The Code of Ordinances of the City of Trinity
Article III Land Use
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Article 1 Definitions

Definitions in the City of Trinity Land Management Ordinance apply to the Water Management Ordinance unless otherwise listed herein. Definitions listed in this Ordinance are particular to water management and take the place of definitions listed in the Land Management Ordinance.

Accessory Structure. A structure 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.

Agricultural Use. The use of waters for stock watering, irrigation, and other farm purposes.

Airport Facilities. All properties, facilities, buildings, structures, and activities that satisfy or otherwise fall within the scope of one or more of the definitions or uses of the words or phrases "air navigation facility," "airport," or "airport protection privileges" under G.S. 63-1; the definition of "aeronautical facilities" in G.S. 63-79(1); the phrase "airport facilities" as used in G.S. 159- 48(b)(1); the phrase "aeronautical facilities" as defined in G.S. 159-81 and G.S. 159-97; and the phrase "airport facilities and improvements" as used in Article V, Section 13, of the North Carolina Constitution.

The term shall include:

- **a.** airports;
- **b.** airport maintenance facilities;
- **c.** aeronautic industrial facilities that require direct access to the airfield;
- **d.** clear zones;
- **e.** drainage ditches;
- **f.** fields;
- **g.** hangars;
- **h.** landing lighting;
- **i.** airport and airport-related offices;
- **j.** parking facilities;
- **k.** related navigational and signal systems;
- **l.** runways;
- **m.** stormwater outfalls;
- **n.** terminals;
- **o.** terminal shops;
- **p.** all appurtenant areas used or suitable for airport buildings or other airport facilities; and
- **q.** all appurtenant rights-of-way; restricted landing areas; any structures, mechanisms, lights, beacons, marks, communicating systems, or other instrumentalities or devices used or useful as an aid, or constituting an advantage or convenience to the safe taking off, navigation, and landing of aircraft, or the safe and efficient operation or maintenance of an airport or restricted landing area; easements through, or interests in, air space over land or water, interests in airport hazards outside the boundaries of airports or restricted landing areas, and other protection privileges, the acquisition or control of which is necessary to ensure safe approaches to the landing areas of airports and restricted landing areas, and the safe operation thereof and any combination of any or all of such facilities.

The following shall not be included in the definition of "airport facilities": Satellite parking facilities; retail and commercial development outside of the terminal area, such as rental car facilities; and other secondary

development, such as hotels, industrial facilities, free-standing offices and other similar buildings, so long as these facilities are not directly associated with the operation of the airport, and are not operated by a unit of government or special governmental entity such as an airport authority, in which case they are included in the definition of "airport facilities."

Appeal. A request for a review of the Water Management Administrator's interpretation of any provision of this ordinance.

Archaeological activities. Activities conducted by a Registered Professional Archaeologist (RPA).

Area of Shallow Flooding. A designated Zone AO on a community's Flood Insurance Rate Map (FIRM) with base flood depths determined to be from one (1) to three (3) feet. These areas are located where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

Authority. The City of Trinity, the local government that has been delegated pursuant to G.S. 143-214.23 to implement a riparian buffer program.

AH Zone. The Special Flood Hazard Area with a 1% annual chance of shallow flooding (usually areas of ponding), where average depths are between one (1) and three (3) feet. Base flood elevations derived from detailed hydraulic analyses are shown in this zone.
The Special Flood Hazard Area subject to inundation by the 1% annual chance flood where base flood elevations have NOT been determined.

AO Zone. The Special Flood Hazard Area with a 1% annual chance of shallow flooding (usually sheet flow on sloping terrain) where average depths are between one (1) and three (3) feet. Average flood depths derived from detailed hydraulic analyses are shown in this zone.

Balance of Watershed (BW). The area adjoining and upstream of the critical area in a - WS-III or WS-IV water supply watershed. The "balance of watershed" is comprised of the entire land area contributing surface drainage to the stream, river, or reservoir where a water supply intake is located.

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

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".

Best Management Practices (BMP). A structural or nonstructural management-based practice used singularly or in combination to reduce nonpoint source inputs to receiving waters in order to achieve water quality protection goals.

Bridge. Any spanning structure that begins and ends at the outer edge of the approach slabs and includes any support structures such as bents, pilings, footings, etc.

Buffer. An area of natural or planted vegetation through which stormwater runoff flows in a dispersed manner so that the runoff does not become channelized and which provides for infiltration of the runoff and filtering of pollutants. The buffer is measured landward from the normal pool elevation of impounded structures and from the bank of each side of streams or rivers. Buffers measured from streams are called riparian buffers or stream buffers.

a. **Buffer Zone.** A division of a riparian buffer established through NCGS 143- 21 and NCGS Chapter 113A, designed for managing the riparian buffer.

Buffer, Vegetated. Vegetated buffers, also known as vegetated setbacks are areas of natural or established vegetation adjacent to surface waters beyond the buffer zones. They are very effective in filtering sediment, nutrients, heavy metals, and other contaminates that can harm fish and other wildlife and degrade water quality. Vegetated setbacks also slow stormwater run-off and stabilize stream banks. For perennial streams, ponds, lakes, and reservoirs, a Vegetated Setback shall begin at the edge of the Zone 2 buffer and extend landward an additional fifty feet, measured horizontally on a line perpendicular to the surface water.

Building. Any structure, having a roof, supported by columns or by walls, and intended for shelter, housing or enclosure of persons, animals or property. The connection of two buildings by means of an open porch, breezeway, passageway, carport or other such open structure, with or without a roof, shall not be deemed to make them one building.

Built-upon area. "Built-upon area" means impervious surface and partially impervious surface to the extent that the partially impervious surface does not allow water to infiltrate through the surface and into the subsoil. "Built-upon area" does not include a slatted deck; the water area of a swimming pool; a surface of washed number 57 stone, as designated by the American Society for Testing and Materials, laid at least four inches thick over a geotextile fabric; a trail as defined in G.S. 113A-85 that is either unpaved or paved as long as the pavement is porous with a hydraulic conductivity greater than 0.001 centimeters per second (1.41 inches per hour); or landscaping material, including, but not limited to, gravel, mulch, sand, and vegetation, placed on areas that receive pedestrian or bicycle traffic or on portions of driveways and parking areas that will not be compacted by the weight of a vehicle, such as the area between sections of pavement that support the weight of a vehicle. The owner or developer of a property may opt out of any of the exemptions from "built-upon area" set out in this Subsection.

Channel. A natural water-carrying trough, cut vertically into low areas of the land surface by erosive action of concentrated flowing water or a ditch or canal excavated for the flow of water.

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.

Cluster Development. The grouping of buildings in order to conserve land resources and provide for innovation in the design of the project including minimizing stormwater runoff impacts. This term includes non-residential development as well as single-family residential and multi-family developments. For the purpose of this ordinance, planned unit developments and mixed-use development are considered as cluster development.

Coastal Wetlands. Marshland as defined in G.S. 113-229.

Common Plan of Development. Site where multiple separate and distinct development activities may be taking place at different times or different schedules but governed by a single development plan regardless of ownership of parcels.

Community. Any State or area or political subdivision thereof, or any Indian tribe or authorized tribal organization, which has authority to adopt and enforce flood plain management regulations for the areas within its jurisdiction.

Community Rating System (CRS). A program developed by the Federal Insurance Administration to provide incentives for those communities in the Regular Program that have gone beyond the minimum floodplain management requirements to develop extra measures to provide protection from flooding.

Conservation Easement for Drainageway. Land designated for use as open or subsurface channel conveying the flow from a one-hundred-year storm event. Conservation Easements shall be left in its natural condition or graded to a slope approved by the Water Management Administrator which allows economical and efficient maintenance and shall be stabilized with permanent vegetative cover.

Construction, New. Structures for which the "start of construction" commenced on or after the effective date of the initial regulations of this Ordinance and includes any subsequent improvements to such structures.

Critical Area. The area adjacent to a water supply intake or reservoir where risk associated with pollution is greater than from the remaining portions of the watershed. The critical area is defined as extending either one-half mile from the normal pool elevation of the reservoir in which the intake is located or to the ridge line of the watershed (whichever comes first); or one-half mile upstream from the intake located directly in the stream or river (run-of-the-river), or the ridge line of the watershed (whichever comes first). Major landmarks such as highways or property lines may be used to delineate the outer boundary of the critical area if these landmarks are immediately adjacent to the appropriate outer boundary of one-half mile.

Critical facility (also called critical action). Facilities for which the effects of even a slight chance of flooding would be too great. The minimum floodplain of concern for critical facilities is the 0.2 percent chance flood level. Critical facilities include, but are not limited to facilities critical to the health and safety of the public such as: emergency operations centers, designated public shelters, schools, nursing homes, hospitals, police, fire, and emergency response installations, vital data storage centers, power generation and water and other utilities (including related infrastructure such as principal points of utility systems) and installations which produce, use, or store hazardous materials or hazardous waste.

Dam. The term as defined in NCGS 143-215. (1) "Dam" means a structure and appurtenant works erected to impound or divert water.

DBH. Diameter at breast height of a tree measured at 4.5 feet above ground surface level.

Department. The North Carolina Department of Environmental Quality.

Design Manual. The stormwater design manual (NCDEQ) approved for use in Phase II jurisdictions by the Department and certified by the City of Trinity 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 man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, any land-disturbing activity that increases the amount of built-upon area or that otherwise decreases the infiltration of precipitation into the subsoil, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials. Development may add to or change the amount of impervious or partially impervious cover on a land area which decreases the infiltration of precipitation into the soil. When additional development occurs at a site that has existing development, the built-upon area of the existing development shall not be included in the density calculations for additional stormwater control requirements, and stormwater control requirements cannot be applied retroactively to existing development, unless otherwise required by federal law.

Director. The Director of the Division.

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.

Ditch or canal. A man-made, open drainage way or channel other than a modified natural stream in or into which

excess surface water or groundwater from land, stormwater runoff, or floodwaters flow either ephemerally, intermittently, or perennially.

Division. The Division of Water Resources of the North Carolina Department of Environmental Quality.

Dry Floodproofing. A combination of measures that make a building and attendant utilities and equipment watertight and substantially impermeable to floodwater, with structural components having the capacity to resist flood loads. Please refer to Technical Bulletin 3, *Requirements for the Design and Certification of Dry Floodproofed Non-Residential and Mixed-Use Buildings*, and available from the FEMA.

Dwelling Unit. A building, or portion thereof, providing complete and permanent living facilities, for one or more persons.

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.

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.

Ephemeral stream. A feature that carries only stormwater in direct response to precipitation with water flowing only during and shortly after precipitation events. An ephemeral stream may or may not have a well-defined channel, the aquatic bed is always above the perched or seasonal high-water table, and stormwater runoff is the primary source of water. An ephemeral stream typically lacks the biological, hydrological, and physical characteristics commonly associated with the continuous or intermittent conveyance of water.

Existing Development. Those projects that are built or those projects that at a minimum have established a vested right under North Carolina zoning law as of the effective date of this ordinance based on at least one of the following criteria:

- **a.** substantial expenditures of resources (time, labor, money) based on a good faith reliance upon having received a valid City of Trinity approval to proceed with the project, or
- **b.** having an outstanding valid building permit as authorized by the General Statutes (160D-102), or
- **c.** having an approved site specific or phased development plan as authorized by the General Statutes (G.S. 160D-102).

Existing Lot (Lot of Record). A lot which is part of a subdivision, a plat of which has been recorded in the Office of the Register of Deeds prior to the adoption of this ordinance, or a lot described by metes and bounds, the description of which has been recorded prior to the adoption of this ordinance. In Randleman Lake watershed means a lot of two acres in size or less that was platted and recorded in the office of the appropriate county Register of Deeds prior to the effective date of a local ordinance or ordinances enforcing Rule .0724 of this Subchapter. For activities listed in Rule .0724(12)(b) of this Subchapter, "existing lot" in the Randleman Lake watersheds means a lot of two acres in size or less that was platted and recorded in the office of the appropriate county Register of Deeds prior to April 1, 1999.

Existing utility line maintenance corridor. The portion of a utility right of way that was established as a permanent maintenance corridor prior to the effective date of the Rule or was approved as a permanent maintenance corridor through an Authorization Certificate or Variance issued by the Authority, and in which the vegetation has been maintained (e.g. can be mowed without a chainsaw or bush-hog).

Expansion to an Existing Manufactured Home Park or Subdivision. The preparation of additional sites by the construction of facilities for servicing the lots on which the manufacturing homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

Family. One or more persons occupying a single dwelling unit, provided that unless all members are related by blood or marriage or adoption, but further provided that domestic servants employed or living on the premises may be housed on the premises without being counted as family or families.

Fertilizer. The term as defined in Rule 15A NCAC 02B .0202. "Fertilizer" means any substance containing nitrogen or phosphorus that is used primarily as plant food.

Flood or Flooding means:

- **a.** A general and temporary condition of partial or complete inundation of normally dry land areas from:
- **b.** The overflow of inland or tidal waters.
- **c.** The unusual and rapid accumulation or runoff of surface waters from any source.
- **d.** Mudslides (i.e., mudflows) which are proximately caused by flooding as defined in paragraph (a)(2) of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.
- **e.** The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph (a)(1) of this definition.

Flood Boundary and Floodway Map (FBFM). An official map of a community, issued by the Federal Emergency Management Agency, on which the Special Flood Hazard Areas and the floodways are delineated. This official map is a supplement to and shall be used in conjunction with the Flood Insurance Rate Map (FIRM).

Flood Hazard Boundary Map (FHBM). An official map of a community, issued by the Federal Emergency Management Agency, where the boundaries of the Special Flood Hazard Areas have been defined as Zone A.

Flood Insurance means the insurance coverage provided under the National Flood Insurance Program.

Flood Insurance Rate Map (FIRM) means 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.

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. In the City of Trinity, the Water Management Administrator is designated as the Floodplain Administrator.

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.

Flood proofing. 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 (1) foot.

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.

Forest management plan. The term as defined in G.S. 160A-458.5. (2) Forest management plan. A document that defines a landowner's forest management objectives and describes specific measures to be taken to achieve those objectives. A forest management plan shall include silvicultural practices that both ensure optimal forest productivity and environmental protection of land by either commercially growing timber through the establishment of forest stands or by ensuring the proper regeneration of forest stands to commercial levels of production after the harvest of timber.

Forest plantation. An area of planted trees that may be conifers (pines) or hardwoods. On a forest plantation, the intended crop trees are planted rather than naturally regenerated from seed on the site, coppice (sprouting), or seed that is blown or carried into the site.

Forest vegetation. The term as defined in Rule 15A NCAC 02B .0202. "Forest vegetation" means the plants of an area that grow in disturbed or undisturbed conditions in wooded plant communities in any combination of trees, saplings, shrubs, vines, and herbaceous plants, including mature and successional forests and cutover stands.

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”.

Freshwater. The term as defined in Rule 15A NCAC 02B .0202. "Freshwater" means all waters that under natural conditions have a chloride ion content of 500 mg/l or less.

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

Greenway / Hiking Trails. Pedestrian trails constructed of pervious and impervious surfaces and related structures including boardwalks, steps, rails, and signage, and that generally run parallel to the surface water.

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.

High value tree. A tree that meets or exceeds the following standards: for pine species, 14- inch DBH or greater or 18-inch or greater stump diameter; or for non-pine species, 16-inch DBH or greater or 24-inch or greater stump diameter.

Highest Adjacent Grade (HAG). The highest natural elevation of the ground surface, prior to construction, immediately next to the proposed walls of the structure.

Historic Structure. Any structure that is:

- **a.** 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;
- **b.** 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;
- **c.** individually listed on a local inventory of historic landmarks in communities with a "Certified Local Government (CLG) Program"; or
- **d.** 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.

Industrial Development. Any non-residential development that requires an NPDES permit for an industrial discharge and/or requires the use or storage of any hazardous material for the purpose of manufacturing, assembling, finishing, cleaning or developing any product or commodity.

Intermittent stream. A well-defined channel that contains water for only part of the year, typically during winter and spring when the aquatic bed is below the perched or seasonal high-water table. The flow may be supplemented by stormwater runoff. An intermittent stream often lacks the biological and hydrological characteristics commonly associated with the continuous conveyance of water.

Landfill. A facility for the disposal of solid waste on land in a sanitary manner in accordance with Chapter 130A Article 9 of the N.C. General Statutes. This term does not include composting facilities.

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.

Local government. The term as defined in Rule 15A NCAC 02B .0202. "Local government" means a city or county in singular or plural as defined in G.S. 160A-1(2) and G.S. 158A-10.

Lot. A parcel of land occupied or capable of being occupied by a building or group of buildings devoted to a common use, together with the customary accessories and open spaces belonging to the same.

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 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.

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.

Modified natural stream. An on-site channelization or relocation of a stream channel and subsequent relocation of the intermittent or perennial flow as evidenced by topographic alterations in the immediate watershed. A modified natural stream must have the typical biological, hydrological, and physical characteristics commonly associated with at least an intermittent conveyance of water.

Natural drainageway. Any water course, channel, ditch, or similar physiographic feature draining water from land to downgradient areas.

New Manufactured Home Park or 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) is completed on or after the effective date of floodplain management regulations adopted by a community.

Nonconforming Lot of Record. A lot described by a plat or a deed that was recorded prior to the effective date of local watershed protection regulations (or their amendments) that does not meet the minimum lot size or other development requirements of the statewide watershed protection rules.

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.

Non-residential Development. All development other than residential development, agriculture, and silviculture.

Normal water level. The water level within a pond, lake, or other type of impoundment, natural or man-made (including beaver ponds), at the elevation of the outlet structure or spillway (i.e., the elevation of the permanent pool). The normal water level is typically identified by the lowest edge of terrestrial vegetation.

Owner. The legal or beneficial owner of land, including but not limited to a mortgagee or vendee in possession, receiver, executor, trustee, 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.

Perched water table. The term as defined in 15A NCAC 18A .1935. Sewage Treatment and Disposal Systems, Definitions. "Perched water table" means a saturated zone, generally above the natural water table, as identified by drainage mottles caused by a restrictive horizon.

Perennial stream. A well-defined channel that contains water year-round during a year of normal rainfall with the aquatic bed located below the perched or seasonal high-water table for most of the year. Groundwater is the primary source of water for a perennial stream, but it also carries stormwater runoff. A perennial stream exhibits the typical biological, hydrological, and physical characteristics commonly associated with the continuous conveyance of water.

Perennial waterbody. A natural or man-made watershed that stores surface water permanently at depths sufficient to preclude growth of rooted plants, including lakes, ponds, sounds, non-stream estuaries and ocean.

Perpendicular. Leading toward the nearest subject surface water at an angle between 75 and 105 degrees.

Plat. A map or plan of a parcel of land which is to be or has been subdivided.

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

Protected Area. The area adjoining and upstream of the critical area of WS-IV watersheds. The boundaries of the protected area are defined as within five miles of and draining to the normal pool elevation of the reservoir or to the ridgeline of the watershed; or within 10 miles upstream and draining to the intake located directly in the stream or river or to the ridgeline of the watershed.

Pruning. The removal of dead tree or shrub branches or live tree or shrub branches with a diameter of less than four inches.

(a) Pruning for Deciduous Trees: If pruning must be done on deciduous trees, then it shall only be performed once a year during the dormant season or following an "act of God" situation, such as a hurricane or ice storm that causes tree damage. Dead branches on trees may be removed any time.

(b) Pruning for Coniferous Trees: Conifers may be pruned any time of year. Dead branches on trees may be removed any time.

(c) Pruning for Shrubs: Shrubs may be pruned by selectively removing branches while maintaining the natural shape of the plant. Cutting the branches of a shrub down to its main trunk is not a selective removal of branches.

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.

Qualified Individual. A person certified to perform stream determinations by completing and passing the Surface Water Identification Training and Certification (SWITC) course offered by the N.C. Div. of Water Resources at N.C. State University.

Recreational Vehicle (RV). 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.
- **e.** Is fully licensed and ready for highway use.
- **f.** Has no attached deck, porch, or shed, and
- **g.** Has quick-disconnect sewage, water, and electrical connectors.

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

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 and community 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.

Repetitive Loss Property. Any insurable building for which two or more claims of more than $1,000 were paid by the National Flood Insurance Program (NFIP) within any rolling 10-year period, since 1978. At least two of the claims must be more than ten days apart but, within ten years of each other. A RL property may or may not be currently insured by the NFIP.

Residential Development. Buildings for human habitation such as attached and detached single-family dwellings, apartment complexes, condominiums, townhouses, cottages, etc. and their associated outbuildings such as garages, storage buildings, gazebos, etc. and customary home occupations.

Residuals. Any solid or semi-solid waste generated from a wastewater treatment plant, water treatment plant or air pollution control facility permitted under the authority of the Environmental Management Commission.

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, including but not limited to vehicles, appliances and related machinery.

Seasonal high-water table. The term as defined in 15A NCAC 02H .1002, Definitions. "Seasonal High Water Table" or "SHWT" means the highest level of the saturated zone in the soil during a year with normal rainfall. SHWT may be determined in the field through identification of redoximorphic features in the soil profile, monitoring of the water table elevation, or modeling of predicted groundwater elevations

Section 1316. That section of the National Flood Insurance Act of 1968, as amended, which states that no new flood insurance coverage shall be provided for any property that FEMA finds has been declared by a duly constituted state or local zoning authority or other authorized public body to be in violation of state or local laws, regulations, or ordinances that are intended to discourage or otherwise restrict land development or occupancy in flood-prone areas.

Severe Repetitive Loss Structure. Any insured property that has met at least one of the following paid flood loss criteria since 1978, regardless of ownership. In either case, two of the claim payments must have occurred within ten years of each other. Multiple losses at the same location within ten days of each other are counted as one loss, with the payment amounts added together.

- **a.** Four or more separate claim payments of more than $5,000 each (including building and contents payments); or
- **b.** Two or more separate claim payments (building payments only) where the total of the payments exceeds the current market value of the property.

Single Family Residential, Detached. Any development where: 1) no building contains more than one dwelling unit, 2) every dwelling unit is on a separate lot, and 3) where no lot contains more than one dwelling unit.

Single Family Residential, Attached. Any development where: 1) a building that may contain multiple single-family dwelling units that are attached to each other with common walls; 2) every dwelling unit is on a separate lot, and 3) where no lot contains more than one dwelling unit.

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

Solid Waste Disposal Site. As defined in NCGS 130A-290(a)(36), definition of solid waste disposal site, 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 Section 2.3.B. of this Ordinance.

Start of Construction. Includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage 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 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.

