

ORDINANCE 2006-_____

**AN ORDINANCE TO ADOPT ARTICLE XI.V, STORM WATER RUNOFF
MANAGEMENT REGULATIONS FOR LAND DEVELOPMENTS, AND FOR
RELATED MATTERS**

BE IT ORDAINED by the Board of Mayor and Aldermen of the City of Vicksburg, Mississippi as follows:

SECTION ONE: The following sections are hereby added to the Code of Ordinances of the City of Vicksburg, Mississippi as Article XI.V to be the Storm Water Runoff Management Ordinance:

“ Storm Water Runoff Management

Sec. 6-287. Purpose:

The purpose of this ordinance is to diminish threats to public health and safety caused by the runoff of excessive storm water; reduce economic losses to individuals and the community at large; and protect, conserve and promote the orderly development of land and water resources. The provisions of this ordinance further regulate, guide and control:

- A. The subdivision layout, redevelopment and improvement of lands located within the City of Vicksburg as such development pertains to storm water run-off.
- B. The construction of buildings and drainage of the sites on which structures are located, including parking and other paved areas.
- C. The design, construction and maintenance of storm water drainage facilities and systems.

Sec. 6-288. General Criteria and Standards:

A. Applicability:

This ordinance shall be applicable within the City of Vicksburg’s jurisdictional area for any residential or non-residential development that exceeds one acre in area. Any area outside the jurisdictional area that receives utilities from the City shall also comply with this ordinance. Compliance with this ordinance shall be required prior to approval of a site plan or preliminary plat for any development as set forth in the Subdivision Regulations and/or Zoning Ordinance.

B. Limitation on Storm Water Runoff:

No development, to which this ordinance is applicable, shall be undertaken that increases the rate of surface runoff to downstream property owners or drainage systems.

C. Detention of Excess Storm Water Runoff:

The increased storm water runoff resulting from the proposed development shall be detained by the provision of retention or detention facilities; sometimes referred to as “Storm Water Retarding Structures or Facilities.”

D. Storage Capacity:

Retention or detention facilities shall be designed with sufficient capacity to accommodate all runoff caused by the development in excess of that runoff which would occur from the site if left in its natural, undeveloped condition.

E. Channel Stability:

The storm water runoff from the proposed development shall not increase channel instability downstream.

F. Retention/Detention Facilities in Flood Plains:

If detention storage is provided within a flood plain of a major stream, no storage volume for the facility may be provided below the high water elevations established for that flood plain.

G. Storm Water Bypass:

Drainage systems shall have adequate capacity to bypass through the development, the natural flow from all upstream areas.

H. Drainage Way Maintenance:

It shall be unlawful to dump trash, debris, landscape waste and other deleterious materials in any and all drainage ways in the City.

Sec. 6-289 Stormwater Report.

The following information and data prepared and certified by a professional engineer, registered in the State of Mississippi, shall be furnished with the plans of each proposed residential, commercial and industrial development.

- A. Topographic map(s) showing all on site and off site contributing drainage areas.

- B. Basis for determining runoff coefficients and time of concentration.
- C. Inflow hydrographs with peak flows for the 2, 10, 25 and 100-year storm frequencies.
- D. Stage/storage/discharge table for all detention ponds.
- E. Details and calculations for all outlet control structures.
- F. Hydrological routing of the 2, 10, 25, and 100-year storm through the proposed system(s).
- G. Summary.

H. The Stormwater report must also include an analysis of the off site properties that in anticipation of future development in addition to addressing existing conditions. Where storm drainage facilities, particularly pipe culverts, serve as basins that include areas likely to develop in the future, runoff calculations must assume higher values of runoff coefficients based on estimated increased impervious areas. All maps and other exhibits shall be shown at a satisfactory scale and sufficient in quantity and scope to define the boundaries of the site relative to any applicable watercourses, drainage divides, drainage structures and other pertinent features. The site plan, submitted in conjunction with Stormwater Report, shall depict all streams, lakes, wetlands and other bodies of water as well as any boundaries of the 100-year flood plain.

Methods used for computing runoff and generating hydrographs must be by one of the following methods:

1. Rational Method for drainage areas up to 100 acres.
2. Soil Conservation Service (SCS) Method (TR-55) for small and medium size water sheds containing up to 10,000 acres.
3. Other methods may be approved upon prior approval of the Director of Building & Inspections

Sec. 6-290. Retention/ Detention.

A. Whenever the Stormwater Report indicates that adverse stormwater runoff and related impact is expected to result from the development of a property, that project shall be required to provide a stormwater detention facility or facilities so that peak flows from the developed site do not exceed those associated with the pre-developed site. The detention facility shall be designed to accommodate the following:

1. 25-year post development event with the discharge structure designed to release the 10-year pre-development flow. Detention and retention ponds shall be designed with adequate freeboard to protect against overtopping of the dam or levee from the 100-year storm.
- B. A variety of methods of achieving stormwater management goals are acceptable in providing detention facilities. The type of facility provided shall be based on the following

criteria:

