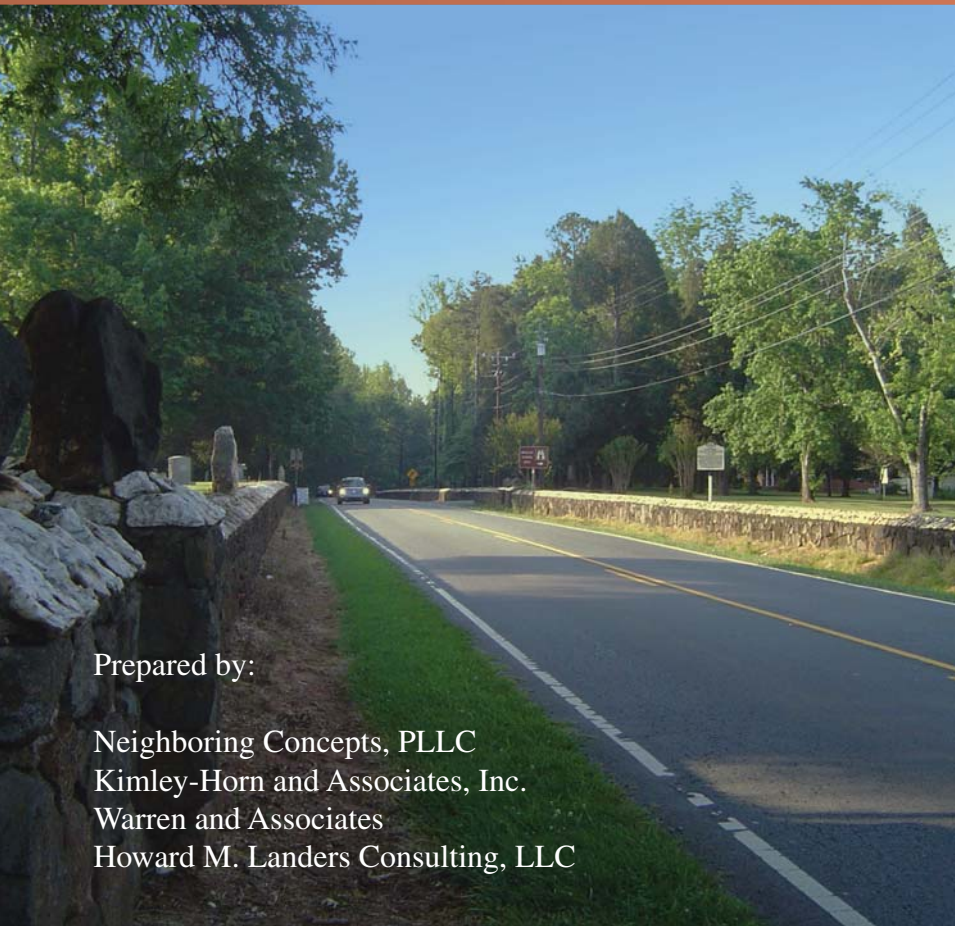




# BEATTIES FORD ROAD CORRIDOR SMALL AREA PLAN



Prepared by:

Neighboring Concepts, PLLC  
Kimley-Horn and Associates, Inc.  
Warren and Associates  
Howard M. Landers Consulting, LLC



Adopted by the Town of Huntersville  
Board of Commissioners

September 17, 2007



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The Town of Huntersville, North Carolina

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Agreement (CRA)



*The Town of Huntersville is committed to preserving a small town quality of life, by embracing traditional town planning principles in an area with numerous cultural, environmental, and historical assets.*

*Huntersville  
Community Plan*

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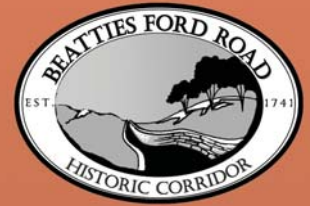
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# Executive Summary



In January 2007, the Town of Huntersville Board of Commissioners directed the Town's Planning and Transportation Staff to prepare a Small Area Plan for the Beatties Ford Road (BFR) Corridor, in response to community concerns about growing pressures for commercial development along the Corridor in the western area of the Town of Huntersville.

