

ARTICLE X

ENVIRONMENTAL AND SPECIAL PURPOSE REGULATIONS

10-1 WATERSHED PROTECTION OVERLAY DISTRICT REGULATIONS

The watershed protection overlay districts, as described in Section 9-1.6(C), are designed to protect designated public water supply watershed from activities which could degrade water quality. These separate watershed protection overlay districts have been established: WCA, WSIV Critical Area Overlay District and WPA, WSIV Protected Area Overlay District. Both of these watershed overlay districts are within a public water supply watershed that has been classified by the State of North Carolina as a WS-IV watershed. The purpose of this Section is to implement the provisions of the Water Supply Watershed Protection Act (NCGS 143-214.5) which requires the City of Shelby to adopt minimum land use regulations to protect water quality of public surface water supplies within the city's zoning jurisdiction.

10-1.1 General Requirements

- (A) The regulations delineated in Section 10-1 are intended to comply with the requirements of NCGS 143-214.5. For property located within a WCA or WPA Overlay District, the provisions of Section 10-1 shall apply only to new development activities which require an erosion and sedimentation control plan in accordance with the rules established by the North Carolina Sedimentation Control Commission.
- (B) No structure or land use shall be allowed within the watershed protection overlay districts which poses a threat to water quality and the public health, safety and welfare. Such conditions may arise from inadequate on-site sewage systems which utilize ground absorption; inadequate sedimentation and erosion control measures; the improper storage or disposal of junk, trash or other refuse within a buffer area; the absence or improper implementation of a spill containment plan for toxic and hazardous materials; the improper management of stormwater runoff; or any other situation found to pose a threat to water quality.

10-1.2 WCA Supplemental Standards

(A) Applicability

The provisions of Section 10-1.2 shall apply only to new development activities which require an erosion and sedimentation control plan in accordance with the rules established by the North Carolina Sedimentation Control Commission.

(B) Density

Single-family residential uses shall not exceed a maximum density of two dwelling units per acre, as defined on a project-by-project basis. No single-family residential lot shall be less than 20,000 square feet in area, excluding

roadway right-of-way, unless located within an approved cluster development in accordance with Section 10-1.5.

However, where public sewer service is not available, a minimum of 40,000 square feet in lot area shall be required for each single-family residential lot. All other types of residential development shall comply with the built-upon area requirements of subsection (C).

(C) Built-Upon Area

All residential development, other than single-family development, and all nonresidential development shall be allowed a 24% built-upon area. For purposes of calculating built-upon area, total project area shall include acreage in the tract on which the project is to be developed.

(D) Permitted Uses

Agricultural uses (subject to the provisions of the Food Security Act of 1985 and the Food, Agricultural, Conservation and Trade Act of 1990) and silvicultural uses (subject to the provisions of the Forest Practices Guidelines Related to Water Quality, 15 NCAC 11.6101-.0209) are permitted with the WCA. Residential and nonresidential uses allowed in the underlying general zoning district or another applicable overlay district are permitted within the WCA except for the following:

- (1) Sites for land application of residuals or petroleum contaminated soils;
- (2) New landfills;

10-1.3 WPA Supplemental Standards

(A) Applicability

The provisions of Section 10-1.3 shall apply only to new development activities which require an erosion and sedimentation control plan in accordance with the rules established by the North Carolina Sedimentation Control Commission.

(B) Density

Single-family residential uses shall not exceed a maximum density of two dwelling units per acre or three dwelling units per acre for projects without a curb and gutter street system, as defined on a project-by-project basis. No single-family residential lot shall be less than 20,000 square feet or 14,500 square feet for projects without a curb and gutter street system, unless located within an approved cluster development in accordance with Section 10-1.5.

However, where public sewer service is not available, a minimum of 40,000 square feet in lot area shall be required for each single-family residential lot.

All other types of residential development shall comply with the built-upon area requirements of subsection (C).

(C) Built-Upon Area

All residential development, other than single-family development, and all nonresidential development shall be allowed at a maximum 24% built-upon area or 36% built-upon area for projects without a curb and gutter street system. For purposes of calculating built-upon area, total project area shall include acreage in the tract on which the project is to be developed.

(D) Permitted Uses

Agricultural uses (subject to the provisions of the Food Security Act of 1985 and the Food, Agricultural, Conservation and Trade Act of 1990) and silvicultural uses (subject to the provisions of the Forest Practices Guidelines Related to Water Quality, 15 NCAC 11.6101-.0209) are permitted with the WPA. Residential and nonresidential uses allowed in the underlying general zoning district or another applicable overlay district are permitted within the WPA.

10-1.4 Best Management Practices

(A) General

The construction of new streets and bridges and nonresidential development shall minimize built-upon area, divert stormwater away from surface water supply waters as much as possible, and employ best management practices to minimize water quality impacts. To the extent practicable, the construction of new streets in the WCA Overlay District should be avoided. The NC Department of Transportation shall use best management practices as outlined in its document entitled, *Best Management Practices for the Protection of Surface Waters*.

(B) Agricultural Uses

Agricultural uses are subject to the provisions of the Food Security Act of 1985 and the Food, Agriculture, Conservation and Trade Act of 1990 (Public Law 101-624).

(C) Forestry Operations

Forestry operations, if allowed in the underlying general zoning district, are subject to the provisions of the Forest Practice Guidelines Related to Water Quality (15 ANCAC 11.0101-.0209).

10-1.5 Cluster Development

(A) Cluster Development

Cluster development is allowed in all watershed protection overlay districts provided that the following conditions are met:

- (1) Minimum lot sizes may be reduced for single-family cluster development projects in accordance with the provisions of Section 9-4.1(B); however, the total number of lots shall not exceed the maximum number of lots allowed for single-family detached developments in Sections 10-1.2(B) and 10-1.3(B). Density or built-upon area requirements for the project shall not exceed that allowed in Sections 10-1.2(C) and 10-1.3(C).
- (2) All built-upon area shall be designed and located to minimize stormwater runoff impact to the receiving waters and minimize concentrated stormwater flow.
- (3) The remainder of the tract not built upon shall remain in a vegetated or natural state. The title to the reserved open space area shall be conveyed to an incorporated homeowners or property owners association for management; to a local government for preservation as a park or open space; or to a conservation organization for preservation in a permanent easement. Where a property association is not incorporated, a maintenance agreement shall be filed with the property deeds.

10-1.6 Buffer Areas

- (A) A minimum fifty-foot vegetative buffer for new development activities is required along all perennial waters indicated on the most recent versions of USGS 1:24,000 (7.5 minute) scale topographic maps or as determined by local government studies. A minimum one hundred foot vegetative buffer is required for all new development activities that utilize the high density development option authorized by Section 10-1.11. Desirable artificial streambank or shoreline stabilization is permitted.
- (B) No new development is allowed in the buffer except for water-dependent structures, other structures such as flag poles, signs and security lights which result in only diminutive increases in impervious areas, and public projects such as street crossings and greenways where no practicable alternative exists. These activities should minimize built-upon surface area, direct runoff away from the surface waters and maximize the utilization of stormwater Best Management Practices. Desirable artificial streambank or shoreline stabilization is permitted.
- (C) Whenever the buffer requirements of other portions of this Ordinance are in conflict with the provisions of this Section, the more stringent requirement shall apply.

10-1.7 Existing Development

- (A) Existing development, as defined in Section 2-4, is not subject to the provisions of the watershed overlay district requirements. Redevelopment of and expansion to existing development is allowed as provided for herein.
- (B) Redevelopment of existing development is allowed if the rebuilding activity does not result in a net increase in built-upon area or if the redevelopment activity includes equal or greater stormwater control than the previous development. However, existing single-family residential development may be redeveloped without any restrictions.
- (C) Expansions to uses and structures classified as existing development must meet the requirements of this Section provided, however, that the built-upon area of the existing development is not required to be included in the built-upon area calculations. However, existing single-family residential development may be expanded without any restrictions.

10-1.8 Exceptions

If a nonconforming lot of record is not contiguous to any other lot owned by the same party, then that lot of record shall not be subject to the development restrictions of this Ordinance if it is developed for single-family residential purposes. Any lot or parcel created as part of a family subdivision after the effective date of these rules shall be exempt from the provisions of Section 10-1 if it is developed for one single-family detached residence and if it is exempt from the provisions of this Ordinance per Section 10-1.1.

10-1.9 Variances

- (A) **Minor Variances.** Minor variances, as defined in Section 2-4, to the provisions of Section 10-1 may be approved by the Board of Adjustment pursuant to the variance procedures outlined for the Board of Adjustment in Article VII, specifically Sections 7-2.1, Section 7-2.3, and Sections 7-4 through 7-12. The Zoning Administrator shall keep a record of all such minor variances and shall submit, for each calendar year, the record to the Water Quality Section, of the NC Division of Environmental Management on or before January 1st of the following year. The record shall include a description of each project receiving a variance and the reasons for granting the variance.
- (B) **Major Variances.** Major variances, as defined in Section 2-4, shall be reviewed by the Board of Adjustment pursuant to the procedures outlined in this Article and a recommendation prepared for submission to the NC Environmental Management Commission (EMC). The record of a major variance review shall include the following items:
 - (1) The variance application;
 - (2) The hearing notices;

- (3) The evidence presented;
- (4) Motions, offers of proof, objections to evidence, and rulings on them;
- (5) Proposed findings and exceptions;
- (6) The Board of Adjustment's recommendation, including all conditions proposed to be added to the permit.

Upon receiving the record of a major variance review from the Board of Adjustment, the EMC shall (i) review the variance request, (ii) prepare a final decision on the request, and (iii) forward its decision to the Board of Adjustment. If the EMC approves the variance as proposed, the Board of Adjustment shall prepare a final decision granting the proposed variance. If the EMC approves the variance with conditions and stipulations, the Board of Adjustment shall prepare a final decision, including such conditions and stipulations, granting the proposed variance. If the EMC denies the variance request, the Board of Adjustment shall prepare a final decision denying the variance.

10-1.10 10%/70% Development Option

- (A) Within the WPA Overlay District, the City Council may, on 10% of the total land area of the WPA Overlay District, authorize new or expansion to existing nonresidential development to be constructed with a maximum 70% built-upon area. Such additional nonresidential intensity allocation authorized by this Section must comply with all other applicable provisions of Section 10-1.
- (B) Development projects authorized under this Section shall, to the maximum extent practicable, minimize built-upon surface area, direct stormwater away from surface waters and incorporate Best Management Practices to minimize water quality impacts.
- (C) The Community Development Director shall keep records of the City's use of the 10%/70% option authorized by this Section. Allocation of the watershed acreage to be developed under this option shall be determined on a first-come first-serve basis unless a specific allocation plan is adopted by the City Council. Records for each watershed shall include the total acres of the WPA watershed, total acres eligible to be developed under this option, total acres approved for this development option, and individual records for each project with the following information: location, number of developed acres, type of land use, and stormwater management plan, if applicable.

10-1.11 Phase II Stormwater

(A) General Provisions

(1) Title

This ordinance shall be officially known as "The City of Shelby Phase II Stormwater Ordinance." It is referred to herein as "this ordinance."

(2) Authority

The City Council of the City of Shelby is authorized to adopt this ordinance pursuant to North Carolina law, including but not limited to Article 14, Section 5 of the Constitution of North Carolina; the Charter of the City of Shelby; North Carolina General Statutes 143-214.7 and rules promulgated by the Environmental Management Commission thereunder; Session Law 2004-163; Chapter 160A, §§ 174, 185 and; Chapter 160A, Article 19 (Planning and Regulation of Development).

(3) Findings

It is hereby determined that:

Development and redevelopment alter the hydrologic response of local watersheds and increase stormwater runoff rates and volumes, flooding, soil erosion, stream channel erosion, nonpoint and point source pollution, and sediment transport and deposition, as well as reducing groundwater recharge;

These changes in stormwater runoff contribute to increased quantities of water-borne pollutants and alterations in hydrology that are harmful to public health and safety as well as to the natural environment; and

These effects can be managed and minimized by applying proper design and well-planned controls to manage stormwater runoff from *development* sites.

Further, the Federal Water Pollution Control Act of 1972 ("Clean Water Act") and federal Phase II Stormwater Rules promulgated under it, as well as rules of the North Carolina Environmental Management Commission promulgated in response to federal Phase II requirements, compel certain urbanized areas, including this jurisdiction, to adopt minimum stormwater controls such as those included in this ordinance.

Therefore, the City Council of the City of Shelby establishes this set of water quality and quantity regulations to meet the requirements of state and federal law regarding control of stormwater runoff and discharge.

(4) Purpose

(a) General

The purpose of this ordinance is to protect, maintain and enhance the public health, safety, environment and general welfare by establishing minimum requirements and procedures to control the adverse effects of increased *post-development* stormwater runoff and nonpoint and point source pollution associated with new development and redevelopment as well as illicit discharges into municipal stormwater systems. It has been determined that proper management of construction-related and post development stormwater runoff will minimize damage to public and private property and infrastructure; safeguard the public health, safety, and general welfare; and protect water and aquatic resources.

(b) Specific

- (i) Establishing decision-making processes for *development* that protect the integrity of watersheds and preserve the health of water resources;
- (ii) Requiring that new *development* and *redevelopment* maintain the *pre-development* hydrologic response in their *post-development* state as nearly as practicable for the applicable design storm to reduce flooding, streambank erosion, nonpoint and point source pollution and increases in stream temperature, and to maintain the integrity of stream channels and aquatic habitats;
- (iii) Establishing minimum *post-development* stormwater management standards and design criteria for the regulation and control of stormwater runoff quantity and quality;
- (iv) Establishing design and review criteria for the construction, function, and use of *structural stormwater BMPs* that may be used to meet the minimum *post-development* stormwater management standards;
- (v) Encouraging the use of better management and site design practices, such as the use of vegetated conveyances for stormwater and the preservation of greenspace, riparian buffers and other conservation areas to the maximum extent practicable;

- (vi) Establishing provisions for the long-term responsibility for and maintenance of *structural and nonstructural stormwater BMPs* to ensure that they continue to function as designed, are maintained appropriately, and pose no threat to public safety;
- (vii) Establishing administrative procedures for the submission, review, approval and disapproval of *stormwater management plans*, for the inspection of approved projects, and to assure appropriate long-term maintenance.
- (viii) Coordinating site design plans that include open space and natural areas with the City of Shelby open space and natural area protection plans, policies or ordinances;
- (ix) Controlling illicit discharges into the municipal separate stormwater system.

(5) Applicability and Jurisdiction

(a) General

Beginning with and subsequent to its effective date, this ordinance shall be applicable to all development and redevelopment, including, but not limited to, site plan applications, subdivision applications, and grading or land disturbing applications, unless exempt pursuant to Subsection (b) of this Section, Exemptions.

(b) Exemptions

Development that cumulatively disturbs less than one acre and is not part of a *larger common plan of development or sale* is exempt from the provisions of this ordinance.

Development that cumulatively disturbs less than one acre and is not part of a *larger common plan of development or sale* is exempt from the provisions of this ordinance.

Development and *redevelopment* that disturb less than one acre are not exempt if such activities are part of a *larger common plan of development or sale*, even though multiple, separate or distinct activities take place at different times on different schedules.

Activities that are exempt from permit requirements of Section 404 of the federal Clean Water Act as specified in 40 CFR 232 (primarily, ongoing farming and forestry activities) are exempt from the provisions of this ordinance.

- (c) No Development or Redevelopment Until Compliance and Permit

No *development* or *redevelopment* shall occur except in compliance with the provisions of this ordinance or unless exempted. No *development* for which a permit is required pursuant to this ordinance shall occur except in compliance with the provisions, conditions, and limitations of the permit.

- (d) Map

The provisions of this ordinance shall apply within the areas designated on the map titled "Phase II Stormwater Map of Shelby, North Carolina" ("the Stormwater Map"), which is adopted simultaneously herewith. The Stormwater Map and all explanatory matter contained thereon accompanies and is hereby made a part of this ordinance.

The Stormwater Map shall be kept on file by the Stormwater Administrator and shall be updated to take into account changes in the land area covered by this ordinance and the geographic location of all *structural BMPs* permitted under this ordinance. In the event of a dispute, the applicability of this ordinance to a particular area of land or BMPs shall be determined by reference to the North Carolina Statutes, the North Carolina Administrative Code, and local zoning and jurisdictional boundary ordinances.

