

## 8. BUILDING & DEVELOPMENT



**TITLE 8**  
**BUILDING AND DEVELOPMENT**

Subject	Chapter
Manufactured Homes And Manufactured	
Home Parks . . . . .	1
Stormwater Control . . . . .	2
General Provisions; Administration	
And Enforcement . . . . .	2A
Definitions . . . . .	2B
Stormwater Drainage And Detention . . . . .	2C
Soil Erosion And Sediment Control . . . . .	2D
Long Term Maintenance Responsibility . . . . .	2E
Inspections . . . . .	2F
Flood Control . . . . .	3



## CHAPTER 1

**MANUFACTURED HOMES AND MANUFACTURED HOME PARKS**

## SECTION:

- 8-1-1: Definitions
- 8-1-2: Regulations Adopted
- 8-1-3: Restricted Residential Uses
- 8-1-4: Manufactured Homes
- 8-1-5: Manufactured Home Parks
  - 8-1-5-1: Compliance With Provisions
  - 8-1-5-2: Permit To Construct, License To Operate And Planning A Park
  - 8-1-5-3: Building Permit Required For Each Unit
  - 8-1-5-4: Design And Construction Requirements
  - 8-1-5-5: Manufactured Home Sites
  - 8-1-5-6: Miscellaneous Restrictions
  - 8-1-5-7: Skirting Required For Each Unit
  - 8-1-5-8: Inspections
  - 8-1-5-9: Revocation Or Suspension Of License

8-1-1: **DEFINITIONS:**

The terms used in this chapter shall have the following meanings.

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| AFFIDAVIT:                           | An oath in writing, sworn before and attested by an individual who has authority to administer an oath.  |
| APPLICANT:                           | Any person making application for a license or permit.   |
| IMMOBILIZED<br>MANUFACTURED<br>HOME: | To remove the wheels, tongue and hitch. The home has to be tied down and have skirting to be an immobilized manufactured home.   |
| LICENSE:                             | A license certificate issued by the City allowing a person to operate and maintain a manufactured home park under the provisions of this chapter and the rules and regulations issued hereunder. |
| LICENSEE:                            | Any person having a license or permit under this chapter.  |

May 2021

**MANUFACTURED HOME:**

A factory assembled, completely integrated structure designed for permanent habitation, with a permanent chassis, and so constructed as to permit its transport on wheels, temporarily or permanently attached to its frame, and is a movable or portable unit that is: a) eight (8) body feet or more in width; b) forty (40) body feet or more in length; and c) three hundred twenty (320) or more square feet, constructed to be towed on its own chassis (comprised of frame and wheels) from the place of its construction to the location, or subsequent locations, at which it is connected to utilities for year-round occupancy for use as a permanent habitation, and designed and situated so as to permit its occupancy as a dwelling place for one or more persons, and specifically includes a "manufactured home", as defined in subdivision (53) of section 9-102 of the Uniform Commercial Code. The term shall include units containing parts that may be folded, collapsed, or telescoped when being towed and that may be expected to provide additional cubic capacity, and that are designed to be joined into one integral unit capable of being separated again into the components for repeated towing. The term excludes campers, travel trailers and recreational vehicles. The term "mobile home" shall not include modular homes and their support systems. The words "mobile home" and "manufactured home" are synonymous for the purposes of this chapter. A manufactured home is any home factory-built in the U.S. to the HUD Title 6 construction standards (commonly known as "the HUD-code"). The HUD-code took effect June 15, 1976.

A HUD-coded home will display documentation called the Certification Label and the Data Plate. The red Certification Label (sometimes called the HUD Label) can be located on the tail end of each transportable section of the home. The Data Plate will be located inside of the home. Registration states that the Data Plate be affixed inside the home or near the main electrical breaker box, or other readily visible/ accessible location. These documents are extremely important: as per the HUD Title 6

May 2021

	regulation removal is illegal. Removal could hinder the buying, selling, financing, or insuring of a manufactured home; they are not replaceable.
MANUFACTURED HOME, DEPENDENT:	A manufactured home which does not have a toilet and bath or shower facilities.
MANUFACTURED HOME, DOUBLEWIDE:	Consists of two (2) mobile units joined at the sides into a single home, but kept on their separate chassis for repeated transportation to a site.
MANUFACTURED HOME LOT:	A parcel of land for the placement of a manufactured home and the exclusive use of its occupants.
MANUFACTURED HOME PAD:	That part of an individual manufactured home space or lot beneath the manufactured home, including the concrete portion of the pad.
MANUFACTURED HOME PARK:	A tract of land or two (2) or more contiguous tracts of land upon which contain sites with the necessary utilities for five (5) or more independent manufactured homes for permanent habitation either free of charge or for revenue purposes, and shall include any building, structure, vehicle, or enclosure used or intended for use as a part of the equipment of such manufactured home park. Separate ownership of contiguous tracts of land shall not preclude the tracts of land from common licensure as a manufactured home park if they are maintained and operated jointly. Neither an immobilized manufactured home nor a motorized recreational vehicle shall be construed as being a part of a manufactured home park.
MANUFACTURED HOME PARK LICENSE:	A license issued by the City authorizing the operation of a manufactured home park in accordance with all applicable regulations.
MANUFACTURED HOME SPACE:	A portion of a manufactured home park designed for the use of occupancy of one manufactured home.
MANUFACTURED HOUSING UNIT:	Includes all forms of housing units listed in this section and as regulated in this chapter.
MOBILE HOME:	See definition of manufactured home.
MOTOR HOME:	A self-propelled vehicle designed to provide temporary living quarters for recreational, camping,

May 2021

	or travel use that complies with all applicable federal vehicle regulations.
OWNER OR OPERATOR:	The licensee.
PERMANENT FOUNDATION:	A foundation which extends into the ground below the frost line so as to attach and become a part of the real estate. Materials such as concrete, mortared brick extending into the ground below the frost line shall satisfy the requirement for a permanent foundation. In addition, piers may be used, extending into the ground below the frost line and sufficient in number to properly support the structure foundation, provided the support beams are affixed to the permanent perimeter.
PERMIT:	A certificate issued by the City Clerk, upon approval of the City Council, permitting the construction, alteration, or reduction in number of spaces of a manufactured home park under the provisions in this chapter.
PERSON:	Any individual, group of individuals, association, trust, partnership, corporation, person doing business under an assumed name, county, municipality, the State of Illinois, or any political subdivision or department thereof or any other entity.
REVOCAATION:	To declare invalid a permit or license issued to the applicant or licensee by the City for an indefinite period of time.
SITE:	The lot on which the manufactured home is located for permanent habitation.
SPACE:	Shall be synonymous with "manufactured home space", as that term is defined herein.
SUSPENSION:	To declare invalid a permit or license issued to the applicant or licensee by the City for a temporary period of time with an expectation of resumption.
TRAVEL TRAILER:	A vehicular unit mounted on wheels, designed to provide temporary living quarters or recreational, camping, or travel use, and of such size or weight as not to require a special highway movement permit

May 2021

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when towed by a motorized vehicle. It may be stored and cannot be utilized as a residence except in travel trailer parks. (Ord. 2018-07, 5-7-2018; amd. 2019 Code; Ord. 2020-10, 11-2-2020)

**8-1-2: REGULATIONS ADOPTED:**

**A. State Regulations:**

1. The Illinois Mobile Home Park Act<sup>1</sup> and any associated regulations, currently 77 Illinois Administrative Code 870, as passed, approved and amended by the Illinois General Assembly, are hereby adopted by the City. The applicable provisions as they pertain to manufactured homes and immobilized manufactured homes shall be controlling within the corporate limits of the City.

2. The Illinois Modular Dwelling and Mobile Structure Safety Act, as passed and approved by the Illinois General Assembly, is hereby adopted by the City. The applicable provisions as they pertain to manufactured homes and immobilized manufactured homes shall be controlling within the City.

3. The Manufactured Home Community Code, as approved by the Illinois Department of Public Health, is hereby adopted by the City. The applicable provisions as they pertain to the manufactured home community shall be controlling within the corporate limits.

**B. National Safety Standards:** No manufactured home or immobilized manufactured home shall be located in the City unless the unit has the National Manufactured Housing Construction and Safety Standards metal seal affixed thereto. (Ord. 2018-07, 5-7-2018; amd. 2019 Code; Ord. 2020-10, 11-2-2020)

**8-1-3: RESTRICTED RESIDENTIAL USES:**

**A. Manufactured Homes To Be In Parks:** On and after the effective date hereof, it shall be unlawful to locate a manufactured home within the City limits except in a licensed manufactured home park.

**B. Existing Manufactured Homes:** Manufactured homes existing in the City before the effective date hereof may be replaced by the owners of those homes, so long as the replacement homes located by those owners meet all specifications in this chapter, and so long as the lot on which the replacement home is located has not been uninhabited for six (6) months or more, and there have

May 2021

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1. 220 ILCS 115/1 et seq.

been no violations of this Code, either in this chapter or other applicable chapters.

C. Other Regulations:

1. **Dependent Mobile Home:** It shall be unlawful to locate a dependent mobile home in the City unless it is placed in a State licensed travel trailer park.
2. **Independent Travel Trailer And Motor Home:** It shall be unlawful to reside in an independent travel trailer or motor home in the City unless it is placed in a State licensed travel trailer park.
3. **Manufactured Or Mobile Home:** It shall be unlawful to locate a manufactured home or a mobile home in a State licensed travel trailer park without written permission from the City Council. (Ord. 2018-07, 5-7-2018; amd. 2019 Code; Ord. 2020-10, 11-2-2020)

8-1-4: **MANUFACTURED HOMES:**

- A. **Age Of Permitted Manufactured Home:** No manufactured home shall be located in the City, or in a mobile home park in the City, unless it is five (5) years old or newer at the time it is located in the City and has been inspected by a City inspector.
- B. **Off Street Parking Area:** Every owner of a manufactured home shall provide for an off-street parking area of four hundred (400) square feet. The parking area must be paved or rocked with a minimum four inch (4") base.
- C. **Fire Extinguisher:** All manufactured housing units located in the City shall be equipped with a fire extinguishing apparatus capable of extinguishing all types of fires. Such extinguishers shall be of sufficient size so that they will reasonably protect the manufactured housing units. All fire extinguishers shall be approved by the Fire Chief or his designated representative prior to installation.
- D. **Immobilized Manufactured Homes:**
  1. **Existing Manufactured Homes To Be Immobilized:** All immobilized manufactured homes located in the City shall be classified as real estate; therefore, it is mandatory for all persons owning, operating, renting, or leasing an existing manufactured home outside a manufactured home park to remove or cause to have removed the wheels or any other transportation device from the manufactured home. The owner or lessor shall permanently fix the manufactured home to the ground in a manner that conforms to the definition of "permanent foundation" in section 8-1-1 of this chapter, or in such other

May 2021

manner as approved by the City Council. All existing manufactured homes, when replaced, shall comply with the immobilization provisions of this chapter. Any existing manufactured home that is replaced with a newer home must comply with this requirement at the time the home is replaced.

2. **Permit Required; Fee:** All persons seeking to replace an existing manufactured home or an immobilized manufactured home outside a manufactured home park shall obtain a location permit from the City. To apply for the permit, the person seeking to replace a manufactured home must provide the City Council with sufficient information about the replacement home to allow the Council to conclude that the home and site meet the requirements of this chapter. No utilities shall be connected to the replacement home until such time as the Council has authorized the issuance of the permit.

3. **Lot Size And Coverage:** The minimum lot size for the location of any manufactured home unit shall be eight thousand (8,000) square feet and shall not be less than fifty feet (50') wide or one hundred feet (100') in depth. All units shall be located in compliance with all restrictions of this chapter. No manufactured home shall exceed forty percent (40%) coverage of the lot.

4. **One Unit Per Lot:** There shall be only one immobilized manufactured home per lot in the City.

