Watershed Management Ordinance

Effective
May 1, 2014

As amended
May 7, 2020
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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

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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 facilities, 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 Detailed Watershed Plans (DWP) for the major watersheds of Cook County. The CCSMP and DWP are available on the District’s website, www.mwrd.org.

§ 102. Considerations

The District 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;
ARTICLE 1. AUTHORITY AND PURPOSE

§ 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. Meeting or exceeding the rules and regulations of the National Flood Insurance Program (NFIP) for development;

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

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 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. The Sewer Permit Ordinance and its companion ordinance, the Manual of Procedures, were 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).

3. The requirements related to the regulation, permitting, and enforcement of qualified sewer construction are now contained in Article 7 of this Ordinance.
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 projects under the control of any governmental entity, agency, or authority.

2. Any person proposing a project that falls under any of the categories set forth in §201 of this Ordinance shall obtain a Watershed Management Permit prior to 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 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;

   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-OWR and does not include qualified sewer;

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

      (1) New or reconstructed outfalls to waterways or Lake Michigan; and

      (2) Direct connections to District interceptors, TARP structures, facilities, or District property;
E. **Projects** 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**;

F. **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**);

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

H. **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 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 **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**; and

   D. **Development** 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**;

      (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;

      (3) Excavation in public rights-of-way or public utility easements for the purpose of installing or maintaining utilities other than **qualified sewer**, 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;
(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

(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 **projects**:

   A. **Qualified sewer** within a **combined sewer area** tributary to either a **combined sewer** or a **waterway**;

   B. **Qualified sewer** within the **District** corporate limits or service agreements areas;

   C. Direct connections to **District** interceptors, reservoirs, facilities, or **TARP structures**;

   D. New or reconstructed **outfalls** to the **waterways** or Lake Michigan, within **Cook County**;

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

   F. Modifications to the **control structure** or storage volume of a **District** permitted **detention facility**.
Table 1. Applicability Summary

<table>
<thead>
<tr>
<th>Project</th>
<th>Regulated Area</th>
<th>Permitting Authority</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development greater than 0.5 acre*</td>
<td>Cook County Except City of Chicago</td>
<td>District or Authorized Municipality</td>
<td>§ 201.1.D</td>
</tr>
<tr>
<td>Reconfiguration of existing major or minor stormwater systems that alters the service area of a District permitted detention facility</td>
<td>Cook County Except City of Chicago</td>
<td>District</td>
<td>§ 201.2.E</td>
</tr>
<tr>
<td>Modifications to a District permitted detention facility</td>
<td>Cook County Except City of Chicago</td>
<td>District</td>
<td>§ 201.2.F</td>
</tr>
<tr>
<td>Development within a flood protection area</td>
<td>Cook County Except City of Chicago</td>
<td>District or Authorized Municipality</td>
<td>§ 201.1.A</td>
</tr>
<tr>
<td>Indirect impacts to a wetland</td>
<td>Cook County Except City of Chicago</td>
<td>District or Authorized Municipality</td>
<td>§ 201.1.B</td>
</tr>
<tr>
<td>Development of residential buildings within 100-feet of the regulatory floodplain</td>
<td>Cook County Except City of Chicago</td>
<td>District or Authorized Municipality</td>
<td>§ 201.1.C</td>
</tr>
<tr>
<td>Qualified sewer within a combined sewer area tributary to either a combined sewer or a waterway</td>
<td>District Corporate Limits or Service Areas Except City of Chicago</td>
<td>District</td>
<td>§ 201.2.A</td>
</tr>
<tr>
<td>Qualified sewer construction including lift stations</td>
<td>District Corporate Limits or Service Areas Except City of Chicago</td>
<td>District</td>
<td>§ 201.2.B</td>
</tr>
<tr>
<td>Direct connections to District interceptors, reservoirs, facilities, or TARP Structures</td>
<td>Entire Cook County Including City of Chicago*</td>
<td>District</td>
<td>§ 201.2.C</td>
</tr>
<tr>
<td>New or reconstructed outfalls to waterways or Lake Michigan</td>
<td>Cook County Including City of Chicago*</td>
<td>District</td>
<td>§ 201.2.D</td>
</tr>
</tbody>
</table>

* Unless the development solely involves one or more provision listed in §201.1.D.
* Facility connection authorization shall be obtained.
§ 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 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 project, such judgment shall not affect the application of said provisions to any other parcel of land, structure, or 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 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 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 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.

§ 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 as set forth under the Code of Federal Regulations (44 C.F.R.§ 59-60) for development. This Ordinance does not encompass all NFIP requirements for a municipality to maintain a compliant NFIP ordinance.

§ 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:
ARTICLE 2. APPLICABILITY AND GENERAL PROVISIONS

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 projects specified in §201.2.A-D of this Ordinance.

4. A Watershed Management Permit shall be required from the District for all 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. Study of Current Provisions of and Potential Amendments to this Ordinance

The District shall initiate a study of certain current provisions of and potential amendments to this Ordinance. This study will be initiated by the end of 2019 with a targeted completion date of May 2022. The study shall include the following areas:

_________________________________________________________________
_________________________________________________________________
1. A pilot study of a regional stormwater detention and volume control credit trading program;

2. Impacts of watershed specific release rates on disproportionately impacted communities;

3. Impacts of release rates under existing and future development scenarios in collar counties on watersheds in the District;

4. Impact of volume control and watershed specific release rates on stream erosion and related water quality effects such as turbidity and sedimentation; and

5. Board of Commissioners shall consider the study in May 2022.

§ 209. Amendments

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

§ 210. Effective Date

This Ordinance shall be effective on May 1, 2014.
ARTICLE 3. WATERSHED MANAGEMENT PERMIT REQUIREMENTS AND SUBMITTALS

§ 300. General Requirements and Limitation

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 applicant from liability for damage to persons or property resulting from the work covered by the permit.

2. The Watershed Management Permit application and plan set submittals shall be certified by a Professional Engineer, indicating that the technical submittal meets the criteria required by this Ordinance.

3. The Watershed Management Permit application shall include the name(s), legal address(es), and original signature(s) of the applicants attesting to the understanding of the requirements and intent to comply with this Ordinance, according to the following;
   A. For projects located within a municipality’s corporate limits, both the permittee and co-permittee(s) must sign the Watershed Management Permit application;
   B. For 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. 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;
ARTICLE 3. WATERSHED MANAGEMENT PERMIT REQUIREMENTS AND SUBMITTALS

(d) Compliance with the administrative requirements in the TGM; and

(e) The permit must be recorded with the Cook County Recorder of Deeds according to §307 of this Ordinance.

(2) For projects that involve development, the 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.

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

5. 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.

6. Either the District or relevant authorized municipality shall make the final determination that all pertinent information is submitted by the applicant to allow for Watershed Management Permit review and/or issuance. Additional information or calculations may be requested from the 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.

§ 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. 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.

§ 302. Watershed Management Permit Application Submittal

The Watershed Management Permit submittal shall include the permit application and all of the following when applicable:

1. A general narrative description of the proposed project that shall include:
   A. The common address and legal description of the property holdings where the project will take place;
   B. Project type, which includes Single-Family Homes, Residential Subdivisions, Multi-Family Residential, Non-Residential, Right-of-Way, and Open Space;
   C. Size of the property holdings where the project will take place;
   D. Size of the proposed project;
   E. A statement from either a Professional Engineer or Wetland Specialist when flood protection areas are not present within:
      (1) The project area;
      (2) The property holdings; or
      (3) 100 feet beyond the project area, including areas not located within the property holdings.

2. The following submittals, as detailed in Article 3 of the TGM:
   A. The Erosion and Sediment Control Submittal, including:
      (1) Schedule P signed by the co-permittee; and
      (2) A narrative of the erosion and sediment control plan that describes all measures appropriate for the project such that all the requirements of Article 4 of this Ordinance are met.
   B. The Stormwater Management Submittal, including:
ARTICLE 3. WATERSHED MANAGEMENT PERMIT REQUIREMENTS AND SUBMITTALS

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

(2) The runoff plan for the development that describes all measures appropriate to meet the requirements of §502 of this Ordinance;

(3) A volume control plan that describes all measures appropriate for the development in accordance with §503 of this Ordinance;

(4) A detention facility plan that describes all measures appropriate for the development in accordance with §504 or §505 of this Ordinance;

(5) Schedule K (Disclosure of Property Interests), signed and notarized by the applicant and Notary Public, respectively, if the aggregate total area of property and all other lands contiguous to said property in which the applicant has property interest is less than the stormwater detention threshold stipulated under Table 2 in §501 of this Ordinance; and

(6) Schedule L (Notice of Requirements for Stormwater Detention), signed and notarized by the applicant and Notary Public, respectively, for property holdings requiring detention in which there are previously undeveloped property holdings areas not included in the detention calculations.

C. The Floodplain Submittal 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 project within the limits of the floodplain and floodway, 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;

(4) A copy of the Cook County FIS Floodway Data Table, if available;

(5) Revisions to FIRM(s) including all hydrologic and hydraulic calculations, modeling, and all CLOMR/LOMR applications;

(6) Floodplain fill and compensatory storage calculations in accordance with §602.5, §602.6, and §602.7 of this Ordinance; and
Calculations or analyses that demonstrate compliance with §602.22 of this Ordinance for development in the floodway.

D. The Wetland Submittal for any development associated with a wetland designated in §603 of this Ordinance, including:

1. Schedule W, signed by a Wetland Specialist;

2. Copies of the following forms of correspondence from the Corps:
   
   (a) A Corps Jurisdictional Determination indicating that the impacted wetland is not under the jurisdiction of the Corps; or

   (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 applicant;

3. The isolated wetland submittal for a standard isolated wetland that is less than one-tenth of an acre (0.10 acre) in aggregate;

4. The isolated wetland submittal for a high quality isolated wetland or a standard isolated wetland greater than or equal to one-tenth of an acre (0.10 acre) in aggregate;

5. An isolated wetland delineation report consistent with the requirements for wetland delineation provided in §603 of this Ordinance, including all Corps “Routine Wetland Determination Data Form(s);” and

6. If wetland mitigation is required, a wetland mitigation document shall be developed in accordance with §604 of this Ordinance.

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

1. Either Schedule H or Schedule W, signed by a Professional Engineer or Wetland Specialist, respectively;

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

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.N of this Ordinance;
For impacts to a **Jurisdictional Waters of the U.S.**, provide a copy of one of the following forms of correspondence from the **Corps**:

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

(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 **applicant** or agent.

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

**F. The Qualified Sewer Submittal** for any **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;

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

(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**.

(5) Schedule O for either of the following:

(a) Direct connections to **District** infrastructure; or

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

(6) All **District** required general notes, approved materials, applicable standard details (or equivalent), technical requirements, and design guidelines for **qualified sewer** construction available from the **TGM**;

(7) Population Equivalency (PE) calculations for expected sewer flows based on new, existing, and/or expanded service area;
ARTICLE 3. WATERSHED MANAGEMENT PERMIT REQUIREMENTS AND SUBMITTALS

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

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

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

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

G. The Maintenance and Monitoring Plan Submittal, including:

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

(2) A schedule of implementation of the erosion and sediment control plan;

(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) Compensatory storage facilities;

(c) Wetlands;

(d) Riparian environments; and

(e) Qualified sewer.

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

§ 303. Plan Set and Exhibits Submittal

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

1. All required topographic information shall be tied to the North American Vertical Datum of 1988 (NAVD88);
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:
   (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
       (c) Delineation of the conveyance route and indication of the *sewer system owner* of sanitary, storm, and/or *combined sewers* from the *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. **MWRD General Notes plan sheet**;

C. **Existing Conditions Plan**;

D. **Demolition Plan**;

E. **Dimensional or Geometry Plan**;

F. **Paving Plan**;

G. **Grading Plan**;

H. **Utility Plan**;

I. **Erosion** and **Sediment** Control Plan;

J. **Construction Details**;

K. **Stormwater** Management Exhibit including:
   (1) **Development** Area Exhibit; and
   (2) **Tributary Area Exhibit**.
L. **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*.

M. **Wetland** plan sheet(s), including:

1. The location of *wetland* and *wetland buffer* on or within 100 feet of the *project*, based upon a survey of the *wetland* delineation in accordance with §603 of this *Ordinance*;
2. 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* are proposed.

N. **Riparian Environment** plan sheet(s), including:

1. Location of *riparian environments* located within the *project*, based upon a survey of the Ordinary High Water Mark (OHWM) of the channel or stream and associated *riparian environment*;
2. 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.

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:

   A. The common address, legal description, and property index number (PIN);
   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 of this Ordinance.

§ 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 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.

§ 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. 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 applicant intends to continue 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 for construction activities under a Watershed Management Permit.
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 **applicant** shall submit a written request for approval, the appropriate fee, and the revised plans. 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.

### § 306. Record Drawings

1. Upon completion of the project, record drawings of all plan sheet(s) shall be submitted to the District.

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:
   
   A. As-built volume of constructed **volume control practices**, **detention facilities**, and **compensatory storage**; and
   
   B. Acreage of constructed **native planting conservation areas**, **wetland mitigation areas**, and **riparian environment mitigation areas**.

4. If the constructed grades, geometries, inverts, acreage, or volumes of constructed stormwater facilities, volume control practices, 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 applicant shall be responsible for any modifications required for compliance with this Ordinance.

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**.

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

1. The **applicant** is responsible for ensuring **Schedule R**, specified under §302.2.G of this **Ordinance**, together with **Exhibit R** specified under §303.4 of this **Ordinance**, is recorded with the Cook County Recorder of Deeds.

2. At the expense of the **applicant**, the **District** may record **Schedule R**, specified under §302.2.G of this **Ordinance**, together with **Exhibit R**, specified under §303.4 of this **Ordinance** 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.

4. Obligations imposed under a recorded Watershed Management Permit shall continue into perpetuity or until the property holding is redeveloped under a new Watershed Management Permit.
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 project requiring a Watershed Management Permit as specified in §201 of this Ordinance shall comply with the requirements of Article 4 of this Ordinance.

2. All applicants shall submit the documents specified in Article 3 of this Ordinance to verify compliance with the requirements in Article 4 of this Ordinance.

3. For all 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.

4. All projects that are subject to National Pollutant Discharge Elimination System (NPDES) Permit ILR10 shall meet the submittal and approval requirements of ILR10.


6. Where criteria and specifications are not provided in the Illinois Urban Manual, the design criteria and specifications shall be taken from the TGM.

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.

8. Erosion and sediment control practices shall be functional before disturbances are made.

§ 401. Temporary Erosion and Sediment Control Requirements

1. All waste generated as a result of projects including, but not limited to, any building waste, concrete or mortar washout, chemicals, litter, sanitary waste, or any other waste shall be 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.
ARTICLE 4. REQUIREMENTS FOR EROSION AND SEDIMENT CONTROL

4. 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.

5. Temporary erosion control practices shall meet the following:

A. Existing vegetation shall be preserved where practicable to minimize the area of soil disturbance.

B. Selection of appropriate temporary erosion control practices shall consider:

   (1) Seasonal, topographic, and maintenance limitations;

   (2) The susceptibility of soils to erosion; and

   (3) Proximity to flood protection areas.

C. Appropriate erosion control practices shall be incorporated in the portions of the property holding 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.

D. Temporary erosion control practices shall be maintained on a year-round basis during construction and any periods of construction shutdown until permanent stabilization is achieved.

E. For projects involving phased construction, the portions of the project area where construction activities have temporarily or permanently ceased must have stabilization practices completed within seven (7) days, except:

   (1) Where precluded by snow cover, erosion control practices shall be completed as soon as practicable; or
(2) Where construction activity resumes on that portion of the project within fourteen (14) days from when activities ceased.

F. If a soil stockpile is to remain dormant or undisturbed:

(1) 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

(2) 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.

G. 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.

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

6. Temporary sediment control practices shall meet the following:

A. Selection of appropriate sediment control practices shall consider:

   (1) Seasonal, topographic, and maintenance limitations;

   (2) Amount of tributary area; and

   (3) Proximity to flood protection areas.

B. Sediment control practices shall be continuously maintained during construction and any periods of construction shutdown until permanent stabilization is achieved.

C. Sediment control practices shall intercept all runoff from projects before runoff leaves the site under the following conditions:

   (1) Projects draining less than one acre shall be protected by silt fence or equivalent; or

   (2) Projects draining one or more acre shall be protected by a silt fence and a sediment basin or equivalent, which shall be:
(a) Sized to intercept the 2-year, 24-hour runoff volume from the tributary area; and

(b) Located at the lowest point of the disturbance.

D. All stormwater facilities draining the project area shall be protected with an appropriate sediment control practice.

E. A stabilized construction entrance/exit shall be provided. Any soil reaching a public or private roadway shall be removed immediately and transported to a controlled sediment disposal area.

F. Perimeter sediment controls are required for any stockpiles created for the project.

G. Construction dewatering operations shall be designed and operated so that water discharged from a project will meet the requirements set forth by the State of Illinois.

§ 402. 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.
ARTICLE 5. REQUIREMENTS FOR STORMWATER MANAGEMENT

§ 500. General Development and Stormwater Management Information

1. All development shall meet the requirements specified in 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 applicants shall submit the documents specified in Article 3 to verify compliance with the requirements in Article 5 of this Ordinance.

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.

4. Stormwater facilities shall meet the analysis, design, and performance standard requirements specified in Article 5 of this Ordinance and the TGM.

5. Stormwater facilities shall be designed to comply with Illinois drainage law in addition to the requirements of this Ordinance.

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.

§ 501. General Development and Stormwater Management Requirements

1. Development shall not:

   A. Increase flood elevations or decrease flood conveyance capacity upstream or downstream of the property holding;

   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 groundwater quality;

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

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

2. Development shall meet the 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. A **Watershed Management Permit** may be issued without the **applicant** providing detention for the undeveloped area within the **property holdings**, and the **Watershed Management Permit** will require Schedule L per §302.2.B(6) of this **Ordinalance**.

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<tr>
<th>Development Type</th>
<th>§502</th>
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<th>§504</th>
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<td>Runoff</td>
<td>Volume Control</td>
<td>Detention</td>
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<td>when new impervious area</td>
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1. Stormwater management requirements do not apply to demolition or maintenance activities.
2. Requirements are applicable when a Watershed Management Permit is required under §201 of this Ordinance.
3. Where practicable.
4. Starting the effective date of this Ordinance, any new development within the property holdings that totals either individually or in the aggregate to greater than or equal to one-half (0.5) of an acre.

§ 502. **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 property holdings greater than or equal to one (1) acre;
B. Multi-family residential development on property holdings greater than or equal to one-half of an acre (0.5 acre);

C. Non-residential development on property holdings greater than or equal to one-half of an acre (0.5 acre);

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

E. Right-of-way development with new impervious area greater than or equal to one (1) acre.

2. Transfers of waters between watersheds shall be prohibited except when such transfers 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 a right-of-way or a public easement; or

B. Capable of 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.

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 facility.

5. Major stormwater systems shall be sized to convey the design runoff rate of the 100-year storm event using the methodology specified in §502.9 of this Ordinance. The design runoff rate for any major stormwater system shall include the runoff from all 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 easement explicitly providing public access for maintenance.

