



## **Watershed Management Ordinance**

# **REDLINE DRAFT AMENDMENT**

*For Public Comment*

*January 7, 2019*

*to*

*February 7, 2019*

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## **Watershed Management Ordinance**

Effective  
May 1, 2014

As amended

Xxxxx XX, 2019

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**METROPOLITAN WATER RECLAMATION DISTRICT  
OF GREATER CHICAGO**  
100 EAST ERIE STREET  
CHICAGO, ILLINOIS 60611  
(312) 751-5600

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**AN ORDINANCE**

**AN ORDINANCE HEREINAFTER KNOWN AS THE “WATERSHED MANAGEMENT ORDINANCE,” ADOPTED  
BY THE BOARD OF COMMISSIONERS, METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER  
CHICAGO, ON OCTOBER 3, 2013 AND AS AMENDED TO, AND INCLUDING, APRIL 17, 2014, MAY 1, 2014,  
JULY 10, 2014, ~~AND~~ FEBRUARY 15, 2018, AND XXXXX XX, 2019**

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## Table of Contents

<b>ARTICLE 1. AUTHORITY AND PURPOSE.....</b>	<b>1-1</b>
§ 100. Statutory Authority .....	1-1
§ 101. Cook County Stormwater Management Plan .....	1-1
§ 102. Considerations.....	1-1
§ 103. Purposes of this Ordinance .....	1-2
§ 104. Relationship to the Sewer Permit Ordinance and Manual of Procedures .....	1-4
<b>ARTICLE 2. APPLICABILITY AND GENERAL PROVISIONS .....</b>	<b>2-1</b>
§ 200. Scope of Regulation .....	2-1
§ 201. Applicability.....	2-2
§ 202. Interpretation.....	2-5
§ 203. Disclaimer of Liability .....	2-5
§ 204. Severability.....	2-5
§ 205. Right of Access .....	2-6
§ 206. National Flood Insurance Program Eligibility .....	2-6
§ 207. Multi-County Municipalities.....	2-6
§ 208. Amendments.....	2-7
§ 209. Effective Date .....	2-7
<b>ARTICLE 3. WATERSHED MANAGEMENT PERMIT REQUIREMENTS AND SUBMITTALS .....</b>	<b>3-1</b>
§ 300. General Requirements and Limitation .....	3-1
§ 301. Permit Fees.....	3-2
§ 302. Watershed Management Permit Application Submittal.....	3-3
§ 303. Plan Set and Exhibits Submittal.....	3-7
§ 304. Terms of Permit/Denial - Appeal .....	3-10
§ 305. Construction Timeline Requirements and Approval of Plan Revisions.....	3-10
§ 306. Record Drawings .....	3-11
§ 307. Recordation and Obligations of a Watershed Management Permit .....	3-11
<b>ARTICLE 4. REQUIREMENTS FOR EROSION AND SEDIMENT CONTROL .....</b>	<b>4-1</b>
§ 400. Erosion and Sediment Control General Requirements .....	4-1
§ 401. Temporary Erosion Control Requirements .....	4-1

§ 402. Temporary Sediment Control Requirements .....	4-2
§ 403. Permanent Erosion Control Requirements .....	4-4
<b>ARTICLE 5. REQUIREMENTS FOR STORMWATER MANAGEMENT .....</b>	<b>5-1</b>
§ 500. General Site Development and Stormwater Management Information .....	5-1
§ 501. General Site Development and Stormwater Management Requirements.....	5-1
§ 502. Runoff Requirements .....	5-2
§ 503. Volume Control Requirements.....	5-5
§ 504. Detention Requirements.....	5-9
§ 505. Development and Redevelopment Tributary to Existing Detention Facilities.....	5-15
<b>ARTICLE 6. REQUIREMENTS FOR FLOOD PROTECTION AREAS .....</b>	<b>6-1</b>
§ 600. Flood Protection Areas.....	6-1
§ 601. Requirements for Floodplain, Floodway, and Flood Protection Elevation Determination.....	6-1
§ 602. Requirements for Development within the Floodplain .....	6-3
§ 603. Requirements for Wetland Boundary, Quality, and Buffer Width Determination .....	6-7
§ 604. Requirements for Development Affecting the Function of Wetlands and Wetland Buffers.....	6-10
§ 605. Wetland Banking .....	6-14
§ 606. Riparian Environments Requirements .....	6-15
§ 607. Requirements for Development Affecting the Function of Riparian Environments.....	6-16
<b>ARTICLE 7. REQUIREMENTS FOR SEWER CONSTRUCTION .....</b>	<b>7-1</b>
§ 700. General Sewer Construction Requirements.....	7-1
§ 701. Qualified Sewer Construction .....	7-2
§ 702. Qualified Sewer Construction Requirements.....	7-3
<b>ARTICLE 8. INFILTRATION / INFLOW CONTROL PROGRAM .....</b>	<b>8-1</b>
§ 800. Introduction .....	8-1
§ 801. Scope and Goals .....	8-1
§ 802. Applicability.....	8-2
§ 803. General Requirements .....	8-2
§ 804. Short Term Requirements.....	8-2
§ 805. Long Term O&M Program .....	8-4
§ 806. Annual Reporting .....	8-5



§ 807. Non-Compliance.....	8-6
§ 808. Administrative Proceedings: Notice of Non-Compliance.....	8-6
§ 809. Administrative Proceedings: Show Cause before the Board of Commissioners.....	8-8
§ 810. Notice of Show Cause.....	8-8
§ 811. Show Cause Hearing and Imposition of Penalties by the Board of Commissioners .....	8-8
§ 812. Legal and Equitable Relief .....	8-9
§ 813. Injunctive Relief.....	8-9
§ 814. Judicial Review .....	8-10
<b>ARTICLE 9. MAINTENANCE .....</b>	<b>9-1</b>
§ 900. General Maintenance Requirements.....	9-1
§ 901. Permitted Facility Operation and Maintenance.....	9-1
§ 902. Maintenance Requirements for Stormwater Projects with No Permittee .....	9-2
<b>ARTICLE 10. INSPECTIONS.....</b>	<b>10-1</b>
§ 1000. General.....	10-1
§ 1001. Inspection Requirements to be met by Development.....	10-1
§ 1002. Special Requirements for Qualified Sewer Construction.....	10-2
§ 1003. Request for Final Inspection .....	10-3
<b>ARTICLE 11. VARIANCES .....</b>	<b>11-1</b>
§ 1100. Authority .....	11-1
§ 1101. Petition for Variance .....	11-1
§ 1102. Notice of Petition .....	11-2
§ 1103. Standards .....	11-3
§ 1104. Submission of Written Comments .....	11-4
§ 1105. Determination by the District .....	11-4
§ 1106. Conditions .....	11-6
<b>ARTICLE 12. PROHIBITED ACTS, ENFORCEMENT, AND PENALTIES.....</b>	<b>12-1</b>
§ 1200. Prohibited Acts.....	12-1
§ 1201. Administrative Proceedings: Notice of Violation .....	12-1
§ 1202. Administrative Proceedings: Show Cause Before the Board of Commissioners .....	12-3
§ 1203. Notice of Show Cause .....	12-3

§ 1204. Show Cause Hearing and Imposition of Civil Penalties by Board of Commissioners.....	12-3
§ 1205. Revocation of Watershed Management Permits.....	12-5
§ 1206. Stop-Work Order .....	12-5
§ 1207. Additional Remedies for Flood Protection Areas.....	12-6
§ 1208. Legal and Equitable Relief .....	12-7
§ 1209. Injunctive Relief.....	12-7
<b>ARTICLE 13. APPEALS .....</b>	<b>13-1</b>
§ 1300. Right to Appeal.....	13-1
§ 1301. Appeals to the Director of Engineering.....	13-1
§ 1302. Appeals to the Board of Commissioners .....	13-2
<b>ARTICLE 14. ADMINISTRATION .....</b>	<b>14-1</b>
§ 1400. Responsibility for Administration.....	14-1
§ 1401. Role of the District .....	14-1
§ 1402. Role of an Authorized Municipality.....	14-2
§ 1403. Procedure for Authorization .....	14-4
§ 1404. District Oversight of Authorized Municipalities .....	14-5
§ 1405. Representative Capacity .....	14-6

## **Signature Page**

## **Appendix A Definitions**

## **Appendix B Watershed Specific Release Rates**

## **Appendix C Legacy Sewer Permit Ordinance and Manual of Procedures for the Administration of the Sewer Permit Ordinance**

## **Appendix D U.S. Army Corps of Engineers Watershed Services Areas**

## **Appendix E Watershed Planning Areas**

## **Appendix F Permit Fees to the Watershed Management Ordinance**

## **Appendix G Existing Intergovernmental Agreements**

## ARTICLE 1. AUTHORITY AND PURPOSE

### § 100. Statutory Authority

1. This **Ordinance** shall be known and may be cited as the Watershed Management Ordinance (**Ordinance**).
2. The Metropolitan Water Reclamation District of Greater Chicago (**District**) promulgates this **Ordinance** pursuant to its authority to adopt ordinances regulating sewers tributary to the **District's water reclamation plants**, regulating **floodplain** and **stormwater** management, and governing the location, width, course, and release rate of all **stormwater runoff** channels, streams, and basins in **Cook County**, over which the **District** has jurisdiction, in accordance with the adopted Cook County Stormwater Management Plan (CCSMP). The statutory authority for this **Ordinance** is contained in 55 ILCS 5/5-1062.1, 70 ILCS 2605/1 *et seq.*, and particularly 70 ILCS 2605/7f, 70 ILCS 2605/7h, 70 ILCS 2605/12, as well as other applicable authority, all as amended from time to time.
3. An **authorized municipality**, as defined in **Article 14** of this **Ordinance**, may adopt this **Ordinance** pursuant to its authority to adopt ordinances regulating **floodplain** and **stormwater** management and governing the location, width, course, and release rate of all **stormwater runoff** channels, streams, and basins in the **authorized municipality**, over which the **authorized municipality** has jurisdiction. The statutory authority for an **authorized municipality** to adopt this **Ordinance** is contained in the Illinois Municipal Code, 65 ILCS 5/1 *et seq.*, as well as other applicable authority, all as amended from time to time.

### § 101. Cook County Stormwater Management Plan

The **District's Board of Commissioners** adopted the CCSMP on February 15, 2007. This **Ordinance** is a component of the countywide **stormwater** management program presented in the CCSMP. Other components of the countywide **stormwater** management program include the ~~development of~~ Detailed Watershed Plans (**DWPs**) for the major **watersheds** of **Cook County**. The CCSMP and **DWPs** are available on the **District's** website, [www.mwrd.org](http://www.mwrd.org).

Commented [A1]: The DWPs have already been developed.

### § 102. Considerations

The **District** ~~has~~ considered numerous factors in the creation of this **Ordinance**, including, but not limited to:

1. Inappropriate **floodplain** uses and **development** have increased **flood** risk, **flood** damage, and environmental degradation;
2. It is necessary to consider **stormwater** management on a **watershed** basis;

3. **Cook County** lands drain poorly due to generally flat topography and soils of low permeability;
4. Many land **development** practices alter the natural hydrologic balance of **Cook County** streams;
5. **Wetlands** play an essential role in **flood** storage, **floodplain** management, **sediment** control, and water quality enhancement;
6. **Riparian environments** may be effective in reducing flow rates and volumes in addition to providing stream bank **erosion** protection and water quality enhancements;
7. Many **stormwater facilities** are not adequately maintained;
8. While the **District** has required **stormwater** detention in **separate sewer areas** since 1972 via the **Sewer Permit Ordinance**, **floodings** continues to be a concern in **Cook County** due to the increased volume and rate of **stormwater runoff** resulting from continued **development**;
9. **Stormwater** detention requirements for new **developments** alone do not address the impacts of transportation and other improvements; and
10. Infiltration and inflow contributes to **basement backups**, **sanitary sewer** overflows, and excessive flows to the **District's water reclamation facilities**.

### § 103. Purposes of this Ordinance

The purpose of this **Ordinance** is to effectuate the purposes and intent of the Metropolitan Water Reclamation District Act (70 ILCS 2605/1 *et seq.*) by:

1. Protecting the public health, safety, and welfare, and reducing the potential for loss of property due to **flood** damage;
2. Managing and mitigating the effects of urbanization on **stormwater** drainage throughout **Cook County**;
3. Protecting existing and new **development** by minimizing the increase of **stormwater runoff** volume beyond that experienced under existing conditions and by reducing peak **stormwater** flows;
4. Promoting responsible land use practices in **Cook County**, particularly within **floodplains** and **floodways**;
5. Protecting existing water resources, including lakes, streams, **floodplains**, **wetlands**, and **groundwater** from detrimental and unnecessary modification in order to maintain their beneficial functions;
6. Reducing or mitigating the environmentally detrimental effects of existing and future

**runoff** in order to improve and maintain water quality;

7. Preserving and enhancing existing **riparian environments**;
8. Controlling **erosion** and the discharge of **sediment** from all sources including, but not limited to, **stormwater facilities, waterways, developments**, and construction sites;
9. Requiring appropriate and adequate provisions for site **runoff** control;
10. Requiring consistency in **stormwater** management activities within and among the units of government having **stormwater** management jurisdiction;
11. Ensuring future **development** in the **floodplain** does not adversely affect **floodplain** environments or increase the potential for **flood** damage;
12. Requiring regular, planned **maintenance** of **stormwater** management facilities;
13. Encouraging control of **stormwater** quantity and quality at the most site-specific or local level;
14. Establishing uniform and minimum countywide **stormwater** management regulations while recognizing and coordinating with **stormwater** programs effectively operating within **Cook County**;
15. Requiring strict compliance with and enforcement of this **Ordinance**;
16. Meeting the **floodway** permitting requirements of the Illinois Department of Natural Resources, Office of Water Resources, delineated in the Rivers, Lakes, and Streams Act (615 ILCS 5/18g);
17. Complying with the rules and regulations of the National Flood Insurance Program (**NFIP**) thereby making federally subsidized **flood** insurance available;
18. Protecting the ability of the **District's** sewerage systems, intercepting sewers, **TARP structures, sewage** disposal and treatment plants, works and facilities to perform the functions for which they were designed;
19. Controlling the nature, volume, and manner of discharge into the **District's** sewerage systems, intercepting sewers, **TARP structures, sewage** disposal and treatment plants, works, and facilities;
20. Maintaining stable operation of the **District's** sewerage systems, intercepting sewers, **TARP structures, sewage** disposal and treatment plants, works, and facilities;
21. Reducing infiltration and inflow into the **District's** sewerage systems, intercepting sewers, **TARP structures, sewage** disposal and treatment plants, works, and facilities; and

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ARTICLE 1. AUTHORITY AND PURPOSE

Page 1-3

[Public Comment Draft: 1/7/19](#)

22. Protecting waters within **Cook County** so as to preserve the public health.

#### § 104. Relationship to the Sewer Permit Ordinance and Manual of Procedures

1. **Permittees** and **co-permittees** that have **Sewerage System Permits** issued ~~prior to the effective date of this Ordinance~~ shall retain all rights, obligations and liabilities under the **Sewer Permit Ordinance** and the Manual of Procedures for the Administration of the Sewer Permit Ordinance (**Manual of Procedures**) as they existed prior to their repeal.
2. ~~Proposed development for which a complete Sewerage System Permit application has been accepted by the District prior to the effective date of this Ordinance will retain all rights, obligations and liabilities under the Sewer Permit Ordinance and the Manual of Procedures as they existed prior to their repeal.~~
- 3-2. ~~Effective May 1, 2014, t~~The Sewer Permit Ordinance and its companion ordinance, the **Manual of Procedures**, ~~were~~will be repealed effective May 1, 2014. (See **District Ordinance** repealing the **Sewer Permit Ordinance** and the Manual of Procedures for the Administration of the Sewer Permit Ordinance, April 17, 2014).
- 4-3. The requirements ~~related to the regulation, permitting, and enforcement of~~ for **qualified sewer construction** are now contained in Article 7 of this **Ordinance**.

**Commented [A2]:** Some SPO permits were issued after the effective date, due to being received up until the day before. Many permits were not yet issued by May 1, 2014, but are still bound to the SPO and retain all rights and responsibilities.

**Commented [A3]:** This provision no longer applies, as all projects applied for under the SPO have been cancelled or constructed.

**Commented [A4]:** Combined with language from §700 and consolidated into one place in the WMO.

## ARTICLE 2. APPLICABILITY AND GENERAL PROVISIONS

### § 200. Scope of Regulation

1. This **Ordinance** applies to all **development** within the boundaries of **Cook County**, Illinois and **qualified sewer** construction within the **District's** corporate boundaries or service agreement areas, over which the **District** has jurisdiction as described in §100.2 of this **Ordinance**, including those ~~developments~~ projects under the control of any governmental entity, agency, or authority.
2. Any **person** proposing a ~~development project~~ that falls under any of the categories set forth in §~~Error! Reference source not found.~~ of this **Ordinance** shall obtain a **Watershed Management Permit** prior to ~~development~~ the start of the project.
3. The requirements for sewer construction contained within Article 7 of this **Ordinance** supersede the requirements of the repealed **Sewer Permit Ordinance** and the **Manual of Procedures**, which make up Appendix C of this **Ordinance**. Any **person** proposing to install **qualified sewer** ~~construction~~ within the **District's** corporate limits or service agreement areas, as detailed under Article 7 of this **Ordinance**, shall obtain a **Watershed Management Permit** prior to commencing sewer work.
4. The provisions of this **Ordinance** shall not apply to any of the following:
  - A. Agriculture and gardening activities that do not involve filling, grading, or construction of levees;
  - B. Structures and land uses existing as of the effective date of this **Ordinance**, except when **redevelopment** occurs;
  - B-C. Projects solely within Lake Michigan, certified by a Professional Geologist or Structural or **Professional Engineer**, licensed in the State of Illinois, that has obtained approval from the **Corps** and **IDNR** and does not include **qualified sewer construction**;
  - C. Proposed development with an active **Sewerage Systems Permit** issued prior to the effective date of this **Ordinance**, which has not been fully constructed by the effective date of this **Ordinance**. **Stormwater** management provisions for such **development** shall conform to the approved plans and specifications of the issued **Sewerage System Permit** and shall not result in any increase in **impervious area** over the amount specified by the **Sewerage System Permit**;
  - D. Proposed development for which a complete **Sewerage System Permit** application has been accepted by the **District** prior to the effective date of this **Ordinance**. Any such **Sewerage System Permit** application shall be subject to the

**Commented [A1]:** Shoreline work in Lake Michigan is being double-regulated. The WMO regulates work in the flood protection area, but not to the extent as is regulated by both IDNR and US Army Corps. Obtaining a Watershed Management Permit causes an undue burden on the applicant and provides no additional protection to the Lake.

**Commented [A2]:** These provisions no longer apply, as all projects applied for under the SPO have been cancelled or constructed.

~~Sewer Permit Ordinance and Manual of Procedures~~ effective at the time the application was made. A complete ~~Sewerage System Permit~~ application is considered accepted by the ~~District~~ upon actual receipt by the ~~District~~ and is minimally composed of the following:

- ~~(1) Complete and executed Sewerage System Permit forms consisting of Schedules A, B, C, and D where stormwater detention is required;~~
- ~~(2) Sewerage System Permit fee paid in full;~~
- ~~(3) Plan drawings signed and sealed by a Professional Engineer; and~~
- ~~(4) Permit documents signed by the permittee and co-permittee;~~

~~E.D. Development Projects~~ within the corporate boundaries of the City of Chicago, Illinois except for any of the following:

- (1) New or reconstructed ~~sewers, drainage, or~~ outfalls to waterways or Lake Michigan; and
- ~~(2) Stormwater discharges directly to District property; and~~
- ~~(3)~~ (2) Direct connections to **District** interceptors, **TARP structures**, facilities, or **District** property;

**Commented [A3]:** This provision applies to all new or reconstructed outfalls, and indicating "sewer outfall" or "drainage outfall" creates confusion. Language is being simplified to just indicate "outfall".

**Commented [A4]:** Projects in the City of Chicago shall follow the City's stormwater management requirements and not the WMO. There is nothing to review under a Watershed Management Permit unless there is a new/reconstructed outfall or direct connection, which are covered in the other provisions of this section. Notification of development on District land and green infrastructure requirements are handled through the lease with the District's Law Department.

~~F.E. Development Projects activities~~ listed in §201.1, §201.2.E, and §201.2.F of this **Ordinance** that are within the corporate boundaries of a **multi-county municipality**, which has adopted and currently enforces the **stormwater** ordinance of a **contiguously** adjacent Illinois county subject to the requirements of §207 of this **Ordinance**;

**Commented [A5]:** Exemptions for multi-county municipalities, consistent with §207.

~~G.F. Development activities~~**Projects** listed solely in §201.1 of this **Ordinance** that are undertaken by state or federal agencies (e.g. **IDOT**, Illinois Tollway Authority, or the **Corps**);

~~H.G. Development activities~~**Projects** listed solely in §201.1 of this **Ordinance** that are undertaken as a **flood control project**; or

~~I.H. Development Projects~~ undertaken by the **District**.

5. Existing **structures** that do not conform to the requirements of this **Ordinance** shall not be substantially improved, replaced, or enlarged in any manner unless such ~~substantial~~ improvements, replacements, or enlargements conform to the requirements of this



Ordinance.

§ 201. Applicability

1. A **Watershed Management Permit** from either the **District** or an **authorized municipality** shall be required for any of the following ~~development activities~~projects:

- A. **Development** within a **Flood Protection Area**;
- B. **Development** with an **indirect wetland impact**;
- C. **Development** of residential **buildings** within 100-feet of the **regulatory floodplain**, ~~excluding non-substantial improvements to a single-family home~~; and
- D. **Development** ~~disturbing more~~greater than 0.5 acre, unless the **development** solely involves one or more of the following:

(1) ~~Single-family home development located outside of flood protection areas~~;

~~(1)(2)~~ Installation, renovation, or replacement of a septic system, potable water service line, or other utility to serve an existing **structure**, provided that the area is restored to existing grade and vegetative cover is restored;

~~(2)(3)~~ Excavation in public rights-of-way or public utility easements, ~~outside of flood protection areas~~, for the purpose of installing or maintaining utilities other than **qualified sewer construction**, provided that the area is restored to existing grade and vegetative cover is restored. Utility excavation not requiring a **Watershed Management Permit** must install and maintain adequate **sediment** and **erosion** control;

~~(3)(4)~~ **Maintenance activities**, repair, or at-grade in-kind replacement of existing lawn areas not otherwise requiring a **Watershed Management Permit**, provided that the area is restored to existing grade and vegetative cover is restored; or

~~(4)(5)~~ **Maintenance activities**, repair, or in-kind replacement of existing **impervious areas** including, but not limited to, roadways or parking lots not otherwise requiring a **Watershed Management Permit**.

2. A **Watershed Management Permit** from the **District** shall be required for any of the following ~~development activities~~projects:

- A. ~~Development~~ **Qualified sewer** ~~proposing sewers, drainage, or detention~~ with in a **combined sewer area** tributary to either a **combined sewer** or a **waterway**;

**Commented [A6]:** A permit is required to determine if any construction to a residential building is in the floodplain by elevation (not FEMA FIRM). Recommended by Technical Advisory Committee Floodplain Sub-Group to protect residential buildings without being inconsistent with NFIP.

**Commented [A7]:** Development is a defined term that does not include maintenance, demolition, or other disturbances. A permit is required based on development area, not disturbance area.

**Commented [A8]:** The WMO does not intend to regulate single-family homes except in special circumstances involving flood protection areas.

**Commented [A9]:** Development within the FPA is covered above, making this language redundant and prohibitive. The provision to restore to existing conditions is written into this section, and soil and erosion control concerns are required in Article 4, regardless of permit applicability.

B. ~~Permittees or co-permittees proposing a~~**Qualified sewer construction** within the ~~District's corporate boundaries~~ limits or service agreements areas;

C. ~~Development proposing a~~**Direct connections to District interceptors, reservoirs, facilities, or TARP structures;**

D. ~~Development proposing a~~**New or reconstructed sewer, drainage, or outfalls to the waterways or Lake Michigan, within Cook County;**

E. ~~Development proposing a~~**Reconfiguration of existing major or minor stormwater systems which alters the service area of a District permitted detention facility; and**

F. ~~Development proposing a~~**Modifications to the outlet control structure or storage volume of a District permitted detention facility;**

G. ~~Development discharging stormwater directly to District property; and~~

H. ~~Non residential development on septic systems or private treatment systems proposing a connection to a sanitary sewer.~~

3. ~~Development located within the City of Chicago that proposes a direct or indirect connection to District interceptors, reservoirs, facilities, or TARP structures or new or reconstructed sewers, drainage, or detention outfalls to waterways or to Lake Michigan shall obtain a facility connection authorization.~~

**Commented [A10]:** This provision applies to all new or reconstructed outfalls, and indicating "sewer outfall" or "drainage outfall" creates confusion. Language is being simplified to just indicate "outfall".

**Commented [A11]:** Projects on District land shall be subject to the same requirements as those not on District land with respect to the WMO. Additional green infrastructure and lease requirements are enforced as part of the lease agreement with the District's Law Department.

**Commented [A12]:** Connecting to a sanitary sewer is considered qualified sewer and is covered under §201.2.8

**Commented [A13]:** Redundant with City of Chicago requirements in §200.4.D. Article 7 reorganization no longer called out FCA as a separate permit type, so City projects fall under a "Watershed Management Permit." No requirements have changed.

**Table 1. Applicability Summary**

<b>Activity/Project</b>		<b>Regulated Area</b>	<b>Permitting Authority</b>	<b>Section</b>
<b>Development Activities</b>	<b>Development</b> <del>disturbing more than 0.5 acre*</del>	<b>Cook County</b> Except City of Chicago	<b>District or Authorized Municipality</b>	§ 201.1.D
	Reconfiguration of existing <b>major or minor stormwater systems</b> <del>which that</del> alters the service area of a <b>District</b> permitted <b>detention facility</b>	<b>Cook County</b> Except City of Chicago	<b>District</b>	§ 201.2.E
	Modifications to a <b>District</b> permitted <b>detention facility</b>	<b>Cook County</b> Except City of Chicago	<b>District</b>	§ 201.2.F
<b>Flood Protection Areas</b>	<b>Development</b> within a <b>flood protection area</b>	<b>Cook County</b> Except City of Chicago	<b>District or Authorized Municipality</b>	§ 201.1.A
	Indirect impacts to a <b>wetland</b>	<b>Cook County</b> Except City of Chicago	<b>District or Authorized Municipality</b>	§ 201.1.B
	<b>Development</b> of residential <b>buildings</b> within 100-feet of the <b>regulatory floodplain</b> , <del>excluding non-substantial improvements to a single family home</del>	<b>Cook County</b> Except City of Chicago	<b>District or Authorized Municipality</b>	§ 201.1.C
<b>Qualified Sewer Construction</b>	Sewers, drainage, or detention in <b>combined sewer areas</b> tributary to <b>combined sewers</b> or <b>waterways</b>	<b>District Corporate Limits or Service Areas</b> Except City of Chicago	<b>District</b>	§ 201.2.A
	<b>Qualified sewer</b> construction including lift stations	<b>District Corporate Limits or Service Areas</b> Except City of Chicago	<b>District</b>	§ 201.2.B
<b>District Impacts</b>	Direct connections to <b>District</b> interceptors, reservoirs, facilities, or <b>TARP Structures</b>	Entire <b>Cook County</b> Including City of Chicago*	<b>District</b>	§ 201.2.C & § 201.3
	<b>Stormwater</b> discharges directly to <b>District</b> Property	Entire <b>Cook County</b> Including City of Chicago*	<b>District</b>	§ 201.2.G & § 201.3
	New or reconstructed <del>sewers, drainage, or detention</del> outfalls to <b>waterways</b> or Lake Michigan	<b>Cook County</b> Including City of Chicago*	<b>District</b>	§ 201.2.D & § 201.3
<p>* Unless the <b>development</b> solely involves one or more <b>activity-provision</b> listed in §201.1.D.</p> <p>* <b>Facility connection authorization</b> <del>as outlined in §703</del> <b>shall be obtained.</b></p>				

**Commented [A14]:** Table moved to follow content for formatting purposes.

**Commented [A15]:** Development is a defined term that does not include maintenance, demolition, or other disturbances. A permit is required based on development area, not disturbance area.

**Commented [A16]:** A permit is required to determine if any construction to a residential building is in the floodplain by elevation (not FEMA FIRM). Recommended by Technical Advisory Committee Floodplain Sub-Group to protect residential buildings without being inconsistent with NFIP.

**Commented [A17]:** Article 7 reorganization removes separate section for Facility Connection Authorization.

## § 202. Interpretation

1. This **Ordinance** shall be liberally construed to protect the health, welfare, safety, and environment of the residents of **Cook County** and to effectuate the purposes of this **Ordinance** and enabling legislation.
2. Nothing contained in this **Ordinance** shall be understood to imply consent, licensing, or permission to locate, construct, or maintain any **structure**, site, or facility, nor to carry on any trade, industry, occupation, operation, or activity.
3. When provisions of this **Ordinance** differ or conflict with any other applicable statute, law, ordinance, regulation, or rule, the more stringent provisions shall apply.
4. The provisions of this **Ordinance** 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**.

## § 203. Disclaimer of Liability

1. The degree of **flood** protection provided by this **Ordinance** is considered reasonable for regulatory purposes and is based on engineering experience and scientific methods of study.
2. This **Ordinance** does not warrant that areas outside the delineated **floodplain** or permitted ~~developments-projects~~ within the delineated **floodplain** will be free from **flooding** and associated damages.
3. This **Ordinance** shall not be construed or applied in any manner to create liability on the part of, or a cause of action against, the **District**, any **municipality**, or any elected official, officer, agent, or employee thereof, for any damage or injury to **person** or property resulting from reliance on the provisions of this **Ordinance** or from reading or interpreting any map that is part of this **Ordinance**.
4. The design and supplementary design requirements contained herein do not replace nor substitute sound engineering practice.

## § 204. Severability

1. The provisions of this **Ordinance** shall be severable in accordance with the following:
  - A. If any court of competent jurisdiction shall adjudge any provision of this **Ordinance** invalid, such judgment shall not affect any other provisions of this **Ordinance**; and
  - B. If any court of competent jurisdiction shall adjudge invalid the application of any provision of this **Ordinance** to a particular parcel of land, a particular **structure**, or

a particular ~~development project~~, such judgment shall not affect the application of said provisions to any other parcel of land, **structure**, or ~~development project~~.

2. All such unaffected provisions of this **Ordinance** shall remain in full force and effect.

#### § 205. Right of Access

1. Representatives of the **District** may, at all reasonable times during regular business hours or upon notice, enter upon any ~~development project~~ subject to this **Ordinance** for the purpose of conducting periodic inspections to ensure compliance with this **Ordinance** or with a **Watershed Management Permit** issued thereunder. The scope of the inspection, including reviewing and copying of records, is limited to determining whether the ~~development project~~ is in compliance with all requirements and conditions of this **Ordinance** and/or **Watershed Management Permit**.
2. The **District** may periodically inspect any mitigation measure at reasonable times and such inspection shall be limited to determining whether the ~~development project~~ is in compliance with all requirements and conditions of this **Ordinance** and/or a **Watershed Management Permit**.
3. An inspection may also be conducted in accordance with ~~Article 10 or Section §1201.5 of this Ordinance~~.

Commented [A18]: This Article of the WMO covers inspections

#### § 206. National Flood Insurance Program Eligibility

1. This **Ordinance** does not repeal any county/municipal ordinance or resolution passed in order to establish eligibility for the National Flood Insurance Program (**NFIP**).
2. This **Ordinance** is not intended to supplement, replace, or remove any responsibility that either **Cook County** or a **municipality** may have to maintain eligibility and good standing in the **NFIP**. Proper administration and enforcement of the **NFIP** within participating **municipalities** and counties is a requirement of the **NFIP**.
3. **Floodplain** requirements included in **Article 6** of this **Ordinance** meet or exceed the **NFIP** requirements for **development** as set forth under the Code of Federal Regulations (44 C.F.R. § 59-60).

#### § 207. Multi-County Municipalities

1. A **multi-county municipality** may adopt and enforce one of the following ordinances of an adjacent county if the **municipality** has corporate area within that county:

- A. The DuPage County Countywide Stormwater and Flood Plain Ordinance, as amended from time to time by the DuPage County Board;
  - B. The Kane County Stormwater Ordinance, as amended from time to time by the Kane County Board;
  - C. The Lake County Watershed Development Ordinance, as amended from time to time by the Lake County Board;
  - D. The McHenry County Stormwater Management Ordinance, as amended from time to time by the McHenry County Board; or
  - E. The Will County Stormwater Management Ordinance, as amended from time to time by the Will County Board.
2. A **Watershed Management Permit** shall not be required from the **District** for any **development** activity specified in §201.1, §201.2.E, and §201.2.F of this **Ordinance** within a **multi-county municipality**, in which the **multi-county municipality** elects to adopt an adjacent county's ordinance as specified in §207.1 of this **Ordinance** and satisfies all of the following requirements:
- A. Has the authority to adopt an adjacent county's ordinance;
  - B. Retains qualified staff per the adopted ordinance;
  - C. Enters into an intergovernmental agreement with the **District**; and
  - D. Administers and enforces the adopted ordinance per the requirements of the adopted ordinance.
3. A **multi-county municipality** that has satisfied §207.2 and entered into an intergovernmental agreement with the **District** is still required to obtain a **Watershed Management Permit** from the **District** for all ~~development activities~~projects specified in §201.2.A, ~~B, C, D, G, and H~~ of this Ordinance.
4. A **Watershed Management Permit** shall be required from the **District** for all ~~development activities~~projects specified in §201.1 and §201.2 of this **Ordinance** within a **multi-county municipality** that has not entered into an intergovernmental agreement with the **District**.

## § 208. Amendments

Amendments to this **Ordinance** shall become effective when adopted by the **District's Board of Commissioners**.

**§ 209. Effective Date**

This **Ordinance** shall be effective on May 1, 2014.

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## ARTICLE 3. WATERSHED MANAGEMENT PERMIT REQUIREMENTS AND SUBMITTALS

### § 300. General Requirements and Limitation

1. ~~The District shall establish permit fees, which are contained in Appendix F of this Ordinance. Fees shall be based upon the costs the District incurs for all aspects of the permitting process, including inspections.~~

**Commented [A1]:** Redundant with fees section (formerly §313.1—moved to §301)

2.1. The issuance of a Watershed Management Permit does not:

- A. Convey any property rights or any exclusive privilege;
- B. Authorize any injury to private property or invasion of private rights; or
- C. Release the ~~permittee or co-permittee~~ applicant from liability for damage to persons or property resulting from the work covered by the permit.

3.2. The Watershed Management Permit application and plan set submittals shall be certified~~include an opinion~~ by a Professional Engineer, indicating that the technical submittal meets the criteria required by this Ordinance.~~In addition:~~

**Commented [A2]:** Edited to provide specifics regarding the certification requirements for permits.

- A. ~~The site stormwater plan shall include the signature and seal of a Professional Engineer;~~
- B. ~~The design of stormwater facilities, calculations for the determination of the 100-year floodplain and regulatory floodplain, and calculations of the impact of development shall meet the standards of this Ordinance and shall be prepared, signed, and sealed by a Professional Engineer;~~
- C. ~~If wetlands are located on the site or within one hundred (100) feet of the site, a survey locating the wetland in plan view, including the wetland buffer in accordance with §603 of this Ordinance, shall be signed and sealed by a Professional Engineer or a Professional Land Surveyor; and~~
- D. ~~If riparian environments, in accordance with §606 of this Ordinance, are located on the site or within one hundred (100) feet of the site, a survey in plan view of the channel or stream and associated riparian environment shall be signed and sealed by a Professional Engineer or a Professional Land Surveyor.~~

**Commented [A3]:** This information belongs in the TGM.

4.3. The Watershed Management Permit application shall include the name(s), legal address(es), and original signature(s), and legal address(es) of the applicants ~~co-permittee(s), permittee, and of the owner(s) of the land,~~ attesting to the understanding of the requirements and intent to comply with this Ordinance, according to the following:

**Commented [A4]:** Definition of "co-permittee" includes land owner, definition of "applicant" includes "co-permittee"

- A. For ~~parcels~~**projects** located within a **municipality's** corporate limits, both the ~~permittee and co-permittee(s)~~ and ~~permittee~~ must sign the **Watershed Management Permit** application;
- B. For ~~parcels~~**projects** located in unincorporated areas, the **co-permittee(s)** must sign the permit **application** and the **permittee** (Cook County) is requested to sign the permit **application**. ~~If the permittee refuses to sign the Watershed Management Permit, it should decline in writing, and t~~The **co-permittee** must comply with the following requirements;
- (1) For **projects** which include qualified **sanitary sewer** work without a **permittee**, the **Watershed Management Permit** may be issued under a **sole permittee** status, and must demonstrate all of the following:
- (a) ~~The area to be served is outside the jurisdiction of any local sanitary district, township, or public utility company which is certified for such service;~~
- (b) ~~The facilities to be served are for the sole and exclusive use of the property owner, and no sewer extension is contemplated for other private users;~~
- (c) Evidence of responsibility, as determined by the **District's Board of Commissioners**;
- (b) ~~The facilities to be served are for the sole and exclusive use of the property owner, and no sewer extension is contemplated for other private users;~~
- (c) ~~The area to be served is outside the jurisdiction of any local sanitary district or public utility company certified for such service;~~
- (d) ~~Compliance with the administrative requirements as outlined in the TGM; and~~
- (d)(e) ~~The permit must be recorded with the Cook County Recorder of Deeds according to §307 of this Ordinance.~~
- (2) For **projects** that involve stormwater management **development** without a **permittee**, the **Watershed Management Permit** may be issued without **sole permittee** status, and **co-permittee** must adhere to the additional **maintenance** requirements in §902 of this **Ordinance**. The permit must be recorded with the Cook County Recorder of Deeds according to §307 of this **Ordinance**.

**Commented [A5]:** Re-ordered from below, as these items must be demonstrated prior to review by the District's Board of Commissioners.

**Commented [A6]:** Sole Permittee permits must be recorded, just as the stormwater only non-sole permittee permits in §300.3.B(2) must be recorded.

**Commented [A7]:** To allow consistent administration for projects in unincorporated areas.

5. ~~All required topographic information shall be tied to the North American Vertical Datum of 1989 based on national map standard accuracy.~~

Commented [A8]: Move to "Plans" section

6.4. Prior to commencing construction, the ~~co-permittee~~**applicant** shall secure all appropriate approvals from local, state, regional, and ~~federal, state, and regional~~ authorities or their designee, including, but not limited to, **OWR**, the **Corps**, **IEPA**, and **FEMA**.

7.5. ~~Co-permittees~~**Applicants** proposing **runoff** at a location on or adjacent to holdings or property of Forest Preserve District of Cook County (FPD) shall contact FPD for review of the proposed work to determine **stormwater** impacts to FPD property and methods to reduce or eliminate any adverse impacts. Refer to the **TGM** for further details.

8. ~~The issuance of a Watershed Management Permit does not:~~

A. ~~Convey any property rights or any exclusive privilege;~~

B. ~~Authorize any injury to private property or invasion of private rights; or~~

C. ~~Release the permittee or co-permittee from liability for damage to persons or property resulting from the work covered by the permit.~~

9.6. Either the **District** or relevant **authorized municipality** shall make the final determination that all pertinent information is submitted by the ~~co-permittee~~**applicant** to allow for **Watershed Management Permit** review and/or issuance. Additional information or calculations may be requested from the ~~co-permittee~~**applicant** by either the **District** or **authorized municipality** to ensure compliance with this **Ordinance**.

7. Any error or omission in the approved Watershed Management Permit documents shall not relieve the applicant from any requirement of this Ordinance.

Commented [A9]: New provision to ensure errors or omissions of WMO requirements on a submittal document do not allow projects to be built outside of WMO standards.

10. ~~Both the Cook County Land Bank Authority and the South Suburban Land Bank and Development Authority offer opportunities for the District to work with neighborhoods, Cook County, and local governments to determine neighborhood level best practices for stormwater and flood mitigation management that can be combined with both the Cook County Land Bank Authority's mission and the South Suburban Land Bank and Development Authority's mission to return vacant and abandoned homes and land back into productive and sustainable community assets.~~

Commented [A10]: This information belongs in the TGM.

### § 301. Permit Fees

1. The **District** shall establish a schedule of permit fees in accordance with the provisions of this **Ordinance**, which may be amended from time to time. The Schedule of permit fees is included in Appendix F of this **Ordinance**.

2. An **authorized municipality** may establish a schedule of permit fees in accordance with the provisions of this **Ordinance**, which may be amended from time to time.
3. Fees shall be based upon the costs either the **District** or **authorized municipality** incurs for all aspects of the permitting process, including, but not limited to, review of permit applications and inspections.
4. ~~A **co-permittee**~~The **applicant** shall pay all relevant permit fees at the time of application for a **Watershed Management Permit**. Permit fees shall be refunded if the permit application is cancelled subject to the conditions of §1401.3 of this **Ordinance**. Base fees, and other completed review fees, are considered non-refundable. ~~See Appendix F of this **Ordinance** for a schedule of permit fees.~~

Commented [A11]: Redundant with number 1 of this section

#### § 302. **Watershed Management Permit Application ~~and~~ Submittals**

The **Watershed Management Permit** ~~application and~~ submittal shall include the permit application schedules A, B, and C, and all of the following when applicable:

1. ~~The name(s), original signature(s), and legal address(es) of the **co-permittee(s)**, **permittee**, and of the **owner(s)** of the land, according to the following:~~
  - A. ~~For parcels located within a municipality's corporate limits, both the **co-permittee(s)** and **permittee** must sign the **Watershed Management Permit** application;~~
  - B. ~~For parcels located in unincorporated areas, the **co-permittee(s)** must sign the permit and the **permittee** (Cook County) is requested to sign the permit. If the **permittee** refuses to sign the **Watershed Management Permit**, it should decline in writing, and the **co-permittee** must comply with the following requirements:~~
    - (1) ~~For projects which include **qualified sanitary sewer** work without a **permittee**, the **Watershed Management Permit** may be issued under a **sole permittee** status, and must demonstrate all of the following:~~
      - (a) ~~Evidence of responsibility, as determined by the **District's Board of Commissioners**;~~
      - (b) ~~The facilities to be served are for the sole and exclusive use of the property **owner**, and no sewer extension is contemplated for other private users;~~
      - (c) ~~The area to be served is outside the jurisdiction of any local sanitary district or public utility company certified for such service;~~

~~(d) Compliance with the administrative requirement as outlined in the TGM.~~

~~(2) For projects that involve stormwater management without a permittee, the Watershed Management Permit may be issued without sole permittee status, and must adhere to the additional maintenance requirements in §902 of this Ordinance. The permit must be recorded with the Cook County Recorder of Deeds according to §309 of this Ordinance.~~

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

~~3.1. A general narrative description of the proposed development project that shall include:~~

~~A. The common address and legal description of the site property interest where the development project will take place;~~

~~B. Type of development Project type, which includes Single-Family Homes, Residential Subdivisions, Multi-Family Residential, Non-Residential, Right-of-Way, and Open Space;~~

~~C. Size of the Total parcel or site property interest where the development project will take place;~~

~~D. Size of the proposed project area under development;~~

~~D.E. A statement of opinion A statement from by either a Professional Engineer or Wetland Specialist when flood protection areas are not present within either denying or acknowledging the presence of flood protection areas:~~

~~(1) Within the project area of the development;~~

~~(2) On the parcel or site property interest development; or~~

~~(3) 100 feet beyond the area of the development project area, including areas not located if not included within the site property interest;~~

~~4. Affidavit(s) signed by the co-permittee(s) attesting to:~~

~~A. The understanding of the requirements of and intent to comply with this Ordinance;~~

~~B. Disclosure of property interests (Schedule K) stating the aggregate total area of said property and all other lands contiguous to said property in which the owner~~

**Commented [A12]:** Only the denial is required, since acknowledgement requires a full floodplain, wetland, or riparian submittal.

**Commented [A13]:** An affidavit is not required, but signatures and certifications are required as part of the permit application, per §300.2.

**Commented [A14]:** Combined with "General Requirements"

holds an ~~interest~~ less than the thresholds stipulated under Table 2 in Article 5 of this Ordinance; and

~~C. Acknowledgement of Schedule L, which provides notice that any parcel areas not being developed under a Watershed Management Permit must comply with detention requirements if future development occurs.~~

~~5. A statement of opinion by either a Professional Engineer or Wetland Specialist either denying or acknowledging the presence of flood protection areas:~~

~~A. Within the area of the development;~~

~~B. On the site;~~

~~C. 100 feet beyond the area of the development if not included within the site; and~~

~~D. The appropriate submittals identified in this Article if the statement acknowledges the presence of flood protection areas;~~

~~6. Copies of other permits or permit applications as required, including any FEMA LOMAs, LOMRs, LOMR-Fs, CLOMAs, and CLOMRs;~~

~~2. The following submittals, as detailed in Article 3 of the TGM, for any development requiring a Watershed Management Permit:~~

~~A. The Erosion and Sediment Control Submittal, including: specified in §302 of this Ordinance for any development requiring a Watershed Management Permit;~~

~~(1) Schedule P signed by the co-permittee; and~~

~~(1)(2) A narrative of the erosion and sediment control plan that describes all measures appropriate for the development project such that all the requirements of Article 4 of this Ordinance are met. This plan shall include:~~

~~B. The Stormwater Management Submittal, including: specified in §303 of this Ordinance for any development requiring a Watershed Management Permit;~~

~~(1) The applicable Schedule D or Schedule D-Legacy with applicable supporting calculations, signed and sealed by a Professional Engineer;~~

~~(2) The site runoff plan for the development that describes all measures appropriate measures necessary to meet the requirements of §502 of this Ordinance. This plan shall include:~~

**Commented [A15]:** This language becomes redundant with the reworking of Article 3

**Commented [A16]:** Redundant with §300.4 and the floodplain submittal, and emphasized in the TGM

**Commented [A17]:** This language is redundant.

- (3) A volume control plan that describes all measures appropriate for the **development** in accordance with §503 of this **Ordinance**; This plan shall include;
- (4) A **detention facility** plan that describes all measures appropriate for the **development** in accordance with §504 or §505 of this **Ordinance**; This plan shall include;
- (5) Schedule K (Disclosure of ~~Property Interests~~ (Schedule K), signed and notarized by the **applicant** and Notary Public, respectively, if stating the aggregate total area of said property and all other lands **contiguous** to said property in which the ~~owner~~**applicant** holds an ~~interest~~**has property interest** is less than the **stormwater detention** thresholds stipulated under Table 2 in §501Article 5 of this **Ordinance**; and
- (6) Acknowledgement of Schedule L (Notice of Requirements for Stormwater Detention), signed and notarized by the **applicant** and Notary Public, respectively, for ~~parcels~~**property interest** requiring detention in which there are, which provides notice that any previously undeveloped ~~parcel~~**property interest** areas not being developed under a **Watershed Management Permit** not included in the detention calculations must comply with detention requirements if future **development** occurs.

**Commented [A18]:** Clarification of when Schedule K is required.

**Commented [A19]:** Clarification of when Schedule L is required.

B.C. The **Floodplain** Submittal ~~specified in §304 of this **Ordinance** for development associated with a **floodplain** and/or **floodway** designated in §601 of this **Ordinance**, including;~~

- (1) Schedule H and applicable supporting calculations, signed and sealed by a **Professional Engineer**;
- ~~(2)~~ A narrative description of the proposed **development**project within the limits of the **regulatory floodplain** and **regulatory floodway**. A narrative discussion and details of **floodproofing** measures including material specifications, construction methods, and calculations;
- (3) A determination of the **BFE** and **FPE**, including the source of the determination, in accordance with §601.4 and §601.9 of this **Ordinance**; A determination of the **FPE**, including the source of the determination, in accordance with §601.9 of this **Ordinance**;
- (4) A copy of the **Cook County FIS Floodway** Data Table, if available; and
- ~~(2)~~ Revisions to **FIRM(s)** including all hydrologic and hydraulic calculations, modeling, and all **CLOMR/LOMR** applications;

**Commented [A20]:** Combine these two identical provisions, since source determination for BFE and FPE has the same submittal requirement.

~~(3)(6)~~ Floodplain fill and compensatory storage calculations in accordance with §602.5, §602.6, and §602.7 of this Ordinance that shall include; and

~~(7)~~ For development in the regulatory floodway, the following eCalculations or analyses that shall be submitted to demonstrate compliance with §602.22 of this Ordinance; for development in the floodway.

