

December 13, 2002

TO: All Holders of the City of Salem Design Standards

EFFECTIVE DATE: February 1, 2003

SUBJECT: **DEVELOPMENT BULLETIN #43**

The following information is distributed as a public service to the Salem development community of engineers, architects, contractors, builders, and developers to make them aware of any changes in the City permit and plan approval process, design standards, or construction standards which may have an impact on their operations:

FINAL DRAFT OF NEW STORMWATER MANAGEMENT DESIGN STANDARDS

PURPOSE: NOTICE OF CHANGE TO STORMWATER MANAGEMENT DESIGN STANDARDS

BACKGROUND:

The final draft of the Stormwater Management Design Standards (Standards) is completed. The draft Standards culminate over a year of work group meetings, research, and discussion by key City staff to bring our standards in closer alignment with the Stormwater Master Plan and current stormwater management methods. A courtesy copy of these draft Standards was delivered to all Salem Watershed Councils and a sample of local engineers and architects for a 30-day preview late this fall. Minor corrections were made based on this preview.

IMPLEMENTATION:

The new standards are being distributed to the community as an attachment to this Development Bulletin. Remove and replace the existing 1984 Stormwater Management Design Standard with this new 2002 draft in your Salem Public Works Design Standards. Also remove Development Bulletins #36 (Storm Drainage on Private Property), #37 (Aluminized Steel Pipe), and #40 (Stormwater Detention Revisions). The issues addressed in those three Bulletins are covered in the new Standards.

The draft Standards will take effect on February 1, 2003, for a trial period of one year. Throughout the year, we will compile additional comments from the development community and other interested parties. At the end of January 2004, all comments will be resolved and incorporated as necessary into a final version of the Standards. The final Standards are expected to take effect early in 2004.

COMPARISON TO EXISTING STANDARDS:

The draft Standards are quite different from the superseded Standards. The organization of the draft Standards is improved and should be easier for engineers to use and understand. There are a number of changes to the content. Listed below are key changes, organized by the new section heading.

IB Definitions:

- All references to open channel conveyance systems (i.e., ditch, creek, or stream) have been replaced with the term “waterway.”

IH Alternate Materials

- The Director is specifically authorized to deny approval of a design that otherwise conforms to these standards if such design does not conform to “Purpose” or “General Considerations.”

II Stormwater Quality

- This section imposes no new requirements, but instead is only for information and guidance if treatment is desired.
- There are no detailed design standards for construction of water quality facilities. The proposed Standards provide guidance for selection of a facility type, but defers to other more thorough publications for detailed design standards.

IIIB General Detention

- Several specific situations authorize the Director to modify (increase or decrease) detention requirements at his discretion.

IIIC Detention Volume Calculations

- Detention volume and orifice calculations reflect the difference between 5-year undeveloped and 50-year post-developed runoff. No longer as much of a cookie-cutter approach, and all tools necessary for the calculation are provided in the proposed Standards. This approach approximates nature better.

IVA General Disposal

- Downstream capacity analysis is generally required downstream to a location where the project site is less than 15 percent of the total basin drainage area.

IVB Outfalls to Waterways

- Outfalls greater than four-inch to an open channel waterway must be designed by an engineer.
- Within the Standards is a figure (from ODOT) for stone placement guidelines.
- Outlets to open channel waterways shall locate invert elevations at normal low water. If construction occurs when water level is higher, the Director may require a performance security for completion at a later time.
- Outfalls to open channel waterways shall be consolidated as much as possible.

VA General Conveyance

- All waterways are classified into one of six categories by drainage area.
- Larger waterways require fish passage and open channels with limited closure.

VB Capacity

- Capacity required for 10-, 25-, or 100-year design storm based on waterway classification.

VC Piped Systems

- A 15-foot-wide access easement is required to each junction/inlet structure outside the public right-of-way.
- Junctions outside the right-of-way are limited to manholes (for ease of raising lids after filling).
- Standard catch basin used in street construction is Type 4.

VD Open Channel

- Preference given to natural bank stabilization, not rip-rap, in open channel waterways.

For more information, please contact the Public Works Department Permit Application Center at 503-588-6211 or 503-588-6292 (TTY).

Robert Reitmajer, PE
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Enclosure:

- 1) Index to Development Bulletins
- 2) Final Draft Stormwater Design Standards