7. Upstream tributary flows shall be safely routed around or through the project in the following manner depending on whether detention is required per §504.1 of this Ordinance:

A. When detention is not required, the 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 the methodology specified in §502.9 of this Ordinance; and

B. When detention is required, the requirements of §504.11 of this Ordinance apply.
8. The **runoff** and **flood** water storage function of **depressional storage** shall be preserved. When **depressional storage** is altered, the **depressional storage** shall be compensated in the following manner depending on whether detention is required per §504.1 of this **Ordinance**:

   A. When detention is not required, the **applicant** shall demonstrate that the **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 use the methodology specified in §502.9 of this **Ordinance** and shall include the **upstream tributary flow** to the existing **depressional storage** area; and

   B. When detention is required, the requirements of §504.6 of this **Ordinance** apply.

9. The **design runoff rate** shall be calculated by using an event hydrograph method with a **critical duration analysis**. The event hydrograph method shall be HEC-1, HEC-HMS or TR-20 using **NRCS** curve number methodology, or a method approved by the **District**. The event hydrograph method shall incorporate the following assumptions:

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

   B. **Bulletin 75** northeast-sectional rainfall depths and appropriate median time distributions.

10. Drain tile that is found during design or construction of the **development** shall be removed or replaced and the conveyed flow shall be incorporated into the **development’s drainage system** in a manner that shall not cause damage to upstream and downstream **structures**, land uses, or existing **stormwater facilities**.

11. The maximum **stormwater runoff** inundation depths on roads and parking lots for all **development** shall not exceed twelve (12) inches.

12. The **lowest floor** in new **buildings**, or 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 runoff rate** of an adjacent **major stormwater system** as sized in §502.5 of this **Ordinance**;

   B. The design elevation associated with the 100-year high water elevation of an adjacent **detention facility** as designed per §504.13 of this **Ordinance**;

   C. The design elevation associated with the overflow path of an adjacent **detention facility** as designed per §504.13.D of this **Ordinance**; and
D. The BFE or any other tailwater conditions shall be incorporated into the design elevations of §502.12.A-C of this Ordinance.

13. When stormwater discharge is proposed into a private stormwater facility, the applicant shall obtain written permission from the facility owner.

14. When construction is proposed on private property and outside the property holdings, the applicant shall obtain written permission from the property owner and obtain any required easements.

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.

16. A separate sanitary sewer and a separate storm sewer shall be provided within the property holding.

17. When located within the combined sewer area, stormwater shall be collected, routed, and discharged into either a waterway or a stormwater facility tributary to a waterway when:

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

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

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

§ 503. 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 holdings greater than or equal to one (1) acre or more;

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

C. Non-residential development on property holdings 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** greater than or equal to one (1) acre or more, where practicable.

2. The first inch of **runoff** from the **impervious area** shall be the **volume control storage**.

3. **Volume control practices** 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 practices** where practicable.

4. **Volume control practices** shall provide treatment of the **volume control storage**. **Volume control practices** shall be provided according to the following hierarchy:

A. **Onsite retention-based practices** with quantifiable storage capacity shall:

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

   (2) Provide pretreatment measures to protect the functionality of **retention-based practices** where necessary. **Flow-through practices** may be used to meet the pretreatment requirement where appropriate;

   (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

   (4) Be located outside of the **floodway**.

B. **Offsite retention-based practices** may be utilized if all of the following conditions are met:

   (1) The following items are applicable depending on where the **development** is located and when the **Watershed Management Permit** application is accepted by the **District**:

      (a) When the **development** is located within the Calumet-Sag Channel, North Branch, Poplar Creek, or Upper Salt Creek **watershed planning areas**, the **applicant** must demonstrate that providing onsite **retention-based practices** are technically infeasible and a documented **site constraint** prevents the **development** from retaining the full **volume control storage**;

      (b) When the **development** is located within the Lower Des Plaines or Little Calumet River **watershed planning areas** and the **Watershed Management Permit** application is accepted by the **District** prior to January 1, 2025:
(i) Up to fifty percent (50%) of the required volume control storage may be provided utilizing offsite retention-based practices in accordance with the requirements of §503.4.B(2) and §503.4.B(3) of this Ordinance, without the applicant demonstrating that onsite retention-based practices are technically infeasible or a site constraint exists, provided that the remaining required volume control storage is retained onsite by retention-based practices; or

(ii) Up to one hundred percent (100%) of the required volume control storage may be provided utilizing offsite retention-based practices in accordance with the requirements of §503.4.B(2) and §503.4.B(3) of this Ordinance, provided the applicant demonstrates that onsite retention-based practices are technically infeasible and a documented site constraint prevents the development from retaining the full volume control storage.

(c) When the development is located within the Lower Des Plaines or Little Calumet River watershed planning areas and the Watershed Management Permit application is accepted by the District on or after January 1, 2025, the applicant must demonstrate that providing onsite retention-based practices are technically infeasible and a documented site constraint prevents the development from retaining the full volume control storage.

(2) When the development utilizing offsite retention-based practices is tributary to a waterway, including when located within the combined sewer area, onsite flow-through practices shall be provided and sized to treat the volume control storage as it passes through the practice; and

(3) The offsite retention-based practice utilized shall be located within the same watershed planning area as the development and meet all of the following conditions:

(a) Be approved under a Watershed Management Permit meeting all of the requirements of Article 5 of this Ordinance;
(b) Provide sufficient storage for the development, above and beyond any storage required by the offsite retention-based practice’s permit and any of the offsite retention-based practice’s storage that was utilized by any other developments;

(c) Capture equivalent impervious stormwater runoff from a parcel that is not tributary to an existing retention-based practice;

(d) Be functional before the applicant requests final inspection of the associated development;

(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.

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

(1) The volume control storage may be reduced by five percent (5%) for every one percent (1%) of existing impervious area reduced;

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

(a) When detention is not required, a detention facility shall be provided for the volume control storage.

(b) When detention is required, detention volume equivalent to the volume control storage shall be provided in addition to the required detention volume;

(3) When tributary to a waterway, including when located within the combined sewer area, flow-through practices shall be provided and sized to pretreat the volume control storage as it passes through the practice.
5. Excess volume control practices may be installed to capture the volume control storage from anticipated impervious area of a future development. A concept plan must be provided to appropriate the storage toward the anticipated impervious area, 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 Permit application is accepted by the District; and

B. If the excess volume control practices do not sufficiently meet the then existing requirements for the complete future development, then additional volume control practices will be required for the difference of the volume control storage under the future permit.

§ 504. 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 holdings greater than or equal to five (5) acres;

   B. Multi-family residential development on property holdings greater than or equal to three (3) acres with new development either individually or in aggregate 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 holdings greater than or equal to three (3) acres with new development either individually or in aggregate 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 gross allowable release rate.

3. The gross allowable release rate shall be determined at the time a complete Watershed Management Permit application is accepted by the District and shall be:

   A. Based on the watershed specific release rate as specified in Appendix B of this Ordinance; and

   B. In compliance with §504.6 of this Ordinance.
4. The **net allowable release rate** shall be calculated by deducting the **unrestricted flow** from the **gross allowable release rate**.

5. **Development with unrestricted flow** shall:
   
   A. Demonstrate the **unrestricted flow** does not cause offsite damage; and
   
   B. Mitigate the **unrestricted flow** by one of the following methods:
      
      (1) Calculate the **unrestricted flow** rate using the methodology specified in §504.10 of this **Ordinance**;
      
      (2) Plant the **unrestricted flow** area with native deep-rooted vegetation approved by the **District**, 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**; or
      
      (3) Divert an equivalent area, within the **property holding**, where detention is not provided to the **detention facility**.

6. 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** shall be based on the existing **runoff** rate minus any **unrestricted flow**. The existing **runoff** rate shall be calculated using the methodology specified in §504.10 of this **Ordinance**.

7. The **actual release rate** from the **detention facility** shall not exceed the **net allowable release rate**.

8. The **required detention volume** shall be calculated using the **actual release rate** of the **detention facility** with either the methodology specified in §504.10 of this **Ordinance** or the nomograph 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** as described in §504.6 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 or any other tailwater conditions affect the control structure for the detention facility.

9. The required detention volume calculated in §504.8 of this Ordinance can be reduced by:

   A. The volume of the retention-based practices provided in §503.4.A of this Ordinance that is located within the same property holdings as the detention facility; and

   B. The volume of any retention-based practice 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 accessed during the 100-year storm event; and

      (2) The development complies with the actual release rate specified in §504.7 of this Ordinance.

10. The event hydrograph method 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. The event hydrograph method shall incorporate the following assumptions:

   A. Antecedent Runoff Condition II; and

   B. Bulletin 75 northeast-sectional rainfall depth for the 100-year storm event with a 24-hour duration and appropriate median rainfall distributions.

11. Upstream tributary flow shall be addressed by one of the following measures:

   A. Provide the required detention volume for the development at the development’s actual release rate while bypassing the upstream tributary flow described in §502.7 of this Ordinance;

   B. Provide the required detention volume for the development and the upstream tributary flow at the development’s actual release rate; or

   C. Provide sufficient detention facility volume for the development and the upstream tributary flow at an actual release rate that ensures no adverse offsite impacts will occur for the 2-year, 10-year, and 100-year storm events, at a minimum, using a critical duration analysis and the methodology specified in §504.10 of this Ordinance. The minimum required detention volume shall be based on the development’s actual release rate as determined in §504.6, §504.7, and §504.12 of this Ordinance.

12. Detention facilities affected by the BFE or any other tailwater conditions shall calculate:
A. 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. 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.

13. The detention facility shall be designed and constructed to:

A. Be accessible and maintainable;

B. Function with a gravity outlet wherever possible;

C. Function without human intervention and under tailwater conditions;

D. Provide an overflow structure and overflow path that can safely convey the design runoff rate using the methodology specified in §502.9 of this Ordinance and no less than 1.0 cfs/acre of tributary area;

E. Maximum detention depths on new parking lots shall not exceed twelve (12) inches, and the inundation hazard below the 100-year high water elevation shall be clearly posted;

F. Provide side slope stabilization; and

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.

14. The control structure for the detention facility shall be:

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 when connecting to the combined sewer system or a storm sewer system tributary to District water reclamation facilities.

15. The required detention volume shall be provided in accordance with the following:

A. In a detention facility located within the property holdings;

B. In a detention facility located outside of the property holdings where the runoff from the 100-year storm event is conveyed to the detention facility;

C. In an offsite detention facility specified in §504.16 of this Ordinance in accordance with the following hierarchy:
   (1) Partially in a detention facility described in §504.15.A or §504.15.B of this Ordinance with supplemental storage in an offsite detention facility specified in §504.15.C(2) and §504.15.C(3) of this Ordinance;
   (2) In an offsite detention facility in a location that is upstream or hydrologically equivalent to the development in the same watershed planning area; or
   (3) In an offsite detention facility within the same watershed planning area.

16. Detention volume provided by an offsite detention facility may be utilized to meet the detention requirements for the development if all of the following conditions are met:

A. The following items are applicable depending on where the development is located and when the Watershed Management Permit application is accepted by the District:
   (1) When the development is located within the Calumet-Sag Channel, North Branch, Poplar Creek, or Upper Salt Creek watershed planning areas, the applicant must demonstrate that providing an onsite detention facility is technically infeasible and a documented site limitation exists;
   (2) When the development is located within the Lower Des Plaines or Little Calumet River watershed planning areas and the Watershed Management Permit application is accepted by the District prior to January 1, 2025, the applicant must demonstrate all of the following conditions are met:
(a) Onsite detention volume shall be provided for the 10-year storm event with a 24-hour duration, at a minimum, using the methodology specified in §504.10 of this Ordinance;

(b) The applicant shall demonstrate that the proposed peak runoff rates do not exceed the existing peak runoff rates during the 2-year, 10-year, and 100-year storm events using the methodology specified in §502.9 of this Ordinance;

(c) The applicant shall provide supplemental detention volume in an offsite detention facility in accordance with §504.15.C of this Ordinance for the difference in runoff volume between the 100-year storm event with a 24-hour duration and the runoff volume detained onsite; and

(d) When development occurs on a site with an existing detention facility approved by the District, the volume of the detention facility approved under the permit shall remain onsite and cannot be reduced.

(3) When the development is located within the Lower Des Plaines or Little Calumet River watershed planning areas and the Watershed Management Permit application is accepted by the District on or after January 1, 2025, the applicant must demonstrate that providing an onsite detention facility is technically infeasible and a documented site limitation exists.

B. The development complies with the runoff requirements in §502 and the volume control storage requirements in §503 of this Ordinance;

C. The offsite detention facility shall meet all of the following conditions:

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

(2) Provide one hundred percent (100%) of the deficient onsite volume for the associated development;

(3) Capture stormwater runoff from a property holding that is not tributary to an existing stormwater detention facility;

(4) Be functional before the applicant requests final inspection of the associated traded development;
(5) 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.

(6) 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.

17. The detention facility shall be constructed prior to or concurrently with other construction on the project and shall be completed and functional prior to occupancy or sanitary sewers being placed in service, and prior to the Request for Final Inspection (RFI).

18. A development is not required to comply with the detention requirements per §504.1 of this Ordinance if all of the following conditions are met:

A. The development discharges stormwater to a stormwater facility that is tributary to Lake Michigan;

B. The downstream receiving stormwater facility has adequate capacity as determined by the governing municipality;

C. The development complies with the volume control requirements of §503 of this Ordinance; and

D. The development intercepts and treats all onsite stormwater runoff to improve water quality prior to discharge.

§ 505. Development and Redevelopment 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. 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 under either this Ordinance or the Sewer Permit Ordinance, based on a recent survey, signed and sealed by a Professional Engineer;

B. The actual 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 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;

C. 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. Volume control practices are provided to treat the volume control storage as required in §503 of this Ordinance.

3. Redevelopment tributary to an existing detention facility shall provide detention volume either onsite based on the lesser of the watershed specific release rate specified in Appendix B of this Ordinance or the actual release rate of the existing detention facility, or in an offsite detention facility as specified in §504.16 of this Ordinance. The onsite required detention volume for the redevelopment shall be calculated as follows:

A. The modified rational method using Bulletin 75 rainfall data, or a method approved by the District, shall be used when:

   (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. The redevelopment shall modify the control structure of the existing detention facility to meet the new composite net allowable release rate specified in §505.4.C of this Ordinance when any redevelopment:

A. Is greater than or equal to twenty-five percent (25%) of the 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%).

5. When the existing control structure is modified, as required in §505.4.B 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.
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ARTICLE 6. REQUIREMENTS FOR FLOOD PROTECTION AREAS

§ 600. Flood Protection Areas

1. Development within a flood protection area shall comply with the requirements of Article 6 of this Ordinance, and shall also meet any applicable requirements of Article 5, Article 7, and Article 9 of this Ordinance.

2. All projects within a flood protection area shall comply with the requirements Article 4 of this Ordinance.

3. All applicants shall submit the documents specified in Article 3 to verify compliance with the requirements in Article 6 of this Ordinance.

4. Compliance with Article 6 of this Ordinance shall not preclude the applicant from meeting all applicable federal, state, and local requirements including, but not limited to, the local NFIP regulations.

5. Any human-induced change in improved or unimproved real estate within the 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 applicant from meeting all local requirements for participation in the NFIP.

§ 601. Requirements for Floodplain, Floodway, and Flood Protection Elevation Determination

1. For purposes of §601 and §602, the floodplain shall be the area determined in §601.3 and §601.4 and any inundation areas resulting from the 100-year flood elevation determined in §601.5 of this Ordinance.

2. Development within floodplains shall not:

   A. Result in any new or additional expense to any person other than the applicant for flood protection or for lost environmental stream uses and functions; and

   B. Violate §501.1 of this Ordinance.

3. Determination shall be made of the BFE, the boundary of the floodplain, and the limits of the floodway as shown on the effective FIS for Cook County and the regulatory floodplain shown on the FIRM, including any LOMC or LOMA that has been issued by FEMA.

4. Determination of the BFE in a floodplain shown on the FIRM associated with the effective FIS shall be determined for:
A. AE Zones by using the 100-year profile;

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 FIRM, a BFE shall be determined by a project-specific floodplain study acceptable to either the District or an authorized municipality. This study shall be approved by OWR in cases where both:

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.

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 applicant to perform a project-specific study to determine the project-specific 100-year flood elevation. If the study determines the presence of floodplain or floodway areas, it 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.

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.

7. The 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; or

B. When the drainage area is less than one (1) square mile, then a floodway designation is not required.
8. The regulatory floodway may be re-designated by the 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.

9. The applicant shall determine 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

1. For a new building or a foundation expansion of an existing building that increases the building footprint by the lesser of either twenty percent (20%) or 2,500 square feet, in aggregate, the proposed lowest floor shall be elevated to at least the FPE in accordance with the requirements specified in §602.8, §602.9, §602.10, and the local municipality’s NFIP ordinance. A non-residential new building or a foundation expansion to an existing building that increases the building footprint by the lesser of either twenty percent (20%) or 2,500 square feet may be floodproofed in accordance with the municipality’s NFIP ordinance.

2. New building 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, with the lowest floor below the BFE, shall comply with the following:

A. The lowest entry elevation, 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, 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 is in the regulatory floodplain.

3. New accessory structures in the floodplain shall be regulated by the relevant municipality under its NFIP ordinance.
4. New parking lots built below the **100-year flood elevation** shall clearly post the potential **flood** hazard.

5. **Compensatory storage** shall be required for any fill, **structure**, or other material above grade in the **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 **floodplain**;

   C. **Be provided** in the immediate vicinity of the **flood** storage lost, where practicable;

   D. **Be provided in addition to** the required **detention volume**; and

   E. **Drain freely and openly** to the **waterway**.

6. **Compensatory storage** shall be provided incrementally as follows:

   A. **All floodplain** storage lost between the normal water level and 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 floodplain** storage lost between the existing regulatory 10-year **flood** elevation and the regulatory **100-year flood elevation** shall be replaced below the proposed regulatory **100-year flood elevation** and above the 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.

7. **Compensatory storage** is not required for the **floodproofing** of existing **buildings** for the **floodplain** volume displaced by the **building**.

8. New **structures** that are elevated, existing **structures** that are **floodproofed**, or foundation expansions 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.

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 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.

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. 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. A 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

   C. Compensatory storage for elevation of structures allowed in §602.10 of this Ordinance shall not be required.

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.

12. No filling, grading, dredging, excavating, or other proposed development within the 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.

13. If a LOMR is required by FEMA, the RFI will not be issued until the approved LOMR is issued by FEMA.
14. **Stormwater facilities** within the 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.

15. All proposed sanitary **structures** shall have above ground openings located above the **FPE** or be constructed with bolted watertight **structure** lids.

16. New and replacement water supply systems and wells shall either have all above ground openings above the **FPE** or be watertight.

17. New waste disposal systems on the **property holding** shall not be constructed within the floodplain.

18. Construction of **District** required **volume control practices** and **detention facilities** within the **regulatory floodway** is strictly prohibited.

19. **Detention facilities** located outside of the **floodway** but within the **floodplain** shall:

   A. Store the required **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**.

20. New or modified **storm sewer outfalls** shall meet the requirements of §702.3.F 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**.