E. **Inspections:** All manufactured housing units located in the City shall be subject to reasonable inspection by an official or officials designated by the City Council. (Ord. 2018-07, 5-7-2018; amd. Ord. 2020-10, 11-2-2020)

**8-1-5: MANUFACTURED HOME PARKS:**

**8-1-5-1: COMPLIANCE WITH PROVISIONS:**

- A. Every manufactured home park hereafter established in the City shall, at a minimum, conform to the requirements of any and all State laws and regulations promulgated thereunder. In addition, all manufactured homes within those parks shall comply with all regulations in this chapter.
- B. Mobile home parks must meet the same requirements of title 9 of this Code. (Ord. 2018-07, 5-7-2018; amd. 2019 Code; Ord. 2020-10, 11-2-2020)

**8-1-5-2: PERMIT TO CONSTRUCT, LICENSE TO OPERATE AND PLANNING A PARK:**

- A. **Permit Or License Required:** Any person seeking to establish, operate, alter, or expand a manufactured home park shall obtain a permit to construct or a license to operate a manufactured home park. "Construct or operate a manufactured home park", as used in this section 8-1-5, shall include, but not necessarily be limited to, supplying or maintaining common water, sewer, or other utility supplies or services, or the collection of rents directly or indirectly from two (2) or more independent manufactured homes. (All plans shall be submitted to the City Council for approval prior to the granting of a permit.) A permit does not relieve the applicant from complying with this chapter or other ordinances applicable hereto.
- B. **Issuance Of Permit; Term:** The City Council shall review each application and plan documents submitted. When the application and plan documents are found to be in compliance with State law, regulations and this chapter, the City Council or its designee may issue the proper permit to the applicant to construct or alter a manufactured home park. Permits shall be valid for one year from date of issue.
- C. **License Fee:** The annual license fee per manufactured home park shall be fifty dollars (\$50.00) and shall be due and payable on or before May 1 of each year. The City Office Manager shall notify the owner or operator of the annual fee at least thirty (30) days prior to May 1. (Ord. 2018-07, 5-7-2018; amd. 2019 Code; Ord. 2020-10, 11-2-2020)

**8-1-5-3: BUILDING PERMIT REQUIRED FOR EACH UNIT:**

Each manufactured home that locates on a lot in a manufactured home park shall secure an initial building permit from the City Council. All future locations on the same lot shall be exempt from the fee. (Ord. 2018-07, 5-7-2018; amd. Ord. 2020-10, 11-2-2020)

**8-1-5-4: DESIGN AND CONSTRUCTION REQUIREMENTS:**

- A. **Plan Document:** In order to obtain a permit to construct or an original license to operate a manufactured home park, the applicant shall file with the City a written application and plan documents, and such plan documents shall be prepared by a registered engineer or architect licensed to practice in the State of Illinois, with registration seal affixed. Two (2) copies of the plan document shall accompany the application filed with the City Office Manager to obtain a permit to construct or alter a manufactured home park or an original license to

operate a manufactured home park not previously licensed by the department. These plans shall include, but not be limited to, the design and construction criteria set forth herein.

B. Application Requirements: Every applicant shall file with the City Office Manager a written application and plan documents for the proposed construction or alteration of a manufactured home park. The application shall be completed by the applicant and the engineer or architect and shall include:

1. The full name and address of the applicant or applicants, or names and addresses of the partners if the applicant is a partnership, or the names and addresses of the officers if the applicant is a corporation, and the present or last occupation of the applicant at the time of the filing of the application. If the applicant is a corporation, a copy of the certificate of incorporation must be filed with the application.

2. The proposed method of lighting the structures and land upon which the manufactured home park is to be located.

3. The plot plans of the manufactured home park, building plans and specifications for existing buildings and facilities, and the plans and specifications for new buildings and facilities or the proposed alterations in existing facilities.

4. An affidavit of the applicant as to the truth of the matters contained in the application shall be attached.

5. Each application shall be accompanied by an application fee of two hundred fifty dollars (\$250.00) for a permit to construct, or an application fee of one hundred fifty dollars (\$150.00) for a permit to alter to increase the size of the park.

C. Site And Location:

1. Sites selected for manufactured home development shall comply with chapter 2 of this title and shall be free from topographical or geological hindrances and from other conditions unfavorable to a proper residential environment.

2. The manufactured home development shall not be located near swamps, wetlands, marshes, or other breeding places of insects, rats, mice or other rodents.

3. Drainage shall comply with chapter 2 of this title.

4. The City Council may authorize a site survey to ascertain that the proposed location complies with the requirements of this subsection.

May 2021

- D. **Streets And Driveways:** Unless otherwise approved by the City Council, all streets and driveways in every park shall be constructed in compliance with title 9 of this Code. (Ord. 2018-07, 5-7-2018; amd. 2019 Code; Ord. 2020-10, 11-2-2020)

**8-1-5-5: MANUFACTURED HOME SITES:**

- A. **Lot Size:** Each manufactured home shall be allotted a site of not less than seven thousand two hundred (7,200) square feet.
- B. **Location Restrictions:**
1. No mobile home shall be parked closer than five feet (5') to the road lines of a manufactured home park or closer than ten feet (10') to a public street, alley or building.
  2. Each individual home site shall abut or face on a driveway or roadway of not less than twenty four feet (24') in width, which driveway or roadway shall have unobstructed access to a public highway or alley.
- C. **Open Space; Parking:** There shall be an open space of at least ten feet (10') adjacent to the sides of every mobile home and in this space shall be provided a permanent parking area substantially constructed in a workerlike manner.
- D. **Space Between Units:** There shall be at least five feet (5') adjacent to the ends of every mobile home.
- E. **Minimum Size Of Unit:** All mobile homes stationed in said mobile home park shall be a minimum size of five hundred (500) square feet.
- F. **Maintenance Of Streets And Driveways:** All private streets and driveways in every mobile home park must be maintained in a passable and reasonable condition at all times, and all streets and driveways in every mobile home park established shall have a minimum width of twenty four feet (24'). (Ord. 2018-07, 5-7-2018; amd. Ord. 2020-10, 11-2-2020)

**8-1-5-6: MISCELLANEOUS RESTRICTIONS:**

- A. No manufactured home unit parked in a manufactured home park shall be immobilized.
- B. Not more than one manufactured home unit shall be parked in one space.

May 2021

8-1-5-6

8-1-5-9

- C. No travel trailer or motor home shall be permitted in any manufactured home park, unless a special area has been approved for that purpose by the City Council. (Ord. 2018-07, 5-7-2018; amd. Ord. 2020-10, 11-2-2020)

**8-1-5-7: SKIRTING REQUIRED FOR EACH UNIT:**

Skirting shall be used to conceal all underpinning, plumbing, and support piers, whether on a permanent foundation or otherwise. All skirting shall be installed on all manufactured housing units within sixty (60) days of the placement of the unit. (Ord. 2018-07, 5-7-2018)

**8-1-5-8: INSPECTIONS:**

Upon completion of the proposed construction of a manufactured home park or the proposed alteration of a manufactured home park, the applicant shall notify the City or the designated official in order that an inspection of the complete facilities can be made. (Ord. 2018-07, 5-7-2018; amd. Ord. 2020-10, 11-2-2020)

**8-1-5-9: REVOCATION OR SUSPENSION OF LICENSE:**

Any license granted hereunder shall be subject to revocation or suspension by the Mayor. However, the Mayor or his representative shall first serve or cause to be served upon the licensee a written notice in which shall be specified the way or ways in which such licensee has failed to comply with the statutes or any rules or regulations promulgated by the City pertaining thereto. The notice shall require the licensee to remove or abate such nuisance, unsanitary or objectionable condition specified in the notice within five (5) days or within a longer period of time as may be allowed by the City Council. If the licensee fails to comply with the terms and conditions of the notice within the time specified or such extended period of time, the Mayor or his representative may revoke or suspend the license. (Ord. 2018-07, 5-7-2018; amd. Ord. 2020-10, 11-2-2020)

May 2021





## CHAPTER 2

## STORMWATER CONTROL

**ARTICLE A. GENERAL PROVISIONS; ADMINISTRATION  
AND ENFORCEMENT**

## SECTION:

- 8-2A- 1: Statute Authority
- 8-2A- 2: Purpose And Objectives
- 8-2A- 3: Application Of Provisions
- 8-2A- 4: Development Permit
- 8-2A- 4-1: Permit Required; Exemptions
- 8-2A- 4-2: Application For Permit; Fee
- 8-2A- 4-3: Security Required
- 8-2A- 4-4: Review Of Applications; Approval Or Disapproval
- 8-2A- 4-5: Final Certification
- 8-2A- 4-6: Expiration Of Permit
- 8-2A- 4-7: Judicial Review
- 8-2A- 4-8: Suspension Or Revocation Of Permit
- 8-2A- 5: Other Permits Required
- 8-2A- 6: Responsibility Of Applicant; Nonliability Of City
- 8-2A- 7: Compliance With NPDES
- 8-2A- 8: Variances
- 8-2A- 9: Amendments To Plans
- 8-2A-10: Violations; Penalties

8-2A-1: **STATUTE AUTHORITY:** This chapter is enacted pursuant to the police powers granted to the City. (2008 Code § 32-1-1; amd. 2019 Code)

8-2A-2: **PURPOSE AND OBJECTIVES:**

- A. The purpose of this chapter is to diminish threats to public health and safety, protect property, prevent damage to the environment and promote public welfare by guiding, regulating and controlling the

design, construction, use and maintenance of any new development or re-development or other activity which disturbs or breaks the topsoil or otherwise results in the movement of earth, and/or changes the stormwater drainage pattern and/or stormwater flows from that which would have occurred if the land had been left in its natural state. This stormwater runoff and resulting soil erosion could result in the inundation of damageable properties, the erosion and destabilization of downstream channels, and the pollution of valuable stream and lake resources. This chapter regulates these activities to minimize adverse impacts.

- B. The purpose of this chapter is also to comply with the General National Pollutant Discharge Elimination System (NPDES) permit no. ILR40 regulations and the Notice of Intent (NOI) submitted to the IEPA in 2003.
- C. This chapter is adopted to accomplish the following objectives:
  - 1. To assure that new development or re-development does not increase the drainage or flood hazards or create unstable conditions susceptible to soil erosion;
  - 2. To protect new buildings and major improvements to buildings from flood damage due to increased stormwater runoff and soil erosion;
  - 3. To protect human life and health from the hazards of increased flooding and soil erosion on a watershed basis;
  - 4. To lessen the burden on the taxpayer for flood control projects, repairs to flood damaged public facilities and utilities, correction of channel erosion problems, and flood rescue and relief operations caused by stormwater runoff and soil erosion quantities from new development or re-development;
  - 5. To protect, conserve, and promote the orderly development of land and soil, water, air, animal, and plant resources;
  - 6. To preserve the natural hydrologic and hydraulic functions of watercourses and floodplains and to protect water quality and aquatic habitats;
  - 7. To preserve the natural characteristics of stream corridors in order to manage floodwater and stormwater impacts, improve water and groundwater quality, reduce soil erosion, protect aquatic and riparian

habitat, maintain quality forest resources, provide recreational opportunities, provide aesthetic benefits, and enhance community and economic development. (2008 Code § 32-1-1)

8-2A-3:       **APPLICATION OF PROVISIONS:** This chapter applies to all new development or re-development in the City meeting the standards in subsection 8-2A-4-1A of this article, except as otherwise provided in this chapter. (2008 Code § 32-1-3)

8-2A-4:       **DEVELOPMENT PERMIT:**

8-2A-4-1:     **PERMIT REQUIRED; EXEMPTIONS:**

A.     No person, firm or corporation, public or private, the State of Illinois and its agencies or political subdivisions, the United States of America, and its agencies or political subdivisions, any agent, servant, officer or employee of any of the foregoing, unless otherwise exempted in this chapter, shall commence any of the following development activities without first having obtained a development permit from the City Council: (2008 Code § 32-1-3; amd. 2019 Code)

1. Any new development or re-development that contains an area of ten thousand (10,000) or more square feet of total impervious surface (i.e., streets, roof, patio or parking area or any combination thereof); or

2. Any land disturbing activity (i.e., clearing, grading, stripping, excavation, fill, or any combination thereof) that affects an area of ten thousand (10,000) or more square feet, or that will exceed one hundred (100) cubic yards; or

3. Any land disturbing activity if the activity is within twenty five feet (25') of a river, lake, pond, stream, sinkhole, or wetland, and is done in conjunction with subsections A1 and A2 of this section; or

4. Any land disturbing activity on the sloping side of the slope disturbance line and is in conjunction with this subsection A; or (2008 Code § 32-1-3)

5. The following uses, but these uses shall not be subject to the provisions of article C of this chapter:

a. Any land disturbing activity that is one acre (43,560 square feet) or less; or

b. Development of tracts of land where not more than one single-family dwelling is being erected; or

c. Any lots in a new subdivision of land where the lots front and have their sole access on an existing street or roadway. (2008 Code § 32-1-5)

B. A development permit shall not be required for the following:

1. Any new development, re-development or other activity falling below the minimum standards as set forth in subsection A of this section.

