be located above the FPE.
 - **15-81.B.7.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').
 - **15-81.B.7.g.** Shall be anchored to resist floatation and overturning.
 - **15-81.B.7.h.** All flammable or toxic materials (gasoline, paint, insecticides, fertilizers, etc.) shall be stored above the FPF
- **15-81.C** Public Health Protection Standards

- **15-81.C.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:
 - 15-81.C.1.a. Items susceptible to flood damage; or
 - **15-81.C.1.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
 - **15-81.C.1.c.** Landscape wastes.
- **15-81.C.2** On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.
- **15-81.C.3** Sanitary sewer systems shall be designed to eliminate infiltration or inflow of flood waters and minimize discharge of sewage.
- **15-81.D** Compensatory Storage Volume Standards
 - 15-81.D.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 between the 0 - 10-year and the 10 - 100-year flood recurrence intervals 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 shall be provided non-incrementally at a ratio of 1:1. Grading in wetland or buffer areas shall be done in such a manner that the existing flood plain storage is maintained at all times. Compensatory storage is not required for flood protection of existing buildings for flood plain volume displaced by the building and within the area of 10 feet adjacent to the building; or
 - **15-81.D.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 15-81.D shall be waived for developments that meet either of the following criteria:
 - **15-81.D.2.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.
 - **15-81.D.2.b.** The total fill volume does not exceed 200 cubic feet.
 - **15-81.D.3** Existing flood storage that is lost due to channel modification shall require compensatory storage at a 1:1 ratio.
 - **15-81.D.4** Flood Plain fill resulting from public roadway developments shall require incremental compensatory storage at a 1:1 ratio.
- **15-82.** Regulatory Floodway Performance Standards

- **15-82.A** In the regulatory floodway, all of the requirements of Article X shall apply to any proposed development, and only the following appropriate uses shall be considered for certifications:
 - **15-82.A.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:
 - **15-82.A.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;
 - **15-82.A.3** Storm and sanitary sewer outfalls;
 - **15-82.A.4** Underground and overhead utilities;
 - **15-82.A.5** Recreational facilities such as playing fields and trail systems including any related fencing built parallel to the direction of flood flows;
 - **15-82.A.6** Bridges, culverts, roadways, sidewalks, and railways, and any modification thereto:
 - **15-82.A.7** Regulatory floodway regrading, without fill, to create a positive slope toward a watercourse;
 - **15-82.A.8** Floodproofing activities to protect existing structures such as, but not limited to, constructing water tight window wells, and elevating, without enlarging the footprint;
 - **15-82.A.9** In-ground swimming pools, without fill.
- **15-82.B** Hydrologic and hydraulic impacts of proposed developments located in the regulatory floodway shall be evaluated using one of the appropriate model as described in the following hierarchy:
 - **15-82.B.1** FEMA approved Flood Plain study model
 - **15-82.B.2** Watershed Plan Models or models published by the Director
 - **15-82.B.3** Development specific model using FEMA-accepted methodology.
- 15-82.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:
 - **15-82.C.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 other FEQ models should be considered for use in the certification of a proposed development.
 - **15-82.C.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.
 - **15-82.C.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.

- **15-82.C.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.
 - 15-82.C.4.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 3 or more events within 0.5 feet of depth that show increases greater than 0.1 feet.
 - **15-82.C.4.b.** No increase in flow greater than 10%.
 - **15-82.C.4.c.** No increase in velocity greater than 10%, unless there is either protection to prevent erosion or evidence that the proposed velocity will be non-erosive.
- 15-82.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.
- 15-82.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:
 - **15-82.E.1** Water will expand no faster than one foot horizontal for every four feet of flooded stream length.
 - **15-82.E.2** Water will contract no faster than one foot horizontal for every one foot of flooded stream length.
 - **15-82.E.3** Water will not expand or contract faster than one foot vertical for every 10 feet of flooded stream length.
- 15-82.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 preand post-construction BFE is not increased based on the hydraulic analysis of the flood plain.
- **15-82.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:

- **15-82.G.1** Permitting of developments undertaken by federal or state agencies including those that are funded, planned, or designed by federal or state agencies.
- **15-82.G.2** Permitting of developments undertaken by the Department, including those in which the Department is involved in the planning or design.
- **15-82.G.3** Permitting of jurisdictional dams.
- **15-82.G.4** Permitting of work in public bodies of water, as defined by IDNR-OWR.
- **15-82.G.5** State approval of new or revised regulatory floodway limits or regulatory flood profiles.
- **15-82.G.6** State certification of flood discharges.
- **15-82.G.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.

15-83. RESERVED

15-84. RESERVED

ARTICLE XI. WETLANDS

- **15-85.** Requirements for Wetland Delineation
 - **15-85.A** The following should be completed as part of an onsite procedure, unless the Director or 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 15-85.B.1. The basis for the decision shall be documented and placed in the development file.
 - 15-85.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 County, or the Complete Waiver Community where the wetland is located. Verified wetland boundaries are valid for two years after the date of verification.
 - **15-85.B.1** If an Environmental Scientist confirms that no wetlands are present on or within 100 feet of the development site, the Director, or Administrator within a Complete Waiver Community, shall document those findings.
 - **15-85.B.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, or the applicable Waiver Community Ordinance.
 - 15-85.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, 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.
 - **15-85.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:
 - **15-85.D.1** Site specific delineation according to the procedures specified in accordance with the Federal wetland delineation methodology.
 - **15-85.D.2** Wetland signatures identifiable from historic and current aerial photography, as determined by an Environmental Scientist.
 - **15-85.D.3** DuPage County Wetland Inventory Maps.
 - **15-85.D.4** US Fish and Wildlife Service, National Wetland Inventory Maps.
 - **15-85.D.5** Wetlands identified in Interim Watershed Plans.
 - **15-85.D.6** Wetlands identified in Watershed Plans.

- **15-85.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 15-85.E.1 through 15-85.E.5 below:
 - 15-85.E.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.
 - **15-85.E.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.
 - **15-85.E.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.
 - **15-85.E.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.
 - **15-85.E.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 15-85.E.1 through 15-85.E.4 above. If the wetland evaluation does not confirm a critical status, the wetland shall be considered "regulatory" for purposes of this Ordinance.
- **15-86.** Requirements for Development Affecting Wetlands
 - **15-86.A** Development affecting wetlands may not occur without certification, or letter of permission if applicable.
 - 15-86.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 15-88.
 - 15-86.C Development proposing to affect 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 15-88. The following exception applies:

- **15-86.C.1** The Director, or Administrator in a Complete Waiver Community, shall waive the requirement for completion of a Alternatives Analysis or provide mitigation for developments proposing, in the aggregate, 0.10 acre or less direct impact to wetlands provided:
 - **15-86.C.1.a.** the wetland(s) is regulatory; and
 - **15-86.C.1.b.** none of the wetland(s) to be impacted is over 0.1 acres in size; and
 - **15-86.C.1.c.** the wetland(s) to be impacted are not jurisdictional under the USACE; and
 - **15-86.C.1.d.** the wetland(s) to be impacted are located entirely within the development's platted lot(s), and
 - **15-86.C.1.e.** There will be no indirect impacts to remaining wetland area(s), and
 - **15-86.C.1.f.** The wetland(s) to be impacted are not part of a wetland mitigation development, and
 - **15-86.C.1.g.** Is in line with the basic development purpose.
- **15-86.D** Development proposing to temporarily affect a regulatory wetland is allowable provided the impacted wetland is restored pursuant to Section 15-88.D.
- 15-86.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 Director or Administrator of a Waiver Community, as long as the development does not require Stormwater Management Certification for any other aspect of the development, the Director or Administrator of a Waiver Community may issue a Letter of Permission to allow the maintenance activity.
- **15-87.** Indirect Impacts to Wetlands
 - **15-87.A** The applicant must demonstrate that the development or hydraulic alteration will not cause an indirect wetland impact with the following exceptions.
 - **15-87.A.1** Wetland at or below the OHWM of a waterway on which the hydraulics will not be changed
 - **15-87.A.2** Streambank stabilization developments.
 - **15-87.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.
 - 15-87.B.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 Director or Administrator concludes otherwise. If there is no potential for change then the Director or Administrator shall not require an evaluation.

- 15-87.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 15-87.E shall be considered an indirect impact. The Director, or Administrator in a Complete Waiver Community, 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.
- 15-87.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 15-87.E.3).
- 15-87.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 15-87.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:
 - 15-87.E.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.
 - 15-87.E.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.
 - **15-87.E.3** The runoff-volume sensitive topographic feature, identified in Section 15-87.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.
 - **15-87.E.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.

15-88. Wetland Mitigation Requirements

- 15-88.A Mitigation for wetland impacts shall take place in the same watershed planning area as the affected wetland. For the purpose of Section 15-88, 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 Director or 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.
- **15-88.B** Mitigation for permanent wetland impacts shall be provided as follows:
 - **15-88.B.1** Three to one (3:1) for permanent development impacts within critical wetlands.
 - **15-88.B.2** One and one half to one (1.5:1) for permanent development impacts within regulatory wetlands,
 - **15-88.B.3** Natural area restoration developments shall provide wetland mitigation for permanent wetland impacts at a minimum proportional rate of one to one (1:1).
 - **15-88.B.4** Developments that contain both development and restoration components shall mitigate at the ratios listed above applicable to each type of impact.
 - **15-88.B.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.
 - **15-88.B.6** In order to be eligible for credit, the mitigation must meet the performance standards referenced by the stormwater certification.
- **15-88.C** The Director or 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.
- **15-88.C.1** Enhancement or restoration of an existing wetland will be credited at a ratio of 0.5:1.
- **15-88.C.2** Enhancement, restoration, or creation of buffer will be credited at a ratio of 0.25:1.
- 15-88.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 Director or Administrator in a Complete Waiver Community shall make a determination as to whether the proposed impacts will be considered temporary.
- **15-88.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.
- **15-88.F** Mitigation for depressional storage lost within wetlands shall be provided in accordance with Section 15-81.D of this Ordinance.
- **15-88.G** Wetland creation shall only take place within areas that are currently non-wetland.
- **15-88.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 VI of this Ordinance.
- **15-88.**IWetland mitigation areas shall incorporate native, non-invasive species and be designed to duplicate or improve the hydrologic and biologic function of the original wetland.
- **15-88.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 Director or Administrator concludes otherwise.
- 15-88.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.
- 15-88.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:
 - **15-88.L.1** Applicants shall submit hydrology information for the wetland suitable to demonstrate wetland sustainability using best available data based on the proposed plant community.
 - **15-88.L.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.
- 15-88.L.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.
- **15-88.L.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.
- 15-88.L.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.
- **15-88.L.6** The applicant shall evaluate the groundwater flow and elevation if the proposed wetland mitigation intersects the seasonal high or apparent water table.
- **15-88.L.7** The applicant shall evaluate the effect of overbank flooding on the wetland mitigation when adjacent to a stream.
- **15-88.M** Mitigation must meet certification requirements and associated performance standards, and shall undergo a maintenance and monitoring period as required in the Stormwater Management Certification.
 - **15-88.M.1** Upon inspection, if the mitigation meets certification requirements and performance standards during or at the end of the monitoring period, the Director, or Administrator in a Complete Waiver Community shall issue regulatory signoff.

- 15-88.M.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 Director or Administrator in a Complete Waiver Community may consider granting early signoff when requested
- **15-88.M.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.
- **15-88.N** Mitigation is considered separate from other development components, and requires a performance security be established in accordance with Article VI for the completion of the mitigation development.
- **15-88.0** The certification 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.
- 15-88.P If property ownership is changed during the management and monitoring period, the applicant shall provide formal written notification to the Director or Administrator. The notification shall contain complete contact information including certification number(s), owner(s) names(s), street address(s), phone number(s) (office, fax, mobile), email address(s), etc. The certification holder must notify the future owners(s) of their obligations regarding certification conditions and maintenance and monitoring requirements for the subject development as they relate to the Stormwater Management Certification and to submit written confirmation from the receiving party accepting these responsibilities.
- **15-88.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:
 - 15-88.Q.1 If the unauthorized wetland impact can be considered a temporary impact, the Director or 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
 - **15-88.Q.2** If the unauthorized wetland impact cannot be considered a temporary wetland impact, the applicant shall enter into a formal Stormwater Management Certification process, and meet all requirements of the Ordinance.

15-89. Wetland Banking

15-89.A Where development affecting wetland meets the requirements of Article XI and the long term preservation of existing wetland

functions or characteristics is unlikely as a result of existing or proposed land use practices in adjacent upland areas, then the Director or Administrator may provide that mitigation for development within or affecting wetlands be accomplished wholly or in part through investment in an established wetland banking development in lieu of constructing new wetlands.

- **15-89.B** Such wetland banking shall be allowed only if no long term net loss of wetlands results within each watershed planning area as defined in Article XI and if the adverse impacts of development in regulatory or critical wetlands are fully mitigated.
- **15-89.C** Wetland banking for development impacts within a critical or regulatory wetland shall take place within an established wetland banking development approved by the Committee, or the Oversight Committee, and shall:
 - **15-89.C.1** Include a wetland enhancement, restoration, and construction plan approved by the Committee and the County Board, or by the Oversight Committee and the corporate authorities; and
 - **15-89.C.2** Include a capital improvements plan containing an estimate of the total per acre cost of wetland mitigation, including operation and maintenance costs; and
 - **15-89.C.3** Include a formula to determine that any investment in a wetland bank shall be at least equal to the cost of planning, acquiring of lands, constructing, operating, and maintaining mitigated wetlands of equivalent or greater functional value than those lost to development.
- 15-89.D If development impacts to a wetland meets all the conditions for mitigation in a wetland banking development, a payment may be made into the wetland banking program and shall be determined by multiplying the acres of required mitigation times the first of the following applicable costs:
 - **15-89.D.1** The investment cost of the closest wetland banking development to the development that is in the watershed planning area that has the greatest wetland deficit, as defined in Section 15-89.D.3; or
 - **15-89.D.2** The investment cost of the closest wetland banking development within the same watershed planning area as the proposed wetland impact; or
 - 15-89.D.3 The investment cost of the closest wetland bank to the development that is outside the watershed planning area where the development is proposed. However, the area of mitigation available within a wetland banking development for mitigation from outside the watershed planning area shall not exceed 15% of the bank's total wetland area. This amount of wetland mitigation is considered a wetland deficit in the watershed planning area where the development occurs. The watershed planning area that receives the wetland mitigation shall pay back the wetland deficit in accordance with Section 15-89.D.1.

- **15-89.E** If development impacts to a wetland meet all the conditions for mitigation in the wetland banking program, and there is not a wetland banking development available per Section 15-89.D, a payment may be made to the County for deposit into a specific wetland banking development or in a wetland bank suspense account equal to \$175,000 per acre of required mitigation.
- All funds deposited in the wetland banking program shall be 15-89.F maintained in accounts designated solely for a particular wetland banking development or in a wetland bank suspense account if collected under Section 15-89.E. At the option of the Director or Administrator, funds may be transferred to the account of another wetland banking development in the same watershed planning area, or if one is not available, in an off-site mitigation area meeting the requirements in Section 15-89, if that particular wetland banking development is not constructed within 10 years after the date on which such funds were deposited. Upon approval of a wetland banking development within a watershed planning area for which payments have been deposited in accordance with Section 15-89.E. such payments shall be immediately transferred into that wetland banking development. Any portion of the payment paid in excess of the actual fee established for said wetland banking development shall be refunded to the then current property owner or his/her/its designee.
- **15-89.G** The County Board or the corporate authorities in a Waiver Community shall audit annually all funds deposited in wetland banking accounts and shall account for such funds on a first-in, first-out basis.

15-90. RESERVED

15-91. RESERVED

ARTICLE XII. BUFFERS

- 15-92. Identification of Buffers
 - **15-92.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):
 - **15-92.A.1** A property may contain a buffer area that originates from another property.
 - **15-92.A.2** Buffer widths for wetland shall be as follows:
 - **15-92.A.2.a.** One hundred (100) feet for critical wetlands, except as noted in Section 15-92.B.2.
 - **15-92.A.2.b.** Fifty (50) feet for regulatory wetlands, except as noted in Section 15-92.B.2.
 - **15-92.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:
 - **15-92.B.1.a.** 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 15-80 will define a 100-yr flood elevation for the site and that elevation shall be used to set the buffer width, except as noted in Section 15-92.B.2.
 - **15-92.B.1.b.** 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, except as noted in Section 15-92.B.2.
 - **15-92.B.1.c.** 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 buffer limit between the 100-year flood plain and fifteen (15) feet from OHWM is appropriate.
 - **15-92.B.2** 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.
- 15-93. RESERVED.
- **15-94.** Development Affecting a Buffer
 - **15-94.A** Vegetative Maintenance within buffer may be allowed through issuance of a Letter of Permission under the following conditions.
 - **15-94.A.1** A written description of the development goals, objectives and management plan must be provided for approval to the Director or Administrator in a Waiver

- Community, as long as the development does not require Stormwater Management Certification for any other aspect of the development, the Director or Administrator of a Waiver Community may issue a Letter of Permission to allow the maintenance activity.
- **15-94.A.2** Maintained lawn or landscape planting beds have limited buffer function and may be replaced in kind.
- **15-94.B** Development of buffer, or a reduction in width, function, or the removal of native vegetation, shall not occur without mitigation.
 - **15-94.B.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.
 - **15-94.B.2** Impacts to buffers shall consider the effectiveness of the natural functions and mitigate those functions to the extent practicable.
- 15-94.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*.
- 15-94.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. 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.
 - **15-94.D.1** Upon inspection, if the buffer mitigation meets certification requirements and performance standards during or at the end of the monitoring period, the Director, or Administrator in a Complete Waiver Community shall issue regulatory signoff.
 - **15-94.D.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.
- **15-94.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 VI of this Ordinance.
- **15-94.F** Mitigation is considered separate from other development components, and requires a performance security be established in accordance with Article VI for the completion of the mitigation development.
- 15-94.G The certification holder shall provide annual monitoring reports documenting progress towards meeting the approved performance standards. The Director or Administrator may require the certification 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.