21. Temporary or permanent storage of items susceptible to **flood** damage is prohibited unless elevated or **floodproofed** to the **FPE**.
ARTICLE 6.
REQUIREMENTS FOR FLOOD PROTECTION AREAS

22. Development shall preserve effective floodway conveyance such that there will be no increases in flood elevations, flow rates, or 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.

23. For any proposed development within the 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.

24. Within the 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. Appropriate uses or specific construction approved by IDNR-OWR shall be considered for permits;

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.

§ 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 applicant proposing development shall investigate the property holding for the presence of wetlands. The applicant shall use the following sources and methods to determine if wetland areas may exist:

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 applicant shall identify the boundaries, extent, function, and quality of all wetland areas on the property holding. The presence and extent of wetland areas 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 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 applicant shall request a Corps jurisdictional determination of any identified wetland areas within the project area or within 100-feet of the project.

5. The approximate location, extent, and quality of offsite wetlands within 100 feet of the 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;

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 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 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.

<table>
<thead>
<tr>
<th>Wetland Quality</th>
<th>Acreage</th>
<th>§603.10.A</th>
<th>§603.10.B</th>
<th>§603.10.C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Isolated Wetland</td>
<td>≥ 0.10 acre and &lt; 0.50 acre</td>
<td>30 ft</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>≥ 0.50 acre</td>
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<td>50 ft</td>
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</tr>
<tr>
<td>High Quality Isolated Wetland</td>
<td>No minimum</td>
<td></td>
<td></td>
<td>100 ft</td>
</tr>
</tbody>
</table>

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 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 property or to mitigate the road hazard, and a determination as to whether a permit should be granted.

<table>
<thead>
<tr>
<th>Wetland Type</th>
<th>Wetland Area</th>
<th>§604.2</th>
<th>§604.3</th>
<th>§604.4</th>
<th>§604.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corps Jurisdictional Wetland</td>
<td>Any</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard Isolated Wetland</td>
<td>&lt;0.10 acre</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>≥0.10 acre</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
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<tr>
<td>High Quality Isolated Wetland</td>
<td>Any</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

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.
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 Ordinance:

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.

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<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Isolated Wetland</td>
<td>&lt;0.10 acre</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>≥0.10 acre</td>
<td></td>
<td>1.5:1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Quality Isolated Wetland</td>
<td>Any</td>
<td></td>
<td></td>
<td>3:1</td>
<td></td>
</tr>
<tr>
<td>Impacts Prior to Issuance of Permit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3:1</td>
</tr>
</tbody>
</table>

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;

B. Onsite wetland mitigation that meets one of the following:
   (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;
   (3) Creation of a new wetland that meets the requirements of §604.13.

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 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 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 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 wetland 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 development 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 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>
<thead>
<tr>
<th>Biological Stream Characterization</th>
<th>Waters Classification</th>
<th>§606.2.A</th>
<th>§606.2.B</th>
<th>§606.2.C or §606.2.D</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Other Streams</td>
<td>Jurisdictional Water of the U.S.</td>
<td>50 feet from the OHWM</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Isolated Waters</td>
<td></td>
<td>30 feet from the OHWM</td>
<td></td>
</tr>
<tr>
<td>BSC of “A” or “B” or BSS Streams</td>
<td>Jurisdictional Water of the U.S.</td>
<td></td>
<td></td>
<td>100 feet from the OHWM</td>
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<tr>
<td></td>
<td>Isolated Waters</td>
<td></td>
<td></td>
<td>100 feet from the OHWM</td>
</tr>
</tbody>
</table>

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 Affecting the Function of Riparian Environments

1. **Development** that impacts Jurisdictional Waters of the U.S. or Corps Jurisdictional Wetlands 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 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 within riparian environments shall take place as soon as possible. In accordance with §402.1 of this Ordinance, stabilization practices shall be initiated as soon as practicable 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 §302.2.E(2) and §303.2.N 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.
ARTICLE 7. REQUIREMENTS FOR SEWER CONSTRUCTION

§ 700. General Sewer Construction Requirements

1. A Watershed Management Permit is required for qualified sewer construction as defined in §701 of this Ordinance.

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 applicants shall submit the documents specified in Article 3 to verify compliance with the requirements in Article 7 of this Ordinance.

4. Qualified sewer shall meet the requirements specified in Article 7 of this Ordinance and the analysis, design, and performance standards specified in the TGM.

5. Qualified sewer that is planned in conjunction with development shall also meet the requirements specified in Article 4 and Article 5 of this Ordinance, and any applicable requirements of Article 6 of this Ordinance.

6. Qualified sewer installed under the provisions of this Ordinance shall be maintained according to the criteria and guidelines established in Article 9 of this Ordinance.

7. The District may enter into service agreements, the area of which is subject to the requirements specified in Article 7 of this Ordinance, for the following areas:

A. Cook County municipalities that are contiguous to the District corporate limits; or

B. Multi-county municipalities.

8. Connection impact fees, as indicated in Appendix E of this Ordinance, are required for the following areas annexing into the District corporate limits:

A. Any applicant that 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 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 District water reclamation facilities; or
(2) Real estate tax-exempt facilities that discharge only domestic sewage into the District water reclamation facilities.

§ 701. Qualified Sewer Construction

1. **Qualified sewer** is 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:
   
   A. **Structures** and appurtenances;
   
   B. Pump station and force main, including modification and pump replacement;
   
   C. Cured-In-Place-Pipe (CIPP) rehabilitation;
   
   D. Alteration to the conveyance capacity of a sewer system;
   
   E. Reinstatement of an existing unpermitted sewer;
   
   F. Sewer connections at the **building** foundation, or within the **right-of-way** or public easement;
      
      (1) Direct connection to a **District** facility; and
      
      (2) Outfall to a **waterway** or Lake Michigan.
   
   G. Treatment and pretreatment facilities, including, but not limited to, treatment processes, private treatment plants, oxidation ponds, and similar facilities.

2. Non-qualified sewer includes any of the following:
   
   A. **Service sewer** or storm sewer for a single-family home, including when located within a residential subdivision, provided the service sewer:
      
      (1) Does not run parallel within the **right-of-way** or public easement;
      
      (2) Does not require an extension of the receiving system within the **right-of-way** or public easement to provide service; and
      
      (3) Conveys domestic sewage only and complies with §702.2.C of this Ordinance.
   
   B. Plumbing internal to any **building**;
   
   C. **Storm sewer** tributary to a waterway when located within the separate sewer area;
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 when located within the separate sewer area and not tributary to District water reclamation facilities;

G. Footing drains to protect a building or structure foundation; and

H. Underdrains solely associated with green infrastructure when located within the combined sewer area that meets the following conditions:

   (1) Discharge is tributary to a waterway; or

   (2) The groundwater separation design guidelines contained in the TGM.

3. Maintenance and inspections of sewers and associated structures and appurtenances are considered non-qualified sewer and includes any of the following:

   A. Cured-In-Place-Pipe (CIPP) rehabilitation of a service sewer described in §701.2.A of this Ordinance or previously permitted private sewers;

   B. Grouting; and

   C. Jetting, cleaning, and root-treating.

§ 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 sewage without treatment:

      (1) Onto the ground;

      (2) Into a stormwater facility tributary to a waterway; or

      (3) Into a receiving waterway.
D. Discharge industrial waste without pre-treatment when required;

E. Violate §501.1 of this Ordinance when stormwater is conveyed;

F. Allow stormwater to enter a sanitary sewer;

G. Allow infiltration in excess of one-hundred (100) gallons per twenty-four (24) hours per mile per inch-diameter of the sewer for any section of the system and at any time during its service life that is tributary to District water reclamation facilities;

H. Increase basement backups, sanitary sewer overflows, or combined sewer overflows; and

I. Violate any provision of this Ordinance either during or after construction.

2. Qualified sewer shall:

A. 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) IPCB Technical Releases and other applicable rules and regulations issued;

   (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. 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:

   (1) Elevated to at least the FPE when located within or adjacent to a floodplain; or

   (2) Elevated to at least one (1) foot above the 100-year high water elevation associated with a stormwater detention facility.
C. Be designed to provide a separate **sanitary sewer** and a separate **storm sewer** within the **property holdings** 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 connect to 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 used in conjunction with **green infrastructure** or **volume control practices**, and conforms to the **groundwater** separation design guidelines contained in the **TGM** and a backflow prevention device is provided.

D. Collect, route, and discharge **stormwater** to 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.

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.

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 holding and prior to discharging into the sewer main. The inspection manhole shall not convey any stormwater or groundwater.

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 holding 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);

(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).

C. Public pump stations and force mains, shall comply with the following:

(1) Gravity sewers shall be used whenever practicable. Pump stations and force mains 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) 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 calculated from the population equivalent of the service area with an appropriate peaking factor or derived from actual water use data;

   (b) 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;

(d) Pumping in excess of the calculated design flow is prohibited; and

(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 pump stations, including mechanical and electrical equipment, 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 pump stations to be repaired or rehabilitated shall have all aboveground equipment elevated to at least the FPE, or **floodproofed** to protect against the base flood. Where possible, ground openings shall be adjusted to at least the FPE, or be **floodproofed** to protect against the base flood and constructed with watertight bolt-down covers/lids to protect against the base flood.

D. **Stream crossings** shall comply with the following:

(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.

E. When a direct connection to a District facility is proposed, the applicant shall:

(1) Contact the District to obtain record drawings of the District facility, and

(2) Obtain written approval from the District prior to entering any District facility.

F. New or reconstructed outfalls to a waterway or Lake Michigan shall comply with the following:

(1) All outfalls shall provide an appropriate energy dissipation device;

(2) All outfalls to Lake Michigan shall provide a water quality device to provide pre-treatment of all discharge into the lake;

(3) All outfalls constructed within a riparian environment are subject to the requirements of §607 of this Ordinance; and

(4) Neither erosion nor downstream flooding shall result from the discharge of the outfall.

G. The removal or abandonment of a septic system shall comply with the following:

(1) The existing septic system shall be abandoned. Abandoned septic tanks shall be removed or filled with granular material;

(2) Connections to the new sanitary service sewer system shall be watertight and made upstream of the septic tank; and

(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.

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.
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 discharge directly and/or indirectly into District facilities 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. 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 SSOs 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 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, 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 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 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 sixty (60) 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 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 funding assistance;

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.

§ 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 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 Watershed Management Permit. The 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 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 applicant 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.

§ 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.
ARTICLE 10. INSPECTIONS

§ 1000. General

1. The District may periodically inspect any project under the District’s scope of regulation as outlined in §200 of this Ordinance.

2. The District may periodically inspect any 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 installation of qualified sewer, major stormwater systems and stormwater facilities;

   C. Completion of the development or qualified sewer.

5. The District may enter upon any 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 trenches related to qualified sewer 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.

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.

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.
§ 1003. Request for Final Inspection

1. Upon substantial completion of construction, the applicant shall submit to the District a properly executed Request for Final Inspection (RFI) and approval on the form prescribed by the District.

2. Upon receipt of the RFI, the District shall schedule the final inspection with the applicant.

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. The 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.

5. Prior to final inspection and approval, the applicant shall provide a copy of the recorded documents, per requirements described in §307 of this Ordinance.
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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; 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 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 applicant shall pay a variance filing fee, as indicated in Appendix F of this Ordinance.

3. A variance petition shall, at a minimum, contain the following:

   A. The applicant’s notarized signature on the petition;

   B. A letter of no objection to the variance request from the permittee or, if the project is located in an unincorporated area, from the appropriate unit of local government, which shall, at a minimum, contain the following:

      (1) Certification from the local NFIP administrator that the project complies with the local NFIP ordinance or has obtained a variance from the local ordinance;

      (2) Certification that the local NFIP administrator has advised the applicant regarding any impact the proposed variance may have on NFIP insurance premiums or eligibility; and

      (3) Certification that the permittee has no objection to the variance request.

   C. The names and addresses of all professional consultants advising the owner regarding the project;

   D. The address(es), plat of survey, and legal description of the site upon which the project is or will be located;
E. The names and address(es) of all owners of record of any property holding within two-hundred fifty (250) feet of the site where the project is or will be located;

F. A detailed statement of the specific feature(s) or characteristic(s) of the 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, the precise variation being sought, and a detailed statement of any alternative or less extensive variance, if any, that would also allow the project to be permitted and completed; and

H. A detailed statement describing how the requested variance satisfies each of the criterion provided in §1103.1 of this Ordinance.

§ 1102. Notice of Petition

1. Within seven (7) calendar days after the petition for variance is filed with the Clerk of the District, the applicant shall publish at least one notice of the petition in a newspaper that is published in Cook County with a general circulation in the vicinity of the site of the proposed 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 applicant shall mail notice via certified mail, return receipt requested, of such petition to all owners of record of any property holding located within two-hundred fifty (250) feet of the site of the proposed project for which a variance is requested, and to any other persons in the vicinity of the proposed development that the applicant has knowledge of or believes may potentially be affected by the requested variance.

3. All notices required by this section shall include the following:

A. The street address of the 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:

   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 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 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;

F. A statement that rules governing the variance hearing process are available on the District’s website; and

G. Any additional information considered necessary or proper.

4. Within fourteen (14) calendar days after the petition for variance is filed, the applicant shall file with the Clerk of the District a certification of publication and shall attach a copy of the published notice.

5. Within fourteen (14) calendar days after the petition for variance is filed, the applicant shall file with the Clerk of the District a sworn affidavit listing the addresses to which notices were mailed and certifying to the completeness of the list to the best of the applicant’s knowledge and belief.

6. No later than seven (7) calendar days after the last of the filings required in paragraphs 4 and 5 above are filed with the Clerk of the District, the District shall publish 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.

§ 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 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 neither alters the essential character of the area involved nor alters existing stream uses;
B. Failure to grant the variance would create an unreasonable hardship on the 
applicant; economic hardship alone shall not constitute unreasonable hardship;

C. The variance to be granted is the minimum necessary and there are no other 
means by which the alleged hardship can be avoided or remedied to a degree 
sufficient to permit the reasonable continuation of the project;

D. The applicant’s circumstances are unique, not self-imposed, and do not represent 
a general condition or problem;

E. The project is unique when compared to other projects that have met the 
provisions of this Ordinance;

F. A development proposed within a flood protection area is unable to be 
constructed outside the flood protection area; and

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 project that is within a regulatory floodway, 
    Corps Jurisdictional 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 applicant shall be responsible for obtaining all applicable federal and/or 
    state permits before any such variance is granted.

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. The Clerk of the District will accept written comments on a petition for variance 
    submitted by any person up to twenty-one (21) calendar days after the date the District 
    published notice of the petition for variance on its website.
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.

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.

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 filings submitted by the applicant; and
   C. Copies of all written comments received.

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
   B. Granting the petition for variance with conditions; or
   C. Denying the petition for variance.

The report shall include the items listed under §1105.3 of this Ordinance, and the Director of Engineering must forward the report to the Board of Commissioners or its designee for consideration.

5. All variance hearings shall be concluded as soon as practicable.
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 the applicant. If the applicant requests the complete record, the applicant must pay the cost for the preparation of the record.

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.

9. The Clerk of the District shall notify the applicant of the final order of the Board of Commissioners by certified mail, return receipt requested within thirty (30) calendar days of the Board of Commissioners’ final order. The final order shall specify the basis of the 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 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 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 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 applicant and co-permittee, if any, shall both file a sworn affidavit with the District, indicating acceptance of the conditions and limitations and their agreement to comply therewith.
ARTICLE 12. PROHIBITED ACTS, ENFORCEMENT, AND PENALTIES

§ 1200. Prohibited Acts

1. It shall be unlawful for any person to undertake any 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 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 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 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.
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.

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.

5. Representatives of the District may, during reasonable hours, enter upon any project subject to a NOV for purposes of inspecting the 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. Each onsite inspection made by the District pursuant to this section is subject to the inspection fee indicated in Appendix F of this Ordinance.

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.
7. If it appears to the Director of Engineering that the respondent subject to a NOV has failed to respond within 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 Engineering may at his discretion either issue an amendment to the NOV or make a Recommendation for Show Cause to the Executive Director.

<table>
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<tr>
<th>Section</th>
<th>Action</th>
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<tr>
<td>1201.1</td>
<td>Issuance of NOV</td>
<td>Director of Engineering</td>
<td>Apparent violation of Ordinance or Watershed Management Permit.</td>
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<tr>
<td>1201.3</td>
<td>Submission of compliance report and schedule</td>
<td>Respondent</td>
<td>Within 45 calendar days after issuance of NOV.</td>
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<td>1201.5</td>
<td>Review of compliance report and schedule</td>
<td>Director of Engineering</td>
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<td>1201.6</td>
<td>Issuance of amendment to NOV</td>
<td>Director of Engineering</td>
<td>Respondent: 1) Does not respond 45 calendar days after service, 2) Fails to submit an acceptable compliance report and schedule, or 3) Fails to achieve compliance on or before the final compliance date.</td>
</tr>
<tr>
<td>1201.6</td>
<td>Recommendation for Show Cause to Executive Director</td>
<td>Director of Engineering</td>
<td>Respondent: 1) Does not respond 45 calendar days after service, 2) Fails to submit an acceptable compliance report and schedule, or 3) Fails to achieve compliance on or before the final compliance date.</td>
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§ 1202. Administrative Proceedings: 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 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 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 not less than $100.00 nor more than $1,000.00 per day for each violation; each day’s continuation of such 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, shall be assessed by the District for each onsite inspection made by the District to ascertain or confirm compliance by a 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 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 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 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 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 section.
§ 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 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 a 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 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 project may be resumed.

5. The District shall issue a stop-work order if the Director of Engineering determines that:
   A. 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. 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 activity to avoid continuing or additional violations and where significant costs and effort would be incurred should the offending activity be allowed to continue; or

C. 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 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 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 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 site in a civil action, together with court costs and other expenses of litigation.

§ 1208. Legal and Equitable Relief

1. 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 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’ 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 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 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, 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.
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 **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 **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 **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. An appellant’s petition to the Board of Commissioners for a hearing must be in writing and filed with the Clerk of the District, at 100 East Erie Street, Chicago, Illinois 60611, with copies to the Director of Engineering and the President of the Board of Commissioners.

3. The Board of Commissioners or its designee may conduct a hearing on an appellant’s petition to the Board of Commissioners.

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 Board of Commissioners shall not grant an appeal if the appellant failed to timely file an appeal with the Director of Engineering.

6. Within 60 calendar days after receipt of a petition, the District shall advise the appellant in writing regarding the date, time, and location at 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, the 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.

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.

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.

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.
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. Enforce this Ordinance;
   
   H. Hear variance 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 projects not involving flood protection areas;
   
   B. Thirty (30) working days of an initial submittal for projects involving flood protection areas; and
3. **The District** reserves the right to cancel **Watershed Management Permit** applications in such a case as:

A. The 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 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 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 not involving flood protection areas;
   (2) Thirty (30) working days of an initial submittal for projects 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;

J. Inspect the construction of all 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 **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**;

   E. Issue **variances**; or

   F. Hear appeals.

§ 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 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 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 §1402.2 of this Ordinance;
B. Violation of any provision of §1402.3 of this Ordinance; or

C. Breach of the intergovernmental agreement;

4. An authorized municipality shall remedy any deficiency listed in §1404.3 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 May 7, 2020.

