

## Plan and Development Goals

- Create a plan to encourage and support development of mixed-use development including office, institutional, business and residential sites, creating a coordinated, cohesive and integrated form.

- Minimize impacts to adjacent existing development.

- Protect floodplain and similar areas not suitable for development.

- Make areas for open space accessible to businesses and the public, including an area for a park, and accommodate the Carolina Thread Trail with a cross-county interconnection.

- Design an integrated road network with internal and external connections providing safe and convenient access the NC16 / NC150 interchange.

- Continue with NCDOT to improve the unsafe traffic conditions at the NC150 / Henry Dellinger Road intersection.

- Enhance stormwater protection by including LID (low impact design) practices and design as amenities with environmental and educational opportunities.

## Land Use Characteristics

### Residential

By comparison, residential makes up approximately one third of the land use in the planning area. The plan includes 134 acres of single family, 35 acres of multi-family and several acres within the mixed use portions of the plan where other residential options should be considered. The bulk of the single family portion already exists and is partially built out. This land use is appropriate to remain consistent with the surrounding residential lot sizes typically ranging between 1 and 3 acres.

Multi-Family residential is encouraged between the single family and the mixed use/commercial portions of the plan to be a transition between land uses and to meet the housing needs of the retail and hospitality workforce in the area. There are opportunities for other types of residential uses in the plan as well. Town houses, for example are a great way to integrate residential land use into a community center including other neighborhood businesses such as dry cleaners, small scale restaurants and possibly even a small grocery market.

### Mixed Use /Commercial

Most State and US Highways are classified as having controlled access, meaning that there are only certain locations called "interchanges" where vehicles are allowed to enter and exit the roadway. When an interchange is built, the land in close proximity is placed at a higher value and the pressure to develop that land increases. As a result, a mixture of uses is often the best scenario for planning these areas, providing a multitude of options for housing, employment and everyday living.

As part of a corridor plan adopted by Catawba County, the land directly adjoining the NC 16 / NC 150 interchange has been identified as prime land for commercial and a mixed use community center. In recent years, a development governed under that plan has been proposed and partially completed that includes a variety of uses. To remain consistent with that plan and the emerging development in Catawba County, the northernmost portion of the planning boundary in Lincoln County consisting of 145 acres around the interchange has been classified as mixed use and commercial also.

The need for additional residential choices, office space and options for commercial businesses will increase as growth in this area of the county continues. The mixed use and commercial portions of this plan present viable land for these types of uses and can provide quick and easy access to the highway for commuters. Although while the interchange provides a quick departure from the area, the land for mixed use should also be viewed as a center or node, including services and businesses that act to support the local community.

