STAFF REPORT

To:	Planning Board of Adjustment
Agenda Title:	Chapter 14 – Flood Damage Prevention Updates
Staff Contact:	Ricky Hurley, Planning Director
Meeting Date:	April 1, 2025

Summary:

A comprehensive update to Chapter 14 of the Town of Woodfin's Flood Damage Prevention Ordinances.

Background:

As with all Town regulations, updates to the Town's flood damage prevention rules are necessary to remain in compliance with federal regulations for participation in the National Flood Insurance Program (NFIP), minimize risk of flood damage in future events, and prevent worsening impacts as development occurs within the watershed. The Town of Woodfin joined the NFIP program in 1980 and adopted flood prevention regulations as part of its Code of Ordinances. These standards generally apply to all new construction located within a designated "special flood hazard area" (SFHA) and are designed to help minimize damage to those structures in the event of a flood. While Woodfin has its own flood standards, Buncombe County administers the flood program for the Town through an interlocal agreement. Town staff are currently working to obtain the necessary training and certification with a plan to assume responsibility for the program by the end of the calendar year.

Although devastation from Tropical Storm Helene experienced in Woodfin was not as extreme as other communities in the area, the Woodfin community still experienced substantial flooding along all waterways, including historic flooding along the French Broad River, impacting roads, homes and businesses in town. More recently constructed buildings built under the current flood prevention standards experienced less damage and disruption while older buildings and businesses were much more severely impacted. Six months later, the non-conforming buildings that did not comply with flood standards are actively renovating but still not fully operational.

While current flood standards helped to minimize the damage to property, and disruption to businesses, they follow an older version of the NFIP model ordinance and were due for a review and update before Tropical Storme Helene hit Western North Carolina. Experiences from Tropical Storm Helene have also shaped the proposed ordinance amendments.

Staff Analysis:

Much of the proposed text amendment reflects re-organization and updated language recommended in the model flood ordinance and is not substantive in nature, and does not materially change the

underlying standards. The more substantial standards that were examined as part of this update include:

1. Freeboard - the additional height added to the base flood elevation (BFE) that establishes the lowest occupied level of a structure. The current freeboard standard is **2-feet above BFE**.
2. Substantial improvement threshold – renovation cost reflected as a percent of the tax-assessed value of the building that when exceeded, triggers compliance with flood standards. The current substantial improvement threshold is **50%.**
3. Substantial improvement look-back period – the period of time that renovation costs are added together to determine if the threshold is exceeded. The current look-back period is **one year**.
4. Allowing/not allowing fill within the special flood hazard areas. Currently, **fill is allowed.**

For these standards, staff propose the following:

1. Change the freeboard standard from two feet to **four feet.**
   While newer construction in Woodfin that met the two foot above BFE standard experienced much less damage and were generally not inundated, flood waters from Tropical Storm Helene came very, very close to breaching the thresholds of these buildings. Elsewhere in the impacted area, buildings that complied with the 2-foot BFE were breached, some by as much as nine feet.
2. Maintain the substantial improvement threshold at **50%.**
   Keeping the threshold at 50% allows property owners to perform a more substantial renovation under a single permit.
3. Change the look-back period from one year to **five years,** or **10 years** when related to flood events**.**
   This helps to prevent phasing renovations in a manner that seeks to deliberately avoid substantial improvement and compliance with flood standards. The model ordinance includes an option to extend the look-back period to 10 years when the renovation is the direct result of flood-related damages.
4. **Do not allow fill** within a special flood hazard area.
   This prevents the practice of bringing in fill material to elevate structures to meet the freeboard + BFE. Filling has the effect of displacing floodwaters whereas elevating allows floodwaters to move under/through buildings.

Some additional changes that are less substantive in nature include:

- Update the listed flood zones
- Add new and update existing definitions
- Prohibit temperature-controlled areas below the lowest floor
- Prohibit conversion of space below the lowest floor into habitable space at any future time
- Added standards for above ground tanks and other types of development involving chemicals and petroleum products within special flood hazard areas.

Considerations:

- An increase in the freeboard standard will help to protect future buildings from flood damage.
- An increase in the freeboard standard will render existing conforming buildings non-conforming, triggering compliance when there is a substantial improvement.
- It is not always practical to elevate existing structures which could limit the life and use of a building.

- Could increase the cost of building in a floodplain, potentially discouraging future development or investment.
- An increase in the look-back period could limit investment in the buildings over time, eventually resulting in fewer buildings located in a floodplain.
- Statutory exceptions exist for designated historic buildings.

Staff Recommendation:

Staff recommends approval of the flood damage prevention regulations, as proposed.

Suggested Motion:

I move to approve the proposed amendment and find that it is reasonable, is in the public interest, is consistent with the ***Woodfin Together*** comprehensive plan, and meets the development needs of the community in that the request:

1. Balances the supply of land for housing and employment and protect land for economic development and ensure an adequate supply of appropriately located and sized employment space (3.1.5, 3.2.5)
2. Makes government decision-making accessible and transparent to all residents while updating development standards to minimize risk from new development. (4.4.3, 5.4.2)
3. Protect floodplains, wetlands, wildlife habitat, and other environmentally valuable and sensitive areas by updating development standards to minimize the risk from new development and educating the public on risks and actions needed to protect themselves (5.1.1, 5.4.1, 5.4.2)

Attachments:

(1) Draft Ordinance – Chapter 14. Flood Damage Prevention

Chapter 14 FLOOD DAMAGE PREVENTION

ARTICLE I. IN GENERAL

Sec. 14-1. Findings of fact.

(a) The flood prone areas within the jurisdiction of the ~~town~~ Town of Woodfin 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.

(b) These flood losses are caused by the cumulative effect of obstructions in floodplains causing increases in flood heights and velocities and by the occupancy in flood prone areas of uses vulnerable to floods or other hazards.

(Code 1995, § 150.156, art. 1, § B; Ord. of 9-16-1973; Ord. of 6-21-1994; Ord. of 10-20-2009)

Sec. 14-2. Statement of purpose.

It is the purpose of this chapter 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.

(Code 1995, § 150.156, art. 1, § C; Ord. of 9-16-1973; Ord. of 6-21-1994; Ord. of 10-20-2009)

Sec. 14-3. Objectives.

The objectives of this chapter 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 community through the National Flood Insurance Program;

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

(~~6~~9) Help maintain a stable tax base by providing for the sound use and development of flood prone areas; and

(~~7~~10) Ensure that potential buyers are aware that property is in a special flood hazard area.

Sec. 14-4. Definitions.

Unless specifically defined below, words or phrases used in this ordinance shall be interpreted so as to give them the meaning they have in common usage and to give this ordinance it's most reasonable application. ~~The following words, terms and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning~~:

Accessory structure (appurtenant structure) means 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) means an extension or increase in the floor area or height of a building or structure.

Alteration of a watercourse means a dam, impoundment, channel relocation, change in channel alignment, channelization, or change in cross-sectional area of the channel or the channel capacity, or any other form of modification which may alter, impede, retard or change the direction and/or velocity of the riverine flow of water during conditions of the base flood.

Appeal means a request for a review of the floodplain administrator's interpretation of any provision of this chapter.

Area of shallow flooding means a designated Zone AO or AH on a community's ~~flood insurance rate map~~ Flood Insurance Rate Map (FIRM) with base flood depths determined to be from one to three 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.

Area of special flood hazard. (See *Special flood hazard area (SFHA*).)

Area of future-conditions flood hazard means the land area that would be inundated by the 1-percent-annual-chance (100- year) flood based on future-conditions hydrology.

Base flood means the flood having a one-percent chance of being equaled or exceeded in any given year.

Base flood elevation (BFE) means 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 R~~r~~egulatory F~~f~~lood P~~p~~rotection E~~e~~levation.

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

Building. (See *Structure.*)

Certified local government (CLG) programs are approved by the U.S. Department of the Interior in cooperation with the state 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.

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

Design flood. (see *Regulatory flood protection elevation*.)

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

Development activity means any activity defined as Development which will necessitate a Floodplain Development Permit. This includes buildings, structures, and non-structural items, including (but not limited to) fill, bulkheads, piers, pools, docks, landings, ramps, and erosion control/stabilization measures.

Digital Flood Insurance Rate Map (DFIRM) means the digital official map of a community, issued by the Federal Emergency Management Agency (FEMA), on which both the Special Flood Hazard Areas and the risk premium zones applicable to the community are delineated.

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

Elevated building means 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 means the advance or infringement of uses, fill, excavation, buildings, structures or development into a special flood hazard area ~~floodplain~~, which may impede or alter the flow capacity of a floodplain.

Existing building and existing structure means any building and/or structure for which the "start of construction" commenced before the effective date of the floodplain management regulations adopted by a community, dated February 1, 1980.

Existing manufactured home park or *manufactured home subdivision* means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) was completed before the initial effective date of the floodplain management regulations adopted by the community dated February 1, 1980.

Flood or *flooding* means a general and temporary condition of partial or complete inundation of normally dry land areas from:

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

(2) The unusual and rapid accumulation of runoff ~~of~~ or surface waters from any source.

Flood boundary and floodway map (FBFM) means an official map of a community, issued by the FEMA, 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) means an official map of a community, issued by the FEMA, 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. (see also *DFIRM*)

Flood insurance study (FIS) means an examination, evaluation, and determination of flood hazards, corresponding water surface elevations (if appropriate), flood hazard risk zones, and other flood data in a community issued by the Federal Emergency Management Agency. The flood insurance study report includes flood insurance rate maps (FIRMs) and flood boundary and floodway maps (FBFMs), if published.

Flood prone area (See *Floodplain*).

Flood zone means a geographical area shown on a flood hazard boundary map or flood insurance rate map that reflects the severity or type of flooding in the area.

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

Floodplain administrator is the individual appointed to ~~administrator~~ administer and enforce the floodplain management regulations.

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

Floodplain management means 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 means this chapter and other zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances, and other applications of police power. ~~The~~ This term ~~"floodplain management regulations"~~ describes federal, state or local regulations, in any ~~combinations~~ combination thereof, which provide standards for preventing and reducing flood loss and damage.

~~*Floodprone area.* (See *Floodplain.*)~~

Floodproofing means 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.

Flood-resistant material means any building product [material, component or system] capable of withstanding direct and prolonged contact (minimum 72 hours) with floodwaters without sustaining damage that requires more than low-cost cosmetic repair. Any material that is water-soluble or is not resistant to alkali or acid in water, including normal adhesives for above-grade use, is not flood-resistant. Pressure-treated lumber or naturally decay-resistant lumbers are acceptable flooring materials. Sheet-type flooring coverings that restrict evaporation from below and materials that are impervious, but dimensionally unstable are not acceptable. Materials that absorb or retain water excessively after submergence are not flood-resistant. Please refer to Technical Bulletin 2, Flood Damage-Resistant Materials Requirements, and available from the FEMA. Class 4 and 5 materials, referenced therein, are acceptable flood-resistant materials.

Floodway means the channel of a river or other watercourse, including the area above a bridge or culvert when applicable, and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

Freeboard means the height added to the base flood elevation (BFE) to account for the many unknown factors that could contribute to flood heights greater ~~that~~ than the height calculated for a selected size flood and floodway conditions, such as wave action, blockage of bridge or culvert openings, precipitation exceeding the base flood, and the hydrological effect of urbanization of the watershed. The base flood elevation plus the freeboard establishes the R~~r~~egulatory F~~f~~lood P~~p~~rotection E~~e~~levation.

Functionally-dependent facility means 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 ~~"functionally dependent facility"~~ does not include long-term storage, manufacture, sales, or service facilities.

Hazardous waste management facility, as defined in G.S. 130A-~~290 et seq.,~~ Article 9, means a facility for the collection, storage, processing, treatment, recycling, recovery, or disposal of hazardous waste.

Highest adjacent grade (HAG) means the highest natural elevation of the ground surface, prior to construction, immediately next to the proposed walls of the structure.

Historic structure means any structure that is:

(1) Listed individually in the National Register of Historic Places (a listing maintained by the U.S. Department of ~~the~~ Interior) or preliminarily determined by the Secretary of ~~the~~ Interior as meeting the requirements for individual listing on the National ~~Registry~~ Register;

(2) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;

(3) Individually listed on a local inventory of historic landmarks in communities with a certified local government (CLG) program; or

(4) Certified as contributing to the historical significance of ~~an~~ a historic district designated by a community with a certified local government (CLG) program.

Letter of map change (LOMC) means an official determination issued by FEMA that amends or revises an effective Flood Insurance Rate Map or Flood Insurance Study. Letters of map change include:

(1) Letter of map amendment (LOMA): An official amendment, by letter, to an effective National Flood Insurance Program map. A LOMA is based on technical data showing that a property had been inadvertently mapped as being in the floodplain, but is actually on natural high ground above the base flood elevation. A LOMA amends the current effective Flood Insurance Rate Map and establishes that a specific property, portion of a property, or structure is not located in a special flood hazard area.

(2) Letter of map revision (LOMR): A revision based on technical data that may show changes to flood zones, flood elevations, special flood hazard area boundaries and floodway delineations, and other planimetric features.

(3) Letter of map revision based on fill (LOMR-F): A determination that a structure or parcel of land has been elevated by fill above the BFE and is, therefore, no longer located within the special flood hazard area. In order to qualify for this determination, the fill must have been permitted and placed in accordance with the community's floodplain management regulations.

(4) Conditional letter of map revision (CLOMR): A formal review and comment as to whether a proposed project complies with the minimum NFIP requirements for such projects with respect to delineation of special flood hazard areas. A CLOMR does not revise the effective Flood Insurance Rate Map or Flood Insurance Study; upon submission and approval of certified as-built documentation, a Letter of Map Revision may be issued by FEMA to revise the effective FIRM.

Light Duty Truck means any motor vehicle rated at 8,500 pounds Gross Vehicular Weight Rating or less which has a vehicular curb weight of 6,000 pounds or less and which has a basic vehicle frontal area of 45 square feet or less as defined in 40 CFR 86.082-2 and is:

(1) Designed primarily for purposes of transportation of property or is a derivation of such a vehicle, or
(2) Designed primarily for transportation of persons and has a capacity of more than 12 persons; or
(3) Available with special features enabling off-street or off-highway operation and use.

Lowest adjacent grade (LAG) means the lowest elevation of the ground, sidewalk or patio slab immediately next to the building, or deck support, after completion of the building.

Lowest floor means 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 ~~the~~ 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 chapter.

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

Map Repository means the location of the official flood hazard data to be applied for floodplain management. It is a central location in which flood data is stored and managed; in North Carolina, FEMA has recognized that the application of digital flood hazard data products have the same authority as hard copy products. Therefore, the NCEM's Floodplain Mapping Program websites house current and historical flood hazard data. For effective flood hazard data the NC FRIS website (http://FRIS.NC.GOV/FRIS) is the map repository, and for historical flood hazard data the FloodNC website (http://FLOODNC.GOV/NCFLOOD) is the map repository.

Market value means 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 chapter, means 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 of a FIRM are referenced. Refer to each FIRM panel to determine datum used.~~

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

Non-conversion agreement means a document stating that the owner will not convert or alter what has been constructed and approved. Violation of the agreement is considered a violation of the ordinance and, therefore, subject to the same enforcement procedures and penalties. The agreement must be filed with the recorded deed for the property. The agreement must show the clerk's or recorder's stamps and/or notations that the filing has been completed.

Non-encroachment area means the channel of a river or other watercourse, including the area above a bridge or culvert when applicable, and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot as designated in the flood insurance study report.

Person means an individual, corporation, business trust, estate, trust, partnership, limited liability company, association, joint venture, government, governmental subdivision, agency or instrumentality, public corporation or any other legal or commercial entity.

Post-FIRM means construction or other development for which the start of construction occurred on or after February 1, 1980), the effective date of the initial flood insurance rate map.

Pre-FIRM means construction or other development for which the start of construction occurred before February 1, 1980, the effective date of the initial flood insurance rate map.

Principally above ground means that at least 51 percent of the actual cash value of the structure is above ground.

Public safety and/or *nuisance* means 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 fee passage or use, in the customary manner, of any navigable lake, or river, bay, stream, canal, or basin.

Recreational vehicle (RV) means a vehicle, which is:

(1) Built on a single chassis;

(2) 400 square feet or less when measured at the largest horizontal projection;

(3) Designed to be self-propelled or permanently towable by a light duty truck; ~~dwelling , but as temporary living quarters for recreational, camping, travel, or seasonal use~~.

(4) Designed primarily not for use as a permanent dwelling, but as temporary living quarters for recreational, camping, travel, or seasonal use, and

(5) Is fully licensed and ready for highway use.

(6) For the purpose of this ordinance, "Tiny Homes/Houses" and Park Models that do not meet the items listed above are not considered Recreational Vehicles and should meet the standards of and be permitted as residential structures.

Reference level ~~is the top of the lowest floor for structures within special flood hazard areas designated as Zone A1-A30, AE, A, A99 or AO~~. is the bottom of the lowest horizontal structural member of the lowest floor for structures within all Special Flood Hazard Areas

Regulatory flood protection elevation means 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~~ four (4) feet of freeboard. In special flood hazard areas where no BFE has been established, this elevation shall be at least ~~two~~ four (4) feet above the highest adjacent grade.

Remedy a violation means 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 impacts 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 this chapter or otherwise deterring future similar violations, or reducing federal financial exposure with regard to the structure or other development.

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

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

Solid waste disposal facility means any facility involved in the disposal of solid waste as defined in G.S. 130A-290(a)(35).

Solid waste disposal site means, as defined in G.S. 130A-290(a)(36), ~~means~~ any place at which solid wastes are disposed of by incineration, sanitary landfill, or any other method.

Special flood hazard area (SFHA) means 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 14-6 of this chapter.

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 ~~on~~ 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 the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the

main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of the building, whether or not that alteration affects the external dimensions of the building.

Structure means a walled and roofed building, a manufactured home, or a gas, liquid, or liquefied gas storage tank that is principally above ground.

Substantial damage means damage of any origin sustained by a structure during any ~~one~~ five-year period whereby the cost of restoring the structure to it's before-damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. See definition of ~~the term~~ "substantial improvement." Substantial damage also means flood-related damage sustained by a structure on two separate occasions during a ~~ten~~ 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.

Substantial improvement means any combination of repairs, reconstruction, rehabilitation, addition, or other improvement of a structure, taking place during any ~~one~~ five-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. ~~The~~ This term ~~"substantial improvement"~~ includes structures which have incurred "substantial damage," regardless of the actual repair work performed. The term ~~"substantial improvement"~~ does not, however, include either:

(1) 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 ~~ensure~~ assure safe living conditions; or

(2) Any alteration of ~~an~~ a historic structure, provided that the alteration will not preclude the structure's continued designation as ~~an~~ a historic structure and the alteration is approved by variance issued pursuant to Section 14-47 of this ordinance.

Technical Bulletin and Technical Fact Sheet means a FEMA publication that provides guidance concerning the building performance standards of the NFIP, which are contained in Title 44 of the U.S. Code of Federal Regulations at Section 60.3. The bulletins and fact sheets are intended for use primarily by State and local officials responsible for interpreting and enforcing NFIP regulations and by members of the development community, such as design professionals and builders. New bulletins, as well as updates of existing bulletins, are issued periodically as needed. The bulletins do not create regulations; rather they provide specific guidance for complying with the minimum requirements of existing NFIP regulations.

It should be noted that Technical Bulletins and Technical Fact Sheets provide guidance on the minimum requirements of the NFIP regulations. State or community requirements that exceed those of the NFIP take precedence. Design professionals should contact the community officials to determine whether more restrictive State or local regulations apply to the building or site in question. All applicable standards of the State or local building code must also be met for any building in a flood hazard area.

Temperature Controlled means having the temperature regulated by a heating and/or cooling system, built-in or appliance.

Variance means a grant of relief from the requirements of this chapter.

Violation means the failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in articles II and III of this chapter is presumed to be in violation until such time as that documentation is provided.

Water surface elevation (WSE) means the height, in relation to NAVD 1988 ~~mean sea level~~, of floods of various magnitudes and frequencies in the floodplains of ~~coastal or~~ riverine areas.

Watercourse means a lake, river, creek, stream, wash, channel or other topographic feature on or over which waters flow at least periodically. ~~The term "watercourse"~~ Watercourse includes specifically designated areas in which substantial flood damage may occur.

Zone A designates the flood hazard area without base flood elevations established.

Zone AE is the one-percent annual chance (100-year) floodplain with base flood elevations established.

Zone X-shaded is the 0.2 percent annual chance (500-year) floodplain.

Zone X-unshaded designates areas outside the 500-year floodplain.

(Code 1995, § 150.156, art. 2; Ord. of 9-16-1973; Ord. of 6-21-1994; Ord. of 10-20-2009)

Sec. 14-5. Lands to which this chapter applies.

This chapter shall apply to all special flood hazard areas within the jurisdiction of the town.

(Code 1995, § 150.156, art. 3, § A; Ord. of 9-16-1973; Ord. of 6-21-1994; Ord. of 10-20-2009)

Sec. 14-6. Basis for establishing the special flood hazard areas.

(a) The special flood hazard areas are those identified under the cooperating technical state (CTS) agreement between the ~~state~~ State of North Carolina and FEMA in its flood insurance study (FIS) and its accompanying flood insurance rate maps (FIRM) and associated DFIRM panels, including any digital data developed as part of the FIS for Buncombe County ~~the county~~ dated January 6, 2010, which are adopted by reference and declared to be a part of this chapter.

(b) The initial flood insurance rate maps are as follows for the jurisdictional area at the initial date: Town of Woodfin, dated 2/1/1980.

(Code 1995, § 150.156, art. 3, § B; Ord. of 9-16-1973; Ord. of 6-21-1994; Ord. of 10-20-2009)

Sec. 14-7. Establishing of floodplain development permit.

A floodplain development permit shall be required in conformance with the provisions of this chapter prior to the commencement of any development activities within special flood hazard areas determined in accordance with the provisions of section 14-6.

(Code 1995, § 150.156, art. 3, § C; Ord. of 9-16-1973; Ord. of 6-21-1994; Ord. of 10-20-2009)

Sec. 14-8. 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 chapter and other applicable regulations.

(Code 1995, § 150.156, art. 3, § D; Ord. of 9-16-1973; Ord. of 6-21-1994; Ord. of 10-20-2009)

Sec. 14-9. Abrogation and greater restrictions.

This chapter is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this chapter and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

(Code 1995, § 150.156, art. 3, § E; Ord. of 9-16-1973; Ord. of 6-21-1994; Ord. of 10-20-2009)

Sec. 14-10. Interpretation.

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

(1) Considered as minimum requirements;

(2) Liberally construed in favor of the governing body ~~board of aldermen~~; and

(3) Deemed neither to limit nor repeal any other powers granted under state statutes.

(Code 1995, § 150.156, art. 3, § F; Ord. of 9-16-1973; Ord. of 6-21-1994; Ord. of 10-20-2009)

Sec. 14-11. Warning and disclaimer of liability.

The degree of flood protection required by this chapter 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 chapter 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 chapter shall not create liability on the part of the Town of Woodfin ~~town~~ or by any officer or employee thereof for any flood damages that result from reliance on this chapter or any administrative decision lawfully made hereunder.

(Code 1995, § 150.156, art. 3, § G; Ord. of 9-16-1973; Ord. of 6-21-1994; Ord. of 10-20-2009)

Sec. 14-12. Penalties for violation.

(a) Violation of the provisions of this chapter 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 NC G.S. § 143-215.58. Any person who violates this chapter or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than $25,000.00 or imprisoned for not more than ~~120~~ 30 days, or both. Each day such violation continues shall be considered a separate offense. Nothing herein contained shall prevent the Town of Woodfin ~~town~~ from taking such other lawful action as is necessary to prevent or remedy any violation.

(b) In addition to revoking or refusing to issue a floodplain development permit, the floodplain administrator or other authorized agent may refuse or cause to be refused a certificate of occupancy for any building or other improvements constructed or being constructed on the site in question or cause the town permitting office to refuse to issue any permit that has been applied for, or cause the county permitting office to freeze (or suspend) active permits and inspections until the applicant has taken the corrective procedures set forth in the notice and cured the violations described therein.

(c) Failure to remove any artificial obstruction or enlargement or replacement thereof, that violates this chapter or the provision of any permit issued under the authority of this chapter, may subject the person in violation of this chapter to a fine of not more than $5,000.00 per day, and such fine shall constitute a separate violation of this chapter for each day that the failure continues after written notice from the floodplain administrator ~~board of aldermen of the town~~. Any fine imposed hereunder shall be a civil penalty which may be recovered by the town or its authorized agent in a civil action in the nature of a debt.

(d) In addition to or in lieu of other remedies, the governing body ~~board of aldermen~~, by and through its floodplain administrator or other authorized agent, may institute any appropriate action or proceeding to restrain or prevent any violation of this chapter or of the provisions of any permit issued under the authority of this chapter, or to require any person, firm or corporation that has committed a violation to remove a violating obstruction or restore the conditions existing before the placement of the obstruction by any manner or means available at law or in equity.

(Code 1995, § 150.156, art. 3, § H; Ord. of 9-16-1973; Ord. of 6-21-1994; Ord. of 10-20-2009)

Secs. 14-13—14-42. Reserved.

ARTICLE II. ADMINISTRATION

Sec. 14-43. Designation of floodplain administrator.

The ~~zoning~~ Stormwater Administrator or ~~his~~ their designee, hereinafter referred to as the floodplain administrator, is hereby appointed to administer and implement the provisions of this article. 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 community's overall compliance with the National Flood Insurance Program and the provisions of this ordinance.

(Code 1995, § 150.156, art. 4, § A; Ord. of 9-16-1973; Ord. of 6-21-1994; Ord. of 10-20-2009)

Sec. 14-44. Floodplain development application, permit and certification requirements.