The primary goals of the small area planning process were to:

- Establish a long-term preservation vision for the corridor
- Define needed land use changes
- Influence the form/design of future commercial development
- Provide a framework for transportation improvements including road network, streetscape, bikeways, traffic calming and access management
- Integrate the open space network



*"Ideally a small area plan with citizen input will deliver the best uses and needs for the area and incorporate some of the historical aspects of the BFR corridor, thus creating a win-win situation for the citizens of Huntersville."*

*Terri Leonhardt,  
Town of Huntersville Board  
of Commissioners*

## Planning Process

The planning process involved the following components to inform and guide the Town Staff's planning activity:

- Utilization of a consulting team of planners, traffic planners, engineers, and market economists to assist in the development of a transportation and land use framework for the Beatties Ford Road Corridor Study Area.



- Creation of a Steering Committee consisting of property owners, developers and other key stakeholders, encompassing a variety of viewpoints as well as long-term interest in the study area.
- Hosting of a three-day community charrette at Town Hall in which town staff, the consulting team, the steering committee and the general public worked cooperatively on the formulation of a vision plan for the BFRCSAP study area. The recommendations which came out of this process are summarized below.

## Study Recommendations

The primary recommendations that were developed through the planning process and that are described in this report include:

### Land Use and Design

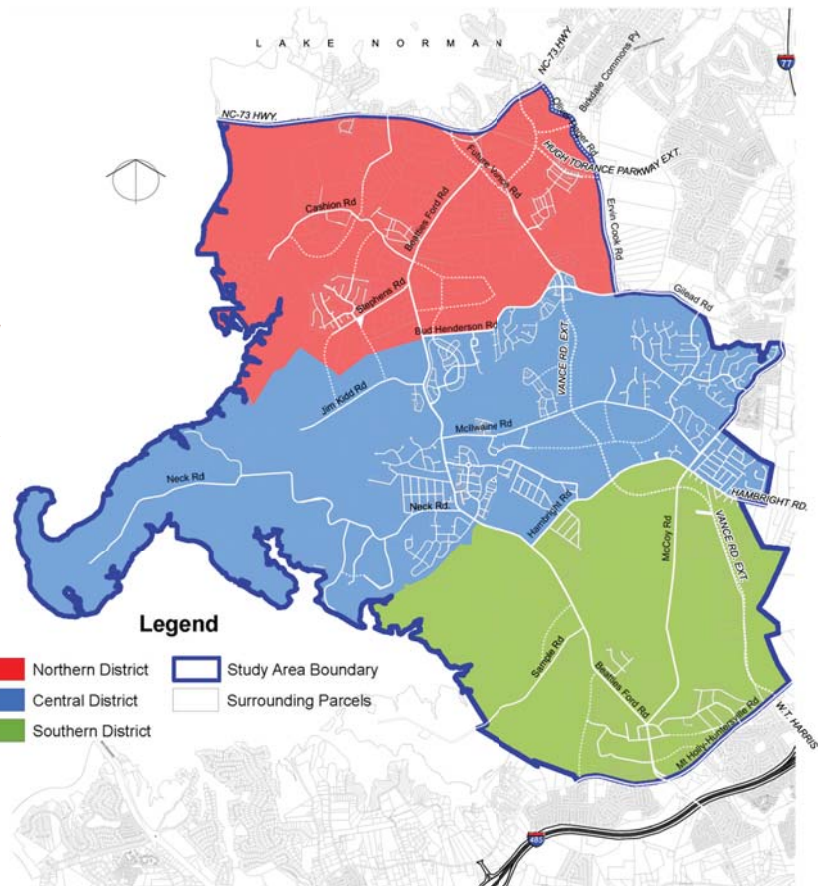
The following strategies shall guide the land use and design character of the study area:

**Land Use:** In general, the study area will continue to develop as a low density, predominantly residential district, as

