



# *Steele Creek Area Plan*

Charlotte-Mecklenburg Planning Department

**DRAFT**  
March 18, 2011



CHARLOTTE

Adopted by Charlotte City Council    Month, day, year

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*Executive  
Summary*



# Executive Summary

The Steele Creek Area Plan defines the vision and land use policies for the plan area and provides specific direction to guide future growth and development, consistent with the *Centers, Corridors and Wedges Growth Framework*. This Executive Summary provides the highlights of the plan document, however, much more detailed information can be found in Part I: Concept Plan.

## Plan Boundary

The Steele Creek plan area is approximately 27,000 acres and has a population of approximately 35,000. The plan area is bounded generally by Shopton Road on the north, and South Carolina state line on the south, the Catawba River on the west, and I-485 on the east. See **Map 1, Area Plan Boundary**.

The area encompasses a diverse mixture of residential, retail, office and industrial land uses. A large portion of the area, particularly closer to I-485, I-77 and South Tryon, includes more intense development primarily located within four Activity Centers—RiverGate and Whitehall / Ayrley Mixed Use Activity Centers; the Westinghouse Industrial Center; and the portion of the Shopton Road Industrial Center that is included within the plan area boundary. Several large industrial parks are also located in the plan area, providing employment opportunities with companies like International Paper, Siemens, Shutterfly and Time Warner Cable.

## Vision Statement

The vision for the Steele Creek area is to create a unique and sustainable community that is a great place to live, work, and recreate, while preserving the community's character by incorporating natural and historic features into new development. The community will implement this vision through the following actions:

- Protecting the Catawba River, McDowell Nature Center and Preserve, natural features and historic places;
- Providing a balanced mixture of land uses with enhanced public facilities that include quality schools;
- Developing a safe, accessible and efficient transportation system for pedestrians, bicyclists, transit users and motorists;
- Encouraging community design that recognizes the natural environment; and
- Creating an interconnected network of parks, greenways and open space amenities.

Much of the plan area is within a Wedge and includes low to moderate density residential developments like Yorkmont, The Crossings, The Sanctuary and The Palisades. The McDowell Nature Center and Preserve is also located within the Wedge and is the oldest nature preserve in Mecklenburg County. Ninety percent of the preserve is undeveloped, forested, rolling terrain along the banks of Lake Wylie. The plan area also includes additional public facilities such as schools, parks, libraries and greenways.

## Key Opportunities and Constraints

Opportunities and constraints that were identified through public input and an examination of the existing conditions helped to focus the planning process. Key opportunities identified include proximity to the Catawba River and interstate access, both of which contribute to the uniqueness of this area. Other opportunities include preserving the neighborhoods and natural environmental features; convenience of Activity Centers for shopping, entertainment and employment; and, availability of parks and greenways. Some of the major constraints that were identified include the impact of increased development on the natural environment and lack of public facilities and local street connectivity.

## Summary Of Goals And Policies

The Steele Creek Area Plan provides goals and detailed policies to ensure that the future envisioned for this area is achieved. Below are the plan goals and a brief summary of the policies.

### Land Use

**GOAL:** Establish a land use pattern that offers a mix of land uses and the opportunity to live, work and recreate in close proximity.

#### Key Policies Highlights

##### Wedge

- Development in the Wedge should remain predominantly lower density residential, typically up to 4 dwelling units per acre.
- Neighborhood supporting land uses and moderate density housing are encouraged at strategic locations, primarily along thoroughfares as shown on **Map 3, Recommended Future Land Use**.
- The community-size retail center approved as part of the Palisades mixed use town center is appropriate to expand to serve the needs of the growing population in this area.

### Activity Centers

- Future development/redevelopment in the RiverGate and Whitehall/Ayrsley Mixed Use Activity Centers should facilitate the transition to a more pedestrian-oriented environment.
- Westinghouse Industrial Center transverses through the center of the plan area and is the largest industrial core in the Carolinas. While this area is developed with over 20 million square feet of industrial development, additional industrial development is appropriate for the area.

### Community Design

**GOAL:** Encourage sustainable development that promotes accessibility for pedestrians and cyclists while integrating green amenities and environmentally sensitive features.

#### Key Policies Highlights

- Building and site design in Steele Creek should be reflective of its surrounding built and natural environment and respect existing neighborhoods.
- Development should orient towards an internal street network and provide a landscaped buffer along South Tryon Street to improve the aesthetic quality of the roadway.

- Improved pedestrian connections and accommodations for cyclists and motorists should be provided throughout the Steele Creek area to encourage a safe pedestrian and vehicular network for all users.

## Transportation

**GOAL:** Provide a safe, accessible and efficient street network for all users.

### Key Policies Highlights

- Improve area connectivity by providing streets, cross access, internal site circulation and multiple entrances.
- Upgrade farm-to-market roads and extend/widen key thoroughfares.
- Improve intersections for both vehicular and pedestrian safety and mobility.
- Enhance the pedestrian and bicycle network and encourage bikeway connections to greenways as development occurs.

## Infrastructure & Public Facilities

**GOAL:** Provide public facilities to maintain and improve service levels to area residents

### Key Policies Highlights

- Encourage new development and redevelopment to incorporate open space (either natural and/or improved) so that it is a prominent component and an amenity.
- Link greenways with other greenways, parks, preserves, neighborhoods, schools, retail centers, Activity Centers and employment areas.
- Provide pedestrian and bicycle access to recreational amenities as development occurs.

## Natural Environment

**GOAL:** Encourage environmentally sensitive land development practices that enhance the area's land, air and water quality.

### Key Policy Highlights

- Preserve tree canopy, native plants and other environmental features by incorporating them into development, and using sensitive site design and construction techniques.
- Target environmentally sensitive areas for preservation when acquiring land for public purposes.
- Develop a network of green spaces that include greenways, nature preserves, parks and open spaces.
- Encourage floodplain preservation and support floodplain reclamation along the major creeks in the area.

## Key Implementation Strategies

The Implementation Guide identifies strategies to implement the policies in the Concept Plan and is not adopted by elected officials. The Implementation Guide includes a number of improvement projects and is intended to be a guide for staff. Some of the key implementation strategies are:

- Utilize land use and community design recommendations to guide and evaluate development proposals.
- Seek street connections as development occurs to improve connectivity within the area.
- Enhance a number of intersections in the plan area to improve traffic flow, area accessibility and safety.
- Explore funding sources for local government participation in development of the street network that will be constructed through the land development process.
- Request easements and/or dedications during the land development process to expand the Walker Branch Greenway.





# Part I

## *Concept Plan*

# Part II Concept Plan

## Plan Context

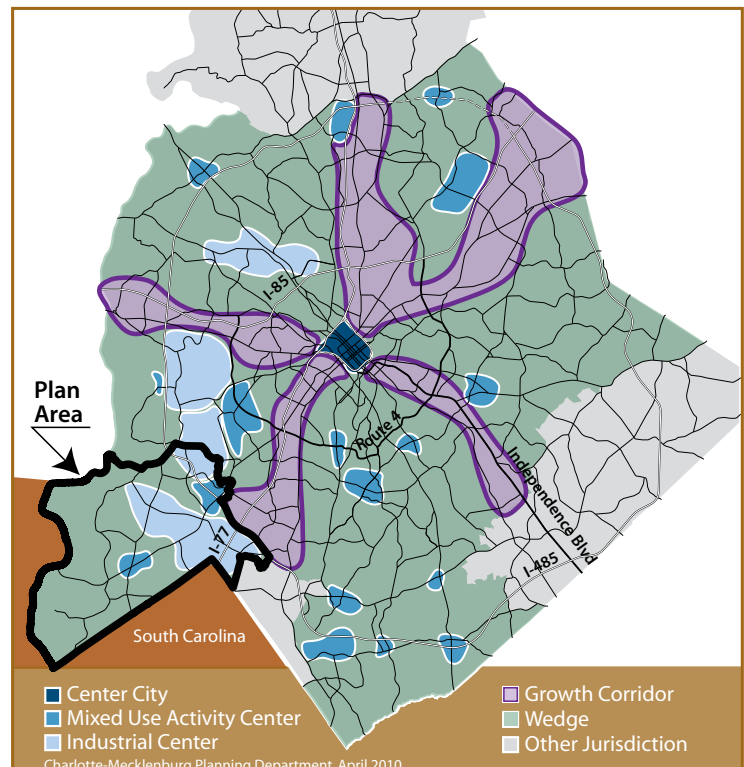
### Purpose

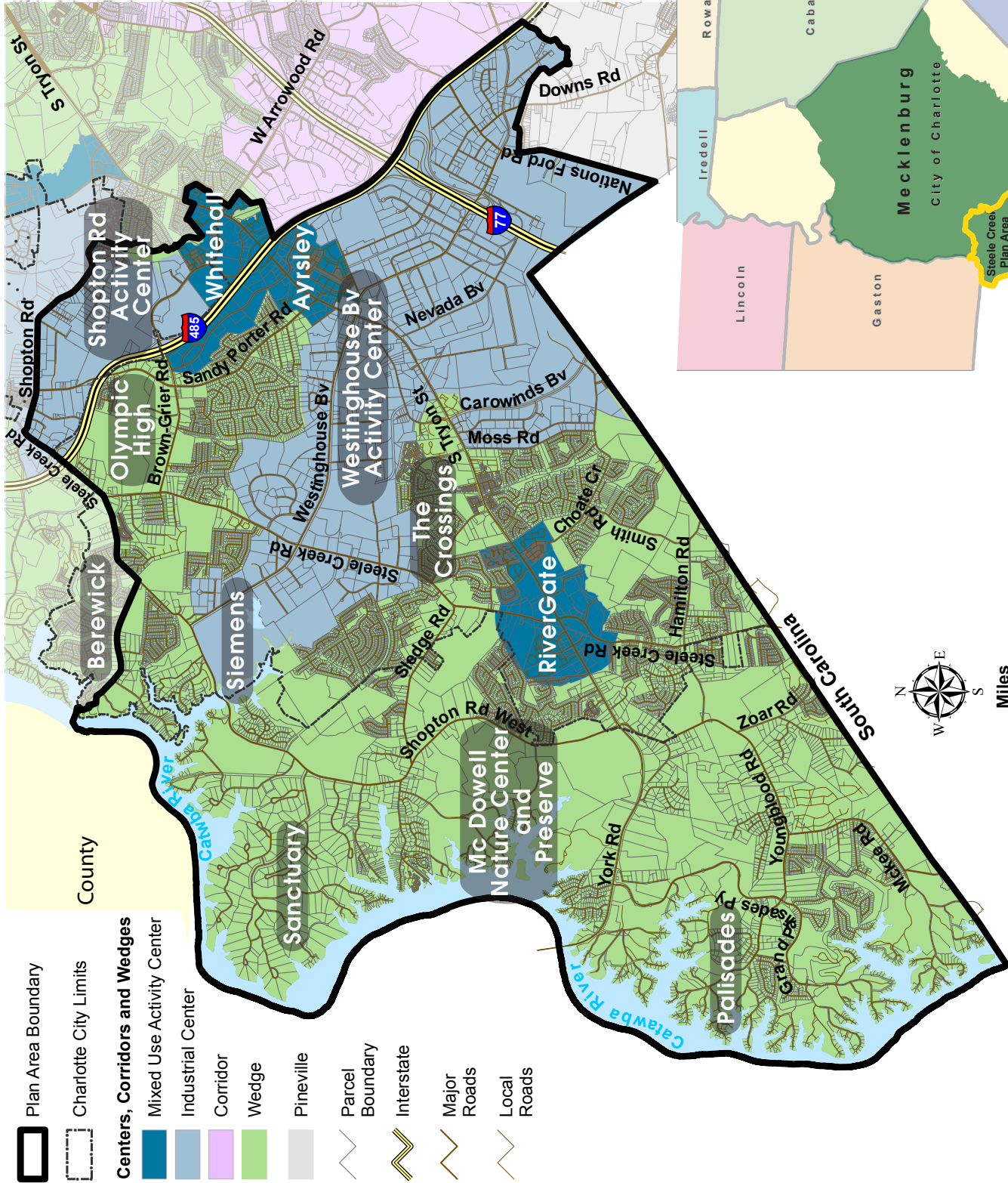
This document establishes a vision for the plan area and provides policy direction to guide future growth and development consistent with the *Centers, Corridors and Wedges Growth Framework*. Once adopted, this plan will:

- update existing plans for the area, including the *Southwest District Plan (1991)*, *Lower Steele Creek (1992)*, *I-485 Interchange Analysis (1999)* and *Westside Strategic Plan (2000)*;
- refine boundaries for the four Activity Centers and Wedge in the plan area;
- address key land use, transportation, urban design and development issues identified during the planning process;
- provide guidance for future land use and infrastructure decisions; and
- function as the official streetscape plan.

### Plan Boundaries

The Steele Creek plan area covers approximately 27,000 acres and has an estimated population of approximately 35,000 based on the County Metrolina Regional Travel Demand Model estimates. The plan area is bounded generally by Shopton Road on the north, South Carolina state line on the south, the Catawba River on the west, and I-485 on the east (See **Map 1, Area Plan Boundary.**)





- Plan Area Boundary
- Charlotte City Limits
- Centers, Corridors and Wedges**
- Mixed Use Activity Center
- Industrial Center
- Corridor
- Wedge
- Pineville
- Parcel Boundary
- Interstate
- Major Roads
- Local Roads



Data Source: City of Charlotte, Mecklenburg County, data as of July 1, 2010  
Produced By Charlotte - Mecklenburg Planning Department

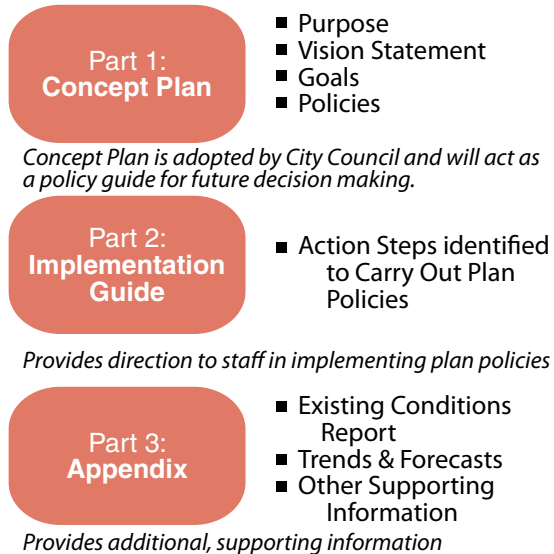
The area encompasses a diverse mixture of residential, retail, office and industrial land uses and a large portion of the area, particularly closer to I-485, I-77 and South Tryon, includes more intense development. The more intense development is located within Rivergate and Whitehall/Ayrsley Mixed Use Activity Centers; and the Westinghouse Industrial Center. Several large industrial parks are also located in the plan area, providing employment opportunities with companies like International Paper, Siemens, Shutterfly and Time Warner Cable.

Seventy percent of the plan area is within a Wedge and includes low to moderate density residential developments like The Crossings, Yorkshire, The Sanctuary and The Palisades. The McDowell Nature Center and Preserve is also located within the Wedge and is the oldest nature preserve in Mecklenburg County. Ninety percent of the preserve is undeveloped, forested, rolling terrain along the banks of Lake Wylie. The plan area also includes additional public facilities such as schools, parks, a library and greenways.

## Organization of this Document

This document is organized into three parts:  
 Part I: The Concept Plan includes the Purpose, Vision Statement, Plan Goals and Policies. Only Part I will become adopted City policy. Part II, Implementation Guide, contains action steps identified to carry out plan policies, and will be used primarily to guide staff work. Part III, Appendix, provides supporting information such as the existing conditions report, market trends and forecasts, and other data used to develop the plan.