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

Storm, One Hundred (100)-Year, 24 Hour. The surface runoff resulting from a rainfall of an intensity that has a

one (1) percent chance of being equaled or exceeded in any given year and of a duration which will produce the maximum peak rate of runoff for the watershed of interest under average antecedent wetness conditions.

Stormwater Control Measure (SCM). A permanent structural device that is designed, constructed, and maintained to remove pollutants from stormwater runoff by promoting settling or filtration; or to mimic the natural hydrologic cycle by promoting infiltration, evapo-transpiration, post-filtration discharge, reuse of stormwater or a combination thereof.

Streambank or shoreline stabilization. The in-place stabilization of an eroding streambank or shoreline.

Street (Road). A right-of-way for vehicular traffic which affords the principal means of access to abutting properties.

Structure. Anything constructed or erected, including but not limited to buildings, which requires location on the land or attachment to something having permanent location on the land.

Stump diameter. The diameter of a tree measured six inches above the ground surface level.

Subdivider. Any person, firm corporation, or official who subdivides or develops any land deemed to be a subdivision as herein defined.

Subdivision. All divisions of a tract or parcel of land into two or more lots, building sites, or other divisions for the purpose of sale or building development (whether immediate or future) and shall include all division of land involving the dedication of a new street or a change in existing streets; but the following shall not be included within this definition nor be subject to the regulations authorized by this ordinance:

- **a.** The combination or recombination of portions of previously subdivided and recorded lots where the total number of lots is not increased and the resultant lots are equal to or exceed the standards of this ordinance.
- **b.** The division of land into parcels greater than 10 acres where no street right-of-way dedication is involved.
- **c.** The public acquisition by purchase of strips of land for the widening or opening of streets.
- **d.** The division of a tract in single ownership whose entire area is no greater than two acres into not more than three lots, where no street right-of-way dedication is involved and where the resultant lots are equal to or exceed the standards of this ordinance;
- **e.** The division of a tract into plots or lots used as a cemetery.
- **f.** The division of a tract into parcels in accordance with the terms of a probated will or in accordance with intestate succession under Chapter 29 of the General Statutes.

Substantial Damage. Damage of any origin sustained by a structure during any one-year period 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. See definition of "substantial improvement". Substantial damage also means flood-related damage 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 average, equals or exceeds 25 percent of the market value of the structure before the damage occurred

Substantial Improvement. Any combination of repairs, reconstruction, rehabilitation, addition, or other improvement of a structure, taking place during any one-year period for which the cost 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 "substantial damage", regardless of the actual repair work performed. The term does not, however, include either:

- **a.** any correction of existing violations of State or community health, sanitary, or safety code specifications which have been identified by the community code enforcement official, and which are the minimum necessary to assure safe living conditions; or
- **b.** any alteration of a historic structure, provided that the alteration will not preclude the structure's continued

designation as a historic structure.

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.

Surface Waters: All waters of the State as defined in NCGS 143-212, definitions except underground waters.

Temporary road. A road constructed temporarily for access or to maintain public traffic during construction and which route is restored to its original condition upon completion of construction.

Toxic Substance. Any substance or combination of substances (including disease causing agents), which after discharge and upon exposure, ingestion, inhalation, or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, has the potential to cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunctions or suppression in reproduction or growth) or physical deformities in such organisms or their off spring or other adverse health effects.

Transportation facility. The existing road surface, road shoulders, fill slopes, ferry terminal fill areas, and constructed stormwater conveyances or drainage canals adjacent to and directly associated with the road.

Tree. A woody plant with a DBH equal to or exceeding five inches or a stump diameter exceeding six inches.

Variance. A grant of relief from the requirements of this ordinance. For the purpose of a watershed variance: A permission to develop or use property granted by the Watershed Review Board relaxing or waiving a water supply watershed management requirement adopted by the Environmental Management Commission that is incorporated into this ordinance.

Variance, Major Watershed. A variance that is not a Minor Variance as defined in this ordinance.

Variance, Minor Watershed. A variance from the minimum statewide watershed protection rules that results in a relaxation, by a factor of up to five (5) percent of any buffer, density or built-upon area requirement under the high-density option; or that results in a relaxation, by a factor of up to ten (10) percent, of any management requirement under the low-density option. For variances to a vegetated setback requirement, the percent variation shall be calculated using the footprint of built-upon area proposed to encroach with the vegetated setback divided by the total area of the vegetated setback within the project.

Vegetated Setback. See Buffer, Riparian.

These restrictions are moved to Section 406 Vegetated Setbacks Required

Vested Right. The right to undertake and complete the development and use of property under the terms and conditions of an approved site-specific development plan or an approved phased development plan. Refer to NCGS Section 160D-108, Permit Choice and Vested Rights for more information.

Violation. The failure of a structure or other development to be fully compliant with the community's water management regulations.

Water Dependent Structure. Any structure for which the use requires access to or proximity to or citing within surface waters to fulfill its basic purpose, such as boat ramps, boat houses, docks and bulkheads. Ancillary facilities

such as restaurants, outlets for boat supplies, parking lots and commercial boat storage areas are not water dependent structures.

Watershed. The entire land area contributing surface drainage to a specific point (e.g. the water supply intake) or alternatively, the geographic region within which water drains to a particular river, stream or body of water.

Water Surface Elevation (WSE). The height, in relation to mean sea level, of floods of various magnitudes and frequencies in the floodplains of riverine areas.

Watercourse. A lake, river, creek, stream, wash, channel or other topographic feature on or over which waters flow at least periodically. Watercourse includes specifically designated areas in which substantial flood damage may occur.

Water Management Administrator. An official or designated person of the City of Trinity responsible for administration and enforcement of this ordinance. The City of Trinity has designated the Public Works Director as the Floodplain Administrator, Watershed Manager, and Stormwater Manager for the City.

Watershed Manager. An official or designated person of the City of Trinity responsible for administration and enforcement of the watershed regulations of this Article. In the City of Trinity, the Water Management Administrator is designated as the Watershed Manager.

Wetlands. The same as defined in Rule 15A NCAC 02B .0202 definitions. "Wetlands" are "waters" as defined by G.S. 143-212(6) that are inundated or saturated by an accumulation of surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands do not include prior converted cropland as defined in the National Food Security Act Manual, Fifth Edition, which is hereby incorporated by reference, not including subsequent amendments and editions, and is available free of charge at https://directives.sc.egov.usda.gov/RollupViewer.aspx?hid=29340.

X Zones. X Zones means areas determined to be low to moderate risk flood zones and are located outside the community's delineated Special Flood Hazard Area (SFHA) and include the following:

(a) Shaded - is the area of moderate flood hazard and can represent:
   1. 0.2% annual chance flood hazard area (500-year flood zone),
   2. Areas of 1% annual chance flood with average depth less than one (1) foot, or
   3. Areas of 1% annual chance flood with drainage areas of less than one (1) square mile

(b) Unshaded - is the area of minimal flood hazard determined to be outside of the 0.2% annual chance flood (500-year flood zone).

Article 2 Word Interpretation

For the purpose of this ordinance, certain words shall be interpreted as follows:

Words in the present tense include the future tense.

Words used in the singular number include the plural, and words used in the plural number include the singular, unless the natural construction of the wording indicates otherwise.

The word "person" includes a firm, association, corporation, trust, and company as well as an individual.

The word "structure" shall include the word "building."

The word "lot" shall include the words, "plot," "parcel," or "tract."

The words "shall" and "will" are always mandatory.

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ARTICLE 100: RESERVED

ARTICLE 200: AUTHORITY AND GENERAL REGULATIONS

Section 201. Authority and Enactment.

The Legislature of the State of North Carolina has, in Chapter 160A, Article 8, Section 174, General Ordinance Making Power; and in Chapter 143, Article 21, Water and Air Resources, authorized local governments to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. In addition, GS 160D-926 and G.S. 143-214.5 specifically authorize local governments to enact and enforce water supply watershed management regulations. The Governing Board of City hereby ordains and enacts into law the following articles as the Water Supply Watershed Protection Ordinance of City.[1]

Section 202. Jurisdiction.

The provisions of this Ordinance shall apply within the areas designated as a Water Supply Watershed by the N.C. Environmental Management Commission and shall be defined and established on a water supply watershed protection map of the City of Trinity, North Carolina which is adopted simultaneously herewith. The watershed map and all explanatory matter contained thereon accompanies and is hereby made a part of this Ordinance. This Ordinance shall be permanently kept on file in the of the City.[2]

Section 203. Exceptions to Applicability.

(A) Nothing contained herein shall repeal, modify, or amend any Federal or State law or regulation, or any ordinance or regulation pertaining thereto except any ordinance which these regulations specifically replace; nor shall any provision of this Ordinance amend, modify, or restrict any other provisions of the Code of Ordinances of City; however, the adoption of this Ordinance shall and does amend any and all ordinances, resolutions, and regulations in effect in the City at the time of the adoption of this Ordinance that may be construed to impair or reduce the effectiveness of this Ordinance or to conflict with any of its provisions

(B) It is not intended that these regulations interfere with any easement, covenants, or other agreements between parties. However, if the provisions of these regulations impose greater restrictions or higher standards for the use of a building or land, then the provisions of these regulations shall control.

(C) Existing Development, as defined in this ordinance, is not subject to the requirements of this ordinance.

(D) Expansions to existing development must meet the requirements of this ordinance, except single family residential development or unless expansion is part of common plan of development. In an expansion, the built-upon area of the existing development is not required to be included in the density calculations. Where there is a net increase of built upon area, only the area of net increase is subject to this ordinance. Where existing development is being replaced with new built upon area, and there is net increase of built upon area, only areas of net increase shall be subject to this ordinance.

(E) If a Non-Conforming Existing Lot is not contiguous to any other lot owned by the same party, then that lot shall not be subject to the development restrictions of this ordinance if it is developed for single-family residential purposes. The City of Trinity requires the combination of contiguous nonconforming lots of record owned by same party to establish a lot or lots that meet requirements in Article 300 of this ordinance.

(F) Any lot or parcel created as part of a Family Subdivision after the effective date of these rules shall be exempt from these rules if it is developed for one single-family detached residence and if it is exempt from local subdivision regulation..

(G) Any lot or parcel created as part of any other type of subdivision that is exempt from the Subdivision Regulations of the City of Trinity Land Management Ordinance shall be subject to the land use requirements (including impervious surface requirements) of these rules, except that such a lot or parcel must meet the minimum buffer requirements to the maximum extent practicable.[3]

(H) An applicant may exceed the density limits in Article 400 if all of the following circumstances apply:
(1) The property was developed prior to the effective date of the local water supply watershed program.
(2) The property has not been combined with additional lots after January 1, 2021.
(3) The property has not been a participant in a density averaging transaction under G.S. 143-214.5(d2).
(4) The current use of the property is nonresidential.
(5) In the sole discretion, and at the voluntary election, of the property owner, the stormwater from all of the existing and new built-upon area on the property is treated in accordance with all applicable local government, state, and federal laws and regulations.
(6) The remaining vegetated buffers on the property are preserved in accordance with the requirements of this Ordinance.

Section 204. Repeal of Existing Watershed Ordinance.

This ordinance in part carries forward by re-enactment, some of the Watershed Ordinance of the City of Trinity, North Carolina (adopted by the City Council on June 9, 2025 as amended, and it is not the intention to repeal but rather to re-enact and continue in force such existing provisions so that all rights and liabilities that have accrued thereunder are preserved and may be enforced. All provisions of the Watershed Ordinance which are not re-enacted herein are hereby repealed. All suits at law or in equity and/or all prosecutions resulting from the violation of any ordinance provisions heretofore in effect, which are now pending in any court of this state or of the United States, shall not be abated or abandoned by reason of the adoption of this ordinance, but shall be prosecuted to their finality the same as if this ordinance had not been adopted; and any and all violations of the existing Watershed Protection Ordinance, prosecutions for which have not yet been instituted, may be hereafter filed and prosecuted; and nothing in this ordinance shall be so construed as to abandon, abate or dismiss any litigation or prosecution now pending

and/or which may heretofore have been instituted or prosecuted.

Section 205. Criminal Penalties.

Any person violating any provisions of this Ordinance shall be guilty of a misdemeanor and, upon conviction, shall be punished in accordance with NCGS 14-4. The maximum fine for each offense shall not exceed $500.00. Each day that the violation continues shall constitute a separate offense.

Section 206. Remedies.

(A) If any subdivision, development and/or land use is found to be in violation of this Ordinance, the City Council may, in addition to all other remedies available either in law or in equity, institute a civil penalty in the amount of $250, action or proceedings to restrain, correct, or abate the violation; to prevent occupancy of the building, structure, or land; or to prevent any illegal act, conduct, business, or use in or about the premises. In addition, the N.C. Environmental Management Commission may assess civil penalties in accordance with G.S. 143-215.6A. Each day that the violation continues shall constitute a separate offense.

(B) If the Water Management Administrator finds that any of the provisions of this ordinance are being violated, he shall notify in writing the person responsible for such violation, indicating the nature of the violation, and ordering the action necessary to correct it. He shall order correction of the violation within 90 days, discontinuance of the illegal use of land, buildings, or structures; removal of illegal buildings or structures, or of additions, alterations, or structural changes thereto; discontinuance of any illegal work being done; or shall take any action authorized by this ordinance and the City of Trinity Land Management Ordinance to ensure compliance with or to prevent violation of its provisions. If a ruling of the Water Management Administrator is questioned, the aggrieved party or parties may appeal such ruling to the Watershed Review Board.

(C) If the Administrator orders correction of the violation, he will re-inspect the property after 90 days. If the Administrator finds that the violation has not been completely corrected, he will issue a Notice of Violation describing the work necessary to correct the violation and requiring a plan of action within 14 calendar days. Work shall be completed within 45 days of re-inspection. Failure to bring the violation into compliance may result in a civil penalty fine of $250. Each act of violation and each day upon which any such violation will continue or occur shall constitute a separate offense.

(D) Any one or all of the procedures set forth in Article 3 Enforcement, Section 3.4 Remedies, of the Trinity Land Management Ordinance, may also be used to enforce the provisions of this Ordinance.

Section 207. Severability.

Should any section or provision of this Ordinance be declared invalid or unconstitutional by any court of competent jurisdiction, the declaration shall not affect the validity of this Ordinance as a whole or any part thereof that is not specifically declared to be invalid or unconstitutional.

Section 208. Effective Date.

This Ordinance shall take effect and be in force on (month, day and year).

ARTICLE 300: SUBDIVISION REGULATIONS. (The Subdivision Regulations of the City of Trinity Land Management Ordinance apply.)

ARTICLE 400: DEVELOPMENT REGULATIONS

Section 401. Establishment of Watershed Areas.

The purpose of this Article is to list and describe the watershed areas herein adopted.

Section 402. Allowed and Not Allowed Uses in WS-III BW

Activity/Use	Allowed?
New landfills	Yes
New permitted residual land application	Yes
New permitted petroleum contaminated soils sites	Yes
NPDES General or Individual Stormwater discharges	Yes
NPDES General Permit Wastewater Discharges pursuant to 15A NCAC 02H .0127	Yes
NPDES Individual Permit trout farm discharges	Yes
New NPDES Individual Permit domestic treated wastewater discharge	Yes
New NPDES Individual Permit industrial treated wastewater discharge	No[b]
Non-process industrial waste	Yes
New industrial connections and expansions to existing municipal discharge with pretreatment program pursuant to 15A NCAC 02H .0904	No
Sewage	No[c]
Industrial Waste	No[c]
Other wastes	No[c]
Groundwater remediation project discharges[e]	Yes
Agriculture	Yes
Silviculture[f]	Yes
Residential Development[g]	Yes
Non-residential Development[gh]	Yes
Nonpoint Source Pollution[j]	Yes
Animal Operations[k]	Yes

Notes:
a. Permitted pursuant to 15A NCAC 02B .0104
b. Except non-process industrial discharges are allowed
c. Only allowed if specified in 15A NCAC 02B .0104
d. Not allowed if activity(ies) has/have adverse impact on human health
e. Where no other practical alternative exists
f. Subject to Forest Practice Guidelines Related to Water Quality (02 NCAC 60C .0100 to .0209) Effective 4/1/2018
g. See density requirements in 15A NCAC 02B .0624
h. See different allowed and not allowed in this table
i. Watershed shall remain undeveloped except for following uses when they cannot be avoided: power transmission lines, restricted access roads, and structures associated with water withdrawal, treatment, and distribution of WS-I waters. Built upon area shall be designed and located to minimize stormwater runoff impact to receiving waters.

j. Non Point Source pollution shall not have adverse impact, as defined in 15A NCAC 02H .1002, on use as water supply or any other designated use
k. Deemed permitted, as defined in 15A NCAC 02T .0103 and permitted under 15A NCAC 2H .0217

Section 403. Watershed Areas – Density and Built-Upon Limits.

(A) PROJECT DENSITY. The following maximum allowable project densities and minimum lot sizes shall apply to a project according to the classification of the water supply watershed where it is located, its relative location in the watershed, its project density, and the type of development:

Water Supply Classification	Location in the Watershed	Maximum Allowable Project Density or Minimum Lot Size		
		Low Density Development		High Density Development
		Single-family detached residential	Non-residential and all other residential	All types
WS-III	Balance of Watershed	1 du per one-half acre; or, 1 du per 20,000 square foot lot excluding roadway right-of-way; or, less than 24% built-upon area	< 24% built-upon area	24 to 50% built-upon area

(B) CALCULATION OF PROJECT DENSITY. The following requirements shall apply to the calculation of project density:
(1) Project density shall be calculated as the total built-upon area divided by the total project area;
(2) A project with "Existing Development," as defined in this ordinance, may use the calculation method in Sub-Item (1) of this Item or may calculate project density as the difference of total built-upon area minus existing built-upon area divided by the difference of total project area minus existing built-upon area.
(3) Expansions to Existing Development shall be subject to 15A NCAC 02B .0624 except as excluded in Rule15A NCAC 02B .0622 (1)(d).
(4) Where there is a net increase of built-upon area, only the area of net increase shall be subject to density and built upon area limits.
(5) Where Existing Development is being replaced with new built-upon area, and there is a net increase of built-upon area, only the area of net increase shall be subject to density and built upon area limits
(6) Total project area shall exclude the following:
(a) areas below the Normal High Water Line (NHWL); and
(b) areas defined as "coastal wetlands" pursuant to 15A NCAC 07H .0205, herein incorporated by reference, including subsequent amendments and editions, and available at no cost at http://reports.oah.state.nc.us/ncac.asp, as measured landward from the NHWL; and
(7) Projects under a common plan of development shall be considered as a single project for purposes of density calculation except that on a case-by-case basis, projects may be considered to have both high and low density areas based on one or more of the following criteria:
(a) natural drainage area boundaries;
(b) variations in land use throughout the project; or
(c) construction phasing.

(C) LOW DENSITY PROJECTS. In addition to complying with the project density requirements of Item (A) of this Rule, low density projects shall comply with the following:
(1) VEGETATED CONVEYANCES. Stormwater runoff from the project shall be released to vegetated

areas as dispersed flow or transported by vegetated conveyances to the maximum extent practicable. In determining whether this criteria has been met, the City of Trinity shall take into account site-specific factors such as topography and site layout as well as protection of water quality. Vegetated conveyances shall be maintained in perpetuity to ensure that they function as designed. Vegetated conveyances that meet the following criteria shall be deemed to satisfy the requirements of this Sub-Item:

(a) Side slopes shall be no steeper than 3:1 (horizontal to vertical) unless it is demonstrated to the City of Trinity that the soils and vegetation will remain stable in perpetuity based on engineering calculations and on-site soil investigation; and

(b) The conveyance shall be designed so that it does not erode during the peak flow from the 10-year storm event as demonstrated by engineering calculations.

(2) CURB OUTLET SYSTEMS. In lieu of vegetated conveyances, low density projects shall have the option to use curb and gutter with outlets to convey stormwater to grassed swales or vegetated areas. Requirements for these curb outlet systems shall be as follows:

(a) The curb outlets shall be located such that the swale or vegetated area can carry the peak flow from the 10-year storm and at a non-erosive velocity;

(b) The longitudinal slope of the swale or vegetated area shall not exceed five percent except where not practical due to physical constraints. In these cases, devices to slow the rate of runoff and encourage infiltration to reduce pollutant delivery shall be provided;

(c) The swale's cross section shall be trapezoidal with a minimum bottom width of two feet;

(d) The side slopes of the swale or vegetated area shall be no steeper than 3:1 (horizontal to vertical);

(e) The minimum length of the swale or vegetated area shall be 100 feet; and

(f) Low density projects may use treatment swales designed in accordance with 15A NCAC 02H .1061 in lieu of the requirements specified in Sub-Items (a) through (e) of this Sub-Item.

(D) HIGH DENSITY PROJECTS. In addition to complying with the project density requirements of Item (A) of this Rule, high density projects shall comply with the following:

(1) Stormwater Control Measures (SCMs) shall be designed, constructed, and maintained so that the project achieves either "runoff treatment" or "runoff volume match" as those terms are defined in 15A NCAC 02B .0621;

(2) For high density projects designed to achieve runoff treatment, the required storm depth shall be one inch. Applicants shall have the option to design projects to achieve runoff volume match in lieu of runoff treatment;

(3) Stormwater runoff from off-site areas and Existing Development, shall not be required to be treated in the SCM. Runoff from off-site areas or existing development that is not bypassed shall be included in sizing of on-site SCMs;

(4) SCMs shall meet the relevant Minimum Design Criteria set forth in 15A NCAC 02H.1050 through .1062; and

(5) Stormwater outlets shall be designed so that they do not cause erosion downslope of the discharge point during the peak flow from the 10-year storm event as shown by engineering calculations.

(E) OPTIONS FOR IMPLEMENTING PROJECT DENSITY. The following options are permitted, with approval of the TRC, in place of or in addition to the requirements of Item (A) above, as appropriate:

(1) Low density single-family detached residential development may be regulated using the minimum lot size requirements, dwelling unit per acre requirements, built-upon area percentages, or some combination of these.

(2) 10/70 OPTION. A percentage of Trinity's watershed area (10%) is allocated higher density development up to a BUA of 70% for non-residential development. This provision is established to allow limited economic development opportunities while maintaining long-term water quality standards. Some new non-residential development, if approved by the City Council, is allowed to

develop under the "10/70 option" in accordance with the following requirements:

(a) A maximum of 10 percent of the land area of a water supply watershed outside of the critical area and within the City of Trinity's planning jurisdiction may be developed with new development projects and expansions of existing development of up to 70 percent built-upon area.

