

Chapter 16 – Drainage Ordinance Revision & Drainage Criteria Manual

Summary of Revisions

- Chapter 16 – Drainage & Flood Control has not had a major revision since the early 1980s
- Two Local Consulting Engineers retained for collaboration with City staff on revisions to Chapter 16 and the Drainage Criteria Manual (SRB and J&A)
- Minor revisions include updating definitions and cleaning up general inconsistencies identified in the current ordinance
- Major revisions from the current ordinance to the revised ordinance include:

DETENTION

- Current Ordinance only requires on-site detention for new development if there have been reports of downstream flooding.
- Revised Ordinance would require on-site stormwater detention for all new developments. A waiver of this requirement may be considered if one of the following are met:
 - If the site drains directly to a public street or public storm sewer system. Developer/engineer must demonstrate with calculations that the public street or storm sewer system has adequate capacity to convey the additional storm runoff in accordance with the Drainage Ordinance and the Drainage Criteria Manual. If the site runoff flows onto adjacent property, the waiver will not be approved.
 - If the site drainage discharges directly to a creek or river channel, and the developer/engineer provides calculations showing that the downstream discharge in the creek or river will increase as a result of the on-site detention
- Removed requirement for Fee-in-Lieu of Detention (FILO)
- Current ordinance requires detention for 100-year event only.
- Revised Ordinance will require multi-frequency outlet structure design for the 2-, 5-, 10-, 25-, 50-, and 100-year storm events. Research of other cities shows that the multi-frequency outlet design is standard practice.
- Individual lots such as residential houses will not be required to provide detention.

DRAINAGE CHANNELS

- Current ordinance requires a channel to convey the runoff from a 50-year storm event.
- Revised ordinance will require all open drainage channels in a development to be designed to convey the runoff from the 100-year storm event, or have the land that would be inundated by such an event be contained within an easement or common area.

DRAINAGE CRITERIA MANUAL (DCM)

- All storm sewer design criteria has been removed from the Drainage Ordinance and will be published in the City of Oklahoma City Drainage Criteria Manual (DCM).
- The DCM will be presented as a reference document to the Drainage Ordinance.
- Subsequent revisions to the DCM may be approved administratively by the Public Works Director/City Engineer without additional approval by the City Council. Revisions will be posted on the City website for a minimum of 60 days before becoming effective.

STORM SEWER SYSTEMS

- Current ordinance requires a 10-year storm event design for on-grade storm sewer systems.
- Revised ordinance requires on-Grade Storm Sewer Systems to be designed for the 25-year storm event.

PUBLIC STORM SEWER SYSTEMS vs PRIVATE STORM SEWER SYSTEMS

- If all the drainage or storm water runoff to be intercepted and carried by the storm sewer system is generated on the development site, that storm sewer system shall be a PRIVATE storm sewer maintained by the property owner.
- Private storm sewer systems will not be submitted to Public Works Engineering for review and approval. Private Storm Sewer Systems will not be inspected by Public Works Engineering inspections personnel. All plan reviews and inspections of the Private Storm Sewer Systems will be provided the Development Services plumbing inspectors in accordance with the applicable Plumbing Code.
- Public Storm Sewer Systems shall be provided when an off-site drainage area of greater than 6 acres enters the development site
- Public Storm Sewer Systems shall be provided when an existing storm sewer system, either public or private discharges onto a new development site.
- Plans for public storm sewer systems will be reviewed by Public Works Engineering for approval. Following construction of public storm sewer systems, the new infrastructure must be dedicated to the City, and the City will assume future maintenance of the system.

FLOODPLAIN ACTIVITY PERMIT

- FEMA Elevation Certificates will no longer be required for buildings/structures that lie within 200 feet of a FEMA mapped floodplain.
- Revised ordinance will clarify that FEMA Elevation Certificates are required when a building or structure is within the limits of the FEMA mapped floodplain.