Adopted:

Kari K. Steele  
President of the Board of Commissioners of the Metropolitan Water Reclamation District of Greater Chicago

Approved as to form and legality:

Jorge T. Mihalopoulos  
Head Assistant Attorney

Susan T. Morakalis  
General Counsel
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;
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 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 less than 750 square feet in area. Accessory structures include, but are not limited to, garages and sheds.

Actual Release Rate
The release rate from the control structure of a detention facility at the 100-year high water elevation.

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.

Applicant
The permittee, co-permittee, sole permittee, or their designated Professional Engineer, who submits a Watershed Management Permit application.

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
Discharge of 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.

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 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 Office of Resource Conservation: Biological Stream Ratings for Diversity, Integrity, and Significance”.

Building
A structure that is enclosed by walls and a roof. This term does not include accessory structures.

Bulletin 75

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.

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. 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

A sewer intended to convey the combined flow of stormwater runoff and sewage. [Compare combined sewer with sanitary sewer and storm sewer].

Combined Sewer Area

Areas within the District’s corporate limits that have combined sewers intended to convey the combined flow of stormwater runoff and sewage to a District facility. The expansion of existing or establishment of a new combined sewer area is prohibited. This area does not represent the actual effective boundaries between the combined sewer area and separate sewer area. Consult the local sewer system atlas information for that level of detail. [Compare combined sewer area with separate sewer area].

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 NONC are remedied.

Connection Impact Fee

Fee for annexing into the District corporate limits on or after July 9, 1998.

Contiguous or Contiguously

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.

Cook County

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. For the purposes of this Ordinance, a wetland not under the jurisdiction of the Corps shall be considered an isolated wetland.

Corps Jurisdictional Wetland
Any wetland that is 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
A study that determines which storm event duration (1-, 2-, 3-, 6-, 12-, 24-, or 48-hour) results in the greatest peak runoff rate.

Demolition
Removal of structures, impervious area, or utilities that return land to a natural or vacant state. Demolition activities that change the use of the 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 activity, and development.]

Depressional Storage
The volume contained within an above-ground area without a traditional outlet that drains by evaporation and/or infiltration, or when the water surface exceeds the highest closed-contour elevation on a one-foot contour topographic map.

Design Runoff Rate
The runoff rate, or flow rate, used to design a major stormwater system and to determine offsite flow rates. Design runoff rates are calculated by using an event hydrograph method and a critical duration analysis.

Detention Facility
A proposed structure providing temporary storage of stormwater runoff to meet the requirements of this Ordinance. The detention facility includes the stormwater storage facility, control structure (i.e., restrictor), and the emergency overflow.

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.
Development
Any human-induced activity or change to real estate (including, but not limited to, grading, paving, excavation, 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. The term development shall include redevelopment and shall be understood to not include maintenance, maintenance activities, or demolition. [Compare development with maintenance, maintenance activity, and demolition.]

Director of Engineering
The Director of Engineering of the Metropolitan Water Reclamation District of Greater Chicago, or his or her designee.

District
Metropolitan Water Reclamation District of Greater Chicago

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.

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 Control Practice
A temporary or permanent measure that stabilizes soil by covering and/or binding soil particles in order to prevent erosion.

Executive Director
The Executive Director of the Metropolitan Water Reclamation District of Greater Chicago.

Existing Detention Facility
A detention facility previously permitted under a Watershed Management Permit or a Sewerage System Permit, or a locally-required facility that has been constructed prior to submitting a new Watershed Management Permit application.

Facility Connection Authorization
Within the City of Chicago, an authorization for a connection to a District owned, operated, and maintained facility, and for impacts to District owned or leased property. Formerly known as a Sewer Connection Authorization under the Sewer Permit Ordinance.

Farmed Wetland
A wetland that is currently farmed or has been farmed within five (5) years prior to submitting a new Watershed Management Permit application.
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 FIRM.

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
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 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 Area
Regulatory floodplain, regulatory floodway, riparian environment, wetland, and wetland buffer.

Floodplain
The area adjacent to and including a body of water where ground surface elevations are at or below a specified flood elevation. Floodplains include regulatory floodplains.

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 store and convey the base flood without cumulatively increasing the water surface elevation more than a tenth of a foot. Floodways include regulatory floodways.
Floodway Conveyance
The flow carrying capacity of the floodway section and is defined using Manning's equation as:

\[ K = \frac{1.486}{n} A R^{2/3} \]

Where: "n" is Manning’s roughness factor;
"A" is the effective area of the floodway cross-section; and
"R" is ratio of the wetted area to the wetted perimeter.

Flow-Through Practice
Permanent volume control practice designed to treat stormwater runoff from the impervious area 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.

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 practice designed to mimic functions of the hydrologic cycle, including infiltration, interception, evapotranspiration, and evaporation. [Compare green infrastructure with volume control practice.]

Gross Allowable Release Rate
The maximum allowable release rate from a detention facility without adjustments due to existing depressional storage and/or unrestricted flow.

Groundwater
Subsurface water occupying the saturation zone below the normal water table.

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.

IDOT
Illinois Department of Transportation.

IEPA
Illinois Environmental Protection Agency.

IPCB
Illinois Pollution Control Board.
Illinois Urban Manual
The manual containing design guidance, 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 surface that does not readily allow for the infiltration of stormwater runoff into the ground. Impervious areas include, but are not limited to, rooftops, asphalt or concrete pavement, compacted graveled, and ponded water at its normal water level. Volume control practices, green infrastructure, or other areas which include, but are not limited to, non-compacted gravel, porous/permeable pavement, and bio-retention (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
Solid, liquid, or gaseous waste resulting from any commercial, industrial, manufacturing, agricultural, trade or business operation or process or from the recovery or processing of natural resources.

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.

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.

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 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 basement backups including, but not limited to, removing I/I sources, addressing deficiencies in 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 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, provided the enclosure is not built to render the structure in violation of the applicable 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, sewer systems, volume control practices, detention facilities, compensatory storage facilities, constructed wetlands, riparian environments, or other stormwater facilities. [Compare maintenance with maintenance activity, development, and demolition.]

Maintenance Activity
In-kind replacement, restoration, or repair of existing infrastructure, pavement, or facilities including, but not limited to, roadways and parking lots, provided they will perform the same function for which they were originally designed and constructed. [Compare maintenance activity with maintenance, development, and demolition.]

Major Stormwater System
The stormwater system designed to store and/or convey flows for the 100-year critical duration storm event.

Manual of Procedures

Material Revision
Any deviation from the approved Watershed Management Permit including, but not limited to, plans, calculations, specifications, or the applicant.
Minor Stormwater System
Infrastructure including curb, gutter, culverts, roadside ditches and swales, storm sewers, tiles, subsurface drainage systems, and other practices intended to capture and convey stormwater runoff from storm events less than 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 project where any building contains three (3) or more dwelling units within the property holding. [Compare multi-family residential with residential subdivision.]

Municipality
A local government, including a city, village, town, or Cook County. The term shall not include a township, school district, park district, or sanitary district.

Native Planting Conservation Area
Area planted with deep-rooted vegetation, as approved by the District, and maintained in perpetuity.

Net Allowable Release Rate
The maximum allowable release rate from a detention facility that is adjusted due to depressional storage and/or unrestricted flow.

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 include, but 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. Non-qualified development may be excluded from the gross allowable release rate calculation specified in §504.3 and detention facility volume calculation specified in §504.8 and §505.2 of this Ordinance.

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
National Pollutant Discharge Elimination System.

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

NWI
National Wetland Inventory. 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.

Offsite Retention-Based Practice
A permanent practice designed to capture, retain, and infiltrate stormwater runoff from an impervious area located elsewhere in the watershed planning area.

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).

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 private single-family home drains.

Owner
The record title holder or a beneficiary of a land trust which is the record title holder. When the owner is other than an individual, the term includes beneficiaries, agents, shareholders, officers, and directors.

OWR
Illinois Department of Natural Resources Office of Water Resources.
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].

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 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.

Property Holding
Contiguous land in which the applicant has a property interest.

Property Interest
The ownership or other beneficial interest in a property regardless of whether that interest is partial or full, or whether the interest is direct or indirect. Property interest includes but is not limited to contractual, legal, or equitable interests and 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.

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
All new and replacement public and private sewers and sewer connections, exterior to a building foundation. See §701 of this Ordinance for a complete list.
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 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 Parts 3700 and 3708), 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.

Residential Subdivision
Residential 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 Practice
Permanent volume control practice designed to capture, retain, infiltrate, and treat or reuse stormwater runoff from the impervious area 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.

Right-of-Way
Land that is dedicated for public access as of the effective date of this Ordinance including roads and sidewalks. [Compare right-of-way with open space.]
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 rainfall and/or snowmelt that exceeds the infiltration capacity of the land.

Sanitary Sewer
Sewers intended to convey 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 District 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 suspended soil particles to settle.

Sediment Control Practice
A system or method that is designed to intercept sediment 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 discharges into a receiving natural or man-made waterway or other stormwater facility. This area does not represent the actual effective boundaries between the combined sewer area and separate sewer area. Consult local sewer system atlas information for that level of detail. [Compare separate sewer area with combined sewer area].

Service Sewer
A sewer 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.

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.

Sewerage System Permit
A permit under the District’s Sewer Permit Ordinance.

Single-Family Home
Residential property 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 Constraint
Condition 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 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 system, 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 basement backups and adverse surcharging conditions that cause health hazards and financial losses.

SSO
Sanitary Sewer Overflow. Any release or diversion of untreated sewage from the sanitary sewer system to a surface water, storm sewer, storm ditch, or the ground.

Standard Isolated Wetland
All isolated wetlands other than high quality isolated wetlands.

Storm Event
The frequency rainfall event as published in Bulletin 75.
Storm Sewer
A sewer intended to convey 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.

Subwatershed
The division of a major watershed planning area as identified in the District’s DWPs and depicted in Appendix E of this Ordinance.

Swink and Wilhelm Mean Coefficient of Conservatism (c̄)
The mean coefficient of conservatism (c̄) 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 (c̄) 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.
Unrestricted Flow

Stormwater runoff from a development that is not tributary to a detention facility. 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 flow from an area upstream of a 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 Practice

Permanent practice 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.

Watershed

Tributary areas discharging to a common point.

Watershed Management Permit

A permit issued by the District or an authorized municipality for a project that is in compliance with this Ordinance.

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 project, a reduction in peak flow rates, and/or enhancement of existing water-related environmental resources created by the project which is greater than the minimum Ordinance requirements.

Waterway

Navigable body of water such as a stream, creek, canal, channel, or river.
Wetland
Areas which are inundated or saturated by surface or groundwater (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 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 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.
APPENDIX B

Watershed Specific Release Rates
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):

<table>
<thead>
<tr>
<th>Watershed Planning Area</th>
<th>Gross Allowable Release Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poplar Creek Watershed</td>
<td>0.25 cfs/acre</td>
</tr>
<tr>
<td>Upper Salt Creek Watershed</td>
<td>0.20 cfs/acre</td>
</tr>
<tr>
<td>Lower Des Plaines Watershed</td>
<td>0.20 cfs/acre</td>
</tr>
<tr>
<td>North Branch Watershed</td>
<td>0.30 cfs/acre</td>
</tr>
<tr>
<td>Calumet Sag Channel Watershed</td>
<td>0.30 cfs/acre</td>
</tr>
<tr>
<td>Little Calumet River Watershed</td>
<td>0.25 cfs/acre</td>
</tr>
</tbody>
</table>
APPENDIX C

Legacy Sewer Permit Ordinance and

Manual of Procedures for the Administration of the Sewer Permit Ordinance
SEWER PERMIT ORDINANCE

AS AMENDED
July, 1999
AN ORDINANCE

AN ORDINANCE REGULATING THE ISSUANCE OF PERMITS FOR CONSTRUCTION, OPERATION AND MAINTENANCE OF SEWERS, SEWERAGE SYSTEMS, TREATMENT FACILITIES AND SEWER CONNECTIONS DESIGNED TO DISCHARGE DIRECTLY OR INDIRECTLY INTO COLLECTION AND TREATMENT FACILITIES OF THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO, OR INTO WATER WITHIN ITS TERRITORY, HEREAFTER TO BE KNOWN AS "THE SEWER PERMIT ORDINANCE."

For information or questions about this Ordinance, call the Local Sewer Systems Section of the MWRDGC’s Engineering Department.

Phone: (312) 751-3260
Fax: (312) 751-7957

Adopted July 10, 1969
Latest Amendment: July 8, 1999
Be it ordained by the Board of Commissioners of the Metropolitan Water Reclamation District of Greater Chicago

Section 1. Authority and Purpose of this Ordinance.

This Ordinance is adopted under the authority of an act to create sanitary districts and to remove obstructions in the Des Plaines and Illinois rivers, as amended, "(Illinois Compiled Statutes, Chapter 70, Sections 7, 7a, 7aa, 7b and 7) and of the powers granted to the Board of Commissioners of the Metropolitan Water Reclamation District of Greater Chicago, expressly or by necessary implication, under other provisions of said act, for the purpose of enabling the Metropolitan Water Reclamation District of Greater Chicago more effectively to protect the ability of its sewerage systems, interceptors, sewage disposal and treatment plants, works, and facilities to satisfactorily perform the functions for which they were designed, by controlling the nature, volume and the manner of discharge into said systems, plants, works, and facilities, and for the purpose of maintaining the stable operation of said systems and facilities, and for the protection of the waters within the district so as to preserve the public health.

Section 2. Definitions.

For the purpose of this Ordinance, the following definitions obtain:

(a) Board of Commissioners: The Board of Commissioners of the Metropolitan Water Reclamation District of Greater Chicago.

(b) District: The Metropolitan Water Reclamation District of Greater Chicago, a municipal corporation, organized and existing under the laws of the State of Illinois.

(c) General Superintendent: The General Superintendent of the Metropolitan Water Reclamation District of Greater Chicago.

(d) Industrial Waste: The solids, liquid or gaseous waste resulting from any industrial, manufacturing, trade or business process or from the development, recovery or processing of natural resources.

(e) 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.

(f) Maintenance: The action required to prevent failure of the sewerage system and preserve its original function.

(g) Material Change: Any deviation from the approved plans or specifications accompanying an application for which a permit has been issued under this Ordinance, that will affect capacity, flow or operation of a sewer, sewer system or connection to any sewer system.

(h) Permittee:

1. Any municipality, municipal corporation, sanitary district, utility company, township government or any other governmental body; or

2. any municipality, municipal corporation, sanitary district, utility company, township government or any other governmental body jointly with any individual, individuals or corporation where application is made for installations or private property; or

3. any individual, individuals, or corporation who owns property directly adjacent to any interceptor sewer of the Metropolitan Water Reclamation District of Greater Chicago, where direct connection to said interceptor is made or is contemplated by the owner of said property for the sole, exclusive and perpetual use of the owner of said property (and where the direct connection serves only that property immediately adjacent to said interceptor, who seeks permission to discharge sewage, industrial waste or other waste into facilities of the Metropolitan Water Reclamation District of Greater Chicago; or
4. any individual, individuals or corporation who provides an acceptable sewage treatment plant for the sole, exclusive and perpetual use of the owner, of the property being served thereby, which discharges into any waters or interceptor sewer of the Metropolitan Water Reclamation District of Greater Chicago in conformity with the ordinances of the Metropolitan Water Reclamation District of Greater Chicago, the rules and regulations of the Illinois EPA Division of Water Pollution Control and the statutes of the State of Illinois; or

5. any responsible individual, individuals, or corporation (not otherwise qualified as permittee under the provisions of Section 2(h)2, 3 or 4 of the Sewer Permit Ordinance), upon presentation of satisfactory evidence of responsibility as determined by the Board of Commissioners, where construction of sewers or sewerage systems is contemplated to serve property owned by said individual, individuals, corporation, in an unincorporated area, and the contemplated construction is intended for the sole, exclusive and perpetual use of the owner; provided that said unincorporated area is outside the jurisdiction of a local sanitary district and outside the area of a public utility company certificated for such service, and the township government declines to execute the permit application and to assume the obligations of a joint permittee, as provided in Section 2(h)2 of the Sewer Permit Ordinance.

(i.) Sewage: The water-carried human wastes or a combination of water-carried wastes from residences, business buildings, institutions and industrial establishments, together with such ground, surface, storm or other wastes as may be present.


(a) In order to effect the intent and purposes of this Ordinance, it shall be the duty of the Board of Commissioners to establish appropriate written rules and regulations as to minimum engineering standards governing the design, construction and maintenance of sewers and sewerage systems within the territory of the District, including requirements as to types of materials, methods of installation, maximum permissable rates of infiltration and other engineering parameters.

(b) Effective January 1, 1972, no permits shall be issued for sewer construction in unsewered or separate sewered areas when construction of the facilities to be served by the proposed sewer would result in run-off in excess of that from its natural or undeveloped state, unless (1) the local government having jurisdiction over the area in which the construction is contemplated shall have adopted a storm water detention or flood control ordinance acceptable to the District, together with a drainage plan and time schedule for its implementation approved by the District, or (2) the run-off rate from the area be restricted to be no greater than that from its natural or undeveloped state and that detention space for the excess storm water be provided in accordance with the current Manual of Procedures of the District. Provision shall be made for proper maintenance of any such detention facility.

Section 4. Permit Required for Sewer Construction.

(a) It shall be unlawful for any person, corporation, sanitary district, school district or other entity to construct, maintain or operate any sewer, sewerage system or private treatment plant that has been planned or designed to discharge, either directly or indirectly, into any sewer, interceptor sewer, sewage treatment plant or other facility maintained and operated by the District, or into waters within the territory of the District, without first having obtained a permit in writing for the construction and operation of such sewer, sewerage system or private treatment plant, which permit shall have been duly approved and issued under the authority of the District, and according to the terms and provisions of this Ordinance.

(b) It shall be unlawful for any person or corporation to install a connection, addition, extension, opening or penetration of any kind into any sewer or interceptor sewer that discharges directly or indirectly into any
sewer, interceptor sewer, sewage treatment plant or other facility maintained and operated by the District; or into waters within the territory of the District, without first having obtained the written permit required under Section 4(a) of this Ordinance.

c. No permit shall be required for any connections, changes, or additions to or extensions of existing sewerage systems that receive or may receive only domestic or sanitary sewage:

(1) From any building to be devoted solely to residential use, which contains less than twenty-five dwelling units, or

(2) From any building, the use of which will not involve the risk of introduction into the sewer system of industrial waste or other waste by accident, spillage or otherwise; provided, however, that it shall be a requirement of the District in the construction of such building that a control sanitary manhole shall be installed.

d. The permit provided for in Section 4(a) of this Ordinance shall always be required for any proposed direct connection to any interceptor sewer or other facility owned or operated by the District.

e. It shall be unlawful for the owner or occupant of any building for which a permit is not required hereunder to cause or permit a change of use of such building to a use for which a permit is required hereunder, without first having obtained the written permit required under Section 4(a) of this Ordinance.

Section 5. Sewer Permit Application and Processing Fees.