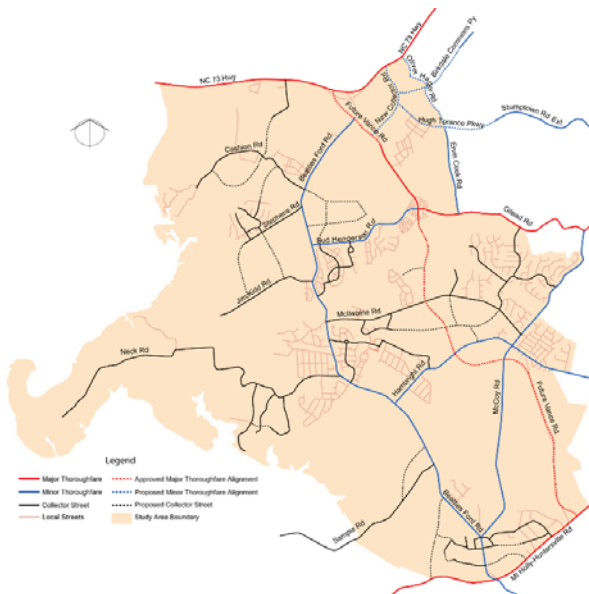


*The Beatties Ford Small Area has a diversity of characteristics including natural, historical, and commercial assets. The study area was broken down into three planning districts for analysis. The Northern District of the small area plan is located between NC 73 and Bud Henderson Road. The Central District extends between Bud Henderson Road and Hambricht Road, and the Southern District is bordered by Hambricht Road and Mount Holly Huntersville Road.*

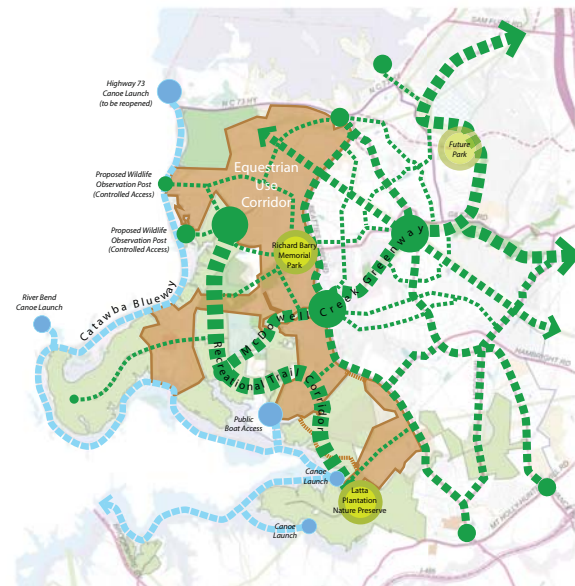
*Above are character sketches of BFRCSAP Districts, (top to bottom): rural character of Northern District; Neck Road plantation home (Central District); concept for a "hamlet center" in the Southern District.*







*Proposed Transportation System Improvements*



*Proposed Non-vehicular Network*

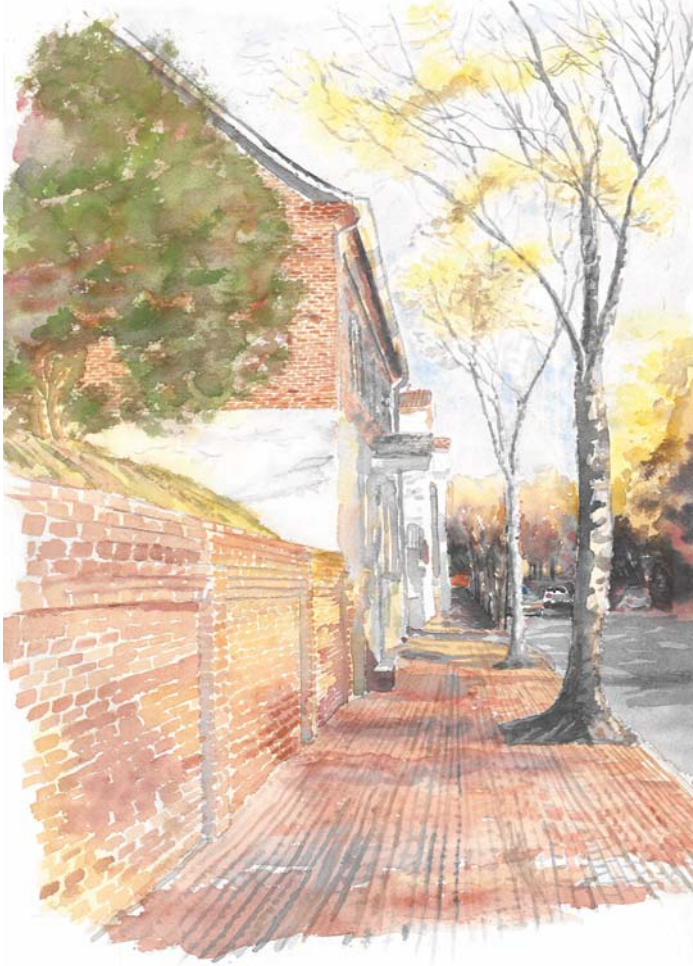
established by the Town’s overall planning framework. Commercial development in the study area will be focused at NC 73 and at Mount Holly – Huntersville Road, with another center at the intersection of Beatties Ford Road with Hambright Road. Commercial development at this location shall be restricted to the approved Latta Village development. Additional commercial centers to serve the Town west of I-77 should be anticipated within the Vance Road corridor as well as within the established commercial centers nearer to I-77.