(6) Interpretation

- (a) Meaning and Intent

All provisions, terms, phrases, and expressions contained in this ordinance shall be construed according to the general and specific purposes set forth in Section 104, Purpose. If a different or more specific meaning is given for a term defined elsewhere in the Code of Ordinances of the City of Shelby, North Carolina, the meaning and application of the term in this ordinance shall control for purposes of application of this ordinance.

- (b) Text Controls in Event of Conflict

In the event of a conflict or inconsistency between the text of this ordinance and any heading, caption, figure, illustration, table, or map, the text shall control.

- (c) Authority for Interpretation

The Stormwater Administrator has authority to determine the interpretation of this ordinance. Any person may request an interpretation by submitting a written request to the Stormwater

Administrator, who shall respond in writing within 30 days. The Stormwater Administrator shall keep on file a record of all written interpretations of this ordinance.

(d) References to Statutes, Regulations, and Documents

Whenever reference is made to a resolution, ordinance, statute, regulation, manual (including the Design Manual, or document, it shall be construed as a reference to the most recent edition of such that has been finalized and published with due provision for notice and comment, unless otherwise specifically stated.

(e) Computation of Time

The time in which an act is to be done shall be computed by excluding the first day and including the last day. If a deadline or required date of action falls on a Saturday, Sunday, or holiday observed by the City of Shelby, the deadline or required date of action shall be the next day that is not a Saturday, Sunday or holiday observed by the City of Shelby. References to days are calendar days unless otherwise stated.

(f) Delegation of Authority

Any act authorized by this Ordinance to be carried out by the Stormwater Administrator of City of Shelby may be carried out by his or her designee.

(g) Usage

(i) Mandatory and Discretionary Terms

The words "shall," "must," and "will" are mandatory in nature, establishing an obligation or duty to comply with the particular provision. The words "may" and "should" are permissive in nature.

(ii) Conjunctions

Unless the context clearly indicates the contrary, conjunctions shall be interpreted as follows: The word "and" indicates that all connected items, conditions, provisions and events apply. The word "or" indicates that one or more of the connected items, conditions, provisions or events apply.

(h) Tense, Plurals, and Gender

Words used in the present tense include the future tense. Words used in the singular number include the plural number and the plural number includes the singular number, unless the context of the particular usage clearly indicates otherwise. Words used in the masculine gender include the feminine gender, and vice versa.

(i) Measurement and Computation

Lot area refers to the amount of horizontal land area contained inside the lot lines of a lot or site.

(7) Design Manual

(a) Reference to Design Manual

The Stormwater Administrator shall use the policy, criteria, and information, including technical specifications and standards, in the Design Manual, as defined in Section 6, as the basis for decisions about stormwater permits and about the design, implementation and performance of *structural and non-structural stormwater BMPs*.

The Design Manual includes a list of acceptable stormwater treatment practices, including specific design criteria for each stormwater practice. Stormwater treatment practices that are designed, constructed, and maintained in accordance with these design and sizing criteria will be presumed to meet the minimum water quality performance standards of the Phase II laws.

(b) Relationship of Design Manual to Other Laws and Regulations

If the specifications or guidelines of the *Design Manual* are more restrictive or apply a higher standard than other laws or regulations, that fact shall not prevent application of the specifications or guidelines in the *Design Manual*.

(c) Changes to Standards and Specifications

If the standards, specifications, guidelines, policies, criteria, or other information in the *Design Manual* are amended subsequent to the submittal of an application for approval pursuant to this ordinance but prior to approval, the new information shall control and shall be utilized in reviewing the application and in implementing this ordinance with regard to the application.

(8) Relationship to Other Laws, Regulations, and Private Agreements

(a) Conflict of Laws

This ordinance is not intended to modify or repeal any other ordinance, rule, regulation or other provision of law. The requirements of this ordinance are in addition to the requirements of any other ordinance, rule, regulation or other provision of law. Where any provision of this ordinance imposes restrictions different from those imposed by any other ordinance, rule, regulation or other provision of law, whichever provision is more restrictive or imposes higher protective standards for human or environmental health, safety, and welfare shall control.

(b) Private Agreements

This ordinance is not intended to revoke or repeal any easement, covenant, or other private agreement. However, where the regulations of this ordinance are more restrictive or impose higher standards or requirements than such an easement, covenant, or other private agreement, the requirements of this ordinance shall govern. Nothing in this ordinance shall modify or repeal any private covenant or deed restriction, but such covenant or restriction shall not legitimize any failure to comply with this ordinance. In no case shall City of Shelby be obligated to enforce the provisions of any easements, covenants, or agreements between private parties.

(9) Severability

If the provisions of any section, subsection, paragraph, subdivision or clause of this ordinance shall be adjudged invalid by a court of competent jurisdiction, such judgment shall not affect or invalidate the remainder of any section, subsection, paragraph, subdivision or clause of this ordinance.

(10) Effective Date and Transitional Provisions

(c) Effective Date

This Ordinance shall take effect on November 18, 2013.

(d) Final Approvals, Complete Applications

All *development* and *redevelopment* projects for which complete and full applications were submitted and approved by the City of Shelby prior to the effective date of this ordinance and which remain valid, unexpired, unrevoked and not otherwise terminated at the time of *development* or *redevelopment* shall be exempt from complying with all provisions of this ordinance dealing with the control and/or

management of post-construction runoff, but shall be required to comply with all other applicable provisions including but not limited to illicit discharge provisions.

A phased development plan shall be deemed approved prior to the effective date of this ordinance if it has been approved by all necessary government units, it remains valid, unexpired, unrevoked and not otherwise terminated, and it shows:

- (i) For the initial or first phase of development, the type and intensity of use for a specific parcel or parcels, including at a minimum, the boundaries of the project and a subdivision plan that has been approved.
- (ii) For any subsequent phase of development, sufficient detail so that implementation of the requirements of this ordinance to that phase of development would require a material change in that phase of the plan.

(e) Violations Continue

Any violation of provisions existing on the effective date of this ordinance shall continue to be a violation under this ordinance and be subject to penalties and enforcement under this ordinance unless the use, *development*, construction, or other activity complies with the provisions of this ordinance.

(B) Administration and Procedures

(1) Review And Decision-Making Entities

(j) Stormwater Administrator

(i) Designation

A Stormwater Administrator shall be designated by the Shelby City Manager to administer and enforce this ordinance.

(ii) Powers and Duties

In addition to the powers and duties that may be conferred by other provisions of the Code of Ordinances of the City of Shelby and other laws, the Stormwater Administrator shall have the following powers and duties under this ordinance:

- To review and approve, approve with conditions, or disapprove applications for approval of plans pursuant to this ordinance.
- To make determinations and render interpretations of this ordinance.
- To establish application requirements and schedules for submittal and review of applications and appeals, to review and make recommendations to the Shelby City Council on applications for development or redevelopment approvals.
- To enforce the provisions of this ordinance in accordance with its enforcement provisions.
- To maintain records, maps, forms and other official materials as relate to the adoption, amendment, enforcement, and administration of this ordinance.
- To provide expertise and technical assistance to the Shelby City Council and City of Shelby Stormwater Advisory Board, upon request.
- To designate appropriate other person(s) who shall carry out the powers and duties of the Stormwater Administrator.
- To take any other action necessary to administer the provisions of this ordinance.

(2) Review Procedures

(a) Permit Required; Must Apply for Permit

A stormwater permit is required for all development and redevelopment unless exempt pursuant to this ordinance. A permit may only be issued subsequent to a properly submitted and reviewed permit application, pursuant to this section.

(b) Effect of Permit

A stormwater permit shall govern the design, installation, and construction of stormwater management and control practices on the site, including structural BMPs and elements of site design for stormwater management other than structural BMPs.

The permit is intended to provide a mechanism for the review, approval, and inspection of the approach to be used for the management and control of stormwater for the development or

redevelopment site consistent with the requirements of this ordinance, whether the approach consists of structural BMPs or other techniques such as low-impact or low-density design. The permit does not continue in existence indefinitely after the completion of the project; rather, compliance after project construction is assured by the maintenance provisions of this ordinance.

(c) Authority to File Applications

All applications required pursuant to this Code shall be submitted to the Stormwater Administrator by the land owner or the land owner's duly authorized agent.

(d) Establishment of Application Requirements, Schedule, and Fees

(i) Application Contents and Form

The Stormwater Administrator shall establish requirements for the content and form of all applications and shall amend and update those requirements from time to time. At a minimum, the stormwater permit application shall describe in detail how post-development stormwater runoff will be controlled and managed, the design of all stormwater facilities and practices, and how the proposed project will meet the requirements of this ordinance.

(ii) Submission Schedule

The Stormwater Administrator shall establish a submission schedule for applications. The schedule shall establish deadlines by which complete applications must be submitted for the purpose of ensuring that there is adequate time to review applications; and that the various stages in the review process are accommodated.

(iii) Permit Review Fees

The Shelby City Council shall establish permit review fees as well as policies regarding refund of any fees upon withdrawal of an application, and may amend and update the fees and policies from time to time.

(iv) Administrative Manual

For applications required under this Code, the Stormwater Administrator shall compile the application requirements, submission schedule, fee schedule, a

copy of this ordinance, and information on how and where to obtain the Design Manual in an Administrative Manual, which shall be made available to the public.

(e) Submittal of Complete Application

Applications shall be submitted to the Stormwater Administrator pursuant to the application submittal schedule in the form established by the Stormwater Administrator, along with the appropriate fee established pursuant to this section.

An application shall be considered as timely submitted only when it contains all elements of a complete application pursuant to this ordinance, along with the appropriate fee. If the Stormwater Administrator finds that an application is incomplete, the applicant shall be notified of the deficient elements and shall be provided with an opportunity to submit a complete application. However, the submittal of an incomplete application shall not suffice to meet a deadline contained in the submission schedule established above.

(f) Review

The Stormwater Administrator shall review the application and determine whether the application complies with the standards of this ordinance.

(i) Approval

If the Stormwater Administrator finds that the application complies with the standards of this ordinance, the Stormwater Administrator shall approve the application. The Stormwater Administrator may impose conditions of approval as needed to ensure compliance with this ordinance. The conditions shall be included as part of the approval.

(ii) Fails to Comply

If the Stormwater Administrator finds that the application fails to comply with the standards of this ordinance, the Stormwater Administrator shall notify the applicant and shall indicate how the application fails to comply. The applicant shall have an opportunity to submit a revised application.

(iii) Revision and Subsequent Review

A complete revised application shall be reviewed by the Stormwater Administrator after its re-submittal and shall be approved, approved with conditions or disapproved.

If a revised application is not re-submitted within thirty (30) calendar days from the date the applicant was notified, the application shall be considered withdrawn, and a new submittal for the same or substantially the same project shall be required along with the appropriate fee for a new submittal.

One re-submittal of a revised application may be submitted without payment of an additional permit review fee. Any re-submittal after the first re-submittal shall be accompanied by a permit review fee additional fee, as established pursuant to this ordinance.

(3) Application for Approval

(a) Concept Plan and Consultation Meeting

Before a stormwater management permit application is deemed complete, the Stormwater Administrator or developer may request a consultation on a concept plan for the post-construction stormwater management system to be utilized in the proposed development project. This consultation meeting should take place at the time of the preliminary plan of subdivision or other early step in the development process. The purpose of this meeting is to discuss the post-construction stormwater management measures necessary for the proposed project, as well as to discuss and assess constraints, opportunities and potential approaches to stormwater management designs before formal site design engineering is commenced. Local watershed plans, open space and natural area protection plans, and other relevant resource protection plans should be consulted in the discussion of the concept plan.

To accomplish this goal, the following information should be included in the concept plan, which should be submitted in advance of the meeting:

(i) Existing Conditions / Proposed Site Plans

Existing conditions and proposed site layout sketch plans, which illustrate at a minimum: site boundaries, existing and proposed topography; perennial and intermittent streams; mapping of predominant soils from soil surveys (if available); boundaries of existing predominant vegetation; proposed limits of clearing and

grading; and location of existing and proposed roads, buildings, parking areas and other impervious surfaces.

(ii) Natural Resources Inventory

A written or graphic inventory of natural resources at the site and surrounding area as it exists prior to the commencement of the project. This description should include a discussion of soil conditions, forest cover, geologic features, topography, wetlands, and native vegetative areas on the site, as well as the location and boundaries of other natural feature protection and conservation areas such as lakes, ponds, floodplains, stream buffers and other setbacks (e.g., drinking water well setbacks, septic setbacks, etc.). Particular attention should be paid to environmentally sensitive features that provide particular opportunities or constraints for development and stormwater management.

(iii) Stormwater Management System Concept Plan

A written or graphic concept plan of the proposed post-development stormwater management system including: preliminary selection and location of proposed structural stormwater controls; low-impact design elements; location of existing and proposed conveyance systems such as grass channels, swales, and storm drains; flow paths; location of floodplain/ floodway limits; relationship of site to upstream and downstream properties and drainages; and preliminary location of any proposed stream channel modifications, such as bridge or culvert crossings.

(b) Stormwater Management Permit Application

The stormwater management permit application shall detail how post-development stormwater runoff will be controlled and managed and how the proposed project will meet the requirements of this ordinance, including Section 3, Standards. All such plans shall be prepared by a qualified registered North Carolina professional engineer, surveyor, soil scientist or landscape architect, and the engineer, surveyor, soil scientist or landscape architect shall perform services only in their area of competence, and shall verify that the design of all stormwater management facilities and practices meets the submittal requirements for complete applications, that the designs and plans are sufficient to comply with applicable standards and policies found in the Design Manual, and that the designs and plans ensure compliance with this ordinance.

The submittal shall include all of the information required in the submittal checklist established by the Stormwater Administrator. Incomplete submittals shall be treated pursuant to Section xx-202(D).

(c) As-Built Plans and Final Approval

Upon completion of a project, and before a certificate of occupancy shall be granted, the applicant shall certify that the completed project is in accordance with the approved stormwater management plans and designs, and shall submit "actual" as built" plans for all stormwater management facilities or practices after final construction is completed.

The plans shall show the final design specifications for all stormwater management facilities and practices and the field location, size, depth, and planted vegetation of all measures, controls, and devices, as installed. The designer of the stormwater management measures and plans shall certify, under seal, that the as- built stormwater measures, controls, and devices are in compliance with the approved stormwater management plans and designs and with the requirements of this ordinance. A final inspection and approval by the Stormwater Administrator shall occur before the release of any performance securities.

(d) Other Permits

No certificate of compliance or occupancy shall be issued by the City of Shelby without final as- built plans and a final inspection and approval by the Stormwater Administrator, except where multiple units are served by the stormwater practice or facilities, in which case the City of Shelby may elect to withhold a percentage of permits or certificates of occupancy until as- built plans are submitted and final inspection and approval has occurred.

(4) Approvals

(a) Effect of Approval

Approval authorizes the applicant to go forward with only the specific plans and activities authorized in the permit. The approval shall not be construed to exempt the applicant from obtaining other applicable approvals from local, state, and federal authorities.

(b) Time Limit/ Expiration

An approved plan shall become null and void if the applicant fails to make substantial progress on the site within one year after the date of approval. The Stormwater Administrator may grant a single, one-year extension of this time limit, for good cause shown, upon receiving a written request from the applicant before the expiration of the approved plan.

In granting an extension, the Stormwater Administrator may require compliance with standards adopted since the original application was submitted unless there has been substantial reliance on the original permit and the change in standards would infringe the applicant's vested rights.

(5) Appeals

(a) Right of Appeal

Any aggrieved person affected by any decision, order, requirement, or determination relating to the interpretation or application of this ordinance made by the Stormwater Administrator, may file an appeal to the City of Shelby Zoning Board of Adjustment within 30 days after receipt of said written decision, order, requirement, or determination.

(C) Standards

(1) General Standards

All development and redevelopment to which this ordinance applies shall comply with the standards of this section.

(2) Development Standards for Low-Density Projects

Low-density projects shall comply with each of the following standards:

(a) Stormwater runoff from the development shall be transported from the development by vegetated conveyances to the maximum extent practicable.

(b) All built-upon area shall be at a minimum of 30 feet landward of all perennial and intermittent surface waters. A perennial or intermittent surface water shall be deemed present if the feature is approximately shown on either the most recent version of the soil survey map prepared by the Natural Resources Conservation Service of the United States Department of Agriculture (USDA) or the most recent version of the 1: 24,000 scale (7.5 minute) quadrangle topographic maps prepared by the United States Geologic Survey (USGS). An

exception to this requirement may be allowed when surface waters are not present in accordance with the provisions of 15A NCAC 2B. 0233 (3) (a) or similar site- specific determination made using Division-approved methodology.

