

**Ordinance No. 169**

**POST-CONSTRUCTION STORMWATER RUNOFF CONTROL**

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**169.1 Short Title.** This ordinance shall be known as the Post Construction Stormwater Runoff Control Ordinance.

**169.2 Purpose.** It is the purpose of this ordinance to:

Protect, maintain and enhance the environment of the City of University Heights and the public health, safety, and general welfare of the public by adopting as the City's standards the guidelines established in the Iowa Stormwater Management Manual (hereinafter collectively the "standards") to manage the stormwater runoff to improve water quality and control the maximum rate of flow to prevent downstream flooding; and

Enable the City of University Heights to comply with its National Pollution Discharge Elimination System Permit (NPDES) and applicable statutes and regulations for stormwater runoff through the following objectives:

- A. Minimize increases in stormwater runoff from development within the city limits and fringe area in order to reduce flooding, siltation, increases in stream temperature, and stream bank erosion and maintain the integrity of stream channels;
- B. Minimize increases in nonpoint pollution caused by stormwater runoff from development which would otherwise degrade local water quality;
- C. Minimize the total annual volume of surface water runoff which flows from any specific development project site after completion to not exceed the pre-development hydrologic regime to the maximum extent practicable;
- D. Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through establishment of appropriate minimum stormwater management standards and BMPs and to ensure that BMPs are maintained and pose no threat to public safety.

### **169.3 Findings.**

- A. The United States Environmental Agency's (EPA) National Pollutant Discharge Elimination System (NPDES) permit program administered by the Iowa Department of Natural Resources (IDNR) requires that cities meeting certain demographic and environmental criteria obtain from the IDNR an NPDES permit for the discharge of storm water from a Municipal Separate Storm Sewer System (MS4) Permit. The City of University Heights is subject to the NPDES permit program and is required to obtain, and has in fact obtained, an MS4 permit; the City's MS4 permit is on file at the office of the City Clerk and is available for public inspection during regular office hours.
- B. As a condition of the City's MS4 permit, the City is obliged to adopt and enforce a Post-Construction Stormwater Runoff Control Ordinance.
- C. Land development and associated increases in impervious cover alter the hydrologic response of local watersheds and increase stormwater runoff rates and volumes, flooding, stream channel erosion and sediment transport and deposition; this stormwater runoff contributes to increased quantities of water-borne pollutants, and; stormwater runoff, soil erosion and nonpoint source pollution can be controlled and

minimized through the regulation of stormwater runoff from development sites.

- D. Therefore, the City of University Heights establishes this set of City stormwater standards applicable to all surface waters to provide for reasonable guidance for the regulation of stormwater runoff for the purpose of protecting local water resources from degradation. It is determined that the regulation of stormwater runoff discharges from land development and other construction activities in order to control and minimize increases in stormwater runoff rates and volumes, soil erosion, stream channel erosion, and nonpoint source pollution associated with stormwater runoff, is in the public interest and will prevent threats to public safety and welfare.
  
- E. The determination of appropriate minimum stormwater management standards ("standards") and the development of effective best management practices ("BMPs") to achieve those standards requires technical expertise that may not always be readily available with the City's own staff. Moreover, it is important that such standards and BMPs be reasonably consistent across the state so that property owners and developers are not confronted with myriad variations depending on the location of the development. The "Iowa Stormwater Management Manual," published collaboratively by the Iowa Department of Natural Resources and The Center for Transportation Research and Education at Iowa State University established guidelines consisting of unified sizing criteria, stormwater management designs and specifications and BMPs. The City of University Heights hereby finds and declares that the "Iowa Stormwater Management Manual" and future editions thereof, should be and is hereby adopted as the stormwater management standards of the City of University Heights. Any BMP installation that complies with the provisions of the Iowa Stormwater Management Manual, or future editions thereof, at the time of installation of the BMP shall be deemed to have been installed in accordance with this ordinance.

