CITY OF NORTH AUGUSTA

STORM DRAINAGE POLICY

North Augusta, like many urban governments nationwide, has recognized the importance of effective stormwater management. The inadequate procedures of the past have resulted in far too many drainage problems. As urbanization has accelerated in recent years, this problem has only been exacerbated.

The City's current policy is based upon common law legal principals, which state, in effect, that the flow of water across adjoining property cannot be materially changed in any way. This means that the flow of water can be neither increased not decreased nor re-channelized as a result of improvements made to the land. The effect of this policy, therefore, is not to add an additional burden upon developers, but to ensure that developers handle their existing common law responsibilities.

The following criteria are the basis for the City's Storm Drainage Policy:

1. Stormwater detention, consisting of a combination of storage and controlled release of stormwater, shall be required for all development and construction projects that will increase the peak rate of runoff by more than one cubic foot per second for a 25-year storm.

2. Detention facilities shall be designed to limit the peak release rate to less than or equal to the peak stormwater runoff rate from the area in its natural, undeveloped state for each of the 2 year, 10 year, and 25 year frequency storms. All outlet control structures shall have "staged" overflows to accomplish this.

3. Where the detention facility discharges into an existing piped drainage system or natural drainage way which is inadequate to handle the 25 year discharge, the City may require the detention facility to limit the discharge rate to the 10 year or 2 year pre-development rate. As an alternative, the developer may, with City approval, install improvements to increase the capacity of the downstream drainage system to handle the 25-year storm.

4. Runoff from the site to be developed shall not be discharged in such a manner as to cause erosion or damage to downstream property. In addition, the location of the discharge shall not change materially from the pre-development location without City and adjoining property owner approval.

5. Generally accepted flood routing techniques shall be used for designing all detention facilities. The bowstring method shall not be used for drainage areas greater than one acre.

6. The same methodology shall be used for computing the pre-development rates of runoff.

7. The detention facility shall include an emergency spillway designed to accommodate the 100-year storm for the entire tributary drainage area. This spillway shall be designed so as not to erode or cause erosion during a 100-year storm.

8. The Rational Method of hydrology shall not be used for drainage areas more than 200 acres.

9. In general, "passive" designs for storm water detention is the preferred alternative for small sites in lieu of ponds. This may include the use of roof and parking lot detention. In no case, however, shall the depth of water in a parking lot exceed three feet during a 25-year storm.

10. Where detention ponds are utilized, dry ponds are the preferred alternative. An exception to this rule, however, is when the pond is large enough to be suitable for aesthetic or recreational uses. The clearing and grubbing of dry ponds is not required in most cases.

11. Where possible, developers are encouraged to "pool their resources" and develop detention facilities that will serve multiple developments.

12. All detention facilities shall be designed to be aesthetically pleasing, and shall be adequately landscaped to prevent erosion.

13. All dams are to be designed utilizing sound engineering judgment to prevent the failure of the dam under a 100-year frequency post-development storm. This design shall include cutoff trenches and walls, anti-seep collars on pipes, adequate freeboard, etc.

14. A five-foot permanent fence must be installed around all detention ponds over three feet in depth or with slopes exceeding 3:1.

15. All embankments shall be compacted to 90% modified proctor. Test results from an independent lab are required.

16. All storm water facilities shall be designed by a Professional Engineer registered in the state of South Carolina. After the facility is installed, the engineer shall certify that it was installed per the plans and specifications.

17. The continued maintenance of all stormwater facilities is the responsibility of the property owner. All facilities must be maintained at all times in order to ensure the safety of the structure. This maintenance shall include the removal of sedimentation and debris that will reduce storage volume or could plug overflows.

The City will make random inspections of all storm drainage facilities to insure compliance.