- (c) The approval of the stormwater permit shall require an enforceable restriction on property usage that runs with the land, such as a recorded deed restriction or protective covenants, to ensure that future development and redevelopment maintains the site consistent with the approved project plans.

(3) Development Standards for High-Density Projects

High-density projects shall implement stormwater control measures that comply with each of the following standards:

- (a) The measures shall control and treat runoff from the first inch of rain. Runoff volume drawdown time shall be a minimum of 48 hours, but not more than 120 hours.
- (b) All structural stormwater treatment systems used to meet these requirements shall be designed to have a minimum of 85% average annual removal for Total Suspended Solids (TSS);
- (c) General engineering design criteria for all projects shall be in accordance with 15A NCAC 2H. 1008(c), as explained in the Design Manual;
- (d) All built-upon area shall be at a minimum of 30 feet landward of all perennial and intermittent surface waters. A surface water shall be deemed present if the feature is approximately shown on either the most recent version of the soil survey map prepared by the Natural Resources Conservation Service of the United States Department of Agriculture (USDA) or the most recent version of the 1: 24,000 scale (7. 5 minute) quadrangle topographic maps prepared by the United States Geologic Survey (USGS). An exception to this requirement may be allowed when surface waters are not present in accordance with the provisions of 15A NCAC 2B. 0233 (3) (a) or similar site- specific determination made using Division-approved methodology.
- (e) The approval of the stormwater permit shall require an enforceable restriction on property usage that runs with the land, such as recorded deed restrictions or protective covenants, to ensure that future development and redevelopment maintains the site consistent with the approved project plans.

(4) Standards for Stormwater Control Measures

(a) Evaluation According to Contents of Design Manual

All stormwater control measures and stormwater treatment practices (also referred to as Best Management Practices, or BMPs) required under this ordinance shall be evaluated by the Stormwater Administrator according to the policies, criteria, and information, including technical specifications and standards and the specific design criteria for each stormwater practice, in the Design Manual. The Stormwater Administrator shall determine whether proposed BMPs will be adequate to meet the requirements of this ordinance.

(b) Determination of Adequacy; Presumptions and Alternatives

Stormwater treatment practices that are designed, constructed, and maintained in accordance with the criteria and specifications in the Design Manual will be presumed to meet the minimum water quality and quantity performance standards of this ordinance. Whenever an applicant proposes to utilize a practice or practices not designed and constructed in accordance with the criteria and specifications in the Design Manual, the applicant shall have the burden of demonstrating that the practice(s) will satisfy the minimum water quality and quantity performance standards of this ordinance. The Stormwater Administrator may require the applicant to provide the documentation, calculations, and examples necessary for the Stormwater Administrator to determine whether such an affirmative showing is made.

(c) Separation from Seasonal High Water Table

For BMPs that require a separation from the seasonal high-water table, the separation shall be provided by at least 12 inches of naturally occurring soil above the seasonal high-water table.

(5) Dedication of BMPS, Facilities & Improvements

Unless otherwise approved by the Shelby City Council, ownership and maintenance responsibility of any existing or future stormwater management facilities shall remain with the owner of the property or a legally established property owner's association. Such facilities shall meet all the requirements of this ordinance and include adequate and perpetual access and sufficient area, by easement or otherwise, for inspection and regular maintenance.

(6) Variances

- (a) Any person may petition the City of Shelby for a variance granting permission to use the person's land in a manner otherwise prohibited by this ordinance. To qualify for a variance, the petitioner must show all of the following:
 - (i) Unnecessary hardships would result from strict application of this ordinance.
 - (ii) The hardships result from conditions that are peculiar to the property, such as the location, size, or topography of the property.
 - (iii) The hardships did not result from actions taken by the petitioner.
 - (iv) The requested variance is consistent with the spirit, purpose, and intent of this ordinance; will secure public safety and welfare; and will preserve substantial justice.
- (b) The City of Shelby may impose reasonable and appropriate conditions and safeguards upon any variance it grants.
- (c) Statutory exceptions

Notwithstanding subdivision (A) of this section, exceptions from the 30- foot landward location of built-upon area requirement as well as the deed restrictions and protective covenants requirements shall be granted in any of the following instances:

- (i) When there is a lack of practical alternatives for a road crossing, railroad crossing, bridge, airport facility, or utility crossing as long as it is located, designed, constructed, and maintained to minimize disturbance, provide maximum nutrient removal, protect against erosion and sedimentation, have the least adverse effects on aquatic life and habitat, and protect water quality to the maximum extent practicable through the use of BMPs.
- (ii) When there is a lack of practical alternatives for a stormwater management facility; a stormwater management pond; or a utility, including, but not limited to, water, sewer, or gas construction and maintenance corridor, as long as it is located 15 feet landward of all perennial and intermittent surface waters and as long as it is located, designed, constructed, and maintained to minimize disturbance, provide maximum nutrient removal, protect against erosion and sedimentation, have the least adverse effects on aquatic life and habitat,

and protect water quality to the maximum extent practicable through the use of BMPs.

- (iii) A lack of practical alternatives may be shown by demonstrating that, considering the potential for a reduction in size, configuration, or density of the proposed activity and all alternative designs, the basic project purpose cannot be practically accomplished in a manner which would avoid or result in less adverse impact to surface waters.

(7) Additional Standards for Special Situations

(a) Nutrient Sensitive Waters

In addition to the standards for stormwater handling set out in the design manual, development and redevelopment that drains in whole or part to class NSW waters shall design and implement the best stormwater practices that reduce nutrient loading, while still meeting the other requirements of this ordinance.

(D) Maintenance

(1) General Standards For Maintenance

(a) Function of BMPs as Intended

The owner of each structural BMP installed pursuant to this ordinance shall maintain and operate it so as to preserve and continue its function in controlling stormwater quality and quantity at the degree or amount of function for which the structural BMP was designed.

(b) Annual Maintenance Inspection and Report

The person responsible for maintenance of any structural BMP installed pursuant to this ordinance shall submit to the Stormwater Administrator an inspection report from one of the following persons performing services only in their area of competence: a qualified registered North Carolina professional engineer, surveyor, landscape architect, soil scientist, aquatic biologist, or person certified by the North Carolina Cooperative Extension Service for stormwater treatment practice inspection and maintenance. The inspection report shall contain all of the following:

- (i) The name and address of the land owner,

- (ii) The recorded book and page number of the lot of each structural BMP;
- (iii) A statement that an inspection was made of all structural BMPs;
- (iv) The date the inspection was made;
- (v) A statement that all inspected structural BMPs are performing properly and are in compliance with the terms and conditions of the approved maintenance agreement required by this ordinance; and
- (vi) The original signature and seal of the engineer, surveyor, or landscape architect.

All inspection reports shall be on forms supplied by the Stormwater Administrator. An original inspection report shall be provided to the Stormwater Administrator beginning one year from the date of as- built certification and each year thereafter on or before the date of the as- built certification.

(2) Operation and Maintenance Agreement

(a) In General

Prior to the conveyance or transfer of any lot or building site to be served by a structural BMP pursuant to this ordinance, and prior to issuance of any permit for development or redevelopment, requiring a structural BMP pursuant to this ordinance, the applicant or owner of the site must execute an operation and maintenance agreement that shall be binding on all subsequent owners of the site, portions of the site, and lots or parcels served by the structural BMP. Until the transference of all property, sites, or lots served by the structural BMP, the original owner or applicant shall have primary responsibility for carrying out the provisions of the maintenance agreement.

The operation and maintenance agreement shall require the owner or owners to maintain, repair and, if necessary, reconstruct the structural BMP, and shall state the terms, conditions, and schedule of maintenance for the structural BMP. In addition, it shall grant to City of Shelby a right of entry in the event that the Stormwater Administrator has reason to believe it has become necessary to inspect, monitor, maintain, repair, or reconstruct the structural BMP; however, in no case shall the right of entry, of itself, confer an obligation on City of Shelby to assume responsibility for the structural BMP.

The operation and maintenance agreement must be approved by the Stormwater Administrator prior to plan approval, and it

shall be referenced on the final plat and shall be recorded with the Cleveland County Register of Deeds upon final plat approval. A copy of the recorded maintenance agreement shall be given to the Stormwater Administrator within fourteen (14) days following its recordation.

(b) Special Requirement for Homeowners' and Other Associations

For all structural BMPs required pursuant to this ordinance and that are to be or are owned and maintained by a homeowners' association, property owners' association, or similar entity, the required operation and maintenance agreement shall include all of the following provisions:

- (i) Acknowledgment that the association shall continuously operate and maintain the stormwater control and management facilities.
- (ii) Establishment of an escrow account, which can be spent solely for sediment removal, structural, biological or vegetative replacement, major repair, or reconstruction of the structural BMPs. If structural BMPs are not performing adequately or as intended or are not properly maintained, the City of Shelby, in its sole discretion, may remedy the situation, and in such instances the City of Shelby shall be fully reimbursed from the escrow account. Escrowed funds may be spent by the association for sediment removal, structural, biological or vegetative replacement, major repair, and reconstruction of the structural BMPs, provided that the City of Shelby shall first consent to the expenditure.
- (iii) Both developer contribution and annual sinking funds shall fund the escrow account. Prior to plat recordation or issuance of construction permits, whichever shall first occur, the developer shall pay into the escrow account an amount equal to fifteen (15) per cent of the initial construction cost of the structural BMPs. Two-thirds ($\frac{2}{3}$) of the total amount of sinking fund budget shall be deposited into the escrow account within the first five (5) years and the full amount shall be deposited within ten (10) years following initial construction of the structural BMPs. Funds shall be deposited each year into the escrow account. A portion of the annual assessments of the association shall include an allocation into the escrow account. Any funds drawn down from the escrow account shall be replaced in accordance with the schedule of anticipated work used to create the sinking fund budget.

- (iv) The percent of developer contribution and lengths of time to fund the escrow account may be varied by the City of Shelby depending on the design and materials of the stormwater control and management facility.
- (v) Granting to the City of Shelby a right of entry to inspect, monitor, maintain, repair, and reconstruct structural BMPs.
- (vi) Allowing the City of Shelby to recover from the association and its members any and all costs the City of Shelby expends to maintain or repair the structural BMPs or to correct any operational deficiencies. Failure to pay the City of Shelby all of its expended costs, after forty-five days written notice, shall constitute a breach of the agreement. In case of a deficiency, the City of Shelby shall thereafter be entitled to bring an action against the association and its members to pay, or foreclose upon the lien hereby authorized by the agreement against the property, or both. Interest, collection costs, and attorney fees shall be added to the recovery.
- (vii) A statement that this agreement shall not obligate the City of Shelby to maintain or repair any structural BMPs, and the City of Shelby shall not be liable to any person for the condition or operation of structural BMPs.
- (viii) A statement that this agreement shall not in any way diminish, limit, or restrict the right of the City of Shelby to enforce any of its ordinances as authorized by law.
- (ix) A provision indemnifying and holding harmless the City of Shelby for any costs and injuries arising from or related to the structural BMP, unless the City of Shelby has agreed in writing to assume the maintenance responsibility for the BMP and has accepted dedication of any and all rights necessary to carry out that maintenance.

(3) Inspection Program

Inspections and inspection programs by City of Shelby may be conducted or established on any reasonable basis, including but not limited to routine inspections; random inspections; inspections based upon complaints or other notice of possible violations; and joint inspections with other agencies inspecting under environmental or safety laws. Inspections may include, but are not limited to, reviewing maintenance and repair records; sampling discharges, surface water, groundwater, and material or water in BMPs; and evaluating the condition of BMPs.

If the owner or occupant of any property refuses to permit such inspection, the Stormwater Administrator shall proceed to obtain an administrative search warrant pursuant to G.S. 15- 27.2 or its successor. No person shall obstruct, hamper or interfere with the Stormwater Administrator while carrying out his or her official duties.

(4) Performance Security for Installation and Maintenance

(a) May Be Required

The City of Shelby may, at its discretion, require the submittal of a performance security or bond with surety, cash escrow, irrevocable letter of credit or other acceptable legal arrangement prior to issuance of a permit in order to ensure that the structural BMPs are

- (i) Installed by the permit holder as required by the approved stormwater management plan, and/ or
- (ii) Maintained by the owner as required by the operation and maintenance agreement.

(b) Amount

(i) Installation

The amount of an installation performance security shall be the total estimated construction cost of the BMPs approved under the permit, plus 25%. The estimate of construction cost shall be prepared by a qualified registered North Carolina Professional Engineer, Surveyor, Soil Scientist, or Landscape Architect.

(ii) Maintenance

The amount of a maintenance performance security shall be the present value of an annuity of perpetual duration based on a reasonable estimate of the annual cost of inspection, operation and maintenance of the BMPs approved under the permit, at a discount rate that reflects the jurisdiction's cost of borrowing minus a reasonable estimate of long-term inflation.

(c) Uses of Performance Security

(i) Forfeiture Provisions

The performance security shall contain forfeiture provisions for failure, after proper notice, to complete

work within the time specified, or to initiate or maintain any actions which may be required of the applicant or owner in accordance with this ordinance, approvals issued pursuant to this ordinance, or an operation and maintenance agreement established pursuant to this ordinance.

(ii) Default

Upon default of the owner to construct, maintain, repair and, if necessary, reconstruct any structural BMP in accordance with the applicable permit or operation and maintenance agreement, the Stormwater Administrator shall obtain and use all or any portion of the security to make necessary improvements based on an engineering estimate. Such expenditure of funds shall only be made after requesting the owner to comply with the permit or maintenance agreement. In the event of a default triggering the use of installation performance security, the City of Shelby shall not return any of the unused deposited cash funds or other security, which shall be retained for maintenance.

(ix) Costs in Excess of Performance Security

If City of Shelby takes action upon such failure by the applicant or owner, the City of Shelby may collect from the applicant or owner the difference between the amount of the reasonable cost of such action and the amount of the security held, in addition to any other penalties or damages due.

(x) Refund

Within sixty days of the final approval, the installation performance security shall be refunded to the applicant or terminated, except any amount attributable to the cost (plus 25%) of landscaping installation and ongoing maintenance associated with the BMPs covered by the security. Any such landscaping shall be inspected one (1) year after installation with replacement for compliance with the approved plans and specifications and, if in compliance, the portion of the financial security attributable to landscaping shall be released.

(5) Notice to Owners

(a) Deed Recordation and Indications on Plat

The applicable operations and maintenance agreement pertaining to every structural BMP shall be referenced on the final plat and shall be recorded with the county Register of Deeds upon final plat approval. If no subdivision plat is recorded for the site, then the operations and maintenance agreement shall be recorded with the county Register of Deeds so as to appear in the chain of title of all subsequent purchasers under generally accepted searching principles.

(b) Signage

Where appropriate in the determination of the Stormwater Administrator to assure compliance with this ordinance, structural BMPs shall be posted with a conspicuous sign stating who is responsible for required maintenance and annual inspection. The sign shall be maintained so as to remain visible and legible.

(6) Records of Installation And Maintenance Activities

The owner of each structural BMP shall keep records of inspections, maintenance, and repairs for at least five years from the date of creation of the record and shall submit the same upon reasonable request to the Stormwater Administrator.

(7) Nuisance

The owner of each stormwater BMP, whether structural or non-structural BMP, shall maintain it so as not to create or result in a nuisance condition.

(8) Maintenance Easement

Every structural BMP installed pursuant to this ordinance shall be made accessible for adequate maintenance and repair by a maintenance easement. The easement shall be recorded and its terms shall specify who may make use of the easement and for what purposes. Dedicated access and/or maintenance easements for structural BMPs on private property are for the use of the owner of the structural BMP(s). Dedication of access and/ or maintenance easements for structural BMPs in no way binds or requires the City of Shelby to perform maintenance on structural BMPs on private property.

(E) Enforcement and Violations

(1) General

(a) Authority to Enforce

The provisions of this ordinance shall be enforced by the Stormwater Administrator, his or her designee, or any authorized agent of City of Shelby. Whenever this section refers to the Stormwater Administrator, it includes his or her designee as well as any authorized agent of City of Shelby.

(b) Violation Unlawful

Any failure to comply with an applicable requirement, prohibition, standard, or limitation imposed by this ordinance, or the terms or conditions of any permit or other development or redevelopment approval or authorization granted pursuant to this ordinance, is unlawful and shall constitute a violation of this ordinance.

(c) Each Day a Separate Offense

Each day that a violation continues shall constitute a separate and distinct violation or offense.