(b) In water supply watersheds classified on or before August 3, 1992 (the watershed containing the City of Trinity was officially reclassified by NCEMC on May 14, 1992) the beginning amount of acreage available under this option shall be based on the City of Trinity's jurisdiction as delineated on July 1, 1993. Any acreage within the critical area shall not be counted towards the allowable 10/70 option acreage;

(c) Projects that are covered under the 10/70 option shall comply with the low density requirements set forth in Item (C) above unless the development is approved for the high-density requirements set forth in Item (D) above. ;

(d) The maximum built-upon area allowed on any given new development project shall be 70 percent;

(e) The City of Trinity may transfer, in whole or in part, its right to the 10/70 land area to another local government within the same water supply watershed upon submittal of a joint resolution and approval by the Commission; and

(f) When the water supply watershed is composed of public lands, such as National Forest land, the City of Trinity may count the public land acreage within the watershed outside of the critical area in calculating the acreage allowed under this provision.

(3) New development shall meet the development requirements on a project-by-project basis.. Prior to approval of the ordinance, the local government shall demonstrate to the Commission that the provisions as averaged meet or exceed the statewide minimum requirements and that a mechanism exists to ensure the planned distribution of development potential throughout the local government's jurisdiction within the watershed.

(4) Future development activities in single-family detached residential developments that exceed the applicable low density requirements will be tracked by dwelling units rather than percentage built-upon area, as long as Stormwater Control Measures are sized to capture and treat runoff from:

(a) all pervious and built-upon surfaces shown on the development plan and

(b) any off-site drainage from pervious and built-upon surfaces, and when an additional safety factor of 15 percent of built-upon area of the project site is figured in.

Section 404. Density Averaging

An applicant may average development density on up to two noncontiguous properties for purposes of achieving compliance with the water supply watershed development standards if all of the following circumstances exist:

(A) The properties are within the same water supply watershed. However, if one of the properties is located in the critical area of the watershed, the critical area property shall not be developed beyond the applicable density requirements for its classification.

(B) Overall project density meets applicable density or stormwater control requirements under 15A NCAC 2B .0200.

(C) Vegetated setbacks on both properties meet the minimum water supply watershed protection requirements.

(D) Built upon areas are designed and located to minimize stormwater runoff impact to the receiving waters, minimize concentrated stormwater flow, maximize the use of sheet flow through vegetated areas, and maximize the flow length through vegetated areas.

(E) Areas of concentrated density development are located in upland areas and, to the maximum extent

practicable, away from surface waters and drainageways.

(F) The property or portions of the properties that are not being developed will remain in a vegetated or natural state and will be managed by a homeowners' association as common area, conveyed to the City of Trinity as a park or greenway, or placed under a permanent conservation or farmland preservation easement unless it can be demonstrated that the local government can ensure long-term compliance through deed restrictions and an electronic permitting mechanism. A metes and bounds description of the areas to remain vegetated and limits on use shall be recorded on the subdivision plat, in homeowners' covenants, and on individual deeds. Any such limitations or restrictions on use shall be irrevocable.

(G) Development permitted under density averaging and meeting applicable low density requirements shall transport stormwater runoff by vegetated conveyances to the maximum extent practicable.

(H) A Stormwater Permit shall be obtained from the Technical Review Committee to ensure that both properties considered together meet the standards of the watershed ordinance and that potential owners have record of how the watershed regulations were applied to the properties.

Section 405. Cluster Development

Cluster development is allowed under the following conditions:

(A) Minimum lot sizes are not applicable to single family cluster development projects; however, the total number of lots shall not exceed the number of lots allowed for single family detached developments in Section 403. Density or built-upon area for the project shall not exceed that allowed for the critical area, balance of watershed or protected area, whichever applies.

(B) All built-upon area shall be designed and located to minimize stormwater runoff impact to the receiving waters and minimize concentrated stormwater flow, maximize the use of sheet flow through vegetated areas, and maximize the flow length through vegetated areas.

(C) Areas of concentrated density development shall be located in upland area and as far as practicable from surface waters and drainageways.

(D) The remainder of the tract shall remain in a vegetated or natural state. The title to the open space area shall be conveyed to an incorporated homeowners association for management; to the City of Trinity for preservation as a park or open space; or to a conservation organization for preservation in a permanent easement.

(E) Cluster developments that meet the applicable low density requirements shall transport stormwater runoff by vegetated conveyances to the maximum extent practicable.

Section 406. Riparian Buffers (See also Section 407 for additional vegetated setbacks required for development that exceeds the lot-density option.)

(A) Applicability. This Section is applicable to all lands located within the zoning jurisdiction of the City of Trinity.

(B) Buffer Design. Also known as stream buffers, riparian buffers are designed in two distinct layers, or buffer zones, to maximize protection.

(1) Zone 1 shall consist of a stable, vegetated area that is undisturbed except for uses provided for in this Ordinance. Zone 1 shall be as follows:

(a) For intermittent and perennial streams, Zone 1 shall begin at the most landward limit of the top of the bank or the rooted herbaceous vegetation and extend landward a distance of thirty feet on all sides of the stream. Where an intermittent or perennial stream begins or ends, including when it

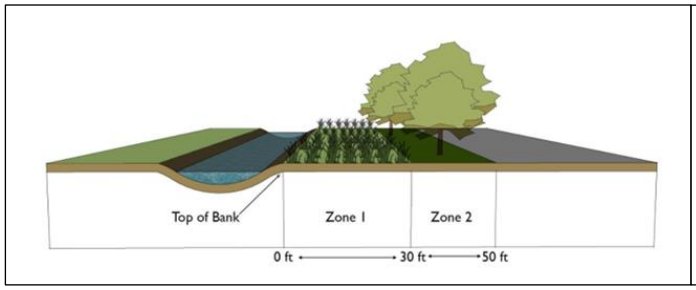
goes underground, enters, or exits a culvert, or enters or exits a wetland, the required distance shall be measured as a radius around the beginning or the end; and

(b) For ponds, lakes, and reservoirs subject to this Rule, Zone 1 shall begin at the normal water level and extend landward to thirty feet, measured horizontally on a line perpendicular to the surface water.

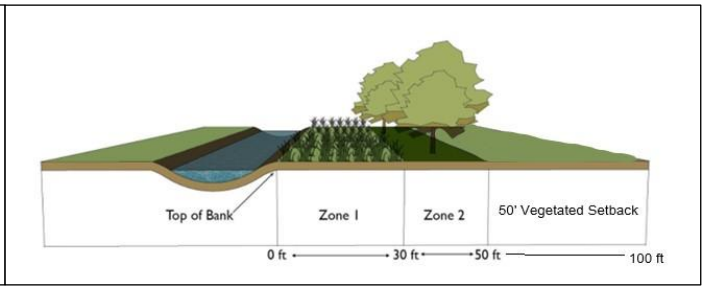
(2) Zone 2 shall consist of a stable, vegetated area that is undisturbed except for uses provided for in this Ordinance. Zone 2 shall begin at the edge of Zone 1 and extend landward twenty feet as measured horizontally on a line perpendicular to the surface water. The combined width of Zone 1 and Zone 2 shall be fifty feet on all sides of the surface water. for all development. With high-density development, perennial streams, ponds, lakes, and reservoirs shall require an additional fifty feet vegetated setback beyond the Zone 1 and Zone 2 buffers for a total width of one hundred feet.

(3) Desirable artificial streambank or shoreline stabilization is permitted within the riparian buffer.

(4) Wetlands adjacent to surface waters or within fifty (50) feet of surface waters shall be considered as part of the riparian buffer but are regulated under 15A NCAC 02H.0506.



Zones of a Stream Buffer for All Low Density Development and for Intermittant Streams with High Density Development



Zones of a Stream Buffer for Perennial Streams with High Density Development

(C) Buffer Required. A fifty (50) foot riparian buffer, comprised of Zone 1 and Zone 2 above, is required for all new development activities along all intermittent and perennial streams, ponds, lakes, and reservoirs indicated on the most recent versions of U.S.G.S. 1:24,000 (7.5 minute) scale topographic maps, Soils Maps, or as determined by local government studies.

(D) Uses Permitted Within the Riparian Buffer. Uses within the riparian buffer, or outside the riparian buffer with hydrological impacts on the authorization, or allowable with mitigation upon authorization, or prohibited, are listed in Appendix C of this Ordinance, Riparian Buffer Uses.

(E) Stormwater Runoff Through the Riparian Buffer. Stormwater runoff into the riparian buffer shall meet dispersed flow as defined in 15A NCAC 02H .1002 except as otherwise described in this Section. Drainage conveyances include drainage ditches, roadside ditches, and stormwater conveyances. The following stormwater conveyances through the riparian buffer are either deemed allowable or allowable upon authorization, providing that they do not erode through the riparian buffer:

(1) The following are deemed allowable.

(a) New stormwater flow to existing drainage conveyances provided that the addition of new flow does not result in the need to alter the conveyance.

(2) The following are allowable upon authorization.

(a) New drainage conveyances from a Primary SCM, as defined in 15A NCAC 02H .1002, definitions when the Primary SCM is provided to treat the drainage area to the conveyance but are not required to be approved under a state stormwater program or this Ordinance;

(b) New drainage conveyances when the flow rate of the conveyance is less than 0.50 cubic feet per second during the peak flow from the 0.75 inches per hour storm;

(c) New stormwater runoff that has been treated through a level spreader-filter strip that complies with 15A NCAC 02H .0159;
(d) Realignment of existing roadside drainage conveyances applicable to publicly funded and maintained linear transportation facilities when retaining or improving the design dimensions provided that no additional travel lanes are added, and the minimum required roadway typical section is used based on traffic and safety considerations;
(e) Realignment of existing drainage conveyances retaining or improving the design dimensions provided that the size of the drainage area and the percent built-upon area within the drainage area remain the same;
(f) New or altered drainage conveyances applicable to publicly funded and maintained linear transportation facilities provided that SCMs, or BMPs from the NCDOT Stormwater Best Management Practices Toolbox, are employed;
(g) New drainage conveyances applicable to publicly funded and maintained linear transportation facilities that do not provide a stormwater management facility due to topography constraints provided other measures and employed to protect downstream water quality to the maximum extent practical; and;
(h) New drainage conveyances where the drainage area to the conveyance has no new built-upon area as defined in 15A NCAC 02H .1002, definitions and the conveyance is necessary for bypass or existing drainage only.

(F) On-Site Determination. When a landowner or other affected party believes that the maps listed in this ordinance have inaccurately depicted surface waters or the specific origination point of a stream, or the specific origination point of the steam is in question or unclear, he or she shall request the City to make an on-site determination. On-site determinations shall be made by the City with staff or a professional certified under NCGS 143-214.25A. Registered Foresters under Chapter 98B of the General Statutes who are employees of the North Carolina Forest Service of the Department of Agriculture and Consumer Services can make on-site determinations for forest harvesting operations and practices. Trinity may accept the results of an on-site determination made by other parties who have completed the Division's Surface Water Identification Training Certification course, its successor, or other equivalent training curriculum approved by the Division. On-site determinations shall expire five years from the date of the determination. Any disputes over on-site determinations shall be referred to the Administrator in writing within sixty (60) calendar days of written notification from the Authority. The determination is subject to review as provided in NCGS 150B Articles 3 and 4.

(G) Exemption Based on On-Site Determination.
(1) Existing Development. Existing development as defined in this ordinance may be continued and maintained subject to the provisions provided herein. Expansions to structures classified as existing development must meet the requirements of this ordinance, however, the built-upon area of the existing development is not required to be included in the built-upon area calculations of Section 3 of this Ordinance Development Regulations. This section deals with all existing development as defined in the EMC rules. All development existing prior to January 1, 1994, whether or not it meets the State minimum standards, is exempt from the provisions of this ordinance.
(a) Uses of Land. This category consists of uses existing at the time of adoption of this ordinance where such use of the land is not permitted to be established hereafter in the watershed area in which it is located. Such uses may be continued except as follows:
i. When such use of land has been changed to an allowed use, it shall not thereafter revert to any prohibited use.
ii. Such use of land shall be changed only to an allowed use.
iii. When such use ceases for a period of at least one year, it shall not be reestablished.
(2) Reconstruction of Buildings or Built-upon Areas. Any existing building or built-upon area not in conformance with the restrictions of this ordinance that has been damaged or removed may be repaired

and/or reconstructed, except that there are no restrictions on single family residential development, provided:

(a) Repair or reconstruction is initiated within twelve (12) months and completed within two (2) years of such damage.

(b) The total amount of space devoted to built-upon area may not be increased unless stormwater control measures equal to or exceeding the previous development, is provided.

(3) Expansions to existing development must meet the requirements of this ordinance except for development meeting all the following circumstances:

(a) The property was initially developed prior to January 1, 1994.

(b) The current use of the property is nonresidential, or the property is developed for single family residential use and is not part of a common development plan.

(c) The property has not been a participant in a density averaging transaction under G.S. 143-214.5

(d) The stormwater from any net increase in built upon area on the property above the preexisting development is treated in accordance with this Ordinance. In an expansion, the built-upon area of the existing development is not required to be included in the built upon area calculations irrespective of whether the impervious surface that existed before expansion is to be demolished or relocated during development activity.

(e) The remaining vegetated buffers and stream buffers on the property are preserved in accordance with this Ordinance.

(f) The net increase in built upon area shall not exceed 24% for low density options, 50% for high density options in the WS-III watershed, or 70% with the approval of a SIDA in accordance with Section 7.2-3.8 D below in the WS-IV watershed.

Section 407 Vegetated Setbacks for High-density Development Along Perennial Streams

(A) Applicability. This Section is applicable to all lands located within the zoning jurisdiction of the City of Trinity.

(B) In addition to the required riparian buffer of Section 406 above, a fifty (50) foot vegetative setback is required along all **perennial** streams, ponds, lakes and reservoirs for all new development activities that exceed the low-density option. The width of the vegetated setback shall be measured horizontally from the normal pool elevation of impounded structures, from the top of bank to each side of streams or rivers. The total required minimum buffer required for all new high-density development activities along all **perennial** streams, ponds, lakes and reservoirs is therefore one hundred (100) feet, including a Zone 1 riparian buffer, a Zone 2 riparian buffer, and a 50-foot vegetated setback.

(C) Restrictions for Vegetated Setbacks.

(1) Vegetated setbacks may be cleared or graded but shall be replanted and maintained in grass or other vegetation pursuant to rules and best practices of the NCDEQ Riparian Protection Programs.

(2) Stormwater that has not been treated in an SCM shall not be discharged through a vegetated setback; instead, it shall be released at the edge of the vegetated setback and allowed to flow through the setback as dispersed flow.

(3) Built-upon area that meets the requirements of NCGS 143-214.7(b2)(2) shall be allowed within the vegetated setback. Development may occur within the area that would otherwise be required to be placed within a vegetative buffer required by the Commission pursuant to G.S. 143-214.1 and this Section, provided the stormwater runoff from the entire impervious area of the development is collected, treated, and discharged so that it passes through a segment of the vegetative buffer and is managed so that it otherwise complies with all applicable State and federal stormwater management requirements. For the purpose of this Subdivision, the entire impervious area of development shall not include any portion of a project that is within a North Carolina Department of Transportation or municipal right-of-way.

(4) No new built-upon area shall be allowed in the vegetated setback except for publicly-funded linear projects such as roads, greenways, and sidewalks, water dependent structures such as docks, and minimal footprint uses such as poles, signs, utility appurtenances, and security lights where it is not practical to locate the built-upon area elsewhere. Built-upon area associated with these uses shall be minimized and the channelization of stormwater runoff shall be avoided.

Section 407. Application of Regulations.

(A) No building or land shall hereafter be used and no development shall take place except in conformity with the regulations herein specified for the watershed area in which it is located.

(B) No area required for the purpose of complying with the provisions of this ordinance shall be included in the area required for another building.

(C) Every residential building hereafter erected, moved or structurally altered shall be located on a lot which conforms to the regulations herein specified, except as permitted in Section 406.

(D) If a use or class of use is not specifically indicated as being allowed in a watershed area, such use or class of use is prohibited.

Section 408. Rules Governing the Interpretation of Watershed Area Boundaries

Where uncertainty exists as to the boundaries of the watershed areas, as shown on the Watershed Map, the following rules shall apply:

(A) Where area boundaries are indicated as approximately following either street, alley, railroad or highway lines or centerlines thereof, such lines shall be construed to be said boundaries.

(B) Where area boundaries are indicated as approximately following lot lines, such lot lines shall be construed to be said boundaries. However, a surveyed plat prepared by a registered land surveyor may be submitted to the City as evidence that one or more properties along these boundaries do not lie within the watershed area.

(C) Where the watershed area boundaries lie at a scaled distance more than twenty-five (25) feet from any parallel lot line, the location of watershed area boundaries shall be determined by use of the scale appearing on the watershed map. Any ambiguities should be resolved in favor of locating built-upon surface area in the least environmentally sensitive area of the project.

(D) Where the watershed area boundaries lie at a scaled distance of twenty-five (25) feet or less from any parallel lot line, the location of watershed area boundaries shall be construed to be the lot line.

(E) Where other uncertainty exists, the Water Management Administrator shall interpret the Watershed Map as to location of such boundaries. This decision may be appealed to the Watershed Review Board.

Section 409. Existing Development

Existing Development, as defined in this ordinance, may be continued and maintained subject to the provisions provided herein. Expansions to structures classified as Existing Development must meet the requirements of this ordinance, however, the built-upon area of the Existing Development is not required to be included in the built-upon area calculations. Please see Section 403 (B) Calculation of Project Density. This section deals with all existing development as defined in the EMC rules. All existing development, whether or not it meets the statewide

minimum standards, is exempt from the provisions of this ordinance.

(A) Uses of Land. This category consists of Existing Development where such use of the land would not be permitted if it were new development. Such uses may be continued except as follows:
  (1) Such use of land shall be changed only to an allowed use.
  (2) When such use of land has been changed to an allowed use, it shall not thereafter revert to any prohibited use.
  (3) When such use ceases for a period of at least one year, it shall not be reestablished.

(B) Reconstruction of Buildings or Built-upon Areas. Any existing building or built-upon area not in conformance with the restrictions of this ordinance that has been damaged or removed may be repaired and/or reconstructed, except that there are no restrictions on single family residential development, provided:
  (1) Repair or reconstruction is initiated within twelve (12) months and completed within two (2) years of such damage.
  (2) The total amount of space devoted to built-upon area may not be increased unless stormwater control that equals or exceeds the previous development is provided.

Section 410. Watershed Protection Permit

(A) Except for single family residential development, no building or built-upon area shall be erected, moved, enlarged or structurally altered, nor shall any building permit be issued nor shall any change in the use of any building or land be made until a Watershed Protection Permit has been issued by the Water Management Administrator. No Watershed Protection Permit shall be issued except in conformity with the provisions of this ordinance.

(B) Watershed Protection Permit applications shall be filed with the Watershed Administrator. The application shall include a completed application form and supporting documentation deemed necessary by the Water Management Administrator.

(C) Prior to issuance of a Watershed Protection Permit, the Water Management Administrator may consult with qualified personnel for assistance to determine if the application meets the requirements of this ordinance.

(D) A Watershed Protection Permit shall expire if a Building Permit or Watershed Occupancy Permit for such use is not obtained by the applicant within twelve (12) months from the date of issuance.

Section 411. Building Permit Required

No permit required under the North Carolina State Building Code shall be issued for any activity for which a Watershed Protection Permit is required until that permit has been issued.

Section 412. Watershed Occupancy Permit

(A) The Water Management Administrator shall issue a Watershed Occupancy Permit (WSOP) certifying that all requirements of this ordinance have been met prior to the occupancy or use of a building hereafter erected, altered, or moved and/or prior to the change of use of any building or land.

(B) A Watershed Occupancy Permit, either for the whole or part of a building, shall be applied for coincident with the application for a Watershed Protection Permit and shall be issued or denied within ten (10) business

days after the erection or structural alterations of the building. The applicant should notify the Water Management Administrator and request the issued WSOP when building is complete.

(C) When only a change in use of land or existing building occurs, the Water Management Administrator shall issue a Watershed Occupancy Permit certifying that all requirements of this ordinance have been met coincident with the Watershed Protection Permit.

(D) If the Watershed Occupancy Permit is denied, the Water Management Administrator shall notify the applicant in writing stating the reasons for denial.

(E) No building or structure which has been erected, moved, or structurally altered may be occupied until the Water Management Administrator has approved and issued a Watershed Occupancy Permit.

ARTICLE 500: PUBLIC HEALTH REGULATIONS

Section 501. Public Health, in general.

No activity, situation, structure, or land use shall be allowed within the watershed which poses a threat to water quality and the public health, safety, and welfare.

Section 502. Abatement.

(A) The Water Management Administrator shall monitor land use activities within the watershed areas to identify situations that may pose a threat to water quality.

(B) The Water Management Administrator shall report all findings to the Watershed Review Board. The Water Management Administrator may consult with any public agency or official and request recommendations. The Water Management Administrator may also coordinate with local inspections department, since local governments can abate most threatening nuisances.

(C) Where the Watershed Review Board finds a threat to water quality and the public health, safety and welfare, the Board shall institute any appropriate action or proceeding to restrain, correct or abate the condition and/or violation.

ARTICLE 600: ADMINISTRATION, ENFORCEMENT AND APPEALS

This article outlines a suggested procedure for the administration and enforcement of the ordinance. It provides for the appointment of a Water Management Administrator and a Watershed Review Board.

Section 601. Water Management Administrator and Duties thereof.

The Director of Public Services, herein referred to as the "Water Management Administrator", or their designee, is hereby appointed by the City of Trinity as the Watershed Administrator to administer and enforce the provisions of this ordinance as follows:

(A) The Water Management Administrator shall issue Watershed Protection Permits and Watershed Occupancy Permits as prescribed herein. A record of all permits shall be kept on file and shall be available for public inspection during regular office hours of the Administrator.

(B) The Water Management Administrator shall serve as clerk to the Watershed Review Board.

(C) The Water Management Administrator is granted the authority to administer and enforce the provisions of this Ordinance, exercising in the fulfillment of his responsibility the full police power of the City. The Water Management Administrator, or his duly authorized representative, may enter any building, structure, or premises, as provided by law, to perform any duty imposed upon him by this Ordinance.

(D) The Water Management Administrator shall keep records of all amendments to the local Water Supply Watershed Protection Ordinance and shall provide copies of all amendments upon adoption to the Stormwater Branch of the Division of Energy, Mineral, and Land Resources.