D. The **Wetland** Submittal ~~specified in §305 of this Ordinance~~ for any **development** associated with a **wetland** designated in §603 of this **Ordinance**, including;

~~(1)~~ Schedule W, signed by a **Wetland Specialist**;

~~(4)(2)~~ Copies of the following forms of correspondence from the **Corps**:

(a) A **Corps** ~~jurisdictional~~ **determination** from the **Corps** indicating that the impacted **wetland** is not under the jurisdiction of the **Corps**; or

~~(b)~~ A Letter of No Objection stating that no permit from the **Corps** is necessary; and

~~(e)(b)~~ If required by the **Corps**, a Section 404 permit application, all associated correspondence, and a copy of the completed joint application form (NCR Form 426, "Protecting Illinois Waters") signed by the ~~co-permittee~~ **applicant**;

~~(5)(3)~~ The **isolated wetland** submittal for a **standard isolated wetland** that includes ~~contiguous isolated waters~~ is less than one-tenth of an acre (0.10 acre) in aggregate; shall include the following:

~~(6)(4)~~ The **isolated wetland** submittal for a **high quality isolated wetland** or a **standard isolated wetland** ~~greater than or equal to or greater than one-tenth of an acre (0.10 acre) in aggregate~~; shall contain the following:

~~(7)~~ An **isolated wetland** delineation report containing the following:

~~(8)~~ A delineation of the ~~wetlands~~ consistent with the requirements for **wetland** delineation provided in §603 of this **Ordinance**; including

~~(9)~~ A statement indicating date of boundary verification by the **District**;

~~(10)(5)~~ All **Corps** "Routine Wetland Determination Data Form(s);" and

~~(11)~~ Mapping products in accordance with §308 of this **Ordinance**;

**Commented [A21]:** A JD or permit from the Corps indicates if the wetland is jurisdictional or isolated. A LONO only indicates that the Corps has no objection to the work, but does not make a determination on what type of wetland exists. Since the WMO regulates isolated wetlands, the wetland type must be determined. Therefore, a LONO is not an acceptable substitute.

**Commented [A22]:** The District does not verify the boundary until after a submittal has been received and the review has been initiated. This is an impossible requirement to meet at the time of submittal, but is part of the permit review and covered under Article 6.

**Commented [A23]:** This is redundant, as mapping, plans, and exhibits are required for all submittal packages (see §302.3), not just wetlands.



~~(12)(6)~~ If **wetland mitigation** is required, a **wetland mitigation** document shall be developed in accordance with §604 of this **Ordinance**; and. This document shall include:

E. The **Riparian Environment** Submittal ~~specified in §306 of this Ordinance~~ for any development associated with a **riparian environment** designated in §606 of this **Ordinance**, including:

~~(13)(1)~~ Either Schedule H or Schedule W, signed by a **Professional Engineer or Wetland Specialist**, respectively;

~~(14)(2)~~ A delineation of the **riparian environments** in accordance with §606.2 of this **Ordinance**;

~~(15)(3)~~ If mitigation is required, a **riparian environment** mitigation document must be developed in accordance with §607, and a plan in accordance with §303.2.O of this **Ordinance**;

~~(16)(4)~~ For impacts to a **Jurisdictional Waters of the U.S.**, provide a ~~copy~~copies of ~~one~~any of the following forms of correspondence from the **Corps**:

~~(a)~~ A **Jurisdictional Determination** from the **Corps** indicating that the impacted waters are isolated;

~~(b)(a)~~ A Letter of No Objection stating that no permit is necessary; or

~~(c)(b)~~ A Section 404 permit application from the **Corps**, all associated correspondence and a copy of the completed joint application form (NCR Form 426, "Protecting Illinois Waters") signed by the ~~co-permittee~~**applicant** or agent.;

~~(17)(5)~~ For channel relocation, include documentation indicating that the length of the mitigated channel is **greater than or equal to** ~~or greater than the~~ length of the disturbed channel.; and

C.F. The **Qualified Sewer Construction** Submittal ~~specified in §307 of this Ordinance~~ for any ~~development~~ associated with **qualified sewer** construction, as designated in Article 7 of this **Ordinance**, including.;

(1) Schedules A, B, and C;

(2) Schedule E and applicable supporting calculations for new, reconstructed, or modified public lift stations and/or forcemains;

**Commented [A24]:** It does not make sense to require a jurisdictional determination for impacts to waters which are already determined to be jurisdictional.

**Commented [A25]:** Add reference to lift station/forcemain Schedule E.

(3) Schedules F and G and applicable supporting documentation for onsite treatment or pre-treatment of industrial wastes;

**Commented [A26]:** Add reference to industrial waste Schedules F & G.

(4) Schedule J, signed and notarized by the applicant and Notary Public, respectively, for projects located in a municipality that has not adopted ordinances requiring overhead plumbing and prohibiting footing drain discharge into the sanitary sewer system. Said ordinances shall be filed with the District.

**Commented [A27]:** Added reference to Schedule J.

(5) Schedule O for either of the following:

**Commented [A28]:** Add reference to outfall/direction connection/District property Schedule O.

(a) Direct connections to District infrastructure; or

(b) New or reconstructed outfalls to waterways or Lake Michigan;

~~(4)~~ All District required general notes, approved materials, and applicable standard qualified sewer construction details (or equivalent), available from the TGM;

~~(2)(6)~~ All applicable District details, technical requirements, and design guidelines for qualified sewer construction available from the TGM;

~~(3)(7)~~ Population Equivalency (PE) calculations for expected sewer flows based on new, existing, and/or expanded service area development;

~~(4)(8)~~ Service area and future service area exhibits along with supporting population calculations;

~~(5)(9)~~ A narrative description of any live sewer connection or live sewer bypass protocol;

~~(6)(10)~~ A recorded maintenance agreement between all sewer system owners when a new connection to a privately-owned sewer is proposed; and

**Commented [A29]:** This provision is from former §310.3.C and also in Article 7. Appropriate here because it refers to a submittal requirement.

~~(7)(11)~~ Other calculations necessary to demonstrate compliance with this Ordinance.

~~D.G.~~ The Maintenance and Monitoring Plan Submittal, including: specified in §310 of this Ordinance; and

(1) Schedule R, signed and notarized by the applicant and Notary Public, respectively;

~~(3)(2)~~ A schedule of implementation of the erosion and sediment control plan; including, but not limited to:

### ARTICLE 3. WATERSHED MANAGEMENT PERMIT REQUIREMENTS AND SUBMITTALS

(3) A scheduled perpetual maintenance program for the following:

(a) Stormwater management facilities, including major stormwater systems, volume control practices, stormwater detention facilities, native planting conservation areas, and other stormwater facilities;

(b) and c Compensatory storage facilities; including, but not limited to:

(c) Wetlands;

(d) Riparian environments; and

(e) A scheduled perpetual maintenance program for g Qualified sewer construction including, but not limited to:

(2) If riparian mitigation is required, a riparian environment mitigation document shall be developed in accordance with §607 of this Ordinance. This document shall include:

**Commented [A30]:** Mitigation documents are required under the respective Wetland and Riparian submittals. However, maintenance is still required for these areas.

**Commented [A31]:** Redundant with §302.3.E(3), requirements for Riparian Submittal

3. All applicable exhibits and plan sheets maps specified in §303 of this Ordinance, and;

### § 303. Erosion and Sediment Control Submittal

The Erosion and Sediment Control Submittal shall include permit Schedule P and require the following when applicable:

**Commented [A32]:** Moved to "§302 Watershed Management Permit Application Submittal" section

1. Maps, exhibits, and plan sheet(s) in accordance with §308.4 of this Ordinance;

2. An erosion and sediment control plan that describes all measures appropriate for the development such that all the requirements of Article 4 of this Ordinance are met. This plan shall include:

A. A narrative description of the existing land cover, hydrologic conditions of the proposed development, and areas adjacent to the development including a description of any flood protection areas, site discharge location(s), points of discharge to Jurisdictional Waters of the U.S., and soil survey data;

B. The NPDES ILR 10 permit number issued by IEPA to the co-permittee upon submittal of the ILR 10 Notice of Intent permit application or permit;

C. A narrative description of the proposed temporary erosion and sediment control practices, including a narrative describing how flood protection areas will be protected from erosion and sedimentation;

- D. A schedule of construction activities including, but not limited to, clearing and grading, installation of stabilized construction entrances, disposal of construction waste, stockpiling, and inspection and maintenance of all erosion and sediment control practices;
- E. A narrative describing how flood protection areas will be protected from erosion and sedimentation;
- F. Data and calculations used to size, locate, design, and maintain all erosion and sediment control practices, and the design of temporary stream crossings; and
- G. A mechanism for ensuring that the erosion and sediment control installation and maintenance requirements for both temporary and permanent measures will be met, including the list of maintenance tasks and performance schedules that have been identified and/or required in the plan sheet(s) and specifications.

**Commented [A33]:** This information belongs in the TGM.

#### **§ 304.—Stormwater Management Submittal**

The Stormwater Management Submittal shall include the appropriate permit Schedule D and require the following when applicable:

**Commented [A34]:** Moved to "§302 Watershed Management Permit Application Submittal" section

1. Maps, exhibits, and plan sheet(s) in accordance with §308.1, §308.2, §308.3, and §308.5 of this Ordinance;
2. ~~The site runoff plan for the development that describes all appropriate measures necessary to meet the requirements of §502 of this Ordinance. This plan shall include:~~
  - A. A narrative description of the existing drainage pattern that shall include:
    - (1) The portion of the parcel(s) that is located in a separate sewer area;
    - (2) The portion of the parcel(s) that is located in a combined sewer area;
    - (3) The parcel(s) and site discharge point(s) to a storm sewer or waterway; and
    - (4) The parcel(s) and site discharge point(s) to a combined sewer;
  - B. A narrative description of the proposed development that shall include:
    - (1) Area in acres of existing impervious areas; and
    - (2) Area in acres of proposed impervious areas;

C. ~~A narrative description of the upstream tributary area to allow for evaluation of offsite impacts resulting from the proposed development;~~

D. ~~Stormwater calculations comprised of site runoff and upstream tributary runoff calculations. Such stormwater calculations must include the following as applicable:~~

- ~~(1) Documentation identifying the procedures, assumptions, and data used to calculate hydrologic and hydraulic conditions for sizing both major and minor stormwater systems;~~
- ~~(2) Time of concentration calculations as required in Article 5 of this Ordinance;~~
- ~~(3) Curve number calculations for existing and proposed conditions;~~
- ~~(4) Calculations for sizing storm sewer systems;~~
- ~~(5) Delineation of areas tributary to each stormwater facility, overland flow route, and storage facility;~~
- ~~(6) Hydraulic grade line and water surface elevations under both design flow and base flood conditions;~~
- ~~(7) Calculations for sizing overland flow routes, ditches, channels, and swales;~~
- ~~(8) Cross section data for open channels;~~
- ~~(9) Profile drawings for open channels and sewers;~~
- ~~(10) Assumptions or calculations utilized to determine tailwater conditions for the site; and~~
- ~~(11) Other calculations necessary to demonstrate compliance with this Ordinance;~~

E. ~~Determination of the BFE and FFE, including the source of the determination, in accordance with §601 of this Ordinance.~~

~~2. A volume control plan that describes all measures appropriate for the development in accordance with §503 of this Ordinance. This plan shall include:~~

A. ~~Calculations of impervious area and the associated volume required for the volume control practices;~~

Commented [A35]: This information belongs in the TGM

B. ~~Narrative description of likely water quality impacts based upon proposed development land use;~~

C. ~~Description of soils that shall include:~~

(1) ~~Infiltration rates;~~

(2) ~~Percentage of clay; and~~

(3) ~~Depth to water table, bedrock, or limiting layer.~~

D. ~~Narrative description of the utilization of the volume control practices hierarchy in §503.3.A-C of this Ordinance, including use of retention-based practices, offsite volume control practices, and flow-through practices in §503.3.A and §503.3.B, and for impervious area reduction in §503.3.C of this Ordinance;~~

E. ~~Calculations of the quantifiable storage provided in each proposed retention-based practice(s) in §503.3 of this Ordinance to verify adequate storage;~~

F. ~~Calculations to demonstrate that the chosen flow-through practice(s) in §503.3 of this Ordinance will treat the targeted water quality impacts; and~~

G. ~~Calculation of impervious area reduction in §503.3 of this Ordinance, if applicable.~~

Commented [A36]: This information belongs in the TGM.

3. ~~A detention facility plan that describes all measures appropriate for the development in accordance with §504 of this Ordinance. This plan shall include:~~

A. ~~Documentation identifying the procedures, assumptions, and data used to calculate hydrologic and hydraulic conditions and to determine the post-development allowable release rate and related storage volume;~~

B. ~~Elevation versus storage area curve and associated calculations for detention facility;~~

C. ~~Elevation versus discharge curve and associated calculations for the outlet works of the storage system;~~

D. ~~Calculations demonstrating that the overflow structure and overflow path are sized in accordance with §504.11.C of this Ordinance; and~~

E. ~~Assumptions or calculations utilized to determine tailwater conditions for the site in accordance with §504.13.B of this Ordinance;~~

Commented [A37]: This information belongs in the TGM

### **§ 305. Floodplain Submittal**

The Floodplain Submittal shall describe all measures appropriate for the development in accordance with Article 6 of this Ordinance. This submittal shall include permit Schedule H and the following when applicable:

1. Maps, exhibits, and plan sheet(s) in accordance with 5 of this Ordinance;
2. A determination of the DFE, including the source of the determination, in accordance with §601.4 of this Ordinance;
3. A determination of the FPE, including the source of the determination, in accordance with §601.9 of this Ordinance;
4. A narrative description of proposed development within the limits of the regulatory floodplain and regulatory floodway;
5. A determination from the permittee of whether the development constitutes a substantial improvement;
6. A narrative discussion and details of floodproofing measures including material specifications, construction methods, and calculations;
7. Floodplain fill and compensatory storage calculations in accordance with §602.7, §602.8, and §602.9 of this Ordinance that shall include:
  - A. Cross section profiles of the floodplain fill and compensatory storage;
  - B. A plan view delineating the location of cross sections; and
  - C. Tabular summary showing fill below and above the existing 10 year flood elevation and cuts below and above the proposed 10 year flood elevation;
8. Revisions to FIRM(s) including all hydrologic and hydraulic calculations, modeling, and all CLOMR/LOMR applications;
9. A copy of the Cook County FIS Floodway Data Table; and
10. For development in the regulatory floodway, the following calculations or analyses shall be submitted to demonstrate compliance with §602.25 of this Ordinance:
  - A. Existing and proposed hydrologic and hydraulic analysis (land use and stream systems);

**Commented [A38]:** Moved to "§302 Watershed Management Permit Application Submittal" section

**Commented [A39]:** Not relevant. Only for SFH permits, and this is listed on the SFHA permit form.

**Commented [A40]:** This information belongs in the TGM

- B. ~~Tabular summary of existing and proposed flows, flood elevations, and floodway velocities for the 2-year, 10-year, and 100-year storm event;~~
- C. ~~All calculations used in hydrologic and hydraulic modeling;~~
- D. ~~Input and output for hydraulic and hydrologic computer models;~~
- E. ~~Plan view drawing locating all cross sections utilized within the hydraulic and hydrologic computer models;~~
- F. ~~Flood damage analyses for the replacement or modification of existing culverts, bridges, or impoundments;~~
- G. ~~Hydraulic analyses of new, modified, or replacement bridges or culverts; and~~
- H. ~~Transition sections as required in §602.28 of this Ordinance; and~~
- I. ~~Analyses of hydrologically and hydraulically equivalent compensatory storage; and~~

11. ~~Copies of any of the following forms of correspondence from the OWR:~~

- A. ~~A letter of no objection stating that no OWR permit is necessary; or~~
- B. ~~A copy of the completed joint application form (NCR Form 426, "Protecting Illinois Waters"), signed by the co-permittee, and all associated correspondence submitted to and received from OWR;~~

**Commented [A41]:** This information belongs in the TGM

**Commented [A42]:** Redundant with §300.4 and emphasized in the TGM

**§ 306. Wetland Submittal**

The Wetland Submittal shall describe all measures appropriate for the development in accordance with ~~Article 6~~ of this Ordinance. This submittal shall include ~~permit Schedule W and the following when applicable:~~

- 1. ~~Maps, exhibits, and plan sheet(s) in accordance with §308.7 of this Ordinance;~~
- 2. ~~The isolated wetland submittal for a standard isolated wetland that includes contiguous isolated waters less than one-tenth of an acre (0.10 acre) in aggregate shall include the following:~~
  - A. ~~An isolated wetland delineation report containing the following:~~
    - (1) ~~A delineation of the wetlands consistent with the requirements for wetland delineation provided in §603 of this Ordinance;~~

**Commented [A43]:** Moved to "§302 Watershed Management Permit Application Submittal" section



~~(2) A statement indicating date of boundary verification by the District;~~

~~(3) All Corps "Routine Wetland Determination Data Form(s)," and~~

~~(4) Mapping products in accordance with §308 of this Ordinance;~~

Field Code Changed

~~B. Copies of the following forms of correspondence from the Corps:~~

~~(1) A jurisdictional determination from the Corps indicating that the impacted wetland is not under the jurisdiction of the Corps; or~~

~~(2) A Letter of No Objection stating that no permit from the Corps is necessary; and~~

~~(3) If required by the Corps, a Section 404 permit application, all associated correspondence, and a copy of the completed joint application form (NCR Form 426, "Protecting Illinois Waters") signed by the co-permittee;~~

~~3. The isolated wetland submittal for a high quality isolated wetland or a standard isolated wetland equal to or greater than one-tenth of an acre (0.10 acre) in aggregate shall contain the following:~~

~~A. An isolated wetland delineation report containing the following:~~

Commented [A44]: Combined with above to require delineation report in all cases, not just isolated wetlands under specific circumstances.

~~(1) A narrative describing the location, type, functions, and size of all wetlands and wetland buffers on the site;~~

~~(2) A statement indicating date of boundary verification by the District;~~

~~(3) A delineation of the isolated wetlands consistent with the requirements for wetland delineation provided in §603 of this Ordinance;~~

~~(4) A classification of each onsite isolated wetland as either a high quality isolated wetland or a standard isolated wetland, including a narrative detailing the results of the assessment of specific functions and values;~~

~~(5) All Corps "Routine Wetland Determination Data Form(s);"~~

~~(6) An assessment to determine the Swink and Wilhelm Floristic Quality Index (FQI) and mean coefficient of conservatism (c), carried out within the growing season for all wetlands on the site;~~

~~(7) Photos of all wetlands and wetland buffers on the site;~~

(8) ~~An Illinois Department of Natural Resources (IDNR) threatened and endangered species consultation;~~

(9) ~~A United States Fish and Wildlife Service (USFWS) threatened and endangered species consultation; and~~

(10) ~~Mapping products in accordance with §308 of this Ordinance;~~

**Commented [A45]:** This information belongs in the TGM.

B. ~~Copies of the following forms of correspondence from the Corps:~~

(1) ~~A jurisdictional determination from the Corps indicating that the impacted wetland is not under the jurisdiction of the Corps; or~~

(2) ~~A Letter of No Objection stating that no permit from the Corps is necessary; and~~

(3) ~~If required by the Corps, a Section 404 permit application, all associated correspondence, and a copy of the completed joint application form (NCR Form 426, "Protecting Illinois Waters") signed by the co-permittee;~~

**Commented [A46]:** Redundant with above language, which was moved to "§302 Watershed Management Permit Application Submittal" section to cover all wetlands.

C. ~~For impacts to high quality isolated wetlands, documentation must be provided indicating that the proposed amount of impact represents the least amount of impact required to allow for an economically feasible use of the parcel, and documentation shall be provided indicating that:~~

(1) ~~The presence of high quality isolated wetlands precludes all economically feasible uses of the site and no practicable alternative to wetland modification exists; and/or~~

(2) ~~Avoidance of high quality isolated wetlands would create a hazardous road condition and no practicable alternative to wetland modification exists;~~

D. ~~For impacts to standard isolated wetlands with a total acreage greater than or equal to one tenth of an acre (0.10 acre) in aggregate, documentation must be provided indicating that no practicable alternative to wetland modification exists;~~

E. ~~An evaluation of the indirect impacts to isolated wetlands on the site and wetlands 100 feet beyond the area of the development if not included within the site;~~

F. ~~For impacts to isolated wetland buffers, documentation must be provided that describes how the impacted buffer functions and how its values will be mitigated. Isolated wetland buffer impacts may be mitigated via replacement or enhancement of impacted functions and values, or through buffer averaging;~~

G. ~~If mitigation is required, a wetland mitigation document must be developed in accordance with §310.4 and a plan in accordance with §308.7 of this Ordinance; and~~

H. ~~If mitigation is to be provided via a wetland mitigation bank, a statement of obligation from the wetland mitigation bank showing mitigation acreage reserved for the project; and~~

4. ~~Prior to construction, the co-permittee shall submit all relevant federal, state, and local permits;~~

**Commented [A47]:** This information belongs in the TGM.

**Commented [A48]:** Redundant with §300.4 and emphasized in the TGM.

### **§ 307. ~~Riparian Environment Submittal~~**

The ~~Riparian Environment Submittal~~ shall describe all measures appropriate for the development in accordance with ~~Article 6~~ of this Ordinance. This submittal shall ~~include either Schedule W or Schedule H~~ and the following when applicable:

**Commented [A49]:** Moved to “§302 Watershed Management Permit Application Submittal” section

1. ~~Maps, exhibits, and plan sheet(s) in accordance with §308.8 of this Ordinance;~~

2. ~~An inventory of the functions of the riparian environments in accordance with §606.1 of this Ordinance;~~

**Commented [A50]:** This information belongs in the TGM.

3. ~~A delineation of the riparian environments in accordance with §606.2 of this Ordinance;~~

4. ~~For impacts to riparian environments, documentation must be provided that describes the impacted riparian functions and how their values will be mitigated. Riparian environments impacts may be mitigated via replacement or enhancement of impacted functions;~~

**Commented [A51]:** Redundant with mitigation language moved to §302.2.E (from below), and emphasized in the TGM.

5. ~~For impacts to a Jurisdictional Waters of the U.S., provide copies of any of the following forms of correspondence from the Corps:~~

A. ~~A Jurisdictional Determination from the Corps indicating that the impacted waters are isolated;~~

B. ~~A Letter of No Objection stating that no permit is necessary; or~~

C. ~~A Section 404 permit application from the Corps, all associated correspondence and a copy of the completed joint application form (NCR Form 426, “Protecting Illinois Waters”) signed by the co-permittee or agent;~~

6. ~~For channel relocation, include documentation indicating that the length of the mitigated channel is equal to or greater than the length of the disturbed channel; and~~

7. ~~If mitigation is required, a riparian environment mitigation document must be developed in accordance with §310.5 and a plan in accordance with §308.8 of this Ordinance.~~

Field Code Changed

Field Code Changed

### § 308. Sewer Construction Submittal

The Sewer Construction Submittal shall describe and delineate all measures appropriate for installing qualified sewer construction in accordance with Article 7 of this Ordinance. In all cases ~~permit Schedules A, B, and C should be submitted. This submittal shall include the following when applicable:~~

**Commented [A52]:** Moved to “§302 Watershed Management Permit Application Submittal” section

1. ~~Maps, exhibits, and plan sheet(s) in accordance with § 308.1 and §308.6 of this Ordinance;~~
2. ~~All District required general notes, approved material and applicable standard qualified sewer construction details available from the TGM;~~
3. ~~All applicable District details, technical requirements, and design guidelines for qualified sewer construction available from the TGM;~~
4. ~~Population Equivalency (PE) calculations for expected sewer flows based on new or expanded development;~~
5. ~~Service area and future service area exhibits along with supporting population calculations;~~
6. ~~A narrative description of any live sewer connection or live sewer bypass protocol;~~
7. ~~Characteristic of waste for onsite treatment or pre treatment of industrial wastes including:~~

A. ~~Completed Watershed Management Permit forms Schedule F & G; and~~

**Commented [A53]:** Moved to “§302 Watershed Management Permit Application Submittal” section

B. ~~Narrative of wastes being generated, treatment process, and flow loading;~~

**Commented [A54]:** This information belongs in the TGM

8. ~~District Direct Connection information, including:~~

A. ~~Completed permit form Schedule O;~~

**Commented [A55]:** Moved to “§302 Watershed Management Permit Application Submittal” section

B. ~~Clearly label all District owned sewers and structures on the plans;~~

C. ~~Provide clearance distances for all proposed excavation within 15 feet of District sewers and structures;~~

D. ~~Provide sewer construction notes associated with construction in proximity of District facilities (available from the TGM);~~

- E. Provide required District direct connection detail (available from the TGM);
- F. Provide narrative(s) of excavation protocol in proximity to District structure; and
- G. Provide shoring calculations certified by a structural engineer for any deep excavation in proximity of District facilities;

Commented [A56]: This information belongs in the TGM

9. Outfall Connection details including:

- A. Completed permit form Schedule O;
- B. Clearly label proposed outfall location on the plans;
- C. Provide District outfall general notes (available from TGM);
- D. Provide construction details for the proposed outfall; and
- E. Provide construction details of stormwater quality interceptor; and

Commented [A57]: Moved to "§302 Watershed Management Permit Application Submittal" section

Commented [A58]: This information belongs in the TGM

10. Other calculations necessary to demonstrate compliance with this Ordinance.

**§ 309. § 303. Maps, Plan Set and Exhibits and Plan Sheets Submittal**

Depending on the complexity of the proposed ~~development project~~, combining plan sheets is desirable if information provided on all ~~plan sheets~~ is clear, specific, and legible. The ~~Maps, Plan Set and Exhibits, and Plan Sheets~~ Submittal shall include the following when applicable:

1. ~~All required topographic information shall be tied to the North American Vertical Datum of 1988 (NAVD88) based on national map standard accuracy;~~
2. The plan set being submitted under the **Watershed Management Permit** shall be comprised of the following plan sheets and exhibits, as applicable:
  - A. ~~Cover or Title Sheet, including the following Mapping products, with the project location indicated, shall include where applicable and where available:~~
    - (1) A ~~location map~~ made to scale displaying the following:
      - (a) The **project** location, and named streets, highways, railroads and **waterways**;
      - (b) Delineation of the conveyance route and indication of the **sewer system owner** of the **stormwater** drainage from the **project** to the **receiving waterway or combined sewer**; and

Commented [A59]: Moved from "General Requirements"

~~(b)(c)~~ Location map to scale displaying Delineation of the conveyance route and indication of the sewer system ownership of sanitary, storm, and/or combined sewers flow from the development project through the local sewer system(s) to the receiving District interceptor or facility;

(2) The index of plan sheets that are included as part of the plan set; and

(3) Original seal and signature of the Professional Engineer of record.

B. United States Geological Survey (USGS) topographic map;

C. Natural Resources Conservation Service (NRCS) soils map noting hydric soils;

D. Cook County FIRM;

E. National Wetland Inventory (NWI);

F. Aerial photo of the site;

G. Aerial photo showing onsite wetland and offsite wetland boundaries and locations of delineation data points; and

H. Historical aerial photographs, USGS hydrological atlas, or NRCS wetland inventory maps;

2. Plan sheet(s) and exhibits that shall contain the following:

A. North arrow;

B. Scale of at least one inch to 100 feet or less (e.g., one inch to 50 feet);

C. Legend;

D. Property and/or parcel lines; and

E. Date of original preparation and any revisions;

B. MWRD General Notes plan sheet;

C. Existing Conditions Plan;

D. Demolition Plan;

F.E. A utility and Dimensional or Site Geometry Plan; sheet(s) shall contain the following:

**Commented [A60]:** These are not general requirements, but are specific to certain submittals. This information belongs in the TGM.

**Commented [A62]:** This information belongs in the TGM

**Commented [A61]:** This is required to determine if previous work has occurred in the area that may fall under stormwater management requirements.

F. Paving Plan;

G. A gGrading pPlan; sheet(s) that shall contain the following;

H. The uUtility pPlan; sheet(s) for qualified sewer construction shall include the following;

I. An eErosion and sSediment eControl pPlan; sheet(s) at the same scale as the stormwater management plan sheet(s) that shall include;

J. Construction Details;

J.K. A drainageTributary aArea eExhibit; that shall include;

K. A vicinity topographic map covering the entire upstream watershed that drains to or through the site and the entire watershed downstream to the point of known or assumed discharge and water surface elevation on the site;

L. Top of foundation elevations and overland flow paths on properties located directly downstream of and adjacent to the proposed site; and

M. A plan view drawing of existing and proposed stormwater facilities at the same scale as the vicinity topographic map that shall include;

N. Watershed boundaries for areas draining through or from the development;

O. The location of the development within the watershed planning area; and

P. Soil types, vegetation, and land cover conditions affecting runoff upstream of the development site for any area draining through or to the site;

Commented [A63]: This information belongs in the TGM

3. An erosion and sediment control plan sheet(s) at the same scale as the stormwater management plan sheet(s) that shall include;

A. Existing contours with drainage patterns and clearly delineated watershed boundaries tributary to the site;

B. Location of flood protection areas and vegetated areas for the development that are to be preserved or avoided;

C. Proposed contours, locations of waterways, and the location of erosion and sediment control practices;

D. The drainage area tributary to each erosion and sediment control practice delineated on the drawing;

- E. ~~A schedule of construction activities including, but not limited to, clearing and grading of the site, installation of stabilized construction entrances, disposal of construction waste, stockpiling, and maintenance of all erosion and sediment control practices;~~
- F. ~~Design details for proposed erosion and sediment control practices; and~~
- G. ~~Identification of person(s) having legal responsibility for installation, maintenance, and removal of erosion and sediment control practices during construction and after development is completed;~~
- H.L. ~~The s~~**Stormwater m**~~Management Exhibit, including the Development Area Exhibit; plan sheet(s) shall include the following:~~
- I. ~~An existing conditions plan sheet(s) that shall contain the following:~~
- ~~(1) Benchmark location and information;~~
  - ~~(2) A delineation of any pre-development regulatory floodplain and regulatory floodway on the site;~~
  - ~~(3) A wetland delineation of all Jurisdictional Waters of the U.S., including wetlands, both on the site and extending one hundred (100) feet beyond the site;~~
  - ~~(4) A delineation of any riparian environments on the site;~~
  - ~~(5) Existing contours on entire site and 50 feet beyond the site;~~
  - ~~(6) Minimal contour intervals of one foot for both existing and proposed contours;~~
  - ~~(7) Top of foundation, lowest floor, lowest entry elevation, and floodproofing elevations of all existing structures within 100 feet of the development area;~~
  - ~~(8) Existing structures, parking lots, driveways, sidewalks, pathways, trails, and other impervious areas on the site;~~
  - ~~(9) All existing stormwater facilities including pipes, field tile, culverts, and inlets on entire site and 50 feet beyond the site. Information regarding the invert and rim elevations, pipe sizes, pipe lengths, and material type shall be provided;~~

**Commented [A64]:** This information belongs in the TGM

**Commented [A65]:** This is often requested to aid in review, and is being added for clarification. Details about what to include in this exhibit are provided in the TGM.



(10) Existing utilities including sanitary, storm, water main, or any other utilities that exist on the site. Information regarding the invert and rim elevations, pipe sizes, pipe lengths, and material type shall be provided; and

(11) Existing trees and vegetation areas on the site;

Commented [A66]: This information belongs in the TGM

J. ~~A utility and geometry plan sheet(s) shall contain the following:~~

(1) Delineated limits of any flood protection areas on the site;

(2) The FPE(s) shall be specified, as appropriate;

(3) All existing and proposed impervious surfaces such as roadways, structures, parking lots, driveways, sidewalks, pathways, trails, or any other impervious surfaces;

(4) All top of foundation elevations for existing and proposed structures;

(5) All existing and proposed lowest entry elevations of any structures within a regulatory floodplain on the site or on adjacent property;

(6) All existing and proposed lowest entry elevations of any structures adjacent to a stormwater facility;

(7) All existing and proposed stormwater facilities including pipes, field tile, culverts, and inlets, including rim and invert elevations, pipe sizes, pipe lengths, and material type;

(8) Existing and proposed utilities including sanitary, storm, water main, electric, television cables, gas or any others that exist on the site. Information regarding the invert and rim elevations, pipe sizes, pipe lengths, and material type should be provided;

(9) Design details for all proposed stormwater facilities including, but not limited to, major and minor stormwater systems, storage basins, detention facilities, volume control practices, and outlet works including restrictor size and invert;

(10) Delineated limits of the base flood condition from new or adjacent detention facilities;

(11) Location of all volume control practices;

(12) Downspout and sump pump discharge line locations and directions. Outlets should be outside the limits of flood protection areas; and

(13) ~~Location and limits of all easements;~~

Commented [A67]: This information belongs in the TGM

K. ~~A grading plan sheet(s) that shall contain the following:~~

(1) ~~Delineated limits of any flood protection areas on the site;~~

(2) ~~Existing and proposed contours of the entire site and 100 feet beyond the site;~~

(3) ~~Existing and proposed spot elevations demonstrating drainage patterns;~~

(4) ~~Major and minor stormwater systems that shall include:~~

(a) ~~All existing and proposed stormwater facilities;~~

(b) ~~All existing and proposed volume control practices;~~

(c) ~~All existing and proposed base flood conditions for the major stormwater system;~~

(d) ~~All existing and proposed overland flow routes;~~

(e) ~~Stage-storage-discharge table for detention facilities;~~

(f) ~~Design details for proposed stormwater facilities including, but not limited to, major and minor stormwater systems, storage basins, volume control practices, and outlet works including restrictor size and invert; and~~

(g) ~~Drainage area to all proposed stormwater facilities;~~

(5) ~~A delineation of the pre-development and post-development regulatory floodplain and regulatory floodway in accordance with §601 of this Ordinance;~~

(6) ~~Topographic survey drawings of all existing and proposed structures located on or within 100 feet of the site including the lowest floor, lowest entry elevation, and floodproofing elevations;~~

(7) ~~Plan view of locations of cross sections utilized to compute compensatory storage; in addition, the cross sections should be plotted on the plans or in the stormwater management submittal at a scale such that the reviewer can verify quantities;~~

- (8) Location of cross sections and any other hydrologic or hydraulic computer-modeled features;
- (9) Volume control practices; if native plantings are required this shall be shown on a separate planting plan;
- (10) Delineation of all unrestricted areas;
- (11) Delineation of all native planting conservation areas; and
- (12) Delineation of all disturbed areas;

Commented [A68]: This information belongs in the TGM

~~The utility plan sheet(s) for qualified sewer construction shall include the following:~~

~~L. A utility plan sheet(s) shall contain the following:~~

- (1) Benchmark location and information;
- (2) Existing structures, parking lots, driveways, sidewalks, pathways, trails, and other impervious areas on the site;
- (3) All top of foundation elevations for existing and proposed structures;
- (4) All proposed qualified sewer construction information including:
  - (a) Qualified sewer manhole, cleanout or other structure information including rim, and invert elevation (each labeled by compass direction), with a unique clearly labeled identifier;
  - (b) Qualified sewer pipe size, length, material, and slope, clearly labeled as proposed;
  - (c) At the upstream building connection, estimated sewer invert;
  - (d) At the downstream point of connection, estimated invert, size, slope, and flow direction of the existing sewer;
  - (e) Utility crossing information and call outs, including pipe to pipe clearance distance, for all water main and water service intersections along the proposed alignment; and
  - (f) Qualified sewer manhole, structure lid cover type where appropriate (within HWL or BFE);

- (5) All existing sanitary and combined sewer pipe and structure information including pipe size, invert and rim elevation, flow direction, material type, and ownership;
  - (6) All existing sanitary and combined sewer pipe and structure to be demolished or abandoned, including septic systems;
  - (7) All existing and proposed water main and water service rim and invert elevations, and the location of all fire hydrants and valves;
  - (8) Existing and proposed utilities including electric, television cables, gas or any others that exist on the site. Information regarding the invert and rim elevations, pipe sizes should be provided;
  - (9) All existing and proposed stormwater facilities including pipes, field tile, culverts, and inlets, including rim and invert elevations, pipe sizes, pipe lengths, and material type;
  - (10) Location of all volume control practices and major stormwater systems;
  - (11) All proposed and existing downspout and sump pump discharge line locations and directions except for residential subdivision development. Outlets should be located outside the limits of flood protection areas;
  - (12) Delineated limits of any flood protection areas on the site;
  - (13) The BFE and FPE(s) shall be specified in accordance with §601 of this Ordinance, as appropriate;
  - (14) Location and limits of all easements; and
  - (15) Locations of existing trees and vegetation areas along the alignment;
- M. The plan and profile for public qualified sewer main construction shall include the following (when applicable):
- (1) Profile views or all proposed public qualified sewer main construction depicted on the same sheet as an accompanying plan view;
  - (2) Profiles shall follow the alignment of public qualified sewer main construction if substantially different from the centerline of a right of way alignment;
  - (3) Proposed size, length, slope, material and class of pipe for all proposed public qualified sewer main construction;

- (4) A unique line type to distinguish between proposed and existing sewer systems;
  - (5) Structure rim and invert elevations (labeled by compass direction) for all proposed qualified sewer construction along with a unique identifier;
  - (6) Horizontal and vertical scale [exaggeration as appropriate to show detail];
  - (7) Utility crossings with vertical distance between proposed qualified sewer and existing or proposed utility;
  - (8) Existing ground profile (and bedrock when applicable);
  - (9) Profile stationing to coincide with plan stationing;
  - (10) Match line when profile covers more than one page; and
  - (11) For large or complex projects, an insert map indicating immediate plan limits within the overall project.
- N. The lift station plan, profile, and schematic shall include the following (when applicable):
- (1) Completed Watershed Management Permit form Schedule E;
  - (2) Lift station and wet well plan and profile, including:
    - (a) Critical pump operation elevations (pump off, pump on, etc.);
    - (b) Pump installation elevation;
    - (c) Structure rim Elevation; and
    - (d) Initial Check valve and air/vacuum relief valve;
  - (3) Force main profile, including:
    - (a) Location of check valve(s);
    - (b) Location of combination air/vacuum relief valve(s) along the alignment; and
    - (c) Stream or waterway crossing(s) and crossing provisions;
  - (4) Pump detail (manufacturer cut sheet) indicating specified horse power and impeller type;

- (5) ~~Lift station construction details;~~
- (6) ~~Lift station service area map;~~
- (7) ~~Calculations for lift station design including:~~
  - (a) ~~Design population including average and peak flow;~~
  - (b) ~~Narrative for basis of lift station design population (service area or actual flow monitoring data);~~
  - (c) ~~Force main pipe friction and design head losses;~~
  - (d) ~~Wet well capacity, cycle time, detention time;~~
  - (e) ~~Narrative of alternative power source;~~
  - (f) ~~System curve and pump performance curve; and~~
  - (g) ~~The logic of the Programmable Logic Controller, including pump operation elevations.~~

Commented [A69]: This information belongs in the TGM

M. Floodplain plan sheet(s) including:

- (1) Location of the existing and proposed BFE and floodway; and
- (2) Cross section profiles of floodplain fill and compensatory storage with a tabular summary of cut and fill volumes below the 10-year flood elevation and between the 10-year and 100-year flood elevations.

O.N. The ~~w~~Wetland plan sheet(s) ~~shall~~ include:

- (1) ~~In plan view, t~~The location of **wetland** and **wetland buffer** on or within 100 feet of the ~~site~~**project**, based upon a survey of the **wetland** delineation in accordance with §603 of this **Ordinance**;
- (2) ~~Acreage and a~~area of proposed impact to **wetland** or **wetland buffer**; and
- (3) A proposed **wetland mitigation plan** that meets the requirements of §604 of this **Ordinance**, if impacts to the wetland or wetland buffer ~~impacts are proposed;~~ ~~the proposed wetland mitigation plan sheet(s) shall include the following:~~
  - (a) ~~Location and acreage of proposed wetland mitigation;~~

- (b) ~~Soil locations and soil management activities;~~
- (c) ~~Planting zones, species, quantities, sizes, locations, specifications, methodologies, and details;~~
- (d) ~~Hydrology monitoring equipment locations;~~
- (e) ~~Schedule of earthwork, planting, maintenance, and monitoring;~~
- (f) ~~Temporary and permanent access locations; and~~
- (g) ~~Applicable maintenance and conservation easements granted or dedicated to, and accepted by, a governmental entity;~~

Commented [A70]: This information belongs in the TGM

P.O. ~~The~~ **Riparian Environment** plan sheet(s) ~~shall~~ include:

- (1) Location of **riparian environments** located ~~on site~~ **within the project**, based upon a survey of the Ordinary High Water Mark (**OHWM**) of the channel or stream and associated **riparian environment**, ~~in plan view;~~
- (2) ~~Acreage and~~ area of proposed impact to **riparian environments** as defined in §607.3 of this **Ordinance**; and
- (3) Proposed **riparian environment** mitigation plan that meets the requirements of §607 of this **Ordinance**, if ~~impacts to the riparian environment are proposed~~ **mitigation is required**. ~~The proposed riparian environment mitigation plan sheet(s) shall include the following:~~
  - (a) ~~A plan and profile of the existing and proposed channel showing the channel width, depth, sinuosity, and location of in stream structures;~~
  - (b) ~~Proposed planting zones, species, quantities, sizes, locations, specifications, methodologies, and details;~~
  - (c) ~~Schedule of earthwork, planting, maintenance, and monitoring;~~
  - (d) ~~Temporary and permanent access locations; and~~
  - (e) ~~Applicable maintenance and conservation easements granted or dedicated to, and accepted by, a governmental entity; and~~

Commented [A71]: This information belongs in the TGM

- 3. The Plat of Survey, Exhibit A, meeting the requirements of Section 1270.54 of Title 68 of the Illinois Administrative Code. When Exhibit A is submitted with Schedule L, it shall also meet the requirements of the Cook County Recorder of Deeds;

4. The recording plan sheet(s), Exhibit R, meeting the requirements of the Cook County Recorder of Deeds, shall include the following:

**Commented [A72]:** Add clarifications on recording exhibit requirements.

- A. The common address, legal description, and property index number (PIN) of the parcel;
- B. The location of all existing and proposed systems indicated in §302.2.G(3) of this Ordinance; and
- C. The type and schedule of **maintenance activities** to be performed on the existing and proposed systems as required under §302.2.G(3) of this **Ordinance**.
- A. Location of all existing and proposed detention facilities to meet District stormwater storage requirements and to ensure they are permanently sustained and adequately maintained by future parcel owners;
- B. Location of any offsite, trade-off detention facilities to meet District stormwater storage requirements not located on the parcel and to ensure they are linked to the permitted parcel development and permanently sustained and adequately maintained by future/alternate parcel owners;
- C. Location of all existing and proposed volume control practices to meet District volume control requirements and to ensure they are permanently sustained and adequately maintained by future parcel owners;
- D. Entire parcel area for phased development providing notice of stormwater detention storage requirements for undeveloped portions of a parcel now developed in part under the WMO;
- E. A sewer utility plan for parcels outside the territorial boundaries of a municipality delineating any qualified sewer construction to be maintained by the co-permittee in the event that the Township or County is unwilling or unable to do so;
- F. Location of all wetland and riparian mitigation areas provided to meet District mitigation requirements and to ensure they are permanently sustained and adequately maintained by future parcel owners;
- G. Location of all native or natural planting areas to ensure they are permanently sustained and remain as native or natural planting areas by future parcel owners; and
- H. Location of all qualified sewer construction for parcels in unincorporated areas, to ensure sewer systems are permanently sustained and adequately maintained by



~~future parcel owners in the event the permittee (Cook County or other non-municipal entity) is unwilling or unable to do so.~~

Commented [A73]: This information belongs in the TGM

#### § 310. § 304. Terms of Permit/Denial - Appeal

1. Upon receipt of a complete **Watershed Management Permit** application, either the **District** or an **authorized municipality** may:
  - A. Request clarifications or revisions from the **co-permittee**;
  - B. Issue a Watershed Management Permit;
  - C. Issue a **Watershed Management Permit** with special conditions in accordance with this **Ordinance**; or
  - D. Deny the application for a **Watershed Management Permit**.
2. Any ~~co-permittee~~**applicant** aggrieved by the special conditions or denial of a **Watershed Management Permit** may appeal said denial or special conditions as specified in Article- 13 of this **Ordinance**.

#### § 311. § 305. Construction Timeline Requirements and Approval of Plan Revisions

1. Construction activities authorized under a **Watershed Management Permit** must be initiated within one year following the date of permit issuance. ~~If construction activity has not started within one year following the date of permit issuance and the **applicant** intends to pursue the permitted activity, then the **applicant** shall submit a written request for an extension. Upon receipt of such request, either the **District** or an **authorized municipality** may grant an extension to start the construction activities under the **Watershed Management Permit**. Failure to commence construction activities within one year following the date of permit issuance or by the granted extension date renders the issued **Watershed Management Permit** null and void.~~
- ~~2.~~ Construction activities authorized under a **Watershed Management Permit** must be completed within three years following the date of permit issuance.
- ~~3-2.~~ If construction activity has been started but is not completed within three years of the date of issuance of a **Watershed Management Permit** and the ~~co-permittee~~**applicant** intends to pursue the permitted activity, then the ~~co-permittee~~**applicant** shall submit a written request for an extension. Upon receipt of such request, either the **District** or an **authorized municipality** may grant an extension for construction activities under a **Watershed Management Permit**.

Commented [A74]: Clarify permit extension policy

4.3. After issuance of a Watershed Management Permit, all material revisions to the plans require the approval of either the District or an authorized municipality. The ~~co-permittee~~ applicant shall submit a written request for approval, the appropriate fee, and the revised plans to either the District or an authorized municipality. If either the District or authorized municipality determines that the revised plans are in compliance with the then current requirements of this Ordinance, an approval of the revised plans will be issued.

#### § 312. § 306. Record Drawings

1. Upon completion of development the project, record drawings of all the site stormwater plan sheet(s), volume control practices, detention facilities, and stormwater facilities, and qualified sewer construction shall be submitted to the District. Record drawings shall consist of the following as necessary:
  - A. Record topography with one foot contours;
  - B. Record utility plans; and
  - C. Cross sections.
2. All record drawings shall contain benchmark information and reference a vertical datum.
3. Record drawing calculations shall be submitted to the District for the following: required showing th
  - A. aAs-built volume of constructed compensatory storage volume control practices, detention facilities, and compensatory storage; and: As-built compensatory storage volume calculations shall incrementally determine both cut and fill volumes within the regulatory floodplain as follows:
    - A.B. Acreage of constructed native planting conservation areas, wetland mitigation areas, and riparian environment mitigation areas.
    - B. Below the 10-year flood elevation; and
    - C. Between the 10-year flood elevation and BFE.
  3. Record drawing calculations shall be required showing the as-built volume of the volume control practices.
  4. Record drawing calculations shall be required showing the as-built volume of the detention facility.

Commented [A75]: This information belongs in the TGM.

Commented [A76]: This information belongs in the TGM.

~~5.4. If the constructed grades, geometries, or inverts, acreage, or volumes of constructed stormwater facilities, volume control practices, or detention facilities, compensatory storage, native planting conservation areas, wetland mitigation areas, or riparian environment mitigation areas are not in conformance with the approved plans, the co-permittee applicant shall be responsible for any modifications required for compliance with this Ordinance.~~

~~6.5. Record drawings shall be prepared, signed, and sealed by a Professional Engineer or a Professional Land Surveyor. The record calculations shall be prepared, signed, and sealed by a Professional Engineer.~~

~~7. Record drawings of all qualified sewer construction with relevant dimensions and elevations.~~

Commented [A77]: This information belongs in the TGM.

#### ~~§ 313. § 307. Recordation and Obligations of a Watershed Management Permit~~

- ~~1. The Co-Permittee applicant is responsible for ensuring Schedule R, specified under §302.2.G the recording of this Ordinance, together with Exhibit R specified under §303.4 submittal defined in §308.9 of this Ordinance, is recorded with the Cook County Recorder of Deeds.~~
- ~~2. At the expense of the Co-Permittee applicant, the District may record Schedule R, the recording submittal specified under §302.2.G of this Ordinance, together with Exhibit R, specified under §303.4 of this Ordinance the appropriate permit form (Schedule R) with the Cook County Recorder of Deeds.~~
- ~~3. The Director of Engineering may record the Watershed Management Permit and any amendments thereto with the Cook County Recorder of Deeds.~~
- ~~3. Obligations imposed under a recorded Watershed Management Permit shall continue into perpetuity or until the parcel property interest is redeveloped under a new Watershed Management Permit for the useful life of the subject development or qualified sewer construction.~~

#### ~~§ 314. Maintenance and Monitoring Plan Submittal~~

~~The maintenance and monitoring plan submittal shall describe all measures appropriate for the development during the construction phase such that requirements of Article 4, Article 5, Article 6, and Article 7 are met, and for the post-construction phase such that all the requirements of Article 9 of this Ordinance are met. Such submittal shall include the following when applicable:~~

Commented [A78]: This information belongs in the TGM.