(d) Responsible Persons/Entities

Any person who erects, constructs, reconstructs, alters (whether actively or passively), or fails to erect, construct, reconstruct, alter, repair or maintain any structure, BIM, practice, or condition in violation of this ordinance shall be subject to the remedies, penalties, and/ or enforcement actions in accordance with this section. Persons subject to the remedies and penalties set forth herein may include any architect, engineer, builder, contractor, developer, agency, or any other person who participates in, assists, directs, creates, causes, or maintains a condition that results in or constitutes a violation of this ordinance, or fails to take appropriate action, so that a violation of this ordinance results or persists; or an owner, any tenant or occupant, or any other person, who has control over, or responsibility for, the use or development of the property on which the violation occurs.

For the purposes of this article, responsible person(s) shall include but not be limited to:

(i) Person Maintaining Condition Resulting In or Constituting Violation

An architect, engineer, builder, contractor, developer, agency, or any other person who participates in, assists, directs, creates, causes, or maintains a condition that constitutes a violation of this ordinance, or fails to take

appropriate action, so that a violation of this ordinance results or persists.

(ii) Responsibility for Land or Use of Land

The owner of the land on which the violation occurs, any tenant or occupant of the property, any person who is responsible for stormwater controls or practices pursuant to a private agreement or public document, or any person, who has control over, or responsibility for, the use, development or redevelopment of the property.

(2) Remedies and Penalties

The remedies and penalties provided for violations of this ordinance, whether civil or criminal, shall be cumulative and in addition to any other remedy provided by law, and may be exercised in any order.

(a) Remedies

(i) Withholdings of Certificate of Occupancy

The Stormwater Administrator or other authorized agent may refuse to issue a certificate of occupancy for the building or other improvements constructed or being constructed on the site and served by the stormwater practices in question until the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise cured the violations described therein.

(ii) Disapproval of Subsequent Permits and Development Approvals

As long as a violation of this ordinance continues and remains uncorrected, the Stormwater Administrator or other authorized agent may withhold, and the Planning and Zoning Board and/ or City Council may disapprove, any request for permit or development approval or authorization provided for by this ordinance or the zoning, subdivision, and/ or building regulations, as appropriate for the land on which the violation occurs.

(iii) Injunction, Abatements, etc.

The Stormwater Administrator, with the written authorization of the City Manager, may institute an action in a court of competent jurisdiction for a mandatory or prohibitory injunction and order of abatement to correct a violation of this ordinance. Any person violating this

ordinance shall be subject to the full range of equitable remedies provided in the General Statutes or at common law.

(iv) Correction as Public Health Nuisance, Costs as Lien, etc.

If the violation is deemed dangerous or prejudicial to the public health or public safety and is within the geographic limits prescribed by North Carolina G.S. 4 160A- 193, the Stormwater Administrator, with the written authorization of the City Manager, may cause the violation to be corrected and the costs to be assessed as a lien against the property.

(v) Stop Work Order

The Stormwater Administrator may issue a stop work order to the person(s) violating this ordinance. The stop work order shall remain in effect until the person has taken the remedial measures set forth in the notice of violation or has otherwise cured the violation or violations described therein. The stop work order may be withdrawn or modified to enable the person to take the necessary remedial measures to cure such violation or violations.

(b) Civil Penalties

Violation of this ordinance may subject the violator to a civil penalty to be recovered in a civil action in the nature of a debt if the violator does not pay the penalty within 30 days after notice of the violation is issued by the Stormwater Administrator. Civil penalties may be assessed up to the full amount of penalty to which the City of Shelby is subject for violations of its Phase II Stormwater permit, or if no Phase II Stormwater permit exists for the jurisdiction, civil penalties may be assessed up to the full amount allowed by law.

(c) Criminal Penalties

Violation of this ordinance may be enforced as a misdemeanor subject to the maximum fine permissible under North Carolina law.

(3) Procedures

(a) Initiation/Complaint

Whenever a violation of this ordinance occurs, or is alleged to have occurred, any person may file a written complaint. Such complaint shall state fully the alleged violation and the basis

thereof, and shall be filed with the Stormwater Administrator, who shall record the complaint. The complaint shall be investigated promptly by the Stormwater Administrator, or his or her designee.

(b) Inspection

The Stormwater Administrator, or his or her designee shall have the authority, upon presentation of proper credentials, to enter and inspect any land, building, structure, or premises to ensure compliance with this ordinance. During any inspection as provided herein, the Stormwater Administrator may take any samples and perform any testing deemed necessary to aid in the pursuit of the inquiry or to record site activities.

(c) Notice of Violation and Order to Correct

When the Stormwater Administrator, or his or her designee finds that any building, structure, or land is in violation of this ordinance, the Stormwater Administrator shall notify, in writing, the property owner or other person violating this ordinance. The notification shall indicate the nature of the violation, contain the address or other description of the site upon which the violation is occurring, order the necessary action to abate the violation, and give a deadline for correcting the violation. If civil penalties are to be assessed, the notice of violation shall also contain a statement of the civil penalties to be assessed, the time of their accrual, and the time within which they must be paid or be subject to collection as a debt.

The Stormwater Administrator may deliver the notice of violation and correction order personally, by a City of Shelby Code Enforcement Officer, by certified or registered mail, return receipt requested, or by any means authorized for the service of documents by Rule 4 of the North Carolina Rules of Civil Procedure.

If a violation is not corrected within a reasonable period of time, as provided in the notification, the Stormwater Administrator may take appropriate action under this ordinance to correct and abate the violation and to ensure compliance with this ordinance.

(d) Extension of Time

A person who receives a notice of violation and correction order, or the owner of the land on which the violation occurs, may submit to the Stormwater Administrator a written request for an extension of time for correction of the violation. On determining that the request includes enough information to

show that the violation cannot be corrected within the specified time limit for reasons beyond the control of the person requesting the extension, the Stormwater Administrator may extend the time limit as is reasonably necessary to allow timely correction of the violation, up to, but not exceeding fourteen (14) days. The Stormwater Administrator may grant seven (7) day extensions in addition to the foregoing extension if the violation cannot be corrected within the permitted time due to circumstances beyond the control of the person violating this ordinance. The Stormwater Administrator may grant an extension only by written notice of extension. The notice of extension shall state the date prior to which correction must be made, after which the violator will be subject to the penalties described in the notice of violation and correction order.

(e) Enforcement After Time to Correct

After the time has expired to correct a violation, including any extension(s) if authorized by the Stormwater Administrator, the Stormwater Administrator shall determine if the violation is corrected. If the violation is not corrected, the Stormwater Administrator may act to impose one or more of the remedies and penalties authorized by this ordinance.

(f) Emergency Enforcement

If delay in correcting a violation would seriously threaten the effective enforcement of this ordinance or pose an immediate danger to the public health, safety, or welfare, then the Stormwater Administrator may order the immediate cessation of a violation. Any person so ordered shall cease any violation immediately. The Stormwater Administrator may seek immediate enforcement, without prior written notice, through any remedy or penalty authorized by this article.

(F) Definitions

(1) Terms Defined

When used in this Ordinance, the following words and terms shall have the meaning set forth in this section, unless other provisions of this Ordinance specifically indicate otherwise.

1-year, 24-hour storm. The surface runoff resulting from a 24-hour rainfall of an intensity expected to be equaled or exceeded, on average, once in 12 months and with a duration of 24 hours.

Best Management Practice (BMP). Measures or practices used to reduce the amount of pollution entering surface waters. BMPs can be

structural or non-structural and may take the form of a process, activity, physical structure or planning.

Built-upon area (BUA). That portion of a project that is covered by impervious or partially impervious surface to the extent that the partially impervious surface including, but not limited to, buildings; pavement and gravel areas such as roads, parking lots, and paths; and recreation facilities such as tennis courts. "Built-upon area" does not include a wooden slatted deck, the water area of a swimming pool, or pervious or partially pervious paving material to the extent that the paving material absorbs water or allows water to infiltrate through the paving material.

Department. The North Carolina Department of Environment and Natural Resources.

Design Manual. The stormwater design manual approved for use in Phase II jurisdictions by the Department for the proper implementation of the requirements of the federal Phase II stormwater program. All references herein to the Design Manual are to the latest published edition or revision.

Development. Any land- disturbing activity that increases the amount of built-upon area or that otherwise decreases the infiltration of precipitation into the soil.

Division (DWR). The Division of Water Resources in the Department.

High-density project. Any project that exceeds the low-density threshold for dwelling units per acre or built-upon area.

Larger common plan of development or sale. Any area where multiple separate and distinct construction or land-disturbing activities will occur under one plan. A plan is any announcement or piece of documentation(including but not limited to a sign, public notice or hearing, sales pitch, advertisement, loan application, drawing, permit application, zoning request, or computer design) or physical demarcation including but not limited to boundary signs, lot stakes, or surveyor markings) indicating that construction activities may occur on a specific plot.

Low-density project. A project that has no more than two dwelling units per acre or no more than twenty-four percent built-upon area (BUA) for all residential and non-residential development. A project with an overall density at or below the relevant low-density threshold, but containing areas with a density greater than the overall project density, may be considered low density as long as the project meets or exceeds the post-construction model practices for low-density projects and locates the higher density in upland areas and away from surface waters and drainage ways to the maximum extent practicable.

Owner. The legal or beneficial owner of land, including but not limited to a mortgagee or vendee in possession, receiver, executor, trustee, or long-term or commercial lessee, or any other person or entity holding proprietary rights in the property or having legal power of management and control of the property. "Owner" shall include long-term commercial tenants; management entities, such as those charged with or engaged in the management of properties for profit; and every person or entity having joint ownership of the property. A secured lender not in possession of the property does not constitute an owner, unless the secured lender is included within the meaning of "owner" under another description in this definition, such as a management entity.

Permeable pavement. A paving material that absorbs water or allows water to infiltrate through the paving material. Permeable pavement materials include porous concrete, permeable interlocking concrete pavers, concrete grid pavers, porous asphalt, and any other material with similar characteristics. Compacted gravel shall not be considered permeable pavement.

Planning jurisdiction. The territorial jurisdiction within which a municipality exercises the powers authorized by Article 19 of Chapter 160A of the General Statutes.

Redevelopment. Any development on previously-developed land, other than a rebuilding activity that results in no net increase in built-upon area and that provides equal or greater stormwater control than the previous development

Stormwater Runoff. The flow of water which results from precipitation and which occurs immediately following rainfall or as a result of snowmelt.

Structural BMP. A physical device designed to trap, settle out, or filter pollutants from stormwater runoff; to alter or reduce stormwater runoff velocity, amount, timing, or other characteristics; to approximate the pre-development hydrology on a developed site; or to achieve any combination of these goals. Structural BMP includes physical practices such as constructed wetlands, vegetative practices, filter strips, grassed swales, and other methods installed or created on real property. "Structural BMP" is synonymous with "structural practice," "stormwater control facility," "stormwater control practice," "stormwater treatment practice," "stormwater management practice," "stormwater control measures," "structural stormwater treatment systems," and similar terms used in this ordinance.

Substantial progress. For the purposes of determining whether sufficient progress has been made on an approved plan, one or more

of the following construction activities toward the completion of a site or subdivision plan shall occur: obtaining a grading permit and conducting grading activity on a continuous basis and not discontinued for more than thirty (30) days; or installation and approval of on-site infrastructure; or obtaining a building permit for the construction and approval of a building foundation. " Substantial progress" for purposes of determining whether an approved plan is null and void is not necessarily the same as "substantial expenditures" used for determining vested rights pursuant to applicable law.

Vegetative buffer. An area of natural or established vegetation directly adjacent to surface water through which stormwater runoff flows is a diffuse manner to protect surface waters from degradation due to development activities.

Vegetative conveyance. A permanent, designed waterway lined with vegetation that is used to convey stormwater runoff at a non-erosive velocity within or away from a developed area.

(G) Illicit Discharges

(2) Illicit Discharges and Connections

(a) Illicit Discharges

No person shall cause or allow the discharge, emission, disposal, pouring, or pumping directly or indirectly to any stormwater conveyance, the waters of the State, or upon the land in manner and amount that the substance is likely to reach a stormwater conveyance or the waters of the State, any liquid, solid, gas, or other substance, other than stormwater; provided that non- stormwater discharges associated with the following activities are allowed and provided that they do not significantly impact water quality:

- (i) Water line and fire hydrant flushing;
- (ii) Flushing and cleaning of stormwater conveyances with potable water;
- (iii) Landscape irrigation;
- (iv) Diverted stream flows;
- (v) Rising ground waters;
- (vi) Uncontaminated ground water infiltration(as defined at 40 CFR 35.2005(20));
- (vii) Uncontaminated pumped ground water;

- (viii) Discharges from potable water sources;
- (ix) Foundation, footing, and crawl space drains;
- (x) Air conditioning condensation;
- (xi) Irrigation water;
- (xii) Springs;
- (xiii) Water from crawl space pumps;
- (xiv) Footing drains;
- (xv) Lawn watering;
- (xvi) Individual residential car washing;
- (xvii) Flows from riparian habitats and wetlands;
- (xviii) Dechlorinated swimming pool discharges;
- (xix) Street wash water;
- (xx) Flows from firefighting; and
- (xxi) Other non-stormwater discharges for which a valid NPDES discharge permit has been approved and issued by the State of North Carolina, and provided that any such discharges to the municipal separate storm sewer system shall be authorized by the City of Shelby.

Prohibited substances include, but are not limited to:

- (i) Fats, oils, or grease;
- (ii) Anti-freeze, parts cleaner, and other motor equipment fluids;
- (iii) Chemicals, paints, pesticides, and other household hazardous wastes;
- (iv) Animal waste;
- (v) Waste water;
- (vi) Washdown from concrete trucks;

(vii) Garbage, litter, yard waste, or any other solid waste materials; and

(viii) Drainage from dumpster drains.

(b) Illicit Connections

(i) Connections to a stormwater conveyance or stormwater conveyance system that allow the discharge of non-stormwater, other than the exclusions described in subsection (A) above, are unlawful. Prohibited connections include, but are not limited to:

- Floor drains;
- Waste water from washing machines;
- Waste water from sanitary sewers;
- Wash water from commercial vehicle washing or steam cleaning; and
- Waste water from septic systems.

(ii) This prohibition expressly includes, without limitation, illicit connections made prior to the adoption of this provision or any other ordinance prohibiting such connections, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection. The property owner or the person using said connection shall remove the connection within one year following the effective date of this ordinance. However, the one year grace period shall not apply to connections which may result in the discharge of hazardous materials or other discharges which pose an immediate threat to health and safety, or are likely to result in immediate injury and harm to real or personal property, natural resources, wildlife, or habitat.

(iii) Where it is determined that said connection:

- May result in the discharge of hazardous materials or may pose an immediate threat to health and safety, or is likely to result in immediate injury and harm to real or personal property, natural resources, wildlife, or habitat, or
- Was made in violation of any applicable regulation or ordinance, other than this section;

The Stormwater Administrator shall designate the time within which the connection shall be removed. In setting the time limit for compliance, the Stormwater Administrator shall take into consideration:

- The quantity and complexity of the work,
- The consequences of delay,
- The potential harm to the environment, to the public health, and to public and private property, and
- The cost of remedying the damage.

(c) Spills

Spills or leaks of polluting substances released, discharged to, or having the potential to released or discharged to the stormwater conveyance system, shall be contained, controlled, collected, and properly disposed. All affected areas shall be restored to their preexisting condition.

Persons in control of the polluting substances immediately prior to their release or discharge, and persons owning the property on which the substances were released or discharged, shall immediately notify the City of Shelby Fire Chief or his designee of the release or discharge, as well as making any required notifications under state and federal law. Notification shall not relieve any person of any expenses related to the restoration, loss, damage, or any other liability which may be incurred as a result of said spill or leak, nor shall such notification relieve any person from other liability which may be imposed by State or other law.

(d) Industrial or Construction Activity Discharges

Any person subject to an industrial or construction activity NPDES stormwater discharge permit shall comply with provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the City of Shelby prior to authorization of discharges to the MS4.

(e) Nuisance

Illicit discharges and illicit connections which exist within the Shelby City Limits and Extraterritorial Jurisdiction are hereby found, deemed, and declared to be dangerous or prejudiced to the public health or public safety and are found, deemed, and declared to be public nuisances. Such public nuisances shall be abated in accordance with the procedures set forth in the City of Shelby Code of Ordinances Chapter 16 Article 3.

10-2 FLOOD HAZARD DISTRICT OVERLAY REQUIREMENTS

The Flood Hazard Overlay District (FHO), as established in Section 9-1.6(A), is designed for the purpose of protecting people and property from the hazards of flooding in accordance with the authority provided in NCGS 160A-381 and 160A-174.