(a) *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:

(1) A plot plan drawn to scale which shall include, but shall not be limited to, the following specific details of the proposed floodplain development:

a. The nature, location, dimensions, and elevations of the area of development/disturbance; existing and proposed structures, utility systems, grading/pavement areas, fill materials, storage areas, drainage facilities, and other development;

b. The boundary of the special flood hazard area as delineated on the FIRM or other flood map as determined in section 14-6, or a statement that the entire lot is within the special flood hazard area;

c. Flood zone(s) designation of the proposed development area as determined on the FIRM or other flood map as determined in section 14-6;

d. The boundary of the floodway or non-encroachment area as determined in section 14-6;

e. The base flood elevation (BFE) where provided as set forth in sections 14-6, 14-45 or 14-72;

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

(2) Proposed elevation, and method thereof, of all development within a special flood hazard area including, but not limited to:

a. Elevation in relation to ~~mean sea level~~ NAVD 1988 of the proposed reference level (including basement) of all structures;

b. Elevation in relation to ~~mean sea level~~ NAVD 1988 to which any non-residential structure in Zones A, AE, AH, ~~or~~ AO, A99 will be floodproofed; and

c. Elevation in relation to ~~mean sea level~~ NAVD 1988 to which any proposed utility systems will be elevated or floodproofed;

(3) If floodproofing, a floodproofing certificate (FEMA Form 086-0-34 ~~81-65~~) with supporting data, ~~and~~ an operational plan, and an inspection and maintenance plan that include~~s~~, but ~~is~~ are not limited to, installation, exercise, and maintenance of floodproofing measures;

(4) A foundation plan, drawn to scale, which shall include details of the proposed foundation system to ensure all provisions of this article are met. These details include, but are not limited to:

a. The proposed method of elevation, if applicable (i.e., fill, solid foundation perimeter wall, solid backfilled foundation, open foundation on columns/posts/piers/piles/shear walls); and

b. Openings to facilitate automatic equalization of hydrostatic flood forces on walls in accordance with section 14-71(4)c when solid foundation perimeter walls are used in Zones A, AE, AH, AO, A99. ~~AE, and A1-30~~;

(5) Usage details of any enclosed areas below the lowest floor;

(6) Plans and/or details for the protection of public utilities and facilities such as sewer, gas, electrical, and water systems to be located and constructed to minimize flood damage;

(7) Certification that all other local, state and federal permits required prior to floodplain development permit issuance have been received;

(8) Documentation for placement of recreational vehicles and/or temporary structures, when applicable, to ensure that the provisions of section 14-71(6) and (7) of this chapter are met;

(9) A description of proposed watercourse alteration or relocation, when applicable, including an engineering report on the effects of the proposed project on the flood-carrying capacity of the watercourse and the effects to properties located both upstream and downstream; and a map (if not shown on the plot plan) showing the location of the proposed watercourse alteration or relocation.

(b) *Permit requirements.* The floodplain development permit shall include, but not be limited to:

(1) 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.).

(2) The special flood hazard area determination for the proposed development in accordance with available data specified in section 14-6.

(3) The regulatory flood protection elevation required for the reference level and all attendant utilities.

(4) The regulatory flood protection elevation required for the protection of all public utilities.

(5) All certification submittal requirements with timelines.

(6) A statement that no fill material or other development shall encroach into the floodway or non-encroachment area of any watercourse, as applicable.

(7) The flood openings requirements~~, if in Zones A, AO, AE, or A1-30.~~

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

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

(c) *Certification requirements.*

(1) Elevation certificates.

a. An elevation certificate (FEMA Form 81-31) is recommended prior to the actual start of any new construction. It shall be the duty of the permit holder to have established an elevation reference level prior to construction. The floodplain administrator can review the certificate data submitted. Deficiencies detected by such review shall be corrected by the permit holder prior to the beginning of construction.

b. A final as-built elevation certificate (FEMA Form 81-31) is required after construction is completed, and prior to certificate of compliance/occupancy issuance. It shall be the duty of the

permit holder to submit to the 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.

(2) Floodproofing certificate. If nonresidential floodproofing is used to meet the regulatory flood protection elevation requirements, a floodproofing certificate (FEMA Form 81-65), with supporting data, an operational plan, and an inspection and maintenance plan are required prior to the actual start of any new construction. It shall be the duty of the permit holder to submit to the floodplain administrator a certification of the floodproofed design elevation of the reference level and all attendant utilities, in relation to mean sea level. Floodproofing certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by the 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.

(3) If a manufactured home is placed within Zones A, AE, AH, AO, A99 ~~AE, or A1-30~~ and the elevation of the chassis is more than 36 inches in height above grade, an engineered foundation certification is required in accordance with the provisions of section 14-71(3)b.

(4) If a watercourse is to be altered or relocated, a description of the extent of watercourse alteration or relocation; a professional engineer's certified report on the effects of the proposed project on the flood-carrying capacity of the watercourse and the effects to properties located both upstream and downstream; and a map showing the location of the proposed watercourse alteration or relocation shall all be submitted by the permit applicant prior to issuance of a floodplain development permit.

(5) Certification exemptions. The following structures, if located within Zones A, AE AH, AO, A99 ~~AE or A1-30~~, are exempt from the elevation/floodproofing certification requirements specified in subsections (a) and (b) of this section:

a. Recreational vehicles meeting requirements of section 14-71(6)a;

b. Temporary structures meeting requirements of section 14-71(7); and

c. Accessory structures less than 150 square feet meeting requirements of section 14-71(8).

(d) *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:

(1) 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;

(2) 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;

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

(4) 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.

(Code 1995, § 150.156, art. 4, § B; Ord. of 9-16-1973; Ord. of 6-21-1994; Ord. of 10-20-2009)

Sec. 14-45. 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 ~~ensure~~ that the requirements of this article have been satisfied.

(2) Review all proposed development within special flood hazard areas to assure ~~ensure~~ that all necessary local, state and federal permits have been received.

(3) Notify adjacent communities and the ~~state department of crime control and public safety, division of emergency management, state coordinator~~ 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 ~~Ensure~~ that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is maintained.

(5) Prevent encroachments into floodways and non-encroachment areas unless the certification and flood hazard reduction provisions of section 14-74 are met.

(6) Obtain actual elevation (in relation NAVD 1988 ~~to mean sea level~~) of the reference level (including basement) and all attendant utilities of all new and substantially improved structures, in accordance with section 14-44(b)(3).

(7) Obtain actual elevation (in relation to NAVD 1988 ~~mean sea level~~) to which all new and substantially improved structures and utilities have been floodproofed, in accordance with the provisions of section 14-44(b)(3).

(8) Obtain actual elevation (in relation to NAVD 1988 ~~mean sea level~~) of all public utilities in accordance with the provisions of section 14-44(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 sections 14-44(b)(3) and 14-74(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 chapter ~~article~~.

(11) When base flood elevation (BFE) data has not been provided in accordance with section 14-6, obtain, review, and reasonably utilize any base flood elevation (BFE) data, along with floodway data or non-encroachment area data available from a federal, state, or other source including data developed pursuant to section 14-72(2)b, in order to administer the provisions of this chapter ~~article~~.

(12) When base flood elevation (BFE) data is provided but no~~t~~ floodway or non-encroachment area data has been provided in accordance with section 14-6, 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 article.

(13) Permanently maintain all records that pertain to the administration of this ~~article~~ chapter 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 community 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 chapter ~~article~~, 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 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 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) ~~May refuse or cause to be refused a certificate of occupancy for any building or other improvements constructed or being constructed on the site in question, or cause the county permitting office to refuse to issue any permit that has been applied for, or cause the county permitting office to freeze (or suspend) active permits and inspections.~~

(18) Make periodic inspections throughout the special flood hazard areas within the jurisdiction of the community. The floodplain administrator and each member of ~~his~~ their inspections department shall have a right, upon presentation of proper credentials, to enter on any premises within the territorial jurisdiction of the department at any reasonable hour for the purposes of inspection or other enforcement action.

(19) Follow through with corrective procedures of section 14-46.

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

(21) Maintain a current map repository to include, but not limited to, ~~the~~ historical and effective FIS report, historical and effective FIRM and other official flood maps and studies adopted in accordance with section 14-6, including any revisions thereto including letters of map change, issued by FEMA. Notify state and FEMA of mapping needs.

(22) Coordinate revisions to FIS reports and FIRMs, including letters of map revision based on fill (LOMR-F) and letters of map revision (LOMR).

(23) Apply and enforce any and all provisions of this chapter ~~article~~. In determining the amount of any penalty ordered under authority of this article, the floodplain administrator shall give due consideration to the appropriateness of the penalty with respect to the size of the business of the person being charged, the gravity of the violation, the good faith of the person, the record of previous violations, and, in general, the facts and circumstances surrounding the violation.

(Code 1995, § 150.156, art. 4, § C; Ord. of 9-16-1973; Ord. of 6-21-1994; Ord. of 10-20-2009)

Sec. 14-46. Corrective procedures.

(a) *Violations to be corrected.* When the floodplain administrator finds violations of applicable state and local laws, it shall be their ~~in his~~ duty to notify the owner or occupant of the building of the violation. The owner or occupant shall immediately remedy each of the violations of law cited in such notification.

(b) *Actions in event of failure to take corrective action.* If the owner of a building or property shall fail to take prompt corrective action, the floodplain administrator shall give the owner written notice, by certified or registered mail to the owner's last-known address or by personal service, stating:

(1) That the building or property is in violation of the floodplain management regulations;

(2) That a hearing will be held before the floodplain administrator at a designated place and time, not later than ten (10) days after the date of the notice, at which time the owner shall be entitled to be heard in person or by counsel and to present arguments and evidence pertaining to the matter; and

(3) That following the hearing, the floodplain administrator may issue an order ~~affirming, modifying or rescinding the original finding or may enter such other finding or order as the floodplain administrator may deem just and proper consistent with the provisions of this article, including, but not limited to, order~~ to alter, vacate, or demolish the building; or to remove fill as applicable.

(c) *Order to take corrective action.* If, upon a hearing held pursuant to the notice prescribed above, the floodplain administrator shall find that the building or development is in violation of the flood damage prevention ordinance, they ~~he~~ shall issue an order in writing to the owner, requiring the owner to remedy the violation within a specified time period, not less than 60 calendar days, nor more than 180 calendar days. Where the floodplain administrator finds that there is imminent danger to life or other property, they ~~he~~ may order that corrective action be taken in such lesser period as may be feasible.

(d) *Appeal.* Any owner who has received an order to take corrective action may appeal the order to the board of adjustment by giving notice of appeal in writing to the floodplain administrator within ten (10) days following issuance of the final order. In the absence of an appeal, the order of the floodplain administrator shall be final. The board of adjustment shall hear an appeal within a reasonable time and may affirm, modify and affirm, or revoke the order. Any order, requirement, decision, or determination made by the floodplain administrator may be appealed to the board of adjustment pursuant to the procedure found in section 14-48.

(e) *Failure to comply with order.* If the owner of a building or property fails to comply with an order to take corrective action for which no appeal has been made or fails to comply with an order of the town council ~~board of aldermen~~ following an appeal, the owner shall be guilty of a misdemeanor and shall be punished at the discretion of the court.

(Code 1995, § 150.156, art. 4, § D; Ord. of 9-16-1973; Ord. of 6-21-1994; Ord. of 10-20-2009)

Sec. 14-47. Variance procedures.

(a) The board of adjustment, as established by the Town of Woodfin ~~county~~, hereinafter referred to as the appeal board, shall hear and decide requests for variances from the requirements of this article.

(b) Variances may be issued for:

(1) 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 ~~an~~ historic structure and that the variance is the minimum necessary to preserve the historic character and design of the structure.

(2) Functionally-dependent facilities if determined to meet the definition as stated in section 14-4, provided provisions of subsections (i)(2), (3) and (5) of this section have been satisfied, and such facilities are protected by methods that minimize flood damages during the base flood and create no ~~not~~ additional threats to public safety~~.~~; or

(3) Any other type of development, provided it meets the requirements of this section.

(c) In passing upon variances, the appeal board shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this chapter ~~article~~, and:

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

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

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

(4) The importance of the services provided by the proposed facility to the community;

(5) The necessity to the facility of a waterfront location as defined under section 14-4 as a functionally-dependent facility, where applicable;

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

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

(8) The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;

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

(10) 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

(11) 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.

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

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

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

(g) The floodplain administrator shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency and the ~~state~~ State of North Carolina upon request.

(h) Conditions for variances.

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

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

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

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

(5) Variances shall only be issued upon:

a. A showing of good and sufficient cause;

b. A determination that failure to grant the variance would result in exceptional hardship; and

c. 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.

(i) 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:

(1) The use serves a critical need in the community.

(2) No feasible location exists for the use outside the special flood hazard area.

(3) The reference level of any structure is elevated or floodproofed to at least the regulatory flood protection elevation.

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

(5) The ~~county~~ Town has notified the ~~secretary of the state department of crime control and public safety~~ Secretary of the North Carolina Department of Public Safety of its intention to grant a variance at least 30 calendar days prior to granting the variance.

(Code 1995, § 150.156, art. 4, § E; Ord. of 9-16-1973; Ord. of 6-21-1994; Ord. of 10-20-2009)

Sec. 14-48. Appeals.

(a) *Appeals.* Appeals shall be heard in accordance with Sec. 54-69(e). ~~*Types of appeals.* The board of adjustment shall hear and decide all appeals from any order, requirement, decision, or determination made by the floodplain administrator. In deciding appeals, it may hear both those based upon an allegedly improper or erroneous interpretation of this article and those based upon alleged hardship resulting from strict interpretation of this article.~~

~~(b) *Procedure for filing appeals.* No appeal shall be heard by the board of adjustment unless notice thereof is filed within 30 days after the interested party receives notice of the order, requirement, decision or determination by the floodplain administrator. The applicant must file his their application for a hearing with the floodplain administrator, who shall act as clerk for the board of adjustment in receiving this notice. All applicants shall be made upon the form specified for that purpose, and all information required thereon shall be complete before an appeal shall be considered as having been filed.~~

~~(c) *Hearings.* Hearings shall be conducted as follows:~~

~~(1) *Time.* After receipt of notice of appeal, the board chairperson shall schedule the time for a hearing, which shall be at a regular or special meeting within 31 days from the filing of such notice of appeal.~~

~~(2) *Notice of hearing.* The board of adjustment shall mail notices of the hearing to the affected parties to the action appealed from, and to such other persons as the floodplain administrator shall direct, at least five days prior to the hearing. Such notice shall state that location of the building or lot, the general nature of the question involved in the appeal, and the time and place of the hearing.~~

(3) *Conduct of hearing*. Any party may appear in person or by agent or by attorney at the hearing. The order of business for the hearing shall be as follows:

a. The chairperson, or such person as he shall direct, shall give a preliminary statement of the case.

b. The applicant shall present the argument in support of his application.

c. Persons opposed to granting the application shall present the argument against the application.

d. Both sides will be permitted to present rebuttals to opposing testimony.

e. The chairperson shall summarize the evidence, which has been presented, giving the parties opportunity to make objections or corrections.

Witnesses may be called and factual evidence may be submitted, but the board of adjustment shall not be limited to consideration of only such evidence as would be admissible in a court of law. The board of adjustment may view the premises before arriving at a decision. All witnesses before the board of adjustment shall be placed under oath and the opposing party may cross examine them.

(d) *Rehearings.* An application for a rehearing may be made in the same manner as provided for an original hearing. Evidence in support of the application shall initially be limited to that which is necessary to enable the board of adjustment to determine whether there has been a substantial change in facts, evidence, or conditions in the case. The application for rehearing shall be denied by the board of adjustment if, from the record, it finds that there has been no substantial change in facts, evidence or conditions. If the board of adjustment finds that there has been a change, it shall thereupon treat the request in the same manner as any other application.

(e) *Decisions.* Decisions shall be made in the following manner:

(1) *Time*. A decision by the board of adjustment shall be made within 30 days from the time of hearing.

(2) *Form*. Written notice by certified or registered mail of the decision in a case shall be given to the applicant by the floodplain administrator as soon as practical after the case is decided. Also, written notice shall be given to owners of the subject property, if not the applicant, and to other persons who have made written request for such notice. The final decision of the board of adjustment shall be shown in the record of the case as entered in the minutes of the board of adjustment and signed by the floodplain administrator and the chairperson upon approval of the minutes of the board of adjustment. Such record shall show the reasons for the determination, with summary of the evidence introduced and the findings of fact made by the board of adjustment. Where a variance is granted, the record shall state in detail any exceptional difficulty or unnecessary hardship upon which the appeal was based and which the board of adjustment finds to exist. The decision may reverse to affirm, wholly or partly, or modify the order, requirement, decision or determination appealed from. The record shall state in detail what, if any, conditions and safeguards are imposed by the board of adjustment in connection with the granting of a variance.

(3) *Expiration of permits.* Unless otherwise specified, any order or decision of the board of adjustment granting a variance shall expire if a floodplain development permit, building permit or certificate of occupancy for such use is not obtained by the applicant within one year from the date of the decision.

(4) *Voting*. The concurring vote of four-fifths of members of the board of adjustment shall be necessary to reverse any order, requirement, decision or determination of the floodplain administrator; to decide in favor of the applicant any matter upon which the board of adjustment is required by this article to pass; or to grant a variance from the provisions of this article.

(5) *Public record of decisions.* The decisions of the board of adjustment, as filed in its minutes, shall be a public record, available for inspection at all reasonable times.

(f) *Appeals from decision of board of adjustment.*

~~(1) Appeals from the board of adjustment may be taken to the courts pursuant to G.S. 153A-345 and 153A-349 as the same is effective on and after January 1, 2010 in accordance with Session Law 2009-421.~~

~~(2) Every final decision granting or denying a permit under this article shall be subject to review by the superior court of the country, with the right of jury trial at the election of the party seeking review. The time and manner of election of a jury trial shall be governed by G.S. 1A-1, Rule 38(b) of the Rules of Civil Procedure. Pending the final disposition of an appeal, no action shall be taken that would be unlawful in the absence of a permit issued under this article.~~

~~(Code 1995, § 150.156, art. 4, § F; Ord. of 9-16-1973; Ord. of 6-21-1994; Ord. of 10-20-2009)~~

Secs. 14-49—14-69. Reserved.

ARTICLE III. PROVISIONS FOR FLOOD HAZARD REDUCTION

Sec. 14-70. 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 ~~E~~electrical, heating, ventilation, ~~plumbing~~, air conditioning, plumbing, duct systems, and other building utility systems equipment, and ~~other~~ service facilities ~~shall~~ must be located at or above the Regulatory Flood Protection Elevation (RFPE) and/or specially designed ~~and/or located so as~~ 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 ~~conditions~~ the occurrence of flooding to the ~~regulatory~~ design flood ~~protection~~ elevation. ~~These~~ Utility systems, equipment, and service facilities include, but are not limited to, HVAC equipment, water softener units, bath/kitchen plumbing fixtures, ductwork, electric~~al~~/gas meter panels/boxes, utility/cable boxes, ~~hot~~ 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 flood waters into the system.

(6) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into floodwaters.

(7) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.

(8) Any alteration, repair, reconstruction, or improvements to a structure, which is in compliance with the provisions of this article, shall meet the requirements of new construction as contained in this article.

(9) Nothing in this ~~article~~ chapter shall prevent the repair, reconstruction, or replacement of a building or structure existing on the effective date of the ordinance from which this ~~article~~ chapter is derived 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 ~~article~~ chapter.

(10) New solid waste disposal facilities and sites, hazardous waste management facilities, salvage yards, and chemical storage facilities shall not be permitted, except by variance as specified in section 14-47(i). 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 section 14-44(c).

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

(12) 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.

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

(14) All subdivisions 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 USC 1334.

(15) When a structure is partially located in a special flood hazard area, the entire structure shall meet the requirements for new construction and substantial improvements.

(16) When a structure is located ~~in multiple flood hazard zones or~~ in a flood hazard risk zone with multiple base flood elevations, the provisions for the more restrictive flood hazard risk zone and the highest base flood elevation shall apply.

(17) Buildings and structures that are located in more than one flood hazard area shall comply with the provisions associated with the most restrictive flood hazard area.

(18) Fill is prohibited in the SFHA, including construction of buildings on fill. This includes not approving Conditional Letters or Letters of Map Revision - Based on Fill (CLOMR-F or LOMR-F).

(Code 1995, § 150.156, art. 5, § A; Ord. of 9-16-1973; Ord. of 6-21-1994; Ord. of 10-20-2009)

Sec. 14-71. Specific standards.

In all special flood hazard areas where base flood elevation (BFE) data has been provided, as set forth in sections 14-6 or 14-72, the following provisions, in addition to the provisions of section 14-70, 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, as defined in section 14-4.

(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 section 14-4. Structures located in Zones A, AE, AH, AO, ~~and A1-30~~ A99 zones may be floodproofed to the regulatory flood

protection elevation in lieu of elevation, provided that all areas of the structure, together with attendant utility and sanitary facilities, below the regulatory flood protection elevation are 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 section 14-70. A registered professional engineer or architect shall certify that the floodproofing standards of this subsection are satisfied. Such certification shall be provided to the floodplain administrator as set forth in section 14-44(c), along with the operational plan and the inspection and maintenance plan~~s~~.

(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, as defined in section 14-4.

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 C~~c~~ommissioner of I~~i~~nsurance pursuant to G.S. 143-143.15. Additionally, when the elevation would be met by an elevation of the chassis 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 36 inches in height, an engineering certification is required.

c. All enclosures or skirting below the lowest floor shall meet the requirements of subsection (4) of this section.

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 not be temperature-controlled or conditioned;

~~b~~c. Shall be constructed entirely of flood-resistant materials at least to the regulatory flood protection elevation;

~~c~~d. Shall include~~, in Zones A, AO, AE, and A1-30,~~ flood openings to automatically equalize hydrostatic flood forces on walls by allowing for the entry and exit of floodwaters. To meet ~~the~~ this requirement, the openings must either be certified by a professional engineer or architect or meet or exceed the following minimum design criteria:

1. A minimum of two flood openings on different sides of each enclosed area subject to flooding;

2. The total net area of all flood openings must be at least one square inch for each square foot of enclosed area subject to flooding;

3. If a building has more than one enclosed area, each enclosed area must have flood openings to allow floodwaters to automatically enter and exit;

4. The bottom of all required flood openings shall be no higher than one foot above the higher of the interior or exterior adjacent grade;

5. 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

6. 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.

e. Fill/Grading

1. Fill is prohibited in the SFHA

f. 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 Town of Woodfin will have the right to inspect the enclosed area. The Town of Woodfin will conduct annual inspections. This agreement shall be recorded with the Buncombe County Register of Deeds and shall transfer with the property in perpetuity.

g. 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:

1. Not a substantial improvement, the addition and/or improvements must be designed to minimize flood damages and *must not be any more nonconforming than the existing structure.*

2. 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 ~~and/or improvements~~ 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:

1. Not a substantial improvement, the addition and/or improvements only must comply with the standards for new construction, ~~except that the reference level of a lateral addition may be located at the regulatory flood protection elevation in effect at the time the existing structure was built.~~ consistent with the code and requirements for the original structure.

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

d. Any combination of repair, reconstruction, rehabilitation, addition or improvement of a building or structure taking place during a five-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 five (5) 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:

1. 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.

2. 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 either:

a. *Temporary placement.*

1. Be on site for fewer than 180 consecutive days; and

2. 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); or

b. *Permanent placement.* Recreational vehicles that do not meet the limitations of Temporary Placement shall meet m~~M~~eet 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 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 months, renewable up to one year;

b. The name, address, and ~~tele~~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 ~~of~~ 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.* When accessory structures (sheds, detached garages, etc.) are to be placed within a special flood hazard area, the following criteria shall be met:

a. Accessory structures shall not be used for human habitation (including working, sleeping, living, cooking or restroom areas);

b. Accessory structures shall not be temperature-controlled;

c. Accessory structures shall be designed to have low flood damage potential;

d. Accessory structures shall be constructed and placed on the building site so as to offer minimum resistance to the flow of floodwaters;

e. Accessory structures shall be firmly anchored in accordance with the provisions of section 14-70(1);

f. All service facilities such as electrical shall be installed in accordance with the provisions of section 14-70(4); and

g. Flood openings to facilitate automatic equalization of hydrostatic flood forces shall be provided below regulatory flood protection elevation in conformance with the provisions of section 14-71(4)c.

An accessory structure with a footprint less than 150 square feet or that is a minimal investment of $5,000 or less and satisfies the criteria outlined above ~~does~~ is not ~~require an~~ required to meet the elevation ~~of~~ or floodproofing ~~certificate~~ standards of Section 14-71(2). Elevation or floodproofing certifications are required for all other accessory structures in accordance with section 14-44(c).

(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:

1. 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

2. 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 commercial structures.

(Code 1995, § 150.156, art. 5, § B; Ord. of 9-16-1973; Ord. of 6-21-1994; Ord. of 10-20-2009)

Sec. 14-72. Standards for floodplains without established base flood elevations.

Within the special flood hazard areas designated as approximate Zone A and established in section 14-6, where no base flood elevation (BFE) data has been provided by FEMA, the following provisions, in addition to the provisions of section 14-70, shall apply:

(1) No encroachments, including fill, new construction, substantial improvements or new development shall be permitted within a distance of 20 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.

(2) The BFE used in determining the regulatory flood protection elevation shall be determined based on the following criteria:

a. When base flood elevation (BFE) data is available from other sources, all new construction and substantial improvements within such areas shall also comply with all applicable provisions of this ~~article~~ chapter and shall be elevated or floodproofed in accordance with standards in sections 14-70 and 14-71.

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 sections 14-71 and 14-74.

c. All subdivision, manufactured home park and other development proposals shall provide base flood elevation (BFE) data if development is greater than five acres or has more than 50 lots/manufactured home sites. Such base flood elevation (BFE) data shall be adopted by reference in accordance with section 14-6 and utilized in implementing this article.

d. When base flood elevation (BDE) data is not available from a federal, state, or other source as outlined above, the reference level shall be elevated or floodproofed (nonresidential) to or above the regulatory flood protection elevation, as defined in section 14-4. All other applicable provisions of section 14-71 shall also apply.

(Code 1995, § 150.156, art. 5, § D; Ord. of 9-16-1973; Ord. of 6-21-1994; Ord. of 10-20-2009)

Sec. 14-73. Standards for riverine floodplains with BFE 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 sections 14-70 and 14-71; 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 foot at any point ~~within the community~~.

(Code 1995, § 150.156, art. 5, § E; Ord. of 9-16-1973; Ord. of 6-21-1994; Ord. of 10-20-2009)

Sec. 14-74. Floodways and non-encroachment areas.

Areas designated as floodways or non-encroachment areas are located within the special flood hazard areas established in section 14-6. 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 sections 14-70 and 14-71, 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 approved by FEMA. A letter of map revision (LOMR) must also be obtained ~~upon~~ within six months of completion of the proposed encroachment.

(2) If subsection (1) of this section is satisfied, all development shall comply with all applicable flood hazard reduction provisions of this ~~article~~ chapter.

(3) No new manufactured homes shall be permitted. Replacement manufactured homes in an existing manufactured home park or subdivision may be permitted, provided the following provisions are met:

a. The anchoring and the elevation standards of section 14-71(3); and

b. The no encroachment standard of subsection (1) of this section.