1. ~~A schedule of implementation of the erosion and sediment control plan including, but not limited to:~~

- A. ~~A statement that installation of erosion and sediment control practices will occur prior to any soil disturbance;~~
- B. ~~A schedule for construction activities, including stabilized construction entrance installation, sediment trapping facility installation, site clearing, stockpiling, grading, construction waste disposal, temporary and permanent stabilization, and removal of temporary erosion and sediment control practices;~~
- C. ~~A schedule for inspection, reporting, and maintenance of all erosion and sediment control practices; and~~
- D. ~~Contact information for the party responsible for implementation and maintenance of the site soil erosion and sediment control plan;~~

Commented [A79]: This information belongs in the TGM

2. ~~A scheduled perpetual maintenance program for stormwater facilities, volume control practices, and compensatory storage including, but not limited to:~~

- A. ~~Planned maintenance tasks and frequency of each task such as removal of sediment, debris, mowing and pruning of vegetation, and restoration of eroded areas;~~
- B. ~~Identification of the responsible parties for performing the maintenance tasks; and~~
- C. ~~A description of applicable temporary and permanent access and maintenance easements granted or dedicated to, and accepted by, a governmental entity.~~

Commented [A80]: This information belongs in the TGM

3. ~~A scheduled perpetual maintenance program for qualified sewer construction including, but not limited to:~~

- A. ~~Planned maintenance tasks and frequency of each task for the removal of objectionable wastes, fats, oils and grease, or any other wastes collected in private pre-treatment or separator structures;~~
- B. ~~Planned routine maintenance for all private lift station and pumping facilities;~~
- C. ~~Operation maintenance agreements for all private service sewers providing service to multiple owners;~~
- D. ~~Identification of the responsible parties for performing the maintenance tasks; and~~

E. ~~A description of applicable temporary and permanent access and maintenance easements granted or dedicated to, and accepted by, a governmental entity.~~

Commented [A81]: This information belongs in the TGM

4. ~~If wetland mitigation is required, a wetland mitigation document shall be developed in accordance with §604 of this Ordinance. This document shall include:~~

A. ~~Proposed wetland hydrology and an inundation and duration analysis;~~

B. ~~Proposed soils and soil management activities;~~

C. ~~Proposed planting zones, species, quantities, sizes, locations, specifications, methodologies, and details;~~

D. ~~Proposed maintenance and monitoring plan with maintenance activities and performance criteria outlined;~~

E. ~~Schedule of earthwork, planting, monitoring, and maintenance;~~

F. ~~A plan for the continued management, operation, and maintenance of the wetland mitigation measures including the designation of funding sources and the person responsible for long-term operation and maintenance; and~~

G. ~~A description of applicable temporary and permanent access and maintenance and conservation easements granted or dedicated to and accepted by a governmental entity; and~~

Commented [A82]: This information belongs in the TGM

5. ~~If riparian mitigation is required, a riparian environment mitigation document shall be developed in accordance with §607 of this Ordinance. This document shall include:~~

A. ~~The proposed methods which will allow naturalizing to occur, such as meandering, pools, or riffles for relocated channels. Methods proposed are expected to be able to withstand all events up to the base flood without increased erosion;~~

B. ~~The methods by which the normal flow within the channel will be diverted to construct the new or relocated channel;~~

C. ~~The erosion and sediment control practices to be utilized to minimize and control sediment and degradation of downstream water quality;~~

D. ~~The appropriate hydrologic and hydraulic methods analyzing the impacts on flood flows and flood elevations (to be provided in the floodplain and floodway submittal) meeting all other requirements in the Ordinance, including the floodplain/floodway requirements outlined in §601 and §602 of this Ordinance;~~

- E. ~~Proposed planting zones, species, quantities, sizes, locations, specifications, methodologies, and details;~~
- F. ~~Proposed maintenance and monitoring plan with maintenance activities and performance criteria outlined;~~
- G. ~~Scheduling of earthwork, planting, maintenance, and monitoring;~~
- H. ~~A plan for the continued management, operation, and maintenance of the riparian environment mitigation measures, including the designation of funding sources and the person responsible for long-term operation and maintenance; and~~
- I. ~~A description of applicable temporary and permanent access and maintenance and conservation easements granted or dedicated to, and accepted by, a governmental entity;~~

Commented [A83]: This information belongs in the TGM

#### ~~§ 315. Record Drawings~~

1. ~~Upon completion of development, record drawings of the site stormwater plan sheet(s), volume control practices, detention facilities, and stormwater facilities shall be submitted to the District. Record drawings shall consist of the following as necessary:~~
  - A. ~~Record topography with one foot contours;~~
  - B. ~~Record utility plans; and~~
  - C. ~~Cross sections.~~
2. ~~All record drawings shall contain benchmark information and reference a vertical datum.~~
3. ~~Record drawing calculations shall be required showing the as built volume of compensatory storage. As built compensatory storage volume calculations shall incrementally determine both cut and fill volumes within the regulatory floodplain as follows:~~
  - A. ~~Below the 10-year flood elevation; and~~
  - B. ~~Between the 10-year flood elevation and BFE.~~
4. ~~Record drawing calculations shall be required showing the as built volume of the volume control practices.~~
5. ~~Record drawing calculations shall be required showing the as built volume of the detention facility.~~

- ~~6. If the constructed grades, geometries, or inverts of stormwater facilities, volume control practices, or detention facilities are not in conformance with the approved plans, the co-permittee shall be responsible for any modifications required for compliance with this Ordinance.~~
- ~~7. Record drawings shall be prepared, signed, and sealed by a Professional Engineer or a Professional Land Surveyor. The record calculations shall be prepared, signed, and sealed by a Professional Engineer.~~
- ~~8. Record drawings of all qualified sewer construction with relevant dimensions and elevations.~~

#### ~~§ 316. Permit Fees~~

- ~~1. The District shall establish a schedule of permit fees in accordance with the provisions of this Ordinance, which may be amended from time to time. The Schedule of permit fees is included in Appendix F of this Ordinance.~~
- ~~2. An authorized municipality may establish a schedule of permit fees in accordance with the provisions of this Ordinance, which may be amended from time to time.~~
- ~~3. Fees shall be based upon the costs either the District or authorized municipality incurs for all aspects of the permitting process, including, but not limited to, review of permit applications and inspections.~~
- ~~4. A co-permittee shall pay all relevant permit fees at the time of application for a Watershed Management Permit. Permit fees shall be refunded if the permit application is cancelled subject to the conditions of §1401.3 of this Ordinance. Base fees, and other completed review fees, are considered non-refundable. See Appendix F of this Ordinance for a schedule of permit fees.~~

#### ~~§ 317. Terms of Permit/Denial Appeal~~

- ~~1. Upon receipt of a complete Watershed Management Permit application, either the District or an authorized municipality may:
  - ~~A. Request clarifications or revisions from the co-permittee;~~
  - ~~B. Issue a Watershed Management Permit;~~
  - ~~C. Issue a Watershed Management Permit with special conditions in accordance with this Ordinance; or~~
  - ~~D. Deny the application for a Watershed Management Permit.~~~~

- ~~2. Any co-permittee aggrieved by the special conditions or denial of a Watershed Management Permit may appeal said denial or special conditions as specified in Article 13 of this Ordinance.~~

~~§ 318. Construction Timeline Requirements and Approval of Plan Revisions~~

- ~~1. Construction activities authorized under a Watershed Management Permit must be initiated within one year following the date of permit issuance. Failure to commence construction activities within one year following the date of permit issuance renders the issued Watershed Management Permit null and void.~~
- ~~2. Construction activities authorized under a Watershed Management Permit must be completed within three years following the date of permit issuance.~~
- ~~3. If construction activity has been started but is not completed within three years of the date of issuance of a Watershed Management Permit and the co-permittee intends to pursue the permitted activity, then the co-permittee shall submit a written request for an extension. Upon receipt of such request, either the District or an authorized municipality may grant an extension for construction activities under a Watershed Management Permit.~~
- ~~4. After issuance of a Watershed Management Permit, all material revisions to the plans require the approval of either the District or an authorized municipality. The co-permittee shall submit a written request for approval, the appropriate fee, and the revised plans to either the District or an authorized municipality. If either the District or authorized municipality determines that the revised plans are in compliance with the then current requirements of this Ordinance, an approval of the revised plans will be issued.~~



## ARTICLE 4. REQUIREMENTS FOR EROSION AND SEDIMENT CONTROL

### § 400. Erosion and Sediment Control General Requirements

1. ~~All projects~~ shall incorporate **erosion and sediment control practices**. ~~The erosion and sediment control practices of Any development project~~ requiring a **Watershed Management Permit** as specified in §201 of this **Ordinance** shall comply with the requirements of Article 4 of this **Ordinance**.
- 1.2. All ~~co-permittees~~**applicants** shall submit the documents specified in ~~§302~~**Article 3** of this **Ordinance** ~~to demonstrate compliance and must develop an erosion and sediment control plan to verify compliance with the requirements in Article 4 of this Ordinance.~~
2. ~~All developments that are subject to National Pollutant Discharge Elimination System (NPDES) Permit ILR-10 shall meet the submittal and approval requirements of ILR-10.~~
3. ~~All developments~~ shall incorporate **erosion and sediment control practices** into the initial **site** plan. Primary emphasis should be placed on **erosion control practices** as they are preventative source controls, while **sediment control practices** are secondary measures designed to contain eroded soil after it is in transport.
- 4.3. For all ~~developments projects~~ that discharge directly to **Jurisdictional Waters of the U.S.**, the hydraulic and hydrologic design of the **erosion and sediment control plan** shall be designed for a **storm event** equal to or greater than a 25-year, 24-hour **storm event**.
- 5.4. ~~All developments projects~~ that are subject to National Pollutant Discharge Elimination System (NPDES) Permit ILR-10 shall meet the submittal and approval requirements of ILR-10.
- 6.5. Design criteria and specifications for **erosion and sediment control practices** shall be taken from the **Illinois Urban Manual**, as amended.
- 7.6. Where criteria and specifications are not provided in the **Illinois Urban Manual**, the design criteria and specifications shall be taken from the **TGM**.
- 8.7. Other **erosion and sediment control practices** that are equally effective as those in the **Illinois Urban Manual** may be used if either the **District** or an **authorized municipality** provides prior written approval.
- 9.8. **Erosion and sediment control practices** shall be functional before disturbances are made ~~to the site~~.

**Commented [A1]:** Erosion and sediment control is required for all aspects of a project, not just development. Maintenance, demolition, and utility construction shall also follow these provisions, regardless if a Watershed Management Permit is required.

**Commented [A2]:** Split from provision above and revised for consistency with other Articles.

**Commented [A3]:** Combined with §400.1 above and guidance/definition language belongs in the TGM.

### § 401. Temporary Erosion Control Requirements

1. Existing vegetation shall be preserved where practicable to minimize the area of soil disturbance.
2. Selection of appropriate temporary **erosion control practices** shall consider:
  - A. Seasonal, topographic, and **maintenance** limitations;
  - B. The susceptibility of soils to **erosion**; and
  - C. Proximity to **flood protection areas**.
3. ~~Temporary **erosion control practices** are **stabilization** measures that include, but are not limited to, protection of existing vegetation or establishment of new vegetation, such as seeding and sod **stabilization**, mulches and soil binders, geotextiles, **erosion control** blankets, plastic covers and mats, wind and dust control measures, **stormwater** conveyance channels, and velocity dissipation measures.~~
- 4.3. ~~Appropriate **erosion control practices** shall be incorporated. Areas where the existing ground cover does not consist of appropriate stabilizing vegetation in the portions of the **site-property interest** not under current **development** where the existing ground cover does not consist of appropriate stabilizing vegetation so as to protect against discharges from upstream areas, or discharges to downstream areas, shall incorporate appropriate **erosion control practices**.~~
- 5.4. ~~Temporary **erosion control practices**~~ **Erosion control practices** shall be maintained on a year-round basis during construction and any periods of construction shutdown until permanent stabilization is achieved.
- 6.5. For **projects** involving phased construction, the portions of the **site-project area** where construction activities have temporarily or permanently ceased must have stabilization practices completed within seven (7) days, except:
  - A. Where precluded by snow cover, **erosion control practices** shall be completed as soon as practicable; or
  - B. Where construction activity resumes on that portion of the **site-project** within fourteen (14) days from when activities ceased.
- 7.6. If a soil stockpile is to remain dormant or undisturbed:
  - A. For time periods between thirty (30) days and twelve (12) months, temporary stabilization shall be completed within seven days of the formation of the stockpile; or

**Commented [A4]:** This is a definition and will be emphasized in the TGM.

**Commented [A5]:** Erosion due to discharges shall be protected, rather than requiring erosion control practices over the entire ownership, even in areas where there is no proposed construction or stormwater conveyance route.

B. For time periods of more than twelve (12) months, permanent stabilization of the stockpile shall be completed within seven days of the formation of the stockpile.

8. ~~Any trenches, holes, or other excavations required for utility installation shall be protected at the end of each workday.~~

**Commented [A6]:** This is specific to only utility work, and all project types are now covered under §400.2. Will be emphasized in the TGM.

9. ~~Development sites shall incorporate appropriate erosion control practices that reduce the potential for wind erosion.~~

**Commented [A7]:** Highlighting only wind, when already defined as part of erosion control, is redundant. This will be emphasized in the TGM.

10.7. Velocity dissipation measures shall be placed at discharge locations and along the length of any **outfall** channel, as necessary, to provide a non-erosive velocity flow so that the natural, physical, and biological characteristics and functions of the channel are maintained and protected.

11. ~~Erosion control practices shall be functional before disturbances are made to the site.~~

**Commented [A8]:** Redundant with §400.8

12.8. Earthen embankment side slopes shall not exceed 3:1 (horizontal to vertical) and shall be stabilized with an **erosion** control blanket.

#### § 402. Temporary Sediment Control Requirements

1. Selection of appropriate **sediment control practices** shall consider:

- A. Seasonal, topographic, and **maintenance** limitations;
- B. Amount of tributary **drainage area**; and
- C. Proximity to **flood protection areas**.

2. ~~Sediment control practices include, but are not limited to, silt fences, fiber rolls and berms, storm drain inlet controls such as barriers and inserts, entrance and exit controls, sediment traps, basins, and check dams. Straw bales shall not be used as sediment control practices.~~

**Commented [A9]:** Move to TGM.

3. ~~Perimeter sediment control practices shall be installed and functioning prior to soil disturbance.~~

**Commented [A10]:** Redundant with §400.8

4.2. **Sediment control practices** shall be continuously maintained ~~on a year-round basis~~ during construction and any periods of construction shutdown until permanent stabilization is achieved.

5.3. **Sediment control practices** shall intercept all **runoff** from ~~disturbed areas~~ projects before **runoff** leaves the site under the following conditions:

- A. ~~Disturbed areas~~**Projects** draining less than one acre shall be protected by silt fence or equivalent; or
- B. ~~Disturbed areas~~**Projects** draining one or more ~~than one~~ acre shall be protected by a silt fence and a **sediment** basin or equivalent, which shall be:
- (1) Sized to intercept the 2-year, 24-hour **runoff** volume from the tributary **drainage area**; and
  - (2) Located at the lowest point of the disturbance.

~~6.4.~~ All ~~stormwater facilities drain inlets~~ draining ~~disturbed areas~~ the project area shall be protected with an appropriate **sediment control practice**.

~~7.5.~~ A stabilized construction entrance/exit 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 and transported to a controlled **sediment** disposal area.

~~8.6.~~ ~~If a soil stockpile is created on the site, p~~Perimeter **sediment** controls are required for any ~~shall be placed around the stockpiles created for the project immediately. Soil stockpiles or other construction materials shall not be located within flood protection areas or their buffers.~~

~~9.7.~~ Flood protection areas shall be protected with a minimum of a double-row silt fence or equivalent measure.

~~10.8.~~ Construction dewatering operations shall be designed and operated so that water discharged from a **site**~~project~~ will meet the requirements set forth by the State of Illinois water quality standards, as set forth in Title 35, Subtitle C, Chapter I, Part 302, Subpart B, of the Illinois Administrative Code.

#### **§ 403. Construction Site Management Requirements**

~~1.9.~~ All waste generated as a result of ~~site development~~**projects** including, but not limited to, any **building** waste, concrete ~~truck or mortar~~ washout, chemicals, litter, sanitary waste, or any other waste shall be ~~properly legally~~ disposed of and shall be prevented from being transported offsite by either wind or water.

~~2.~~ ~~Flood protection areas shall be protected with a minimum of a double row silt fence or equivalent measure.~~

~~3.~~ ~~Soil stockpiles or other construction materials shall not be located within flood protection areas or their buffers.~~

**Commented [A11]:** This provision is meant to indicate that discharges must meet the requirements of ILR-10, which is a state permit. All Federal, State, and Local requirements shall be met for all projects, per §300.4.

**Commented [A12]:** Incorporated into temporary requirements above.

~~4.10.~~ Temporary stream crossings used during construction shall be designed to convey a 2-year, 24-hour **flood** event without overtopping unless either the **District** or an **authorized municipality** approves a more frequent design event. In addition, the following conditions shall be met:

- A. Temporary stream crossings shall not reduce the carrying capacity of the channel;
- B. The entire crossing shall be designed to withstand hydrodynamic, hydrostatic, and erosive forces up to the **base flood** event without washing out;
- C. Upon completion of construction, the temporary stream crossings shall be entirely removed and the stream bed and banks restored to a stable non-erosive condition that incorporates native vegetation where appropriate; and
- D. **Erosion** and **sediment control practices** shall be implemented and maintained during installation, **maintenance**, and removal of temporary stream crossings.

**§ 404. § 403. Permanent Erosion Control Requirements**

- 1. Permanent **erosion control practices** shall be initiated within seven days following the completion of soil disturbing activities.
- 2. All temporary **erosion** and **sediment control practices** shall be maintained until permanent stabilization practices are achieved by at least one of the following:
  - A. The establishment of a uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent on all unpaved areas and areas not covered by permanent **structures**; and
  - B. Installation of riprap, gabions, or other non-vegetative practices.
- 3. All temporary **erosion** and **sediment control practices** shall be removed within thirty (30) days after permanent stabilization is achieved in accordance with §403.2 of this **Ordinance**.

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## ARTICLE 5. REQUIREMENTS FOR STORMWATER MANAGEMENT

### § 500. General Site Development and Stormwater Management Information

1. All **developments** shall meet the requirements specified ~~for general site development specified in §501, Article 4, and Article 5 of this Ordinance, and shall also meet any applicable requirements of Article 6, and Article 7 of this Ordinance.~~
2. All ~~co-permittees~~**applicants** shall submit the documents specified in Article 3 to verify compliance with the requirements in Article 5 of this **Ordinance**.
3. ~~Development in combined sewer areas shall collect, route and discharge stormwater to the waterway as required in §502.19 of this Ordinance.~~
4. ~~Analysis, design, and performance standards of all stormwater facilities required for development shall be consistent with the TGM for the Ordinance.~~
- 5.3. **Stormwater facilities** constructed under the provisions of this **Ordinance** shall be maintained according to the criteria and guidelines established in Article 9 of this **Ordinance**.
- 6.4. ~~Stormwater facilities shall meet the Analysis, design, and performance standards requirements of all stormwater facilities required for development shall be consistent with the TGM for the specified in Article 5 of this Ordinance and the TGM.~~
- 7.5. ~~For all developments,~~ **Stormwater facilities** shall be designed to comply with Illinois drainage law in addition to the requirements of this **Ordinance**.
- 8.6. For any **development** subject to an intergovernmental agreement listed in Appendix G of this **Ordinance**, the terms of the intergovernmental agreement shall prevail over any conflicting requirements of Article 5 of this **Ordinance**.

**Commented [A1]:** Revised to include Article 5 and applicable provisions of other articles.

**Commented [A2]:** Development that includes sewer construction must also meet the sewer construction requirements of Article 7.

**Commented [A3]:** Moved to Article 7.

**Commented [A4]:** Language revised for consistency throughout all Articles.

**Commented [A5]:** Redundant language deleted.

### § 501. General ~~Site~~ Development and Stormwater Management Requirements

1. **Development** shall not:
  - A. Increase **flood** elevations or decrease **flood** conveyance capacity upstream or downstream of ~~the area under the ownership or control of the property interest of the co-permittee;~~
  - B. Pose any increase in **flood** velocity or impairment of the hydrologic and hydraulic functions of streams and **floodplains** unless a **water resource benefit** is realized;
  - C. Unreasonably or unnecessarily degrade surface or **ground-water** quality; ~~and~~

D. ~~Result in any new or additional expense to any person other than the applicant as a result of stormwater discharge; and~~

~~D.E.~~ Violate any provision of this Ordinance either during or after construction.

2. Development shall meet the ~~site~~ stormwater management requirements of Article 5 as summarized in Table 2 of this Ordinance.

3. ~~Development that incorporates in-kind replacement with green infrastructure may be considered non-qualified development.~~

4. ~~The District or an authorized municipality may issue a Watershed Management Permit may be issued without the co-applicant providing stormwater detention facilities for the undeveloped area within the entire parcel property interest, and place a special condition on the Watershed Management Permit will require Schedule L per §302.2.B(6) of this Ordinance, requiring stormwater detention facilities to be provided by the co-applicant for future development on the parcel. The co-applicant shall submit Schedule L with the Watershed Management Permit, which shall be recorded with the Cook County Recorder of Deeds, as an encumbrance against the entire parcel.~~

**Commented [A6]:** Moved from §702.1.E to be applicable to all Articles that reference §501.1.

**Commented [A7]:** New provision suggested by the TAC to not "penalize" installation of GI via requiring detention for newly created pervious area.

**Commented [A8]:** This requirement exists in Article 3.

Table 2.

Summary of Site-Stormwater Management Requirements<sup>1,2</sup>

Development Type (See Appendix A for definitions)	§502	§503	§504
	Runoff Requirements	Volume Control Requirements <sub>2</sub>	Detention Requirements <sub>2</sub>
Single-Family Home <del>on property interest</del>	Exempt	Exempt	Exempt
Residential Subdivision <del>on property interest</del>	<del>Parcels</del> ≥ 1 acre	<del>Parcels</del> ≥ 1 acre	<del>Parcels</del> ≥ 5 acres
Multi-Family Residential <del>on property interest</del>	<del>Parcels</del> ≥ 0.5 acre	<del>Parcels</del> ≥ 0.5 acre	<del>Parcels</del> ≥ 3 acres <sup>†</sup>
Non-Residential <del>on property interest</del>	<del>Parcels</del> ≥ 0.5 acre	<del>Parcels</del> ≥ 0.5 acre	<del>Parcels</del> ≥ 3 acres <sup>†</sup>
Open Space <del>on property interest</del>	≥ 0.5 acre	Not Applicable	Not Applicable
Right-of-Way <del>when new impervious area</del>	<del>New Impervious Area</del> ≥ 1 acre	<del>New Impervious Area</del> ≥ 1 acre <sup>†</sup>	<del>New Impervious Area</del> ≥ 1 acre <sup>†</sup>
Open Space	<del>Parcels</del> ≥ 0.5 acre	Not Applicable	Not Applicable

**Commented [A9]:** Footnote added since runoff requirements are also applicable when a permit is required.

Table changed to reference "property interest" from "parcel" because the term "parcel" was defined differently than the common definition.



<sup>1</sup> ~~Site-~~Stormwater management requirements are not required for demolition or maintenance activities as defined in Appendix A of the WMO.

<sup>2</sup> Requirements are applicable when a **Watershed Management Permit** is required under §201 of the **WMO**.

<sup>†</sup> Where practicable.

<sup>‡</sup> Starting the effective date of the **WMO**, any new **development** ~~on~~ within the parcel-property interest that totals either individually or in the aggregate to more than one-half (0.5) of an acre.

*NOTE: The term "parcel" includes all contiguous ownership or interest, as defined in Appendix A*

**Commented [A10]:** Demolition definition added per 2/15/2018 amendment. Bold terms are defined in Appendix A.

## § 502. **Site** Runoff Requirements

1. The requirements of this section shall apply to any of the following when a Watershed Management Permit is required under §201 of this Ordinance:

A. **Residential subdivision development** on ~~parcels-property interest totaling greater than or equal to~~ one (1) acre ~~or more;~~

B. **Multi-family residential development** on ~~property interest parcels totaling greater than or equal to~~ one-half of an acre (0.5 acre) ~~or more;~~

C. **Non-residential development** on ~~property interest parcels totaling greater than or equal to~~ one-half of an acre (0.5 acre) ~~or more;~~

D. Open space development on parcels-property interest totaling greater than or equal to one-half of an acre (0.5 acre) or more; and

E. **Right-of-way development** with new **impervious area** ~~totaling greater than or equal to~~ one (1) acre ~~or more of new impervious area, where practicable; and~~

~~F. Open space development on parcels totaling one-half of an acre (0.5 acre) or more.~~

2. Transfers of waters between **watersheds** shall be prohibited except when such transfers ~~will do~~ not violate any of the provisions of §501.1 of this **Ordinance**.

3. Concentrated discharges from **stormwater facilities** must enter conveyance systems that are:

A. ~~Contained within public rights-of-way or a public easements; or~~

B. Capable of ~~carrying-conveying~~ the **design runoff rate** without increasing **flood** or **erosion** damages downstream or on adjacent property for the 2-year, 10-year, and 100-year **storm events** using the methodology provided in §502.9 of this Ordinance; ~~or~~

~~C. Contained within public rights-of-way or public easements.~~

**Commented [A11]:** Language added to clarify that runoff requirements are applicable when a permit is required.

**Commented [A12]:** Deleted to be consistent with Table 2.

**Commented [A13]:** Right-of-way definition indicates that the area is for public use/access. Also revised to singular tense.

**Commented [A14]:** Engineering nomenclature.

**Commented [A15]:** Added to indicate methodology to be used.

4. Minor stormwater systems shall be sized to convey runoff from the tributary area under fully developed conditions consistent with the design requirements of the local jurisdiction or existing stormwater system facility.
5. Major stormwater systems shall be sized to convey the design runoff rate of the 100-year storm event using the methodology provided specified in §502.4 of this Ordinance. The design runoff rate for any major stormwater systems shall include the calculated flows runoff from all the tributary areas upstream of the point of design without increasing flood or erosion damages downstream or on adjacent properties.
6. Major stormwater systems shall be located within a right-of-way or a public easements or rights-of-way explicitly providing public access for maintenance of such facilities.
7. Upstream tributary flows must shall be considered for all developments and safely routed around or through or around the site project in the following manner depending on whether detention is required per §504.1 of this Ordinance:
  - A. Where site When detention is not required in §504.1 of this Ordinance, the co-permittee applicant shall demonstrate that the development will not increase velocities or flows downstream or on adjacent properties for the 2-year, 10-year, and 100-year storm events, at a minimum, using critical duration analysis and the methodology provided specified in §502.9 of this Ordinance; and
  - B. Where site When detention is required in §504.1, the requirements of §504.11 of this Ordinance apply.
8. The runoff or and flood water storage function of depressional storage on the site shall be preserved. For developments where the When depressional storage is altered, the depressional storage must shall be compensated in the following manner depending on whether site detention is required per §504.1 of this Ordinance:
  - A. Where site When detention is not required, the co-permittee applicant shall demonstrate that the proposed development does not increase velocities, flows, or flood elevations downstream nor on adjacent properties for the 2-year, 10-year, and 100-year storm events of a 24-hour duration. The analysis shall utilize use the methodology described specified in §502.9 of this Ordinance and shall include the upstream tributary flow areas to the existing depressional storage area; and
  - B. Where site When detention is required, the requirements of §504.6 of this Ordinance shall apply.
9. The Design runoff rates for major stormwater systems shall be calculated by using an event hydrograph methods with a critical duration analysis. The Event hydrograph

**Commented [A16]:** Deleted since this is stated in §502.9.

**Commented [A17]:** Runoff and flood storage both need to be preserved, not one or the other.

**Commented [A18]:** Referenced in §502.5. Also, this methodology is not solely used for major stormwater systems.

methods ~~must shall~~ be HEC-1 (~~SCS runoff method~~), HEC-HMS, or TR-20 using **NRCS** curve number methodology, ~~or a method approved by the District. A critical duration analysis is required for all methods.~~ The ~~Event~~ hydrograph methods shall incorporate the following assumptions:

**Commented [A19]:** SCS renamed to NRCS in 1994.

**Commented [A20]:** Added to be consistent with §504.10.

A. Antecedent ~~Moisture Runoff~~ Condition II;

**Commented [A21]:** Per the NRCS TR-55 Manual.

B. **Bulletin 70** northeast sectional ~~frequency distributions~~rainfall statistics shall be ~~used for rainfall depths~~; and

**Commented [A22]:** Revised to refer to the data more appropriately.

C. **Circular 173** median time distributionsAppropriate Huff rainfall distributions shall be used when performing the ~~critical duration analysis~~.

**Commented [A23]:** Deleted since this rainfall distribution is needed to model any runoff rate.

~~10. Minor stormwater systems shall be sized to convey runoff from the tributary area under fully developed conditions consistent with the design requirements of the local jurisdiction or existing stormwater system.~~

~~11. Major stormwater systems shall be sized to convey the design runoff rate of the 100-year storm event using the methodology provided in §502.4 of this Ordinance. The design runoff rate for major stormwater systems shall include the calculated flows from all the tributary areas upstream of the point of design without increasing flood or erosion damages downstream or on adjacent properties.~~

~~12.10. Drain tiles that are found on the site during design or construction of the development shall be removed or replaced and the conveyed flow shall be incorporated into the development's new site drainage plan system or removed and incorporated into the new site drainage system, based upon their existing capacity and capability to properly convey low flow groundwater and upstream flows in a manner that shall not cause damage to upstream and downstream structures, land uses, or existing stormwater facilities. The co-permittee shall ensure that:~~

**Commented [A24]:** Redundant language that is covered in the TGM.

~~A. The new site drainage plan shall not cause damage to upstream and downstream structures, land uses, or existing stormwater facilities;~~

**Commented [A25]:** Incorporated above.

~~B. Drain tiles that receive upstream tributary flows shall maintain drainage service during construction until the new stormwater system can be installed for a permanent connection;~~

~~C. Replaced drain tile shall be properly reconnected to the downstream system and located within a public right of way or dedicated easement and marked on the record drawings; and~~

~~D. Drain tiles are not tributary to either a sanitary sewer or combined sewer.~~

**Commented [A26]:** Language moved to TGM.

13. ~~Major stormwater systems~~ shall be located within easements or rights of way explicitly providing public access for ~~maintenance~~ of such facilities.
14. ~~Upstream tributary flows~~ must be considered for all ~~developments~~ and safely routed through or around the ~~site~~ in the following manner:
- A. ~~Where site detention is not required in §504.1 of this Ordinance, the co-permittee shall demonstrate that the development will not increase velocities or flows downstream or on adjacent properties for the 2-year, 10-year, and 100-year storm events, at a minimum, using critical duration analysis and the methodology provided in §502.4 of this Ordinance; and~~
- B. ~~Where site detention is required in §504.1, the requirements of §504.10 of this Ordinance apply.~~
15. ~~The runoff or flood water storage function of depressional storage on the site shall be preserved. For developments where the depressional storage is altered, the depressional storage must be compensated in the following manner depending on whether site detention is required per §504.1 of this Ordinance:~~
- A. ~~Where site detention is not required, the co-permittee shall demonstrate that the proposed development does not increase velocities, flows, or flood elevations downstream nor on adjacent properties for the 2-year, 10-year, and 100-year storm events of a 24-hour duration. The analysis shall utilize the methodology described in §502.4 of this Ordinance and include the upstream tributary flow areas to the existing depressional storage; and~~
- B. ~~Where site detention is required, the requirements of §504.5 of this Ordinance shall apply.~~
16. ~~All developments shall provide a separate sanitary sewer and a separate storm sewer within the property lines of the development.~~
- 17.11. The ~~M~~maximum stormwater runoff inundation depths on roads and parking lots for all development shall not exceed twelve (12) inches. ~~Maximum flow depths on roads for all development shall not exceed twelve (12) inches during the base flood condition.~~
18. ~~Maximum detention depths on new parking lots shall be designed for protection against damages caused by stormwater detention inundation, which shall not exceed twelve (12) inches. The inundation hazard below the 100-year high water elevation shall be clearly posted.~~
19. ~~For developments adjacent to a floodplain, the lowest floor in new buildings or additions to existing buildings shall be:~~

Commented [A27]: Moved to Article 6.

Commented [A28]: Moved to §504.11.A.

- A. ~~Elevated to the FPE as determined by §601.9 of this Ordinance; or~~
- B. ~~Floodproofed or otherwise protected to prevent the entry of surface stormwater or floodwater below the FPE and such that the lowest entry elevation of the building is at or above the FPE; and~~
- C. ~~Floodproofing devices should be operational without human intervention. If electricity is required for protection against flood damage, there shall be a backup power source that will activate without human intervention.~~

12. The lowest floor in new buildings, or ~~added foundation expansions~~ to existing buildings, shall be elevated, floodproofed, or otherwise protected to at least one (1) foot above the following elevations to prevent the entry of surface stormwater:

- A. The design elevation associated with the design flow rate of an adjacent ~~to a~~ major stormwater system as sized in §500.1 of this Ordinance;
- ~~D.B. The lowest floor in new buildings, or added to existing buildings, The design elevation associated with the 100-year high water elevation of an adjacent to a detention facility as designed in per §504.12 of this Ordinance shall be elevated, floodproofed, or otherwise protected with a minimum of one foot of freeboard for the base flood condition to prevent the entry of surface stormwater.~~
- C. The design elevation associated with ~~or a detention facility the~~ overflow path of an adjacent detention facility as designed in per §504.13.D of this Ordinance; and shall be elevated, floodproofed, or otherwise protected to at least one foot above the design elevation associated with the design flow rate to prevent the entry of surface stormwater.
- D. The BFE or any other tailwater conditions shall be incorporated into the design elevations of §502.12.A-C of this Ordinance.

20. ~~The lowest floor in new buildings, or added to existing buildings, adjacent to a detention facility as designed in §504.11 of this Ordinance shall be elevated, floodproofed, or otherwise protected with a minimum of one foot of freeboard for the base flood condition to prevent the entry of surface stormwater.~~

21. ~~To the extent practicable, all runoff from rooftops and parking lots that does not discharge into a detention facility shall be directed onto pervious surfaces.~~

22.13. ~~Proposed developments that discharge~~When stormwater discharge is proposed into a private sewer stormwater facility, the applicant shall obtain written permission from the sewer facility owner.

Commented [A29]: Incorporated below. Freeboard for detention is handled in runoff, making this redundant with this section and provisions in Article 6. The hydraulic grade line provisions below already incorporate the BFE.

Commented [A30]: Incorporating tailwater conditions

~~23.14. Proposed developments that propose offsite~~When construction is proposed outside the property and on private property and outside the property interest, the applicant shall obtain written permission from the property owner and obtain any required easements.

~~24.15. To the extent practicable, all runoff from rooftops and parking lots that does not discharge into a detention facility shall be directed onto pervious surfaces.~~

~~25.16. All developments shall provide a~~A separate sanitary sewer and a separate storm sewer shall be provided within the property interest lines of the development.

~~26.17. Development in~~When located within the combined sewer areas, stormwater shall be collected, routed, and discharged stormwater into either a waterway or storm sewer tributary to a waterway when if:

- A. Any boundary of the development project is within one-eighth (1/8) of a mile of either a waterway or storm sewer; or
- B. Any boundary of the development project is within one-fourth (1/4) of a mile of either a waterway or storm sewer if practicable.

~~18. The co-permittee applicant shall procure any required federal, state, or local permits for stormwater discharges to a waterway.~~

~~C. Development in combined sewer areas shall collect, route and discharge stormwater to either a waterway or storm sewer if:~~

~~D. Any boundary of the development is within one eighth (1/8) of a mile of either a waterway or storm sewer; or~~

~~27. Any boundary of the development is within one fourth (1/4) of a mile of either a waterway or storm sewer if practicable.~~

~~28. Proposed developments that propose offsite construction on private property shall obtain written permission from the property owner and obtain any required easements.~~

~~29. Watertight connections are required for any storm sewer, sanitary sewer, or combined sewer, excluding underdrains, tributary to a combined sewer. Watertight connections per sanitary sewer standards are required between sewer segments and all manholes, inlets, and structures.~~

~~30. Underdrains shall not be tributary to a combined sewer, unless:~~

- A. ~~Separation is provided upstream of the receiving combined sewer;~~

Commented [A31]: Moved to Article 7.

B. ~~The underdrain is intended to protect a building or structure foundation and cannot discharge to a storm sewer; or~~

C. ~~The underdrain is used in conjunction with green infrastructure and conforms to §701.2.H of this Ordinance.~~

~~Underdrains shall not be directly connected to any sewer tributary to a combined sewer without backflow prevention.~~

Commented [A32]: Moved to Article 7.

Commented [A33]: Move to Article 7.

### § 503. ~~Site~~ Volume Control Requirements

1. The requirements of this section shall apply to any of the following when a **Watershed Management Permit** is required under §201 of this **Ordinance**:

A. **Residential subdivision development** on ~~property interest parcels totaling greater than or equal to~~ one (1) acre or more;

B. **Multi-family residential development** on ~~property interest parcels totaling greater than or equal to~~ one-half of an acre (0.5 acre) or more;

C. **Non-residential development** on ~~property interest parcels totaling greater than or equal to~~ one-half of an acre (0.5 acre) or more; and

D. **Right-of-way development** ~~with new impervious area totaling greater than or equal to~~ one (1) acre or more ~~of new impervious area~~, where practicable.

2. ~~The first inch of runoff from the impervious area of development on the site shall be the volume control storage.~~

Commented [A34]: Separated from first sentence of original §503.2 to clearly differentiate between volume control storage and volume control practices.

~~2.3.~~ **Volume control storage practices** ~~is are~~ required ~~to capture the volume control storage~~ for all development with impervious area greater than or equal to 0.10 acre. Development with impervious area less than 0.10 acre shall provide **volume control storage practices** where practicable.

Commented [A35]: Provides clarification of the difference between volume control practices (system to capture) and volume control storage (volume to capture).

~~3.4.~~ **Volume control practices** shall provide treatment of the **volume control storage**. ~~The~~ **Volume control practices** shall be ~~designed~~ provided according to the following hierarchy:

A. ~~Onsite Retention-based practices~~ with quantifiable storage capacity shall be the primary form of water quality treatment. ~~Retention-based practices shall be provided onsite~~ and shall:

Commented [A36]: STORMSTORE

(1) Be sized to retain and infiltrate ~~or reuse~~ the **volume control storage**;

Commented [A37]: Added per 7/11/2018 TAC Meeting

(2) ~~Include, but not be limited to: infiltration trenches, infiltration basins, porous pavement, bio retention systems, dry wells, open channel practices fitted with check dams, retention storage below the outlet of a detention facility, and constructed wetlands that have quantifiable storage; and~~

**Commented [A38]:** Added to retention-based practices definition in Appendix A

(2) Provide pretreatment measures to protect the functionality of **retention-based practices** where necessary. **Flow-through practices** ~~included in §503.3.C of this Ordinance~~ may be used to meet the pretreatment requirement where appropriate;

**Commented [A39]:** Practices moved to definition.

(3) ~~Be designed to incorporate a backflow prevention device when discharging into a combined sewer system or a storm sewer system that is tributary to District water reclamation facilities; and~~

**Commented [A40]:** Clarifying existing requirement for backflow prevention devices.

(4) Be located outside of the ~~regulatory~~ floodway.

B. ~~Offsite volume control retention-based practices may be constructed~~ utilized to meet the **volume control storage** requirement for the **development** ~~if all means of providing volume control storage onsite are technically infeasible and documented, offsite volume control practices may be constructed if all of the~~ following conditions are met:

**Commented [A41]: STORMSTORE**  
The volume control storage requirement can only be met with retention-based practices, not flow-through practices.

**Commented [A42]: STORMSTORE**  
Offsite volume control can now be applied to any project meeting the requirements.

(1) The **applicant** shall record the documents specified in §307 of this **Ordinance** with the Cook County Recorder of Deeds to ensure perpetual existence, function, agreement, and **maintenance**;

(2) ~~Should the property interest where the offsite retention-based practice is located have different ownership than the development, the applicant shall provide an agreement for the perpetual maintenance of the offsite retention-based practice between all parties and obligates the parties and their successors and assigns to perpetually maintain the offsite retention-based practice; and~~

**Commented [A43]: STORMSTORE**

(3) ~~Should the property interest where the offsite retention-based practice is located have different ownership than the development, the applicant shall provide an agreement establishing the available storage of the offsite retention-based practice utilized to meet the volume control storage requirement for the development between all parties;~~

**Commented [A44]: STORMSTORE**

(4) The **development** shall meet the following requirements:

(a) **Onsite retention-based practices** shall be provided and capture fifty-percent (50%), at a minimum, of the volume control storage;



(a)(b) ~~The co-permittee~~ means of providing onsite retention-based practices are technically infeasible and documented, and demonstrates that site constraints prevent the development from providing use of onsite retention-based practices to capture and retain the full volume of the volume control storage onsite, offsite retention-based practices may be utilized to provide up to one-hundred percent (100%) of the volume control storage; and

**Commented [A45]: STORMSTORE**

Incorporated 50% onsite rule and additional if site constraints exist.

(b) ~~The parcel area is less than ten (10) acres;~~

**Commented [A46]:** This exclusion creates an unintended consequence of not requiring large sites with site constraints to pursue offsite volume control.

(c) ~~When runoff from the development site utilizing offsite volume control retention-based practices is tributary to a waterway, including when located within the combined sewer area, must be routed through a onsite flow-through practices shall be provided located on the parcel for sites and sized to treat the volume control storage as it passes through the practice in which runoff is tributary to a waterway; and~~

**Commented [A47]:** Clarifying the volume control storage must be treated by the flow-through practice.

(2)(5) ~~Volume control storage is traded and provided in a retention-based practice, partially or fully offsite, and located within the same subwatershed. The traded offsite volume control retention-based practice utilized shall be located within the same watershed planning area as the development and meet all of the following conditions:~~

**Commented [A48]:** To remain consistent with the stormwater management boundaries identified in Appendix B and Appendix E.

**Commented [A49]: STORMSTORE**

Added to be consistent with H and refer to appendix E by definition.

**Commented [A50]:** To remain consistent with the stormwater management boundaries identified in Appendix B and Appendix E.

**Commented [A51]: STORMSTORE**

Added to be consistent with H and refer to appendix E by definition.

(a) Be approved under a **Watershed Management Permit** meeting all of the requirements of ~~this Article 5~~ of this **Ordinance**;

(b) Provide sufficient ~~volume storage~~ for the ~~associated traded development~~, above and beyond any ~~volume storage~~ required ~~for~~ by the ~~offsite development retention-based practice's~~ permit and any of the ~~offsite retention-based practice's~~ storage that was utilized by any other ~~traded developments utilizing the volume control storage~~;

(c) Capture equivalent ~~impervious~~ **stormwater runoff** from ~~impervious areas~~ not located on private property and outside the ~~property interest, and from a parcel that is not~~ tributary to an existing ~~volume control retention-based practice~~;

**Commented [A52]: STORMSTORE**

Intended to ensure there will be runoff to be managed over the long-term. Upstream tributary areas to the volume control practices must not be directed from private property that has different ownership than the supply site. If for example, the supply site had planned to accept runoff from, an adjacent mall parking lot, and the mall and parking are later redeveloped, the supply site could have capacity but no runoff to manage. Upstream areas that consist of right-of-way (publicly-owned) would be allowable.

(d) Be functional before ~~the applicant requests final inspection of the utilization toward meeting the volume control storage requirements of any~~ associated traded ~~development with a site constraint~~;

(e) ~~Should a private, non-governmental person have ownership of the property interest where the offsite retention-based practice is located, provide a performance bond, to be held by the municipality, to ensure the perpetual operation and maintenance of the offsite retention-based practice in the event of bankruptcy or failure to properly operate and maintain the offsite retention-based practice;~~

Commented [A53]: STORMSTORE

(e) ~~Provide a trade agreement for perpetual maintenance of the offsite volume control practice between all parties that have an interest in the offsite volume control practice and obligates the parties' successors and assigns to perpetually maintain the offsite volume control practice; and~~

(f) ~~Record the recording submittal specified in §307 of this Ordinance with Cook County to ensure perpetual existence, function, trade agreement, and maintenance;~~

(f) Provide a certification to the District from a licensed Professional Engineer or National Green Infrastructure Certified Professional that inspections and maintenance activities of the offsite retention-based practice have been conducted, as necessary, to ensure the practice is operating as designed, but no less than:

(i) Once per year for the first three (3) years that the offsite volume control practice is in operation; and

(ii) Once every three (3) years thereafter into perpetuity.

Commented [A54]: STORMSTORE  
Added Inspection requirements.  
Added Professional Engineer or NGI requirement.

(6) ~~Should the property interest where the development is located undergo a transfer of ownership, the volume control storage provided by the offsite retention-based practice shall transfer with the property; and~~

(7) ~~Should the property interest where the offsite retention-based practice is located undergo a transfer of ownership, the requirements imposed by §503.4.B(5) shall transfer with the property; and~~

Commented [A55]: STORMSTORE

- C. If all means of providing onsite and offsite retention-based practices are technically infeasible and documented, and the applicant demonstrates that a qualifying site constraints exists that prevents the use of onsite retention-based practices to retain the full volume control storage in full, the following compliance alternative shall be applicable:

- (1) The ~~co-applicant may reduce the~~ **volume control storage** ~~may be reduced~~ by ~~twenty-five percent (25%)~~ for every ~~one five percent (1%) (5%)~~ of ~~reduced existing~~ **impervious area** ~~reduced~~;

**Commented [A56]:** Reduce to lowest ratio to clarify prorated percentages apply.

- (2) ~~Sites~~ ~~When~~ tributary to a ~~combined sewer~~ **system** or a ~~storm sewer~~ **system** that is tributary to **District water reclamation facilities**, ~~shall provide detained detention~~ **volume** equivalent to the ~~required~~ **volume control storage**, ~~shall be provided in the following manner depending on whether site detention is required per §504.1 of this Ordinance~~ the following:

- (a) ~~Sites in which~~ ~~When~~ detention is not required, ~~shall provide a detention facility shall be provided for the required volume control storage.~~

- (b) ~~Sites~~ ~~When~~ detention is required ~~to provide detention under §504 of this Ordinance~~, of the WMO must provide detention volume equivalent to the **volume control storage** ~~shall be provided~~ in addition to the **required** ~~detention volume~~ ~~required~~; and

- ~~(c) Sites in which detention is not required shall provide a detention facility for the required volume control storage.~~

- ~~(d)~~ (c) ~~When~~ ~~Sites~~ tributary to a **waterway**, including ~~those when~~ located within the **combined sewer area**, **flow-through practices** shall be ~~required to~~ ~~provided~~ ~~and~~ ~~flow-through practices~~ ~~Be sized to filter/pretreat the volume control storage as it passes through the structure practice~~; and

**Commented [A57]:** Revised to refer to the aforementioned flow-through practice.

- (3) **Flow through practices** shall:

- (a) ~~Be sized to filter the volume control storage as it passes through the structure~~; and

**Commented [A58]:** Combined with provision above.

- (b) ~~include, but not be limited to: vegetated filter strips, bio swales, constructed wetlands, catch basin inserts, and oil and grit separators.~~

**Commented [A59]:** Add to flow-through practices definition in Appendix A

- 4-5. ~~Excess~~ **volume control storage** ~~practices~~ may be installed ~~to capture the volume control storage for from future~~ anticipated **impervious area** ~~of a future development~~. A concept plan must be provided to appropriate ~~volume control the storage~~ toward ~~the~~ anticipated **impervious area** ~~development~~, and is subject to the following:-

- A. Future **development** will be subject to the volume control requirements in effect as of the date the future ~~complete Watershed Management p~~**Permit** application is ~~submitted~~**accepted by the District**; and-
- B. If the excess **volume control storage practices** ~~does~~ not sufficiently meet the then existing requirements for the complete future **development**, then additional **volume control practices volume control storage** will be required ~~to make up for~~ the difference ~~of the volume control storage~~ under the future **development** permit.

**Commented [A60]:** Revised to be consistent with other provisions.

#### § 504. **Site** Detention Requirements

1. The requirements of this section shall apply to any of the following when a **Watershed Management Permit** is required under §201 of this **Ordinance**:
  - A. **Residential subdivision development** on ~~property interest parcels totaling greater than or equal to five (5) acres or more~~;
  - B. **Multi-family residential development** on ~~property interest parcels totaling greater than or equal to three (3) acres or more~~ with new **development** ~~on the parcel that totals either individually or in the aggregate to more than greater than or equal to~~ one-half of an acre (0.5 acre) after the effective date of this **Ordinance**;
  - C. **Non-residential development** on ~~property interest parcels totaling greater than or equal to three (3) acres or more~~ with new **development** ~~on the parcel that totals either individually or in the aggregate to more than~~ **is greater than or equal to** one-half of an acre (0.5 acre) after the effective date of this **Ordinance**; and
  - D. **Right-of-way development** totaling one ~~(1)~~ acre or more of new **impervious area**, where practicable.
2. The area of **development** shall be used to calculate the ~~development's gross~~ **allowable release rate**.
3. The **gross allowable release rate** ~~for a development~~ shall be determined at the time a complete **Watershed Management Permit** application is accepted by the **District** and shall be:
  - A. ~~0.30 cfs/acre of development for the storm event having a one percent probability of being equaled or exceeded in a given year (100 year storm event) until April 30, 2019; and~~

**Commented [A61]:** The gross allowable release rate is now based on the watershed specific release rate.

~~B.A.~~ Based on ~~a the~~ watershed specific release rate after and including May 1, 2019 as specified in Appendix B of this Ordinance. ~~The watershed specific release rate shall not be less than 0.15 cfs/acre of development;~~ and

~~C.B.~~ In compliance with §504.12 of this Ordinance.