10-2.1 Definitions

Unless specifically defined below, words or phrases used in this section shall be interpreted so as to give them the meaning they have in common usage and to give this section its most reasonable application.

Accessory Structure (Appurtenant Structure)

A structure which is located on the same parcel of property as the principal structure and the use of which is incidental to the use of the principal structure. Garages, carports, and storage sheds are common urban accessory structures. Pole barns, hay sheds, and the like qualify as accessory structures on farms, and may or may not be located on the same parcel as the farm dwelling or shop building.

Addition (to an existing building)

An extension or increase in the floor area or height of a building or structure.

Appeal

A request for a review of the floodplain administrator's interpretation of any provision of this ordinance.

Area of Special Flood Hazard

See "Special Flood Hazard Area (SFHA)".

Base Flood

The flood having a one (1) percent chance of being equaled or exceeded in any given year.

Base Flood Elevation (BFE)

A determination of the water surface elevations of the base flood as published in the Flood Insurance Study. When the BFE has not been provided in a "Special Flood Hazard Area", it may be obtained from engineering studies available from a Federal, State, or other source using FEMA approved engineering methodologies. This elevation, when combined with the "Freeboard", establishes the "Regulatory Flood Protection Elevation".

Basement

Area of the building having its floor subgrade (below ground level) on all sides.

Building

See "Structure".

Chemical Storage Facility

A building, portion of a building, or exterior area adjacent to a building used for the storage of any chemical or chemically reactive products.

Development

Any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials.

Disposal

As defined in NCGS 130A-290(a)(6), the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste into or on any land or water so that the solid waste or any constituent part of the solid waste may enter the environment or be emitted into the air or discharged into any waters, including groundwaters.

Elevated Building

A non-basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, posts, piers, pilings, or columns.

(M) Encroachment

The advance or infringement of uses, fill, excavation, buildings, structures or development into a floodplain, which may impede or alter the flow capacity of a floodplain.

Existing Manufactured Home Park or Manufactured Home Subdivision

A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) was completed before the effective date of the floodplain management regulation adopted by the City of Shelby.

Flood or Flooding

A general and temporary condition of partial or complete inundation of normally dry land areas from:

- (1) The overflow of inland or tidal waters; and,

- (2) The unusual and rapid accumulation of runoff of surface waters from and source.

Flood Hazard Boundary Map (FHBM)

An official map of a community, issued by the Federal Emergency Management Agency, where the boundaries of the areas of special flood hazard have been defined as Zone A.

Flood Insurance

Insurance coverage provided under the National Flood Insurance Program.

(R)Flood Insurance Rate Map (FIRM)

An official map of a community, issued by the Federal Emergency Management Agency, on which both the Special Flood Hazard Areas and the risk premium zones applicable to the community are delineated.

Flood Insurance Study (FIS)

An examination, evaluation, and determination of flood hazards, corresponding water surface elevations (if appropriate), flood hazard risk zones, and other flood data in a community issued by the Federal Emergency Management Agency. The Flood Insurance Study report includes Flood Insurance Rate Maps (FIRMs) and Flood Boundary and Floodway Maps (FBFMs), if published.

Flood Prone Area

See “Floodplain”

Flood Zone

A geographical area shown on a Flood Hazard Boundary Map or Flood Insurance Rate Map that reflects the severity or type of flooding in the area.

Floodplain

Any land area susceptible to being inundated by water from any source.

Floodplain Administrator

The individual appointed to administer and enforce the floodplain management regulations.

Floodplain Development Permit

Any type of permit that is required in conformance with the provisions of this ordinance, prior to the commencement of any development activity.

Floodplain Management

The operation of an overall program of corrective and preventive measures for reducing flood damage and preserving and enhancing, where possible, natural resources in the floodplain, including, but not limited to, emergency preparedness plans, flood control works, floodplain management regulations, and open space plans.

Floodplain Management Regulations

This ordinance and other zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances, and other applications of police power. This term describes Federal, State or local regulations, in any combination thereof, which provide standards for preventing and reducing flood loss and damage.

Floodproofing

Any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitation facilities, structures, and their contents.

Floodway

The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

Freeboard

The height added to the Base Flood Elevation (BFE) to account for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, blockage of bridge openings, and the hydrological effect of urbanization of the watershed. The Base Flood Elevation plus the freeboard establishes the "Regulatory Flood Protection Elevation".

Functionally Dependent Facility

A facility which cannot be used for its intended purpose unless it is located or carried out in close proximity to water, such as a docking or port facility necessary for the loading and unloading of cargo or passengers, shipbuilding, ship repair, or seafood processing facilities. The term does not include long-term storage, manufacture, sales, or service facilities.

Hazardous Waste Management Facility

As defined in NCGS 130A, Article 9, a facility for the collection, storage, processing, treatment, recycling, recovery, or disposal of hazardous waste.

Highest Adjacent Grade

The highest natural elevation of the ground surface, prior to construction, next to the proposed walls of the structure.

Historic Structure

Any structure that is:

- (1) Listed individually in the National Register of Historic Places (a listing maintained by the US Department of Interior) or preliminarily determined by the Secretary of Interior as meeting the requirements for individual listing on the National Register;
- (2) Certified or preliminarily determined by the Secretary of Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- (3) Individually listed on a local inventory of historic landmarks in communities with a "Certified Local Government (CLG) Program"; or
- (4) Certified as contributing to the historical significance of a historic district designated by a community with a "Certified Local Government (CLG) Program".

Certified Local Government (CLG) Programs are approved by the US Department of the Interior in cooperation with the North Carolina Department of Cultural Resources through the State Historic Preservation Officer as having met the requirements of the National Historic Preservation Act of 1966 as amended in 1980.

Lowest Adjacent Grade (LAG)

The elevation of the ground, sidewalk or patio slab immediately next to the building, or deck support, after completion of the building.

Lowest Floor

The lowest floor of the lowest enclosed area (including basement). An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access or storage in area other than a basement area is not considered a building's lowest floor provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this Ordinance.

Manufactured Home

A structure, transportable in one or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term manufactured home does not include a recreational vehicle.

Manufactured Home Park or Subdivision

A parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

Market Value

The building value, not including the land value and that of any accessory structures or other improvements on the lot. Market value may be established by independent certified appraisal; replacement cost depreciated for age of building and quality of construction (Actual Cash Value); or adjusted tax assessed values.

Mean Sea Level

For purposes of this ordinance, the National Geodetic Vertical Datum (NGVD) as corrected in 1929, the North American Vertical Datum (NAVD) as corrected in 1988, or other vertical control datum used as a reference for establishing varying elevations within the floodplain, to which Base Flood Elevations (BFEs) shown on a FIRM are referenced. Refer to each FIRM panel to determine datum used.

New Construction

Structures for which the “start of construction” commenced on or after the effective date of the initial floodplain management regulations and includes any subsequent improvements to such structures.

Non-Encroachment Area

The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot as designated in the Flood Insurance Study report.

Post-FIRM

Construction or other development for which the “start of construction” occurred on or after the effective date of the initial Flood Insurance Rate Map.

Pre-FIRM

Construction or other development for which the “start of construction” occurred before the effective date of the initial Flood Insurance Rate Map.

Principally Above Ground

That at least 51% of the actual cash value of the structure is above ground.

Public Safety and/or Nuisance

Anything which is injurious to the safety or health of an entire community or neighborhood, or any considerable number of persons, or unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, or river, bay, stream, canal, or basin.

Recreational Vehicle

A vehicle which is: (a) built on a single chassis; (b) 400 square feet or less when measured at the largest horizontal projection; (c) designed to be self-propelled or permanently towable by a light duty truck; and (d) designed primarily not for use as a permanent dwelling, but as temporary living quarters for recreational, camping, travel, or seasonal use.

Reference Level

The top of the lowest floor for structures within Special Flood Hazard Areas designated as Zone A1-A30, AE, A, A99 or AO.

Regulatory Flood Protection Elevation

The “Base Flood Elevation” plus the “Freeboard”. In “Special Flood Hazard Areas” where Base Flood Elevations (BFEs) have been determined, this elevation shall be the BFE plus two (2) feet of freeboard. In “Special Flood Hazard Areas” where no BFE has been established, this elevation shall be at least two (2) feet above the highest adjacent grade.

Remedy a Violation

To bring the structure or other development into compliance with State or local floodplain management regulations, or, if this is not possible, to reduce the impact of its noncompliance. Ways that impacts may be reduced include protecting the structure or other affected development from flood damages, implementing the enforcement provisions of the ordinance or otherwise deterring future similar violations, or reducing Federal financial exposure with regard to the structure or other development.

Repetitive Loss

Flood-related damages sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds 25 percent of the market value of the structure before the damage occurred.

Riverine

Relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.

Salvage Yard

Any non-residential property used for the storage, collection, and/or recycling of any type of equipment, and including but not limited to vehicles, appliances and related machinery.

Solid Waste Disposal Facility

Any facility involved in the disposal of solid waste, as defined in NCGS 130A-290(a)(35).

Solid Waste Disposal Site

As defined in NCGS 130A-290(a)(36), any place at which solid wastes are disposed of by incineration, sanitary landfill, or any other method.

Special Flood Hazard Area (SFHA)

The land in the floodplain subject to a one percent (1%) or greater chance of being flooded in any given year, as determined in Article 3, Section B of this ordinance.

Start of Construction

[For other than new construction or substantial improvements under the Coastal Barrier Resources Act (PL 97-348)]. Includes substantial improvement and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, or improvement was within 180 days of the permit date. The actual start means the first placement of permanent construction of a structure (including a manufactured home) on a site, such as the pouring of slabs or footings, installation of piles, construction of columns, or any work beyond the state of excavation or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of the building, whether or not that alteration affects the external dimensions of the building.

Structure

A walled and roofed building that is principally above ground, a manufactured home, a gas or liquid storage tank, or other man-made facilities or infrastructures.

Substantial Damage

Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. Substantial damage also

means flood-related damages sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds 25 percent of the market value of the structure before the damaged occurred.

Substantial Improvement

Any repair, reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the 'start of construction' of the improvement. This term includes structures which have incurred 'repetitive loss' or 'substantial damage', regardless of the actual repair work performed.

Substantially Improved Existing Manufactured Home Park or Subdivision

Where the repair, reconstruction, rehabilitation or improvement of the streets, utilities and pads equals or exceeds 50 percent of the value of the streets, utilities and pads before the repair, reconstruction, or improvement commenced.

Variance

A grant of relief to a person from the requirements of this Ordinance which permits construction in a manner otherwise prohibited by this Ordinance where specific enforcement would result in unnecessary hardship.

Violation

The failure of a structure or other development to be fully compliant with the City's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this Section is presumed to be in violation until such time as that documentation is provided.

10-2.2 Artificial Obstructions within Floodways and Non-Encroachment Areas Prohibited

- (A) Located within areas of special flood hazard are areas designated as floodways or non-encroachment areas. The floodways and non-encroachment areas are extremely hazardous areas due to the velocity of flood waters which carry debris and potential projectiles and have erosion potential.
- (B) No artificial obstruction may be located within any floodway or non-encroachment area, except as provided in Section 10-2.3.
- (C) For purposes of this Section, an artificial obstruction is any obstruction, other than a natural obstruction, that is capable of reducing the flood-carrying capacity of a stream or may accumulate debris and thereby reduce the flood-carrying capacity of a stream. A natural obstruction includes any rock, tree, gravel, or analogous natural matter that is an obstruction and has been

located within the floodway or non-encroachment area by a nonhuman cause.

- (D) The following standards shall apply to any permissible use as delineated in Section 10-2.3 or any other use allowed by variance (in accordance with Section 7-2.2):
 - (1) No encroachments, including fill, new construction, substantial improvements and other developments shall be permitted within floodways or non-encroachment areas unless certification (with supporting technical data) by a registered professional engineer is provided demonstrating that such encroachments shall not result in any increase in flood levels during occurrence of the base flood discharge.
 - (2) If subsection (D) (1) is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section 10-2.4.
 - (3) No manufactured home shall be permitted nor relocated in a floodway or non-encroachment area.

10-2.3 Permissible Uses within Floodways and Non-Encroachment Areas

- (A) Notwithstanding Section 9-3.1 of this Ordinance (Permitted Use Table), no permit to make use of land within a floodway or non-encroachment area may be issued unless the proposed use is listed as permissible both in the Table of Permissible Uses and in the following list and provided that the proposed use does not involve a structure or fill:
 - (1) General farming, pasture, outdoor plant nurseries, horticulture, forestry, wildlife sanctuary, game farm, and other similar agricultural, wildlife and related uses.
 - (2) Ground level streets, streets, loading areas, parking areas, rotary aircraft ports, and other similar ground level area uses.
 - (3) Lawns, gardens, play areas, and other similar uses.
 - (4) Golf courses, tennis courts, driving ranges, archery ranges, picnic grounds, parks, hiking or horseback riding trails, open space and other similar private and public recreational uses.
- (B) The uses listed in subsection (A) are permissible only if and to the extent that they do not cause any increase in flood levels in accordance with the provisions of Section 10-2.4 (F).
- (C) No building may be constructed and no substantial improvement of any existing building may take place within any floodway or non-encroachment area.

- (D) Any accessory structure allowed in subsection (A) shall not be used for human habitation.

10-2.4 Construction within Areas of Special Flood Hazard Restricted

- (A) No new residential building may be constructed and no substantial improvement of a residential building may take place within any area of special flood hazard except in accordance with subsection (D) or (E) of this Section.
- (B) No new nonresidential building, with the exception of public utility structures, may be constructed and no substantial improvements of a nonresidential building may take place within any area of special flood hazard except in accordance with subsection (D) or (E) of this Section.
- (C) The following general standards shall apply to any permissible use, any public utility structure and any use allowed by variance (in accordance with Section 7-2.2) in an area of special flood hazard:
 - (1) All new construction and substantial improvements shall be designed (or modified) and adequately anchored to prevent flotation, collapse and lateral movement of the structure.
 - (2) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
 - (3) All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damages.
 - (4) Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding to the Regulatory Flood Protection Elevation. These include, but are not limited to, HVAC equipment, water softener units, bath/kitchen fixtures, ductwork, electric/gas meter panels/boxes, utility/cable boxes, hot water heaters, and electric outlets/switches.
 - (5) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.
 - (6) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters.
 - (7) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.

- (8) Any alteration, repair, reconstruction or improvements to a structure which is in compliance with the provisions of this Ordinance shall meet the requirements of 'new construction' as contained in this Ordinance.
- (9) Nothing in this Ordinance shall prevent the repair, reconstruction, or replacement of a building or structure existing on the effective date of this Ordinance and located totally or partially within the floodway, non-encroachment area, or stream setback, provided there is no additional encroachment below the Regulatory Flood Protection Elevation in the floodway, non-encroachment area, or stream setback, and provided that such repair, reconstruction, or replacement meets all of the other requirements of this Ordinance.
- (10) New solid waste disposal facilities and sites, hazardous waste management facilities, salvage yards, and chemical storage facilities shall not be permitted, except by variance as specified in Section 7-2. A structure or tank for chemical or fuel storage incidental to an allowed use or to the operation of water treatment plan of a wastewater treatment facility may be located in a Special Flood Hazard Area only if the structure or tanks is either elevated or floodproofed to at least the Regulatory Flood Protection Elevation and certified in accordance with the provisions of Section 10-2.4 (D)
- (11) All development proposals shall be consistent with the need to minimize flood damage.
- (12) All development proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.
- (13) All development proposals shall have adequate drainage provided to reduce exposure to flood hazards.
- (14) All development proposals shall have received all necessary permits from those governmental agencies for which approval is required by federal or state law, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334.
- (15) When a structure is partially located in a Special Flood Hazard Area, the entire structure shall meet the requirements for new construction and substantial improvements.
- (16) When a structure is located in multiple flood hazard zones or in a flood hazard risk zone with multiple base flood elevations, the provisions for the more restrictive flood hazard risk zone and the highest Base Flood Elevation shall apply.
- (17) Whenever any portion of an area of special flood hazard outside of the floodway or non-encroachment area is filled in with fill dirt, slopes shall

be adequately stabilized to withstand the erosive force of the base flood.