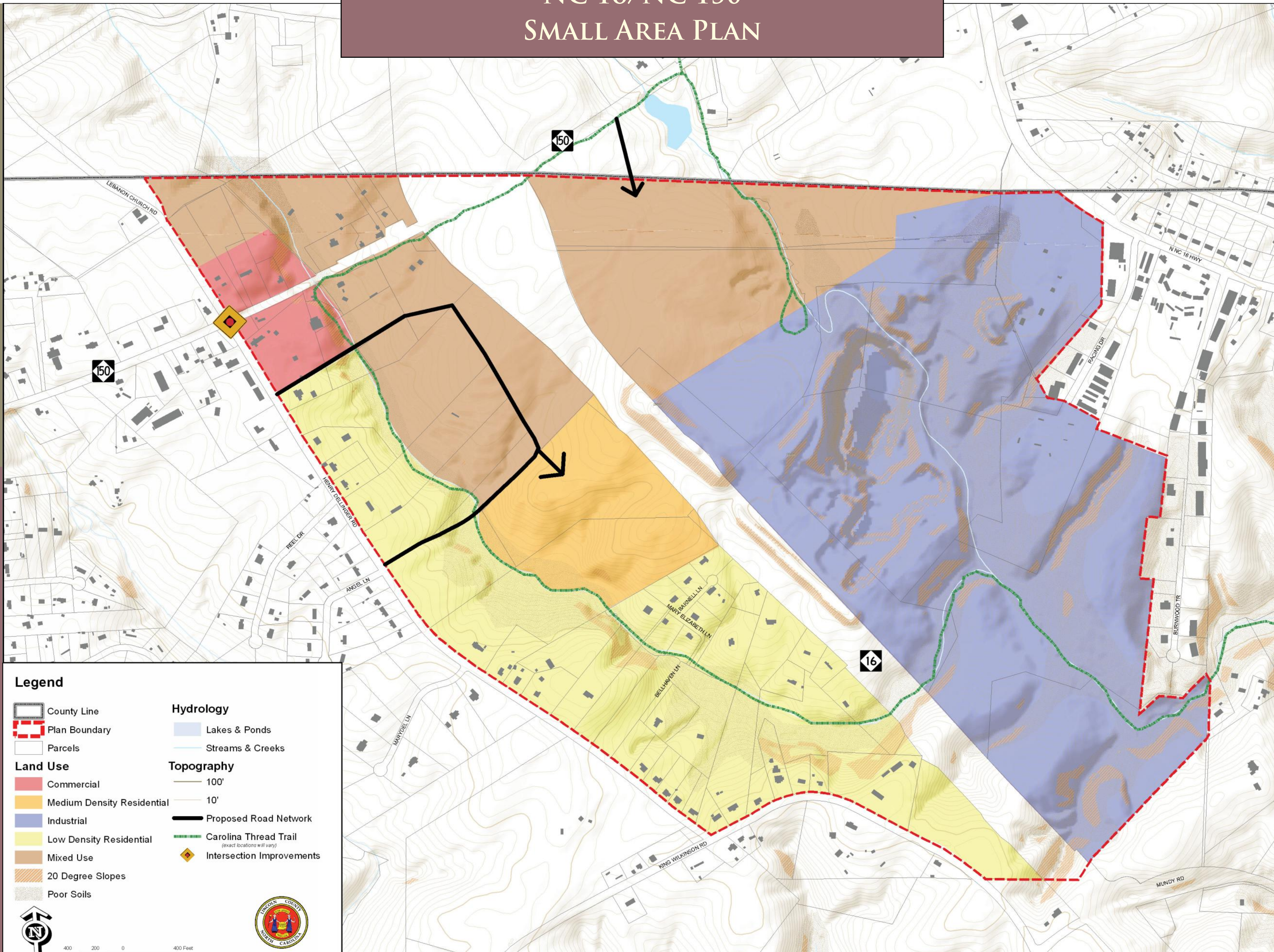
Common areas or "green space" is heavily encouraged to be a part of any development proposals. Not only does this help identify the area as a place where people can gather and enjoy community activities, it also promotes recreation and a healthy and active lifestyle. As an additional amenity, connections and access should be provided to these areas both by the internal street network and by the local trail system that is planned for this area.