**Design:** The design character of Beatties Ford Road as a historic rural road should continue with maintenance of an enhanced two-lane road, maintenance of a 100-foot wide natural buffer on both sides of the road (which will include multi-purpose trails), enhancement of the road through the historic walled section at Hopewell Presbyterian Church, and the use of appropriate traffic control measures at major intersections to regulate traffic flows. Employment of stone landscape features that reflect the character of the historic walls is encouraged at intersections, public facilities and other key sites within the corridor. The proposed roundabout at McCoy Road and the intersection of Vance Road and Mt. Holly-Huntersville Road shall receive more extensive gateway landscape treatments that include the use of stone features to define the entries into

the BFR corridor.

**Residential Pattern:** The lower density single-family development that is permitted under the Rural zoning district designation should be continued so long as critical viewsheds are minimally impacted, preservation goals are maintained, and watershed, green infrastructure and public right of way connectivity standards are observed. Public right of ways and access to river frontage, greenways and trails shall be provided. Similar guidelines should apply to subdivisions in the Transitional Residential district. Development should allow for the future realization of a continuous recreational trail corridor linking the preserves and preservation lands along the Catawba River. If located in the designated Equestrian Use Corridor (see Section 6.5.3.2) of the study area, equestrian related uses and easements for creating future equestrian trails and links should be accommodated to the extent possible.

**Future Commercial Development:** New mixed-use retail and office centers should be located at the north (NC 73) and south (Mt. Holly - Huntersville Road) ends of the corridor. For development at the southern end of the corridor, a "hamlet" development pattern is recommended. A hamlet can be defined as a discernible place with a focal point and boundary that maintains and fosters primarily



residential, institutional (i.e. places of worship, schools) or recreational activities. It is organized in accordance with a pedestrian scale. The commercial center approved by the Town at Beatties Ford Road and Hambright Road will represent an additional commercial node in the BFR corridor. Design standards for commercial development are to reference the rural and historical features of the Beatties Ford Road corridor, using (primarily) brick structures employing Neoclassical details in the style reminiscent of Federalist civic architecture (such as that of the historic churches in the area), and to employ a village-grid development pattern that can easily be adapted or transition between residential, open space, mixed-use and civic uses over time.

**Public Uses:** The BFR corridor contains a number of schools, parks, churches and other public and quasi-public uses that provide important services to the study area. All setback, design and transportation requirements of this study shall apply equally to public facilities.

## Transportation

The transportation network of the study area should be enhanced through the following primary initiatives:

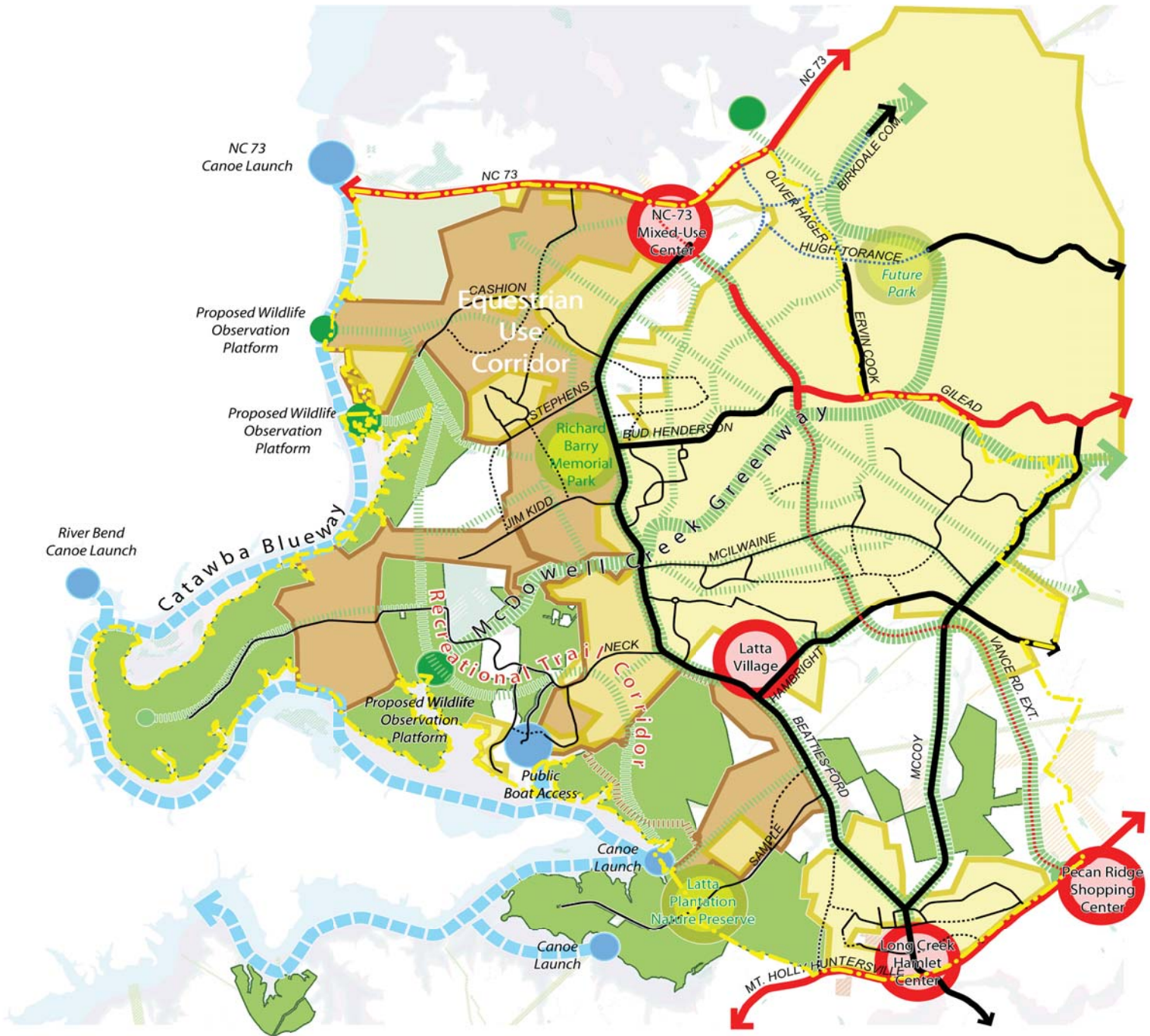
**Beatties Ford Road:** Maintain and enhance Beatties Ford Road as a two-lane roadway with the following operational and aesthetic features:

- Limited use of turn lanes at other intersections to facilitate traffic flow
- Design features that complement the historic setting and provide design continuity shall be utilized.
- Further research is needed to analyze the appropriateness of roundabouts, or other feature, at the intersections of Cashion Road, Bud Henderson Road, Neck Road, McIlwaine Road, and Hambright Road. A roundabout is proposed at the intersection of BFR and McCoy Road.

**Vance Road:** Continue to emphasize Vance Road as the primary Major Thoroughfare west of I-77. The recommended realignment of the northern end of Vance, in conjunction with the proposed realignment of Hugh Torance Parkway, is intended to direct both the east-bound and west-bound traffic from NC 73 southward onto Vance.

**Hugh Torance Parkway:** Relocate the alignment of Hugh Torance Parkway to work in conjunction with Birkdale Commons Parkway and Vance Road to provide a more integrated thoroughfare network in the north end of the study area while helping direct NC 73 traffic southward along Vance.