2. The agricultural use of land, including the implementation of conservation measures included in a farm conservation plan approved by the Soil and Water Conservation District and including the construction of agricultural structures.

3. The maintenance of any existing stormwater drainage/detention component or structure or any existing soil erosion/sediment control component or structure, including dredging, levee restoration, tree removal or other function which maintains the original design capacities of the above.

4. The construction of, improvements to, or maintenance of any street, road, highway or interstate highway performed by any unit of government whose powers grant such authority. (2008 Code § 32-1-4)

8-2A-4-2: **APPLICATION FOR PERMIT; FEE:** Application for a development permit shall be made by the owner of the property or his authorized agent to the City Council on a form furnished for that purpose. Each application shall bear the name(s) and address(es) of the owner or developer of the site, the contractor(s) and any consulting firm retained by the applicant, together with the name of the applicant's principal contact at such firm, and shall be accompanied by a filing fee of two hundred dollars (\$200.00) for any permit subject to the requirements of article C of this chapter. No permit fee is assessed for those developments where only the requirements of article D of this chapter apply. Each application shall include certification that any land clearing, construction, or development involving the movement of earth shall be in accordance with

the plans approved upon issuance of the permit. (2008 Code § 32-7-1; amd. 2019 Code)

8-2A-4-3: **SECURITY REQUIRED:** The applicant for a development permit may be required to file with the City a faithful performance bond or bonds, letter of credit, or other improvement security satisfactory to the City in an amount deemed sufficient by the City Council to cover all costs of improvements, landscaping, maintenance of improvements and landscaping, and soil erosion and sediment control measures for such period as specified by the City, and engineering and inspection costs to cover the cost of failure of repair of improvements installed on the site. (2008 Code § 32-7-2; amd. 2019 Code)

8-2A-4-4: **REVIEW OF APPLICATIONS; APPROVAL OR DISAPPROVAL:** Each application for a development permit shall be reviewed and acted upon according to the following procedures: (2008 Code § 32-7-3)

- A. The City Council will review each application for a development permit to determine its conformance with the provisions of this chapter. The Council may also refer any application to the County Soil and Water Conservation District, a consulting engineer retained by the City, and/or any other local government or public agency within whose jurisdiction the site is located for review and comment. All costs or fees acquired from the review shall be the responsibility of the applicant to reimburse the City in full before the permit is processed further. Within sixty (60) days after receiving an application and all costs or fees acquired, the City Council shall in writing: (2008 Code § 32-7-3; amd. 2019 Code)
1. Approve the permit application if it is found to be in conformance with the provisions of this chapter, and issue the permit;
  2. Approve the permit application subject to such reasonable conditions as may be necessary to secure substantially the objectives of this chapter, and issue the permit subject to these conditions; or
  3. Disapprove the permit application, indicating the deficiencies and the procedure for submitting a revised application and/or submission.
- B. No development permit shall be issued for an intended development site unless:

1. The development, including, but not limited to, subdivision or planned unit development, has been approved by the City where applicable; or
  2. Such permit is accompanied by or combined with a valid building permit issued by the City; or
  3. The proposed earth moving is coordinated with any overall development program previously approved by the City for the area in which the site is situated; and
  4. All relevant Federal and State permits have been received for the portion of the site subject to soil disturbance as noted in section 8-2A-5 of this chapter. (2008 Code § 32-7-3)
- C. Failure of the City Council to act on an original or revised application within sixty (60) days of receipt shall authorize the applicant to proceed in accordance with the plans as filed and in compliance with the regulations contained herein, unless such time is extended by agreement between the City Council and the applicant. Pending preparation and approval of a revised plan, development activities shall be allowed to proceed in accordance with conditions established by the City Council. (2008 Code § 32-7-3; amd. 2019 Code)

8-2A-4-5: **FINAL CERTIFICATION:** Prior to final approval by the City, a registered professional engineer shall certify that the detention basin has been constructed in accordance with construction plans and proposed volume has been provided. An "as-built" survey of the detention basin, prepared by a licensed surveyor, shall be included with the certification for approval. (2008 Code § 32-7-4)

8-2A-4-6: **EXPIRATION OF PERMIT:** Every development permit shall expire and become null and void if the work authorized by such permit has not been commenced within one hundred eighty (180) days, or if not completed by a date which shall be specified in the permit; except, that the City Council may, if the permittee presents satisfactory evidence that unusual difficulties have prevented work being commenced or completed within the specified time limits, grant a reasonable extension of time if written application is made before the expiration date of the permit. The City Council may require modification of the erosion control plan to prevent any increase in erosion or off-site sediment runoff resulting from any extension. (2008 Code § 32-7-5; amd. 2019 Code)

8-2A-4-7: **JUDICIAL REVIEW:** The applicant, or any person or agency which received notice of the filing of an application, may seek prompt judicial review of the action of the City Council in any court of competent jurisdiction. (2008 Code § 32-7-6; amd. 2019 Code)

8-2A-4-8: **SUSPENSION OR REVOCATION OF PERMIT:** In the event any person holding a development permit pursuant to this chapter violates the terms of the permit or carries on-site development in such a manner as to materially adversely affect the health, welfare, environment, or safety of persons residing or working in the neighborhood of the development site or so as to be materially detrimental to the public welfare or injurious to property or improvements in the neighborhood, the City Council may suspend or revoke the development permit.

A. **Suspension:** Suspension of a permit shall be by a written stop work order issued by the City Council and delivered to the permittee or his agent or the person performing the work. The stop work order shall be effective immediately, shall state the specific violations cited, and shall state the conditions under which work may be resumed. A stop work order shall remain in effect until the next regularly scheduled meeting of the City Council, at which time the conditions of section 8-2A-4-6 of this section 8-2A-4 can be met. (2008 Code § 32-8-1; amd. 2019 Code)

B. **Revocation:**

1. No development permit shall be revoked until a hearing is held by the City Council. Written notice of such hearing shall be served on the permittee, either personally or by registered mail, and shall state:

a. The grounds for complaint or reasons for suspension or revocation, in clear and concise language; and

b. The time when and place where such hearing will be held. (2008 Code § 32-8-1)

2. Such notice shall be served on the permittee at least five (5) days prior to the date set for the hearing. At such hearing, the permittee shall be given an opportunity to be heard and may call witnesses and present evidence on his behalf. At the conclusion of the hearing, the City Council shall determine whether the permit shall be revoked. (2008 Code § 32-8-1; amd. 2019 Code)

8-2A-5: **OTHER PERMITS REQUIRED:** Before a development permit under this chapter becomes effective, all required Federal, State, and local permits will have been officially approved. The acquisition of these permits shall be the sole responsibility of the applicant. These may include, but are not limited to, section 404 of the Clean Waters Act, section 106 of the National Historic Preservation Act, section 10 of the Rivers and Harbors Act, or permitting required by the Illinois Department of Natural Resources, Office of Water Resources in accordance with the Rivers, Lakes and Streams Act<sup>1</sup>, the Soil and Water Conservation Districts Act<sup>2</sup>, the Farmland Preservation Act<sup>3</sup>, the Illinois Groundwater Protection Act<sup>4</sup>, and the National Pollutant Discharge Elimination System permit (NPDES) through the Illinois Environmental Protection Agency, Division of Water Pollution Control. Compliance is also required with, but not limited to, the City subdivision regulations. (2008 Code § 32-1-2; amd. 2019 Code)

8-2A-6: **RESPONSIBILITY OF APPLICANT; NONLIABILITY OF CITY:** The applicant shall not be relieved of responsibility for damage to persons or property otherwise imposed by law, and the City or its officers or agents will not be made liable for such damage, by:

- A. The issuance of a development permit under this chapter; (2008 Code § 32-1-8)
- B. Compliance with the provisions of that development permit or conditions attached to it by the City Council; (2008 Code § 32-1-8; amd. 2019 Code)
- C. Failure of City officials to observe or recognize hazardous or unsightly conditions;
- D. Failure of City officials to recommend denial or to deny a development permit; or
- E. Exemptions from development permit requirements of this chapter. (2008 Code § 32-1-8)

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1. 615 ILCS 5/4.9 et seq.

2. 70 ILCS 405/1 et seq.

3. 505 ILCS 75/1 et seq.

4. 415 ILCS 55/1 et seq.



8-2A-7: **COMPLIANCE WITH NPDES:** New and re-development that is applicable to this chapter (per subsection 8-2A-4-1A of this article) must comply with the NPDES regulations (the General NPDES permit no. ILR40 and the NOI). NPDES compliance is obtained by adhering to this chapter, ILR10 permits, the General NPDES for Macoupin and Sangamon Counties and the NOI submitted for the City and all future steps taken by the City to implement the NOI. (2008 Code § 32-1-9; amd. 2019 Code)

8-2A-8: **VARIANCES:** The City Council may, in accordance with the following procedures, authorize variances to any of the requirements and the regulations set forth in this chapter:

- A. Application for a variance shall be made by a verified petition of the applicant for a development permit, stating fully the grounds of the petition and the facts relied upon by the applicant. Such petition shall be filed with the development permit application. In order for the petition to be granted, it shall be necessary that the City Council find all of the following facts with the respect to the land referred to in the application:
1. That the land is of such shape or size or is affected by such physical conditions or is subject to such title limitations of record, that it is impossible or impractical for the applicant to comply with all of the requirements of this chapter;
  2. That the variance is necessary for the preservation and enjoyment of a substantial property right of the applicant; and
  3. That the granting of the variance will not be detrimental to the public welfare or environment or injurious to other property in the vicinity of the subject property.
- B. Each application for a variance shall be made to the City Council, which shall review such application prior to granting or denying the variance.
- C. The City Council shall hold a public hearing on each application for a variance, within thirty (30) days after receiving the application, in the manner established by ordinance. Within thirty (30) days after public hearing, the City Council shall either approve the site development permit application with the variances and conditions it deems necessary, or it shall disapprove such development permit application and

variance application, or it shall take other such action as appropriate.  
(2008 Code § 32-1-6; amd. 2019 Code)

8-2A-9:       **AMENDMENTS TO PLANS:** Major amendments to storm-water drainage and detention or erosion and sediment control plans shall be submitted to the City Council and shall be processed and approved or disapproved in the same manner as the original plans. Field modification of a minor nature may be authorized by the City Council by written authorization to the permittee. (2008 Code § 32-6-4; amd. 2019 Code)

8-2A-10:      **VIOLATIONS; PENALTIES:** No person shall construct, enlarge, alter, repair or maintain any grading, excavation or fill, or cause the same to be done, contrary to or in violation of any terms of this chapter. Any person violating any of the provisions of this chapter shall be deemed guilty of a misdemeanor, and each day during which any violation of any of the provisions of this chapter is committed, continued, or permitted shall constitute a separate offense. Upon conviction of any such violation, such person, partnership, or corporation shall be punishable by a fine of not more than allowed by section 1-4-1 of this Code for each offense. In addition to any other penalty authorized by this section, any person, partnership, or corporation convicted of violating any of the provisions of this chapter shall be required to restore the site to the condition existing prior to commission of the violation or to bear the expense of such restoration. (2008 Code § 32-8-2)

CHAPTER 2  
STORMWATER CONTROL  
**ARTICLE B. DEFINITIONS**

## SECTION:

8-2B-1: Terms Defined

8-2B-1: **TERMS DEFINED:** For the purposes of this chapter, certain terms are defined and set forth below:

**ADVERSE IMPACTS:** Any negative impact on plant, soil, air or water resources affecting their beneficial uses including recreation, aesthetics, aquatic habitat, quality, and quantity.