### Industrial

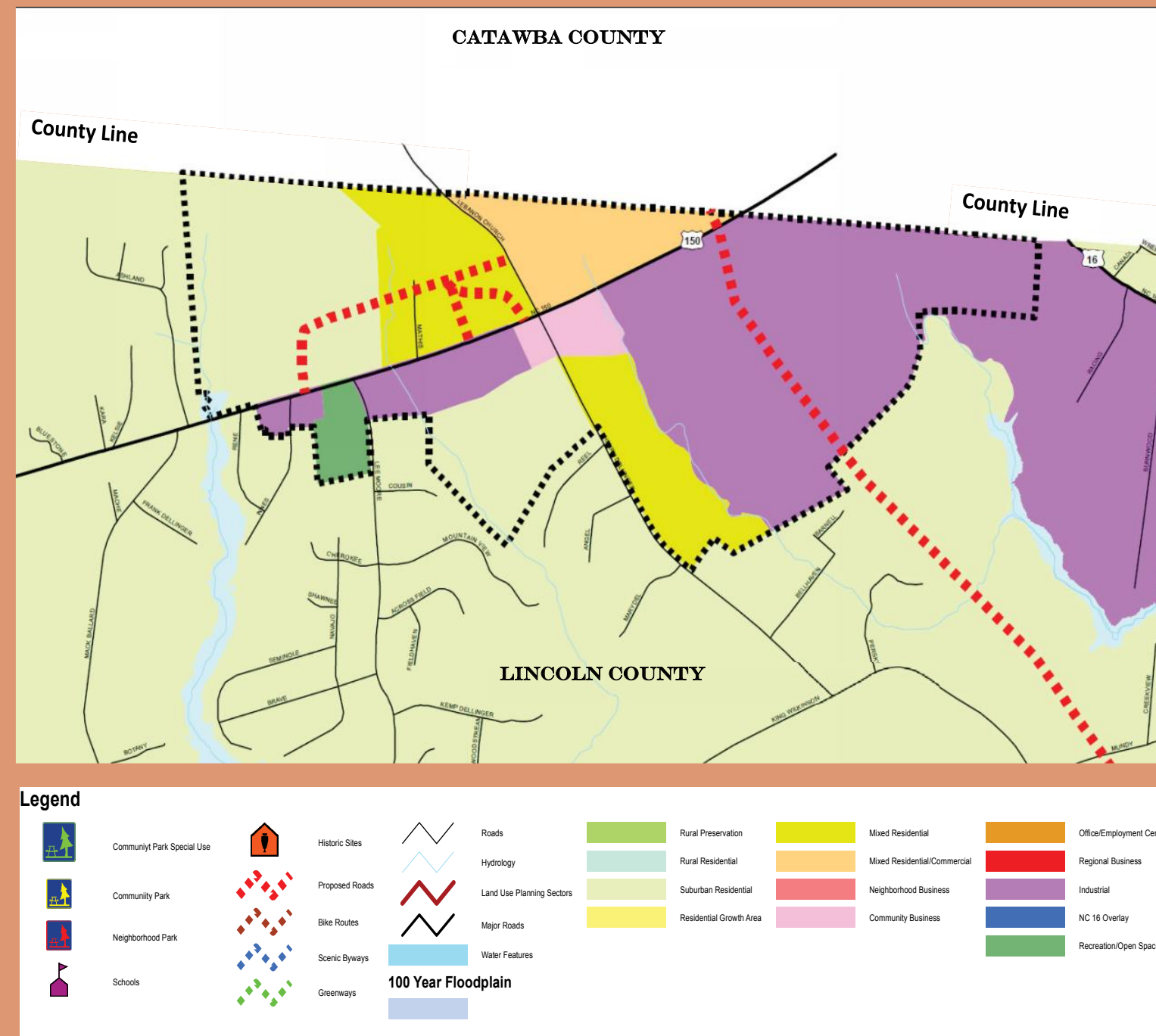
The land directly east of NC Highway 16 and north of Mundy Road consisting of roughly 200 acres within this plan is recommended as an industrial use. The land contains a rock quarry that operates on about 80 acres overall and is directly adjacent to 2 small scale industrial parks. These two light industrial areas provide potential connections to the portion of this plan classified as industrial.