~~4. The release rate from the detention facility in addition to any unrestricted flow shall not exceed the allowable release rate for the development.~~

4. The net allowable release rate shall be calculated by deducting the unrestricted flow from the gross allowable release rate.

~~5. For sites where depressional storage exists and where the existing runoff rate for the development is less than the allowable release rate provided in §504.3 of this Ordinance, then the allowable release rate and the corresponding detention facility volume shall be based on the existing runoff rate. The existing runoff rate shall be calculated using the methods described in §504.9 of this Ordinance.~~

6.5. When all runoff from a development is not captured in the detention facility, the with unrestricted flow shall be addressed by:

A. Demonstrating that the unrestricted flow does not cause offsite damage; and

B. Mitigation of the unrestricted flow by one of the following methods:

~~(1) Diverting an equivalent upstream tributary area where detention is not provided to the detention facility;~~

~~(2)(1) Calculating the unrestricted flow rate using the methods methodology specified in §504.10 of this Ordinance and reducing the required site runoff release rate such that the total developed release rate from the development site equals the allowable release rate; or~~

~~(2) Planting the unrestricted flow area with native deep-rooted vegetation approved by either the District or an authorized municipality. Unrestricted flow areas, and the area shall be placed in an easement and maintained as a native planting conservation area in perpetuity. The gross allowable release rate for the development shall be based on subtracting the native planting conservation area from the development area tributary to the detention facility; or~~

(3) Diverting an equivalent upstream tributary area, within the property interest, where detention is not provided to the detention facility;

Commented [A62]: Deep-rooted vegetation may not be planted in all unrestricted areas, e.g., impervious unrestricted area.

7-6. ~~For sites w~~Where **depressional storage** exists and where the existing **runoff** rate for the **development** is less than the **gross allowable release rate** provided in §504.3 of this **Ordinance**, then the **net allowable release rate** and the corresponding **detention facility volume** shall be based on the existing **runoff** rate **minus any unrestricted flow**. The existing **runoff** rate shall be calculated using the ~~methods~~**methodology** ~~described~~**specified** in §504.10 of this **Ordinance**.

**Commented [A63]:** Deleted. Required detention volume is based on the actual release rate (see §504.8), which cannot exceed the net allowable release rate

8-7. The **actual release rate** from the **detention facility** in addition to any **unrestricted flow** shall not exceed the **net allowable release rate** for the **development**.

9-8. ~~Detention facility volume~~The **required detention volume** shall be calculated using **the actual release rate** of the **detention facility** with either ~~an event hydrograph routing method~~**the methodology specified in §504.10 of this Ordinance** or the nomograph ~~relating percent impervious to unit area as a method~~ presented in the **TGM**. The nomograph ~~method~~ shall not be used in any of the following scenarios:

- A. The **gross allowable release rate** is affected by **depressional storage** ~~on the site~~as described in §504.4 of this **Ordinance**;
- B. The **gross allowable release rate** is affected by **unrestricted flow** as described in §504.5.B(1) or §504.5.B(2) of this **Ordinance**;
- C. When there are **upstream tributary flows** to the **detention facility** described in §504.11 of this **Ordinance**; or
- D. When ~~the BFE there are or any other~~ tailwater conditions ~~on~~**affect** the **control structure** ~~for the detention facility outlet structure~~.

10-9. The **required detention facility volume** calculated in §504.6 of this **Ordinance** can be reduced by:

- A. ~~The volume of the retention-based practices volume control storage~~ provided in §503.4.A of this **Ordinance** that is located ~~on~~**within** the same **site property interest** as the **detention facility**; and
- B. The volume of any **retention-based practice** ~~listed in §503.3.A(2) of this Ordinance~~ in excess of the **volume control storage** if **all** of the following conditions are met:

~~(1) The storage volume of the retention-based practice is quantifiable;~~

**Commented [A64]:** Delete. Already stated in §503.4.A.

~~(2)~~**(1)** The storage volume of the **retention-based practice** is accessed ~~under~~**during** the 100-year **storm event**; **and**

~~(3)(2)~~ The **development** complies with the ~~allowable-actual~~ release rate specified in §504.7 of this **Ordinance**;

~~(4)~~ ~~Maintenance responsibilities for the retention-based practice are delineated in the maintenance plan required in Article 9 of this Ordinance; and~~

**Commented [A65]:** Redundant. Required for all development.

~~(5)~~ The volume control practice and detention facility are located on the same site.

**Commented [A66]:** Stated in §503.4.A.

~~11.10.~~ The ~~Event~~ hydrograph methods shall be HEC-1, HEC-HMS, or TR-20 using **NRCS** curve number methodology and an outlet control routing option, or a method approved by the **District**, using SCS curve number methodology and an outlet control routing option. The ~~Event~~ hydrograph methods shall incorporate the following assumptions:

A. Antecedent **Moisture-Runoff** Condition II; and

B. **Bulletin 70** northeast sectional frequency distribution for the 100-year storm event with a 24-hour duration, as specified in **Bulletin 70** northeast sectional rainfall statistics; and

~~B.C.~~ **Circular 173** median time distributions appropriate Huff time distribution of heavy storm rainfall.

**Commented [A67]:** Revised to be consistent with §502.9.

~~12.11.~~ ~~Developments that have u~~Upstream tributary flow to the site shall provide be addressed by one of the following ~~site runoff~~ measures:

A. Provide the **required detention facility** volume for the **development** at the ~~allowable-development's actual~~ release rate while bypassing the upstream tributary flows described in §500.1 of this **Ordinance** (~~bypass flow~~);

B. Provide the **required detention facility** volume to accommodate both for the runoff for the **development** and the upstream tributary flow area on the site at the site's ~~allowable-development's actual~~ release rate; or

C. Provide sufficient **detention facility** volume to accommodate for the runoff from the **development** and the upstream tributary flow area at an **actual** release rate that ensures that no adverse offsite impacts will occur. The ~~co-permittee~~ shall consider runoff from all tributary areas and demonstrate the impacts for the 2-year, 10-year, and 100-year storm events, at a minimum, using a **critical duration analysis** and the methodology provided specified in §504.10 of this **Ordinance**. The minimum **required detention facility** volume required shall be based on the ~~site allowable-development's actual~~ release rate as determined in §504.6, and §504.7, and §504.12 of this **Ordinance**.

**Commented [A68]:** Added to include sites with depressional storage.

~~13.12.~~ **Detention facilities in areas outside of the regulatory floodway, but within the regulatory floodplain, affected by the BFE or any other tailwater conditions shall calculate:**

- A. ~~Conform to all applicable requirements specified in Article 6 of this Ordinance; and~~ **The actual release rate** assuming no tailwater effect (free-flow release) due to the nearby effective BFE, by elevation, not delineation, which shall not exceed the **net allowable release rate; and**
- B. ~~Store the site runoff from the development such that the required post development release rate is not exceeded.~~ **The required detention volume at the actual release rate** assuming a zero release rate below the tailwater effect (submerged release) due to the nearby effective BFE, by elevation, not delineation.

**Commented [A69]:** Redundant with §500.1.

~~14.13.~~ **The detention facilities shall be designed and constructed to:**

- A. ~~Be accessible and maintainable; and~~
- B. Function with a gravity outlet wherever possible;
- C. Function without human intervention and under tailwater conditions ~~with minimal maintenance;~~
- D. Provide an overflow **structure** and overflow path that can safely ~~pass convey a the design runoff rate using the methodology specified in §502.9 of this Ordinance and no less than of at least~~ 1.0 cfs/acre of **tributary area to the detention facility;**
- ~~D-E.~~ ~~Maximum detention depths on new parking lots shall be designed for shall not exceed twelve (12) inches, and protection against damages caused by stormwater detention inundation, which shall not exceed twelve (12) inches. The inundation hazard below the 100-year high water elevation shall be clearly posted;~~
- ~~E-F.~~ Provide side slope stabilization; **and**
- ~~F-G.~~ Provide earth stabilization and armoring with riprap, concrete, or other durable material when high erosive forces could lead to soil **erosion** or washout. Examples of where armoring may be required include:
  - (1) **Storm sewer** flared end sections; and
  - (2) Emergency overflows.
- ~~G.~~ ~~Be accessible and maintainable; and~~

**Commented [A70]:** Redundant with provision above.

**Commented [A71]:** Added to clarify.

**Commented [A72]:** Relocated from §502.13

~~15.14.~~ The **outlet-control structure device** for **the detention facilities** shall be:

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ARTICLE 5. REQUIREMENTS FOR STORMWATER MANAGEMENT



- A. Located within the property boundary when possible;
- B. Durable and permanent;
- C. Visible and accessible for **maintenance**;
- D. Located on the outlet side of a manhole **structure**;
- E. Designed to be self-cleaning; and
- F. Designed to incorporate a backflow prevention device ~~if discharging when connecting to a~~ **combined sewer system or a storm sewer system tributary to District water reclamation facilities.**

15. ~~Stormwater detention is~~ **The required detention volume shall be** provided in accordance with the following hierarchy:

- A. **Fully onsite in a detention facility;**
- B. **Offsite in a detention facility where the development conveys the 100-year storm event to the detention facility;**
- C. **Partially onsite in a detention facility with supplemental storage offsite in an offsite detention facility according to per §500.1.A(1) through §500.1.A(1) 504.14.F(4) of this Ordinance;**
- ~~Offsite in an offsite detention facility where the development conveys the 100-year storm event to the offsite detention facility;~~
- D. **Offsite in an offsite detention facility in a location that is upstream or hydrologically equivalent to the development in the same subwatershed planning area; or**
- E. **Offsite in an offsite detention facility within the same subwatershed planning area;**

16. ~~Detention facilities in areas outside of the regulatory floodway, but within the regulatory floodplain, shall:~~

- A. ~~Conform to all applicable requirements specified in Article 6 of this Ordinance; and~~
- B. ~~Store the site runoff from the development such that the required post development release rate is not exceeded, assuming a zero release rate below the nearby effective BFE, by elevation, not delineation.~~

**Commented [A73]:** Moved to §504.15.B above.

**Commented [A74]:** To remain consistent with the stormwater management boundaries identified in Appendix B and Appendix E.

**Commented [A75]:** To remain consistent with the stormwater management boundaries identified in Appendix B and Appendix E.

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17.16. ~~If it is not practicable to provide detention facility onsite,~~ Detention volume provided by an offsite detention facility may be utilized to meet the detention requirements for the development ~~constructed if all of the following conditions are met:~~

A. ~~The applicant shall demonstrate the development complies with §501.1 of this Ordinance;~~

Commented [A76]: STORMSTORE

A. ~~The co-permittee demonstrates that site limitations prevent the development from providing the full volume of the detention facility onsite;~~

Commented [A77]: STORMSTORE

B. ~~The parcel area is less than ten (10) acres;~~

Commented [A78]: This exclusion creates an unintended consequence of not requiring large sites to pursue offsite detention.

C. ~~B. The development complies with the site-runoff requirements in §502 and the volume control storage requirements in §503 of this Ordinance are satisfied;~~

D. ~~The co-permittee demonstrates that site limitations prevent the development from providing the full volume of the detention facility onsite;~~

E. ~~The parcel area is less than ten (10) acres;~~

F. ~~A. Stormwater detention is provided in accordance with the following hierarchy:~~

~~(1) Partially onsite in a detention facility with supplemental storage offsite in an offsite detention facility according to §504.15.C(2) through §504.14.D(4) of this Ordinance;~~

~~(2)(1) Offsite in an offsite detention facility where the development conveys the 100-year storm event to the offsite detention facility;~~

~~(3)(1) Offsite in an offsite detention facility in a location that is upstream or hydrologically equivalent to the development in the same subwatershed;~~

~~(4)(1) Offsite in an offsite detention facility within the same subwatershed;~~

C. ~~The applicant shall demonstrate that the offsite detention facility has the available volume to meet the detention requirements for the development;~~

Commented [A79]: STORMSTORE

D. ~~Should the property interest where the offsite detention facility is located have different ownership than the development, the applicant shall provide an agreement for the perpetual maintenance of the offsite detention facility between all parties that obligates the parties and their successors and assigns to perpetually maintain the offsite detention facility;~~

E. The applicant shall record the documents specified in §307 of this Ordinance with the Cook County Recorder of Deeds to ensure perpetual existence, function, agreement, and maintenance;

G-F. The offsite detention facility shall meet all of the following conditions:

(1) Meet all of the requirements of this Article 5 of this Ordinance;

Commented [A80]: Combined with provision below, consistent with §503.4.B(4)(a).

(2)(1) ObtainBe approved under a Watershed Management Permit separate from the developmentmeeting all of the requirements of Article 5 of this Ordinance;

(3)(2) Provide one hundred percent (100%) of the deficient onsite volume for the associated development, above and beyond any volume required by the offsite detention facility's permit and any volume of the offsite detention facility utilized by other developments;

Commented [A81]: STORMSTORE

(3) Capture equivalent stormwater runoff not located on private property and outside of the property interest, and not tributary to an existing detention facility;

Commented [A82]: STORMSTORE

Capture stormwater runoff from a parcel that is not tributary to an existing stormwater detention facility;

(4) Be functional before the applicantco-permittee requests final inspection of the associated traded development;

(5) Should a private, non-governmental person have ownership of the property interest where the offsite detention facility is located, provide a performance bond, to be held by the municipality, to ensure the perpetual operation and maintenance of the offsite detention facility in the event of bankruptcy or failure to properly operate and maintain the offsite detention facility;

Commented [A83]: STORMSTORE

(6) Provide a certification to the District from a licensed Professional Engineer that inspections and maintenance activities of the offsite detention facility have been conducted, as necessary, to ensure the facility is operating as designed, but no less than:

(a) Once per year for the first three (3) years that the offsite detention facility is in operation; and

(a)(b) Once every three (3) years thereafter into perpetuity. - and

Commented [A84]: STORMSTORE

(4) ~~Provide a trade agreement for perpetual maintenance of the offsite detention facility between all parties that have an interest in the offsite detention facility and obligates the parties' successors and assigns to perpetually maintain the offsite detention facility.~~

(5) ~~Record the recording submittal specified in §307 of this Ordinance with the Cook County Recorder of Deeds to ensure perpetual existence, function, trade agreement, and maintenance.~~

G. ~~Should the property interest where the development is located undergo a transfer of ownership, the required detention volume provided by the offsite detention facility shall transfer with the property; and~~

H. ~~Should the property interest where the offsite detention facility is located undergo a transfer of ownership, the requirements imposed by §504.16.F shall transfer with the property; and~~

H. ~~A co-permittee may collaborate with either the Cook County Land Bank Authority or the South Suburban Land Bank and Development Authority referenced in §300.8 of this Ordinance to provide offsite stormwater detention facilities.~~

Commented [A85]: STORMSTORE

Commented [A86]: No longer referenced in Article 3, and information belongs in the TGM.

~~18.17. The Detention facilities shall be functional before prior to occupancy permits are issued for residential and non-residential subdivisions or sanitary service sewers are placed in service.~~

Commented [A87]: Redundant language.

~~19.18. The Detention facilities shall be functional for developments before prior to the start of building construction or impervious paving begins.~~

~~20.19. A development is not required to comply with the site detention requirements of §504 of this Ordinance if the development satisfies all of the following conditions are met:~~

- A. ~~The development discharges stormwater to a storm-sewerstormwater facility that is tributary to Lake Michigan;~~
- B. ~~The downstream receiving storm-sewerstormwater facility has adequate capacity as determined by the governing municipality;~~
- C. ~~The development complies with the site-volume control requirements of §503 of this Ordinance; and~~
- D. ~~The development intercepts and treats all onsite stormwater runoff onsite to improve water quality prior to discharge from the development.~~

**§ 505. Allowances for Redevelopment and Development and Redevelopment Subject to Legacy Sewerage System Permits Tributary to Existing Detention Facilities**

1. Incidental disturbance to an existing detention facility to provide the new required additional detention volume may be considered non-qualified development.
2. For redevelopment of a site tributary to an existing detention facility that will only require a marginal increase in the new total storage required in the same existing detention facility, redevelopment may utilize an existing detention facility to provide the required detention volume if all of the following conditions are met:
  - A. The existing control structure is verified (or is further modified as part of the current work) to meet the release rate requirements in effect at the time the control structure was constructed set under either this Ordinance or the Sewer Permit Ordinance, based on a recent survey, signed and sealed by a Professional Engineer;
  - A.B. Actual storage detention volume is verified (or is further modified as part of the current work) to meet or exceed the required detention volume in effect at the time the existing detention facility was constructed set under either this Ordinance or the Sewer Permit Ordinance, based on a recent survey, signed and sealed by either a Professional Engineer or Professional Land Surveyor; and
  - B. The marginal increase in incremental required storage volume is less than one-tenth (0.10) of an acre-foot or within two percent (2%) of the existing total storage;
  - C. The redevelopment provides adequate capacity is provided to convey stormwater runoff from the redevelopment to the existing detention facility for all storms up to and including the 100-year storm event;
  - D. The redevelopment volume control practices are provided to treatment of the volume control storage as required in §503 of this Ordinance; and
- ~~3. Incidental disturbance to an existing detention facility to provide the new required additional detention volume may be considered non-qualified development.~~
3. Redevelopment tributary to an existing detention facility shall provide detention volume based on the watershed specific release rate specified in Appendix B of this Ordinance. The required detention volume for the redevelopment shall be calculated as follows:
  - A. The modified rational method using Bulletin 70 rainfall data, or a method approved by the District, shall be used when:

**Commented [A88]:** This revised section is now applicable to all existing detention facilities.

**Commented [A89]:** New provision to cover District requirements.

**Commented [A90]:** This allowance is now deleted to account for redevelopment that will provide additional volume based on the watershed specific release rate while retaining the existing control structure.

**Commented [A91]:** New provision to explain methodology for calculations.

(1) The **redevelopment** is tributary to an **existing detention facility** approved under a **Sewerage System Permit**; or

(2) The **redevelopment** is tributary to an **existing detention facility** that was constructed prior to the effective date of this **Ordinance** and was never approved under a **Sewerage System Permit**.

B. The methodology specified in §504.8 of this **Ordinance** shall be used when:

(1) The **redevelopment** is tributary to an **existing detention facility** approved under a **Watershed Management Permit**; or

(2) The **redevelopment** is tributary to an **existing detention facility** that was constructed on or after the effective date of this **Ordinance** and was never approved under a **Watershed Management Permit**.

4. Allowances noted below may be granted for the **redevelopment** of a **parcel** that was planned to be tributary or contains within the **parcel** an **existing detention facility** permitted under a **sewerage system permit**:

A. If the **redevelopment** meets all of the following conditions:

(1) The design of the **existing detention facility** is documented and approved under an **existing sewerage system permit** (commonly referred to as Schedule D);

(2) Actual storage volume is verified (or is further modified as part of the current work) to meet or exceed the **required detention volume** under the permit based on a recent survey, signed and sealed by either a **Professional Engineer** or **Professional Land Surveyor**;

(3) The **redevelopment** provides treatment of the **volume control storage** as required in §503 of this **Ordinance**; and

(4) The **redevelopment** provides adequate capacity to convey **stormwater runoff** to the **existing detention facility** for all storms up to and including the 100-year **storm event**;

B. Then, the following **redevelopment** allowances may be granted:

(1) If the **redevelopment's** composite **runoff** coefficient does not exceed the design composite **runoff** coefficient of the **existing detention facility** as designed and intended under the original permit, additional **stormwater** detention volume is not required;

**Commented [A92]:** Allowance provisions are deleted and revised in new §505.4 and §505.5 to incorporate watershed specific release rates and related detention volume.

**Commented [A93]:** Redundant, covered under §505.4 above.

**Commented [A94]:** Now covered in §505.2 above.

(2) If the ~~redevelopment's~~ composite ~~runoff~~ coefficient exceeds the design composite ~~runoff~~ coefficient of the ~~existing detention facility~~ as designed and intended under the original permit, additional ~~stormwater~~ detention volume shall be provided for the ~~redevelopment~~. In such situations, the modified rational method using ~~Bulletin 70~~ rainfall data may be used to calculate the additional required storage volume. The release rate for the ~~redevelopment~~ will be based as follows:

(a) For ~~redevelopment~~ of areas within a permitted ~~parcel~~ intended to be tributary to an ~~existing detention facility~~, the existing approved release rate and restrictor may be retained;

(b) For ~~redevelopment~~ of areas within a permitted ~~parcel~~ that was never intended to be tributary to an ~~existing detention facility~~, but will become tributary to such ~~detention facility~~ upon ~~redevelopment~~, the original ~~release rate~~ for the basin will be recalculated based on a pro-rated area amount. The total new ~~required storage volume~~ will be updated based on the new required ~~release rate~~ and the restrictor may need to be replaced. For ~~redevelopment~~ of a ~~parcel~~ never planned to be tributary or that does not contain an ~~existing detention facility~~ permitted under a ~~sewerage system permit~~, the ~~redevelopment~~ shall be subject to the standard ~~stormwater~~ management requirements described in §500 through §504 of this ~~Ordinance~~.

**Commented [A95]:** Allowances are now revised to incorporate watershed specific release rates and related detention volume.

5. Allowances noted below may be granted for the ~~redevelopment~~ of a ~~parcel~~ that contains a ~~detention facility~~ within the ~~parcel~~ that was never permitted under a ~~sewerage system permit~~:

A. If the ~~redevelopment~~ meets all of the following conditions:

(1) Actual detention volume is verified (or is further modified as part of the current work) to meet or exceed the ~~detention volume~~ calculated according to the standards set under the Legacy ~~Sewer Permit Ordinance~~, and signed and sealed by either a ~~Professional Engineer~~ or ~~Professional Land Surveyor~~;

(2) ~~Actual release rate~~ from the existing ~~control structure~~ is verified (or is further modified as part of the current work) to be less than the requirements set under the ~~Sewer Permit Ordinance~~, and the calculations are signed and sealed by a ~~Professional Engineer~~;

- (3) ~~The redevelopment provides treatment of the volume control storage as required in §503 of this Ordinance; and The redevelopment provides adequate capacity to convey stormwater runoff to the detention facility for all storms up to and including the 100-year storm event.~~

B. ~~Then, the following redevelopment allowances may be granted:~~

- (1) ~~If the redevelopment's proposed impervious area does not exceed the existing or anticipated impervious area, additional stormwater detention volume is not required;~~
- (2) ~~If the redevelopment's proposed impervious area exceeds the existing or anticipated impervious area, additional stormwater detention volume shall be provided for the redevelopment. In such situations, the modified rational method using Bulletin 70 rainfall data may be used to calculate the additional required storage volume. The release rate for the redevelopment will be based on a pro-rata share of redevelopment's portion of the actual release rate of the control structure.~~

4. The redevelopment shall modify the control structure of the existing detention facility to meet the new composite net allowable release rate specified in §505.5 of this Ordinance when any development:

A. Is greater than or equal to twenty-five percent (25%) of the area considered detention service area;

B. Results in the aggregate development of the detention service area to exceed the following milestones:

- (1) Forty percent (40%);
- (2) Results in the aggregate development of the detention service area to exceed eighty percent (80%); or
- (3) Results in the aggregate development of the detention service area to equal one-hundred percent (100%).

6.5. When the existing control structure is modified, as required in §505.4 of this Ordinance, the new composite net allowable release rate shall be recalculated based on the redevelopment's watershed specific release rate specified in Appendix B of this Ordinance and the pro-rated share of the existing release rate for the remaining non-redeveloped area.



## ARTICLE 6. REQUIREMENTS FOR FLOOD PROTECTION AREAS

### § 600. Flood Protection Areas

1. ~~Flood Protection Areas include floodplains, wetlands, wetland buffers, and riparian environments. Requirements for determining floodplains are specified in §601 of this Ordinance. Requirements for delineating wetlands are specified in §603 of this Ordinance. Requirements for determining riparian environments are specified in §606 of this Ordinance.~~
- 2.1. ~~Any development within a the flood protection arealain shall comply with the requirements of §601 and §602 and the requirements of Article 4, Article 5, Article 6 of this Ordinance, and shall also meet any applicable requirements of Article 5, Article 7, and Article 9 of this Ordinance.~~
- 3.2. ~~AnyAll development projects within a wetlands flood protection area shall comply with the requirements of §603, §604, and §605 and the requirements of Article 4, Article 5, and Article 9 of this Ordinance.~~
4. ~~Any development within riparian environments shall comply with the requirements of §606 and §607 and the requirements of Article 4, Article 5, and Article 9 of this Ordinance.~~
- 5.3. ~~All co-permitteesapplicants shall submit the documents specified in Article 3 of this Ordinance to verify compliance with the requirements in Article 6 of this Ordinance.~~
- 6.4. ~~Compliance with Article 6 of this Ordinance does not excuseshall not preclude the co-permitteeapplicant from meeting all applicable federal, state, and local requirements including, but not limited to, the local NFIP regulations.~~
- 7.5. ~~Any human-induced change in improved or unimproved real estate within the regulatory floodplain not considered to be development under this Ordinance, including substantial improvements, shall meet the requirements of the local jurisdiction's NFIP or other stormwater ordinance. Compliance with §601 and §602 of this Ordinance does not excuse the co-permitteeapplicant from meeting all local requirements for participation in the NFIP.~~

**Commented [A1]:** Definition, not needed here. Move to TGM.

**Commented [A2]:** Revised to include Article 6 and applicable provisions of other articles.

**Commented [A3]:** Article 4 is applicable to all project area, not just development area

**Commented [A4]:** Combined with above

**Commented [A5]:** Remove "regulatory" throughout the Article, to emphasize all floodplains are subject to WMO regulation. Regulatory floodplains refer just to those as defined by FEMA.

### § 601. Requirements for Floodplain, ~~Regulatory~~ Floodway, and Flood Protection Elevation Determination

1. ~~For purposes of this §601 and §602, the floodplain shall be the area determined in of the regulatory floodplain (§601.3 and §601.4) and any inundation areas resulting from the 100-year flood elevation determined in §601.5 of this Ordinance. The 100-year flood~~

~~elevation in this §602 of this Ordinance is the highest of the BFE or the project specific 100 year flood elevation.~~

Commented [A6]: This is the definition in Appendix A.

~~1-2.~~ **Development** within **floodplains** shall not:

- A. Result in any new or additional expense to any **person** other than the ~~co-permittee~~**applicant** for **flood** protection or for lost environmental stream uses and functions; and
- B. ~~Violate §501.1 of this Ordinance. Increase flood elevations or decrease flood conveyance capacity upstream or downstream of the area not under the ownership or control of the co-permittee;~~
- C. ~~Pose any increase in flood velocity or impairment of the hydrologic and hydraulic functions of streams and floodplains unless a water resource benefit is realized;~~
- D. ~~Unreasonably or unnecessarily degrade surface or ground water quality; or~~
- E. ~~Violate any provision of this Ordinance either during or after construction.~~

Commented [A7]: Identical to §501.1

~~3.~~ Any ~~co-permittee~~ proposing ~~development~~ shall identify ~~Determination shall be made of the elevation BFE, and the boundary of the regulatory floodplain, and the limits of the regulatory floodway within the development site. The regulatory floodplain shall be determined by the base flood elevation (BFE) as determined by~~ shown on the effective Cook County Flood Insurance Study (FIS) for Cook County and the regulatory floodplain shown on the associated FIRM, including any Letter of Map Change (LOMC) or LOMA that has been issued by the Federal Emergency Management Agency (FEMA).

~~2.~~ The ~~co-permittee~~ is responsible for utilization of the current applicable FIRM and any associated LOMC. A list of FIRM for Cook County is provided in the TGM. FIRM are available at FEMA's Map Service Center; a web link to FEMA's Map Service Center is provided in the TGM.

Commented [A8]: This is redundant with above and will be moved to the TGM.

~~3-4.~~ Determination of the BFE in ~~a~~ **Special Flood Hazard Areas** shown on the FIRM associated with the effective FIS shall be determined for:

- A. AE Zones by using the 100-year profile ~~at the development site;~~
- B. AH Zones by using the elevation noted on the applicable FIRM;
- C. AO Zones by using the **highest adjacent grade** plus the depth number shown on the applicable FIRM, or two feet above the **highest adjacent grade** if no depth number is provided; and

D. For areas shown as A Zones on the effective ~~FIS~~**FIRM**, a **BFE** shall be determined by a **project-specific floodplain** study ~~acceptable to~~**approved by** either the **District** or an **authorized municipality**. This study shall be approved by **OWR** in cases where both:

**Commented [A9]:** Zone A is an unstudied area.

- (1) The **drainage area** is one (1) square mile or greater; and
- (2) The **development** is associated with a permit that will be issued by **OWR**.

~~4-5.~~ When a known **flood** hazard is not identified as a **Special Flood Hazard Area** on the **FIRM**, the **District** or an **authorized municipality** may require the ~~co-permittee~~**applicant** to perform a **project-specific floodplain** study to determine the **project-specific 100-year flood elevation**. ~~If the study determines the presence of floodplain or floodway areas, it~~**This study** shall be approved by **OWR** in cases where both:

- A. The **drainage area** is one square mile or greater; and
- B. The **development** is associated with a permit that will be issued by **OWR**.

~~5-6.~~ **Project-specific floodplain** studies shall be performed by a **Professional Engineer** using the appropriate models when applicable:

- A. TR-20, HEC-1, or HEC-HMS hydrologic model;
- B. HEC-2 or HEC-RAS hydraulic model; or
- C. A model or technique approved by the **District** and **OWR**.

~~6-7.~~ The ~~co-applicant~~ shall observe the **regulatory floodway** as designated by **OWR**, which is delineated on the effective **FIRM**. If a **floodway** is not designated on the **FIRM** then the following shall apply:

- A. When the **drainage area** is greater than one square mile, then the **regulatory floodway** shall be deemed to be the limits of the **regulatory floodplain** and subject to all **floodway** requirements of this **Ordinance** ~~with the exception of the appropriate use criteria in §602.27 of this Ordinance~~; or
- B. When the **drainage area** is less than one (1) square mile, then a **floodway** designation is not required.

**Commented [A10]:** Redundant, the referenced section is still part of the floodway requirements of this Ordinance.

~~7-8.~~ The **regulatory floodway** may be re-designated by the ~~co-permittee~~**applicant**. For **floodways** where the **drainage area** is greater than one square mile, approval of the re-designation shall be required by **FEMA**, through a Conditional Letter of Map Revision (**CLOMR**) and/or Letter of Map Revision (**LOMR**). **OWR** concurrence is also required by **FEMA** where a **regulatory floodway** is re-designated.

8.9. The ~~co-permittee applicant~~ shall determine the ~~flood protection elevation (FPE). The FPE,~~  
~~which~~ shall be two feet above the highest **100-year flood elevation** as determined by:

- A. The **BFE** associated with the effective **Cook County FIS**, including any **LOMC** that has been issued by **FEMA**; or
- B. **Project-specific 100-year flood elevation** developed in §601.5 of this **Ordinance**.

**§ 602. Requirements for Development within the Floodplain ~~and Residential~~  
~~Buildings within 100-feet of the Floodplain~~**

~~1. For purposes of this §602, the floodplain shall be the area of the regulatory floodplain (§601.3 and §601.4) and any inundation areas resulting from the 100-year flood elevation determined in §601.5 of this Ordinance. The 100-year flood elevation in this §602 of this Ordinance is the highest of the BFE or the project specific 100-year flood elevation.~~

~~2.1. For a new buildings, additions or a foundation expansion of an~~ existing **buildings** ~~that increases the building footprint by the lesser of either twenty percent (20%) or 2,500 square feet, in aggregate, and substantial improvements to single family homes,~~ the ~~proposed~~ **lowest floor** shall be elevated to at least the **FPE** in accordance with the requirements specified in §602.8, §602.9, and §602.10, unless **floodproofed against the base flood** ~~protected~~ in accordance with §602.2 of this **Ordinance**.

~~3.2. New building, additions or foundation expansions to existing buildings, that increases the building footprint by the lesser of either twenty percent (20%) or 2,500 square feet, in aggregate, or substantial improvements to single family homes with the lowest floor below the BFE, shall comply with the following:~~

- A. The **lowest entry elevation** ~~opening in the foundation wall~~, shall be at or above the **FPE**;
- B. Provide **compensatory storage** per §602.5 and §602.6 of this **Ordinance**;
- C. Demonstrate that a **building, building site,** and foundation below the **BFE** are reasonably safe from **flooding** per design standards requirements in Technical Bulletin 10-01 issued by **FEMA**; and
- D. Obtain a Letter of Map Revision Based on Fill (LOMR-F) if the **building site** is in the **regulatory floodplain**.

~~4. Substantial improvements to buildings in the floodplain may be floodproofed. Floodproofing shall meet the requirements listed in §602.10 or §602.12 of this Ordinance and shall be operational without human intervention.~~

**Commented [A11]:** Revert title to previous version, as this causes conflict with local NFIP regulation. Single-family homes within 100-feet of the floodplain are being regulated via the SFHA permit form, which is required per §201.1.C.

**Commented [A12]:** Standard created to exclude non-substantial improvements, continue to exclude internal construction, and not be in conflict with NFIP. Vetted through the TAC to determine percentage and square foot values.

**Commented [A13]:** Single-family homes are considered "buildings" and only applicable here if a permit is necessary under §201.1.C.

**Commented [A14]:** This is local NFIP regulation and redundant with §600.5. Existing buildings shall still be protected from runoff effects in Article 5.

~~5.3.~~ New **accessory structures** in the **floodplain** shall be regulated by the relevant **municipality** under its **NFIP** ordinance.

~~6.4.~~ New parking lots built below the **100-year flood elevation** shall clearly post the potential **flood** hazard.

~~7.5.~~ **Compensatory storage** shall be required for any fill, **structure**, or other material above grade in the **regulatory floodplain** that temporarily or permanently displaces **floodplain** storage volume. In addition, **compensatory storage** shall:

- A. Equal at least 1.1 times the volume of **flood** storage lost below the **BFE**;
- B. Be operational prior to placement of fill, **structures**, or other materials temporarily or permanently placed in the **regulatory floodplain**;
- C. Be provided in the immediate vicinity of the **flood** storage lost, where practicable;
- D. Be provided in addition to the **site-required detention volume**; and
- E. Drain freely and openly to the **waterway**.

~~8.6.~~ **Compensatory storage** shall be provided incrementally as follows:

- A. All **regulatory floodplain** storage lost ~~between the normal water level and below~~ the existing regulatory 10-year **flood** elevation shall be replaced below the proposed regulatory 10-year **flood** elevation and above the normal water level;
- B. All **regulatory floodplain** storage lost above the existing regulatory 10-year **flood** elevation shall be replaced above the proposed regulatory 10-year **flood** elevation; and
- C. The additional **compensatory storage** required beyond a one to one (1:1) ratio may be placed above or below the proposed regulatory 10-year **flood** elevation.

**Commented [A15]:** Comp Storage cannot exist below the normal water level

~~9.7.~~ **Compensatory storage** is not required for the **floodproofing** of existing **buildings** for the **floodplain** volume displaced by the **building**.

~~10.8.~~ New **structures** that are elevated, existing **structures** that are floodproofed, or ~~substantial foundation expansions~~**improvements** shall:

- A. Be anchored to prevent flotation, collapse, or lateral movement;
- B. Use **flood** resistant materials below the **FPE**;

- C. Use construction methods and practices that do not increase the potential for increases in **flood** damage;
- D. Elevate electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities to the **FPE** or higher;
- E. Provide adequate access and drainage; and
- F. Provide a backup power source that will activate without human intervention if electricity is required.

~~11.9.~~ Any fill required to elevate a **building** must:

- A. Extend ten feet beyond the foundation before the grade slopes below the **100-year flood elevation** for **buildings**, unless it is demonstrated that the **building and building site are is** reasonably safe from **flooding** per design standard requirements in Technical Bulletin 10-01 issued by **FEMA**;
- B. Be placed in layers no greater than six inches deep before compaction; and
- C. Provide **compensatory storage** per §602.5 and §602.6 of this **Ordinance**.

~~12.10.~~ When a **structure** is elevated by means other than filling:

- A. The **lowest floor** of any **building** and all electrical, heating, ventilating, plumbing, and air conditioning equipment of any **structure** shall be located at or above the **FPE**;
- B. ~~Elevation can be accomplished using stilts, piles, walls, or other foundations. Walls, stilts, piles, and other foundations below the lowest floor that are subject to flooding shall be designed so that hydrostatic forces on exterior walls are automatically equalized. An adequate drainage system must be installed to remove floodwaters from the area interior to the structure foundation by non-mechanical means within a reasonable period of time after the floodwaters recede; and, and by allowing for the entry and exit of floodwaters and shall be anchored and aligned in relation to flood flows and adjoining structures so as to minimize exposure to known hydrodynamic forces such as currents, waves, ice, and floating debris. Designs for meeting this requirement shall be prepared, signed, and sealed by a structural engineer or licensed architect in the State of Illinois and meet or exceed the following minimum criteria:~~
  - ~~(1) A minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding;~~

**Commented [A16]:** This language belongs in the TGM.

(2) The bottom of all openings shall be no higher than one (1) foot above grade;

(3) Openings may be equipped with screens, louvers, valves, or other coverings, provided that such coverings do not impede the automatic entry and exit of floodwaters;

(4) The grade interior to the foundation of the structure shall not be more than two feet below the lowest adjacent exterior grade;

(5) An adequate drainage system must be installed to remove floodwaters from the area interior to the structure foundation within a reasonable period of time after the floodwaters recede; and

(6) All materials and structures below the FFE shall be resistant to flood damage;

Commented [A17]: This language belongs in the TGM.

Commented [A18]: This language belongs in the TGM.

C. **Compensatory storage** for elevation of **structures** allowed in §602.10 of this Ordinance shall not be required.

~~13.11.~~ All **CLOMR**, **LOMR**, and **LOMR-F** applications require the approval of the governing **municipality** and shall be submitted to either the **District** or an **authorized municipality** concurrently with the application to **FEMA**.

~~14.12.~~ No filling, grading, dredging, excavating, or other proposed **development** within the ~~regulatory~~ **floodplain** that results in an increase to the **FIS** effective **BFE** or a modification to the **regulatory floodway** boundary shall take place until a **CLOMR** is issued by **FEMA** and a **floodway** construction permit is issued by **OWR**.

~~15.13.~~ If a **LOMR** is required by **FEMA**, ~~the RFI will not be issued~~ **no building construction shall take place** until the approved **LOMR** is issued by **FEMA**.

Commented [A19]: RFI covers all work approved under the Watershed Management Permit. Buildings may be constructed in some instances, even when a LOMR is required for a different area of the project.

~~16.14.~~ **Stormwater facilities** within the ~~regulatory~~ **floodplain**, such as culverts, bridges, and impoundments that have an associated backwater shall not be removed, replaced, or modified unless all of the following apply:

- A. All **structures** and their associated **lowest entry elevations** within the backwater of the existing **stormwater facility** are identified;
- B. Hydraulically equivalent **compensatory storage** is provided to mitigate any potential increases in flow or **flood** elevations upstream or downstream of the **stormwater facility**; and
- C. A **water resource benefit** is provided.

~~17.15.~~ All proposed sanitary **structures** shall have above ground openings located above the **FPE** or be constructed with bolted watertight **structure** lids.

~~18.~~ **Lift station facilities (including mechanical and electrical equipment)**

A. ~~Existing lift station facilities to be repaired or rehabilitated shall have all above ground equipment elevated above the **FPE**. Where possible, ground openings and vents shall be adjusted above the **FPE** or be constructed with lock-type, watertight **structure** lids to protect against the **base flood**.~~

B. ~~New lift station facilities shall be located above the **FPE** and outside the limits of the **regulatory floodplain**. New lift stations facilities shall also be carefully located to ensure **maintenance** access at all times during the **base flood**.~~

Commented [A20]: Exists in Article 7

~~19.16.~~ New and replacement water supply systems and wells shall either have all above ground openings above the **FPE** or be watertight.

~~20.17.~~ New waste disposal systems on the **site property interest** shall not be constructed within the **floodplain**.

~~21.18.~~ Construction of **District** required **volume control practices** and **detention facilities** within the **regulatory floodway** is strictly prohibited.

~~22.19.~~ **Detention facilities** located outside of the **regulatory floodway** but within the **floodplain** shall:

- A. Store the required **site runoff** under all stream flow and backwater conditions up to the **100-year flood elevation**, assuming a zero release rate below the **100-year flood elevation**; and
- B. Not allow design release rates to be exceeded under any stream elevation less than the **100-year flood elevation**.

~~23.20.~~ New or modified **storm sewer outfalls** shall meet the requirements of §501 and §502 of this **Ordinance** and shall comply with **Illinois Department of Transportation's (IDOT)** minimum standards. Relevant **IEPA** and **NPDES** permits shall be required for all new **outfalls** to **waterways** and Lake Michigan. Copies of all such permit applications for **outfalls** located within the City of Chicago should be provided concurrently to the **District**.

~~24.21.~~ Temporary or permanent storage of items susceptible to **flood** damage is prohibited unless elevated or **floodproofed** to the **FPE**.

~~25.22.~~ **Development** shall preserve effective **regulatory floodway conveyance** such that there will be no increases in **flood** elevations, flow rates, or **regulatory floodway** velocity, unless



these increases are contained in a **public flood easement**, a **water resource benefit** is provided, and a **CLOMR** is issued by **FEMA** prior to any work in the **regulatory floodway**.

~~26.23.~~ For any proposed **development** within the ~~regulatory floodway~~ the **co-permittee** shall provide either the **District** or an **authorized municipality** with an evaluation of the hydrologic and hydraulic impacts of the **development**:

- A. Using the **regulatory floodplain** model, if available, or a study as directed by the **District** using the methodology provided in §601.6 of this **Ordinance**;
- B. For the 2-year, 10-year, and 100-year **storm events** for the 24-hour event, at a minimum; and
- C. For existing and any future planned **watershed** conditions as directed by either the **District** or an **authorized municipality**.

~~27.24.~~ Within the ~~regulatory floodway~~, any proposed **development** shall meet the requirements of ~~Parts 3700 or 3708 of Title 17 of the Illinois Administrative Code and §602 of this Ordinance~~ and ~~only the following~~ appropriate uses ~~or specific construction approved by IDNR-OWR~~ shall be considered for permits:

- A. ~~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 and wildlife that provides a water resource benefit;~~
- B. ~~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;~~
- C. ~~Storm and sanitary sewer outfalls;~~
- D. ~~Underground and overhead utilities;~~
- E. ~~Recreational facilities such as playing fields and trail systems including any related fencing built parallel to the direction of flood flows;~~
- F. ~~Detached garages, storage sheds, or other non-habitable accessory structures to existing buildings that will not block flood flows. This does not include the construction or placement of any other new structures, fill, building additions, buildings on stilts, fencing (including landscaping or plantings designed to act as a fence), and the storage of materials;~~

**Commented [A21]:** The below language is found in Section 3708 of the Illinois Admin Code. Section 3700 is referenced for unmapped floodways.

**Commented [A22]:** Section 'N' below.

G. ~~Bridges, culverts, roadways, sidewalks, railways, runways and taxiways, and any modification thereto;~~

H. ~~Parking lots built at or below existing grade where either:~~

(1) ~~The depth of flooding at the BFE will not exceed one (1) foot; or~~

(2) ~~The parking lot is for short term outdoor recreational use facilities where the co-permittee agrees to restrict access during overbank flooding events and agrees to accept liability for all damage caused by vehicular access during all overbank flooding events. Signs shall be posted to clearly identify the flooding hazard.~~

I. ~~Aircraft parking aprons built at or below ground elevation where the depth of flooding at the BFE will not exceed one (1) foot;~~

J. ~~Regulatory floodway re-grading without fill to create a positive slope toward the watercourse;~~

K. ~~Floodproofing activities to protect existing structures including, but not limited to, constructing water tight window wells and elevating;~~

L. ~~The replacement, reconstruction, or repair of a damaged building, provided that the outside dimensions of the building are not increased, and provided that, if the building is damaged to fifty (50) percent or more of the building's market value before it was damaged, the building will be protected from flooding to or above the FFE; and~~

M. ~~Modifications to an existing building that would not increase the enclosed floor area of the building below the BFE, and would not block flood flows to including, but not limited to, fireplaces, bay windows, decks, patios, and second story additions;~~

N. ~~Specific construction approved by IDNR OWR;~~

~~28,25.~~ Transition sections are required for the calculation of effective **regulatory floodway conveyance** due to the modification or replacement of existing bridge and culvert **structures** or to compensate for lost conveyance for other appropriate uses approved by IDNR-OWR. ~~The following expansion and contraction ratios shall be assumed to determine transition sections:~~

A. ~~Water will expand at a rate no faster than one foot horizontal for every four feet of flooded stream length;~~

**Commented [A23]:** No administrative change. This information is verbatim from IDNR-OWR regulation and is set by OWR. Language will be added to the TGM.

**Commented [A24]:** Combined with above.

B. ~~Water will contract at a rate no faster than one foot horizontal for every one foot of flooded stream length; and~~

C. ~~Water will not expand or contract faster than a rate of one foot vertical for every ten feet of flooded stream length.~~

**Commented [A25]:** No administrative change. This information is verbatim from IDNR-OWR regulation and is set by OWR. Language will be added to the TGM.

### § 603. Requirements for Wetland Boundary, Quality, and Buffer Width Determination

1. **Wetlands** provide any or all of the following functions:
    - A. Facilitate hydrologic functions, including infiltration, evaporation, and evapotranspiration;
    - B. Reduce **flood** flow rates, velocities, and volumes;
    - C. Provide **flood** control by storing **stormwater**;
    - D. Prevent **erosion** and promote bank stability of streams, lakes, and ponds;
    - E. Control **sediment** from **upland** areas reducing the impact of urbanization on stream habitat and water quality by filtering and assimilating nutrients discharged from surrounding **uplands**;
    - F. Serve as important areas for de-nitrification, which reduces growth of algal blooms and subsequent depressed levels of dissolved oxygen in-stream; and
    - G. Provide an effective mechanism for treatment of contaminated surface **runoff**.
  2. Any ~~co-permittee~~applicant proposing **development** shall investigate the ~~site~~-property interest for the presence of **wetlands**. The ~~co-permittee~~applicant shall use the following sources and methods to determine if **wetland** areas may exist ~~on the site~~:
- A. Onsite **wetland** investigation;
  - B. National Wetland Inventory (**NWI**) Maps from the United States Fish and Wildlife Service (USFWS);
  - C. National Resource Conservation Service (**NRCS**) **wetland** inventory maps; and
  - D. **Wetlands** identified in current and historical aerial photographs, United States Geological Survey (USGS) hydrological atlas, soil survey of **Cook County**, and USGS topographic maps.

3. The ~~co-permittee applicant~~ shall identify the boundaries, extent, function, and quality of all **wetland** areas on the ~~site~~ **property interest**. The presence and extent of **wetland** areas ~~on the site~~ shall be determined as the result of an onsite **wetland** delineation according to the following:
  - A. All onsite **wetland** delineations are required to use procedures in accordance with the current **Corps Wetland Delineation Manual**; or
  - B. **Farmed wetlands** located ~~on the site~~ in agricultural areas which are in production and which are not determined to be **wetlands** through the federal **wetland** methodology shall be delineated through the current National Food Security Act Manual methodology;
  - C. Agricultural areas that have been abandoned for five (5) consecutive years shall be delineated in accordance with the **Corps Wetland Delineation Manual**.
4. The ~~co-permittee applicant~~ shall request a **Corps jurisdictional determination** of any identified **wetland** areas ~~within the project area or within 100-feet of the project on the proposed site~~.
5. The approximate location, extent, and quality of offsite **wetlands** within 100 feet ~~of the site-project~~ shall be identified. Offsite **wetlands** shall be delineated using the **Corps Wetland Delineation Manual**, or if delineation is unavailable or cannot be performed, the approximate limits of **wetlands** shall be identified using one or more of the following resources:
  - A. **NWI** Maps from the United States Fish and Wildlife Service (USFWS);
  - B. **NRCS wetland** inventory maps; and
  - C. **Wetlands** identified in current and historical aerial photographs, USGS hydrological atlas, soil survey of **Cook County**, and USGS topographic maps.
6. Any offsite **wetland** that cannot be accessed in the field by a **wetland specialist** shall be considered a **high quality isolated wetland** and shall be subject to the **wetland buffers** of §603.10.C of this **Ordinance**.
7. The following **isolated wetland** areas are exempt from the **wetland** requirements of this **Ordinance**:
  - A. **Wetlands** in roadside ditches created by excavation in **upland** areas;
  - B. **Wetlands** created by excavation or by other unfinished **development** activities in **upland** areas;

**Commented [A26]:** Wetland submittal is required for all potential wetlands onsite, but Corps JD only required for those within 100-feet due to potential buffer impacts.