### Area Plan Document



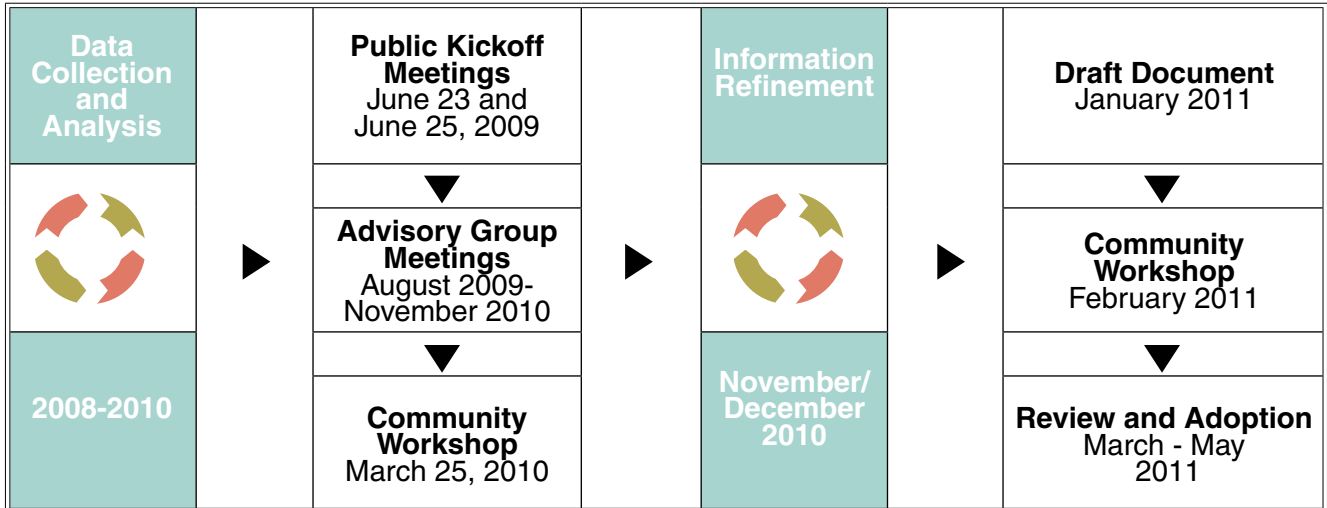
## Planning Process

Development of a plan for the Steele Creek area was identified as a priority to respond to significant increases in population and development activity. The draft *Steele Creek Area Plan* was prepared over a period of 21 months and included the following key public involvement opportunities:

- public kick off meetings held on June 23 and 25, 2009 with approximately 250 people in attendance;
- 62-member Citizen Advisory Group met 11 times over the course of nine months to assist staff in developing plan policies;
- final public meeting held on \_\_\_ with approximately \_\_\_ number of people in attendance.

In addition to these public input opportunities, the Planning Committee of the Charlotte-Mecklenburg Planning Commission hears citizen comments, reviews the area plan and makes a recommendation to the Charlotte City Council. The City Council also hears citizen comments and makes the final decision concerning adoption of the plan.

### Steps in the Area Plan Process



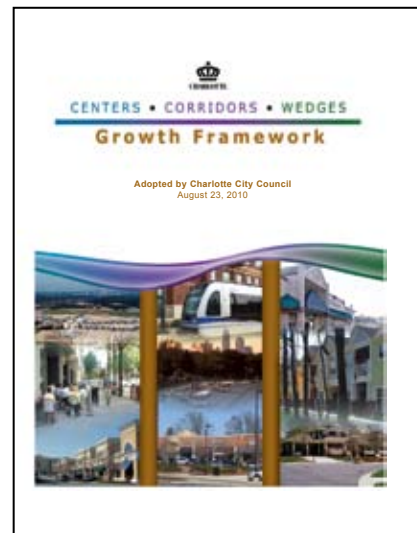
## Policy Framework

The following key documents provided guidance and direction for this plan:

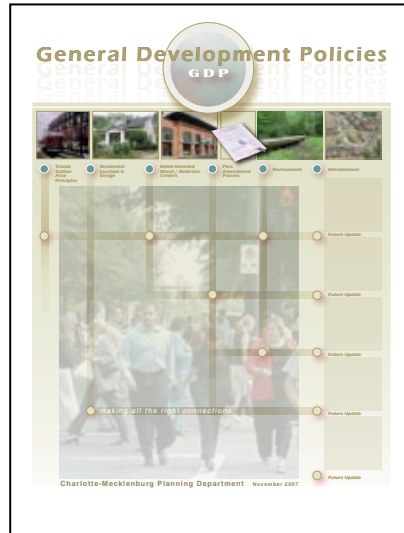
*Centers, Corridors and Wedges Growth Framework* establishes a vision for future growth and development. It does this by identifying three geographic types used to categorize land in Charlotte and its sphere of influence, and outlining the desired characteristics of each of these geographies:

- Activity Centers are generally appropriate for new growth, with the type and intensity of development corresponding to the Center type.
- Some parts of Growth Corridors are often priority locations for new growth, especially in identified Transit Station Areas.
- Wedges are envisioned to remain predominately low density residential with limited higher density housing and neighborhood serving commercial uses.

Much of Charlotte’s future moderate to higher intensity development is expected to occur within the five Growth Corridors and in designated Activity Centers. This will help maximize existing infrastructure and services. This growth framework is important as the Steele Creek plan area encompasses four Mixed Use Activity Centers and a Wedge. The framework provides direction for intensification and mixing of uses within the Mixed Use Activity Centers while creating opportunities for lower intensity residential and supporting services in the Wedge area, consistent with plans for future infrastructure improvements.

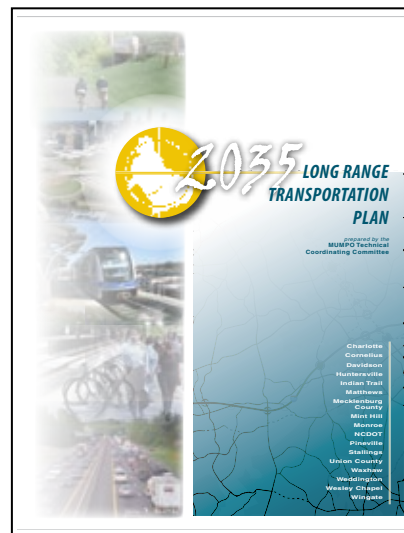


General Development Policies are adopted policies on various topics relevant to development and redevelopment in Charlotte-Mecklenburg. In particular, they address residential location and design, retail-oriented mixed/multi-use centers and transit supportive development. Additionally, the General Development Policies provide guidance to minimize the negative environmental impacts of land development and to more closely link land use and development decisions to the availability of infrastructure to support it. This area plan builds upon the General Development Policies' guidance in these areas: Residential Location and Design, Retail-Oriented Mixed-Multi-Use Centers, Natural Environment and Infrastructure. They also were used to improve the integration of transportation and land use by strategically locating land uses to increase opportunities for transportation choices.



Adopted Land Use Plans include six geographic districts which make up the City of Charlotte's planning jurisdiction: the Northeast, East, South, Southwest, Northwest and Central districts. Each of these areas have a district plan that addresses a wide range of physical development issues and provides parcel-specific land use recommendations for all properties within that district plan. This plan will update the Southwest District Plan.

2035 Long Range Transportation Plan defines the policies, programs and projects to be implemented over the next twenty years, providing transportation choices in Mecklenburg and western Union County. Several Long Range Transportation Projects have been identified within the Steele Creek area and were considered when developing this plan.



Transportation Action Plan defines short and long-term policies for accommodating motor vehicles, transit riders, bicyclists and pedes-

trians together with an implementation "blueprint" for improvements. The Transportation Action Plan's comprehensive "toolbox" of transportation programs will help implement the recommendations made in this plan.

2030 Transit Corridor System Plan is a long-range multi-modal transportation plan that identifies five transportation corridors, a series of Center City improvements, and enhanced bus service and facility improvements throughout the region.

Urban Street Design Guidelines offer a comprehensive approach to designing new and modified streets within the City. They are also a key component of the Transportation Action Plan, and were used in developing this plan to assist with street classifications and cross-sections that will guide the design and redesign of streets. The Urban Street Design Guidelines also address integrating land use and transportation to create synergy between the streets and the land uses adjacent to them.

Greenway Master Plan Update identifies an expanded greenway network and greenway trail system throughout Mecklenburg County. As land is acquired and set aside over time, the greenway system should also improve water quality by reclaiming natural floodplains, protect wildlife habitats and open space, and provide recreational and educational opportunities for residents. The Greenway Master Plan provided guidance on the existing and proposed locations for park and recreational facilities such as the McDowell Nature Center and Preserve, Capps Community Park, T. M. Winget Park and the Walker Branch, Polk Ditch, Steele Creek and Big Sugar Creek Greenways.



# Vision Statement

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The vision for the Steele Creek area is to create a unique and sustainable community that is a great place to live, work, and recreate, while preserving the community's character by incorporating natural and historic features into new development. The community will seek to achieve this vision through the following actions:

- Protecting the Catawba River, McDowell Nature Center and Preserve, natural features and historic places;
- Encouraging a balanced mixture of land uses with enhanced public facilities that include quality schools;
- Developing a safe, accessible and efficient transportation system for pedestrians, bicyclists, transit users and motorists;
- Encouraging community design that recognizes the natural environment; and
- Creating an interconnected network of parks, greenways and open space amenities.

## **Key Opportunities and Constraints Summary**

An understanding of existing conditions, including feedback received from the public during the planning process, reveals opportunities to build upon and constraints to overcome. Key opportunities and constraints were discussed at the first public meeting and formed the basis for the vision statement and ultimately, plan policies.

Key opportunities identified include the area's proximity to the Catawba River, multiple interstate access, preservation of neighborhoods, convenience of Activity Centers and availability of parks, greenways and other natural environmental features. Some of the major constraints that were identified include the impact of increased development on the natural environment and lack of public facilities and local street connectivity.





# Goals

To achieve the future envisioned for the plan area, the following goals have been identified. Consideration was given to the opportunities, constraints and vision for the area when developing these goals. The goals build upon adopted plans and policies.

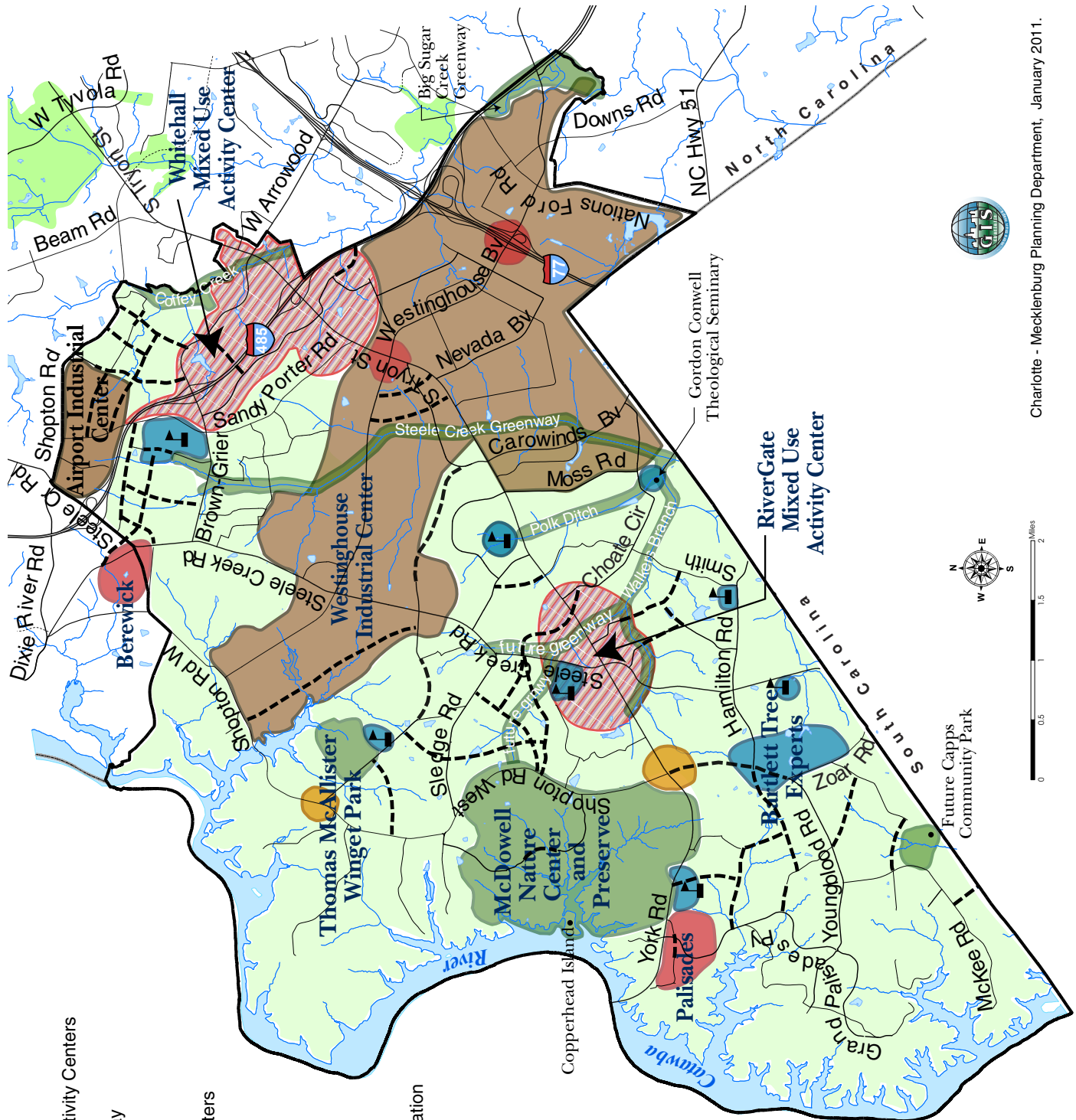
**Land Use Goal:** Establish a land use pattern that offers a variety of land uses and the opportunity to live, work and recreate in close proximity.










**Community Design Goal:** Encourage sustainable development that promotes accessibility for pedestrians and cyclists while integrating green amenities and environmentally sensitive features.

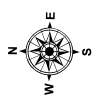
**Transportation Goal:** Provide a safe, accessible and efficient street network for all users.

**Infrastructure and Public Facilities Goal:** Provide public facilities to maintain and improve service levels to area residents.

**Natural Environment Goal:** Encourage environmentally sensitive land development practices that enhance the area's land, air and water quality.



-  Mixed Use Activity Centers
-  Park/Greenway
-  Institutional
-  Industrial Centers
-  Wedge Residential Community Centers
-  Neighborhood Centers
-  Key Transportation Connections
-  School
-  Steele Creek Area Plan Boundary



Charlotte - Mecklenburg Planning Department, January 2011.

# Overall Plan Concept

Taking the vision statement and goals into consideration, **Map 2, Concept**, illustrates the recommended development pattern for the plan area. The basic premise is to guide growth and development in a way that protects the area's unique natural environment by preserving open space and focusing retail, industrial and office development in the Activity Centers. The plan strategically places mixed use and moderate density residential developments along major thoroughfares in the Wedge, while keeping the majority of the Wedge area as lower density residential with neighborhood supporting land uses.

## Concept Plan Land Use Patterns

AREA	CHARACTER	Examples of LAND USE	Examples of BUILDING TYPES
<p><b>Industrial Center</b></p> 	<p>Primarily Single Use Office and Industrial with Supporting Retail</p>	<ul style="list-style-type: none"> <li>• Manufacturing</li> <li>• Warehouse</li> <li>• Flex</li> <li>• Retail</li> <li>• Office</li> </ul>	
<p><b>Wedge Residential</b></p> 	<p>Primarily Low to Moderate Density Residential</p>	<ul style="list-style-type: none"> <li>• Single Family Homes</li> <li>• Townhomes</li> <li>• Duplexes, Quadriplexes, Triplexes</li> <li>• Condos</li> <li>• Apartments</li> </ul>	
<p><b>Mixed Use Activity Center</b></p> 	<p>Mixed/Multi Use Retail, Office and Residential</p>	<ul style="list-style-type: none"> <li>• Retail</li> <li>• Apartment Homes</li> <li>• Townhomes</li> <li>• Condos</li> <li>• Storefront Commercial/Retail</li> <li>• Office</li> </ul>	

# Plan Policies

## Overview

The following sections set forth plan policies for land use, community design, transportation, infrastructure and public facilities and the natural environment to realize the vision and goals for the plan area. Goals for each section are briefly stated and followed by the recommended plan policies. Plan policies will guide future land use, zoning and other growth and development decisions.

## Land Use

### GOAL:

Establish a land use pattern that offers a mix of land uses and the opportunity to live, work and recreate in close proximity.

This section establishes future land use policies for the area and recommends appropriate land uses to realize the plan vision. In developing these policies, transportation and community design issues were also considered and incorporated as appropriate. However, separate sections for transportation and community design policies follow and build upon the policies discussed in the land use section.

The land use policies seek to enhance the relationship between land use and transportation in the plan area. The land use policies are organized into two major geographic areas – Wedge and Activity Center as illustrated on **Map 3, Recommended Future Land Use**. The Steele Creek area is largely located within a Wedge, but also a significant Industrial Activity Center, two Mixed Use Activity Centers (RiverGate and Whitehall), and a portion of the Shopton Road Industrial Center. The *Centers, Corridors and Wedges Growth Framework* provides the starting point for developing plan recommendations. This area plan will also help to refine the boundaries of the Activity Centers and Wedge areas within the plan boundary.

Each land use policy has a corresponding implementation strategy detailed in the Implementation Guide of this document.

## Land Use Policies

These land use policies will update land use recommendations from previously adopted plans as well as guide future growth and development. The single family and multi-family land use categories used in the *Southwest District Plan* will be updated to residential with an assigned density for properties within the plan boundary upon the adoption of this area plan. This change will help to implement the community vision by accommodating a variety of housing types at a density appropriate for the specified location.

