ORDINANCE NO. 2025-

AN ORDINANCE AMENDING THE CODE OF ORDINANCES OF THE CITY OF INDEPENDENCE, IOWA, BY ADDING A NEW CHAPTER ON STORM WATER MANAGEMENT

BE IT ENACTED by the City Council of the City of Independence, Iowa:

SECTION 1. NEW CHAPTER. The Code of Ordinances of the City of Independence, Iowa, is amended by adding a new Chapter 102, entitled STORM WATER MANAGEMENT, which is hereby adopted to read as follows:

STORM WATER MANAGEMENT

102.01 Purpose	102.07 Ownership by City
102.02 Definitions	102.08 Private Ownership
102.03 Areas Requiring Storm Water Management Plan	102.09 Further Requirements
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102.01 PURPOSE.

It is the purpose of this chapter to establish policies to manage and control Storm Water Runoff occurring from new Development of residential, commercial and industrial areas. The goal is to reduce peak runoff caused by Development of the land. Additional protection is provided through detention and storage structures to control release rates to downstream systems. This will result in cost savings to the overall storm sewer collection system by reducing the size of improvements required. In addition, increased public safety and sediment and erosion control are the expected benefits.

102.02 DEFINITIONS.

The following terms are defined for use in this chapter:

1. "Capacity (of a storm water facility)" means the maximum volume or rate of conveyance available in a storm water management facility, including freeboard, to store or convey storm water without damage to public or private property.

- 2. "Civil Engineer" means a professional engineer licensed in the State of Iowa to practice in the field of civil works.
- 3. "Control structure" means part of a storm water management facility designed to regulate the storm water runoff release rate.
- 4. "Design storm" means a storm with characteristics of the average storm for the desired return frequency.
- 5. "Detention basin" means any facility designed for the purpose of temporarily holding water which is then released at a predetermined rate and controls the flow of storm water downstream.
- 6. "Development" means the changing of land from its existing state or an area of land use change, usually involving the building of infrastructure, housing, commercial, and/or industrial structures.
- 7. "Developed condition" means the hydraulic and hydrologic site characteristics that occur upon completion of a development.
 - 8. "Drainage area" means an area of land contributing to storm water runoff.
- 9. "Green infrastructure" means natural drainage ways, wet lands, infiltration systems, open green space, permeable pavements, etc.
- 10. "Green space" means that area in and around a development which is covered with grass, trees, shrubs, and other natural plantings that naturally absorbs storm water.
- 11. "New development" means the platting of land for the establishment of residential, commercial, industrial and/or agricultural lots.
- 12. "Overflow path" means the path taken by storm water runoff as a result of flows exceeding the capacity of the underground drainage system or detention basin. The path may include streets, channels, drainage ways or areas of sheet flows, and be located on public property or private property within an easement.
- 13. "Permeable pavement" means a system consisting of permeable pavers, porous hot mix asphalt, or pervious Portland cement concrete, with storage aggregate and underdrain, designed to manage stormwater.
- 14. "Pre-developed condition" means hydraulic and hydrologic site characteristics that occur prior to a new proposed development or substantial redevelopment. For the purposes of this chapter, stormwater analyses for the pre-developed condition of a site, regardless of existing site conditions, shall be based on the actual existing condition of the site at the time the construction commences. Stormwater analysis shall use runoff curve numbers for each particular soil and ground cover at the construction site as defined in the runoff curve numbers for urban areas table (Table 2-2a) of the USDA Urban Hydrology for Small Watersheds Technical Release 55 (TR-55).
- 15. "Redevelopment" means changing or improving land from its existing state and includes any exterior additions to an existing building(s).

- 16. "Regional storm water management facilities" means those facilities designed to handle storm water runoff from several lots which may include the entire subdivision, or multiple subdivisions, and may include existing developed areas.
- 17. "Retention basin" means a facility for the temporary storage of stormwater with a permanent water surface.
- 18. "Return frequency" means the statistic parameter that defines the average occurrence time for a storm of a given magnitude.
- 19. "Site" means a lot, parcel or tract of land (or portion thereof) where development is occurring or has occurred and which may or may not require additional permits.
- 20. "Site plan" means an overall plan of the area to be developed including, but not limited to: proposed building location, proposed parking and drive locations, proposed utilities including storm sewer components and subsurface drain tile, proposed ground elevations with drainage patterns highlighted, roof drainage outlet locations, other underground utilities, and property boundaries.
- 21. "Storm sewer system" means facilities for the conveyance of storm water runoff, a series of conduits and appurtenances, to accommodate frequent storms not generating large peak discharges. These facilities usually include conduits, street gutters and swales.
- 22. "Storm water management facilities" means a detention or retention basin and the associated appurtenances to make the system functional.
- 23. "Storm water management plan" means a site plan certified by a Civil Engineer, including materials, construction phasing, grading activities, and methods used for mitigation of increased storm water runoff from the site.
- 24. "Storm water runoff" means the flow of water resulting from precipitation upon a surface area, not absorbed by the soil or plant material.
 - 25. "Subdivision" refer to Section 175.03(27) of this Code of Ordinances.

