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**GUILFORD COUNTY  
PLANNING & DEVELOPMENT**

**FLOODPLAIN  
DEVELOPMENT  
BULLETIN**

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**PURPOSE**

Guilford County has adopted flood damage prevention regulations to help minimize public and private losses due to flood conditions in areas subject to periodic flooding and to permit only that development within the floodplain areas which is appropriate considering the probability of flood damage. Floodplain development permits are used to track development within the areas of special flood hazard located throughout Guilford County and to ensure compliance with National Flood Insurance Program (NFIP) regulations.

Section 9.3 Flood Damage Prevention of the Guilford County Unified Development Ordinance (UDO) contains the specific regulations pertaining to floodplain development and flood protection.

**DEFINITIONS**

The following terms are used throughout the flood damage prevention regulations and discussions relating to floodplain development permits.

“Base Flood” means the flood having a one (1) percent chance of being equaled or exceeded in any given year. This is often referred to as the 1% Annual Chance Flood or 100-year Flood.

“Basement” means any area of the building having its floor subgrade (below ground level) on all sides.

“Development” means 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.

“Elevation Certificate” & “Floodproofing Certificate” means a certificate prepared by a registered land surveyor or registered professional engineer certifying the finished elevation of the lowest floor, floodproofed elevation, or the elevation of the bottom of the lowest floor, whichever is applicable, as built in relation to mean sea level.

“FEMA” means Federal Emergency Management Agency responsible for producing flood insurance studies, flood insurance rate maps, and assisting local governments in evaluating no-rise certifications.

“Floodplain Development Permit” means a permit issued by the Planning & Development Department allowing development, development activities or land disturbance in a Special Flood Hazard Area (SFHA).

“Floodway” means 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.

“Floodway Fringe” means the land area located between the floodway and the outer edge of the SFHA.

“Lowest Floor” means the subfloor, top of slab or grade of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access, or limited storage in an area other than a basement area is not considered a building's lowest floor provided that such an enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this ordinance.



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"No-Impact" Certification" means a certification signed and sealed by a registered professional engineer with supporting technical data stating that the proposed development will not change the pre-project base flood elevations, floodway elevations, or floodway widths.

"Non-Encroachment Area" means 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 (FIS) report.

"Special Flood Hazard Area (SFHA)" is the land in the floodplain subject to a one (1%) percent or greater chance of being flooded in any given year. Also referred to as the 1% Annual Chance Flood area or 100-year Flood area.

### **PERMIT REQUIRED**

A Floodplain Development Permit is required before undertaking any development or land disturbance activities within a Special Flood Hazard Area (SFHA, 100-year Floodplain). The information required to obtain a permit is completed on the Floodplain Development Permit Application and consists of the following:

- Site address.
- Tax map, block and lot number.
- Zoning and overlay districts.
- Owner's name, address, and phone.
- Plat book, page and lot number or deed book and page.
- Nature of development
- Site plan, plot plan or grading plan showing proposed development and floodplain.

When the proposed development is located within the floodway fringe of the SFHA, then a separate Floodplain Development Permit will be issued in the form of a land-use occupancy permit upon receipt of the \$35.00 permit fee and approval of the application and associated documentation. If a building is approved to be located in the SFHA as part of a Floodplain Development Permit, then an Elevation Certificate is required to be submitted prior to issuance of a Building Permit, and an as-built Elevation Certificate is required prior to issuance of a Certificate of Occupancy for the building.

If the proposed development or land disturbance activities is not located within the actual SFHA then a Floodplain Development Permit will not be issued and no fee will be charged.

### **FLOODWAY DEVELOPMENT**

When development is proposed within the floodway of a SFHA, then a floodplain development permit will be required similar to that described for development in the floodway fringe, with some additional documentation and analysis. Development within the floodway also requires a "no-impact" certification stating that the proposed development will not impact the pre-development base flood elevations, floodway elevations or floodway data widths. The certification shall be signed, sealed, and dated by a registered professional engineer.

The "no-impact" certification shall be submitted with supporting technical data that shall include, but not be limited to the following:

- a. Duplicate of the original Flood Insurance Study (FIS) step-backwater model printout or digital format.
- b. Revised existing conditions step-backwater model.
- c. Proposed conditions step-backwater model.
- d. Flood Insurance Rate Map (FIRM) and topographic map, showing floodplain and floodway, the



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- additional cross-sections, the site location with the proposed topographic modifications superimposed onto the maps, and a photocopy of the effective FIRM showing the current regulatory floodway.
- e. Documentation clearly stating the analysis procedures. All modifications made to the original FIS model to represent revised existing conditions, as well as those made to the revised existing conditions model to represent proposed conditions, should be well documented and submitted with all supporting data.
  - f. Copy of the effective Floodway Data table copied from the FIS report.
  - g. Statement defining source of additional cross-section topographic data and supporting information.
  - h. Cross-section plots, of the added cross-sections, for revised existing and proposed conditions.
  - i. Certified planimetric (boundary survey) information indicating the location of structures on the property.
  - j. Copy of the microfiche, or other applicable source, from which input for the original FIS HEC-2 model was taken.
  - k. Floppy disk with all input files.
  - l. Printout of output files from EDIT runs for all three floodway models.