(E) The Water Management Administrator shall keep records of the jurisdiction's use of the provision that a maximum of ten percent (10%) of the non-critical area of WS-II, WS-III, and, WS-IV watersheds may be developed with new non-residential development at a maximum of seventy percent (70%) built-upon surface area. Records for each watershed shall include the total acres of non-critical watershed area, 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).

(F) The Water Management Administrator shall keep a record of variances to the local Water Supply Watershed Protection Ordinance.

(G) The Water Management Administrator is responsible for ensuring that Stormwater Control Measures are inspected at least once a year and shall keep a record of SCM inspections.

Section 602. Appeal from the Water Management Administrator

Any order, decision, or determination made by the Water Management Administrator may be appealed to and decided by the Watershed Review Board.An appeal from a decision of the Water Management Administrator must be submitted to the Watershed Review Board within thirty 30 calendar days from the date the order, interpretation, decision, or determination is issued. All appeals must be made in writing stating the reasons for appeal. Following submission of an appeal, the Water Management Administrator shall transmit to the Board all papers constituting the record upon which the action appealed from was taken.

An appeal stays all proceedings in furtherance of the action appealed, unless the officer from whom the appeal is taken certifies to the Board after the notice of appeal has been filed with him, that by reason of facts stated in the certificate of approval for recording, a stay would in his opinion cause imminent peril to life or property. In such case, proceedings shall not be stayed otherwise than by a restraining order which may be granted by the Board or by a court of record on application of notice of the officer from whom the appeal is taken and upon due cause shown. All appeals of Water Management Administrator decisions shall follow the procedures for appeals of administrative decisions in GS 160D-405.

Section 603. Changes and Amendments to the Watershed Protection Ordinance.

(A) The City Governing Board may, on its own motion or on petition, after public notice and hearing, amend, supplement, change or modify the watershed regulations and restrictions as described herein.

(B) No action shall be taken until the proposal has been submitted to the Watershed Review Board for review and

recommendations. If no recommendation has been received from the Watershed Review Board within forty-five (45) days after submission of the proposal to the Chairman of the Watershed Review Board, the City Governing Board may proceed as though a favorable report had been received.

(C) Under no circumstances shall the City Board adopt such amendments, supplements or changes that would cause this ordinance to violate the watershed protection rules as adopted by the N.C. Environmental Management Commission. All amendments must be filed with the
N.C. Division of Energy, Mineral, and Land Resources.

Section 604. Public Notice and Hearing Required.

Before adopting or amending this ordinance, the City Governing Board shall hold a public hearing on the proposed changes. A notice of the public hearing shall be given once a week for two successive calendar weeks in a newspaper having general circulation in the area. The notice shall be published for the first time not less than ten (10) nor more than twenty-five (25) days before the date for the hearing.

Section 605. Establishment of Watershed Review Board.

(A) There shall be and hereby is created the Watershed Review Board for the City of Trinity, NC. The City of Trinity Board of Adjustment is designated as the Water Management Review Board to be hereinafter referred to as the Review Board for the purposes of this Ordinance.

(B) The City shall appoint two (2) alternate members to serve on the Watershed Review Board in the absence of any regular member and shall be appointed for three (3) year terms. While attending in the capacity of a regular member, the alternate shall have and exercise all the powers and duties of the absent regular member.

Section 606. Rules of Conduct for Watershed Review Board Members.

Members of the Board may be removed by the City Governing Board for cause, including violation of the rules stated below:

(A) Faithful attendance at meetings of the Board and conscientious performance of the duties required of members of the Board shall be considered a prerequisite to continuing membership on the Board.

(B) No Board member shall take part in the hearing, consideration, or determination of any case in which he is personally or financially interested. A Board member shall have a "financial interest" in a case when a decision in the case will: 1) cause him or his spouse to experience a direct financial benefit or loss, or 2) will cause a business in which he or his spouse owns a 10 per cent or greater interest, or is involved in a decision-making role, to experience a direct financial benefit or loss. A Board member shall have a "personal interest" in a case when it involves a member of his immediate family (i.e., parent, spouse, or child). The intent is to prohibit members of the Board from acting in situations where they have a conflict of interest in a manner similar to the prohibition in NCGS 14-234(c)(1). Please also see NCGS 160D – 109 – standards for conflicts of interest for local government development decisions.

(C) No Board member shall discuss the substance of any appeal or other quasi-judicial case with any parties thereto prior to the public hearing on that case; provided, however, that members may receive and/or seek information pertaining to the case from the Water Management Administrator or any other member of the Board, or its secretary prior to the hearing.Members of the Board shall not express individual opinions on the proper judgement of any case prior to its determination on that case, and shall not form a fixed opinion on the

case prior to the hearing on that case.

(D) Members of the Board shall give notice to the chairman at least forty-eight (48) hours prior to the hearing of any potential conflict of interest which he has in a particular case before the Board.

(E) No Board member shall vote on any matter that decides an application or appeal unless he had attended the public hearing or watched a recording of the meeting on that application or appeal.

Section 607. Powers and Duties of the Watershed Review Board.

(A) Administrative Review. The Watershed Review Board shall hear and decide appeals from any decision or determination made by the Water Management Administrator in the enforcement of this ordinance.

(B) Variances. The Watershed Review Board shall have the power to authorize, in specific cases, minor variances from the terms of this Ordinance. The City Council may review major variance requests and make recommendations to the Environmental Management Commission regarding the same. In addition, the City shall notify and allow a reasonable comment period for all other local governments having jurisdiction in the designated watershed where the variance is being considered.

(1) Applications for a variance shall be made on the proper form obtainable from the Water Management Administrator and shall include the following information:

(a) A site plan, drawn to a scale of at least one (1) inch to forty (40) feet, indicating the property lines of the parcel upon which the use is proposed; any existing or proposed structures; parking areas and other built-upon areas; and surface water drainage. The site plan shall be neatly drawn and indicate north point, name and address of person who prepared the plan, date of the original drawing, and an accurate record of any later revisions.

(b) A complete and detailed description of the proposed variance, together with any other pertinent information which the applicant feels would be helpful to the Watershed Review Board in considering the application.

(c) Evidence or proposed witness testimony that tends to support a finding that each of the factors listed in subsection (B)(3), below, are met.

(2) The Water Management Administrator shall notify in writing each local government having jurisdiction in the watershed and the entity using the water supply for consumption. Such notice shall include a description of the variance being requested. Local governments receiving notice of the variance request may submit comments to the Water Management Administrator prior to a decision by the Watershed Review Board. Such comments shall become a part of the record of proceedings of the Watershed Review Board.

(3) Before the Watershed Review Board may grant a variance, it shall make the following three findings, which shall be recorded in the permanent record of the case, and shall include the factual reasons on which they are based:

(a) There are practical difficulties or unnecessary hardships in the way of carrying out the strict letter of the Ordinance. In order to determine that there are practical difficulties or unnecessary hardships, the Board must find that the five following conditions exist:

1. If he complies with the provisions of the Ordinance, the applicant can secure no reasonable return from, nor make reasonable use of, his property. Merely proving that the variance would permit a greater profit to be made from the property will not be considered adequate to justify the Board in granting an variance. Moreover, the Board shall consider whether the variance is the minimum possible deviation from the terms of the Ordinance that will make possible the reasonable use of his property.
2. The hardship results from the application of the Ordinance to the property rather than from

other factors such as deed restrictions or other hardship.

3. The hardship is due to the physical nature of the applicant's property, such as its size, shape, or topography, which is different from that of neighboring property.
4. The hardship is not the result of the actions of an applicant who knowingly or unknowingly violates the Ordinance, or who purchases the property after the effective date of the Ordinance, and then comes to the Board for relief.
5. The hardship is peculiar to the applicant's property, rather than the result of conditions that are widespread. If other properties are equally subject to the hardship created in the restriction, then granting a variance would be a special privilege denied to others, and would not promote equal justice.

(b) The variance is in harmony with the general purpose and intent of the Ordinance and preserves its spirit.

(c) In the granting of the variance, the public safety and welfare have been assured and substantial justice has been done. The Board shall not grant a variance if it finds that doing so would in any respect impair the public health, safety, or general welfare.

(4) In granting the variance, the Board may attach thereto conditions regarding the location, character, and other features of the proposed building, structure, or use that relate to the purpose and standards of this ordinance. If a variance for the construction, alteration or use of property is granted, such construction, alteration or use shall be in accordance with the approved site plan.

(5) The Watershed Review Board shall refuse to hear an appeal or an application for a variance previously denied if it finds that there have been no substantial changes in conditions or circumstances bearing on the appeal or application.

(6) A variance issued in accordance with this Section shall be considered a Watershed Protection Permit and shall expire if a Building Permit or Watershed Occupancy Permit for such use is not obtained by the applicant within six (6) months from the date of the decision.

(a) If the application calls for the granting of a major variance, and if the Watershed Review Board decides in favor of granting the variance, the Board shall prepare a preliminary record of the hearing with all deliberate speed. The preliminary record of the hearing shall include:The variance application;

(b) The hearing notices;

(c) The evidence presented;

(d) Motions, offers of proof, objections to evidence, and rulings on them;

(e) Proposed findings and exceptions;

(f) The proposed decision, including all conditions proposed to be added to the permit.

The preliminary record shall be sent to the Environmental Management Commission for its review

(C) Subdivision approval. See Article 300.

(D) Public Health. See Article 500.

(E) Approval of all development greater than the low density option.

Section 608. Appeals from the Watershed Review Board.

Appeals from the Watershed Review Board must be filed with the Superior Court within 30 days from the date of the Board’s written decision. Decisions by the Superior Court will be in the manner of certiorari.

FOOTNOTES PAGE

[1]House Bill 124, enacted in 1991, provides that watershed regulations may be adopted by a local government pursuant to its "general police power," to its power to adopt a land subdivision ordinance, to its zoning power, or to some combination of these powers. The model ordinance, since it has been established as a free-standing ordinance, cites the general police power statutes as its authority along with the watershed statutes. Local governments must choose which authority they wish to use and should not cite all legislative authorities because each authority has its own corresponding jurisdictional implications. Local governments should decide whether or not they intend to adopt a free-standing ordinance, or as an alternative, separate (or amendments to) zoning and subdivision ordinances.
Whichever method is chosen, the appropriate authorities should be cited in this section and elsewhere in the ordinance whenever needed.

Coordination between the jurisdictions is very important. A county may enforce the watershed protection regulations for a municipality within that county if a resolution is passed by both the county and municipal governing boards.

[2] Statutory authority for this section is derived from N.C. General Statutes Chapter 160A, Article 8, Section 174, Section 193 and Chapter 143-214.5.

[3] This section states the watershed protection ordinance will not affect existing ordinances or agreements between parties unless those ordinances or agreements are less restrictive than the watershed protection ordinance. In those situations, the watershed protection ordinance will take precedence.

[4] Statutory authority for this section is derived from N.C. General Statutes Chapter 160A, Article 8, Section 174, Section 193 and Chapter 143-214.5.

[5]Statutory authority for this section is derived from N.C. General Statutes Chapter 160A, Article 8, Section 174, Section 193 and Chapter 143-214.5.. This article contains development regulations for each of the watershed classifications. Watersheds designated WS-V require no local government regulatory program. Local governments will only need to include the regulations corresponding to the classifications assigned to watersheds in their jurisdiction. For WS-II, WS-III and WS-IV watershed areas, the EMC rules provide for single family residential development to be controlled either by limiting built-upon area or by limiting density (dwelling units per acre). Those involved in drafting the model ordinance felt that most local units of government would find it easier to enforce single family residential requirements through density controls rather than limiting built-upon area. All other residential and non-residential development is controlled by regulating the amount of built-upon area as required by the EMC rules.

PART 3 Flood Damage Prevention

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ARTICLE 1. STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE AND OBJECTIVES.

SECTION A. STATUTORY AUTHORIZATION.

The Legislature of the State of North Carolina has in Part 6 of Article 21 of Chapter 143; Article 6 of Chapter 153A; Article 8 of Chapter 160A; and Articles 1, 7, 9, and 11 of Chapter 160D of the North Carolina General Statutes, delegated to local governmental units the authority to adopt regulations designed to promote the public health, safety, and general welfare.

Therefore, the City Council of the City of Trinity, North Carolina, does ordain as follows:

SECTION B. FINDINGS OF FACT.

(1) The flood prone areas within the jurisdiction of the City of Trinity are subject to periodic inundation which results in loss of life, property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures of flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare.

(2) These flood losses are caused by the cumulative effect of obstructions, both inside and outside the identified Special Flood Hazard Areas, causing increases in flood heights and velocities and by the occupancy in flood prone areas by uses vulnerable to floods or other hazards. These obstructions and occupancy by uses vulnerable to floods may be hazardous to other lands which are inadequately elevated, floodproofed, or otherwise unprotected from flood damages.

SECTION C. STATEMENT OF PURPOSE.

It is the purpose of this ordinance to promote public health, safety, and general welfare and to minimize public and private losses due to flood conditions within flood prone areas by provisions designed to:

(1) Restrict or prohibit uses that are dangerous to health, safety, and property due to water or erosion hazards or that result in damaging increases in erosion, flood heights or velocities;

(2) Require that uses vulnerable to floods, including facilities that serve such uses, be protected against flood damage at the time of initial construction;

(3) Control the alteration of natural floodplains, stream channels, and natural protective barriers, which are involved in the accommodation of floodwaters;

(4) Control filling, grading, dredging, and all other development that may increase erosion or flood damage; and

(5) Prevent or regulate the construction of flood barriers that will unnaturally divert flood waters or which may increase flood hazards to other lands.

SECTION D. OBJECTIVES.

The objectives of this ordinance are to:

(1) Protect human life, safety, and health;

(2) Minimize expenditure of public money for costly flood control projects;

(3) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;

(4) Minimize prolonged business losses and interruptions;

(5) Minimize damage to public facilities and utilities (i.e. water and gas mains, electric, telephone, cable and sewer lines, streets, and bridges) that are located in flood prone areas;

(6) Minimize damage to private and public property due to flooding;

(7) Make flood insurance available to the City through the National Flood Insurance Program;

(8) Maintain the natural and beneficial functions of floodplains;

(9) Help maintain a stable tax base by providing for the sound use and development of flood prone areas; and

(10) Ensure that potential buyers are aware that property is in a Special Flood Hazard Area.

ARTICLE 2. Reserved

ARTICLE 3. GENERAL PROVISIONS.

SECTION A. LANDS TO WHICH THIS ORDINANCE APPLIES.

This ordinance shall apply to all Special Flood Hazard Areas within the City's zoning jurisdiction and Bona Fide Farms as allowed by law, of the City of Trinity.

SECTION B. BASIS FOR ESTABLISHING THE SPECIAL FLOOD HAZARD AREAS

The Special Flood Hazard Areas are those identified under the Cooperating Technical State (CTS) agreement between the State of North Carolina and FEMA in its FIS dated January 2, 2008 for Randolph County and associated DFIRM panels, including any digital data developed as part of the FIS, which are adopted by reference and declared a part of this ordinance, and all revisions thereto.

SECTION C. ESTABLISHMENT OF FLOODPLAIN DEVELOPMENT PERMIT.

A Floodplain Development Permit shall be required in conformance with the provisions of this ordinance prior to the commencement of any development activities within Special Flood Hazard Areas determined in accordance with the provisions of Article 3, Section B of this ordinance.

SECTION D. COMPLIANCE.

No structure or land shall hereafter be located, extended, converted, altered, or developed in any way without full compliance with the terms of this ordinance and other applicable regulations.

SECTION E. ABROGATION AND GREATER RESTRICTIONS.

This ordinance is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions.

However, where this ordinance and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

SECTION F. INTERPRETATION.

In the interpretation and application of this ordinance, all provisions shall be:

(a) Considered as minimum requirements;
(b) Liberally construed in favor of the City Council; and
(c) Deemed neither to limit nor repeal any other powers granted under State statutes.

SECTION G. WARNING AND DISCLAIMER OF LIABILITY.

The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering consideration. Larger floods can and will occur. Actual flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside the Special Flood Hazard Areas or uses permitted within such areas will be free from flooding or flood damages. This ordinance shall not create liability on the part of the City of Trinity or by any officer or employee thereof for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made hereunder.

SECTION H. PENALTIES FOR VIOLATION.

Violation of the provisions of this ordinance or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of variance or special exceptions, shall constitute a Class 1 misdemeanor pursuant to North Carolina General Statute § 143-215.58. Any person who violates this ordinance or fails to comply with any of its requirements shall be fined not more than two-hundred and fifty dollars ($250). Each day such violation continues shall be considered a separate offense. Nothing herein contained shall prevent the City of Trinity from taking such other lawful action as is necessary to prevent or remedy any violation.

ARTICLE 4. ADMINISTRATION.

SECTION A. DESIGNATION OF FLOODPLAIN ADMINISTRATOR.

The Director of Public Services, hereinafter referred to as the "Water Management Administrator", appointed as the "Floodplain Administrator," or their designee, is hereby appointed to administer and implement the provisions of this ordinance. In instances where the Floodplain Administrator receives assistance from others to complete tasks to administer and implement this ordinance, the Floodplain Administrator shall be responsible for the coordination and City's overall compliance with the National Flood Insurance Program and the provisions of this ordinance.

SECTION B. FLOODPLAIN DEVELOPMENT APPLICATION, PERMIT AND CERTIFICATION REQUIREMENTS.

(1) **Application Requirements.** Application for a Floodplain Development Permit shall be made to the Floodplain Administrator prior to any development activities located within Special Flood Hazard Areas. The following items shall be presented to the Floodplain Administrator to apply for a floodplain development permit:
   (a) A plot plan drawn to scale which shall include, but shall not be limited to, the following specific details of the proposed floodplain development:

(i) 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;

(ii) 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;

(iii) Flood zone(s) designation of the proposed development area as determined on the FIRM, or other flood map as determined in Article 3, Section B;

(iv) The boundary of the floodway(s) or non-encroachment area(s) as determined in Article 3, Section B;

(v) The Base Flood Elevation (BFE) where provided as set forth in Article 3, Section B; Article 4, Section C; or Article 5, Section D;

(vi) The old and new location of any watercourse that will be altered or relocated as a result of proposed development; and

(viii) The certification of the plot plan by a registered land surveyor or professional engineer.

(b) Proposed elevation, and method thereof, of all development within a Special Flood Hazard Area including but not limited to:
   (i) Elevation in relation to NAVD 1988 of the proposed reference level (including basement) of all structures;
   (ii) Elevation in relation to NAVD 1988 to which any non-residential structure in Zones A, AE, AH, AO, A99 will be floodproofed; and
   (iii) Elevation in relation to NAVD 1988 to which any proposed utility systems will be elevated or floodproofed.

(c) If floodproofing, a Floodproofing Certificate (FEMA Form FF-206-FY-22-153) 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.

(d) 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:
   (i) 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
   (ii) Openings to facilitate automatic equalization of hydrostatic flood forces on walls in accordance with Article 5, Section B(4)(c) when solid foundation perimeter walls are used in Zones A, AE, AH, AO, A99.

(e) Usage details of any enclosed areas below the lowest floor.

(f) 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.

(g) Certification that all other Local, State and Federal permits required prior to floodplain development permit issuance have been received.

(h) Documentation for placement of Recreational Vehicles and/or Temporary Structures, when applicable, to ensure that the provisions of Article 5, Section B, subsections (6) and (7) of this ordinance are met.

(i) 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.

(2) **Permit Requirements.** The Floodplain Development Permit shall include, but not be limited to:

(a) A complete description of all the development to be permitted under the floodplain development permit (e.g. house, garage, pool, septic, bulkhead, cabana, pier, bridge, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials, etc.) including a cost estimate.

(b) The Special Flood Hazard Area determination for the proposed development in accordance with available data specified in Article 3, Section B.

(c) The Regulatory Flood Protection Elevation required for the reference level and all attendant utilities.

(d) The Regulatory Flood Protection Elevation required for the protection of all public utilities.

(e) All certification submittal requirements with timelines.

(f) A statement that no fill material or other development shall encroach into the floodway or non-encroachment area of any watercourse unless the requirements of Article 5, Section F have been met.

(g) The flood openings requirements.

(h) Limitations of below BFE enclosure uses (if applicable). (i.e., parking, building access and limited storage only).

(i) A statement, that all materials below BFE/RFPE must be flood resistant materials.

(3) **Certification Requirements.**

(a) Elevation Certificates

(i) An Elevation Certificate (FEMA Form FF-206-FY-22-152) is required prior to the actual start of any new construction. It shall be the duty of the permit holder to submit to the Floodplain Administrator a certification of the elevation of the reference level, in relation to mean sea level. The Floodplain Administrator 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.

(ii) An Elevation Certificate (FEMA Form FF-206-FY-22-152) 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 Floodplain Administrator 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 Floodplain Administrator 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.

(iii) A final Finished Construction Elevation Certificate (FEMA FF-206-FY-22-152) 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 Floodplain Administrator a certification of final as-built construction of the elevation of the reference level and all attendant utilities. The Floodplain Administrator 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.

(b) Floodproofing Certificate

(i) If non-residential floodproofing is used to meet the Regulatory Flood Protection Elevation requirements, a Floodproofing Certificate (FEMA Form FF-206-FY-22-153), 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 Floodplain

Administrator a certification of the floodproofed design elevation of the reference level and all attendant utilities, in relation to NAVD 1988. Floodproofing certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same. The Floodplain Administrator 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.

(ii) A final Finished Construction Floodproofing Certificate (FEMA Form FF-206-FY-22-153), with supporting data, an operational plan, and an inspection and maintenance plan are required prior to the issuance of a Certificate of Compliance/Occupancy. It shall be the duty of the permit holder to submit to the Floodplain Administrator a certification of the floodproofed design elevation of the reference level and all attendant utilities, in relation to NAVD 1988. Floodproofing certificate shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same. The Floodplain Administrator 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 Certificate of Occupancy. 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 deny a Certificate of Compliance/Occupancy.

(c) If a manufactured home is placed within Zones A, AE, AH, AO, A99 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 Article 5, Section B(3)(b).

(d) 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.

(e) Certification Exemptions. The following structures, if located within Zones A, AE, AH, AO, A99, are exempt from the elevation/floodproofing certification requirements specified in items (a) and (b) of this subsection:

(i) Recreational Vehicles meeting requirements of Article 5, Section B(6)(b);

(ii) Temporary Structures meeting requirements of Article 5, Section B(7); and

(iii) Accessory Structures that are 150 square feet or less and meeting requirements of Article 5, Section B(8).