- (D) In all areas of special flood hazard where Base Flood Elevation (BFE) data has been provided, the following provisions, in addition to the provisions of Section 10-2.4 (C), shall apply to any permissible use and any use allowed by variance (in accordance with Section 7-2.2):
- (1) Residential Construction. New construction or substantial improvement of any residential structure shall have the reference level, including basement, elevated no lower than the Regulatory Flood Protection Elevation as defined in Section 10-2.1.
 - (2) Non-Residential Construction. New construction or substantial improvement of any commercial, industrial, or non-residential structure shall have the reference level, including basement, elevated no lower than the Regulatory Flood Protection Elevation as defined in Section 10-2.1. Structures located in A and AE zones may be flood-proofed to the Regulatory Flood Protection Elevation in lieu of elevation provided that all areas of the structure, together with attendant utility and sanitary facilities, below the Regulatory Flood Protection Elevation are water tight with walls substantially impermeable to the passage of water, using structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that the floodproofing standards of this subsection are satisfied. Such certification shall be provided to the Floodplain Administrator as set forth in Section 10-2.7(A) (5) along with the operational plan and the inspection and maintenance plan.
 - (3) Manufactured Homes.
 - (a) New and replacement manufactured homes that are placed or substantially improved on sites (i) outside a manufactured home park or subdivision; (ii) in a new manufactured home park or subdivision; (iii) in an expansion to an existing manufactured home park or subdivision; or, (iv) in an existing manufactured home park or subdivision on which a manufactured home has incurred 'substantial damage' as the result of a flood, must be elevated on a permanent foundation such that the reference level of the manufactured home is no lower than the Regulatory Flood Protection Elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.
 - (b) Manufactured homes shall be securely anchored to an adequately anchored foundation to prevent flotation, collapse, or lateral movement either by certified engineered foundation system, or in accordance with the most current edition of the State of North Carolina *Regulations for Mobile Homes and*

Modular Housing adopted by the Commissioner of Insurance pursuant to NCGS 143-143.15. Additionally, when the elevation would be met by an elevation of the chassis thirty-six (36) inches or less above the grade at the site, the chassis shall be supported by reinforced piers or engineered foundation. When the elevation of the chassis is above thirty-six (36) inches in height, an engineering certification is required.

- (c) All enclosures or skirting below the lowest floor shall meet the requirements of Section 10-2.4 (D) (5).
 - (d) An evacuation plan must be developed for evacuation of all residents of all new, substantially improved or substantially damaged manufactured home parks or subdivisions located within flood prone areas. This plan shall be filed with and approved by the Planning Director and the local Emergency Management Coordinator.
- (4) Recreational Vehicles. A recreational vehicle is ready for highway use if it is on wheels or jacking system, is attached to the site only by quick-disconnect type utilities and security devices, and has no permanently attached additions. Recreation vehicles placed on sites shall either:
- (a) Be on site for fewer than 180 consecutive days;
 - (b) Be fully licensed and ready for highway use; or
 - (c) Meet the requirements for new construction.
- (5) Elevated Buildings. Fully enclosed area, of new construction and substantially improved structures, which is below the lowest floor:
- (a) Shall not be designed or used for human habitation, but shall only be used for parking of vehicles, building access, or limited storage of maintenance equipment used in connection with the premises. Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment (standard exterior door), or entry to the living area (stairway or elevator). The interior portion of such enclosed area shall not be finished or partitioned into separate rooms, except to enclose storage areas;
 - (b) Shall be constructed entirely of flood resistant materials at least to the Regulatory Flood Protection Elevation; and
 - (c) Shall include, in Zones A and AE, flood openings to automatically equalize hydrostatic flood forces on walls by allowing for the entry and exit of floodwaters. To meet this

requirement, the openings must either be certified by a professional engineer or architect or meet or exceed the following minimum design criteria:

- (i) A minimum of two flood openings on different sides of each enclosed area subject to flooding;
 - (ii) The total net area of all flood openings must be at least one (1) square inch for each square foot of enclosed area subject to flooding;
 - (iii) If a building has more than one enclosed area, each enclosed area must have flood openings to allow floodwaters to automatically enter and exit;
 - (iv) The bottom of all required flood openings shall be no higher than one (1) foot above the adjacent grade;
 - (v) Flood openings may be equipped with screens, louvers, or other coverings or devices, provided they permit the automatic flow of floodwaters in both directions; and
 - (vi) Enclosures made of flexible skirting are not considered enclosures for regulatory purposes, and, therefore, do not require flood openings. Masonry or wood underpinning, regardless of structural status, is considered an enclosure and requires flood openings as outlined above.
- (6) Temporary Non-Residential Structures. Prior to the issuance of a floodplain development permit for a temporary structure, the applicant must submit to the Floodplain Administrator a plan for the removal of such structure(s) in the event of a hurricane, flash flood or other type of flood warning notification. The following information shall be submitted in writing to the Floodplain Administrator for review and written approval:
- (a) A specified time period for which the temporary use will be permitted. Time specified may not exceed three (3) months, renewable up to one (1) year;
 - (b) The name, address, and phone number of the individual responsible for the removal of the temporary structure;
 - (c) The time frame prior to the event at which a structure will be removed (i.e., minimum of 72 hours before landfall of a hurricane or immediately upon flood warning notification);
 - (d) A copy of the contract or other suitable instrument with the entity responsible for physical removal of the structure; and

- (e) Designation, accompanied by documentation, of a location outside the Special Flood Hazard Area, to which the temporary structure will be moved.
- (7) Accessory Structure. When accessory structures (sheds, detached garages, etc.) are to be placed within a Special Flood Hazard Area, the following criteria shall be met:
- (a) Accessory structures shall not be used for human habitation (including working, sleeping, living, cooking or restroom areas);
 - (b) Accessory structures shall not be temperature-controlled;
 - (c) Accessory structures shall be designed to have low flood damage potential;
 - (d) Accessory structures shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters;
 - (e) Accessory structures shall be firmly anchored in accordance with Section 10-2.4(C) (1);
 - (f) Service facilities such as electrical and heating equipment shall be elevated in accordance with Section 10-2.4(C) (5); and,
 - (g) Flood openings to facilitate automatic equalization of hydrostatic flood forces shall be provided below Regulatory Flood Protection Elevation in conformance with the provisions of Section 10-2.4 (D).

An accessory structure with a footprint less than 150 square feet that satisfies the criteria outlined above does not require an elevation or a floodproofing certificate. Elevation or floodproofing certifications are required for all other accessory structures in accordance with Section 10-2.4 (D) (5) (c).

- (E) Floodplains without Established Base Flood Elevations. Located within the areas of special flood hazard are streams where no Base Flood Elevation (BFE) data has been provided. The following provisions apply within such areas to any permissible use or any use allowed by variance (in accordance with Section 7-2.2);
- (1) No encroachments, including fill, new construction, substantial improvements or new development shall be permitted within a distance of the stream bank equal to three times the width of the stream at the top of bank or twenty feet each side from top of bank, whichever is greater, unless certification with supporting technical data by a registered professional engineer is provided demonstrating

that such encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.

- (2) The BFE used in determining the regulatory flood protection elevation shall be determined based on the following criteria:
 - (a) When Base Flood Elevation (BFE) data is available from other sources, all new construction and substantial improvements within such areas shall comply with all applicable provisions of this ordinance and shall be elevated or flood-proofed in accordance with Section 10-2.4(C) and (D).
 - (b) When floodway or non-encroachment area data is available for a Federal, State, or other source, all new construction and substantial improvements with floodway and non-encroachment areas shall also comply with the requirements of Section 10-2.4 (D) and (F).
 - (c) All subdivision, manufactured home park and other development proposals shall provide Base Flood Elevation (BFE) data if development is greater than five (5) acres or has more than fifty (50) lots/manufactured home sites. Such Base Flood Elevation (BFE) data shall be adopted by reference in accordance with Section 10-2.8 and utilized in implementing this ordinance.
 - (d) When base flood elevation data is not available from a federal, state, or other source, the reference level shall be elevated or floodproofed (non-residential) to or above the Regulatory Flood Protection Elevation as defined in Section 10-2.1. All other applicable provision of Section 10-2.4 (D) shall also apply.
- (F) Floodways and Non-Encroachment Areas. Located within areas of special flood hazard are areas designated as floodways or non-encroachment areas. The floodways and non-encroachment areas are extremely hazardous areas due to the velocity of flood waters which carry debris and potential projectiles and have erosion potential. The following provisions shall apply within such areas:
 - (1) No encroachments, including fill, new construction, substantial improvements and other developments shall be permitted unless
 - (a) It has been demonstrated that the proposed encroachment would not result in any increase in the flood levels during the occurrence of the base flood, based on hydrologic and hydraulic analyses performed in accordance with standard engineering practice and. presented to the Floodplain Administrator prior to issuance of a floodplain development permit, or
 - (b) A Conditional Letter of Map Revision (CLOMR) has been approved by FEMA. A Letter of Map Revision (LOMR) must

also be obtained upon completion of the proposed encroachment.

- (2) If the requirements of subsection (a) are satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of this Section.
 - (3) No manufactured homes shall be permitted, except in an existing manufactured home park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring and the elevation standards of Section 10-2.4(D)(3) are met and the encroachment standards of subsection (a) above.
- (G) Floodplains with Base Flood Elevations but Without Established Floodways or Non-Encroachment Areas. Along rivers and streams where Base Flood Elevation (BFE) data is provided by FEMA or is available from another source but neither floodway nor non-encroachment areas are identified for a Special Flood Hazard Area on the FIRM or in the FIS report, the following requirements shall apply to all development within such areas:
- (1) Standards of Sections 10-2.4 (C) and (D); and
 - (2) Until a regulatory floodway or non-encroachment area is designated, no encroachments, including fill, new construction, substantial improvements, or other development, shall be permitted unless certification with supporting technical data by a registered professional engineer is provided demonstrating that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one (1) foot at any point within the community.

10-2.5 Special Provisions for Subdivisions

- (A) An applicant for subdivision plat approval shall be informed by the Planning Director of the use and construction restrictions contained in Sections 10-2.2, 10-2.3, and 10-2.4 if any portion of the land to be subdivided lies within an area of special flood hazard.
- (B) Final plat approval for any subdivision containing land that lies within an area of special flood hazard may not be given unless the plat shows the boundary of the area of special flood hazard and floodway or non-encroachment area boundary and contains, in clearly discernible print, the following statement: 'Use of land within an area of special flood hazard is substantially restricted by Section 10-2 of the Shelby Unified Development Ordinance'.
- (C) Subject to the following sentence, a request for final plat approval for any subdivision may not be granted if:

- (1) The land to be subdivided lies within a zone where residential uses are permissible and it reasonably appears that the subdivision is designed to create residential building lots; and
- (2) Any portion of one or more of the proposed lots lies within an area of special flood hazard; and
- (3) It reasonably appears that one or more lots described in subsections (C) (1) and (C) (2) could not practicably be used as a residential building site because of the restrictions set forth in Sections 10-2.2, 10-2.3, and 10-2.4.

The foregoing provision shall not apply if a notice that the proposed lots are not intended for sale as residential building lots is recorded on the final plat, or if the developer otherwise demonstrates to the satisfaction of the authority approving the final plat that the proposed lots are not intended for sale as residential building lots.

- (D) All subdivision proposals shall be consistent with the need to minimize flood damage.
- (E) All subdivision proposals shall have public utilities and facilities such as water, sewer, gas, and electrical systems located and constructed so as to minimize flood damage.
- (F) All subdivisions shall have adequate drainage provided to reduce exposure to flood hazards.
- (G) Base flood elevation data shall be provided for subdivision proposals that contain fifty lots or five acres, whichever is less.

10-2.6 Water Supply and Sanitary Sewer Systems in Areas of Special Flood Hazard

Whenever any portion of a proposed development is located within an area of special flood hazard or whenever replacement water supply and sewage disposal systems are proposed within an area of special flood hazard, the agency or agencies responsible for certifying to the City the adequacy of the water supply and sewage disposal systems for the development (as set forth in Section 15-7.4) shall be informed by the developer that a specified area within the development lies within an area of special flood hazard. Thereafter, approval of the proposed system by that agency shall constitute a certification that:

- (A) Such water supply system is designed to minimize or eliminate infiltration of flood waters into it.
- (B) Such sanitary sewer system is designed to eliminate infiltration of flood waters into it and discharges from it into flood waters.
- (C) Any on-site sewage disposal system is located to avoid impairment to it or contamination from it during flooding.

10-2.7 Permit Requirements, Certifications, and Duties and Responsibilities of the Planning Director

- (A) The Planning Director shall serve as the Floodplain Administrator. The Floodplain Administrator is hereby appointed to administer and implement the provisions of this ordinance.
- (B) Application Requirements. Application for a Floodplain Development Permit shall be made to the Planning Director prior to any development activities located within Special Flood Hazard Areas. The following items shall be presented to the Planning Director to apply for a floodplain development permit:
 - (1) A plot plan drawn to scale which shall include, but shall not be limited to, the following specific details of the proposed floodplain development:
 - (a) The nature, location, dimensions, and elevations of the area of development/disturbance; existing and proposed structures, utility systems, grading/pavement areas, fill materials, storage areas, drainage facilities, and other development;
 - (b) The boundary of the Special Flood Hazard Area as delineated on the FIRM or other flood map as determined in Article 3, Section B, or a statement that the entire lot is within the Special Flood Hazard Area;
 - (c) Flood zone(s) designation of the proposed development area as determined on the FIRM or other flood map as determined in Section 10-2.8;
 - (d) The boundary of the floodway(s) or non-encroachment area(s) as determined in Section 10-2.8;
 - (e) The Base Flood Elevation (BFE) where provided as set forth in Section 10-2.8; Section 10-2.7 (E); or Section 10-2.4 (E);
 - (f) The old and new location of any watercourse that will be altered or relocated as a result of proposed development; and
 - (g) The certification of the plot plan by a registered land surveyor or professional engineer.
 - (2) Proposed elevation, and method thereof, of all development within a Special Flood Hazard Area including but not limited to:
 - (a) Elevation in relation to mean sea level of the proposed reference level (including basement) of all structures;

- (b) Elevation in relation to mean sea level to which any non-residential structure in Zone AE or A will be floodproofed; and
 - (c) Elevation in relation to mean sea level to which any proposed utility systems will be elevated or floodproofed.
 - (3) If floodproofing, a Floodproofing Certificate (FEMA Form 81-65) with supporting data, an operational plan, and an inspection and maintenance plan that include, but are not limited to, installation, exercise, and maintenance of floodproofing measures.
 - (4) A Foundation Plan, drawn to scale, which shall include details of the proposed foundation system to ensure all provisions of this ordinance are met. These details include but are not limited to:
 - (a) The proposed method of elevation, if applicable (i.e., fill, solid foundation perimeter wall, solid backfilled foundation, open foundation on columns/posts/piers/piles/shear walls); and
 - (b) Openings to facilitate automatic equalization of hydrostatic flood forces on walls in accordance with Section 10-2.4 (D) (5)
 - (c) when solid foundation perimeter walls are used in Zones A and AE.
 - (5) Usage details of any enclosed areas below the lowest floor.
 - (6) Plans and/or details for the protection of public utilities and facilities such as sewer, gas, electrical, and water systems to be located and constructed to minimize flood damage.
 - (7) Certification that all other Local, State and Federal permits required prior to floodplain development permit issuance have been received.
 - (8) Documentation for placement of Recreational Vehicles and/or Temporary Structures, when applicable, to ensure that the provisions of Section 10-2.4 (D), subsections (4) and (6) of this ordinance are met.
 - (9) A description of proposed watercourse alteration or relocation, when applicable, including an engineering report on the effects of the proposed project on the flood-carrying capacity of the watercourse and the effects to properties located both upstream and downstream; and a map (if not shown on plot plan) showing the location of the proposed watercourse alteration or relocation.
- (C) Permit Requirements. The Floodplain Development Permit shall include, but not be limited to:
- (1) A description of the development to be permitted under the floodplain development permit.

- (2) The Special Flood Hazard Area determination for the proposed development in accordance with available data specified in Section 10-2.8.
 - (3) The Regulatory Flood Protection Elevation required for the reference level and all attendant utilities.
 - (4) The Regulatory Flood Protection Elevation required for the protection of all public utilities.
 - (5) All certification submittal requirements with timelines.
 - (6) A statement that no fill material or other development shall encroach into the floodway or non-encroachment area of any watercourse, as applicable.
 - (7) The flood openings requirements, if in Zones A or AE.
 - (8) Limitations of below BFE enclosure uses (if applicable). (I.e., parking, building access and limited storage only).
- (D) Certification Requirements.
- (1) Elevation Certificates
 - (a) An Elevation Certificate (FEMA Form 81-31) is required prior to the actual start of any new construction. It shall be the duty of the permit holder to submit to the Planning Director a certification of the elevation of the reference level, in relation to mean sea level. The Planning Director shall review the certificate data submitted. Deficiencies detected by such review shall be corrected by the permit holder prior to the beginning of construction. Failure to submit the certification or failure to make required corrections shall be cause to deny a floodplain development permit.
 - (b) An Elevation Certificate (FEMA Form 81-31) is required after the reference level is established. Within seven (7) calendar days of establishment of the reference level elevation, it shall be the duty of the permit holder to submit to the Planning Director a certification of the elevation of the reference level, in relation to mean sea level. Any work done within the seven (7) day calendar period and prior to submission of the certification shall be at the permit holder's risk. The Planning Director shall review the certificate data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further work being permitted to proceed. Failure to submit the certification or failure to make

required corrections shall be cause to issue a stop-work order for the project.