With the existing use of the land being industrial and the surrounding land containing industrial uses, it is appropriate as well as logical for the area identified to remain industrial. The land in this area possesses some poor soils and some challenging topography, which would limit the amount of developable land. However, there are some areas that could support additional light industrial and or manufacturing type uses provided that the proper connections are made available.

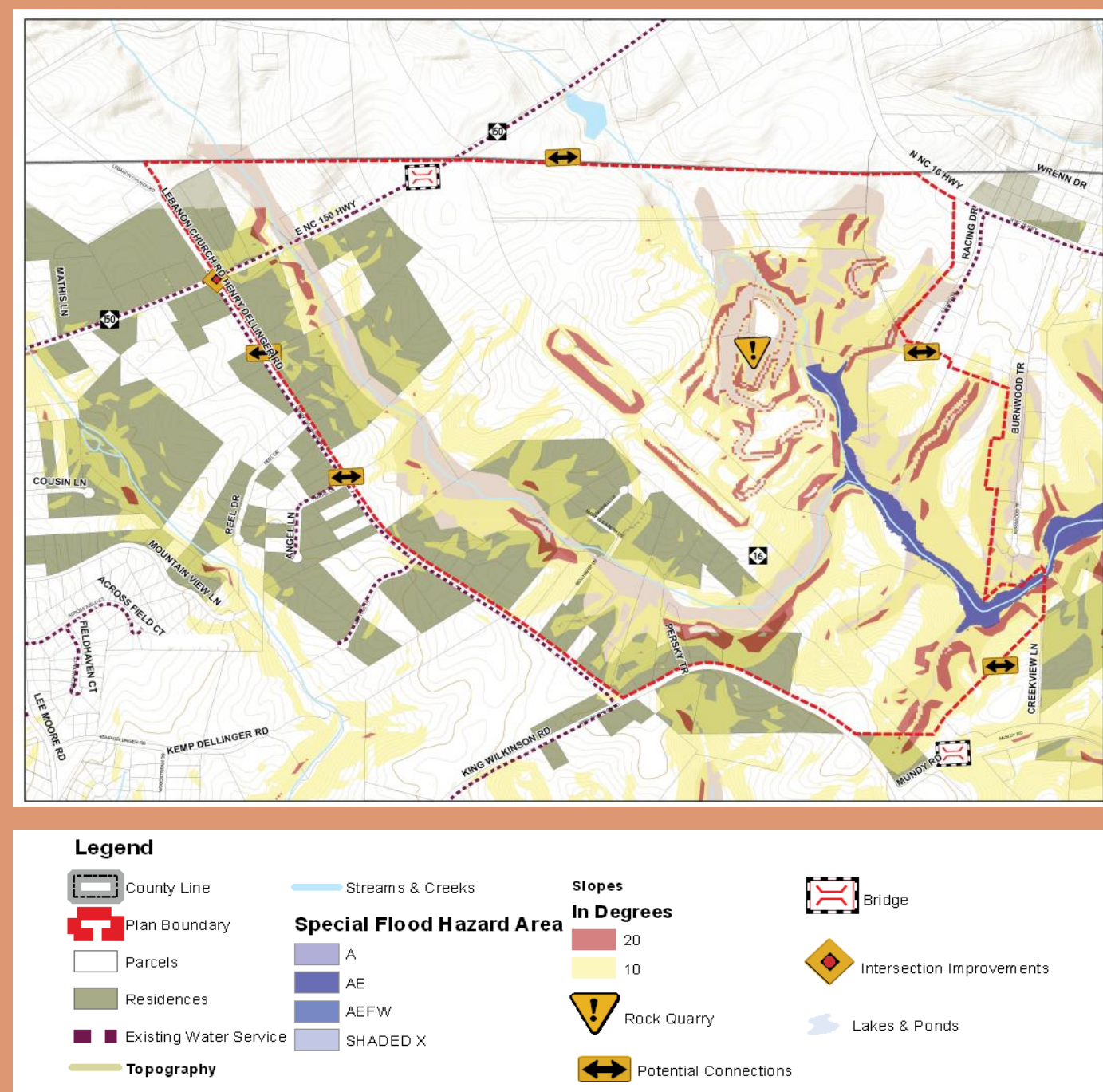
## NC 16/NC 150 SMALL AREA PLAN



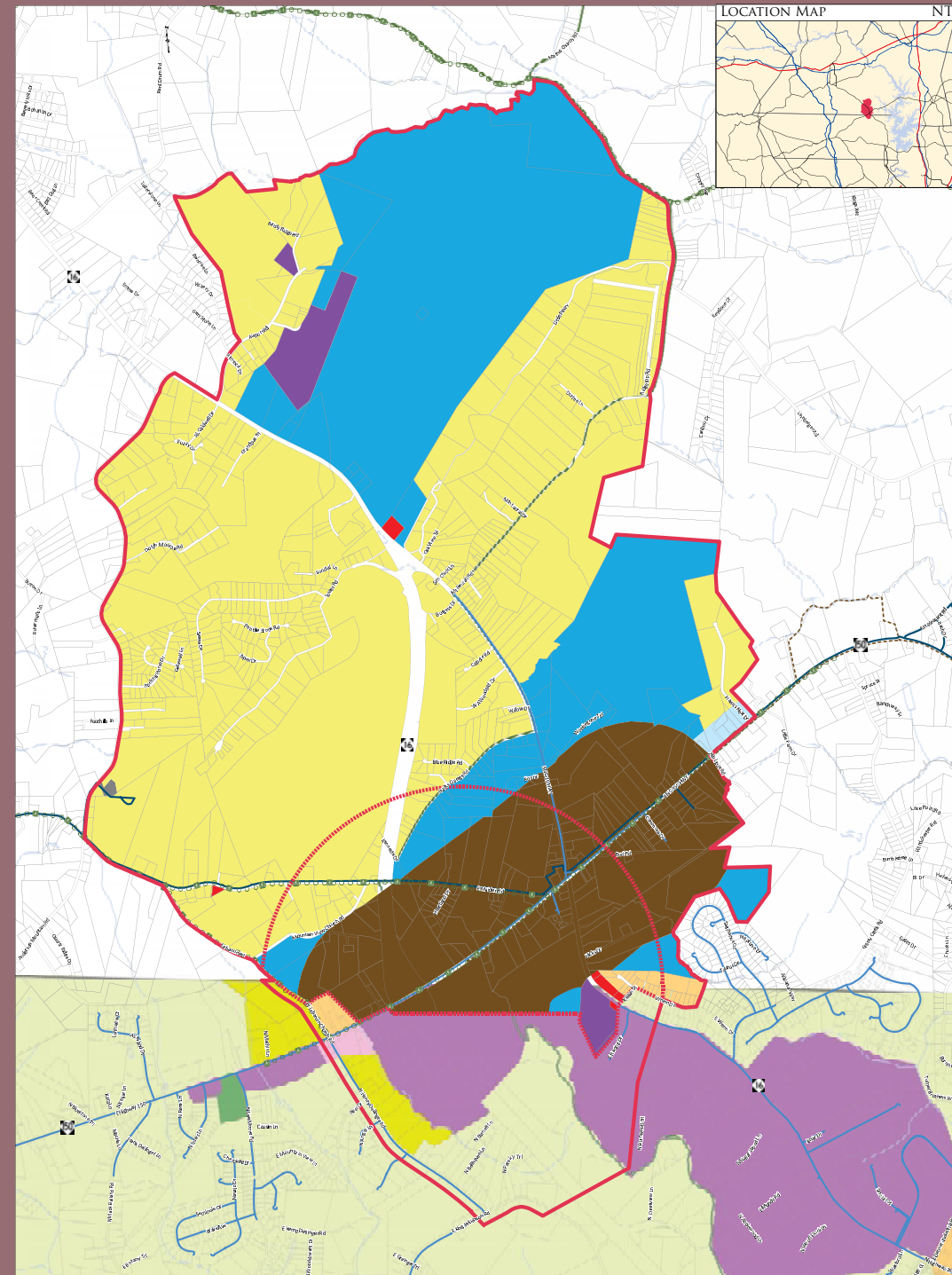
## FUTURE LAND USE PLAN



## DEVELOPMENT CONSTRAINTS



## CATAWBA COUNTY



### NC 16 / NC 150 SMALL AREA PLAN CATAWBA COUNTY REFERENCE MAP



In 2011, Catawba County completed their "Highway 16 South Corridor Plan" which included the properties along NC150 between NC16 and Business NC16 and to the Lincoln County boundary. The area which abuts Lincoln County is recommended to be classified as "mixed-use." The Catawba County Plan states, "The mixed-use classification is limited to property adjacent to or within a relatively short distance of NC 150 and NC 150 / 16 intersections. Within a mixed-use classification, higher density residential, commercial, and office-institutional uses are allowed but never exclusively single-family homes. The mixed-use classification supports the goals of this Plan."

The Lincoln County NC 16 / NC 150 Small Area Plan have identified the future land use of the properties along NC 150 to continue with a "mixed-use" classification. This is done for several reasons including to provide the same development opportunities and guidelines as Catawba County has recommended in order providing a cohesive character along this important corridor. This recommendation provides developers with a similar set of guidelines in different counties, easing the confusion of varying regulations and provides a working dialogue between inter-county departments toward economic growth in the area.

In addition to Land Use, other categories also contained within the Catawba County plan are recommendations for Transportation, Public Service and Community Facilities, Economic Development, Natural and Cultural Resources, all of which are addressed within this plan. It should be understood that many of the Catawba County recommendations were formed through public involvement, which it understood to reiterate how the residents of the area would like to see their community develop. This too is a primary goal for Lincoln County and through the public involvement opportunities, planning staff have heard many similar comments. Also Catawba County planning Staff was invited to review this plan and noted that the recommendations are consistent between the two county plans.