(4) **Substantial Improvement/Damage determinations for existing buildings and structures**.

For applications for building permits to improve buildings and structures, including alterations, movement, enlargement, replacement, repair, change of occupancy, additions, rehabilitations, renovations, substantial improvements, repairs of substantial damage, and any other improvement of or work on such buildings and structures, the Floodplain Administrator, in coordination with the Building Official, shall:

(a) Estimate the market value, or require the applicant to obtain an appraisal of the market value prepared by a qualified independent appraiser, of the building or structure before the start of construction of the proposed work; in the case of repair, the market value of the building or structure shall be the market value before the damage occurred and before any repairs are made;

(b) Compare the cost to perform the improvement, the cost to repair a damaged building to its pre-damaged condition, or the combined costs of improvements and repairs, if applicable, to the market value of the building or structure;

(c) Determine and document whether the proposed work constitutes substantial improvement or repair of substantial damage; and

(d) Notify the applicant if it is determined that the work constitutes substantial improvement or repair of substantial damage and that compliance with the flood resistant construction requirements of the NC

Building Code and this ordinance is required.

SECTION C. DUTIES AND RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR.
The Floodplain Administrator 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, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334.
(3) Notify adjacent communities and the North Carolina Department of 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 Article 5, Section F are met.
(6) Obtain actual elevation (in relation to NAVD 1988) of the reference level (including basement) and all attendant utilities of all new and substantially improved structures, in accordance with the provisions of Article 4, Section B(3).
(7) Obtain actual elevation (in relation to NAVD 1988) to which all new and substantially improved structures and utilities have been floodproofed, in accordance with the provisions of Article 4, Section B(3).
(8) Obtain actual elevation (in relation to NAVD 1988) of all public utilities in accordance with the provisions of Article 4, Section B(3).
(9) When floodproofing is utilized for a particular structure, obtain certifications from a registered professional engineer or architect in accordance with the provisions of Article 4, Section B(3) and Article 5, Section B(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 BFE data has not been provided in accordance with the provisions of Article 3, Section B, 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 Article 5, Section D(2)(c), in order to administer the provisions of this ordinance.
(12) When BFE data is provided but no floodway or non-encroachment area data has been provided in accordance with the provisions of Article 3, Section B, 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) 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.
(14) Make on-site inspections of work in progress. As the work pursuant to a floodplain development permit progresses, the Floodplain Administrator 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 Floodplain Administrator has a right, upon presentation of proper credentials, to enter on any premises within the jurisdiction of the City at any reasonable hour for the purposes of inspection or other enforcement action.
(15) 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 Floodplain Administrator 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.

(16) Revoke floodplain development permits as required. The Floodplain Administrator 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.

(17) Make periodic inspections throughout the Special Flood Hazard Areas within the jurisdiction of the City. The Floodplain Administrator 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.

(18) Follow through with corrective procedures of Article 4, Section D.

(19) Review, provide input, and make recommendations for variance requests.

(20) Maintain a current map repository to include, but not limited to, historical and effective FIS Report, historical and effective FIRM and other official flood maps and studies adopted in accordance with the provisions of Article 3, Section B of this ordinance, including any revisions thereto including Letters of Map Change, issued by FEMA. Notify State and FEMA of mapping needs.

(21) Coordinate revisions to FIS reports and FIRMs, including Letters of Map Revision Based on Fill (LOMR-Fs) and Letters of Map Revision (LOMRs).

(22) Make substantial improvement and post event damage assessments and determinations:

(a) Conduct damage assessments for damaged structures located within the SFHA

(b) Complete substantial improvement/damage determinations in accordance with the provisions of Article 4, Section B(4).

SECTION D. CORRECTIVE PROCEDURES.

(1) Stop Work Order: If the City determines that an owner, occupant, applicant or other responsible person has taken action that will result in an immediate danger to the public health, safety, and welfare as described in the findings of fact, statement of purpose and objectives of this Article, the City shall issue a stop work order, which shall be served on the applicant or other responsible person. The stop work order shall remain in effect until the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise remedied the violation or violations described therein, provided the stop work order may be withdrawn or modified to enable the applicant or other responsible person to take the necessary remedial measures to remedy such violation or violations

(2) Notice of Violation. If the City determines that an owner, occupant, applicant or other responsible person has failed to comply with the terms and conditions of a permit, or the provisions of this ordinance, it shall issue a written notice of violation, by certified return receipt mail, to such applicant or other responsible person. Where the person is engaged in activity covered by this ordinance without having first secured a permit, the notice shall be served on the owner or the responsible person in charge of the activity being conducted on the site. The notice of violation shall contain:

(a) The name and address of the owner or the applicant or the responsible person;

(b) The address or other description of the site upon which the violation is occurring;

(c) A statement specifying the nature of the violation;

(d) A description of the remedial measures necessary to bring the action or inaction into compliance with the permit or this ordinance and the date for the completion of such remedial action;

(e) A statement of the penalty or penalties that may be assessed against the person to whom the notice of violation is directed, and;

(f) A statement that the determination of violation may be appealed to the City by filing a written notice of appeal within thirty days after the notice of violation (except, that in the event the violation constitutes an immediate danger to public health or public safety, 24-hour notice shall be sufficient).

(3) Additional Enforcement Actions. If the remedial measures described in the Notice of Violation have not been completed by the date set forth for such completion in the Notice of Violation, any one or more of the

following enforcement actions shall be enacted against the person to whom the Notice of Violation was directed. Before taking any of the following actions or imposing any of the following penalties, the City of Trinity shall first notify the owner, applicant or other responsible person in writing of its intended action. The City of Trinity shall provide reasonable opportunity, of not less than ten days (except, that in the event the violation constitutes an immediate danger to public health or public safety, 24-hour notice shall be sufficient) to remedy such violation. In the event the applicant or other responsible person fails to remedy such violation after such notice and remedial period, the City of Trinity shall impose the following civil and criminal penalties:

(a) Violation of the provisions of this ordinance or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of variance or special exceptions shall constitute a Class 1 misdemeanor pursuant to North Carolina General Statute § 143-215.58.

(i) Any person who violates this ordinance or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than two-hundred and fifty dollars ($250). Each day such violation continues shall be considered a separate offense. Nothing herein contained shall prevent the City of Trinity from taking such other lawful actions, pursuant to North Carolina General Statute § 153A, 160A, and 160D, as is necessary to prevent or remedy any violation.

(ii) Enforcement by an appropriate equitable remedy issuing from a court of competent jurisdiction may be pursued if the offender fails to remedy the violation, pays assessed fines, and/or fails to file an appeal within the prescribed period of time. In such case, the general court of justice shall have jurisdiction to issue such orders as may be appropriate.

(b) If the Floodplain Administrator determines that the violation constitutes an immediate danger to public health or public safety, he or she may take or impose any one or more of the following enforcement actions or penalties in addition to civil and criminal penalties:

(i) Termination of utility service and/or withhold or revoke Certificate of Occupancy: The City may terminate utilities and/or refuse to issue and/or revoke a certificate of occupancy for the building or other improvements and/or repairs conducted or being conducted on the site until the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise remedy the violation or violations described therein.

(ii) Suspension, revocation, or modifications of permit: The City may suspend, revoke, or modify the permit authorizing the development project. A suspended, revoked, or modified permit may be reinstated after the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise remedy the violations described therein, provided such permit may be reinstated, upon a determination by the Floodplain Administrator that remedial measures can be reasonably taken before an immediate danger to public health or public safety is imminent, to enable the applicant or other responsible person to take the necessary remedial measures to cure such violations.

(4) Administrative appeal; judicial review. Any person receiving a Notice of Violation may appeal the determination of the City, including but not limited to the issuance of a stop work order, the assessment of an administratively-imposed monetary penalty, the suspension, revocation, modification, or grant with condition of a permit by the City upon finding that the holder is in violation of permit conditions, or that the holder is in violation of any applicable ordinance or any of the City's rules and regulations, or the issuance of a notice of bond forfeiture.

(a) Any person receiving a Notice of Violation may appeal the determination of the Floodplain Administrator to the Trinity City Council. The Notice of Appeal must be in writing and be received by the Floodplain Administrator and the clerk within thirty (30) days of the date of the Notice of Violation. In the absence of an appeal, the determination of the Floodplain Administrator shall be final.

(b) All appeals shall be heard and decided by the City's Board of Adjustment designated as the Appeal Board**.** . The Appeal Board shall hear an appeal within a reasonable time and shall have the power to affirm, modify, or reject the original penalty, including the right to increase or decrease the amount of any monetary penalty and the right to add or delete remedial actions required for correction of the

violation and compliance with the City's flood damage prevention ordinance, and any other applicable local, state, or federal requirements. In the absence of a petition for review of a quasi-judicial decision, the decision of the Appeal Board shall be final.

(c) A petition for review of a quasi-judicial decision can be requested by any person with standing aggrieved by a decision or order of the City, after exhausting his/her administrative remedies. The petition shall be received by the Randolph County Clerk of Superior Court within 30 days of the date of the City Council decision.

(5) Section 1316 Declaration: Section 1316 of the National Flood Insurance Act authorizes FEMA to deny flood insurance to a property declared by the State, County, or Municipal government to be in violation of the local Floodplain Management Ordinance. A Section 1316 declaration shall be used when all other legal means to remedy a violation have been exhausted and the structure remains noncompliant. The City must coordinate a request for Section 1316 declaration to the FEMA Regional Office through the State NFIP Coordinator. Once invoked, the property's flood insurance coverage will be terminated and no new or renewal policy can be issued; no flood insurance claim can be paid on any policy on the property, and disaster assistance will be denied. If a structure that has received a Section 1316 declaration is made compliant with the City's Floodplain Management Ordinance, then the Section 1316 declaration can be rescinded by FEMA and flood insurance eligibility restored.

SECTION E. VARIANCE PROCEDURES.

(1) The Board of Adjustment as established by the City of Trinity, shall hear and decide requests for variances from the requirements of this ordinance.

(2) Any person aggrieved by the decision of the Board may appeal such decision to the Court, as provided in Chapter 7A of the North Carolina General Statutes.

(3) Variances may be issued for:

(a) The repair or rehabilitation of historic structures upon the determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and that the variance is the minimum necessary to preserve the historic character and design of the structure;

(b) Functionally dependent facilities if determined to meet the definition as stated in Article 2 of this ordinance, provided provisions of Article 4, Section E(9)(b), (c), and (e) have been satisfied, and such facilities are protected by methods that minimize flood damages during the base flood and create no additional threats to public safety; or

(c) Any other type of development provided it meets the requirements of this Section.

(4) In passing upon variances, the Board shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this ordinance, and:

(a) The danger that materials may be swept onto other lands to the injury of others;

(b) The danger to life and property due to flooding or erosion damage;

(c) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;

(d) The importance of the services provided by the proposed facility to the City;

(e) The necessity to the facility of a waterfront location as defined under Article 2 of this ordinance as a functionally dependent facility, where applicable;

(f) The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;

(g) The compatibility of the proposed use with existing and anticipated development;

(h) The relationship of the proposed use to the City of Trinity Comprehensive Land Use Plan and the City of Trinity Water Management Ordinance program for that area;

(i) The safety of access to the property in times of flood for ordinary and emergency vehicles;

(j) The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site; and

(k) The costs of providing governmental services during and after flood conditions including maintenance

and repair of public utilities and facilities such as sewer, gas, electrical and water systems, and streets and bridges.

(5) A written report addressing each of the above factors shall be submitted with the application for a variance.

(6) Upon consideration of the factors listed above and the purposes of this ordinance, the appeal board may attach such conditions to the granting of variances as it deems necessary to further the purposes and objectives of this ordinance.

(7) Any applicant to whom a variance is granted shall be given written notice specifying the difference between the BFE and the elevation to which the structure is to be built and that such construction below the BFE increases risks to life and property, and that the issuance of a variance to construct a structure below the BFE may result in increased premium rates for flood insurance up to $25 per $100 of insurance coverage. Such notification shall be maintained with a record of all variance actions, including justification for their issuance.

(8) The Floodplain Administrator shall maintain the records of all appeal actions and report any variances to the FEMA and the State of North Carolina upon request.

(9) Conditions for Variances:

(a) Variances shall not be issued when the variance will make the structure in violation of other federal, state, or local laws, regulations, or ordinances.

(b) Variances shall not be issued within any designated floodway or non-encroachment area if the variance would result in any increase in flood levels during the base flood discharge.

(c) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

(d) Variances shall only be issued prior to development permit approval.

(e) Variances shall only be issued upon:

(i) A showing of good and sufficient cause;

(ii) A determination that failure to grant the variance would result in exceptional hardship; and

(iii) A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, or extraordinary public expense, create nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.

(10) A variance may be issued for solid waste disposal facilities or sites, hazardous waste management facilities, salvage yards, and chemical storage facilities that are located in Special Flood Hazard Areas provided that all of the following conditions are met.

(a) The use serves a critical need in the City.

(b) No feasible location exists for the use outside the Special Flood Hazard Area.

(c) The reference level of any structure is elevated or floodproofed to at least the Regulatory Flood Protection Elevation.

(d) The use complies with all other applicable federal, state and local laws.

(e) The City of Trinity has notified the Secretary of the North Carolina Department of Public Safety of its intention to grant a variance at least thirty (30) calendar days prior to granting the variance, in accordance with North Carolina General Statutes §143-215.54A(b).

ARTICLE 5. PROVISIONS FOR FLOOD HAZARD REDUCTION.

SECTION A. GENERAL STANDARDS.

In all Special Flood Hazard Areas, the following provisions are required:

(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 in accordance with the FEMA Technical Bulletin 2, *Flood Damage-Resistant Materials Requirements.*

(3) All new construction and substantial improvements shall be constructed by methods and practices that

minimize flood damages.

(4) All new electrical, heating, ventilation, air-conditioning, plumbing, duct systems, and other building utility systems, equipment, and service facilities must be located at or above the Regulatory Flood Protection Elevation (RFPE) and/or specially designed to prevent water from entering or accumulating within the components and installed to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding to the design flood elevation. Utility systems, equipment, and service facilities include, but are not limited to, HVAC equipment, water softener units, bath/kitchen plumbing fixtures, ductwork, electric/gas meter panels/boxes, utility/cable boxes, water heaters, fuel tanks, and electric outlets/switches.
   (a) Replacements part of a substantial improvement must also meet the above provisions.
   (b) Replacements that are for maintenance and not part of a substantial improvement, may be installed at the original location provided the addition and/or improvements comply with the standards for new construction consistent with the code and requirements for the original structure.

(5) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.

(6) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters 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) 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.

(9) 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 Article 4, Section E(10). A structure or tank for chemical or fuel storage incidental to an allowed use or to the operation of a water treatment plant or wastewater treatment facility may be located in a Special Flood Hazard Area only if the structure or tank is either elevated or floodproofed to at least the Regulatory Flood Protection Elevation and certified in accordance with the provisions of Article 4, Section B(3).

(10) All subdivision proposals and other development proposals shall be consistent with the need to minimize flood damage.

(11) All subdivision proposals and other development proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.

(12) All subdivision proposals and other development proposals shall have adequate drainage provided to reduce exposure to flood hazards.

(13) All subdivision proposals and other 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.

(14) 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.

(15) When a building or structure is located in more than one flood hazard zone or in a flood hazard zone with multiple base flood elevations, the provisions for the more restrictive flood hazard zone and the highest BFE shall apply.

(16) Structural fill shall not be used unless design and construction of the structural fill accounts for the following:
   (a) consolidation of the underlying soil under the weight of the fill and the structure,
   (b) differential settlement due to variations in fill composition and characteristics, and
   (c) slope stability and erosion control during conditions of the base flood.

SECTION B. <u>SPECIFIC STANDARDS</u>.

In all Special Flood Hazard Areas where BFE data has been provided, as set forth in Article 3, Section B, or Article 5, Section D, the following provisions, in addition to the provisions of Article 5, Section A, are required:

(1) Residential Construction. New construction and substantial improvement of any residential structure (including manufactured homes) shall have the reference level, including basement, elevated no lower than the Regulatory Flood Protection Elevation (RFPE), as defined in Article 2 of this ordinance.

(2) Non-Residential Construction. New construction and substantial improvement of any commercial, industrial, or other non-residential structure shall have the reference level, including basement, elevated no lower than the Regulatory Flood Protection Elevation, as defined in Article 2 of this ordinance. Structures located in Zones A, AE, AH, AO, A99 may be floodproofed to the Regulatory Flood Protection Elevation (RFPE) 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 watertight 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. For AO Zones, the floodproofing elevation shall be in accordance with Article 5, Section G(2). 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 Article 4, Section B(3), along with the operational plan and the inspection and maintenance plan.

(3) Manufactured Homes.

(a) New and replacement manufactured homes shall be elevated so that the reference level of the manufactured home is no lower than the Regulatory Flood Protection Elevation (RFPE), as defined in Article 2 of this ordinance.

(b) Manufactured homes shall be securely anchored to an adequately anchored foundation to resist flotation, collapse, and lateral movement, either by certified engineered foundation system, or in accordance with the most current edition of the State of North Carolina Regulations for Manufactured Homes 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 Article 5, Section B(4).

(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 Floodplain Administrator and the local Emergency Management Coordinator.

(4) 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 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 higher

of the interior or exterior 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.

(d) Shall not be temperature-controlled or conditioned with the exception of crawlspaces.

(e) Property owners shall be required to execute and record a non-conversion agreement prior to issuance of a building permit, declaring that the area below the lowest floor shall not be improved, finished or otherwise converted to habitable space; the City of Trinity shall have the right to inspect the enclosed area. This agreement shall be recorded with the Randolph County Register of Deeds and shall transfer with the property in perpetuity.

(f) Release of restrictive covenant. If a property which is bound by a non-conversion agreement is modified to remove enclosed areas below BFE, then the owner may request release of restrictive covenant after staff inspection and submittal of confirming documentation.

(5) Additions/Improvements.

(a) Additions and/or improvements to pre-FIRM structures when the addition and/or improvements in combination with any interior modifications to the existing structure are:

(i) Not a substantial improvement, the addition and/or improvements must be designed to minimize flood damages and must not be any more non-conforming than the existing structure.

(ii) A substantial improvement, with modifications/rehabilitations/improvements to the existing structure or the common wall is structurally modified more than installing a doorway, both the existing structure and the addition must comply with the standards for new construction.

(b) Additions to pre-FIRM or post-FIRM structures that are a substantial improvement with no modifications/rehabilitations/improvements to the existing structure other than a standard door in the common wall, shall require only the addition to comply with the standards for new construction.

(c) Additions and/or improvements to post-FIRM structures when the addition and/or improvements in combination with any interior modifications to the existing structure are:

(i) Not a substantial improvement, the addition and/or improvements only must comply with the standards for new construction consistent with the code and requirements for the original structure.

(ii) A substantial improvement, both the existing structure and the addition and/or improvements must comply with the standards for new construction.

(a) Any combination of repair, reconstruction, rehabilitation, addition or improvement of a building or structure taking place during a one-year period, the cumulative cost of which equals or exceeds 50 percent of the market value of the structure before the improvement or repair is started must comply with the standards for new construction. For each building or structure, the one-year period begins on the date of the first improvement or repair of that building or structure subsequent to the effective date of this ordinance. Substantial damage also means flood-related damage 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. If the structure has sustained substantial damage, any repairs are considered substantial improvement regardless of the actual repair work performed. The requirement does not, however, include either:

(i) Any project for improvement of a building required to correct existing health, sanitary or safety code violations identified by the building official and that are the minimum necessary to assume safe living conditions.

(ii) Any alteration of a historic structure provided that the alteration will not preclude the structure's continued designation as a historic structure.

(6) Recreational Vehicles. Recreational vehicles shall meet the following:

(a) Placement of a Recreational Vehicle in the Regulatory Floodway is prohibited. This includes both

temporary and permanent placement.

(b) Temporary Placement
  (i) Be on site for fewer than 180 consecutive days; or
  (ii) Be fully licensed and ready for highway use. (A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and has no permanently attached additions.)

(c) Permanent Placement. Recreational vehicles that do not meet the limitations of Temporary Placement shall meet all the requirements for new construction.

(7) 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.

(8) Accessory Structures.

(a) When accessory structures (sheds, detached garages, etc.) with a footprint of no more than 600 square feet are placed within A, AO, AH, AE and A99 flood zones, wet floodproofing may be permitted when the following criteria are met:
  i. Accessory structures shall not be used for human habitation (including working, sleeping, living, cooking or restroom areas);
  ii. Accessory structures shall not be temperature-controlled;
  iii. Accessory structures shall be designed to have low flood damage potential;
  iv. Accessory structures shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters;
  v. Accessory structures shall be firmly anchored in accordance with the provisions of Article 5, Section A(1);
  vi. All service facilities such as electrical shall be installed in accordance with the provisions of Article 5, Section A(4); and
  vii. Flood openings to facilitate automatic equalization of hydrostatic flood forces shall be provided below Regulatory Flood Protection Elevation in conformance with the provisions of Article 5, Section B(4)(d).

(b) All other accessory structures exceeding the size restrictions in Article 5, Section B(8)(a) above must comply with the elevation or floodproofing standards and certification requirements in accordance with Article 4, Section B(3) and Article 5, Section B(2).

An accessory structure with a footprint of 150 square feet or less in A, AO, AH, AE and A99 zones satisfying the criteria outlined above in Article 5, Section B(8)(a) is not required to meet the elevation or floodproofing certification requirements of Article 4, Section B(3). All other accessory structures must comply with the elevation or floodproofing certification requirements in accordance with Article 4, Section B(3).

(9) Tanks. When gas and liquid storage tanks are to be placed within a Special Flood Hazard Area, the following criteria shall be met:

(a) Underground tanks. Underground tanks in flood hazard areas shall be anchored to prevent flotation, collapse or lateral movement resulting from hydrodynamic and hydrostatic loads during conditions of

the design flood, including the effects of buoyancy assuming the tank is empty;

(b) Above-ground tanks, elevated. Above-ground tanks in flood hazard areas shall be elevated to or above the Regulatory Flood Protection Elevation on a supporting structure that is designed to prevent flotation, collapse or lateral movement during conditions of the design flood. Tank-supporting structures shall meet the foundation requirements of the applicable flood hazard area;

(c) Above-ground tanks, not elevated. Above-ground tanks that do not meet the elevation requirements of Article 5, Section B(2) of this ordinance shall be permitted in flood hazard areas provided the tanks are designed, constructed, installed, and anchored to resist all flood-related and other loads, including the effects of buoyancy, during conditions of the design flood and without release of contents in the floodwaters or infiltration by floodwaters into the tanks. Tanks shall be designed, constructed, installed, and anchored to resist the potential buoyant and other flood forces acting on an empty tank during design flood conditions.