**APPLICANT:** Any person, firm, or governmental agency who executes the necessary forms to procure official approval of a development or permit to carry out construction of a new development or re-development from the City.

**BASE FLOOD ELEVATION:** The elevation at all locations delineating the level of flooding resulting from the 100-year frequency flood event which has a one percent (1%) chance of occurring in any given year.

**BUILDING PERMIT:** A permit issued by the City of Virden, Illinois for the construction, erection or alteration of a structure or building and the related ground and surface preparation prior to and after completion of construction, erection or alteration of a structure or building.

**BYPASS FLOWS:** Stormwater runoff from upstream properties tributary to a property's drainage system but not under its control.

CERTIFY OR CERTIFICATION:	Formally attesting that the specific inspections and tests were performed, and that such inspections and tests comply with the applicable requirements of this chapter.
CHANNEL:	Any defined river, stream, creek, brook, branch, natural or artificial depression, ponded area, on-stream lake or impoundment, karst area (sinkhole), flowage, slough, ditch, conduit, culvert, gully, ravine, wash, or natural or manmade drainageway, which has a definite bed and bank or shoreline, in or into which surface water or groundwater flows, either perennially or intermittently.
CHANNEL MODIFICATION:	Alteration of a channel by changing the physical dimensions of materials of its bed or banks. Channel modification includes damming, ripraping (or other armoring), filling, widening, deepening, straightening, relocating, lining, and significant removal of bottom or woody rooted vegetation. Channel modification does not include the manmade clearing of debris or removal of trash.
CLEARING:	Any activity which removes the natural vegetative ground cover.
COMPENSATORY STORAGE:	An artificially excavated, hydraulically equivalent volume of storage within the floodplain used to balance the loss of natural flood storage capacity when fill or structures are placed within the floodplain.
CONDUIT:	Any channel, pipe, sewer or culvert used for the conveyance or movement of water, whether open or closed.
CUBIC YARD:	A one yard by one yard by one yard amount of material in excavation and/or fill.
DETENTION BASIN:	A facility constructed or modified to provide for the temporary storage of stormwater runoff and the controlled release by gravity of this runoff at

a prescribed rate during and after a flood or storm.

**DETENTION TIME:** The amount of time stormwater is held within a detention basin.

**DEVELOPMENT:** Any manmade change to real estate or property, including:

A. The division or subdivision of any duly recorded parcel of property.

B. Construction, reconstruction or placement of a building or any addition to a building.

C. Installation of a manufactured home on a site, preparing a site for a manufactured home, or installing a travel trailer on a site for more than one hundred eighty (180) days per year.

D. Construction of roads, bridges, or similar projects.

E. Redevelopment of a site.

F. Filling, dredging, grading, clearing, excavating, paving or other nonagricultural alterations of a ground surface.

G. Storage of materials or deposit of solid or liquid waste.

H. Any other activity that might alter the magnitude, frequency, direction, or velocity of stormwater flows from a property.

**DRAINAGE PLAN:** A plan, including engineering drawings and supporting calculations, which describes the existing stormwater drainage system and environmental features, including grading, as well as proposed alterations or changes to the drainage system and environment of a property.

DRY BASIN:	A detention basin designed to drain after temporary storage of stormwater flows and to normally be dry over much of its bottom area.
EROSION:	The general process whereby soil or earth is moved by rainfall, flowing water, or wind or wave action.
EXCAVATION:	Any act by which organic matter, earth, sand, gravel, rock or any other similar material is cut into, dug, quarried, uncovered, removed, displaced, re-located or bulldozed and shall include the conditions resulting from such actions.
EXCESS STORMWATER RUNOFF:	The volume and rate of flow of stormwater discharged from a new development or re-development which is or will be in excess of that volume and rate which existed before development or re-development.
EXISTING GRADE:	The vertical location of the existing ground surface prior to excavation or filling.
FILL:	Any act by which earth, sand, gravel, rock, or any other material is deposited, placed, replaced, pushed, dumped, pulled, transported or moved by man to a new location and shall include the conditions resulting therefrom.
FINAL GRADE:	The vertical location of the ground surface after grading work is completed in accordance with the engineering plans.
FLOOD FRINGE:	That area as designated by the Federal Emergency Management Agency (FEMA) on either side of the floodway. This area is subject to inundation from the base flood but conveys little or no flow.
FLOOD HAZARD BOUNDARY MAP (FHBM):	A very generalized map prepared by the Federal Emergency Management Agency (FEMA) which shows only where floodplains are

located based on very basic data. FHBM's do not include base flood elevations.

**FLOOD INSURANCE  
RATE MAP (FIRM):**

A map prepared by the Federal Emergency Management Agency (FEMA) that depicts the special flood hazard area (SFHA) within the City. This map includes insurance rate zones and regulatory floodplains and may or may not depict regulatory floodways.

**FLOODPLAIN:**

That land adjacent to a body of water with ground surface elevations at or below the base flood or the 100-year frequency flood elevation which is subject to inundation. The floodplain, as designated by the Federal Emergency Management Agency (FEMA), is also known as the special flood hazard area (SFHA). These areas can be found on the FIRM, the Flood Boundary and Floodway Map, or the Flood Hazard Boundary Map (FHBM) of the City. This area is the collective combination of the regulatory floodway and the flood fringe.

**FLOODWAY:**

The channel and that portion of the floodplain, including on-stream lakes, adjacent to a stream or watercourse which is needed to store and convey the anticipated existing and future 100-year frequency flood discharge with no more than a 0.1 foot increase in stage due to any loss of flood conveyance or storage and no more than a ten percent (10%) increase in velocities. Floodways are designated by FEMA on some Flood Insurance Rate Maps and Flood Boundary and Floodway Maps. However, there are floodways on all streams whether mapped by FEMA or not.

**GRADING:**

The excavation or fill, or any combination thereof, and shall include the conditions resulting from any excavation or fill.

**HYDROGRAPH:**

A graph showing, for a given location on a stream or conduit, the flow rate with respect to time.

HYDROGRAPH METHOD:	This method estimates runoff volume and runoff hydrographs for the point of interest by generating hydrographs for individual sub-areas, combining them, and routing them through stream lengths and reservoir structures. Factors such as rainfall amount and distribution, runoff curve number, time of concentration, and travel time are included.
IMPERVIOUS SURFACE:	That area of property that is covered by materials other than soil and vegetation and that has no intended capacity to absorb water, such as parking lots, driveways, sidewalks, patios, tennis courts, roofs and other structures.
INFILTRATION:	The passage or movement of water into the soil surfaces.
LOT:	An individual platted parcel in an approved subdivision.
MAJOR DRAINAGE SYSTEM:	That portion of a drainage system needed to store and convey flows beyond the capacity of the minor drainage system.
MINOR DRAINAGE SYSTEM:	That portion of a drainage system designed for the convenience of the public. It consists of street gutters, storm sewers, small open channels, and swales and, where manmade, is to be designed to handle the 2-year runoff event.
MITIGATION:	When the prescribed controls are not sufficient, and additional measures are required to offset the development, including those measures necessary to minimize the negative effects which stormwater drainage and development activities might have on the public health, safety and welfare. Examples of mitigation include, but are not limited to, compensatory storage, soil erosion and sedimentation control, and channel restoration.
MODIFIED RATIONAL METHOD:	As described in the Illinois Department of Transportation "Drainage Manual" is based on the



principal that the maximum rate of runoff from a given drainage area occurs at that point in time when all parts of the watershed are contributing to the flow. The rainfall generating the peak flow is assumed to be of uniform intensity for the entire watershed with a rainfall duration equal to the time of concentration.

- NATURAL:** Conditions resulting from physical, chemical, and biological processes without intervention by man.
- NATURAL DRAINAGE:** Channels formed in the existing surface topography of the earth prior to changes made by unnatural causes.
- 100-YEAR EVENT:** A rainfall, runoff, or flood event having a one percent (1%) chance of occurring in any given year. A 24-hour storm duration is assumed unless otherwise noted.
- PARCEL:** All contiguous land in one ownership.
- PEAK FLOW:** The maximum rate of flow of water at a given point in a channel or conduit.
- PERMITTEE:** Any person to whom a building permit is issued.
- PERSON:** Any individual, firm or corporation, public or private, the State of Illinois, and its agencies or political subdivisions, the United States of America, and its agencies or political subdivisions, and any agent, servant, officer or employee of any of the foregoing.
- POSITIVE DRAINAGE:** Provision for overland paths for all areas of a property including depressional areas that may also be drained by a storm sewer.
- PRIME FARMLAND:** Land that is best suited to food, feed, forage, fiber and oilseed crops. It may be cropland, pasture, woodland, or other land, but it is not urban and built up land or water areas. It is either used for food or fiber or is available for those uses. The soil qualities, growing season

and moisture supply are those needed for a well managed soil to economically produce a sustained high yield of crops. Prime farmland produces the highest yields with minimum inputs of energy and economic resources and farming it results in the least damage to the environment.

PROPERTY:	A parcel of real estate.
RETENTION BASIN:	A facility designed to completely retain a specified amount of stormwater runoff without release except by means of evaporation, infiltration, emergency bypass or pumping.
SEDIMENTATION:	The process that deposits soils, debris, and other materials either on other ground surfaces or in bodies of water or stormwater drainage systems.
SITE:	A parcel of land, or a contiguous combination thereof, where grading work is performed as a single unified operation.
SLOPE DISTURBANCE LINE:	The line which delineates relatively level building areas from areas where slopes exceed eight percent (8%) and where special precautions must be taken.
STORM SEWER:	A closed conduit for conveying collected stormwater.
STORMWATER DRAINAGE SYSTEM:	All means, natural and manmade, used for conducting stormwater to, through or from a drainage area to the point of final outlet from a property. The stormwater drainage system includes, but is not limited to, any of the following: conduits and appurtenance features, canals, channels, ditches, streams, culverts, streets, storm sewers, detention basins, swales and pumping stations.
STORMWATER RUNOFF:	The waters derived from melting snow or rain falling within a tributary drainage basin which

are in excess of the infiltration capacity of the soils of that basin, which flow over the surface of the ground or are collected in channels or conduits.

STREAM:	Any river, creek, brook, branch, flowage, ravine, or natural or manmade drainageway which has a definite bed and banks or shoreline, in or into which surface water or groundwater flows, either perennially or intermittently.
STRIPPING:	Any activity which removes the vegetative surface cover, including tree removal, by spraying or clearing and storage or removal of topsoil.
10-YEAR EVENT:	A runoff, rainfall, or flood event having a ten percent (10%) chance of occurring in any given year. A 24-hour storm duration is assumed unless otherwise noted.
TIME OF CONCENTRATION:	The elapsed time for stormwater to flow from the most hydraulically remote point in a drainage basin to a particular point of interest in that watershed.
TRIBUTARY WATERSHED:	All of the land surface area that contributes runoff to a given point.
2-YEAR EVENT:	A runoff, rainfall, or flood event having a fifty percent (50%) chance of occurring in any given year. A 24-hour storm duration is assumed unless otherwise noted.
VACANT:	Land on which there are no structures or only structures which are secondary to the use or maintenance of the land itself.
WATERSHED:	All land area drained by, or contributing water to, the same stream, creek, ditch, lake, marsh, stormwater facility, groundwater or depressional area.

