CITY OF LE ROY COUNTY OF McLEAN, STATE OF ILLINOIS

ORDINANCE NO. 15-01-03-52

AN ORDINANCE AMENDING TITLE 11, SUBDIVISION REGULATIONS BY THE ADDITION OF CHAPTER 5, STORM WATER MANAGEMENT, SUBSECTIONS 11-5-1 THROUGH 11-5-10 OF THE MUNICIPAL CODE FOR THE CITY OF LE ROY, MCLEAN COUNTY, ILLINOIS, 2003 (AS AMENDED)

ADOPTED BY THE CITY COUNCIL OF THE CITY OF LE ROY THIS 19th Day of January, 2015

PRESENTED:

January 19, 2015

PASSED:

January 19, 2015

APPROVED:

January 19, 2015

RECORDED:

January 19, 2015

PUBLISHED:

January 19, 2015

In Pamphlet Form

Voting "Aye" 8

Voting "Nay" 0

The undersigned being the duly qualified and Acting City Clerk of the City of LeRoy does hereby certify that this document constitutes the publication in pamphlet form, in connection with and pursuant to Section 1-2-4 of the Illinois Municipal Code, of the above-captioned **ordinance** and that such **ordinance** was presented, passed, approved, recorded and published as above stated.

(SEAL)

Vicki Moreland City Clerk of the City of

Le Roy, McLean County, Illinois

ask Moreland

Dated: January 19, 2015

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AN ORDINANCE AMENDING TITLE 11, SUBDIVISION REGULATIONS BY THE ADDITION OF CHAPTER 5, STORM WATER MANAGEMENT, SUBSECTIONS 11-5-1 THROUGH 11-5-10 OF THE MUNICIPAL CODE FOR THE CITY OF LE ROY, MCLEAN COUNTY, ILLINOIS 2003 (AS AMENDED)

WHEREAS, the Mayor and City Council of the City of Le Roy, McLean County, Illinois, an Illinois municipal corporation, have reviewed the regulations for sewer use and service in reference to building sewers and connections; and

WHEREAS, the Mayor and City Council of the City of Le Roy have determined that regulations shall be established, being in the best interest of the city and its residents; and

WHEREAS, all things required by law, an ordinance to be done in regard to said regulations has been completed;

NOW, THEREFORE BE IT ORDAINED, by the City Council of the City of Le Roy, Illinois in lawful meeting assembled, as follows:

SECTION 1. That Title 11, Subdivision Regulations of the Municipal Code of the City of Le Roy, Illinois is herby amended by the addition of new Chapter 5, STORM WATER MANAGEMENT consisting of Sections 11-5-1 through 11-5-10.

SECTION 2. That Title 11, Subdivision Regulations; Chapter 5 STORM WATER MANAGEMENT consisting of Sections 11-5-1 through 11-5-10 for the Municipal Code of Le Roy, Illinois, is hereby added in word and figures as per the attached Exhibit A.

SECTION 3. This ordinance shall be in full force and effect from and after its passage and approval as required by law.

Chapter 5 STORM WATER MANAGEMENT

11-5-1: DETENTION FACILITIES:

11-5-2: STORM WATER DETENTION REQUIRED:

11-5-3: EXCEPTIONS TO REQUIRED STORM WATER MANAGEMENT PLAN:

11-5-4: DESIGN FORMULAS:

11-5-5: RUNOFF COEFFICIENTS AND OVERLAND FLOW COEFFICIENTS:

11-5-6: RELEASE RATE AND REQUIRED STORAGE:

11-5-7: DETENTION BASIN DESIGN:

11-5-8: **STANDARDS**:

11-5-9: ALTERNATE METHODS ALLOWED:

11-5-10: REVIEW FEE REQUIRED:

No development shall be authorized in the city unless there is either an adequate outlet or the city has approved detention facilities. The applicant shall provide detailed calculations of the outlet capacity and the city shall determine its adequacy. In the event the city determines the outlet is not adequate, the developer shall be required to construct detention facilities. Such facilities shall be based on the design formulas. At the option of the city the developer may be asked to pay a fee in lieu of providing detention facilities.