**169.4 Applicability of Ordinance.**

- A. This Post-Construction Stormwater Runoff Control Ordinance shall be applicable to all of the following:

1. All land-disturbing activities that disturb one-acre or more of land.
  2. All land-disturbing activities that disturb less than one acre of land if such activities are part of a larger common plan of development that is one acre or more in size, even if multiple separate and distinct land development activities may take place at different times on different schedules.
  3. All applications for site plans or subdivisions that are located in a business, commercial, industrial, multi-family residential, or multi-family commercial zone, as defined by the University Heights Zoning Code, regardless of the size of the land involved.
  4. All land disturbing activities (regardless of the size of the land so disturbed), if the amount of impervious ground surface created or recreated by the activity exceeds 5,000 square feet, notwithstanding the exemption set forth in section 169.4(B)(2)\_below for additions or modifications to existing single family homes.
- B. The following activities are exempt from this ordinance:
1. Any logging or agricultural activity which is consistent with an approved soil conservation plan or a timber management plan approved by an appropriate agency.
  2. Additions or modifications to single family homes. However, this Ordinance shall be applicable whenever an addition or modification to an existing single-family home results in the creation or recreation of more than 5,000 square feet of impervious ground surface.
  3. Repairs to any stormwater BMPs deemed necessary by the City.

**169.5 Definitions.** The following definitions shall apply in this ordinance. References to "Sections" shall hereafter mean references to sections in this

ordinance unless otherwise specified. Defined terms shall remain defined terms whether capitalized or not capitalized.

- A. Applicant means any individual, firm, corporation, association, partnership, limited liability company or any other business entity or proprietor of land that will perform Land Disturbing Activity.
- B. Best Management Practices ("BMPs") means physical, structural and/or managerial practices that, when used singly or in combination, control activities including, but not limited to, site run-off, spillage and leaks, and waste disposal, and prevent or reduce the discharge of pollutants directly or indirectly to the Waters of the United States. BMP's may include schedules of activities, prohibition of practices, design standards, educational activities and treatment requirements.
- C. Board of Appeals means the University Heights City Council, sitting as an appeal board for this ordinance.
- D. Building means any structure, either temporary or permanent, having walls and a roof, designed for the shelter of any person, animal, or property occupying over 100 square feet.
- E. Building Permit means a permit issued by the City of University Heights or its designee.
- F. Channel Protection Storage Volume means providing 24-hour extended detention of the 1-year, 24-hour storm event. If channel protection and water quality volumes share a common extended detention facility and outlet structure, water quality volume may be included in the channel protection volume.
- G. City Council means the City Council of the City of University Heights, Iowa.
- H. Mayor or Engineer means the Mayor or Engineer of the City of University Heights, Iowa and their authorized designees.
- I. City Stormwater Standards mean the guidelines provided for in the Iowa Stormwater Management Manual and this ordinance, as amended. Where conflict occurs between the Iowa Stormwater Manual and this ordinance, requirements of this ordinance shall apply.

- J. Department means the Iowa Department of Natural Resources.
- K. Dedication means the deliberate appropriation of property by its owner for general public use.
- L. Developer means a person who undertakes land disturbing activities.
- M. Development means either:
1. Land Disturbing Activity that disturbs one acre or more of land; or
  2. Land disturbing activities that disturb less than one acre of land if such activities are part of a larger common plan of development that is one acre or more in size, even if multiple separate and distinct land development activities may take place at different times on different schedules; or
  3. All land disturbing activities (regardless of the size of land so disturbed), if the amount of impervious ground surface created or recreated by the activity exceeds 5,000 square feet; or
  4. Any land disturbing activity that takes place within any business, commercial, industrial, multi-family residential or multi-family commercial zone, as defined by the University Heights Zoning Code regardless of the size of the land involved.
- N. Drainage Easement means a legal right granted by a landowner to a grantee for the purposes of allowing use of private land for stormwater management purposes.
- O. Iowa Stormwater Management Manual means the manual collaboratively developed by the Iowa Department of Natural Resources (IDNR) and the Center for Transportation Research and Education (CTRE) at Iowa State University that contains the sizing criteria, design and specification guidelines and BMPs that address stormwater quality and quantity management.
- P. Land disturbing activity means any activity that results in a movement of earth or a change in the existing soil cover (both vegetative and

nonvegetative) or the existing topography. Land disturbing activity includes, but are not limited to, clearing, grading, filling, excavation or addition or replacement of impervious surface.

