

CHAPTER 10. LAND DEVELOPMENT ACTIVITIES

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CHAPTER 10. LAND DEVELOPMENT ACTIVITIES

ARTICLE I. PURPOSE OF CHAPTER 10.

This Chapter contains the requirements that apply to carrying out the land development process, including site grading and land disturbance activities; addressing flood hazard areas; the installation of streets, drainage facilities and public utilities; and building construction.

ARTICLE II. OVERVIEW—PROJECT CONSTRUCTION.

Sec. 10-1 Development activity.

(a) Preconstruction activity.

Following the issuance of any permit authorizing clearing and grading of a site, areas required to be undisturbed, such as natural buffers or stream greenways, must be designated by survey stakes, flags, ribbon, or other appropriate markings and shall be inspected and approved by the Planning Department prior to the commencement of any clearing or grading activities.

(b) Grading.

- (1) Grading shall be done in accordance with the lines and grades drawn on the approved grading plan.
- (2) Required erosion and sedimentation control measures and stormwater drainage facilities are to be installed in accordance with the approved plans as development progresses.

Sec. 10-2 Development phase inspections.

Requests for inspections shall be made by the owner or contractor to the Public Works Department at least 24 hours prior to when the inspection is needed. Inspections shall be made and passed prior to continuation of further activity or proceeding into new phases. Inspections are required of each of the following phases, as applicable to the actual work to be performed under the development permit:

- (a) Prior to clearing or clearing and grubbing of the property or any portion included under the development permit, inspection of erosion and sedimentation control measures and protective devices for undisturbed areas. Inspection of erosion and sedimentation control measures will be conducted on a continuing basis.
- (b) Upon completion of street grading, inspection and approval shall be required prior to trenching or continuation with subgrade preparation.
- (c) Upon installation of storm drainage pipe, detention, or other storm water facilities.
- (d) Street curbing and gutter (if provided). Inspection shall be requested after the forms or string line have been set. Street width and vertical and horizontal alignment may be spot checked.

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- (e) Sub-grade of streets. After compaction and receipt of test reports by the Planning Department. The sub-grade may be roll tested with an 18-ton tandem dump truck and shall pass to the satisfaction of the Public Works Director.
 - (f) Street base. After receipt of test reports by the Public Works Department, the base may be string-lined for depth and crown. The street base may be roll-tested with an 18-ton tandem dump truck and shall pass to the satisfaction of the Public Works Director.
 - (g) Paving. A Public Works Department Inspector shall be on site during the paving process to check consistency, depth, and workmanship, as applicable. For asphalt paving, the temperature of the material will be monitored and the street will be cored after completion to check thickness and density. Satisfactory test results of the cores shall be delivered to Public Works Department prior to approval of a final subdivision plat or certificate of occupancy.

Sec. 10-3 As-built surveys.

- (a) Upon completion of the development activity as authorized by the development permit and prior to final development inspection of public and private improvements, the owner shall submit to the Public Works Department for review and approval a complete set of record drawings showing “as-built” conditions prepared by a registered land surveyor. These drawings shall show the location, vertical and horizontal alignment, and finished elevations of:
 - (1) Drainage system pipes and channels.
 - (2) Storm water detention facilities.
 - (3) Sanitary sewer system (if any).
 - (4) Water system.
 - (5) Streets, including street centerlines showing angles of deflection and standard curve data of intersection, radii, length of tangents and arcs, and degree of curvature with basis of curve data.
- (b) The As-Built Surveys shall be certified and sealed by the registered land surveyor, subject to the tolerances of accuracy indicated in the survey certification.

Sec. 10-4 Final development inspection.

- (a) Following submission and review of the as-built surveys, the Public Works Department shall conduct a final development inspection of the project.
- (b) The owner shall be responsible for correcting any deficiencies identified in the final development inspection prior to approval of a final subdivision plat.

Sec. 10-5 Maintenance warranty.

The owner shall be responsible for the full cost of maintenance of all such public improvements for 1 year from the date of issuance of the certificate of occupancy or final subdivision plat approval, as applicable.

ARTICLE III. SITE CLEARING AND GRADING.

Sec. 10-6 Development permit required.

- (a) Clearing and grading shall not proceed until issuance of an approved development permit by the Planning Department. See the Procedures and Permits Chapter of this Development Code for details.
- (b) Grading shall be done in accordance with the lines and grades drawn on the approved grading plan.

Sec. 10-7 Erosion and sedimentation control measures

Required erosion and sedimentation control measures must be installed in accordance with the approved soil erosion and sedimentation control plan prior to any major development activity and as development progresses.

Sec. 10-8 Stormwater drainage facilities.

Required stormwater drainage facilities are to be installed in accordance with the approved stormwater management plan as development progresses.