### I.

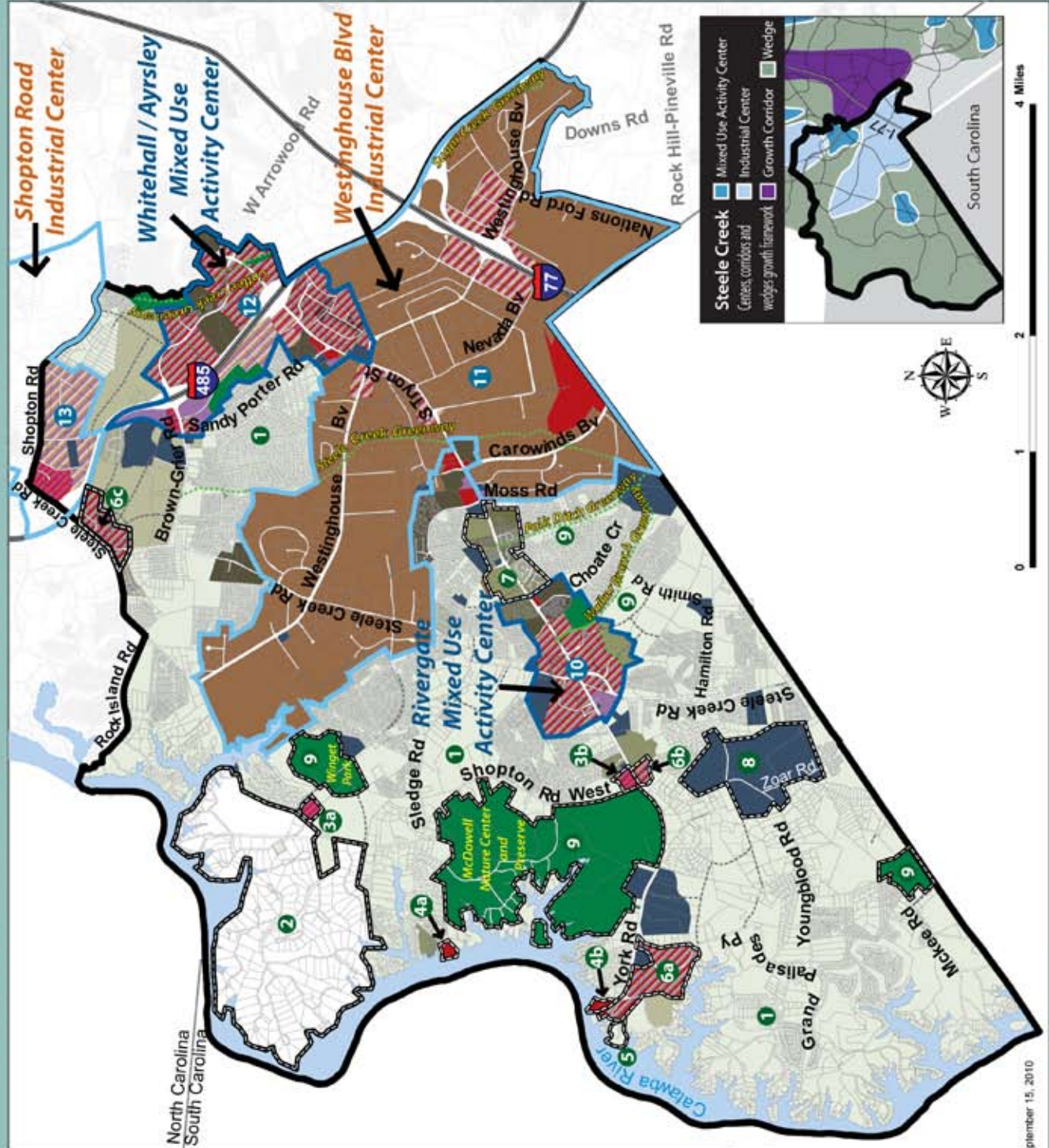
## Wedge Areas

Wedges are the large areas between Growth Corridors primarily comprised of lower density residential neighborhoods. The Wedges provide a range of housing choices as well as supporting facilities and services. Most of the Steele Creek area, approximately 70 percent, is located within a Wedge as defined by the *Centers, Corridors and Wedges Growth Framework*. This area is primarily developed with, and zoned for, residential development. However, there are some nonresidential land uses that support the surrounding residential development. The intent of the land use policies is to preserve the character and integrity of neighborhoods in the Wedge, while improving connectivity and access to green spaces and neighborhood serving land uses. Development in the Wedge should remain predominantly lower density residential, typically up to four dwelling units per acre. Some neighborhood supporting land uses and moderate density housing will also be appropriate as shown on **Map 3, Recommended Future Land Use**, where the street network can accommodate such development. Appropriate locations are also shown for future institutional, office, retail, and mixed use development in the Wedge, primarily along S. Tryon Street.

In addition to preserving neighborhood character, the Wedge land use policies will contribute to the protection of the environment in the areas where it's most vulnerable, mainly around the river, creeks and streams.

Following is a more detailed discussion of the land use policies for the Wedge that are called out with numbers on **Map 3, Recommended Future Land Use**.

# Recommended Future Land Use



<b>Recommended Land Use</b>	<b>Activity Centers</b>
Residential <= 1 DUA	Mixed Use
Residential <= 4 DUA	Industrial
Residential <= 5 DUA	Proposed Street*
Residential <= 6 DUA	Plan Area Boundary
Residential <= 8 DUA	100 Year Floodplain
Residential <= 12 DUA	<b>Greenways</b>
Residential <= 17 DUA	Developed
Institutional	Proposed
Office	
Retail	
Industrial-Warehouse-Distribution	
Park/ Open Space	
Residential/ Office/ Retail	
Residential/ Office	
Office/ Retail	
Office/ Industrial-Warehouse-Distribution	
Office/ Retail/ Industrial-Warehouse-Distribution	
Wedge Land Use Recommendation	
Activity Center Land Use Recommendation	

\* Note: The location of the proposed streets is conceptual. Alternative locations, consistent with the intent of the proposed network, will also be considered. Additional streets may be requested to facilitate improved network and connectivity.

**Steele Creek**

- Centers, corridors and wedges growth framework
- Mixed Use Activity Center
- Industrial Center
- Growth Corridor
- Wedge



Data Source: City of Charlotte, Mecklenburg County, data as of September 15, 2010  
 Produced By Charlotte - Mecklenburg Planning Department

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## Wedge Policies

1. **Low density residential development, up to four dwelling units per acre (DUA), should remain the predominant land use in the Wedge area as shown on Map 3, *Recommended Future Land Use*.** Along with maintaining a lower intensity of development in this area, the form and design of future development will be especially important to ensure long-term sustainability. Following the guidance provided in the Community Design section of this document will help to ensure that future development is both environmentally and economically sustainable.
2. **Residential development in The Sanctuary should not exceed one dwelling unit per acre.** The approved site plan for The Sanctuary subdivision allows for 20 percent of the 1,350-acre site to be developed. This subdivision is developed with single family homes on large lots and preserves a large amount of open space. Any future development should continue to take into consideration the environmental features in the area.
- 3a. **A convenience size retail center is recommended for the intersection of Shopton Road West and the future connection of Winget Road.** This convenience center (70,000 square feet maximum) would benefit an underserved area, where the nearest proposed retail center is more than three miles away and not yet built. However, if the Winget Road connection does not take place, consideration should be given to an alternate site if it is located on a thoroughfare, has pedestrian and vehicular access and is oriented toward a collector or local street.
- 3b. **Allow a mixture of office and retail land uses in the northeast quadrant of York Road and Shopton Road West.** A large amount of office and retail development exists elsewhere in the plan area; therefore, a convenience center (70,000 square feet maximum) is recommended at this location to serve the surrounding residential area.
- 4a. **Small scale retail land uses are appropriate at the end of Pine Harbor Road on Lake Wylie.** Retail development at this location should be limited to marina related uses such as boat storage, bait and tackle shop, restaurants (no drive-thru) and other convenience type uses.
- 4b. **A commercial marina with supportive retail land uses is appropriate on S. Tryon Street at Lake Wylie.** These uses could include restaurants (no drive-thru), convenience type uses such as a bait and tackle shop and other marina related retail uses limited to 10,000 square feet.
5. **The Red Fez Club which is located on Lake Wylie just south of York Road is an institutional use.** However, if the site were to redevelop, the land use recommendation is for residential at up to four dwelling units per acre.
- 6a. **Recognize the mixed use center approved as part of The Palisades development.** The approved site plan for The Palisades, a large mixed use development located off York Road near Lake Wylie, allows for 225,000 square feet of retail and office land uses. However, the approved plan notes that an additional 100,000 square feet of retail is allowed with a plan amendment. This additional 100,000 square feet is warranted to serve the needs of the large number of residential units in the vicinity of the Palisades neighborhood but should not exceed 325,000 square feet.
- 6b. **Allow a mixture of residential, office and retail land uses on the southeast corner of S. Tryon Street and Youngblood Road** to serve the immediate area. One or any combination of these uses is appropriate. Development should be limited to a convenience size center (70,000 square feet maximum). Residential densities should not exceed eight dwelling units per acre and should serve as a transition to the adjacent residential development.
7. **Residential land uses ranging in density from 6 to 12 dwelling units per acre are appropriate in close proximity to the Activity Centers** where supporting infrastructure and services are generally in place. These locations are specified on **Map 3, *Recommended Future Land Use***.

Several parcels located along S. Tryon Street between the RiverGate Mixed Use Activity Center and the Westinghouse Boulevard Industrial Center are appropriate for moderate density residential land uses. S. Tryon Street is a major thoroughfare, the RiverGate Mixed Use Activity Center provides a mix of uses to serve residents and the Westinghouse Boulevard Industrial Center has a large employment base. Therefore, Area 7 can support higher density development. However, multi-family developments should be designed in accordance with the Community Design section of this plan, especially regarding pedestrian circulation, building orientation and site design.

- 8. Institutional land uses such as churches, schools and daycares are appropriate at various locations** as indicated on **Map 3, Recommended Future Land Use**. The plan generally recognizes existing institutional land uses; and does not specify appropriate locations for all future institutional land uses.

**Bartlett Tree Experts-Tree Research Laboratories**, a large institutional use in the area, is a learning and research facility that covers over 400 acres. It has an extensive collection of over 2,000 species of trees, shrubs and other plants as well as display gardens. This facility is an important asset to the area but if the site redevelops in the future, the recommended land use is for residential at a density of four dwelling units per acre.

- 9. Park and open space land uses, including greenway connections should be provided throughout the Wedge area.** Active open spaces that can serve as a gathering space for area residents as well as greenways and trails that link areas and protect environmental features are important to the livability and sustainability of the plan area.

## **II. Activity Centers**

Activity Centers are focal points of economic activity typically planned for concentrations of compact development. Many existing Activity Centers are appropriate locations for significant new growth along with enhancements to the supporting infrastructure. There are three types of Activity Centers: Center

City, Mixed Use Activity Centers and Industrial Centers. Several portions of the plan area, approximately 30 percent, lie within identified Activity Centers. See **Map 3, Recommended Future Land Use**. The S. Tryon Street and I-485 Interchange area and the intersection of S. Tryon Street and Steele Creek Road are located within Mixed Use Activity Centers (Whitehall/Ayrsley and RiverGate, respectively). Properties located along both sides of Westinghouse Boulevard and properties located on the south side of Shopton Road and along both sides of Sandy Porter Road are located within Industrial Activity Centers (Westinghouse and Shopton Road, respectively).

### **Activity Center Policies**

#### **RiverGate Mixed Use Activity Center**

The RiverGate Mixed Use Activity Center currently includes office, institutional, residential and retail land uses. Hospitals are generally considered institutional land uses but Carolinas Medical Center – Steele Creek functions as an office use. This facility primarily provides outpatient and overnight emergency care. Institutional uses in the Center include Southwest Middle School and Steele Creek Branch Library.

Retail includes the RiverGate Shopping Center with approximately 600,000 square feet of existing retail and office uses, developed around a power center format, which is at the core of this Mixed Use Activity Center. Additionally, approximately 1,775 residential units have been approved at RiverGate but not yet built. Other retail centers in the area include Steele Creek Crossing located across S. Tryon Street from RiverGate; this center is approximately over 70,000 square feet and includes a grocery store and drug store. Steelecroft Shopping Center located at the northeast corner of S. Tryon Street and Steele Creek Road has approximately 80,000 square feet of retail space and includes a grocery store and other retail uses. Together these shopping centers total approximately 750,000 square feet which constitutes a super regional size center as defined in the General Development Policies (GDP).

While the RiverGate shopping center is already developed with retail and office uses, in the future, higher density and more intense development that



incorporates a mix of retail, office and residential uses may be appropriate, if it addresses the community design and transportation guidance provided in this plan. In particular, future development should be more compact and better connected so that people can easily walk between the various uses. Street connections within the center should reduce block sizes and provide interconnectivity for not only automobile drivers but transit riders, cyclists and pedestrians.

New streets should include pedestrian amenities like pedestrian scale lighting, benches, trash receptacles, on-street parking and walking surface texture. Existing surface parking lots could transition over time to decked parking structures wrapped with active ground-floor uses.

Building heights in this area should not exceed four stories. In areas designated for residential, office and retail land uses, two or any combination of retail, office and/or residential uses is appropriate. If the vertical integration of uses is not feasible, the

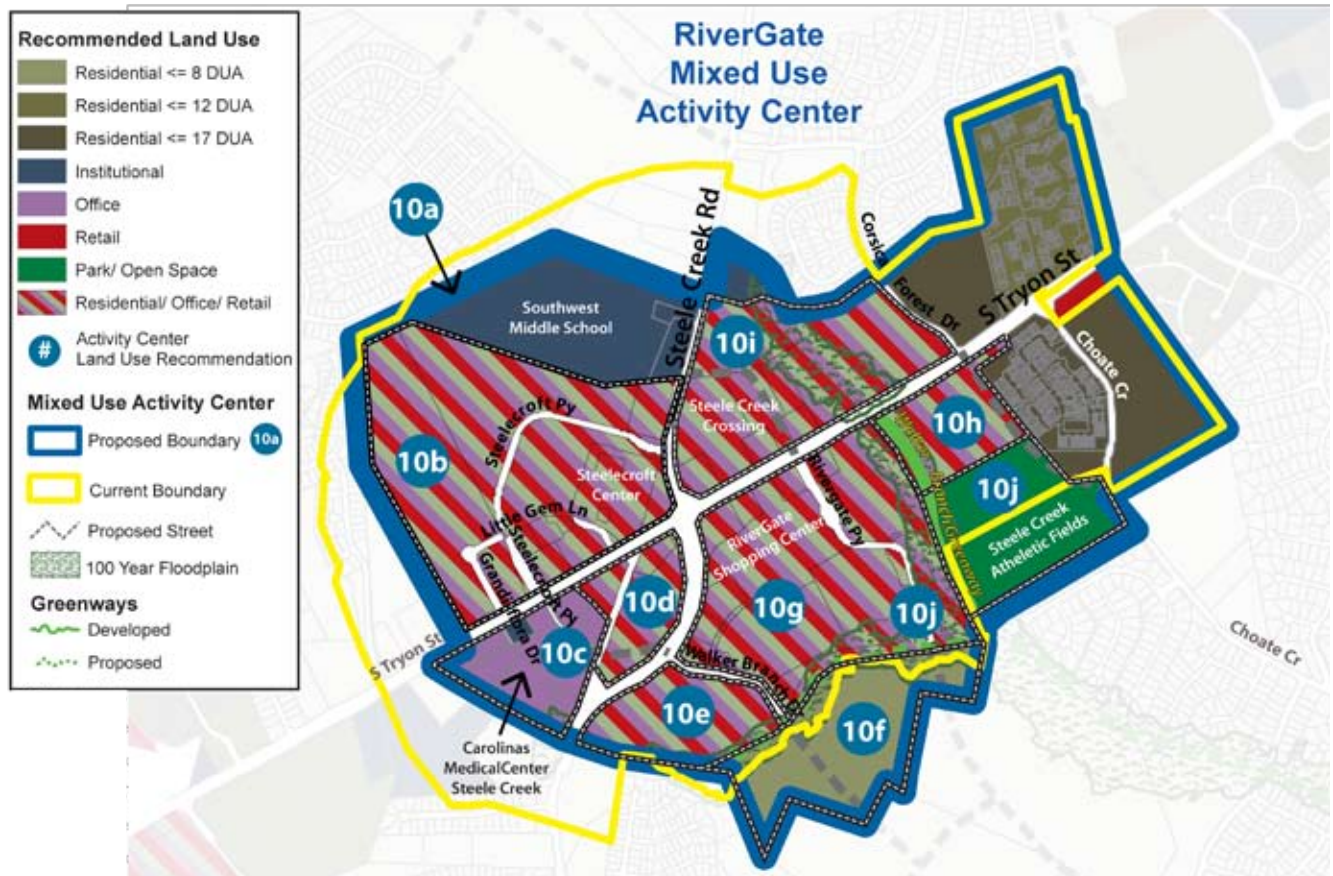
area should develop with a horizontally integrated mix of office, retail and / or residential uses that are interconnected so that buildings function collectively with common pedestrian connections and open space.