- 15-94.H If property ownership is changed during the management and monitoring period, the applicant shall provide formal written notification to the Director or Administrator. The notification shall contain complete contact information including certification number(s), owner(s) names(s), street address(s), phone number(s) (office, fax, mobile), email address(s), etc. The certification holder must notify the future owners(s) of their obligations regarding certification conditions and maintenance and monitoring requirements for the subject development as they relate to the Stormwater Management Certification and to submit written confirmation from the receiving party accepting these responsibilities.
- **15-94.**IFeatures of a naturalized stormwater management system, such as stormwater structures, infiltration trenches, vegetated swales, filter strips, site runoff storage ponds, 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.
- **15-94.J** Access through buffer areas shall be allowed, when necessary, for maintenance purposes.

15-95. RESERVED

15-96. RESERVED

ARTICLE XIII. FEE-IN-LIEU PROGRAMS

- 15-97. Site Runoff Storage Variance Fee Program
 - **15-97.A** Where a variance to the site runoff storage requirements of Section 15-72 is granted, payment into a site runoff storage variance fee program shall be made prior to the issuance of a Stormwater Management Certification as a condition of the variance.
 - **15-97.B** All developments shall participate in the County's fee in lieu program, unless the development is within a waiver community with its own ordinance and fee in lieu program.
 - **15-97.B.1** Payment of a site runoff storage variance fee for the varied storage shall be made to the County and is determined by applying the first applicable criteria as follows:
 - **15-97.B.1.a.** Where the program has an established off-site storage facility(ies) the fee shall be calculated by multiplying the per acre-foot cost of the closest off-site storage facility times the varied storage where:
 - **15.97.B.1.a.1.** A design concept plan for the facility has been approved by the Committee and the County Board containing an estimate of the per acre-foot cost of constructing the storage, including operation and maintenance costs; and
 - 15.97.B.1.a.2. A formula has been developed to determine that any investment in the facility shall be at least equal to the cost of planning, acquiring of lands, constructing, operating, and maintaining the facility; and
 - **15.97.B.1.a.3.** The facility is located in the same watershed planning area as the variance.
 - 15-97.B.1.b. Where the program has not established off-site storage facility(ies) in accordance with sub-parts B.1.a.1 through B.1.a.3, above, detention variance fee shall be charged in accordance with an adopted fee schedule, attached to this Ordinance as Schedule B and by this reference incorporated into this Ordinance. The fees set forth in Schedule B shall identify reasonable and rational costs to provide site runoff storage in the same watershed planning area as the subject variance. The detention variance fee shall include the cost of planning, acquiring land, construction, operation, and maintenance.
 - **15-97.B.2** Fee in lieu funds collected shall be accounted for in separate development or watershed planning area accounts. Funds shall be used in the same community or watershed planning areas as collected to enhance existing site runoff storage facilities and related components, construct off-site facilities and related components, provide maintenance of stormwater facilities, or undertake other development that provides a watershed benefit.

- **15-97.B.3** Each authority administering a fee-in-lieu program shall provide an annual accounting of all funds deposited in each development or watershed planning accounts and shall account for each fund on a first-in, first-out basis.
- **15-97.B.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 June 30th of each year for funds within the watershed planning accounts for uses identified in Section 15-97.B.2.
- **15-97.B.5** Detention variance fees shall be refunded to the person who paid the fee, or to that person's successor in interest, in accordance with Sec. 15-97.B.6, whenever the program administrator fails to encumber fees collected within 10 years from the date on which such fees were collected.
- **15-97.B.6** Refunds shall be made provided that the appropriate party files a petition with the program administrator within one year from the date on which such fees are required to be encumbered.
- 15-97.C A Waiver Community may adopt its own fee schedule and designate off-site facilities. Funds collected in a Waiver Community program shall be used within the Waiver Community, or within the watershed planning area in which such fee was collected. A Waiver Community's accounting records shall be made available to the Committee upon request.

15-98. Post Construction BMP Fee-in-Lieu Program

- 15-98.A With the approval of the Administrator, or the Director in a Non-Waiver Community, and provided the conditions of Section 15-63 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 Certification. For purposes of this section, payment of a VCBMP Fee-in-lieu is interchangeable with payment of PCBMP fee-in-lieu.
- **15-98.B** Development in a Non-Waiver Community or in a Waiver Community that has not adopted a PCBMP fee-in-lieu program shall participate in the County's program where:
 - 15-98.B.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, attached to this Ordinance as Schedule B and by this reference incorporated into this Ordinance, that identifies reasonable and rational cost to construct and maintain similar PCBMPs for those areas of the development that remain without effective 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.
 - **15-98.B.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.
- **15-98.B.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.
- **15-98.B.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 15-98.B.2.
- **15-98.B.5** All BMP 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 15-97.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.
- **15-98.B.6** Refunds shall be made provided that the appropriate party files a petition with the program administrator within one year from the date on which such fees are required to be encumbered.
- 15-98.C Development in a Waiver Community shall participate in the Waiver Community's BMP fee-in-lieu program where the corporate authority has adopted a program that is consistent with Section 15-98.B. A Waiver Community may adopt its own fee schedule and designate off-site facilities. Funds collected in a Waiver Community program shall be used within the Waiver Community, or within the watershed planning area in which such fee was collected. A Waiver Community's accounting records shall be made available to the Committee upon request.
- **15-99.** Wetland Mitigation Fee in Lieu. If development impacts to a wetland meet all the conditions for mitigation in the wetland banking program, and there is no wetland banking development available under the criteria set forth in Article XI, the applicant may make a fee-in-lieu payment to the County in the sum of \$175,000 per acre of required mitigation area.
- **15-100**. RESERVED
- **15-101.** RESERVED

ARTICLE XIV. PROHIBITED ACTS/ENFORCEMENT/PENALTIES

15-102. Prohibited Acts

- **15-102.A** It shall be unlawful for any person to undertake any development within the County or within a Waiver Community without first securing a Stormwater Management Certification as required by this Ordinance or the applicable Waiver Community Ordinance.
- **15-102.B** It shall be unlawful for any person to violate, disobey, omit, neglect, or refuse to comply with, or to resist enforcement of, any provision of this Ordinance, or an applicable Waiver Community Ordinance, or any condition of any Stormwater Management Certification or variance required by this Ordinance, or a Waiver Community Ordinance.
- 15-102.C It shall be unlawful for the person owning or exercising control over any property, or development thereon, to permit or allow that property, or any development thereon, or any condition thereof, to violate, or remain in violation of, any provision of this Ordinance, or a Waiver Community Ordinance, or fail to comply with, abide by or satisfactorily complete any condition of any Stormwater Management Certification or variance granted to, or issued for, that property or development.
- **15-102.D** It shall be unlawful for any person to continue any work on a property after having been served with a stop work order issued pursuant to Sec. 15-108, except such work as that person is directed, or authorized, to perform by the Administrator necessary to remove a violation having a temporary impact or to abate an unsafe condition.
- 15-103. Prosecution of Violations. Upon finding the existence of any violation of this Ordinance or a Waiver Community Ordinance, the Director or the Administrator shall have the authority and duty to take or direct all actions necessary or appropriate to abate and redress such violation. The Director or the Administrator shall also initiate proceedings, as necessary, to enforce this Ordinance or the Waiver Community Ordinance. A code enforcement adjudication program may be used to prosecute violations of this Ordinance, or a Waiver Community Ordinance.

15-104. Notice of Violations

- **15-104.A** Whenever the Director or the Administrator determines that a violation of the Ordinance exists, the Director or the Administrator shall issue a Notice of Violation in any of the following manner:
 - **15-104.A.1** By posting a copy on the subject property in a conspicuous place, or
 - **15-104.A.2** by personally delivering or mailing a copy to the person, firm, or corporation responsible for the unlawful act or omission or condition which forms the basis for the violation, or
 - **15-104.A.3** by personally delivering or mailing a copy to any adult who resides at, occupies, uses, leases, manages or maintains the property on which the violation is located, or

- **15-104.A.4** By personally delivering or mailing a Notice of Violation to any owner in title to the property on which the violation is located.
- **15-104.B** If a notice, or order, is issued in accordance with Sec. 15-104.A.1 or if the party to whom the Notice of Violation was issued was in accordance with Sec. 15-104.A.2 or A.3 is not also the property owner, a copy of the notice shall also be mailed to the "owner of record" as indicated on the latest Tax Assessor's records at the last address to which a tax bill was mailed.
- **15-104.C** A Notice of Violation shall contain the following:
 - **15-104.C.1** A brief statement setting forth the type and nature of the violation; and
 - **15-104.C.2** The section, or sections, of the Ordinance violated and, if applicable, the identity of any order, permit, plan or statement of specifications violated; and
 - **15-104.C.3** The date the violation was observed; and
 - **15-104.C.4** The address and/or PIN of the property on which the violation was observed; and
 - **15-104.C.5** A statement directing the discontinuance of the illegal action or condition and abatement of the violation; and
 - **15-104.C.6** A statement informing the violator, and/or owner, that they may contest the Notice of Violation by requesting in writing and within fourteen (14) days of issuance of the notice, an administrative appeal; and
 - **15-104.C.7** A statement informing the violator, and/or owner, that they may correct the violation within fourteen (14) days. A violator may remedy the violation by either;
 - **15-104.C.7.a.** Correcting, abating or removing the violation, or the condition(s) which cause the violation, and has such remediation verified by an inspection; or
 - **15-104.C.7.b.** Applying to the County, or Waiver Community, for any necessary certification(s), or to revise or amend any previously issued certification, or revise or amend any previously approved plan, drawing or specifications, as applicable.
 - **15-104.C.8** A warning that if the violator fails to comply with the Ordinance and remedy the violation within the time specified the County, or Waiver Community, shall institute appropriate legal proceedings against the violator.
 - **15-104.C.9** A statement that the Ordinance authorizes fines of up to one thousand dollars (\$1,000.00), per day, for each day a violation remains uncorrected, plus additional court costs, which fines and costs may be assessed in addition to other remedies at law including a court order enjoining further violations and ordering the offender to cease, correct, repair, abate or otherwise remedy the offending condition.
- **15-104.D** If a party to which a Notice of Violation has been issued requests an extension of time to comply with the Ordinance, or perform any act necessary to remedy a violation, the Director or

- Administrator may allow an extension of time for such compliance or act, which extension shall not be more than forty five (45) days. The Director or Administrator shall not extend the period of time in which a party may request an administrative hearing
- **15-104.E** The issuance of a Notice of Violation shall not be required as a condition of the County, or a Waiver Community, commencing legal action to enforce a stop work order issued pursuant to Sec. 15-108, or where the a violation presents an imminent risk of harm to the health, life or safety of any person, or an injunctive suit brought pursuant to Sec. 15-111.
- **15-105.** Inspection and Maintenance Authority
 - **15-105.A** Pursuant to the authority granted by 55 ILCS 5/5-1104 & 5-1062, the County may, after thirty (30) days written notice to the owner or occupant, in a non-emergency situation enter upon any lands or waters within the County for the purpose of inspecting or maintaining stormwater facilities or causing the removal of any obstruction to an affected watercourse.
 - **15-105.B** The Director or the Administrator shall post the notice in a prominent place on the premises, or shall send by certified mailing a copy of the notice to the property owner listed in the County property tax records. The notice shall:
 - **15-105.B.1** State the method by which the stormwater facility will be cleaned or maintained; and
 - **15-105.B.2** State the date upon which the proposed work will begin; and
 - **15-105.B.3** Inform the property owner that the property owner may appeal the commencement date of the proposed maintenance work.
 - **15-105.C** Where an obstruction is within a water course and is obstructing flow, the County or a Waiver Community may, with 10-days notice, enter upon the property and remove the obstruction.
- 15-106. Requirements for Immediate Remedial Action. Whenever the Director or Administrator determines that a violation has a temporary impact to a flood plain, wetland, buffer or BMP, 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 Director or Administrator may authorize the violator, in writing, to perform remedial action at the violation site without certification:
 - **15-106.A** Unauthorized wetland impacts that are intended to be permanent are required to proceed through the normal Stormwater Certification process to determine if the impact will be allowed to remain, or
 - **15-106.B** Remedial action may include, as the Director or Administrator deems appropriate for the situation, the following:
 - **15-106.B.1** Removal of fill or other materials from the impacted area; and

- **15-106.B.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
- **15-106.B.3** A restoration and/or mitigation plan for the impacted area setting forth performance standards, management and monitoring requirements as necessary, and implementation schedule.
- **15-106.C** When the Director or Administrator authorizes remedial action under this Section, such remedial acts shall:
 - **15-106.C.1** Focus of the restoration of floristic communities and function of the impacted area; and
 - **15-106.C.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.
- **15-106.D** In all cases the Director or Administrator shall document the nature of violation and the basis for his determination that the impact was temporary.
- **15-107.** Revocation and Suspension of Certifications.
 - **15-107.A** The Director or the Administrator may revoke a Stormwater Management Certification under any of the following circumstances:
 - **15-107.A.1** When the application, plans, or other supporting documents submitted by the applicant reflect a false statement or misrepresentation as to material fact; or
 - **15-107.B** The development violates any relevant local, State, or Federal requirement.
 - **15-107.C** The Director or the Administrator may revoke a Stormwater Management Certification under any of the following circumstances:
 - **15-107.C.1** When the security, access rights or covenants posted by the certification holder do not comply with the requirements of this Ordinance, or a Waiver Community Ordinance.
- **15-108.** Stop-Work Order
 - 15-108.A The Director or the Administrator, upon discovery of the existence of any of the circumstances established in Section 15-107.B. of this Ordinance, is authorized to issue an order requiring the suspension of the subject development. Such stop-work order shall be in writing, shall indicate the reason for its issuance, and shall order the act(s), if any, necessary to resolve the circumstances requiring the stop-work order
 - **15-108.B** A stop-work order shall be issued when:
 - **15-108.B.1** Development is proceeding in a manner which creates imminent hazard of severe harm to persons or property on or off the site; or
 - **15-108.B.2** Development has been accomplished in violation of a requirement of this Ordinance, or the Waiver Community Ordinance, or a Stormwater Management Certification, or any

- other applicable law or regulation, and a period of longer than fifteen (15) calendar days has elapsed since written notice of the violation or noncompliance was issued and the violation or noncompliance has not been corrected, abated or rectified; or
- **15-108.B.3** Development for which a Stormwater Management Certification is required is proceeding without issuance of a Stormwater Management Certification. In such instance, the stop-work order shall indicate that the effect of the order terminates when the required Stormwater Management Certification is properly obtained.
- **15-108.C** If the Director or Administrator discovers that work on any property is being conducted contrary to the provisions of this Ordinance, or in an unsafe and dangerous manner, such work shall be immediately stopped. The stop work order shall be in writing and shall be given to the owner of the property involved, or to the owner's agent, or to the person doing the work, or posted on the subject property; and shall state the appropriate code section(s) in violation.
- **15-108.D** Upon receipt of a stop work order, the property owner has fourteen (14) days to resolve the violation or apply for a Stormwater Management Certification. Failure to comply within this timeframe may result in prosecution and/or fines as outlined in Section 15-109.

15-109. Fines

- 15-109.A Any person who violates, disobeys, omits, neglects, or refuses to comply with, or who resists enforcement of, any provision of this Ordinance, the applicable Waiver Community Ordinance, or any condition in any certification issued pursuant to this Ordinance or a Waiver Community Ordinance, shall be subject to a fine not less than one hundred dollars (\$100.00) nor in excess of one thousand (\$1,000) for each offense. Each calendar day a violation continues to exist shall constitute a separate offense.
- **15-109.B** For the purposes of this Section 15-109, the owner, any occupant, or the developer and any contractor doing development work on the land shall be jointly and severally liable for any violation of this Ordinance or the Waiver Community Ordinance.
- **15-109.C** The Committee, in a Complete Waiver Community, the Oversight Committee, shall request its appropriate legal counsel 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.
- **15-110.** Additional Remedies for Special Flood Hazard Areas
 - **15-110.A** In accordance with state law, the County may petition the circuit court for an order to remove any unauthorized fill placed in a special flood hazard area and to restore the subject property to its natural elevation(s) in order to lessen or avoid the imminent threat to public health, safety, or welfare and damage to property resulting from the accumulation or runoff of stormwater or floodwater.