(4) No new habitable structures, including structures used for working, sleeping, living, cooking, or restroom facilities, shall be permitted in floodways and non-encroachment areas.

(Code 1995, § 150.156, art. 5, § F; Ord. of 9-16-1973; Ord. of 6-21-1994; Ord. of 10-20-2009)

Secs. 14-75—14-91. Reserved.

ARTICLE IV. LEGAL STATUS PROVISIONS

Sec. 14-92. Effective on rights and liabilities under the existing flood damage prevention ordinance.

This ~~article~~ chapter in part comes forward by re-enactment of some of the provisions of the flood damage prevention ordinance enacted February 1, 1980 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 article shall not affect any action, suit or proceeding instituted or pending. All provisions of the Flood Damage Prevention Ordinance of the Town of Woodfin enacted on February 1, 1980, as amended, which are not reenacted herein are repealed.

(Code 1995, § 150.156, art. 6, § A; Ord. of 9-16-1973; Ord. of 6-21-1994; Ord. of 10-20-2009)

Sec. 14-93. 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~~ their authorized agents before the time of passage of this ~~article~~ chapter; provided, however, that when construction is not begun under such outstanding permit within a period of six months subsequent to the date of issuance of the outstanding permit, construction or use shall be in conformity with the provisions of this ~~article~~ chapter.

Sec. 14-94. 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.

EFFECTIVE DATE.

This ordinance shall become effective insert upon adoption or a specific date.

ADOPTION CERTIFICATION.

I hereby certify that this is a true and correct copy of the Flood Damage Prevention Ordinance as adopted by the Woodfin Town Council of Woodfin, 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)

STAFF REPORT

To:	Planning Board of Adjustment
Agenda Title:	Conditional Zoning – Olivette Townhomes
Staff Contact:	Ricky Hurley, Planning Director
Meeting Date:	April 1, 2025

Summary:
Conditional zoning review for approximately 11.25 acres located off Old Macedonia Road from Mountain Village (MV) to Mountain Village-Conditional Zone (MV-CZ) for the development of 61 townhome sites. The project area is a portion of properties identified in the Buncombe County tax record as PINs 9721-43-6677 and 9721-23-4787. The applicant is Red Tree Organization, LLC on behalf of the property owners Olivette Development, LLC and Bridges at French Broad, LLC.

Background/Site Context:
The proposed development is situated at the end of Old Macedonia Road, approximately 1,000 feet east of its intersection with Westridge Farm Road. It is located on the western side of the larger Olivette community, where the surrounding land uses includes a mix of detached single-family homes, farms, woodlands, and open fields. The Olivette development extends to the north, west, and east of the site, while an existing subdivision of detached single-family homes borders the southern edge of the project. A previously approved master plan for the Olivette community was approved in 2015.

The topography is characterized by a low ridgeline, which is followed by the future Olivette Crossing Parkway, connecting the two main portions of the community. Smaller valleys descend toward the French Broad River to the north of the site and Lee's Creek to the southeast. A small stream borders the southwestern side of the project area, with the required 30-foot buffer indicated.

Project Proposal/Staff Analysis:
The applicant is requesting a zoning change and master plan approval as part of a conditional zoning request, which is required for any project containing 20 or more lots or units. The development includes 61 townhouse units, all facing two new public streets. The units will feature front porches, garages for on-site parking, and two general home styles: uphill walk-up or downhill walkout. The new construction aims to be classified as a "net positive" community through energy efficient, green building construction including the use of solar panels that will supply excess energy back to the grid. The new public streets will include sidewalks, on-street parking, and street trees on both sides of the roadway and comply with the town's development standards.

The zoning classifications for the surrounding properties include Mountain Village to the north, west, and east of the site, and Buncombe County Open Use District to the south. Adjacent land uses consist of detached single-family homes to the west and south, with vacant land to the north and east, which is designated for future planned phases of Olivette.

The proposed townhome development will introduce a new housing type, adding to the diversity of the community and while the townhomes are more dense than other portions of the Olivette community, they comply with the overall density limits set in the Mountain Village zoning district and are located in an area with less topography, minimizing heavy grading impacts. Open space is required and provided, as shown on the Exhibit E – Site & Building Plans and the developer is incorporating a network of trails and on-site gathering spaces within the project area, including a playground, trails, and grassed lawns, for use by Olivette residents. Townhome residents will also have access to additional amenities within the larger Olivette community.

The area is currently served by Woodfin Water and MSD sewer services. The project will be required to submit a detailed stormwater management plan, including calculations, to ensure compliance with the Town's Stormwater Ordinance. Additionally, a separate application must be submitted for an erosion control permit through Buncombe County.

The project is requesting two development modifications:

- Use of LED fixtures for streetlights (all fixtures will be dark sky compliant).
- Increase the maximum spacing of street trees from 60 feet to 85 feet due to avoid conflict with utilities and other structures.

Staff Recommendation:
Staff supports approval of the proposed conditional zoning of the subject property to Mountain Village-Conditional Zone (MV-CZ) subject to the conditions identified in the Exhibit D – Project Conditions; however, the Board may recommend additional conditions to mitigate the anticipated impacts.

Suggested Motion:
I move to approve the conditional zoning of 11.25 acres as shown on Exhibits A, B, & C from Mountain Village (MV) to Mountain Village - Conditional Zone (MV-CZ), subject to the conditions identified in the Exhibit D - Project Conditions and subject to the following additional conditions:

1) (*Board to add conditions here, if applicable.)*
2) ….

and find that the request is reasonable, is in the public interest, is consistent with the Woodfin Together Comprehensive Plan, and meets the development needs of the community in that the request:

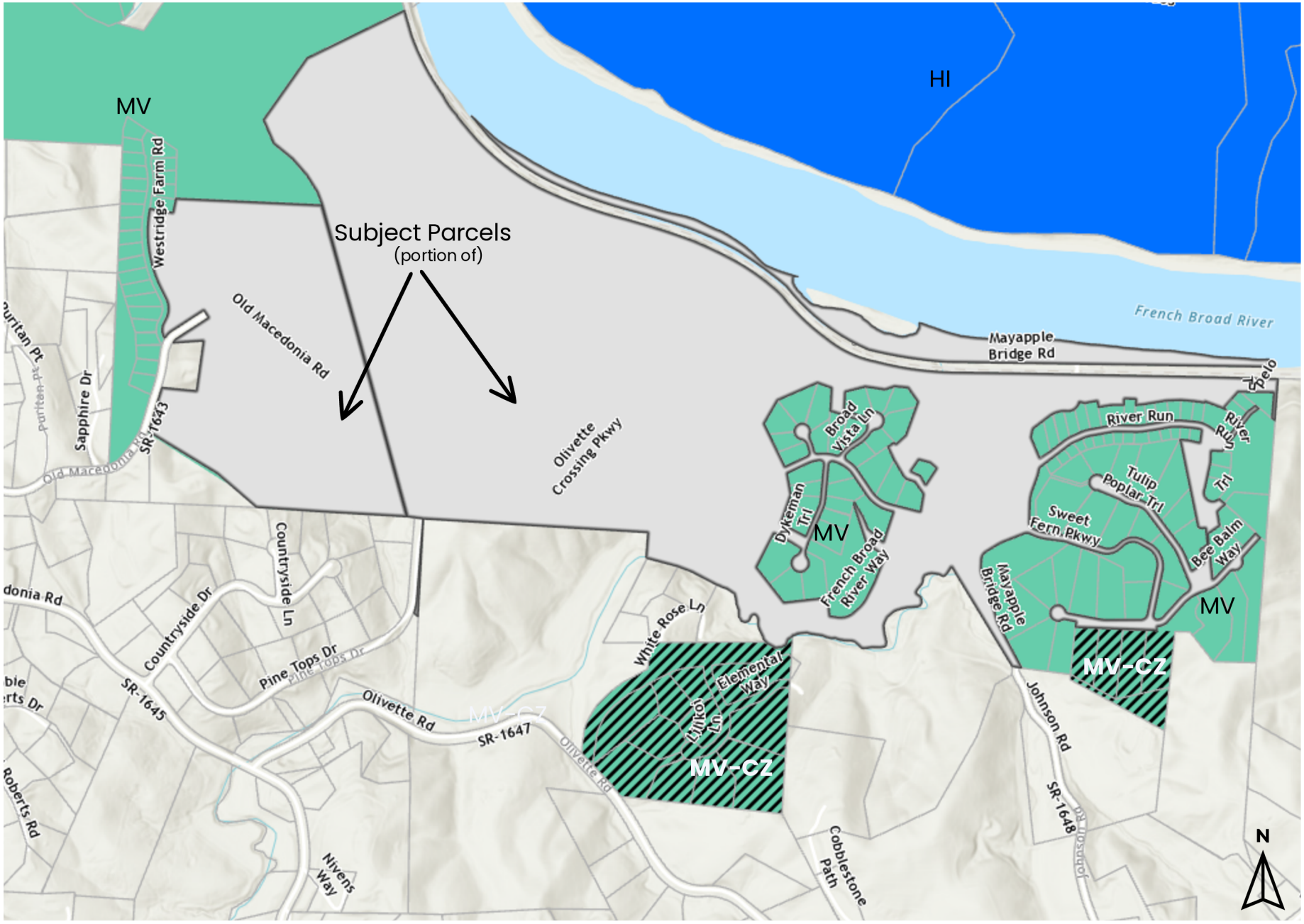
1. Uses green and sustainable principles with distinct and human-scale architectural design while forming complete communities. (Principles 6 & 7)
2. Uses the Future Land Use Map to guide development decisions and connect existing and future activity centers with multimodal transportation for all users. (1.1.1 & 1.1.3)

3. Extends or improves infrastructure needed to support residents and sustainable growth while promoting long-term fiscal responsibility by growth in areas with existing services. (1.1.8 & 1.2.6)
4. Balances the supply of land for housing and employment and protects land for economic development. (3.1.5).
5. Protects environmentally sensitive areas such as floodplains, wetlands, steep slopes, and areas adjacent to streams and creeks while also encouraging accessibility to green spaces. (5.1.1 & 5.1.2)

Attachments:

(1) Exhibit A – Zoning Map
(2) Exhibit B – Existing Conditions/Aerial
(3) Exhibit C – Future Land Use Map
(4) Exhibit D – Proposed Project Conditions
(5) Exhibit E – Site & Building Plans
(6) Technical Review Report
(7) Draft Planning Board Recommendation

Exhibit A - Woodfin Zoning Map

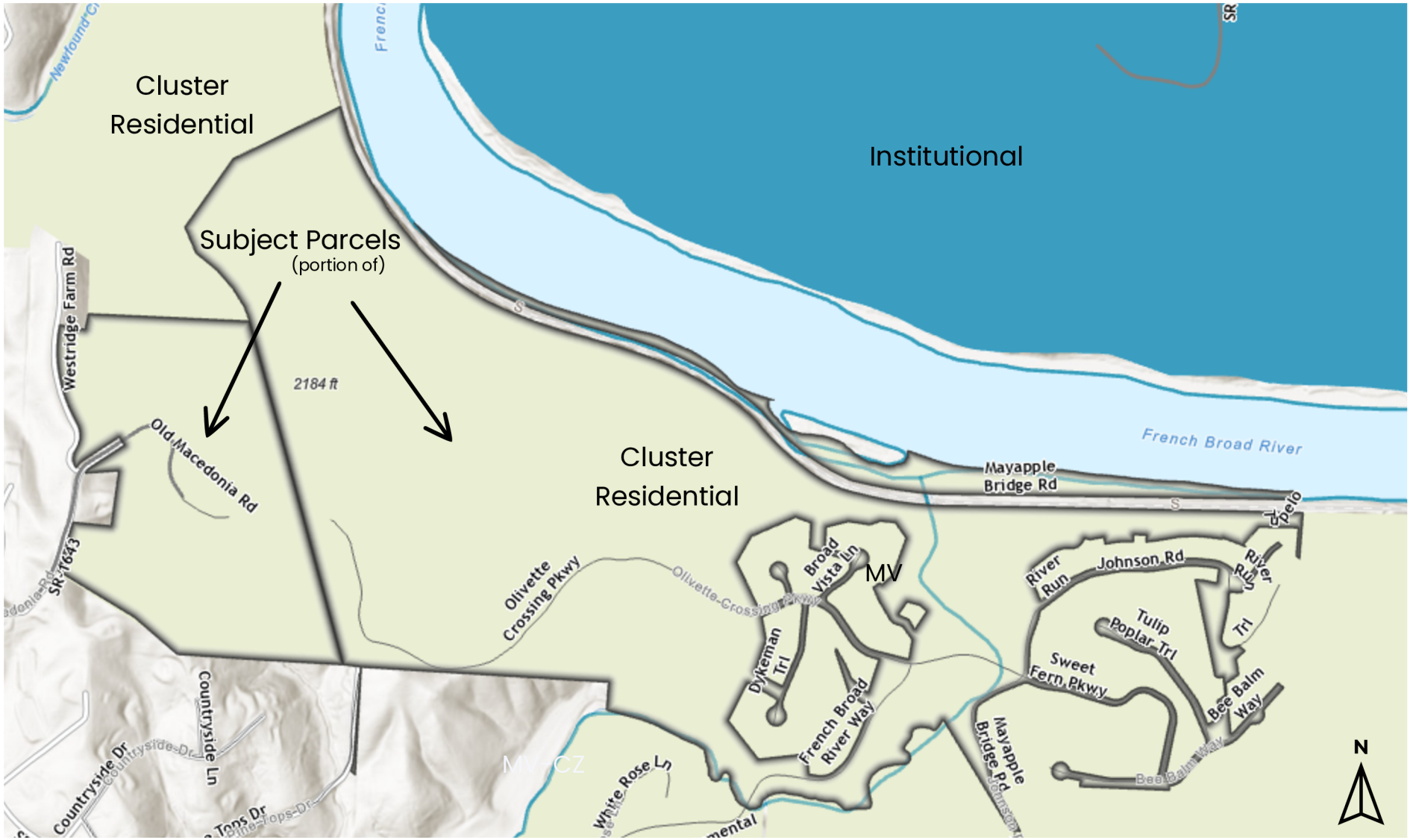


Woodfin Zoning 2025

- MV - Mountain Village
- MVCZ - Mountain Village Conditional Zone
- Heavy Industrial

Sources: Esri, TomTom, Garmin, FAO, NOAA SGS, (c) OpenStreetMap contributors, and the GIS User Community, North Carolina Department of Information Technology - Transportation, GIS Unit,
Sources: Esri, Maxar, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap, and the GIS user community.

Exhibit B - Future Land Use Map

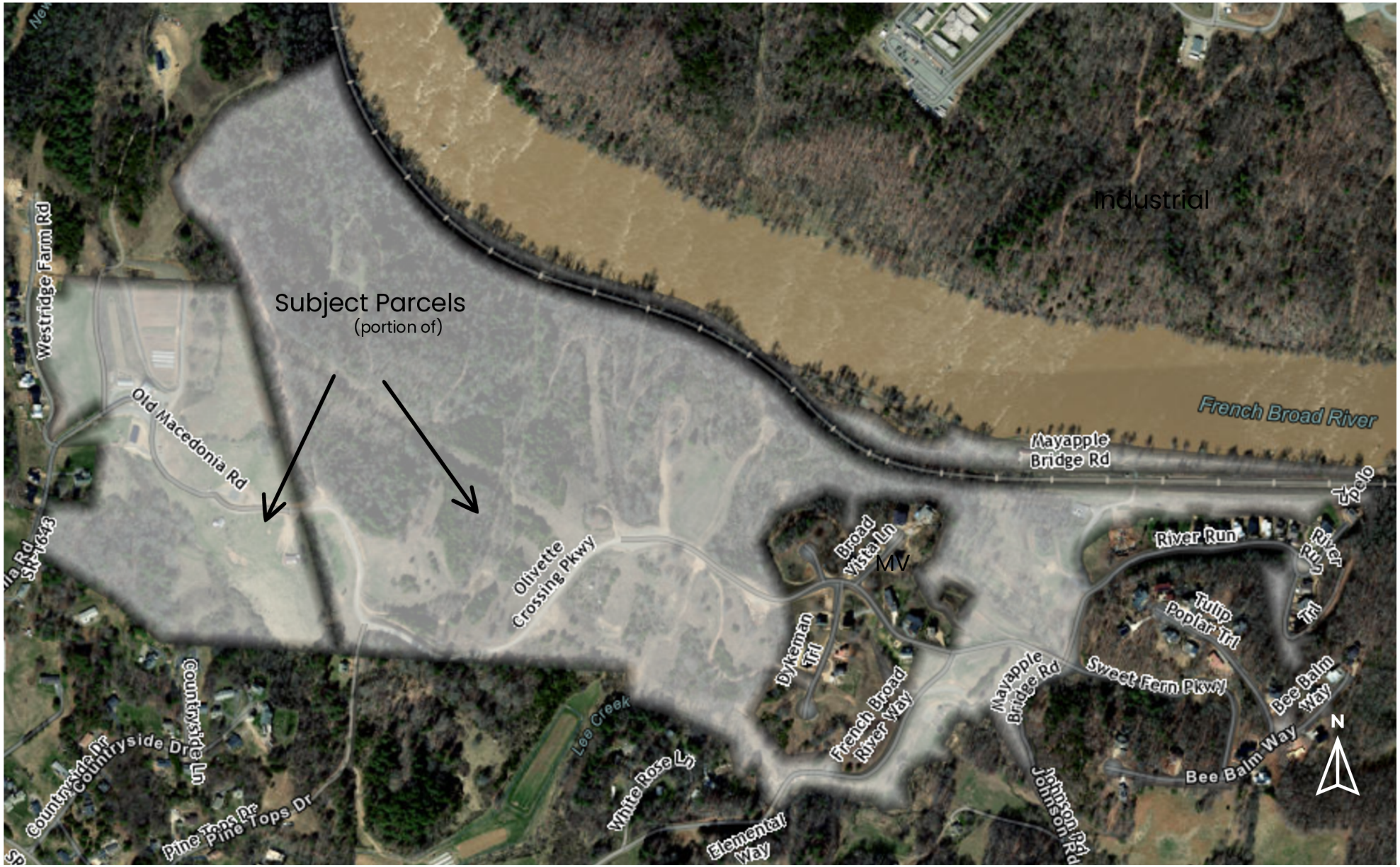


Woodfin Future Land Use Map

- Cluster Residential
- Institutional

Sources: Esri, TomTom, Garmin, FAO, NOAA SGS, (c) OpenStreetMap contributors, and the GIS User Community, North Carolina Department of Information Technology - Transportation, GIS Unit,
Sources: Esri, Maxar, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap, and the GIS user community.

Exhibit C - Aerial Map



Sources: NC CGIA, Mazar, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, North Carolina Department of Technology - Transportation, GIS Unit

EXHIBIT D - PROJECT CONDITIONS
Olivette Townhomes – Conditional Zoning

1. The property included in the rezoning is shown on the proposed conceptual plan and is identified in the Buncombe County tax record as portions of PINs 9721-23-4787 and 9721-43-6677 and is 11.25 acres.
2. Pursuant to this ordinance, the subject property is rezoned to Mountain Village-Conditional Zone (MV-CZ), but approval is limited to the proposed project ("Project") described herein.
3. The Project will include a maximum of 61 townhouses along with proposed subdivision infrastructure including road, sewer, water, and utilities as shown on the proposed conceptual plan.
4. A small community park and walking trails are included in the development as community amenities and shall be maintained by the homeowners' association.
5. Multiple separate stormwater facilities are proposed and shall be maintained by the homeowners' association.
6. Separate zoning compliance permits shall be required for homes to be constructed on the 61 townhome sites with the only restriction being that all individual applications must comply with the applicable provision contained in this Ordinance.
7. Setbacks for the lots will be 10 feet front from edge of the right-of-way, 15 feet rear, 0/5 feet side.
8. A minimum of 30,500 square feet of open space shall be provided, as shown on the approved site plan.
9. The maximum height of all structures shall be limited to 35 feet.
10. Access into the community shall be from an extension of Old Macedonia Road.
11. Access to the 61 townhome sites shall be approved and permitted via the internal public streets, as shown on the proposed site plan.
12. A future road connection to the east as part of the Olivette development shall be included, as shown on the approved site plan.
13. Signage shall be permitted separately and must comply with Chapter 34 of the Town of Woodfin Code of Ordinances.
14. Landscaping shall be required, and grading shall be limited to the extents, as shown on the Exhibit E – Site & Building Plans.
15. The Project includes the following technical modifications:
    a. Applicant will provide the equivalent number of trees at a ratio of one tree per 40 feet. However, due to site utilities and hardscape layout, tree spacing may occasionally exceed 40 feet when necessary but may not exceed 85 feet.
    b. Use of LED lighting for street lights (all fixtures will be dark sky compliant).
16. The Project will undergo final technical review prior to issuance of any permits.
17. All proposed site lighting must meet the outdoor lighting requirements found in *Section 46-119(c) Street Lights* of the Town of Woodfin Ordinances except as modified by this ordinance. Residential building lighting must be dark sky compliant.
18. The building design, site design and orientation on site must substantially comply with the approved preliminary plat and site plans, which are incorporated herein by reference.
19. All applicable required local, state, and federal permits and approvals must be obtained prior to initiation of construction.

20. The conditional zoning will be valid for two years from the date of approval by the Town Council with the first building permit obtained within this 24-month period. Failure to obtain the first building permit within this time frame shall render the plan approval null and void.

Agreed to and accepted this the 15th day of April 2025, by the Property Owner/Applicant:

_____

MASTER PLAN LEGEND

- EXIST. BOUNDARY
- EXIST. ADJOINER
- EXIST. STREAM
- EXIST. STREAM BUFFER
- EXIST. WETLAND
- EXIST. RIGHT OF WAY
- EXIST. BUILDING SETBACK
- EXISTING PAVEMENT
- NEW PROPERTY LINES
- NEW RIGHT OF WAY
- NEW EASEMENT
- BUILDING SETBACK LINE
- NEW LANDSCAPE BUFFER
- NEW COMMON OPEN SPACE
- NEW BUILDING
- NEW PAVEMENT
- NEW HD PAVEMENT
- NEW CONCRETE SIDEWALK
- NEW GRAVEL
- NEW CURB & GUTTER
- NEW WALL (BY OTHERS)
- LIMITS OF DISTURBANCE
- NEW STORM PIPE
- NEW WATER DISTRIBUTION MAIN
- NEW WATER EASEMENT
- NEW SEWER LINE
- NEW SEWER EASEMENT

NOTES:

1. THE BUILDING AND GRADING & EROSION CONTROL PERMITS WILL BE REVIEWED AND ISSUED BY BUNCOMBE COUNTY.
2. DRIVEWAY PERMITS SHALL BE REQUIRED AND WILL BE REVIEWED AND ISSUED BY THE TOWN OF WOODFIN.
3. WOODFIN WATER WILL SERVE THE DEVELOPMENT. METROPOLITAN SEWERAGE DISTRICT WILL PROVIDE SANITARY SEWER TO PROJECT.
4. THE EROSION/FLOOD PERMIT APPLICATIONS WILL BE REVIEWED AND APPROVED BY BUNCOMBE COUNTY PRIOR TO ANY CONSTRUCTION OR LAND DISTURBANCE OCCURRING. A TOWN OF WOODFIN STORM WATER REVIEW AND PERMIT WILL BE REQUIRED PRIOR TO ISSUANCE OF THE ZONING COMPLIANCE PERMIT BY THE TOWN OF WOODFIN.