More specific policies for the RiverGate Mixed Use Activity Center follow and are illustrated in **Graphic 1**.

**10a. Refine the boundaries of the RiverGate Mixed Use Activity Center** as shown on Graphic 1 to include parcels that are appropriate for more intense development and to remove parcels that better relate to the surrounding Wedge area.

- The parcel located on the southeast corner of S. Tryon Street and Choate Circle that is zoned and recommended for retail land uses should be added to the RiverGate Mixed Use Activity Center.

**Graphic 1:**  
RiverGate Mixed Use Activity Center (refer to Policy 10)



- In addition, the parcel that is located on the southerly side of Walker Branch Greenway and recommended for residential up to eight dwelling units per acre should be included in the Activity Center. This provides the opportunity to better orient the residential development to the greenway and Activity Center.
  - Several parcels that are located on the periphery of the Activity Center and primarily zoned and recommended for residential land uses are to be included in the Wedge Area.
- 10b. Residential, office and retail land uses are appropriate in the northwest quadrant of York and Steele Creek roads.** This area is currently developed with office and retail land uses along York Road and residential development to the rear. This quadrant should continue to function as a neighborhood center (up to 100,000 square feet of retail and 30,000 square feet of office).
- 10c. Office land uses are recommended for this area.** Carolinas Medical Center recently opened a medical office and emergency care facility on this site. Buildings should front an internal street network. Strong pedestrian connections should be provided to surrounding uses and amenities. Building heights should not exceed four stories.
- 10d.** This area is currently vacant and zoned for office and residential uses. **If it does not develop within the existing zoning; residential, office and / or retail land uses are appropriate.** Buildings should front streets with parking at the rear of the site and consideration may also be given to on street parking. Development should focus on improving internal and external pedestrian connectivity. Building heights should not exceed six stories.
- 10e.** This area is currently vacant and zoned for residential development. **If it does not develop within the existing zoning; residential, office and / or retail land uses are appropriate.** Building heights should not exceed four stories, outparcels are discouraged and parking structures should be wrapped with active ground floor uses. Buildings should make use of the greenways and open space amenities,
- front Walker Branch Drive and Steele Creek Road with parking at the rear of the site. On street parking may be considered along Walker Branch Drive.
- 10f. Residential up to eight dwelling units per acre is appropriate in this area.** This could include a combination of single family and multi-family uses such as detached single family homes, duplexes/quadrplexes and townhomes. The highest intensity of development should be closest to the retail core of the Activity Center and transition to lower intensity near the Wedge area. Walker Branch Drive and Rivergate Parkway should be extended through the subject property to improve connectivity to adjacent parcels. Strong pedestrian connections are encouraged to link surrounding uses and amenities. The Walker Branch Greenway is adjacent to the property and can be used as an amenity to this area. Buildings could face the greenway and the greenway can provide pedestrian access to other areas.
- 10g.** The **RiverGate Shopping Center site may intensity** with infill development concentrated around the core of the Activity Center. Future development should be compact and better connected so that people can easily walk between various uses. Infilling surface parking lots with residential, office and retail development is appropriate with the following considerations: buildings should not exceed six stories and should front an internal street network with strong pedestrian connections to surrounding uses and amenities. Future development may also include infill surface parking structures wrapped with active ground floor uses and should adhere to the community design and transportation guidance provided in this plan.
- 10h.** This area is currently vacant and zoned for residential development. **However, a mixture of residential, office and / or retail land uses are appropriate.** Building heights should not exceed four stories, outparcels are discouraged and parking structures should be wrapped with active ground floor uses. Buildings should make use of the Walker Branch Greenway and open space amenities.

**10i. The northeast quadrant of S. Tryon Street and Steele Creek Road is recommended for a mix of residential, office and / or retail land uses.** Property located along S. Tryon Street is developed with a retail center. Property to the rear of the shopping center is zoned for office land uses, while other parcels are zoned for residential land uses. Building heights should not exceed four stories, outparcels are discouraged and parking structures should be wrapped with active ground floor uses. Buildings should make use of the Walker Branch Greenway and open space amenities.

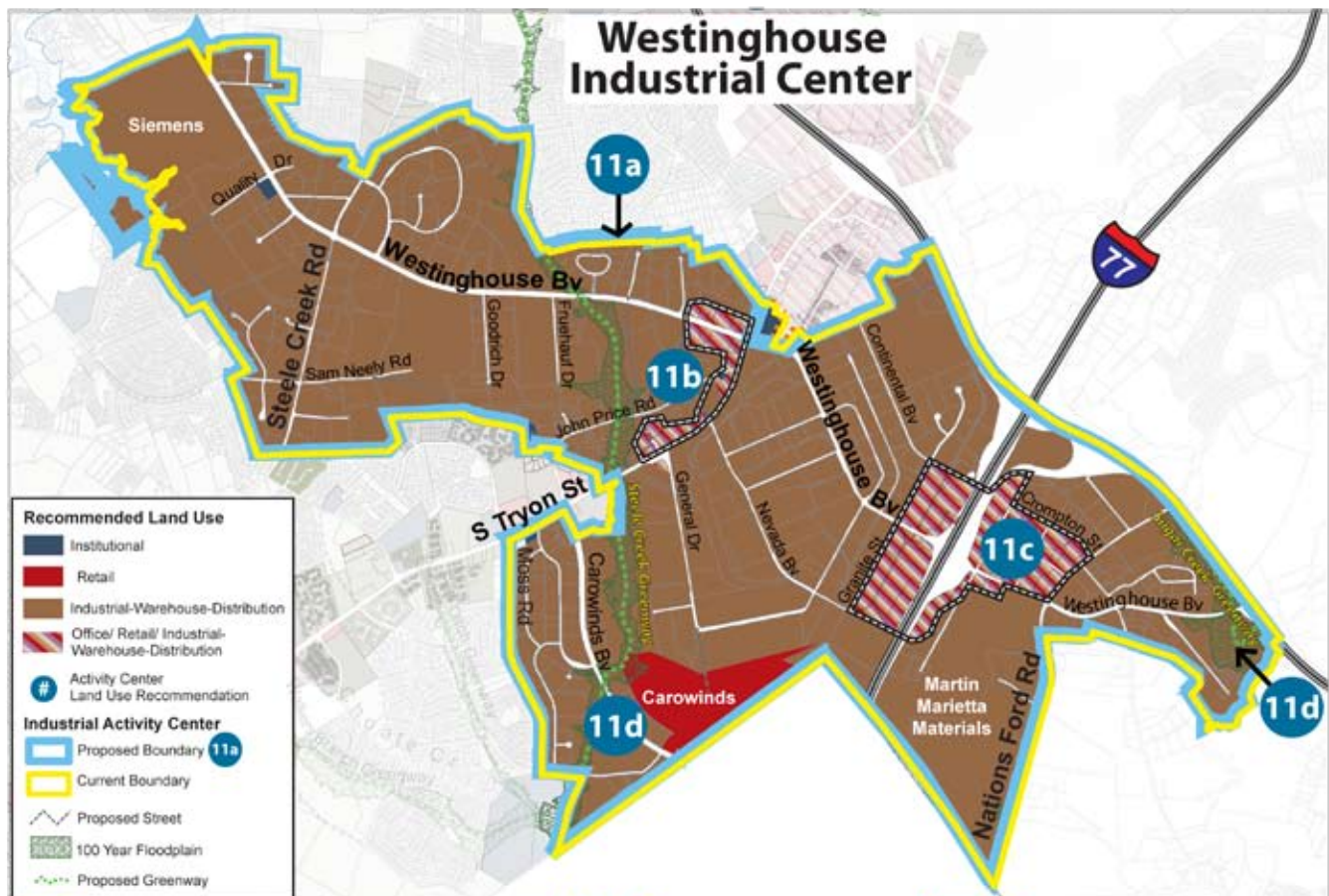
**10j. Park and open space land uses, including greenway connections should be provided throughout the RiverGate Mixed Use Activity Center.** Active open spaces that serve as a gathering space, incorporate greenways and trails, link areas and preserve environmental features are an important asset to this Center. Existing parks and open spaces in the Center are Walker Branch Greenway, Steele Creek Greenway and Steele Creek Athletic Fields.

**Westinghouse Industrial Center**

The Westinghouse Industrial Center is the largest industrial sub market in North Carolina, and provides employment opportunities for people throughout the region. It is anticipated that the area will continue to attract more industrial and office uses, especially given its location along two major interstates (I-77 and I-485) and the large number of businesses that exist in the area.

The continued development of industrial land uses is appropriate in this Industrial Center along with some retail and office uses that support area employees and visitors. These supporting retail and office land uses should be focused around the intersections of S. Tryon Street / Westinghouse Boulevard and I-77 / Westinghouse Boulevard or be internal to industrial / business parks. Additional street connections may be needed to improve access, circulation, and support future development within the Industrial Center.

**Graphic 2:**  
Westinghouse Boulevard Industrial Center (refer to Policy 11)



**11a. Modify the Westinghouse Boulevard Industrial Center boundaries** as shown on **Graphic 2** to include property that is more appropriate for industrial development. A portion of the Siemens property, located off Shopton Road West, is separated from the larger parcel by Armour Creek (one of the fingers off of the Catawba River). This property is currently located in the Wedge area and zoned I-2. It should be added to the Industrial Center.

Property located on the northerly side of Westinghouse Boulevard east of S. Tryon Street is adjacent to the Whitehall / Ayrley Mixed Use Activity Center and should be included in the Activity Center. A couple of the parcels are recommended for institutional land uses while the remaining parcels are recommended for a mixture of residential, office and retail land uses. These uses at this location are considered more appropriate in the Activity Center.

**11b. Properties located along S. Tryon Street, extending from Westinghouse Boulevard to the proposed Steele Creek Greenway, are appropriate for office, civic, and convenience type retail uses that serve the Industrial Center.** There is existing vacant retail space in this area that offers redevelopment opportunities. In addition, the new Charlotte-Mecklenburg Police Department Steele Creek Division Police Station is planned for the southwest corner of S. Tryon Street and Westinghouse Boulevard.

**11c. Office, retail and industrial warehouse distribution land uses are appropriate at the intersection of I-77 and Westinghouse Boulevard which is the key gateway to this major industrial and employment area.** This area is predominantly developed with a mixture of retail and industrial land uses. In the future, one or any combination of these uses is appropriate. However, the landscaping and pedestrian network needs to be well integrated into future development and future development should not compromise the accessibility of the interchange.

**11d. Support the proposed greenways in the area.** The proposed Steele Creek Greenway generally extends from Brown-Grier Road south to the County Line and the proposed

Big Sugar Creek Greenway is located near the intersection of Westinghouse Boulevard and I-485. These proposed greenways provide the opportunity to preserve open space, provide pedestrian amenities and protect environmental features in the area.

**Whitehall/Ayrley Mixed Use Activity Center**

This Activity Center was initially developed with mainly office and industrial land uses and in more recent years, new developments have incorporated retail and residential uses. Ayrley Town Center, located across S. Tryon Street from Whitehall, southwest of the I-485 interchange, is part of the Whitehall Mixed Use Activity Center. This Mixed Use Activity Center, previously referred to as the Whitehall Mixed Use Activity Center, should be renamed Whitehall/Ayrley Mixed Use Activity Center to recognize Ayrley, as a significant mixed use development within the Center boundaries. Future development in the Ayrley area should continue to be designed to be compact and pedestrian oriented.

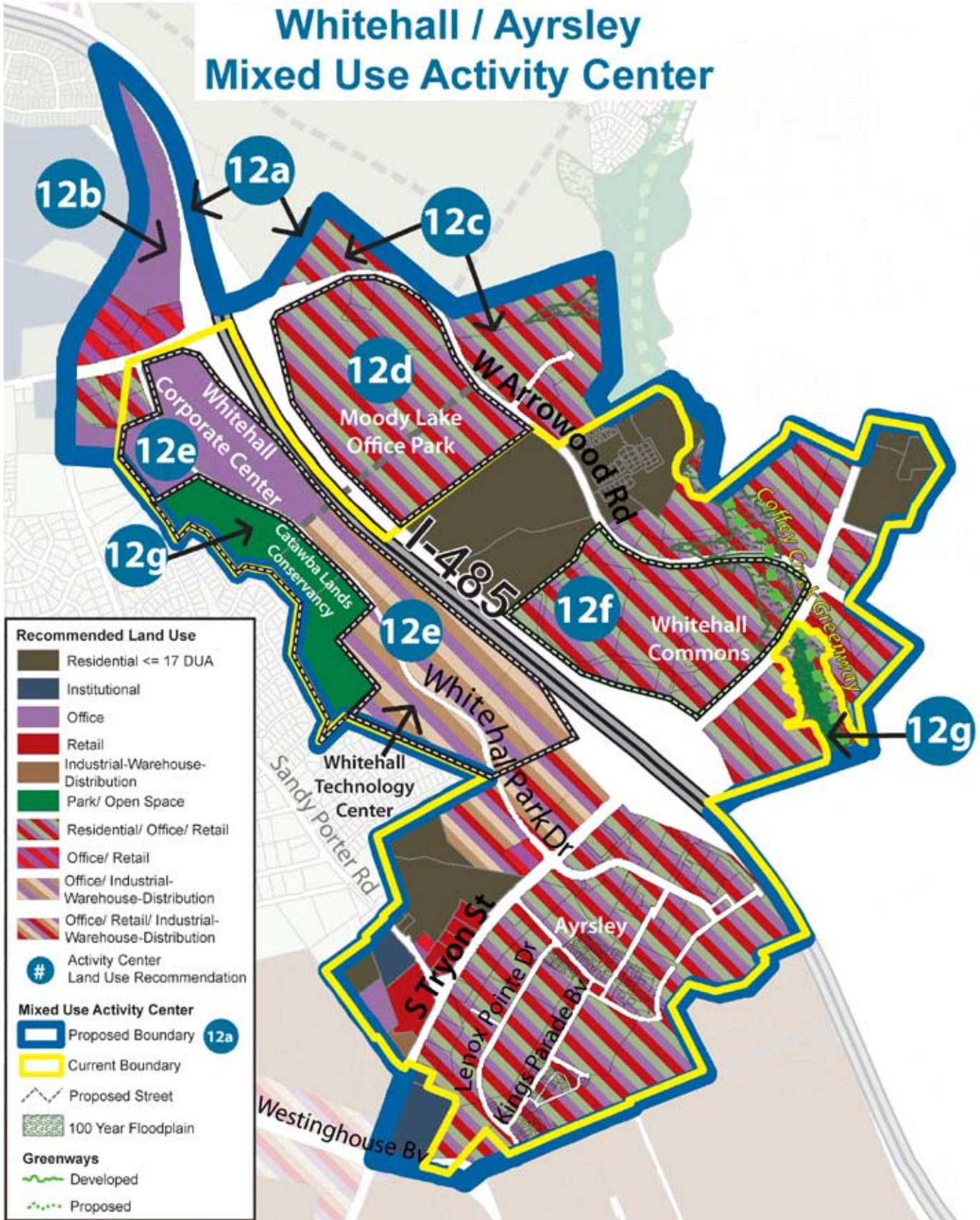
**12a. Modify the Whitehall/Ayrley Mixed Use Activity Center boundaries as shown on Graphic 3 to include additional parcels that are appropriate for a greater mixture and intensity of development.** Property located along the westerly side of I-485 north of W. Arrowood Road and property located along the easterly side of I-485 and north and south of W. Arrowood Road should be added to the Mixed Use Activity Center. Previously these parcels were included in the Wedge area. However, the recommended mix of residential, office and retail land uses is appropriate in the Activity Center. The Moody Lake Office Park is located in this area.

Parcels located off the southerly side of S. Tryon Street along the Coffey Creek Greenway (currently in the Wedge area) as well as property located on the northeast corner of S. Tryon Street and Westinghouse Boulevard (currently in the Westinghouse Boulevard Industrial Center) are recommended to be included in this Mixed Use Activity Center.