- **15-110.A.1** When, after a diligent search, the identity or whereabouts of the owner of any such parcel, including lien holders of record, are not ascertainable, notice mailed to the person in whose name the real estate was last assessed for taxes, constitutes sufficient notice under Section 15-104.
- **15-110.A.2** The cost of removal of fill and restoration incurred by the County shall be recoverable from the owner of such real estate and shall be a lien against the property.
- **15-110.A.3** Such lien shall be superior to all other prior existing liens and encumbrances, except taxes; provided that within sixty (60) days after such removal of fill or restoration of the parcel to its natural elevation, the County Board shall file a notice of lien of such cost and expense incurred in the office of the County Recorder.
- **15-110.A.4** Such notice shall include a sworn statement setting out:
 - **15-110.A.4.a.** A description of the real estate sufficient for identification thereof; and
 - **15-110.A.4.b.** The amount of money representing the cost and expense incurred; and
 - **15-110.A.4.c.** The date on which the cost was incurred.
- **15-110.A.5** Such lien may be enforced by proceedings of foreclosure as in the case of mortgages or mechanics' liens, which action shall be commenced within three years after the date of filing of the notice of lien.
- **15-110.A.6** Upon payment of the costs and expenses by the owner or persons interested in the property, the lien shall be released by the County or the Waiver Community and the release may be filed of record.
- **15-110.B** Each Waiver Community shall utilize all available means at law or in equity to enforce the Special Flood Hazard Area provisions of its applicable ordinance.
- 15-111. Legal and Equitable Relief. In the enforcement of this Ordinance or the applicable Waiver Community Ordinance, the Director or the Administrator shall have the authority to institute, or cause to be instituted, in the name of the County or the Waiver Community, any and all actions, legal or equitable, including appeals, that are required for the enforcement of this Ordinance or the applicable Waiver Community Ordinance. Article XV shall not be construed to limit or otherwise restrict a Waiver Community from adopting differing or supplemental enforcement procedures, or setting differing fine amounts, pursuant to their statutory or home-rule authority.
- **15-112.** Injunctive Relief. In circumstances of substantial danger to the environment, to the public health and welfare, or to the livelihood of any person, the Director or the Administrator shall have the authority to cause to be instituted a civil action for an immediate injunction to halt any discharge or other activity causing or contributing to the danger, or to require such other action as may be necessary.

15-113. RESERVED

ARTICLE XV. APPEALS

15-114. Right to Appeal

- 15-114.A Any person directly aggrieved by any decision, order, requirement, or determination of the Director, or the Director acting as the Administrator in a Non-Waiver Community, made pursuant to an interpretation of this Ordinance shall have the right to appeal such action to the Committee. Any person directly aggrieved by any decision, order, requirement, or determination of the Administrator in a Waiver Community made pursuant to an interpretation of a Waiver Ordinance shall have the right to appeal such action to the Oversight Committee.
- **15-114.B** Every applicant for an appeal shall notify the Committee or 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.
- 15-114.C Upon receipt of such a notice of appeal, the Committee or the Oversight Committee shall set a date for a public hearing before the Committee or 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.
- **15-114.D** A public hearing shall be set, noticed, and conducted by the Committee in accordance with the provisions of Section 15-139 of this Ordinance. Oversight Committees may conduct public hearings in accordance with each community's own public hearing procedures, which procedures need not strictly comply with this Article XV and Section 15-139.
- 15-114.E The Committee or 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 Committee or the Oversight Committee to act within sixty (60) days shall be deemed to be a decision denying the appeal.
- 15-114.F A party may appeal the decision of the Committee to the County Board by filing a notice thereof in the form required by Section 15-114.B of this Ordinance with the County Board within fourteen (14) days after the date of decision by the Committee. Failure to properly file such notice shall render final the decision of the Committee. A party may appeal the decision of an Oversight Committee to the corporate authorities of the Waiver Community by filing a notice thereof with that body within fourteen (14) days after the date of decision by the Oversight Committee.
- **15-114.G** Within thirty-five (35) days after receipt of a properly prepared and filed notice of appeal, the County Board, or the Waiver Communities' corporate authorities, shall, without further hearing, affirm, reverse, or modify the decision of the Committee, or Oversight

Committee. The failure of the County Board, the Waiver Communities' corporate authorities, 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 Committee, or Oversight Committee.

15-114.H The decision of the County Board, or the Waiver Communities' corporate authorities, shall in all instances be considered a final decision.

15-115. RESERVED

15-116. RESERVED

ARTICLE XVI. VARIANCES

- **15-117.** Authority; Applications; Standards
 - **15-117.A** The County Board in Non-Waiver Communities or the corporate authorities of a Waiver Community shall have the authority to grant variances from the requirements of this Ordinance, or the Waiver Community Ordinance, but only in compliance with the procedures set forth in this Article XVI.
 - **15-117.B** The variance procedure is intended to provide a narrowly circumscribed means by which relief may be granted to allow development when the requirements of this Ordinance or the applicable Waiver Community Ordinance place an undue and particular hardship on a specific developer.
 - **15-117.C** Variance petitions may be filed either by the owner or by the developer of land specified in the application.
 - **15-117.D** The petition for a variance shall accompany or follow an application for a Stormwater Management Certification including all necessary submittals.
 - **15-117.E** All variance petitions filed pursuant to this Article XVI shall be filed with the Director or the Administrator.
 - **15-117.F** All variance petitions filed pursuant to this Article XVI shall be on forms supplied by the Director or the Administrator and shall be filed in such number of duplicate copies as the Director or the Administrator may designate by administrative order.
 - **15-117.G** Every variance petition filed pursuant to this Article XVI shall provide the following information:
 - **15-117.G.1** The owner's or developer's signed consent to the filing of the petition; and
 - **15-117.G.2** The names and addresses of all professional consultants, if any, advising the petitioner with respect to the petition; and
 - **15-117.G.3** The name and address and the nature and extent of any economic or family interest of any officer or employee of the County in Non-Waiver Communities, or the local municipality in a Waiver Community, as to: the owner, the petitioner, or the subject property or development; and
 - **15-117.G.4** The addresses and legal description of the subject property or development; and
 - **15-117.G.5** The specific feature or features of the proposed construction or development that require a variance; and
 - **15-117.G.6** The specific provision of this Ordinance or the Waiver Community Ordinance from which a variance is sought and the precise variation there from being sought; and
 - **15-117.G.7** A statement of the characteristics of the subject property or development that prevent compliance with the provisions of this Ordinance or the Waiver Community Ordinance; and
 - **15-117.G.8** A statement of the minimum variance of the provisions of this Ordinance or the Waiver Community Ordinance that

- would be necessary to certify the proposed construction or development; and
- **15-117.G.9** A statement of how the variance sought satisfies the standards set forth in Section 15-27 of this Ordinance.
- **15-117.H** No public hearing will be scheduled on a variance petition unless the petition is filed in proper form and number and contains all required information.
- 15-117.I Whenever supplemental data in connection with a previously filed variance petition is required or offered by the applicant, it shall be submitted at least five (5) days prior to the date on which it is to be considered at a hearing or acted upon in connection with such petition. The filing of such data shall, in the discretion of the body hearing the petition, be a cause to delay a requested or scheduled hearing date.
- 15-117.J The Committee or the Oversight Committee shall consider, and the County Board or the corporate authorities of the Waiver Community may grant, such petition for a variance only when it is consistent with the general purpose and intent of this Ordinance or the Waiver Community Ordinance and when the development meets the requirements specified in Section 15-27 of this Ordinance as well as the following conditions:
 - **15-117.J.1** Granting the variance shall not alter the essential character of the area involved, including existing stream uses; and
 - **15-117.J.2** Carrying out the strict letter of the provisions of this Ordinance or the Waiver Community Ordinance would create an undue or particular hardship or difficulty on a specific developer or owner; and
 - **15-117.J.3** The relief requested is the minimum necessary and there are no means other than the requested variance by which the alleged hardship can be avoided or remedied to a degree sufficient to permit the reasonable continuation of the development; and
 - **15-117.J.4** The applicant's circumstances are unique and do not represent a general condition or problem; and
 - **15-117.J.5** The subject development is exceptional as compared to other developments subject to the same provision; and
 - **15-117.J.6** When the variance request involves the standards for wetlands and flood plains, the development proposed for a wetland or flood plain could not be constructed if it were limited to areas outside the wetland or flood plain.
- **15-117.K** No variance shall be granted for any development in the regulatory floodway, regulatory wetlands, and critical wetlands from any provision of this Ordinance or a Waiver Community Ordinance where the effect of such variance would be to create regulation less restrictive or stringent than Federal or State required minimum standards for development in such areas. Subject to this standard, a variance may be granted in accordance with this Article XVI from provisions of this Ordinance or a Waiver Community Ordinance more

- restrictive or stringent than the federal and/or state required minimum standards for development in such areas.
- **15-117.L** When a variance from the requirements of this Ordinance or the Waiver Community Ordinance would lessen the degree of protection to a structure, the Director or the Administrator shall notify the applicant that the variance, if granted, may result in increased rates for flood insurance.
- 15-117.M The Director or the Administrator shall give written notice of any variance petition, including the date and time of the public hearing, to the Committee, the Director, and all watershed planning area community Administrators. Such notice shall be sent no less than twenty-one (21) days in advance of the date of the public hearing by regular U.S. mail or its equivalent. In addition, the certification application and variance petition including all certification submittals and support documentation shall be sent to the Director.
- **15-118.** Public Hearing Required. A public hearing shall be set, noticed, and conducted by the Committee or the Oversight Committee in accordance with the provisions of Section 15-139 of this Ordinance.
- **15-119.** Review and Recommendation
 - **15-119.A** The Director or the Administrator shall review all requests or petitions for a variance and shall present written findings of the review to the Committee or the Oversight Committee.
 - 15-119.B Within thirty-five (35) days after the close of the public hearing, the Committee or the Oversight Committee shall make a written recommendation to the County Board or the corporate authorities of the Waiver Community to grant or deny the variance petition. The failure of the Committee or the Oversight Committee to act within thirty-five (35) days shall be deemed to be a recommendation to deny the variation.
 - 15-119.C The written recommendation of the Committee or the Oversight Committee whether to grant or deny the requested variance shall be accompanied by written findings of fact specifying the reasons for the decision, which written findings shall be distributed to the members of the County Board or the corporate authorities of the Waiver Community before the County Board or the corporate authorities of the Waiver Community votes to grant or deny the variance petition.
 - 15-119.D Decision. The County Board or the corporate authorities of the Waiver Community shall grant the variation, grant the variation with modifications or conditions, or deny the variation within forty-five (45) days after receipt of the recommendation of the Committee or the Oversight Committee. The failure of the County Board or the corporate authorities of the Waiver Community to act within forty-five (45) days, or such additional time as the applicant may agree, shall be deemed to be a decision denying the variation.
 - **15-119.E** Conditions.

- **15-119.E.1** A variance less than or different from that requested may be granted when the record supports the applicant's right to some relief but not to the relief requested.
- **15-119.E.2** The County Board or the corporate authorities of the Waiver Community may impose such specific conditions and limitations concerning any matter relating to the purposes and objectives of this Ordinance or the Waiver Community Ordinance on the development benefited by a variance as may be necessary or appropriate.
- **15-119.E.3** Whenever any variance authorized pursuant to this Ordinance or the Waiver Community Ordinance is made subject to conditions and limitations to be met by the developers, the applicant shall, upon meeting such conditions, file an affidavit with the Director or the Administrator so stating.
- **15-119.E.4** For any variance to Section 15-72, a fee shall be required pursuant to Section 15-97 to compensate for any site runoff storage not being provided.
- **15-120**. RESERVED
- **15-121.** RESERVED

ARTICLE XVII. WAIVER COMMUNITIES

- **15-122.** Notice of Intent to Petition for Waiver
 - **15-122.A** Any community that desires to enforce, either partially or completely, within its borders the provisions of this Ordinance or its own stormwater management ordinance, (Waiver Community Ordinance), that is consistent with, and at least as stringent as, the Plan and this Ordinance, shall provide the Committee with written notice of that intent within 60 days after the date of enactment of this Ordinance, or in accordance with the provisions of Section 15-122.B.
 - 15-122.B Following the effective date of this Ordinance and every June 1st thereafter, any community may request a change in waiver status by providing the Committee with written notice of intent that such community intends to petition for such a change of waiver status. The Committee shall consider any such petition pursuant to the provisions of Article IV of this Ordinance.
- **15-123.** Filing and Contents of Petition
 - **15-123.A** A petition to the Committee for a partial or a complete waiver of enforcement of this Ordinance shall be filed by the community with the Committee. Each petition shall include a duly adopted resolution or ordinance of the corporate authorities of the community including:
 - **15-123.B** Adoption of, or an agreement to adopt the provisions of this Ordinance or an ordinance consistent with, and at least as stringent as, the Plan and this Ordinance; and
 - **15-123.C** A proposed schedule indicating how the minimum criteria of this Ordinance will be implemented, including proposed staffing; and
 - **15-123.D** Documentation indicating the intent and ability to comply with Section 15-127.D of this Ordinance.
 - **15-123.E** Each petition shall specify whether the community seeks a Partial Waiver or a Complete Waiver of enforcement.

15-124. RESERVED

15-125. Committee Consideration of Petition. The Committee shall consider each properly filed petition for either a Partial or a Complete Waiver of County enforcement of this Ordinance at a regular or special call meeting. The Committee may take comments from interested parties, and the Committee shall have the right by rule to establish procedures for the conduct of such meetings.

15-126. RESERVED

- **15-127.** Standards for Grant of Petition
 - **15-127.A** The Committee shall grant a petition for waiver of County enforcement of this Ordinance upon finding that:
 - **15-127.B** The community's stormwater ordinance is consistent with, and at least as stringent as, the Plan and this Ordinance, as they may be amended from time to time: and

- **15-127.C** The community has complied with the requirements of Article III of this Ordinance; and
- **15-127.D** By the effective date of the community's stormwater ordinance, the community shall provide reasonable assurance that it has available and will utilize experts with the following qualifications:
 - **15-127.D.1** In a Complete Waiver Community:
 - **15-127.D.1.a.** A professional engineer with two years experience in stormwater and flood plain management; and
 - **15-127.D.1.b.** A professional engineer with two years experience in the application of continuous hydrology and fully dynamic hydraulic models; and
 - 15-127.D.1.c. A environmental scientist, and
 - **15-127.D.1.d.** A soil scientist; or,
 - **15-127.D.2** In a Partial Waiver Community:
 - **15-127.D.2.a.** A professional engineer with two (2) years experience in stormwater and flood plain management; and
 - **15-127.D.2.b.** An environmental engineer or environmental scientist; or a request for assistance from the Director to review for PCBMPs.
- **15-127.E** An agreement to include a provision in any new annexation or pre-annexation agreement that requires every developer to comply with the stormwater standards as currently adopted or as amended from time to time with regard to any proposed development for which a plat of subdivision has not yet been recorded; and
- **15-127.F** An agreement that the community will be bound by the rules and procedures governing the petition, including without limitation the Committee's procedures for reasserting county jurisdiction over stormwater management within waiver community boundaries.
- 15-128. Decision; Findings and Decision in Writing. The Committee shall decide, based upon all of the facts and circumstances: whether to deny the petition; whether to grant the petition and approve a partial waiver; or, whether to grant the petition and approve a complete waiver. The Committee's findings and decision shall be in writing, and shall specify whether a partial or a complete waiver has been approved or whether the petition has been denied, and shall specify the reasons for granting or denying the petition.
- 15-129. Final Action Required By Committee. If the Committee fails to take final action on a community's petition within 75 days after the petition for application has been properly completed and filed with the Committee, such petition shall be deemed to be granted; provided, however, that the Committee may, on its own motion, extend such 75-day period for not more than one additional 60-day period, during which additional 60-day period this Ordinance shall not be enforced by the County in such community.
- **15-130.** Waiver Community Records