(d) Tank inlets and vents. Tank inlets, fill openings, outlets and vents shall be:

(i) At or above the Regulatory Flood Protection Elevation or fitted with covers designed to prevent the inflow of floodwater or outflow of the contents of the tanks during conditions of the design flood; and

(ii) Anchored to prevent lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the design flood.

(10) Other Development.

(a) Fences in regulated floodways and NEAs that have the potential to block the passage of floodwaters, such as stockade fences and wire mesh fences, shall meet the limitations of Article 5, Section F of this ordinance.

(b) Retaining walls, sidewalks and driveways in regulated floodways and NEAs. Retaining walls and sidewalks and driveways that involve the placement of fill in regulated floodways shall meet the limitations of Article 5, Section F of this ordinance.

(c) Roads and watercourse crossings in regulated floodways and NEAs. Roads and watercourse crossings, including roads, bridges, culverts, low-water crossings and similar means for vehicles or pedestrians to travel from one side of a watercourse to the other side, that encroach into regulated floodways shall meet the limitations of Article 5, Section F of this ordinance.

(d) Commercial storage facilities are not considered "limited storage" as noted in this ordinance and shall be protected to the Regulatory Flood Protection Elevation as required for non-residential structures.

SECTION C. Reserved

SECTION D. STANDARDS FOR FLOODPLAINS WITHOUT ESTABLISHED BASE FLOOD ELEVATIONS.

Within the Special Flood Hazard Areas designated as Approximate Zone A and established in Article 3, Section B, where no BFE data has been provided by FEMA, the following provisions, in addition to the provisions of Article 5, Section A, shall apply:

(1) No encroachments, including fill, new construction, substantial improvements or new development shall be permitted within a distance of fifty (50) feet each side from top of bank or five times the width of the stream, 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.

Model has 20 feet, 2007 ordinance had

(2) The BFE used in determining the Regulatory Flood Protection Elevation shall be determined based on the following criteria:

(a) When BFE data is available from other sources, all new construction and substantial improvements within such areas shall also comply with all applicable provisions of this ordinance and shall be elevated

or floodproofed in accordance with standards in Article 5, Sections A and B.

(b) When floodway or non-encroachment data is available from a Federal, State, or other source, all new construction and substantial improvements within floodway and non-encroachment areas shall also comply with the requirements of Article 5, Sections B and F.

(c) All subdivision, manufactured home park and other development proposals shall provide BFE data Such BFE data shall be adopted by reference in accordance with Article 3, Section B and utilized in implementing this ordinance.

(d) When BFE data is not available from a Federal, State, or other source as outlined above, the reference level shall be elevated or floodproofed (non-residential) to or above the Regulatory Flood Protection Elevation, as defined in Article 2. All other applicable provisions of Article 5, Section B shall also apply.

SECTION E. STANDARDS FOR RIVERINE FLOODPLAINS WITH BASE FLOOD ELEVATIONS BUT WITHOUT ESTABLISHED FLOODWAYS OR NON-ENCROACHMENT AREAS.

Along rivers and streams where 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 Article 5, Sections A and B; 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.

SECTION F. STANDARDS FOR FLOODWAYS AND NON-ENCROACHMENT AREAS.

Areas designated as floodways or non-encroachment areas are located within the Special Flood Hazard Areas established in Article 3, Section B. The floodways and non-encroachment areas are extremely hazardous areas due to the velocity of floodwaters that have erosion potential and carry debris and potential projectiles. The following provisions, in addition to standards outlined in Article 5, Sections A and B, shall apply to all development within such areas:

(1) No encroachments, including fill, new construction, substantial improvements and other developments shall be permitted unless:

(a) It is demonstrated that the proposed encroachment would not result in any increase in the flood levels during the occurrence of the base flood discharge, based on hydrologic and hydraulic analyses performed in accordance with standard engineering practice and presented to the Floodplain Administrator prior to issuance of floodplain development permit; or

(b) A Conditional Letter of Map Revision (CLOMR) has been issued by FEMA for proposed encroachments resulting in increases in the flood levels during the occurrence of the base flood discharge. A Letter of Map Revision (LOMR) must be obtained within six months of completion of the proposed encroachment.

(c) A Letter of Map Revision (LOMR) must be obtained within six months of completion of the proposed encroachment, permitted in accordance with Article 5, Section F(1)(a), if the encroachment results in changes to the floodway/non-encroachment area widths, and/or changes to the stream location.

(2) If Article 5, Section F(1) is satisfied, all development shall comply with all applicable flood hazard reduction

provisions of this ordinance.

(3) Manufactured homes may be permitted provided the following provisions are met:
   (a) The anchoring and the elevation standards of Article 5, Section B(3); and
   (b) The encroachment standards of Article 5, Section F(1).

(4) Placement of recreational vehicles in the regulatory floodway is prohibited.

SECTION G. STANDARDS FOR AREAS OF SHALLOW FLOODING (ZONE AO).

Located within the Special Flood Hazard Areas established in Article 3, Section B, are areas designated as shallow flooding areas. These areas have special flood hazards associated with base flood depths of one (1) to three (3) feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and indeterminate. In addition to Article 5, Sections A and B, all new construction and substantial improvements shall meet the following requirements:

(1) The reference level shall be elevated at least as high as the depth number specified on the Flood Insurance Rate Map (FIRM), in feet, plus a freeboard of four (4) feet above the highest adjacent grade; or at least four (4) feet above the highest adjacent grade if no depth number is specified.

(2) Non-residential structures may, in lieu of elevation, be floodproofed to the same level as required in Article 5, Section G(1) so that the structure, together with attendant utility and sanitary facilities, below that level shall be watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. Certification is required in accordance with Article 4, Section B(3) and Article 5, Section B(2).

(3) Adequate drainage paths shall be provided around structures on slopes, to guide floodwaters around and away from proposed structures.

SECTION H. STANDARDS FOR AREAS OF SHALLOW FLOODING (ZONE AH).

Located within the Special Flood Hazard Areas established in Article 3, Section B, are areas designated as shallow flooding areas. These areas are subject to inundation by 1-percent-annual-chance shallow flooding (usually areas of ponding) where average depths are one (1) to three (3) feet. Base Flood Elevations are derived from detailed hydraulic analyses are shown in this zone. In addition to Article 5, Sections A and B, all new construction and substantial improvements shall meet the following requirements:

(1) Adequate drainage paths shall be provided around structures on slopes, to guide floodwaters around and away from proposed structures.

ARTICLE 6. LEGAL STATUS PROVISIONS.

SECTION A. 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 March 16, 2004 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 thereunder 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 Trinity enacted on March 16, 2004, as amended, which are not reenacted herein are repealed.
The date of the initial Flood Damage Prevention Ordinance for Randolph County is May 4, 1987.

SECTION B. 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.

SECTION C. SEVERABILITY.
If any section, clause, sentence, or phrase of the Ordinance is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall in no way effect the validity of the remaining portions of this Ordinance.

SECTION D. EFFECTIVE DATE.
This ordinance shall become effective upon adoption.

SECTION E. ADOPTION CERTIFICATION.
I hereby certify that this is a true and correct copy of the Flood Damage Prevention Ordinance as adopted by the City Council of the City of Trinity, North Carolina, on the Day (number or text) day of Month, Year.

WITNESS my hand and the official seal of insert Name, Title, this the Day (number or text) day of Month, Year.

_____

(signature)

(Seal)

I. APPLICATION.

Applications shall be accompanied by a description of the proposed method of providing storm water drainage. The subdivider shall provide a drainage system that diverts stormwater runoff away from surface waters, incorporates storm water Control Measures to minimize water quality impacts, and meets the requirements of the City of Trinity Water Management Ordinance. The following information is required on the application:

1. Project/Site Information

Project/Site Name: _____

_____

Project Location (Address): _____

PIN(s) (Parcel Identification Numbers): _____

_____

Total Site Area (ac): _____ _____

Total Proposed Disturbed Area (ac): _____

Existing Built-Upon Area (BUA): _____ (ac) _____(sq.ft.)

Proposed BUA: _____ (ac) _____(sq.ft.)

Proposed BUA (%): _____(as a percentage of parcel/site area)

Net Increase in BUA (if applicable): _____ (ac) _____(sq.ft.)

Number of lots _____ Lot density (units/acre) _____

Low Density: YES ____NO _____

High Density: YES ____NO _____

2. Engineer/Designer Information

Engineer Name: _____

NC PE License #: _____

Engineer's Company/Firm: _____

Company/Firm Address: _____

Office Phone: _____Cell Phone: _____

Design Engineer's E-mail: _____

Engineer's Signature: _____Date: _____ _____

3. Project Owner Information

Owner/Developer Name (if an individual): _____

Owner/Developer/Firm (if a company): _____

Authorized Representative Signature and Title:

_____

Owner/Developer Address: _____

Office Phone: _____Cell Phone: _____

Owner/Developer Contact E-mail: _____

Owner/Developer Signature: _____Date: _____

II. Stormwater Management System Financial Surety and Maintenance Fund

- **Single Owner Development:** For Stormwater Management Systems that are to be owned and maintained by a single owner (commercial or industrial single owner developments), a Certificate of Occupancy shall not be issued until the SCM and all related provisions are complete and the Engineer's Certification and As-built plans have been filed and approved. The Construction Estimate and Maintenance Fund sections below also apply.

- **Construction Estimate:** Submit a sealed engineer's estimate, or certified contractors bid for the construction costs of the Stormwater Management System to the Water Management Administrator upon approval of the design phase of the permit (plans and report/study receiving approval from reviewer). This estimate or bid should include all items related to the cost of constructing the system, including, but not limited to:
    - Grading
    - Conversion costs from the erosion control phase and associated components of that phase of the project to the post construction phase
    - SCM component breakdown costs
    - Stormwater conveyance system costs throughout the site that convey runoff to and from any SCM including any by-pass conveyances, landscaping costs etc.

  This estimate, once approved, will be used to determine the owner's, developer's or HOA's escrow account contribution.

- **Performance Surety:** For multi-owner developments (such as subdivisions and commercial group developments), the City of Trinity shall allow the submittal of a performance security or bond with surety, cash escrow, letter of credit or other acceptable legal arrangement prior to final certification to allow for issuance of a permit or final plat in order to ensure that the SCMs are installed by the permit holder as required by this Ordinance. Submit a sealed engineer's estimate, or, certified contractor's bid for the remaining construction costs of the Stormwater Management System to the Water Management Administrator upon approval of the design phase of the permit (plans and report/study receiving approval from reviewer). This estimate or bid should include all items related to the remaining cost of constructing the system including, but not limited to, grading, conversion costs from the erosion control phase and associated components of that phase of the project to the post construction phase, SCM component breakdown costs, stormwater conveyance system costs throughout the site that convey runoff to and from any SCM including any by-pass conveyances, landscaping costs etc. The surety shall be for the total remaining cost plus a 25% contingency. Within sixty (60) days of the Engineer's Certification and approval of as-built plans, 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 function and performance associated with the SCMs covered by the security. Any such landscaping, SCM function and performance shall be inspected one (1) year after installation for compliance with the approved plans and specifications. If in compliance, the portion of the financial security attributable to landscaping shall be released. If not in compliance, the landscaping shall be replaced as necessary and SCM function or performance issues shall be addressed. Once these issues are corrected and in compliance, the portion of the financial security attributable to landscaping shall be released.

- **Owner's Association:** The developer of a multi-owner development must establish a Home Owners Association (HOA), Property Owner's Association (POA), or similar type of entity, that will agree to operate, maintain, repair, inspect and, if necessary, reconstruct the stormwater management system as part of the permit

application process. The City of Trinity's Attorneys will review all Association Articles of any such entity prior to establishment to ensure adequacy. Proof of establishment shall be provided to the Water Management Administrator after the fact.

- **Maintenance Fund:** The owner of the stormwater control management system shall establish, collect, and retain funds for maintenance, repair, replacement, and reconstruction costs for the owner's stormwater management system, which shall equal ten percent (10%) of the stormwater management system's original cost of construction and shall be retained by the owner of the system. The owner of the stormwater control management system is allowed a term of five (5) years, beginning when the stormwater control management system is accepted by the city per city regulations, for the funds to be collected and retained by the owner of the SCM. A minimum of twenty percent (20%) of the required funds shall be collected and retained during each of the five (5) years. Funds collected must be held in a segregated escrow account and used solely for the purposes of maintaining, repairing, replacing, and reconstructing the owners' stormwater control management system. Evidence of the fund balance shall be provided to the City when the annual SCM inspection reports are submitted.

III. Stormwater Management System Operation and Maintenance Agreement and if applicable Escrow Agreements Information

A fully reviewed and recorded Operation and Maintenance Agreement, per Section 7-2-4.2 of the ordinance, must be in place and recorded for any development that has a Stormwater Management System designed and approved. **Certificates of Occupancy shall not be issued, and plats shall not be recorded until such an agreement is recorded.**

The following describes the process of the Operation and Maintenance Agreement submittal and requirements for its review:

Upon approval of the design phase of the permit, the developer shall submit to the Administrator an appropriately signed and notarized Operation and Maintenance Agreement with all relevant exhibits attached. This agreement must be signed by the person or entity, who is responsible for all future operation and maintenance requirements for the Stormwater Management System. The agreement shall consist of the following:

- The main body of the agreement shall include all signature pages signed and notarized appropriately by the owner/developer, and if applicable the HOA/POA. The standard template and approved language of the agreement shall be available upon request to the Administrator. Please note that there is one template for single owner type developments and one for multi owner (HOA/POA) type developments, and the appropriate template shall be sent to the engineer upon request.
- **Exhibit A** is a legal description of the land on which the development is taking place. This exhibit (as with Exhibit B and C) should be included in the agreement following the main signature pages.

- **Exhibit B** is either a recorded plat of the required Stormwater private access, drainage and maintenance easements for the Stormwater Management System, or in lieu of a recorded plat/dedicated easements, a legal description of the blanket easement that encompasses the entire property on which the development is taking place. Please note that if a plat of dedicated easements is to be provided, these easements must match what is shown on the approved design plans and the plat must be submitted through the City of

Trinity's Planning Department plat review process before ultimately recording the plat at the Randolph County Register of Deeds. Only a copy of the recorded plat that shows the deed book and page number will be accepted as Exhibit B. An unrecorded plat is not acceptable.

- **Exhibit C** is the signed and notarized Operation and Maintenance Manual(s) for the specific SCM(s) designed. Example SCM manual templates that the City accepts may be found at the following location: BMP Manual Forms and Documents | NC DEQ. Other manuals that a developer or his engineer may choose to submit will be accepted by the City if they are found to be appropriate to address all inspection and maintenance needs for a particular SCM.

- An **Escrow Agreement** must also, in addition to the O&M Agreement items above, be submitted, reviewed, and approved by the Administrator and then recorded. The standard template and approved language of this agreement is available upon request to the Stormwater Administrator.

Once all of the above applicable items are complete, they should be submitted to the Administrator for review. The Administrator shall sign the agreement(s) if they are deemed to be sufficient and then forward the agreement(s) to the City Attorney's office for their review and signature. Once the Agreement(s) have been signed by all relevant City officials, the City Attorney's Office will contact the owner/developer to collect the agreement(s) for recording purposes. The owner/developer shall record the agreement(s) at the Randolph County Register of Deeds office and provide a copy of this recorded agreement(s) (showing the deed book and page number stamp)to the Administrator for their files. **Note: A permit will not be issued until the Administrator is in receipt of a copy of the recorded applicable agreement(s).**

IV. As-Built records submittal - acknowledgement by owner/developer and design engineer of requirement to submit these records upon completion of construction:

We, the undersigned owner/developer and design engineer for this development, acknowledge that immediately after completion of the construction and initial operation of the stormwater management system, the system shall be inspected by the design engineer and a detailed set of as-built plans based on survey information of the Stormwater Management System and its design components and as-built calculations of the Stormwater Management System that verify the system has been built and is operating in accordance with the approved design, shall be submitted to the City of Trinity's Water Management Administrator for review and approval per the ordinance requirements. **Failure to submit this information as required will result in the development being placed under a Notice of Violation (NOV) at that time, if necessary, per provisions of the City of Trinity Land Management Ordinance Article 3, Enforcement.**

Owner/Developer Signature: _____Date: _____
Design Engineer Signature: _____ Date: _____

V. Design Checklist for the Stormwater Analysis Report/Study:

Submit two hard copies and one digital copy of the report for review.

General Items:

- Cover sheet with project title; project name and address; owner's name, address, email, phone number, designer/preparer's name, address, email, phone number, designer's seal, signature and date.
- Table of contents (with sequential numbering of pages) showing report sections, appendices, exhibits, tables, and figures.
- Project narrative to include a description of project, a description of how the project will meet the ordinance requirements with regard to quality and quantity provisions (as applicable), pre- and post-development site conditions, channel protection, etc.
- A description of the methodologies, assumptions and procedures used in preparing the analysis.
- Summary of any previous hydrologic/hydraulic studies, if applicable (e.g. for a site that already has an existing Stormwater Management Plan in operation for development prior to this proposal), or other information which may pertain to the development of the property.
- A conclusion paragraph summarizing the findings of the study/report. Include tables of results comparing pre- and post-development peak discharges and increases as well as routed discharges and drawdown times for applicable storm events.
- Copies of all state and federal permits as applicable are included in the report. (Note: this would include for example any required US Army Corps of Engineer and North Carolina Division of Environmental Quality permits for work in regulated waters/wetlands, such as 401/404 permits, State Dam Safety permits etc.).
- A sealed geotechnical engineering analysis report including details of subsurface exploration which shows the investigation of the location of the seasonally high groundwater elevation if this elevation is required to be ascertained per the North Carolina Division of Environmental Quality (NCDEQ) Stormwater Design Manual. Borings or other approved means of subsurface exploration shall be taken at, or as close as practicable to the immediate vicinity of each proposed stormwater management device. Boring(s) should include the existing ground elevations at the boring location(s) as well as depths of boring(s)

Hydrologic Section:

- Location map showing the project in relation to adjacent properties, streets, and nearby water features.
- Site and watershed topography – existing and proposed.
- Delineated drainage areas and outfall points (including those located offsite if applicable), mapped, and quantified, for pre- and post-development conditions.
- Land uses pre- and post-development (mapped and quantified).
- Soil types (mapped and quantified, include hydrologic group classifications).
- Pre- and post-development drainage paths and lengths for each delineated drainage basin, mapped and quantified, including start and finish points of sheet flow, shallow concentrated flow and concentrated flow along with lengths, conveyance sizes and all other relevant data used in the TR-55 time of concentration

calculations. Include reasons for choice of a Manning's coefficient(s) or assumptions of why you chose a certain coefficient.

- Precipitation data (most recent data from NOAA website).
- Time of concentration (TC) calculations for pre and post development conditions. Use TR-55 analysis. Include a description of any assumptions made if applicable. Note: Sheet flow lengths should not exceed 100 feet. Kirpich method may be accepted for smaller watersheds (2 acres or less). Use a 5-minute minimum time if calculated value is less than this.
- Composite Curve Number (CN) analysis and determinations for pre- and post-development conditions. Describe why each CN was chosen including references to type of ground cover.

Hydraulics Section:

- Open channel conveyance capacity design for all designed swales including bypass conveyances. Bypass systems shall be designed for the 100-year event.
- Provide adequate cross sections of the open channel conveyances with dimensions noted.
- Design information/calculations on the types of liner (vegetated, rip-rap etc.) to be used to ensure conveyances will not suffer erosion.
- Design computations for all culverts, storm drainage pipes and inlets (both for conveyances that carry runoff to a SCM(s) and for any bypass systems). Design shall include a labeled schematic of the storm drain network and pipe and inlet labels should match those on the design plans, design discharges, pipe capacities, pipe sizes, slopes and lengths, profiles, outlet velocities, upstream and downstream invert elevations, and hydraulic grade line information/profiles (for the 10-year event). Bypass systems shall be designed for the 100-year event.
- Hydraulic data summary for all proposed pipes and/or channels. Internal street piping shall be designed for the 10-year event. Open culverts under roads shall be designed to capture precipitation from the 25-year event without overtopping the roadway. If a roadway has a culvert crossing with only one means of ingress/egress, or crosses a regulated floodplain, the culvert and roadway shall be designed to handle the 100-year event without overtopping the roadway.
- Provide design calculations and design specifications for all rip-rap aprons or other forms of approved energy dissipaters.
- The width of flow along streets shall not exceed 8-feet from the face of curb. Curb inlets shall be spaced so that this limit will not be exceeded during a 2-year, 5-minute design storm. In special cases where flow is allowed to bypass inlets on a continuous slope, inlets located downhill in the sump shall be designed to handle that extra flow.

Design and Review Criteria for Post-Construction Stormwater Management:

<u>Water Quality Items</u>

- Vegetative conveyances shall be used to the maximum extent practicable per the low- and high-density provisions of the ordinance.

- All SCM(s) must be approved device(s) for 85% TSS (Total Suspended Solids) removal and referenced in the NCDEQ Stormwater Design Manual. The manual can be found at the following link: http://deq.nc.gov/about/divisions/energy-mineral-land-resources/energy-mineral-land-permit-guidance/stormwater-bmp-manual
- The design of the SCM(s) shall meet all of the MDC (Minimum Design Criteria) in the relevant chapter of the NCDEQ Stormwater Design Manual.
- The SCM(s) shall be designed so that the first inch of runoff volume is discharged at a rate equal to or less than the pre-development discharge rate for the 1 year, 24-hour rainfall event per Section 75-302(b)(2) of the ordinance. Single-family residential lots in new subdivisions are required to contribute a minimum of 4,000 square feet of Built-Upon-Area (BUA) each to the runoff quantities.
- All SCM calculations shall be provided as necessary per the NCDEQ Stormwater Design Manual chapter requirements to verify the design, including drainage areas, built upon areas and percentages, surface area and volume calculations etc. as needed and that these match plan call-outs.
- All existing built upon areas onsite (that will remain) and offsite shall also be accounted for and treated in the SCM(s) unless those areas can be successfully bypassed.
- Built upon areas shall meetthe landward buffer requirements for all perennial and intermittent surface waters, as stipulated in WMO section 7.2-3.4 (C) for low density projects and section 7.2-3.4 (D) for high density projects. Perennial and intermittent surface waters shall be determined to exist if they are indicated on USGS and/or Soil Survey mapping. Designers may submit sealed documentation from NCDEQ or from NCDEQ-certified professionals that prove otherwise, based on field determinations, if they choose to do so.
- If retaining walls are utilized as part of an SCM design, free body diagrams showing all forces, moments and computations shall be provided for determining factors of safety against sliding and overturning.