In those locations already served by an existing storm water detention facility or where the city is contemplating constructing a detention facility to serve upstream watersheds not yet fully developed, or where the developer cannot provide adequate storage capacity in a detention facility within his/her development, at the option of the city, the developer shall pay a fee in lieu of providing said detention facility, or the deficient volume thereof.

Facilities shall be designed so that local storm sewer systems and drainage ways will discharge to proposed or existing detention facilities, or to an adequate trunk line storm sewer and flood route, or drainage way feeding same, which discharges into a proposed or existing storm water detention facility. Where adequate storm sewer or drainage way capacity is not available to convey design runoff to an existing downstream detention facility, an on-site detention facility shall be required.

All drainage and detention calculations and designs shall be provided by a Professional Engineer licensed in the state of Illinois.

No statement contained within Chapter 5 shall be construed to interfere with any additional requirements that may be imposed by the City.

11-5-2: STORM WATER DETENTION REQUIRED:

A combination of storage and controlled release of storm water is required for all.

- A. Nonresidential developments greater than two acres in area or less than two acres with greater than fifty percent impervious area.
- B. Residential developments greater than five acres in area or less than five acres with greater than fifty percent impervious area.
- C. Where a subdivision plat or a planned unit development involves new lots that are zoned for commercial or industrial purposes, the developer/own er/applicant may provide for storage and controlled release of storm water runoff for the developed lots by sufficient and enforceable covenants upon the individual lots. The covenant shall

require construction of on-site storm water detention facilities upon each lot at the time of subsequent development of the lot. The form of covenant shall be approved by the city attorney, and the substance of the covenant shall require construction of on-site storm water runoff storage and controlled release of storm water runoff from each lot in a manner approved by the city and in accordance with the provisions of this chapter.

11-5-3: EXCEPTIONS TO REQUIRED STORM WATER MANAGEMENT PLAN:

Exceptions to the required storm water management plan are:

- A. Traditional agricultural land uses;
- B. Improvement of existing roadways;
- C. Modification of single family residential or two-family residential structures which will continue to be used as single family or two-family dwellings;
- D. Modification of existing structures or appurtenances, other than a single family dwelling or two-family dwelling, which do not increase the amount of impervious area of the lot or parcel upon which it is constructed.
- E. When runoff can be directed into a storm sewer, channel, or natural drainage way with sufficient capacity to transport storm water to an acceptable location as determined by the city.

11-5-4: DESIGN FORMULAS:

Unless otherwise approved by the city, formulas to be used in connection with the calculation of runoff volumes and allowable release rates reasonably expected from the minimum design storm shall be the rational method for total contributing areas of twenty acres or less and the soil conservation hydrograph method for areas greater than twenty acres.

11-5-5: RUNOFF COEFFICIENTS AND OVERLAND FLOW COEFFICIENTS:

For post developed conditions, the amount of pervious and impervious land shall be determined and prorated using the following coefficients: Pervious (C = 0.30, CN = 61); Impervious (C = 0.90, CN = 98). The overland flow coefficient (n) shall not be greater than 0.15.

For pre-developed conditions the runoff coefficients shall not be greater than C = 0.30 or CN = 69. The overland flow coefficient (n) shall not be less than 0.13.

11-5-6: RELEASE RATE AND REQUIRED STORAGE:

Allowable Release Rate

This will be determined by the design formula using a minimum design storm with an average rainfall intensity associated with average recurrence interval of five years for the storm period calculated by the time of concentration as outlined by the latest technical letters of the Illinois State Water Survey for rainfall frequencies. Runoff coefficients or CN numbers used shall reflect pre-developed condition of the watershed, as previously noted.

Storage Volume When Using the Rational Method

This will be the volume generated by the difference between the average runoffs of fifty-year rainfall frequency in post-development condition and five-year rainfall frequency in predevelopment condition, assuming such difference occurs for one hour. The average discharge being half of the peak discharge calculated by the rational method.

Storage Volume When Using the Soil Conservation Hydrograph Method

This will be determined from inflow hydrographs generated by the design formula using a minimum design storm with a range of rainfall intensities associated with an average recurrence interval of fifty years. The storage volume will be the difference between the inflow hydrograph and a designed outflow hydrograph that releases no more than the allowable release rate.

