

Item 12.B.1

Section 17-506, Protection of Existing Watersheds and Conveyance Systems



Appendix V – Drainage

17-506. – Protection of existing watersheds and conveyance systems.

Commentary: This section includes a major update to require an additional 10 percent water to be retained onsite post development. Additionally, the design basis for modifications to off-site conveyance systems were revised to the 50-year storm instead of "higher than the 25-year storm." Additional edits for consistency with the drainage requirements in the Subdivision regulations and to update old cross-references.

- A. Drainage for proposed developments and redevelopments shall be designed to maintain the existing flow patterns established prior to proposed improvements at the site. Impacts to existing water surface profiles due to additional runoff shall be mitigated for all new development or redevelopment of existing sites not specifically excluded as follows except for the following:
 - <u>1.</u> Redevelopment—Any proposed improvements to a commercial facility that result in a net increase in changed surface of less than 1,750 square feet, or the replacement of less than 3,500 square feet of existing impervious surface area.
 - Any combination of new and replaced surface area totaling more than 3,500 square feet does not qualify for this exemption.
 - <u>1.3.</u> All redevelopments are subject to items in section 17-507.
- B. <u>For all new residential and commercial developments</u>, <u>S</u>storm water detention systems <u>that</u><u>shall be</u> <u>required to limit detain ten percent more water onsite using</u> the post_-developed peak flow rate <u>to-than</u> <u>currently detained by</u> the existing condition peak flow rate.<u>-shall be required for all residential and</u> <u>commercial developments required to mitigate impacts to existing water surface profiles</u>.
- C. The natural ridgelines and drainage boundaries for a site shall be <u>established designated</u> prior to any development and the developed condition shall maintain the drainage areas draining to each natural outfall as closely as possible. Exceptions <u>will may</u> be considered <u>with approval by the Parish Engineer</u> in instances where modifications are necessary to consolidate engineered storm system elements.
- D. Where an existing storm water conveyance system traverses through or near a proposed development and accommodates off-site drainage areas, any alterations to the existing system shall be made such that no increase in the existing water surface profile will be caused by the development.
 - An existing condition water surface profile shall be modeled based upon the natural channel, culverts, bridges, and other natural features through the property to be developed. Approved methods of analysis and required supporting documentation for existing condition modeling are outlined in the Ascension Parish Drainage Impact Study Procedure (Appendix VI-IV, Subdivision Code-Regulations, Attachment B)Section 8) document.
 - A developed condition water surface profile shall be modeled based upon the proposed condition and shall account for all existing features to remain, the new channel geometry, proposed culverts or storm drain systems, and any fill placed within the over bank flow section in the existing channel sections. Approved methods of analysis and required supporting documentation for proposed condition modeling are outlined in the Ascension Parish Drainage Impact Study Procedure (Appendix <u>VI-IV</u>, Subdivision <u>Code-Regulations</u>, <u>Attachment Bsection 8</u>) document.
 - 3. The water surface profile elevation at the upstream and downstream property lines of the development during the peak runoff period for the sub-basin shall not be greater than the existing condition water surface profile elevation at those points. The <u>Planning-Director of</u> <u>Planning and Development in consultation with the Parish Engineer</u> may allow for minimal increases in profile in cases where the development may be restricted from making improvements to lower the water surface profile.



- 4. For major streams as defined by the Department of Public Works or the appropriate drainage district, the Office of Planning and Development shall require the analysis to be based upon a higher storm frequency than the 2550-year event, particularly when the difference between the 25-year and 100-year design water surface is potentially greater than 18".
- E. No individual, partnership, or corporation shall deepen, widen, fill, reroute, or change the location of any <u>An</u> existing ditch, stream, drain, or drainage canal used for public drainage of off-site upstream or downstream areas, within an existing public drainage servitude, shall not be modified or relocated in any way without first obtaining a permit<u>written permission</u> from the Ascension Parish <u>Office of Planning and DevelopmentDepartment of Public Works</u>. The Office of Planning and <u>Development will only issue said</u> permit after written authorization from the Department of Public Works or the appropriate Drainage <u>District.</u> This provision does not apply to routine maintenance of existing drainage systems.

(Ord.# DR07-01, 9/6/07; DR09-01, 716/09; DC09-09, 12/17/09; SR13-14, 1/09/14; DR19-05, 9/5/19, <<insert ordinance #, date>>)