

**RULE NO.: R161-13.20**

**NOTICE OF PROPOSED RULE**

**POSTING DATE: July 3, 2013**

The Director of the Watershed Protection Department proposes to adopt the following rule after August 4, 2013.

Comments on the proposed rule are requested from the public. Comments should be submitted to Dana McGehee, 505 Barton Springs Road, Suite 1200, Austin Texas, 78704, 974-2634, or via email at *dana.mcgehee@austintexas.gov*. To be considered, comments must be submitted before August 4, 2013, the 32nd day after the date this notice is posted. A summary of the written comments received will be included in the notice of rule adoption that must be posted for the rule to become effective.

An affordability impact statement regarding the proposed rule has been obtained and is available for inspection or copying at the address noted in the preceding paragraph.

**EFFECTIVE DATE OF PROPOSED RULE**

A rule proposed in this notice may not become effective before the effective date established by a separate notice of rule adoption. A notice of rule adoption may not be posted before August 4, 2013 (the 32nd day after the date of this notice) or not after October 1, 2013 (the 90th day after the date of this notice).

If a proposed rule is not adopted on or before October 1, 2013, it is automatically withdrawn and cannot be adopted without first posting a new notice of a proposed rule.

**BRIEF EXPLANATION OF PROPOSED RULE**

**R161-13.20:** Proposes revisions to the Drainage Criteria Manual, Sections 7 and 8 as follows:

**Drainage Criteria Manual – Section 7, Culverts**

*7.1.0 – General:* Proposed modifications clarify the design storm type that drainage culverts are required to pass, and that the drainage system must accommodate runoff for both the 25-year and 100-year design storms. Proposed addition requires that culverts be spaced according to the manhole spacing requirements outlined in Section 5.

*7.2.0 – Culvert Headwalls and Endwalls:* Proposed addition includes endwalls in section title.

*7.2.5 – Trashracks and Safety End Treatments:* Proposed addition offers guidance for use of trashracks and safety end treatments.

*7.3.0 – Culvert Discharge Velocities:* Proposed modifications provide guidance for designing culverts to reduce erosion hazards.

*7.4.0 – Selection of Culvert Size and Flow Classification:* Proposed addition provides guidance for using software to perform culvert calculations.

*7.4.1.A – Inlet Control Condition:* Proposed modifications remove references to figures 7-5 and 7-6 and refer readers to the Federal Highway Administration nomographs.

*7.4.1.B – Outlet Control Condition:* Proposed addition refers readers to the Federal Highway Administration publications for design calculations; equations and figures for hand calculations are proposed for deletion.

*7.4.1.C – Depths of Tailwater and Headwater:* Proposed addition refers readers to the Federal Highway Administration publications for design calculations and culvert nomographs; equations and figures for hand calculations are proposed for deletion.

*7.4.2 – Design Procedures:* Proposed modifications remove existing culvert design procedures and refer readers to the Federal Highway Administration for culvert hydraulic design guidance.

*7.4.3 – Instructions for Using Nomographs:* Section is proposed for deletion.

*7.4.4 – Example 7-1:* Proposed modifications correct typographical errors and refer readers to the Federal Highway Administration for nomographs.

*7.5.1 – General:* Proposed modifications remove explanation of overtopping policy and refer readers to Section 1.2.4 of the DCM.

### **Drainage Criteria Manual – Section 8, Stormwater Management**

*Section 8.1.0 – General:* Proposed modification replaces “regional SWM” with “off-site SWM detention facilities” and includes off-site facilities with on-site facilities, in comparison to regional facilities. Proposed addition indicates that control of excess flow must comply with the Drainage Policy Section of the DCM.

*Section 8.2.0 – Regional Stormwater Management Program:* Proposed additions clarify that RSMP program applies to public regional drainage improvements, and clarify that RSMP is administered by the Watershed Protection Department. Proposed modifications update the types of improvements that the RSMP may utilize; clarify that RSMP is established in watersheds inside and outside of the city limits; clarify methods of RSMP participation and program limitations; and refer readers to the City of Austin website for

additional RSMP information rather than Appendix D which will be deleted from the DCM. The list of benefits afforded by the RSMP is proposed for deletion.

*Section 8.2.2 – Participation Guidelines:*

*A – General:* Proposed modifications remove numbering for subsection A; refer readers to Table 8-1 for a list of watersheds in which RSMP participation is available; and correct department name. Information on RSMP application requirements is moved to “Participation Requirements” section. Proposed addition provides information on watershed delineations.

*Table 8-1:* Proposed addition provides table of watershed eligible for RSMP participation.