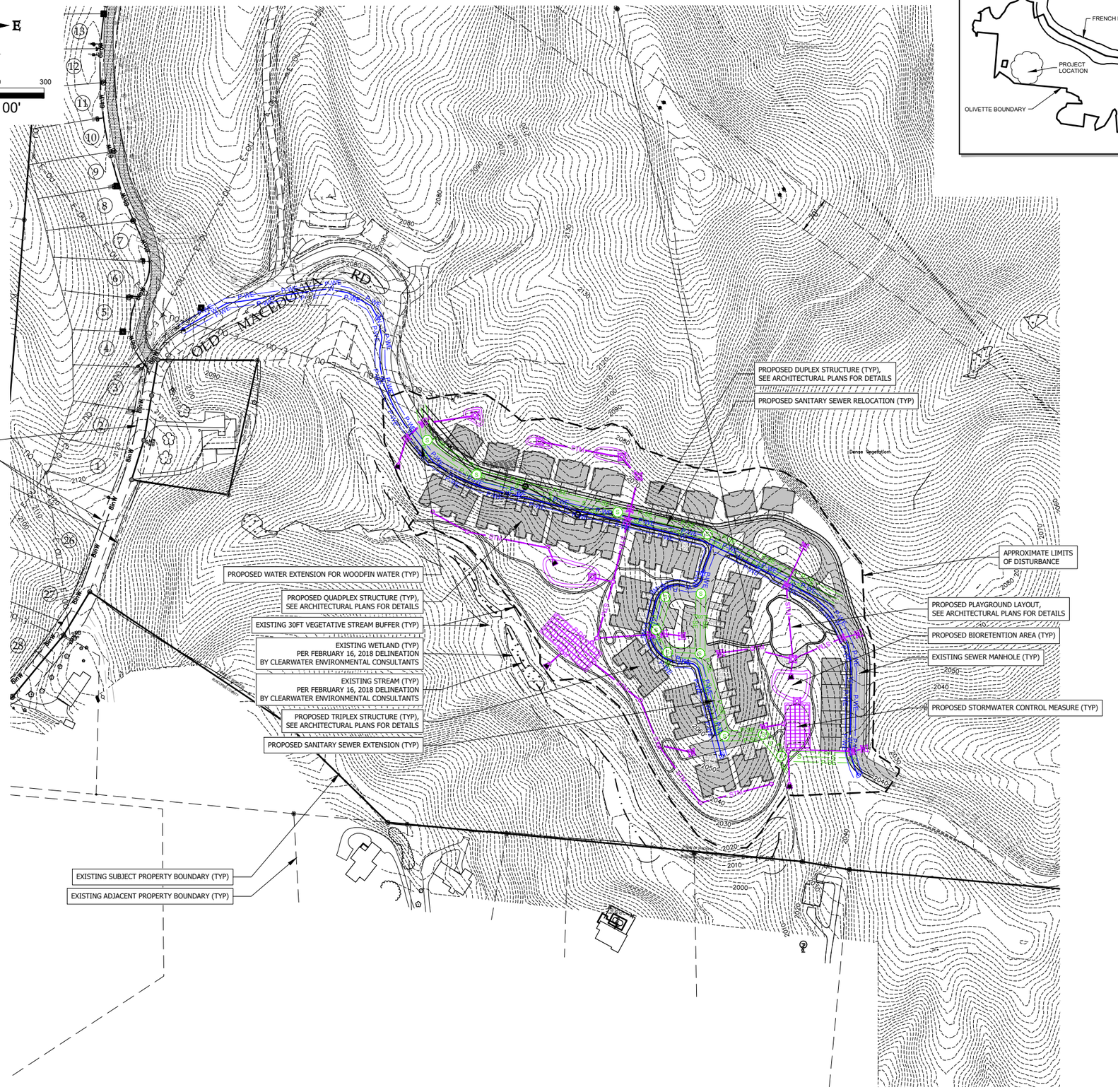
N

W E

S

0 100 200 300

SCALE: 1"= 100'



VICINITY MAP

DEVELOPMENT DATA

PROPERTY ADDRESS: 215 OLD MACEDONIA RD
WOODFIN, NC 28804
PIN NUMBER: 9721-23-4787 & 9721-53-4264
PROPERTY SIZE: 11.25 AC
ZONING REVIEW: TOWN OF WOODFIN
EROSION CONTROL REVIEW: BUNCOMBE COUNTY
STORMWATER REVIEW: TOWN OF WOODFIN
ZONING CLASSIFICATION: MOUNTAIN VILLAGE-CONDITIONAL ZONE (MV-CZ)
PROPOSED NUMBER OF UNITS: 300
PROPOSED DENSITY: 26.7 UNITS / AC
PROPERTY OWNER: OLIVETTE DEVELOPMENT, LLC
CONTACT: SCOTT AUSTIN
ADDRESS: P.O. BOX 9775
GREENSBORO, NC 27429
EMAIL: BRANDON.BRYANT@ALAIRHOMES.COM
PHONE: (336) 355-9775
DEVELOPER: MINDFULLY BUILT, LLC DBA ALAIR HOMES ASHEVILLE
CONTACT: BRANDON BRYANT
ADDRESS: 301 MERRIMOM AVE
ASHEVILLE, NC 28801
EMAIL: BRANDON.BRYANT@ALAIRHOMES.COM
PHONE: (828) 712-1518
ENGINEER: CDG, INC.
CONTACT: ERIC J. HUTCHINSON III, PE
ADDRESS: 15 ARLINGTON ST
ASHEVILLE, NC 28801
EMAIL: ERIC.HUTCHINSON@CDGE.COM
PHONE: 828-232-4700

NO.	REVISION/SUBMISSION	DATE:

PROFESSIONAL SEAL:

DRAFT

CERTIFICATE OF AUTHORIZATION:

15 ARLINGTON STREET
ASHEVILLE, N.C. 28801
PH: 1-(828) 232-4700
FAX: 1-(828)-232-1331

PRELIMINARY - NOT FOR CONSTRUCTION

OLIVETTE TOWNHOMES
RED TREE ORGANIZATION, LLC
WOODFIN, NC

PROJECT NO: R84.282501
DATE: 2025.03.24
SCALE: AS SHOWN
SHEET NO: C-1.0

DRAWING TITLE: MASTER PLAN

C-1.0 MASTER PLAN.dwg

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: LIMIT OF DISTURBANCE

: TRAIL

: SIDEWALK

LOT TYPE

DOWNHILL WALKOUT	36 UNITS
UPHILL WALKUP	18 UNITS
TOWNHOMES (FUTURE)	7 UNITS
	61 UNITS

REQUIRED OPEN SPACE:	30,500 SF
PROPOSED OPEN SPACE:	152,460 SF
IMPERVIOUS AREA:	200,521 SF
DENSITY AREA:	1 UNIT PER 5,787 SF

STREET TREE

REQUIRED STREET TREES: 62
PROPOSED STREET TREES: 62

RECOMMENDED STREET TREE SPECIES

AS	Acer saccharum Sugar Maple
BN	Betula nigra River Birch
LT	Liriodendron tulipfera Tulip Tree
PA	Platanus acerifolia London Plane Tree
QP	Quercus phellos Willow Oak

0' 50' 100' 150'
1 = 50'

NORTH

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T 303.443.7533

www.dtjdesign.com

RED TREE ORGANIZATION, LLC
CONDITIONAL ZONING PERMIT

WOODFIN, NORTH CAROLINA

DRAWN BY: DTJ
CHECKED BY: JH
PROJECT NO.: 2024044.10
ISSUE DATE: 03/25/2025
REVISIONS:

SHEET TITLE:

LANDSCAPE PLAN

SHEET NUMBER:

L100

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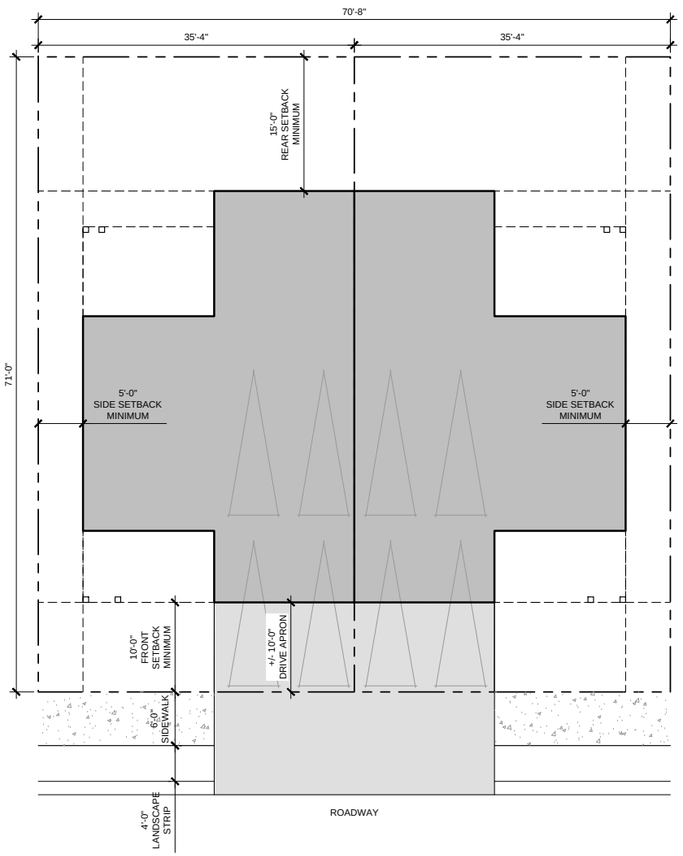
2 L200 ARCHITECTURAL CHARACTER - UPHILL WALKUP

IMAGERY



1 L200 TYPICAL LOT DIAGRAM - UPHILL WALKUP

1/8"=1'-0"

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ISSUE DATE: 03/25/2025
REVISIONS:

SHEET TITLE:

SITE DETAILS

SHEET NUMBER:

L200

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Last Plotted 3/25/2025 9:37:05 AM
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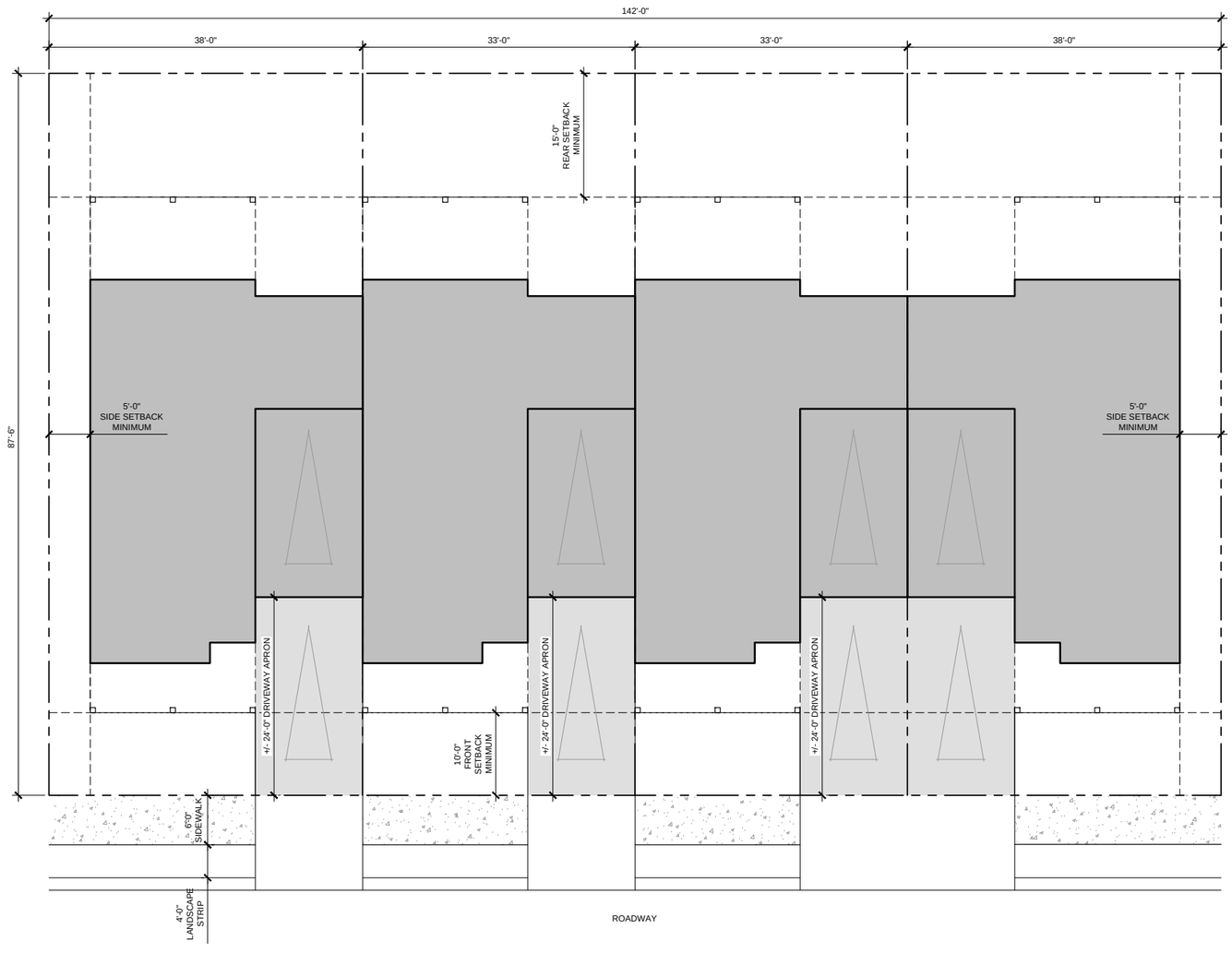
2 L201 ARCHITECTURAL CHARACTER - DOWNHILL WALKOUT

IMAGERY



1 L201 TYPICAL LOT DIAGRAM - 4-PLEX DOWNHILL WALKOUT CONDITION

1/8"=1'-0"

PLAN

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DRAWN BY: DTJ
CHECKED BY: JH
PROJECT NO.: 2024044.10
ISSUE DATE: 03/25/2025
REVISIONS:

SHEET TITLE: SITE DETAILS

SHEET NUMBER: L201

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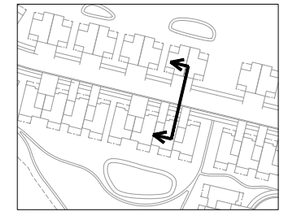

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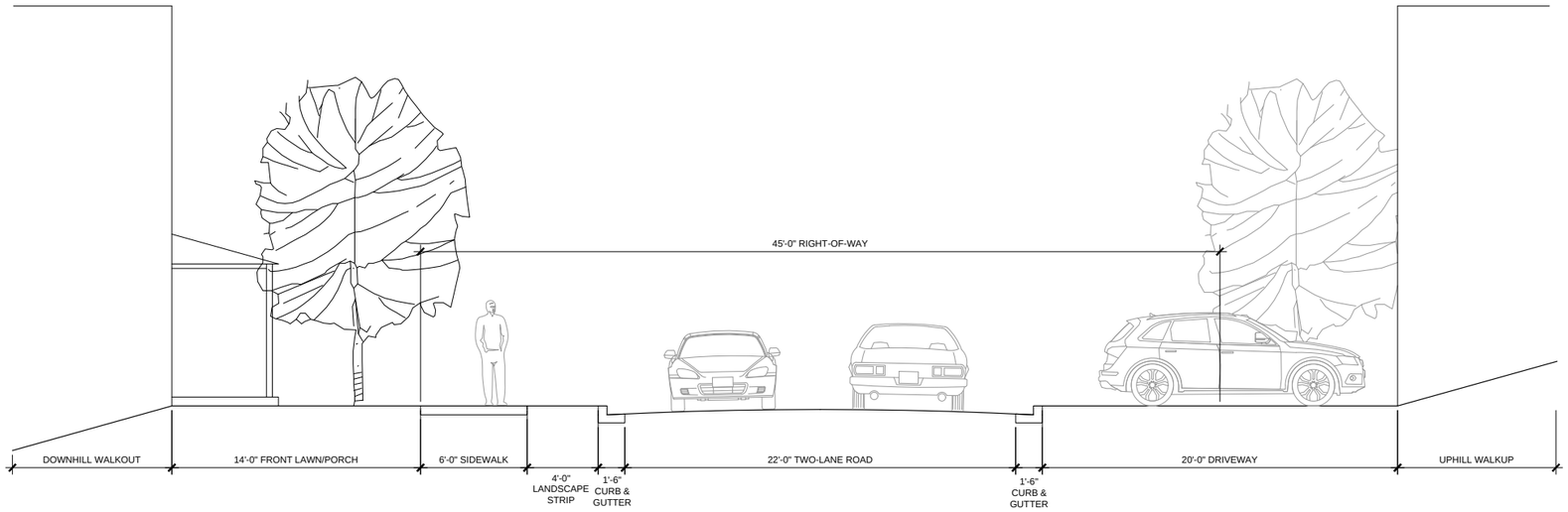
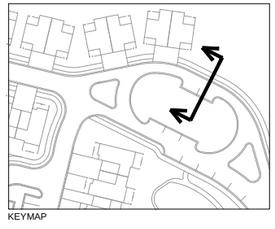


2 L202 TWO-WAY ROAD CONDITION

1/4" = 1'-0"

SECTION



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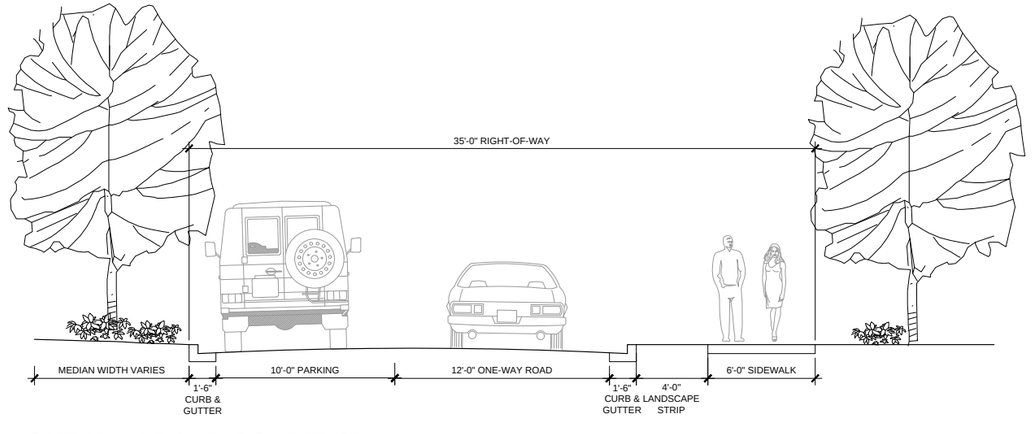
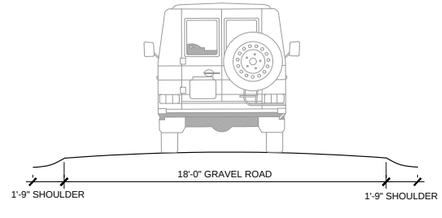


3 L202 ONE-WAY ROAD CONDITION

1/4" = 1'-0"

SECTION



1 L202 EXISTING ROAD CONDITION

1/4" = 1'-0"

SECTION

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RED TREE ORGANIZATION, LLC
CONDITIONAL ZONING PERMIT
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DRAWN BY: DTJ
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REVISIONS:

SHEET TITLE:
SITE DETAILS

SHEET NUMBER:
L202

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TECHNICAL REVIEW REPORT

DATE: March 19, 2025
PREPARED BY: Ricky Hurley, Planning Director
OWNER/APPLICANT: Bridges at French Broad, LLC/Red Tree Organization, LLC
SUBJECT: Major Subdivision/Conditional Zoning – Olivette Townhouses

PROJECT SUMMARY: A conditional zoning review of a new 61-unit townhouse development located at 215 Old Macedonia Road and portions of PINs 9721-23-4787 and 9721-53-4264.

REVIEW NOTES:

- The project site is approximately 11.25-acre portion within the Olivette development located at the end of Old Macedonia Road.
- Property is currently zoned Mountain Village and is requesting a conditional rezoning to Mountain Village-Conditional Zone (MV-CZ).
- All lots will be served by public water and sewer.
- All roads within the community are proposed to be publicly maintained. Old Macedonia Road is state maintained with the remaining roads within the development maintained by the Town
- All townhomes will be conveyed fee simple (not condominiums).
- The proposed Mountain Village-CZ zoning district setbacks are: 10 feet front from edge of right of way, 15 feet rear, 0/5 feet side, and are regulated by the proposed conditional zoning ordinance.
- There are no minimum lot width, lot size, or structure size standards in the Mountain Village zoning district. Dimensional requirements are set by the proposed conditional zoning.
- The maximum height of all structures shall be limited to 35', as noted in the Draft Exhibit D.
- Multiple stormwater devices are proposed and will require a separate stormwater permit to be reviewed and issued by the Town of Woodfin.
- The applicant is requesting a modification to the maximum street tree spacing of 40 feet along portions of the street frontage as depicted on the landscape plan.

PLANNING:
Changes required to plans:

- Street trees are required at a rate of one tree for every 40 linear feet of road, unless granted a modification, with a 10' wide, undisturbed, planting zone.
- Provide calculations for density and impervious area for the phase. The property is not subject to Steep Slope standards.
- Provide open space calculations and designate areas on plans based on phase acreage. Recreational open space is required at a rate of 500 square feet per residence, resulting in a total requirement of 30,500 square feet for 61 units. *Note: Exhibit D conditions associated with the rezoning may hold the project to a higher standard.*
- Show corporate limits for Woodfin and zoning classifications for all adjacent properties.
- Buffer may be necessary at southern limits of this phase.
- Confirm with Buncombe County fire marshal approval for the single entrance serving this phase along with Westridge Farm Rd section. Confirm hydrant spacing and fire truck turnaround as adequate when using circle.

Requirements to be noted (no change required to plans):

- The rezoning plan anticipates phasing of the project. Applicant will be required to provide a preliminary subdivision plat for each phase and follow the processes outlined in *Chapter 46 Subdivision* of the Town of Woodfin Code of Ordinances. The conditional zoning process for this project is conceptual in design.
- The Building and Grading & Erosion Control permits are reviewed and issued by Buncombe County.
- Driveway permits shall be required and are reviewed and issued by the Town of Woodfin.

EMERGENCY ADDRESSES:

Addresses and street names will be assigned by the Buncombe County E-911 Address Coordinator prior to issuance of any individual single-family permits. Applicant is advised to submit early in the development review process.

ROADS/ACCESS/LIGHTING:

- Indicate the limits of right of way and public maintenance.
- No lighting plan was provided, which will be required prior to issuance of a zoning compliance permit. Streetlights shall be reviewed prior to order and installation along roadways.
- This plan with the hydrants meets current fire codes, as the road is pre-existing.

UTILITIES:

Woodfin Water will serve the development. Metropolitan Sewerage District will provide sanitary sewer to the project. Provide allocation/commitment letters

EC/FLOOD:

The respective permit applications shall be reviewed and approved by Buncombe County prior to any construction or land disturbance occurring. A Town of Woodfin Storm Water review and permit will be required prior to issuance of the zoning compliance permit by the Town.

RECOMMENDATION FROM
TOWN OF WOODFIN PLANNING BOARD
OF ADJUSTMENT TO
WOODFIN TOWN COUNCIL

Having reviewed the **Zoning Map Amendment** to rezone properties at 215 Old Macedonia Road (PINs 9721-43-6677 and 9721-23-4787) from MV Mountain Village to Mountain Village MV-CZ on **April 1, 2025**, and having considered information from planning staff of the Town of Woodfin and comments from the other persons, pursuant to 160D-604(d), the Town of Woodfin Planning Board of Adjustment hereby adopts the following motion, effective April 1, 2025:

The Town of Woodfin Planning Board of Adjustment recommends approval of the proposed map amendment and finds that it is reasonable, in the public interest, and consistent with the Woodfin Together Comprehensive Plan in that the proposed rezoning will:

1. Use green and sustainable principles with distinct and human-scale architectural design while forming complete communities. (Principles 6 & &)
2. Use the Future Land Use Map to guide development decisions and connect existing and future activity centers with multimodal transportation for all users. (1.1.1 & 1.1.3)
3. Extend or improve infrastructure needed to support residents and sustainable growth while promoting long-term fiscal responsibility by growth in areas with existing services. (1.1.8 & 1.2.6)
4. Balance the supply of land for housing and employment and protect land for economic development. (3.1.5).
5. Protect environmentally sensitive areas such as floodplains, wetlands, steep slopes, and areas adjacent to streams and creeks while also encouraging accessibility to green spaces. (5.1.1 & 5.1.2)

Vote:

Ayes/No

This document is a true and accurate statement of the findings and recommendations of the Woodfin Planning Board of Adjustment.

_____ _____

Chair Date

STAFF REPORT

To: Planning Board of Adjustment

Agenda Title: Conditional Zoning—Altura

Presenter: Ricky Hurley, AICP

Meeting Date: April 1, 2025

Summary:

Conditional zoning review for 77.5 acres located at 36 Goodman Road from Mountain Village (MV) and Residential District R-21 to Mountain Village-Conditional Zone (MV-CZ) for the development of mixed residential development for 398 units consisting of 83 single family lots, 91 townhouse sites, and 225 multi-family units. The subject properties are identified in the Buncombe County tax record as PINs 9731-31-1730, 9730-39-9432, 9731-31-1066, 9731-21-7026, with additional PINS listed in Exhibit N. The applicant is Dan Mason on behalf of the owners Altura Communities, LLC and Stars and Stripes, LLC.

Background/Site Context:

A conditional rezoning is required for any project with 20 or more dwelling units. The proposed development is located approximately 750 feet east of the intersection of Riverside Drive/NC Highway 251 and Goodman Road. The properties are currently vacant and covered in woodlands with elevations ranging from 2010' to 2380' (west to east) with approximately 27 acres of single-family lots subject to steep slope standards. The rezoning request excludes approximately 5.4 acres, made up of 21 individually owned single-family lots and 20 townhouse lots located throughout the project area.

The subject parcels were included in a master plan that was previously approved by the Planning and Zoning Board of Adjustment on December 3, 2018, to develop a mix of 447 single-family and multi-family units, although this approval has since expired. The single-family lots were recorded on June 5, 2007, and November 19, 2007, prior to the Town's adoption of steep slope regulations. The townhouse lots were recorded on March 18, 2008, and the multi-family parcel was recorded on February 5, 2009.

The topography is characterized by a small cove, bordered to the south, east, and north by three low ridges. The elevation gradually increases from the French Broad River to the west of the property, reaching the highest point at the eastern boundary of the site. Small streams flow towards Goodman Road, with one potential road crossing at the upper reaches. The regulated steep slope areas are situated on the eastern side of the project, overlaying the existing single-family lots.

Project Proposal/Staff Analysis:

The proposed development offers a range of housing options, including detached single-family homes, townhouses, and apartments. While the Mountain Village zoning district allows for limited commercial uses, the applicant does not propose any uses that would attract outside visitors or generate commercial traffic beyond what is typical during the construction phase of such a project. As proposed, the project decreases the overall density to 398 units by recombining single-family lots and redistributing the density between the townhouse and apartment sections.

The applicant proposes the construction of two private access roads along the eastern property boundary to provide easier driveway access and a more favorable home layout on the uphill side. The 14-foot-wide access roads will be located within a 20-foot access easement and designed for one-way traffic. The applicant is requesting a modification to the steep slope limits for land disturbance and impervious surface in these areas, offering to recombine 13 lots within the steep slope zone to offset the additional land disturbance and impervious surface needed for the construction of the access roads.

The zoning classifications for surrounding properties include R-21 Residential District to the east, Mountain Village zoning to the north, south, and west, and a small area of R-10 Residential District to the southwest across Goodman Road. Land uses in the area include the previously approved Charter Mountain subdivision development to the west, scattered residential homes, and the Metropolitan Sewerage District's wastewater treatment facility to the south. To the east, there are several residential subdivisions, including North Ridge Estates, Town & Country Estates, and Running Ridge, as well as vacant properties to the north.

The site is accessible via two publicly maintained roads: Goodman Road from the west and Windwhisper Drive from the southeast. Additionally, there is one planned stub street to facilitate a future connection with Charter Mountain development. The subdivision streets are planned to be a combination of public and privately maintained.

The area is currently served by Woodfin Water, Asheville Water Department, and MSD sewer services. The applicant has indicated that the sewer and water lines were installed during previous development efforts but will require inspection, testing, and final connection to the respective utility systems. A significant portion of the project's roadway system serving the single-family lots has already been constructed, although additional paving is required. The project will need to submit a detailed stormwater plan, including calculations, to ensure compliance with the Town's Stormwater ordinance. A separate application for an erosion control permit must also be submitted to Buncombe County.

The developer is providing 29.2 acres of open space scattered throughout the project with a mix of trails, sidewalks, and side paths within the development for exclusive use by residents, except for a sidewalk and bicycle climbing lane from the Goodman Road entrance that will continue along Altura Parkway. The site plan reflects a staff requested connection of the public pedestrian facility from Charter Mountain development to this project.

The project is requesting several development modifications, including:

- Sidewalks to be required only along new road infrastructure related to the multi-family and townhome phases. Use of a trail network elsewhere within the development is proposed in lieu of sidewalk.
- Use of LED fixtures for streetlights and will be dark sky compliant.
- An increase in the allowable land disturbance and impervious surfaces in the steep slope zone for the installation of two access drives located along the uphill/eastern project boundary. The area will not utilize any individual lot's allowance for land disturbance or impervious surfaces.
- A maximum height limit of 5 stories/60 feet and not to exceed 12 feet per occupiable story.
- To extend the validity of the conditional zoning for up five years and require the first building permit to be obtained within 24 months after the technical plans have been approved.