102.03 AREAS REQUIRING STORM WATER MANAGEMENT PLAN.

A storm water management plan shall be required for the following; however, if an area under development or redevelopment consideration is known to have drainage challenges and/or capacity issues under the existing conditions, the jurisdiction may require more restrictive stormwater solutions in order to protect adjacent and downstream property:

- 1. All new residential, commercial, industrial, and manufacturing developments and subdivisions 2 acres in size and larger. Phased residential, commercial, industrial, and manufacturing developments whose combined total is 2 acres and larger.
- 2. Commercial, industrial, and manufacturing developments under 2 acres in size shall maintain a minimum of 20% green space. Stormwater management practices that reduce runoff to traditional drainage systems, improve water quality, and enhance infiltration, such as green

roofs, permeable pavements, and rain gardens, shall reduce the need for green space. For each 1% of these systems that are installed (on a square footage basis), 0.5% of the green space shall not be required.

- 3. In developments where the natural drainage is divided into more than one watershed, the individual watershed drainage areas must meet the criteria mentioned above before storm water management is required.
- 4. Residential, commercial, industrial, and manufacturing zoning districts with an overall area of two acres or more shall provide on-site storm water detention. Commercial, industrial and multi-family residential lots with an overall area less than two acres shall comply with one of the following, as approved by the City Manager:
 - A. Privately owned, on-site detention or retention basin.
- B. Tributary to a privately or publicly owned detention or retention basin, storm sewer, drainage watercourse or storm water management facility.

In some watersheds, on-site storm water detention may not be required, at the discretion of the City Manager, for non-single-family lots with an overall area of less than two acres.

- 5. Other developments may be required to submit a storm water management plan at the discretion of the City Council. No subdivision or development plan over two acres will be approved unless adequate drainage will be provided to an appropriate storm sewer, drainage watercourse, or storm water management facility.
- 6. At the discretion of the City Council, a fee may be charged the developer in lieu of providing storm water management facilities. This may be utilized when the City is constructing a larger regional storm water management facility to handle multiple existing or proposed developments.

102.04 STORM WATER MANAGEMENT REQUIREMENTS.

The storm water management plan shall include, but not be limited to, the following information:

- 1. Peak discharges for pre-developed and developed conditions based upon the design storms.
- 2. Individual parameters used for determining discharges shall be listed.
- 3. Hydraulic capacity of storm sewer inlets, pipes, open channels or other means of conveying water.
 - 4. Green space calculations to meet the 20% minimum requirement.
 - 5. Detention or retention basin design with capacity listed.
 - 6. Control structure/outlet design.
 - 7. Review of existing or proposed downstream conveyance capacities.

8. The SCS TR-55 computerized runoff volume program or other technically proven method shall be utilized for runoff calculations.

102.05 MANAGEMENT PLAN DESIGN REQUIREMENTS.

The design requirements of the storm water management plan shall include:

- 1. The rate runoff for the developed site(s) for design storm events having an expected return frequency of five, ten, twenty-five, and fifty years (twenty-four-hour duration), shall not exceed the pre-developed condition peak runoff from a design storm with a five-year return frequency (twenty-four-hour duration). Allowable discharge may be restricted due to downstream capacity.
- 2. The maximum release rate for storms up to an expected return frequency of 100 years shall be the 5-year pre-developed storm. The single-stage outlet (i.e. one culvert pipe) is not recommended because of its inability to detain post-developed runoff. A more desirable outlet has two or more stages. A safe overflow path shall be designed for storms exceeding the capacity of the detention or retention basin.
- 3. Regional storm water management facilities are encouraged. Retention basins are also encouraged because they enhance water quality, add aesthetic value, and increase property value.
- 4. For new residential developments, storm water detention is not allowed within any front or side yard setbacks required by the Zoning Code, or within 25 feet from the estimated rear building line. A single lot detention or retention will not be allowed within 3 feet of rear building lot line.
- 5. Dry-bottomed detention basins shall be oversized by 10% to help offset anticipated sedimentation. An alternative to over-sizing is the construction of a series of sediment trapping forebays in the basin with firm bottoms which allow routine removal of sediment.
 - 6. Maximum side slopes of detention or retention basins shall not exceed 3.5:1.
- 7. Provisions shall be made to keep the bottom of a detention basin dry unless a permanent pond or lake is being utilized for detention.