**12b. Office and retail land uses are recommended along the west side of I-485 north of W. Arrowood Road.** A mixture of office and retail

Graphic 3:

Whitehall/Ayrsley Mixed Use Activity Center (refer to Policy 12)



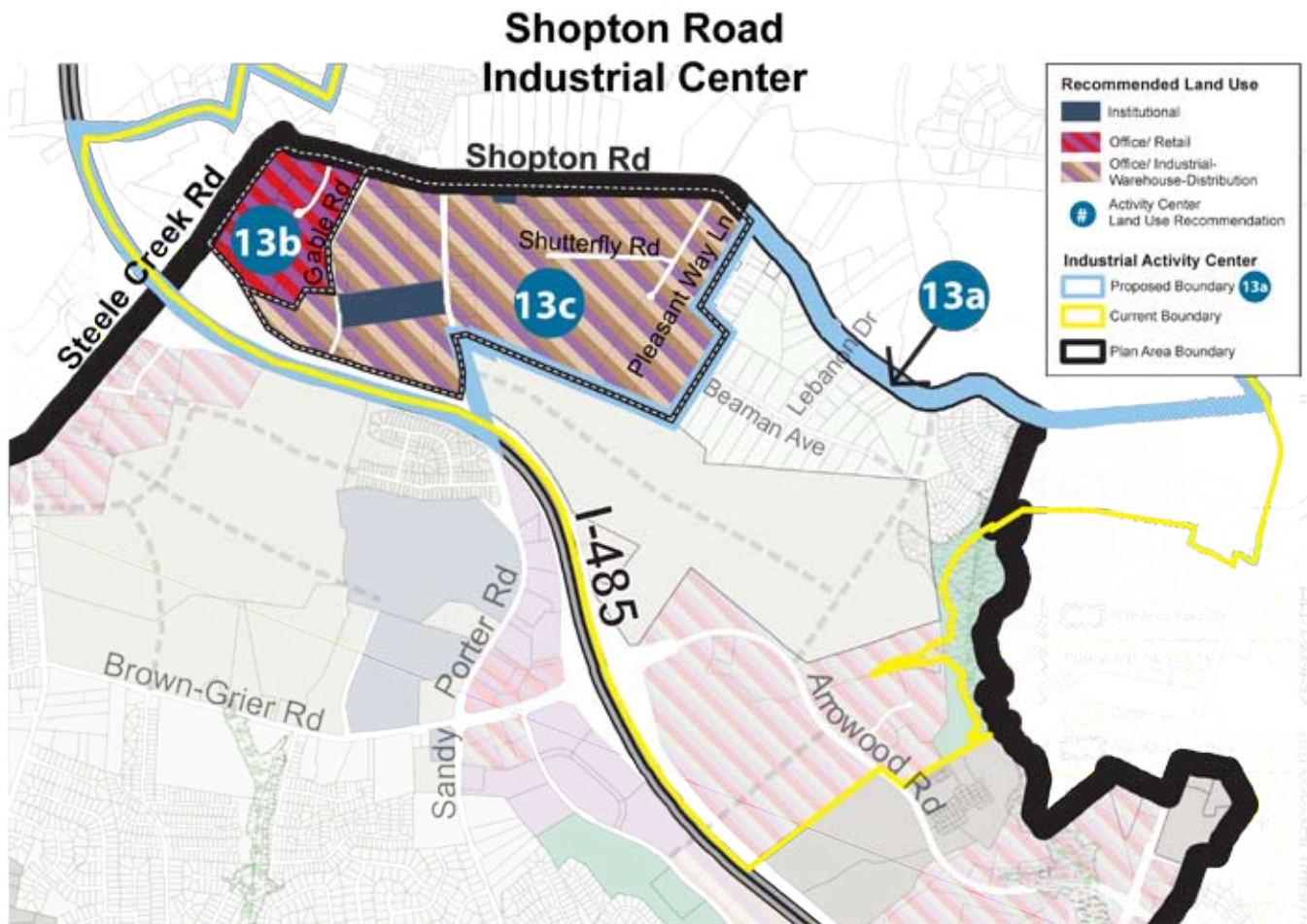
land uses is appropriate near the intersections transitioning to office land uses.

- 12c. **A mixture of residential, office and / or retail land uses are appropriate adjacent to Moody Lake Office Park.** Building heights should not exceed four stories and outparcels are discouraged. Buildings should make use of the greenways and open space amenities.
- 12d. **Recognize the Moody Lake development at Arrowood Road and I-485, which was approved in 2008, as a mixed use development.** The approved site plan allows for 1.8 million square feet of office space, 40,000 square feet of retail and 400 residential units.
- 12e. **The west side of I-485 along Whitehall Park should continue to develop with office and industrial-warehouse distribution uses, with a higher concentration of office at the**

**intersection of Arrowood / Brown Grier Road and I-485.** Building heights in this area should not exceed six stories. It is important in this area that future development does not compromise the accessibility of the interchange.

- 12f. **Future infill development may include office, retail and residential land uses concentrated around the intersection of Arrowood Road and S. Tryon Street.** Currently, this area is developed with retail (Wal Mart Shopping Center), light industrial (Whitehall Technology Park), and multi-family residential land uses. Development in this area may intensify in the future. Infilling the surface parking lots with development is appropriate with the following considerations: buildings should front an internal street network with strong pedestrian connections to surrounding uses and amenities. Buildings should not exceed

**Graphic 4:**  
Shopton Road Industrial Center (refer to Policy 13)



six stories. More intense development is appropriate for this site if it is compact and better connected so that people can easily walk between the various uses and it adheres to the community design and transportation guidance provided in this plan. Also, future development should not compromise the accessibility of the interchange.

**12g. Provide open space and greenways.** Land adjacent to Whitehall Technology Park is owned by the Catawba Lands Conservancy and is to be preserved as open space. Also, portions of the Coffey Creek Greenway are located in this area and recommended to expand in the future.

### **Shopton Road Industrial Center**

The portion of the Shopton Road Industrial Center within the plan area boundaries is mostly vacant and sparsely developed with a few industrial / warehouse distribution, and residential land uses.

**13a. Modify the boundaries of the Shopton Road Industrial Center to exclude the residential portions along Shopton Road, Lebanon Drive and Beaman Avenue as shown on *Graphic 4*.** Include this existing residential neighborhood in the Wedge. Properties located along both sides of Arrowood Road, which includes the Moody Lake development, are recommended to be included the Whitehall / Ayrley Mixed Use Activity Center (See **Policy 12A**).

**13b. Retail and / or office land uses are appropriate closer to the intersection of Shopton Road and Steele Creek Road; as well as the interchange with I-485.** It will be important in this area that future development does not compromise the accessibility of the interchange.

**13c. This area is appropriate to develop over time with more industrial / warehouse distribution land uses, due to its proximity to I-485 and the airport, just north of this area.** Industrial uses adjacent to residential should provide appropriate buffers and screening and be designed to lessen any negative impacts on the neighborhood.

## **Community Design**

Community design policies help to ensure that new development complements the existing or desired character of the Steele Creek community. While design policies alone do not dictate land use or zoning, they are used to strengthen how various land uses fit together. These policies consider not only the built environment in conjunction with the natural environment, but also consider how people move through those spaces as pedestrians, bicyclists or automobile drivers.

### **GOAL:**

Encourage sustainable development that promotes accessibility for pedestrians and cyclists while integrating green amenities and environmentally sensitive features.

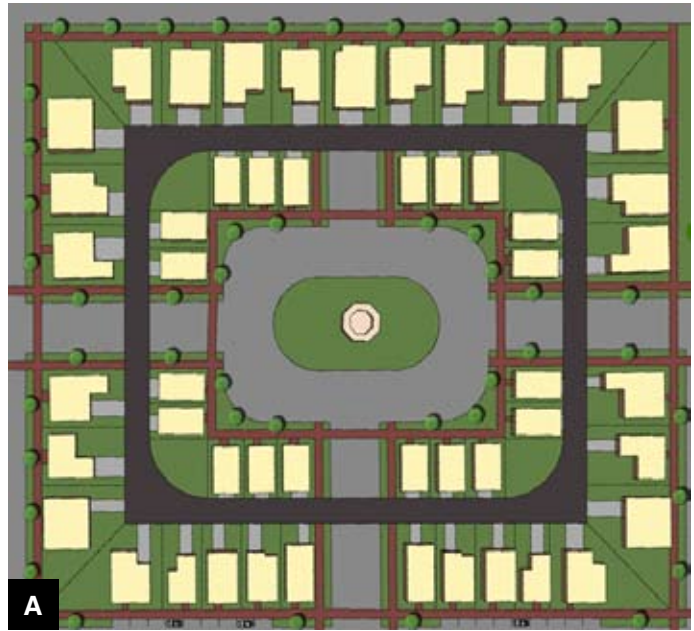


*Pleasant streetscape created with sidewalks, pedestrian scale lighting, street trees and on-street parking.*

**C**lose attention to building design serves to enhance the community. Design policies do not result in conformity of design, but provide direction for both new and infill development.

RESIDENTIAL Design Policies <sup>1</sup>				
14 Building Architecture and Site Design	Policy Number	Graphic Reference	Single Family Detached	Single Family Attached and Multi-Family
<i>Preserve historically or architecturally significant structures.</i>	14A		●	●
<i>Avoid blank walls along pedestrian circulation areas and public rights-of-way.</i>	14B		●	●
<i>Orient building towards internal street network (unless a thoroughfare) or common open space and provide pedestrian access to the street.</i>	14C	<b>A</b>	●	●
<b>Encourage clustered development where appropriate, such as areas where the preservation of open space and/or environmentally sensitive areas is particularly important.</b>	14D		●	●
<b>Provide a variety of housing types (floor plans, exterior treatments and materials, massing, and roof forms).</b>	14E	<b>B</b>	●	●
<b>Porches should be a minimum of 6' deep and at least half the width of the facade (excluding garages).</b>	14F		●	●
<b>Design residential garages to reduce visual impact from the street.</b>	14G		●	●
<b>Vary horizontal and vertical plane of elevations to break up the mass and scale of large buildings.</b>	14H	<b>C</b>		●
<b>Distinguish ground level of buildings from upper stories through use of materials, articulation or a combination thereof.</b>	14I			●
<b>Blend the scale and height of development with respect to single family neighborhoods.</b>	14J			●
<b>Locate service areas and dumpsters away from pedestrian circulation areas.</b>	14K			●

<sup>1</sup> Adopted by City Council, the *General Development Policies (GDP)* provide guidance for the location, intensity and form of future development and redevelopment throughout the community. Many of the residential and mixed/multi-use center policies for the plan area are based upon these adopted GDP policies. Plan policies that appear in italic text are based upon those previously adopted GDP policies. **Additional, plan-specific policies are shown in bold font.** Plan-specific policies augment the GDP design guidelines.



**A** Buildings are oriented away from South Tryon Street and towards an internal street network.



**B** Provide a variety of housing types and materials.



**C** Break up the massing of buildings by varying both horizontal and vertical elevations.



*These policies provide direction to accommodate growth and change while protecting the natural environment on which we depend, including the quality of our air, water and land.*

RESIDENTIAL Design Policies <sup>1</sup>				
15 Natural Environment	Policy Number	Graphic Reference	Single Family Detached	Single Family Attached and Multi-Family
Provide a meaningful amount of usable and accessible open space. In single family development, this should be common open space.	15A		●	●
Incorporate functional, unique, natural, and/or historical elements into the open space.	15B		●	●
Preserve steep slopes along streams or adjacent to significant natural landscape features.	15C	<b>D</b>	●	●
Preserve at least 10% of the site as "tree save area" consistent with residential tree ordinance.	15D		●	●
Provide and encourage accessibility to the Catawba River and other natural amenities through better connected streets, sidewalks and trails.	15E	<b>E</b>	●	●
Design open space to create a network of green spaces.	15F		●	●
Use low maintenance native vegetation as much as possible.	15G		●	●
Preserve prominent stands of existing trees, whenever feasible.	15H		●	●
Create a gradual transition between the open space and the built environment where development adjoins natural areas/open spaces.	15I		●	●
Buffer development along South Tryon St/York Road through a combination of landscaping treatments and/or retention of existing trees.	15J	<b>F</b>	●	●
Encourage "green" site design and building practices.	15K		●	●

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Preserve steep slopes along creek and stream beds.



Provide access to the Catawba River through a system of trails, sidewalks and greenways.



Buffer development along South Tryon Street with landscaping to reduce noise impacts.

Providing a safe, accessible and comfortable network of streets, sidewalks and pathways for all modes of transportation is an important step in establishing a livable community. The policies below provide guidance for achieving mobility and connectivity for pedestrians, bicyclists and automobile drivers. For additional policies concerning transportation, please see the Transportation section of the plan, as well as the *City of Charlotte Urban Street Design Guidelines (2003)*.

RESIDENTIAL Design Policies <sup>1</sup>				
16 Pedestrian and Vehicular Network	Policy Number	Graphic Reference	Single Family Detached	Single Family Attached and Multi-Family
Provide pedestrian amenities such as street furniture and pedestrian scale lighting.	16A	<b>G</b>		•
Provide bicycle parking in appropriate common areas (for example, playground, swimming pools.)	16B		•	•
Provide pedestrian/bicycle connections to nearby parks, greenways, bikeways and trails.	16C		•	•
Provide direct pedestrian and bicycle connections between all abutting or adjacent developments and transit stops.	16D		•	•
Design streets with pedestrian safety and comfort in mind.	16E		•	•
Design street system to calm traffic.	16F		•	•
Align collectors at thoroughfare intersections to promote safe crossings for pedestrians, cyclists and automobile drivers.	16G		•	•
Encourage on-street parking along public and private streets where appropriate to reduce the size of surface parking lots.	16H	<b>H</b>		•
Provide multiple vehicular entry points.	16I		•	•
Design an internal street system with spine road, including: • parallel parking, street trees, and sidewalks; • driveways or secondary streets to connect parking lots and primary street; and • sidewalks on secondary streets.	16J	<b>I</b>		•
<b>Reduce driveway cuts along South Tryon Street and other thoroughfares.</b>	16K		•	•
<b>Locate parking to the side or rear of buildings and screen parking from public rights-of-way.</b>	16L			•
<b>Use landscaping to break surface parking lots into smaller pockets.</b>	16M			•
<sup>1</sup> Adopted by City Council, the <i>General Development Policies (GDP)</i> provide guidance for the location, intensity and form of future development and redevelopment throughout the community. Many of the residential and mixed/multi-use center policies for the plan area are based upon these adopted GDP policies. Plan policies that appear in italic text are based upon those previously adopted GDP policies. <b>Additional, plan-specific policies are shown in bold font.</b> Plan-specific policies augment the GDP design guidelines.				



Amenities such as street furniture and pedestrian scaled lighting can make an environment more pleasurable to the pedestrian.



On street parking is encouraged where feasible to provide easy access for visitors.



Create a spine street with on street parking, planting strips and sidewalks in accordance with USDG standards.

## Development Scenario

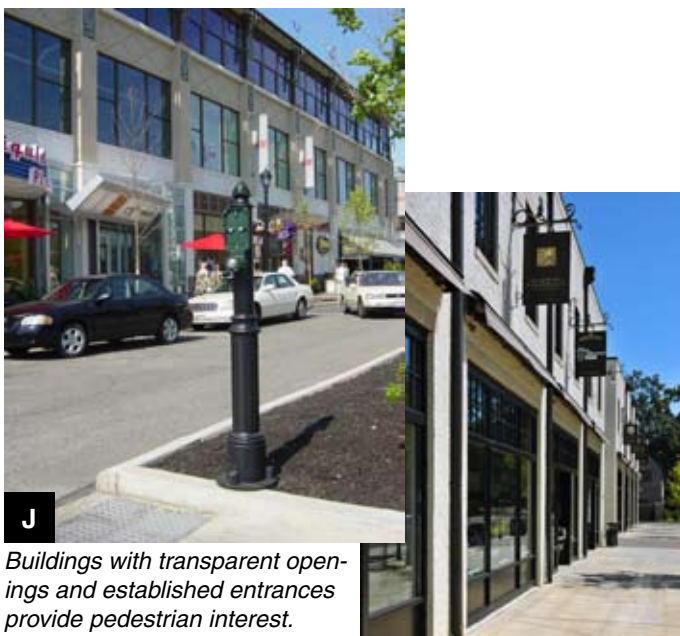


Shown above is a conceptual plan for a site located along South Tryon Street in the Steele Creek plan area. The recommended future land use for this area is a mix of residential, office and retail land uses. This scenario is presented to demonstrate some of the community design principles discussed in the plan.

Architecture and landscape design define streets and public spaces as areas of shared use. Streets lined by buildings and trees rather than vast expanses of parking lots provide a visually rich and physically safe environment.

