

**COUNCIL ACTION FORM**

**SUBJECT: POST CONSTRUCTION STORMWATER MANAGEMENT ORDINANCE**

**BACKGROUND:**

In order to increase stormwater run-off quality, decrease stormwater run-off, and minimize soil erosion, a new post construction stormwater management ordinance is being considered. This ordinance will also help the City be in compliance with both federal and state environmental laws, which require the City to implement progressive stormwater management policies.

The City of Ames' Municipal Separate Storm Sewer Permit (MS4) (Permit No. 85-03-0-03), issued by the Iowa Department of Natural Resources (DNR), states that the City must adopt and enforce a stormwater management ordinance that addresses both water quality and water quantity components. This new ordinance is to be considered in the design of new construction and implemented when practical. The ordinance must promote the use of storm water detention, retention, grass swales, bio-retention swales and riparian buffers, along with proper operation and maintenance of these facilities.

In order to meet this permit requirement, Public Works staff has been working for several years to establish a draft ordinance that meets these requirements while also aligning with flood mitigation efforts within the community. After gathering input from three public meetings, the current Storm Water Advisory Committee, and the City Council at a February 18 work session, staff now needs Council direction in order to develop the ordinance for Council approval on first reading on March 25.

**As discussed during the City Council Workshop, areas where direction is needed include the following:**

**A. Which manual should the City rely on when developing the City's new stormwater program?**

Option 1: Utilize the IDNR Iowa Stormwater Management Manual including Unified Sizing Criteria with future editions and local supplemental specifications.

Option 2: Create the City's own design and specification documents.

*The Iowa Stormwater Management Manual was created by utilizing the expertise of many subject matter experts from across the state. The manual is endorsed/owned by the Iowa DNR and will be maintained and updated by*

stormwater professionals. The City of Ames may make local amendments to the manual, should any be deemed appropriate to fit our local circumstances. Creating a standalone manual for the City would require hundreds of hours of staff time along with consultant assistance, likely over at least a two year time period. For these reasons, **Option 1 is recommended for approval.**

**B. To what size of development should the new stormwater standards apply?**

Option 1: Apply to new development and redevelopment disturbing 1 acre or more of land and to any development disturbing less than 1 acre if impervious cover exceeds 10,000 square feet.

Option 2: Apply to new development and redevelopment disturbing 1 acre or more of land and to any development disturbing less than 1 acre if impervious cover exceeds 5,000 square feet

*In order to provide clarity for our customers, it is important that the new ordinance designate where these requirements will apply. Designers of small sites will need to be creative in order to meet the new requirements of this ordinance. However, it is still very feasible through the use of stormwater facilities such as permeable pavers, underground detention, coordinating landscape code requirements with stormwater practices within the required green space, and bio-retention cells. Therefore, **Option 1 is recommended for approval.***

**C. Should stream buffers be required, and if so, how wide should they be?**

Option 1: Use the same standard as that contained in the City's existing Conservation Subdivision Ordinance. The South Skunk River, Squaw Creek, and Onion Creek would require an analysis to determine adequate buffer width. College, Clear, and Worle Creeks would utilize a stream buffer width of 100 feet on each side perpendicular to the waterway.

Option 2: Do not include a stream buffer provision.

*The City's Urban Stream Assessment – which was completed in 2007 and updated in 2011 – reflects how stream corridors within the corporate limits are experiencing severe erosion that continue to shed sediment into our waterways. By establishing stream buffers, the area around the stream corridors becomes stabilized through the use of native vegetation and by preventing buildings from being built close to the streams, which causes further instability. Therefore, **Option 1 is recommended for approval.***

**D. Should there be a requirement for a Letter of Credit to assure that required stormwater improvements are properly constructed?**

Option 1: Require financial security with Final Plat or Site Plan.

Option 2: Do not include a financial security provision.

*This provision follows similar current practice for other public infrastructure that is installed as part of development. Once a Preliminary Plat is approved, public improvements can be reviewed, approved and installed. Public improvements that are installed in an acceptable manner (meeting the City's specifications) prior to filing of the Final Plat do not need financial security. Where all required public improvements have not yet been installed by the developer or accepted by the City, developers are required to file financial security **to ensure that the improvements will be installed appropriately**. Such security likewise seems appropriate for required stormwater improvements. Otherwise, there would be minimal assurance that the practices would be installed. For these reasons, **Option 1 is recommended for approval.***

**E. Who should be responsible for the ongoing maintenance of stormwater management facilities – the developer (and ultimately a property or homeowners association), or the City?**

Option 1: Designate this as the owner's responsibility in all development and redevelopment. For example, a Property Owners' Association could meet this requirement through contracting with a contractor, consultant or non-profit organization (e.g., Iowa Natural Heritage Foundation).

Option 2: Designate this as the owner's responsibility for commercial and industrial development, with the City taking responsibility for residential development. The City improvements could be funded through the Storm Sewer Utility Fund, G.O. Bonds, and/or assessment.