(a) Except as hereinafter provided, each sewer permit applicant shall pay to the District a sewer permit application and processing fee in accordance with the terms and conditions hereinafter set forth. These fees are subject to change on an annual basis.

(1) A sewer permit application fee shall be remitted by an applicant with each permit application required to be made pursuant to this Ordinance. Said permit application fee shall be paid at the time of the filing of the sewer permit application, and no sewer permit shall be issued until all application and processing fees with respect thereto are paid in full.

(2) The sewer permit application fee shall be computed on the basis of the following charges:

i. A $850.00 non-refundable permit application fee; or

ii. A $500.00 non-refundable sewer connection authorization application fee; or

iii. A $100.00 non-refundable notification and request for inspection (sewer replacement) fee; and

iv. A $25.00 (three dollars fifty cents) for each foot of sanitary/combined sewer pipe included in the sewer permit application and any plans and specifications made a part hereof.

(Fees Amended at December 18, 1997 Board Meeting, effective January 1, 1998)

(3) Exemptions:

i. Governmental agencies seeking to construct public works projects (where ownership and control of the project is reposed with the governmental agency), the cost of which is financed by the proceeds of ad valorem property taxation, user charges, special assessments, or municipal bonds shall be exempt from the fee provisions of this Ordinance;

ii. Municipalities and utility companies which apply for permits under this Ordinance to effect sewer rehabilitation work mandated by the District and the Illinois Environmental Protection Agency shall be exempt from the fee provisions of this Ordinance.
(4.) No refund or additional charges will be made with respect to the fees charged pursuant to this Ordinance if the final total fee, as determined from as-built plans for the project, varies by less than $100.00 from the original total fee paid.

(5.) In addition to the foregoing fees herein above established, a $50.00 processing fee shall be paid for each set of revised plans, drawings, specifications or any other supplementary filings submitted to the District by the applicant or his representative subsequent to the issuance of the permit.

(b) Connection Impact Fees

The Permittee/Co-permittee for any permit project within Cook County, except for publicly owned facilities performing a local governmental function or real estate tax-exempt facilities and which discharge solely sewage into its sewers, which is (a) thereafter annexed to the District or (b) located in a greater than 500-acre Tax Increment Financing (TIF) district, shall pay a Connection Impact Fee to the District at a time that such area or a portion thereof is the subject of a sewer permit application to the District. The Connection Impact Fee will be assessed at the following rates per acre:

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Units/Acre</th>
<th>Fee/Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Density</td>
<td>20 or less</td>
<td>$3,750</td>
</tr>
<tr>
<td>Medium Density</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Density</td>
<td>21 or more</td>
<td>$8,000</td>
</tr>
<tr>
<td>Other Land Use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial or</td>
<td>N/A</td>
<td>$7,500</td>
</tr>
<tr>
<td>Industrial</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For permit service areas in a greater than 500-acre TIF district only, a preliminary connection impact fee is computed by multiplying the acreage of each Permanent Index Number (PIN) in the permit service area by the appropriate unit fee set forth in the table above. The preliminary connection impact fee is multiplied by an adjustment factor which is equal to the number of years during the 12-year period immediately preceding the sewer permit application that real estate taxes for the District were not paid for that PIN in the permit service area divided by twelve. The preliminary connection impact fee for each PIN in the permit service area is then multiplied by the adjustment factor. Each of the adjusted preliminary connection impact fees so computed is added together and the sum total is the Connection Impact Fee for the permit service area.

Ten percent (10%) of the Connection Impact Fee will be paid to the District with the sewer permit application. Fifty percent (50%) of the Connection Impact Fee will be paid no later than the first to occur of substantial completion or one year after construction begins. The remaining 40% of the Connection Impact Fee will be paid to the District no later than the first to occur of the Permittee/Co-permittee's Request for Final Inspection or two years after sewer construction begins.

(c) Tax Increment Financing (TIF) District Service Fees for Sewer Permits issued with respect to projects within a TIF district other than for publicly owned facilities performing a local governmental function or real estate tax-exempt facilities and which discharge solely sewage into its sewers, shall be paid to the District for the duration of the TIF district. The municipal Permittees shall pay to the District an annual service fee equal to the difference between the amount of real estate tax paid to the District on account of each Permanent Index Number (PIN) in the permit service area and the actual cost of providing sewage transport and disposal service to those PINs. The amount of service fee for each parcel of real estate in the permit service area shall be calculated by multiplying the current equalized assessed valuation for each PIN in the permit service area by the tax rate for the District for each reporting year and then multiplying that product by the Operation, Maintenance and Replacement Factor established by the District for that tax year (as required by the District’s User Charge Ordinance). That amount is compared to the
actual real estate tax receipts by the District for each PIN for that tax year. In the event the cost for providing actual sewage transport and disposal service exceeds the actual tax receipts by the District for that PIN, the difference is the Tax Increment Financing District Service Fee. The municipal Permittee shall furnish a tabulation to the Chief Engineer by September 1st of each year that the TIF district is in effect which shall list all parcels in the permit service area by PIN for each permitted project. For each PIN shown, he following information, which will be subject to audit and confirmation by the District shall be provided:

a) The amount of real estate taxes actually paid to the District by the Cook County Treasurer for each reporting year for each PIN in the permit service area.

b) The cost to the District for providing sewage transport and disposal services to each PIN in the permit service area, using the formula set forth above.

c) The difference between a) and b) above.

d) The TIF district service fee due to the District for that PIN, together with a total aggregate fee for that tax year for the permit service area.

The TIF District Service Fee shown to be owed in the tabulation shall be remitted to the District by the Permittee with the tabulation.

(Adopted at the Board Meeting of May 7, 1988; Amended, Board Meeting of July 8, 1996; Amended, Board Meeting of November 5, 1996; Amended, Board Meeting of July 8, 1999)

Section 6. Plans and Specifications to be Submitted.

(a) All applications for permits required under Section 4 of this Ordinance shall be on forms prescribed by the District. Such applications shall be submitted to the General Superintendent, together with plans and specifications prepared by a licensed registered professional engineer, showing details of the proposed construction. The General Superintendent shall review the application, plans and specifications for the purpose of ascertaining whether or not they comply with the rules and regulations established under Section 3 of this Ordinance, and he may approve same and issue the permit, or he may reject such application, in which case he shall transmit to the applicant, within ten working days from the date of receipt of such application, a notice of such rejection, together with his written recommendations for such revisions and/or modifications as shall be required to meet with his approval. No permit under Section 4 of this Ordinance shall be approved or issued without approval by the General Superintendent of the plans and specifications for the proposed construction. A copy of such approved plans and specifications shall be kept in the files of the District, and all construction performed under authority of the permit required under Section 4 of this Ordinance shall be done in strict compliance and conformity with such approved plans and specifications.

(b) In the event that it should be necessary or desirable to make material changes in the construction proposed under plans and specifications that have been approved as required under Section 6(a) of this Ordinance, revised plans and specifications shall be submitted, together with a written statement as to the reason for the proposed changes, and the General Superintendent may approve such revised plans and specifications, in which case he shall cause a supplemental written permit to be issued, or he may reject such revised plans and specifications on the same terms and in the same manner as is provided for such rejections under Section 6(a) of this Ordinance.

(c) All applications, plans and specifications shall be promptly reviewed, and the District shall, within ten working days of the receipt of each application, make written response to the applicant, or his agent, by rejection, or by request for additional information.

(d) The rejection of any permit application shall be subject to reconsideration by the Board of Commissioners upon the written request of the applicant or his agent, made within twenty days of the receipt of such rejection, and the Board of Commissioners shall have twenty days from the receipt of
such request for reconsideration, within which to act thereon and respond to the applicant in writing.

Section 7. Assignment of Permit.

No permit issued under Section 4 of this Ordinance may be assigned or transferred without the consent in writing of the General Superintendent, and any such assignment or transfer without said written consent shall be void and of no legal effect.

Section 8. Maintenance by the Permittee.
—Bond Required in Certain Cases.

(a) It shall be the duty and responsibility of every permittee to whom a permit has been issued for the construction and operation of any facility or connection under Section 4 of this Ordinance to keep said facility or connection in a proper state of repair and maintenance after same has been completed and placed in operation and use.

(b) No permits shall be issued for the construction, extension, operation and maintenance of sewage treatment plants, oxidation pond, or other treatment facility unless accompanied by a bond with sufficient surety to assure proper construction, extension, operation and maintenance of any such treatment plant, oxidation pond, or other sewage treatment facility within the borders of the District, said bond to 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; and it shall be one of the conditions for issuing a permit for the construction, extension, operation and maintenance of a sewage treatment plant, oxidation pond or other treatment facility, that the person, persons, partnership or corporation requesting said permit be required in its or their application to agree that if they will provide any additional security required by the Board of Commissioners of the District for the life of the permit, to guarantee full and complete performance including the execution of any and all documents that may be required by the Board of Commissioners in support thereof; and said bond shall be approved as to form and legality by the Law Department of the District; and as to engineering details by the Chief Engineer.

Section 9. Construction Specifications where Permit is not required.

All sewer connections from buildings where a permit is not required under the provisions of this Ordinance shall nevertheless conform to such minimum engineering standards as to design and construction and maintenance as are established by the General Superintendent to carry out the purposes of this Ordinance. Construction in flood hazard areas shall conform to all applicable, Federal, State and local flood plain requirements.


(a) Whenever it shall appear to the General Superintendent that a violation of any provision of this Ordinance may exist, including the fact that a permit required thereunder has not been issued, or that construction performed under authority of a duly issued permit does not comply with the conditions of such permit, or fails to conform with the plans and specifications that were approved in connection therewith, or that a sewer, sewerage system, treatment plant or facility or sewer connection is not being maintained and operated in accordance with the provisions of this Ordinance, the General Superintendent shall, as soon as practicable, notify the Permittee or whomsoever is responsible for the apparent violation to appear before the Board of Commissioners or its duly designated representative and show cause why he should not be found in violation of this Ordinance.

Such notice shall specify the time and place where a hearing will be held, and notice of such hearing shall be served personally or by registered or certified mail at least ten (10) working days before said hearing; and in the case of a municipality or a corporation such service shall be upon an officer or agent thereof. The Board of Commissioners may itself conduct the
hearing and take evidence, or may designate any of its members or any officer or employee of the District or any other person:

(1) To issue in the name of the Board notices of hearings requesting the attendance and testimony of witnesses and the production of evidence relevant to any matter involved in any such hearing; and

(2) To take the evidence.

Thereafter the Board of Commissioners shall review said evidence and any recommendations which may be presented in connection therewith, and shall make such findings and issue such orders as it deems appropriate to the enforcement of compliance with the provisions of this Ordinance. Testimony taken at the hearing provided for herein shall be under oath and recorded stenographically, and the transcript 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 therefor.

(b) When the violation referred to in Section 10 (a) above does not appear to be clearly willful, and does not involve an emergency endangering the public health, the alleged violator shall be made aware of the violation prior to the show cause hearing so as to allow the alleged violator an opportunity to correct the violation and secure compliance with the provisions of this Ordinance and the terms and conditions of permits issued hereunder prior to the show cause hearing.

(c) With respect to violations of the Sewer Permit Ordinance cited after August 31, 1984, an inspection fee of $100.00 shall be charged by the District for each on-site inspection made by the District to ascertain or confirm compliance by a violator hereunder with the construction, operation, and maintenance provisions of this Ordinance or permit issued pursuant to this Ordinance. Such inspection(s) shall be made when requested by a Permittee, or if no such request(s) is (are) made, then upon the compliance date established by an order of the Board of Commissioners, and thereafter as circumstances may reasonably require.

After a hearing on an alleged violation the Board may, in addition to any fine 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 inspection, sampling, analysis, administrative costs, and court reporter and attorney fees.

Payment of the above-described costs shall be made by the violator within 30 days of its receipt of an invoice therefore prepared and transmitted by the District to the violator. Invoices issued hereunder which shall be in arrears for more than 30 days shall be subject to an additional late payment charge of 1 1/2% per month until paid.

Section 11. Penalties.

Whoever violates any provisions of this Ordinance, or any amendment hereafter adopted, or fails to comply with an order of the Board of Commissioners issued in accordance with the provisions of this Ordinance shall be fined not less than one hundred dollars ($100.00) nor more than one thousand dollars ($1,000.00). Each day's continuance of such violation or failure shall constitute a separate offense. The Attorney for the District shall take such action as he may deem necessary to enforce collection and payment of all penalties, to restrain violations of, and to compel compliance with, the provisions of this Ordinance, and with the conditions of any permit issued hereunder.

Section 12. Right to Repeal or Amend Ordinance.

The District reserves the right at any time, and from time to time, to repeal or amend this Ordinance or any provisions thereof, and all permits are issued subject to such right. Where conditions so warrant, the Board of Commissioners, after a hearing may waive any of the requirements of this Ordinance and waive any other requirements imposed by rules and regulations adopted for the implementation of this Ordinance.
Section 13. Sewage and Waste Control
Ordinance; Pollution Control
Board Rule and Regulations.

Any construction performed under a permit
issued under the provisions of this Ordinance
shall comply with the provisions of the District's
'Sewage and Waste Control Ordinance' and the
rules and regulations of the Illinois Pollution
Control Board, wherever the same are applicable.

Section 14. Construction Under Former
Ordinances.

Construction under any permit issued prior to the
effective date of this Ordinance shall be governed
by the provisions of the ordinances in force at the
time said permit was issued.

Section 15. Permits not Required in
Municipalities 500,000 Population.

Nothing in this Ordinance shall be construed to
require permits in municipalities having a
population of over 500,000.

Section 16. Effect of Court Decisions.

If the provisions of any section of this
Ordinance shall be declared unconstitutional or
invalid by the final decision of any court of
competent jurisdiction, the provision of the
remaining paragraphs shall nevertheless continue
in full force and effect.

Section 17. Effective Date.

This Ordinance became effective on the 1st
day of January 1970. The last amendment
became effective July 8, 1999.
METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO
100 East Erie Street
Chicago, Illinois 60611
(312) 751-5600

BOARD OF COMMISSIONERS
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AN ORDINANCE

The manual of Procedures is an Ordinance providing minimum Engineering Standards for the design, construction, operation and maintenance of sewers, sewerage systems, treatment facilities and sewer connections designed to discharge directly or indirectly into collection and treatment facilities of the Metropolitan Water Reclamation District of Greater Chicago, or into waters within its territory, supplementing the Sewer Permit Ordinance.

For information or questions about this Ordinance, call the Local Sewer Systems Section of the MWRDGC’s Engineering Department.

Phone: (312) 751-3260
Fax: (312) 751-7957

Adopted September 3, 1970
Latest Amendment November 5, 1998
Foreword

The following pages of this Manual contain the design standards and the administrative requirements for the issuance of sewer permits and outline the procedures for permit application. The contents of this Manual have been formulated with the courteous assistance of a Blue Ribbon Committee representing a cross-section of concerned citizens, local governments, builders, contractors and consulting engineers, with a view towards facilitating the issuance of permits. It is hoped that this Manual will reach, and be used by as many hands as may be potentially involved in the preparation of the permit application and the other plans and documents related thereto. For if it does, it is our hope that it will properly serve the purposes it is intended for.

Let us assure you in this connection that the permit and all entries therein, together with the other information and documents related thereto, are individually designed to serve specific and related purposes in our overall responsibility for the protection of the health and welfare of the public. To be specific, the purposes served include: compliance of the project with the minimum design standards; prevention of pollution by controlling flows into the District systems, including flows into waters within the District; prevention of overflowing of the District interceptors and water reclamation plants; and, equally important, the assistance to the District in planning for the future to provide for flood control and to meet demands of population growth as reflected by new construction projects.

It is our sincere hope that this Manual will prove beneficial to you and that you will be generous in extending your cooperation and assistance so that, in turn, we will be able better to serve you and serve and protect the public.
MANUAL OF PROCEDURES
FOR THE ADMINISTRATION OF THE
SEWER PERMIT ORDINANCE

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MANUAL OF PROCEDURES
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SECTION I—APPLICABLE RULES AND REGULATIONS

Article 1. PERMIT REQUIREMENTS

1-1. Purpose. The "Manual of Procedures for the Administration of the Sewer Permit Ordinance", contained herein, is issued for the implementation, administration and enforcement of the provisions of The Sewer Permit Ordinance of the Metropolitan Water Reclamation District of Greater Chicago, hereinafter known as the "District".

The Engineer of Local Sewers is designated as the authorized representative of the General Superintendent to receive and review permit applications, to inspect and approve construction under the permit, and to investigate violations of the Ordinance.

1-2. Permit Requirements. Except as provided in Article 1-3, Exemptions, and Article 1-4, Waivers, permits are required for all construction of sewers and sewer facilities within the territorial boundaries of the District, whether such construction is on private or public property. A permit is also required for existing buildings when the use of the building changes to a use for which a permit is required. Unless the Ordinance contains clear language granting a specific exemption as indicated herein, the intent is that no exemption is granted. It is the responsibility of the General Superintendent to interpret, administer and enforce the Ordinance within the authority granted to him by the Board of Commissioners.

1-3. Exemptions. A building service sewer (See Article 4-4) constructed to serve a single building devoted solely for residential purposes and containing less than twenty-five (25) dwelling units is exempt from the sewer permit requirement. Any extension of said service sewer is a violation of the Ordinance.

Any sewer constructed in the public right-of-way or easement, except for crossing, is considered a lateral and is not exempt from the permit requirement, even though it may serve a single building containing less than twenty-five (25) dwelling units. Except as herein provided, all other construction requires a permit.

1-4. Administrative Waivers.
Administrative Waivers for some non-residential buildings may be available to Permittees meeting specific requirements which minimize or eliminate industrial wastes.

1-5. Permits. The District recognizes as Permittees the parties listed below as provided in Section 2(h) of the Ordinance. The Permittee is held responsible for compliance with the conditions of the permit.

a. Any municipality, municipal corporation, sanitary district, utility company, township government or any other governmental body.

b. Any municipality, municipal corporation, sanitary district, utility company, township government or any other governmental body jointly with any individual, individuals or corporation where application is made for installations on private property.

MWLDRD Manual of Procedures for the Administration of the Sewer Permit Ordinance July, 1969
c. Any individual, individuals, or corporation who owns property directly adjacent to an interceptor sewer of the District, where direct connection to said interceptor is made or is contemplated by the owner of said property for the sole, exclusive and perpetual use of the owner of said property (and where the direct connection serves only that property immediately adjacent to said interceptor), who seeks permission to discharge sewage, industrial waste or other waste into facilities of the District.

d. Any individual, individuals or corporation who provides an acceptable sewage treatment plant for the sole, exclusive and perpetual use of the owner of the property being served thereby, which discharges into any waters or interceptor sewer of the District in conformity with the Ordinances of the District, the Rules and Regulations of the Illinois Pollution Control Board, the Illinois Environmental Protection Agency, and the Statutes of the State of Illinois.

e. Any responsible individual, individuals, or corporation, (not otherwise qualified as permittee under the provisions of Section 2(H)(2), 3 or 4 of the Sewer Permit Ordinance), upon presentation of satisfactory evidence of responsibility as determined by the Board of Commissioners, where construction of sewers or sewerage systems is contemplated to serve property owned by said individual, individuals, or corporation, in an unincorporated area, and the contemplated construction is intended for the sole, exclusive and perpetual use of the owner; provided that said unincorporated area is outside the jurisdiction of a local sanitary district and outside the area of a public utility company certificated for such service, and the township government declines to execute the permit application and to assume the obligations of a joint permittee, as provided in Section 2(H)(2) of the Sewer Permit Ordinance.