- WET BASIN:** A detention basin designed to maintain a permanent pool of water after the temporary storage of stormwater runoff.
- WETLANDS:** Are defined by regulation as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions". For general, but not inclusive, locations of designated wetlands, refer to mapping prepared jointly by the U.S. Department of Interior, Fish and Wildlife Service and the Illinois Department of Natural Resources, Office of Resource Conservation; National Wetlands Inventory Mapping, 1987. The applicant may be required to provide a field investigation by a qualified wetland delineator. (2008 Code § 32-2-1; amd. 2019 Code)

## CHAPTER 2

## STORMWATER CONTROL

**ARTICLE C. STORMWATER DRAINAGE AND DETENTION**

## SECTION:

- 8-2C-1: Drainage Plan Submittal Requirements
- 8-2C-2: Minimization Of Increases In Runoff Volumes And Rates
- 8-2C-3: Water Quality And Multiple Uses
- 8-2C-4: Design Criteria, Standards And Methods
- 8-2C-5: Early Completion Of Detention Facilities

8-2C-1: **DRAINAGE PLAN SUBMITTAL REQUIREMENTS:** Each applicant shall submit the following information to ensure that the provisions of this chapter are met. The submittal shall include sufficient information to evaluate the environmental characteristics of the property, the potential adverse impacts and benefits of the development on water resources, both on-site and off-site, and the effectiveness of the proposed drainage plan in managing stormwater runoff, and meet the provisions of section 8-2A-5 of this chapter. The applicant shall certify on the drawings that all clearing, grading, drainage, and construction shall be accomplished in strict conformance with the drainage plan. The following information shall be submitted for both existing and proposed property conditions for all new development or re-development:

- A. Topographic Survey Plan: A topographic survey of the property at one foot (1') contours unless otherwise specified or approved by the City. If the mapping is compiled using a digital format and the Global Positioning System (GPS), the applicant will provide both paper and digital copies including GPS points.
- B. Mapping And Descriptions: An existing drainage and proposed drainage plan for the property and one hundred feet (100') surrounding the property at a scale of not more than one hundred feet (100') to one inch (1") and including the following:

1. Property boundary, dimensions, and approximate acreage;
2. Building setback lines;
3. All existing and proposed structures and sizes;
4. "Area in" square feet of existing and proposed impervious surface;
5. All existing, or proposed easements;
6. All existing, abandoned, or proposed water or monitoring wellhead locations;
7. All sanitary or combined sewer lines and septic systems;
8. The banks and centerline of streams and channels;
9. Shoreline of lakes, ponds, and detention basins with normal water level elevation;
10. Known farm drains and tiles;
11. Soils classifications;
12. Location, size and slope of stormwater conduits and drainage swales;
13. Depressional storage areas;
14. Detention facilities;
15. Roads, streets and associated stormwater inlets including finished grades;
16. Base flood elevation, flood fringe, and regulatory floodway;
17. Basis of design for the final drainage network components;
18. A statement giving any applicable engineering assumptions and calculations;
19. A vicinity map showing the relationship of the site to its general surroundings at a scale of not less than two thousand feet (2,000') to one inch (1");

20. Title, scale, north arrow, legend;
  21. Signature and seal of licensed professional engineer, date, and name of person preparing plans;
  22. Cross-section data for open channel flow paths and designated overland flow paths;
  23. Direction of storm flows;
  24. Flow rates and velocities at critical points in the drainage system may be included in the supporting documentation;
  25. A statement by the design engineer of the drainage system's provision for handling events greater than the 100-year, 24-hour runoff may be included in the supporting documentation; and
  26. A statement of certification of all drainage plans, calculations, and supporting data by an Illinois licensed professional engineer.
- C. Environmental Features: A depiction of environmental features of the property and immediate vicinity including the following:
1. The limits of designated regulatory and nonregulatory wetland areas;
  2. The location and limits of known sinkholes (karst areas);
  3. Any known designated natural areas, prime farmland; and
  4. Any known proposed environmental mitigation features. (2008 Code § 32-3-1; amd. 2019 Code)

8-2C-2: **MINIMIZATION OF INCREASES IN RUNOFF VOLUMES AND RATES:** In the selection of a drainage plan for a new development or re-development, the applicant shall evaluate and implement site design features which minimize the increase in runoff volumes and rates from the site. The applicant's drainage plan submittal shall include evaluations of site design features which are consistent with the following hierarchy:

- A. Preservation of regulatory floodplains and flood prone and wetland areas;

- B. Minimize impervious surfaces on the property consistent with the needs of the project;
- C. Attenuate flows by use of open vegetated swales and natural depressions and preserve the existing natural stream channel;
- D. Infiltration of runoff on-site;
- E. Provide stormwater retention structures;
- F. Provide wet or wetland detention structures;
- G. Provide dry detention structures; and
- H. Construct storm sewers. (2008 Code § 32-3-2)

8-2C-3: **WATER QUALITY AND MULTIPLE USES:**

- A. The drainage system should be designed to minimize adverse surface water and groundwater quality impacts off-site and on the property itself. Water quality shall adhere to:
  - 1. Illinois Environmental Protection Act<sup>1</sup>.
  - 2. Illinois Pollution Control Board Rules and Regulations - Title 35: Environmental Protection, subtitle C: Water Pollution, chapter 1: Pollution Control Board, part 302 Water Quality Standards; and
  - 3. Illinois Pollution Control Board Rules and Regulations - Title 35: Environmental Protection, subtitle C: Water Pollution, chapter 1: Pollution Control Board, part 304 Effluent Standards.
- B. Detention basins shall incorporate design features to capture stormwater runoff pollutants. When designers propose wet bottom and wetland type designs, all flows from the development shall be routed through the basin (i.e., low flows shall not be bypassed). When it is not practical or feasible to route all of the project's flow to the detention basin, the design of the basin shall compensate for the bypass flow. In cases where detention facilities are practical and the long term maintenance of such facilities are provided for, detention of stormwater shall be promoted throughout the property's drainage

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1. 415 ILCS 5/12.



system to reduce the volume of stormwater runoff and to reduce the quantity of runoff pollutants.

- C. The drainage system should incorporate multiple uses where practicable. Uses considered compatible with stormwater management include open space, aesthetics, aquatic habitat, recreation (boating, fishing, trails, playing fields), wetlands and water quality mitigation. (2008 Code § 32-3-3)

8-2C-4: **DESIGN CRITERIA, STANDARDS AND METHODS:**

- A. **Release Rates:** The drainage system for new developments or re-developments shall be designed to control the peak rate of discharge from the property to discharge rates at or below the 2-year discharge rate which existed prior to development for all rainfall events up to and including the 100-year frequency rainfall. Additionally, the discharge from a stormwater detention facility shall not cause an increase in flooding or channel instability downstream when considered in aggregate with other developed properties and downstream drainage capacities. The downstream area will encompass a minimum distance of one thousand two hundred feet (1,200') from the project site or as otherwise determined by the City's consulting engineer. The controlled release rate in any case shall not exceed the rated capacity of the existing natural downstream outlet channel or storm sewer system as determined by the City's consulting engineer.

1. **Detention Basin Outlet Design:** The detention basin outlet control structure shall be designed to account for observed or anticipated downstream tailwater elevations. The tailwater elevations used in the detention model shall be for the particular storm frequency being routed through the detention basin. An emergency spillway or overflow device shall be provided and set at an elevation equivalent to the 100-year design high water. In designing outlets, the applicant shall consider the impact of downstream areas on the capacity of the basin. Velocity dissipation measures shall be incorporated into the design to minimize erosion at inlets and outlets.

- B. **Detention Storage Requirements:** The volume of detention required shall be necessary to handle the run-off of a 100-year frequency rate rainfall for any and all durations from the fully developed drainage area tributary to the detention facility, less that volume discharge during the same duration.

- C. Rainfall: Unless a continuous simulation approach to drainage system hydrology is used, all design rainfall events shall be based on the Illinois State Water Survey's Bulletin 70.
- D. Wet Detention Basin Design: The use of wet basins for stormwater detention shall be subject to approval of the Planning Commission and City Council. If approved, wet detention basins shall be designed to remove stormwater pollutants, to be safe, to be aesthetically pleasing and, as much as feasible, to be available for recreational use.
1. Wet Basin Depths: Wet basins shall be at least three feet (3') deep, excluding near-shore banks and safety ledges. If fish habitat is to be provided, they shall be at least eight feet (8') deep over twenty five percent (25%) of the bottom area to prevent winter kill.
  2. Wet Basin Shoreline Slopes: The side slopes of wet basins at the normal pool elevation shall not be steeper than three to one (3:1), horizontal to vertical. It is recommended that aquatic vegetation be established around the perimeter to provide protection from shoreline erosion. For basins in excess of five (5) acres, rip rap shoreline protection shall be provided.
  3. Permanent Pool Volume: The permanent pool volume in a wet basin at normal depth shall, at a minimum, be equal to the runoff volume from its watershed for the 2-year, 24-hour event (calculated during dry weather conditions).
  4. Wet Basin Inlet And Outlet Orientation: The distance between detention inlets and outlets shall be maximized. Inlets and outlets shall be at opposite ends of the basin; providing, that the orientation does not create undue hardship based on topography or other natural constraints.
- E. Dry Detention Basin Design: In addition to the other requirements of this chapter, dry basins shall be designed to remove stormwater pollutants, to be safe, to be aesthetically pleasing and, as much as feasible, to be available for multiple uses. Paved low flow channels may be used in a dry basin, provided provisions are made to prevent ponding.
1. Dry Basin Drainage: Dry basins shall be designed so that eighty percent (80%) of their bottom area shall have standing water no longer than seventy two (72) hours for any runoff event less than the 100-year, 24-hour event. Grading plans shall clearly distinguish the

wet portion of the basin bottom. Underdrains directed to the outlet may be used to accomplish this requirement.

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

3. **Dry Basin Inlet And Outlet Orientation:** The distance between detention inlets and outlets shall be maximized. Inlets and outlets shall be at opposite ends of the basin providing that the orientation does not create undue hardship based on topography or other natural constraints.

F. **Minimum Detention Outlet Size:** Where a single pipe outlet or orifice plate is to be used to control discharge, it shall have a minimum diameter of twelve inches (12") for larger basins. Smaller basins may install a smaller rectangular or v-notch weir to control discharge. If this minimum orifice size permits release rates greater than those specified in this section, and regional detention is not a practical alternative, outlets, structures such as perforated risers, or flow control orifices shall be used.

G. **Other Considerations:**

1. **Accommodation Of Upstream Drainage Areas:** A culvert or other drainage facility shall in each case be large enough to accommodate potential runoff from its entire upstream drainage area, whether inside or outside the subdivision or development. The size of the facility needed will be determined by the developer's engineer and will be based on the provisions of the construction standards and specifications assuming conditions of maximum potential watershed development permitted by the zoning regulations.

2. **Effect On Downstream Drainage Areas:** The effect of each subdivision or development on existing downstream drainage facilities outside the area of the subdivision or development shall also be considered. Local government drainage studies together with such other studies as shall be appropriate, shall serve as a guide to needed improvements. Where it is anticipated that the additional runoff incident to the development of the subdivision or development will overload an existing downstream drainage facility, the Planning Commission may withhold approval of the subdivision or development until provision has been made for the expansion of the existing downstream facility. No subdivision or development shall be

approved unless adequate drainage will be provided to an adequate drainage watercourse or facility.