- Q. Landowner means the legal or beneficial owner of land, including those holding the right to purchase or lease the land, or any other person holding proprietary rights in the land.
- R. Maintenance Agreement means a legally recorded document that acts as a property deed restriction, and which provides for the long term maintenance of BMPs.
- S. Overbank Flood Protection Volume means providing discharge control such that the post-development 100-year storm event peak discharge does not exceed the 5-year pre-development peak discharge. If channel protection, water quality, and overbank flood protection volumes share a common extended detention facility and outlet structure, water quality and channel protection volumes may be included in the overbank flood protection discharge control.
- T. Person means any individual, association, organization, partnership, firm, corporation or other entity recognized by law and acting as either the owner of the Premises or as the owner's agent.
- U. Responsible Person means an individual identified in a permit issued by the City of University Heights as the principal contact for communications regarding the permit.
- V. Storm Water means any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation and resulting from such precipitation.
- W. Stormwater Management means the use of BMPs that are designed in accordance with the City stormwater standards to reduce stormwater runoff pollutant loads, discharge volumes, peak flow discharge rates and detrimental changes in stream temperature that affect water quality and habitat.
- X. Storm Water Pollution Prevention Plan ("SWPPP") means a document which describes the Best Management Practices and activities to be implemented by a Person to identify sources of pollution or contamination at a Site and the actions to eliminate or reduce pollutant discharges to Stormwater, Stormwater Conveyance

Systems, and/or receiving waters of the United States to the maximum extent practicable.

Y. *Storm Water Wet Detention Pond* means a constructed stormwater detention basin that has a permanent pool of water. Minimum pool depth shall be 10-feet for at least 25% of the permanent pool area. Upon completion of the pond, the owner shall stock the pond with appropriate bass, bluegill, and catfish combination. Owner may contact DNR fisheries or the City for fish stocking.

Z. Water Quality Volume means the storage needed to capture and treat the runoff from 90% of the average annual rainfall. For purposes of this ordinance, the design rainfall depth for determining Water Quality Volume is 1.25 inches.

**169.6 Administration.** The Mayor or Engineer shall administer, implement and enforce the provisions of this ordinance. Any powers granted or duties imposed upon the Mayor or Engineer may be delegated by the Mayor or Engineer to persons or entities acting in the beneficial interest of or in the employ of the City.

**169.7 City Not Liable.** Nothing contained in this ordinance is intended to be nor shall be construed to create or form the basis of any liability on the part of the City, or its officers, employees, or agents for any injury or damage resulting from the failure of Responsible Parties to comply with the provisions of this ordinance or by reason or in consequence of any inspection, notice, order, certificate, permission or approval authorized or issued or done in connection with the implementation or enforcement of this ordinance, or by reason of any action or inaction on the part of the City related in any manner to the enforcement of this ordinance by its officers, employees or agents.

**169.8 Permit Required.** No Landowner or Developer shall receive any Construction Site Runoff Permit or Building Permit without first meeting the requirements of this ordinance prior to commencing the proposed activity.

**169.9 Stormwater Management Plan Required.** No application for development subject to the provisions of this ordinance will be accepted unless it includes a stormwater management plan detailing in concept how

runoff and associated water quality impacts resulting from the development will be controlled and managed.

**169.10 Stormwater Management Plan Requirements.** The Stormwater Management Plan for each development subject to this ordinance shall:

- A. Be prepared by a licensed professional engineer; and
- B. Indicate whether stormwater will be managed on-site or off-site and, if on-site, the general location and type of BMPs, with clear citations to the Iowa Stormwater Management Manual; and
- C. Include a signed and dated certification under penalty of perjury by the preparer of the Stormwater Management Plan that it complies with all of the requirements of this ordinance and the Iowa Stormwater Management Manual, meets the submittal requirements outlined in the Iowa Stormwater Management Manual, is designed to achieve the City stormwater standards, and that the City is entitled to rely upon the certification as due diligence on the part of the City.
- D. Include a scaled map indicating the location of existing and proposed buildings, roads, parking areas, utilities, structural stormwater management and sediment and erosion BMPs.
- E. Include a map showing the proposed land use with a tabulation of the percentage of surface areas to be adapted to various uses, drainage patterns, location of utilities, roads and easements and the limits of clearing and grading.
- F. Include an appropriately scaled topographic base map of the site which extends an appropriate distance beyond the limits of the proposed development and indicates existing surface water drainage, including but not limited to, streams, ponds, culverts, ditches and wetlands; current land use including all existing structures; locations of utilities, roads and easements and significant natural and manmade features not otherwise shown.
- G. Include hydrologic and hydraulic design calculations for the pre-development and post-development conditions for the design storms specified in the Iowa Stormwater Management Manual. Such calculations shall include:

1. Description of the design storm frequency, intensity and duration;
  2. Time of concentration
  3. Data on the increase in rate and volume of runoff for the design storms referenced in the Iowa Stormwater Management Manual
  4. Soil Curve Numbers or Runoff Coefficients
  5. Peak Runoff rates and total volumes for each watershed area
  6. Culvert capacities
  7. Flow velocities; and
  8. Documentation of sources for all computation methods and field test results.
- H. Include a soils report, if a stormwater BMP depends on the hydrologic properties of soils. The soils report shall be based on on-site boring or soil pit profiles.
- I. Include a maintenance and repair plan for all stormwater BMPs including detailed maintenance and repair procedures to ensure their continued efficient function. These plans shall identify the parts or components of a stormwater BMP that need to be maintained and the equipment and skills or training necessary. Provisions for periodic review and evaluation of the effectiveness of the maintenance program and the need for revisions or additional maintenance procedures shall be included in the plan.
- J. Include a detailed Landscaping plan for management of vegetation at the site after construction is finished, including the Person responsible for the maintenance of vegetation at the site and what practices will be employed to ensure that adequate vegetative cover is preserved. This plan must be prepared by a qualified individual approved by the City such as a registered landscape architect, wetland specialist, licensed engineer, landscape designer or by the soil and water conservation district.
- K. Include proof of permanent recorded Maintenance Easements that will ensure access to all stormwater BMPs at the site for the purpose of inspection and repair.
- L. Include proof of permanent recorded Maintenance Agreements binding on all subsequent Landowners served

by stormwater BMPs to ensure maintenance and repair in accordance with the specifications of this ordinance.

- M. Include copies of all other applicable environmental permits for the site.
- N. Include any other information required by the Mayor or Engineer to ensure compliance with the requirements of this ordinance.

**169.11 Compliance Required.** Each Development subject to the requirements of this ordinance shall comply with the City's mandate to improve stormwater quality and manage stormwater quantity within the City.

The property owner or applicant shall provide to the City an as-built plan detailing dimensions and elevations as well as certification that the approved facilities were installed and properly working. The as-built plan shall be completed by an Iowa licensed Professional Engineer and submitted to the City prior to the acceptance of any improvements or issuance of any Certificates of Occupancy.

The Developer is deemed to have complied with the City's mandate to improve stormwater quality and manage stormwater quantity if the development:

- A. Treats the water quality volume resulting from a rainfall depth of 1.25 inches in accordance with the City Stormwater Standards; and
- B. Provides Channel Protection Storage Volume and extended detention in accordance with the City Stormwater Standards; and
- C. Provides Overbank Flood Protection in accordance with the City Stormwater Standards (Q100, POST  $\leq$  Q5, PRE); and
- D. Provides an emergency overflow spillway (including one-foot freeboard) and designated overflow route for extreme rainfall events. The spillway shall be designed for the 100-yr event and assuming the initial outlet controls are completely blocked.
- E. Provides stormwater BMP facilities that are constructed and function in accordance with the approved design and maintained as required by the City Stormwater Standards.

**169.12 Maintenance and Repair of Stormwater BMPs**

- A. The Landowner or Developer of every site subject to the provisions of this ordinance shall be responsible for maintaining as-built stormwater BMPs in an effective state as determined in the sole judgment of the City for 25 years after completion of construction.
- B. Prior to the issuance of any permit for development involving any stormwater BMP, the Landowner or Developer must execute a stormwater management easement for each BMP in a form acceptable to the City. Said easement will provide for access to the BMP by the City for periodic inspection. Said easement shall be recorded at the expense of the Landowner or Developer.
- C. Prior to the issuance of any development permit, the Landowner or Developer shall execute a Stormwater BMP Maintenance Agreement in a form acceptable to the City that requires the Landowner or Developer to inspect and maintain each stormwater BMP for a period of 25 years. In addition, the Stormwater BMP Maintenance Agreement shall provide for assessment against all owners of property in the development should the stormwater BMP not be maintained. In lieu of the assessment agreement, the Landowner/Developer may submit a maintenance bond for a period of 25 years.
- D. In the event that the responsible party fails to maintain the stormwater BMP, the City, upon thirty (30) days written notice, may repair or cause to be repaired, the stormwater BMP to its proper working condition. After completion of the repair, the City shall submit an invoice for the repair to the responsible party, who shall pay said invoice within 30 days. In the event that the invoice is not paid, the City shall either certify the amount to the County Treasurer for collection as contemplated in the Stormwater BMP Maintenance Agreement to be collected in the same manner as ordinary taxes. When applicable, the City may also commence proceedings against the surety for payment of the expenses.