1-6. Joint Permittees. In addition to those cases where the requirement for joint permittee is mandatory under the Ordinance, permits may be issued to joint permittees if so requested by the local governmental body having jurisdiction.

1-7. Permittees Under Previous Ordinance. Nothing contained in Article 1-4 shall operate to annul permits previously issued for the construction of sewers under the Ordinance then in effect, except that in unincorporated areas where a permit had been issued to an individual owner as Permittee, if said owner/Permittee shall abandon, or transfer the ownership of, the sewer system constructed under a permit and the area served becomes subsequently incorporated or is annexed to a duly constituted local government, sanitary district or utility company, the local authority assuming jurisdiction over the area shall thereby become the Permittee for said system and shall thereafter be responsible for the proper maintenance and operation of the system.

1-8. Definitions. For the purposes of the District, the following definitions shall apply:

a. "Sewage" means water-carried human wastes or a combination of water-carried wastes from residences, business buildings, institutions and industrial establishment, together with such ground, surface, storm or other wastes as may be present.

b. "Industrial Waste" means the solids, liquids or gaseous waste resulting from any industrial, manufacturing, trade or business process or from the development, recovery or processing of natural resources.

c. "Other Wastes" means all decayed wood, sawdust, shavings, bark, lime, refuse, ashes, garbage, offal, tar, chemicals and other substances except sewage and industrial wastes.

d. "Maintenance" means keeping the sewer lines, sewer systems, sewer facilities or sewage works and structures in satisfactory working condition and good state of repair,
(including but not limited to preventing any obstructions or extraneous materials or
flows from entering said facilities, protecting said facilities from any damage,
and keeping same free from defects or malfunctions), and making necessary
provisions and taking necessary precautions to assure that said sewer
facilities are at all times capable of satisfactorily performing the services, and
adequately discharging the functions and producing the final results and purposes
said facilities are intended to perform, discharge or produce.

Article 2. APPLICABLE RULES AND
REGULATIONS

2-1. General. The most current copy of the
rules, regulations, ordinances and policies
listed below which are issued by the
authorities indicated are incorporated herein
by reference.

2-2. The Metropolitan Water Reclamation
District of Greater Chicago.

a. The Sewer Permit Ordinance.
b. The Sewage and Waste Control
Ordinance.
c. The rules, regulations, resolutions, policies,
directives and instructions that may be
adopted or issued from time to time by the
Board of Commissioners.
d. The administrative procedures or directives
issued by the General Superintendent.

Administrative Code.

a. Pollution Control Board Technical releases
and other applicable rules and regulations
issued.
b. The "Illinois Recommended Standards for
Sewage Works" (Part 370).

2-4. U.S. Department of Housing and Urban
Development.

a. Minimum Design Standards for Community
Sewage System.

2-5. Standard Specifications for Water and
Sewer Main Construction in Illinois.

2-6. Recommended Standards for Sewage
Works;
(Ten State Standards)

The standards under Article 2-4, 2-5 and 2-6 are
incorporated only to the extent that they are not in
conflict with the above requirements or with any other
provisions in this Manual.

SECTION II - DESIGN AND OTHER REQUIREMENTS

Article 3. DESIGN REQUIREMENTS.

3-1. Minimum Design Standards. All design
and construction of sewers and sewer
systems within the territorial boundaries of the
District shall be governed by the minimum
standards contained in the rules and

MWRO Manual of Procedures for the Administration of the Sewer Permit Ordinance July, 1990

6

APPENDIX C. LEGACY SEWER PERMIT ORDINANCE AND MANUAL OF PROCEDURES FOR THE
ADMINISTRATION OF THE SEWER PERMIT ORDINANCE
Page C-21
conform to the design standards and other requirements contained herein.

3-2. Design Slopes. Minimum and maximum slopes are tabulated below. The slopes are those that produce minimum and maximum velocities of 2.0 fps and 15.0 fps based on Kutter's Formula, with "n" equal 0.013, and the pipe flowing full, as provided in the rules and regulations of the Illinois Pollution Control Board.

<table>
<thead>
<tr>
<th>Sewer Size</th>
<th>Minimum Slope</th>
<th>Maximum Slope</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inches</td>
<td>Percent</td>
<td>Percent</td>
</tr>
<tr>
<td>6</td>
<td>1.00</td>
<td>33.0</td>
</tr>
<tr>
<td>(Service Sewers)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>0.40</td>
<td>22.0</td>
</tr>
<tr>
<td>10</td>
<td>0.28</td>
<td>15.0</td>
</tr>
<tr>
<td>12</td>
<td>0.22</td>
<td>11.0</td>
</tr>
<tr>
<td>14</td>
<td>0.17</td>
<td>9.0</td>
</tr>
<tr>
<td>15</td>
<td>0.15</td>
<td>8.3</td>
</tr>
<tr>
<td>16</td>
<td>0.14</td>
<td>7.8</td>
</tr>
<tr>
<td>18</td>
<td>0.12</td>
<td>6.5</td>
</tr>
<tr>
<td>21</td>
<td>0.10</td>
<td>5.1</td>
</tr>
<tr>
<td>24</td>
<td>0.08</td>
<td>4.2</td>
</tr>
</tbody>
</table>

3-3. Manholes, Drop Manholes. An exterior drop pipe should be provided for a sewer entering a manhole at an elevation of 24 inches or more above the manhole invert, as provided in the State of Illinois Title 35, Part 370. The minimum diameter of any manhole shall be 48 inches. The diameter of the drop pipe shall preferably be larger than, or of the same diameter as, the entering sewer. The minimum diameter of the drop pipe shall not be smaller than the diameter of the entering sewer by more than two nominal diameters (e.g. for 12", 15" and 18" entering sewer, the drop shall be 8", 10" and 12" respectively), provided that the minimum diameter of the drop pipe shall not be less than 8". If a smaller drop is desired, design calculations and configurations shall be submitted for review and approval. The drop pipe shall be encased in concrete. The flow channel through manholes shall be made to conform in shape and slope to that of the sewers. A bench shall be provided which shall have a minimum slope of two (2) inches per foot.

3-4. Protection of Water Mains. Water mains shall be protected in accordance with the requirements of the State of Illinois Recommended Standards for Sewage Works (Title 35 Part 370). Where a sewer main lateral or building service sewer crosses a water main, a minimum vertical separation of 18" shall be provided between the top of the lower pipe and the bottom of the upper pipe. Where the 18" vertical separation is not provided, the sewer shall be designed and constructed of pipe equal to water pipe or shall be encased in concrete for a minimum distance of 10 feet on each side of the water main.

3-5. Materials. All materials shall conform to the applicable ASTM, ASA or other national or accepted standards. When the materials indicated below are specified by the design engineer, the materials and the joints for pipe made of that material shall conform to the specifications shown, for sanitary sewer work in separate areas and for all sewer work in combined areas:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Vitrified Clay Pipe</td>
<td>ASTM C-700</td>
<td>ASTM C-425</td>
</tr>
<tr>
<td>Extra Strength</td>
<td>ASTM C-700</td>
<td>ASTM C-425</td>
</tr>
<tr>
<td>b. Concrete Sewer Pipe</td>
<td>ASTM C-14</td>
<td>ASTM C-443</td>
</tr>
<tr>
<td>c. Reinforced Concrete</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

MWRO Manual of Procedures for the Administration of the Sewer Permit Ordinance  July, 1990
### Appendix C. Legacy Sewer Permit Ordinance and Manual of Procedures for the Administration of the Sewer Permit Ordinance

#### Sewer Pipe

<table>
<thead>
<tr>
<th>Type</th>
<th>Standard Code 1</th>
<th>Standard Code 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asbestos Cement Pipe</td>
<td>ASTM C-428</td>
<td>ASTM D-1869</td>
</tr>
<tr>
<td>Truss Pipe Solid wall 6&quot; Dia. SDR 35</td>
<td>ASTM D-2751</td>
<td>ASTM D-2751</td>
</tr>
<tr>
<td>Truss Wall 8&quot; to 15&quot; Dia.</td>
<td>ASTM D-3212</td>
<td>ASTM D-3212</td>
</tr>
<tr>
<td>Ductile Iron Pipe</td>
<td>ANSI A21.51</td>
<td>ANSI A21.11</td>
</tr>
<tr>
<td>Polystyrene Pipe</td>
<td>ASTM F-679</td>
<td>ASTM D-3212</td>
</tr>
</tbody>
</table>

Nothing contained in this Article shall be interpreted to mean nor imply an endorsement by the District of any material over another, nor an opinion by the District regarding the equality or superiority of the performance qualities of any of the materials.

#### 3-8. Curvilinear Sewer

- Available information based on field data falls short of providing conclusive evidence in support of the practice of curvilinear alignment for sewers 24" or less in diameter. Where local governments elect to permit the construction of curvilinear sewer, it is mandatory that available maintenance equipment be evaluated and proper equipment acquired.

When permitted by the local government, construction of sewers 24" or less in diameter on curvilinear alignment shall be subject to the following criteria.

- **Alignment**: Alignment shall follow the general alignment of the street. Curvilinear sewer alignment shall be limited to curved street areas.
- **Curvature**: Only simple curves may be used.
- **Radius**: Minimum radius shall be no less than 200 feet.
- **Minimum Slope**: The minimum slope shall be that which produces a minimum velocity of 2.0 fps. (Hydraulics of curvilinear alignment to be taken into account.)
e. Manhole Location: Manholes are required at the point of beginning and at the end of the curve and at the point of inflection. (PC, PT and PRC).

f. Deflection: Deflection of pipe shall not exceed the maximum deflection recommended by the joint manufacturer. The deflections shall be uniform and the finished installation shall follow a smooth curve.

Article 4. SUPPLEMENTAL DESIGN REQUIREMENTS.

4-1. Overhead Plumbing. After December 31, 1970, all new buildings with basements, floors, rooms or occupancy areas below ground level at the building site and served by a public or private sewer system, shall have overhead plumbing. No permit application will be accepted, nor any permits issued after December 31, 1970, to any municipality or local government unless said municipality or local government shall have adopted an ordinance requiring overhead plumbing, and a copy of said ordinance shall have been filed with the District, or that the permittee and/or co-permittee shall agree to comply with the requirements of this Article.

4-2. Datum. The datum shall be indicated on the plans submitted. All plans shall preferably be based on the Chicago City Datum which is established as: 0.00C.C.D=579.48 ft. above Mean Sea Level (1929 Adjustment) or 579.88 ft. above Mean Tide New York. If any other datum is used, a conversion equation shall be shown on the plans to relate the datum used to the Chicago City Datum.

4-3. Pipe Bedding. Bedding, other than concrete embedment, shall consist of gravel, crushed gravel, crushed stone or crushed slag, 1/4" to 1" in size. As a minimum, the material shall conform to the requirements of Article 704.01 of the "Standard Specifications for Road and Bridge Construction," of the State of Illinois or ASTM C-33. The gradation shall conform to gradation CA 11 or CA 13 of the Illinois Standard Specifications or to ASTM Gradation No. 67. The pipe shall be laid so that it will be uniformly supported and the entire length of the pipe barrel will have full bearing. No blocking of any kind shall be used to adjust the pipe to grade except when used with embedment concrete. Bedding shall be required for all sewer construction, except ductile iron pipe, and shall be of a thickness equal to 1/4th of the outside diameter of the sewer pipe with a maximum required thickness of eight inches (8") but shall not be less than four inches (4"). Where polyvinyl chloride (PVC) pipe is specified, the backfill material to a level two inches (2") over the top of the pipe shall be of the same material as the bedding material specified above and shall be carefully placed so as to completely fill the space under and around the pipe, in eight inch layers, loose measurement, and compacted to the satisfaction of the inspection Engineer named in the permit.

Where unsuitable material is encountered at the grade established, all such unsuitable soil shall be removed under the pipe and for the width of the trench, and shall be replaced with well compacted bedding material, to the satisfaction of the Inspection Engineer named in the Permit.

Where rock is encountered, it shall be removed below grade and replaced with a cushion of well compacted bedding material having a thickness under the pipe of not less than eight inches (8") for all types of pipe including ductile iron pipe.

4-4. Building Service Sewer. Building service sewer is defined as a sewer pipe
receiving flow from a single building and connecting to a sewer main or lateral, and constructed on private property, except for street crossing. The maximum length of a building service sewer shall preferably be 120 ft. and shall not exceed 150 ft. If the length is exceeded an intermediate manhole shall be built. A manhole or clean-out shall also be installed every 150 ft. When the building service sewer connects to a sewer lateral of a size not larger than the size of the service sewer, a manhole shall be built at the point of connection. The minimum slope of the service line shall be one percent (1%).

Minimum design standards, and other requirements hereof, governing materials, joints, infiltration, workmanship and maintenance for sewer mains and laterals shall also apply to building service sewers. Horizontal and vertical alignment of the service sewer shall be uniform and shall follow a straight line alignment. There shall be no dips in the grade or fall of the line. Turns or bends required for the riser, if any, necessary to connect to the sewer wye or tee, shall be made with standard bends.

In those instances where the building service sewer is partially constructed from the sewer lateral or main to a point other than the building to be served, the pipe shall be tightly plugged using a manufactured plug. The plug shall be pre-wired by the manufacturer so that it can be firmly secured in place.

4-5. Connection of Building Service Sewers to Sewer Mains. Building service sewer shall generally enter the sewer main or lateral by way of an existing wye or tee. In the event of absence of the wye or tee, the connection to the sewer main or lateral shall be made by one of the methods indicated below. If another method is desired, a detail shall be submitted for review and approval by the District before the connection is made. Indiscriminate breaking of the sewer main pipe is not allowed.

a. Installation of a manhole.

b. Circular saw-cut of sewer main by proper tools ("Shewer-Tap" machine or similar), and proper installation of hub wye saddle or hub tee saddle, in accordance with manufacturer's recommendations.

c. Remove an entire section of pipe and replace with a wye or tee branch section. Pipe section shall be removed by breaking only the top of one bell. After the wye or tee branch is inserted, concrete shall be placed over the broken area to a minimum thickness of four inches (4") and to a dimension of eight inches (8") in all directions.

d. Using pipe cutter, neatly and accurately cut out desired length of pipe for insertion of proper fitting. Use "Bend-Seal" couplings, or similar couplings, and shear rings and clamps to fasten the inserted fitting and hold it firmly in place. Follow manufacturer's recommendations for the installation.

4-6. Inspection Manholes. An inspection manhole having a minimum diameter of 48" is required for all commercial and industrial buildings. The manhole shall be constructed on the building service sewer before it connects to the sewer main, and preferably shall not be closer than five (5) ft. to the building. There shall be no flow into the inspection manhole except flow from the building or buildings for which the inspection manhole is intended. Manholes constructed on public sewer, or on sewers receiving other flows are not considered inspection manholes.

4-7. Sound Engineering Practice. The design and supplementary design requirements contained herein do not
replace and are not a substitute for sound engineering practice nor the professional ability and judgement of the design engineer.

Article 5. CONSTRUCTION WITHIN THE FLOODPLAIN

5-1. Issuance of Permit. No permit will be issued for sewer construction within any municipality lying totally or partially within a floodplain, unless the municipality shall have adopted a Floodplain Ordinance which has been filed with and approved by the District as to minimum requirements for the protection of the health and welfare of the public.

5-2. Minimum Requirements. Floodplain Ordinances adopted by the municipality shall include the following minimum requirements.

a. Elevations and Limits. Highwater elevations and limits of floodplain shall be established by the Ordinance based on the 100-year flood, as determined by the most recent and best available data listed in Article 5-4 below. If the 100-year flood information is not available, the regulatory base flood shall be the flood of record. When data of higher order becomes available, data of lower order shall not be used for regulatory purposes.

b. Building Openings. A door sill, window sill, top of foundation, or the bottom of any other opening in the outer walls of a building or structure shall be constructed at an elevation not lower than 12" above the established highwater elevation of the 100-year flood and not lower than 12" above the highwater elevation of the flood of record, if the 100-year flood information is not available.

c. Overhead Sewers. When the building wall encloses open space that is below the base flood elevation, gravity storm and sanitary sewer connections are specifically prohibited and overhead sewers are required for the sanitary connections and sumps for the storm sewer connections.

d. Existing Buildings. Existing buildings to be connected into a proposed sewer system within a floodplain must have sanitary connections designed to protect the sewer system from flooding.

e. Floodways. Adequate flood channel provisions should be provided. The width of the floodway should be determined in the field and should be protected from encroachment by the zoning ordinance and by the use of building setbacks. Floodway easements should be provided which permit necessary public channel maintenance and improvement work.

f. Floodproofing. That part of the structure constructed within floodplain areas below the highwater elevation must be floodproofed. The design must include measure to cope with sewer backup, groundwater seepage, and hydrostatic pressure.

g. Sanitary Manholes. All sanitary sewer manholes constructed in the floodplain must be provided with watertight, lock-type covers, or the rims must be raised to an elevation not lower than 12" above the highwater elevation.

5-3. Conformance with Floodplain Ordinance. All projects constructed within a floodplain area shall conform to the requirements of the floodplain ordinance adopted by the local government having jurisdiction over the area in which the project
is located. The portion of the project lying within the floodplain shall be delineated and the limits of the floodplain shall be clearly indicated on the overall plans submitted to the District as part of the permit application.

5-4. Floodplain Highwater Elevation and Limits. In reviewing submittals for sewer permits, the District will base its review on the highwater elevations and limits of the 100-year flood as established by the most recent and best available data. If the 100-year flood information is not available, the review will be based on the flood of record data. The data which will be used by the District is listed below in descending order of overall accuracy, completeness, and currentness. When data of higher order becomes available, data of lower order will not be used.

(1) HUD Flood Insurance Studies (FIS), if certified by Illinois Department of Transportation, Division of Water Resources (IDOT-DWR).

(2) IDOT-DWR Regulatory Floodplain Maps and Profiles.

(3) Soil Conservation Service-Metropolitan Water Reclamation District of Greater Chicago (SCSMWRDGC) Floodwater Management Plans, using the "without project" data shown therein.

(4) Other detailed 100-year flood studies, if certified by IDOT-DWR.

(5) HUD Flood Hazard Boundary Maps (FHBMs) and Approximate FIS Data.

(6) USGS Maps of Flood-prone Areas.

(7) USGS-NIPC Hydrologic Investigation Atlases (Floods of Record).

When either the HUD Flood Hazard Boundary Maps or the USGS Maps of Flood-prone Areas are used to determine the limits of the floodplain, then regulatory highwater elevations shall be those of the flood of record.

5-5. Statutory Floodplain Requirements. All construction in the floodplain must meet the requirements of the Rules and Regulations issued by the Illinois Department of Transportation, Division of Water Resources, pursuant to "An Act in Relation to the Regulation of the Rivers, Lakes, and Streams of Illinois" as amended. For any construction within the floodplain, the Illinois Department of Transportation permit for such construction or, in the alternative, a written statement from the Illinois Department of Transportation that no permit is required shall be submitted to the District prior to the issuance of a District permit.