Water Quantity

- The SCM(s) shall be designed and calculations/supporting design documentation such as model information as applicable including plotted hydrographs for pre and post development drainage basins, pond reports, reservoir routing stage storage information etc. shall be provided, to show that the development is managing the 1, 2, and 10 year storm events of a 24-hour duration so that the post development routed peak discharge rates for those events are less than or equal to the pre-development peak discharge rates for the site.
- The routing for the 100-year 24-hour duration storm shall also be provided to ensure the SCM(s) can handle the flow while maintaining a minimum of 12 inches of freeboard to top of embankments. Methods for routing shall be TR-55, Storage-Indication Method, Chainsaw Routing by H. Rooney Malcolm, or equivalent method. The Rational Method is not allowed for pre- and post- flow determinations.
- The SCM(s) shall be designed (and calculations/supporting design documentation such as model information including plotted hydrographs etc. provided) to show that the development detains the stormwater runoff volume at least equal to the difference between the pre- and post-development volume for the 10-year storm of 24-hour duration, and that this volume difference is detained and released over a period of no less than 48 hours but no longer than 120 hours.
- All existing built upon areas onsite (that will remain) and offsite must also be accounted for and attenuated in the SCM(s) unless those areas can be successfully bypassed.
- Calculations are provided to show that the development of the site does not increase flooding impacts to structures on properties upstream and downstream of the site during a 100-year flood event.

- Discharge from any on-site stormwater management system into any natural or surface drainage channel or feature shall be evaluated to ensure that the discharge does not cause damage to the receiving system.
- Any water impounding structures (dams) shall be designed in accordance with NC Dam Safety standards and if required shall be reviewed and approved by the NC Dam Safety Engineer. Proof of compliance with this requirement shall be provided by the applicant during the submittal.
- If retaining walls are utilized as part of an SCM design, free body diagrams showing all forces, moments and computations shall be provided for determining factors of safety against sliding and overturning.

Note: Other items may be required as necessary depending on the design chosen. The overall basis of design shall be based on the NCDEQ Stormwater Design Manual. The manual can be found at the following link: http://deq.nc.gov/about/divisions/energy-mineral-land-resources/energy-mineral-land-permit-guidance/stormwater-bmp-manual . **Trinity reserves the right to require more stringent standards depending on site conditions as determined by the TRC. Where conflicts between the NCDEQ Stormwater Design Manual and City of Trinity requirements exist, the more stringent requirements shall be required.**

VI. DESIGN CRITERIA CHECKLIST FOR HIGH DENSITY STORMWATER MANAGEMENT PLAN

Submit two hard copies and one digital copy of the plans for review (Plan sheets should be 36" x 24").

All plan sheets shall be sealed and certified/signed by a registered North Carolina professional engineer or landscape architect, to the extent that the General Statutes, Chapter 89A, allow.

The plan set should include the following at a minimum:

- Cover sheet with a list of plan sheets including existing site plan, proposed site plan, stormwater management and grading and drainage plan, utility plan, erosion control plans, drainage area delineation sheets, details sheets as appropriate for stormwater management items etc, and other sheets as may be required by the City of Trinity if deemed necessary.
- Date(s) of preparation and all revisions.
- Vicinity map.
- North arrow as applicable on each plan sheet.
- Appropriate scale(s).
- Appropriate legend identifying features and layers for all plan sheets.
- Established benchmark of known elevation indicated on the existing site plan to which every other elevation is referenced.
- Property boundary lines for the proposed development/redevelopment site, along with adjacent property lot lines and street right-of-way lines. Indicate names of the streets and if they are private or public on the plans.
- Existing and proposed zoning and land use.
- Show ownership information for site and adjacent properties.
- Note with allowable limits on BUA %.
- Existing and proposed impervious areas for the development in terms of area (acres and/or sq. ft.) and percentage of the site. Include references to any existing impervious area that may exist and will remain or will be removed, etc.
- State the number of units/acre, if applicable.
- Location(s) of existing easements (temporary, permanent, public, and private) if applicable.
- Proposed private drainage and access easements shown and labeled for future maintenance of any stormwater management system(s). 20-ft minimum width required to surround all permanent SCM(s) and all conveyances to and from the SCM(s) and bypass conveyance systems and the maintenance and access easements must connect to a public right-of-way. If a blanket easement covering the entire property is proposed in lieu of platting dedicated easements, then a note indicating the provision of such a blanket easement is to be provided on the stormwater management plan sheet.
- Delineation of all existing and proposed impervious surfaces including locations of buildings, roads, parking areas and other permanent impervious structures or ground coverings.
- Existing and proposed utilities.
- Existing and proposed stormwater discharge points (surface and subsurface flows). Show where and how the runoff from the developed site, including outflows from SCM(s) safely connects into a downstream receiving drainage system and or/open channel or streams.
- Delineated drainage area maps for pre- and post-development conditions provided showing all discharge points for all basins/sub-basins for pre- and post-development conditions including relevant off-site areas contributing to the site. Show and quantify the impervious area within each basin.

- Pre- and post-development drainage paths and lengths for each delineated drainage basin - mapped and quantified including start and finish points of sheet flow, shallow concentrated flow, and concentrated flow along with lengths, conveyance sizes and all other relevant data used in the TR-55 time of concentration calculations, or the Kirpich method (if permitted).
- Show all perennial and intermittent streams, lakes, ponds, impoundments, drainage swales, conveyances, regulatory floodplains (including 100-year floodplain identifying the Base Flood Elevations where available, floodway fringe, 50% flood fringe line (also called the "floodplain no fill line", etc.)) wetlands, natural storage and other physical or environmentally sensitive features within or adjacent to the project area.
- Show the required landward buffer widths from all perennial and intermittent surface waters and indicate the undisturbed buffer widths as measured from top of bank, if applicable. These buffers must be platted.
- Show and label all existing and proposed site topography. Utilize a contour interval that is appropriate for the site conditions, minimum 2-ft interval unless specific site conditions dictate a smaller interval and extend existing contours a minimum of 200 feet into adjacent properties as appropriate to be able to show discharge and off-site drainage patterns.
- Identify and label all proposed and existing stormwater conveyance systems including but not limited to storm drainage inlets, catch basins, junction boxes etc. showing their location, details, profiles, cross-sections, and other specifications as necessary to be able to construct all of the proposed major and minor stormwater management conveyance systems (Indicate type and size of conveyance, e.g. storm drainage pipe, grass swale, diversion berms etc.) Include all bypass systems as well. The conveyances must be designed to convey the 10-year event. Bypass systems shall be designed for the 100-year event.
- Hydraulic data summary for all proposed pipes and/or channels. Internal street piping shall be designed for the 10-year event. Open culverts under roads shall be designed for the 25-year event without overtopping the roadway. If a roadway has a culvert crossing with only one means of ingress/egress, or crosses a regulated floodplain, the culvert and roadway shall be designed for the 100-year event without overtopping the roadway.
- Cross sections/details with specifications of dimensions and type of lining of any permanent swales and/or swale/berm combinations.
- Roof drainage directions and roof leader locations/specifications
- Estimated seasonal high groundwater elevation (documented in geotechnical report) in the vicinity of the SCM(s) if this elevation is required to be ascertained per the NCDEQ Stormwater Design Manual. Label this elevation in the profile/sectional views of the proposed SCM(s)
- Construction notes, specifications, and design details for any existing stormwater management system components if applicable, e.g., if an existing and already approved stormwater management plan has been modified to allow for a development expansion or addition.
- Recommendations from any soils engineering or engineering geology report incorporated in the plans and/or specifications as needed, e.g., required permeability testing/specifications, recommendations on liners, etc.
- Proposed limits of disturbance and the area of disturbance stated.
- Erosion Control plans and detail sheets clearly specifying and showing how a site is to be transitioned from the erosion control phase to the permanent post construction stormwater management phase. Detailed sequencing must be provided that describes the steps required to convert a temporary sediment and erosion control device to a permanent SCM(s). This sequencing should incorporate a note stating that the contractor is to contact the City of Trinity's Stormwater Administrator for a pre-construction site meeting, and upon completion of construction of the stormwater management system a set of as-built plans and calculations of the system prepared by the design engineer are to be provided to the City before the contractor leaves the site. A "close out" meeting with the contractor and design engineer will be held with the City of Trinity's Stormwater Administrator to ensure the system is built per the City's satisfaction and in accordance with the

design/permit. NCDEQ oversees erosion and sedimentation control. NCDEQ must approve conversion of SCM(s). SCM(s) shall not be converted from temporary basins to permanent devices until the area draining to them is stabilized.

- Specifications of all permanent energy dissipation devices.
- Details of all the components of the proposed stormwater management system that the engineer chooses to design. The SCM(s) used in a design to meet the water quality provisions of the ordinance must be approved and referenced for 85% TSS removal in the NCDEQ Stormwater Design Manual and meet all of the relevant MDC of that manual. **The following items are examples of what is expected to be seen on the plans for the SCM(s) depending on the type of SCM(s) designed:**
  - Plan views of the SCM(s) location
  - Detailed cross sections and profiles of the SCM(s) showing critical design specifications as applicable for such components such as:
    - Side slopes (3:1 minimum)
    - Soil/media
    - Structural components such as risers /outlet control structures, design elevations, relevant peak design storm elevations and water quality elevations
    - Orifice and weir information
    - Orifice trash guard
    - Bypass structures
    - Underdrains and cleanout locations
    - Forebay details
    - Dam embankments (12' minimum width for 0-10' height and 15' minimum width if higher
    - Emergency spillway details (concrete liner required for emergency spillways in fill material), with a minimum vertical distance of 24" between emergency spillways and the top of dam/berm, a minimum vertical distance of 18" between the primary spillway and emergency spillway, bottom drains at the invert of the barrel, anti-seep protection along the barrel, security fencing, aquatic shelf information, details of inlet and outlet pipes/conveyances.

  Note: Other items may be required as necessary depending on the design chosen. Trinity reserves the right to require more stringent standards depending on site conditions as determined by the TRC.
- Provide landscaping plans and specifications in accordance with the NCDEQ Stormwater Design Manual if applicable for the SCM(s). Note: No trees or shrubs shall be planted within 10 feet of inlet or outlet pipes, spillways, or flow spreaders, or on any dam areas.
- Provide details and specifications of all liners that may be required for a SCM(s) as applicable. If the designer does not choose to include a liner he must include and provide information on his plans and in geotechnical reports verifying that excluding a liner is warranted.

VII. DESIGN CRITERIA CHECKLIST FOR LOW DENSITY DEVELOPMENT PLAN

Submit two hard copies and one digital of the plans for review (Plan sheets should be 36" x 24").

Plan submittals shall include the following at a minimum:

- Cover sheet with a list of plans sheets included, existing site plan, proposed site plan, grading and drainage plan, erosion control plans. Other sheets may be required by the City of Trinity if deemed necessary.
- All plan sheets are sealed and certified/signed by a registered North Carolina professional engineer or landscape architect, to the extent that the General Statutes, Chapter 89A, allow.

- Date(s) of preparation and all revisions.
- Vicinity map.
- North arrow as applicable on each plan sheet.
- Appropriate scale(s).
- Appropriate legend identifying features and layers for all plan sheets.
- Established benchmark of known elevation indicated on the existing site plan to which every other elevation is referenced.
- Property boundary lines for the proposed development/redevelopment site, along with adjacent property lot lines and street right of way lines. Indicate names of the streets and if they are private or public on the plans.
- Existing and proposed zoning and land use.
- Show ownership information for site and adjacent properties.
- Note allowable limits on BUA % (if applicable).
- Existing and proposed impervious areas for the development in terms of area (acres and/or sq. ft.) and percentage of the site. Include references to any existing impervious that will remain or will be removed etc.
- State the number of units/acre, if applicable.
- Delineation of all existing and proposed impervious surfaces including locations of buildings, roads, parking areas and other permanent impervious structures or ground coverings.
- Existing and proposed stormwater discharge points (surface and subsurface flows). Show where and how the runoff from the developed site safely connects into a downstream receiving drainage system and/or open channel or streams.
- Show all perennial and intermittent streams, lakes, ponds, impoundments, drainage swales, conveyances, regulatory floodplains (including 100-year floodplain identifying the Base Flood Elevations where available, floodway fringe, 50% flood fringe line (also called the “floodplain no fill line”, etc.)) wetlands, natural storage and other physical or environmentally sensitive features within or adjacent to the project area.
- Show the required 50-foot landward buffer widths from all perennial and intermittent surface waters, lakes, ponds, and other water bodies. Indicate the undisturbed buffer widths as measured from top of bank, if applicable. **Note: These buffers must be platted.**
- Show and label all existing and proposed site topography. Utilize a contour interval that is appropriate for the site conditions, minimum 2-ft interval unless specific site conditions dictate a smaller interval and extend existing contours a minimum of 200 feet into adjacent properties as appropriate to be able to show discharge and off-site drainage patterns.
- Identify and label all proposed and existing stormwater conveyance systems including but not limited to storm drainage inlets, catch basins, junction boxes, etc. Their location, details, profiles, cross-sections, and other specifications shall be shown as necessary to facilitate construction of all proposed major and minor stormwater management conveyance systems (Indicate type and size of conveyance, e.g. storm drainage pipe, grass swale, diversion berms etc.)

- Hydraulic data summary for all proposed pipes and/or channels. Internal street piping shall be designed for the 10-year event. Open culverts under roads shall be designed for the 25-year event without overtopping the roadway. If a roadway has a culvert crossing with only one means of ingress/egress, or crosses a regulated floodplain, the culvert and roadway shall be designed for the 100-year event without overtopping the roadway.
- Cross sections/details with specifications of dimensions and type of lining of any permanent swales or swale/berm combinations.
- Proposed limits of disturbance and the area of disturbance stated.
- Specifications of all permanent energy dissipation devices.
- Plans and design should follow the Low-Density Guidance chapter of the NCDEQ manual and meet the requirements contained therein.

VIII. HIGH DENSITY DEVELOPMENT DEED RESTRICTIONS

Prepared by and return to:

DECLARATION OF STORMWATER RESTRICTIVE COVENANTS
FOR
[SUBDIVISION NAME] PHASE __ SECTION __

THIS **DECLARATION OF STORMWATER RESTRICTIVE COVENANTS FOR [SUBDIVISION NAME] PHASE __, SECTION__** (the "**Declaration**") is made and entered into as of the _____ day of _____ 20__, by [**OWNER], LLC**, a North Carolina limited liability company ("**Declarant**").

W I T N E S S E T H :

WHEREAS, Declarant is the owner of the certain property, [Subdivision Name], Phase __, Section__, recorded in PB ____ PP _____ in the Randolph County Register of Deeds, more particularly described in Exhibit A attached hereto and incorporated herein by reference (the "**Property**"); and

WHEREAS, the City of Trinity requires certain restrictions to be imposed upon the Property in order to ensure continued compliance with the City of Trinity's high density residential requirements; and

WHEREAS, Declarant now wishes to record this Declaration for the purpose of imposing such restrictions upon the Property.

NOW, THEREFORE, Declarant hereby declares that the Property shall be held, sold, and conveyed subject to the following restrictions, covenants, and conditions:

1. The following covenants are intended to ensure ongoing compliance with City of Trinity and State of North Carolina Stormwater Management Regulations.
2. The City of Trinity and the State of North Carolina are made beneficiaries of these covenants to the extent necessary to maintain compliance with the stormwater management permit issued with respect to the Property.
3. These stormwater restrictive covenants are to run with the land and be binding on all property owners and the homeowners' association.
4. The covenants pertaining to stormwater may not be altered or rescinded without the express written consent of the City of Trinity or the State of North Carolina, Division of Energy, Mineral and Land Resources.
5. Alteration of the drainage as shown on the approved plan may not take place without the concurrence of the City of Trinity or the North Carolina Division of Energy, Mineral and Land Resources or its successors.
6. The maximum allowable built-upon area per lot is _____ square feet. This allotted amount includes any built-upon area constructed within the lot property boundaries, and that portion of the right-of-way between the front lot line and the edge of the pavement. Built-upon area includes, but is not limited to, structures, asphalt, concrete, gravel, brick, stone, slate, and coquina, but does not include raised, open wood decking, or the water surface of swimming pools.

OR, if the proposed built-upon areas per lot will vary, please **REPLACE #6** above with the following (DELETE the option that is not being used):

The maximum built-upon area **per lot**, in square feet, is as listed below:

Lot #	BUA	Lot #	BUA	Lot #	BUA	Lot #	BUA

This allotted amount includes any built-upon area constructed within the lot property boundaries, and that portion of the right-of-way between the front lot line and the edge of the pavement. Built upon area includes, but is not limited to, structures, asphalt, concrete, gravel, brick, stone, slate, coquina, and parking areas, but does not include raised, open wood decking, or the water surface of swimming pools.

7. Each lot shall maintain a 50-foot-wide vegetated buffer between all impervious areas and any intermittent stream, and an additional 50-foot-wide vegetated setback along all perennial streams, pond, and lakes.
8. All roof drains shall terminate at least 50 feet from the mean high-water mark of surface waters.
9. All runoff from the built-upon areas on the lot must drain into the permitted system. This may be accomplished through a variety of means including roof drain gutters which drain to the street, grading the lot to drain toward the street, or grading perimeter swales to collect the lot runoff and directing them into a component of the stormwater collection system. Lots that will naturally drain into the system are not required to provide these additional measures.
10. These restrictions are in addition to and supplement the restrictive covenants recorded in DB ____ DP ____ in the Register of Deeds Office in Randolph County, North Carolina.

SIGNATURE AND ACKNOWLEDGMENT PAGE

IN WITNESS WHEREOF, Declarant has caused this Declaration to be executed under Seal as of the Effective Date.

Declarant:

_____, LLC,
a North Carolina limited liability company

By: _____ (SEAL)
PRINTED NAME, Manager

STATE OF NORTH CAROLINA

COUNTY OF _____

I certify that the following person personally appeared before me this day, acknowledging to me that he or she signed the foregoing document under seal: **NAME**

Today's Date: _____, 20__ _____

[Notary's signature as name appears on seal]

_____

[Notary's printed name as name appears on seal]
My commission expires: _____
[Affix Notary Seal in Space Above]

Exhibit A
Property Description
IX. LOW DENSITY DEVELOPMENT DEED RESTRICTIONS

Prepared by and return to:

DECLARATION OF STORMWATER RESTRICTIVE COVENANTS

FOR

[SUBDIVISION NAME] PHASE __ SECTION __

THIS DECLARATION OF STORMWATER RESTRICTIVE COVENANTS FOR [SUBDIVISION NAME] PHASE __, SECTION__ (the "**Declaration**") is made and entered into as of the _____ day of _____ 20__, by **OWNER, LLC**, a North Carolina limited liability company ("**Declarant**").

W I T N E S S E T H :

WHEREAS, Declarant is the owner of the certain property, Subdivision Name, Phase __, Section__, recorded in PB ____ PP _____ in the Randolph County Register of Deeds, more particularly described in Exhibit A attached hereto and incorporated herein by reference (the "**Property**"); and

WHEREAS, the City of Trinity requires certain restrictions to be imposed upon the Property in order to ensure continued compliance with the City of Trinity's low density residential requirements; and

WHEREAS, Declarant now wishes to record this Declaration for the purpose of imposing such restrictions upon the Property.

NOW, THEREFORE, Declarant hereby declares that the Property shall be held, sold, and conveyed subject to the following restrictions, covenants, and conditions:

1. The following covenants are intended to ensure ongoing compliance with City of Trinity and State of North Carolina Stormwater Management Regulations.

2. The City of Trinity and the State of North Carolina are made beneficiaries of these covenants to the extent necessary to maintain compliance with the stormwater management permit issued with respect to the Property.
3. These stormwater restrictive covenants are to run with the land and be binding on all property owners and the homeowners' association.
4. The covenants pertaining to stormwater may not be altered or rescinded without the express written consent of the City of Trinity or the State of North Carolina, Division of Energy, Mineral and Land Resources.
5. Alteration of the drainage as shown on the approved plan may not take place without the concurrence of the City of Trinity or the North Carolina Division of Energy, Mineral and Land Resources or its successors.
6. The maximum allowable built-upon area per lot is _____ square feet. This allotted amount includes any built-upon area constructed within the lot property boundaries, and that portion of the right-of-way between the front lot line and the edge of the pavement. Built-upon area includes, but is not limited to, structures, asphalt, concrete, gravel, brick, stone, slate, and coquina, but does not include raised, open wood decking, or the water surface of swimming pools.
7. Filling in or piping of any vegetative conveyances (ditches, swales, etc.) associated with the development except for average driveway crossings is strictly prohibited by any persons.
8. Each lot shall maintain a 50-foot-wide vegetated buffer between all impervious areas and surface waters.
9. All roof drains shall terminate at least 50 feet from the mean high-water mark of surface waters.
10. These restrictions are in addition to and supplement the restrictive covenants recorded in DB ____ DP ____ in the Register of Deeds Office in Randolph County, North Carolina.

SIGNATURE AND ACKNOWLEDGMENT PAGE

IN WITNESS WHEREOF, Declarant has caused this Declaration to be executed under Seal as of the Effective Date.

Declarant:

_____, LLC,
a North Carolina limited liability company

By: _____ (SEAL)
PRINTED NAME, Manager

STATE OF NORTH CAROLINA

COUNTY OF _____

I certify that the following person personally appeared before me this day, acknowledging to me that he or she signed the foregoing document under seal: **NAME**

Today's Date: _____, 20__ _____

[Notary's signature as name appears on seal]

_____
[Notary's printed name as name appears on seal]
My commission expires: _____
[Affix Notary Seal in Space Above]
Exhibit A

Property Description

The Code of Ordinances of the City of Trinity
Article III Land Use
Chapter 14 The City of Trinity Water Management Ordinance
APPENDIX B: Riparian Buffer Rules, Permitted Uses

A) Uses

Under 15A NCAC 02B .0724 (the Rule), the protection of the pollutant removal and other water quality services provided by riparian buffers throughout the watershed is an important element of the overall Randleman Lake water supply pollutant strategy. The following references are found in the Rule.