## NC 16/NC150 SMALL AREA PLAN

### A DETAILED LOOK AT THE LANDS AND FUTURE DEVELOPMENT

Prepared by the Lincoln County Planning Staff and Planning Board-December 2013

### OVERVIEW:

The purpose of this plan is to identify and guide development through a well thought-out development plan and growth scenario for the lands within the area of the NC16 / NC150 interchange. The plan relates land uses, access and development concepts seen to fit the land based on built existing conditions, driveway cuts, traffic flow, streams and topography.

The new NC16 was constructed through the study area as part of a new bypass and includes an interchange on the site. The location of the study area is at the northeastern area of Lincoln County with direct access to Catawba County to the north, Mooresville to the east and Charlotte to the south, making it a location for new businesses and residents wanting convenient access, but outside of the urban traffic congestion. The location, access and present conditions make the area desirable for mixed-use developments, shopping and potential higher-density residential developments. This small area plan location was selected due to the interchange, development pressure and land sales, availability of a large vacant tracts, proximity in the region to workforce and convenient access.

### EXISTING CONDITIONS:

The study area for the plan is bounded by the northern county line, existing development which fronts Business NC16 to the east, Henry Dellinger Road on the west and existing rock quarry to the south. The planning area is bisected by NC16 which includes an interchange for primary access. Primary access to the lands in the planning area is NC150. There has been no new development within the planning area to speak of and a majority of the area is vacant at this time. Two major streams, one located to the east of NC16 and one to the west of NC16, along with environmentally sensitive areas (including areas of wetlands, floodplains, and poor soils) which will impact development potential. Additionally, there are several single family homes west of NC16 along NC150 and along Henry Dellinger Road which need to be considered and protected from unrelated development...

A Small Area Plan for the lands north of the county line was completed by Catawba County Planning Staff and adopted by the Catawba County Board of Commissioners in 2011. The plan recommendation for lands which abut Lincoln County are primarily mixed-use classification for new development allowing higher density residential, commercial and office/institutional land uses.