102.06 SUBMISSION AND APPROVAL OF PLAN.

A site plan shall be a required attachment to a proposed storm water management plan, all of which is to be submitted to the City Manager for review. Include a cover sheet with project name and location, name of firm or agency preparing the report, a Professional Engineer's signed and sealed certification, and a table of contents. Number each page of the report.

The storm water management plan, including proposed storm water detention facilities, shall be reviewed and approved by the City Manager (or those chosen by the City Manager) prior to the issuance of any building permit for the proposed Development. The City may inspect the site at any time to determine compliance with this chapter. Upon determination that a site is not in compliance with this chapter, the City may issue a stop work order until compliance is achieved. The order shall describe the problem, specify a completion date, and indicate the penalties to be assessed for further noncompliance.

102.07 OWNERSHIP BY CITY.

Regional storm water management facilities which are of sufficient size may be deeded to and be maintained by the City. The conditions for City ownership will be reviewed on a case-by-case basis. The City is under no obligation to accept ownership of the facility. If the City elects to obtain ownership of the facility, the property owner shall dedicate to the City any property on which public storm sewer detention or retention basins will be located with a 25-foot perimeter (subject to change) to establish and maintain a vegetative buffer. Ingress-egress easements for maintenance of public facilities shall be provided prior to final approval.

102.08 PRIVATE OWNERSHIP.

For sites on which privately owned storm water detention or retention facilities are located, the property owner will be responsible for the following:

- 1. All future grading, repairs, and maintenance.
- 2. Maintenance of the minimum storm water detention capacity, as originally designed.
- 3. Maintenance of the detention or retention basin control structures and discharge pipes to insure the maximum theoretical design release rate is not increased.
- 4. The property owner shall not place fill material, or erect any buildings, obstructions, or other improvements on the area reserved for storm water detention or retention purposes, unless approved in writing by the City.
- 5. Maintenance of the facility so as to be in compliance with Section 50.02 of this Code of Ordinances.

102.09 FURTHER REQUIREMENTS.

Compliance with this chapter does not relieve the developer or property owner of other responsibilities relating to storm water discharge. This includes, but is not limited to NPDES storm water discharge permits regulated by the Iowa Department of Natural Resources and other State of Iowa and federal requirements.

102.10 EXEMPTIONS.

The following are exempt from the requirements of the chapter:

- 1. Agricultural use of land.
- 2. Emergencies posing an immediate danger to life or property, or substantial flood or fire hazards.

3. Areas deemed appropriate by the City Manager.

102.11 PENALTIES.

Any person who shall engage in the development of a site within the area of jurisdiction of this chapter before meeting the requirements of this chapter shall be subject to the following: No foundation permits or building permits shall be issued for the property in question until the violations are corrected. Nothing contained herein shall limit the right of the City to any other remedies available to the City for the enforcement of this chapter, including the use of municipal infractions. Enforcement of this section shall be the responsibility of the City.

102.12 OBJECTIONS.

The City Council shall review any objections to decisions made pursuant to this chapter and make the final decision.

SECTION 2. REPEALER. All ordinances or parts of ordinances in conflict with the provisions of this ordinance are hereby repealed.

SECTION 3. SEVERABILITY. If any section, provision, or part of this ordinance shall be adjudged invalid or unconstitutional, such adjudication shall not affect the validity of this ordinance as a whole or any section, provision, or part thereof not adjudged invalid or unconstitutional.

SECTION 4. EFFECTIVE DATE. This ordinance shall be effective after its passage and publication as required by law.

	APPROVED by the 0025.	City Council of Independenc	ee, Iowa, on this	day of
ATTEST:		Brad Bleichner, Ma	yor of the City of Indep	pendence, IA
A '	C, IaCMC, IaCFO, anager/City Clerk/Trea	- surer of the City of Independ	lence, IA	
First Reading: Second Reading: Third Reading:				
I certify that the	foregoing was publis	hed as Ordinance No. 2025	on the	day of

Susi Lampe, CMC, IaCMC, IaCFO,
Assistant City Manager/City Clerk/Treasurer of the City of Independence, IA