- **15-130.A** Each Waiver Community shall maintain records of every Stormwater Management Certification issued and every variance granted for development within its borders.
- **15-130.B** Each Waiver Community shall maintain record drawings of all structures erected or constructed pursuant to a Stormwater Management Certification issued or variance granted by such community.
- **15-130.C** Each Waiver Community shall maintain such records for periodic inspection by the Department.
- **15-130.D** Each Waiver Community shall send to the Department a copy of each variance granted by such community, together with a copy of those documents required by Article XVI of this Ordinance.
- **15-131.** Committee Review of Waiver Community Programs. The Department shall review the implementation and enforcement of each Waiver Community's stormwater program on a schedule adopted by the Committee.
- **15-132.** Complaints
 - **15-132.A** Any person may file a written complaint with the Committee alleging that a Waiver Community or the Department has failed in some significant way, or has repeatedly failed, to implement or enforce the applicable stormwater management ordinance.
 - **15-132.B** Such complaint shall contain a short statement of facts describing how the Waiver Community or the Department has so failed in some significant way, or has repeatedly failed, to implement or enforce the Waiver Community Ordinance or this Ordinance.
- **15-133.** Complaint Investigation and Review
 - 15-133.A Upon receipt of a complaint, the Department shall notify, and provide a copy of the complaint to, any community named in the complaint. When a complaint involves the Department's failure to implement or enforce this Ordinance, the Committee shall designate a third-party to act in place of Department personnel for the purpose of carrying out the requirements of Sections 15-133.B through E and Section 15-134.
 - **15-133.B** The Department shall conduct a preliminary investigation of the complaint, including without limitation:
 - **15-133.B.1** An inspection of all relevant records related to the implementation and enforcement of the Waiver Community Ordinance or this Ordinance by the community or the Department; and
 - **15-133.B.2** Field inspections of relevant developments, structures, or stormwater facilities.
 - **15-133.C** The Department shall compile such information as necessary to determine whether there has been any failure in some significant way, or a repeated failure, to implement or enforce the Waiver Community Ordinance or this Ordinance.
 - **15-133.D** If the Department determines that there has been any failure in some significant way, or a repeated failure, to implement or enforce

- the Community Waiver Ordinance or this Ordinance, then it shall prepare a report of its findings and determinations and file such report with the Committee.
- **15-133.E** The Department shall provide a copy of its report to the complainant and the community.
- **15-134.** Formal Complaint of Committee
 - **15-134.A** After receipt of the Department report specified in Section 15-133.E of this Ordinance, the Committee may request the State's Attorney, by his assistant, to issue and serve on the Department or the community that is the subject of the investigation a written notice of charges together with a formal complaint.
 - **15-134.B** The formal complaint shall specify the manner in which the community or the Department has failed in some significant way, or has repeatedly failed, to implement or enforce the applicable Stormwater Ordinance.
 - **15-134.C** The complaint shall also advise the community or the Department of its right to answer the charges specified therein at a public hearing before the Committee. The date, time, and place of such hearing shall be specified in the written notice.
 - **15-134.D** A copy of the written notice and formal complaint shall also be sent to OWR, FEMA, adjacent communities within the same watershed planning area, and to any person that has filed a complaint about the community or the Department within the six months immediately preceding the date of the complaint.
- 15-135. Answer and Time for Filing. The community or the Department shall have the right to file a written answer to the allegations contained in the formal complaint at least seven days prior to the date for which the public hearing is first scheduled. No written answer shall be allowed to be filed less than seven days prior to the date for which the public hearing is first scheduled except by leave of the Committee. In lieu of filing an answer, the community or the Department may waive the public hearing and submit to a final determination of the Committee issued in accordance with Sections 15-135 and 136.
- **15-136.** Public Hearing. Any public hearing required by this Article shall be set, noticed, and conducted by the Committee in accordance with the provisions of Section 15-139 of this Ordinance. Such hearing shall be commenced not less than 30 days nor more than 45 days after the date of service of the written notice.
- **15-137.** Committee Decision
 - **15-137.A** After due consideration of all written and oral statements, testimony, and arguments submitted at the public hearing, or upon default in appearance of the community or the Department on the hearing day specified in the notice, the Committee shall issue a final determination, as it shall deem appropriate under the circumstances.

- **15-137.B** The Committee shall file a written opinion, within thirty-five (35) days of the conclusion of the public hearing, stating the facts and reasons leading to its decision.
- **15-137.C** The Committee shall immediately notify the community or the Department of the Committee's opinion and order, if any, in writing.
- **15-137.D** If the Committee determines that a fine or other penalty other than reduction or rescission of waiver status is to be sought, then it shall request the State's Attorney to file a complaint for such in a court of competent jurisdiction.
- **15-137.E** If the Committee determines that reduction or rescission of waiver status is mandated then such reduction or rescission shall occur at the direction of the Committee. The Committee's opinion and determination may be appealed in a court of competent jurisdiction. Any such appeal must be filed within thirty (30) days of issuance of the Committee's written determination.
- **15-138.** Committee Determinations. The Committee may by final determination revoke any partial or complete waiver of County enforcement of this Ordinance previously granted, specifying the date on which the revocation will be effective; or the Committee may issue any other order directing the community or the Department to take such actions or measures as the Committee deems are necessary and appropriate to assure cooperation and proper enforcement of the Waiver Community Ordinance or this Ordinance.

ARTICLE XVIII. MISCELLANEOUS PROVISIONS

- **15-139.** Public Hearings
 - 15-139.A When the provisions of this Ordinance or the Waiver Community Ordinance require a public hearing in connection with any application, petition, or appeal, the Committee or the Oversight Committee shall, upon receipt of a properly completed application, petition, or notice, fix a reasonable time and place for such hearing; provided, however, that such hearing shall be commenced no later than sixty (60) days, and shall be concluded no later than one hundred twenty (120) days, following the submission of the subject application, or petition, unless hearing dates of the body are completely committed during that time.
 - **15-139.B** All hearings shall be open to the public and shall be held before the Committee or the Oversight Committee.
 - **15-139.C** The Committee or the Oversight Committee shall cause notice to be given of public hearings in the form and manner and to the persons herein specified.
 - **15-139.C.1** Such notice shall contain a description of the subject matter to be heard or considered at the hearing, the address or particular location of the subject development, and the time, place, and date of the hearing. The notice shall also contain a reference to the particular sections of this Ordinance or the Waiver Community Ordinance involved.
 - **15-139.C.2** Notice of every hearing shall be given by mail or personal delivery to the applicant or petitioner. Notice by mail shall be mailed no fewer than fourteen (14) days in advance of the hearing by regular U.S. mail, except as otherwise specifically provided in this Ordinance or the Waiver Community Ordinance.
 - **15-139.C.3** The Committee or the Oversight Committee shall publish notice of the public hearing at least once, not less than fourteen (14) days before the date for the hearing, in a newspaper of general circulation in the geographic area where the property that is the subject of the hearing is located.
 - **15-139.D** Any interested person may appear and testify at a public hearing, either in person or by a duly authorized agent or attorney, and may submit documentary evidence; provided, however, that the Committee, and the Oversight Committee, may exclude irrelevant, immaterial, or unduly repetitious evidence.
 - **15-139.E** Subject to the discretion of the Committee, and the Oversight Committee, the applicant or petitioner, or any other party to the hearing, may be allowed any or all of the following rights:
 - **15-139.E.1** To present witnesses on their behalf.
 - **15-139.E.2** To cross-examine all witnesses testifying in opposition to the application, petition, or appeal.
 - **15-139.E.3** To examine and reproduce any documents produced at the hearing.

- **15-139.E.4** To have subpoenas issued by the body in charge of the hearing as may be provided by Illinois law for persons to appear at the hearings and for examination of documents by the person requesting the subpoena either before or during the hearing, where such persons or documents are shown to have a substantial evidentiary connection with:
 - **15-139.E.4.a.** The development to which the request applies; or **15-139.E.4.b.** Facts that would support or negate the legal standards for granting or denying the request or appeal.
- **15-139.E.5** To a continuance, upon request, for the purpose of presenting evidence to rebut evidence introduced by any other person. In determining whether to grant or withhold such rights, the discretion of the Committee, and the Oversight Committee, shall be governed by the goal of securing all information and opinion relevant and material to its deliberations. Such rights shall not be granted, however, when undue and unwarranted delay would result or when to do so would tend to produce no new evidence to aid the hearing body in reaching its decision.
- 15-139.F The Committee, and the Oversight Committee, may at any time, on its own motion or at the request of any person, adjourn the hearing for a reasonable time and to a fixed date, time, and place, for the purpose of giving further notice, taking further evidence, gathering further information, deliberating further, or for such other reason as the Committee, and the Oversight Committee, may find sufficient. Proper notice of such a recess shall be given to all parties to the hearing, and any other person designated by the Committee, and the Oversight Committee.
- **15-139.G** All testimony at every hearing shall be given under oath.
- **15-139.H** Any person may at any time prior to the commencement of a hearing hereunder, or during such hearing, or within such time as may be allowed by the Committee, and the Oversight Committee, following such hearing, submit written statements in support of or in opposition to the application, petition, or appeal being heard.
- **15-139.I** All other matters pertaining to the conduct of hearings shall be governed by the provisions of this Ordinance or the Waiver Community Ordinance pertaining to, and the rules promulgated by, the Committee or the Oversight Committee.
- **15-139.J** The record of the public hearing shall include:
 - **15-139.J.1** All notices and responses thereto; and
 - **15-139.J.2** A transcript or notes, if any, of all oral testimony received, the cost of which transcription shall be the responsibility of the party requesting that the record be transcribed, and all written information, if any, submitted by parties or the public; and
 - **15-139.J.3** Any recommendation or report by the hearing body; and
 - **15-139.J.4** All Department memoranda or data submitted to the hearing body in connection with its consideration of the subject matter of the hearing.

15-139.K The decision or recommendation of the Committee or the Oversight Committee shall be in writing and shall include findings of fact specifying the reasons for the decision. The copy of the written decision shall be provided to the applicant or petitioner and transmitted to the County Board or the corporate authorities of a Waiver Community.

15-140. Severability

- **15-140.A** The several provisions of this Ordinance or the Waiver Community Ordinance shall be severable in accordance with the following rules:
 - **15-140.A.1** If any court of competent jurisdiction shall adjudge any provision of this Ordinance or the Waiver Community Ordinance invalid, such judgment shall not affect any other provisions of this Ordinance or the Waiver Community Ordinance.
 - **15-140.A.2** If any court of competent jurisdiction shall adjudge invalid the application of any provision of this Ordinance, or the Waiver Community Ordinance, to a particular parcel of land, a particular structure, or a particular development, such judgment shall not affect the application of said provisions to any other land, structure, or development.
- **15-140.B** All such unaffected provisions of this Ordinance or the Waiver Community Ordinance shall remain in full force and effect.

15-141. Most Restrictive Provisions Apply

- 15-141.A The provisions of this Ordinance and all applicable Waiver Community Ordinances shall be interpreted to be cumulative of, and to impose limitations in addition to, all other ordinances, laws, codes, and regulations in existence or which may be passed governing any subject matter of this Ordinance or the Waiver Community Ordinances. To the greatest extent possible, the provisions of this Ordinance and the Waiver Community Ordinances shall be construed to be consistent with, and not in conflict with, the provisions of such other ordinances, laws, codes, and regulations, and with each other, to the end that all such provisions may be given their fullest application.
- **15-141.B** This Ordinance is intended to repeal the original ordinance or resolution which was adopted to meet the National Flood Insurance Program regulations, but is not intended to repeal any resolution which the applicable governmental entity passed in order to establish initial eligibility for the National Flood Insurance Program.
- 15-142. Amendments. This Ordinance may be amended in accordance with the adopted rules of the Committee and the DuPage County Board. Amendments to this Ordinance shall take effect after the amendment is adopted by the DuPage County Board. Unless otherwise noted, complete Stormwater Certification Applications that are accepted prior to the effective date of an amendment will not be subject to that amendment.

15-143. Effective Date. This Ordinance shall take effect for all purposes, and its effective date shall be, February 15, 1992.

15-144. RESERVED

15-145. RESERVED

APPENDIX A – ACRONYMS, INITIALISMS AND DEFINITIONS

ACRONYMS AND INITIALISMS

AASHTO American Association of State Highway and Transportation Officials

BFE Base Flood Elevation
BMP Best Management Practice

CLOMC Conditional Letter of Map Change

CMAP Chicago Metropolitan Agency for Planning CORS Continuously Operating Reference Station

DFIRM DuPage Flood Insurance Rate Map

EPA United States Environmental Protection Agency FEMA Federal Emergency Management Agency

FEQ Full Equation model

FIA Flood Insurance Administration
FIRM Flood Insurance Rate Map
FPE Flood Protection Elevation
FQI Floristic Quality Index

GNSS Global Navigation Satellite System

GPS Global Positioning System

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

IDOT Illinois Department of Transportation
IDPH Illinois Department of Public Health
IEPA Illinois Environmental Protection Agency

LOMC Letter of Map Change
LOP Letter of Permission
MEG Municipal Engineers Group

MRWQ Mean Rated Wildlife Quality
NARI Natural Area Rating Index

NFIP National Flood Insurance Program
NFIP National Flood Insurance Program

NGS National Geodetic Survey

NPDES National Pollutant Discharge Elimination System

OHWM Ordinary High Water Mark

OPUS – RS Online Positioning System – Rapid Static service

OWR Illinois Department of Natural Resources - Office of Water Resources

PCBMP Post Construction Best Management Practices.

RFM Regulatory Flood Map

SESC Soil Erosion and Sediment Control

SFHA Special Flood Hazard Area

SWPPP Storm Water Pollution Prevention Plan

TSS Total Suspended Solids

USACE United States Army Corps of Engineers

USEPA United States Environmental Protection Agency VCBMP Volume Control Best Management Practice

Appendix A Page 99 of 142

DEFINITIONS

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

Accessory Structure. A structure which is on the same parcel of property as a principal structure and the use of which is incidental to the use of the principal structure. Accessory structures are also referred to as appurtenant structures.

Administrator. The person administering the implementation and enforcement of this Ordinance; or, the person administering the implementation and enforcement of a community ordinance in a Waiver Community.

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 Certification, 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 Certification. See Section 15-82 of this Ordinance.

Authorization. A notice issued by the County to a Waiver Community 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.

Base Flood Elevation (BFE). The height of the base flood in relation to the National Geodetic Vertical Datum of 1929. DuPage County has developed by Watershed, appropriate conversion factors to transform BFE's to NAVD88 datum.

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

Appendix A Page 100 of 142

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.

Certify/Certification. A statement that a proposed development meets the requirements of 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 Stormwater Management Planning Committee of the DuPage County Board, authorized by Public Act 85-905.

Community. Any municipality, or the unincorporated County, within DuPage County acting as a unit of local government.

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.

Appendix A Page 101 of 142

Complete Waiver. The authority granted to a community pursuant to Articles I, II, III, and XVII of this Ordinance whereby a community acquires complete jurisdiction over reviewing applications for and granting Stormwater Management Certifications.

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. See Sections 15-85.E of this Ordinance.

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 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. 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 professional engineer.

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

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.

Appendix A Page 102 of 142

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.

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

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

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.

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. The current effective FIRMs for the incorporated and unincorporated DuPage County are listed in Exhibit 2.

FIS. Flood Insurance Study. An examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations. The current effective FIS's for the incorporated and unincorporated DuPage County are listed in Exhibit 2.

Appendix A Page 103 of 142

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 one foot above the base flood elevation.

Flood Protection Elevation (FPE). The base flood elevation plus one foot 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 one 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. The maps that identify the current effective floodways for the incorporated and unincorporated DuPage County are listed in Exhibit 2.

Floodway Conveyance. The measure of the flow carrying capacity of the floodway section and is defined using Manning's equation as, K = 1.49 AR 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 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, 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.

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 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 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.

Appendix A Page 104 of 142

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.

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

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.

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). A basement is any area of a building having its floor below grade on all sides. 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 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.

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.

Manufactured Home Park. A parcel or contiguous parcels of land divided into two or more manufactured home lots for rent or sale.

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;

Appendix A Page 105 of 142

- Does not involve any work within 100 feet of a wetland boundary; and
- Does not involve any work within a mapped flood plain; and
- Does not involve more than 2,500 square feet of net new impervious area. A
 development may also qualify as minor, with the prior concurrence of the
 Administrator or Director in a Non-Waiver Community if it exceeds 2,500 square feet
 of net new impervious area but does not meet the thresholds for providing site runoff
 storage listed in Section 15-72.

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 impervious areas are constructed under the set of plans associated with an application for Stormwater Management Certification.

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.

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

Appendix A Page 106 of 142

Open Space Development Developments. Developments which create only incidental amounts of impervious area, such as trails, picnic shelters or playgrounds that 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 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. A committee appointed by a Waiver Community to oversee the implementation and enforcement of the Waiver Community's Ordinance.

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

Parcel. Contiguous land under single ownership or control.

Partial Waiver. Authority granted to a community pursuant to Articles I, II, III, and XVII of this Ordinance whereby the Waiver Community acquires limited jurisdiction over reviewing applications for, and issuing, Stormwater Management Certifications.

Performance Standard. A set of criteria for a specified area which the vegetation, soils, or hydrology must meet in order to obtain approval as outlined in a Stormwater Management Certification.

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

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 runoff, 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**.

Appendix A Page 107 of 142

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 and buffers are important predevelopment 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 professional engineer or land surveyor representing the final "as-built" record of the actual in-place elevations, location of structures, and topography.