3. Areas Of Poor Drainage: Submitted design plans for subdivisions or developments containing areas subject to poor drainage, but located outside the 100-year floodplain, may be approved by the Planning Commission subject to performance of any remedial measures determined by the City's consulting engineer to be appropriate and necessary to alleviate such drainage conditions. The plat of subdivision or development shall provide for an overflow zone along the bank of any stream or watercourse, in a width that shall be sufficient in times of high water to contain or move the water, and no fill shall be placed in the overflow zone nor shall any structure be erected or placed in the overflow zone. The boundaries of the overflow zone shall be subject to approval by the City Engineer. The Planning Commission may deny subdivision or developmental approval for areas of extremely poor drainage. The lowest building floor elevations should be at least two feet (2') above any potential flood level as determined by the City Engineer.

H. Detention In Floodplains: The placement of detention basins within the floodplain is strongly discouraged because of questions about their reliable operation during flood events. However, the stormwater detention requirements of this chapter may be fulfilled by providing detention storage within flood fringe areas on the project site, provided the following provisions are met as well as compliance with section 8-2A-5 of this chapter:

1. Detention In Flood Fringe Areas: The placement of a detention basin in a flood fringe area shall require compensatory storage for one and one-half (1.5) times the volume below the base flood elevation occupied by the detention basin including any berms. The release from the detention storage provided shall still be controlled consistent with the requirements of this section. The applicant shall demonstrate its operation for all stream flow and floodplain back-water conditions. Excavations for compensatory storage along watercourses shall be opposite or adjacent to the area occupied by detention. All floodplain storage lost below the existing 10-year flood elevation shall be replaced below the existing 10-year elevation. All floodplain storage lost above the existing 10-year flood elevation shall be replaced above the existing 10-year flood elevation. All compensatory storage excavations shall be constructed to drain freely and openly to the watercourse and comply with section 8-2A-5 of this chapter.

2. Detention On Prime Farmland: The placement of detention basins shall avoid the utilization of prime farmland. All detention basin construction shall examine potential impacts to adjacent agricultural land and shall address measures that will be implemented to eliminate such impacts and comply with section 8-2A-5 of this chapter.

3. Detention In Floodways: Detention basins shall not be placed in the floodway.

4. On-Stream Detention: On-stream detention basins are discouraged but allowable if they provide regional public benefits and if they meet the other provisions of this chapter with respect to water quality and control of the 100-year, 24-hour events from the property. Further criteria are presented in section 8-2C-5 of this article. If on-stream detention is used in watersheds larger than one square mile, the applicant will use hydrographic modeling to demonstrate that the design will not increase the water level for any properties upstream or downstream of the property. Also, impoundment of the stream as part of on-stream detention:

a. Shall not prevent the migration of indigenous fish species, which require access to upstream areas as part of their life cycle, such as for spawning;

b. Shall not cause or contribute to the degradation of water quality or stream aquatic habitat;

c. Shall include a design calling for gradual bank slopes, appropriate bank stabilization measures, and a pre-sedimentation basin;

d. Shall not involve any stream channelization or the filling of wetlands;

e. Shall require the implementation of an effective nonpoint source management program throughout the upstream watershed which shall include as a minimum: runoff reduction "Best Management Practices" (BMPs) consistent with section 8-2C-2 of this article; and 2-year, 24-hour detention/sedimentation basins for all development consistent with this section;

f. Shall not occur downstream of a wastewater discharge;

g. Shall not contribute to the duration or flood frequency of any adjacent land; and

- h. Shall comply with section 8-2A-5 of this chapter.
- I. Drainage Into Wetlands, Rivers, Streams, Lakes, Ponds And Depressional Storage Areas: Wetlands, lakes, ponds and depressional storage areas shall be protected from damaging modifications and adverse changes in runoff quality and quantity associated with land developments. In addition to the other requirements of this chapter, the following requirements shall be met for all developments whose drainage flows into wetlands, rivers, lakes, ponds or depressional storage areas:
1. Detention In Wetlands, Rivers, Streams, Lakes, Ponds Or Depressional Storage Areas: Existing wetlands, rivers, lakes, ponds or depressional storage areas shall not be modified for the purposes of stormwater detention unless it is demonstrated that the proposed modifications will maintain or improve its habitat and ability to perform beneficial functions and shall comply with section 8-2A-5 of this chapter. Existing storage and release rate characteristics of wetlands, rivers, lakes, ponds or depressional storage areas shall be maintained and the volume of detention storage provided to meet the requirements of this section shall be in addition to this existing storage.
  2. Sediment Control: The existing wetlands, rivers, lakes, ponds, or depressional storage areas shall be protected during construction and as further regulated in article D of this chapter.
  3. Alteration Of Drainage Patterns: Site drainage patterns shall not be altered to substantially decrease or increase the existing area tributary to the wetlands, rivers, lakes, ponds or depressional storage areas. (2008 Code § 32-3-4)
  4. Detention/Sedimentation: All runoff from the development shall be routed through a preliminary detention/sedimentation basin designed to capture the 2-year, 24-hour event and hold it for at least twenty four (24) hours before being discharged to the wetland, river, lake, pond, or depressional storage area. This basin shall be constructed before property grading begins and shall be maintained throughout the construction process. In addition, the drainage hierarchy defined in section 8-2C-2 of this article should be followed to minimize runoff volumes and rates being discharged to the wetland, river, stream, lake, pond, or depressional storage area. (2008 Code § 32-3-4; amd. 2019 Code)

- J. Public Facilities: No public facilities such as streets, ditches, storm sewers and culverts shall be used for detention of stormwater.
- K. Safety Considerations: The drainage system components, especially all detention basins, shall be designed to protect the safety of any children or adults coming in contact with the system during runoff events and shall comply with section 8-2A-5 of this chapter.
1. Side Slopes: The side slopes of all detention basins at 100-year, 24-hour capacity shall be as level as practicable to prevent accidental falls into the basin and for stability and ease of maintenance. Side slopes of detention basins and open channels shall not be steeper than three to one (3:1) (horizontal to vertical).
  2. Safety Ledge: All wet detention basins shall have a level safety ledge at least four feet (4') in width two and one-half feet (2.5') to three feet (3') below the normal water depth or must be protected by an enclosed fence at least forty eight inches (48") in height.
  3. Velocity: Velocities throughout the surface drainage system shall be controlled to safe levels taking into consideration rates and depths of flow.
  4. Overflow Structures: See subsection A1 of this section.
- L. Maintenance Considerations: The stormwater drainage system shall be designed to minimize and facilitate maintenance. Turfed side slopes shall be designed to allow lawn mowing equipment to easily negotiate them. Wet basins shall be provided with alternate outflows which can be used to completely drain the pool for sediment removal. Pumping may be considered if drainage by gravity is not feasible. Pre-sedimentation basins shall be included, where feasible, for localizing sediment deposition and removal. Site access for heavy equipment shall be provided. (2008 Code § 32-3-4; amd. 2019 Code)

**8-2C-5: EARLY COMPLETION OF DETENTION FACILITIES:**

Where detention, retention, or depressional storage areas are to be used as part of the drainage system for a property, they shall be constructed as the first element of the initial earthwork program. Any eroded sediment captured in these facilities shall be removed by the applicant on a regular basis and before project completion in order to maintain the design volume of the facilities. (2008 Code § 32-3-6)





## CHAPTER 2

## STORMWATER CONTROL

**ARTICLE D. SOIL EROSION AND SEDIMENT CONTROL**

## SECTION:

8-2D-1:	Findings
8-2D-2:	General Principles
8-2D-3:	Erosion And Sediment Control Plan Submittal Requirements
8-2D-4:	Design And Operation Standards And Requirements
8-2D-5:	Maintenance Of Control Measures
8-2D-6:	Control Of Construction Site Wastes
8-2D-7:	Construction Site Stormwater Pollution Prevention Plan

8-2D-1: **FINDINGS:** The City hereby finds that:

- A. The soil types found in the City are susceptible to erosion and if left unprotected could cause severe loss of soil with resultant damage to property;
- B. The topography of the City contains areas with steep slopes upon which, if clearing of trees and/or inappropriate construction takes place, could result in severe erosion and slope stability problems which could result in damage to property;
- C. Excessive quantities of soil may erode from areas undergoing development for certain nonagricultural uses including, but not limited to, the construction of dwelling units, commercial buildings and industrial plants; the building of roads and highways; the modification of stream channels and drainageways; and the creation of recreational facilities;
- D. The washing, blowing, and falling of eroded soil across and upon roadways endangers the health and safety of users thereof by decreasing vision and reducing traction of road vehicles;

- E. Soil erosion necessitates the costly repairing of gullies, washed out fills, and embankments;
- F. Sediment from soil erosion tends to clog sewers and ditches and to pollute and silt rivers, streams, lakes, sinkholes, wetlands, and reservoirs;
- G. Sediment limits the use of water and waterways for most beneficial purposes, promotes the growth of undesirable aquatic weeds, destroys fish and other desirable aquatic life, and is costly and difficult to remove; and
- H. Sediment reduces the channel capacity of waterways and the storage capacity of floodplains and natural depressions, resulting in increased chances of flooding at risk to public health and safety. (2008 Code § 32-4-1)

**8-2D-2: GENERAL PRINCIPLES:**

- A. It is the objective of this chapter to control soil erosion and sedimentation caused by development activities, including clearing, grading, stripping, excavating, and filling of land in the City. Water quality shall adhere to:
  1. Illinois Environmental Protection Act - 415 Illinois Compiled Statutes 5/12;
  2. Illinois Pollution Control Board Rules and Regulations - title 35: Environmental Protection, subtitle C: Water Pollution chapter I: Pollution Control Board, part 302 Water Quality Standards; and
  3. Illinois Pollution Control Board Rules and Regulations - title 35: Environmental Protection, subtitle C: Water Pollution, chapter I: Pollution Control Board, part 304 Effluent Standards.
- B. Measures taken to control soil erosion and off-site sediment runoff shall be adequate to assure that sediment is not transported from the site by a storm event of 10-year, 24-hour frequency or less. The following principles shall apply to all new development or re-development activities within the City and to the preparation of the submissions required under section 8-2D-3 of this article:
  1. New development or re-development shall be related to the topography and soils of the site so as to create the least potential for

erosion. Areas of steep slopes greater than thirty three percent (33%) where high cuts and fills may be required are to be avoided wherever possible, and natural contours should be followed as closely as possible.

2. Natural vegetation shall be retained and protected wherever possible. Areas immediately adjacent to natural watercourses, lakes, ponds, sinkholes, and wetlands are to be left undisturbed wherever possible. Temporary crossings of watercourses, when permitted, must include appropriate stabilization measures.

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

4. The smallest practical area of land should be exposed for the shortest practical time during development.

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

6. The selection of erosion and sediment control measures shall be based on assessment of the probable frequency of climatic and other events likely to contribute to erosion, and on evaluation of the risks, costs, and benefits involved.

7. In the design of erosion control facilities and practices, aesthetics and the requirements of continuing maintenance must be considered.

8. Provision shall be made to accommodate the increased runoff caused by changed soil and surface conditions during and after development. Drainageways should be designed so that their final gradients and the resultant velocities and rates of discharge will not create additional erosion on-site or downstream.