**169.13 Issuance of Permit.** If the Mayor or Engineer or their designee deems that the Stormwater Management Plan meets the requirement of this ordinance, the Mayor or Engineer or their designee will notify the appropriate City officials that appropriate development permits may be issued. However, this action by the Mayor or

Engineer or their designee does not obviate the Developer from any of the additional requirement in this Code of Ordinances for the construction of a development.

**169.14 Denial of Permit.** The Mayor or Engineer or their designee may reject a Stormwater Management Plan that the Mayor or Engineer or their designee believes does not meet the requirements of this ordinance. If a permit is denied, the Mayor or Engineer or their designee shall state the reasons for the denial in writing and return the application to the applicant.

**169.15 Right of Entry.** The Mayor or Engineer or their designee or other duly authorized employees or contractors of the City, bearing proper credentials and identification, shall be permitted to enter all properties for the purposes of inspection, observation and monitoring compliance with the with the provisions of this ordinance.

**169.16 Required Inspections for Stormwater BMPs.** The City shall, on occasion, inspect each stormwater BMP to ensure that the stormwater BMP is working properly to achieve the goals of this ordinance. In the event a stormwater BMP is not working correctly, the City shall notify the Landowner per Section 12 of this ordinance.

**169.17 Stop Work Order.** When the Mayor or Engineer or their designee determines that any land disturbing activity regulated by this ordinance is being performed in a manner contrary to the provisions of this ordinance, the Mayor or Engineer or their designee is authorized to issue a Stop Work Order.

A. The Stop Work Order shall be in writing and shall be served upon the owner of the Site, Responsible Person, or to the Person(s) violating the requirements of this ordinance. The Stop Work Order shall state the reason for the order, and the conditions to be corrected prior to the lifting of the Stop Work Order.

B. Any Person who shall continue any work after having been served a stop work order, except such work as that Person is ordered to perform to remove a violation or unsafe condition, shall be a violation of this ordinance.

**169.18 Fees.**

- A. Prior to the approval of the Stormwater Management Plan, the Applicant shall submit an application fee as adopted by Resolution of the City Council.
- B. The fees for review and inspection shall be adopted by Resolution of the City Council and may include, without limitation, engineering and attorney fees and expenses, as well as administrative fees.

**169.19 Misdemeanor and Municipal Infraction Penalties.**

- A. Any person who fails to perform an act required by this ordinance or who commits an act prohibited by this ordinance or who resists the enforcement of any section of this ordinance shall be guilty of a simple misdemeanor punishable by a fine not to exceed \$500.00 or imprisonment for a period not to exceed 30 days, or by both such fine and imprisonment.
- B. Any Person who fails to perform an act required by this ordinance or who commits an act prohibited by this ordinance or who resists the enforcement of any section of this ordinance shall be deemed to have committed a municipal infraction. The Mayor or Engineer or their designee may issue a civil citation to anyone in violation of any section or provision of this ordinance. A violation of this ordinance is punishable by a civil penalty of \$250.00 for a first offense and \$500.00 for a repeat offense.
- C. Each day that a violation of or failure to comply with any section or provision of this ordinance continues or exists constitutes a separate violation.

**169.20 Nuisance.** Any violation of this ordinance shall be deemed to be a public nuisance injurious to the public health, safety and welfare. The City Attorney, in addition to the penalties set forth above, may seek correction of any such violations as nuisances.

**169.21 Remedies Not Exclusive.** The remedies provided in the ordinance and otherwise in this Code of Ordinances are not exclusive, or in lieu of the rights and remedies that the City may have at law or in equity.

**169.22 Appeals.**

- A. The City Council, in regular or special session, shall sit as the Board of Appeals and, on appeals under this ordinance, may seek additional professional counsel schooled in matters contained in this ordinance. A



ATTEST:

(seal)

/s/\_\_\_\_\_  
City Clerk

Ordinance No. 213, amending Ordinance No. 169, was passed and approved November 14, 2017, and published in the Iowa City Press-Citizen \_\_\_\_\_, \_\_, 201\_. The amendments change Sec. 169.4 to provide that the ordinance is applicable to land-disturbing activities of less than one acre in specified circumstances; change Sec. 169.5(M) to expand the definition of "Development;" and change Sec. 169.11 to required as-built plans showing compliance with the ordinance.

SEB/UH/Ordinances/Ordinance 169 amended by 213