- (c) A final as-built Elevation Certificate (FEMA Form 81-31) is required after construction is completed and prior to Certificate of Compliance/Occupancy issuance. It shall be the duty of the permit holder to submit to the Planning Director a certification of final as-built construction of the elevation of the reference level and all attendant utilities. The Planning Director shall review the certificate data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to Certificate of Compliance/Occupancy issuance. In some instances, another certification may be required to certify corrected as-built construction. Failure to submit the certification or failure to make required corrections shall be cause to withhold the issuance of a Certificate of Compliance/Occupancy.

(2) Floodproofing Certificate

If non-residential floodproofing is used to meet the Regulatory Flood Protection Elevation requirements, a Floodproofing Certificate (FEMA Form 81-65), with supporting data, an operational plan, and an inspection and maintenance plan are required prior to the actual start of any new construction. It shall be the duty of the permit holder to submit to the Planning Director a certification of the floodproofed design elevation of the reference level and all attendant utilities, in relation to mean sea level. Floodproofing certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same. The Planning Director shall review the certificate data, the operational plan, and the inspection and maintenance plan. Deficiencies detected by such review shall be corrected by the applicant prior to permit approval. Failure to submit the certification or failure to make required corrections shall be cause to deny a floodplain development permit. Failure to construct in accordance with the certified design shall be cause to withhold the issuance of a Certificate of Compliance/Occupancy.

- (3) If a manufactured home is placed within Zone A or AE and the elevation of the chassis is more than 36 inches in height above grade, an engineered foundation certification is required in accordance with the provisions of Section 10-2.4 (D)(3)(b).

- (4) If a watercourse is to be altered or relocated, a description of the extent of watercourse alteration or relocation; a professional engineer's certified report on the effects of the proposed project on the flood-carrying capacity of the watercourse and the effects to properties located both upstream and downstream; and a map showing the location of the proposed watercourse alteration or

relocation shall all be submitted by the permit applicant prior to issuance of a floodplain development permit.

- (5) Certification Exemptions. The following structures, if located within Zone A or AE, are exempt from the elevation/floodproofing certification requirements specified in items (1) and (2) of this subsection:
 - (a) Recreational Vehicles meeting requirements of subsections (a) and (b) of Section 10-2.4 (D) (4);
 - (b) Temporary Structures meeting requirements of Section 10-2.4 (D) (6); and
 - (c) Accessory Structures less than 150 square feet meeting requirements of Section 10-2.4 (D) (6).
- (E) The Planning Director shall perform, but not be limited to, the following duties:
 - (1) Review all floodplain development applications and issue permits for all proposed development within Special Flood Hazard Areas to assure that the requirements of this ordinance have been satisfied.
 - (2) Review all proposed development within Special Flood Hazard Areas to assure that all necessary Local, State and Federal permits have been received.
 - (3) Notify adjacent communities and the North Carolina Department of Crime Control and Public Safety, Division of Emergency Management, State Coordinator for the National Flood Insurance Program prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency (FEMA).
 - (4) Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is maintained.
 - (5) Prevent encroachments into floodways and non-encroachment areas unless the certification and flood hazard reduction provisions of Section 10-2.4 (F) are met.
 - (6) Obtain actual elevation (in relation to mean sea level) of the reference level (including basement) and all attendant utilities of all new and substantially improved structures, in accordance with the provisions of Section 10-2.7 (D).

- (7) Obtain actual elevation (in relation to mean sea level) to which all new and substantially improved structures and utilities have been floodproofed, in accordance with the provisions of Section 10-2.7 (D).
- (8) Obtain actual elevation (in relation to mean sea level) of all public utilities in accordance with the provisions of Section 10-2.7 (D).
- (9) When floodproofing is utilized for a particular structure, obtain certifications from a registered professional engineer or architect in accordance with the provisions of Section 10-2.7 (D) and Section 10-2.4 (D)(2).
- (10) Where interpretation is needed as to the exact location of boundaries of the Special Flood Hazard Areas, floodways, or non-encroachment areas (for example, where there appears to be a conflict between a mapped boundary and actual field conditions), make the necessary interpretation. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this article.
- (11) When Base Flood Elevation (BFE) data has not been provided in accordance with the provisions of Section 10.28, obtain, review, and reasonably utilize any BFE data, along with floodway data or non-encroachment area data available from a Federal, State, or other source, including data developed pursuant to Section 10-2.4 (E) (2) (b), in order to administer the provisions of this ordinance.
- (12) When Base Flood Elevation (BFE) data is provided but no floodway or non-encroachment area data has been provided in accordance with the provisions of Section 10-2.8, obtain, review, and reasonably utilize any floodway data or non-encroachment area data available from a Federal, State, or other source in order to administer the provisions of this ordinance.
- (13) When the lowest floor and the lowest adjacent grade of a structure or the lowest ground elevation of a parcel in a Special Flood Hazard Area is above the Base Flood Elevation (BFE), advise the property owner of the option to apply for a Letter of Map Amendment (LOMA) from FEMA. Maintain a copy of the LOMA issued by FEMA in the floodplain development permit file. (*OPTIONAL*)
- (14) Permanently maintain all records that pertain to the administration of this ordinance and make these records available for public inspection, recognizing that such information may be subject to the Privacy Act of 1974, as amended.
- (15) Make on-site inspections of work in progress. As the work pursuant to a floodplain development permit progresses, the Planning Director shall make as many inspections of the work as may be necessary to ensure that the work is being done according to the provisions of the

local ordinance and the terms of the permit. In exercising this power, the Planning Director has a right, upon presentation of proper credentials, to enter on any premises within the jurisdiction of the community at any reasonable hour for the purposes of inspection or other enforcement action.

- (16) Issue stop-work orders as required. Whenever a building or part thereof is being constructed, reconstructed, altered, or repaired in violation of this ordinance, the Planning Director may order the work to be immediately stopped. The stop-work order shall be in writing and directed to the person doing or in charge of the work. The stop-work order shall state the specific work to be stopped, the specific reason(s) for the stoppage, and the condition(s) under which the work may be resumed. Violation of a stop-work order constitutes a misdemeanor.
- (17) Revoke floodplain development permits as required. The Planning Director may revoke and require the return of the floodplain development permit by notifying the permit holder in writing stating the reason(s) for the revocation. Permits shall be revoked for any substantial departure from the approved application, plans, and specifications; for refusal or failure to comply with the requirements of State or local laws; or for false statements or misrepresentations made in securing the permit. Any floodplain development permit mistakenly issued in violation of an applicable State or local law may also be revoked.
- (18) Make periodic inspections throughout the Special Flood Hazard Areas within the jurisdiction of the community. The Planning Director and each member of his or her inspections department shall have a right, upon presentation of proper credentials, to enter on any premises within the territorial jurisdiction of the department at any reasonable hour for the purposes of inspection or other enforcement action.
- (19) Follow through with corrective procedures of Section 5-3.
- (20) Review, provide input, and make recommendations for variance requests.
- (21) Maintain a current map repository to include, but not limited to, the FIS Report, FIRM and other official flood maps and studies adopted in accordance with the provisions of Section 10-2.8 of this ordinance, including any revisions thereto including Letters of Map Change, issued by FEMA. Notify State and FEMA of mapping needs.
- (22) Coordinate revisions to FIS reports and FIRMs, including Letters of Map Revision Based on Fill (LOMR-Fs) and Letters of Map Revision (LOMRs).

10-2.8 Location of Boundaries of Areas of Special Flood Hazard

As used in Section 10-2, the term 'areas of special flood hazard' refers in the first instance to certain areas whose boundaries are determined and can be located on the ground by reference to the specific fluvial characteristics set forth in the definitions of this term. This term also refers to overlay zoning districts whose boundaries are those identified under the Cooperating Technical State (CTS) agreement between the State of North Carolina and FEMA in its Flood Insurance Study (FIS) and its accompanying Flood Insurance Rate Map (FIRM), for Cleveland County dated February 20, 2008, which are adopted by reference and declared to be a part of this ordinance, which boundaries are intended to correspond to the actual, physical location of areas of special flood hazard. (These overlay districts thus differ from other zoning districts whose boundaries are established solely according to planning or policy, rather than physical criteria.) Therefore, the Floodplain Administrator is authorized to make necessary interpretations as to the exact location of the boundaries of areas of special flood hazards if there appears to be a conflict between a mapped boundary and actual field conditions. Such interpretations, like other decisions of the Floodplain Administrator, may be appealed to the Board of Adjustment in accordance with the applicable provisions of this Ordinance.

The initial Flood Insurance Rate Maps are as follows for the jurisdictional areas at the initial date:

Cleveland_ County Unincorporated Area, dated July 2, 1991
City of Shelby, dated April 3, 1978

10-2.9 Amendments to the Official Flood Hazard Zoning and Flood Insurance Rate Map; Variance Procedures

(A) Amendments to the Official Flood Hazard Zoning and Flood Insurance Rate Map:

- (1) All requests for revisions of areas of special flood hazard boundaries and Base Flood Elevations (BFEs) shall be reviewed and approved by the Federal Emergency Management Agency.
- (2) The existing location of any area of special flood hazard as herein above defined may be amended in cases where:
 - (a) A flood control project of the federal, state, county or city government has substantially altered the flood hazard;
 - (b) Flood data indicates that the boundaries of either of the areas as shown on the official Flood Insurance Rate Map are no longer correct; or
 - (c) A private individual, corporation, firm or city agency has submitted plans for a channel improvement or relocation requiring an amendment to the official Flood Insurance Rate Map.

(B) Variance Procedures

Requests for variances from the Flood Hazard Overlay District Requirements shall be reviewed by the Board of Adjustment in accordance with the procedures outlined in Section 7-2.2.

10-2.10 Regulations Do Not Guarantee Flood Protection

The degree of flood protection required by this Ordinance is considered reasonable for regulating purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes.

10-2.11 Setbacks from Streams Outside Designated Areas of Special Flood Hazard

In any area that is located outside a designated area of special flood hazard but where a stream is located, no building or fill may be located within a distance of the stream bank equal to five times the width of the stream at the top of the bank or twenty feet on each side, whichever is greater.

10-2.12 Effect on Rights and Liabilities under the Existing Flood Damage Prevention Ordinance.

This ordinance in part comes forward by re-enactment of some of the provisions of the flood damage prevention ordinance enacted November 19, 2001 as amended, and it is not the intention to repeal but rather to re-enact and continue to enforce without interruption of such existing provisions, so that all rights and liabilities that have accrued there under are reserved and may be enforced. The enactment of this ordinance shall not affect any action, suit or proceeding instituted or pending. All provisions of the flood damage prevention ordinance of the City of Shelby enacted on November 19, 2001 as amended, which are not reenacted herein are repealed.

10-2.13 Effect upon Outstanding Floodplain Development Permits

Nothing herein contained shall require any change in the plans, construction, size, or designated use of any development or any part thereof for which a floodplain development permit has been granted by the Floodplain Administrator or his or her authorized agents before the time of passage of this ordinance; provided, however, that when construction is not begun under such outstanding permit within a period of six (6) months subsequent to the date of issuance of the outstanding permit, construction or use shall be in conformity with the provisions of this ordinance.

10-3 STORMWATER MANAGEMENT

The general standards contained in this Section shall apply throughout the planning jurisdiction. However, developments located within watershed protection overlay districts shall comply with the applicable additional requirements of Section 10-1.

10-3.1 Natural Drainage System Utilized to Extent Feasible

- (A) To the extent practicable, all development shall conform to the natural contours of the land and natural and pre-existing man-made drainage ways shall remain undisturbed.
- (B) To the extent practicable, lot boundaries shall be made to coincide with natural and pre-existing man-made drainage ways within subdivisions to avoid the creation of lots that can be built upon only by altering such drainage ways.

10-3.2 Developments Must Drain Properly

- (A) All developments shall be provided with a drainage system that is adequate to prevent the undue retention of surface water on the development site. Surface water shall not be regarded as unduly retained if:
 - (1) The retention results from a technique, practice or device deliberately installed as part of an approved sedimentation or storm water runoff control plan; or
 - (2) The retention is not substantially different in location or degree than that experienced by the development site in its pre-development stage, unless such retention presents a danger to health or safety.
- (B) No surface water may be channeled or directed into a sanitary sewer.
- (C) Whenever practicable, the drainage system of a development shall coordinate with and connect to the drainage systems or drainage ways on surrounding properties or streets.
- (D) All developments shall be constructed and maintained so that adjacent properties are not unreasonably burdened with surface waters as a result of such developments. More specifically:
 - (1) No development may be constructed or maintained so that such development unreasonably impedes the natural flow of water from higher adjacent properties across such development, thereby unreasonably causing substantial damage to such higher adjacent properties; and
 - (2) No development may be constructed or maintained so that surface waters from such development are unreasonably collected and channeled onto lower adjacent properties at such locations or at such volumes as to cause substantial damage to such lower adjacent properties.

10-3.3 Design Standards

New and extended stormwater systems shall be designed to the specifications maintained by the City of Shelby City Engineer and calculated to accommodate ten-year design frequency stormwater runoff.

10-3.4 Construction of Systems by Developers; Responsibility for Maintenance

Storm drainage systems shall be constructed by developers as part of the public improvements of new subdivisions, under provisions of Article XV.

- (A) A site plan illustrating all drainage facilities shall be submitted to the City Engineer for approval prior to construction.
- (B) Street storm drains which discharge water onto lots within a development shall be extended by the developer to a point fifteen feet beyond any structure on or to be constructed on said subdivision lots.
- (C) The City maintenance responsibility for storm drainage systems is restricted to structures and piping within street rights-of-way.
- (D) Owners of private property containing stormwater channels or piping shall be responsible for maintaining them open, clean, and properly functioning as parts of the stormwater runoff system.

10-3.5 Installation and Maintenance by Private Property Owners

Private property owners are permitted to install storm piping in runoff channels, in accordance with specification and calculations of pipe and structure size approved by the City Engineer.

- (A) Property owners with stormwater runoff systems on their property will be responsible for maintaining these channels, systems and structures open to accommodate the free flow of stormwater away from the street right-of-way.
- (B) Culverts under driveway connections to public streets shall be maintained clear of obstructions and capable of freely carrying stormwater flow by the private property owner owning and utilizing the driveway.

10-4 SOIL EROSION AND SEDIMENTATION CONTROL

- (A) No zoning, special use, or conditional use permit may be issued and preliminary plat approval for subdivisions may not be given with respect to any development that would cause land disturbing activity requiring prior approval of an erosion and sedimentation control plan by the Land Quality Section, Division of Land Resources, NC Department of Environment and Natural Resources under NCGS 113A-57(4) unless the Land Quality Section has certified to the City, either that:

- (1) An erosion control plan has been submitted to and approved by the Land Quality Section; or
 - (2) The Land Quality Section has examined the preliminary plans for the development and it reasonably appears that an erosion control plan can be approved upon submission by the developer of more detailed construction or design drawings. However, in this case, construction of the development may not begin (and no building permits may be issued) until the Land Quality Section approves the erosion control plan.
- (B) For purposes of this Section, 'land disturbing activity' means any use of the land by any person in residential, industrial, educational, institutional or commercial development, highway and street construction and maintenance that results in a change in the natural cover or topography and that may cause or contribute to sedimentation except activities that are exempt under NCGS 113A-52(6)). Sedimentation occurs whenever solid particulate matter, mineral or organic, is transported by water, air, gravity, or ice from the site of its origin.

10-5 COORDINATION WITH THE US ARMY CORPS OF ENGINEERS REGARDING WETLANDS

If a developer, corporation, private landowner or other person proposes to perform construction/filling activities in or near a lake, stream, creek, tributary or any unnamed body of water and its adjacent wetlands, Federal permit authorization may be required from the US Army Corps of Engineers prior to commencement of earth-disturbing activities. The US Army Corps of Engineers shall be notified by the developer or person proposing such earth-disturbing activities for possible issuance of Section 404 or other permits.