Staff Recommendation:

Staff supports approval of the proposed conditional zoning of the subject property to Mountain Village-Conditional Zone (MV-CZ) subject to the conditions identified in the Exhibit D – Project Conditions; however, the Board may recommend additional conditions to mitigate the anticipated impacts.

Suggested Motion:

I move to approve the conditional zoning of 77.5 acres as shown on Exhibits A, B, & C from Mountain Village and Residential District R-21 to Mountain Village Conditional Zone, subject to the conditions identified in the Exhibit D- Project Conditions and subject to the following additional conditions:

1) (*Board to add conditions here, if applicable.)*
2) ….

and find that the request is reasonable, is in the public interest, is consistent with the Woodfin Together Comprehensive Plan, and meets the development needs of the community in that the request:

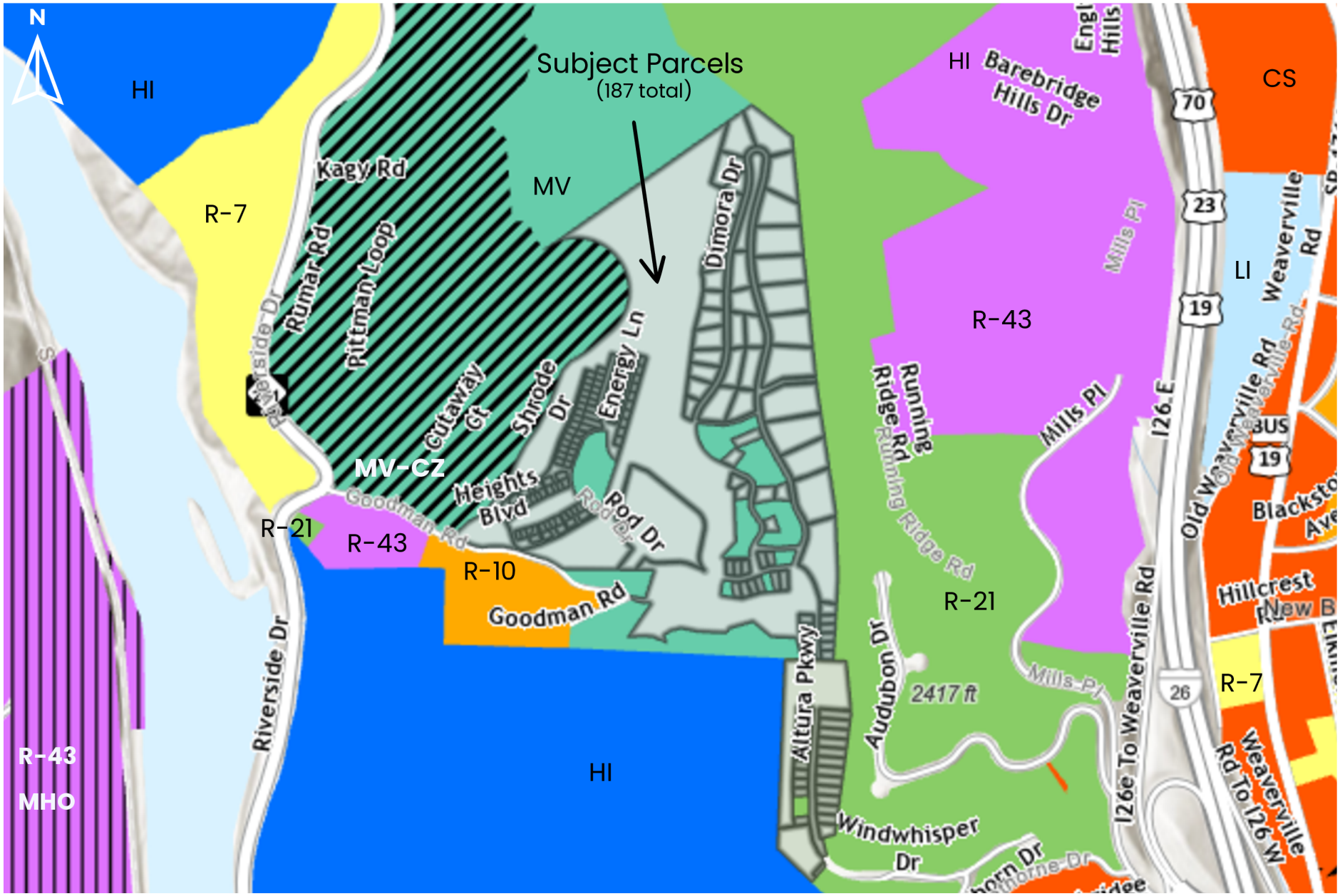
1. Uses the Future Land Use Map to guide development decisions and connect existing and future activity centers with multimodal transportation for all users. (1.1.1 & 1.1.3)
2. Promotes an integrated mix of housing types and affordability options while connecting existing and future activity centers with well-designed multimodal transportation connections. (1.1.2 & 1.1.3)
3. Extends or improves infrastructure needed to support residents and sustainable growth while promoting long-term fiscal responsibility by growth in areas with existing services. (1.1.8 & 1.2.6)
4. Protects environmentally sensitive areas such as floodplains, wetlands, and areas adjacent to streams and creeks while also encouraging accessibility to green spaces. (5.1.1 & 5.1.2)

Attachments:

(1) Exhibit A – Zoning Map
(2) Exhibit B – Future Land Use Map
(3) Exhibit C – Aerial

(4) Exhibit D – Proposed Project Conditions
(5) Exhibit E – Master Plan/View Corridors
(6) Exhibit F – Traffic Impact Analysis
(7) Exhibit G – TIA Scope Review
(8) Exhibit H – TIA NCDOT Response
(9) Exhibit N – PIN Roster
(10) Technical Review Report
(11) Draft Planning Board Recommendation

Exhibit A - Woodfin Zoning Map

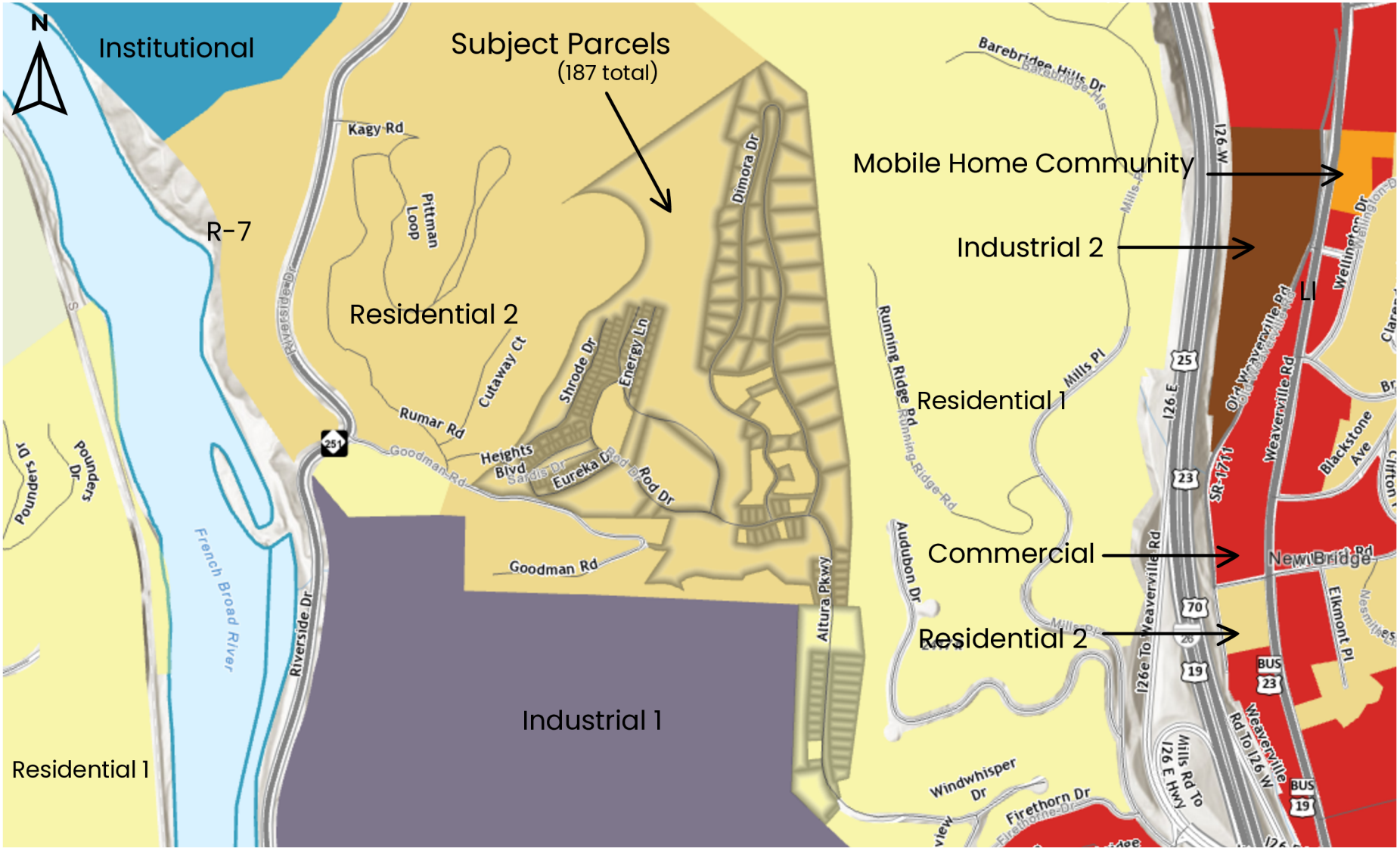


Woodfin Zoning 2025

- MV - Mountain Village
- HI - Heavy Industrial
- LI - Light Industrial
- R-43
- MVCZ - Mountain Village Conditional Zone
- R43 with Manufactured Housing Overlay
- CS - Community Shopping
- R-10
- R-7

Sources: Esri, TomTom, Garmin, FAO, NOAA SGS, (c) OpenStreetMap contributors, and the GIS User Community, North Carolina Department of Information Technology - Transportation, GIS Unit, Sources: Esri, Maxar, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap, and the GIS user community.

Exhibit B - Future Land Use Map



Woodfin Future Land Use Map

- Residential 1
- Residential 2
- Industrial 1
- Industrial 2
- Commercial
- Institutional
- Mobile Home Community

Sources: Esri, TomTom, Garmin, FAO, NOAA SGS, (c) OpenStreetMap contributors, and the GIS User Community, North Carolina Department of Information Technology - Transportation, GIS Unit, Sources: Esri, Maxar, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap, and the GIS user community.

Exhibit C - Aerial Map



Sources: NC CGIA, Mazar, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, North Carolina Department of Technology - Transportation, GIS Unit

EXHIBIT D - PROJECT CONDITIONS
Altura – Conditional Zoning

1. The property included in the rezoning is shown on the proposed conceptual plan and is identified in the Buncombe County tax record as PINs 9731-31-1730, 9730-39-9432, 9731-31-1066, 9731-21-7026, with additional PINS listed in Exhibit N and is 77.5 acres.
2. Pursuant to this ordinance, the entire subject property is rezoned to Mountain Village-Conditional Zone (MV-CZ), but approval is limited to the proposed project ("Project") described herein.
3. The Project will include a maximum of 398 units consisting of 82 single-family home lots, 91 townhouse lots, and 225 multi-family units along with proposed subdivision infrastructure including road, sewer, water, and utilities as shown on the proposed conceptual plan.
4. Open space and off-road trails are included in the development as community amenities and shall be maintained by the homeowner association.
5. Multiple separate stormwater facilities are proposed and shall be maintained by the homeowner association or apartment owner.
6. Separate zoning compliance permits shall be required for homes to be constructed on the individual home sites with the only restriction being that all individual applications must comply with the applicable provision contained in this Ordinance.
7. Setbacks for the lots will be 10 feet front from edge of pavement, 0 feet rear, 5 feet side, and 25 feet when abutting exterior project boundary.
8. A minimum of 25 acres of open space shall be provided, as shown on the approved site plan. No land disturbance or tree removal shall be permitted in these areas other than what is necessary to maintain trails and park area.
9. No more than 37 acres or 48% of disturbance is proposed and limited to the areas shown on the proposed grading plan.
10. No more than 19.50 acres or 25% of impervious surfaces will be included in the development.
11. The maximum height of all multi-family structures shall not exceed 5 stories or 60 vertical feet.
12. Access into the community shall be from one of two entrances located on Goodman Road and Windwhisper Drive/Altura Parkway.
13. Access to the home sites and multi-family complex shall be approved and permitted via the internal public and private streets, as shown on the proposed site plan.
14. A road connection to the adjacent project, known as Charter Mountain, shall be included, as shown on the approved site plan.
15. Street trees for new road infrastructure are required at a rate of 1 large maturing tree per 40 feet of road frontage, to be verified during a field inspection. Existing trees may satisfy all or part of this requirement, specifically for existing road and single-family development.
16. Signage shall be permitted separately and must comply with Chapter 34 of the Town of Woodfin Code of Ordinances.
17. The Project includes the following technical modifications:
    a. Sidewalks are included along new road infrastructure related to multi-family and townhome phases. In addition, designated and share the road bicycle routes shall be provided along Altura Parkway connecting to Goodman Road and access to the trail parallel to Goodman Road within the Charter Mountain development.
    b. Use of LED lighting for streetlights (will be dark sky compliant).

18. All recommendations from the updated Traffic Impact Analysis (TIA) shall be followed and implemented. If required.
19. The Project will undergo final technical review prior to issuance of any permits.
20. All proposed site lighting must meet the outdoor lighting requirements found in *Section 46-119(c) Street Lights* of the Town of Woodfin Ordinances except as modified by this ordinance. Residential building lighting must be dark sky compliant.
21. The Project will provide a 20-foot easement measured from the edge of pavement along property's Goodman Road frontage for future multi-modal improvements.
22. The site design must substantially comply with the approved preliminary plat and site plans, which are incorporated herein by reference.
23. All applicable required local, state, and federal permits and approvals must be obtained prior to initiation of construction.
24. The conditional zoning will be valid for five years from the date of approval by the Town Council with the first building permit obtained within 24-month period after technical review plans have been approved by all regulatory agencies. Failure to obtain the first building permit within this time frame shall render the plan approval null and void.

Agreed to and accepted this the 20th day of May 2025, by the Property Owner/Applicant:

_____

Exhibit E

LOT TYPE

# SINGLE FAMILY (STEEP SLOPE)	69 UNITS
# SINGLE FAMILY	13 UNITS
	82 UNITS
MULTI-FAMILY	225 UNITS
TOWNHOMES	91 UNITS
TOTAL UNITS	398 UNITS

STEEP SLOPE AREA (Above 2200' & 20% slope)

OPEN SPACE CALCULATION = 29.22 ACRES

STREET TREE

RECOMMENDED STREET TREE SPECIES

Key		Large Deciduous Trees
AS		Acer saccharum Sugar Maple
BN		Betula nigra River Birch
LT		Liriodendron tulipfera Tulip Tree
PA		Platanus acerifolia London Plane Tree
QP		Quercus phellos Willow Oak

SIDEWALK

TRAILS

DESIGNATED "CLIMBING" BIKE LANE

SIGNED / STRIPED "SHARE THE ROAD" BIKE FACILITY



VICINITY MAP

North

0 60 120 240 360

Scale: 1"=120'

MARCH 25, 2025

North

Altura

Rendered Master Plan

28 Hi Landa Acres
Weaverville, NC 28787
828.545.5989
www.sds-la.com

SITE DESIGN STUDIO

landscape architecture
planning
project management
construction observation

LOT TYPE

#	SINGLE FAMILY (STEEP SLOPE)	69 UNITS
#	SINGLE FAMILY	13 UNITS
		82 UNITS
	MULTI-FAMILY	225 UNITS
	TOWNHOMES	91 UNITS
	TOTAL UNITS	398 UNITS
	OPEN SPACE	29.22 AC

OUTPARCELS

SINGLE FAMILY

ALAM: 7105
BARRY: 4550
BITTON: 7925
BUNCOMBE LAND HOLDINGS: 8553, 8558
CANDIANO: 8936
ISI ENTERPRISES: 7893, 7843, 4668
OSTROW: 6299
SEMMEN FRANCES: 5849, 6919
SKINNER GUY: 6780, 6014, 5191
WILSON: 6504, 4482, 6452, 6315, 7352, 8033

MULTI-FAMILY

BB ENTERPRISES: 8347
MJC HOLDINGS: 7274, 7291, 9304, 8391, 8288, 8275, 8262, 8250
JOHN CUMMINGS: 8471, 8464, 8457, 8550, 8418, 8405, 7493, 7480, 7377, 7364, 7350, 7267



STEEP SLOPE AREA (Above 2200' & 20% slope)

STREET TREE

RECOMMENDED STREET TREE SPECIES

Key		Large Deciduous Trees
AS		Acer saccharum Sugar Maple
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QP		Quercus phellos Willow Oak

VICINITY MAP

North

0 60 120 240 360
Scale: 1"=120'
MARCH 25, 2025
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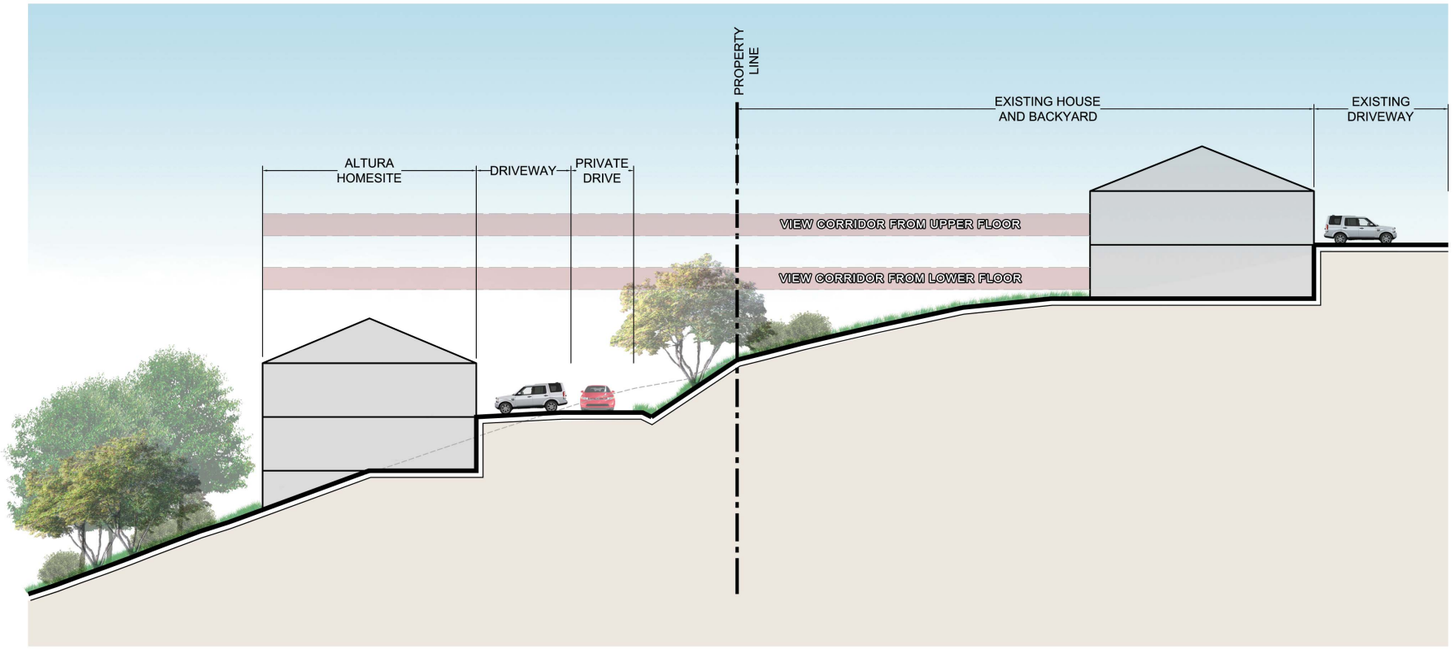
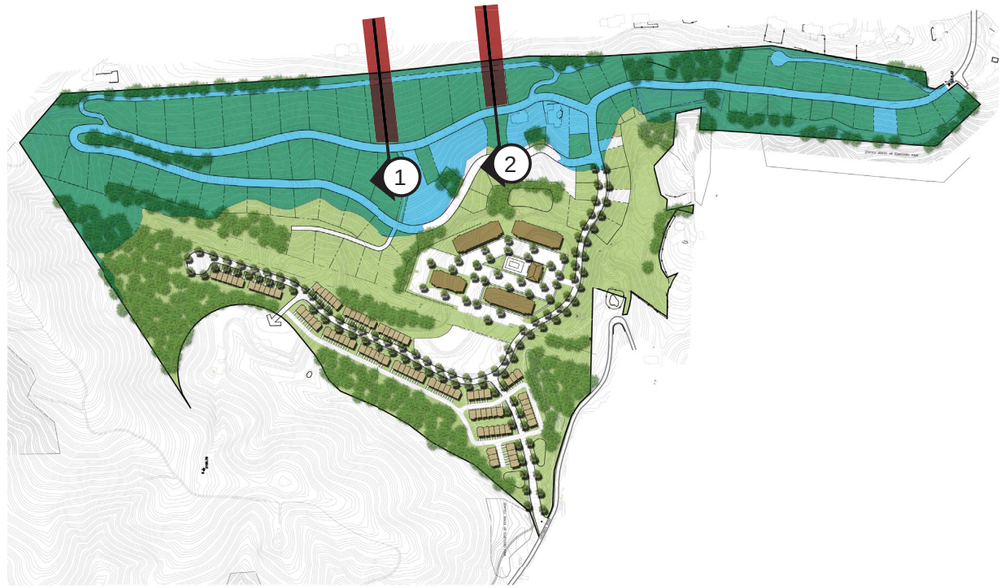
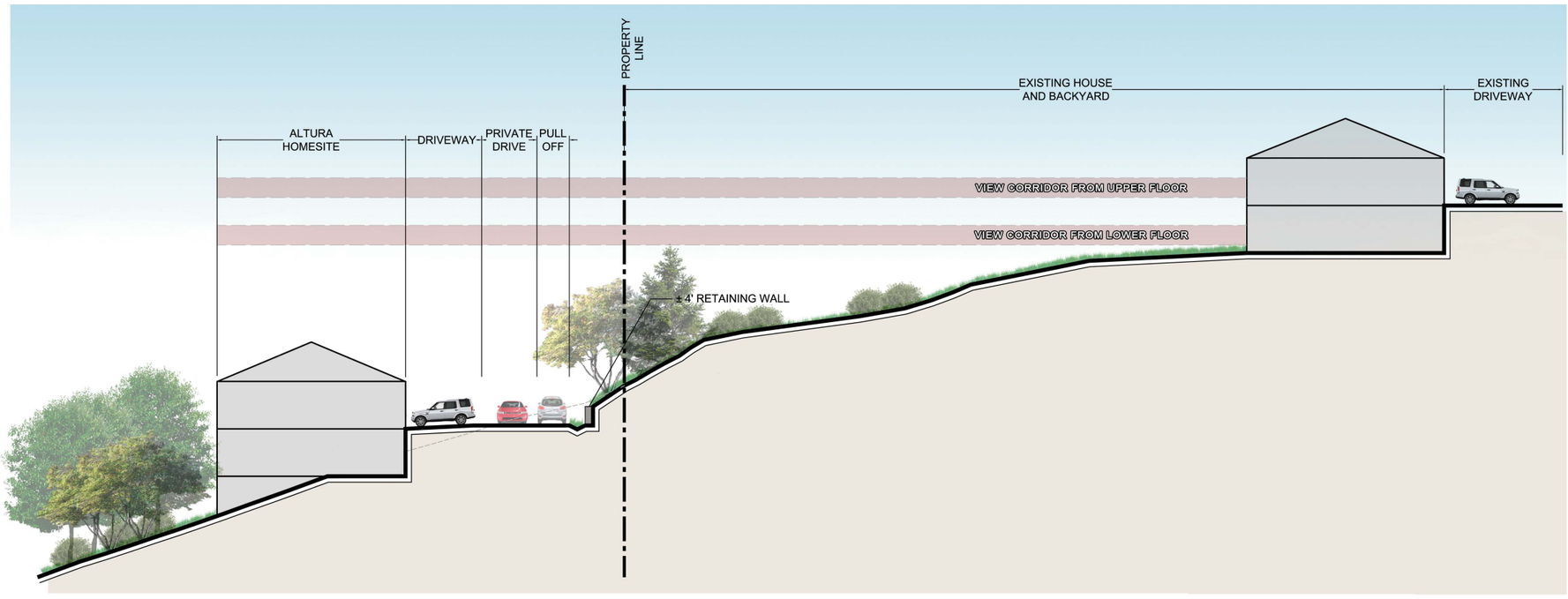




Section 1

Scale: 1/16” = 1’-0”



Section 2

Scale: 1/16” = 1’-0”