11-5-7: DETENTION BASIN DESIGN:

Hydrologic design calculations shall be reviewed by the city engineer through one of the following:

- 1. Subdivision plan review;
- 2. Grading and drainage plan review;
- 3. Construction plan review (typically public improvements)
- A. Hydrologic design calculations shall include contour map(s) clearly showing the design drainage area(s), storm water facilities, storm sewers, swales, ditches, culverts, bridges and receiving storm water facilities. Critical spot elevations, invert elevations, pervious and impervious areas shall be clearly indicated.
- B. Submittals shall include design calculations, drainage basin area and surface types, and rainfall data used.
- C. Plans shall clearly indicate normal and high water elevations, design storage volume, and minimum and maximum typical slopes.
- D. Emergency spillways shall be clearly designated for runoff in excess of the fifty-year storm.
- E. Minimum outlet storm sewer size shall be twelve inches; smaller diameter restrictions (e.g., orifice plate) are acceptable.
- F. Inlet and outlet pipes shall be provided with end sections and erosion protection.
- G. Weirs, dams, retaining walls, and specialized outflows shall be designed by a Professional Engineer or Structural Engineer licensed in the state of Illinois, as required.
- H. Temporary erosion techniques shall be used as required to ensure a full stand of cover vegetation in minimum time.
- Detention basin side slopes shall be 4:1 or flatter and shall be designated with permanent erosion protection consisting of grass, non-grass vegetation, or other permanent finish. Permanent erosion protection shall be aesthetically suitable to the development or existing surrounding land use.
- J. Rooftop detention is not allowed.
- K. A building's lowest water entry point shall be a minimum of two feet above the fifty-year design high water elevation.

Earthen Dams

When dedicated to the public for ownership and maintenance by the city, earthen damns shall meet the following criteria:

- 1. Side Slope: 4H:1V or flatter.
- 2. Minimum ten-foot wide flat crest for access by maintenance equipment.

All earthen dams, whether publicly or privately owned and maintained, shall meet the following:

- 1. Freeboard: All earthen dams shall be constructed with a minimum of one foot of freeboard over the maximum anticipated water level in the emergency spillway.
- 2. All earthen darns shall include, at a minimum, an impervious compacted clay core. The core shall be of sufficient width to allow for mechanical compaction and of sufficient

- depth to penetrate the overburden of topsoil, keying into the underlying strata of virgin clay.
- 3. The developer shall be responsible for obtaining all construction permits required by governmental agencies.

Emergency Spillway

All detention facilities, whether publicly or privately owned and maintained, shall include an emergency spillway.

- 1. Emergency spillways shall, wherever feasible, be constructed in virgin ground.
- 2. Erosion Protection: Emergency spillways shall be protected from erosion with approved surface paving or vertical cutoff walls appropriate for the size of the impoundment and the height of the spillway crest.
- 3. Capacity: Emergency spillways shall be sized for no less than seventy-five percent of the maximum peak inflow into the basin.

Dry Bottom Basins

- 1. Side slopes shall be a maximum of 4H:1V. If retaining walls are used, their height is limited to four feet. Retaining wall design and material type shall be approved by the city engineer.
- 2. Dry bottom basins shall have two percent minimum bottom slopes.
- 3. Dry bottom basins shall include a low flow channel with some form of erosion protection, or a bypass sewer.

Wet Bottom Basins

- 1. Above water side slopes shall be a maximum of 4H:1V extending to two feet below normal water surface elevation. If retaining walls are used, their height is limited to four feet. Retaining wall design and material type shall be approved by the city engineer.
- 2. At two feet below normal water level there shall be a 5' wide (minimum) flat shelf. Subsequent under water slopes shall be 3H:1V (maximum) in public and residential areas and 2H:1V (maximum) in industrial areas.
- 3. Erosion protection shall be required at the water's edge on all developments. The protection shall extend from a minimum of one foot below to one foot above the normal water level.
- 4. Wet bottom basin design shall include an evaluation of soil permeability. A basin liner shall be included in the design if needed to ensure water retention to normal pool elevation.

11-5-8: STANDARDS:

All construction requirements shall conform to the applicable sections of the Standard Specifications for Road and Bridge Construction, Illinois Department of Transportation.

The applicant will be responsible for all engineering costs for design of storm sewers, drainage ways, and detention facilities within his/her development.