10-6 AIRPORT OVERLAY DISTRICT REQUIREMENTS (*RESERVED*)

The use of land within the Shelby Municipal Airport approach surface zones, horizontal surface zones, conical surface zones, and transitional surface zones established by Airport Zoning Ordinance in Appendix B of the City of Shelby Municipal Code shall be in accordance with such airport zoning ordinance.

10-7 MANUFACTURED HOUSING OVERLAY DISTRICT REQUIREMENTS

The Manufactured Housing Overlay Districts are intended to provide for alternative housing opportunities by allowing the placement of manufactured homes within specific defined areas which overlay the R10, R8, and R6 general zoning districts. Such overlay districts are designated R10MH, R8MH, and R6MH. The Manufactured Housing Overlay Districts are established pursuant to Article 19, Section 160A-383.1 (e) of the North Carolina General Statutes.

10-7.1 Minimum Development Area

- (A) A manufactured Housing Overlay District shall consist of a minimum of 4 contiguous lots meeting the minimum lot size requirements of the zoning district in which the lots are located.
- (B) The procedure for establishing Manufactured Housing Overlay Districts shall be in accordance with Article VIII, Amendments.

10-7.2 General Standards for Manufactured Homes

Manufactured homes permitted within Manufactured Housing Overlay Districts shall be Class A Manufactured Homes as defined in Section 2-4. Additionally, such manufacture homes shall comply the standards delineated below.

- (A) The manufactured home shall have a minimum width of 24 feet and a maximum length not to exceed 4 times its width.
- (B) The manufactured home shall have a minimum gross floor area on 1,000 square feet.
- (C) The roof shall have a vertical rise of at least 3 inches for each 12 inches of horizontal run (3 to 12 pitch) and the roof finish shall be a class 'C' or better material that is commonly used in conventional residential construction.
- (D) The manufacture home shall be placed on a permanent masonry foundation that meets or exceeds the standards of the NC Uniform Residential Building Code and such foundation walls shall be unpierced except for normal ventilation and access openings. Exposed common concrete blocks shall not be used.
- (E) The exterior siding and finish may be vinyl or aluminum siding with a reflectivity not exceeding white gloss paint, wood, or hardwood comparable in composition, appearance, and durability to siding materials commonly used in conventional residential construction.
- (F) All attachments (i.e., stairs, steps, porches, decks, and/or other additions to the manufactured home) shall be permanent-type construction commonly used in conventional residential-type construction that shall meet or exceed the standards of the North Carolina Residential Building Code.
- (G) The longest axis dimension of the manufactured home shall be oriented parallel or within a fifteen-degree deflection of being parallel with the front property line along a street. In the case of lots having property lines on a radius along the street, the longest axis dimension of the manufactured home shall be parallel or within a fifteen-degree deflection of being parallel with an imaginary straight line connecting the two front corners of the lot.

- (H) The towing apparatus, wheels, axles, and transporting lights shall be removed after placement on the lot and before occupancy and shall not be included in the length and width measurements of the manufactured home.
- (I) The electric meter shall be installed on the exterior of the manufactured home, subject to the conditions mandated by *the North Carolina Regulations for Manufactured Homes and Mobile Homes*.

10-8 CORRIDOR PROTECTION DISTRICT REQUIREMENTS

The Corridor Protection District is intended to provide development that is compatible with a major highway corridor and that enhances the visual attractiveness of major entrances into the City. The following regulations are applicable to property located within a Corridor Protection District (CPD).

10-8.1 Access Points and Traffic Movement

- (A) Whenever a tract proposed for a residential subdivision borders on a corridor highway, all lots created out of such tract must have sufficient frontage on another street so that direct access to such lot needs not be provided by the corridor highway unless the applicant can demonstrate, to the satisfaction of the Zoning Administrator, that compliance with this requirement is not reasonably practicable due to the size or shape of the tract to be subdivided. The final plat creating the subdivision shall indicate a limitation on driveway access to the corridor highway for those lots that have alternative access.
- (B) For lots having more than 500 feet of frontage on the corridor highway, driveways shall be no closer than 400 linear feet.
- (C) For lots having less than 500 feet of frontage on a corridor highway, only one driveway onto that highway shall be allowed. Whenever possible, a minimum distance of 200 feet shall be maintained between driveways of adjacent lots.
- (D) Ingress and egress from a corner or reverse frontage lot adjacent to a corridor highway shall be limited to the more minor thoroughfare.
- (E) Adjacent or adjoining lots with small corridor highway frontages are encouraged to combine access to one driveway. In such instances, a wider driveway may be permitted, conditioned on NCDOT approval.
- (F) Whenever separate or single parcels are assembled under one purpose, plan, entity, or usage, consolidation of existing direct access to the corridor highway shall be required to the extent feasible. Approval depends on the developer's plan to use existing driveways, close other existing driveways, and/or redesign and rebuild some existing driveways. However, the spacing and number of access points shall not exceed the limits set based on highway frontage.

10-8.2 Parking and Landscaping

- (A) All parking, loading and storage areas shall be located to the side and/or rear of all principal structures, except single-family, fronting on the highway corridor. For corner lots, the side of the lot facing the more major thoroughfare shall be considered the street yard for the purpose of this requirement. Exceptions to this provision may be granted by the Zoning Administrator under two circumstances:
 - (1) When the applicant can demonstrate the placement of such facilities in the side and/or rear yards would require substantially greater clearing and grading than if such facilities were to be located in the street yard.
 - (2) When the applicant can demonstrate that the necessary vehicular and pedestrian circulation of the proposed use cannot function without street yard parking, loading, and/or storage.
- (B) Trash containers and dumpsters shall only be located in the rear yard unless the applicant can demonstrate, to the satisfaction of the Zoning Administrator, that access to the rear yard would not be feasible for the purpose of servicing such trash container or dumpster. On corner lots, the rear yard shall, for purposes of this requirement, be the yard opposite the major thoroughfare.
- (C) All parking, loading, and storage areas shall be paved.

10-8.3 Signs

- (A) For a multiple tenant development, only one on-premises sign, which may be illuminated, shall be permitted per street frontage. Said sign shall not exceed 48 square feet in area, shall be a maximum of 12 feet in height, and shall be located no closer than 10 feet to the street right-of-way or 15 feet to the traveled portion of a street where the right-of-way does not exist or cannot be determined. In addition, each establishment in the development shall be permitted illuminated, attached signage at the place of occupancy not to exceed 1.5 square feet per lineal foot of building frontage on an exterior wall.
- (B) Any establishment not operating in a multiple tenant development shall be allowed one on-premises sign, which may be illuminated, per street frontage not to exceed 36 square feet in area, 12 feet in height, and located no closer than 10 feet to the street right-of-way or 15 feet to the traveled portion of a street where the right-of-way does not exist or cannot be determined. Illuminated, attached signage shall also be allowed and shall not exceed 1.5 square feet per lineal foot of building frontage on an exterior wall.
- (C) The following signs are prohibited in a CPD:
 - (1) Billboards (Outdoor Advertising Signs).
 - (2) Portable signs.

- (3) Flashing signs.
- (4) Signs located on, attached to, or extending above the roof of a structure.

10-9 Alternative Energy

10-9.1 Solar Energy Systems

(A) Purpose

The purpose of this section is to facilitate the construction, installation, and operation of Solar Energy Systems (SESs) in the City of Shelby in a manner that promotes economic development and ensures the protection of health, safety, and welfare. This section is not intended to abridge safety, health or environmental requirements contained in other applicable codes, standards, or sections. The provisions of this section shall not be deemed to nullify any provisions of local, state or federal law.

(B) Applicability

- (1) This section applies to the construction of any new SES within the zoning jurisdiction of the City of Shelby.
- (2) An SES established prior to the effective date of this section shall remain exempt:
 - (a) Exception: Modifications to an existing SES that increases the SES area by more than 5% of the original footprint or changes the solar panel type (e.g. photovoltaic to solar thermal) shall be subjected to this section.
- (3) Maintenance and repair are not subject to this section.
- (4) This section does not supersede regulations from local, state, or federal agencies.

(C) Permits Required

- (1) The type of permit required for an SES is displayed in Table 10-9-1: Permit Requirements.

Table 10-9-1: Permit Requirements							
Z= Permitted Use; D= Development Standards; S= Special Use Permit; C = Conditional Use Permit							
Zoning District	R20 and RR	R10	R8	R6 and RO	GB and GB2	LI and GI	CB, NB, and CPD
Solar Energy Facilities							
Roof-mounted, parking lot cover, or building integrated (Level 1)	Z	Z	Z	Z	Z	Z	Z
Ground-mounted:							
Up to 50% of the footprint of the primary structure (Level 1)	Z	Z	Z	Z	Z	Z	Z
≤1/2 acre (Level 2)	D	D	D	D	D	D	
≤10 acres (Level 2)					D	D	
>10 acres (Level 3)					C	D	

(D) Parcel Line Setbacks

- (1) The following table, Table 10-9-2: Parcel Line Setbacks, provides the parcel line setbacks for ground mounted SES equipment, excluding any security fencing, poles, and wires necessary to connect to facilities of the electric utility.

Table 10-9-2: Parcel Line Setbacks					
Zoning District	Level 1	Level 2	Level 3		
			Front	Side	Rear
R20 and RR	Per Zoning District **, ***	Per Zoning District *, **			
R10					
R8					
R6 and RO			30' *	15' *	25' *
GB and GB2			30' ****	0' ****	0' ****
LI and GI					
CB, NB, and CPD					
* 100' setback for SES equipment, excluding any security fencing, to any residential dwelling unit. If the SES is on a working farm where the primary residential structure of the farm is on an adjacent lot then this 100' setback will not apply to this primary residential structure.					
** Ground-mounted SES must comply with district front yard limitations and setbacks, or otherwise not impair sight distance for safe access to or from the property or other properties in the vicinity					
*** Level 1 SESs are not subject to screening requirements typically applied to accessory utility systems (HVAC, dumpsters, etc.).					
**** 50' setback for SES equipment, excluding any security fencing, to any residential dwelling unit. If the SES is on a working farm where the primary residential structure of the farm is on an adjacent lot then this 50' setback will not apply to this primary residential structure.					

(E) Height Limitations

- (1) The height of systems, shown in Table 10-9-3: Height Limitations, will be measured from the highest natural grade below each solar panel.

Zoning Districts	Level 1	Level 2	Level 3
R20 and RR	Roof-mounted: Per Zoning District	20'	
R10		20'	
R8		20'	
R6 and RO		20'	
GB and GB2		Ground-mounted: 20'	20'
LI and GI	20'		20'
CB, NB, and CPD			

* This excludes utility poles and any antennas constructed for the project.

(F) Aviation Notification

- (1) The requirements below apply only to Level 1, 2, & 3 systems over half (½) an acre in size:
- (a) A map analysis showing a radius of five (5) nautical miles from the center of the SES with any airport operations within this area highlighted shall be submitted with permit application.
 - (b) For consideration of potential impacts to low altitude military flight paths, notification of intent to construct the SES shall be sent to the NC Commanders Council at least 30 days before the CUP/SUP hearing for Level 3 SESs and at least 45 days before starting construction for applicable Level 1 & Level 2 SESs. Notification shall include location of SES (i.e. map, coordinates, address, or parcel ID), technology (i.e. roof-mounted PV, ground-mounted fixed PV, tracked PV, solar thermal, etc.), and the area of system (e.g. 5 acres). Proof of delivery of notification and date of delivery shall be submitted with permit application.
 - (c) The latest version of the Solar Glare Hazard Analysis Tool (SGHAT) shall be used per its user's manual to evaluate the solar glare aviation hazard. The full report for each flight path and observation point, as well as the contact information for the zoning administrator, shall be sent to the authority indicated below at least 30 days before the conditional use permit or special use permit hearing for Level 3 SESs and at

least 45 days before starting construction for Level 1 & Level 2 SESs. Proof of delivery of notification and date of delivery shall be submitted with permit application.

(i) *Airport operations at airport in the National Plan of Integrated Airport Systems (NPIAS) within 5 nautical miles of the center of SES:* Provide required information to the Federal Aviation Administration's (FAA) Airport District Office (ADO) with oversight of North Carolina.

(d) Any applicable SES design changes (e.g. module tilt, module reflectivity, etc.) after initial submittal shall be rerun in the SGHAT tool and the new full report shall be sent without undue delay to the contact specified in G.1.c.i above for accurate records of the as-built system.

(G) Level 1 Solar Energy System Requirements

(1) Level 1 SESs are a permitted use provided they meet the applicable height, setback, aviation notification, and related district standards.

(H) Levels 2 & 3 Solar Energy System Requirements

(1) These requirements are in addition to height, setback, aviation notification, and applicable district standards.

(a) Site Plan

(i) Refer to site plan checklist in Appendix A.

(ii) A site plan shall be submitted to the Director of Planning & Development demonstrating compliance with:

- Setback and height limitations established in Tables 2 and 3.
- Applicable zoning district requirements such as lot coverage.
- Applicable solar requirements per this section.

(b) Visibility

- (i) SESs shall be constructed with buffering as required by the applicable zoning district or development standards.
- (ii) Public signage (i.e. advertising, educational, etc.) as permitted by local signage ordinance, including appropriate or required security and safety signage.
- (iii) If lighting is provided at site, lighting shall be shielded and downcast such that the light does not spill onto the adjacent parcel or the night sky. Motion sensor control is preferred.

(c) **Decommissioning**

- (i) A decommissioning plan signed by the SES Developer and the landowner (if different) addressing the following shall be submitted with permit application.
 - Defined conditions upon which decommissioning will be initiated (i.e. end of land lease, no power production for 12 months, etc.)
 - Removal of all non-utility owned equipment, conduit, structures, fencing, roads, and foundations
 - Restoration of property to condition prior to development of the SES.
 - The timeframe for completion of decommissioning activities.
 - Description of any agreement (e.g. lease) with landowner regarding decommissioning.
 - The party currently responsible for decommissioning.
 - Plans for updating this decommissioning plan.
- (ii) Before final electrical inspection, provide evidence that the decommissioning plan was recorded with the Register of Deeds.

(d) **Abandonment**

- (i) A SES that ceases to produce energy on a continuous basis for 12 months will be considered abandoned unless the current responsible party (or parties) with

ownership interest in the SES provides substantial evidence (updated every 6 months after 12 months of no energy production) to the Zoning Administrator of the intent to maintain and reinstate the operation of that facility. It is the responsibility of the responsible party (or parties) to remove all equipment and facilities and restore the Parcel to its condition prior to development of the SES.

- Upon determination of abandonment, the Planning and Development Director shall notify the party (or parties) responsible they must remove the SES and restore the site to its condition prior to development of the SES within three hundred and sixty (360) days of notice by the Zoning Administrator.
- If the responsible party (or parties) fails to comply, the Planning and Development Director may remove the SES, sell any removed materials, and initiate judicial proceedings or take any other steps legally authorized against the responsible parties to recover the costs required to remove the SES and restore the site to a non-hazardous condition.

10-9.2 Wind - Reserved

10-9.3 Micro-Hydro

Shall be defined as any unit or device which generates electricity from a water source. Units that are capable of generating less than 100kW per month are not considered a Utility or Utility related appurtenances. Units that generate more than the amount specified above are subject to North Carolina Utility Commission regulations in addition to the regulations set forth in this ordinance.

- (A) Micro-Hydro facilities shall be a permitted use in all zoning districts as outlined in section 9-3-1 of the City of Shelby Unified Development Ordinance. Micro-hydro facilities shall meet setback requirements for the applicable zone in which the device will be located.
- (B) Site plan and electrical drawings need to be sealed by a NC Licensed Engineer.
- (C) Any permanent structure, as defined by the City of Shelby Unified Development Ordinance, shall be secured and meet the landscaping requirements set forth in Article XIV of the City of Shelby Unified Development Ordinance.
- (D) Any man-made diversions of water more than 12 inches deep shall be secured with fencing or other type material as approved by the Planning Director, as necessary to prevent accidental injury.

- (E) All utility lines related to the device shall be placed underground, if possible.
- (F) Applicant must provide evidence of an application or appropriate letter of intent to the appropriate permitting agency to include (as applicable):
 - (1) Flood Plain Administrator
 - (2) US Fish and Wildlife Service
 - (3) US Army Corps of Engineers (USACE)
 - (4) Drinking Water Source Protection (NCDENR)
 - (5) Utility Provider- (City of Shelby/Duke Energy)