Recreational Vehicle. A vehicle which is: (a) Built on a single chassis; (b) 400 square feet or less when measured at the largest horizontal projections; (3) Designed to be self-propelled or permanently towable by a light duty truck; and (4) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

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.

Appendix A Page 108 of 142

Roadway Projects. 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. 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.

Start of Construction. The date the certification was issued provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement or other improvement was within 180 days of the certification 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 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 Certification. A certification established by this Ordinance or by a Waiver Community's Stormwater Ordinance; and issued by the Department or a Waiver Community 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, dams,

Appendix A Page 109 of 142

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.

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 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.

Variance. An Authorization recommended by the Committee or an Oversight Committee, and granted by the DuPage County Board or the corporate authorities of a Waiver Community, that varies certain requirements of this Ordinance or a Waiver Community Ordinance in a manner in harmony with the application of such 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.

Appendix A Page 110 of 142

Waiver Community. A community that has been granted either a Partial Waiver or a Complete Waiver from County enforcement of this Ordinance. See Article XVII of this Ordinance.

Waiver Community Ordinance. An approved, valid, and effective stormwater management ordinance of a Waiver Community. See Articles XVII of this 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).

Water Quality Best Management Practices Technical Guidance. This document is a standalone guidance manual intended to be placed in Appendix E of the DuPage County Countywide Stormwater and Flood Plain Ordinance (March 2008). 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.

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, and depicted on the attached Exhibit 1.

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 Director, or the Administrator, reserves the right on a case-by-case basis to determine that a particular waterbody within these categories of waters is a Water of DuPage.

Drainage, irrigation and roadside ditches excavated on dry land.

Appendix A Page 111 of 142

- 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 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

Appendix A Page 112 of 142

APPENDIX B – PERFORMANCE STANDARDS

| | ILAND ENHANCEMEI | NT, STREAMBA | NK STABILZATION | AND NATIVE P | TABLE 1. BUFFERS, WETLAND ENHANCEMENT, STREAMBANK STABILZATION AND NATIVE PLANTED PCBMPs (See Footnote 1) | Footnote 1) | |
|--|----------------------|--|---|--|---|--|--|
| Temporary Vegetative Cover/ Permanent Soil Stabilization* | ative t Soil * | Percent Cover Native Vegetation* | Floristic Quality Index (FQI)*** | Coefficient of Conservatism (Ĉ)*** | None of Three Most Dominant Species are Non-native or Invasive** | Survival Rate for Trees and Shrubs**** | |
| Must meet NPDES standards | SE | 10% | ı | _ | Cover crop acceptable | 100% | |
| No unvegetatated areas >1m² | reas | 25% | I | I | Required | 100% | |
| No unvegeta ta ted a reas | reas | 75% | 20 | 3.5 | Required | 100% | |
| | | | | | | | |
| TABLE 2. WETLAND CREATION | | | | | | | |
| Temporary Vegetative Cover/ Permanent Soil Stabilization * | ive | Percent Cover Native Vegetation* | Percent Cover of Species as Listed on Approved Plant Mixes * | Floristic Quality Index (FQI) | Coefficient of Conservatism (Ĉ) | None of Three Most Dominant Species are non-native or invasive** | Survival Rate for Trees and Shrubs**** |
| Must meet NPDES standards | | 10% | 10% | I | I | Cover crop acceptable | 100% |
| No unvegeta ta ted a reas | eas | 25% | 25% | I | I | Required | 100% |
| No unvegetatated areas >1 m² | reas | 20% | 20% | 15 | 3.0 | Required | 100% |
| No unvegetatated areas >1m² | reas | %09 | %09 | I | I | Required | 100% |
| No unvegetatated areas >1m² | reas | %08 | 75% | 20 | 3.5 | Required | 100% |
| | | | | : | | | |

As measured by aerial coverage, excluding the emergent zone. The emergent zone must achieve a minimum of 50% vegetative cover.

Page 113 of 142 Appendix B

^{**} Species include, but are not limited to: Typha angustifolia, Typha X glauca, Phragmites australis, Lythrum salicaria, Salix interior, Phalaris arundinacea, Cirsium arvense, Melilotus sp., Poa pratensis, Dipasacus sp.

^{***} FQI and/or (Ĉ) can be adjusted downward when taking the context of the location into consideration. PCBMPs are not required to meet FQI or (Ĉ).

Note: 1) Performance standards shall be applied to and achieved in each separate plant community zone and do not apply to designated open water areas. **** Percentage can be adjusted downward based on quantities planted and when taking the context of the location into consideration.

²⁾ Upon final acceptance, it is the expectation that the PCBMP will continue to be maintained as specified in the Stormwater Management Certification in perpetuity or until modified by a subsequent Stormwater Management Certification.

Footnote 1: BMP standards are only for BMPs with a tributary area greater than 1 acre. There are no performance standards for BMPs with tributary areas areas of less than 1 acre.

APPENDIX C – CERTIFICATION FLOW CHARTS

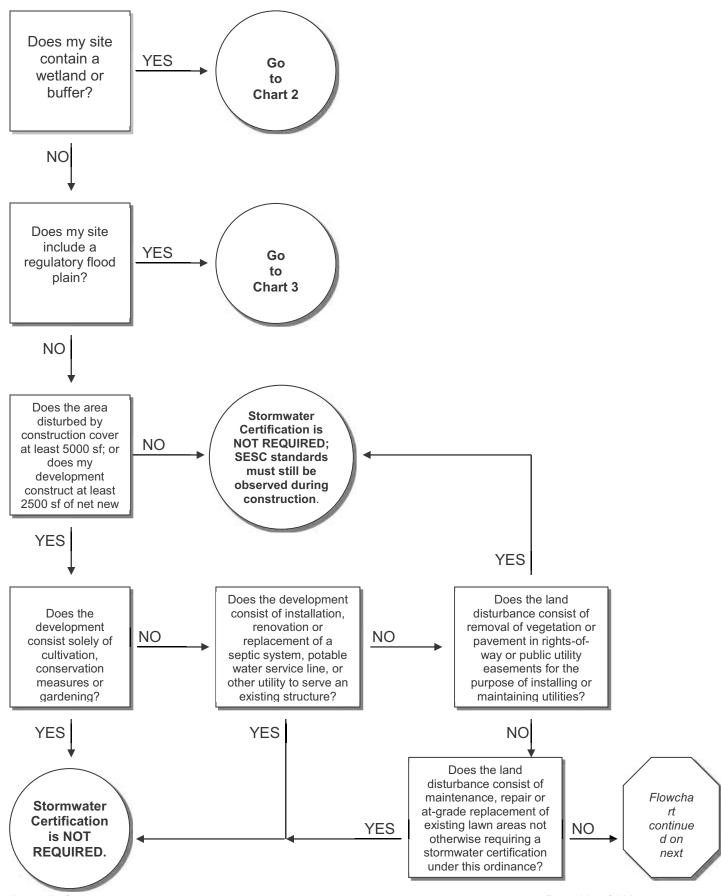
Chart 1- Is a Stormwater Certification Required?

Chart 2 – Wetland Requirements

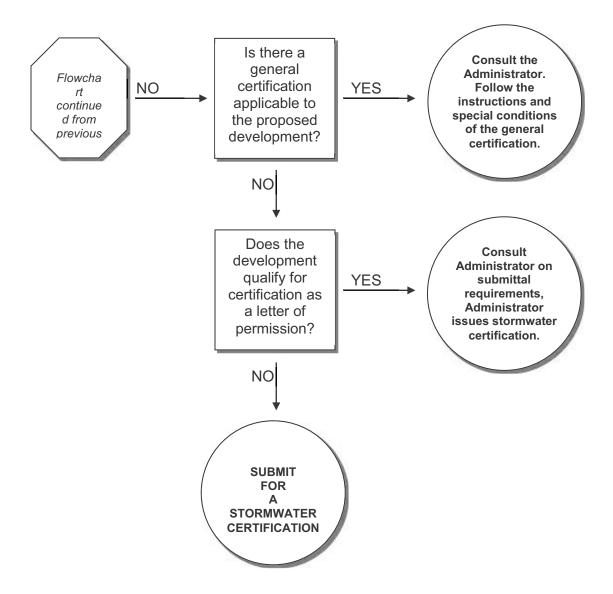
Chart 3 – Flood Plain Requirements

Appendix C Page 114 of 142

CHART 1: IS A STORMWATER CERTIFICATION REQUIRED?

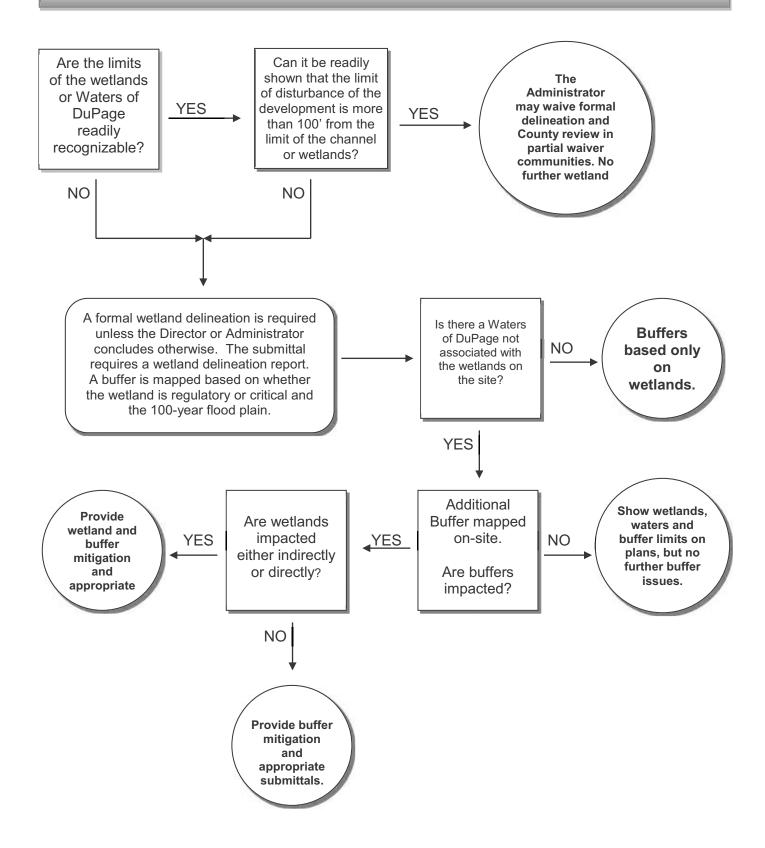


Appendix C Page 115 of 142



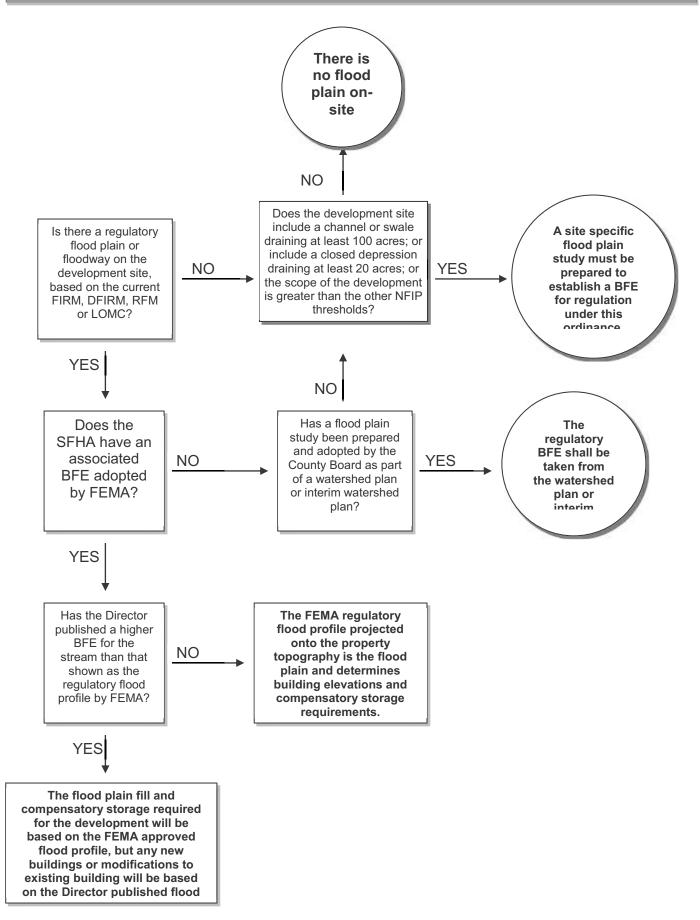
Appendix C Page 116 of 142

CHART 2: WETLAND REQUIREMENTS



Appendix C Page 117 of 142

CHART 3: FLOOD PLAIN REQUIREMENTS



Appendix C Page 118 of 142

EXHIBIT 1 DuPage County Watershed Planning Areas

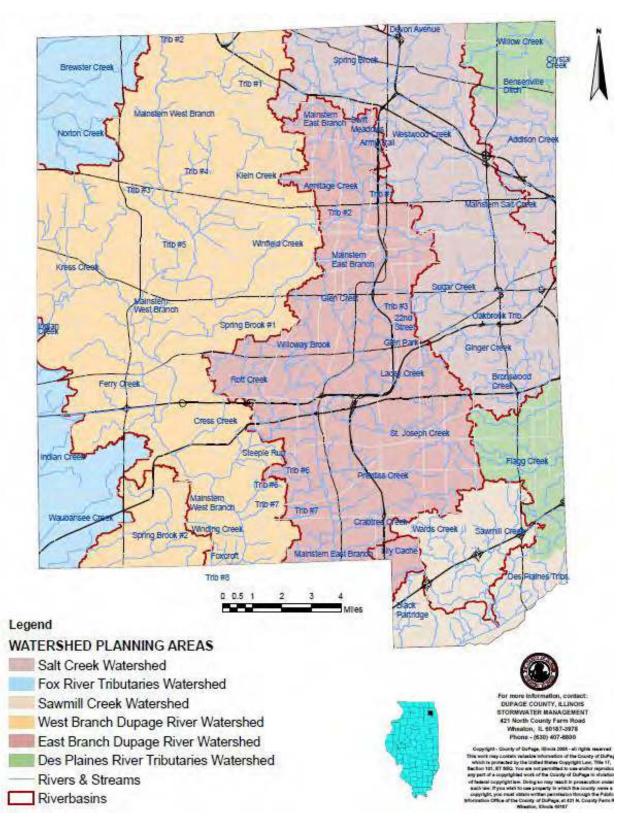


EXHIBIT 2

DU PAGE COUNTY, ILLINOIS

DESIGNATED FLOODWAYS / FLOOD PLAINS

June 1, 2004

INCORPORATED AND UNINCORPORATED AREAS

| REGULATORY | TORY | п | RFM's: E.D.'S: | 0101 thru 1006 07/01/04 or later | | |
|------------|------|-----------------|--------------------|---|----------------|----------------------|
| FIRM | | п | C.PN'S: E.D.'S: | 17043C 12/16/04 | 0101 thru 1006 | |
| FIS | | н | December 16, 2004 | 16, 2004 | | |
| | | | | * * AURORA * * | * * * | |
| FIRM | u | C-PN's: | 170320 001 | 170320 0015D thru 0030D; E.D.: 01-05-89 | 01-05-89 | |
| FIS | u | January 5, 1989 | 6861 | | | |
| WATERWAY | ΆX | MA | MAP TYPE | MAP NUMBER | MAP DATE | DESCRIPTION OF REACH |

NORTH OF EAST-WEST TOLLWAY 2400' EAST KANE-DUPAGE COUNTY

01/05/89

0015D

FIRM

SELMARTEN CREEK

BOUNDARY.