Altura

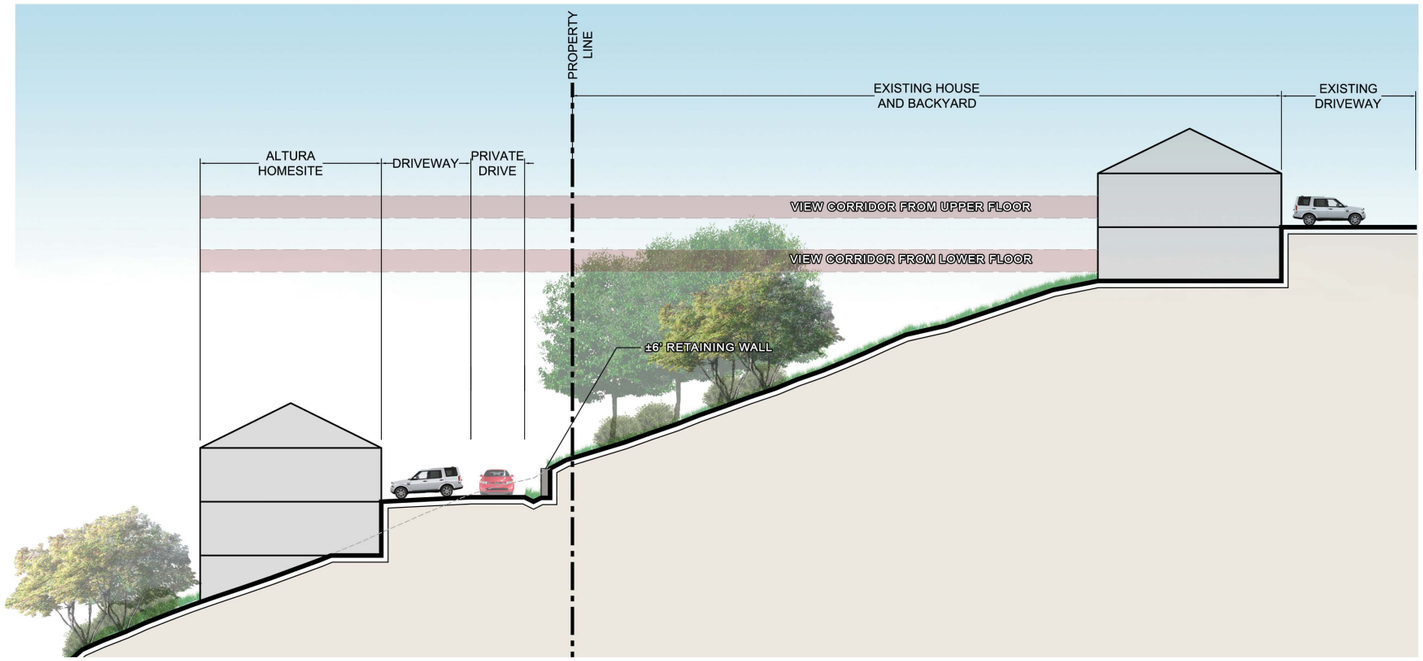
View Corridor Exhibits

March 3, 2025

28 Hi Landa Acres
Weaverville, NC 28787
828.545.5989
www.sds-la.com

SITE DESIGN STUDIO

landscape architecture
planning
project management
construction observation



Section 3

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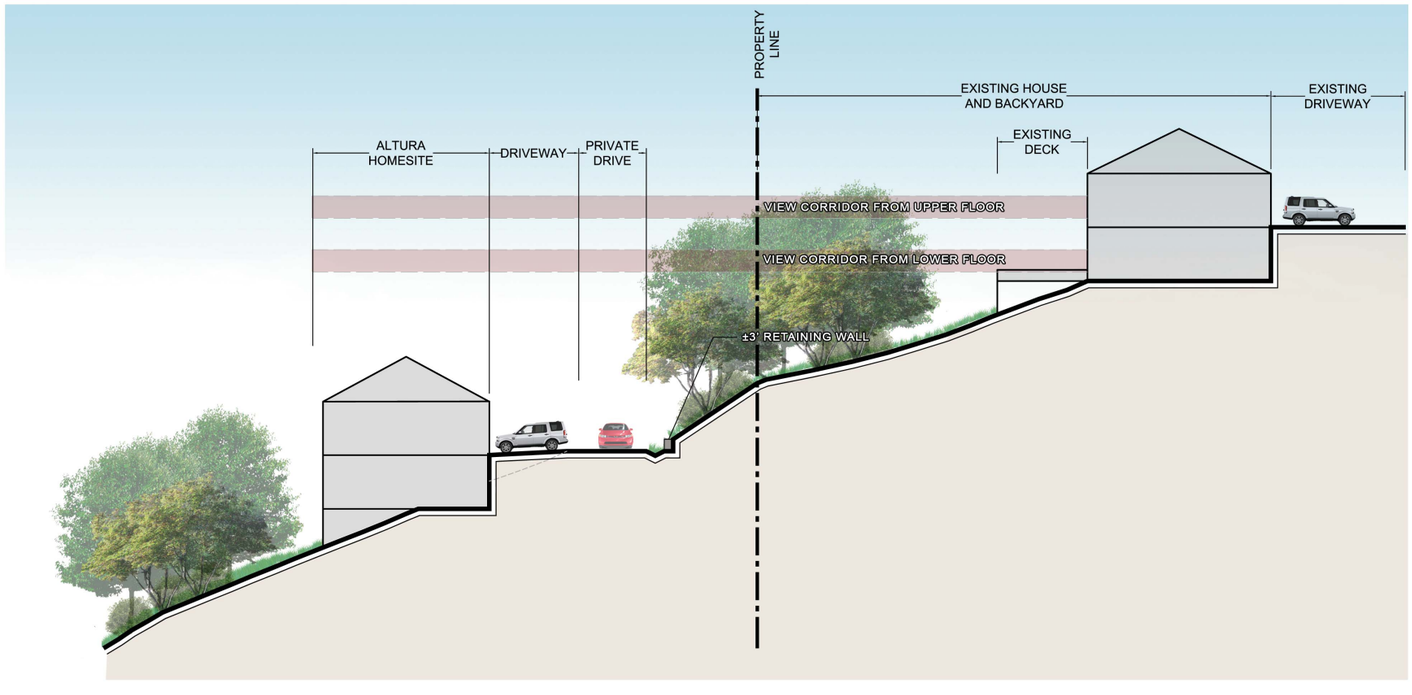

Section 4

Scale: 1/16” = 1’-0”



Altura

View Corridor Exhibits

drapac capital partners

ST. BOURKE ASSET MANAGEMENT

March 3, 2025

28 Hi Landa Acres
Weaverville, NC 28787
828.545.5989
www.sds-la.com

SITE DESIGN STUDIO

landscape architecture
planning
project management
construction observation

Exhibit F

McAdams
80 Charlotte Street
Suite 40
Asheville, NC 28801
919. 361. 5000

STB25001.00

March 14, 2025

Dan Mason
St. Bourke Development

RE: Altura Riverside Development – Woodfin, North Carolina – Trip Generation

Dear Dan,

Trip Generation

This letter presents a summary of the trip generation comparison for the Altura Riverside Development to reflect the change in land use density. The project is located east of Riverside Drive (SR 0251) and north of Altura Parkway in the town of Woodfin, Buncombe County, North Carolina. A Traffic Impact Analysis (TIA) was completed for the Altura Residential Development (SC 2018-146) on November 1, 2019. The land use density of the development has been changed, and this letter provides the new site plan with density in **Attachment 1**.

Based on the previous TIA, the proposed development was expected to consist of:

- 340 multi-family residential units
- 100 single family residential units
- 440 Total residential units

The proposed new land use density is as follows:

- 227 multi-family residential units
- 82 single family residential units
- 91 Townhomes
- 400 Total residential units

Site Data

Based on the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition, and the suggested method of trip calculations provided in North Carolina Department of Transportations' (NCDOT) Rate vs. Equation spreadsheet, trips for the proposed development were calculated for weekday daily, weekday AM peak hour, and weekday PM peak hour. Refer to **Table 1** below, for a summary of the trip generation for the previous TIA land use. The 2019 TIA for the development is included in **Attachment 2**.

TABLE 1: TRIP GENERATION (BASED ON PREVIOUS TIA)

Land Use (ITE Code)	Density	Calculation Methodology	Daily Trips	AM Peak Hour			PM Peak Hour		
				Enter	Exit	Total	Enter	Exit	Total
Single Family-Detached (210)	100	DU	1040	19	57	76	64	38	102
Multi-Family (221)	340	DU	2530	35	118	153	111	65	176
Total	**440**	**DU**	**3570**	**54**	**175**	**229**	**175**	**103**	**278**

Refer to Table 2 below, for a summary of the trip generation for the proposed land use.

TABLE 2: TRIP GENERATION (BASED ON NEW LAND USE DESNSITY)

Land Use (ITE Code)	Density	Calculation Methodology	Daily Trips	AM Peak Hour			PM Peak Hour		
				Enter	Exit	Total	Enter	Exit	Total
Single Family-Detached (210)	82	DU	841	16	46	62	52	30	82
Signal Family -Attached (215)	91	DU	643	10	32	42	30	21	51
Multi-Family (221)	227	DU	1036	20	68	88	54	35	89
Total	**400**	**DU**	**2520**	**46**	**146**	**192**	**136**	**86**	**222**

Refer to Table 3 below, for a comparison of the trip generation for the previous land use and the proposed land use.

TABLE 3: TRIP GENERATION COMAPRISON

Condition	Density	Calculation Methodology	Daily Trips	AM Peak Hour			PM Peak Hour		
				Enter	Exit	Total	Enter	Exit	Total
Previous Land Usage	440	DU	3570	54	175	229	175	103	278
Proposed Land Usage	400	DU	2520	46	146	192	136	86	222
Difference	**-40**	**DU**	**1050**	**8**	**29**	**37**	**39**	**17**	**56**
% Difference	**-9%**	**DU**	**-29%**	**-14%**	**-17%**	**-16%**	**-22%**	**-17%**	**-20%**

Summary

The proposed development is expected to have 40 fewer residential units. Based on review of the ITE trip generation calculations, the proposed development is expected to generate approximately 37 fewer external trips (8 entering and 29 exiting) during the weekday AM peak hour and 56 fewer external trips (39 entering and 17 exiting) during the weekday PM peak hour and 1050 fewer daily trips. This represents 16 percent fewer AM peak hour trips and 20 percent few PM peak hour trips during an average weekday. With the anticipated trip generation for the proposed development, recommendations from the previous TIA are not expected to change significantly.

If you should have any questions or comments relative to this analysis, please feel free to contact me at 919.361.5000.

Sincerely,

McAdams

Signed by:
S. Colin Kinton
34B9AEEC3663481...

Colin Kinton, PE | Senior Project Engineer
ckinton@mcadamsco.com | 919. 361. 5000

Attachment:
1. Site Plan
2. 2019 TIA

LOT TYPE

(#) SINGLE FAMILY (STEEP SLOPE)	69 UNITS
(#) SINGLE FAMILY	13 UNITS
	82 UNITS
MULTI-FAMILY	225 UNITS
TOWNHOMES	91 UNITS
TOTAL UNITS	398 UNITS
OPEN SPACE	29.22 AC
OWNED BY OTHERS	

STEEP SLOPE AREA (Above 2200' & 20% slope)

STREET TREE

RECOMMENDED STREET TREE SPECIES

Key		Large Deciduous Trees
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QP		Quercus phellos Willow Oak



VICINITY MAP

North

0 60 120 240 360

Scale: 1"=120' MARCH 7, 2025 North

Altura
Rendered Master Plan

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construction observation

SITE DESIGN STUDIO

Altura Riverside Development

Woodfin, NC

Site Plan

Figure 2

McADAMS

ALTURA RESIDENTIAL DEVELOPMENT
TRANSPORTATION IMPACT ANALYSIS

FOR SUBMISSION TO:

Town of Woodfin, NC

Prepared For:
St. Bourke Development
1123 Zonolite Road NE, Suite 30
Atlanta, Georgia 30306

November 1, 2019
TPD # STBD.00001

Est. 1989
TRAFFIC PLANNING AND DESIGN, INC.

Prepared By:
Traffic Planning and Design, Inc.
1293 Hendersonville Road
Building A, Suite 9
Asheville, NC 28803

Phone: (828) 575-0133
E-mail: TPD@TrafficPD.com
Website: www.trafficpd.com

NC Business License #C-4448



Christy Staudt, P.E.
Project Manager

North Carolina License Number PE045387-E

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Appendix A: Project Correspondence
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EXECUTIVE SUMMARY

The purpose of this analysis is to examine the potential traffic impact associated with the proposed Altura Residential development on the roadway network in the Town of Woodfin, Buncombe County, NC. Based on this evaluation, the following conclusions were reached:

1. A project scoping request was sent to NCDOT on October 23, 2018. Final scoping approval was received on March 20, 2019.
2. The study area intersections included in this TIA are as follows:
   - Riverside Drive (SR 0251) and Goodman Road
   - Mills Place and Firethorne Drive
   - Mills Place and Newbridge Parkway
   - Newbridge Parkway and the Future I-26 Eastbound Ramps (US 19 Business)
   - Future I-26 Westbound Ramps with US 19 Business (& Future I-26 EB Ramps)
   - US 19 Business/Future I-25 EB Ramps & Weaverville Road (US 25/US 19 Business)
3. The project site is located east of Riverside Drive, north of Goodman Road. The proposed site will consist of 340 multi-family homes and 100 single-family homes.
4. Upon full build-out, the proposed development is expected to generate 229 new vehicle-trips during the weekday A.M. peak hour, and 278 new vehicle-trips during the weekday P.M. peak hour.
5. Access to the site is proposed via two existing driveways: one access to Goodman Road and one full-access driveway to Altura Parkway. In addition, an internal connection between the Altura Residential Development and the proposed Riverside Community Development will provide additional access to Riverside Drive.
6. Under the 2022 and 2025 projected conditions, with implementation of the site-related recommendations, all approaches and turning movements at the site driveway intersections with the external roadway network will operate at LOS B or better during weekday A.M. and P.M. peak hours.
7. Under 2022 projected conditions, all study area intersection movements will operate at the same LOS as under background (no-build) conditions or fall within NCDOT's allowable 25% delay increase between background (no-build) and projected (build) condition scenarios with the exception of the future I-26 WB Ramps/US 19 Business intersection during the P.M. peak hour which will be mitigated under 2025 conditions with implementation of the NCDOT planned interchange improvements.
8. Under 2025 projected (full-build) conditions, with implementation of NCDOT TIP programmed improvements and improvements identified as part of this study, all study area intersection movements will operate at the same LOS under projected (build) conditions as under background (no-build) conditions or will fall within NCDOT's allowable 25% delay increase between background (no-build) and projected (build) condition scenarios.
9. SIDRA roundabout analysis completed for the Future I-26 EB Ramps (US 19 Bus) & Newbridge Parkway intersection utilizing Year 2040 based projections developed for the TIP I-26 improvement project indicate acceptable operations and no approach failures
10. Traffic Planning and Design Inc. (TPD) recommends the following roadway improvements as outlined at the study area intersections:

Goodman Road & Riverside Drive (SR 0251)

» Evaluate re-alignment of Goodman Road to improve available sight distance

Altura Parkway & Dimora Drive/Driveway

» Provide a stop sign to control exiting traffic on Dimora Drive

Firethorn Drive & Stillview Drive (not studied due to low cul-de-sac volumes)

» The cul-de-sac on the western end of Firethorn Drive only serves one home. Given that Stillview Drive has a steep approach grade and is the main traffic movement, stop compliance is anticipated to be an issue. As such, the stop control should be reversed to provide stop control on the Firethorn Drive approaches, instead of Stillview Drive.

INTRODUCTION

Traffic Planning and Design, Inc. (TPD) has completed a Transportation Impact Analysis (TIA) for the proposed Altura Residential development in the Town of Woodfin in Buncombe County, North Carolina. The project site is located east of Riverside Drive (SR 0251), and north of Altura Parkway as shown in **Figure 1**. As shown in **Figure 2**, the proposed site will consist of 340 multi-family residential units and 100 single-family residential units.

This report has been prepared in accordance with NCDOT's *Policy on Street and Driveway Access to North Carolina Highways, 2003* and the *NCDOT Congestion Management Capacity Analysis Guidelines, 2015*. The project scope and the extent of the study area were submitted to NCDOT. Background growth rates and intersections of study were verified. All relevant correspondence pertaining to this project has been included in **Appendix A**.

Site Access Locations

The proposed site will be served by extension of the existing Altura Parkway via Wind Whisper Drive, an internal connection between Altura Residential and the proposed Riverside Community and connection to Goodman Road off of Riverside Drive. The proposed residential development will connect into or extend from existing local neighborhood streets rather than NCDOT maintained collector or arterial roadways. As such, the 100-foot minimum stem length requirement is not applicable for this development.

Please note, the applicant is aware of sight distance issues related to the Goodman Road intersection with Riverside Drive and is working on realignment plans that may include combining Goodman Road with the Riverside Community Development's Site Access A. Once a realignment configuration is available, plans will be submitted to NCDOT for review and approval.

BASE CONDITIONS

Existing Roadway Network

A field review of the existing roadway system in the study area was conducted. The existing roadway characteristics within the study area are summarized in **Table 1**. The existing lane configuration and intersection controls for the study area intersections are shown in **Figure 3**. The future lane configuration and intersection controls for the study area intersections are shown in **Figure 4**.

TABLE 1
ROADWAY CHARACTERISTICS WITHIN STUDY AREA

Roadway	Roadway Maintenance	Predominant Directional Orientation	Posted Speed Limit
Riverside Drive (SR 0251)	NCDOT	North-South	35 mph
Goodman Drive	Local	East-West	20 mph
Mills Place	Local	North-South	25 mph
Firethorn Drive	Local	East-West	Not Posted
Newbridge Parkway	Local	East-West	Not Posted
Future I-26 EB Ramps (US 19 Business)	NCDOT	North-South (@ Newbridge Parkway)	Not Posted
Weaverville Highway (US 25)	NCDOT	North-South	35 mph

Bicycle and Pedestrian Facilities

Based on observations during field visits at the study area intersections, there are no pedestrian accommodations present in the vicinity of the proposed development.

Mass Transit Facilities

There are no scheduled bus routes in the vicinity of the proposed development

Crash Data Investigation

Crash data were requested from NCDOT for the study area intersections. The data has not yet been received.

Existing Traffic Conditions

Manual Turning Movement Counts

Manual traffic counts were conducted on 15-minute intervals during the weekday morning (7:00 to 9:00 A.M.), and weekday evening (2:30 to 6:00 P.M.) peak periods. Data pertaining to heavy vehicles, pedestrians and transit vehicles were observed during the manual counts. Peak hours and count dates for the study area intersections are identified in **Table 2**.

TABLE 2
MANUAL TRAFFIC COUNT INFORMATION

Intersection	Date of Traffic Counts	Time Period	Intersection Peak Hour[1]
Riverside Drive (SR251) & Goodman Road	Tuesday October 30, 2018	Weekday A.M.	7:15 to 8:15 AM
		Weekday P.M.	4:30 to 5:30 PM
Mills Place & Firethorne Drive	Tuesday October 30, 2018	Weekday A.M.	7:30 to 8:30 AM
		Weekday P.M.	4:45 to 5:45 PM
Mills Place & Newbridge Parkway	Tuesday October 30, 2018	Weekday A.M.	7:30 to 8:30 AM
		Weekday P.M.	4:45 to 5:45 AM
Future I-26 EB Ramps (US 19 Bus) & Newbridge Parkway	Tuesday October 30, 2018	Weekday A.M.	7:30 to 8:30 AM
		Weekday P.M.	4:30 to 5:30 PM
Future I-26 WB Ramps & US 19 Business	Tuesday October 30, 2018	Weekday A.M.	7:30 to 8:30 AM
		Weekday P.M.	4:30 to 5:30 PM
Weaverville Road (US 25) & US 19 Business	Tuesday October 30, 2018	Weekday A.M.	7:45 to 8:45 AM
		Weekday P.M.	4:30 to 5:30 AM

(1) Peak Hour consists of the four consecutive 15-minute intervals where the highest traffic volumes occur.

Existing condition traffic volumes for the weekday A.M. and weekday P.M. peak hours are illustrated in **Figures 5 and 6**, respectively. Manual traffic count data sheets are provided in **Appendix B**.

Automatic Traffic Recorder Counts

Automatic Traffic Recorder (ATR) counts were conducted along Riverside Drive (SR 0251) in the vicinity of the proposed site driveways in order to determine the existing traffic volumes on a 24-hour weekday basis and speeds.

The ATR counts were conducted from Tuesday October 30, 2018 to Monday November 5, 2018. ATR counts are provided in **Appendix B**.

BACKGROUND CONDITIONS

Annual Background Growth

Background growth factors for the roadways in the study area were provided to TPD by NCDOT staff. A background growth trend factor of 1% per year was utilized. As such, the background growth factors were applied annually to yield overall growth percentages of 4.06% (1% per year, compounded over 4 years) for the 2022 future year and 7.21% (1% per year, compounded over 7 years) for the 2025 future year, where applicable.

Nearby Proposed Developments

Background (no-build) traffic conditions were calculated to include traffic volumes from proposed developments, though not operating under existing conditions, may be operating by the opening year (2022) of the proposed development. The following nearby planned development was included in this study:

Riverside Community is proposed to consist of 278 single-family homes and 40 multi-family homes to be constructed in two phases. Phase I will consist of 149 single-family homes and Phase II will consist of 129 single-family homes and 40 multi-family homes. The proposed development will be located on the north side of Goodman Road, east of Riverside Drive. Trip generation and distributions were for this development were based on the *Riverside Community Development TIA*, prepared by TPD and submitted to NCDOT on July 25, 2019 (resubmitted on October 1, 2019). Consistent with the submitted TIA, Phase I is anticipated to be built out by 2022 with full build-out by 2025.

The additional traffic volumes due to background growth and the background development were added to the existing traffic data to produce 2022 and 2025 background (no-build) condition traffic volumes. Background condition volumes for the weekday A.M. and weekday P.M. peak hours are illustrated in **Figures 7 and 8** for the 2022 future year conditions and **Figures 9 and 10** for the 2025 future year conditions.

Programmed Improvements

TIP A-0010AA & U 4715 B: These projects incorporate Future I-26 modernization and interchange/intersection upgrades in the study area. Improvements are anticipated at the Future I-26 Interchange at Weaverville Road (US 25 & US 19 Business) Exit 25 in Asheville. Based on figures provided by NCDOT's project consultant, AECOM, the identified interchange improvements within the study area are as follows:

- Newbridge Parkway and Route 19/I-26 EB Ramps: Construction of a single lane roundabout
- I-26 WB Off-Ramp: relocate the ramp to intersect with Route 19 opposite Weaverville Road (Business Route 25/19). The existing northbound Weaverville Road will merge with Merrimon Avenue, to become the new westbound approach.
- Weaverville Road (Business Route 25/19) and Relocated I-26 WB Off-Ramp: A separate right turn lane and thru lane on the eastbound approach. Two thru lanes and a separate right turn lane on the westbound approach. Separate left, thru and right turn lane on the northbound approach. Dual lefts and dual rights on the southbound Weaverville Road approach.

Year 2025 volumes with implementation of the TIP were developed based on the 2040 future volumes and I-26 interchange improvements identified by NCDOT's consultant AECOM. TPD developed 2025 base (no-build) volumes by interpolating between the existing 2018 volumes and 2040 future year volumes, and then adding the Altura Residential Development site traffic. Study area intersections, which were not included in AECOM's TIP analysis, were assumed to experience a growth rate of 1% per year, consistent with the 2022 future year analyses.

Relevant volume projection and future lane configuration figures provided by AECOM as well as TPD calculations are included in **Appendix C**.

PROJECT CONDITIONS

Trip Generation

The trip generation rates for the proposed development were obtained from the manual *Trip Generation*, 10th Edition, 2017, an Institute of Transportation Engineers (ITE) Informational Report. The statistics in *Trip Generation* are empirical data based on more than 4,800 trip generation studies. The data are categorized by Land Use Codes, with total vehicular trips for a given land use estimated using an independent variable and statistically generated rates or equations.

For the proposed development, Land Use Codes 210 (Single-Family Detached Housing) and 220 (Multi-Family Housing, Low Rise) from *Trip Generation* was used to calculate the number of vehicular trips the development will generate during the following time periods: (1) average weekday; (2) weekday A.M. peak hour; and (3) weekday P.M. peak hour. **Table 3** shows the rates/equations and directional percentages for the analyzed time periods.

TABLE 3
ITE TRIP GENERATION DATA

Land Use	ITE #	Time Period	Equations/Rates	Entering %
Single-Family Detached Housing	210	Weekday A.M. Peak Hour	T = 0.71*(X) + 4.8	25%
		Weekday P.M. Peak Hour	Ln(T) = 0.96*Ln(X) + 0.20	63%
		Weekday	Ln(T) = 0.92*Ln(X) + 2.71	50%
Multi-Family Housing (Low Rise)	220	Weekday A.M. Peak Hour	Ln(T) = 0.95*Ln(X) – 0.51	23%
		Weekday P.M. Peak Hour	Ln(T) = 0.89*Ln(X) – 0.02	63%
		Weekday	T = 7.56*(X) – 40.86	50%

T = number of site-generated vehicular trips
X = independent variable (dwelling units)

The calculated trip generation for the proposed development is shown in **Table 4**.

TABLE 4
TRIP GENERATION SUMMARY

Time Period	Land Use	Size	Altura Residential Development		
			Total	Enter	Exit
A.M. Peak Hour	Single-Family	100 du	76	19	57
	Multi-Family	340 du	153	35	118
	Total	**440 du**	**229**	**54**	**175**
P.M. Peak Hour	Single-Family	100 du	102	64	38
	Multi-Family	340 du	176	111	65
	Total	**440 du**	**278**	**175**	**103**
Weekday	Single-Family	100 du	1040	520	520
	Multi-Family	340 du	2530	1265	1265
	Total	**440 du**	**3570**	**1785**	**1785**

Based on the trip generation analysis summarized in **Table 4**, the proposed development will generate approximately 229 new trips during the weekday A.M. peak hour, and 278 new trips during the weekday P.M. peak hour at full build out.

Trip Distribution

The distribution of trips generated by the proposed development was based on the local road network, the existing traffic patterns, the proposed use of the site, and the site driveway locations. The new trips for the proposed development were distributed to the local roadway network based on the percentages shown in **Table 5**.

TABLE 5
TRIP DISTRIBUTION PERCENTAGES

Direction - To/From	Assignment (To/From)	AM Distribution Percent		PM Distribution Percent	
		Enter	Exit	Enter	Exit
North	Via Future I-26	15%	10%	15%	20%
	via Weaverville Road (US Bus 19)	5%	5%	5%	5%
South	via Riverside Drive (SR 0251)	5%	5%	5%	5%
	via Future I-26	45%	50%	40%	45%
	via Weaverville Road (US 25)	30%	30%	35%	25%

Trip assignment percentages for the 2022 opening year are shown in **Figures 11 and 12**, for the weekday A.M. peak hour, respectively. The assignment of site-generated trips for the 2022 opening year of the proposed development during the weekday A.M. and P.M. peak hours are shown in **Figures 13 and 14**, respectively.

Trip assignment percentages for the 2025 design year are shown in **Figures 15 and 16**, for the weekday A.M. peak hour, respectively. The assignment of site-generated trips for the 2025 design year of the proposed development during the weekday A.M. and P.M. peak hours are shown in **Figures 17 and 18**, respectively.

Projected (Build) Condition Traffic Volumes

The site-generated trips for the proposed development were added to the 2022 base (no-build) condition traffic volumes to develop 2022 projected (build) condition traffic volumes.