Uses within the riparian buffer, or outside the riparian buffer with hydrological impacts on the authorization, are allowable, allowable upon authorization, allowable with mitigation upon authorization, prohibited, or allowable with exceptions pursuant to this Section. Potential new uses shall have the following requirements:

(1) Deemed Allowable

Uses designated or deemed allowable in Sub-Item (9) of the Rule and Section B. of this Appendix may occur within the riparian buffer. Deemed allowable uses shall be designed, constructed, and maintained to minimize vegetation and soil disturbance and to provide the maximum water quality protection practicable, including construction, monitoring, and maintenance activities. Also, deemed allowable uses shall meet requirements listed in Section B. of this Appendix for the specific use.

(2) Allowable Upon Authorization

Uses designated as allowable upon authorization in Sub-Item (9) of the Rule and Section B. of this Appendix require a written Authorization Certificate from the Authority for impacts within the riparian buffer if there are no practical alternatives to the requested use according to 15A NCAC 02B .0611.

(3) Allowable With Mitigation Upon Authorization

Uses designated as allowable with mitigation upon authorization in Section B, Table of Uses, of this Appendix, require a written Authorization Certificate from the Authority for impacts within the riparian buffer according to 15A NCAC 02B .0611 and in appropriate mitigation strategy has received written approval under Section C, Mitigation, of this Appendix.

(4) Prohibited

Uses designated as prohibited in Section B, Table of Uses, of this Appendix may not proceed within the riparian buffer unless a Variance is granted under 15A NCAC 02B .0226. Mitigation may be required as a condition of a variance approved.

(5) Allowable With Exception

Uses not designated as deemed allowable, allowable under an authorization, allowable with mitigation under authorization or prohibited in Section B, Table of Uses, of this Appendix require a written Authorization Certificate with Exception from the Authority for impacts within the riparian buffer according to 15A NCAC 02B .0611 and an appropriate mitigation strategy that has received written approval according to Section C, Mitigation, of this Appendix.

B) Table of Uses Within the Riparian Buffer

The following table sets out potential new uses within the riparian buffer, or outside the riparian buffer with hydrological impacts on the riparian buffer, and designates them as deemed allowable, allowable upon authorization, allowable with mitigation upon authorization, or prohibited.

Use	Allowable	Allowable with authorization	Allowable with mitigation upon authorization	Prohibited
Airport facilities:				
• Airport facilities that impact equal to or less than one-third of an acre of riparian buffer.		✓		
• Airport facilities that impact greater than one-third of an acre of riparian buffer.			✓	
• Vegetation removal activities necessary to comply with FAA requirements (e.g., line of sight requirements) provided the disturbed areas are stabilized and revegetated.	✓			
Archaeological activities:	✓			
Bridges:				
• Impact equal to or less than one-tenth of an acre of riparian buffer.	✓			
• Impact greater than one-tenth of an acre of riparian buffer.		✓		
Dam maintenance activities:				
• Dam maintenance activities that do not cause additional riparian buffer disturbances beyond the footprint of the existing dam.	✓			
• Dam maintenance activities that do cause additional riparian buffer disturbances beyond the footprint of the existing dam.		✓		
Drainage of a pond subject to Item (4) of the Rule provided that a new riparian buffer is established by natural regeneration or planting, within fifty feet of any stream which naturally forms or is constructed within the drained pond area. Drained ponds shall be allowed to naturalize for a minimum of six months from completion of the draining activity before a stream determination is conducted under Item (4) of the Rule.	✓			

Use	Allowable	Allowable with authorization	Allowable with mitigation upon authorization	Prohibited
Fences:				
• Fencing livestock out of surface waters.	✓			
• Installation does not result in the removal of trees from *Zone 1*.	✓			
• Installation results in the removal of trees from *Zone 1*.		✓		
Fertilizer application:				
• One-time fertilizer application at agronomic rates in the riparian buffer to establish replanted vegetation. No runoff from this one-time application in the riparian buffer is allowed in the surface water.	✓			
• Ongoing fertilizer application.				✓
Forest harvesting (See 15A NCAC 02B .0611**)**				
Grading in only *Zone 2* provided that the health of existing vegetation in *Zone 1* is not compromised, Item (9) of the Rule is complied with, and disturbed areas are stabilized and revegetated.	✓			
Greenways, trails, sidewalks, or linear pedestrian/bicycle transportation systems:				
• In *Zone 2* provided that no built-upon area is added within the riparian buffer.	✓			
• In *Zone 1* provided that no built-upon area is added within the riparian buffer and the installation does not result in the removal of tree(s).	✓			
• When built upon area is added to the riparian buffer, equal to or less than ten feet wide with two-foot-wide shoulders. Shall be located outside *Zone 1* unless there is no practical alternative.		✓		

Use	Allowable	Allowable with authorization	Allowable with mitigation upon authorization	Prohibited
• When built upon area is added to the riparian buffer, greater than ten feet wide with two-foot-wide shoulders. Shall be located outside *Zone 1* unless there is no practical alternative.			✓	
Historic preservation:	✓			
New landfills as defined in NCGS § 130A-290.				✓
Maintenance access of modified natural streams; a grassed travel way on one side of the waterbody when less impacting alternatives are not practical. The width and specifications of the travel way shall be only that needed for equipment access and operation. The travel way shall be located to maximize stream shading.		✓		
Mining activities:				
• Mining activities that are covered by the Mining Act provided that new riparian buffers that meet the requirements of Items *(8)* and *(9)* of the Rule are established adjacent to any relocated channels.		✓		
• Mining activities that are not covered by the Mining Act OR where new riparian buffers that meet the requirements of Items *(8)* and *(9)* of the Rule are not established.			✓	
• Wastewater or mining dewatering wells with approved NPDES permit.	✓			

Use	Allowable	Allowable with authorization	Allowable with mitigation upon authorization	Prohibited
Pedestrian access trail and associated steps leading to surface water, dock, canoe or kayak access, fishing pier, boat ramp, or other water-dependent structure:				
• Equal to are less than six feet wide that does not result in the removal of tree(s) within the riparian buffer and does not result in the addition of built-upon area to the riparian buffer.	✓			
• Equal to or less than six feet wide that results in the removal of tree(s) or the addition built upon area to the riparian buffer.		✓		
• Greater than six feet wide.			✓	
Playground equipment:				
• Playground equipment on single-family lots if installation and use does not result in the removal of vegetation.	✓			
• Playground equipment on single-family lots where installation or use results in the removal of vegetation.		✓		
• Playground equipment installed on lands other than single-family lots.			✓	
Ponds created or modified by impounding streams subject to riparian buffers under Item (3) of the Rule and not used as stormwater control measures (SCMs):				
• New ponds provided that a riparian buffer that meets the requirements of Items (8) and (9) of the Rule is established adjacent to the pond.		✓		

Use	Allowable	Allowable with authorization	Allowable with mitigation upon authorization	Prohibited
• New ponds where a riparian buffer that meets the requirements of Items (8) and (9) of the Rule is NOT established adjacent to the pond.			✓	
Protection of existing structures and facilities when this requires additional disturbances of the riparian buffer.		✓		
Public safety or publicly owned spaces where it has been determined by the head of the local law enforcement agency with jurisdiction over that area that the buffers pose a risk to public safety. The head of the local law enforcement agency shall notify The Planning Department and the Division of Water Resources of any such determination in writing.	✓			
Removal of previous fill or debris if Item (9) of the Rule is complied with and any vegetation removed is restored.	✓			
Residential properties: Where the application of the Rule would preclude construction of a single-family residence and necessary infrastructure, the single-family residence may encroach in the riparian buffer if all of the following conditions are met: (1) the residence is set back the maximum feasible distance from the top of the bank, rooted herbaceous vegetation, normal high-water level, or normal water level, whichever is applicable, on the existing lot; (2) the residence is designed to minimize encroachment into the riparian buffer; (3) the residence complies with Item (9) of the Rule; and (4) if the residence will be served by an on-site wastewater system, no part of the septic system or drain field may encroach into the riparian buffer.				

Use	Allowable	Allowable with authorization	Allowable with mitigation upon authorization	Prohibited
• The residence or necessary infrastructure only impacts *Zone 2*.		✓		
• The residence or necessary infrastructure impacts *Zone 1*.			✓	
• Impacts other than the residence or necessary infrastructure.			✓	
Restoration or enhancement (wetland, stream) as defined in 33 CFR Part 332 available free of charge on the internet.[1]				
• Wetland or stream restoration is part of a compensatory mitigation bank, nutrient offset bank, or the In-Lieu Fee Program.	✓			
• Wetland or stream restoration other than those listed above.		✓		
Road, driveway, or railroad: perpendicular crossings of streams and other surface waters subject to the Rule:				
• The impact is equal to less than one-tenth of an acre of riparian buffer.	✓			
• Impact greater than one-tenth of an acre but equal to or less than one-third of an acre of riparian buffer.		✓		
• Impact greater than one-third of an acre of riparian buffer.			✓	
• Driveway crossings in a residential subdivision that cumulatively impact equal to or less than one-third of an acre of riparian buffer.		✓		

1 http://water.epa.gov/lawregs/guidance/wetlands/wetlandsmitigation_index.cfm

Use	Allowable	Allowable with authorization	Allowable with mitigation upon authorization	Prohibited
• Driveway crossings in a residential subdivision that cumulatively impact greater than one-third of an acre of riparian buffer.			✓	
• Farm roads and forest roads that are exempt from permitting from the US Army Corps of Engineers per Section 404(f) of the Federal Clean Water Act.	✓			
Road, driveway, or railroad: impacts other than perpendicular crossings of streams and other surface water subject to the Rule.			✓	
Road relocation of existing private access roads associated with public road projects where necessary for public safety:				
• Less than or equal to 2,500 square feet of riparian buffer impact.		✓		
• Greater than 2,500 square feet of riparian buffer impact			✓	
Scientific studies and stream gauging:	✓			
Slatted uncovered decks, including steps and support posts, which are associated with a dwelling, if it meets the requirements of Items *(8)* and *(9)* of the Rule and:				
• Installation does not result in the removal of vegetation in *Zone 1*		✓		
• Installation results in the removal of vegetation in *Zone 1*.			✓	
Stormwater Control Measure (SCM) as defined in 15A NCAC 02H .1002:				
• In *Zone 2* if Item (9) of this Rule is complied with		✓		
• In *Zone 1*			✓	
Streambank or shoreline stabilization:		✓		

Use	Allowable	Allowable with authorization	Allowable with mitigation upon authorization	Prohibited
Temporary roads provided that the disturbed area is restored to pre-construction topographic and hydrologic conditions and replanted with comparable vegetation within two months of when construction is complete. Tree planting may occur during the dormant season. At the end of five years, any restored wooded riparian buffer shall comply with the restoration criteria in 15A NCAC 02B .0295(i):				
• Less than or equal to 2,500 square feet of riparian buffer disturbance.	✓			
• Greater than 2,500 square feet of riparian buffer disturbance.		✓		
• Associated with culvert installation or bridge construction or replacement.		✓		
Temporary sediment and erosion control devices provided that the disturbed area is restored to pre-construction topographic and hydrologic conditions and replanted with comparable vegetation within two months of when construction is complete. Tree planting may occur during the dormant season. At the end of five years, any restored wooded riparian buffer shall comply with the restorations criteria in 15A NCAC 02B .0295(i).				
• In *Zone 2* only if the ground cover is established within the timeframes required by the Sedimentation and Erosion Control Act, the vegetation in *Zone 1* is not compromised and that discharge is under Item (9) of the rule.	✓			

Use	Allowable	Allowable with authorization	Allowable with mitigation upon authorization	Prohibited
• In *Zone 1* and *Zone 2* to control impacts associated with uses identified in this Table or uses that have received an Authorization Certificate with Exception if sediment and erosion control for upland areas is addressed outside the riparian buffer.		✓		
• In-stream temporary erosion and sediment control measures for work within a stream channel that is authorized under Section 401 and 404 of the Federal Clean Water Act.	✓			
Utility Lines: Streambank stabilization for the protection of publicly owned utility lines (not including new line installation):				
• Less than 150 feet of streambank disturbance.	✓			
• Greater than 150 feet of streambank disturbance.		✓		
Utility Lines: Sanitary Sewer Overflows:				
• Emergency sanitary sewer overflow response activities provided that the disturbed area within the riparian buffer outside of the existing utility line maintenance corridor is the minimum necessary to respond to pre-construction topographic and hydrologic conditions, and is replanted with comparable vegetation (e.g., grass with grass, hardwoods with hardwoods) within two months of when the disturbance is complete.	✓			

Use	Allowable	Allowable with authorization	Allowable with mitigation upon authorization	Prohibited
• Emergency sanitary sewer overflow response activities that do not meet the listing above. For any new proposed permanent impacts that are not a "Deemed Allowable Activity", an application for an Authorization Certificate shall be submitted to the Authority no later than thirty calendar days of the conclusion of the emergency response activities.		✓		
Utility lines: Utility, Sewer Lines: Vegetation maintenance activities that remove forest vegetation from existing sewer utility rights-of-way (not including new line installation) outside of the existing utility line maintenance corridor:				
• *Zone 2* impacts.	✓			
• *Zone 1* impacts: For lines that have not been maintained, the vegetation can be mowed, cut, or otherwise maintained without disturbance to the soil structure for a maintenance corridor that is equal to or less than thirty feet wide.	✓			
• *Zone 1* impacts other than those listed above.		✓		

Use	Allowable	Allowable with authorization	Allowable with mitigation upon authorization	Prohibited
Utility, Sewer Lines: Replacement/Rehabilitation of existing sewer lines within, or adjacent to, an existing right-of-way but outside of an existing utility line maintenance corridor provided that comparable vegetation (e.g., grass with grass, hardwoods with hardwoods) can regenerate in disturbed riparian buffers outside of the permanent maintenance corridor and riparian buffers outside of the permanent maintenance corridor are not maintained:				
• Permanent maintenance corridor equal to or less than thirty feet wide provided there is no grading and/or grubbing within ten feet of the top of the bank when the sewer line is parallel to the stream.	✓			
• Grading and/or grubbing within ten feet of the top of the bank when the sewer line is parallel to the stream and permanent maintenance corridor equal to is less than thirty feet wide.		✓		
• A permanent maintenance corridor is greater than thirty feet wide. For impacts other than perpendicular crossings, mitigation is only required for *Zone 1* impacts. For perpendicular crossings that disturb equal to or less than forty linear feet, no mitigation is required. For perpendicular crossings that disturb than forty linear feet, mitigation is only required for *Zone 1* impacts.			✓	

Use	Allowable	Allowable with authorization	Allowable with mitigation upon authorization	Prohibited
Utility: Sewer Lines, New Line Construction/Installation Activities: Perpendicular crossings of streams and other surface waters subject to the Rule or perpendicular entry into the riparian buffer that does not cross a stream or other surface water subject to the Rule if vegetation can regenerate in disturbed areas outside of the permanent maintenance corridor:				
• Construction corridor of less than or equal to forty linear feet wide and a permanent maintenance corridor that is equal to or less than thirty feet wide.	✓			
• Construction corridor of greater than forty linear feet wide and less than or equal to 150 linear feet wide and a permanent maintenance corridor that is equal to or less than thirty feet wide.		✓		
• Construction corridor of greater than forty linear feet wide and less than or equal to 150 linear feet wide and a permanent maintenance corridor that is equal to or less than thirty feet wide.			✓	

Use	Allowable	Allowable with authorization	Allowable with mitigation upon authorization	Prohibited
• Permanent maintenance corridor that is greater than thirty linear feet wide. For impacts other than perpendicular crossings, mitigation is only required for *Zone 1* impacts. For perpendicular crossings, the disturb equal to or less than forty linear feet, no mitigation is required. For perpendicular crossings that disturb greater than forty linear feet, mitigation is only required for *Zone 1* impacts.			✓	
Utility: Sewer Lines, New Line Construction/Installation Activities: Impacts other than perpendicular crossings if vegetation can regenerate in disturbed areas outside of the permanent maintenance corridor:				
• *Zone 2* impacts.	✓			
• *Zone 1* impacts to less than 2,500 square feet when impacts are solely the result of tying into an existing utility line and when grubbing or grading within ten feet immediately adjacent to the surface water is avoided.		✓		
• *Zone 1* impacts other than those listed above.			✓	
Utility: Non-sewer Underground Lines: Vegetation maintenance activities that remove forest vegetation from existing utility rights-of-way (not including new line installation) outside of the existing utility line maintenance corridor:				
• *Zone 2* impacts.	✓			

Use	Allowable	Allowable with authorization	Allowable with mitigation upon authorization	Prohibited
• *Zone 1* impacts: For lines that have not been maintained, the vegetation can be mowed, cut, or otherwise maintained without disturbance to the soil structure for a maintenance corridor that is equal to or less than thirty feet wide.	✓			
• *Zone 1* impacts other than those listed above.		✓		
Utilities: Non-sewer Underground Lines: Perpendicular crossings of streams and other surface water subject to the Rule or perpendicular entry into the riparian buffer that does not cross a stream or other surface water subject to the Rule if vegetation can regenerate in disturbed areas outside of the permanent maintenance corridor:				
• Construction corridor of less than or equal to fifty linear feet wide and a permanent maintenance corridor that is equal to or less than thirty feet wide.	✓			
• Construction corridor of greater than fifty linear feet wide and less than or equal to 150 linear feet wide and a permanent maintenance corridor that is equal to or less than thirty feet wide.		✓		
• Construction corridor of greater than 150 linear feet wide and a permanent maintenance corridor that is equal to or less than thirty feet wide.			✓	

Use	Allowable	Allowable with authorization	Allowable with mitigation upon authorization	Prohibited
• Permanent maintenance corridor that is greater than thirty linear feet wide. (Mitigation is required only for *Zone 1* impacts.)			✓	
Utilities: Non-sewer Underground Lines: Impacts other than perpendicular crossings if vegetation can regenerate in disturbed areas outside of the permanent maintenance corridor:				
• *Zone 2* impacts.	✓			
• *Zone 1* impacts to less than 2,500 square feet when impacts are solely the results of tying into an existing utility line and when grubbing or grading within ten feet immediately adjacent to the surface water is avoided.		✓		
• *Zone 1* impacts other than those listed above.			✓	
Utilities: Non-sewer and Aerial Lines: Perpendicular crossings of streams and other surface waters subject to the Rule or perpendicular entry into the riparian buffer that does not cross a stream or other surface water subject to the Rule:				

Use	Allowable	Allowable with authorization	Allowable with mitigation upon authorization	Prohibited
• Disturb equal to or less than 150 linear feet wide of the riparian buffer provided that a minimum zone of ten feet wide immediately adjacent to the water body is managed such that only vegetation that poses a hazard or has the potential to grow tall enough to interfere with the line is removed, that no land grubbing or grading is conducted in *Zone 1*, and that poles or aerial infrastructure are not installed within ten feet of a waterbody.	✓			
• Disturb greater than 150 linear feet wide of riparian buffer.		✓		
Utilities: Non-sewer Aerial Lines: Impacts other than perpendicular crossings of streams and other surface waters subject to the Rule or perpendicular entry into the riparian buffer that does not cross a stream or other surface water subject to the Rule:				
• Impacts in *Zone 2* only		✓		
• Impacts in *Zone 1* provided that a minimum zone of ten feet wide immediately adjacent to the water body is managed such that only vegetation that poses a hazard or has the potential to grow tall enough to interfere with the line is removed, that no land grubbing or grading is conducted in *Zone 1*, and that poles or aerial infrastructure are not installed within ten feet of a waterbody.			✓	
Vegetation management:				

Use	Allowable	Allowable with authorization	Allowable with mitigation upon authorization	Prohibited
• Emergency fire control measures if the topography is restored.	✓			
• Periodic mowing and harvesting of plan products only in *Zone 2*.	✓			
• Placement of mulch ring around restoration plantings for a period of five years from the date of planting.	✓			
• Planting non-invasive vegetation to enhance the riparian buffer.	✓			
• Pruning forest vegetation provided that the health and function of the forest vegetation are not compromised.	✓			
• Removal of individual trees, branches, or limbs that are in danger of causing damage to dwellings, existing utility lines, other structures, or human life, or are imminently endangering the stability of the streambank provided that the stumps are left or ground in place without causing an additional land disturbance.	✓			
• Removal of individual trees that are dead, diseased, or damaged.	✓			

Use	Allowable	Allowable with authorization	Allowable with mitigation upon authorization	Prohibited
• Removal of poison ivy, oak, or sumac. Removal can include the application of pesticides within the riparian buffer if the pesticides are certified by the EPA for use in or near aquatic sites and are applied following the manufacturer's instructions. If removal is significant, then the riparian buffer shall be replaced with non-invasive species.	✓			
• Removal of understory nuisance vegetation as defined in Smith, Cherri L. 2008. *Invasive Plants for North Carolina.* NCDOT.[2] Removal can include the application of pesticides within the riparian buffer if the pesticides are certified by the EPA for use in or near aquatic sites and are applied following the manufacturer's instructions. If removal is significant, then the riparian buffer shall be replanted with non-invasive species.	✓			
• Removal of woody vegetation in *Zone 1* if Item (I) of the Rule is complied with.			✓	
Vehicle access roads and boat rams (excluding parking areas) leading to surface water, docks, fishing piers, and other water-dependent activities:				

2https://www.ncforestservice.gov/forest_health/invasives.htm

Use	Allowable	Allowable with authorization	Allowable with mitigation upon authorization	Prohibited
• Singular vehicular access road and a boat ramp to the surface water but not crossing the surface water that is restricted to the minimum width practical not to exceed fifteen feet wide.		✓		
• Vehicular access roads and boat ramps to the surface water but not crossing the surface water that is restricted to the minimum width practicable and exceed fifteen feet wide.			✓	
Water-dependent structures (except for boat ramps) as defined in 15A NCAC 02b .0202.		✓		
Water supply reservoirs:				
• New reservoirs provided that a riparian buffer that meets the requirements of Items (8) and (9) of the Rule is established adjacent to the reservoir.		✓		
• New reservoirs where a riparian buffer that meets the requirements of Items (8) and (9) of the Rule is not established adjacent to the reservoir.			✓	
Water wells	✓			
Wildlife passage structures		✓		

C) Mitigation.

Persons who wish to undertake uses designated as allowable upon authorization with mitigation as defined in Sub-Section A(3) of this Appendix or allowable with exception as defined in Sub-Section A(5) of this Appendix shall meet the following requirements in order to proceed with their proposed use.

(1) Obtain an Authorization Certificate pursuant to 15A NCAC 02B .0611; and

(2) Obtain written approval for a mitigation proposal pursuant to 15A NCAC 02B.0295

City of Trinity Watershed Map