*B – Categories for Participation:* Proposed modifications remove numbering for subsection B and rename subsection as “Participation Requirements;” remove references to Type I and Type II programs; clarify RSMP application requirements and refer applicants to the City’s website rather than Appendix D; and more concisely summarize the conditions that must be satisfied for participation in RSMP.

*C – Special Conditions:* Proposed modifications remove numbering for subsection C, and clarify that capacity of a regional detention facility or the intervening public drainage system may be increased with the cost of the improvements being credited towards the RSMP fee.

*D – Participation Fees:* Proposed modifications refer reader to the City of Austin website for information on participation fees; correct department name; correct minor grammatical issues; and refer reader to the City of Austin website for an RSMP application.

*8.2.3 – Watershed Master Plans:* Proposed modifications rename section “Watershed Floodplain Models;” replace information on watershed mater plans with information on City of Austin and FEMA floodplain models; and include information on the FloodPro website.

*8.3.1 – General:* Proposed modifications indicate that both on-site and off-site ponds are subject to the same requirements; and refer readers to the Environmental Criteria Manual for definitions of best management practices.

*8.3.2 – Performance Criteria for On-Site SWM Ponds:* Proposed modification changes section title to “Performance Criteria for SWM Ponds.”

A. Proposed modification replaces size classification for SWM ponds with information on post-development peak rates of discharge.

*B.* Proposed addition clarifies that performance criteria for regional ponds will be reviewed by the Watershed Engineering Division, and that the determination will be based on a preliminary engineering study. Existing Section 8.3.2.B is proposed for deletion.

*C.* Proposed addition requires 24-hour draw-down time for SWM ponds as currently stated in Section 1 and adds a provision for credit towards detention for water quality control facilities.

*8.3.3 – Performance Criteria for Regional SWM Ponds:* This section is proposed for deletion.

*8.3.4 – Safety Criteria for SWM Ponds:*

*A:* Proposed additions require that the outfall safely pass the design storm hydrograph; clarify that off-site areas routed through the SWM pond shall be assumed to be fully developed; and clarify that the fully developed assumption allows for properly sizing spillway, outfall, embankment and appurtenant structures; and update detention pond class table with volume requirements for on-site and regional ponds.

*B.4:* Proposed modifications shorten Stormwater Management to SWM; require that a 20-foot clear zone be called out on site plan; and require that the 20-foot clear zone be part of the drainage easement dedicated for the dam if the facility is to be maintained by the City.

*B.5:* Proposed modification shortens Stormwater Management to SWM.

*B.6:* Proposed modification shortens Stormwater Management to SWM.

*B7:* Proposed modifications require that markers on SWM ponds be retroreflective, and address minor grammatical issue.

*D:* Proposed modification corrects range for embankment height.

*G:* Proposed modification addresses minor grammatical issue.

*H:* Proposed modification removes the numeral “1”.

*I:* Proposed modifications clarify that no improvements discharging concentrated flows may discharge directly onto arterial or collector streets; limit the size of sites from which concentrated flow can be discharged to local streets; require that fiscal security be posted if no storm sewer exists within 300 feet of the outfall; and prohibit concentrated discharge across sidewalks.

*8.4.0 – Detention Pond Storage Determination:* Proposed modifications clarify types of hydrologic methods that may be used for flow routing analysis.

*8.5.0 – Detention Basin Maintenance and Equipment Access Requirements:* Proposed modifications to Section 8 figures renumber figures 8-7, 8-8 and 8-9 as 1-1, 1-2 and 1-3 as these are referenced in Section 1. Figure 8-6 is proposed for deletion.

## **TEXT OF PROPOSED RULE**

A copy of the complete text of the proposed rule is available for public inspection and copying at the following locations. Copies may be purchased at the locations at a cost of ten cents per page:

Watershed Protection Department, located at 505 Barton Springs Road, Suite 1200, Austin, TX, 78704; and

Office of the City Clerk, City Hall, located at 301 West 2nd Street, Austin, Texas.

## **AUTHORITY FOR ADOPTION OF PROPOSED RULE**

The authority and procedure for the adoption of a rule to assist in the implementation, administration, or enforcement of a provision of the City Code is established in Chapter 1-2 of the City Code. The authority to regulate dedication of drainage easements is established in Section 25-7-152 of the City Code; the authority to regulate design and construction of drainage facilities and improvements is established in Section 25-7-121 of the City Code.

**CERTIFICATION BY CITY ATTORNEY**

By signing this Notice of Rule Adoption R161-13.20, the City Attorney certifies that the City Attorney has reviewed the rule and finds that adoption of the rule is a valid exercise of the Director's administrative authority.

**REVIEWED AND APPROVED**

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Victoria J. Li, P.E., Director  
Watershed Protection Department

Date: \_\_\_\_\_

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Karen M. Kennard  
City Attorney

Date: \_\_\_\_\_