Article 6. STORM WATERS.

6-1. Separation of Storm Waters and Sanitary Sewage. Except as provided in Article 6-2 below, all new sewer construction shall provide two separate and distinct sewer systems as follows:

a. Storm Sewer Systems. The system shall be for the collection and conveyance of surface run-off and other storm waters. All storm waters shall be collected and conveyed in a pipe or ditch system to the point of discharge in the receiving natural or man-made stream or drainage ditch. No storm waters shall be allowed to enter the sanitary sewer systems except that in "Combined Sewer Areas" only, the storm waters are allowed to be discharged into the District interceptors.
b. **Sanitary Sewer Systems.** The system shall be for the collection and conveyance of sanitary sewage consisting of domestic and other water-borne wastes. All sanitary sewage shall be collected and conveyed in a pipe system to the point of discharge into an existing sanitary sewage system, District interceptor or treatment plant. No sanitary sewage shall be allowed to enter any storm sewer system or discharge onto the ground or into receiving streams, without first having been treated.

6-2. Combined Sewer Areas. In areas designated as "Combined Sewer Areas" on the District maps, the following requirements shall apply:

a. **Separation.** Complete separation of sewers shall be provided within the property lines.

b. **Detention.** Detention shall be provided and/or permanent constrictions shall be built on the storm sewer system to control the flow into the existing combined system in accordance with the requirements of the local government.

c. **Down-Spouts.** All down-spouts or roof drains shall discharge onto the ground or be connected to the storm or combined sewer. No down-spouts or roof drains shall be connected to the sanitary sewers.

d. **Footing Drains.** Footing drains shall be connected to sump pumps, and discharge shall be made into storm sewers, combined sewers or drainage ditches. No footing drains or drainage tile shall be connected to the sanitary sewer. After December 31, 1970 all new construction shall conform to the requirements of this paragraph. No permit application will be accepted, nor any permits issued after December 31, 1970 to any municipality or local government unless said municipality or local government shall have adopted an ordinance reflecting the requirements of this paragraph and a copy of said ordinance shall have been filed with the District, or that the permittee and/or co-permittee shall agree to comply with the requirements of this Article.

e. **Floor Drains.** Floor drains in basements shall be connected to sump pumps and discharged to the sanitary or combined sewers.

f. **Sump Pumps.** Sump pumps installed to receive and discharge ground waters or other storm waters shall be connected to the storm or combined sewers or discharge into a drainage ditch. Sump pumps installed to receive and discharge floor drain flow or other sanitary sewage shall be connected to the sanitary or combined sewers. A sump pump shall be used for one function only, either the discharge of storm waters or the discharge of sanitary sewage.

6-3. Separate Sewer Areas. In areas served by separate sewer systems, the following requirements shall apply:

a. **Down Spouts.** All down-spouts or roof drains shall discharge onto the ground or be connected to storm sewer. No down-spouts or roof drains shall be connected to the sanitary sewers.

b. **Footing Drains.** Footing drains shall be connected to sump pumps, and discharge shall be made into storm sewers or drainage ditches. No footing drains or drainage tile shall be connected to the sanitary sewer. After December 31, 1970 all new construction shall conform to the requirements of this paragraph.
to the requirements of this paragraph. No permit application will be accepted, nor any permits issued after December 31, 1970, to any municipality or local government unless said municipality or local government shall have adopted an ordinance reflecting the requirements of this paragraph and a copy of said ordinance shall have been filed with the District, or that the permittee and/or co-permittee shall agree to comply with the requirements of this Article.

c. Floor Drains. Floor drains in basements shall be connected to sump pumps and discharged to the sanitary sewers.

d. Sump Pumps. Sump pumps installed to receive and discharge ground waters or other storm waters shall be connected to the storm sewer or discharge into a drainage ditch. Sump pumps installed to receive and discharge floor drain flow or other sanitary sewage shall be connected to the sanitary sewers. A sump pump shall be used for one function only, either the discharge of storm waters or the discharge of sanitary sewage.

e. Completion of Storm Sewer System. The construction of the proposed storm sewer system shall be completed before the sanitary sewer system is put in service. When compliance with this requirement may cause an undue hardship to the Permittee, the Permittee shall so notify the District and the District may waive this requirement if the conditions so warrant.

f. Window Well and Area-Way Drains. No window well or area-way drains shall be connected to the sanitary sewer.

6.4 Storm Water Detention in Unsewered and Separate Sewered Areas.

a. General. It is recognized that the receiving streams within the District do not have the capacity to receive and convey the increased storm water runoff resulting from rapid urbanization occurring in many areas. These receiving streams are subject to frequent flooding which results in a growing rate of property damage.

It is the intent of Section 3(B) of the Sewer Permit Ordinance to encourage local governments and developers to jointly participate in providing detention storage to eliminate the excessive runoff during heavy storm periods. Where impervious areas are planned or contemplated, it is the intent that detention be provided as required by the provisions hereinafter set forth. It is proposed that well maintained landscaped areas would be provided to act jointly as detention reservoirs and recreation facilities or aesthetic focal points in new village parks, either in incorporated or unincorporated areas, forest preserve areas, county parks, housing developments, shopping centers, industrial parks, etc. Other control methods to regulate the rate of storm water discharge which would be acceptable include detention on flat roofs, parking lots, streets, lawns, underground storage, oversized storm sewers with restricted outlets, etc.

It is recognized that in order to better serve the long-range interests of the local communities and the Metropolitan area, comprehensive basin-wide planning for food control should be formulated, adopted and implemented. Comprehensive planning is far more beneficial than the proliferation of small, on-site detention areas, although on-site detention does provide protection and is acceptable for compliance with this Ordinance. The District may be called upon by the local governments to render advisory, technical and other assistance for the
formulation and implementation of a drainage plan.

b. Requirements. Pursuant to the provisions of Section 3(B) of the Sewer Permit Ordinance, a sewer permit will not be issued after January 1, 1972, unless (1) The permittee (governmental body) has adopted a Storm Water Detention or Flood Control Ordinance acceptable to the District, and has on file with the District, an approved drainage plan and schedule for its implementation, or (2) The permittee or co-permittee provide detention of storm water runoff as set forth in the following criteria.

(1) Allowable Release Rate. The release rate of storm water from all developments requiring detention shall not exceed the storm water runoff from the area in its natural undeveloped state.

Because of the flat conditions of the land in this area, channel configurations cut by nature are generally unable to handle the runoff from high intensity rainfalls and results in flood plain storage or spreading of runoff over the land areas during the larger storm periods. In order not to increase the runoff from such areas after development, the release rate must be limited to the carrying capacity of these natural channels.

The District will accept the release rate of not greater than that calculated from a storm of three (3) year frequency with a runoff rate coefficient of 0.15, unless the applicant can show by his detail calculations, which are acceptable to the District, that the discharge rate of the natural outlet channel serving the area is greater.

(2) Bypass. Drainage systems shall have adequate capacity to bypass through the development the flow from all upstream areas for a storm of design frequency assuming that the land is in a fully developed state under present zoning or zoning proposed under a Comprehensive Plan. The bypass flow rate shall be computed utilizing a runoff coefficient of not less than 0.35. An allowance will be made for upstream detention when such upstream detention and release rate has previously been approved by the District and that evidence of its construction can be shown.

(3) Design Storm. The live detention storage to be provided will be calculated on the basis of the 100-year frequency rainfall as published by the U.S. Weather Bureau for this area. The detention volume required will be that necessary to handle the runoff of a 100-year rainfall, for any and all durations, for the fully developed drainage area tributary to the reservoir, less that volume discharged during the same duration at the approved release rate.

c. Exemptions. Under the provisions of this article, storm water detention facilities meeting the criteria and requirements established herein are not required by the District for the following projects, provided that the available outlet capacity is adequate as determined by the Municipal Engineer. If the outlet capacity is not adequate, then detention as determined by the Municipal Engineer will be required to store that portion of the runoff exceeding the outlet capacity.

(1) Real estate developments occupied or operational prior to January 1, 1972. If redevelopment thereof in whole or in part is redeveloped after this date, detention facilities as required herein shall be provided.
part subsequently occurs, the exemption shall cease. Redevelopment occurs when a permit application is made to the District for a new sanitary sewer in the original development area. Redevelopment requires storm water detention for the entire original development area.

(Amended at the Board Meeting of November 5, 1998)

(2) Non-residential projects having a total area of less than five acres.

(3) Residential non-single family projects having a total area of less than five acres.

(4) Residential single-family projects having a total area of less than ten acres.

d. Special Provisions:

(1) Multiple Outlets. In order to eliminate small multiple outlets, generally designs requiring a release pipe of less than four (4) inches in diameter are not acceptable.

(2) Affidavit of Disclosure of Property Interest.

(a) As part of the submittal documents, for projects in the separate sewered areas, the owner of the property upon which the project (for which the permit application is made) is located, shall furnish in all instances an Affidavit of Disclosure Property Interest stating the aggregate total area of said property and all other lands contiguous to said property in which the owner holds an interest. The applicability of the detention requirements will be based on the total contiguous area in which an interest is held by the owner.

(b) Where a permit application is made for sanitary sewer and the area serviceable by the sewer is under the control of an individual or a legal entity (directly or indirectly, in part or in full), the area of the project (for the purpose of determining the applicability of the detention requirements) shall be considered to be the total area owned or controlled by the applicant, and detention facilities or provisions shall be made as part of the permit for the total area. If the area serviceable by the sewer is not in its entirety under the control of the applicant, the applicant shall be responsible to provide detention facilities only for that part of the area which is under his control.

c. In all instances where the property which is the subject of a permit is less than five (5) acres (or less than ten acres for residential single family projects) and detention is not provided as part of the permit, the applicant shall furnish to the District, as part of the submittal, an Affidavit of Disclosure of Property Interest with respect to the property, which is the subject of the permit stating that:

(i.) The owner of the property has no interest, nor did he have any interest at any time during the previous two years in any land contiguous to said property, such that the aggregate total area of the property and the contiguous lands exceeds five (5) acres.

(ii.) The owner covenants and agrees that if within two years after the issuance of the permit he acquires any interest in lands contiguous to the property such that the
aggregate area of the property and the contiguous lands exceeds five (5) acres, the owner shall provide for storm water detention for the entire aggregate area.

(iii) No owner of any lands contiguous to the property has any interest in the property such that the aggregate total area of the property and the contiguous lands exceeds five (5) acres.

For the purpose of this article, the following definitions shall apply:

Owner: means record title holder or a beneficiary of a land trust which is the record title holder, and includes singular and plural; if the owner is other than an individual, the term includes beneficiaries, agents, shareholders, officers and directors.

Ownership: means holding of record title or any beneficial interest.

Interest: means property interest or contractual interest, legal or equitable, directly or indirectly, in part or in full, and includes option to buy. In the case of a shareholder interest, the shareholder shall be deemed to have an interest if he owns or controls 5% or more of the shares.

Contiguous: means 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.

(3) Recording: Under special and unusual circumstances, where conditions so warrant as solely determined by the District (generally where sewer connections are not proposed), the District may issue the sewer permit without detention being provided for the entire area as part of the submittal and place a special condition on the permit that on-site detention will be provided for each future project within the area regardless of the area of the individual future project, provided that a Notice of Requirements for Storm Water Detention in connection with the permit issued by the District shall be recorded with the Cook County Registrar of Titles or the Recorder of Deeds of Cook County, as an encumbrance against the entire area.

Before such permit is issued by the District, the applicants shall furnish as part of the submittal, preliminary plans and design showing in adequate detail the manner in which the detention requirements will be satisfied by future projects within the area which is the subject of the permit. If, as part of the preliminary plans and design, it is proposed that the detention requirements will be satisfied by providing on-site detention facilities for individual future projects, the facilities shall be designed such that the minimum size of the area served by such facilities shall not be less than three (3) acres. The acres for which the detention facilities are designed shall be delineated on the preliminary plans. If individual lots having an area of less than three (3) acres each are proposed for development in the future, such lots shall be jointly developed so that the minimum area for which detention facilities are designed and provided shall not be less than three (3) acres. Individual projects developed within the area which is the subject of the permit shall conform to the preliminary plans made a part of the permit with respect to providing detention facilities to satisfy the detention requirements or provide alternate design meeting the intent of the preliminary plans and of the detention requirements as outlined herein.

Where only the name of the permittee appears on the permit application, the permittee shall furnish to the District as part
of the submittal an affidavit that the permittee is aware of the above requirements and will require any person connecting to the sewer which is the subject of the permit to comply with these requirements. Permits issued under the provisions of this article will contain a condition to the effect that the permittee will require any person connecting to the sewer to comply with the requirements contained herein.

6-5. Correction of Existing Deficiencies in Separate Sewered Areas.

It is recognized that the existing separate sanitary sewers within the District service area were 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. This occurs as a consequence of water pollution from the treatment plant bypasses and sewage overflows into streams, and also as a result of backups of sewage into buildings andonto streets and yards. Excessive extraneous clearwater flows also result in additional sewage treatment costs to the public. In order to remedy and prevent these problems, it is the intent of this Article to set forth a regionally applied program for the rehabilitation and correction of sanitary sewer systems, and for the establishment of adequate long-term sewer management programs by owners of separate sanitary sewers tributary to the District sewage treatment facilities.

a. Scope and Goals. The purpose of this program is the removal of groundwater infiltration and stormwater inflow (I/I) from separate sanitary sewer systems in order to meet the following goals:

(1) Prevention of water pollution.

(2) Elimination of basement sewage backups and other adverse sewer surcharging conditions that cause health hazards and financial losses.

b. Applicability. This Article applies to all tributary communities which own and/or operate a sanitary sewer system which discharges directly to the District system. As used herein, the term "tributary communities" shall include municipalities, townships, private utility companies, school and sanitary districts, and any other permittee or entity. Tributary communities which have been notified by the District as being in compliance with the District I/I removal requirements need not undertake another sewer rehabilitation program and are subject only to the requirement for the long-term maintenance and operation program as specified in Item h, below.

c. Compliance Criteria.

(1) Each tributary community shall undertake a program for removal of excessive I/I which meets all of the following criteria.

(a) Average daily wet weather flow in the tributary community's entire sanitary sewer system shall not exceed 150 gallons per capita per day, or optionally, documented water usage plus allowable
infiltration of 500 gallons per inch diameter-mile per day.

(b) Elimination of basement sewer backups and other adverse sewer surcharging conditions that cause health hazards and financial losses.

(2) Each tributary community has the option of undertaking the alternative VI Corrective Action Program (ICAP), which meets all of the following criteria:

(a) The ICAP program shall be conducted pursuant to USEPA regulations/guidance (40 CFR 35.2120, Construction Grants 1985). All VI that is determined to be excessive by an acceptable cost effectiveness analysis performed by the tributary community shall be eliminated. (Also, see item g, "Basin-by-Basin Analysis" below.)

(b) Completion of such additional work as may be required as a result of a Sewer System Compliance Conference provided for in Item g(2), below. The additional work may be required even after the elimination of the cost effective VI. The cumulative effect on the basin of the remaining VI from some of the tributary communities may continue to cause problems such as: raw sewage bypasses to local waterways, inadequate treatment at plants due to overloading, surcharging, and basement sewage backups. In some cases, one community's VI may cause adverse effects on another community's ability to meet the goals set forth in this ordinance.

(c) In order to participate in the ICAP option, tributary communities must submit a formal resolution electing the ICAP option on or before March 1, 1986.

d. Private Sources of VI. A program for the correction of private sources of VI, which is compatible with the purpose of this Article and meeting the compliance criteria, shall be initiated under either program option selected in Item c above. Private sources are defined as cracked, broken or open-jointed building service laterals; and illegal connections such as, roof downspouts, storm sump pumps, area way drains, window well drains, exterior stairwell drains, patio, yard and driveway drains, and footing/foundation drains connected to the sanitary sewer system.

e. Semi-annual Reports. The District shall prepare and distribute semi-annual status reports regarding progress by the communities on their VI identification and removal efforts. In order to complete this report, each tributary community shall submit to the District semi-annual reports of its progress and plans relative to its VI identification and removal efforts. The first semi-annual report shall be submitted to District on or before July 1, 1986. Reports must be submitted regardless of the degree of progress made during the reporting period.

f. Compliance Schedule. Each tributary community shall complete a series of work items in accordance with the time frames set forth below. The work items and schedule herein apply to both options set forth in Item C above unless otherwise indicated.

(1) Sewer System Evaluation.

(a) To the extent not already completed, each tributary community pursuing the District Compliance Criteria in Item C1, shall undertake a study and evaluation of its sewer system, and submit a completed evaluation study report to the
District by no later than January 1, 1987. The evaluation study shall be in conformance with the District “Guidelines for Sewer Rehabilitation and Elimination of Extraneous Flows,” April, 1985. The work shall include flow measurements, physical survey of the system, and, if determined necessary, rainfall simulation (smoke testing and dyed water flooding), televising of sewers, and identification of private sector II sources. All studies must consider basement flooding, adverse surcharging, and private sector II.

(b) If the ICAP option is chosen (Item c(2)), a Sewer System Evaluation Survey (SSES) shall be conducted in accordance with USEPA regulations and guidelines by no later than January 1, 1987. A cost effectiveness analysis, prepared in accordance with Appendix A of 40 CFR Section 35 as of July 1, 1984, shall be performed as part of the SSES report. The cost information for interceptors and sewage treatment facilities to be used in the cost effectiveness analysis shall be furnished by the District for the appropriate basins. Existing sewer and treatment capacity designed and intended for future population and development cannot, for the purpose of cost effectiveness analysis and planning, be used to accommodate excessive II. This existing capacity is necessary for the continuing economic growth and the vitality of the community which accrue by virtue of having adequate sanitary infrastructure available to serve future development. All sewer system evaluation studies shall be reviewed by the District, and the District shall, if necessary, provide the guidance required to achieve District approval.

(2) Design. Plans and specifications for the public sector corrective work necessary to eliminate the deficiencies identified in the above study shall be submitted to District as soon as possible, but no later than January 1, 1988. The plans for corrective work must include a timely and reasonable implementation schedule and appropriate funding arrangements. All designs, schedules and funding arrangements will be subject to review and approval by the District and, if necessary, by the IEPA.

(3) Corrective Actions. Corrective work necessary to eliminate the deficiencies that have been identified shall be started as soon as possible, but no later than July 1, 1988. All corrective work must be completed in accordance with a reasonable schedule which establishes a final completion date and incorporates the private sector II removal program plan and long-term operation and maintenance program. The schedule will be based upon the nature of the corrective work to be performed and the funding mechanism to be utilized. The schedule will be formally codified in an enforceable manner.

(4) Private Sector. A program plan for the correction of private sector II sources shall be developed as soon as possible but no later than January 1, 1988.

g. Basin-by-Basin Analysis. Analysis of each sewage treatment basin shall be performed by the District as follows:

(1) After January 1, 1987, the District will conduct a basin-by-basin analysis of the potential, cumulative effect on the corrective actions, identified by the completed SSES as indicated in Item f(1) (a) and (b), above. This analysis will
utilize I/I removal projections to assess the impact on transport and treatment capacities and may identify continuing concerns relative to the goals in Item (a) above that will necessitate consideration of further corrective actions for particular basins or sub-basins which may apply to those tributary communities undertaking the ICAP (cost effectiveness) option.