9. Permanent vegetation and structures shall be installed and functional as soon as practical during development.

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

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

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

13. All temporary soil erosion and sediment control practices shall be maintained to function as intended until the contributing drainage area has been permanently stabilized, at which time, they shall be removed. (2008 Code § 32-4-2)

**8-2D-3: EROSION AND SEDIMENT CONTROL PLAN SUBMITTAL REQUIREMENTS:** Each applicant shall submit the information, depending on development size, as regulated to ensure that the provisions of this chapter are met. The submittal shall include sufficient information to evaluate the environmental characteristics of the property, the potential adverse impacts of the development related to erosion both on-site and off-site, and the effectiveness of the proposed erosion and sediment control plan in reducing sediment loss and meet the provisions of section 8-2A-5 of this chapter. The applicant shall certify on the drawing that all clearing, grading, drainage, and construction shall be accomplished in strict conformance with the erosion and sediment control plan. The following information shall be submitted for both existing and proposed property conditions and new developments or re-developments meeting the requirements of subsection 8-2A-4-1A of this chapter:

- A. Erosion And Sediment Control Plan Requirements: Shall meet the requirements of subsections 8-2C-1A and B and section 8-2A-2 of this chapter.
- B. Mapping And Descriptions: The existing and proposed erosion and sediment control features of the property and immediate vicinity including:
  - 1. As required in subsections 8-2C-1A, B and C of this chapter;
  - 2. Location of the slope disturbance line;
  - 3. Location and description of the erosion and sediment control measures to be employed during construction;
  - 4. For any structures proposed to be located on the slope side of the slope disturbance line, the map shall include the limits of disturbance

including tree removal, erosion and sediment control measures during construction, cross section view of any proposed cut or fill, erosion and sediment control measures during construction, details of method(s) proposed for providing slope stability, permanent stormwater control measures, and permanent erosion and sediment control measures, all being certified by a registered professional engineer or a "certified professional erosion control specialist".

5. The predominant soil types on the site, their location, and their limitations for the proposed use as defined by the USDA Natural Resources Conservation Service. (2008 Code § 32-4-3)

6. The proposed use of the site, including present and planned development; areas of clearing, stripping, grading, excavation and filling; proposed contours, finished grades, and street profiles; the stormwater plan as required in article C of this chapter; kinds and locations of utilities, areas and acreages proposed to be paved, sodded or seeded, vegetatively stabilized, or left undisturbed; and the location of specimen trees over eighteen inches (18") in diameter and their type. (2008 Code § 32-4-3; amd. 2019 Code)

7. The erosion and sediment control plan showing all measures necessary to meet the requirements of this chapter throughout all phases of construction and those remaining permanently after completion of the development of the site, including:

a. Location and description, including standard details, of all sediment control measures; runoff control measures, including diversions, waterways and outlets; and design specifics of sediment basins and traps, including outlet details.

b. Location and description of all soil stabilization and erosion control measures, including seeding mixtures and rates, types of sod, method of seedbed preparation, expected seeding dates, type and rate of lime and fertilizer application, kind and quantity of mulching for both temporary and permanent vegetative control measures, and types of nonvegetative stabilization measures.

c. Location and description of methods to prevent tracking of sediment off-site including construction entrance details, as appropriate.

d. Description of dust and traffic control measures.

e. Locations of stockpiles and description of stabilization methods.

f. Location of off-site fill or borrow volumes and locations and methods of stabilization.

g. Provisions for maintenance of control measures, including type and frequency of maintenance, easements, and estimates of the cost of maintenance. (2008 Code § 32-4-3)

h. The proposed phasing of development of the site, including stripping and clearing, rough grading and construction, and final grading and landscaping. Phasing should identify the expected date on which clearing will begin, the estimated duration of exposure of cleared area, and the sequence of installation of temporary sediment control measures (including perimeter controls), installation of stormwater drainage, paving streets and parking areas, final grading and the establishment of permanent vegetative cover, and the removal of temporary measures. It shall be the responsibility of the applicant to notify the City Council of any significant changes which occur in the site development schedule after the initial erosion and sediment control plan has been approved. (2008 Code § 32-4-3; amd. 2019 Code)

**8-2D-4: DESIGN AND OPERATION STANDARDS AND REQUIREMENTS:**

- A. The preparation of soil erosion and sediment control plans shall follow the principles outlined in the "Illinois Procedures and Standards for Urban Soil Erosion and Sedimentation Control", excepting chapter 6, published by the Urban Committee of the Association of Illinois Soil and Water Conservation Districts. The design criteria, standards, and methods shall be prepared in accordance with the requirements of this chapter and the standards and specifications contained in "Illinois Urban Manual" prepared for the Illinois Environmental Protection Agency by the USDA Natural Resources Conservation Service, which standards and methods are hereby incorporated into this chapter by reference. In the event of conflict between the provisions of said manuals and of this chapter, this chapter shall govern.
- B. New developments or re-developments shall comply with section 8-2D-3 of this article and meet the following:

1. Control measures shall be constructed to control runoff from the property to such an extent possible that sediment is retained on-site.
2. Temporary on-site control measures required shall be constructed and functional prior to initiating clearing, grading, stripping, excavating or fill activities on the site.
3. Disturbed areas shall be stabilized with permanent measures within seven (7) calendar days following the end of active disturbance, or re-disturbance consistent with the following criteria:
  - a. Appropriate permanent stabilization measures shall include seeding, mulching, and sodding, with nonvegetative measures as a last resort.
  - b. Areas having slopes greater than thirty three percent (33%) shall be stabilized with sod, mat, or blanket in combination with seeding or equivalent.
4. All temporary and permanent erosion and sediment control practices must be maintained and repaired as needed to assure effective performance of their intended function.
5. All temporary erosion and sediment control measures shall be disposed in a proper manner within thirty (30) days after final site stabilization is achieved with permanent soil stabilization measures. Trapped sediment and other disturbed soils resulting from the disposition of temporary measures shall be permanently stabilized to prevent further erosion and sedimentation.
6. On-site sediment control measures, as specified by the following criteria, shall be constructed as specified in the referenced handbooks and functional prior to initiating clearing, grading, stripping, excavating or fill activities on the site:
  - a. For new developments or re-developments less than one acre, or for a tract of land where a single-family dwelling is being erected and less than ten thousand (10,000) square feet of impervious surface is being developed, filter barriers (including filter fences, straw bales, or equivalent control measures) shall be constructed to control all on-site runoff. Vegetated filter strips, with a minimum width of twenty five feet (25'), may be used as an alternative only where runoff in sheet flow is expected.

b. For new developments or re-developments more than one acre but less than five (5) acres, a sediment trap designed in accordance with the IEPA Standards and Specifications for Soil Erosion or equivalent control measure shall be constructed at the downslope point of the disturbed area.

c. For new developments or re-developments greater than five (5) acres, a sediment basin or equivalent control measure shall be constructed at the downslope point of the disturbed area.

d. Sediment basin and sediment trap designs shall provide for both "dry" detention and "wet" detention sediment storage. The detention storage shall be composed of equal volumes of "wet" detention storage and "dry" detention storage, and each shall be sized as regulated in article C of this chapter. The release rate of the basin shall be that rate as regulated in article C of this chapter. The elevation of the outlet structure shall be placed such that it only drains the dry detention storage.

e. The sediment storage shall be sized to store the estimated sediment load generated from the site over the duration of the construction period with a minimum storage equivalent to the volume of sediment generated in one year. For construction periods exceeding one year, the 1-year sediment load and a sediment removal schedule may be substituted.

f. The alteration of sinkholes by filling, grading or excavation is prohibited, including an area within twenty five feet (25') from the rim.

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

7. Stormwater conveyance channels, including ditches, swales, and diversions, and the outlets of all channels and pipes shall be designed and constructed as regulated in article C of this chapter. All constructed or modified channels shall be stabilized within forty eight (48) hours, consistent with the standards as required in the



IEPA Erosion Control Manual "Standards and Specifications for Soil Erosion and Sediment Control".

8. Land disturbance activities in stream channels shall be avoided, where possible, or as regulated in article C of this chapter. If disturbance activities are unavoidable, the following requirements shall be met:

a. Construction vehicles shall be kept out of the stream channel to the maximum extent practicable. Where construction crossings are necessary, temporary crossings shall be constructed of nonerosive material, such as riprap or gravel.

b. The time and area of disturbance of stream channels shall be kept to a minimum. The stream channel, including bed and banks, shall be stabilized within forty eight (48) hours after channel disturbance is completed, interrupted, or stopped.

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

10. Soil storage piles containing more than ten (10) cubic yards of material shall not be located with a downslope drainage length of less than twenty five feet (25') to a roadway, drainage channel, or sinkhole. Filter barriers, including straw bales, filter fence, or equivalent, shall be installed immediately on the downslope side of the piles.

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

12. Each site shall have graveled (or equivalent) entrance roads, access drives, and parking areas of sufficient length and width to prevent sediment from being tracked onto public or private roadways. Any sediment reaching a public or private road shall be removed by shoveling or street cleaning (not flushing) before the end of each workday and transported to a controlled sediment disposal area. (2008 Code § 32-4-4)

8-2D-5: **MAINTENANCE OF CONTROL MEASURES:** All soil erosion and sediment control measures necessary to meet the re-

quirements of this chapter shall be maintained periodically by the applicant or subsequent landowner during the period of land disturbance and development of the site in a satisfactory manner to ensure adequate performance. (2008 Code § 32-4-5)

**8-2D-6: CONTROL OF CONSTRUCTION SITE WASTES:** All waste materials generated during construction activities must be properly disposed. Examples of construction site waste may consist of, but not be limited to, all building materials, raised structure debris, concrete (including concrete truck wash), asphalt, brick, excess soil, rebar, erosion and sediment control materials, cleared vegetation, chemicals, temporary bathroom facilities and all other construction site wastes. (2008 Code § 32-4-6)

**8-2D-7: CONSTRUCTION SITE STORMWATER POLLUTION PREVENTION PLAN:**

- A. Activities that are applicable to this chapter, per section 8-2A-3 of this chapter must provide a Construction Site Stormwater Pollution Prevention Plan (CSSPPP).
- B. The Construction Site Stormwater Pollution Prevention Plan may be a full sized plan sheet with necessary notes for requirements or may be a narrative explaining construction site operating procedures to minimize or eliminate stormwater pollution as a result of construction activities.
- C. The items covered in an approvable CSSPPP are dependent on the activities and the materials required on-site to complete the project. Therefore, the detail of the plan may be more or less depending on site activities planned. Standard items included in a CSSPPP are, but are not limited to:
  - 1. Purpose.
  - 2. Construction site description.
  - 3. Activities/materials to be addressed in the CSSPPP.
  - 4. Construction site operating procedures.
  - 5. Activities/materials monitoring and maintenance.

6. Emergency and spill procedures.

- D. Should construction site activities/materials change during construction, the CSSPPP must reflect the changes. Therefore, the plan must be kept on-site at all times and be altered as necessary with the approval of the inspector. Should major changes be warranted, a revised plan must be submitted for review and approval. (2008 Code § 32-4-7)



## CHAPTER 2

## STORMWATER CONTROL

**ARTICLE E. LONG TERM MAINTENANCE RESPONSIBILITY**

## SECTION:

- 8-2E-1: Owner Responsibility  
8-2E-2: Maintenance Agreement  
8-2E-3: Bond

8-2E-1: **OWNER RESPONSIBILITY:** Maintenance of stormwater drainage, and erosion and sediment control facilities located on private property shall be the responsibility of the owner of that property. (2008 Code § 32-5-1)

8-2E-2: **MAINTENANCE AGREEMENT:**

- A. Before an appropriate permit is obtained from the City, the applicant shall execute a maintenance agreement with the City guaranteeing that the applicant and all future owners of the property will maintain its stormwater drainage and erosion and sediment control system. Such agreement shall be recorded with the Recorder of Deeds of Macoupin or Sangamon County.
- B. The maintenance agreement shall include a schedule for regular maintenance of each aspect of the property's stormwater drainage and erosion and sediment control system and shall provide for access to the system for inspection by authorized personnel of the City.
- C. The maintenance agreement shall also stipulate that if the appropriate personnel of the City notify the property owner in writing of maintenance problems which require correction, the property owner shall begin such corrections within twenty four (24) hours and shall not extend beyond seven (7) calendar days of such notification. If

the corrections are not made within this time period, the City may have the necessary work completed and assess the cost to the property owner. (2008 Code § 32-5-1)

8-2E-3:       **BOND:** The City has the option of requiring a bond to be filed by the property owner for maintenance of the stormwater drainage and erosion and sediment control system. (2008 Code § 32-5-1)