WAUBANSEE CREEK FIRM 0020D & 0025D 01/05/89 KAUTZ RD TO SPRING LAKE.

| VILLE * * | 02/04/81 |
|-----------|-------------------------|
| ENSEN | E.D.: |
| | 170200 0002B and 0003B; |
| | N. N. |

| 04.81 | |
|-------------------------|--|
| E.D.; 02 | |
| 170200 0002B and 0003B. | |
| C-PNPs | |
| ii. | |
| FIRM | |

C-PN's

U

FBFW

| ġ. | | |
|---------|-----|--|
| 2 | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| 6 | | |
| | | |
| | | |
| 9 | | |
| E. | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| 7 | - | |
| | 8 | |
| | 2 | |
| | 4 | |
| 0.00000 | 150 | |
| | 50 | |
| Š. | 2 | |
| | -57 | |
| | | |
| | . 0 | |
| | - | |
| | | |
| | | |
| | | |
| | 202 | |
| 2000 | SIZ | |
| | - | |
| | | |
| | | |

| WATERWAY | MAP TYPE | MAP NUMBER | MAP DATE | DESCRIPTION OF REACH |
|---------------|----------|---------------------|-------------------|---------------------------------|
| | | THE PERSON NAMED IN | The second second | |
| ADDISON CREEK | FBFW | 6003B | 02/04/81 | GEORGE ST. SOUTH TO CORPORATE |
| EK | FBFW | 0003B | 02/04/81 | MARION ST. TO GEORGE ST. |
| TRIB NO. 1 | FIRM | 0003B | | REERVOIR |
| EK | FBFW | (0003B | 02/04/81 | CHURCH RD, TO ADDISON CK, TRIB. |
| TRIB NO. 2 | FIRM | 0003B | | NO.3 CONFLIENCE, |
| ADDISON CREEK | FBFW | 0003B | 02/04/81 | CHURCH ST. TO ADDISON CK TRIB. |
| | FIRM | 00038 | | NO. 2 CONFLUENCE. |
| ADDISON CREEK | FBFW | 0003B | 02/04/81 | CHURCH ST. TO ADDISON CK. TRIB. |
| | FIRM | 0003B | | NO. 2 CONFLUENCE. |
| ter | FBFW | .0002B | 02/04/81 | IRVING PK, RD, NORTH TO |
| DITCH | FIRM | 0002B | | CORPORATE LIMITS. |

Exhibit 2 List of Designated Floodway/Flood plain Maps

| FBFW | U | C-PN's | 170059 000 | 170059 0005 and 0007. | E.D. | E.D.: 03/15/84 | |
|-----------------------------|--------------|-------------------|------------|--|-------|--------------------------|---|
| FIRM | u | C-PN"s | 170059 003 | 170059 003C, and 0007C; E.D.; 03:15:84 | E.D.: | 03/15/84 | |
| SILS | · a | December 15, 1980 | 5, 1980 | | | | |
| WATERWAY | 'AK | MA | MAP TYPE | MAP NUMBER | ER | MAP DATE | DESCRIPTION OF REACH |
| BREWSTER CREEK | ER CREE | K FBFW | W | 0005 & 0007 0005C-& 0007C | 200 | 3/15/84 | APPLE VALLEY DRIVE WEST TO MUNGER RD. |
| COUNTRY CREEK SOUTH OF | Y CREEK F | | W FIRM | - | _ | 3/15/84 0005C & 0007C | DEVON AVE, SOUTH TO A POINT 3/15/84 STERNS RD. |
| WEST BRANCH DUPAGE RIVES | ANCH | FBFW | | 0007C | | 3/15/84 | ACCESS RD, SOUTH OF STERNS RD, TO ARMY TRAIL RD. |

* * BARTLETT * *

* * BOLINGBROOK * *

| | U | C-PN's | 170812 0001 and 0003; | E.D.: | 07/16/84 |
|---|-----|--------------|-------------------------|-------|----------|
| 7 | li. | C-PN"s | 170812 0001D and 0003D; | E.D.; | 07/16/84 |
| | U | July 16, 198 | 4 | | |

MAP NUMBER MAP TYPE FBFW EAST BRANCH DUPAGE REIVER WATERWAY

0003 0003D

07/16/94

ROYCE RD, S.W. TO CORPORATE LIMITS.

DESCRIPTION OF REACH

MAP DATE

Exhibit 2 List of Designated Floodway/Flood plain Maps

* * HINSDALE * *

| 142 |
|------|
| of |
| 125 |
| Page |

| i u | C-PN's: | 170105 000 | 170105 0002B thru 0004B; | E.D.: | 01/16/81 | |
|---------------|---------------|------------|--------------------------|-------|----------|---|
| a Avair | July 16, 1980 | 00 | KARNTAR | 0.0 | MADDATE | NESCO DE PERSON |
| WALERWAY | MA | MARITEE | MACNUMBER | EK | MAPPALE | DESCRIPTION OF REACH |
| SALT CREEK | REG | | SC-4 0004B | | 07/01/79 | 47,150 FT. ABOVE MOUTH TO YORK ROAD AT 51,750 FT. ABOVE MOUTH. |
| BRONSWOOD | FBF | W | 0002B | | 01/16/81 | 4200 FT. TO 7800 FT. ABOVE |
| CEMETARY TRIB | | | 0002B | | 18/91/10 | MOUTH AT TE, 83. |
| TREET | | W | 0003B | | 18/91/10 | 63,050 FT. TO 38,925 FT. ABOVE |
| DITCH | FIRST | N | 0003B | | 18/91/10 | MOUTH. |
| FLAGG CREEK | FBF | W | 0002B & 0004B | 4B | 16/91/10 | |
| | FIRM | 1 | 0002B & 0004B | 48 | 01/16/81 | |

Page 126 of 142

Exhibit 2 List of Designated Floodway/Flood plain Maps

| FBFW | ě. | C-PN's 170213 0 | 170213 0001C thru 0023C; E.D.: 05/23/92 | 23/92 | |
|------------------|-------------------------------|-----------------|---|----------|----------------------|
| FIS | ш | May 18, 1992 | | | |
| WATERWAY | AY | MAP TYPE | MAP NUMBER | MAP DATE | DESCRIPTION OF REACH |
| EAST BRANCH | INCH | FIRM | 0001C, 0002C, 0006C, 0007C, 0012C, 0013C, 0017C | 05/18/92 | |
| RESS KREEK | REK | FIRM | 0007C, 0008C, 0012C | 05/18/92 | |
| SPRING BROOK | ROOK | FIRM | 0011C, 0012C, 0013C, 0015C, 0016C | 05/18/92 | |
| NNAME F FOXCE | UNNAMED CK. S. DF FOXCROFT | | 0017C | 05/18/92 | |
| NNAME F 87 TH | UNNAMED SOUTH OF 87 TH | FIRM | 0017C | 0518.92 | |
| INDING | CREEK | FIRM | .0016C_0017C. | 05/18/92 | |

Exhibit 2 List of Designated Floodway/Flood plain Maps

| | | | | DESCRIPTION OF REACH | 15,250 FT. TO 24,500 FT. ABOVE LAKE KADUFAH SPILLWAY. | |
|----------------|----------------------------|----------------------------|-------------------|----------------------|--|--|
| 62/10/20 | 18/61/50 | E.D.: 05/19/81 | | MAPDATE | 07/01/73 05/19/81 05/19/81 | 05/19/81 05/19/81 05/19/81 |
| E.D.: | 70216 0002B & 0004B; E.D.: | 170216 0002B & 0004B; E.D. | | MAP NUMBER | SC-32 & SC-33 0002B & 0004B 0002B & 0004B | 0002B 0002B 0004B 0004B |
| SC-32 & SC-33; | 2-PN's: 179216 000 | C-PN"s 170216 000 | November 19, 1980 | MAPIYPE | REG FBFW FIRM | FBFW FIRM FBFW FIRM |
| REG. = So | FBFW = C | TRM = C | N | CIERWAY | SPRING BROOK | WEST BRANCH MEACHEM CREEK WEST BRANCH TRIBUTARY |

* * ROSELLE * *

Exhibit 2 List of Designated Floodway/Flood plain Maps

| | | | DESCRIPTION OF REACH | | | |
|---------------------------|-----------------------------|--------------|----------------------|--------------|-------------------------------|--|
| 12,01/81 | 12/01/81 | | MAP DATE | 12/01/81 | 12/01/81 | |
| 700865 0002 & 0004; E.D.; | 200865 0002A & 0004A; E.D.: | | MAPNUMBER | 0004 | 0002 & 0004 (0002A & 0004A | |
| C-PN's: 1700865 | C-PN's 1700865 | June 1, 1981 | MAPIXPE | FBFW | FBFW | |
| FBFW | FIRM | FIS | WATERWAY | NORTON CREEK | NORTON CREEK TRIBUTARY | |

* * WAYNE * *

FIRM/RFM Cross Index: Tributary Watersheds vs. (Panel Numbers, Incorporated Areas)

| Tributary | FIRM/RFM Panel | Incorporated Areas / Unincorporated Areas |
|--|---|--|
| DesPlaines River, Addison Cheek (DPAC) | GODS, CNOCA, CNOCA, CNOCA, CNOCA, CNOCA | ADDISON, BENSEWILLE ELMHURST, UNINCORPORATED DUPAGE COUNTY, WOOD DALE |
| DesPlaines River, Bensenville Ditch (CP9D) | D802, D808, D805, D808 | BENSENVILLE, CHICAGO, UNINCORPORATED DUPAGE COUNTY, WOOD DALE |
| DesPlaines River, Black Partridge Creek (DPBP) | 1001 1004 | WOODRIDGE WOODRIDGE |
| DesPlaines River, Crystal Creek (DPCT) | 0303 | CHICAGO |
| DesPlanes River, Main Stem (DPDP) | 0908, 0909, 1001, 1002, 1003, 1004, 1005, 1006 | ARGONNE NATIONAL UNB BURR RIDGE, DARIEN, LEMONT, UNINCORPORATED DUPAGE COUNTY, WOODRIDGE |
| DesPlaines River, Flagg Creek (DPFC) | D609, D602, D903, D905, D906, D909, 1003 | BURR RIDGE CLARENDON HILLS DARIEN HINSDALE UNINCORPORATED DUPAGE COUNTY, WESTMONT, WILLOWBROCK |
| DesPlaines River, Lily Cache (DPLL) | 0809, 0807, 1001 | BOLINGBROOK, DARIEN, UNINGORPORATED DUPAGE COUNTY, WOODRIDGE |
| DesPlaines River, Willow Creek (DPWL) | 0902; 0903; 0905, 0306 | BENSENVILLE, CHICAGO, ELK GROVE VILLAGE, UNINCORPORATED DUPAGE COUNTY, WOOD DALE |
| DuPage River, Springbrook #2 (DUSG) | 0705, 0706, 0707, 0708, 0709, 0807 | AURORA, NAPERVILLE, UNINCORPORATED DUPAGE COUNTY |
| East Branch CuPage River, Armitage Creek (EBAR) | 0208, 0209 | CARCL STREAM, CLENDALE HEIGHTS, UNINCORPORATED CUPAGE |
| East Branch DuPage River, Army Trail Road Tributary (EBAT) | 0206, 0209 | ADDISON, BLOOMINSONLE, GLENDALE HEIGHTS, UNINCORPORATED DUPAGE COUNTY |
| East Branch DuPage River, Crabtree Creek (EBCR) | 6806, 0809, 0907 | UNINCORPORATED DUPAGE COUNTY, WOODRIDGE |
| East Branch DuPage River, Tributary #1 (EBE1) | 0208, 0307, 0503, 0601 | ADDISON, LOMBARD, UNINCORPORATED DUPAGE COUNTY |
| East Branch DuPage River, Tributary #2 (EBE2) | DZ08, DZ09, D502, D503 | GLEN ELLYN, GLENDALE HEIGHTS, UNINCORPORATED DUPAGE COUNTY |
| East Branch OuPage River Tributary #3 (EBE3) | 0606, 0604 | LOMBARD, UNINCORPORATED DUPAGE COUNTY |
| East Branch OuPage | Déb4, DBD6, DBD8 | LISLE, NAPERVILLE, UNINCORPORATED DUPAGE COUNTY, |

| River, Tributary #6 (EBE6) | | WOODRIDGE |
|--|---|--|
| East Branch DuPage River, Tributary #7 (EBE7) | 0800 USDS 0800 | NAPERVILLE, UNINCORPORATED DUPAGE COUNTY, WOODRIDGE |
| East Branch DuPage River, Main Stem (EBEB) | 0205, 0206, 0208, 0209, 0307, 0502, 0503, 0505, 0504, 0505, 0507, 0802, 0505, 0506, | ADDISON, BLOOMINGDALE, BOLINGBROCK, DOWNERS GROVE, GLEN ELLYN, GLENDALE, HEIGHTS, LISLE, LOMBARD, NAFERVILLE, UNINCORPORATED DUPAGE COUNTY, WHEATON, WOODRIDGE |
| East Branch DuPage River, Glen Crest Greek (EBGL) | CECIS, DISTIS, CISTOS, DISTOS | GLEN ELLYN, LOMBARD, UNINCORPORATED DUPAGE COUNTY, WHEATON |
| East Branch DuPage River, Glen Park (EBGP) | DE09. DE07 | DOWNERS GROVE LOMBARD, UNINCORPORATED DUPAGE COUNTY |
| East Branch DuPage River, Lacey Creek (EBLA) | 0509, 0607, 0609, 0903, 0901, 0902 | DOWNERS GROVE LOMBARD DAK BROOK, UNINCORPORATED DUPAGE COUNTY |
| East Branch DuPage River, Prentiss Creak (EBPR) | 0803, 0805, 0809, 0804, 0905, 0907, 0908 | DARIEN DOMNERS GROVE LISLE, LININCORPORATED DUPAGE COUNTY, WOODRIDGE |
| East Branch OuPage River, Rott Creek (EBRC) | D409, D507, D509, D709, D601, D802, D605 | LISLE, NAPERVILLE, UNINCORPORATED DUPAGE COUNTY WARRENVILLE, WHEATON |
| East Branch DuPage River, St. Josepha Greek (EBSJ) | DB05 DB02, DB03, DB05, DB01, DB02, GB04, DB05 | DARIEN DOWNERS GROVE, LISLE, UNINCORPORATED DUPAGE COUNTY, WESTMONT |
| East Branch DuPage River, Swift Meadows (EBSM) | t/206, t/206 | ADDISON, BLOOMINGOALE, UNINCORPORATED DUPAGE COUNTY |
| East Branch DuPage River, 22 Street (EBTS) | 0606, 0609, 0904, 0607 | DOWNERS GROVE, LOMBARD, UNINCORPORATED DUPAGE COUNTY |
| East Branch DuPage River, Willoway Brock (EBWI) | 0605, 0507, 0508, 0509, 0802 | GLEN ELLYN, LISLE, LININGCRPORATED DUPAGE COUNTY, WHEATON, |
| Fox River, Brewster Creek (FRBC) | 0101, 0102, 0104, 0105 | BARTLETT, UNINCORPORATED DUPAGE COUNTY, WAYNE |
| Fax River, Indian Greek (FRKC) | D404 D407 0701 D704 | |
| Fax River, Norton: Creek (FRNC) | 0101, 0104 0105, 0107, 0108 | BARTLETT, ST. CHARLES, UNINCORPORATED DURAGE COUNTY, WAYNE WEST CHICAGO |
| Fox River, Waubansee | 0702, 0704, 0706, 0707, 0708 | AURORA, NAPERVILLE, UNINCORPORATED DUPAGE COUNTY |

| Creek (FRWA) | 000000000000000000000000000000000000000 | The state of the s |
|--|---|--|
| Saf Creek, cronswood Creek (SCBW) | DEGR, UROS, UROS, DRUS | CLARENCON HILLS, DOWNERS GROVE, HINSDALE, CAR BRICOR, UNINCORPORATED DUPAGE COUNTY, WESTMONT |
| Sait Creek Devon Avenue Tributary (SCDA) | 0203, 0301, 0302 | ITASCA, UNINCORPORATED DUPAGE COUNTY |
| Saff Creek, Ginger Creek (\$CGC) | 0604, 0605, 0606, 0507, 0608, 0609 | DOWNERS GROVE, LOMBARD, OAK BROOK OAKBROOK TERRACE. UNINCORPORATED DUPAGE COUNTY, MESTMONT |
| Saft Creek, Oak Brook Tributary (SCOB) | 0605, 0606. | OAK BROOK, GAKBROOK TERRACE, UNINCORPORATED DUPAGE COUNTY |
| Sall Creek, Spring Brook Creek (SCSB) | 0202, 0203, 0205, 0206, 0301, 0302, 0304 | ADDISON, BLOOMINGDALE, ITASCA, ROSELLE, SCHAUMBURG, UNINCORPICRATED DUPAGE COUNTY, WOOD DALE |
| Self Creek Main Stem (SCSC) | 0501, 0302, 0304, 0305, 0307, 0308, 0308, 0601, 0602, 0603, 0606, 0609, 0609, 0903 | ADDISON, B.K. GROVE VILLAGE, ELMHURST, HINSDALE, ITASCA, LOMBARD, CAK BROOK, CAKBROCK TERRACE, LININCORPORATED DUPAGE COUNTY, VILLA PARK, WOOD DALE |
| Sall Creek, Sugar Creek (SCSU) | DE02, 0604, 0605, D676 | ELMHURST LOMBARD, OAKBROCK TERRACE, UNINCORPORATED DUPAGE COUNTY, VILLA PARK |
| Salf Creek, Westwood Creek (SOWC) | 0206, 0209, 0304, 0305, 0307, 0308, 0601 | ADDISON, LONBARD, UNINCORPORATED DUPAGE COUNTY, VILLA PARK, WOOD DALE |
| Sawmiff Creek Main Stem (SWSW) | 0905, 0905, 0908, 0908, 1001, 1002, 1005 | ARGONNE NATIONAL LAB BURR RIDGE DARIEN DOMNERS GROVE, LEMONT, UNINCORPORATED DUPAGE GOUNTY, WILLOWBROCK, WOODRIDGE. |
| Sawmill Croek, Wards Creek (SWWD) | 3807, 3938, 1931, 1902 | DARREN, DOWNERS GROVE, UNINCORPORATED DUPAGE COUNTY, WOODRIDGE |
| West Branch DuPage River, Cress Creek (WBCC) | 0703, 0708, 0801, 0804 | NAPERVILLE, UNINCORPORATED DUPAGE COUNTY, WARRENVILLE |
| West Branch DuPage River, Ferry Creek (WBFE) | 0404, 0405, 0407, 0406, 0409, 0701, 0702, 0703, 0704, 0706 | AURORA, FERMI NATIONAL ACCEL, LAB., NAPERVILLE. UNINCORPORATED DUPAGE COUNTY, WARRENVILLE. |
| West Branch DuPage River, South of Foxcroft (WBFX) | U709, 08077 | NAPERVILLE, UNINCORPORATED DUPAGE COUNTY |
| West Branch DuPage River, Klein Creek (WBKC) | 0502, 0204, 0205, 0207, 0208, 0403, 0501, 0502 | BLOOMINGDALE, CAROL STREAM, GLENDALE HEIGHTS, HANDVER PARK, UNINCORPORATED DUPAGE COUNTY, WHEATON, WINFIELD |
| West Branch DuPage River Kress Cheek (WBKR) | 0107, 0108, 0401, 0402, 0404, 0405 | BATAVIA, FERMI NATIONAL ACCEL, LAB., ST, CHARLES, UNINCORPORATED DUPAGE COUNTY, WEST CHICAGO |
| West Branch DuPage River, Spring Brook#1 (WBSP) | 0408, 0408, 0409, 0502, 0504, 0505, 0507, 0508 | GLEN ELLYN, UNINCORPORATED DUPAGE COUNTY, WARRENVILLE WHEATON |
| West Branch DuPage River, Steedie Run | 0801, 0902, 0904, 0905 | LISTE, MAPERVILLE, UNINCORPICRATED DUPAGE COUNTY, |