- C. **Wetlands** created by artificial hydrology including, but not limited to, irrigation or **detention facility** outlets which would revert to **upland** areas if irrigation was to cease;
  - D. **Wetlands** created by the construction of **stormwater facilities** in **upland** areas, provided that the facility was not created for the purpose of **wetland mitigation**; and
  - E. **Wetlands** created by the construction of ponds in **upland** areas.
8. Either the **District** or an **authorized municipality** shall verify all onsite **isolated wetland** determinations and delineations.
9. The ~~co-permittee~~**applicant** shall provide an assessment of any identified **isolated wetland** and classify it as either a **high quality isolated wetland** or a **standard isolated wetland** using the criteria described below. Either the **District** or an **authorized municipality** will make the final determination of **wetland** status. A **high quality isolated wetland** satisfies any one of the criteria listed below. An **isolated wetland** that does not meet any of the following criteria can be classified as a **standard isolated wetland**. The criteria to receive a **high quality isolated wetland** status are as follows:
- A. It has a **Swink and Wilhelm Floristic Quality Index (FQI)** value greater than or equal to 20 during a single season assessment or a native mean C-value of 3.5 or higher as calculated by the Swink and Wilhelm methodology; or
  - B. It is known to possess a federal- or state-listed threatened or endangered species based upon consultation with the Illinois Department of Natural Resources (IDNR) and the United States Fish and Wildlife Service (USFWS).
10. **Wetland buffers** for **isolated wetlands** shall be determined according to the classification of the **wetland** as determined in §603.9 of this **Ordinance**. Minimum **isolated wetland buffer** widths shall be as follows and as summarized in Table 3 ~~of this Article 6~~ of this **Ordinance**:
- A. Thirty feet from the boundary of **standard isolated wetlands** greater than or equal to one-tenth of an acre (0.10 acre) and less than one-half of an acre (0.5 acre) in area;
  - B. Fifty feet from the boundary of **standard isolated wetlands** greater than or equal to one-half of an acre (0.5 acre) in area; or
  - C. One-hundred feet from the boundary of **high quality isolated wetlands**.

<b>Table 3. Wetland Buffer Determination for Isolated Wetlands</b>
--

Wetland Quality	Acreage	§603.10.A	§603.10.B	§603.10.C
Standard Isolated Wetland	≥ 0.10 acre and < 0.50 acre	30 ft		
	≥ 0.50 acre		50 ft	
High Quality Isolated Wetland	No minimum			100 ft

11. The **Wetland Buffer** width for **isolated wetlands** may be varied to a minimum of the greater of one-half the required buffer width or thirty (30) feet, upon approval of either the **District** or an **authorized municipality**.

#### § 604. Requirements for Development Affecting the Function of Wetlands and Wetland Buffers

1. Requirements for **development** affecting the function of **wetlands** are summarized in Table 4 ~~of this Article 6~~ of this **Ordinance**.
2. **Development** that impacts onsite **Corps jurisdictional wetlands** shall be prohibited unless a permit for all regulated activities is obtained from the appropriate federal and state authorities.
3. **Development** that impacts onsite **high quality isolated wetlands** shall be prohibited unless documentation is submitted that demonstrates:
  - A. That the presence of **high quality isolated wetlands** precludes all economic use of the site and that no practicable alternative to **wetland** modification exists; or
  - B. That avoidance of **high quality isolated wetlands** would create a hazardous road condition and that no practicable alternative to **isolated wetland** modification exists.

Based upon a review of the submitted documentation and any other available resources, either the **District** or an **authorized municipality** will make the final determination as to whether the proposed **high quality isolated wetland** modification represents the least amount of **wetland impact** required to allow economic use of the ~~parcel property~~ or to mitigate the road hazard, and a determination as to whether a permit should be granted.

4. **Development** that impacts onsite **standard isolated wetlands** that are equal to or greater than one-tenth of an acre (0.10 acre) in aggregate shall be prohibited unless documentation is submitted which demonstrates that no practicable alternative to **wetland** modification exists. Based upon a review of the submitted documentation and

other available resources, either the **District** or an **authorized municipality** will make a determination as to whether the proposed **wetland** modifications will be permitted.

5. **Development** that impacts onsite **standard isolated wetlands** with a total acreage less than one-tenth of an acre (0.10 acre) in aggregate, including **contiguous Isolated Waters** less than one-tenth of an acre (0.10 acre), does not require documentation showing that no practicable alternatives to **wetland** modification exist.

Table 4. Wetland Impact Matrix					
Wetland Type	Wetland Area	§604.2	§604.3	§604.4	§604.5
Corps Jurisdictional Wetland	Any	X			
Standard Isolated Wetland	<0.10 acre				X
	≥0.10 acre			X	
High Quality Isolated Wetland	Any		X		

6. **Development** will be permitted only when the indirect environmental impacts to onsite and offsite **wetlands** can be sufficiently evaluated, minimized, and mitigated as specified in §604 and §605 of this **Ordinance**. The designed hydrology should be maintained as close to 100 percent of the existing hydrology as possible. An **indirect wetland impact** shall be assumed if the **development** activity causes the **wetland** hydrology to fall below 80 percent, or to exceed 150 percent, of the existing condition **storm event runoff** volume to the **wetland** for the 2-year, 24-hour **storm event**.
7. **Detention facilities** are permissible in **standard isolated wetlands**. **Detention facilities** are not permissible in **high quality isolated wetlands**. **Detention facilities** are not permissible in **Corps Jurisdictional Wetlands** when prohibited by the **Corps**. When detention is provided in a **standard isolated wetland**:
  - A. The **wetland** hydrology should be maintained as close to 100 percent of the existing hydrology as possible;
  - B. The **wetland** hydrology shall not fall below 80 percent, nor exceed 150 percent, of the existing condition **storm event runoff** volume to the **wetland** up through the 2-year, **24-hour storm event**; and
  - C. The **isolated wetlands** shall not be inundated with more than twelve inches of water above the **isolated wetland's** normal water elevation for longer than twenty four hours during **storm events** up to and including the 100-year, 24-hour **storm event**.

8. **Stormwater** outlets discharging into an **isolated wetland** will only be allowed provided that appropriate **volume control practices** and **erosion control practices** are proposed and the outlets discharge through proper energy dissipation and scour protection, such as a level spreader or vegetated swale.
9. Mitigation for **developments** that impact an **isolated wetland** shall provide for the replacement of the lost **wetland** environment in accordance with Table 5 of this [Article 6 of this Ordinance](#):

Table 5. Isolated Wetland Mitigation Requirement Ratios					
Wetland Quality	Area	§604.9.A	§604.9.B	§604.9.C	§604.9.D
Standard Isolated Wetland	<0.10 acre	None			
	≥0.10 acre		1.5:1		
High Quality Isolated Wetland	Any			3:1	
Impacts Prior to Issuance of Permit					3:1

- A. Impacts to **standard isolated wetlands** less than one-tenth of an acre (0.10 acre) in aggregate do not require mitigation;
  - B. Impacts to **standard isolated wetlands** more than or equal to one-tenth of an acre (0.10 acre) in aggregate shall be mitigated at a minimum ratio of one-and-one-half acre of creation for each acre impacted (1.5:1);
  - C. **High quality isolated wetlands** impacts shall be mitigated at a minimum ratio of three acres of creation for each acre impacted (3:1);
  - D. **Isolated wetland impacts** initiated after the effective date of this **Ordinance** and prior to issuance of a **Watershed Management Permit**, or other unauthorized impact shall be mitigated at a minimum ratio of three acres of creation for each acre impacted (3:1); and
  - E. The **District**, federal, state, and local authorities may require a greater compensation ratio where unique **wetland** functions are threatened.
10. When **development** impacts an **isolated wetland**, mitigation of said impacts shall be accomplished through one or more of the following options:



A. Payment into a **Corps** approved **wetland mitigation bank** in accordance with §605.1 within the same Watershed Planning Area as the impact;

**Commented [A27]:** Redundant with §605.1.A

B. ~~Payment into a **Corps** approved **wetland mitigation bank** that is closest to the **development** within the same **Corps** Watershed Service Area as the impact as shown in Appendix D of this Ordinance;~~

**Commented [A28]:** Redundant with §605.1.B

C. ~~Enhancement of an existing onsite isolated wetland from a standard isolated wetland to a high quality isolated wetland, subject to §604 of this Ordinance;~~

**Commented [A29]:** Within the definition of “wetland mitigation”. Move to a sub-category of wetland mitigation, below

D. ~~Expansion of an existing onsite isolated wetland;~~

~~F.B.~~ Onsite **wetland mitigation** that meets one of the following; and

(1) Enhancement of an existing onsite isolated wetland from a standard isolated wetland to a high quality isolated wetland, subject to §604 of this Ordinance;

(2) Expansion of an existing onsite isolated wetland;

~~(2)~~(3) Creation of a new **wetland** that meets the requirements of §604.13.

~~F.C.~~ Offsite **wetland mitigation** within the same **Watershed Planning Area** as the impact.

11. **Wetland mitigation** for impacts to **Corps** jurisdictional wetlands shall not be credited toward **wetland mitigation** for impacts to **isolated wetlands**.
12. Mitigated **isolated wetlands** shall be designed to duplicate or improve the hydrologic and biologic features of the original **isolated wetland**.
13. Creation of **wetlands** for the mitigation of **development** impacts, within or affecting a **wetland**, may take place only within areas that are not currently **wetlands** and where there is reasonable expectation that **wetland mitigation** will succeed.
14. Either the **District** or an **authorized municipality** may allow an existing **isolated wetland** that is contiguous to a proposed **isolated wetland** mitigation site-area to be enhanced in quality from a standard isolated wetland to a high quality isolated wetland in exchange for a partial reduction in the mitigation area required. In no case shall there be a loss of wetland function. Either the District or an authorized municipality may reduce the total wetland mitigation area required by 0.75 acre for every one acre of such wetland enhancement; however, the area of creation of new wetlands to compensate for unavoidable wetland loss shall not be allowed to fall below a ratio of one acre of creation for each acre impacted (1:1).

15. An **isolated wetland mitigation** plan shall be developed by the ~~co-permittee~~**applicant**. This plan shall include design, construction, monitoring, and **maintenance** of the mitigation measures and shall meet the requirements of Article 9 of this **Ordinance**. Cumulative impacts with a total acreage less than one-tenth of an acre (0.10 acre) to all onsite **standard isolated wetlands** do not require a mitigation plan.
16. **Development** in or affecting an **isolated wetland** shall be initiated only after the mitigation plan has been approved by either the **District** or an **authorized municipality**.
17. The design, analysis, and construction of all **wetland mitigation** shall comply with all applicable federal, state, and local regulations.
18. Either the **District** or an **authorized municipality** will require that the ~~co-permittee~~**applicant** provide annual monitoring reports on the status of the constructed mitigation measures for five years, or until such time that the performance criteria have been met. Either the **District** or an **authorized municipality** may also require the **co-permittee** to undertake remedial action to bring the area into compliance with the mitigation plan.
19. **Development** within an **isolated wetland buffer** shall not, without mitigation:
  - A. Adversely change the quantity, quality, or temporal and areal distribution of flows entering any adjacent **wetlands** or waters;
  - B. Adversely affect any **groundwater** infiltration functions; or
  - C. Destroy or damage vegetation that stabilizes **wetland** fringe areas or provides overland flow filtration to **wetlands**. The removal of invasive vegetation is not considered to be destruction or damage of vegetation.
20. Impacts to **buffer** areas shall be mitigated through the replacement or enhancement of impacted functions.

#### **§ 605. Wetland Banking**

1. **Isolated wetland mitigation** provided through a **wetland mitigation bank** shall abide by the following hierarchy unless the method is not available, or unless the next method is justified through avoidance and minimization sequencing:
  - A. Payment into a **Corps** approved **wetland mitigation bank** in the same **watershed planning area**; or

- B. Payment into a **Corps** approved **wetland mitigation bank** that is closest to the **development** within the same **Corps Watershed** Service Area as the impact as shown in Appendix D of this **Ordinance**.
- 2. The payment amount made into a **wetland mitigation bank** will be determined by multiplying the acres of required mitigation by the appropriate banking cost.
- 3. **Wetland mitigation bank** credits applied toward impacts to **Corps jurisdictional wetlands** may not be applied simultaneously to mitigate impacts to **isolated wetlands**.
- 4. **Wetland mitigation banks** shall be approved by the **Corps**.

#### **§ 606. Riparian Environments Requirements**

- 1. **Riparian environments** provide any or all of the following functions:
  - A. Reduce **flood** flow rates, velocities, and volumes;
  - B. Prevent **erosion** and promote bank stability of streams, lakes, ponds, or **wetland** shorelines;
  - C. Control **sediment** from **upland** areas, reducing the impact of urbanization on stream habitat and water quality by filtering and assimilating nutrients discharged from surrounding **uplands**;
  - D. Insulate and moderate daily and seasonal stream temperature fluctuations by maintaining cooler in-stream temperatures for areas with overhanging vegetation;
  - E. Serve as important areas for de-nitrification which reduces growth of algal blooms and subsequent depressed levels of dissolved oxygen in-stream; and
  - F. Provide an effective mechanism for treatment of contaminated surface **runoff**.
- 2. Any **developments** involving **riparian environments** shall identify the boundaries of those **riparian environments** within the buffer area by using the following documents or procedures at the time of the **development** and which are summarized in Table 6 of this Article 6 of this **Ordinance**:
  - A. For any **Jurisdictional Waters of the U.S.** that does not qualify as a **wetland**, the **riparian environment** shall be 50 feet from the **OHWM**.
  - B. For any **Isolated Waters** that does not qualify as a **wetland**, the **riparian environment** shall be 30 feet from the **OHWM**.

- C. For any **Jurisdictional Waters of the U.S.** or for any **Isolated Waters** that do not qualify as a **wetland**, and which have a **BSC** of “A” or “B”, the **riparian environment** shall be 100 feet from the **OHWM**.
- D. For any **Jurisdictional Waters of the U.S.** or **Isolated Waters** that do not qualify as a **wetland** identified as a **BSS**, the **riparian environment** shall be 100 feet from the **OHWM**.

**Table 6. Riparian Environment Determination ~~Buffer~~**

Biological Stream Characterization	Waters Classification	§606.2.A	§606.2.B	§606.2.C or §606.2.D
All Other Streams	Jurisdictional Water of the U.S.	<i>50 feet from the OHWM</i>		
	<b>Isolated Waters</b>		<i>30 feet from the OHWM</i>	
<b>BSC</b> of “A” or “B” or <b>BSS</b> Streams	Jurisdictional Water of the U.S.			<i>100 feet from the OHWM</i>
	<b>Isolated Waters</b>			<i>100 feet from the OHWM</i>

- 3. The following are not considered to be **riparian environments** and shall be exempt from the **riparian environment** requirements of this **Ordinance**:
  - A. Roadside ditches created by excavation for the purposes of **stormwater** conveyance;
  - B. Channels or bodies of water created by unfinished **development** activities; or
  - C. Channels or bodies of water created by the construction of **stormwater facilities** for the purposes of **stormwater** management.

**§ 607. Requirements for Development ~~That Affect~~Affecting the Function of Riparian Environments**

- 1. **Development** that impacts **Jurisdictional Waters of the U.S.** or **Corps Jurisdictional Wetlands** ~~on the development site~~ shall be prohibited unless a permit for the regulated activities is obtained from the appropriate federal and state authorities.
- 2. To the extent practicable, the existing functions of a **riparian environment** as defined by §606.1 of this **Ordinance** shall be protected.
- 3. Adverse impacts to **riparian environment** functions shall be defined as:

- A. Modification or relocation of streams and channels;
  - B. Significant changes to quantity, quality, or distribution of flows draining to any adjacent **wetlands** or waters; or
  - C. Damage to vegetation that overhangs, stabilizes, and provides overland flow filtration, or shades stream channels, **wetlands**, or impoundments that normally contain water. The removal of invasive vegetation is not considered to be destruction or damage of vegetation. The removal of vegetation and downed trees impeding drainage is not considered to be damage to vegetation when included as part of a **District** recognized program or **project** for stream **maintenance**, or stabilization, restoration, or enhancement.
4. Adverse impacts to the existing functions of a **riparian environment** shall be mitigated and a mitigation plan shall be prepared.
5. The following requirements pertain to channel relocation and stabilization practices:
- A. When practicable, impacts to natural streams and channels should be avoided;
  - B. If a channel is completely or partially relocated, the newly created portion shall be constructed in a manner which will allow naturalizing to occur including, but not limited to, meandering, pools, or riffles;
  - C. New or relocated channels shall be built under dry conditions through the diversion of the normal flow within the channel. All items of construction (including establishment of vegetation) shall be completed prior to diversion of water into the new channel;
  - D. If a channel is modified, an approved and effective **erosion** and **sediment control practice** to minimize and control suspended **sediment** and degradation of downstream water quality must be installed before excavation begins. The installed means must be maintained throughout the construction period and conform to the requirements of Article 4 of this **Ordinance**;
  - E. The length of any new or relocated channel shall be greater than or equal to the length of the disturbed channel;
  - F. Any channel modifications shall meet all other requirements in the **Ordinance**, including the **floodplain** and **floodway** requirements described in §601 and §602 of this **Ordinance**;
  - G. The **co-permittee** shall provide a plan and profile of the existing and proposed channel and supporting calculations for the channel width, depth, sinuosity, and

riffle locations. Impacts on **flood** flows and **flood** elevations shall be evaluated using appropriate hydrologic and hydraulic methods;

H. Streams and channels shall be expected to withstand all events up to the **base flood** without increased **erosion**. Hard armoring of banks with concrete, bulkheads, riprap, and other man-made materials shall be avoided where practicable. Hard armoring shall be used only where **erosion** cannot be prevented by use of bioengineering techniques or gradual slopes. Such armoring shall not have any adverse impact on other properties, nor shall it have an adverse impact upon the existing land use; and

I. All ~~disturbed areas~~**project areas** must be replanted for stability with native vegetation where appropriate. The **TGM** provides examples of native vegetation that is appropriate in **riparian environments**.

6. Re-vegetation ~~of disturbed areas~~ within **riparian environments** shall take place as soon as possible. In accordance with §403.1 of this **Ordinance**, stabilization practices shall be initiated as soon as practicable ~~in portions of the site~~ where construction activities have temporarily or permanently ceased.

7. **Stormwater** outlets discharging into a channel will only be allowed provided that appropriate **volume control practices** are implemented and that they discharge through proper energy dissipation, such as a level spreader or vegetated swale.

8. A riparian mitigation plan in accordance with §306 and §302.2.E(3) of this **Ordinance** shall be developed. Mitigation of **riparian environment** impacts shall include design, construction, and continued monitoring and **maintenance** of the mitigation measures and shall meet the requirements of Article 9 of this **Ordinance**.

9. The design, analysis, and construction of all **riparian environment** mitigation measures shall comply with all applicable federal, state, and local regulations.

10. **Development** in or affecting a **riparian environment** shall be initiated only after a mitigation plan has been approved by either the **District** or an **authorized municipality**.

~~11.~~ Either the **District** or an **authorized municipality** will require that the **co-permittee** provide annual reports monitoring the status of the constructed mitigation measures for five years, or until such time that the performance criteria has been met. Either the **District** or an **authorized municipality** may also require the **co-permittee** undertake remedial action to bring the area into compliance with the mitigation plan.

#### **§ 608. Requirements for Outfalls**

**Commented [A30]:** Moved to Article 7

### ARTICLE 6. REQUIREMENTS FOR FLOOD PROTECTION AREAS

Page 6-22

Public Comment Draft: 1/7/19

1. ~~All new and reconstructed outfalls to any waterways within Cook County, including Lake Michigan, require a Watershed Management Permit. For new and reconstructed outfalls to waterways located in the City of Chicago, a facility connection authorization is required.~~
2. ~~All new and reconstructed outfalls must provide an appropriate energy dissipation structure. Outfalls constructed within riparian environments will be subject to the requirements of §607 of this Ordinance.~~
3. ~~All new and reconstructed outfalls to Lake Michigan must provide a water quality device to pre-treat all discharge into the lake.~~
4. ~~Neither erosion nor downstream flooding shall result from discharge from a new or reconstructed outfall. In accordance with Article 4 of this Ordinance, stabilization practices shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased.~~
- 5.11. ~~All new and reconstructed outfalls within Cook County for which a Watershed Management Permit is required shall comply with the details, technical requirements, and design guidelines contained in the TGM.~~

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## ARTICLE 7. REQUIREMENTS FOR SEWER CONSTRUCTION

### § 700. General Sewer Construction Requirements

1. ~~The intent of Article 7 of this Ordinance is to supersede requirements of the repealed Sewer Permit Ordinance and the Manual of Procedures, as described in §104 of this Ordinance, as these prior ordinances related to the regulation, permitting, and enforcement of qualified sewer construction.~~
- 2.1. A Watershed Management Permit is required for qualified sewer construction as defined in §701 of this Ordinance.
- 3.2. A Watershed Management Permit is not required for non-qualified sewer construction, as defined in §701.2 and §701.3 of this Ordinance.
3. ~~All permittees and co-permittees~~ applicants shall submit the documents specified in ~~§307~~ Article 3 to verify compliance with the requirements in Article 7 of this Ordinance.
- 4.1. ~~All qualified sewer construction shall meet the requirements specified under Article 7 of this Ordinance.~~
4. ~~All~~ Qualified sewer construction shall meet the requirements specified under in Article 7 of this Ordinance and the analysis, design, and performance standards specified in the TGM.
5. Any ~~q~~Qualified sewer construction that is planned in conjunction with general site development shall also meet the requirements specified under in Article 4, and Article 5 of this Ordinance, and any applicable requirements of Article 6 of this Ordinance where applicable. ~~Qualified sewer that conveys stormwater shall not:~~
  - A. ~~Result in any new or additional expense to any person other than the co-permittee as a result of stormwater discharge;~~
  - B.A. ~~Increase flood elevations or cause an adverse impact to stormwater conveyance capacity upstream or downstream of the area under the ownership or control of the co-permittee;~~
  - C.A. ~~Pose any increase in flood velocity or impairment of the hydrologic and hydraulic functions of streams and floodplains unless a water resource benefit is realized;~~
  - D.A. ~~Unreasonably or unnecessarily degrade surface or groundwater quality; and~~
  - E.A. ~~Violate any provision of this Ordinance either during or after construction.~~

Commented [A1]: Combined and consolidated with §104.3.

Commented [A2]: Revised to include applicable provisions of other articles.

~~6.1. All permittees and co-permittees shall submit the documents specified in §307 to verify compliance with the requirements in Article 7 of this Ordinance.~~

~~7. Design and performance standards of all qualified sewer construction shall be consistent with the TGM.~~

Commented [A3]: Incorporated into §700.6 above.

~~8.6. Qualified sewer construction~~ installed under the provisions of this Ordinance shall be maintained according to the criteria and guidelines established in Article 9 of this Ordinance.

~~9.1. Qualified sewer construction shall be designed to comply with all Federal, State, and local laws and engineering standards pertaining to sewer construction, including but not limited to:~~

~~A. The District's Sewage and Waste Control Ordinance;~~

~~B.A. Title 35 of the Illinois Administrative Code;~~

~~C.A. Illinois Pollution Control Board Technical Releases and other applicable rules and regulations issued;~~

~~D.A. Illinois Recommended Standards for Sewage Works;~~

~~E.A. Standard Specifications for Water & Sewer Construction in Illinois; and~~

~~F.A. Recommended Standards for Wastewater Facilities.~~

~~10.7. The District may enter into service agreements, the area of which is subject to the requirements specified in Article 7 of this Ordinance to provide an outlet for sanitary sewer service, for the following service areas types:~~

Commented [A4]: Redundant language deleted.

A. Cook County municipalities that are contiguous to the District corporate limits of the District; or

B. Multi-county municipalities, provided that the municipality is located partly within the corporate limits of the District.

Commented [A5]: Redundant language deleted since this is already stated in the "Multi-County Municipality" definition.

~~When the area to be served by the service agreement is not within the corporate limits of the District, the terms and conditions of Article 7 of this Ordinance apply to the area to be served.~~

Commented [A6]: Incorporated into §700.7 above.

~~11.8. Connection impact fees, as indicated in Appendix F of this Ordinance, for annexing areas into the District are required for the following areas annexing into the District corporate limits:-~~

## ARTICLE 7. REQUIREMENTS FOR SEWER CONSTRUCTION

Page 7-2

Public Comment Draft: 1/7/19

A. Any ~~permittee and co-permittee~~applicant that ~~have~~has not previously paid a **connection impact fee** for any permit **project** area that annexed into the **District** on or after July 9, 1998, shall pay a **connection impact fee** to the **District** ~~at a time that such~~when said area or a portion thereof is the subject of a **Watershed Management Permit**.

B. **Connection impact fees** are not required for:

- (1) Publicly owned facilities performing a local governmental function that discharge only domestic **sewage** into ~~the District's collection facility~~ water reclamation facilities; or
- (2) Real estate tax-exempt facilities that discharge only domestic **sewage** into the ~~District's collection facility~~ water reclamation facilities.

~~C. Connection impact fees are contained in Appendix F of this Ordinance.~~

**Commented [A7]:** Incorporated into §700.8 above.

## § 701. Qualified Sewer Construction

1. ~~Qualified sewer construction is considered all public and private new sewers and new sewer connections, exterior to a building envelope, including sewer repair and sewer replacement. Qualified sewer construction includes any of the following all new and replacement service sewer, sanitary sewer, combined sewer, and storm sewer when located within the combined sewer area or when tributary to District water reclamation facilities, including any of the following:~~

**Commented [A8]:** Article reorganization defines qualified sewer first, then exclusions follow.

~~A. New and replacement sewers including:~~

- ~~(1) Sanitary sewer (public and private);~~
- ~~(2) Sanitary service sewer (exterior to building envelope);~~
- ~~(3) Combined sewer;~~
- ~~(4) Storm sewer within combined sewer areas;~~
- ~~(5) Storm sewer tributary to a combined sewer and/or a District collection or water reclamation facility;~~

**Commented [A9]:** Incorporated into §701.1 above.

~~B.A. Structures and appurtenances to sewers listed above;~~

~~C.B. Pump station and Force main, including modification and pump replacement conveying any flows from sewer listed above;~~

**Commented [A10]:** Added since a permit is required for this work.

- ~~(1) Repair of an existing lift station or sewer listed above;~~

**Commented [A11]:** Incorporated into §701.1.B above.

~~(2)(1) Reinstatement of an existing unpermitted sewer as listed above;~~

~~D.C. Cured-In-Place-Pipe Lining (CIPP) rehabilitation of existing public sewers; and~~

~~E.D. Alterations to the conveyance capacity of a sewer system, as listed above;~~

~~E. Reinstatement of an existing unpermitted sewer as listed above;~~

F. ~~New and replacement s~~Sewer connections at the building foundation, or within the right-of-way or public easement; including:

~~(1) Building connections at the building envelope;~~

~~(2) Public sewer connections in the right-of-way;~~

~~(1) Direct connection to a District facility; and~~

~~(3) Direct connections to District interceptors or interceptor structures, (except for within the City of Chicago);~~

~~(4) Direct connections to District TARP structures or tunnels (except for within the City of Chicago);~~

~~(5) Direct connections to District-owned reservoirs, properties or facilities (pump stations, water reclamation facilities, etc., except for within the City of Chicago); and~~

G. ~~Outfalls to a waterways~~ or Lake Michigan ~~(except for within the City of Chicago).~~

H. Treatment and pretreatment facilities, including, but are not limited to, treatment processes, private treatment plants, oxidation ponds, and similar facilities.

H. ~~For direct connections and outfalls noted above, §701.1.B.(3-6), within the City of Chicago, refer to Facility Connection Authorization in §703 of this Ordinance.~~

2. ~~Non-qualified-qualified sewer construction~~ includes any of the following:

A. ~~Service sewer or storm sewer for Private a single-family-family home, storm drain or service sewer (less than three (3) units) including single-family homes when located within a residential subdivision, provided the service sewer;~~

~~(1) Does not run parallel within the right-of-way or public easement;~~

**Commented [A12]:** Incorporated into §701.1.F above.

**Commented [A13]:** This is considered qualified sewer construction within the City of Chicago, and requires a Facility Connection Authorization. Since this permit type is a "Watershed Management Permit", it is no longer being called out separately in this Article.

**Commented [A14]:** Article reorganization removes separate section for Facility Connection Authorization. Since this permit type is a "Watershed Management Permit," it is no longer being called out separately in this Article. No requirements have changed.

(2) ~~Does not require an extension of the receiving system within the right-of-way or public easement to provide service; and~~

~~(1)(3) Conveys domestic sewage only and complies with §702.2.C of this Ordinance.~~

**Commented [A15]:** New language covers old §702.2.A and §702.2.B

- B. Plumbing internal to any ~~building envelope~~;
- C. **Storm sewer** tributary to a **waterway** when located within the separate sewer areas;
- D. Septic systems and associated sewers that do not discharge effluent to District water reclamation facilities;
- E. Sewers and sewer connections constructed outside of the District corporate limits or service agreement areas, at the time of permit application;
- F. Sewers and sewer connections for Private grey water, reclamation, or water harvesting systems ~~sewers and associated connections~~ when located within the separate sewer areas and not tributary to **District water reclamation facilities**;
- G. ~~Structure~~ Footings drains to protect a building or structure foundation; and
- H. ~~Within combined sewer areas, perforated underdrains~~ solely associated with **green infrastructure** ~~improvements or volume control practices when located within the combined sewer area~~ that meets the following conditions:
  - (1) Discharge is ~~T~~ tributary to a **waterway**; or
  - (2) Conform with §502.22 of this Ordinance and the **groundwater** separation design guidelines contained in the **TGM**.

**Commented [A16]:** Language added for clarification.

**Commented [A17]:** Deleted since required volume control practices require a Watershed Management Permit and will not be exempt from permitting requirements. Language remains for green infrastructure projects since they may not require a Watershed Management Permit.

**Commented [A18]:** This Article 5 provision reference has been moved and incorporated into §702.2.C(3).

3. ~~Sewer m~~ **Maintenance** and inspections of sewers and associated structures and appurtenances ~~is are~~ considered non-qualified sewer ~~construction~~ and includes any of the following:

**Commented [A19]:** Language added since inspections do not require a Watershed Management Permit

- A. Cured-In-Place-Pipe ~~Lining~~ (CIPP) rehabilitation of a service sewer described in §701.2.A of this Ordinance or existing previously permitted private sewers;
- B. Grouting ~~of existing sewers~~; and
- C. Jetting, cleaning, and root-treating ~~of existing sewers~~.

## § 702. Qualified Sewer Construction Requirements

1. **Qualified sewer** construction shall not:

- A. Pollute public potable water supply systems, ~~(water mains), or water service lines;~~
- B. Pollute **waterways**, water bodies, or **groundwater**;
- C. Discharge ~~sanitary~~ **sewage** without treatment:

(1) ~~Onto the ground; or~~

(1)(2) Into a ~~storm sewer system~~ **stormwater facility in a separate sewer area** tributary to a **waterway**; or

(2)(1) ~~Onto the ground; or~~

(3) Into a receiving **waterway**;

- D. ~~Convey~~ **Discharge** ~~industrial wastes that qualify for~~ **without** pre-treatment **when** required;

- E. ~~Drain clean clear groundwater into a collection system tributary to a water reclamation facility;~~

~~Result in any new or additional expense to any person other than the co-permittee as a result of stormwater discharge;~~

~~Increase flood elevations or cause an adverse impact to stormwater conveyance capacity upstream or downstream of the area under the ownership or control of the co-permittee;~~

~~Pose any increase in flood velocity or impairment of the hydrologic and hydraulic functions of streams and floodplains unless a water resource benefit is realized;~~

~~Unreasonably or unnecessarily degrade surface or groundwater quality; and~~

~~Violate any provision of this Ordinance either during or after construction;~~

- E. Violate §501.1 of this **Ordinance** when **stormwater** is conveyed;

- F. ~~Allow stormwater to enter a sanitary sewer systems in separate sewer areas;~~

- G. ~~Allow excessive infiltration and inflow into a collection sewer system tributary to water reclamation facilities~~ **District water reclamation facilities;**

- F-H. Increase **basement backups, sanitary sewer overflows, or combined sewer overflows** ~~by disproportionately decreasing sewage capacity within the existing sanitary sewer system and/or combined sewer system; and~~

**Commented [A20]:** Language revised to include all stormwater conveyance systems discharging into a waterway.

**Commented [A21]:** Incorporated into §702.1.G below.

**Commented [A22]:** Moved to §501.1.D, and subsequently falls under provisions of following §702.1.E.

**Commented [A23]:** These are the same as §501.1. Consolidated into new §702.1.E below.

**Commented [A24]:** Language revised to delete reference to separate sewer area, since stormwater must not enter any sanitary sewer regardless of area.

**Commented [A25]:** Redundant language deleted.

## ARTICLE 7. REQUIREMENTS FOR SEWER CONSTRUCTION

~~G.A. Allow excessive infiltration and inflow into a collection system tributary to water reclamation facilities;~~

~~H.A. Allow stormwater to enter sanitary sewer systems in separate sewer areas;~~

~~I. Combine storm sewer flow with sanitary sewage within a parcel (including within Combined Sewer Areas). Complete separation of sewers shall be provided within a parcel, and sewage may only be combined at the property line, immediately prior to the public combined sewer main connection; and~~

**Commented [A26]:** Incorporated into §702.2.C below.

~~J.I. Violate any provision of this Ordinance either during or after construction.~~

2. **Qualified sewer ~~construction~~ requirements by project types shall:**

A. ~~Qualified sewer construction shall be~~ **Be designed and constructed to comply with all Federal, State, and local laws, and engineering standards pertaining to sewer construction, including, but not limited to:**

(1) ~~The District's Sewage and Waste Control Ordinance;~~

(2) ~~Title 35 of the Illinois Administrative Code, including Part 370, Illinois Recommended Standards for Sewage Works;~~

(3) ~~Illinois Pollution Control Board Technical Releases and other applicable rules and regulations issued;~~

~~Illinois Recommended Standards for Sewage Works;~~

**Commented [A27]:** Included in 702.2.A(2) above.

(4) ~~Standard Specifications for Water & Sewer Construction in Illinois, published by the Illinois Society of Professional Engineers; and~~

(5) ~~Recommended Standards for Wastewater Facilities, published by the Great Lakes-Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers.~~

B. ~~Be constructed with watertight material, joints, and connections to sewers, structures, or appurtenances. connections are required for any storm sewer, sanitary sewer, or combined sewer, excluding underdrains, tributary to a combined sewer. Watertight connections per sanitary sewer standards are required between sewer segments and all manholes, inlets, and structures. When a structure or appurtenance is subject to surface water inundation, a bolt-down watertight frame and cover shall be provided unless the structure is:~~

**Commented [A28]:** Relocated from §502.21. Redundant language is deleted.

(1) ~~Elevated to at least the FPE when located within or adjacent to a floodplain; or~~

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ARTICLE 7. REQUIREMENTS FOR SEWER CONSTRUCTION

(2) Elevated to at least one (1) foot above the 100-year high water elevation associated with a **stormwater detention facility**.

C. ~~All developments shall~~Be designed to provide a separate **sanitary sewer** and a separate **storm sewer** within the **property interest** ~~lines of the development and all of the following shall apply:~~

(1) Floor drains located within the **building** shall connect to the **sanitary sewer** system;

(2) The following shall discharge onto the ground, or connect to the **storm sewer** system or **stormwater facility**, and shall not connect to the **sanitary sewer** system:

(a) Downspouts, roof drains, or window well drains;

(b) Footing drains used to protect a **building** or **structure** foundation; and

(c) Sump pumps or any drains used to collect and discharge **groundwater** or **stormwater**.

(3) **Underdrains** shall discharge onto the ground, or connect to the **storm sewer** system or **stormwater facility**, and shall not connect to the **sanitary sewer** system. **Underdrains** shall not be tributary connect to a the **combined sewer system** or a **storm sewer system** that is tributary to District **water reclamation facilities**, unless:

(a) Separation is provided upstream of the receiving **combined sewer system** or **storm sewer system**; or

(b) ~~The underdrain is intended to protect a building or structure foundation and cannot discharge to a storm sewer; or~~The **underdrain** is used in conjunction with **green infrastructure** or **volume control practices**, and conforms to §701.2.H of this Ordinance~~the groundwater separation design guidelines contained in the TGM and Underdrains shall not be directly connected to any sewer tributary to a combined sewer without a backflow prevention device is provided.~~

**Commented [A29]:** Relocated from §502.11 and additional language added.

**Commented [A30]:** Relocated from §502.22.

**Commented [A31]:** Incorporated into 702.2.C(1)(b).

**Commented [A32]:** Relocated from §502.23.

D. ~~Development in combined sewer areas shall c~~Collect, route, and discharge **stormwater** to ~~the a waterway when located within the combined sewer area~~ as required in §502.17 of this **Ordinance**.



E. ~~Discharge into a receiving system that drains by gravity or by permanent pump, and shall not connect to a system that promotes septic conditions or deposition of solids.~~

**Commented [A33]:** New provision.

F. ~~A sewer bypass system shall be provided during construction, as necessary, and shall:~~

(1) ~~Be capable of maintaining the full capacity of the sewer system such that service for all facilities connected to the affected sections of the sewer system is not disrupted and maintained at all times; and~~

(2) ~~Not be installed within or discharge into any **waterway**, creek, canal, channel, ditch, river, pond, **storm sewer**, **stormwater facility**, **floodplain**, **riparian environment**, **wetland**, or any other system used to drain and convey **groundwater** or **stormwater** from land.~~

**Commented [A34]:** New provision.

A. ~~A. **Single Family Home**~~

**Commented [A35]:** Incorporated into §701.1 and exclusions are provided in §701.2.A

(1) ~~Private single family residential **service sewer** (less than three (3) units) is exempt from these **Ordinance** requirements, provided that:~~

(a) ~~An extension of public **qualified sewer** construction is not required to obtain service access; and~~

(b) ~~Wastes consist of domestic **sewage** only.~~

(2) ~~Single family residential **service sewer** shall not run:~~

(a) ~~Parallel to the **right of way**; or~~

(b) ~~Extend beyond the ends of the right of way frontage.~~

**Commented [A36]:** Delete since a service sewer may extend past the frontage to connect to the sewer main.

B. ~~**Residential Subdivision**~~

**Commented [A37]:** Incorporated into §701.1 and exclusions are provided in §701.2.A

(1) ~~Any extension of public **qualified sewer** construction within a residential subdivision **development** requires a **Watershed Management Permit**.~~

(2) ~~An application submittal for a **Watershed Management Permit** shall include a plan and profile of all public sewers.~~

(3) ~~Each residential single family **service sewer** meeting conditions specified under §700.1 of this **Ordinance** can be considered exempt from these requirements.~~

(4) ~~Refer to Table 2 in Article 5 of this **Ordinance** to determine **site stormwater** management requirements.~~

## ARTICLE 7. REQUIREMENTS FOR SEWER CONSTRUCTION

C. ~~Multi-Family Residential Sewer~~

- (1) ~~Residential service sewer for a building with three (3) units or more requires a Watershed Management Permit.~~
- (2) ~~A multi-family residential service sewer may require an inspection manhole prior to the public right-of-way. The appropriate District inspection manhole detail is available from the TGM and shall be provided on the plans, when appropriate.~~

**Commented [A38]:** Incorporated into §701.1 and exclusions are provided in §701.2.A  
Reference to inspection manhole is now included in §702.3.A.

D. ~~Refer to Table 2 in Article 5 of this Ordinance to determine site stormwater management requirements.~~

E. ~~Non-Residential Service Sewer~~

- (1) ~~Non-residential service sewer requires a Watershed Management Permit.~~
- (2) ~~All non-residential service sewers require inspection manholes prior to the public right-of-way. The appropriate District inspection manhole detail is available from the TGM and shall be provided on the plans.~~
- (3) ~~Refer to Table 2 in Article 5 of this Ordinance to determine site stormwater management requirements.~~
- (4) ~~Refer to the TGM for further design guidelines.~~

**Commented [A39]:** Incorporated into §701.1.  
Reference to inspection manhole is now included in §702.3.A.

3. Qualified sewer construction shall incorporate the following items:

A. An inspection manhole shall be constructed on all non-residential sanitary service sewers, and on multi-family residential sanitary service sewers when applicable, within the property interest and prior to discharging into the sewer main. The inspection manhole shall not convey any stormwater or groundwater.

- (5) Objectionable Wastes. When the use of a non-residential building is such that it will produce objectionable wastes or heavily loaded discharges, (e.g. auto service, garage, car wash), the co-permittee shall comply with all of the following requirements:
  - (a) Provide a triple basin, or similar settling structure, to treat all non-domestic flow, prior to discharging into the sewer main;
  - (b) Perform regularly scheduled maintenance to remove and properly dispose of all collected objectionable wastes; and
  - (c) Provide a detail of the triple basin (or settling structure) on the plans.

**Commented [A40]:** Consolidated in incorporated in new provision §702.3.8 below.

(6) ~~Fats, Oils and Grease. When the use of a non-residential building is such that Fats, Oils, and Grease are expected to be produced and discharged (e.g. restaurants), the co-permittee shall comply with all of the following requirements:~~

(a) ~~Provide a grease separator, or similar device, to treat all non-domestic flow, except the discharge from an automatic dishwasher, prior to discharging to the sewer main;~~

(b) ~~Perform regularly scheduled maintenance to remove and properly dispose of all collected fats, oils, and grease; and~~

F. ~~Provide a detail of the grease separator on the plans.~~

**Commented [A41]:** Consolidated in incorporated in new provision §702.3.B below.

(1) ~~Industrial Waste Potential. When the use of a non-residential building does not involve processes or operations that will produce industrial wastes (e.g. warehouse), the co-permittee shall:~~

(a) ~~Provide a statement on the owner's letterhead describing the use of the building; and~~

(b) ~~Certify that no industrial waste will be allowed to discharge into the sewer system.~~

**Commented [A42]:** Consolidated in incorporated in new provision §702.3.B below.

(2) ~~Industrial Waste Present. When the use of a non-residential building involves processes or operations that will produce industrial wastes (e.g. chemical plating, industrial food processing, etc.), the co-permittee shall submit:~~

(a) ~~A statement on the owner's letterhead describing the use of the building and the processes used;~~

(b) ~~The additional appropriate permit forms, disclosing the planned effluent characteristics of wastes;~~

(c) ~~The additional appropriate permit forms for documenting the onsite treatment / pre-treatment facilities planned;~~

**Commented [A43]:** Consolidated in incorporated in new provision §702.3.B below.

B. ~~When the use of a building is such that it will produce non-domestic or industrial waste, the following shall be provided within the property interest and prior to discharging into the sewer main:~~

(1) ~~Grease separator, or similar separation appurtenance, when fat, oil, or grease is produced (e.g. restaurant);~~

## ARTICLE 7. REQUIREMENTS FOR SEWER CONSTRUCTION

- (2) Triple basin, or similar settling appurtenance, when objectionable waste or heavy-loaded discharges are produced (e.g. auto service, carwash); or
- (3) Treatment or pretreatment facility when **industrial waste** is produced (e.g. chemical plating, industrial food processing).

G.C. Public Lift Station / Force Main pump stations and force mains, shall comply with the following:

- (1) Gravity sewers shall be used whenever practicable. ~~Lift~~Pump stations and force mains ~~may shall~~ only be used after all other alternatives have been exhausted;
- (2) The pump station and force main shall be designed and incorporate the following:
  - (a) ~~Lift station p~~Pumping capacity shall be designed and justified on the basis of dry weather flow at the time of permit application. The design flow shall be ~~expected~~calculated from the population equivalent ~~to be served~~of the service area with an appropriate peaking factor ~~at the time of permit development~~, or derived from ~~actual flow monitoring data~~ or derived from actual water use data;
  - (b) ~~Additional pumping capacity accommodations may be made for reasonable future build-out of undeveloped / underdeveloped areas within the tributary sewer shed. In such situations, a future service area exhibit and flow estimate must be provided to justify final lift station capacity.~~
  - (b) ~~Lift stations shall be designed to operate with standby pumping capacity available for system redundancy in the event of a pump failure. Multiple pumps shall be provided and have capacity such that, with any pump out of service, the remaining pumps will have capacity for the calculated design flow. When only two (2) pumps are provided, they shall be the same size;~~
  - (c) ~~Automatically alternate the pumps in use; Pumps will be designed to alternate operation to evenly distribute wear and to ensure the standby pump is regularly exercised. Double pumping (dual discharge of design flow rated pumps) in excess of the calculated peak capacity is prohibited.~~

Commented [A44]: Excessive I/I is not allowed to be pumped

Commented [A45]: Moved to TGM

Commented [A46]: Language refined.

Commented [A47]: Incorporated into provision below.

~~(d) Pumping in excess of the calculated design flow is prohibited; and unjustified excessive lift station capacity (including existing facilities under rehabilitation) is prohibited.~~

**Commented [A48]:** Language deleted since a permit won't be issued with unjustified capacity. This will be further explained in the TGM.

~~(e) Emergency pumping capability shall be provided and shall be accomplished by connection of the pump station to at least two (2) independent power sources, by portable or in-place electric generation equipment, or by portable pumping equipment with sufficient capacity to maintain the capacity of the pump station.~~

~~(3) Flood protection provisions shall be provided for lift pump stations, facilities (including mechanical and electrical equipment), flood protection requirements are distinguished based on the following type of work:~~

~~(a) New pump stations shall be located outside the limits of the regulatory floodplain, elevated to at least the FPE, or floodproofed to protect against the base flood. New pump stations shall also be designed and located such that it is accessible to provide maintenance at all times during the base flood.~~

~~(b) Existing lift pump stations facilities to be repaired or rehabilitated shall have all above-ground equipment elevated above to at least the FPE, or floodproofed to protect against the base flood. Where possible, ground openings shall be adjusted above to at least the FPE, or be floodproofed to protect against the base food and constructed with watertight bolt-down watertight bolt-down structure covers/lids to protect against the base flood.-~~

~~New lift station facilities shall be located above the FPE and outside the limits of the regulatory floodplain. New lift stations facilities shall also be carefully located to ensure maintenance access at all times during the base flood.~~

**Commented [A49]:** Moved to §702.3.C(3)(a) above.

~~(2) Discharge of force mains directly into another lift station is discouraged and is only allowed when it is impracticable to discharge into a gravity sewer. Where a force main or a lift system is designed to discharge into another lift station, a detailed report is required to justify such design and shall include:~~

~~(a) A written statement that other methods were considered and exhausted;~~

~~(b) A written recommendation of the design supported by engineering considerations;~~

## ARTICLE 7. REQUIREMENTS FOR SEWER CONSTRUCTION

(c) ~~Written approval of the owner of the receiving lift station acknowledging the risks and the need for additional maintenance; and~~

(d) ~~A maintenance and operation agreement between the co-permittee and owner specifying the responsibilities of each in case of failure of either lift station.~~

**Commented [A50]:** Moved to TGM.

(3) ~~Completion of the appropriate additional permit schedule for documentation of lift station design and capacity.~~

(4) ~~Refer to the TGM for further design guidelines.~~

D. Stream crossings shall comply with the following:

**Commented [A51]:** New provision for stream crossing requirements.

(1) ~~The top of all sewers entering or crossing the stream shall be at a sufficient depth below the natural bottom of the stream bed to protect the sewer. The following cover requirements shall be provided:~~

(a) ~~One foot of cover when the sewer is located in rock;~~

(b) ~~Three feet of cover when the sewer is located in other material; or~~

(c) ~~In a paved channel, the top of the sewer shall be located below the bottom of the channel pavement.~~

(2) ~~Less cover may be approved only if the proposed sewer crossing will not interfere with future modifications to the stream channel and additional provisions are provided to protect the sewer; and~~

(3) ~~Sewers entering or crossing a stream shall be constructed of ductile iron pipe with mechanical joints, or other material capable of absorbing pipe movement and joint deflection while remaining intact and watertight.~~

H.E. When a District Interceptor, TARP and other Direct Connections to a District Facilities facility is proposed, the applicant shall:

(1) ~~Excluding the City of Chicago, direct connections to District facilities require a Watershed Management Permit. For direct connections within the City of Chicago refer to Facility Connection Authorization in §703 of this Ordinance.~~

(2) ~~Refer to §701.1.B of this Ordinance for a list of District facilities requiring a permit for direct connection.~~

**Commented [A52]:** Article reorganization removes separate section for Facility Connection Authorization. Since this permit type is a "Watershed Management Permit," it is no longer being called out separately in this Article. No requirements have changed.