## Development Standards

Development Standards are thought of as being the driving factor behind what identifies the character of an area once implemented appropriately. They can also be thought of as tools or a mechanism by which a local government can utilize in setting a foundation for what the County expects future development to accomplish. If and when standards are put into effect are two larger issues, but ones that deserve input from citizens on both their needs and desires to attain a broad outlook for the entire community. This approach is viable in that it helps the planning staff and the associated decision makers come to terms on what is best for the county as a whole, but more importantly what is best in specific areas. In keeping with the general standards of the Unified Development Ordinance and that of the Eastern Lincoln Development District (ELDD), all of the area plans for Lincoln County including the NCIG/NCISO small area plan will focus and be centered around well designed development models and plans that meet the description of the standards that have been set forth.

Concepts as well as actual guidelines are noted throughout the Unified Development Ordinance to help achieve the overall goals of the county. Areas that are critical to achieving those goals are building design, open space, landscaping, screening and buffering, access management, parking and loading, storm water drainage and erosion control, signage and lighting. These particular areas are where design and best practices are most heavily considered and are the main focus in all of the small area plans for Lincoln County.

### Building Design

Building design is an important feature when it comes to the standards of any development plan. The purpose of having building design standards is to formally encourage best practices in areas of design that directly relate to the facade of the building. More importantly, are the design considerations of articulation, human scale, and building orientation, which aid in giving the building and the development as a whole its character. The general standard for this type of development is to exhibit a unity of design through the use of similar elements such as rooflines, materials, window arrangement, sign location, and other architectural details. Other standards include distinctions between the primary and secondary entrances to the building, historical structure significance, and finer details such as accent lighting.

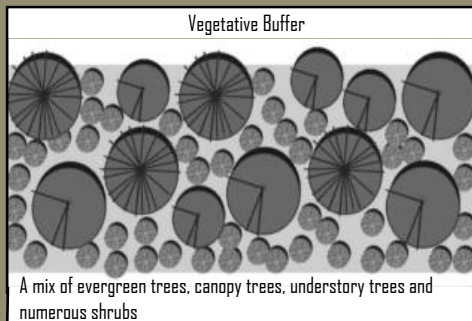
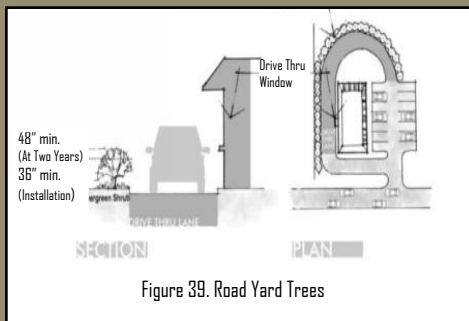
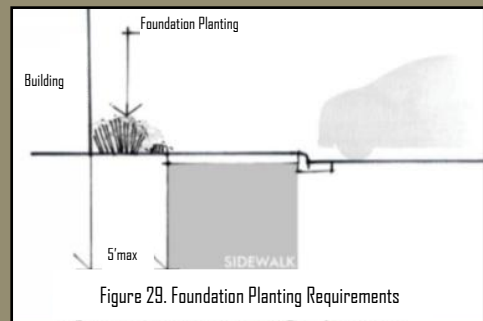
### Open Space

When the development of a small area plan is originally designed there are multiple areas and types of land use considered, one of which is open space. This is the land that is usually unbuildable and remains in its natural state for the most part. There are some cases where open space is implemented as a park, or simply as public green space within the development. These areas are designed to accommodate trails and greenway systems, to be utilized as recreation and exercise areas, and used as community gathering spaces for festivals and other community events. Depending on the development plan and the natural landscape these areas may exist as swaths alongside creeks and streams or may be implemented as green space features in the center of the site, on opposing ends, or dispersed throughout. Agreements between the developer and the County can provide assurance that the wishes of the community and of the designing agency are met and that open space will be included as part of the development and incorporated as part of the overall design for a more environmentally friendly and community driven approach.

### Landscaping, Screening, and Buffering

The Unified Development Ordinance requires the developer of the property to comply with standards that provides landscaping, screening, and buffering improvements to the site. Those standards are yet another important tool that helps improve the safety, health and well-being, and overall quality of life to the community's residents. In many instances, it also gives an aesthetically pleasing landscape for the users of the area to enjoy.

Although the initial indication in many of the standards that are put in place to encompass landscaping, screening and buffering seems to be that of an aesthetic one, there too are just as many safety and quality of life principles behind their rationale. Screening and buffering standards are most notably the means by which an area is protected, or in many instances, the means by which mechanical equipment, drive-thru facilities, and even waste management containers are hidden from public view. More specifically, different types of buffers may be required between two parcels of land because of the land uses on each of them or screening may be a design element implemented to match the material of a building with that of its ancillary structures. In many cases there are few opportunities to exhibit these standards; however, when implemented correctly they can make all the difference.