Sec. 10-9 Earthen embankments.

Earthen embankments shall be placed in uniform layers not to exceed a compacted thickness of 6 inches per layer and shall be compacted to a density of 95 percent of the maximum laboratory dry weight per cubic foot as determined by AASHTO Method T-99 in all areas where structures, parking lots and drives, streets, and utilities are to be placed. All other embankments are to be compacted to at least 90 percent. Floodproofing shall be accomplished prior to placement of embankments to detect soft spots.

Sec. 10-10 Slopes.

The maximum slope for all fill or cut slopes shall be as shown on Table 10.1:

The depth of cut referenced in the table shall be construed to be the maximum cut or fill occurring in any one section of cut or fill. The slope on cut or fill shall be uniform throughout for each section of cut or fill. When a cut is made in rock that

Table 10.1: Maximum Cut or Fill Slopes

Depth of Cut or Fill	Slopes (Maximum distance of run to rise)
2 feet or less	4 to 1
2 feet to 5 feet	3 to 1
Over 5 feet	2 to 1

requires blasting, slope may be changed to vertical slope upon the written approval of the Planning Director.

ARTICLE IV. SOIL EROSION AND SEDIMENTATION CONTROL.

See the County's Soil Erosion, Sedimentation and Pollution Control Ordinance.

ARTICLE V. FLOOD DAMAGE PREVENTION.

See the County's Flood Damage Prevention Ordinance.

ARTICLE VI. INSTALLATION OF STORMWATER DRAINAGE FACILITIES.

Sec. 10-11 Timing of installation.

Construction of the stormwater system shall be initiated as part of the grading of the site. Storm water detention facilities shall be constructed prior to the installation of any other site improvements, and may be utilized under proper design as sedimentation basins during development. Installation of all other storm drainage pipes, culverts, headwalls, and ditches, shall be coordinated with the construction of streets and other site improvements, as appropriate.

Sec. 10-12 Maintenance responsibilities.

- (a) It shall be the responsibility of the developer to maintain all facilities required by the stormwater management plan during construction and for a one-year maintenance period following approval of the final subdivision plat or issuance of a certificate of occupancy, as applicable. The developer shall be responsible for removing temporary structures or facilities at the completion of the construction.
- (b) The owners of the property shall be responsible for maintaining the permanent facilities identified by the stormwater management plan to remain after construction is complete, following the one-year maintenance period.
- (c) Should an owner or developer, whichever is the responsible party, fail to maintain the stormwater management facilities in a state of service intended by the stormwater management plan, then the Director of Planning shall notify the responsible party in writing of the deficiencies and specific minimum maintenance requirements to remedy such deficiencies.
- (d) If the responsible party fails to perform the required maintenance work within a reasonable period of time (30 days maximum) then the owner shall be in violation of the provisions of this Code.

ARTICLE VII. INSTALLATION OF STREETS AND UTILITIES.

Sec. 10-13 Grading.

- (a) All streets shall be graded to their full width by the developer so that pavement extensions or sidewalks, where required or if installed in the future, can be constructed on the same level plane.
- (b) Preparation of roadway: Before grading is started the entire area to be paved shall be first cleared of all stumps, roots, brush and other objectionable materials. In all areas to be graded or filled, the developer shall stockpile the topsoil later to be spread in all disturbed areas not paved.
- (c) Grading shall be done in accordance with the Site Clearing and Grading Section of this Chapter.
- (d) If any sections of the subgrade are composed of unsuitable or unstable material, such material shall be removed to the depth directed by the appropriate Planning Department and replaced with suitable, thoroughly compacted material.
- (e) When the street is to be used for construction traffic before the paving work is completed, a layer of No. 5 stone can be laid as a traffic surface if the developer so desires.
 - (1) This material shall not be used as part of the base material.
 - (2) It may be worked into the subgrade; or it shall be removed before the base course is set up for paving.
 - (3) Provision shall be made to drain low points in road construction when the final paving surface is delayed.
- (f) Abutting property shall be suitably sloped to the right-of-way line.

Sec. 10-14 Installation of utilities.

- (a) After grading is completed and approved, the curb lines or edge of pavement lines, as applicable, shall be staked by the developer's Registered Land Surveyor. Before any base is applied, all of the underground utilities—water mains, sewer mains, gas mains, or any other underground utilities, and all service connections related thereto—shall be installed completely and provided throughout the length of the street and across the flat section. Service connections for sanitary sewer (if required) and water shall be extended to the right-of-way lines.
- (b) No private improvements, such as private lawn sprinkler systems, yard lighting, and the like, shall be installed within a public right-of-way except by authorization of the Planning Director. Such authorization, if issued, shall require the owner to assume all repair costs of the owner's facilities should they become damaged.