ARTICLE 7. REQUIREMENTS FOR SEWER CONSTRUCTION

~~(3)(1) Preliminary coordination with the District is recommended prior to submitting a permit application for proposed connections to District facilities. The co-permittee shall formally petition the Director of Engineering, or his/her designee, in writing to schedule a coordination meeting. Contact the District to obtain record drawings of the District facility, and-~~

~~(4)(2) Obtain written approval from the District shall be obtained prior to entering any District facilities (including TARP and interceptor manholes) facility.~~

~~(5) The appropriate District direct connection details, specification for connection, and proper construction requirements are available from the TGM and shall be provided on the plans. Refer to the TGM for further design guidelines.~~

~~(6) Complete the appropriate additional permit schedule for documentation of direct connections to District facilities.~~

~~4.F. New or reconstructed Outfalls-Connections to a waterway or Lake Michigan shall comply with the following:~~

~~(1) Excluding the City of Chicago, all new and reconstructed outfalls to waterways and Lake Michigan within Cook County require a Watershed Management Permit. For outfalls within the City of Chicago refer to Facility Connection Authorization in §703 of this Ordinance.~~

~~(2) New and reconstructed outfalls shall comply with the requirements of §608 of this Ordinance.~~

~~(3) All new and reconstructed outfalls within Cook County shall comply with the details, technical requirements, and design guidelines contained in the TGM.~~

~~(4) Complete the appropriate additional permit schedule to document the outfall connections location.~~

~~(1) All new and reconstructed outfalls to any waterways within Cook County, including Lake Michigan, require a Watershed Management Permit. For new and reconstructed outfalls to waterways located in the City of Chicago, a facility connection authorization is required. All new and reconstructed outfalls must shall provide an appropriate energy dissipation structure device:-~~

**Commented [A53]:** Article reorganization removes separate section for Facility Connection Authorization. Since this permit type is a "Watershed Management Permit," it is no longer being called out separately in this Article. No requirements have changed.

Also, §608 Requirements for Outfalls, is relocated here.

(2) All ~~new and reconstructed outfalls~~ to Lake Michigan ~~must shall~~ provide a water quality device to provide pre-treatment of all discharge into the lake;

~~(5)(3)~~ All ~~Outfalls~~ constructed within a riparian environments ~~will be~~ subject to the requirements of §607 of this Ordinance; and

(4) Neither **erosion** nor downstream **flooding** shall result from the discharge from a new or reconstructed of the outfall. ~~In accordance with Article 4 of this Ordinance, stabilization practices shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased. All new and reconstructed outfalls within Cook County shall comply with the details, technical requirements, and design guidelines contained in the TGM.~~

Commented [A54]: Included in Article 4 and in the TGM.

J. ~~Treatment and Pretreatment Facilities~~

~~(1) Treatment and pretreatment facilities include, but are not limited to, treatment processes, private treatment plants, oxidation ponds, and similar facilities.~~

(2) ~~Preliminary coordination with the District is recommended prior to submitting a permit application for proposed treatment facilities. The co-applicant shall formally petition the Director of Engineering, or his/her designee, in writing to schedule a coordination meeting.~~

~~(3) Refer to the TGM for further design guidelines.~~

Commented [A55]: Moved to TGM.

K.G. ~~The removal or abandonment of a Sseptic Ssystems shall comply with the following:~~

(1) ~~The District does not regulate the design, construction, or maintenance of septic systems for sewage disposal serving a single family home or building. When proposing septic systems, the co-permittee shall obtain permits from all relevant local and state authorities.~~

(2) ~~Septic systems shall not discharge effluent to a sewer tributary to the District's interceptors or water reclamation facilities.~~

Commented [A56]: Deleted since this is considered non-qualified sewer construction.

(1) ~~When septic systems are disconnected and a sanitary service connection is made, The existing septic systems shall be removed or abandoned. by completely filling the tank. Abandoned septic tanks shall be removed or filled with granular material.~~



(2) ~~Connections and piping to the new sanitary service sewer system shall be watertight and made upstream of the septic tank; and. All existing septic systems and tank connections to be abandoned shall be plugged with non-shrink mortar or cement.~~

(3) ~~The applicant shall conduct an internal and external inspection of the buildings and premises to be connected to the new sanitary service sewer to identify infiltration and inflow (I/I) sources due to faulty, illegal, and improper connections. The sanitary service sewer shall not be put in service until all I/I sources are eliminated.~~

**Commented [A57]:** New provision to cover District requirements.

(4) ~~Non-residential projects on septic systems or private treatment plant systems that propose connection to a sanitary sewer system shall provide stormwater detention for all proposed development. Refer to Table 2 in Article 5 of this Ordinance to determine site stormwater management requirements.~~

**Commented [A58]:** Covered in Article 2 and Article 5.

(5) ~~Refer to the TGM for further design guidelines.~~

H. ~~When a private-to-private sewer connection within private property is proposed, the applicant shall submit written permission from the private owner and a recorded maintenance agreement to the District.~~

**Commented [A59]:** This was not carried over from the SPO (Article 7-8) and is now added per 10/10/2018 TAC meeting.

L. ~~Sewer Construction in Floodplain~~

**Commented [A60]:** Item deleted and provisions are covered in §702.2.B above.

(1) ~~All proposed sanitary structures shall have above ground openings located above the FPE or shall be constructed with watertight bolt down structure covers/lids.~~

(2) ~~Refer to Article 6 of this Ordinance for further requirements regarding development within flood protection areas.~~

(3) ~~Refer to the TGM for further design guidelines.~~

(4)(1) ~~Lift station facilities (including mechanical and electrical equipment) flood protection requirements are distinguished based on the following type of work:~~

(a) ~~Existing lift station facilities to be repaired or rehabilitated shall have all above ground equipment elevated above the FPE. Where possible, ground openings shall be adjusted above the FPE or be constructed with watertight bolt down structure covers/lids to protect against the base flood.~~

## ARTICLE 7. REQUIREMENTS FOR SEWER CONSTRUCTION

Page 7-17

Public Comment Draft: 1/7/19

~~(b)(a) New lift station facilities shall be located above the FFE and outside the limits of the regulatory floodplain. New lift stations facilities shall also be carefully located to ensure maintenance access at all times during the base flood.~~

### **~~§ 703.~~ Facility Connection Authorization**

1. ~~Within the City of Chicago, a facility connection authorization application is necessary to track the following types of connections to District owned, operated, and maintained facilities, and for impact to District owned or leased property:~~

A. ~~District Interceptor, TARP and other Direct Connections to District Owned Sewer Collection Facilities~~

- ~~(1) Preliminary coordination with the District is recommended prior to submitting a facility connection authorization application for proposed connections to District facilities. The co-applicant shall formally petition the Director of Engineering, or his/her designee, in writing to schedule a coordination meeting.~~
- ~~(2) Written approval from the District shall be obtained prior to entering any District facilities including TARP and interceptor manholes.~~
- ~~(3) The appropriate District direct connection details, specification for connection, and proper construction requirements are available from the TGM and shall be provided on the plans. Refer to the TGM for further design guidelines.~~

B. ~~District Property Impact~~

- ~~(1) All impacts, including new planned improvements, on District owned or leased property within City of Chicago must first obtain a facility connection authorization.~~
- ~~(2) Preliminary coordination with the District is recommended prior to submitting a facility connection authorization application for proposed improvements to District property or facilities. The co-applicant shall formally petition the Director of Engineering, or his/her designee, in writing to schedule a coordination meeting.~~
- ~~(3) Written approval from the District shall be obtained prior to entering any District facilities including TARP and interceptor manholes.~~

C. ~~Outfall connections to the Chicago Area Waterway System and Lake Michigan~~

- (1) All new and reconstructed ~~outfalls~~ connections either direct or indirect to the Chicago Area Waterway System or Lake Michigan within the City of Chicago must first obtain a ~~facility connection authorization~~.
- (2) New and reconstructed ~~outfalls~~ structures shall comply with the requirements of §608 of this ~~Ordinance~~.
- (3) All new and reconstructed outfalls shall comply with the details, technical requirements, and design guidelines contained in the ~~TGM~~.

**Commented [A61]:** Article reorganization removes separate section for Facility Connection Authorization. Since this permit type is a "Watershed Management Permit," it is no longer being called out separately in this Article. No requirements have changed.

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## ARTICLE 8. INFILTRATION / INFLOW CONTROL PROGRAM

### § 800. Introduction

The separate **sanitary sewers** within the **District's** service area are designed and intended to receive and convey only domestic and industrial wastewaters together with a limited amount of **groundwater** infiltration. **Stormwater runoff** and excessive **groundwater** infiltration, however, have in many cases been entering and overloading **sanitary sewers** through deficiencies in the sewer systems such as open pipe joints, cracked or broken pipes, leaking manholes, and illegal connections (i.e., direct or indirect **stormwater/groundwater** connections to separate **sanitary sewers**). Sewer overloading arising from such deficiencies may cause health hazards, financial losses, and inconvenience to area residents. These detrimental conditions occur as a consequence of water pollution from treatment plant bypasses and **sewage** overflows into streams, and also as a result of backups of **sewage** into **buildings** and onto streets and yards. Excessive extraneous clear water flows also result in additional **sewage** treatment costs to the public. Since the enactment of the 1985 Sewer Summit Agreement (**SSA**), many communities have invested in rehabilitation efforts yet the sewer systems still have excessive **stormwater** inflow and **groundwater** infiltration (I/I) requiring further reduction. Many communities still need to establish on-going **maintenance** programs and budgets that continually renew local systems. The Illinois Environmental Protection Agency (**IEPA**) has imposed a special condition as part of the **District's** National Pollutant Discharge Elimination System (**NPDES**) Permits that requires the owners and/or operators of separate **sanitary sewer** systems (**satellite entities**) that discharges directly and/or indirectly ~~to the~~**into** **District's** facilities ~~(satellite entities)~~ to implement measures in addition to those required under the **SSA** if excessive I/I causes or contributes to sanitary sewer overflows (**SSOs**) and/or **basement backups** ~~(BBs)~~. In order to address the requirements set forth in the **NPDES** Permits and other federal, state and local regulations, it is the intent of this Article to set forth a regionally applied Infiltration/Inflow Control Program (Program) for the rehabilitation and correction of **sanitary sewer** system deficiencies, and for the continuation of adequate long-term **sanitary sewer** management and **maintenance** programs by the **satellite entities** that are tributary to the **District's** facilities.

### § 801. Scope and Goals

1. The purpose of this Program is to provide a framework for asset management of separate **sanitary sewer** systems to meet the following goals:
  - A. Maintain infrastructure to prevent **sanitary sewer overflows** and **basement backups** due to sewer surcharging and other adverse sewer system conditions;

- B. Comply with the **District's NPDES** Permits and all other applicable federal, state, and local laws and regulations ~~;~~ and
- C. Minimize extraneous flows transported to the **District's** facilities due to defective system components or illegal connections.

#### **§ 802. Applicability**

1. This Article applies to all **satellite entities** that own and/or operate a **sanitary sewer** system that discharges directly and/or indirectly to the **District's** facilities.

#### **§ 803. General Requirements**

1. All **satellite entities** shall implement and complete all Short Term Requirements as described in §804 of this **Ordinance** within five (5) years of July 10, 2014, the effective date of this Article or, for **satellite entities** that connect to the **District's** sewer system after the effective date of this Article, five (5) years from the date of connection. ~~-~~ **Satellite entities** that have been notified by the **District** as being in compliance with the Short Term Requirements described in §804 of this **Ordinance** will be subject only to the requirement of the **Long Term Operation and Maintenance (O&M) Program** described in §805 of this **Ordinance**.
2. All **satellite entities** shall implement a **Long Term O&M Program** as described in §805 of this **Ordinance**.
3. All **satellite entities** shall submit annual reports of their progress and plans relative to their Short Term Requirements and **Long Term O&M Program** to the **District** as described in §806 of this **Ordinance**.
4. All **satellite entities** shall comply with the **SSA** and applicable federal, state, and local laws and regulations.
5. All **satellite entities** shall prioritize corrective action with the goal of preventing **SSOs, ~~BBs~~ basement backups** and system failures.
6. All **satellite entities** shall develop an adequate funding mechanism that will ensure program sustainability.

#### **§ 804. Short Term Requirements**

1. Each **satellite entity** shall complete the following Short Term Requirements:
  - A. Conduct a Sewer System Condition Assessment:

- (1) Conduct a prioritized condition assessment of high risk public **sanitary sewer** system infrastructure through various inspection and testing methods. ~~The assessment shall prioritize:~~ (a) areas with **SSOs** and/or **basement backups**; (b) areas upstream of **SSOs** and **basement backups**; (c) sub-basins known to surcharge; (d) areas with excessive wet weather flows and/or excessive lift station pumpage; and (e) areas with system deficiencies that could result in system failure.
- (2) Recent documented condition assessment(s) can be used as credit toward this assessment.
- (3) Utilize inspections to catalog illegal connections in high wet weather areas for disconnection in Private Sector Program.

B. Conduct Sewer System Rehabilitation:

- (1) Utilize assessment data to identify rehabilitation needs and begin development of a Capital Improvement Program (CIP) based on severity of condition.
- (2) Begin addressing high priority deficiencies according to CIP plan within three (3) years.
- (3) Disconnect direct and indirect cross connections identified during inspections within one year of identification.
- (4) Repair uncovered or broken service lateral cleanout caps within one year of identification.

C. Develop and submit to the **District** for approval a **Private Sector Program (PSP)** that addresses disconnection of illegal private inflow sources and removal of infiltration due to private laterals.

D. Develop and submit to the **District** for approval a **Long Term O&M Program** conforming to §805.3 of this **Ordinance**.

2. The **District** will support **satellite entities'** efforts by providing the following:

- A. The **District** will complete an interceptor capacity allocation analysis to inform communities of built capacity and set maximum allowable flow rates.
- B. The **District** will work with the Council of Government organizations to encourage consolidation of Information Technology platform with secure access to provide **satellite entities** access to Geographic Information System (GIS), Computerized

Maintenance and Management System (CMMS) platforms and a customer support system software that tracks reports from the **satellite entities** regarding sewer service.

- C. The **District** will work with the Council of Government organizations to encourage cross-community cleaning, inspection and repair contracts that offer an economy of scale to **satellite entities**.
- D. The **District** will seek unit pricing for flow monitoring and look into providing software tracking of flow information to interested communities.
- E. The **District** will continue meeting with the Advisory Technical Panel (ATP) to provide templates and guidance documents for this program.

#### **§ 805. Long Term O&M Program**

- 1. Under this Program the **satellite entities** will develop a comprehensive operation and **maintenance** program to prevent **SSOs** and ~~**BBs**~~ **basement backups** by removing I/I sources, addressing deficiencies of their **sanitary sewer** system, maintaining and restoring system capacity, and preventing system failures. This plan will include an adequate funding mechanism for the program.
- 2. Each **satellite entity** shall implement the **Long Term O&M Program** and **PSP** developed and approved under §804 of this **Ordinance**.
- 3. The **Long Term O&M Program** must include the following elements:
  - A. Sewer System Management: Adequate and trained/qualified staff will be provided to implement all aspects of the **Long Term O&M Program**. Staff will be periodically trained for safety, sewer inspection, **maintenance** and rehabilitation work. Records of all work completed under the **Long Term O&M Program** will be maintained.
  - B. Sewer System Map: The sewer system map will be maintained and updated on an annual basis.
  - C. Sewer System Inspection: A continuous inspection program will be implemented to assess the condition of the system, identify I/I sources, and keep the system map current. Results of the inspections will be utilized to prioritize system **maintenance** and rehabilitation work.
  - D. Sewer System **Maintenance**: A continuous **maintenance** program will include sewer cleaning and other preventive **maintenance** work required as a result of the inspection program. The **maintenance** work performed will maintain system capacity.



- E. Sewer System Rehabilitation: A continuous rehabilitation program will correct system defects and deficiencies found as a result of the inspection program. The rehabilitation work performed will address the removal of I/I sources, ensure system integrity, and restore system capacity.
  - F. Sewer System Capacity Evaluation: Periodic evaluations will be made to determine if adequate capacity exists within the system and identify areas of inadequate capacity.
  - G. Material and Equipment: Adequate and proper material and equipment will be provided to implement all aspects of the **Long Term O&M Program**. The materials will be periodically inspected to assure that an adequate supply is available and in a working condition.
  - H. A CIP will be developed and updated as additional deficiencies are identified under the inspection program. The CIP will detail a plan and schedule to address all long term corrective work.
  - I. The **PSP**, which addresses disconnection of illegal private inflow sources and removal of infiltration due to private laterals.
  - J. A plan for funding all aspects of the **Long Term O&M Program** and the **PSP** will be provided.
4. Each **satellite entity** shall consult the Technical Guidance Manual for additional details regarding the **Long Term O&M Program** requirements.

#### **§ 806. Annual Reporting**

- 1. All **satellite entities** shall submit to the **District** Annual Reports of their progress and plans relative to their Short Term Requirements and **Long Term O&M Program**. Annual Reports must be submitted regardless of the degree of progress made during the reporting period. Among other uses, the **District** will utilize the Annual Reports to prepare and distribute an annual status report regarding progress made by the **satellite entities** on their I/I identification and removal efforts.
- 2. During the first five (5) years after the effective date of this Article, or during the first five (5) years after the date of connection for **satellite entities** that connect to the **District's** sewer system after the effective date of this Article, **satellite entities** must demonstrate the following:
  - A. Completion of their Short Term Requirements described in §804.1.A and §804.1.B of this **Ordinance**.

- B. Development of their **PSP** described in §804.1.C of this **Ordinance**.
- C. Development of their **Long Term O&M Program** described in §804.1.D of this **Ordinance**.
- 3. **Satellite Entities** shall demonstrate that they are implementing their **PSP** and **Long Term O&M Program** by summarizing the following items on Annual Report forms provided by the **District**. :
  - A. Public and private sector **SSOs** and ~~BB~~**basement backups**.
  - B. **Sanitary sewer** system inspection, **maintenance** and rehabilitation activities.
  - C. All completed rehabilitation projects.
  - D. All completed CIP work.

#### **§ 807. Non-Compliance**

- 1. Any **satellite entity** may be found to be in non-compliance with this Article for the following reasons:
  - A. Failure to demonstrate adequate annual progress toward implementing and completing the Short Term Requirements described in §804 of this **Ordinance** within five (5) years of the effective date of this Article or, for **satellite entities** that connect to the **District's** sewer system after the effective date of this Article, within five (5) years from the date of connection.
  - B. Failure to demonstrate adequate implementation of the approved **Long Term O&M Program** as described in §805 of this **Ordinance**.
  - C. Failure to demonstrate adequate implementation of the approved **PSP** described in §804.1.C of this **Ordinance**.
  - D. Failure to submit an Annual Report or submission of an Annual Report that does not meet the requirements of §806 of this **Ordinance**.
  - E. Failure to otherwise comply with any provision of this Article.

#### **§ 808. Administrative Proceedings: Notice of Non-Compliance**

- 1. Whenever it shall appear to the **Director of Engineering** that non-compliance with a provision of this Article exists, the **Director of Engineering** shall, as soon as practical, issue a written **Notice of Non-Compliance (NONC)** to the **satellite entity** responsible for the apparent non-

compliance. The **NONC** shall advise the **satellite entity** of the nature of the non-compliance and shall require the **satellite entity** to investigate the alleged non-compliance, determine remediation measures, and develop a schedule to correct the non-compliance. The **NONC** may be sent via Certified Mail, Return Receipt Requested, or may be served personally by a representative of the **District** to the **satellite entity**, or its representative.

2. The **Director of Engineering** may request a conciliation meeting concurrent with the issuance of a **NONC** for the purpose of investigating the **NONC** and for establishing a compliance schedule. In the event a conciliation meeting is not requested by the **Director of Engineering**, the **satellite entity** may request a conciliation meeting within seven (7) calendar days of receipt of a **NONC**. The **Director of Engineering** shall use his or her best efforts to convene the conciliation meeting within forty-five (45) calendar days of issuance of the **NONC**. During conciliation proceedings, the **satellite entity** may be required to furnish the **District** with such information as is reasonably necessary to demonstrate compliance with this Article. The **Director of Engineering** may continue the conciliation meeting from time to time as deemed necessary to further compliance with this Article.
3. A **satellite entity** engaging in conciliation proceedings with respect to a **NONC** shall submit a **compliance report and schedule** to the **Director of Engineering** within sixty (60) calendar days after the conciliation meeting, or upon such further date as determined appropriate by the **Director of Engineering**. In the event that no conciliation meeting is held, the **satellite entity** shall submit the **compliance report and schedule** within sixty (60) calendar days after the receipt of the **NONC**.
4. The **compliance report and schedule** shall establish a final compliance date, representing a date certain upon which all conditions contained in the **NONC** are remedied. The **compliance report and schedule** shall be executed by the **satellite entity** or its authorized representative and shall be certified as to accuracy and completeness.
5. Within twenty-one (21) calendar days after receipt of the **compliance report and schedule**, the **Director of Engineering** shall accept the **compliance report and schedule** as filed or shall request such further amendments to the **compliance report and schedule** as deemed necessary to insure compliance with the requirements of this Article.
6. No later than twenty-one (21) calendar days after the final compliance date, the **Director of Engineering** shall review the compliance status of the **satellite entity** and shall advise the **satellite entity** in writing whether the **satellite entity** has adequately remedied the condition(s) contained in the **NONC**.
7. If it appears to the **Director of Engineering** that the **satellite entity** subject to a **NONC** has failed to respond within ~~forty-fivesixty~~ (4560) calendar days after service, or has failed to submit a **compliance report and schedule** acceptable to the **Director of Engineering**, or has failed to achieve compliance on or before the final compliance date, the **Director of**

Commented [A1]: Revised to be consistent with §808.3.

**Engineering** may at his or her discretion either issue an amendment to the **NONC** or make a Recommendation for Show Cause to the **Executive Director**. The issuance of a Recommendation for Show Cause may trigger a loss of eligibility for the **satellite entity** to receive **District**-sponsored funding assistance.

#### **§ 809. Administrative Proceedings: Show Cause before the Board of Commissioners**

1. Upon recommendation of the **Director of Engineering** as set forth in §808.7 of this **Ordinance**, the **Executive Director** may order the **satellite entity** to appear before the **Board of Commissioners** or its duly designated representative and show cause why the **satellite entity** should not be found in non-compliance of this Article.
2. The **Board of Commissioners** shall promulgate procedural rules governing administrative proceedings pursuant to this Article.

#### **§ 810. Notice of Show Cause**

1. Notice to the **satellite entity** shall specify the date, time and location of a hearing to be held by the **Board of Commissioners** or its designee. The notice of the hearing shall be served personally or by registered or certified mail at least ten (10) working days before said hearing.

#### **§ 811. Show Cause Hearing and Imposition of Penalties by the Board of Commissioners**

1. The **Board of Commissioners** or its designee may conduct a Show Cause hearing.
2. The **Board of Commissioners** shall establish a panel of independent hearing officers, from which a designee must be selected, to conduct all hearings not presided over by the **Board of Commissioners**. All hearing officers shall be attorneys licensed to practice law in the State of Illinois.
3. All hearings shall be on the record and any testimony taken at a hearing shall be under oath and recorded stenographically. The transcripts so recorded must be made available to any member of the public or to the **satellite entity** or party to such hearing upon payment of the usual charges for transcripts. At the hearing, the hearing officer may issue in the name of the **Board of Commissioners** notices of hearing requesting the attendance and testimony of witnesses and the production of evidence relevant to any matter involved in the hearing.
4. The **Board of Commissioners**, or the hearing officer, shall conduct a full and impartial hearing on the record, with an opportunity for the presentation of evidence and cross-examination of the witnesses.

5. For hearings conducted by a hearing officer, after all evidence has been presented, the hearing officer shall issue a report based upon the preponderance of the evidence in the record, which includes findings of fact, conclusions of law, an order, and, if non-compliance is proved, recommended penalties as detailed under §811.8 of this **Ordinance**. The Report shall be transmitted to the **Board of Commissioners**, along with a complete record of the hearing if so requested by the hearing officer or the **Board of Commissioners**.
6. The **Board of Commissioners** shall either approve or reject the report. If the report is rejected, the **Board of Commissioners** shall remand the matter to the hearing officer for further proceedings. If the report is accepted by the **Board of Commissioners**, it shall constitute the final order of the **Board of Commissioners**.
7. The final determination regarding the imposition of penalties rests within the sole discretion of the **Board of Commissioners**.
8. Penalties may be assessed as follows:
  - A. Loss of eligibility for ~~the satellite entity to receive District-sponsored any funding assistance that can be provided by the District for the development and implementation of the Program as required under this Article;~~
  - B. Loss of status as an **Authorized Municipality** as described in this **Ordinance**;
  - C. Reporting of the **satellite entity's** non-compliance to the **IEPA** and/or **USEPA**; and
  - D. The denial of a **watershed management permit** for **qualified sewer** construction as described in Article 7 of this **Ordinance**.

Commented [A2]: Revised to be consistent with §808.7.

#### § 812. Legal and Equitable Relief

1. The **General Counsel** of the **District** shall take such action deemed necessary to compel compliance with the provisions of this Article.
2. In the enforcement of this Article, the **District** shall have the authority to institute, or cause to be instituted, any and all actions, legal or equitable, including appeals, which are required for the enforcement of this Article without first exhausting the administrative remedies set forth herein.

#### § 813. Injunctive Relief

1. In addition to the penalties provided in Article 8 of this **Ordinance**, whenever a **satellite entity** violates any provision of this Article or fails to comply with any order of the **Board of Commissioners**, the **District**, acting through the **Executive Director**, may apply to the Circuit Court of **Cook County**, or other Court having jurisdiction, for the issuance of an

injunction restraining the **satellite entity** from violating or further violating this Article or failing to comply with a Board Order.

**§ 814. Judicial Review**

1. The Administrative Review Act of the State of Illinois and the rules adopted under such act, shall govern all proceedings for judicial review of final orders of the **Board of Commissioners** issued under this section.

## ARTICLE 9. MAINTENANCE

### § 900. General Maintenance Requirements

1. A **maintenance** plan shall be required under a **Watershed Management Permit** to provide for the perpetual **maintenance** of all of the following systems as required by §302.2.G of this **Ordinance**:
  - A. **Erosion and sediment control practices**;
  - B. **Stormwater detention facilities**;
  - C. **Stormwater** collection facilities including both **major** and **minor stormwater systems**;
  - D. **Volume control practices**;
  - E. **Native planting conservation areas**;
  - F. **Qualified sewer ~~construction~~** including service on grease basins, triple basins, and private pre-treatment facilities;
  - G. **Wetland mitigation**; and
  - H. **Riparian environment** mitigation.
2. The **maintenance** plan provisions shall describe inspection, **maintenance**, and monitoring activities that occur after the construction phase and continue into perpetuity.
3. Guidance on inspection, **maintenance**, and monitoring is provided in the **TGM**.
4. **Maintenance** is the responsibility of the **co-permittee** and **permittee** of the ~~development~~**Watershed Management Permit**. The ~~co-permittee~~ and ~~permittee~~**applicant** may delegate **maintenance** responsibility to an entity acceptable to the **permittee**; however, ultimate responsibility for **maintenance** of the facilities listed under §900.1 of this **Ordinance**, lies with the **permittee**.
5. Any amendment to the **maintenance** plan shall be submitted to and approved by the **District's Director of Engineering**.

### § 901. Permitted Facility Operation and Maintenance

1. Constructed facilities must be permanently operated and maintained by the **permittee and co-permittee applicant** in accordance with the issued **Watershed Management Permit** and special conditions.
2. Permitted facilities shall not be modified, extended, replaced, eliminated or abandoned without written permission from the **District's Director of Engineering**.
3. It shall be the duty and responsibility of every **permittee** to whom a **Watershed Management Permit** has been issued for the construction and operation of any facility or sewer connection under this **Ordinance** to keep said facility or sewer connection in a proper state of repair and **maintenance** after same has been completed and placed in operation.
4. ~~No permits shall be issued for the construction, extension, operation and maintenance of private sewage treatment plants, oxidation ponds or other treatment facilities unless accompanied by a bond with sufficient surety for proper construction, extension, operation and maintenance of any such treatment plant, oxidation pond, or other sewage treatment facility located within the corporate boundaries of the District. The bond shall conform to all of the following requirements:~~
  - A. ~~The bond shall terminate upon connection of said sewage treatment plant, oxidation pond, or other sewage treatment facility to an intercepting sewer, or treatment plant of the District;~~
  - B. ~~The bond shall be a condition for issuing a Watershed Management Permit;~~
  - C. ~~The co-permittee shall provide any additional security required by the Director of Engineering for the life of the permit, to guarantee full and complete performance, including the execution of any and all documents that may be required in support thereof;~~
  - D. ~~The form and legality of the bond must be approved by the Law Department of the District; and~~
  - E. ~~The engineering details of the bond must be approved by the Director of Engineering.~~

**Commented [A1]:** Any bonding is handled through the Sole Permittee process, and language relating to bonding these systems is covered in Article 3 TGM.

#### **§ 902. Maintenance Requirements for Stormwater Projects With No Permittee**

1. For **stormwater projects** located within unincorporated areas, which do not have an assigned **permittee**, as outlined in §300.3.B(2) of this **Ordinance**, constructed **stormwater facilities (volume control practices and detention facilities)** must be permanently operated and maintained by the **co-permittee** in accordance with the issued **Watershed Management Permit** and special conditions.



2. **Stormwater facilities** shall not be modified, extended, replaced, eliminated or abandoned without written permission from the **District's Director of Engineering**.
3. The **co-permittee** shall ensure inspections occur on a regular basis, and adequate funding is allocated for proper operation and **maintenance** responsibilities. An estimate of O&M costs shall be submitted with the **maintenance** plan, and the **co-permittee** shall demonstrate an adequate funding mechanism is in place to cover future expenditures, as adjusted for inflation over time. The above documents shall be recorded with **Cook County**.

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## ARTICLE 10. INSPECTIONS

### § 1000. General

1. The **District** may periodically inspect any ~~development or qualified sewer construction project~~ under the **District's** scope of regulation as outlined in §200 of this **Ordinance**.
2. The **District** may periodically inspect any ~~development or qualified sewer construction project~~ requiring a **Watershed Management Permit** as outlined in §201 of this **Ordinance**.
3. An **authorized municipality** shall periodically inspect any **development** in its jurisdiction requiring a **Watershed Management Permit** as outlined in §201.1 of this **Ordinance**.
4. Inspections shall verify compliance with this **Ordinance** and issued **Watershed Management Permits**. Typical inspections may occur on the following milestones:
  - A. After mobilization and installation of initial **erosion** and **sediment control practices**, prior to any soil disturbance;
  - B. During ~~excavation for the construction~~ installation of **qualified sewer construction**, **major stormwater systems** and ~~detention stormwater~~ facilities;
  - C. Completion of the **development** or **qualified sewer** construction.
5. The **District** may enter upon any ~~development project~~ subject to this **Ordinance** to conduct inspections as outlined in §205.1 of this **Ordinance**.

### § 1001. Inspection Requirements to be Met by Development

1. Prior to commencement of construction under a **Watershed Management Permit**, the **co-permittee** shall give, or cause to be given, to the **District** or relevant **authorized municipality**, an advance notice of at least two (2) working days of the milestones described in §1000.4 of this **Ordinance**.
2. All construction shall be in accordance with the plans and specifications made part of a **Watershed Management Permit**. The **Watershed Management Permit** together with a set of the plans and specifications for the **project** shall be kept on the job site at all times during construction, until final inspection and approval by the **District** or relevant **authorized municipality**.

3. All construction shall be inspected and approved by a **Professional Engineer** acting on behalf of the **permittee** or the **owner** of the **project**, or by the duly authorized representative of the **Professional Engineer**.

4. No ~~sewer~~ trenches related to qualified sewer construction or **major stormwater systems** shall be backfilled except as authorized by the inspection engineer and the **District Inspector** after having inspected and approved the sewer installation.

5. No underground stormwater facilities shall be backfilled except as authorized by the inspection engineer and the District Inspector after having inspected and approved the installation.

**Commented [A1]:** Listing stormwater facilities separately from sewers and pipes

~~5-6.~~ Construction records may be inspected at any time during the **project** to demonstrate ongoing compliance with this **Ordinance** and any issued **Watershed Management Permits**. Such records may include, but are not limited to:

- A. The **stormwater** pollution prevention plan with associated inspection reports;
- B. A copy of the latest revised construction drawings;
- C. The **project** construction schedule;
- D. **Project** construction photography; and
- E. Copies of other federal, state, and local permits.

~~6-7.~~ Where construction is performed without advance notice to the **District** or relevant **authorized municipality**, as required in §1001.1 of this **Ordinance**, the **District** or relevant **authorized municipality** will assume that the construction does not comply with the applicable **Ordinance** requirements. Any portion of the construction performed without the requisite advance notice shall be exposed by the **owner**, at his expense, in at least one location between every two manholes, two terminal points or as directed by the **District** for visual inspection by the **District** to insure compliance with applicable requirements as to materials and workmanship.

## § 1002. Special Requirements for Qualified Sewer Construction

- 1. In addition to the inspection requirements of §1001 of this **Ordinance**, the requirements of this section shall apply to **qualified sewer** construction.
- 2. Testing: All sewers constructed under the **Watershed Management Permit** issued by the **District** shall be subject to inspection, testing and approval by the **District** to insure compliance with the **Ordinance**. All testing shall be made, or caused to be made, by the

permittee or co-permittee at no cost to the District and in the presence of the District inspector or representative.

3. Backfilling: No sewer trenches shall be backfilled except as authorized by the District inspector after having inspected and approved the sewer installation. ~~The inspector shall signify his approval and authorization for backfilling on the inspection report. The inspection report shall be on the job site at all times, and shall bear the signature of the co-permittee's engineer, identifying those portions of the sewer inspected and approved by him. The inspection report shall be made available to the District for the inspector's review.~~

**Commented [A2]:** This is administrative procedure and not an Ordinance requirement. Detail such as this belongs in the TGM.

### § 1003. Request for Final Inspection

1. ~~Prior to~~ Upon substantial completion of construction, the ~~co-permittee~~ applicant shall submit to the District a properly executed Request for Final Inspection (RFI) and approval on the form prescribed by the District.
2. ~~The co-permittee shall provide~~ Upon receipt of the RFI, the District shall schedule the final inspection with the applicant ~~inspector an advance notice of at least two (2) working days prior to final inspection.~~
3. No qualified sewer shall be put in service until it has been approved by the District, and until all facilities (excluding landscaping) required as conditions of the Watershed Management Permit are satisfactorily constructed and completed.
4. ~~Refer to the TGM for further details regarding the administration of the request for final inspection.~~
- 5.4. ~~Record Drawings. Prior to final inspection and approval by the District, the~~ co-permittee applicant shall furnish or cause to be furnished to the District, a set of record drawings, as described in §306 of this Ordinance, which shall be approved by the District prior to final inspection and approval.
- 6.5. ~~Recordation. Prior to final inspection and approval, the~~ co-permittee applicant shall provide a copy of the recorded documents, per requirements described in §307 of this Ordinance. ~~In the event the co-permittee does not provide a copy of the recorded documents described under §308.9 of this Ordinance, the District may record such document at the cost of the co-permittee.~~

**Commented [A3]:** The District is responsible for scheduling the final inspection, not the applicant.

**Commented [A4]:** This is not a requirement of the WMO. The TGM provides guidance for the entire WMO and does not need to be called out separately in this section.

**Commented [A5]:** This is redundant with §307.

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## ARTICLE 11. VARIANCES

### § 1100. Authority

1. Only the **District** may grant **variances** from the requirements of this **Ordinance** ~~and the District shall do so only in compliance with this Article as set forth herein~~; an **authorized municipality** shall not grant **variances** from the requirements of this **Ordinance**.
2. The **variance** procedure is intended to provide a narrowly circumscribed means by which relief may be granted from the requirements of this **Ordinance**.

### § 1101. Petition for Variance

1. A request for a **variance** shall be filed as a petition by the ~~co-permittee~~**applicant** and shall be filed with the Clerk of the **District**, at 100 East Erie Street, Chicago, Illinois 60611.
2. At the time of filing the petition, the ~~co-permittee~~**applicant** shall pay a **variance** filing fee, ~~as indicated. The District permit fees, including variance filing fees, are contained in Appendix F of this Ordinance.~~
3. ~~All A~~ **variance** petitions shall, at a minimum, contain the following ~~information including, but not limited to:~~
  - A. The ~~co-permittee's~~**applicant's** notarized signature on the petition;
  - B. A letter of no objection to the **variance** request from the **permittee** or, if the **development project** is located in an unincorporated area, from the appropriate unit of local government;
  - C. The names and addresses of all professional consultants advising the ~~co-permittee~~**owner** regarding the ~~petition~~**project**;
  - D. The address(es), plat of survey, and legal description of the site upon which the site project is or will be located;
  - E. The names and address(es) of all **owners** of record of any property interest within two-hundred fifty (250) feet of the site where the site project is or will be located;
  - F. A detailed statement of the specific feature(s) or characteristic(s) of the proposed development project or proposed project that requires a variance and prevent it from complying with this Ordinance;
  - G. The specific provision(s) of this **Ordinance** from which a **variance** is being requested, ~~and~~ the precise variation being sought, and a detailed statement of

**Commented [A1]:** Combining two sections from prior versions, no substantive alteration is intended.

any alternative or less extensive variance, if any, that would also allow the project to be permitted and completed; and

~~H. A detailed statement of the characteristics of the development that prevent it from complying with this Ordinance;~~

~~I. A detailed statement of the minimum variance from the provisions of this Ordinance that would be necessary to permit the proposed construction or development; and~~

~~J.H.~~ A detailed statement describing how the requested variance satisfies each of the criterion provided in §1103.1 of this Ordinance.

Commented [A2]: Combined in §1101.3.F&G above.

#### § 1102. ~~Co-Permittee's~~ Notice of Petition

1. Within seven (7) calendar days after the petition for variance is filed with the Clerk of the District, the ~~co-permittee~~applicant shall publish at least one notice of ~~such the~~ petition in a newspaper that is published in Cook County with a general circulation in the vicinity of the site of the proposed ~~development project~~ for which a variance is requested.
2. Within seven (7) calendar days after the petition for variance is filed with the Clerk of the District, the ~~co-permittee~~applicant shall mail notice via certified mail, return receipt requested, of such petition to all owners of record of any property interest located within two-hundred fifty (250) feet of the site of the proposed ~~development project~~ for which a variance is requested, and to any other persons in the vicinity of the proposed development that the ~~co-permittee~~applicant has knowledge of or believes may potentially be affected by the requested variance.

~~3.1. Within seven (7) calendar days after the petition for variance is filed with the Clerk of the District, the District shall publish such petition for variance on its website.~~

~~4.3.~~ All notices required by this section shall include the following:

- A. The street address of the ~~development project~~, or if there is no street address, then the legal description and the location with reference to any well-known landmarks, highway, road or intersection;
- B. A description of the requested variance;
- C. A statement that any person may submit written comments regarding the petition for variance to the Clerk of the District within twenty-one (21) calendar days after the publication and mailing of notice; the notice shall include mailing information for said comments as follows:

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#### ARTICLE 11. VARIANCES

Page 11-2

Public Comment Draft: 1/7/19



Metropolitan Water Reclamation District of Greater Chicago,  
Clerk of the District, 100 East Erie Street, Chicago, Illinois 60611;

D. A statement that copies of the petition for **variance** are available upon request from the ~~co-permittee~~**applicant**;

E. A statement that any and all documents that concern the petition for **variance**, which are subject to public disclosure, will be made available for inspection by the ~~co-permittee~~**applicant** at a readily accessible location; the notice will include the address where said inspection of documents will take place together with the name and telephone number of the **person** responsible for making the records available for inspection;

~~E.F.~~ A statement that rules governing the **variance** hearing process are available on the **District's** website; and

~~F.G.~~ Any additional information considered necessary or proper.

5.4. Within ~~seven-fourteen~~ (7) calendar days after the ~~publication of notice~~**petition for variance is filed**, the ~~co-permittee~~**applicant** shall ~~submit file to with~~ the Clerk of the **District** a certification of publication and shall attach a copy of the published notice.

5. Within ~~seven-fourteen~~ (7) calendar days after ~~mailing of notice to owners of record as described in §1102.2 of this Ordinance~~**the petition for variance is filed**, the ~~co-permittee~~**applicant** shall ~~submit file with~~ the Clerk of the **District** a ~~sworn~~ **notarized** affidavit listing the addresses to which notices were mailed and certifying to the completeness of the list to the best of the ~~co-permittee's~~**applicant's** knowledge and belief.

6. ~~Within~~ **No later than seven (7) calendar days after the petition for variance last of the filings required in paragraphs 4 and 5 above is are filed with the Clerk of the District, the District shall publish such the petition for variance and all notices filed on its website. The website shall advise all persons of the opportunity to submit written comments regarding the petition, as described in §1104 of this Ordinance.**

7. **The District may deny any petition for variance based solely on an applicant's failure to file any item(s) required by this section.**

**Commented [A3]:** Intended to provide the public additional information regarding the process

**Commented [A4]:** Attempt to clarify and set firm deadline for filing of certificate of publication.

**Commented [A5]:** Attempt to clarify and set firm deadline for filing of affidavit of notice provided to neighbors and persons interested.

**Commented [A6]:** Clarification of the date of publication to District's website for administrative purposes.

**Commented [A7]:** Added to identify potential repercussions of failing to comply with this section.

## § 1103. Standards

1. The **District** may grant a **variance** when it is consistent with the general purpose and intent of this **Ordinance** and when the ~~development project~~ meets the requirements as specified

in §501.1.A-C of this **Ordinance** and the petition demonstrates all of the following conditions:

- A. Granting the **variance** ~~shall not neither~~ alters the essential character of the area involved, ~~including nor alters~~ existing stream uses;
- B. Failure to grant the **variance** would create an ~~exceptional-unreasonable~~ hardship on the ~~co-permitteeapplicant~~; economic hardship ~~of the co-permitteeapplicant~~ alone shall not constitute ~~exceptional-unreasonable~~ hardship;
- C. The ~~relief requested~~ variance to be granted is the minimum necessary and there are no other 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 ~~developmentproject~~;
- D. The ~~co-permittee'sapplicant's~~ circumstances are unique, not self-imposed, and do not represent a general condition or problem;
- E. The ~~development-project~~ is ~~exceptional-unique~~ when compared to other ~~developments-projects~~ that have met the provisions of this **Ordinance**;
- F. A **development** proposed within a **flood protection area** ~~is unable to could not~~ be constructed ~~if it were located~~ outside the **flood protection area**; and
- G. ~~The co-permittee's circumstances are not self-imposed; and~~

**Commented [A8]:** Attempt to avoid ambiguity of exceptional

**Commented [A9]:** Intended to clarify that the District will only grant the minimum variance necessary

**Commented [A10]:** Added to §1103.1.D above

~~H.G.~~ Granting the **variance** shall not result in any of the following:

- (1) Increase in the **regulatory floodplain** elevation, unless a **CLOMR** is issued by **FEMA**;
- (2) Additional threats to public safety;
- (3) Extraordinary public expense;
- (4) Nuisances, fraud, or victimization of the public; or
- (5) Conflict with existing laws or ordinances.

- 2. The **District** shall not grant **variances** for any ~~development-project~~ that is within a **regulatory floodway**, ~~Corps jurisdiction~~ **Wetland**, or **Jurisdictional Waters of the U.S.** unless such **variance** meets or exceeds federal and/or state required minimum standards for **development** in such areas. ~~The co-permitteeapplicant~~ shall be responsible for obtaining all applicable federal and/or state permits before any such **variance** is granted.

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#### ARTICLE 11. VARIANCES

Page 11-4

Public Comment Draft: 1/7/19

3. The **District** shall not grant **variances** that would violate the minimum standards for **floodplain** management established by the **OWR** and the requirements of **FEMA** for participation in the **NFIP**.

#### § 1104. Submission of Written Comments

1. ~~Any person may submit written comments regarding the petition for variance to the~~ Clerk of the **District** ~~will accept written comments on a petition for variance submitted by any person within up to~~ twenty-one (21) calendar days ~~after the date the District published notice of the petition for variance on its website after the publication and mailing of notice by the co-permittee.~~
2. Written comments should be mailed to: Metropolitan Water Reclamation District of Greater Chicago, Clerk of the District, 100 E. Erie Street, Chicago, Illinois 60611.
3. The **District** shall provide all written comments received regarding a petition for variance to the applicant within seven (7) calendar days of the end of the written comment period as described in §1104.1 of this Ordinance.
- ~~3.4.~~ The **District** shall take into consideration all written comments received regarding a petition for **variance**.

#### § 1105. Determination by the District

1. The **Board of Commissioners** or its designee may conduct a hearing on a petition for variance.
2. The **Board of Commissioners** shall promulgate procedural rules that will govern hearings pursuant to this Article.— All hearings conducted pursuant to this Article will also follow the requirements for show cause hearings as set forth in §1204.2 through §1204.5 of this Ordinance.
- ~~1.3.~~ After closure of the written comment period specified in §1104 of this **Ordinance**, the Clerk of the **District** shall forward to the **Director of Engineering**:
  - A. The petition for **variance**;
  - B. Copies of all ~~notices~~ filings submitted by the applicant; and
  - C. Copies of all written comments received.
- ~~2.4.~~ The **Director of Engineering** shall review the petition for **variance** and prepare a report recommending one of the following actions:
  - A. Granting the petition for **variance**; or

**Commented [A11]:** Added to be consistent with other administrative hearings in District ordinances.

- B. Granting the petition for **variance** with conditions; or
- C. Denying the petition for **variance**.

The report ~~must also shall~~ include the items listed under §11045.3 of this **Ordinance**, and the **Director of Engineering** must forward the report to the **Board of Commissioners** or its designee for consideration.

3. ~~Within thirty (30) calendar days after the Board of Commissioners' receipt of the petition for variance, the Board of Commissioners shall review the petition for variance and determine whether the petition for variance shall be heard by the Board of Commissioners itself or by its designee in a variance hearing.~~

4. ~~The Clerk of the District shall promptly notify the co-permittee in writing of the Board of Commissioners' determination regarding who shall hear the petition for variance.~~

5.1. ~~The Board of Commissioners shall promulgate procedural rules that will govern hearings pursuant to this Article. All hearings conducted pursuant to this Article will also follow the requirements for show cause hearings as set forth in §1204.2 through §1204.5 of this Ordinance.~~

6.5. All **variance** hearings shall be concluded as soon as practicable.

7.6. When a **variance** hearing is conducted by the designee of the **Board of Commissioners**, the designated hearing officer shall submit the following at the conclusion of the hearing:

- A. A written report to the **Board of Commissioners** containing the designated hearing officer's findings with respect to the petition for **variance**, and the basis for those findings; and
- B. A complete record of the **variance** hearing if requested by either the **Board of Commissioners** or ~~by the co-permittee~~ applicant. If the applicant requests the complete record, the applicant must pay the cost for the preparation of the record at its own expense.

7. The **Board of Commissioners** shall either approve or reject the report of the designated hearing officer. If the report is rejected, the **Board of Commissioners** shall remand the matter to the designated hearing officer for further proceedings. ~~If the report is accepted by the Board of Commissioners, it shall constitute the final order of the Board of Commissioners.~~

8. The final determination regarding the petition for **variance** rests within the sole discretion of the Board of Commissioners, subject to the provisions of this Article.

**Commented [A12]:** Null with new §1105.1, which is consistent with other administrative hearings in District ordinances.

**Commented [A13]:** Added to clarify the cost shift if the Board does not request a complete record of the hearing.

#### ARTICLE 11. VARIANCES

Page 11-6

Public Comment Draft: 1/7/19

9. The Clerk of the **District** shall notify the ~~permittee and co-permittee~~applicant of the ~~determination-final order~~ of the **Board of Commissioners** by certified mail, return receipt requested within thirty (30) calendar days of the **Board of Commissioners' final determination order**. ~~A denial of a variance request~~The final order shall specify the ~~requirements and conditions of this Ordinance forming the basis of the denial order,~~ including any requirements and conditions of this Ordinance that are involved.
10. The Clerk of the **District** shall notify all **persons** who submitted written comments of the ~~determination-final order~~ of the **Board of Commissioners** by certified mail, return receipt requested within thirty (30) calendar days of the **Board of Commissioners' determination**.
11. The Administrative Review Law of the State of Illinois, and the rules adopted under such law, shall govern all proceedings for judicial review of final orders of the **Board of Commissioners** issued under this ~~s~~Section.