The engineering "no-impact" certification and supporting technical data must stipulate no impact on the 100-year flood elevation, floodway elevations or floodway widths at any new cross-sections and at all existing cross-sections anywhere in the model. Therefore, the revised computer model should be run for a sufficient distance (usually one mile) upstream and downstream of the development site to insure proper analysis. Once a "no-impact" certification and supporting technical data are received they will be reviewed for completeness and then forwarded to the Federal Emergency Management Agency (FEMA) regional office for review and recommendations. The applicant is responsible for all fees involved in this review. The "no-impact" certification will be verified and approved prior to issuance of any permit for development in the floodway.

### **FOR ASSISTANCE**

Copies of the Flood Insurance Rate Maps (FIRM) for unincorporated Guilford County are available for in the Planning & Development Department or can be viewed & obtained at websites below:

- FEMA Flood Map Service Center  
<https://msc.fema.gov/portal/home>
- NC Flood Risk Information System (FRIS)  
<https://fris.nc.gov/fris/Home.aspx?ST=NC>

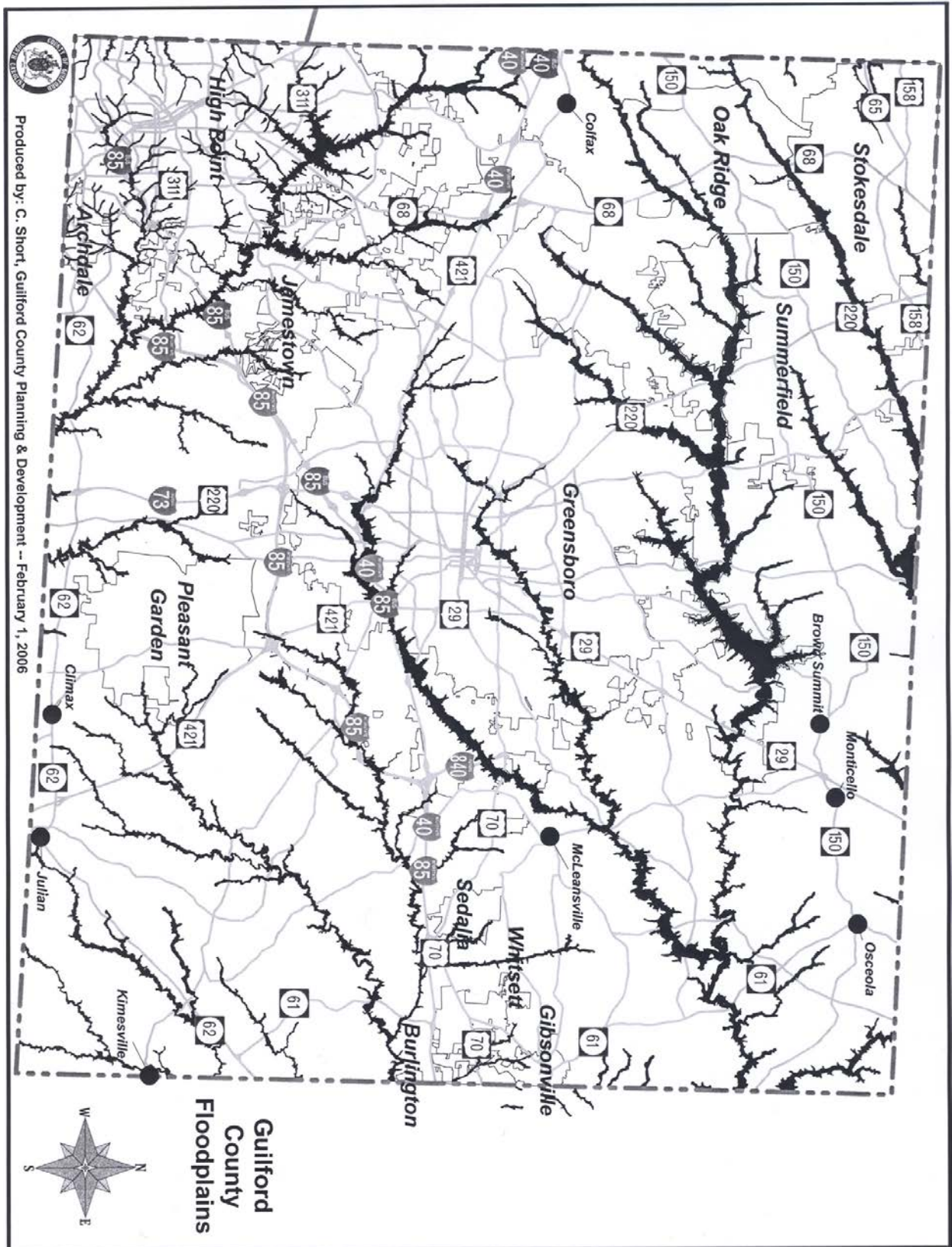
Planning staff can assist you in determining permit requirements and fees required for your proposed development plans. Detailed questions regarding floodplain regulations should be directed to the Guilford County Watershed / Stormwater Section at 336-641-3753 or -5565.

This Bulletin is intended for public information purposes only. It is not to be construed or used as an official Development Ordinance interpretation in any legal proceeding.



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