1. The type of development for which the detention facility is intended to protect.
2. Volume of stormwater to be stored.
3. Origin and magnitude of the flows to be managed.
4. Topographic opportunities and limitations.
5. Safety considerations.
6. Likelihood of facility operation interfering with access to public or private facilities.
7. Proximity of facility to property lines, utilities, buffers, etc.
8. Similar site-specific constraints as necessary.
9. The maximum planned depth of storm water stored shall not exceed five feet unless natural ground conditions lend themselves to greater depths.
10. The approach slopes of the basin shall conform as closely as possible to natural land contours. Regrading is preferable if necessary to keep the slopes under ten percent. Erosion control measures shall be provided as well as devices or measures to insure public safety.
11. Outlet control structures shall be designated as simply as possible and shall operate automatically. They will be designed to limit discharges into existing or planned downstream channels or conduits so as not to exceed predetermined safe capacities and not in excess of flows which would have occurred with the land in its natural, undeveloped condition. If necessary, velocity dissipation measures shall be employed at the outlet to ensure that the discharge does not increase downstream erosion.
12. Emergency overflow facilities shall be provided unless positive measures are installed to control the inflow so as not to exceed the safe capacity of the basin.
13. Detention facilities shall where possible, use natural topography and natural vegetation. In lieu thereof, these facilities shall have planted trees and vegetation such as shrubs and permanent ground cover on their borders.
14. Detention structures shall be enclosed by a six foot fence (plastic coated chain link or other type of fence that allows visibility) where the depth of the water would reach three feet. Each fenced structure shall be effectively and attractively screened with trees and plant material.

Sec. 6-291.Maintenance of Facilities.

A. The developer shall be responsible for the maintenance of all improvements until such time as 80 percent of the lots or project have been improved with buildings and occupancy permits issued. However, the developer shall not transfer these improvements for the purpose of maintenance until he has complied with the above and until he has received final approval, final inspection, and a Letter of Compliance from the Director of Building & Inspections.

B. All improvements, including landscaping, shall be maintained in perpetuity and cannot be developed for any other use which would limit or cause to limit the use of

the improvements. The improvements shall be owned and/or maintained by the owner or property owner's association of the development and each property owner shall own a proportionate share of the improvements and shall bear his proportionate responsibility for the continued maintenance in accordance with the above.

Each property owner shall, within the contents of his deed, be liable for the combined maintenance of the improvements. A special note to this effect shall appear on any final plat of subdivision or any plat of condominium and their declarations.

C. The property owner's association shall be formed by the developer in perpetuity for the maintenance of the improvements. Membership shall be mandatory by all property owners.

D. In subdivisions consisting of five single family residential lots or fewer, the provision of a property owner's association may be waived, provided that other parts of this Section have been met.

E. The City of Vicksburg will maintain drainage structures that are located in dedicated public rights-of-ways and are necessary for draining municipal streets.

F. When problems arise due to inadequate maintenance, the Building & Inspection Department may inspect the improvements and notify the owner in writing of the required corrections.

Sec.6-292. Dedication of Facilities.

Whenever drainage facilities are planned to service several projects or a specific area deemed necessary by the City, the Board of Mayor and Aldermen, by resolution finding that said drainage facility is necessary for the draining of municipal streets, may allow the drainage facility to be dedicated to the City.

Sec.6-293. Inspection of Facilities.

The Building & Inspection Department shall inspect all drainage facilities while under construction. When facilities are not constructed according to approved plans, the City has the explicit authority to compel compliance, including a stop work order, and have any situations corrected which are not according to the approved plans. All drainage facilities located on private property, whether dedicated to the City or not, shall be accessible at all times for inspection by the Building & Inspection Department or other responsible public official.

Sec.6-294. Regional Detention.

The City may construct a regional retention/detention facility. The requirements for on site retention/detention facilities may be waived by the City if it is determined that a development project is too small, or if engineering, aesthetic or economic factors

make a combined or regional facility more practical for construction. In this case, the City shall require a fee and/or dedication of facilities from the developer which the City shall use to construct and/or maintain the regional facility. This fee and/or dedication shall be based on the proportionate share for the development in its completely developed state of the present cost of constructing the regional facility.

Sec. 6-295. Miscellaneous.

A. Penalties for Violation

Any person found to be in violation of any of the terms and provisions of this Ordinance shall be guilty of a misdemeanor and subject to a fine not to exceed \$ 1,000.00 or imprisonment for no more than ninety (90) days or both such fine and imprisonment. A continuance of a violation without reasonable effort on the part of the defendant to correct same shall be and constitute a new and separate offense each day.

B. Conflict

All ordinances heretofore adopted on the subject of this Ordinance which are in conflict herewith are hereby repealed and the applicable provisions of this Ordinance are substituted in their place.

C. Variances

The Board of Mayor and Aldermen shall have the power to authorize variances from the provisions or requirements of this Ordinance. No variance from the strict application of any provision shall be granted unless it is found that:

1. Literal interpretation of the provisions of this Ordinance would deprive the owner of reasonable use of their land; and
2. Granting the variance would be in harmony with the general purpose and intent of this Ordinance and will not be injurious to the neighborhood or otherwise detrimental to the public welfare.

D. Severability

If any provision of this Ordinance is determined by a court of competent jurisdiction to be invalid or otherwise unenforceable, such findings shall not effect the other provisions hereof which shall remain in full force and effect.”

SO ORDAINED this the _____ day of December, 2006.

**The Mayor and Aldermen
of the City of Vicksburg, MS**

Laurence E. Leyens, Mayor

Sidney H. Beauman, Jr., Alderman

Michael A. Mayfield, Sr., Alderman