### Storm Water Drainage and Erosion Control

Storm water drainage and erosion control measures are taken to prevent further contamination of the runoff of surface water from a site. These standards require the rates of that surface water runoff to be in harmony with that of the US Soil Conservation Services National Engineering Field Manual for Conservation Practices. In addition to these practices the standards also require the developer to provide for adequate drainage of all surface water using the existing natural surface drainage system in accordance with the standards of North Carolina Division of Land Quality and the North Carolina Department of Transportation as reflected in the Handbook of the Design of Highway Surface Drainage Structures. The general standard recommends and the Eastern Lincoln Development Overlay District standard requires that Low Impact Development (LID) practices be used where possible or when an Erosion Control Plan is required. These are measures that are taken to help the site decrease its' impact on the environment by reducing the amount of storm water runoff and controlling soil erosion on the site. They consist of many diverse methods such as the use of rain gardens, cisterns, bio-swale retention, wetlands management, and level spreaders. The standards do specifically state that retention ponds are not to be permitted as the singular means of retention on the site.

## BUILDING AND SITE DESIGN

Building Articulation	1			7 Undisturbed Natural Buffer Area
Building Facade Materials	2			8 Carbage Container Screening
Creative Architectural Elements	3			9 Pervious Pavement Parking
Parking Lot/Driving Isle Lighting	4			10 Sidewalks/Connectivity
Building Facade Wall Signage	5			11 Utility Screening
Ground/Monument Signage	6			12 Low Impact Design - Bio Swale

TERRACED RETAINING WALL

LANDSCAPING

PERVIOUS PAVEMENT

ARCHITECTURAL STYLE

## TRANSPORTATION

NC 150 / HENRY DELLINGER RD.

STREET NETWORK CROSS SECTIONS

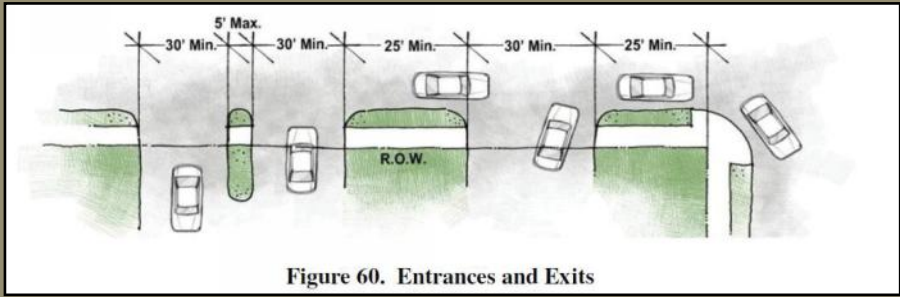
TRAFFIC VOLUME

Staff continues to work closely with the North Carolina Department of Transportation (NCDOT) to assess and carefully plan the future transportation needs as they relate to this area. When examining current conditions and considering future transportation improvement projects it is important to note several key components of the local transportation network. Proper traffic flow and circulation for example, hinge on the ability to access adjacent land uses quickly and safely. Driveways, intersections, and interchanges are all a part of this particular network and therefore, must be planned carefully in order to achieve efficient traffic movement.

During the study of this area several key components were noted dealing with transportation. Traffic volume data along with accident data are two examples of research that are compiled to help identify areas that need improvement. The intersection of Henry Dellinger Rd. /Lebanon Church Rd. and NC Highway 150, through the planning process, has been identified as one area for discussion. Other considerations for planning along the highway are long range in nature and consist of widening's to add travel lanes that manage congestion and turn lanes that properly distribute traffic on and off the roadway. A widening project has been planned for NC Highway 150 from Interstate 77 in Iredell County to the NC 16 Bypass in Catawba County. The project has been broken into phases with the first slated to begin construction as early as 2019 and the succeeding portion, ending just north of the Lincoln County line, to follow in the early to mid-2020s. Expanding NC Highway 150 to increase its carrying capacity creates the need to plan for the traffic volumes that will impact Lincoln County around the NC 16 interchange.

### Access Management

Access management plays a key role in the realm of public safety and the general welfare of the community. The Standards in this section are written to help the traffic volumes, road network, and land uses co-exist in the most efficient way possible. Some of the main items of concern in this area are: the amount of road frontage required to have access to a parcel, access to main thoroughfares, collector roads, and arterials, subdivision access and connectivity, driveways, visibility at intersections and even emergency response. The ways in which a parcel is accessed, whether it be by county services such as police, fire, and EMS, the general public, or even delivery trucks, are equally important. Access management standards provide solutions to a wide array of issues in the planning arena.