Sec. 10-15 Street installation.

- (a) Preparation of subgrade.

Prior to placement of the street base, the subgrade shall be compacted to 95% density.

- (b) Street base, curbing and paving.

Street base, curbing and paving shall be installed by the developer in accordance with the requirements and standards of this Development Code.

Sec. 10-16 Testing requirements.

It is the responsibility of the developer to ensure that all required tests are made and reported to the Planning Department. The cost of all testing and quality control shall be performed at the expense of the developer by qualified testing laboratories.

Table 10.2: Testing Requirements

Type of Test to be Performed	Minimum Number of Tests	Testing Standards
Sub-grade Compaction	Each 500 linear feet of roadway	95% Max Density ASTM-1557 Field Tests ASTM D-1556 F-2922 and D-2167
Base Compaction	Each 500 linear feet of roadway	100% Max Density ASTM-1557 Field Tests ASTM D-1556 F-2922 and D-2167
Asphalt Density	Each 1,000 linear feet of roadway	92% Laboratory Density
Asphalt Thickness	Each 500 linear feet of roadway	Deficient in thickness not more than 1/4"

Sec. 10-17 Protection of shoulders.

- (a) Immediately after grading and filling and re-spreading of topsoil, all areas of disturbed soil shall be fertilized and seeded (or in steep areas sodded or otherwise appropriately treated) with suitable vegetative cover to retard erosion.
- (b) When all construction is completed, all slopes and shoulders shall be cleared of all rubbish and shall have a stand of grass to prevent undue erosion, either by sprigging or seeding.

Sec. 10-18 Traffic control devices and street lights.

- (a) Street signs, traffic control signs, and devices such as striping and signalization, shall be provided through payment of fees to Planning Department. Traffic control devices may also be installed by the developer after receiving written approval from the Planning Director.
- (b) The installation of all street lighting fixtures within the right-of-way must be approved by the Planning Director prior to such installation.

ARTICLE VIII. BUILDING CONSTRUCTION.

Sec. 10-19 Building permit required.

- (a) Building permits for all structures or interior finishes are issued after meeting the applicable requirements of the fire prevention and life safety code and the various health and building codes. A permit is also required for the movement of any house, structure or building.
- (b) For any structure served by an on-site sewage disposal system, a permit issued by the Crisp County Health Department shall be required prior to issuance of a Building permit. Said permit may first require approval by the Crisp County Health Department of a plan showing the location of the sewage disposal system and other on-site improvements, in accordance with their regulations.
- (c) Building permits shall only be issued on lots of record, as defined in this Development Code.

Sec. 10-20 Building inspection.

- (a) Scheduling a building inspection.

Inspections shall be scheduled with the Planning Department at least 48 hours before the inspection is needed. Requests for inspection should include the street address, lot number, building permit number, and type of inspection.
- (b) Required inspections:
 - (1) Foundation. Verify minimum required building setbacks, footing, trenches dug and reinforcing steel in place.
 - (2) Plumbing Connections. Water supply line and sewer lateral in slab foundation.
 - (3) Framing. Completion of all rough-ins before insulation is installed.
 - (4) Interior walls may not be covered until the following inspections are completed:
 - a. Mechanical. Rough-ins complete with pressure test on gas line.
 - b. Electrical. Rough-ins with neutral, ground, and service cable wired.
 - c. Plumbing. Rough-ins complete and all fixtures installed.
 - (5) Final Inspection. Building is complete and ready to occupy.

Sec. 10-21 Construction in flood hazard area.

Construction of a structure for which a flood area permit was issued shall be governed by the following:

- (a) Upon placement of the lowest floor, or floodproofing by whatever construction means, or upon placement of the horizontal structural members of the lowest floor, whichever is applicable, it shall be the duty of the permit holder to submit to the Planning Director a certification of the elevation of the lowest floor, floodproofed elevation, or the elevation of the lowest portion of the horizontal structural members of the lowest floor, whichever is applicable, as built, in relation to mean sea level.
- (b) Certification shall be prepared by or under the direct supervision of a registered land surveyor or professional engineer and certified by such registered land surveyor or professional engineer. When floodproofing is utilized for a particular building, the certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by the professional engineer or architect.
- (c) Any work undertaken prior to submission of the certification shall be at the development permit holder's risk.
- (d) The Planning Director shall review the floor elevation survey data submitted. Deficiencies detected by such review shall be corrected by the development permit holder immediately and prior to further progressive work being permitted to proceed. Failure to submit the survey or failure to make the corrections shall be cause to issue a stop-work order for the project.

Sec. 10-22 Certificate of occupancy required.

A Certificate of Occupancy must be issued prior to the occupancy or use of any new or newly renovated building or structure, in accordance with the Procedures and Permits Chapter of this Development Code.