Projected condition traffic volumes for the future year of 2022 for the weekday A.M. and P.M., peak hours are shown in **Figures 19 and 20**, respectively. Projected condition traffic volumes for the design year of 2025 for the weekday A.M. and P.M., peak hours are shown in **Figures 21 and 22**, respectively. Traffic volume development worksheets are contained in **Appendix C**.

LEVELS OF SERVICE FOR AN INTERSECTION

For analysis of intersections, level of service is defined in terms of delay, which is a measure of driver discomfort and frustration, fuel consumption, and lost travel time. LOS criteria is stated in terms of control delay per vehicle for a one-hour analysis period. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The criteria are shown in **Table 6**. Delay, as it relates to level of service, is a complex measure and is dependent upon a number of variables. For signalized intersections, these variables include the quality of vehicle progression, the cycle length, the green time ratio, and the volume/capacity ratio for the lane group in question. For unsignalized intersections, delay is related to the availability of gaps in the flow of traffic on the major street and the driver's discretion in selecting an appropriate gap for a particular movement from the minor street (straight across, left or right turn).

TABLE 6
LEVEL OF SERVICE CRITERIA
UNSIGNALIZED AND SIGNALIZED INTERSECTIONS[1]

Level of Service	Control Delay Per Vehicle (Seconds)	
	Signalized	Unsignalized
A	< 10	< 10
B	> 10 and < 20	> 10 and < 15
C	> 20 and < 35	> 15 and < 25
D	> 35 and < 55	> 25 and < 35
E	> 55 and < 80	> 35 and < 50
F	> 80 or v/c > 1.0	> 50 or v/c > 1.0

1 Obtained from Exhibits 18-4 and 19-1 of the Transportation Research Board's Highway Capacity Manual 2010

CAPACITY ANALYSIS METHODOLOGY

Capacity analyses were conducted for the weekday A.M. and P.M., peak hours at the study area intersections. These analyses were conducted according to the methodologies contained in the 2010 *Highway Capacity Manual* (HCM) using *Synchro 10* software, a Trafficware product. The NCDOT TIP planned roundabout at the intersection of Newbridge Parkway at I-26 Eastbound Ramps and US 19 Business has been analyzed utilizing *SIDRA Intersection 8.0* software by Akcelik and Associates Pty Ltd.

The following conditions were analyzed, as applicable:

- Existing conditions;
- 2022 Background conditions (build-out year without development);
- 2022 Projected conditions (build-out year with development);
- 2025 Background conditions (NCDOT TIP project implementation without development);
- 2025 Projected conditions (NCDOT TIP project implementation with build-out of development);
- 2040 Background conditions (NCDOT TIP project implementation without development for the Newbridge Parkway at I-26 Eastbound Ramps and US 19 Business intersection only); and
- 2040 Projected conditions (NCDOT TIP project implementation with full build-out of both Riverside Community and Altura Residential developments for the Newbridge Parkway at I-26 Eastbound Ramps and US 19 Business intersection only).

In addition, capacity analyses were conducted at the proposed site driveway intersections under the 2022 and 2025 projected conditions. In accordance with NCDOT's *Policy on Street and Driveway Access to North Carolina Highways*, the following default factors have been utilized:

- Future year 2022 and 2025 analysis peak hour factors have been adjusted to 0.90 at all study area intersections.
- Under existing condition analyses, truck percentages were entered for each movement based on the existing turning movement counts. Under 2022 and 2025 future-year analyses, truck percentages were increased as necessary to show a minimum of 2% trucks.
- The right turns on red (RTOR) option has not been utilized at signalized intersections;
- Where signalized intersections have left-turn signal phasing, future year 2022 and 2025 analyses have assumed phasing to be protected only.
- Pedestrian timings have not been utilized for this analysis.

- When pedestrian signal equipment is present and/or proposed, the default walk times have been set to 7.0 seconds.
- For existing signalized intersections, the signal timing settings indicated on NCDOT record traffic signal plans were utilized.
- Under existing conditions, yellow and all red timings are consistent with the NCDOT record traffic signal plans.
- Under future conditions, yellow and all red timings are equal to 7 seconds (5 seconds for yellow, 2 seconds for red), per NCDOT guidelines.
- Total lost time for all conditions is equal to 5 seconds; the lost time adjust is calculated based on the corresponding yellow + all red timing and a startup lost time of 2 seconds.

The capacity analysis worksheets are included in **Appendix D.** Existing NCDOT traffic signal plans are included in **Appendix E.**

NCDOT's Transportation Impact Study Guidelines outlined in NCDOT's *Policy on Street and Driveway Access to North Carolina Highways*, dated July, 2003 contain the following criteria regarding levels of service:

- Page 21-22 of the Guidelines state that the applicant will be required to identify mitigation improvements to the roadway network if at least one of the following conditions exists when comparing base network conditions to project conditions:
- The total average delay at an intersection or individual approach increases by 25% or greater, while maintaining the same level of service;
- The Level of Service degrades by at least one level;
- Level of Service is "F"; and
- Page 22 of the Guidelines state that for turning lanes, improvements shall be identified when the analysis indicates that 95th percentile queue exceeds the storage capacity of the existing lane.

2022 OPENING YEAR ANALYSIS

LEVELS OF SERVICE IN THE STUDY AREA

Level of service (LOS) matrices for the study area intersections are shown in **Table 7** for the weekday A.M., and weekday P.M. peak hours.

TABLE 7
LEVEL OF SERVICE DELAY (SECONDS) SUMMARY

Intersection	Move-ment	Weekday A.M. Peak Hour							Weekday P.M. Peak Hour						
		Existing Condition		2022 Conditions					Existing Condition		2022 Conditions				
				Background		Projected		%			Background		Projected		%
		LOS	Delay	LOS	Delay	LOS	Delay	Change[1]	LOS	Delay	LOS	Delay	LOS	Delay	Change[1]
Riverside Drive (SR 0251) & Goodman Rd	WB LR	A	9.3	A	9.5	A	9.5	0%	A	9.9	B	10.2	B	10.2	0%
	SB L	A	8.4	A	8.5	A	8.5	0%	A	8.1	A	8.2	A	8.2	0%
Mills Place & Firethorne Drive	EB LR	A	8.6	A	8.7	A	9.6	10%	A	8.6	A	8.7	A	9.1	5%
	NB L	A	7.3	A	7.3	A	7.4	1%	A	7.3	A	7.4	A	7.7	4%
Mills Place & Newbridge Parkway[2]	EB LTR	A	6.3	A	4.8	A	5	4%	A	5.4	A	6.6	A	4.4	-33%
	WB LTR	A	0.4	A	0.1	A	0.8	700%	A	0.6	A	1.2	A	1.3	8%
	NB LTR	A	3.1	A	4.6	A	4.4	-4%	A	3.8	A	3.9	A	4.2	8%
	SB LTR	A	4.4	A	4.8	A	3.8	-21%	A	4.3	A	4.7	A	5.5	17%
Newbridge Parkway & I-26 EB Ramps/US 19 Business	EB L	B	11.9	B	12.8	C	16.7	30%	B	13	B	13.7	C	22.4	64%
	EB R	A	9.9	B	10.1	B	10.8	7%	A	9.6	A	9.5	A	9.9	4%
	NB L	A	8.1	A	8.2	A	8.3	1%	A	7.8	A	7.9	A	8.3	5%
Future I-26 WB Ramps & US 19 Business	EB L	A	8.25	A	8.4	A	8.5	1%	A	9.2	A	9.7	B	10.2	5%
	NB L	B	13.3	B	14.2	C	16.8	18%	B	14	C	17	D	27.6	62%
	NB TR	B	13.8	B	14.9	C	16.5	11%	B	12	B	13.5	B	14.2	5%
US 19 Business (Future I-26 WB Ramps) & Weaverville Road (US 25/US 19 Business)	EB L	B	18.2	C	22	C	22.6	3%	B	18.8	C	30	D	36.7	22%
	EB TR	B	13.7	B	16	B	16.3	2%	B	12.9	B	18.7	C	21.2	13%
	WB LT	B	13.5	B	15.9	B	16.1	1%	B	13.2	B	19.2	C	21.8	14%
	WB R	B	13.2	B	15.4	B	15.6	1%	B	12.8	B	18.4	C	20.9	14%
	NB L	B	10.5	C	28.1	C	29.4	5%	B	12.5	D	40	D	43	8%
	NB TR	B	10.7	B	13.2	B	13.5	2%	B	14.2	B	18.6	B	18.2	-2%
	SB L	B	10.5	B	28.7	C	29.7	3%	B	15.1	D	38.3	D	43	12%
	SB T	B	17.4	C	22.2	C	23.3	5%	C	20.9	C	32.2	D	40.1	25%
	SB R	A	0	A	0	A	0	0%	A	0	A	0	A	0	0%
	ILOS	**B**	**15.5**	**C**	**21.0**	**C**	**21.9**	**4%**	**B**	**15.9**	**C**	**28.3**	**C**	**32.4**	**14%**
Altura Parkway & Dimora Drive	EB L	--	--	A	7.3	A	7.4	1%	--	--	A	7.3	A	7.7	5%
	SB LR	--	--	A	8.8	A	10	14%	--	--	A	8.8	B	10	14%
Riverside Drive & Charter Mountain Access A	WB LR	--	--	B	10.6	B	10.8	2%	--	--	B	10.3	B	10.5	2%
	SB L	--	--	A	7.4	A	7.4	0%	--	--	A	7.6	A	7.7	1%
Riverside Drive & Charter Mountain Access B	WB LR	--	--	B	10.5	B	10.6	1%	--	--	B	10.2	B	10.2	0%
	SB L	--	--	A	7.4	A	7.4	0%	--	--	A	7.6	A	7.6	0%
Dimora Drive & Altura Access	EB LR	--	--	--	--	A	9.3	--	--	--	--	--	A	9	--
	NB L	--	--	--	--	A	7.3	--	--	--	--	--	A	7.6	--

Background = No-Build scenario; Projected = Build scenario
[1]Percent increase in delay from background to projected conditions
[2]Due to unconventional stop control and HCM2010 limitations, this intersection was analyzed utilizing SimTraffic

As shown in **Table 7**, under 2022 projected conditions with the development of the proposed site, all movements at the study area intersections will operate at the same level of service (LOS) as under 2022 background (no-build) conditions or fall within NCDOT's allowable 25% delay increase during the weekday A.M. and P.M. peak hours with the exception of Newbridge Parkway at I-26 EB Ramps/US 19 Business and

Future I-26 WB Ramps at US 19 Business. These two intersections are expected to have acceptable delay and levels-of-service; however, the increase in delay exceeds the allowable limit of 25 percent. Both of these intersections are expected to be reconfigured with implementation of the NCDOT TIP A-0010AA & U-4715B projects.

QUEUE ANALYSIS

Queue analyses were conducted at the study area intersections using *Synchro 10* software. For this analysis, both the 95th percentile Synchro queue and the maximum SimTraffic queue were evaluated. The higher of the two is reported in **Table 8.** The 95th percentile queue is defined as the queue length that is exceeded in 5% of the signal cycles. As an example, for a signal with a 90-second cycle, this means that the 95th percentile queue length will be exceeded during 2 of the 40 signal cycles that occur during the peak hour. The queue analysis results are summarized in **Table 8** for the analyzed peak hours.

TABLE 8
MAXIMUM SIMTRAFFIC QUEUE (FEET) ANALYSIS YEAR 2022

Intersection	Move-ment	Available Storage	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour		
			Existing Condition	2022 Conditions		Existing Condition	2022 Conditions	
				Background	Projected		Background	Projected
Riverside Drive (SR 0251) & Goodman Road	WB LR	100+	0	28	28	0	52	28
	SB L	100+	0	67	0	0	0	0
Mills Place & Firethorne Drive	EB LR	100+	0	5[3]	23[3]	0	3[3]	13[3]
	NB L	100+	0	0	30	29	3[3]	29
Mills Place & Newbridge Parkway[2]	EB LTR	100+	48	50	47	48	27	27
	WB LTR	65[1]	0	0	0	56	56	93
	NB LTR	100+	30	28	30	54	31	54
	SB LTR	190[1]	55	78	31	31	30	31
Newbridge Parkway & I-26 EB Ramps/US 19 Business	EB L	65[1]	52	50	52	51	53	55
	EB R	65[1]	55	79	31	53	31	52
	NB L	170	26	27	27	26	49	75
Future I-26 WB Ramps & US 19 Business	EB L	200	21	20	20	103	42	41
	NB L	200+	27	48	64	50	714	714
	NB TR	200+	306	284	690	367	732	714
US 19 Business (Future I-26 WB Ramps) & Weaverville Road (US 25/US 19 Business)	EB L	100[1]	168[3]	220[3]	233[3]	185[3]	298[3]	343[3]
	EB TR	200+	148	152	133	113	140	137
	WB LT	75	20[3]	34	34	99	79	78[3]
	WB R	100+	3[3]	5	6	29	25	18[3]
	NB L	350+	122	95[3]	150	258	365[3]	460[3]
	NB TR	350+	113	90[3]	115	230[3]	335[3]	350[3]
	SB L	120	52	52	52	31	47	30
	SB T	300+	328	320[3]	330[3]	180[3]	283[3]	323[3]
	SB R	300+	0	0	0	0	124	203
Altura Parkway & Dimora Drive	EB L	50+	--	0	0	--	0	0
	WB LR	50+	--	55	54	--	30	55
Riverside Drive & Charter Mountain Access A	WB LR	600	--	16	31	--	30	31
	SB L	50+	--	0	0	--	0	0
Riverside Drive & Charter Mountain Access B	WB LR	230	--	31	52	--	57	29
	SBL	50+	--	0	0	--	0	0
Dimora Drive & Altura Access	EB LR	230	--	0	76	--	0	56
	NB L	50+	--	0	3	--	0	13[3]

Background = No-Build scenario; Projected = Build scenario
[1]Distance to adjacent intersection
[2]Due to unconventional stop control and HCM2010 limitations, this intersection was analyzed utilizing SimTraffic
[3]95th percentile Synchro queue

As shown in **Table 8,** adequate queue storage will be provided for the turn lanes in 2022 with construction of the proposed development or there will be no discernable change from background to projected conditions with exception of US 19 Business (Future I-26 WB Ramps) at Weaverville Road (US 25/US 19 Business). As previously indicated, these issues should be resolved with the planned NCDOT TIP projects. Queue analysis worksheets are included with the capacity analysis worksheets provided in **Appendix D**.

2025 BUILD OUT ANALYSIS WITH TIP IMPROVEMENTS

TPD analyzed the 2025 future year scenario with build-out of the proposed site and implementation of the anticipated TIP improvements at the I-26 interchange intersections with US 19. For the future intersection of US 19 Business (Future I-26 WB Ramps) and Weaverville Road (US 25/US 19 Business), signal timings were optimized for both Background and Projected conditions under Year 2025 conditions as actual timings are not known at this time. Future lane configurations are shown in **Figure 4**. Capacity and queueing analysis results are summarized in **Tables 9 and 10**.

Level of Service Analysis

As shown in **Table 9**, under 2025 projected conditions with full build-out of the proposed site, all movements at the study area intersections will operate at the same level of service (LOS) as under 2025 background (no-build) conditions or fall within NCDOT's allowable 25% delay increase during the weekday A.M. and P.M. peak hours with the following exception:

- Newbridge Parkway/Future I-26 EB Ramps (US 19 Business) during the A.M. and P.M. peak hours. The anticipated roundabout, with the I-26 TIP improvements, is expected to operate at ILOS B during the A.M. peak hour with a 31 percent increase in overall delay. The intersection is anticipated to operate at ILOS B during the P.M. peak hour with a 51 percent increase in delay for the northbound approach, 36 percent increase for the southbound approach and a 44 percent increase overall; however, additional mitigation or improvements are not recommended at this time.

See next page for Table 10.

TABLE 9
LEVEL OF SERVICE DELAY (SECONDS) SUMMARY

Intersection	Move-ment	Weekday A.M. Peak Hour							Weekday P.M. Peak Hour						
		Existing Condition		2025 Conditions[4]					Existing Condition		2025 Conditions[4]				
				Background		Projected		%			Background		Projected		%
		LOS	Delay	LOS	Delay	LOS	Delay	Change[1]	LOS	Delay	LOS	Delay	LOS	Delay	Change[1]
Riverside Drive (SR 0251) & Goodman Road	WB LR	A	9.3	A	9.7	B	9.7	0%	A	9.9	B	10.6	B	10.7	1%
	SB L	A	8.4	A	8.5	A	8.5	0%	A	8.1	A	8.4	A	8.4	0%
Mills Place & Firethorne Drive	EB LR	A	8.6	A	8.9	A	9.8	10%	A	8.6	A	8.8	A	9.3	6%
	NB L	A	7.3	A	7.4	A	7.5	1%	A	7.3	A	7.5	A	7.8	4%
Mills Place & Newbridge Parkway[2]	EB LTR	A	6.3	A	4.9	A	4.5	-8%	A	5.4	A	4.7	A	7.3	55%
	WB LTR	A	0.4	A	0.1	A	0.3	200%	A	0.6	A	0.4	A	0.9	125%
	NB LTR	A	3.1	A	3.3	A	3	-9%	A	3.8	A	3.2	A	2.5	-22%
	SB LTR	A	4.4	A	3.9	A	4.3	10%	A	4.3	A	6.1	A	4.2	-31%
Newbridge Parkway & I-26 EB Ramps/US 19 Business[3]	EB L	B	11.9	A	6.7	B	10.1	51%	B	13	A	5.5	A	6.8	24%
	EB R	A	9.9						A	9.6					
	NB L(T)	A	8.1	A	7.4	A	9.7	31%	A	7.8	A	8.4	B	12.7	51%
	SB TR	--	--	A	6.2	A	6.8	10%	--	--	A	5.5	A	7.5	36%
	ILOS	**--**	**--**	**A**	**6.8**	**B**	**8.9**	**31%**	**--**	**--**	**A**	**7**	**B**	**10.1**	**44%**
Future I-26 WB Ramps & US 19 Business	EB L	A	8.25	A	8.7	A	9	3%	A	9.2	B	10.4	B	11.5	11%
	NB L	B	13.3	--	--	--	--	--	B	14	--	--	--	--	--
	NB TR	B	13.8	--	--	--	--	--	B	12	--	--	--	--	--
US 19 Business (Future I-26 WB Ramps) & Weaverville Road (US 25/US 19 Business	EB L	B	18.2	C	20.3	C	21	3%	B	18.8	C	23.4	C	26.8	15%
	EB T(R)	B	13.7	B	19.5	C	20.2	4%	B	12.9	B	17.1	B	17.4	2%
	WB (L)T	B	13.5	B	16.5	B	16.5	0%	B	13.2	B	17.8	B	18.8	6%
	WB R	B	13.2	B	19.5	B	18.9	-3%	B	12.8	C	23.4	C	23.2	-1%
	NB L	B	10.5	C	24.1	C	25.9	7%	B	12.5	C	31.2	C	31.9	2%
	NB T	--	--	C	20.4	C	22.1	8%	--	--	C	26	C	26.7	3%
	NB R	B	10.7	B	16.6	B	17.9	8%	B	14.2	B	19	B	19.4	2%
	SB L	B	10.5	C	21.8	C	23.4	7%	B	15.1	C	29.3	C	29.9	2%
	SB T	B	17.4	--	--	C	--	--	C	20.9	--	--	--	--	--
	SB R	A	0	A	0	C	0	0%	A	0	A	0	A	0	0%
	ILOS	**B**	**15.5**	**B**	**19.7**	**C**	**20.4**	**4%**	**B**	**15.9**	**C**	**22.6**	**C**	**22.9**	**1%**
Altura Parkway & Dimora Drive	EB L	--	--	A	7.3	C	7.4	1%	--	--	A	7.4	A	7.8	5%
	SB LR	--	--	A	9	C	10.3	14%	--	--	A	9.1	B	10.4	14%
Riverside Drive & Charter Mountain Access A	WB LR	--	--	B	11.4	C	11.5	1%	--	--	B	11.1	B	11.3	--
	SB L	--	--	A	7.5	C	7.5	0%	--	--	A	7.8	A	7.8	--
Riverside Drive & Charter Mountain Access B	WB LR	--	--	B	11.1	C	11.2	1%	--	--	B	10.9	B	11	--
	SB L	--	--	A	7.5	C	7.5	0%	--	--	A	7.7	A	7.7	--
Riverside Drive & Charter Mountain Access C	WB R	--	--	A	8.8	C	8.8	0%	--	--	A	9.2	A	9.2	--
Dimora Drive & Altura Access	EB LR	--	--	--	--	C	9.5	--	--	--	--	--	A	9.2	--
	NB L	--	--	--	--	C	7.4	--	--	--	--	--	A	7.7	--

Background = No-Build scenario; Projected = Build scenario; [1]Percent increase in delay from background to projected conditions
[2]Due to unconventional stop control and HCM2010 limitations, this intersection was analyzed utilizing SimTraffic
[3]This intersection was analyzed utilizing SIDRA Intersection 8.0 software for Background and Projected scenarios
[4]Analysis includes NCDOT TIP improvements summarized earlier in this report.

Queue Analysis

TABLE 10
MAXIMUM SIMTRAFFIC QUEUE (FEET) ANALYSIS YEAR 2025

Intersection	Move-ment	Available Storage	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour		
			Existing Condition	2025 Conditions[5]		Existing Condition	2025 Conditions[5]	
				Background	Projected		Background	Projected
Riverside Drive (SR 0251) & Goodman Road	WB LR	100+	0	0	28	0	51	28
	SB L	100+	0	0	0	0	0	0
Mills Place & Firethorne Drive	EB LR	100+	0	8[3]	28[3]	0	5[3]	15[3]
	NB L	100+	0	3[3]	5[3]	29	29	29
Mills Place & Newbridge Parkway[2]	EB LTR	100+	48	44	45	48	27	47
	WB LTR	65[1]	0	0	0	56	0	20
	NB LTR	100+	30	9	11	54	38	11
	SB LTR	190[1]	55	52	31	31	49	54
Newbridge Parkway & I-26 EB Ramps/US 19 Business[4]	EB L	65[1]	49	29	77	50	29	50
	EB R	65[1]	31			77		
	NB L(T)	170 (575)	28	78	101	26	95	175
	SB TR	100+	--	57	64	--	33	46
Future I-26 WB Ramps & US 19 Business	EB L	200	21	30	31	103	53	96
	NB L	200+	27	--	--	50	--	--
	NB TR	200+	306	--	--	367	--	--
US 19 Business (Future I-26 WB Ramps) & Weaverville Road (US 25/US 19 Business)	EB L	200[1]	168[3]	83	58[3]	185[3]	40[3]	48[3]
	EB T(R)	200+	148	228[3]	270[3]	113	160[3]	183[3]
	WB (L)T	400+	20[3]	183	141	99	195[3]	243[3]
	WB R	375	3[3]	283[3]	293[3]	29	518[3]	525[3]
	NB L	100	122	61	87	258	200	199
	NB T	400+	113	210[3]	223[3]	230[3]	338	339
	NB R	150		92	89		250	113
	SB L	300	52	160	161	31	146	161
	SB T	300+	328	--	--	180[3]	--	--
	SB R	275	0	150	163	0	165	164
Altura Parkway & Dimora Drive	EB L	50+	--	0	0	--	0	0
	WB LR	100+	--	74	54	--	30	30
Riverside Drive & Charter Mountain Access A	WB LR	600	--	49	55	--	48	78
	SB L	50+	--	0	0	--	0	0
Riverside Drive & Charter Mountain Access B	WB LR	230	--	30	32	--	30	77
	SB L	50+	--	0	0	--	0	31
Riverside Drive & Charter Mountain Access C	WB R	230	--	0	29	--	0	0
Dimora Drive & Altura Access	EB LR	50+	--	0	76	--	0	54
	NB L	50+	--	0	5[3]	--	0	15[3]

Background = No-Build scenario; Projected = Build scenario
[1]Distance to adjacent intersection
[2]Due to unconventional stop control and HCM2010 limitations, this intersection was analyzed utilizing SimTraffic
[3]95th percentile Synchro queue
[4]This intersection was analyzed utilizing SIDRA Intersection 8.0 software for Background and Projected scenarios
[5]Analysis includes NCDOT TIP improvements summarized earlier in this report.

As shown in **Table 10,** adequate queue storage will be provided for the turn lanes in 2025 with construction and full build-out of the proposed development or there will be no discernable change from background to projected conditions. Queue analysis worksheets are included with the capacity analysis worksheets provided in **Appendix D**.

2040 BUILD OUT ANALYSIS WITH TIP IMPROVEMENTS

At the request of NCDOT, TPD performed a Future Year 2040 analysis for the NCDOT planned roundabout at the intersection of the I-26 EB Ramps at Newbridge Parkway. For this analysis, TPD developed traffic projections as follows:

- Future 2040 "no-build" (without Riverside or Altura Developments) volumes were developed by utilizing the 2040 projections developed by AECOM for the anticipated TIP improvements at the I-26 interchange.
- Future 2040 "build" volumes include the future 2040 "no-build" volumes, described above, plus the Altura Residential Development and Riverside Community Development projections.

TPD analyzed the 2040 future year scenario with full build-out of the proposed site and implementation of the anticipated TIP improvements at the I-26 interchange intersections with US 19. The additional analyses were completed only for the proposed TIP roundabout based on based on NCDOT *Congestion Management Capacity Analysis Guidelines*. Capacity and queueing analysis results are summarized in Tables **11** and **12**.

TABLE 11
YEAR 2040 SIDRA ROUNDABOUT ANALYSIS – LEVEL OF SERVICE SUMMARY

Intersection	Movement	2040 Conditions							
		Weekday A.M. Peak Hour				Weekday P.M. Peak Hour			
		Background		Projected		Background		Projected	
		LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Newbridge Parkway & I-26 EB Ramps/US 19 Business	EB L	A	6.9	B	14.1	A	5.4	A	7.7
	EB R								
	NB L(T)	A	9.9	C	18.2	A	9.4	C	21.5
	SB TR	A	8.4	B	10.5	A	5.4	A	9.1
	ILOS	**A**	**9.0**	**B**	**14.9**	**A**	**7.8**	**C**	**16.0**

As shown in **Table 11**, all movements and the overall intersection will operate at acceptable levels of service during year 2040 with implementation of the planned TIP improvement and development of the proposed site. Based on the summarized analysis, this intersection is not anticipated to fail prior to 2040.