| (WBSR) | | |
|---|---|---|
| West Branch DuPage River, Tributary #1 (WBW1) | 0103, 0106, 0201, 0202, 0204, 0208. | BLOOMINGOALE, HANCVER PARK, ROSELLE, UNWCORPORATED DUPAGE COUNTY |
| West Branch DuPage River, Tributary #2 (WBW2) | 0102, 0103 | BARTLETT, HANDVER PARK, UNINCORPORATED CUPAGE COUNTY |
| West Branch DuPage River, Tributary #3 (WBW3) | 0108, 0109, 0402, 0403 | UNINCORPORATED DUPAGE GOUNTY, WEST CHICAGO |
| West Branch DuPage River, Tributary #4 (WSW/4) | 0106, 0108, 0204, 0207 | BLOOMINGDALE, CAROL STREAM, HANOVER PARK, UNINCORPORATED CUPAGE COUNTY, WEST CHICAGO |
| West Branch DuPage River, Tributary #5 (WBM5) | 0402, 0403, 0406 | UNINODEPORATED DUPAGE COUNTY, WEST CHICAGO, WINFIELD |
| West Branch DuPage River, Tributary #6 (WBW6) | 0604, 0605, 0607 | LISEE, NAPERVILLE, UNINOGRPORATED DUPAGE COUNTY |
| West Branch DuPage River, Tributary #7 (WBW7) | 0604, 0805, 0807, 0808 | LISILE, NAPERVILLE, UNINCORPORATED DUPAGE COUNTY |
| West Branch DuPage River, Tributary #8 (MSW8) | 0705, 0807 | NAPERVILLE, UNINCORPORATED DUPAGE COUNTY |
| West Branch DuPage River Main Stem (WEWB) | 0102, 0103, 0105, 0106, 0108, 0109, 0201, 0202, 0204, 0402, 0403, 0405, 0406, 0408, 0409, 0501, 0507, 0702, 0703, 0705, 0706, 0709, 0601, 0804, 0807, 0808 | AURORA, BARTLETT, BLOOMINGDALE, CARCI, STREAM, FERMI NATIONAL ACCEL LAB, HANOVER PARK, NAPERVILLE, ROSELLE SCHALMBLIRG, UNINCORPORATED DUPAGE COUNTY, WARRENVILLE, WAYNE, WEST CHICAGO, WINFIELD. |
| West Branch DuPage River, Winfletd Creek (WBWF) | 0207, 0208, 0403, 0406, 0501, 0502, 0504 0505 | CAROL STREAM, GLEN ELLYN, GLENDALE HEIGHTS, UNINCORPORATED DUPAGE COUNTY, WHEATON, WINFIELD |
| West Branch DuPage River, Winding Creek (MRWG) | 0709, 0607 | NAPERVILLE, UNINCORPORATED DUPAGE COUNTY |

FIRM/RFM Cross Index: Panel Numbers vs. (Tributary Watershads, Incorporated Areas)

| Panel | Tributary Watershed | Incorporated Areas / Unincorporated Areas |
|-------|------------------------------|---|
| 0101 | FRBC, FRNC | BARTLETT, UNINCORPORATED DUPAGE COUNTY, WAYNE |
| 0102 | FRBC, WBW2, WBWB | BARTLETT, UNINCORPORATED DUPAGE COUNTY |
| 0103 | WBW1, WBW2, WBWB | BARTLETT, HANOVER PARK, UNINCORPORATED DUPAGE COUNTY |
| 0104 | FRBC, FRNC | BARTLETT, ST, CHARLES, UNINCORPORATED DUPAGE COUNTY, WAYNE, WEST CHICAGO |
| 0105 | FRBC, FRNC, WBWB | BARTLETT, UNINCORPORATED DUPAGE COUNTY, WAYNE |
| 0106 | WBW1, WBW4, WBWB | BARTLETT, CAROL STREAM, HANOVER PARK, UNINCORPORATED DUPAGE COUNTY |
| 0107 | FRNC, WBKR | ST, CHARLES, UNINCORPORATED DUPAGE COUNTY, WEST CHICAGO |
| 0108 | FRNC, WBKR, WBW3, WBWB | UNINCORPORATED DUPAGE COUNTY, WEST CHICAGO |
| 0109 | WBKC, WBW3, WBW4, WBWB | CAROL STREAM, UNINCORPORATED DUPAGE COUNTY, WEST CHICAGO |
| 0201 | WBW1, WBWB | BLOOMINGDALE, HANOVER PARK, ROSELLE, UNINCORPORATED DUPAGE COUNTY |
| 0202 | SCSB, WBW1, WBWB | BLOOMINGDALE, ROSELLE, SCHAUMBURG, UNINCORPORATED DUPAGE COUNTY |
| 0203 | SCDA, SCSB | BLOOMINGDALE, ITASCA, ROSELLE, UNINCORPORATED DUPAGE COUNTY |
| 0204 | WBKC, WBW1, WBW4, WBWB | BLOOMINGDALE, CAROL STREAM, HANOVER PARK, UNINCORPORATED DUPAGE COUNTY |
| 0205 | EBEB, SCSB, WBKC, WBW1 | BLOOMINGDALE, GLENDALE HEIGHTS, ROSELLE, UNINCORPORATED DUPAGE COUNTY |
| 0206 | EBAT, EBEB, EBSM, SCSB, SCWC | ADDISON, BLOOMINGDALE, GLENDALE HEIGHTS, ITASCA, UNINCORPORATED DUPAGE COUNTY |
| 0207 | WBKC, WBW4, WBWF | CAROL STREAM, UNINCORPORATED DUPAGE COUNTY, WINFIELD |
| 0208 | EBAR, EBE2, EBEB, WBKC, WBWF | BLOOMINGDALE, CAROL STREAM, GLENDALE HEIGHTS, UNINCORPORATED DUPAGE COUNTY |
| 0208 | EBSM, SCWC EBSM, SCWC | ADDISON, BLOOMINGDALE, GLENDALE HEIGHTS, LOMBARD, UNINCORPORATED DUPAGE COUNTY |
| 0301 | SCDA, SCSB, SCSC | ITASCA, UNINCORPORATED DUPAGE COUNTY, WOOD DALE |
| 0302 | DPBD, DPWL, SCDA, SCSB, SCSC | BENSENVILLE, ELK GROVE VILLAGE, ITASCA, UNINCORPORATED DUPAGE COUNTY, WOOD DALE |
| 0303 | DPBD, DPCT, DPWL | BENSENVILLE, CHICAGO, ELK GROVE VILLAGE |
| 0304 | SCSB, SCSC, SCWC | ADDISON, ITASCA, UNINCORPORATED DUPAGE COUNTY, WOOD DALE |

| 0302 | DPAC, DPBD, DPWL, SCSC, SCWC | ADDISON, BENSENVILLE, UNINCORPORATED DUPAGE COUNTY, WOOD DALE |
|------|---------------------------------|---|
| 9060 | DPAC, DPBD, DPWL | BENSENVILLE, CHICAGO, UNINCORPORATED DUPAGE COUNTY |
| 0307 | EBE1, EBEB, SCSC, SCWC | ADDISON, LOMBARD, UNINCORPORATED DUPAGE COUNTY, VILLA PARK |
| 0308 | DPAC, SCSC, SCWC | ADDISON, ELMHURST, UNINCORPORATED DUPAGE COUNTY, VILLA PARK |
| 9309 | DPAC, SCSC | BENSENVILLE, ELMHURST, UNINCORPORATED DUPAGE COUNTY |
| 0401 | WBKR | UNINCORPORATED DUPAGE COUNTY, WEST CHICAGO |
| 0402 | WBKR, WBW3, WBW5, WBWB | UNINCORPORATED DUPAGE COUNTY, WEST CHICAGO |
| 9403 | 7.9 | UNINCORPORATED DUPAGE COUNTY, WEST CHICAGO, WINFIELD |
| 0404 | FRIC, WBFE, WBKR | BATAVIA, FERMI NATIONAL ACCEL. LAB., WEST CHICAGO |
| 0405 | WBFE, WBA | FERMI NATIONAL ACCEL, LAB., UNINCORPORATED DUPAGE COUNTY, WARRENVILLE, WEST CHICAGO |
| 9040 | WBSP, WBW5, WBWB, WBWF | UNINCORPORATED DUPAGE COUNTY, WHEATON, WINFIELD |
| 0407 | FRIC, WBFE | AURORA, FERMI NATIONAL ACCEL. LAB., UNINCORPORATED DUPAGE COUNTY |
| 0408 | WBFE, WBSP, WBWB | AURORA, FERMI NATIONAL ACCEL, LAB., NAPERVILLE, UNINCORPORATED DUPAGE COUNTY, WARRENVILLE |
| 0409 | EBRC, WBFE, WBSP, WBWB | NAPERVILLE, UNINCORPORATED DUPAGE COUNTY, WARRENVILLE, WHEATON |
| 1090 | WBKC, WBWB, WBWF | CAROL STREAM, UNINCORPORATED DUPAGE COUNTY, WHEATON, WINFIELD |
| 0502 | EBE2, EBEB, WBKC, WBSP, WBWF | CAROL STREAM, GLEN ELLYN, GLENDALE HEIGHTS, UNINCORPORATED DUPAGE COUNTY, WHEATON |
| 0503 | EBE1, EBE2, EBE8 | GLEN ELLYN, GLENDALE HEIGHTS, LOMBARD, UNINCORPORATED DUPAGE COUNTY |
| 0504 | WBSP, WBWF | UNINCORPORATED DUPAGE COUNTY, WHEATON, WINFIELD |
| 9090 | | GLEN ELLYN, UNINCORPORATED DUPAGE COUNTY, WHEATON |
| 9090 | | GLEN ELLYN, LOMBARD, UNINCORPORATED DUPAGE COUNTY |
| 0507 | EBRC, EBWI, WBSP, WBWB | LISLE, NAPERVILLE, UNINCORPORATED DUPAGE COUNTY, WHEATON |
| 0508 | | GLEN ELLYN, LISLE, UNINCORPORATED DUPAGE COUNTY, WHEATON |
| 8090 | EBEB, EBGL, EBGP, EBLA, EBTS, | DOWNERS GROVE, GLEN ELLYN, UNINCORPORATED DUPAGE COUNTY |

| 0601 | FRE1 FREB SCSC SCWC | LOMBARD UNINCORPORATED DUPAGE COUNTY VILLA PARK |
|-------|--|---|
| 0602 | scs | ELMHURST, LOMBARD, UNINCORPORATED DUPAGE COUNTY, VILLA PARK |
| 0603 | DPAC, SCSC | ELMHURST, VILLA PARK |
| 0604 | EBE3, EBEB, EBTS, SCGC, SCSU | GLEN ELLYN, LOMBARD, UNINCORPORATED DUPAGE COUNTY |
| 9090 | EBEB, SCGC, SCOB, SCSC, SCSU | ELMHURST, LOMBARD, OAK BROOK, OAKBROOK TERRACE, UNINCORPORATED DUPAGE COUNTY, VILLA PARK |
| 9090 | DPAC, SCGC, SCOB, SCSC, SCSU | ELMHURST, OAK BROOK, OAKBROOK TERRACE, UNINCORPORATED DUPAGE COUNTY, VILLA PARK |
| 1090 | EBEB, EBGP, EBLA, EBTS, SCGC | DOWNERS GROVE, LOMBARD, OAK BROOK, UNINCORPORATED DUPAGE COUNTY |
| 8090 | EBLA, EBSJ, SCBW, SCGC | DOWNERS GROVE, LOMBARD, OAK BROOK, OAKBROOK TERRACE, UNINCORPORATED DUPAGE COUNTY, WESTMONT |
| 6090 | DPFC, SCBW, SCGC, SCSC | HINSDALE, OAK BROOK, DAKBROOK TERRACE, WESTMONT |
| 0701 | FRIC, WBFE | AURORA, NAPERVILLE, UNINCORPORATED DUPAGE COUNTY |
| 0702 | FRWA, WBFE, WBWB | AURORA, NAPERVILLE, UNINCORPORATED DUPAGE COUNTY, WARRENVILLE |
| 0703 | EBRC, WBCC, WBFE, WBWB | NAPERVILLE, UNINCORPORATED DUPAGE COUNTY, WARRENVILLE |
| 0704 | FRIC, FRWA, WBFE | AURORA, NAPERVILLE, UNINCORPORATED DUPAGE COUNTY |
| | DUSG, FRWA, WBFE, WBWB | AURORA, NAPERVILLE, UNINCORPORATED DUPAGE COUNTY |
| | DUSG, WBCC, WBWB | NAPERVILLE, UNINCORPORATED DUPAGE COUNTY |
| | DUSG, FRWA | AURORA, UNINCORPORATED DUPAGE COUNTY |
| 8070 | DUSG, FRWA | AURORA, NAPERVILLE, UNINCORPORATED DUPAGE COUNTY |
| 1.19% | DUSG, WBFX, WBW8, WBWB, WBWG | NAPERVILLE, UNINCORPORATED DUPAGE COUNTY |
| 0801 | EBRC, WBCC, WBSR, WBWB | LISLE, NAPERVILLE, UNINCORPORATED DUPAGE COUNTY |
| 0802 | EBEB, EBRC, EBSJ, EBWI, WBSR | LISLE, UNINCORPORATED DUPAGE COUNTY |
| 0803 | EBEB, EBLA, EBPR, EBSJ | DOWNERS GROVE, LISLE, UNINCORPORATED DUPAGE COUNTY |
| 0804 | EBEE, WBCC, WBSR, WBWE, WBW7, WBWB | LISLE, NAPERVILLE, UNINCORPORATED DUPAGE COUNTY |
| 0802 | EBEB, EBE7, EBEB, EBPR, EBRC, WBSR, WBW7 | LISLE, NAPERVILLE, UNINCORPORATED DUPAGE COUNTY, WOODRIDGE |
| 9090 | EBCR, EBEB, EBPR, EBSJ | DOWNERS GROVE, LISLE, UNINCORPORATED DUPAGE COUNTY, WOODRIDGE |
| 2080 | DUSG, WBFX, WBW6, WBW7, WBW8, WBW8, WBWB, WBW6 | NAPERVILLE, UNINCORPORATED DUPAGE COUNTY |

| PAGE COUNTY, WOODRIDGE | DUPAGE COUNTY, WOODRIDGE | ED DUPAGE COUNTY | VE, UNINCORPORATED DUPAGE | BROOK, UNINCORPORATED | RPORATED DUPAGE COUNTY, | RS GROVE, UNINCORPORATED OWBROOK | RIEN, HINSDALE, | RPORATED DUPAGE COUNTY, | RPORATED DUPAGE COUNTY, | ATED DUPAGE COUNTY, | ROOK, DARIEN, LEMONT, | NINCORPORATED DUPAGE | RATED DUPAGE COUNTY | EMONT, UNINCORPORATED | UNINCORPORATED DUPAGE | |
|---|--|---|--|--|---|---|--|--|---|---|--|--|--|---|--|--|
| NAPERVILLE, UNINCORPORATED DUPAGE COUNTY, WOODRIDGE | BOLINGBROOK, UNINCORPORATED DUPAGE COUNTY, WOODRIDGE | DOWNERS GROVE, UNINCORPORATED DUPAGE COUNTY | CLARENDON HILLS, DOWNERS GROVE, UNINCORPORATED DUPAGE COUNTY, WESTMONT | CLARENDON HILLS, HINSDALE, OAK BROOK, UNINCORPORATED DUPAGE COUNTY, WESTMONT | DARIEN, DOWNERS GROVE, UNINCORPORATED DUPAGE COUNTY, WESTMONT | CLARENDON HILLS, DARIEN, DOWNERS GROVE, UNINCORPORATED DUPAGE COUNTY, WESTMONT, WILLOWBROOK | BURR RIDGE, CLARENDON HILLS, DARIEN, HINSDALE, UNINCORPORATED DUPAGE COUNTY, WILLOWBROOK | DARIEN, DOWNERS GROVE, UNINCORPORATED DUPAGE COUNTY, WOODRIDGE | DARIEN, DOWNERS GROVE, UNINCORPORATED DUPAGE COUNTY WILLOWBROOK | BURR RIDGE, DARIEN, UNINCORPORATED DUPAGE COUNTY, WILLOWBROOK | ARGONNE NATIONAL LAB, BOLINGBROOK, DARIEN, LEMONT, UNINCORPORATED DUPAGE COUNTY, WOODRIDGE | ARGONNE NATIONAL LAB, DARIEN, UNINCORPORATED DUPAGE COUNTY | BURR RIDGE, LEMONT, UNINCORPORATED DUPAGE COUNTY | ARGONNE NATIONAL LAB, DARIEN, LEMONT, UNINCORPORATED DUPAGE COUNTY, WOODRIDGE | ARGONNE NATIONAL LAB, LEMONT, UNINCORPORATED DUPAGE COUNTY | Control of the Contro |
| EBEG EBE7, EBEB, WBW7, WBWB | EBC | EBLA, EBSJ | DPFC, EBLA, EBSJ, SCBW | DPFC, SCBW, SCSC | EBPR, EBSJ | DPFC, EBPR, EBSJ, SWSW | DPFC, SWSW | DPLL, EBCR, EBPR, SWWD | DPDP, E8PR, SWSW, SWWD | DPDP, DPFC, SWSW | DPBP, DPDP, DPLL, SWSW, SWWD | DPDP, SWSW, SWWD | DPDP, DPFC | DPBP, DPDP | DPDP, SWSW | |
| 8080 | 6080 | 1080 | 2060 | 0803 | 0804 | 9060 | 9060 | 2060 | 8060 | 6060 | 1001 | 1002 | 1003 | 1004 | 1005 | The second second |