Detention basins may be maintained and owned by the applicant, the lot owner, the developer, a homeowners association, or by the city. The decision on ownership will be made by the City of LeRoy at the time of submission of the preliminary plan.

11-5-9: ALTERNATE METHODS ALLOWED:

Alternate methods of detention will be allowed pending review of the City of LeRoy and its city engineer. The alternate methods may be, but are not limited to, the following:

- A. Parking lot detention.
- B. Subsurface detention or underground storage, as in buried pipes or structures.

11-5-10: REVIEW FEE REQUIRED:

The applicant shall pay to the City of LeRoy:

- A. A subdivision review fee equal to one and one-half percent of the estimated cost of the detention facilities and all public improvements; or
- B. A site plan review fee equal to one percent of the estimated cost of the detention facilities and all site improvements, excluding buildings.

PASSED by the City Council of the City of Le Roy, Illinois, upon the motion made by Brad Poindexter, and seconded by Greg Steffen by roll call vote on the 19th day of January, 2015 as follows

Aldermen elected 8

Aldermen Present 8

V	otin	g A	ye:

Dawn Hanafin,	Rae Ann Ahlers,	Mike Bailey	, Glenn Reinhart,	Brad Poindexter, Ann	ne
Anderson, Greg	Steffen				

Voting Nay: None

Absent: None

Abstain: None

Other: None

And deposited and filed in the office of the City Clerk in said municipality on the 19th day of January, 2015.

Vicki Moreland, City Clerk

of the City of Le Roy, McLean County, Illinois

APPROVED BY the Mayor of the City of Le Roy, Illinois, this 19th day of

January, 2015

Steve Dean Mayor of the City of Le Roy,

Mc Lean County, Illinois

ATTEST: (SEAL)

Vicki Moreland, City Clerk of the City of Le Roy

Mc Lean County, Illinois

CERTIFICATE

I, Vicki Moreland, certify that I am the duly appointed and acting Municipal

Clerk of the City of Le Roy, McLean County, Illinois.

I further certify that on January 19, 2015 the Corporate Authorities of such

municipality passed and approved Ordinance No. 15-01-03-52 entitled:

AN ORDINANCE AMENDING TITLE 11, SUBDIVISION REGULATIONS BY THE ADDITION OF CHAPTER 5, STORM WATER MANAGEMENT,

SUBSECTIONS 11-5-1 THROUGH 11-5-10 OF THE MUNICIPAL CODE FOR

THE CITY OF LE ROY, MCLEAN COUNTY, ILLINOIS, 2003 (AS AMENDED)

Which provided by its terms that it should be published in pamphlet form.

The pamphlet form of Ordinance No. 15-01-03-52, including the Ordinance and a

cover sheet thereof, was prepared, and a copy of such Ordinance was posted at the

municipal building, commencing on January 19, 2015 and continuing for at least ten

days thereafter. Copies of such Ordinance were also available for public inspection upon

request in the office of the municipal clerk.

Dated at Le Roy, Illinois this 19th day of January, 2015.

(SEAL)

Vicki Moreland, City Clerk of the City of Le Roy, McLean County,

Illinois

STATE OF ILLINOIS)
SS:
COUNTY OF MCLEAN)

I, Vicki Moreland do hereby certify that I am the duly qualified and acting
City Clerk of the City of Le Roy, McLean County, Illinois, and as such City Clerk that I
am the keeper of the records and files of the Mayor and the City Council of said City.

I do further certify that the foregoing is a true, correct and complete copy of an ordinance entitled:

AN ORDINANCE AMENDING TITLE 11, SUBDIVISION REGULATIONS BY THE ADDITION OF THE MUNICIPAL CODE FOR THE CITY OF LE ROY, MCLEAN COUNTY, ILLINOIS, 2003 (AS AMENDED)

I do further certify said *ordinance* was adopted by the City Council of the City of Le Roy at a regular meeting on the 19th day of January, 2015 and prior to the making of this certificate the said ordinance was on file with the permanent records of said City where it now appears and remains as a permanent record of said ordinance in the record books.

Dated this 19th day of January, 2015

(SEAL)

Vicki Moreland, City Clerk of the City of Le Roy, McLean County, Illinois