When dealing with the term "access" in correlation with the Unified Development Ordinance, one will quickly find that this can cover many different areas of site development. For instance, there is the concern of how to properly enter and exit a parcel. This may include calculating the size of the lot, knowing the distance from existing driveways, and understanding numerous methodologies within the North Carolina Department of Transportation's manual. Driveway location and number are important safety concerns in that they reduce the number of frequent stops along a rather busy arterial or collector road. Other standards with regard to access management include connectivity or access to adjacent development which calls for there to be driveway connections between parcels that are housed within one development. This protects users from having to return to a major thoroughfare to access two parcels that are next to each other. Furthermore, the standards that are just as equally important are the standards that require emergency lanes for Fire and EMS access to be included in development. The Unified Development Ordinance goes into further detail about the standards in which access management needs to be implemented and to what degree.

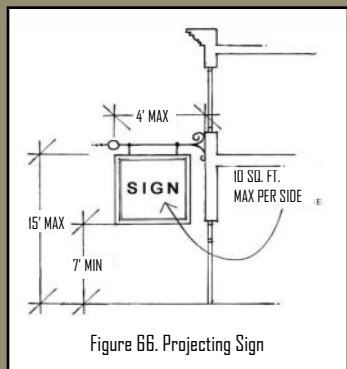
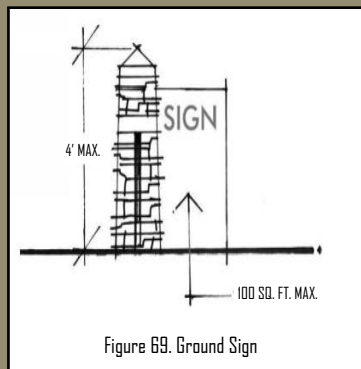
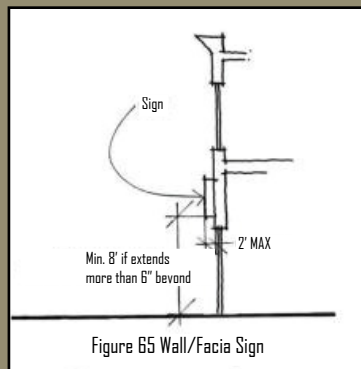
### Parking and Loading

The standards for this subsection are broken down separately and have a more quantitative approach to them than other standards in the ordinance. Parking and loading are considered in the initial phase of development of a parcel for it to be compatible with that of the building footprint placement. They are calculated to meet the needs of the use being implemented and to serve the development as a whole.

Parking is calculated by an index that determines the appropriate number of parking spaces that shall be provided in a specific situation, these are known as "parking ratios". Parking also encompasses a wide array of other standards designated to the general scope of a project such as parking space dimensions, grade maximums, surface materials, parking lot landscaping and lighting, pedestrian ways, and alternative parking plans. Loading, on the other hand, involves facilities that are incorporated into the functional design of the building. They are designated areas of the development for the businesses and companies within the area to distribute/receive goods. The standards for these areas in keeping with the ordinance contain such issues as prohibiting the location of said structures or areas from interfering with pedestrian facilities, sidewalks, roads, automotive lanes within the development, and fire hydrants. Finally all loading and dock areas shall be screened in accordance with the standards of the Unified Development Ordinance.

### Signage and Lighting

Signs are regulated in the interest of promoting traffic safety, safeguarding the public health, facilitating police and fire protection, preventing adverse community appearance and over-crowding of the land, and protecting the character of the area in which they are located. This section of standards is intended to prevent their over-concentration, improper placement, and excessive height, bulk and area, in order to maximize sign legibility and effectiveness, while at the same time preserving community, scenic, economic and aesthetic values. The standards for signage are different for each type of classification of signage. Whether the sign is deemed a ground sign, monument sign, pole sign, window sign, wall sign, projecting sign, or free standing sign could make the difference in how tall or how wide it can be, the materials the sign is to be constructed of, and the number of signs that are allowed for a particular business or piece of land. Wall signs, ground signs, and projecting signs would be the most pursued types for the small area plan series including NC IG/NCISO.



The lighting of the developments infrastructure, single buildings and multi-tenant buildings, landscaping, signage, and accent or decorative lighting are all covered in this section. The standards for lighting are designed to relate to many different situations. Lighting may be required due to the size or square footage of a building or an area; the type of placement or mounting for light fixtures may be regulated; and the source in which lighting comes from is also restricted to certain types of light. The standards protect the safety of the public by stating that entrances and exits to buildings shall be lit via security lighting fixtures and that public parking areas shall provide lighting during evening and night hours of operation. Good design is also taken into consideration in which the standards indicate that fixtures be limited to a maximum height depending on the land use and that accent lighting be used sparingly and oriented appropriately.