(2) After July 1, 1988, the District will initiate action to address any continuing concerns identified in Item g (1), above. A ‘Sewer System Compliance Conference’ shall be convened which includes representatives of all the tributary communities identified as causing, contributing to, or being affected by the continuing concerns within each applicable basin. The IEPA and USEPA will also be invited.

Each conference will discuss the nature of the continuing concerns and formulate additional corrective actions and mitigation measures which may be required of tributary communities undertaking the ICAP cost effectiveness option. As soon as possible, but no later than one year after convening a conference, a final compliance program and schedule will be adopted by the District which will be applicable to the appropriate tributary communities after completion of the corrective work in Item f, above.

h. Long-Term Operation and Maintenance Program. All tributary communities (including communities presently in compliance) must establish a long-term operation and maintenance program with the aim of preventing entry of I/I into their sewer systems.

i. Advisory Technical Panel. An ICAP Technical Panel will be established by the District by January 1, 1986. This Panel will act in an advisory capacity and will be composed of appropriate elected officials and other representatives from the tributary communities, and the District. The Panel will be given the following duties and assignments:

(1) Develop, by March 1, 1986, recommendations regarding the components used to compute transport and treatment cost.

(2) Review and comment upon by March 1, 1986, flow metering criteria used to evaluate I/I.

(3) Develop by January 1, 1987 guidelines for the long-term operation and maintenance of sanitary sewer systems in the District service area.

(4) Review and comment upon the basin analyses prepared pursuant to Item g, above.

j. Evaluation of Impacts from Residual Flow. The District will plan for and initiate a special study of the impacts of "residual" I/I remaining in the separate sewer systems. This study will begin in the spring of 1987 and continue for the period of time necessary to adequately characterize the impacts in areas where corrective actions have been implemented. The results of this special study may be utilized for the Sewer System Compliance Conferences convened pursuant to Item g(2).
SECTION III—SUBMITTAL REQUIREMENTS

Article 7. PROCEDURES FOR SUBMITTALS.

7-1. Documents to be submitted. The applicant shall submit the documents listed below and prepared as indicated.

a. Permit Form. Submit the permit form in quadruplicate with all items complete. Provide all the signatures and seals necessary by the appropriate parties. Furnish all the information required or indicate non-applicability. Do not leave any blank spaces. Except for signatures and seals, all the information shall be typed.

b. Overall Plan. The plan shall clearly show and name all streets, buildings, sanitary and storm sewers, stub locations and method of capping, manholes, catch basins, curb inlets, watermains, surface water drainage and any other pertinent features or information. All manholes shall be clearly shown for all sanitary and storm sewers. Indicate the length and slope of all runs and show invert at both ends. When the set of drawings submitted contains five (5) or more sheets, the overall plan shall be cross-referenced. A typical overall plan will be furnished upon request.

c. Plot Plan. When the project consists of one building, a plot plan on 8-1/2” x 11” will be accepted, provided the purpose and clarity of the drawing are not sacrificed. Otherwise use a standard size sheet, preferably 11” x 17” or 24” x 36”. Give the location of the building service sewer with the length and slope. Give invert elevations at both ends, and any manhole rim elevations. Provide all of the other information described in Article 7-1b above. A typical plot plan will be furnished upon request.

d. Location Map. The location map shall be made to a scale compatible with clarity and purpose, but not smaller than 1/2” = 1000 ft. The site of the project shall be clearly identified. The map shall encompass an area surrounding the project site and extending approximately one mile in each direction. The map shall show the main streets or highways and/or section lines, labeled by name or number, so as to make them easily identifiable. Show the nearest interceptor and the nearest natural stream. Trace the entire route of the sanitary sewer to the point of connection to the District interceptor and label ownership of the sanitary sewer systems. Trace the entire route of the storm sewer from the site through existing storm sewer systems or drainage ditches to the point of discharge into the receiving stream. The location map will be waived if the municipality in which the project is located maintains an up-to-date sewer atlas, showing all the storm and sanitary sewer systems, and a copy of said atlas is furnished to the District by March 1 of each year. A typical location map will be furnished upon request.

e. Construction Details and Other Data. Submit drawings of construction details of special appurtenances, structures, connections and other relevant details. Submit additional information, statements and design data as may be required for specific types of projects.

7-2. Consultation with the District. The design engineer is encouraged to consult with the District in all instances to clarify any questions that he may have in connection with the permit and to insure adequacy and conformance of the drawings to the applicable requirements. In all cases which involve the design of treatment facilities, direct connection to the
District interceptors or facilities, and any project involving industrial waste, the design engineer should confer with the District prior to the preparation of the final plans. The transmittal letter submitting the plans must bear reference to prior consultations, if any.

7-3. Plans. Four copies of the plans no larger in size than 24" x 36", shall be submitted with the permit application. All plans shall show a "North" arrow, and shall be oriented so that the 'North' arrow points upward or to the right hand side of the drawing. When the set of drawings submitted contains five or more sheets, an index shall be provided on the title sheet of the set, if any, or on the over-all plan. Each sheet shall be designated by a proper title. The index sheet shall bear a date and shall show the name of the project and the name, address and telephone number of the design engineer. When the set of plans contains less than five sheets, and no index is provided, each sheet shall be identified independently and shall show the name of the project, the date, the sheet title, and the name, address and telephone number of the design engineer.

7-4. Project and Plan Titles. The engineer is urged to select precise and identifiable titles that would reveal or describe the nature of the project or the work encompassed on the sheet. A project title like "Three Story Building" or a sheet title like "Sanitary Sewer," is vague and unidentifiable.

7-5. Specifications. When specifications are prepared for the project, submit two copies of the specifications covering or relating to the sewer work. The specifications shall indicate the name of the project, and the name and address of the design engineer and shall contain a table of contents.

7-6. Seals and Signatures. The seal and signature referred to shall be those of the Professional Engineer responsible for the design. The seal shall be affixed on the title sheet and table of contents of the specifications, on the index sheet of the plans and on the location map. Where no index sheet is provided, the seal and signature shall be affixed on each sheet.

7-7. The Illinois Professional Engineering Act. The affixing of a Registered Professional Engineer's seal to any work which has not been done by, or under the personal supervision of, that Professional Engineer, is a violation of Section 28 of The Illinois Professional Engineering Act.

7-8. Connection to Private Sewers. When the proposed sewer connects to a private sewer, submit the written approval of the owner of the private sewer to which the connection is proposed, and a copy of the maintenance agreement.

Article 8. RESIDENTIAL AND NON-RESIDENTIAL PROJECTS.

8-1. Trunks and Laterals. When a permit application is made for the construction of trunk and/or lateral sewers to serve a future residential or non-residential project, submit the following:

a. Standard contract plans, profiles and specifications of the proposed sanitary sewer trunk and/or laterals.

b. Permit form, over-all plan, location map, and other data as may be required. (Article 7-1)

If the project includes construction of building service sewers, submit additional information as required for each specific project listed below. The requirements below may be incorporated in the plans described above.
8-2. Residential Multi-Family Building. When the project consists of, or includes, a building service sewer for a residential building containing 25 or more dwelling units, submit the following:

a. Permit form, plot plan, location map, construction details and other data as may be required. (Article 7-1)

b. Method of connection to sewer main. (See Article 4-4 and 4-5)

8-3. Commercial Building.

a. General. When the project consists of, or includes, a building service sewer for a commercial building, submit the following:

1. Permit form, plot plan, location map, construction details, and other relevant data as may be required. (Article 7-1)

2. Method of connection to sewer main. (See Article 4-4 and 4-5)

3. Provide an inspection manhole on the building service sewer. (See Article 4-6)

b. Objectionable Wastes. When the use of the building is such that it will produce objectionable or heavily-loaded discharges, (e.g. auto service garage), include the additional items below in the design: 1. Provide a triple basin or similar device and submit detail or manufacturer's catalog number of same. All non-domestic flow must go through the basin before entering the sewer main.

c. Less Objectionable Wastes. When the use of the building is such that less objectionable or heavily loaded discharges (e.g. from restaurants) are produced, submit the additional items below.

1. Provide a grease separator or similar device and submit detail manufacturer's catalog number of same. All non-domestic flow except the discharge from an automatic dishwasher must go through the separator before entering the sewer main.

d. Specific Use. Consult with the Local Sewer Systems Section of the District for building use classifications and specific requirements in each case.

8-4. Industrial Building.

a. General. When the project consists of, or includes, a building service sewer for an industrial building, submit the following:

1. Permit form, plot plan, location map, construction details, and other relevant data as may be required. (Article 7-1)

2. Method of connection to sewer main. (See Article 4-4 and 4-5)

3. Provide an inspection manhole on the building service sewer. (Article 4-6)

b. Industrial Waste Potential. When the use of the building does not involve processes or operations that will produce industrial wastes, (e.g. warehouse), submit the additional items below:

1. Provide a statement on the owner's stationery describing the use of the building and certifying that no industrial waste will be allowed to discharge into the sewer system.

c. Industrial Waste Present. When the use of the building involves processes or operations that will produce industrial wastes (e.g. pickling plant), submit the additional items below.
1. A statement on the owner's stationery describing the use of the building and the processes used.

2. Indicate quantity, character and quality of industrial wastes produced. Indicate 5-day BOD, pH, suspended solids, etc. (See MWRD Sewer User Form)

3. Indicate type and location of treatment facilities proposed and the expected quality of the effluent. (See also Article 8-5)

4. Indicate method of controlling the quantity of discharge into the public sewer and times of discharge.

5. Indicate other wastes created but not discharged into the sewer and the method of disposal of same.

8-5. Treatment Facilities
   Treatment facilities under this article: include by description and not enumeration, treatment processes, treatment plants, oxidation ponds and similar facilities. When the project involves, or consists of, treatment facilities submit the items indicated below. In all cases, the design engineer should consult with the District before the final design is completed:
   a. Permit form, location map and other relevant data as may be required. (See Article 7-1)
   b. Contract drawings.
   c. Design criteria and calculations.
   d. Required maintenance bond.

8-6. Lift Stations. Gravity sewers are by far preferable to Lift Stations and force mains as a means for conveying sewage. In general, lift stations are not desirable nor recommended and should be resorted to only after all other engineering studies for alternatives have been exhausted. Force mains should preferably be designed to discharge into gravity sewers. Discharge of force mains into another lift station is discouraged and is considered to be potentially detrimental to the health and welfare of the public served. 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. The report should include other methods considered, and the recommendation for the design must be supported by engineering considerations. Written approval of the Owner of the receiving lift station and a copy of the maintenance and operation agreement between the parties must be furnished. The agreement shall also clearly specify the responsibilities of the parties in case of failure of either lift station.

   Where the project for which a permit application is made consists of, or involves a lift station and force main or lift system, submit the following:
   a. Permit form, location map and other relevant data as may be required. (See Article 7-1)
   b. Contract drawings.
   c. Plan and profile of force main.
   d. Design calculations and alternate power available. (Complete special District form for this purpose.)
   e. Map of area to be served, clearly delineated.

MWRD Manual of Procedures for the Administration of the Sewer Permit Ordinance    July, 1999
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SECTION IV - CONSTRUCTION, TESTING AND APPROVAL

Article 9. CONSTRUCTION AND INSPECTION

9-1. Advance Notice. Prior to commencement of sewer construction under the Permit, the Permittee shall give, or cause to be given, to the District, an advance notice of at least two (2) working days.

9-2. Conformance to Plans and Specifications. All construction shall be in accordance with the plans and specifications made part of the Permit. The 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.

9-3. Construction Inspection. All sewer construction shall be inspected and approved by a Registered Professional Engineer acting in behalf of the Permittee or the Owner of the project, or by the duly authorized representative of the Professional Engineer.

No sewer trenches shall be backfilled except as authorized by the Inspection Engineer after having inspected and approved the sewer installation. The Inspection Engineer 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 Engineer, identifying those portions of the sewer inspected and approved by him. The Inspection Report shall be made available for review by the District representative.

9-4. Record Drawings. Within sixty (60) days after final inspection and approval by the District, the Permittee shall furnish or cause to be furnished to the District, a set of record drawings. The pipe and joint materials and applicable ASTM Specifications shall be indicated on the drawings.

Article 10. TESTING AND APPROVAL.

10.1. Requirement for Testing. All sewers constructed under permits issued by the District shall be subject to inspection, testing and approval by the District to insure compliance with the applicable requirements. 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 Representative.

a. Testing procedures for polyvinyl chloride (PVC) pipe shall include the following:

1. The project engineer shall randomly select portions of the project to be deflection tested. Such portions shall consist of the manhole intervals for the initial sewer construction up to 1,200 linear feet and not less than 10% of the remainder of the sewer project.

2. The 5% deflection test for pipe sizes six (6) to fifteen (15) inches in diameter is to be run using a nine-arm mandrel having a diameter equal to 95% of the base diameter of the pipe as established in ASTM D-3034. For pipe sizes eighteen (18) to twenty-seven (27) inches diameter, the nine-arm mandrel size shall be 95% of the inside diameter and wall thickness dimensions shown in Table 1 of ASTM F-679, latest issue. The test shall be performed without mechanical pulling devices.

3. The individual lines to be tested shall be so tested no sooner than 30 days after they have been installed.
4. Wherever possible and practical, the testing shall initiate at the downstream lines and proceed towards the upstream lines.

5. No pipe shall exceed a deflection of 5%.

6. In the event that the deflection exceeds the 5% limit in 10% or more of the manhole intervals tested, the total sewer project shall be tested.

7. Where deflection is found to be in excess of 5% of the original pipe diameter, the contractor shall excavate to the point of excess deflection and carefully compact around the point where excess deflection was found. The line shall then be retested for deflection. If, after the second test, the deflected pipe fails to return to the original size (inside diameter) the line shall be replaced.

10-4. Maximum Allowable Infiltration. It is the intent of the District that all sewers within its territorial boundaries shall be constructed of sound material and shall be properly joined so that the amount of ground water infiltration into the sewer shall be kept at a minimum. The maximum allowable rate of infiltration or exfiltration shall not exceed 100 gallons per twenty-four (24) hours per mile per inch-diameter of the sewer pipe, for any section of the system and at any time during its service life.

10-2. Request for Final Inspection. Upon completion of construction, the Permittee shall submit to the District a properly executed request for final inspection and approval on the form prescribed by the District. No sewer shall be put in service until it has been approved by the District, and until all the conditions of the permit have been satisfactorily met.

10-3. Construction Without Advance Notice. Construction without advance notice to the District, as provided in Article 9-1, shall be considered prima facie evidence that construction may not have been done in accordance with the applicable requirements. In addition to any other requirements, that portion of the newer construction prior to the notification of the District 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.
APPENDIX D

U.S. Army Corps of Engineers
Watershed Service Areas
APPENDIX D
US ARMY CORP OF ENGINEERS
WATERSHED SERVICES AREAS

Source: US Army Corps of Engineers, Chicago District
APPENDIX E

Watershed Planning Areas
APPENDIX F

Permit Fees
## Appendix F. Permit Fees

### Watershed Management Permit Fee Schedule

*(Authorized Municipality permits are subject to the fees instituted by the municipality. Only Section IV. Qualified Sewer fees apply)*

<table>
<thead>
<tr>
<th>Total Fee</th>
<th>Section</th>
<th>Fee Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1,100</td>
<td>I-A</td>
<td>Regular WMO Permit</td>
</tr>
<tr>
<td>$250</td>
<td>I-B</td>
<td>Notification and Request For Inspection (NRI)</td>
</tr>
<tr>
<td>$2,100</td>
<td>I-C</td>
<td>Earthwork/Foundation Limited Permit</td>
</tr>
<tr>
<td>$1,000</td>
<td>I-D</td>
<td>Facility Connection Authorization (within City of Chicago)</td>
</tr>
<tr>
<td>$500</td>
<td>I-E</td>
<td>Permit Revision</td>
</tr>
<tr>
<td>$0</td>
<td>I-F</td>
<td>Single-Family Home Special Flood Hazard Area (SFHA)</td>
</tr>
<tr>
<td>$0</td>
<td>I-G</td>
<td>Resubmittals</td>
</tr>
<tr>
<td>$0</td>
<td>II-A</td>
<td>Runoff, volume control, or D-Legacy with no additional detention volume required</td>
</tr>
<tr>
<td>$500</td>
<td>II-B</td>
<td>Nomograph or D-Legacy with additional detention volume required</td>
</tr>
<tr>
<td>$1,500</td>
<td>II-C</td>
<td>Model - Small Detention Service Area (≤10 acres)</td>
</tr>
<tr>
<td>$3,000</td>
<td>II-D</td>
<td>Model - Large Detention Service Area (&gt;10 acres)</td>
</tr>
<tr>
<td>$250</td>
<td>III-A</td>
<td>Verification of Isolated Wetland Boundary, Classification and Buffer</td>
</tr>
<tr>
<td>$500</td>
<td>III-B</td>
<td>Isolated Wetland Impact &lt; 0.10 Acre or Riparian Environment without Mitigation</td>
</tr>
<tr>
<td>$2,500</td>
<td>III-C</td>
<td>Isolated Wetland Impact ≥ 0.10 Acre or Riparian Environment with Mitigation Plan</td>
</tr>
<tr>
<td>$5</td>
<td>IV-A</td>
<td>Sewer Inspection Fee</td>
</tr>
<tr>
<td>$250</td>
<td>IV-B</td>
<td>Pump Station and/or Forcemain (Schedule E)</td>
</tr>
<tr>
<td>$250</td>
<td>IV-C</td>
<td>Outfalls/Direct Connections to District Facilities/Impacts to District Property (Schedule O)</td>
</tr>
<tr>
<td>$3,750/Acre</td>
<td>IV-D</td>
<td>Connection Impact Fee</td>
</tr>
<tr>
<td>$6,000/Acre</td>
<td>IV-D</td>
<td>High Density Residential (21 Units/Acre or More)</td>
</tr>
<tr>
<td>$7,500/Acre</td>
<td>IV-D</td>
<td>Commercial or Industrial</td>
</tr>
<tr>
<td>$500</td>
<td>V-A</td>
<td>Recordation Deposit (Schedule R/Exhibit R) – Required for most projects</td>
</tr>
<tr>
<td>$250</td>
<td>V-B</td>
<td>Hazard Areas (Floodplain/Floodway/Riparian Environment - Schedule H)</td>
</tr>
<tr>
<td>$250</td>
<td>V-C</td>
<td>Notice of Requirements of Stormwater Detention (Schedule L/Exhibit A)</td>
</tr>
<tr>
<td>$250</td>
<td>V-D</td>
<td>Inspections for Violations</td>
</tr>
<tr>
<td>$2,000</td>
<td>V-E</td>
<td>Variances (Filing and Review Fee)</td>
</tr>
</tbody>
</table>

*Sewers tributary to a waterway are exempt from inspection fees. Use the longest dimension length for underground vaults.*
APPENDIX G

Existing Intergovernmental Agreements
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.