NON-RESIDENTIAL Design Policies <sup>1</sup>							
17 Building Architecture and Site Design	Policy Number	Graphic Reference	Retail-Oriented Mixed/Multi Use	Retail	Office	Mixed Use	Industrial
<i>Design buildings with transparent openings, ornamentation, and architectural character.</i>	17A	<b>J</b>	●	●	●	●	
<i>Establish entrances with pedestrian interest.</i>	17B	<b>J</b>	●	●	●	●	
<i>Orient buildings towards street and provide pedestrian access.</i>	17C		●	●	●	●	
<i>Arrange buildings in an orderly block pattern.</i>	17D		●	●	●	●	
<i>Discourage tearing down historic or architecturally significant structures.</i>	17E		●	●	●	●	●
<i>Design buildings with human scale and visual interest in mind.</i>	17F		●	●	●	●	
<i>Minimize impacts of drive-thru development.</i>	17G		●	●	●	●	
<i>Design for pedestrian safety.</i>	17H		●	●	●	●	●
<i>Locate dumpsters and service areas away from residential areas.</i>	17I		●	●	●	●	●
<b>Vary horizontal and vertical plane of elevations to break up the mass and scale of large buildings.</b>	17J	<b>K</b>	●	●	●	●	●
<b>Distinguish ground level of buildings from upper stories through use of materials, articulation or a combination thereof.</b>	17K		●	●	●	●	
<b>Blend the scale and height of development with respect to single family neighborhoods.</b>	17L		●	●	●	●	●

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**J**  
*Buildings with transparent openings and established entrances provide pedestrian interest.*



**K**  
*Distinguish the ground level of retail and mixed use buildings and provide variation in massing, materials, roof lines, etc. for visual interest.*

NON-RESIDENTIAL Design Policies <sup>1</sup>							
18 Natural Environment	Policy Number	Graphic Reference	Retail-Oriented Mixed/Multi Use	Retail	Office	Mixed Use	Industrial
	<i>Preserve steep slopes along stream beds or adjacent to significant natural landscape features.</i>	18A		●	●	●	●
<i>Provide a meaningful amount of usable and accessible common open space and integrate the tree canopy into it.</i>	18B	<b>L</b>	●	●	●	●	●
<i>Consider using pervious pavement for overflow parking.</i>	18C		●	●	●	●	●
<i>Avoid piping creeks and minimize channelization. Use a bridge, rather than a culvert at existing creeks when possible.</i>	18D		●	●	●	●	●
<i>Retain existing landscaping when possible. Mass clearing is not preferable and existing tree canopy should be preserved where practical.</i>	18E		●	●	●	●	●
<b>Provide large natural buffers between industrial uses and surrounding areas, including the Catawba River.</b>	18F						●
<b>Encourage the use of green roofs to reduce storm water runoff and provide other environmental benefits.</b>	18G	<b>M</b>	●	●	●	●	●
<b>Buffer development along South Tryon St/York Road through a combination of landscaping treatments and/or existing landscaping.</b>	18H		●	●	●	●	●

<sup>1</sup> Adopted by City Council, the *General Development Policies (GDP)* provide guidance for the location, intensity and form of future development and redevelopment throughout the community. Many of the residential and mixed/multi-use center policies for the plan area are based upon these adopted GDP policies. Plan policies that appear in italic text are based upon those previously adopted GDP policies. **Additional, plan-specific policies are shown in bold font.** Plan-specific policies augment the GDP design guidelines.



Provide usable and common open space throughout mixed use developments.



Encourage the use of green roofs to reduce storm water runoff and promote green building design.

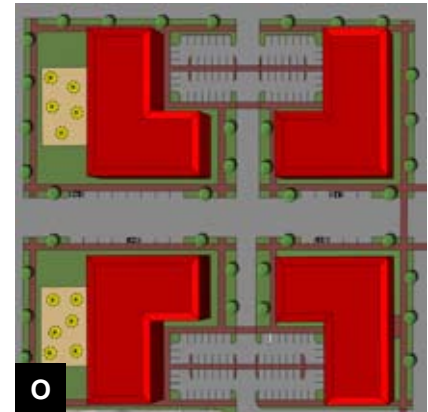
Circulation in and through a site should be comfortable, safe, secure and efficient for pedestrians, bicyclists and automobile drivers.

NON-RESIDENTIAL Design Policies <sup>1</sup>								
19 Pedestrian and Vehicular Network	Policy Number	Graphic Reference	Retail-Oriented Mixed/Multi Use		Retail	Office	Mixed Use	Industrial
	<i>Create an interconnected sidewalk system.</i>	19A	N	•	•	•	•	•
	<i>Design short blocks with an organized street pattern.</i>	19B		•	•	•	•	•
	<i>Provide pedestrian/bicycle connections to nearby parks, greenways, bikeways and trails.</i>	19C		•	•	•	•	•
	<i>Design streets with pedestrian safety and comfort in mind.</i>	19D		•	•	•	•	•
	<i>Provide ample sidewalk width to accommodate pedestrian circulation, congregation, outdoor dining, and amenities such as street furnishings, trash receptacles, art work and trees.</i>	19E		•	•	•	•	•
	<i>Establish clear "way-finding" signage for pedestrians and automobile drivers.</i>	19F	N	•	•	•	•	•
	<i>Provide safe pedestrian circulation throughout the development, including through parking lots and decks.</i>	19G	O	•	•	•	•	•
	<i>Provide safe and secure transit waiting facilities.</i>	19H		•	•	•	•	•
	<i>Establish a central vehicular access into the site from the more auto-oriented street and provide secondary access options from the minor streets.</i>	19I		•	•	•	•	•
	<i>Design access from surrounding neighborhood so that the appearance is residential in character.</i>	19J		•	•	•	•	•
	<i>Integrate landscaping with seating along facades when possible and, when practical, work to integrate the existing tree canopy into the site design.</i>	19K		•	•	•	•	•
	<b>Reduce driveway cuts along South Tryon Street and other thoroughfares.</b>	19L		•	•	•	•	•
	<i>Encourage shared driveways and alleys within the development.</i>	19M		•	•	•	•	•
	<b>Provide and encourage accessibility to Catawba River through better connected streets, sidewalks and trails.</b>	19N		•	•	•	•	•
	<b>Orient buildings away from South Tryon Street.</b>	19O		•	•	•	•	•
	<i>Provide bicycle parking and storage areas.</i>	19P		•	•	•	•	•
	<i>Design parking lots on a street/block pattern to minimize large surface lots.</i>	19Q	O	•	•	•	•	•
	<i>Minimize large surface parking lots with smaller pods and extensive landscaping.</i>	19R		•	•	•	•	•
	<i>Encourage commercial or residential uses in parking decks fronting pedestrian circulation areas.</i>	19S		•	•	•	•	•
	<i>Provide structured parking where feasible to conserve land and minimize surface parking.</i>	19T		•	•	•	•	•
	<b>Locate parking to the side or rear of buildings and screen parking from public rights-of-way.</b>	19U	O	•	•	•	•	•

<sup>1</sup> Adopted by City Council, the *General Development Policies (GDP)* provide guidance for the location, intensity and form of future development and redevelopment throughout the community. Many of the residential and mixed/multi-use center policies for the plan area are based upon these adopted GDP policies. Plan policies that appear in italic text are based upon those previously adopted GDP policies. **Additional, plan-specific policies are shown in bold font.** Plan-specific policies augment the GDP design guidelines.



A well designed wayfinding system allows pedestrians to find their way around the development.



An interconnected sidewalk system creates a safe pedestrian environment.

*Freestanding single tenant buildings (out parcels) can be classified as either independent or interconnected. Independent buildings function separate of the surrounding complex while interconnected buildings share parking and site amenities with other buildings in the same complex whether independent or interconnected. The design of freestanding single tenant buildings should be sensitive to the surrounding neighborhood, both built and natural environments.*

NON-RESIDENTIAL Design Policies <sup>1</sup>							
20 Freestanding Single Tenant Buildings	Policy Number	Graphic Reference	Retail-Oriented	Retail	Office	Mixed Use	Industrial
			Mixed/Multi Use				
<i>Design buildings to relate to the scale, height and configuration of the center.</i>	20A		●	●	●	●	●
<i>If drive-thru(s) are included, they must not compromise pedestrian circulation.</i>	20B	<b>P</b>	●	●	●	●	●
<i>Design to facilitate walking to the freestanding building from other buildings within the center. Provide safe pedestrian pathways and crossings without creating conflicts with automobiles.</i>	20C		●	●	●	●	●
<i>Design the site so that dumpsters, service areas or auxiliary storage do not interfere with, and are not visible from the pedestrian circulation area and do not negatively impact surrounding residential areas.</i>	20D		●	●	●	●	●
<i>The site layout should be clustered in a village arrangement around shared amenities.</i>	20E		●	●	●	●	●

<sup>1</sup> Adopted by City Council, the *General Development Policies (GDP)* provide guidance for the location, intensity and form of future development and redevelopment throughout the community. Many of the residential and mixed/multi-use center policies for the plan area are based upon these adopted GDP policies. Plan policies that appear in italic text are based upon those previously adopted GDP policies. **Additional, plan-specific policies are shown in bold font.** Plan-specific policies augment the GDP design guidelines.



*A well-designed drive thru fits into the context of the development and is sensitive to the pedestrian environment.*

# Transportation

Streets connect people to places. The resulting street network has a direct impact on the community's quality of life. If the design of the street network is efficient, the community can benefit from a range of travel choices, route options, emergency access, a mix of land uses and pedestrian and bicycle options. To help guide the creation of an efficient street network, the following transportation goal was developed with the community for the Steele Creek plan area.

**GOAL:**  
Provide a safe, accessible and efficient street network for all users.



*Sidewalks are being built along parts of Sledge Road by developers of adjacent property. A "farm-to-market road upgrade" may complete remaining gaps as part of a future City capital project.*

Achieving this transportation goal will require not only strengthening the relationship between land use and transportation, but also advancing key transportation investments, consistent with the *Transportation Action Plan (TAP)* and improving connectivity throughout the area.

Because the Steele Creek area is challenged by limited road capacity, minimal street network and a sparse bicycle and pedestrian network, it will require significant transportation infrastructure investment to accommodate the anticipated growth. However, the lack of funding available for transportation improvements in this area will likely continue to be a sig-

nificant challenge. (See **Transportation Improvements & Costs** table in the Implementation Guide, page 56.)

Within much of the Steele Creek area, the transportation focus should be on completing the street network and improving the capacity of the existing transportation system. In addition, the focus should be on ensuring that the Steele Creek area develops consistent with the land use and design guidance provided in this area plan to minimize impacts on the transportation system.

The following policies provide guidance for creating a well-connected system of streets and improving the overall transportation system in the Steele Creek Area.

## Transportation/Street Design Policies

This section outlines transportation policies addressing both proposed new streets and enhancements to existing streets to make them more pedestrian and bicycle-friendly. These improvements will likely be accomplished in conjunction with new development and redevelopment. The general locations of the improvements are noted on **Map 4**, page 35.

### 21. Upgrade Farm-to-Market Roads

As shown on **Map 4**, *Future Transportation Network*, page 35, farm-to-market upgrades include:

- Choate Circle
- Erwin Road
- Hamilton Road
- Sandy Porter Road
- Shopton Road
- Shopton Road West
- Sledge Road
- Smith Road
- Youngblood Road
- Zoar Road

These fairly narrow roads were historically "farm-to-market" rural roads but increasingly serve as the primary routes for new suburban development. As growth has occurred, these roads have become overburdened by traffic resulting in significant congestion.

The City's *Transportation Action Plan*, adopted in 2006, recommended additional funding to upgrade farm-to-market roads within Charlotte's city limits.



Typical improvements include adding curbs, gutters, sidewalks, additional lane width and turning lanes to improve traffic flow and build a complete street serving multiple types of users (drivers, pedestrians and cyclists).

The *Transportation Action Plan* identified 23 miles of farm-to-market roads within the Steele Creek plan area and estimated that it would cost approximately \$173 million (2010 dollars) to upgrade them. At this time, there is little funding available to begin to address these needed upgrades. (The appendix of this Plan provides more information on transportation project cost estimates.)

## 22. Extend and widen key thoroughfares

The following major thoroughfare projects are recommended to keep pace with area growth:

- Extend Carowinds Boulevard from South Tryon Street (NC 49) to Sam Neely and Wingate Roads
- Widen Carowinds Boulevard (2 to 4 lanes) from South Tryon Street (NC 49) to Choate Circle
- Widen South Tryon Street (NC 49) (4 to 6 lanes) from Arrowood Road to Steele Creek Road (NC 160)
- Widen Steele Creek Road (NC 160) (2 to 4 lanes) from Shopton Road West to State Line (SC)

Extending and widening area thoroughfares should continue to be coordinated through the land development process. These improved thoroughfares will provide more direct routes for longer distance trips crossing the Steele Creek area, many of which are destined for interchanges on Interstates 77 and 485.

Similar to the situation with farm to market roads, while there are numerous thoroughfare and intersection improvements that are needed in the Steele Creek area, there is currently no funding identified to address them. Today, Steele Creek Road operates at an unacceptable level of service and has been identified for widening. Unfortunately, widening Steele Creek Road is not included in the 2035

*Long Range Transportation Plan (LRTP)*, meaning that it may not be funded prior to 2035.

## 23. Realign Choate Circle to South Tryon Street

To increase accessibility for Steele Creek residents, Choate Circle should be realigned to South Tryon Street opposite Corsica Forest Drive. This would likely occur as a part of private development project or through a public-private partnership.

## 24. Improve intersections

Intersection improvements may include a combination of geometric design changes, traffic signals, roundabouts, pedestrian countdown signals, painted crosswalks, curb ramps and pedestrian refuge islands. Such improvements will enhance traffic flow, accessibility and safety. As shown on **Map 4**, intersections recommended to be improved include:

- Carowinds Boulevard at Choate Circle
- Steele Creek Road (NC 160) at Brown-Grier Road
- Steele Creek Road (NC 160) at Sam Neely Road
- Steele Creek Road (NC 160) at Sledge Road
- Steele Creek Road (NC 160) at Westinghouse Boulevard
- South Tryon Street (NC 49) at Carowinds Boulevard
- South Tryon Street (NC 49) at Interstate 485
- South Tryon Street (NC 49) at Shopton Road
- South Tryon Street (NC 49) at Steele Creek Road (NC 160)
- South Tryon Street (NC 49) at Whitehall Park Drive
- South Tryon Street (NC 49) at Corsica Forest Drive pending Choate Circle Realignment
- Westinghouse Boulevard at Interstate 77
- South Tryon Street (NC 49) at Grand Palisades Parkway
- Steele Creek Road (NC 160) and I-485

## 25. Provide key “connector” streets

Connectors form a system of parallel local streets that offer alternatives to thoroughfares for local trips. Depending on the scale and accessibility of surrounding development, these key connections will likely need to be implemented in a variety of ways including via private land development, the City’s Connectivity Program or funding partnerships. These conceptual new streets are shown on **Map 4** (see also detailed list of proposed key connector streets on **Map 5, Future Transportation Projects**, page 55 in the Implementation Guide).

Legend for  
**Map 5, Future Transportation Projects**

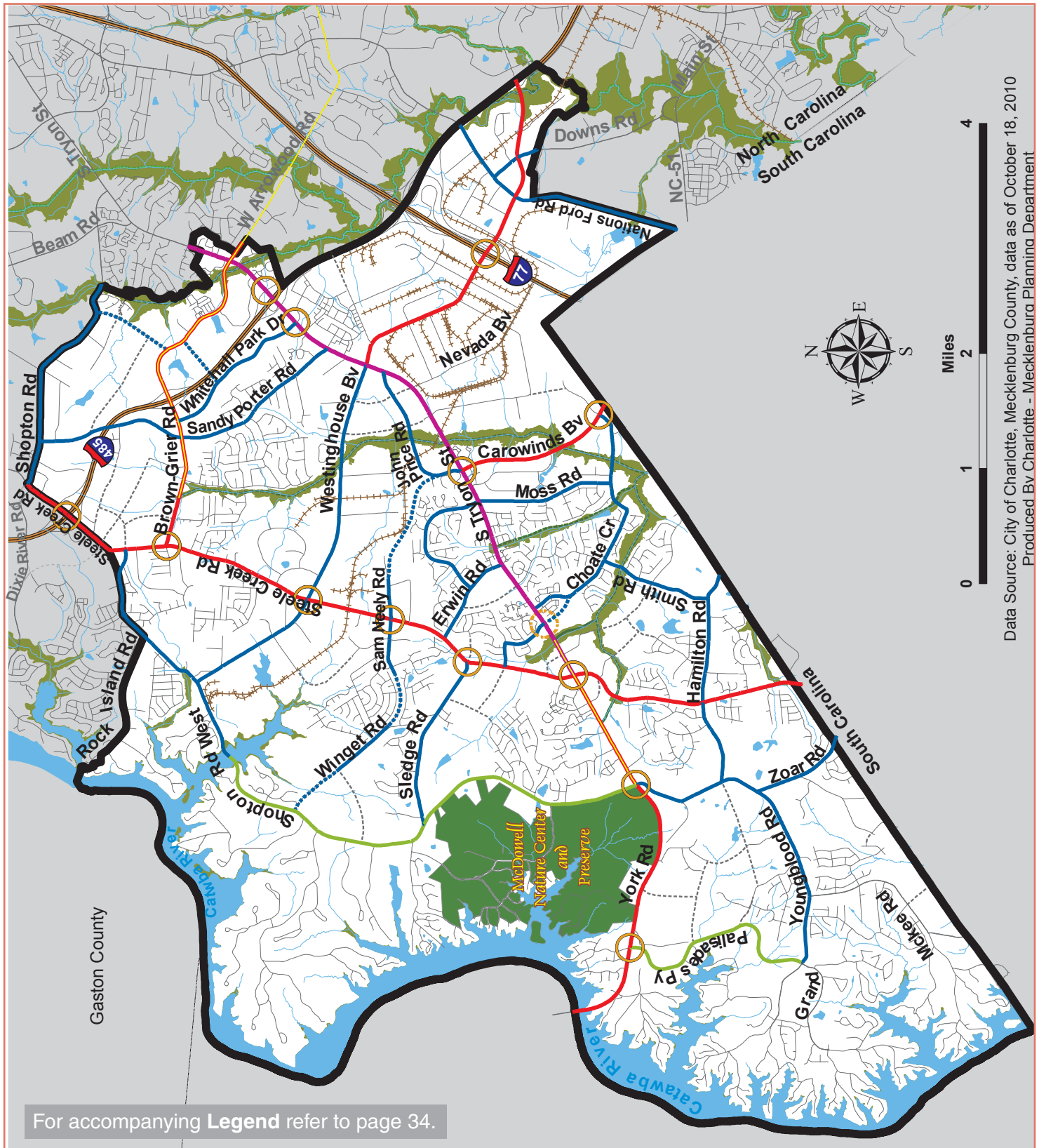
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-  Enhanced Intersection
-  Enhanced Intersection (Pending Connection)
-  Boulevard: Six Lane
-  Boulevard: Four Lane
-  Avenue: Two Lane
-  Avenue: Two Lane with Parkway Edge
-  Proposed Avenue: Two Lane
-  Local Street
-  Proposed New Street \*
-  Railroad

**Greenways**

-  Developed
-  Proposed
-  Overland Connectors
-  100 Year Floodplain
-  Creeks and Streams
-  Ponds & Wetlands
-  Plan Area Boundary

\* In most cases, these new connectors will be requested through the land development process to support increased travel demand and to provide additional travel routes to area Activity Centers. *The locations of the proposed connector streets are conceptual. Alternative locations, consistent with the intent of the proposed network, will also be considered. Additional streets may also be identified to facilitate improved network and connectivity.*



Data Source: City of Charlotte, Mecklenburg County, data as of October 18, 2010  
Produced By Charlotte - Mecklenburg Planning Department

**26. Facilitate cross-access and parallel connections on either side of South Tryon Street**

Local trips along South Tryon Street should have alternative route choices other than having to use this high-volume, fast-moving, regional corridor. New development should incorporate multiple access points, not using South Tryon Street, cross-access driveways and parallel street connections.