CHAPTER 2  
STORMWATER CONTROL  
**ARTICLE F. INSPECTIONS**

SECTION:

- 8-2F-1: Authority Of Public Works Director  
8-2F-2: Notice Of Request For Inspection  
8-2F-3: Special Precautions

8-2F-1: **AUTHORITY OF PUBLIC WORKS DIRECTOR:** The Public Works Director shall make inspections as hereinafter required and shall either approve that portion of the work completed or shall notify the permittee wherein the work fails to comply with the stormwater drainage or erosion and sedimentation control plan as approved. Plans for grading, stripping, excavating, and filling work bearing the stamp of approval of the Public Works Director shall be maintained at the site during progress of the work. (2008 Code § 32-6-1; amd. 2019 Code)

8-2F-2: **NOTICE OF REQUEST FOR INSPECTION:**

A. In order to obtain inspections and to ensure compliance with this chapter, the permittee shall notify the Public Works Director within two (2) working days of the completion of the construction stages specified below: (2008 Code § 32-6-1; amd. 2019 Code)

1. Upon completion of installation of the stormwater drainage and erosion and sediment control measures (including perimeter controls and diversions), prior to proceeding with any other earth disturbance or grading;
2. After stripping and clearing;
3. After rough grading;

4. After final grading;
  5. After seeding and landscaping deadlines; and
  6. After final stabilization and landscaping, prior to removal of sediment controls.
- B. If stripping, clearing, grading and/or landscaping are to be done in phases or areas, the permittee shall give notice and request inspection at the completion of each of the above work stages in each phase or area.
- C. If an inspection is not made and notification of the results given within five (5) working days after notice is received by the City from the permittee, the permittee may continue work at his/her own risk, without presuming acceptance by the City.
- D. Notification of the results of the inspection shall be given in writing at the site. (2008 Code § 32-6-1)

**8-2F-3: SPECIAL PRECAUTIONS:**

- A. If at any stage of the grading of any development site the Public Works Director determines by inspection that the nature of the site is such that further work authorized by an existing permit is likely to imperil any property, public way, stream, lake, wetland, or drainage structure, the Public Works Director may require, as a condition of allowing the work to be done, that such reasonable special precautions to be taken as is considered advisable to avoid the likelihood of such peril. "Special precautions" may include, but shall not be limited to, a more level exposed slope; construction of additional drainage facilities, berms, terracing, compaction, or cribbing; installation of plant materials for erosion control; and recommendations of a registered soils engineer and/or engineering geologist which may be made requirements for further work. (2008 Code § 32-6-3; amd. 2019 Code)
- B. Where it appears that storm damage may result because the grading on any development site is not complete, work may be stopped and the permittee required to install temporary structures or take such other measures as may be required to protect adjoining property or the public safety. (2008 Code § 32-6-3)



- C. On large developments or where unusual site conditions prevail, the Public Works Director may specify the time of starting grading and time of completion or may require that the operations be conducted in specific stages so as to ensure completion of protective measures or devices prior to the advent of seasonal rains. (2008 Code § 32-6-3; amd. 2019 Code)



CHAPTER 3  
**FLOOD CONTROL**

**SECTION:**

- 8-3-1: Definitions
- 8-3-2: Duties Of Director Of Operations
- 8-3-3: Base Flood Elevation
- 8-3-4: Permit Requirements
- 8-3-5: Review Of Development Proposals
- 8-3-6: Water Supply System
- 8-3-7: Sanitary Sewage And Waste Disposal Systems
- 8-3-8: Penalty
- 8-3-9: Abrogation And Greater Restrictions

**8-3-1: DEFINITIONS:**

**DEVELOPMENT:** Any manmade change to real estate including, but not limited to, construction or reconstruction of buildings; installing manufactured homes or travel trailers; installing utilities; construction of roads or bridges; erection of levees, walls, or fences; and drilling, mining, filling, dredging, and storage of materials.

**FLOOD:** A general and temporary condition of partial or complete inundation of normally dry land areas from overflow of inland waves, or the unusual and rapid accumulation or runoff of surface waters from any source.

**FLOODPLAIN AND SPECIAL FLOOD HAZARD AREA (SFHA):** A. These two (2) terms are synonymous. Those lands within the jurisdiction of the City, the extraterritorial jurisdiction of the City, or that may be annexed into the City, that are subject to inundation by the base flood. The floodplains of the City are generally identified as such on

panel number(s) 0520 of the Countywide Flood Insurance Rate Map of Sangamon County and the Flood Hazard Boundary Map for the City prepared by the Federal Emergency Management Agency and dated August 2, 2007, and April 16, 1976, respectively. Floodplain also includes those areas of known flooding as identified by the City.

B. The floodplains of those parts of unincorporated Macoupin and Sangamon Counties that are within the extraterritorial jurisdiction of the City or that may be annexed into the City are generally identified as such on the Flood Hazard Boundary Map and the Flood Insurance Rate Map prepared for Macoupin and Sangamon Counties by the Federal Emergency Management Agency and dated January 6, 1978, and August 2, 2007, respectively.

- FLOODPROOFING:** Any combination of structural and nonstructural additions, changes or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.
- IDNR/OWR:** Illinois Department of Natural Resources/Office of Water Resources.
- MANUFACTURED HOME:** A structure, transportable in one or more sections, which is built on a permanent chassis and is designated for use with or without a permanent foundation when attached to the required utilities.
- NEW CONSTRUCTION:** Means, for the purposes of determining insurance rates, structures for which the start of construction commenced on or after the effective date of an initial FIRM or after December 31, 1974, whichever is later, and includes any subsequent improvements to such structures. For floodplain management purposes, "new construction" means structures for which the start of construction commenced on or after the

effective date hereof and includes any subsequent improvements to such structures.

**PERSON:**

Includes any individual, corporation, partnership, association, or any other entity, including State and local governments and agencies.

**SPECIAL FLOOD HAZARD AREA:**

The land in the floodplain within the City subject to a one percent (1%) or greater chance of flooding in any given year. The area may be designated as Zone A on the FHBM. After detailed ratemaking has been completed in preparation for publication of the Flood Insurance Rate Map, Zone A usually is refined into Zones A, AO, AH, A1 - 30, AE, A99, AR, AR/A1 - 30, AR/AE, AR/AO, AR/AH, AR/A, VO, V1 - 30, VE, or V. For purposes of this chapter, the term "special flood hazard area" is synonymous in meaning with the phrase "area of special flood hazard".

**STRUCTURE:**

For floodplain management purposes, means a walled and roofed building, including gas or liquid storage tanks, that is principally aboveground. The term includes recreational vehicles and travel trailers on site for more than one hundred eighty (180) days.

**SUBSTANTIAL IMPROVEMENT:**

A. Any repair, reconstruction or improvement of a structure, the cost of which equals or exceeds fifty percent (50%) of the market value of the structure either:

1. Before the improvement or repair is started; or

2. If the structure has been damaged and is being restored, before the damage occurred.

B. For the purposes of this definition, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the

external dimensions of the structure regardless of the actual work performed.

C. The term does not, however, include either:

1. Any project for improvement of a structure to comply with existing State or local Health, Sanitary, or Safety Code specifications which are solely necessary to assure safe living conditions; or

2. Any alteration of a historic structure; provided, that the alteration will not preclude the structure's continued designation as a historic structure. (2019 Code)

**8-3-2: DUTIES OF DIRECTOR OF OPERATIONS:**

- A. The Director of Operations, hereinafter referred to as the "responsible person", is appointed as the person responsible for receiving applications and examining the plans and specifications for the proposed construction or development. After reviewing the application, the responsible person may require any additional measures which are necessary to meet the minimum requirements of this chapter.
- B. The responsible person shall review the proposed development to assure that all necessary permits have been received from those governmental agencies from which approval is required by Federal or State law, including section 404 of the Federal Water Pollution Control Act amendments of 1972, 33 USC 1334. (2019 Code)

**8-3-3: BASE FLOOD ELEVATION:** This chapter's protection standard is the base flood. The best available base flood data are listed below. Whenever a party disagrees with the best available data, the party shall finance the detailed engineering study needed to replace the existing data with better data and submit it to FEMA and IDNR/OWR for approval prior to any development of the site.

- A. The base flood elevation for the floodplains of the City shall be as delineated on the 100-year flood profiles in the Countywide Flood Insurance Study of Sangamon County prepared by the Federal Emergency Management Agency and dated August 2, 2007.

- B. The base flood elevation for each of the remaining floodplains delineated as an "A Zone" on the Countywide Flood Insurance Rate Map of Sangamon County and the Flood Hazard Boundary Map of the City shall be according to the best data available from Federal, State or other sources. Should no other data exist, an engineering study must be financed by the applicant to determine base flood elevations.
- C. The base flood elevation for the floodplains of those parts of unincorporated Sangamon County that are within the extraterritorial jurisdiction of the City, or that may be annexed into the City, shall be as delineated on the 100-year flood profiles in the Flood Insurance Study of Sangamon County prepared by the Federal Emergency Management Agency and dated August 2, 2007. (2019 Code)

8-3-4: **PERMIT REQUIREMENTS:**

- A. Permits Required:
  - 1. No person shall erect, construct, enlarge, alter, repair, improve, move, or demolish any building or structure without first obtaining a separate permit for each building or structure from the responsible person.
  - 2. No manmade change to improved or unimproved real estate including, but not limited to, buildings or other structures, fences, mining, dredging, filling, grading, paving, excavation or drilling operations shall be commenced until a separate permit has been obtained from the responsible person for each change.
  - 3. No manufactured home shall be placed on improved or unimproved real estate without first obtaining a separate permit for each manufactured home from the responsible person.
- B. Application For Permit: To obtain a permit, the applicant shall first file a permit application on a form furnished for that purpose. The form must be completed and submitted to the responsible person before the issuance of a permit will be considered.
- C. Review Of Application: The responsible person shall review all permit applications to determine whether proposed building sites will be reasonably safe from flooding. If a proposed building site is in a flood prone area, all new construction and substantial improvements (including the placement of manufactured homes) shall be:

1. Designed (or modified) and adequately anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;
2. Constructed with materials and utility equipment resistant to flood damage;
3. Constructed by methods and practices that minimize flood damage; and
4. Constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding. (2019 Code)

8-3-5:       **REVIEW OF DEVELOPMENT PROPOSALS:** The responsible person shall review subdivision proposals and other proposed new development to determine whether such proposals will be reasonably safe from flooding. If a subdivision proposal or other proposed new development is in a flood prone area, any such proposal shall be reviewed to assure that:

- A. All such proposals are consistent with the need to minimize flood damage within the flood prone area;
- B. All public utilities and facilities such as sewer, gas, electrical, and water systems are located and constructed to minimize or eliminate flood damage; and
- C. Adequate drainage is provided to reduce exposure of flood hazard. (2019 Code)

8-3-6:       **WATER SUPPLY SYSTEM:** The responsible person shall require within flood prone areas new and replacement water supply systems to be designed to minimize or eliminate infiltration of floodwaters into the systems. (2019 Code)

8-3-7:       **SANITARY SEWAGE AND WASTE DISPOSAL SYSTEMS:** The responsible person shall require within flood prone areas:



- A. New and replacement sanitary sewage systems to be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into floodwaters; and
- B. On site waste disposal systems to be located to avoid impairment to them or contamination from them during flooding. (2019 Code)

8-3-8: **PENALTY:** Any person who violates this chapter shall, upon proven violation thereof, be fined as provided in section 1-4-1 of this Code. A separate offense shall be deemed committed upon each day during or on which a violation occurs or continues. (2019 Code)

8-3-9: **ABROGATION AND GREATER RESTRICTIONS:** This chapter is not intended to repeal, abrogate, or impair any existing easements, covenants or deed restriction. Where this chapter and other ordinances, easements, covenants, or deed restrictions conflict or overlap, whichever imposes the more stringent restrictions shall prevail. (2019 Code)