Page 137 of 142

FIRMUREM Cross Index: Incorporated Areas vs. (Panel Numbers, Tributary Watershields)

| Area | DFIRM'RFM Panel | Tributary Watershed |
|-------------------------------|---|---|
| ADDISON | 0206, 0209, 0304, 0305, 0307, 0308 | DPAC, EBAT, EBE1, EBEB, EBSM, SCSB, SCSC, SCWC |
| ARGONNE NATIONAL LAB | 0809, 1002, 1004, 1005 | DPDP, SWSW |
| AURORA | 0407, 0408, 0701, 0702, 0704, 0705, 0707, 0708 | DUSG, FRIC, FRWA, WBFE, WBWB |
| BARTLETT | 0101, 0102, 0103, 0104, 0105, 0108 | FRBC, FRNC, WBW2, WBWB |
| BATAVIA | 0404 | WBKR |
| BENSENVILLE | 0302, 0303, 0305, 0306, 0309 | DPAC, DPBD, DPWI, |
| BLOOMINGDALE | 0201, 0202, 0203, 0204, 0205, 0206, 0207, 0208, 0209 | EBAT, EBEB, EBSM, SCSB, WBKC, WBW1, WBW4, WBWB |
| BOLINGBROOK | 6080 | DPLL,EBEB |
| BURR RIDGE | 0906, 0909, 1003 | DPDP, DPFC, SWSW |
| CAROL STREAM | 0106, 0109, 0204, 0205, 0207, 0208, 0501, 0502 | EBAR, WBKC, WBW4, WBWB, WBWF |
| CHICAGO | 0303, 0306 | DPBD, DPCT, DPVM. |
| CLARENDON HILLS | 0902, 0903, 0905, 0906 | DPFC, SCBW |
| DARIEN | 0809, 0904, 0905, 0906, 0907, 0908, 0909, 1002, 1003, 1004 | DPBP, DPDP, DPFC, DPLL, EBPR, EBSJ, SWSW, SWWD |
| DOWNERS GROVE | 3607, | SCBW, SCGC, SWSW, SWWD |
| ELK GROVE VILLAGE | 0302, 0303 | DPWL, SCSC |
| ELMHURST | 0308, 0309, 0602, 0603, 0605, 0606 | DPAC, SCSC, SCSU |
| FERMI NATIONAL ACCEL, LAB. | 0401, 0402, 0404, 0405, 0407, 0408 | FRIC, WBFE, WBKR, WBWB |
| GLEN ELLYN | 0502, 0503, 0505, 0508, 0508, 0509, 0604 | EBE2, EBEB, EBGL, EBWI, WBSP, WBWF |
| GLENDALE HEIGHTS | 0205, 0206, 0208, 0209, 0502, 0503 | EBAR, EBAT, EBE2, EBEB, WBKC, WBWF |
| HANOVER PARK | 0103, 0106, 0201, 0204 | WBKC, WBW1, WBW2, WBW4, WBWB |
| HINSDALE | 0609, 0903, 0906 | DPFC, SCBW, SCSC |
| ITASCA | 0203, 0206, 0301, 0302, 0304 | SCDA, SCSB, SCSC |
| LEMONT | 0809, 1003, 1004, 1005, 1006 | DPBP, DPDP, SWSW |

| LISLE | 0507, 0508, 0801, 0802, 0803, 0804, 0805, 0806 | WBSR, WBW6, WBW7 |
|--|---|--|
| LOMBARD | 0209, 0307, 0503, 0506, 0509, 0601, 0602, 0604, 0605, 0607, 0608 | EBE1, EBE3, EBEB, EBGL, EBGP, EBLA, EBTS, SCGC, SCSC, SCSU, SCWC |
| NAPERVILLE | 0409, 0706, 0808 | MBCC, WBFE, WBFX, WBSR, WBW6, WBW7, WBW8, WBW8, WBW6, WBW6 |
| OAK BROOK | 0605, 0606, 0607, 0608, 0609, 0903 | EBLA, SCBW, SCGC, SCOB, SCSC |
| DAKBROOK | 0605, 0606, 0608, 0609 | SCGC, SCOB, SCSC, SCSU |
| ROSELLE | 0201, 0202, 0203, 0205 | SCSB, WBW1, WBWB |
| SCHAUMBURG | 0202 | SCSB,WBWB |
| ST, CHARLES | 0104, 0107 | FRNC, WBKR |
| UNINCORPORATED DUPAGE COUNTY WARRENVILLE WAYNE WEST CHICAGO WESTMONT WHEATON | 0101, 0102, 0103, 0104, 0105, 0106, 0107, 0108, 0109, 0201, 0202, 0203, 0204, 0205, 0206, 0207, 0208, 0203, 0204, 0205, 0206, 0207, 0208, 0209, 0301, 0302, 0304, 0305, 0306, 0307, 0308, 0309, 0401, 0402, 0403, 0405, 0405, 0406, 0407, 0408, 0409, 0501, 0502, 0504, 0505, 0506, 0507, 0508, 0707, 0708, 0709, 0704, 0705, 0706, 0707, 0708, 0709, 0704, 0705, 0706, 0707, 0708, 0709, 0801, 0802, 0803, 0804, 0805, 0806, 0807, 0808, 0903, 1002, 1003, 1004, 1005, 1006, 0807, 0808, 0909, 1002, 1003, 1004, 1005, 1006, 0405, 0408, 0409, 0702, 0703, 0405, 0405, 0405, 0405, 0405, 0405, 0507, 0508, 0409, 0501, 0502, 0504, 0505, 0507, 0406, 0409, 0501, 0502, 0504, 0505, 0507, 0406, 0409, 0501, 0502, 0504, 0505, 0507, 0406, 0409, 0501, 0502, 0504, 0505, 0507, 0406, 0409, 0501, 0502, 0504, 0505, 0507, 0406, 0409, 0501, 0502, 0504, 0505, 0507, 0508, 0409, 0501, 0502, 0504, 0505, 0507, 0508, 0409, 0501, 0502, 0504, 0505, 0507, 0508, 0409, 0501, 0502, 0504, 0505, 0507, 0508, 0409, 0501, 0502, 0504, 0505, 0507, 0508, 0409, 0501, 0502, 0504, 0505, 0507, 0508, 0409, 0501, 0502, 0504, 0505, 0507, 0508, 0501, 0502, 0504, 0505, 0507, 0508, 0501, 0502, 0504, 0505, 0507, 0508, 0501, 0502, 0504, 0505, 0507, 0508, 0501, 0502, 0504, 0505, 0507, 0508, 0501, 0502, 0504, 0505, 0507, 0508, 0501, 0502, 0504, 0505, 0507, 0508, 0502, 0504, 0505, 0507, 0508, 0504, 0505, 0507, 0508, 0504, 0505, 0507, 0508, 0502, 0504, 0505, 0507, 0508, 0502, 0504, 0505, 0507, 0508, 0504, 0505, 0507, 0508, 0504, 0505, 0507, 0508, 0504, 0505, 0507, 0508, 0504, 0505, 0507, 0508, 0504, 0505, 0507, 0508, 0504, 0505, 0507, 0508, 0507, 0508, 0504, 0505, 0507, 0508, 0504, 0505, 0507, 0508, 0504, 0505, 0507, 0508, 0504, 0505, 0507, 0508, 0504, 0505, 0507, 0508, 0504, 0505, 0507, 0508, 0504, 0505, 0507, 0508, 0504, 0505, 0507, 0508, 0504, 0505, 0507, 0508, 0504, 0505, 0507, 0508, 0504, 0505, 0507, 0508, 0504, 0505, 0507, 0508, 0504, 0505, 0507, 0508, 0504, 0505, 0502, 0504, 0505, 0507, 0508, 0504, 0505, 0504, 0505, 0504, 0505, 0504, 0505, 0507, 0508, 0504, 0505, 0504, 0505, 0502, | DPAC, DPBD, DPBP, DPDP, DPFC, DPLL, DPWL, DUSG, EBAR, EBAT, EBCR, EBET, EBEZ, EBES, EBEG, EBET, EBSM, EBTS, EBWI FRBC, FRIC, FRNC, ERWA, SCBW, SCDA, SCGC, SCOB, SCSB, SCSC, SCSU, SCWC, SWSW, SWWD, WBCC, WBFE, WBFX, WBWC, WBWA, WBWS, WBWB, WBWT, WBWZ, WBWB, WBWF, WBSP, WBSR, WBWT, WBWB, WBWB, FRBC, FRNC, WBFE, WBSP, WBWB FRBC, FRNC, WBFE, WBSP, WBWB FRNC, WBCC, WBFE, WBSP, WBWB FRBC, FRNC, WBWS, WBWA, WBWS, WBWB FRNC, WBCC, WBFE, WBSP, WBWB FRNC, WBCC, WBFE, WBSP, WBWB FRNC, WBCC, WBFE, WBSP, WBWS, WBWB FRNC, WBCC, EBSJ, SCBW, SCGC EBEB, EBCL, EBRC, EBWI, WBKC, WBSP, |
| MALLOWNEDOOK | NOOR DOOK DOOR DOOG | ODEC SMOOK |
| WILLOWBROOM | 0207, 0403, 0406, 0504, 0504 | WEKE WEWS WRWE WEWE |

| D DAL | 0301 | 3301, 0302, | 0304 | 0305, | 9080 | 100000 | Contract of | DPAC. | DPBD. | DPWL, | SCSB | SCSC, S | SCW | 0 |
|-----------|-------|-------------|------------------------|-------|------|--------|-------------|-----------------------|-------|---------|------|------------|------|-------|
| WOODRIDGE | 0805. | 805, 0806, | 0808, 0809, 0904, 0907 | 0808 | 0904 | | 1004 | DPBP, DPC EBPR, SW | SS | DPLL, E | BCR, | EBE6, EBE7 | Par. | EBEB. |

Page 140 of 142

Exhibit 2 List of Designated Floodway/Flood plain Maps

LEGEND:

Illinois Department of Transportation Division of Water Resources Regulatory Flood Plain Lower Salt Creek Maps REG .

FBPW - Federal Emergency Mattagement Agency flood Boundary and Floodway Maps

REM - Regulatory Floodplain Map muintained by DuPage County Stormwater Management

FIRM - Federal Emergency Management Agency Flood Insurance Rate Maps

FIS - Flood Insurance Studies

C-PN - Community-Panel Number

E.D. - Effective Date

See LOMIR or LOMA

** Note**

1.) LOMA's and LOMR's are available at the County, Stormwater Management

LOMA's and LOMR's may have been obtained which will effect flood elevations and limits, and/or floodway locations. The communities will have records of these changes. 23 local

SCHEDULE A STORMWATER REVIEW PERMIT FEES

Application Fee -- \$200

In addition to the application fee, the following fees will apply as appropriate: (permit fees are non-refundable once review has begun)

| REVIEW CATEGORY | FEE | REVIEW CATEGORY | FEE |
|--|--|---|---|
| Stormwater Submittals (butside Special Management Areas) | | Wetland Submittal (special management area) | |
| S.F. Home on a single parcel and/or >5000 sq. ft. disturbed | \$50 | Wetland Review (includes the review of the dekneation, status determination, and development impact to the wetland) | |
| Small Site - no detention required (*1 ecrenon-residential, ur 43 ecre resid.) | 5890 | Developments × 1 scre Developments 1-10 scres Developments 10-50 scres | \$460 \$710 \$960 |
| Small Site - detention required (1-5 acre non-residential subdivision or PUQ, or 3-10 acre residental subdivision) | \$2,215 | Developments > 50 acres Wetland Mitigation Plans (on site or off site) | \$1,200 |
| Large Site – detention required (>5 sore non-residential subdivision or PUD, and >10 scre residential subdivision) | \$3,545 (plus \$30/ac over Investodis) | Mitigated weblands < 0.5 acre ve-inspection like Mitigated weblands 0.5 - 2.0 acres //e-aspection like | 51,160 5200 51,260 \$400 |
| Roads (per linear mile) | \$105 + \$500/mile (1 mile minimum) | Mitigated wetlands 2 - 5 acres re-inspector fee Mitigated wetlands > 5 acres | \$1,360 \$600 \$1,460 |
| Flood Plain Submittals (Special Management Area) | (rest framework | re-inspection fee Wetland banking option | \$800 |
| Non-insurable accessory structure or small accessory structure - S.F. Home | 80 | "based on the area to be benied and the acre- bank. Riparian Submittal (special management area) | 9360 |
| S.F. Home, flood plain | \$490 | Other Administrative Fees | |
| Small site, flood plain (development w/o detention in regulatory flood plain, outside the reg. floodway – (i.e. comp. Storage) | \$1,200 | Pre-application meetings: Initial meeting: Each additional meeting - vanes depending on requested staff members (assume 1 hr., 2 staff members) | \$0 \$100 |
| Detention site, floodplain (development with detender in the regulatory flood plath outside the regulatory floodway) | 51,340 | Permit Review Submittels First rejection Second rejection Third or more rejections | 10% of permit fee 20% of permit fee 60% of permit fee |
| Development in the regulatory floodway | | Permit Violations/enforcement | 2 times narmal |
| Chernel modifications, pridges, dams, on-line desertion, filing, and any development which affects flood elevations or floodway limits of requires FEO analysis | se,380 | (after the fact permits, not hait according to approved plans, atc.—Any required wetland demeation will be accomplished by a County approved consultant at the cost of the applicant). | permit fee |
| Utility crossing at estating grade (sediment & eroeion plan only), and other minor developments which do not require a FEQ. | \$365 | Flood plain & wetland map requests | \$65 |
| | | Variance | \$1,360 |
| Streambank stabilization meeting the County's streamline procedure | 5120 | misc staff time | \$50Atr |
| | | Appaiats Refundable if upheld | \$1.360 |

SCHEDULE B DETENTION VARIANCE FEE AND BMP FEE-IN-LIEU SCHEDULE 8/1/08

Detention Variance Fee

| \$133,000 per acre-foot |
|-------------------------|
| \$106,000 per acre-foot |
| \$ 94,000 per acre-foot |
| \$ 87,000 per acre-foot |
| \$133,000 per acre-foot |
| \$ 81,000 per acre-foot |
| |

The fee is calculated by multiplying the varied storage amount by the cost per acre-foot for the watershed planning area where the development is located.

BMP Fee-in-lieu

| Single or two family residential land uses Religious institutions defined under Sec. 15-40 of the Illinois | \$ 3,000 per acre |
|--|-------------------|
| Property Tax Code and governmental entities, not to include | |
| roadways and parking lots | \$ 3,000 per acre |
| Multiple family or non-residential land uses | \$15,000 per acre |
| Roadway developments | \$30,000 per acre |