TABLE 12
YEAR 2040 SIDRA ROUNDABOUT ANALYSIS – 95TH PERCENTILE QUEUE (FEET) SUMMARY

Intersection	Movement	2040 Conditions			
		Weekday A.M. Peak Hour		Weekday P.M. Peak Hour	
		Background	Projected	Background	Projected
Newbridge Parkway & I-26 EB Ramps/US 19 Business	EB L	21	123	23	55
	EB R				
	NB L(T)	161	479	133	679
	SB TR	90	115	37	63

As shown in **Table 12**, projected queue storage lengths are indicated for 2040 with construction and full build-out of the proposed development. As the design plans for the interchange are not yet available, adjustments can be made to ensure adequate storage is provided.

RECOMMENDATIONS

TPD has made the following recommendations in relation to the proposed Altura Residential Development:

Goodman Road & Riverside Drive (SR 02510)

- Evaluate re-alignment of Goodman Road to improve available sight distance

Altura Parkway & Dimora Drive/Driveway

- Provide a stop sign to control exiting traffic on Dimora Drive

Firethorn Drive & Stillview Drive (not studied due to low cul-de-sac volumes)

- The cul-de-sac on the western end of Firethorn Drive only serves one home. Given that Stillview Drive has a steep approach grade and is the main traffic movement, stop compliance is anticipated to be an issue. As such, the stop control should be reversed to provide stop control on the Firethorn Drive approaches, instead of Stillview Drive.

CONCLUSIONS

Based on the results of the transportation impact study, TPD offers the following conclusions:

- The project site is located east of Riverside Drive, north of Goodman Road. The proposed site will consist of 340 multi-family homes and 100 single-family homes;

- Upon full build-out, the proposed development is expected to generate 229 new vehicle-trips during the weekday A.M. peak hour, and 278 new vehicle-trips during the weekday P.M. peak hour;

- Access to the site is proposed via two existing driveways: one access to Goodman Road and one full-access driveway to Altura Parkway. In addition, an internal connection between the Altura Residential Development and the proposed Riverside Community Development will provide additional access to Riverside Drive;

- Under the 2022 and 2025 projected conditions, with implementation of the site-related recommendations, all approaches and turning movements at the site driveway intersections with the external roadway network will operate at LOS B or better during weekday A.M. and P.M. peak hours;

- Under 2022 projected conditions, all study area intersection movements will operate at the same LOS as under background (no-build) conditions or fall within NCDOT's allowable 25% delay increase between background (no-build) and projected (build) condition scenarios with the exception of the future I-26 WB Ramps/US 19 Business intersection during the P.M. peak hour which will be mitigated under 2025 conditions with implementation of the NCDOT planned interchange improvements;

- Under 2025 projected (full-build) conditions, with implementation of NCDOT programmed improvements and improvements identified as part of this study, all study area intersection movements will operate at the same LOS under projected (build) conditions as under background (no-build) conditions or will fall within NCDOT's allowable 25% delay increase between background (no-build) and projected (build) condition scenarios. However, the Future I-26 EB Ramps (US 19 Bus) & Newbridge Parkway roundabout is expected to operate at ILOS B during the A.M. peak hour with a 31 percent increase in overall delay and during the P.M. peak hour with a 44 percent increase overall. Additional mitigation or improvements are not recommended at this time.

- SIDRA roundabout analysis completed for the Future I-26 EB Ramps (US 19 Bus) & Newbridge Parkway intersection utilizing Year 2040 based projections developed for the TIP I-26 improvement project indicate acceptable operations and no approach failures.

Exhibit G

Altura Riverside Development

TIA Scoping Review

BULLET LIST OF CONGESTION MGMT. COMMENTS AND CONCERNS (SC-2023-242)

March 12, 2025

The Congestion Management Section (CMS) has performed a review of the scoping document for the proposed Altura Riverside Development prepared by McAdams (received March 11, 2025). According to the document, the proposed development is to be located in the northwest quadrant of Altura Pkwy and Dimora Dr east of NC 251 (Riverside Dr) in Woodfin, Buncombe County. The scoping document states that the full build-out of the development is to be constructed by 2031 and is to consist of residential land use generating 2,520 unadjusted daily trips. Based on our review, we have the following comments at this time:

Trip Generation

- The trip generation appears reasonable.

Trip Distribution and Growth Rate

- Trip distribution appears reasonable; however, we defer to the District office and local authorities for the final trip distribution.
- Growth factor of 2 percent appears too high based on AADT growth trends in this area, particularly on the eastern side of the study area; it is suggested to rather use a 0-1 percent growth factor.

Study Intersections

- Study intersections appear reasonable.

Site Plan and Proposed Driveways

- Site plan appears reasonable and appears to match with the trip generation.
- Please ensure that the proposed driveway(s) are in accordance with the NCDOT Driveway Manual and Internal Protected Stem lengths are provided with the TIA.

NOTE: This list should not be considered all-inclusive. Further review may identify additional areas of concern.

Exhibit H

TRAFFIC PLANNING AND DESIGN, INC.

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Memorandum

To: Christopher D. Medlin, PE
NCDOT Division 13, District 2

From: Colin Kinton, PE
Traffic Planning and Design, Inc. (TPD)

cc: Dan Mason
St. Bourke Development

Date: March 6, 2020

Re: Altura Residential Development
Sensitivity Analysis: I-26 Westbound Off Ramp Left Turn Lane to US-19 Business
Buncombe County, NC
TPD# STBD.00001

Purpose of Sensitivity Analysis

The Traffic Impact Analysis (TIA) completed for the Altura Residential Development (SC 2018-146) completed November 1, 2019 indicated that the I-26 Off Ramp approach to US-19 Business will experience delay increases exceeding 25 percent at build-out during the PM Peak Hour. Per NCDOT guidelines, delays greater than 25 percent increase necessitate mitigation. The mitigation identified to improve operations at this intersection is to lengthen the existing left turn lane on the I-26 Off Ramp approach to accommodate the increased queue length.

In order to better define the development's impacts over a phased construction schedule, a sensitivity analysis has been completed for the proposed development. The purpose would be to determine the point when turning volumes do not exceed the 25 percent delay increase that would necessitate the need for geometric improvement. This would allow the project to move forward while the improvements are phased and constructed to be in place when necessary.

Analysis Results

Based on the TIA results, the site impacts during the AM Peak Hour did not exceed the 25percent threshold for the site build conditions; therefore, only PM Peak Hour was included in this analysis. During the PM Peak Hour, the proposed development is anticipated to add 70 left turns to the I-26 Off Ramp turning left onto US-19 Business.

The results of this sensitivity analysis determined that an initial Phase 1 of the development can build out to a level that will generate up to 50 percent of the full buildout trip generation. At 50 percent of the trip generation, the site will have only 24.7 percent increase in delay during the PM Peak Hour, which is within the NCDOT allowable limits. The Level-of-Service Delay Summary is indicated in **Table 1** with the Synchro output attached.

TABLE 1

LEVEL-OF-SERVICE DELAY (SECONDS) SUMMARY

Intersection	Movement	Weekday A.M. Peak Hour									
		Existing Condition		2022 Conditions							
				Background		Projected		%	50% Phase 1		%
		LOS	Delay	LOS	Delay	LOS	Delay	Change	LOS	Delay	Change
I-26 WB Ramp & US-19 Business	NB L	C	14	C	17	D	27.6	62%	C	21.2	24.7%

At 50 percent of the full build out trip generation, the site will generate 144 PM Peak Hour trips (91 entering / 53 exiting). Utilizing the NCDOT approved trip distribution, the proposed Phase 1 development will result in the addition of 36 left turns exiting WB I-26 onto US-19 Business during the PM Peak Hour. **Figure 14** illustrates the Phase 1 PM peak hour site trips. **Figure 20** illustrates the proposed Phase 1 projected traffic volumes in Year 2020.

With a planned combination of both single-family homes and townhomes, an iterative evaluation was completed in order to determine the number of units of each type that would result in a 50 percent trip generation reduction. The following **Table 2** summarizes the maximum number of dwelling units that can be built prior to meeting this 50 percent trip generation threshold.

TABLE 2

PHASE 1 TRIP GENERATION SUMMARY

Time Period	Land Use	Size	Altura Residential Development		
			Total	Enter	Exit
P.M. Peak Hour	Single-Family	60 du	62	39	23
	Multi-Family (Low Rise)	145 du	82	52	30
	Total	**205 du**	**144**	**91**	**53**

RECOMMENDATIONS

TPD has made the following Phase 1 development recommendations based on the results of the above sensitivity analysis completed for the proposed Altura Residential Development.

I-26 Westbound Off Ramp and US-19 Business

Phase 1 Construction - Prior to left turn lane extension: Maximum of 60 single-family homes and 145 multi-family homes.

Phase 2 Construction – Allowed after left turn lane extension: Full site build out would be permitted for development after construction of the NCDOT required left turn lane improvement.

If you have any questions or comments related to this analysis, please contact Colin Kinton, at ckinton@trafficpd.com.

Attachments: Synchro Analysis Results
Traffic Volume Figures

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	60	238	0	0	426	335	92	4	360	0	0	0
Future Vol, veh/h	60	238	0	0	426	335	92	4	360	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	-	-	-	0	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	-4	-	-	2	-	-	-6	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	67	264	0	0	473	372	102	4	400	0	0	0

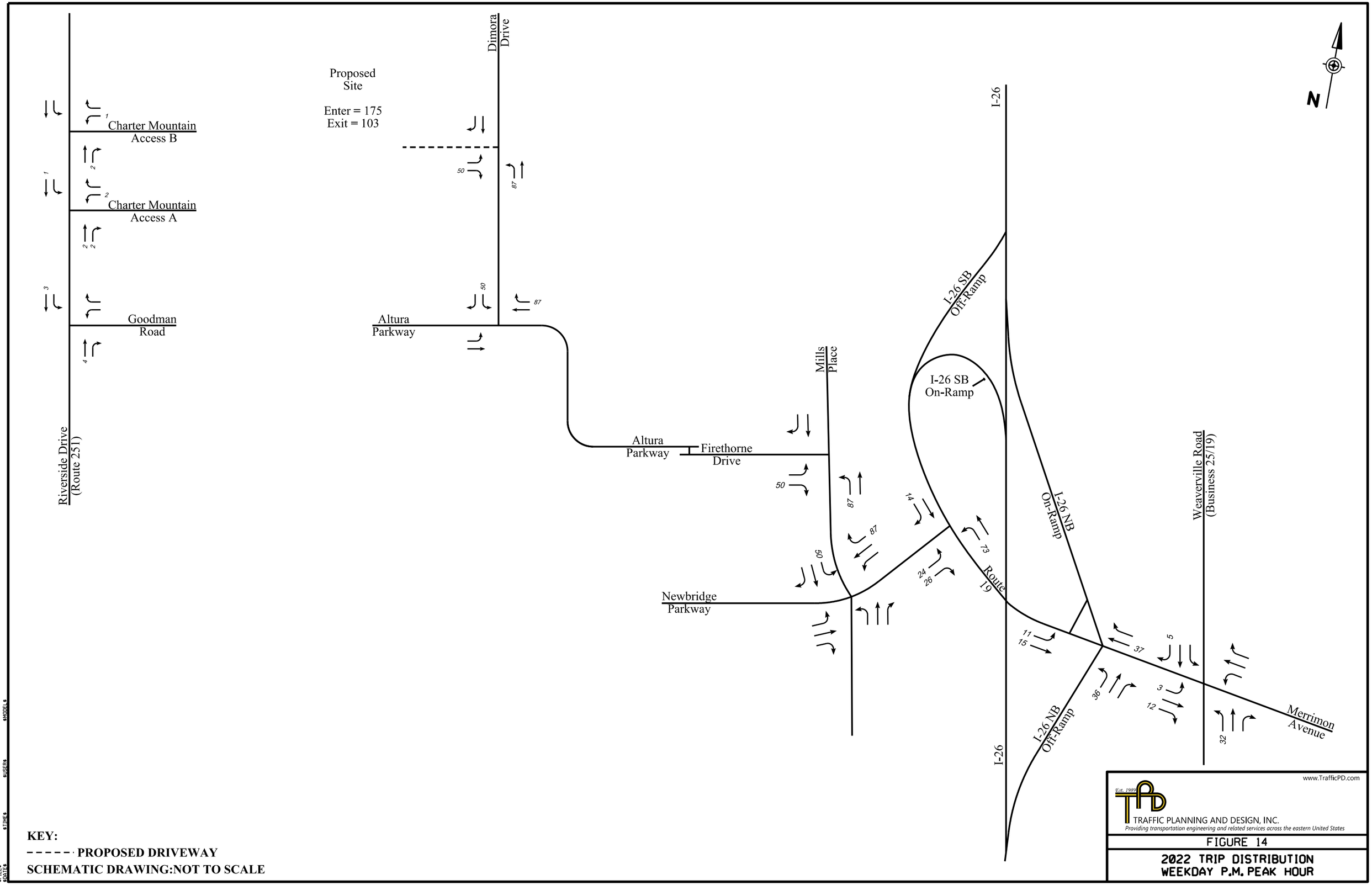
Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	845	0	-	-	-	0	1057	1243	264
Stage 1	-	-	-	-	-	-	398	398	-
Stage 2	-	-	-	-	-	-	659	845	-
Critical Hdwy	4.12	-	-	-	-	-	5.22	5.32	5.62
Critical Hdwy Stg 1	-	-	-	-	-	-	4.22	4.32	-
Critical Hdwy Stg 2	-	-	-	-	-	-	4.22	4.32	-
Follow-up Hdwy	2.218	-	-	-	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	792	-	0	0	-	-	354	264	809
Stage 1	-	-	0	0	-	-	775	688	-
Stage 2	-	-	0	0	-	-	641	502	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	792	-	-	-	-	-	324	0	809
Mov Cap-2 Maneuver	-	-	-	-	-	-	324	0	-
Stage 1	-	-	-	-	-	-	709	0	-
Stage 2	-	-	-	-	-	-	641	0	-

Approach	EB	WB	NB
HCM Control Delay, s	2	0	15.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	324	809	792	-	-	-
HCM Lane V/C Ratio	0.316	0.5	0.084	-	-	-
HCM Control Delay (s)	21.2	13.8	10	-	-	-
HCM Lane LOS	C	B	A	-	-	-
HCM 95th %tile Q(veh)	1.3	2.8	0.3	-	-	-

Intersection: 5: I-26 NB Off-Ramp/I-29 NB On-Ramp & Route 19

Movement	EB	EB	WB	NB	NB
Directions Served	L	T	TR	L	TR
Maximum Queue (ft)	68	101	87	162	603
Average Queue (ft)	22	28	5	64	249
95th Queue (ft)	51	76	32	120	454
Link Distance (ft)		295	91	698	698
Upstream Blk Time (%)			0		
Queuing Penalty (veh)			0		
Storage Bay Dist (ft)	200				
Storage Blk Time (%)					
Queuing Penalty (veh)					



KEY:

- - - - - PROPOSED DRIVEWAY

SCHEMATIC DRAWING:NOT TO SCALE

$FILE$ $DATE$ $TIME$ $USER$ $MODEL$

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FIGURE 14

2022 TRIP DISTRIBUTION
WEEKDAY P.M. PEAK HOUR

Charter Mountain Access C

Charter Mountain Access B

Charter Mountain Access A

Goodman Road

Riverside Drive (Route 251)

Proposed Site

Dimora Drive

Altura Parkway

Altura Parkway

Firethorne Drive

Newbridge Parkway

Mills Place

I-26

I-26 SB Off-Ramp

I-26 SB On-Ramp

I-26 NB On-Ramp

Route 19

I-26 NB Off-Ramp

Weaverville Road (Business 25/19)

Merrimon Avenue

N

KEY:

- - - - - PROPOSED DRIVEWAY

SCHEMATIC DRAWING:NOT TO SCALE

$FILE$ $DATE$ $TIME$ $USER$ $MODEL$

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FIGURE 20

2022 PROJECTED CONDITIONS WEEKDAY P.M. PEAK HOUR TRAFFIC VOLUMES

Exhibit N – Additional Buncombe County Tax Record Parcel Identification Numbers

PINs for Altura CZ
973121966700000
973132564200000
973132551200000
973039959400000
973131918600000
973131063800000
973121742500000
973121427400000
973132448300000
973132437300000
973132425300000
973121977000000
973132414300000
973132509500000
973132404300000
973121853900000
973131495300000
973121863300000
973121863600000
973131586500000
973131484400000
973121874000000
973121962900000
973121875300000
973121973200000
973121876600000
973121974600000
973131379600000
973121978400000
973121887000000
973131467600000
973121975900000
973121888300000
973121986200000
973131363600000
973121889600000
973121987500000
973121988800000

973121999200000
973039959900000
973131074200000
973121741200000
973121523700000
973131534700000
973131527500000
973039865300000
973131810900000
973131070700000
973131519900000
973131710900000
973049060400000
973131076700000
973121730800000
973121539000000
973131703300000
973039865800000
973131081000000
973049060900000
973131933500000
973131087100000
973039943200000
973039876300000
973131082400000
973049071400000
973131089600000
973039876800000
973131083700000
973049072900000
973131190100000
973039887200000
973131094000000
973049082400000
973131858000000
973121645000000
973039887700000
973131095300000
973049083800000

973121647300000
973039898100000
973131642800000
973049094300000
973121648600000
973121957000000
973121851700000
973039898600000
973049094800000
973121659000000
973130809000000
973140005300000
973131867800000
973121751200000
973130809500000
973131569700000
973121752600000
973131173000000
973121754900000
973121766200000
973131886800000
973121767500000
973131685500000
973121768800000
973121779200000
973140038200000
973121870500000
973130938600000
973140038700000
973132808500000
973121871800000
973130999100000
973121958400000
973121757400000
973039948300000
973132608400000
973140047200000
973121882100000
973130947200000

Exhibit N – Additional Buncombe County Tax Record Parcel Identification Numbers

973140047700000
973121884400000
973130946700000
973140056100000
973132825100000
973130956100000
973132623000000
973140056700000
973121964100000
973132833600000
973132631600000
973132577300000
973132852200000
973131050900000
973121755100000
973130777100000
973130772100000
973130689300000
973132862800000
973130685200000
973130664900000
973039845900000
973121965400000
973130660800000

973130576900000
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973130562700000
973130477900000
973133707700000
973133612000000
973039949900000
973131061300000
973121743800000
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973132596100000
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973132667700000
973131106600000
973121702600000
973121718200000
973121501000000
973121508200000
973121605500000
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TECHNICAL REVIEW REPORT

DATE: March 19, 2025
PREPARED BY: Ricky Hurley, Planning Director
OWNERS/APPLICANT: Stars & Stripes, LLC, Altura Communities, John Cummings, MJS Holdings, et al/Dan Mason
SUBJECT: Conditional Zoning – Altura

PROJECT SUMMARY: A conditional zoning review of a residential mixed-use development for 82 single family homes, 91 townhomes, and 225 multi-family units located at 2 Altura Parkway, 36 and 99999 Goodman Road being PIN's 9731-31-1730, 9731-31-1066, 9730-39-9432, and 230 others(?).

REVIEW NOTES:

- The project site is 77.5 acres located at the intersection Altura Parkway and Goodman Rd.
- Property is currently zoned Mountain Village and is requesting a conditional rezoning to Mountain Village-Conditional Zone (MV-CZ).
- All lots will be served by public water and sewer.
- All roads within the community are proposed to be publicly maintained. Goodman Road is state maintained road, with access from Windwhisper Drive maintained by the Town
- 398 units are proposed with a combination of single family, multi-family, and townhouse units proposed, being 82 single family units, 225 multi-family units, and 91 townhouse units.
- The subdivision was previously platted at various times from 2008
- Any proposed Mountain Village-CZ zoning district setbacks will be regulated by the proposed conditional zoning ordinance. Any proposed?
- There are no minimum lot width, lot size, or structure size standards in the Mountain Village zoning district. Dimensional requirements are set by the proposed conditional zoning.
- The maximum height of all structures shall be limited to 35', as noted in the Draft Exhibit D.
- Multiple stormwater ponds are proposed and will require a separate stormwater permit to be reviewed and issued by the Town of Woodfin.
- Noted the overall reduction in single family lots. For townhouses, will the number of lots/units be the same, less/more?

PLANNING:
Changes required to plans:

- Provide a detailed landscape plan or provide a statement as the intent to comply. Street trees will be required along all streets within the proposed subdivision. Street trees are required at a rate of one tree for every 40 linear feet of road with a 10' wide, undisturbed, planting zone unless modified in Exhibit D - Conditions.
- Provide calculations for density, land disturbance, and impervious area for the area above 2,200 feet in elevation and subject to Steep Slope as well as the remainder of the site.
- Provide open space calculations. Recreational open space is required at a rate of 500 square feet per residence, resulting in a total requirement of 199,000 square feet or approximately 4.6 acres. *Note: Exhibit D conditions associated with the rezoning may hold the project to a higher standard.*
- Provide justification for any modification related to sidewalks, greenways, and trails. Pedestrian connectivity (sidewalks/trails) are required in Mountain Village. Please evaluate and explain the lack of sidewalks along Goodman Road frontage. The Charter Mountain development will be connecting a trail near the entrance to this project Significant development is expected in this area and connectivity to future development will be important. Areas along Altura Parkway, multi-family, and townhouses should have sidewalks at a minimum.
- Confirm with the Buncombe County fire marshal the proposed road layout and access.
- Indicate the maintenance for all proposed streets. Recommend that a maintenance agreement be included in the POA documents for smaller access streets which are likely to remain private.
- Does Altura Communities represent ALL property owners listed on the ownership parcel sheet? Or is the application only for those properties owned by Stars & Stripes and Altura Communities? A narrative would clarify this as well as the general scope of the proposal.
- A sheet or exhibit showing properties specifically excluded from the request besides listing as "owned by others".
- The applicant is requesting a modification to the Steep Slope standards to reallocate the allowed disturbance and impervious surface area from 13 individual lots within the Steep Slope for the purpose of constructing a one-way access drive behind the uppermost lots. This was discussed but not clarified in the plan documents.

Requirements to be noted (no change required to plans):

- If the rezoning plan anticipates phasing of the project. Applicant will be required to provide a preliminary subdivision plat for each phase and follow the processes outlined in *Chapter 46 Subdivision* of the Town of Woodfin Code of Ordinances. The conditional zoning process for this project is conceptual in design.
- The Building and Grading & Erosion Control permits are reviewed and issued by Buncombe County.
- Connection to Goodman Road will require a driveway permit and reviewed/issued by the NCDOT.

EMERGENCY ADDRESSES:

Addresses and street names will be assigned by the Buncombe County E-911 Address Coordinator prior to issuance of any individual single-family permits. Applicant is advised to submit early in the development review process.

ROADS/ACCESS/LIGHTING:

- One connection to Goodman Road and Windwhisper Drive are planned with a stub street to the adjacent Charter Mountain development located to the west of the project. Clarify if streets shown to be public/private or combination of maintenance?.
- No lighting plan was provided and will be required prior to issuance of a zoning compliance permit. Commercial buildings and street lighting must comply with Chapter 26-Lighting.
- Will NCDOT require an updated TIA??

To ensure this development will meet the current NC Fire Code, I will need several other additions to this.

- A road profile showing grades and widths. Two access points to the multi-family apartments must meet aerial fire apparatus standards of 26 feet in width.
- The road grades and profiles must meet Chapter 5 and Appendix D of the 2018 NC Fire Code.
- Proof of adequate water, meeting the fire flow requirements and domestic demand. This will include any proposed additions of pump stations and tanks.
- No drive to any structure may be more than 600 feet from a fire hydrant.
- Please let them know this must be submitted prior to any fire code approval.

UTILITIES:

City of Asheville Water had previously issued two different allocations serve the development although both of these have since expired. A new allocation is required from either Woodfin Water or Asheville Water.

> We had issued an allocation for the project on 2 different occasions but all are expired. No application to renew has been received. Don't know the issues that Woodfin W&S would have serving the development but it appears they have existing infrastructure closer to this development then we do.
>
> COA WRD does have issues with providing service to this development. They had originally proposed extension from our existing line off Windwhisper but it cannot fully support the development without negative impacts to existing customers. So they were being required to extend down from our line on Riverside, near the old landfill entrance and connect the water all the way through to Windwhisper. It made more sense for them to do that in the last iteration because they had a pocket development closer to the end of the line on Riverside that did not connect to the part further south so they had to extend down some anyway to get water service into that pocket. That pocket is not included with this most recent concept so not sure of the willingness to make the extension from Riverside Dr.
>
> Summary, we will not approve their allocation unless they commit to the off site extension down riverside and loop the waterline to the end of our existing on Windwhisper.

Metropolitan Sewerage District will provide sanitary sewer to the project. Provide MSD allocation letter.

SW/EC/FLOOD:

The respective permit applications shall be reviewed and approved by Buncombe County prior to any construction or land disturbance occurring. A Town of Woodfin Storm Water review and permit will be required prior to issuance of the zoning compliance permit by the Town. Are there any intermittent or perennial streams?

RECOMMENDATION FROM
TOWN OF WOODFIN PLANNING BOARD
OF ADJUSTMENT TO
WOODFIN TOWN COUNCIL

Having reviewed the **Zoning Map Amendment** to rezone properties at 36 Goodman Road (PINs 9731-31-1730, 9730-39-9432, 9731-31-1066, 9731-21-7026, with additional PINS listed in Exhibit N) from MV Mountain Village and Residential District R-21 to Mountain Village MV-CZ on **April 1, 2025**, and having considered information from planning staff of the Town of Woodfin and comments from the other persons, pursuant to 160D-604(d), the Town of Woodfin Planning Board of Adjustment hereby adopts the following motion, effective April 1, 2025:

The Town of Woodfin Planning Board of Adjustment recommends approval of the proposed map amendment and finds that it is reasonable, in the public interest, and consistent with the Woodfin Together Comprehensive Plan in that the proposed rezoning will:

1. Use the Future Land Use Map to guide development decisions and connect existing and future activity centers with multimodal transportation for all users. (1.1.1 & 1.1.3)
2. Promote an integrated mix of housing types and affordability options while connecting existing and future activity centers with well-designed multimodal transportation connections. (1.1.2 & 1.1.3)
3. Extend or improve infrastructure needed to support residents and sustainable growth while promoting long-term fiscal responsibility by growth in areas with existing services. (1.1.8 & 1.2.6)
4. Protect environmentally sensitive areas such as floodplains, wetlands, and areas adjacent to streams and creeks while also encouraging accessibility to green spaces. (5.1.1 & 5.1.2)

Vote:

Ayes/No

This document is a true and accurate statement of the findings and recommendations of the Woodfin Planning Board of Adjustment.

_____ _____

Chair Date