Option 3: Designate this as the owner's responsibility for new development, with the City being responsible for redevelopment. It should be noted that, where a redevelopment covers a large area, a Property Owners' Association would likely be established, which could assume responsibility for these maintenance activities. In redevelopment of a commercial or industrial property, the improvements would likely be private, serving only the redevelopment on that specific property.

Option 4: Designate this as a City responsibility for all development and redevelopment. The improvements could be funded through the Storm Sewer Utility Fund, G.O. Bonds, and/or assessment.

*Over the years, as part of various development agreements, the City assumed long-term maintenance responsibility for regional stormwater facilities or those that treat public runoff from streets. These facilities would then be renovated as part of the CIP programs using Storm Sewer Utility Funds or G.O. Bonds. Other communities have taken a different approach where the owner is responsible for this long-term maintenance. If the owner were to be made responsible, City staff would provide technical guidance and educational literature to remind them of their maintenance responsibilities. Leaving this responsibility with the private sector seems most appropriate. Therefore, **Option 1 is recommended approval.***

**F. Should there be a requirement for a performance bond to assure that the stormwater improvements continue to function properly, and if so, how long should the bond be in effect?**

Option 1: Require a 4 year performance bond.

Option 2: Do not require a performance bond.

*A performance bond is a measure that would assure that the stormwater practices are continuing to function correctly following the initial construction. Several other communities require a performance bond. However, the length of the bonds varies with each community's preference. A 4-year performance bond is recommended, since that time frame corresponds to the length of time needed to get native vegetation established (about 3 years), as well as to accommodate weather variations (floods vs. droughts). **Option 1 is recommended for approval.***

**G. To protect homes from overland localized flooding, should there be a requirement that the lowest opening of an inhabited building be at least 3 feet above the 100-year water surface elevation?**

Option 1: Specify that all buildings adjacent to or impacted by a stormwater best management practice (BMP) shall have the lowest opening a minimum of 3 feet above the 100-year water surface elevation. Note: A BMP is any feature designed to store, treat, or convey stormwater as part of an overall stormwater management plan.

Option 2: Do not include a localized flooding provision.

*Following each major rainfall event in our community, including 2010, staff inevitably works with property owners on localized flooding impacts. After working through localized flooding issues in Northridge Parkway Subdivision over the past 3 years, it has become clearer to staff and the Council that a provision is*

*needed to lessen flooding to buildings. Therefore, **Option 1 is recommended for approval.***

#### **H. Should there be a waiver process administered by the Municipal Engineer?**

Option 1: Direct that partial waivers may be granted by the Municipal Engineer for redevelopment projects if the proposed development does not impair attaining the objectives of this ordinance. Sequential factors to consider in analyzing a waiver request would include (1) establishing alternative minimum requirements for on-site management, (2) constructing facilities off the project site to meet the requirements, and then (3) making a monetary contribution (Fee-in-Lieu) for watershed studies, monitoring, and/or improvements.

Option 2: Do not include a waiver provision.

*As mentioned earlier in presentations to City Council, this section of the ordinance would enable staff to work through most, if not all, potential ordinance conflicts with developers through use of this waiver process. Therefore, **Option 1 is recommended for approval.***

#### **I. Should an appeal process be established for challenges to the waiver decision?**

Option 1: Rely on the waiver process noted above, without creating an appeal process. Should that waiver process be problematic in the future, an additional appeal level could be created through the City Council or a separate Stormwater Appeal Board.

Option 2: Direct that appeals come to the City Council for resolution.

Option 3: Create a Stormwater Appeal Board to be appointed by the Mayor.

*It is anticipated that staff will be able to work with developers through the waiver process described above. Since there are numerous practices that can be implemented to achieve the stormwater management requirements of this ordinance, staff anticipates it can work with designers to achieve compliance or else utilize the waiver process. Therefore, **Option 1 is recommended for approval.***

## **ALTERNATIVES:**

1. Give staff specific direction to draft a Post Construction Stormwater Management Ordinance that includes the staff recommendations to address each of the questions presented above and present the ordinance for Council consideration for first reading on March 25, 2014.
2. Give staff specific direction to draft a Post Construction Stormwater Management Ordinance that addresses each of the questions presented above differently than is being recommended by the City staff and present the ordinance for Council consideration for first reading on March 25, 2014.
3. Direct staff to develop a program to achieve the MS4 permit requirements through a different, specific approach.

## **MANAGER'S RECOMMENDED ACTION:**

Staff has spent several years developing this ordinance, which is required by both federal and state law. Input has been received from stormwater management experts, as well as from local developers and civil engineers who will be impacted by the new requirements.

Council direction is needed on each of the questions posed above. After staff receives this direction, the ordinance can be brought to Council for public hearing and consideration on first reading on March 25<sup>th</sup>. The final ordinance can then be adopted in April 2014, which aligns with the start of the City's new MS4 permit cycle.

**Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, thereby giving direction to the City Attorney to draft an ordinance that incorporates the staff recommendations to address each of the questions raised above.**

It is staff's intent to bring the ordinance back to the City Council for approval of its first reading on March 25, 2014.