**27. Revisit major thoroughfare alignments**

Coordinate the land development process to set up more constructible alignments of Carowinds Boulevard Extension and Youngblood Road. The currently adopted centerline for Carowinds Extension is challenged by crossing a railroad twice, while the adopted realignment of Youngblood Road bisects the institutional use of a tree research farm.

**28. Install new sidewalks along thoroughfares**

The Steele Creek area has limited sidewalks along most of the existing thoroughfare system (see **Map 13, Existing Pedestrian Facilities**). As development occurs, new sidewalks are required to be constructed along existing thoroughfares, following adopted streetscape standards. Additionally, five-foot minimum sidewalks are required on all new local streets.



*Shopton Road West near Steele Creek Road is an example of a newly improved thoroughfare, including new turn lanes, median islands, bicycle lanes, planting strips and sidewalks.*

**29. Eliminate gaps in the sidewalk system within existing residential areas**

Some neighborhoods do not have sidewalks because they were built prior to standards requiring sidewalks. The City's sidewalk program will slowly address these gaps, prioritizing continuous and direct routes linking residential areas to parks, schools and shopping (see **Map 13, Existing Pedestrian Facilities**). In many cases, constructing these sidewalks may require support through a petition based process.

**30. Construct bicycle lanes along all thoroughfares**

As development occurs, new bicycle lanes should be included along any thoroughfare with a new or relocated curb line. Cross-sections for all Avenue- and Boulevard-classified streets (see **Map 4, Future Transportation Network**) should include bicycle lanes. Shopton Road West, near Steele Creek Road, is a newly improved thoroughfare that has bike lanes.

**31. Complete the Steele Creek Greenway**

Planning of the greenway trail system should be coordinated with the Mecklenburg County Park and Recreation Department and other partners. (See also the Park and Recreation policies contained in the Infrastructure and Public Facilities section of this area plan.)

**32. Encourage bikeway and pedestrian connections to primary greenways**

Tributaries and streams leading to Steele Creek provide contiguous open spaces, create focal points for development and make key connections to the greenway system. These areas should be considered for dedication during the land development process. (See also the Park and Recreation policies contained in the Infrastructure and Public Facilities section of this area plan.)

### 33. Implement a parallel shared-use path or paved shoulders along Shopton Road West

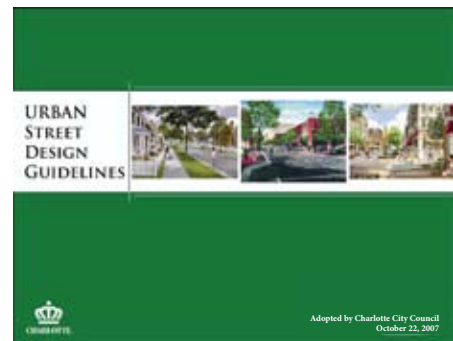
Bicycle/pedestrian accommodations are needed along farm-to-market roads until other improvements can be fully implemented. As development occurs, provision of an 8'-10' foot minimum shared-use path should be requested along Shopton Road West to create an overland connector to McDowell Nature Center and Preserve.

### 34. Expand transit service to major nodes of activity

As new activity nodes develop, such as the planned "Palisades Town Center" off South Tryon Street and existing nodes intensify, CATS should consider expanding service to these areas. Additionally, park-and-ride opportunities should be created as possible termini or major stops for expanded transit service.

## Street Cross-Sections

The following recommendations for future street cross-sections and streetscape development standards help define the function and visual appeal of the Steele Creek area's proposed street network. The streetscape development standards specifically define the character and width of the area behind the curbs, between buildings and the existing curb line, including accommodations for sidewalks and landscaping. The cross-section specifications show typical conditions and may vary upon further study and in unique circumstances.




Based on the City's *Urban Street Design Guidelines*, the future cross-sections have been determined for Steele Creek area streets (see *Proposed Streetscape Details*, page 39 and refer to **Map 4** for specific locations), with the exception of neighborhood areas, where little change to existing streets is expected. The street types on the following page are recommended for this plan area:



*Palisades Parkway is an example of an Avenue with Parkway Edge on one side. This treatment is also recommended for the future cross-section of Shopton Road West.*

## Description of Street Types\*

Street Type				
	<b>BOULEVARDS</b>	<b>AVENUES</b>	<b>LOCAL STREETS</b>	
Description / Function	<p>Intended to move large numbers of vehicles, often as through traffic, from one part of the city to another and to other lower level streets in the network. The most common type of Boulevard is 4-lane Standard.</p>	<p>The most common (non-local street) providing access from neighborhoods to commercial areas. Designed to provide a balance of service for all modes of transportation. The most common type of Avenue is 2-lane Standard.</p>		
Proposed Street Classification	<ul style="list-style-type: none"> <li>• Arrowood Rd</li> <li>• Brown-Grier Rd</li> <li>• Carowinds Bv (east of S Tryon St)</li> <li>• South Tryon St ** (north of Steele Creek Rd)</li> <li>• South Tryon St (south of Steele Creek Rd)</li> <li>• Steele Creek Rd</li> <li>• Westinghouse Bv (east of South Tryon St)</li> </ul>	<ul style="list-style-type: none"> <li>• Arrowood-Shopton Conn</li> <li>• Arrowood-Whitehall Conn</li> <li>• Carowinds Bv (west of Tryon St)</li> <li>• Choate Circle</li> <li>• Downs Rd</li> <li>• Erwin Rd</li> <li>• Hamilton Rd</li> <li>• John Price Rd</li> <li>• McKee Rd</li> <li>• Moss Rd</li> <li>• Nations Ford Rd</li> <li>• Palisades Pkwy ***</li> </ul>	<ul style="list-style-type: none"> <li>• Sam Neely Rd</li> <li>• Sandy Porter Rd</li> <li>• Shopton Rd</li> <li>• Shopton Rd West *** (southwest of Withers Rd)</li> <li>• Sledge Rd</li> <li>• Smith Rd</li> <li>• Westinghouse Bv (west of Tryon St)</li> <li>• Whitehall Park Dr</li> <li>• Winget Rd</li> <li>• Youngblood Rd</li> <li>• Zoar Rd</li> </ul>	<p>All remaining streets</p>

\* A complete description of all street types are provided in the **Urban Street Design Guidelines**

\*\* Six lane boulevard only applies to South Tryon St, north of Steele Creek Rd

\*\*\* Parkway edge only applies to Palisades Pkwy and Shopton Rd West southwest of Withers Rd

Source: Charlotte Department of Transportation, 2010

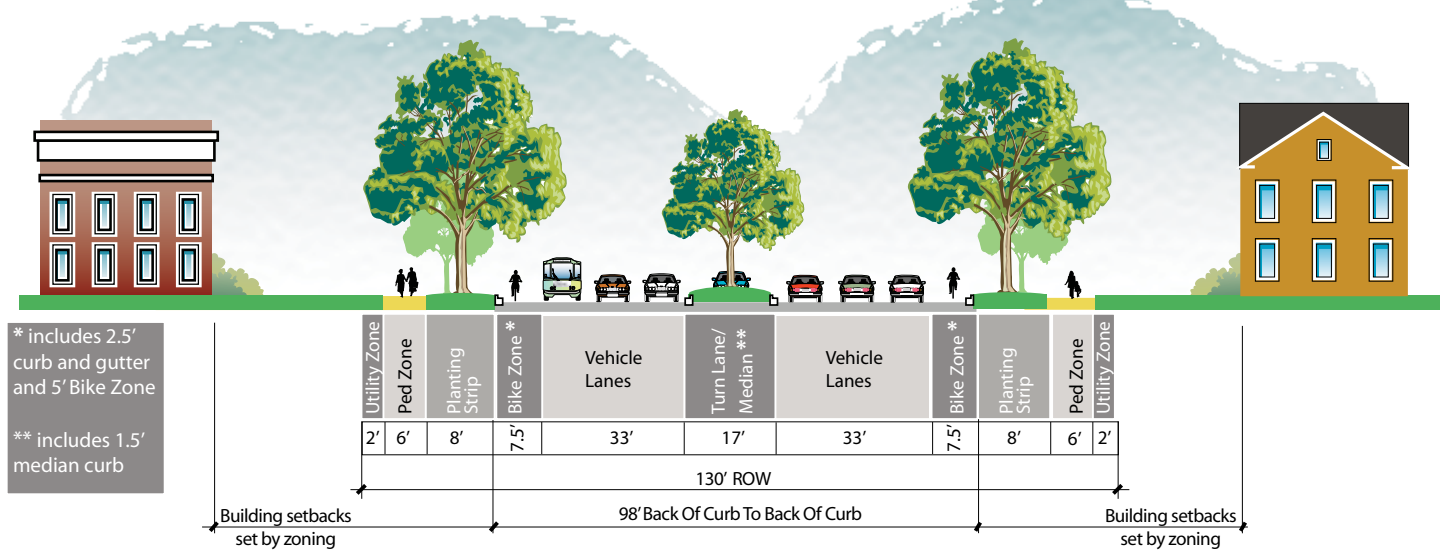


# Proposed Streetscape Details

## Boulevard~ Six Lane

**Width:** 98' from back of curb to back of curb; ROW is 130'.

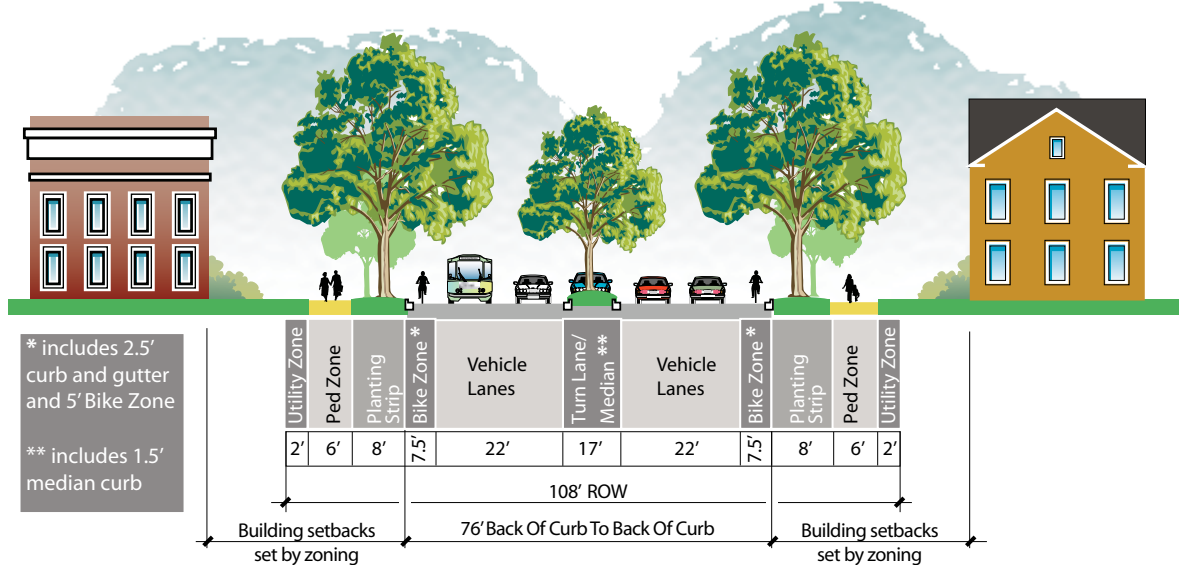
**Cross Section:** Three lanes in each direction with a wide median to accommodate turn lanes, bike zone, planting strip, sidewalk and utility zone. Building setbacks will vary by zoning districts.



## Boulevard ~ Four Lane

**Width:** 76' from back of curb to back of curb; ROW is 108'.

**Cross Section:** Two lanes in each direction with a wide median to accommodate turn lanes, bike zone, planting strip, sidewalk and utility zone. Building setbacks will vary by zoning districts.



**NOTE:** These dimensions reflect typical street sections at mid-block locations. They will be used by Charlotte Department of Transportation, in consultation with the Charlotte-Mecklenburg Planning Department, to determine the location of the ultimate curb lines. Variations from the typical street sections, where needed to address physical conditions, enhance operations, or better meet the intent of this area plan, may be identified during future design and analysis phases.