#### § 1106. Conditions

1. The **District** may grant a **variance** that differs from the relief requested when supported by the record.
2. The **District** may impose specific conditions and limitations on the ~~development project~~ receiving a **variance** as the **District** deems necessary to meet the intent of this **Ordinance**.
3. Whenever a **variance** is authorized with conditions and limitations, the ~~permittee applicant~~ and ~~co-permittee~~, if any, shall both file a ~~notarized-sworn~~ affidavit with the **District**, indicating acceptance of the conditions and limitations and their agreement to comply therewith.

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## ARTICLE 12. PROHIBITED ACTS, ENFORCEMENT, AND PENALTIES

### § 1200. Prohibited Acts

1. It shall be unlawful for any **person** to undertake any ~~development project~~ within **Cook County** that requires a **Watershed Management Permit** under this **Ordinance** without first securing a **Watershed Management Permit**.
2. It shall be unlawful for any **person** to install **qualified sewer** ~~construction~~ within the **District's** corporate limits or service agreement areas that requires a **Watershed Management Permit** under this **Ordinance** without first securing a **Watershed Management Permit**.
3. It shall be unlawful for any **person** to fail to maintain systems, in whole or in part, as required:
  - A. Within a **Watershed Management Permit**; and
  - B. Within the **maintenance** plan of the **Watershed Management Permit** as required in ~~§900.1~~ Article 3 and Article 9 of this **Ordinance**.
4. It shall be unlawful for any **person** to violate, disobey, omit, fail to maintain, or refuse to comply with or to resist enforcement of any provision of this **Ordinance** or any condition of a **Watershed Management Permit** required by this **Ordinance**.

### § 1201. Administrative Proceedings: Notice of Violation

1. Whenever it shall appear to the **Director of Engineering** that a violation of a provision of this **Ordinance** exists, the **Director of Engineering** shall, as soon as practical, issue a written **Notice of Violation (NOV)** to the ~~permittee/co-permittee, and/or the person(s)~~ responsible for the apparent violation (**respondent**). The **NOV** shall advise the **respondent** of the nature of the noncompliance and shall require the **respondent** to investigate the alleged violation, determine remediation measures, and develop a schedule to correct the noncompliance. The **NOV** may be sent via Certified Mail, Return Receipt Requested, or may be served personally by a representative of the **District** at the site, on the **respondent** or its representative.
2. Upon receipt of an **NOV**, the **respondent** shall cease all actions that are related to or in furtherance of the alleged noncompliant activity until such time as the **NOV** is finally resolved.
- ~~2.3.~~ The **Director of Engineering** may request a conciliation meeting concurrent with the issuance of a **NOV** for the purpose of investigating the **NOV** and for establishing a compliance schedule. In the event a conciliation meeting is not requested by the **Director of Engineering**, the **respondent** may request a conciliation meeting within seven (7)

calendar days of receipt of a **NOV**. The **Director of Engineering** shall use his/her best efforts to convene the conciliation meeting within forty-five (45) calendar days of issuance of the **NOV**. During conciliation proceedings, the **respondent** may be required to furnish the **District** with such information as is reasonably necessary to demonstrate compliance with the **Ordinance** or with a **Watershed Management Permit** issued thereunder. The **Director of Engineering** may continue the conciliation meeting from time to time as deemed necessary to further compliance with this **Ordinance**.

3.4. A **respondent** engaging in conciliation proceedings with respect to a **NOV** shall submit a **compliance report and schedule** to the **Director of Engineering** within 30 calendar days after the conciliation meeting, or upon such further date as determined appropriate by the **Director of Engineering**. In the event no conciliation meeting is held, the **respondent** shall submit the **compliance report and schedule** within forty-five (45) calendar days after the receipt of the **NOV**. The **compliance report and schedule** shall be executed by the **respondent** or its authorized representative and shall be certified as to accuracy and completeness by a **Professional Engineer**. The **compliance report and schedule** shall include a schedule that establishes a final compliance date, representing a date certain upon which all violations and conditions contained in the **NOV** are remedied. Within twenty-one (21) calendar days after receipt of the **compliance report and schedule**, the **Director of Engineering** shall accept the **compliance report and schedule** as filed or shall request such further amendments to the **compliance report and schedule** as deemed necessary to insure compliance with the requirements of the **Ordinance** or **Watershed Management Permit**.

4.5. Representatives of the **District** may, during reasonable hours, enter upon ~~the site of any development project~~ subject to a **NOV** for purposes of inspecting the ~~development project~~ that is the subject of the **NOV** and/or for verifying compliance with a **compliance report and schedule** submitted pursuant to §1201.4 of this **Ordinance**. Inspections shall be conducted in accordance with the provisions of this **Ordinance** concerning Right of Access as set forth in §205 of this **Ordinance**. ~~An inspection fee of \$250.00 shall be charged by the District for each onsite inspection made by the District pursuant to this section is subject to the inspection fee indicated in Appendix F of this Ordinance.~~

5.6. No later than twenty-one (21) calendar days after the final compliance date, the **Director of Engineering** shall review the compliance status of the **respondent** and shall advise the **respondent** in writing whether **respondent** has adequately remedied the violation(s) contained in the **NOV**.

6. If it appears to the **Director of Engineering** that ~~a person~~ the respondent subject to a **NOV** has failed to respond within ~~30~~ forty-five (45) calendar days after service, or has failed to submit a **compliance report and schedule** acceptable to the **Director of Engineering**, or has failed to achieve compliance on or before the final compliance date, the **Director of**

Commented [A1]: To be consistent with the time set out in §1201.3



**Engineering** may at his discretion either issue an amendment to the **NOV** or make a Recommendation for Show Cause to the **Executive Director**.

7. ~~Upon receipt of an **NOV**, the **respondent** shall cease all actions that are related to or in furtherance of the alleged noncompliant activity until such time as the **NOV** is finally resolved.~~

**Table 7 Notice of Violation (NOV)**

Section	Action	By	When
1201.1	Issuance of <b>NOV</b>	<b>Director of Engineering</b>	Apparent violation of <b>Ordinance</b> or <b>Watershed Management Permit</b> .
1201.3	Submission of <b>compliance report and schedule</b>	<b>Respondent</b>	Within 45 calendar days after issuance of <b>NOV</b> .
1201.5	Review of <b>compliance report and schedule</b>	<b>Director of Engineering</b>	Within 21 calendar days after receipt of <b>compliance report and schedule</b> .
1201.6	Issuance of amendment to <b>NOV</b>	<b>Director of Engineering</b>	<b>Respondent:</b> 1) Does not respond <del>30-45</del> calendar days after service, 2) Fails to submit an acceptable <b>compliance report and schedule</b> , or 3) Fails to achieve compliance on or before the final compliance date.
1201.6	Recommendation for Show Cause to <b>Executive Director</b>	<b>Director of Engineering</b>	<b>Respondent:</b> 1) Does not respond <del>30-45</del> calendar days after service, 2) Fails to submit an acceptable <b>compliance report and schedule</b> , or 3) Fails to achieve compliance on or before the final compliance date.

**§ 1202. Administrative Proceedings: ~~Proceedings for~~ Show Cause Before the Board of Commissioners**

1. Upon recommendation of the **Director of Engineering** as set forth in §1201.7 of this **Ordinance**, the **Executive Director** may order the **respondent** to appear before the **Board of Commissioners** or its ~~duly designated representative~~designee and show cause why the **respondent** should not be found in violation of this **Ordinance**.
2. The **Board of Commissioners** shall promulgate procedural rules governing administrative proceedings pursuant to this Article.

**§ 1203. Notice of Show Cause**

1. Notice to the **respondent** shall specify the date, time and location of a hearing to be held by the **Board of Commissioners** or its designee. The notice of the hearing shall be served personally or by registered or certified mail at least ten (10) working days before said

hearing. In the case of a **municipality** or a corporation, said service shall be upon an officer or agent thereof.

**§ 1204. Show Cause Hearing and Imposition of Civil Penalties by the Board of Commissioners**

1. The **Board of Commissioners** or its designee may conduct a Show Cause hearing.
2. The **Board of Commissioners** shall establish a panel of independent hearing officers, from which a designee must be selected, to conduct all hearings not presided over by the **Board of Commissioners**.— All hearing officers shall be attorneys licensed to practice law in the State of Illinois who are in good standing.
3. All hearings shall be on the record and any testimony taken at a hearing shall be under oath and recorded stenographically. The transcripts so recorded must be made available to any member of the public or to the **respondent** or party to such hearing upon payment of the usual charges for transcripts. At the hearing, the hearing officer may issue in the name of the **Board of Commissioners** notices of hearing requesting the attendance and testimony of witnesses and the production of evidence relevant to any matter involved in the hearing.
4. The **Board of Commissioners**, or the hearing officer, its designee shall conduct a full and impartial hearing on the record, with an opportunity for the presentation of evidence and cross-examination of the witnesses.
5. For hearings conducted by a hearing officer, after all evidence has been presented, the hearing officer shall issue a report based upon the preponderance of the evidence in the record, which includes findings of fact, conclusions of law, an order, and, if violations are proved, recommended penalties as detailed under §1204.8 of this **Ordinance**.— The Report shall be transmitted to the **Board of Commissioners**, along with a complete record of the hearing if so requested by the hearing officer or the **Board of Commissioners**.
6. The **Board of Commissioners** shall either approve or reject the report. If the report is rejected, the **Board of Commissioners** shall remand the matter to the hearing officer for further proceedings. If the report is accepted by the **Board of Commissioners**, it shall constitute the final order of the **Board of Commissioners**.
7. The final determination regarding the imposition of penalties, and the amount thereof, rests within the sole discretion of the **Board of Commissioners**.
8. Penalties and costs shall be assessed as follows:
  - A. Civil penalties shall be assessed at the level of not less than \$100.00 nor and no more than \$1,000.00 per day of for each violation; each day's continuation of such

**Commented [A2]:** To clarify that all hearing officers must be in good standing

violation or failure to abide by the terms of this **Ordinance** is a separate and distinct offense;

- B. An inspection fee, as listed in Appendix F of this Ordinance, of \$250.00 shall be assessed by the **District** for each onsite inspection made by the **District** to ascertain or confirm compliance by a violator-respondent hereunder with the construction, operation, and **maintenance** provisions of this **Ordinance** or with a permit issued pursuant to this Ordinance; such inspection(s) shall be made when requested by the permittee/co-permittee ~~respondent~~, when required by the compliance schedule agreed upon in conciliation proceedings, or if no such request(s) is(are) made, then upon the compliance date established by an order of the Board of Commissioners ~~hearing officer~~ and thereafter as circumstances may reasonably require; and
- C. After a hearing on an alleged violation the hearing officer or **Board of Commissioners** may, in addition to any other penalties imposed, order any **person** found to have committed a violation to reimburse the **District** for the costs of the hearing, including any expenses incurred for the inspection, sampling, analysis, document preparation, administrative costs, court reporter, and attorney fees.
9. All penalties specified by the **District** shall be paid within thirty (30) days after the party on whom it is imposed receives a written copy of the order of the **Board of Commissioners**, unless the **person** to whom the order is issued seeks judicial review of the order, and obtains a stay of the decision from the Circuit Court of Cook County or other court having jurisdiction in accordance with the Administrative Review Act ~~Law~~ of the State of Illinois.
10. All unpaid penalties shall be considered in arrears thirty (30) days after the date of the order.
11. The Administrative Review Act ~~Law~~ of the State of Illinois, and the rules adopted under such act ~~law~~, shall govern all proceedings for judicial review of final orders of the **Board of Commissioners** issued under this section.

**Commented [A3]:** To be consistent with the current name of statute.

**Commented [A4]:** To be consistent with current name of statute.

## § 1205. Revocation of Watershed Management Permits

1. In addition to the provisions for administrative and legal proceedings contained in this Article 12 of this **Ordinance**, whenever the **Executive Director** determines that a **person** to whom a **Watershed Management Permit** has been issued has wholly failed to remedy the violations stated in a **NOV** issued pursuant to this **Ordinance**; or whenever a **person** has failed to comply with an order of the **Board of Commissioners** issued pursuant to this **Ordinance**; or has failed to comply with a substantive order of a court entered in litigation initiated by the **District**, the Office of the State's Attorney or the United States Attorney, against such **person** for noncompliance with this **Ordinance**; or has failed to promptly pay

all civil penalties, inspection fees, or other costs assessed against such **person** in any action taken by the **District**, the **Executive Director** may order such **person** to show cause before the **Board of Commissioners** why the **Watershed Management Permit** should not be revoked, except in circumstances where a properly filed appeal is pending.

#### § 1206. Stop-Work Order

1. The **District**, upon the **Director of Engineering**'s determination, as set forth herein, is authorized to issue an order requiring the suspension of ~~construction of a~~ development project that is subject to this **Ordinance**.
2. A stop-work order shall:
  - A. Be in writing;
  - B. Indicate the reason for its issuance; and
  - C. Order the action, if any, necessary to resolve the circumstances requiring the stop-work order.
3. One copy of the stop-work order shall be posted on the property in a conspicuous location and one copy shall be delivered by Registered Mail, Return Receipt Requested, or personal delivery to the ~~permittee/co-permittee~~ respondent, and/or to the property **owner** or his/her agent.
4. The stop-work order shall state the conditions under which the construction of the subject development project may be resumed.
5. The **District** shall issue a stop-work order if the **Director of Engineering** determines that:
  - A. ~~Development-The project~~ is proceeding in a manner which creates imminent hazard of severe harm to **persons**, property, or the environment on or off the site;
  - B. ~~Development-The project~~ is occurring in violation of a requirement of this **Ordinance**, or of a **Watershed Management Permit**, and the **District** has determined it is necessary to halt ongoing ~~development~~ activity to avoid continuing or additional violations and where significant costs and effort would be incurred should the offending ~~development~~ activity be allowed to continue; or
  - C. ~~Development-The project~~ for which a **Watershed Management Permit** is required is proceeding without issuance of a **Watershed Management Permit**.— In such an instance, the stop-work order shall state that the order terminates when the required **Watershed Management Permit** is properly obtained.

6. Any ~~permittee / co-permittee, and/or property owner~~**applicant** aggrieved by the issuance of a stop-work order may appeal the stop-work order as outlined in Article 13 of this **Ordinance**.

#### **§ 1207. Additional Remedies for Flood Protection Areas**

1. Upon the unauthorized excavation, filling, or modification of a **flood protection area** by any **person**, the **District** may petition the circuit court for an order to restore the ~~parcel~~**site** to its prior condition in order to lessen or avoid the imminent threat to public health, safety, or welfare, or damage to property or the environment resulting from the accumulation of **runoff of stormwater** or floodwater, or loss of beneficial function.
2. When, after a diligent search, the identity or whereabouts of the **owner(s)** of any such ~~parcel(s)~~**sites**, 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.
3. The reasonable costs of restoration of the **flood protection area** that are incurred by the **District** shall be recoverable from the **owner** of such ~~real estate~~**site** in a civil action, together with court costs and other expenses of litigation.

#### **§ 1208. Legal and Equitable Relief**

1. The ~~General Counsel of the~~ **District** shall take such action deemed necessary to enforce collection and payment of all costs and penalties, to restrain violations of, and to compel compliance with the provisions of this **Ordinance** and with the conditions of any **Watershed Management Permit** issued hereunder.
2. In the enforcement of this **Ordinance**, the **District** shall have the authority to institute, or cause to be instituted, any and all actions, legal or equitable, including appeals, which are required for the enforcement of this **Ordinance** without first exhausting the administrative remedies set forth herein.

#### **§ 1209. Injunctive Relief**

1. In addition to the penalties provided in this Article 12 of this **Ordinance**, whenever a **person** violates any provision of this **Ordinance** or fails to comply with any order of the **Board of Commissioners**, the **District**, acting through the **Executive Director**, may apply to the Circuit Court of **Cook County**, or other ~~C~~court having jurisdiction, for the issuance of an injunction restraining the **person** from violating this **Ordinance** or failing to comply with the ~~Board of Commissioners' o~~**Board of Commissioners' o**Order from making further violations.
2. Notwithstanding any remedies that the **District** may have by statute, common law, or this

**Ordinance**, when, in the determination of the **Executive Director**, the construction, operation, **maintenance**, ownership or control of any ~~development project~~ subject to this **Ordinance** presents an imminent danger to the public health, welfare or safety, presents or may present an endangerment to the environment, is in violation of this **Ordinance**, or threatens to interfere with the operation of the sewerage system of a **water reclamation facility** under the jurisdiction of the **District**, the **District**, acting through the **Executive Director**, may apply to the Circuit Court of **Cook County**, or other ~~c~~court having jurisdiction, for injunctive relief to cease and desist such activities without first exhausting administrative remedies set forth herein.

## ARTICLE 13. APPEALS

### § 1300. Right to Appeal

1. Any **person** subject to this **Ordinance**, or his/her authorized representative, shall have a right to appeal the following to the **Director of Engineering**:
  - A. The denial of a **Watershed Management Permit**;
  - B. The conditions imposed in a **Watershed Management Permit**; and
  - C. The issuance of a stop-work order.
2. Any **person** contesting any final decision, order, requirement, or determination of the **Director of Engineering** made pursuant to §1300.1 of this **Ordinance** shall have the right to appeal to the **Board of Commissioners**.

### § 1301. Appeals to the Director of Engineering

1. All appeals to the **Director of Engineering** shall be made in writing and shall specify the reasons for the appeal. For appeals regarding permit denials or permit conditions, the appeal must be served upon the **Director of Engineering** within 60 calendar days from the date of denial or conditional issuance of a **Watershed Management Permit**. An appeal of the issuance of a stop-work order must be served upon the **Director of Engineering** within 14 calendar days from the date of posting of the stop-work order.
2. The **Director of Engineering** will use his/her best efforts to respond in writing to a request for an appeal within 30 calendar days of the receipt of a request from the **appellant** and shall schedule an appeal meeting in the letter responding to the request. In the case of an appeal of the issuance of a stop-work order, the **Director of Engineering** shall use his/her best effort to schedule and conduct an appeal meeting within 30 calendar days of receipt of the request for appeal.
3. When a meeting is scheduled by the **Director of Engineering**, the **appellant** must submit all information pertinent to the appeal. Unless otherwise agreed to by the Director of Engineering and the appellant, this information must be submitted to the Director of Engineering at least 14 calendar days prior to the scheduled appeal meeting. In the case of an appeal of the issuance of a stop-work order, the **appellant** must submit all information pertinent to the appeal contemporaneously with the request for appeal.

**Commented [A1]:** Added to provide some flexibility if an appeal is time-sensitive.

4. The **Director of Engineering** will conduct an appeal meeting and attempt to resolve any bona fide claims, disputes, or inquiries the **appellant** may have. All determinations made by the **Director of Engineering** shall be in writing and a copy thereof transmitted to the **appellant**. The **Director of Engineering** will use his/her best efforts to transmit these determinations to the **appellant** within 60 calendar days of the appeal meeting. Determinations regarding the appeal of the issuance of a stop-work order shall be transmitted to the **appellant** within 14 days of the appeal meeting.
5. Should the **appellant** fail to appear at the scheduled appeal meeting, another appeal meeting will not be scheduled unless the **appellant** requests such a meeting, in writing to the **Director of Engineering**, not later than 30 calendar days after the date of the initially scheduled appeal meeting. A second appeal meeting may be granted at the discretion of the **Director of Engineering** upon a finding of good cause as to why the initial appeal meeting was missed. If a properly filed request for a second appeal meeting under this section is denied by the **Director of Engineering**, the **appellant** may file an appeal to the **Board of Commissioners** for the sole purpose of determining the propriety of the **Director of Engineering's** denial. If the **Board of Commissioners** grant the **appellant's** request, then the matter shall be remanded for an appeal by the **Director of Engineering** under the provisions of this section.
6. Any **person** who has been issued a **Watershed Management Permit**, and who appeals a condition contained in that permit, may commence construction of the subject ~~development project~~ prior to a resolution of the appeal. However, any commencement of construction must comply with all of the terms and conditions of the ~~Watershed Management Permit~~ as issued to said **person**, and not otherwise in violation of this Ordinance.
7. Any **person** whose request for a **Watershed Management Permit** was denied by the **District** or by an **authorized municipality** is prohibited from commencing construction of the subject ~~development project~~ during the pendency of an appeal. Under no circumstances can construction commence prior to the issuance of a **Watershed Management Permit**.
8. Any **person** who requests an appeal of the issuance of a stop-work order must suspend construction of the subject ~~development project~~ while the appeal is pending.

#### § 1302. Appeals to the Board of Commissioners

1. In the event that the **appellant** does not concur with the determination of the **Director of Engineering**, the **appellant** may petition the **Board of Commissioners** for a hearing. Any petition requesting a hearing by the **Board of Commissioners** shall be made by the **appellant** within 30 calendar days after receipt of the determination by the **Director of Engineering** pursuant to §1301 of this Ordinance.



2. ~~This~~An appellant's petition to the Board of Commissioners for a hearing must be in writing by the appellant and sent filed with the President of the Board of CommissionersClerk of the District, at 100 East Erie Street, Chicago, Illinois 60611, with a copy to the Director of Engineering and the President of the Board of Commissioners. Within 30 calendar days after receipt of this petition, the Director of Engineering will advise the appellant in writing regarding the date on which the Board of Commissioners will consider the petition made by the appellant.
3. The Board of Commissioners or its designee may conduct a hearing on an appellant's petition to the Board of Commissioners.
3. ~~The Board of Commissioners shall review this petition and determine whether the petition for an appeal shall be heard by the Board of Commissioners itself or by its designee.~~
4. The Board of Commissioners shall establish a panel of independent hearing officers, from which a designee must be selected, to conduct all hearings not presided over by the Board of Commissioners. All hearing officers shall be attorneys licensed to practice law in the State of Illinois who are in good standing.
5. ~~The Director of Engineering will promptly notify the appellant in writing of the Board of Commissioners' determination of who shall hear the appeal.~~
- 6.5. The Board of Commissioners shall not grant an appeal if the appellant failed to timely file an appeal with the Director of Engineering.
6. Within 630 calendar days after receipt of thisa petition, the Director of EngineeringDistrict shall advise the appellant in writing regarding the date, time, and location at on which the Board of Commissioners or its designee will consider the petition made by the appellant.
7. When an appeal hearing is conducted by the designee of the Board of Commissioners, the designated hearing officer shall submit a written report of his or her findings to the Board of Commissioners with respect to such appeal. The hearing officer must also submit a complete record of the appeal hearing if requested by the Board of Commissioners, or by the District Director of Engineering or by the appellant. If only the appellant requests the complete record, the appellant must pay the cost for the preparation of the record, at its own expense.
8. The Board of Commissioners shall either approve or reject the report of the designated hearing officer. If the report is rejected, the Board of Commissioners shall remand the matter to the hearing officer for further proceedings. If the report is accepted by the Board of Commissioners, it shall constitute the final order of the Board of Commissioners.

**Commented [A2]:** Edited for consistency with other administrative proceedings within the WMO.

**Commented [A3]:** Edited for consistency with other WMO administrative proceedings and to streamline proceedings.

**Commented [A4]:** Null with above provision being consistent with other District ordinances.

**Commented [A5]:** Edited to make clear that all hearing officers must be in good standing.

**Commented [A6]:** Null with above provision being consistent with other District ordinances.

**Commented [A7]:** Edited to provide more administrative flexibility in who must notify the petitioner and to provide sufficient time for full hearing to be scheduled.

**Commented [A8]:** To clarify who at the District

9. The scope of any hearing conducted under this section shall be limited to the issues raised by the **appellant** in the **Director of Engineering's** appeal meeting. Technical information that was not submitted by the **appellant** to the **Director of Engineering** under §1301 of this **Ordinance** shall not be utilized in a hearing before the **Board of Commissioners** or its designee.
10. All appeal hearings before the **Board of Commissioners** or the designated hearing officer shall be concluded as soon as practicable.
11. Determinations by the **Board of Commissioners** or its designee shall be effective immediately. The **District** shall provide the final decision and order of the **Board of Commissioners** in writing to the **appellant** within 30 calendar days of entry.
12. Final decisions of the **Board of Commissioners** under this Article are subject to the Administrative Review Law of the State of Illinois, and that law and the rules adopted under such law, shall govern all proceedings for judicial review of any such orders~~Administrative Review Act.~~
13. Any **person** who requests an appeal to the **Board of Commissioners** under this section must maintain the status quo during the pendency of the appeal and shall not take any action in contravention of the determination of the **Director of Engineering**.
14. The **Board of Commissioners** shall promulgate procedural rules governing administrative proceedings pursuant to this Article.

**Commented [A9]:** Edited to be consistent with other provisions of the WMO.

## ARTICLE 14. ADMINISTRATION

### § 1400. Responsibility for Administration

1. The **District** has the authority and responsibility for the administration of this **Ordinance**.

### § 1401. Role of the District

1. The role of the **District** in the administration of this **Ordinance** shall include all of the following:
  - A. Supervise the execution of this **Ordinance**;
  - B. Review and issue **Watershed Management Permits**;
  - C. Develop and maintain the **TGM**, which will serve as a companion reference to this **Ordinance**;
  - D. Notify Cook County governmental agencies, **municipalities**, **authorized municipalities**, **FEMA**, **OWR**, **Corps**, and **IEPA** of any amendments to this **Ordinance**;
  - E. Provide inspections to ensure proper compliance with this **Ordinance**;
  - F. Investigate complaints of violations of this **Ordinance**;
  - ~~G. A. Grant variances;~~
  - ~~H. G. Enforce this **Ordinance**;~~
  - ~~H. G. Grant **Hear variances petitions**;~~
  - I. Hear appeals;
  - J. Advise, consult with, and cooperate with other governmental entities to promote the purposes of this **Ordinance**; and
  - K. Supervise **authorized municipalities**.
2. The **District** shall timely review **Watershed Management Permit** applications and respond within:
  - A. Fifteen (15) working days of an initial submittal for ~~developments~~ **projects** not involving **flood protection areas**;

**Commented [A1]:** Existing language implies all variances will be granted. The District will hear all variance petitions, but may or may not grant the variance.

- B. Thirty (30) working days of an initial submittal for ~~developments-projects~~ involving **flood protection areas**; and
  - C. Ten (10) working days of a resubmittal.
3. The **District** reserves the right to cancel **Watershed Management Permit** applications in such a case as:
- A. The ~~permittee or co-permittee~~applicant gives notice that the **project** has been cancelled; or
  - B. A resubmittal has not been received by the **District** within ninety (90) days of the **District's** issuance of its review comments. Such permit applications will be considered non-responsive and will be subject to cancellation upon notice by the **District**.
4. **Watershed Management Permit** applications that are cancelled by the District shall have permit fees refunded as described in §301.4 of this **Ordinance**.

#### § 1402. Role of an Authorized Municipality

1. The role of an **authorized municipality** in the administration of this **Ordinance** shall include the following:
- A. Issue **Watershed Management Permits** for **development** ~~activities~~ listed in §201.1 of this **Ordinance** and within its corporate boundaries in conformance with this **Ordinance**;
  - B. Provide inspections to ensure proper compliance with this **Ordinance**;
  - C. Investigate complaints of violations of the **Ordinance**;
  - D. Advise, consult with, and cooperate with other governmental entities to promote the purposes of this **Ordinance**; and
  - E. Follow its own policies regarding permit cancellation and fee refunds.
2. An authorized municipality must:
- A. Have legal authority to:
    - (1) Perform all requirements of an **authorized municipality** under this **Ordinance**; and
    - (2) Adopt this **Ordinance** by reference;

- B. Adopt this **Ordinance**, including all amendments, by reference;
- C. Participate in the regular phase of the **NFIP**;
- D. Have the ability to review and issue **Watershed Management Permits** for **development activities** in **separate sewer areas** listed in §201.1 of this **Ordinance** and within its corporate boundaries in conformance with this **Ordinance**;
- E. Employ or retain by contract, adequate staff for all of the following positions:
  - (1) An **enforcement officer**;
  - (2) **Professional Engineer(s)**; and
  - (3) **Wetland specialist(s)**;
- F. Timely review **Watershed Management Permit** applications and respond within:
  - (1) Fifteen (15) working days of an initial submittal for **projects developments** not involving **flood protection areas**;
  - (2) Thirty (30) working days of an initial submittal for **projects developments** involving **flood protection areas**; and
  - (3) Ten (10) working days of a resubmittal;
- G. Maintain all of the following records;
  - (1) **Watershed Management Permits**;
  - (2) **Record drawings**;
  - (3) **Structure** improvement data;
  - (4) Elevation certificates **for the BFE and lowest floor, published by FEMA**;
  - (5) **Base flood** data and **base flood** maps; and
  - (6) LOMC, LOMR;
- H. Transmit all records specified in §1402.2.G of this **Ordinance** to the **District** upon request;
- I. Issue **Watershed Management Permits** for **development** activities listed in §201.1 of this **Ordinance** within its corporate boundaries in conformance with this **Ordinance**;

**Commented [A2]:** Incorporating definition language and deleting defined term "elevation certificate".

- J. Inspect the construction of all ~~developments-projects~~ which require a **Watershed Management Permit** from the **authorized municipality**;
- K. Ensure inspection of all constructed **volume control practices** occurs on an annual basis;
- L. Notify the **District** promptly for any violation within the **authorized municipality**;
- M. Issue local stop work orders for all **violations**, when appropriate; and
- N. Establish **Watershed Management Permit** fees for **Watershed Management Permits** reviewed and issued by the authorized municipality.

3. An authorized municipality shall not:

- A. Issue **Watershed Management Permits** inconsistent with the provisions of this **Ordinance**;
- B. Issue **Watershed Management Permits** for development activities listed in §201.2 of this **Ordinance** without first receiving approval from the **District**;
- C. Issue **Watershed Management Permits** for ~~development-projects~~ within **combined sewer areas** or **separate sewer areas** that are tributary to **combined sewers**;

D. ~~Issue Watershed Management Permits for projects in which a conflict of interest exists between the Professional Engineer employed by the municipality, per §1402.2.E, and the Professional Engineer that designed the project;~~

~~D-E.~~ Issue **variances**; or

~~E-F.~~ Hear appeals.

**Commented [A3]:** New provision to ensure the engineer reviewing the permit application does not have a conflict of interest with the design engineer.

### § 1403. Procedure for Authorization

- 1. A **municipality** seeking to become an **authorized municipality** shall formally petition the **District** through a letter of intent. The letter of intent shall contain all of the following:
  - A. A statement of intent to adopt this **Ordinance** by reference;
  - B. A legal opinion indicating the **authorized municipality** has legal authority to perform all obligations required by this **Ordinance** including:
    - (1) The regulation of **erosion** and **sediment** control, **stormwater management**, **floodplains**, **isolated wetlands**, and **riparian environments**;

- (2) The ability to conduct inspections;
  - (3) The issuance of **Watershed Management Permits**;
  - (4) The enforcement of this **Ordinance**; and
  - (5) The ability to enter into an intergovernmental agreement with the **District**;
- C. A verified statement of financial capability to perform and adequately fund the obligations of the **authorized municipality**;
  - D. Designation of an **enforcement officer**;
  - E. An implementation plan; and
  - F. Proposed staffing.
- 2. An intergovernmental agreement between a **municipality** and the **District** shall effectuate the status of a **municipality** as an **authorized municipality**. The intergovernmental agreement shall remain effective unless terminated.

#### **§ 1404. District Oversight of Authorized Municipalities**

- 1. The **District** may inspect any ~~project development~~ within an **authorized municipality**.
- 2. The **District** may audit an **authorized municipality** periodically. During an audit, the **District** may:
  - A. Inspect and copy pertinent records kept by an **authorized municipality**;
  - B. Inspect **Watershed Management Permits** issued by an **authorized municipality**;
  - C. Meet with staff of an **authorized municipality**;
  - D. Conduct field inspections of ~~projects developments~~ permitted by an **authorized municipality**;
  - E. Request and copy financial records of the **authorized municipality**;
  - F. Verify that an **authorized municipality** complies with all requirements listed in §1402.2 of this **Ordinance**; and
  - G. Verify that an **authorized municipality** does not violate any provision listed in §1402.3 of this **Ordinance**.

3. The **Director of Engineering** shall promptly notify an **authorized municipality** of any of the following deficiencies:
  - A. Failure to comply with any provision of §2 of this **Ordinance**;
  - B. Violation of any provision of §3 of this **Ordinance**; or
  - C. Breach of the intergovernmental agreement;
4. An **authorized municipality** shall remedy any deficiency listed in §100.3 of this **Ordinance** within thirty (30) calendar days of notice of the deficiency. In cases where a deficiency cannot be remedied within thirty days, the **Director of Engineering** may grant an extension.
5. The **Director of Engineering** may either suspend or terminate a **municipality's** status as an **authorized municipality** if the **municipality** fails to remedy a violation in accordance with §100.4 of this Ordinance. If a **municipality's** status as an **authorized municipality** is either suspended or terminated, the **municipality** may petition the **Director of Engineering** for reauthorization after all deficiencies are remedied.

#### **§ 1405. Representative Capacity**

1. Any action to enforce any provision of this **Ordinance** by an elected official, officer, agent, or employee of the **District** shall be taken in the name of and on behalf of the District and said elected official, officer, agent, or employee shall not be rendered personally liable.
2. Any action to enforce any provision of this **Ordinance** by an elected official, officer, agent, or employee of an **authorized municipality** shall be taken in the name of and on behalf of the **authorized municipality** and said elected official, officer, agent, or employee shall not be rendered personally liable.
3. Any action to enforce any provision of this **Ordinance** by an **authorized municipality** shall be taken in the name of and on behalf of the **authorized municipality** and not in the name of and on behalf of the **District**.



This Ordinance as amended shall be in full force and effect Xxxxx XX, 2019.

Adopted:

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Mariyanna T. Spyropoulos  
President of the Board of Commissioners of the  
Metropolitan Water Reclamation District of  
Greater Chicago

Approved as to form and legality:

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Ellen Avery  
Head Assistant Attorney

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Susan T. Morakalis  
General Counsel

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## APPENDIX A. DEFINITIONS

### Interpretation of Terms and Words

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

1. Verbs and phrases in the present tense shall be presumed to include the future tense;
2. Parts of speech used in the singular shall be presumed to include the plural, and those used in plural shall be presumed to include the singular;
3. The words "shall," "will," and "must" are understood as mandatory, not permissive; ~~and~~
4. All distances shall be measured horizontally unless otherwise stated; ~~and~~
5. A masculine, feminine or neuter pronoun shall not exclude the other genders.

### Definitions

Words and terms not defined herein shall be understood by their common dictionary definition.

Within the context of this **Ordinance**, the following words and terms shall be defined as follows (except where otherwise specifically indicated):

#### 100-Year Flood Elevation

The ~~100-year flood elevation is~~ highest elevation of the BFE or a project-specific 100-year flood elevation.

#### Accessory Structure

A detached, non-habitable **building** without sanitary facilities that ~~is an accessory to an existing a building and that~~ is less than 750 square feet in area. **Accessory structures** include, but are not limited, to, garages and sheds.

**Commented [A1]:** Does not necessarily need to be related to an existing or proposed building.

#### Actual Release Rate

The release rate from the **control structure** of a **detention facility** at the 100-year high water elevation.

**Commented [A2]:** Added per §504.

#### Allowable Release Rate

The maximum or actual postdevelopment release rate from a required **detention facility** as specified in §504.3 of this **Ordinance**, which is adjusted by existing ~~depressional storage and/or unrestricted flow areas on the site.~~

#### Appellant

~~An applicant, permittee, or~~ co-permittee who appeals the **District's** denial and/or imposition of conditions of a **Watershed Management Permit** or of a **variance** request.

**Commented [A3]:** Added for projects that do not include a co-permittee.

#### **Applicant**

The ~~permittee, co-permittee, sole permittee, or their designated Professional Engineer, who~~ submits a **Watershed Management Permit** application.

**Commented [A4]:** New definition to include all permit stakeholders

#### **Appropriate Use**

The only types of ~~development within the regulatory floodway that are eligible for a Watershed Management Permit as specified in §602.27 of this Ordinance.~~

**Commented [A5]:** Defined by IDNR-OWR, and referenced as "approved by IDNR-OWR" in the Ordinance. Definition not required.

#### **Authorized Municipality**

A Cook County municipality authorized by the District to issue **Watershed Management Permits** within its corporate boundaries.

#### **Base Flood**

The **flood** having a one percent probability of being equaled or exceeded in a given year. The **base flood** is also known as the "100-year **flood**."

#### **Basement**

Any area of a **building** having its floor below grade.

#### **Basement Backup**

~~Basement Backup.~~ Discharge of ~~sanitary wastewater sewage~~ into the lower level of a **building** caused by either a blockage or collapse on the service lateral from the **building** to the public sewer system or by surcharging of the public sector sewer system.

**Commented [A6]:** Acronym deleted.

#### **BFE**

**Base Flood Elevation.** The height of the **base flood** in relation to the North American Vertical Datum of 1988 that is associated with the **Special Flood Hazard Area** on the effective **FIRM**. The **BFE** shall be determined by the effective Flood Insurance Study (**FIS**) for a ~~development site project~~ at the time of application as determined by the criteria provided in §601.3 and §601.4 of this **Ordinance**.

#### **Board of Commissioners**

The nine-member Metropolitan Water Reclamation **District** of Greater Chicago's **Board of Commissioners** who are elected by the public.

#### **BSC**

**Biological Stream Characterization.** A program developed by the Illinois Environmental Protection Agency (**IEPA**) in conjunction with biologists from the Illinois Department of Natural Resources (**IDNR**) to aid in the classification of streams throughout the **watersheds** of Illinois. The **BSC** utilizes the Alternative Index of Biotic Integrity (**AIBI**) to classify streams as A, B, C, D, or E. The ratings use fish, macroinvertebrates, crayfish, mussels, and threatened and endangered species information to generate an overall score of biological diversity and integrity in streams.

#### **BSS**

**Biologically Significant Stream.** Streams with a Biological Diversity or Integrity of "A", "B", or "C" according to the latest edition of the "Illinois Department of Natural Resources ~~(NRCS)~~ Office of Resource Conservation: Biological Stream Ratings for Diversity, Integrity, and Significance."

## Building

A **structure** that is ~~constructed and is~~ enclosed by walls and a roof, ~~including manufactured homes~~. This term does not include **accessory structures**.

**Commented [A7]:** Buildings can be either existing or proposed

**Commented [A8]:** All reference to manufactured homes only exists in this Appendix and are proposed for deletion.

## Building Envelope

The delineation between the interior and the exterior environments of a **building** and often depicted as the **building foundation**.

**Commented [A9]:** Causes confusion with plumbing code. Reference building foundation throughout the WMO.

## Bulletin 70

Huff, F.A., and J.R. Angel, 1989. "Rainfall Distributions and Hydroclimatic Characteristics of Heavy Rainstorms in Illinois" (**Bulletin 70**), Illinois State Water Survey.

## CCSMP

~~The Cook County Stormwater Management Plan adopted by the Metropolitan Water Reclamation District of Greater Chicago Board of Commissioners on February 15, 2007, as amended from time to time.~~

**Commented [A10]:** This is only referenced in Article 1, and is explained prior to using the acronym. No need for a definition.

## CLOMA

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

## CLOMR

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

## Circular 173

Huff, Floyd A. "Time Distributions of Heavy Rainstorms in Illinois. Illinois State Water Survey," Champaign, Circular 173, 1990.

**Commented [A11]:** Added per §502 and §504.

## Co-Permittee

A **person** applying for a **Watershed Management Permit**, who must be the **owner** of the land specified in the application, the **owner's** representative, or a developer with the **owner's** authorization. ~~In the event, the co-permittee is a beneficiary of a land trust that owns the land specified in the application, the co-permittee must have power of direction. When the record title holder of the land specified in the application is a land trust, the person with power of direction must be the co-permittee.~~ [Compare **co-permittee** with **permittee** and **sole permittee**].

## Combined Sewer

~~Sewers~~ A sewer intended ~~for the combined conveyance to convey the combined flow~~ of **stormwater runoff** and ~~wastewater flows~~ **sewage**. [Compare **combined sewer** with **sanitary sewer** and **storm sewer**].

## Combined Sewer Area

Areas within the **District's** corporate ~~boundaries-limits~~ that have **combined sewers** intended ~~for the~~

to convey the combined conveyance flow of stormwater runoff and wastewater flows to a District wastewater storage or treatment facility. The expansion of existing or establishment of a new combined sewer area is prohibited. This regulatory limit should be considered the high water mark of combined sewer area service limits, and was established in the past to limit further expansion of areas served by combined sewers. This area does not represent the actual effective boundaries between the combined sewer area and separate sewer areas. Consult the local sewer system atlas information for that level of detail. [Compare combined sewer area with separate sewer area].

Commented [A12]: Consistency with "combined sewer" above.

Commented [A13]: Revise to indicate the moratorium on expansion of CSA.

### Compensatory Storage

An excavated volume of storage used to offset the loss of existing flood storage capacity when fill or structures are placed within the floodplain.

### Compliance Report and Schedule

A report that specifies a schedule and final compliance date for which all violations and conditions contained in a NON-Stormwater and/or a NONC are remedied.

Commented [A14]: This does not exist in the WMO

### Connection Impact Fee

Fee for annexing into the District corporate limits on or after July 9, 1998.

Commented [A15]: Clarification

### Contiguous

Adjacent to and touching at one point or more; if the lands are separated by an easement or a dedicated right-of-way, it shall be considered contiguous.

### Control Structure

The structure (i.e., restrictor) that controls the flow rate out of the detention facility such that the required detention volume is provided.

Commented [A16]: Added per §504

### Cook County

Cook County is defined as the land area within the boundaries of Cook County, Illinois.

### Corps

United States Army Corps of Engineers.

### Corps Jurisdictional Determination

Procedure by which the Corps determines whether it has jurisdiction over a subject water as a waters of the United States. The purpose of a jurisdictional determination is to determine whether a wetland is a Corps jurisdictional wetland. For the purposes of this Ordinance, a wetland not under the jurisdiction of the Corps shall be considered an isolated wetland.

Commented [A17]: This is indicated in Article 3

### Corps Jurisdictional Wetlands

Any wetlands that are under the jurisdiction of the Corps.

### Corps Wetland Delineation Manual

The current Corps Wetland Delineation Manual, including any relevant regional supplements, or superseded and as authorized under Section 404 of the Clean Water Act.

### Critical Duration Analysis

~~Study~~ A study that determines which storm event duration (1-, 2-, 3-, 6-, 12-, 24-, or 48-hour) results in the greatest peak runoff rate.

### Dam

Any obstruction, wall embankment, or barrier, including the related abutments and appurtenant works, that is constructed to store, direct, or impound water. An underground water storage tank is not classified as a dam.

**Commented [A18]:** Only used in two locations in WMO and is not outside of common use, so no definition required.

### Demolition

Removal of structures, impervious area, or utilities that return land parcel to a natural or vacant state. ~~Demolition must not affect the volume, flow rate, drainage pattern, or composition of stormwater.~~ Demolition activities that change the use of the site land, involves berms, landscaping, or grading for future development, or requires any fill within a flood protection area are considered development. [Compare demolition with maintenance, maintenance activities, and development.]

**Commented [A19]:** Language was taken from "development" and should not be part of the definition. Clarification to be made in the TGM.

### Depressional Storage

The volume potentially contained within an above-ground area without a traditional outlet that drains by evaporation and/or infiltration, or when the water surface exceeds the below a highest closed-contour elevation on a one-foot contour topographic map, with the upper elevation determined by the invert of a surface gravity outlet.

**Commented [A20]:** Stylistic

### Design Runoff Rate

The runoff rate, or flow rates, used to design a major stormwater systems and to determine offsite flow rates. Design runoff rates are calculated by using an event hydrograph methods and a critical duration analysis.

### Detention Facility

A manmade-proposed structure providing temporary storage of stormwater runoff from a development with a release rate specified by to meet the requirements of this Ordinance. The Detention Facility includes a the stormwater storage basin facility, control structure (or restrictor), and the basin outlet, control structure (i.e., restrictor), and the emergency overflow and inflow pipes.

### Detention Service Area

All areas accounted for when calculating the gross allowable release rate. This term shall include tributary areas and unrestricted areas considered in the design of a detention facility.

**Commented [A21]:** New definition to ensure unrestricted areas are accounted for in redevelopment calculations for detention.

### Development

Any human-induced activity or change to real estate (including, but not limited to, grading, paving, excavation, dredging, fill, or mining; alteration, subdivision, change in land use or practice; building; or storage of equipment or materials) undertaken by private or public entities that affects the volume, flow rate, drainage pattern or composition of stormwater, or the substantial improvement of an existing building in a Special Flood Hazard Area. The term development shall include redevelopment and shall be understood to not include maintenance, maintenance activities, or

**Commented [A22]:** Dredging is considered a maintenance activity, which is not considered development.

**Commented [A23]:** Per §201.1.C Comment  
A permit is required to determine if any construction to a residential building is in the floodplain by elevation (not FEMA FIRM). Recommended by Technical Advisory Committee Floodplain Sub-Group to protect residential buildings without being inconsistent with NFIP

demolition. [Compare development with maintenance, maintenance activities, and demolition.]

#### Director of Engineering

The **Director of Engineering** of the Metropolitan Water Reclamation District of Greater Chicago, ~~and/or~~ his or her designee.

#### District

Metropolitan Water Reclamation **District** of Greater Chicago. ~~A special purpose district established by the State of Illinois to, among other things, manage wastewater for an area largely corresponding to Cook County, and stormwater in Cook County. The District is an independent unit of local government with an elected nine member Board of Commissioners.~~

**Commented [A24]:** This description is included in the defined term "Board of Commissioners"

#### Disturbed Area

~~Actual land surface area disrupted by construction activity.~~

**Commented [A25]:** Definition update: Merged with **project**

#### Drainage Area

~~The land area tributary to a given point that contributes runoff from rainfall and/or snowmelt.~~

**Commented [A26]:** Same as "Tributary Area"

#### DWP

Detailed **Watershed Plans**. A study and evaluation by the **District** to assess the specific conditions and needs for each of the following **watersheds**: Calumet-Sag Channel, the Little Calumet River, the Lower Des Plaines River, the North Branch Chicago River, Poplar Creek, and the Upper Salt Creek.

#### Elevation Certificates

~~A form published by FEMA that is used to certify the BFE and the lowest elevation of a building's lowest floor.~~

**Commented [A27]:** Only used in §1402.2.G. Definition language incorporated and definition not required.

#### Enforcement Officer

A municipal official having actual authority from an **authorized municipality** to administer this **Ordinance** and issue **Watershed Management Permits**.

#### Erosion

The process of soil particle detachment from the land surface by the forces of wind, water, or gravity.

#### Erosion and Sediment Control Practice

~~A temporary or permanent measure that stabilizes soil by covering and/or binding soil particles in order to prevent soil particles from becoming detached by the forces of wind, water, or gravity and intercepts sediment in runoff.~~

**Commented [A28]:** Redundant - combined definition of Erosion Control Practice and Sediment Control Practice.

#### Erosion Control Practice

A temporary or permanent measure that stabilizes soil by covering and/or binding soil particles in order to prevent ~~erosion~~ soil particles from becoming detached by the forces of wind, water, or gravity.

**Commented [A29]:** Definition of erosion

#### Executive Director

The **Executive Director** of the Metropolitan Water Reclamation District of Greater Chicago.



#### **Existing Detention Facility**

A ~~detention~~ **detention facility** ~~either previously permitted under a Watershed Management Permit, or a Sewerage System Permit, the Sewer Permit Ordinance or a locally-required facility that is has been constructed prior to submitting a new Watershed Management Permit application as of the effective date of this Ordinance.~~

**Commented [A30]:** Possible alteration this definition is required to allow for local detention since 2014 be applied for WMO detention. This depends on §505 language.

#### **Existing Development Plans List**

A list of proposed ~~development~~ projects submitted by a ~~municipality to the District~~ for which the ~~municipality~~ has granted formal preliminary approval.

**Commented [A31]:** All reference to the EDPL has been removed, as it expired May 1, 2015.

#### **Existing Manufactured Home Park or Subdivision**

A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the ~~manufactured homes~~ are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of this **Ordinance**.

**Commented [A32]:** This definition does not appear in the WMO, except for in the following definition, which also does not appear in the WMO.

#### **Expansion to an Existing Manufactured Home Park or Subdivision**

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

**Commented [A33]:** This definition does not appear in the WMO.

#### **Facility Connection Authorization**

Within the City of Chicago, an authorization for ~~a planned~~ connection to ~~a District~~ owned, operated, and maintained facility ~~ies located within the City of Chicago~~, and for impacts to ~~District~~ owned or leased property. ~~Examples of District-owned facilities may include (but are not limited to): District interceptor, TARP structure or District tunnel, District Lift Station or force main, District reservoir, a new or reconstructed outfall to a Chicago Area Waterway within the City of Chicago, new or reconstructed outfall to Lake Michigan from property located within the City of Chicago.~~ Formerly known as a Sewer Connection Authorization under the Sewer Permit Ordinance.

**Commented [A34]:** This information is in Article 2 and the TGM.

~~Refer to §702 of this Ordinance for more information.~~

**Commented [A35]:** Reference no longer exists after reorganization of Article 7.

#### **Farmed Wetland**

A **wetland** that is currently farmed ~~currently~~ or has been farmed within five (5) years ~~previous prior~~ to ~~the submitting a new Watershed Management Permit permit~~ application ~~date~~.

#### **FEMA**

**Federal Emergency Management Agency.** The federal agency whose primary mission is to reduce the loss of life and property and protect the nation from all hazards (including natural disasters, acts of terrorism, and other man-made disasters) by leading and supporting the nation in a risk-based, comprehensive emergency management system of preparedness, protection, response, recovery, and mitigation.

#### **FIRM**

**Flood Insurance Rate Map.** The current version of a map issued by **FEMA** that is an official community map on which **FEMA** has delineated both the special hazard areas and the risk premium zones applicable to a community together with any amendments, additions, revisions, or

substitutions issued by **FEMA** at any time.

#### **FIS**

**Flood Insurance Study**. The current version of a study of **flood** discharges and **flood** profiles for a community adopted and published by **FEMA**, together with any amendments, additions, revisions or substitutions issued by **FEMA** at any time. The **FIS** also includes its associated **FIRMs**.

#### **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 Control Project**

~~1) A development~~ undertaken by either the **District** or a **municipality** to reduce the frequency and magnitude of **flood** events, including, but not limited to, reservoirs, floodwalls, levees, and channel conveyance improvements and excluding **detention facilities**; or ~~2) a development~~ undertaken by a public utility, as defined in the Illinois Public Utilities Act, that the **District** determines is necessary to protect critical utility infrastructure from **flood** events and that the **District** determines is consistent with the purposes of this **Ordinance**, as set forth in §103.

#### **Flood Protection Areas**

**Regulatory floodplains**, **regulatory floodways**, **riparian environments**, **wetlands**, and **wetland buffers**.

#### **Floodplain**

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

#### **Floodproof or Floodproofing**

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

#### **Floodway**

The channel and portion of the **floodplain** adjacent to a stream or watercourse that is needed to convey the **base flood** without cumulatively increasing the water surface elevation more than a tenth of a foot.

#### **Floodway Conveyance**

The ~~measure of the~~ flow carrying capacity of the **floodway section** and is defined using Manning's equation as:

$$K = \frac{1.486}{n} AR^{2/3}, K = (1.49/n) AR^{2/3} \text{ where: } n \text{ is Manning's roughness factor; } A \text{ is the effective area of the floodway cross-section; and } R \text{ is ratio of the wetted area to the wetted perimeter.}$$

Commented [A36]: Stylistic change.

#### **Flow-Through Practices**

Permanent **volume control practices** designed to treat **stormwater runoff** from **the impervious areas** of a **development** after permanent stabilization is achieved. **Flow-through practices include**,

but are not limited to: vegetated filter strips, bio-swales, constructed wetlands, catch basin inserts, and oil and grit separators.

**Commented [A37]:** Added from WMO §503.

#### FPE

**Flood Protection Elevation.** The highest **100-year flood elevation** plus two foot of freeboard, as determined in §601.9 of this **Ordinance**.

#### General Counsel

The **General Counsel** of the Metropolitan Water Reclamation **District** of Greater Chicago.

#### Green Infrastructure

~~A Practices aimed designed~~ to mimic functions of the hydrologic cycle, including infiltration, interception, ~~depression storage~~, evapotranspiration, and evaporation. ~~[Compare green infrastructure with volume control practice.]~~

**Commented [A38]:** This is related to detention, not green infrastructure or volume control.

#### Gross Allowable Release Rate

~~The maximum allowable release rate from a detention facility without adjustments due to existing depressional storage and/or unrestricted flow.~~

**Commented [A39]:** Added per §504.

#### Groundwater

Subsurface water occupying the saturation zone, ~~from which wells and springs are fed. Water found~~ below the normal water table.

**Commented [A40]:** Isn't necessarily only used for wells or springs.

#### High Quality Isolated Wetland

**Isolated wetlands** that are of the highest value due to their uniqueness, scarcity, function, and/or value as determined by §603.9 of this **Ordinance**.

#### Highest Adjacent Grade

The highest natural elevation of the ground surface next to the proposed walls of a **building** prior to construction.

#### ~~Hydraulically Equivalent Compensatory Storage~~

~~Compensatory storage~~ that can be shown by hydrologic and hydraulic analysis to offset the increase in flood elevations due to development.

**Commented [A41]:** Only used in §602.16.B. Redundant with Compensatory Storage in the referenced section.

#### ~~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.~~

**Commented [A42]:** This definition is not specific to WMO, nor is "Hydraulics", and does not require a separate definition under the WMO.

#### IDOT

**Illinois Department of Transportation.**

#### IEPA

**Illinois Environmental Protection Agency.**

#### IPCB

**Illinois Pollution Control Board.**

~~A quasi-legislative and quasi-judicial body created under the Illinois Environmental Protection Act. The Illinois Pollution Control Board adopts environmental regulations and hears contested cases.~~

**Commented [A43]:** Revised to be consistent with other agencies above.

#### **Illinois Recommended Standards for Sewage Works**

~~The Illinois Recommended Standards for Sewage Works as included in the Illinois Administrative Code, 35 Ill. Adm. Code 370.~~

**Commented [A44]:** Definition language incorporated into Article 7 reference.

#### **Illinois Urban Manual**

~~The~~ This manual contains design guidance ~~for a development site to meet this Ordinance's~~ performance standards for **erosion** and **sediment** control ~~to meet the requirements of this Ordinance. The Illinois Urban Manual is published by the Association of Illinois Soil and Water Conservation Districts.~~

#### **Impervious Area**

~~A~~ Surfaces that do not readily allow for the penetration-infiltration of stormwater runoff rain into the ground. Impervious areas ~~and~~ include, but are not limited to, rooftops, asphalt or concrete paved areas, compacted and graveled areas, and ponded water at its normal water level. Volume control practices, green infrastructure, or other Areas that are designed to promote the infiltration of rainfall into the ground at rates at or above the infiltration rate of naturally vegetated areas (given applicable soil types) which include, but are not limited to, such as non-compacted gravel areas, porous/permeable pavement areas, and bio-retention areas (rain gardens and bio-swales, composed of an engineered soil mix) that are designed to promote infiltration of stormwater runoff into the ground shall not be considered an impervious area.

#### **Indirect Wetland Impact**

A **development** activity that causes the **wetland** hydrology to fall below eighty percent (80%), or exceed one-hundred fifty percent (150%), of the existing condition **storm event runoff** volume to the **wetland** for the 2-year, 24-hour **storm event**.

#### **Industrial Waste**

~~The~~ Solids, liquid, or gaseous wastes resulting from any commercial, industrial, manufacturing, agricultural, trade or business operation or process or from the development, recovery or processing of natural resources.

**Commented [A45]:** Now consistent with the Sewage and Waste Control Ordinance

#### **Isolated Waters**

All waters including lakes, ponds, streams, intermittent streams, and ephemeral pools that are not under the **Corps** jurisdiction. The limits of the **Isolated Waters** in **Cook County** extend to the **OHWM**.

#### **Isolated Wetland**

All **wetlands** that are not under the jurisdiction of the **Corps**.

#### **Isolated Wetland Buffer**

~~The vegetated area adjacent to isolated wetlands left open for the purpose of eliminating or minimizing adverse impacts to such areas.~~

**Commented [A46]:** Redundant with "Wetland Buffer"

#### **Isolated Wetland Submittal**

~~Submittal required under §305 of this Ordinance.~~

**Commented [A47]:** Other submittals are not defined

#### **Jurisdictional Waters of the U.S.**

All waters including lakes, ponds, streams, intermittent streams, and ephemeral pools that are under the jurisdiction of the **Corps**.

#### **Jurisdictional Wetlands**

~~All wetlands that are under the jurisdiction of the Corps.~~

**Commented [A48]:** Redundant with "Corps Jurisdictional Wetland"

#### **Lake**

~~A natural or artificial body of water encompassing a surface area of two or more acres that retains water throughout the year.~~

**Commented [A49]:** Other water body types are not defined.

#### **LOMA**

Letter of Map Amendment. The official determination by **FEMA** that a specific **structure** or parcel of land is not in a **regulatory floodplain**. A **LOMA** amends the effective **FIRM**.

#### **LOMC**

Letter of Map Change. A letter from **FEMA** which reflects an official revision to an effective **NFIP** map. **LOMCs** are issued in place of the physical revision and republication of the effective map.

#### **LOMR**

Letter of Map Revision. A letter from **FEMA** that revises **BFEs**, **flood** insurance rate zones, **flood** boundaries, or the regulatory floodway as shown on an effective **FIRM**.

#### **LOMR-F**

Letter of Map Revision Based on Fill. A letter from **FEMA** which officially revises an effective **NFIP** map. A **LOMR-F** provides **FEMA's** determination concerning whether a **structure** or parcel has been elevated by or fill above the **BFE** and excluded from the **Special Flood Hazard Area**.

#### **Long Term O&M Program**

Long Term Operation and Maintenance Program. An ongoing program that a **satellite entity** develops and implements to reduce **SSOs** and ~~**BBs**~~ **basement backups** including, but not limited to, removing I/I sources, addressing deficiencies in ~~its~~ their sewer system, maintaining system capacity, and preventing catastrophic system failures.

#### **Lowest Entry Elevation**

The elevation at which water can enter a **building** through any non-water tight opening such as a doorway threshold, windowsill, or **basement** window well.

#### **Lowest Floor**

The ~~lowest~~ floor of the lowest enclosed area, ~~(including the basement).~~ An unfinished or **flood** resistant enclosure, used solely for parking of vehicles, **building** access, or storage in an area other than a **basement** area is not considered the lowest floor of a building's lowest floor; provided, that ~~such~~ the enclosure is not built ~~so as~~ to render the **structure** in violation of the applicable

**Commented [A50]:** The defined word should not be used to define itself.

non-elevation design requirement of the Code of Federal Regulations (44 CFR 60.3).

#### Maintenance

The action required to preserve the original function and prevent failure of systems, which include, but are not limited to, ~~sewage sewer~~ systems, ~~major stormwater systems, volume control practices, detention facilities, compensatory storage facilities,~~ constructed ~~wetlands, riparian environments, or other stormwater facilities-green infrastructure.~~ [Compare maintenance with maintenance activities, development, and demolition.]

**Commented [A51]:** Expand this list for clarity.

#### Maintenance Activities

~~In-~~kind replacement, restoration, or repair of existing infrastructure, pavement, or facilities including, but not limited to, roadways and parking lots, ~~provided such that~~ they will perform the same functions for which they were originally designed and constructed. [Compare maintenance activities with maintenance, development, and demolition.]

#### Major Stormwater System

The ~~entire portion of a~~ stormwater system ~~designed~~ needed to store and/or convey flows for the 100-year ~~critical duration~~ storm event.

#### Manual of Procedures

The District's Manual of Procedures for the Administration of the Sewer Permit Ordinance as amended November 5, 1988.

#### Manufactured Home

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

**Commented [A52]:** This definition does not appear in the WMO, except for in the definitions, most of which are proposed for deletion.

#### Manufactured Home Park or Subdivision

A parcel or contiguous parcels of land divided into two or more **manufactured home lots**.

**Commented [A53]:** This definition does not appear in the WMO, except for in the definitions, most of which are proposed for deletion.

#### Material Change/Revision

Any deviation from the approved ~~plans or specifications accompanying an application for which a Watershed Management Permit,~~ including, but not limited to, plans, calculations, specifications, or the applicant, has been issued under this Ordinance, that would affect the runoff, capacity, flow, or operation of sewerage and/or major stormwater systems constructed under said Watershed Management Permit.

**Commented [A54]:** Not actually used in the WMO. Modify to "material revision" to satisfy §305.3. Incorporated into Article 3 TGM.

**Commented [A55]:** Revisions are not limited to this list of affected aspect of the Watershed Management Permit.

#### Minor Stormwater System

~~All~~ infrastructure including curb, gutter, culverts, roadside ditches and swales, storm sewers, tiles, subsurface drainage systems, and other practices intended to ~~convey or capture~~ and convey stormwater runoff from storm events less than a ~~the~~ 100-year storm event.

#### Multi-County Municipality

A municipality containing corporate area within both Cook County and an Illinois county located contiguously adjacent to Cook County.

### Multi-Family Residential

Residential ~~parcel projects~~ where any **building** contains three (3) or more dwelling units ~~or more on~~ within the property interest. [Compare multi-family residential with residential subdivision.]

### Municipality

A local government, including a city, village, town, or Cook County. The term shall not ~~be understood to~~ include a township, school district, park district, or sanitary district.

### Native Planting Conservation Area

Area planted with ~~native~~ deep-rooted vegetation, as approved by the **District**, and maintained in perpetuity ~~to address unrestricted flow areas of a development site~~.

### New Construction

~~For the purpose 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 the purpose of floodplain management, new construction means structures for which the start of construction commenced on or after the effective date of the floodplain management regulation adopted by a community and includes any subsequent improvements to such structures.~~

**Commented [A56]:** These areas do not need to be limited to just unrestricted flow areas. They should be encouraged throughout projects.

**Commented [A57]:** This definition does not appear in the WMO.

### Net Allowable Release Rate

The maximum allowable release rate from a **detention facility** that is adjusted due to **depressional storage and/or unrestricted flow**.

**Commented [A58]:** Added per §504

### New Impervious Area

~~Impervious areas that result from development or redevelopment including new structures or buildings associated with development, new impervious surfaces, and impervious surfaces that are being replaced as part of redevelopment.~~

**Commented [A59]:** Only used in conjunction with ROW (Article 5, Table 2). Redundant with "Impervious Area".

### New Manufactured Home Park or Subdivision

~~A manufactured home park or subdivision 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 this Ordinance.~~

**Commented [A60]:** This definition does not appear in the WMO.

### NFIP

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

### NONC

Notice of Non-Compliance. Notice issued to a **satellite entity** by the **District** for an apparent infraction of the Infiltration/Inflow Control Program described in Article 8 of this **Ordinance**.

### Non-Residential

Land uses other than **residential subdivisions, multi-family residential, right-of-way, or open space**. **Non-residential** land uses ~~may~~ include, but ~~is are~~ not limited to, commercial land use and industrial

land use.

#### Non-Qualified Development

**Development** that incorporates in-kind replacement with **green infrastructure**, naturalized **compensatory storage areas**, **native planting conservation areas**, or incidental disturbances to an **existing detention facility** to restore or provide additional detention volume. **Redevelopment** **Non-qualified development** may be ~~area~~ excluded from the **gross allowable release rate** calculation specified in §504.3 and **detention facility** volume calculation specified in §504.7 **and §505.1** of this Ordinance.

**Commented [A61]:** Added per TAC discussion and to be consistent with Article 5.

#### ~~Non-Qualified Sewer Construction~~

~~Nonqualifying sewer construction is defined in §701.2 of this Ordinance.~~

**Commented [A62]:** Definition points to the term being defined elsewhere, therefore, not actually needed as a definition.

#### NOV

Notice ~~of~~ **Violation**. Notice given to a **permittee**, **co-permittee**, and/or any other **person** responsible for an apparent violation of this **Ordinance**.

#### NPDES

~~The~~ **N**ational **P**ollutant **D**ischarge **E**limination **S**ystem.

#### NRCS

The United States Department of Agriculture **N**atural **R**esources **C**onservation **S**ervice.

#### NWI

**N**ational **W**etland **I**nventory. The **wetland** mapping program created by the U.S. Fish and Wildlife Service to provide information on the characteristics, extent, and status of the nation's **wetlands**, deepwater habitats, and other wildlife habitats.

#### Offsite Detention Facility

A manmade **structure** providing temporary storage of **stormwater runoff** intended to mitigate hydrologic impacts of **development** ~~that is not directly tributary to the facility and located~~ elsewhere in the **watershed planning area**.

**Commented [A63]:** Clarification added. These are not regional detention facilities.

#### Offsite ~~Volume Control~~Retention-Based Practices

~~A~~ **P**ermanent practices designed to capture, retain, and infiltrate **stormwater runoff** from **an** **impervious areas** ~~of a development~~ located elsewhere in the **subwatershed planning area**.

**Commented [A64]:** The volume control storage requirement can only be met with retention-based practices, not flow-through practices.

**Commented [A65]:** The impervious area being captured by an offsite "bank", not due to development. If impervious area was result of development, it could potentially be double-counted, which is inconsistent with Article 5.

**Commented [A66]:** To be consistent with Appendix B and E

#### OHWM

**Ordinary High Water Mark**. The point on a bank or shore at which the presence and movement of surface waters is continuous, leaving a distinctive mark. The mark may be caused by **erosion**, destruction or prevention of terrestrial vegetation, a predominance of hydrophytic vegetation, or other recognized factors.

#### Open Space

Pervious land to be retained as pervious land which is not part of a larger **development**. **Open space** may **also** include sidewalk, bike path, nature or walking trail **development** less than or equal to fourteen feet in width. *[Compare open space with right-of-way.]*



## Ordinance

This Watershed Management Ordinance (WMO).

### Other Wastes

All decayed wood, sawdust, shavings, bark, lime, refuse, ashes, garbage, offal, oil, tar, chemicals, and all other substances except sewage and industrial wastes.

**Commented [A67]:** Circular reference with "sewage" and not used in the WMO.

## Outfall

The end point of any **storm**, **sanitary**, or **combined sewer**, providing a point source discharge into a defined **waterway**, or Lake Michigan. **Outfalls** do not include culverts or open conveyances systems connecting two segments of a **waterway**, or ~~Outfalls do not include~~ private **single-family home** drains.

## Owner

The record title holder or a beneficiary of a land trust which is the record title holder, and includes singular and plural; if When the **owner** is other than an individual, the term includes beneficiaries, agents, shareholders, officers, and directors.

**Commented [A68]:** Already stated in "Interpretation of Terms and Words."

### Ownership

~~The holding of record title or any beneficial interest.~~

**Commented [A69]:** Combine with "Interest" and revise to "Property Interest"

## OWR

~~The~~ Illinois Department of Natural Resources Office of Water Resources.

### Parcel

~~Contiguous land area under single ownership or control, under an affidavit of ownership, or under a single legal description on record with the Cook County Recorder of Deeds Office.~~

**Commented [A70]:** Definition update: Removed and replaced with "Property Interest."

## Permittee

Any **municipality**, municipal corporation, sanitary district, utility company, township government, or any other governmental body required to jointly sign a **Watershed Management Permit** application. The permittee is the municipality where the development is located and/or the receiving sewer system owner(s) that conveys flow from the qualified sewer to the District water reclamation facility. [Compare permittee with **co-permittee** and **sole permittee**].

**Commented [A71]:** Clarification.

## Person

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

## 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,~~

**Commented [A72]:** This definition does not appear in the WMO.

skills, ability, and professional judgment developed through professional engineering education, training, and experience.

#### Professional Land Surveyor

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

#### Project

Any human-induced activity, including **development, redevelopment, demolition, maintenance activities, and qualified sewer construction.**

**Commented [A73]:** New definition covers old disturbed area and is meant to refer to any construction activity subject to the WMO.

#### Property Interest

~~The property interest or~~ **Contiguous land owned or** contractual interest, legal or equitable, directly or indirectly, in part or in full, and includes options to buy. In the case of a shareholder interest, the shareholder shall be deemed to have **a property interest** if he owns or controls 5% or more of the shares.

**Commented [A74]:** Combine with "Ownership" and revise to "Property Interest"

#### PSP

**Private Sector Program.** An ongoing program that a **satellite entity** develops and implements to identify and remove I/I from privately owned sources.

#### Public Flood Easement

An easement acceptable to the appropriate jurisdictional body that meets the regulation of the **OWR, the District, and the municipality,** that provides legal assurances that all areas subject to **flooding** in the created backwater of the **development** will remain open to allow **flooding.**

#### Qualified Sewer ~~Construction~~

All **new and replacement** public and private ~~new~~ sewers and ~~new~~ sewer connections, exterior to a **building envelope foundation, including sewer repair and sewer replacement.** See §701 of this Ordinance for a complete list.

#### ~~Recommended Standards for Wastewater Facilities~~

~~The current edition of the Recommended Standards for Wastewater Facilities, also known as the Ten States Standards, as published by the Great Lakes—Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers.~~

**Commented [A75]:** Definition language incorporated into Article 7 reference.

#### Record Drawings

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

#### Redevelopment

Any human-induced activity or change to an existing developed property (including but not limited to, grading, paving, excavation, dredging, fill, or mining; alteration, subdivision, change in land use or practice; **building;** or storage of equipment or materials) undertaken by private or public entities that affects the volume, flow rate, drainage pattern, or composition of ~~the~~

~~site~~ **stormwater runoff** on the previously developed land. The term shall not be understood to include **maintenance**.

#### Regulatory Floodplain

The **floodplain** as determined by the **BFE** used as the basis for regulation in this **Ordinance**.

#### Regulatory Floodway

**Floodway** under the jurisdiction of the Illinois Department of Natural Resources (17 Ill. Adm. Code 1700.30), which consists of portions of the **floodplain** depicted as **floodway** on maps recognized by **OWR**.

#### Required Detention Volume

The volume required to be provided within a **detention facility** to store the 100-year **storm event** with a 24-hour duration at the **actual release rate**.

Commented [A76]: Added per §504

#### Residential Subdivision

Residential ~~parcel~~ **property** that is planned to be subdivided for **development**, and where each sub-parcel contains a **building** with less than three (3) dwelling units. [Compare **residential subdivision** with **multi-family residential** and **single-family home**].

#### Respondent

**Permittee**, **co-permittee**, and/or any other **person** responsible for an apparent violation of this **Ordinance**.

#### Retention-Based Practices

Permanent **volume control practices** designed to capture, retain, infiltrate, and treat ~~or reuse~~ **stormwater runoff** from ~~the~~ **impervious areas** of a **development** after permanent stabilization is achieved. **Retention-based practices** include, but are not limited to: infiltration trenches, infiltration basins, porous pavement, bio-retention systems, dry wells, open channel practices fitted with check dams, retention storage below the outlet of a **detention facility**, and constructed **wetlands** that have quantifiable storage.

Commented [A77]: Water re-use is an acceptable retention practice.

Commented [A78]: Added from WMO §503.

#### Right-of-Way

~~Public right-of-way~~ Land that is dedicated ~~for public access~~ as of the effective date of this **Ordinance** including ~~features such as~~ roads and sidewalks. [Compare **right-of-way** with **open space**.]

Commented [A79]: The defined word should not be used to define itself.

#### Riparian Environment

The vegetated area between aquatic and **upland** ecosystems adjacent to a **waterway** or body of water that provides **flood** management, habitat, and water quality enhancement or other amenities dependent upon the proximity to water.

#### Runoff

The water from ~~melting snow and/or precipitation falling rainfall and/or snowmelt within a~~

~~watershed drainage area~~ that exceeds the infiltration capacity of the ~~soil of that basin land~~.

**Commented [A80]:** Revised to remove reference to "watershed" since all runoff occurs in a watershed.

### Sanitary Sewer

Sewers intended ~~for the to~~ convey~~ance of wastewater~~ sewage. [Compare sanitary sewer with storm sewer and combined sewer].

### Satellite Entity

Any **municipality**, municipal corporation, township government or other governmental body, sanitary district, or utility company that owns and/or operates a public **sanitary sewer** system, including any successors or assigns of those entities, that discharges directly and/or indirectly into the District's water reclamation facilities.

### Sediment

The suspended soil particles that are transported after **erosion** has occurred.

### Sedimentation

The process when the velocity of wind or water is slowed sufficiently to allow ~~the~~ suspended soil particles to settle.

### ~~Sediment Basin~~

~~A structure or area that allows for the sedimentation of stormwater runoff.~~

**Commented [A81]:** This is just one example for a Sediment Control Practice and does not need to be defined.

### Sediment Control Practice

A ~~structure system or method~~ that is designed to intercept **sediment** ~~in that is transported by~~ runoff.

### Separate Sewer Area

An area where **stormwater runoff** is intended to be collected and conveyed in a separate **storm sewer**, pipe, and/or ditch system ~~to a point of discharges into~~ a receiving natural or man-made **waterway** or other **stormwater facility**. ~~This regulatory limit was established in the past to limit further expansion of areas served by combined sewers.~~ This area does not represent the actual effective boundaries between the combined sewer area and separate sewer areas. Consult local sewer system atlas information for that level of detail. [Compare separate sewer area with combined sewer area].

### Service Sewer

A sewer ~~pipe~~ constructed on private property, except for street crossing, that receives flow from a single **building** and connects to a sewer main or lateral.

### Sewage

The water-carried human wastes or a combination of water-carried waters from residences, business **buildings**, institutions and industrial establishments, together with such ground, surface, storm or other wastes as may be present.

### ~~Sewage and Waste Control Ordinance~~

~~The District's current Sewage and Waste Control Ordinance.~~

**Commented [A82]:** We do not define IWD's User Charge Ordinance. Only used in §702.2, and defined there.

## Sewer Permit Ordinance

The District's Sewer Permit Ordinance as amended in July of 1999.

### Sewer System Owner

~~The municipality, township, or sanitary district that owns and/or is responsible for the maintenance and operation of a sewer system. The sewer system owner is a permittee for a Watershed Management Permit that includes qualified sewer.~~

Commented [A83]: Added per Article 8

### Sewerage System Permit

A permit ~~required~~ under the District's Sewer Permit Ordinance.

### Silt Fence

~~A temporary sediment control barrier consisting of entrenched geotextile filtering fabric attached to supporting posts that is designed to prevent sediment-laden runoff from leaving a site. The application of a silt fence is limited to containment of sheet flow runoff from small drainage areas.~~

Commented [A84]: This is just one example for a Sediment Control Practice and does not need to be defined.

### Single-Family Home

Residential ~~property parcel~~ containing less than three (3) dwelling units. **Single-family home** parcels subdivided after the effective date of this Ordinance are considered as **residential subdivision**. [Compare single family home with residential subdivision and multi-family residential].

### Site

~~Parcel or parcels associated with a development or redevelopment.~~

Commented [A85]: Definition update: No longer used as defined in WMO. Compare to "Property Interest" and "Project"

### Site Constraint

Condition ~~on~~ of a site that limits the use of **retention-based practices**, such as contaminated soils, high **groundwater**, **wetlands**, **riparian environments**, or **floodway**. New **development** that is considered a **site constraint** includes, but is not limited to, gas stations, chemical storage facilities, and conservation areas. Poor soils and proposed utility conflicts are not considered **site constraints**.

### Sole Permittee

~~An applicant-co-permittee~~ applying for a **Watershed Management Permit** without a **permittee**. A **sole permittee** is solely and completely responsible for the perpetual operation and **maintenance** of all site infrastructure, including the **sanitary sewer systems**, as approved under the **Watershed Management Permit**. See §300.3.B of this Ordinance for a complete list requirements. [Compare sole permittee with permittee and co-permittee].

### Special Flood Hazard Area

An area having special **flood**, **mudslide**, **mudflow**, or **flood-related erosion** hazards and which is identified on a **FIRM** as Zone A, AO, A1-30, AE, A99, AH, VO, V1-30, VE, V, M, or E.

### SSA

**Sewer Summit Agreement** provides guidelines for achieving final compliance with sewer rehabilitation requirements acceptable to **IEPA**, **USEPA**, municipal conferences and the **District**. The goals of the **SSA** are to prevent water pollution and eliminate **BBS-basement backups** and adverse surcharging conditions that cause health hazards and financial losses.

## SSO

**Sanitary Sewer Overflow.** Any release or diversion of untreated ~~sanitary wastewatersewage~~ from the **sanitary sewer** system to a surface water, **storm sewer**, or storm ditch, or the ground ~~due to circumstances including but not limited to rain, snow melt, power outage, collapsed sewers, equipment failure, widespread flooding and/or pumping.~~

## Stabilization or Stabilized

Establishment of vegetative cover, riprap, or other means that minimizes ~~erosion on disturbed areas.~~

**Commented [A86]:** Not used outside of dictionary definition.

## Standard Isolated Wetland

All **isolated wetlands** other than **high quality isolated wetlands**.

## Standard Specifications for Water & Sewer Construction in Illinois

The current edition of the Standard Specifications for Water & Sewer Construction in Illinois published by the Illinois Society of Professional Engineers.

**Commented [A87]:** Definition language incorporated into Article 7 reference.

## Start of Construction

The date the ~~building or development~~ permit was issued, provided the actual **start of construction**, repair, reconstruction, rehabilitation, addition placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a **structure** on a **site**, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a **manufactured home** on a foundation. 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**.

**Commented [A88]:** This definition does not appear in the WMO.

## Storm Event

The frequency rainfall event as published in **Bulletin 70**.

## Storm Sewer

A sewer intended ~~for the~~ conveyance of only **stormwater runoff**. [Compare **storm sewer** with **combined sewer** and **sanitary sewer**].

## Stormwater

Precipitation that falls to the ground that does not naturally infiltrate into the subsurface soil.

## Stormwater Facility

**Structures** and measures both natural and artificial which serve as a means of draining surface and subsurface water from land including, but not limited to, ditches, channels, conduits, bridges, culverts, levees, ponds, natural and man-made impoundments, **wetlands**, **wetland buffers**, **riparian environment**, tile, swales, **storm sewers**, and **waterways**.

## Structure

A **structure** is anything that is erected or constructed on or below ground including, but not limited to, **buildings**, manufactured homes, **accessory structures**, fences, sheds, tanks, dams, sewers,

manholes, drop shafts, constructed channels, **outfalls**, parking lots, driveways, roads, sidewalks, and concrete patios.

#### **Substantial Damage**

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

**Commented [A89]:** Only used in definition of Substantial Improvement, which is determined by the local NFIP regulator

#### **Substantial Improvement**

~~Determined by the local **municipality** in accordance with **NFIP** regulation. **FEMA** defines substantial improvement as "Any repair, reconstruction, rehabilitation, addition, or other improvement of a **building**, the cost of which improvement equals or exceeds, individually or in the aggregate, fifty percent (50%) 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. This term includes **buildings** which have incurred "substantial damage", regardless of the actual repair work performed." The term "cost of improvement" includes the market value of volunteer labor and donated materials. The term "cost of improvement" does not, however, include either (a) any project 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 (b) any alteration of a historic **building** or a historic district that will not preclude the **building's** continued designation as a historic **building**.~~

**Commented [A90]:** No longer used in the WMO.

#### **Subwatershed**

~~Major **watershed**~~The division of a major watershed planning area as identified in the District's DWPs and depicted in Appendix E of this Ordinance~~Detailed Watershed Plans.~~

#### **Swink and Wilhelm Mean Coefficient of Conservatism ( $\bar{c}$ )**

The mean coefficient of conservatism ( $\bar{c}$ ) in an inventory group calculated by the sum of all coefficients in an inventory unit divided by the number of species (N).

#### **Swink and Wilhelm Floristic Quality Index (FQI)**

The index derived from floristic inventory data. The index is the arithmetic product of the average coefficient of conservatism ( $\bar{c}$ ) and the square-root of species richness (VN) of an inventory unit.

#### **TARP**

The District's Tunnel And Reservoir Plan including all associated **structures** and appurtenances.

#### **TGM**

Technical Guidance Manual. A manual prepared in conjunction with this **Ordinance** that provides technical information and guidance on how to comply with the provisions of this **Ordinance**, and as amended from time to time.

#### **Tributary Area**

All land drained by or contributing water to the same stream, lake, or **stormwater facility**, or which drains to a common point.

### Underdrain

A below grade pipe containing openings that allow the drainage of **stormwater** from overlying soils, gravel, sand, aggregate, and other similar media. **Underdrains** include, but are not limited to, field tiles, drain tiles, and open jointed pipes. This term does not include footing drains.

Commented [A91]: Added for consistency with Article 7

### Unrestricted Flow

**Stormwater runoff** from a **development** ~~which is not directed to the required~~ that is not tributary to a detention facility is unrestricted or uncontrolled release or flow. The areas generating unrestricted flow are referred to as unrestricted or uncontrolled release rate areas. Unrestricted flow must be included in Net Allowable Release Rate calculations. Non-qualified development does not contribute to unrestricted flow.

### Upland

Terrain lying above the level where water flows or where **flooding** occurs.

### Upstream Tributary Flow

**Stormwater runoff** or **groundwater flows** from ~~tributary~~ an areas upstream of a ~~development site~~ project. Upstream tributary flows can be bypass flows.

### USEPA

United States Environmental Protection Agency

### Variance

A limited grant of relief by the **District** from the term(s) or condition(s) of this **Ordinance**.

### Volume Control Practices

Permanent practices designed to capture, retain, and infiltrate **stormwater runoff** from **impervious areas** of a **development** after permanent stabilization is achieved. [Compare volume control practice with green infrastructure.]

### Volume Control Storage

The first inch of **runoff** from the **impervious area** ~~of development on the site~~.

### Watershed

**Tributary areas** discharging to a common point.

### Watershed Management Permit

A permit ~~established by this Ordinance that is~~ issued by the **District** ~~or an authorized municipality for a project that is in compliance with this Ordinance prior to the approval of a building or construction permit by the appropriate unit of local government. The issuance of a Watershed Management Permit signifies that the proposed development is in compliance with the provisions of this Ordinance.~~

Commented [A92]: The District is independent from local regulation.

### Watershed Planning Area

The area considered in a specific **DWP** and depicted in Appendix E of this **Ordinance**.



**Water Reclamation Facility**

Facility designed to treat **sewage**.

**Water Resource Benefit**

A decrease in **flood** elevations, a reduction in **flood** damages to **structures** upstream or downstream of the ~~development site~~**project**, a reduction in peak flow rates, and/or enhancement of existing water-related environmental resources created by the ~~development~~**project** which is greater than the minimum **Ordinance** requirements.

**Waterway**

Navigable body of water such as a stream, creek, canal, channel, or river.

**Wetlands**

Areas which are inundated or saturated by surface or **ground-water** (hydrology) at a frequency and duration sufficient to support, under normal circumstances, a prevalence of vegetation (hydrophytes) typically adapted for life in saturated soil conditions (hydric soils). **Wetlands** generally include swamps, marshes, bogs, and similar areas.

**Wetland Buffer**

The vegetated area adjacent to **wetlands** left open for the purpose of eliminating or minimizing adverse impacts to such areas.

**Wetland Impact**

**Wetlands** that are directly or indirectly disturbed or otherwise adversely affected, whether temporarily or permanently, by filling, excavation, **flooding**, or drainage which results from implementation of a **development** activity.

**Wetland Mitigation**

The process of offsetting **wetland impacts** through the restoration, creation, enhancement, and preservation of **wetlands**.

**Wetland Mitigation Bank**

A ~~site where~~**repository of wetlands** ~~that~~ are restored, established, enhanced, and/or preserved for the purpose of providing compensatory mitigation for authorized impacts. In general, a mitigation bank sells compensatory mitigation credits (acres) to the ~~co-permittee applicant~~**applicant(s)**, whose obligation to provide compensatory mitigation is then transferred to the mitigation bank sponsor.

**Wetland Specialist**

A **person** having skill in the art and science of identifying, delineating, and assessing **wetlands**.

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## APPENDIX B. Watershed Specific Release Rates

Watershed specific release rates for each of the Watershed Planning Areas depicted in Appendix- E for the storm event having a one percent probability of being equaled or exceeded in a given year (100-year storm event):

<u>Watershed</u>	<u>Release Rate</u>
<u>Poplar Creek Watershed</u>	<u>0.25 cfs/acre</u>
<u>Upper Salt Creek Watershed</u>	<u>0.20 cfs/acre</u>
<u>Lower Des Plaines Watershed</u>	<u>0.20 cfs/acre</u>
<u>North Branch Watershed</u>	<u>0.30 cfs/acre</u>
<u>Calumet Sag Channel Watershed</u>	<u>0.30 cfs/acre</u>
<u>Little Calumet River Watershed</u>	<u>0.25 cfs/acre</u>

Watershed Management Permit applications accepted by the District prior to January 1, 2020, have the option to use a gross allowable release rate of 0.30 cfs/acre for the 100-year storm event. All permit applications submitted on or after January 1, 2020 shall use the watershed specific release rates listed above.

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## **APPENDIX C**

### **Legacy Sewer Permit Ordinance and Manual of Procedures for the Administration of the Sewer Permit Ordinance**

**There are no proposed changes to this Appendix**

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## **APPENDIX D**

U.S. Army Corps of Engineers  
Watershed Service Areas

**There are no proposed changes to this Appendix**

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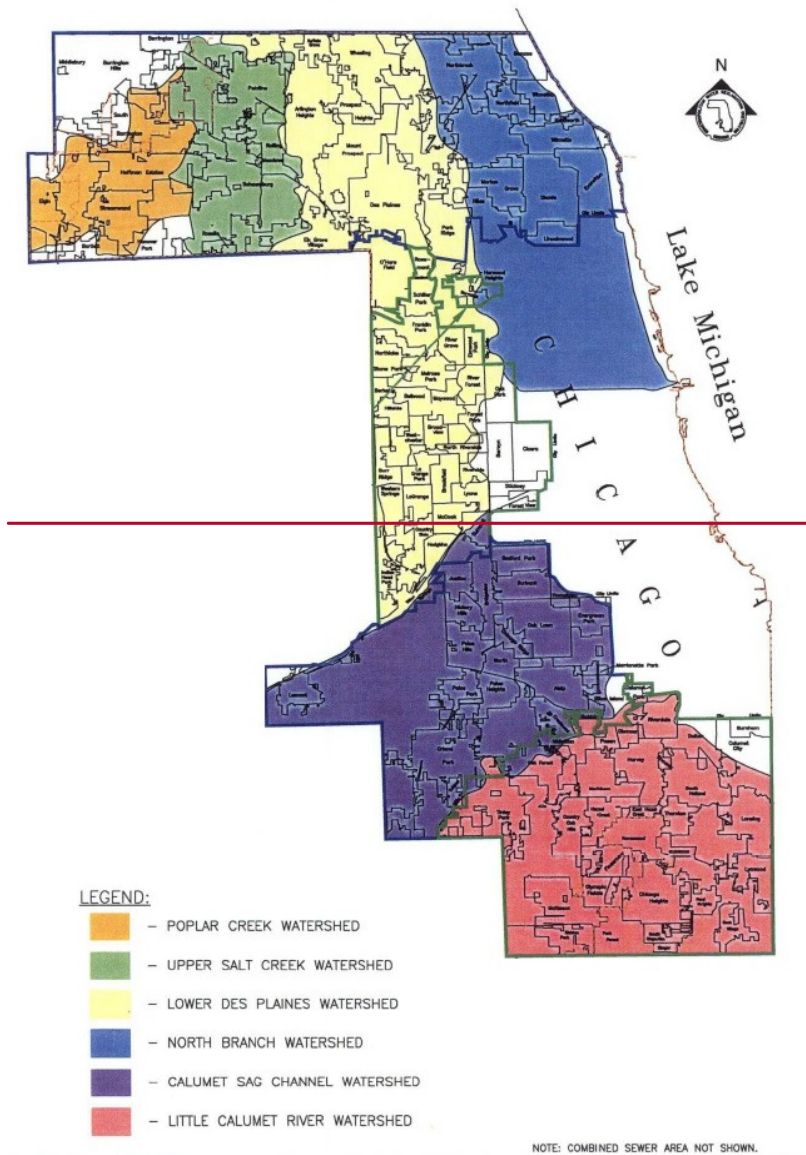


## APPENDIX E

Watershed Planning Areas

**Commented [A1]:** Exhibit has been updated to reflect the areas subject to the Watershed Specific Release Rates (Article 5, App B) and to make the exhibit more printer-friendly.

## Watershed Planning Areas

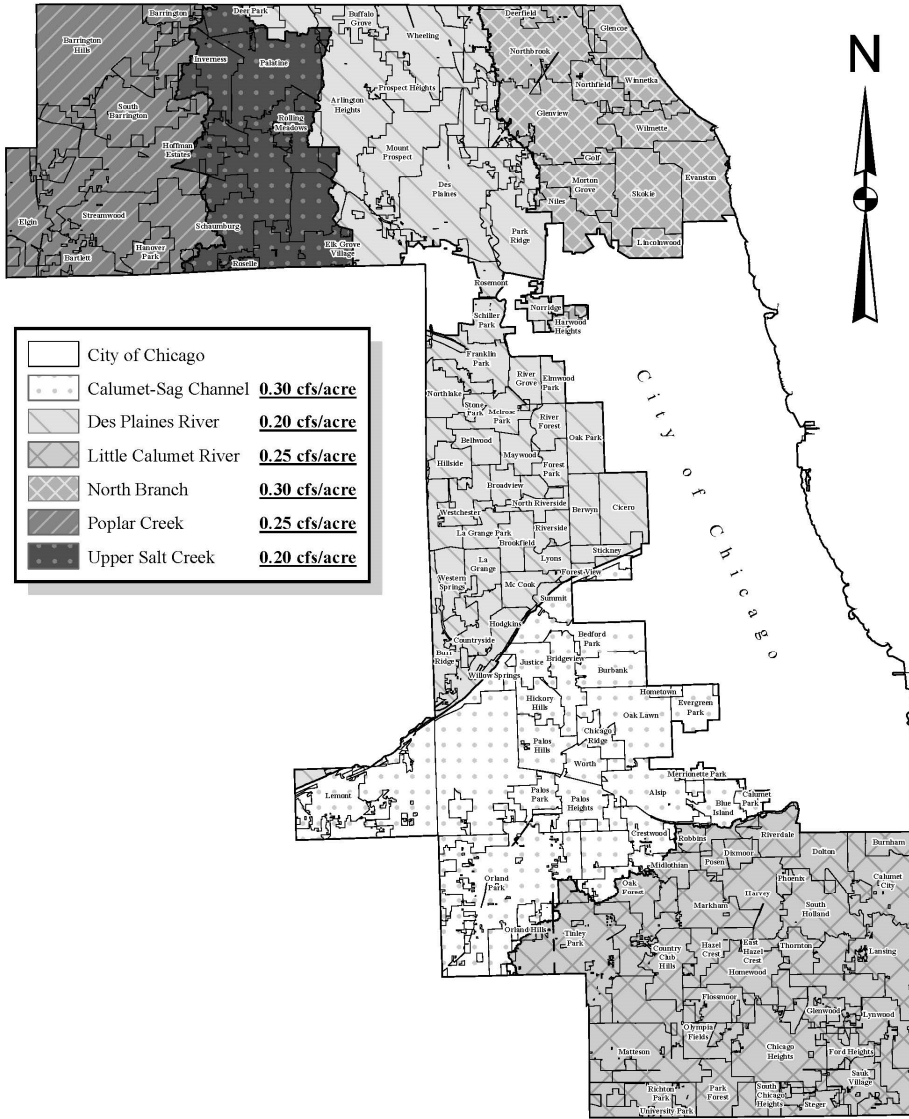


### APPENDIX E. WATERSHED PLANNING AREAS

Page E-2

[Public Comment Draft: 1/7/19](#)

# Watershed Planning Areas



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## APPENDIX F. PERMIT FEES TO THE WATERSHED MANAGEMENT ORDINANCE

WATERSHED MANAGEMENT PERMIT FEE SCHEDULE <i>(Authorized Municipality permits are subject to the fees instituted by the municipality. Only the Section IV. Sanitary-Qualified Sewer Construction and Schedule O WMO fees below apply)</i>	Total Fee
<b>SECTION I. NON-REFUNDABLE BASE PERMIT FEES (Does not include Section II, III, IV, and V of this form)</b>	
(A) <del>Regular WMO</del> Watershed Management Permit	\$1,100
<del>(B) Notification and Request For Inspection (NRI)</del>	<del>\$250</del>
<del>(B) Earthwork/Foundation Limited Permit</del>	<del>\$2,100</del>
<del>(C) Notification and Request For Inspection (NRI)</del>	<del>\$250</del>
(D) Facility Connection Authorization (within City of Chicago)	\$1,000
(E) Permit Revision	\$500
<del>(F) Single-Family Home Special Flood Hazard Area (SFHA)</del>	<del>\$0</del>
<del>(F) Resubmittals</del>	<del>\$0</del>
<b>SECTION II. STORMWATER MANAGEMENT-DETENTION</b>	
<del>(A) Runoff, volume control, or D-Legacy with no additional detention volume required</del>	<del>\$0</del>
<del>(B) Nomograph or D-Legacy with additional detention volume required</del> <del>Small Development - Residential &lt; 10 acres &amp; Non-Residential &lt; 5 acres (Nomograph)</del>	<del>\$500</del>
<del>(B) Model - Small Development Tributary Area (&lt;10 acres) - Residential &lt; 10 acres &amp; Non-Residential &lt; 5 acres (Model)</del>	<del>\$1,500</del>
<del>(C) Large Development - Residential &gt; 10 acres &amp; Non-Residential &gt; 5 acres (Nomograph)</del>	<del>\$1,000</del>
<del>(D) Model - Large Development Tributary Area (&gt;10 acres) - Residential &gt; 10 acres &amp; Non-Residential &gt; 5 acres (Model)</del>	<del>\$3,000</del>
<b>SECTION III. ISOLATED WETLANDS/RIPARIAN ENVIRONMENTS</b>	
(A) Verification of Isolated Wetland Boundary, Classification and Buffer	\$250
(B) Isolated Wetland Impact < 0.10 Acre or Riparian Environment without Mitigation	\$500
(C) Isolated Wetland Impact ≥ 0.10 Acre or Riparian Environment with Mitigation Plan	\$2,500
<b>SECTION IV. <del>SANITARY-QUALIFIED SEWER CONSTRUCTION</del></b>	
(A) Sewer Inspection Fee	\$5-Per-/LF of Sewer*
(B) Lift Station and/or Forcemain (Schedule E)	\$250
<del>(C) Outfalls/Direct Connections to District Facilities/Impacts to District Property (Schedule O)</del>	<del>\$250</del>
<del>(D) Connection Impact Fee</del>	
(1) Low Density and/or Medium Density Residential (20 Units/Acre or Less)	\$3,750/Acre
(2) High Density Residential (21 Units/Acre or More)	\$6,000/Acre
(3) Commercial or Industrial	\$7,500/Acre
<b>SECTION V. OTHER FEES</b>	
(A) Recordation Deposit <del>(Schedule R/Exhibit R) - Required for most projects</del>	\$500
<del>(B) Inspections for Violations</del>	<del>\$250 Per inspection</del>
<del>(B) Hazard Areas (Floodplain/Floodway/Riparian Environment - Schedule H)</del>	<del>\$250</del>
<del>(D) Outfalls/Direct Connections to District Facilities/Impacts to District Property (Schedule O)</del>	<del>\$250</del>
<del>(E) Notice of Requirements of Stormwater Detention (Schedule L/Exhibit A)</del>	<del>\$250</del>

**Commented [A1]:** Schedule O added to Section IV, so already included

**Commented [A2]:** Clarify which detention scenarios fit under which fee line item.

**Commented [A3]:** Calculations depend on the tributary area for the detention basin, not just the development area.

**Commented [A4]:** Nomograph method is less reliable for large tributary areas

**Commented [A5]:** Calculations depend on the tributary area for the detention basin, not just the development area.

<del>(D)</del> Inspections for Violations	\$250-Per /Inspection
<del>(F)</del> Resubmittals	\$0
<del>(E)</del> Variances (Filing and Review Fee)	\$2,000

Note: Single-family home developments are exempt from fees, excluding projects involving wetlands/riparian and/or public sewer extensions  
\* Sewers tributary to a waterway are exempt from inspection fees. Use the longest dimension length for underground vaults.

**Commented [A6]:** Added single-family home permit to Section I

**Commented [A7]:** Provide clarification for underground vaults as qualified sewer

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## APPENDIX G. EXISTING INTERGOVERNMENTAL AGREEMENTS

The intergovernmental agreements referenced in §500.6 of this **Ordinance** include, but are not limited to, all of the following:

1. Agreement by and between the Metropolitan Sanitary District of Greater Chicago and the Villages of Westchester and Hillside, dated February 10, 1972 and commonly known as the Westchester and Hillside Agreement;
2. Agreement by and between the Society of the Divine Word, Missionary Sisters Servants of the Holy Spirit, and Metropolitan Sanitary District of Greater Chicago, dated August 17, 1975 and commonly known as the Techny Agreement; and
3. Intergovernmental Agreement for Acquisition, Design, Construction, Use, Operation and Maintenance of Stormwater and Recreational Improvements at Heritage Park, dated April 1, 2010 and commonly known as the Heritage Park Flood Control Facility Agreement.
4. Intergovernmental Agreement by and between the Village of Flossmoor, Homewood Flossmoor High School District 233, and the Metropolitan Water Reclamation District of Greater Chicago for Construction and Perpetual Maintenance of the Cherry Creek East Branch Flood Control Project in Flossmoor, Illinois.

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