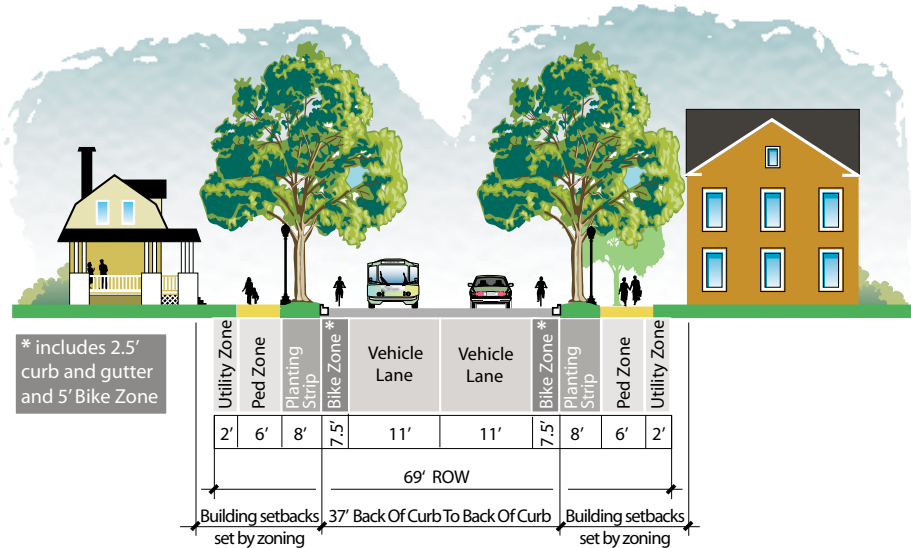
## Proposed Streetscape Details

not to scale

### Avenue ~ Two Lane Undivided

**Width:** 37' from back of curb to back of curb. ROW is 69'.

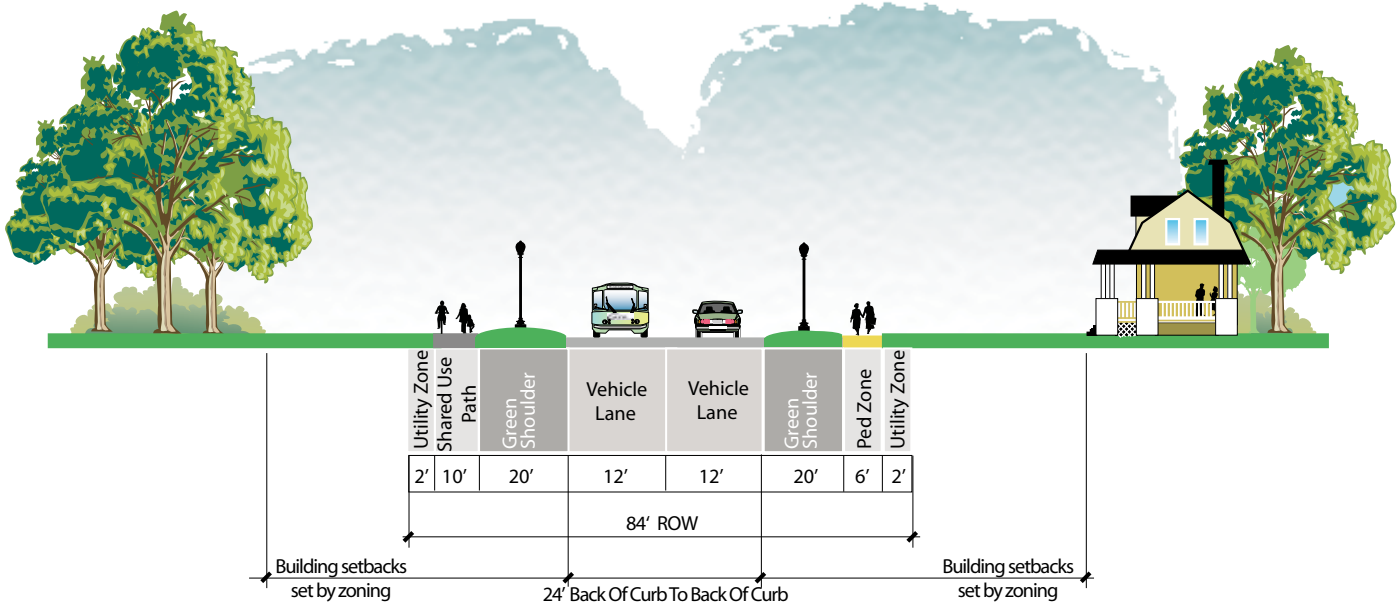
**Cross Section:** One travel lane in each direction with bike zone, planting strip, sidewalk and utility zone. If a turn lane is added, an additional 11' is required. Building setbacks will vary by zoning districts.



### Avenue ~ Two Lane with Parkway Edge

**Width:** 24' from edge of pavement to edge of pavement. ROW is 84'.

**Cross Section:** One travel lane in each direction with Shared Use Path on Lake Wylie side, planting strip, sidewalk and utility zone. If a turn lane is added, an additional 11' is required. Building setbacks will vary by zoning districts.



**NOTE:** These dimensions reflect typical street sections at mid-block locations. They will be used by Charlotte Department of Transportation, in consultation with the Charlotte-Mecklenburg Planning Department, to determine the location of the ultimate curb lines. Variations from the typical street sections, where needed to address physical conditions, enhance operations, or better meet the intent of this area plan, may be identified during future design and analysis phases.



## Infrastructure and Public Facilities

Public facilities and services addressed in the plan include public water and sewer, storm water, police, fire, parks and recreation and schools. As Charlotte-Mecklenburg continues to grow and develop, timely planning for these services is essential to maintain the high quality of life residents have come to expect. Other public facilities, including medical and social services are not addressed in this land use plan.

The *Steele Creek Area Plan's* vision includes the statement that the area will have a "balanced mixture of land uses with enhanced public facilities that include quality schools." It also emphasizes the creation of "an interconnected network of parks, greenways and open space amenities." Public facilities that currently serve much of this plan area include public water and sewer, storm water, police, fire, parks and recreation, a library and schools. Over the last decade, the Steele Creek area has experienced significant growth. As this trend continues, additional public facilities will be needed to serve residents and businesses.

### GOAL:

Provide public facilities to maintain and improve service levels to area residents.



*Infrastructure improvements in the area are needed to keep pace with current and future development.*

## Infrastructure and Public Facilities Policies

The following policies are recommended to enhance the area's existing public facilities and meet future growth demands. The joint use of facilities is encouraged to reduce cost and make the best use of resources when possible.

### Water and Sewer

#### **35. Encourage development to locate where appropriate water and sewer capacity exists or is planned.**

Public water is currently available to all retail and industrial centers and major transportation corridors in the area. However, there are service needs in many of the residential areas of the southwest portion of the plan area. A large transmission main was constructed in 2010 along Steele Creek Road from Shopton Road to South Tryon Street to expand water service in the area. In an effort to address the lack of water and sewer capacity in parts of the plan area, development should be located in areas where the infrastructure is in place or is planned.

Sewer service to the southwest part of the plan area is difficult to provide due to changes in topography and the area's distance from the Steele Creek Pump Station. This pump station, located on Choate Circle, transfers sewage to the McAlpine Wastewater Treatment Plant and will be redesigned in the future to accommodate additional flow.

#### **36. Utilize the rezoning process to provide input on the impact of new development on infrastructure.**

When a proposed development requires a rezoning, the rezoning process offers the opportunity to assess infrastructure impacts and to direct more intense development into areas where the infrastructure is in place to support it.

### Storm Water

#### **37. Minimize stormwater runoff through site design and the use of Best Management Practices.**

Some of the hydrology features within the plan area include the Catawba River, Steele Creek, Neal

Branch and Walker Branch as well as other creeks, streams, ponds and wetlands. The land surface in the plan area has a moderate to steep slope closest to creeks, streams and Lake Wylie.

Storm water runoff is the result of precipitation that is not absorbed by the earth. It often carries pollutants into area creeks and streams. Trees and natural areas generate less storm water runoff and help filter pollutants. Therefore, preservation of the tree canopy, open space, limited grading and compact development contribute to the protection of the area's natural resources and reduce storm water runoff.

Storm water facilities help to remove storm water runoff from areas such as streets and sidewalks for public safety reasons and help to protect the area's aquatic resources. Existing topography can be used as part of the drainage system on a site to preserve environmental features while taking advantage of the area's natural resources.

Most development in the plan area is subject to the Post Construction Controls Ordinance (PCCO) which regulates storm water runoff in accordance with State and Federal regulations. Its intent is to control the adverse effects of increased post-construction storm water runoff and non-point source pollution associated with development. Also, Best Management Practices (BMP) serve to protect the environment and improve water quality by reducing flood risks and pollution in streams, rivers and lakes. They may also serve as an attractive and useable part of a development's amenities. A few ways to conceal BMPs include fountains, ponds and gardens.

### **Parks and Recreation**

#### **38. Encourage the location of future parks and open space in highly visible areas such as residential communities, retail centers, schools and along thoroughfares.**

The location of parks in highly visible areas will allow for more activity and better access. Also, open space areas may serve as an amenity and allow for the incorporation of natural features into development.

The plan area is served by T.M. Winget Regional Park and McDowell Nature Center and Preserve. Berewick and Ramblewood parks are located on the periphery of the plan area. In the southern portion of the plan area, Capps Community Park is planned on a heavily wooded 67-acre site. Plans have been approved for a neighborhood park to be co-located at the Palisades Elementary School site. In addition, the Steele Creek Athletic Association has a playing field complex located off Choate Circle that includes baseball, softball, soccer and football fields. Other private facilities include Palisades Golf Courses and Soccer fields.

#### **39. Continue to develop the greenway system and connect greenways to areas of activity, such as parks, nature preserve, residential communities, retail centers, employment areas and schools.**

The greenway system may serve as active or passive open space in the community. It provides the opportunity to connect areas for pedestrians and cyclists to move through the community more easily. The location of water and sewer along greenways allows the potential for joint use projects.

An extensive and well connected greenway network is important to Steele Creek residents. There are several greenways planned for the area. Currently, Walker Branch Greenway runs along the rear of the RiverGate shopping center. Area greenway plans include the eventual development of an interconnected greenway system linking greenways to McDowell Nature Center and Preserve, T.M. Winget Regional Park, schools, shopping and employment. In the future, the Steele Creek Greenway corridor could be connected to the Anne Springs Close Greenway corridor in Fort Mill, South Carolina (see **Map 16, Public Facilities**).

#### **40. Seek opportunities to improve public access to the Catawba River.**

As development occurs along the River, consideration should be given to providing land to allow for future public boat access points. Although, Copperhead Island provides boat access in the plan area, residents desire additional public access points to the Catawba River.

## Schools

### **41. Strive to extend school capacity as development occurs.**

While developing the vision statement for the plan, Citizen Advisory Group (CAG) members emphasized the importance of having enhanced public facilities that include quality schools. Many of Charlotte-Mecklenburg Schools (CMS) are currently overcrowded and schools in the plan area will continue to face increasing demand as development occurs. Additional schools will be needed if the area grows as projected.

There are four elementary, two middle and one high school in the plan area. For example, River Gate Elementary School, located near the intersection of Hamilton and Smith roads, opened in 2009 and is at 90 percent capacity. *Charlotte-Mecklenburg Long Range School Facilities Master Plan* includes future plans for the construction of an elementary, middle and high school off of South Tryon Street, in the Palisades area, to serve the southwestern portion of the plan area. The elementary school will be co-located with a neighborhood park adjacent to the McDowell Nature Center and Preserve.

The construction of schools in the plan area could be impacted by a lack of funding and potential closing of schools in other areas. CMS continues to face a number of financial challenges. As a result, in recent months a number of proposals to consolidate and/or close schools have been discussed. The proposed closing of E. E. Waddell High School will impact Olympic High School located in the plan area.

As development occurs, the opportunity exists to reserve land for school sites as part of future development, when appropriate. To make the best use of resources and preserve land in the area, consideration should be given to locating schools adjacent to parks, libraries and other public facilities. New schools should integrate environmentally sensitive and sustainable design standards consistent with other policies in the plan.

### **42. Encourage the development and joint use of public service facilities to share resources and to support area growth.**

As public facilities are developed in the plan area, consideration should be given to combining resources to reduce costs and travel time. The intent is to provide for more effective and efficient use of public resources.

## Police

### **43. Construct new police station to serve the Steele Creek division**

The Charlotte-Mecklenburg Police Steele Creek Division covers this area. Currently, their headquarters are located in the Police and Fire Training Academy on Shopton Road. Future plans include the construction of a new Charlotte-Mecklenburg Police Department Steele Creek Division Police Station on the southwest corner of South Tryon Street and Westinghouse Boulevard.

## Fire

### **44. Provide fire stations to serve future development and annexed areas**

There are two fire stations located within the plan area. Station 37 is located on South Tryon Street and Station 38 is located on Shopton Road West. Station 38 is home to Charlotte's first and only fire boat house. Future plans also include a fire station in the area of Youngblood and McKee roads, contingent upon annexation. Charlotte Fire Department plans call for additional fire stations to serve the plan area that will be developed after areas are annexed and demand warrants.

## Libraries

### **45. Develop regional library to serve the area's growing population**

The plan area is currently served by the Steele Creek Branch Library located on Steele Creek Road, adjacent to Southwest Middle School. Land for a new regional library has been acquired on Shopton Road in the northern most portion of the plan area, near the Berewick development.

## Natural Environment

A good land use plan balances preservation of the area's natural resources with the demand for new development. This is possible with careful planning and adherence to policies and regulations. The specific environmental policies contained in this plan are based on the more general principles and policies taken from the *General Development Policies – Environment (GDP)*, adopted in 2007.

The protection of the environment which includes the preservation of the tree canopy and other natural features, such as the Catawba River, were identified as primary concerns for area residents during the planning process. The vision developed for the area makes specific mention of "Protecting the Catawba River, McDowell Nature Center and Preserve, natural features, and historic places." The vision also advocates "Encouraging community design that recognizes the natural environment; and creating an interconnected network of parks, greenways, and open space amenities".

Portions of the plan area are located within the Lake Wylie, Steele Creek and Sugar Creek watershed basins. Most of the western boundary of the plan area, approximately 9,143 acres located along Lake Wylie, is located within the Critical Area of the Lake Wylie Watershed Overlay Zoning District and approximately 2,965 acres is located within the Protected Area of the Lake Wylie Watershed Overlay Zoning District.

Area creeks and streams running through the area include Steele Creek, Polk Ditch, Walker Branch and Neal Branch. (Parks and greenways are addressed in the park and recreation section of this document.) Other environmental features include ponds and wetlands located throughout the study area, floodplain, swim buffers, natural heritage areas and natural heritage element occurrences. See **Map 17**, *Environmental Features*.

Natural heritage areas are areas of land or water identified by N.C. Natural Heritage Program biologists as being important for the conservation of the state's biodiversity. These areas often contain examples of natural communities and often include rare and endangered species. Natural heritage element occurrences are locations of rare and endangered species populations and occurrences of exemplary or unique natural ecosystems and special wildlife habitats.

### GOAL:

Encourage environmentally sensitive land development practices

## Natural Environment Policies

The preservation and protection of open space, trees, water bodies, air and other natural assets is extremely important as the area continues to develop. The natural environment policies which follow provide direction to accommodate growth and change while protecting the quality of the area's land, water and air.

### Land Quality

#### **46. Support mixed use and compact development that preserve land, reduce vehicular trips and protect natural resources.**

Mixed use and compact development reduce trip lengths and support alternative travel options. This type of development encourages walking and biking as well as protects air quality, water quality and other natural resources. The land use and design sections provide details about the appropriate location for mixed use development and provide guidance for appropriate design. The land use and design policies help insure that impacts of growth are mitigated.



*Ayrsley Town Center was one of the first mixed use developments in the area.*

**47. Protect and preserve the area’s environmental features.**

A survey of area residents and property owners early in the planning process revealed that the area’s proximity to the Catawba River / Lake Wylie is what respondents liked most, followed by the area’s other natural features. The biggest concern shared in the survey, was the loss of natural habitat. The preservation of large areas of mature trees to retain tree canopy and a network of green spaces is important as development occurs.

**Map 17, *Environmental Features*** illustrates a number of areas that have identified environmental features including the McDowell Nature Center and Preserve. The Preserve is mostly forested with a significant tree canopy and rolling terrain along Lake Wylie. The Preserve has a large variety of rare and endangered plant life. In addition, the Preserve is home to numerous species of birds, mammals, reptiles and amphibians.

**48. Encourage business and property owners to adhere to environmental standards and work with appropriate agencies to clean up sites and minimize soil contamination.**

Although the area has many positive environmental features, there are soil and groundwater contamination sites identified on **Map 17, *Environmental Features***. Most of these sites are located within the Westinghouse Industrial Center. The contamination may be due to underground tanks, chemical leaks and improper disposal of chemicals.

**Water Quality**

**49. Protect the Catawba River, creeks, streams, ponds, wetlands, floodplain and other environmental features in the area.**

Nearly 40 percent of the plan area is located within the watershed protection area and there are 83 miles of stream within the plan area. Protection of the quality of the area’s water supply is very important. The Catawba River / Lake Wylie is considered a major asset by most in the community. Development practices that utilize minimal clearing, grading and soil compaction have less impact on the water quality. Water conservation is a simple tool that can be practiced by everyone and is important in protecting the area’s water supply.

**Air Quality**

**50. Implement the land use, community design and transportation policies to reduce vehicle emissions.**

Clean healthy air is our most vital natural resource. Ground-level ozone is the biggest air pollution problem in Mecklenburg. Mobile sources such as cars are the largest contributor of ozone-forming pollution. Future development should strive to reduce vehicle trips, improve connectivity and provide travel choices/route options. The reduction of vehicles miles traveled (VMT) and the implementation of policies recommended throughout the plan will help improve air quality.



*Water quality is very critical for the health and safety of Lake Wylie area residents and visitors.*

# Conclusion

The Steele Creek area has grown at a rapid pace during the last decade. The impact of regional growth and the opening of three I-485 interchanges within the area have placed additional growth pressures on the Steele Creek community. The area experienced an 84 percent increase in population and transitioned from being a largely undeveloped area to an active area with four Activity Centers.

As the Charlotte region continues to attract new residents and businesses, development pressure in the Steele Creek area will likely continue. The ability to successfully accommodate growth, while maintaining a high quality of life, is not likely without appropriate planning.

The *Steele Creek Area Plan* sets the stage for managing future growth and development consistent with the *Centers, Corridors and Wedges Growth Framework*, the City's vision for future growth and development, and the Steele Creek community's vision for the area. The plan offers the opportunity to help fulfill the vision for the area by protecting the area's environmental features while providing for the integration of land use and transportation planning.

There are many factors that will determine how the area develops over time such as environmental constraints and market conditions. However, the policies in this plan are intended to help guide future growth and development in an organized manner and to contribute to the long term sustainability of the community.

The plan policies provide for future development that is consistent with the character and vision for the area, an efficient street network, public facilities to serve residents and development practices that have minimal impact on the environment.