**Connectivity:** A connected street network that provides multiple routes of travel within neighborhoods will help relieve traffic on BFR and other major streets. As development of land parcels (and potential redevelopment in the future) continues within the study area, the street network of each development shall provide linkages to existing developments where the means exist and shall provide “stub-out” streets to property boundaries abutting undeveloped parcels. One improvement suggested is the creation of a new road connecting



**Land Use**

- BFRCSAP Study Area Boundary
- Residential Area / Subdivisions
- Equestrian Use Corridor
- Nature Preserve / Passive Open Space
- Active Use Park
- Mixed-Use / Hamlet Center

**Proposed Transportation System**

- Existing Major Thoroughfare
- Existing Minor Thoroughfare
- Proposed Major Thoroughfare
- Proposed Minor Thoroughfare
- Existing Collector Street
- Proposed Collector Street

**Proposed Non-Vehicular Network**

- Primary Greenway / Trail
- Secondary Trail
- Blueway
- Boat Access / Canoe Launch

Sample Road and BFR to the north of the current intersection of these two roads in order to improve traffic safety in the historic walled section of BFR.

**Non-Vehicular Transportation:** In addition to the multi-purpose trails to be located within the buffers on either side of BFR, other non-vehicular trails should be located along other roadways and within the extensive open space and recreational lands in the study area. The Greenways that are being developed by the Mecklenburg Park and Recreation Department are a critical part of the regional non-vehicular network that will be developed within the study area. Enhanced connectivity requirements for non-vehicular networks are to apply to all new developments.

### Open Space and Preservation

Preservation of the rural character of the study area should continue and be enhanced through:

- The provision of broad buffers along Beatties Ford Road
- The continued protection, acquisition and management of conservation easements in rural land parcels, these occurring primarily in the threatened viewshed areas along Cashion, Linderman, Stephens, Jim Kidd, and Hubbard Roads.

### Implementation

The following principle implementation strategies are recommended:

- Request that MUMPO consider amending the Thoroughfare Plan to:
  - Change the alignment of the Vance Road Major Thoroughfare corridor as shown on the Proposed Transportation System Map of this document (p. 34).
  - Change the alignment of the Birkdale Commons Parkway as shown

on the Proposed Transportation System Map.

- Change the alignment of the Hugh Torance Parkway Extension Minor Thoroughfare as shown on the Proposed Transportation System Map.
- Provide additional collector roads to offer alternative network options as shown on the transportation system map.
- Amend appropriate Town regulations as needed to codify:
  - The 100' buffer on both sides of BFR and define the design requirements for the buffers.
  - Incorporate connectivity standards for vehicular as well as non-vehicular circulation in the site planning process.
- Continue to integrate the Open Space and Recreation lands of the study area by:
  - Use of strategic land acquisition where essential to constrain further commercial development.
  - Enhancing the connectivity policy for transportation links (vehicular and non-vehicular) to ensure access to greenways, nature preserves and the Catawba River.
  - Continued coordination with public agencies (such as CMUD) and private non-profit or public land conservancy organizations to acquire additional environmentally sensitive lands and conservation easements in the threatened viewsheds.
  - Working closely with the Mecklenburg County Park and Recreation Department, the Mecklenburg County School Board and other agencies to expand recreational lands and services. Joint use of facilities shall be used as a major strategy for efficient use of public funds and to provide additional opportunities to reduce traffic.





1.0

# Introduction

## 1.1 Background and Purpose

Beatties Ford Road is the only roadway in the western part of the Town of Huntersville that currently provides a continuous north-south transportation route from NC 73 into central Charlotte between I-77 and the Catawba River. In January 2007, in response to community concerns about increased development pressure for commercial development along the Beatties Ford Road Corridor, the Town Board directed Town staff to retain a consulting team to assist in the preparation of a Small Area Plan for the Beatties Ford Road Corridor Study area. The primary goals of the small area planning process were:

- Establish a long-term preservation vision for the corridor
- Define needed land use changes
- Influence the form/design of future commercial development
- Shape transportation improvements including road network, streetscape, bikeways, traffic calming and access management
- Integrate the open space network

The Board also directed staff to include refinement of the long-standing general alignment of Hugh Torance Parkway from the north end of the existing segment in the Gilead Ridge subdivision to NC 73. Staff was directed to complete the study by August 2007.



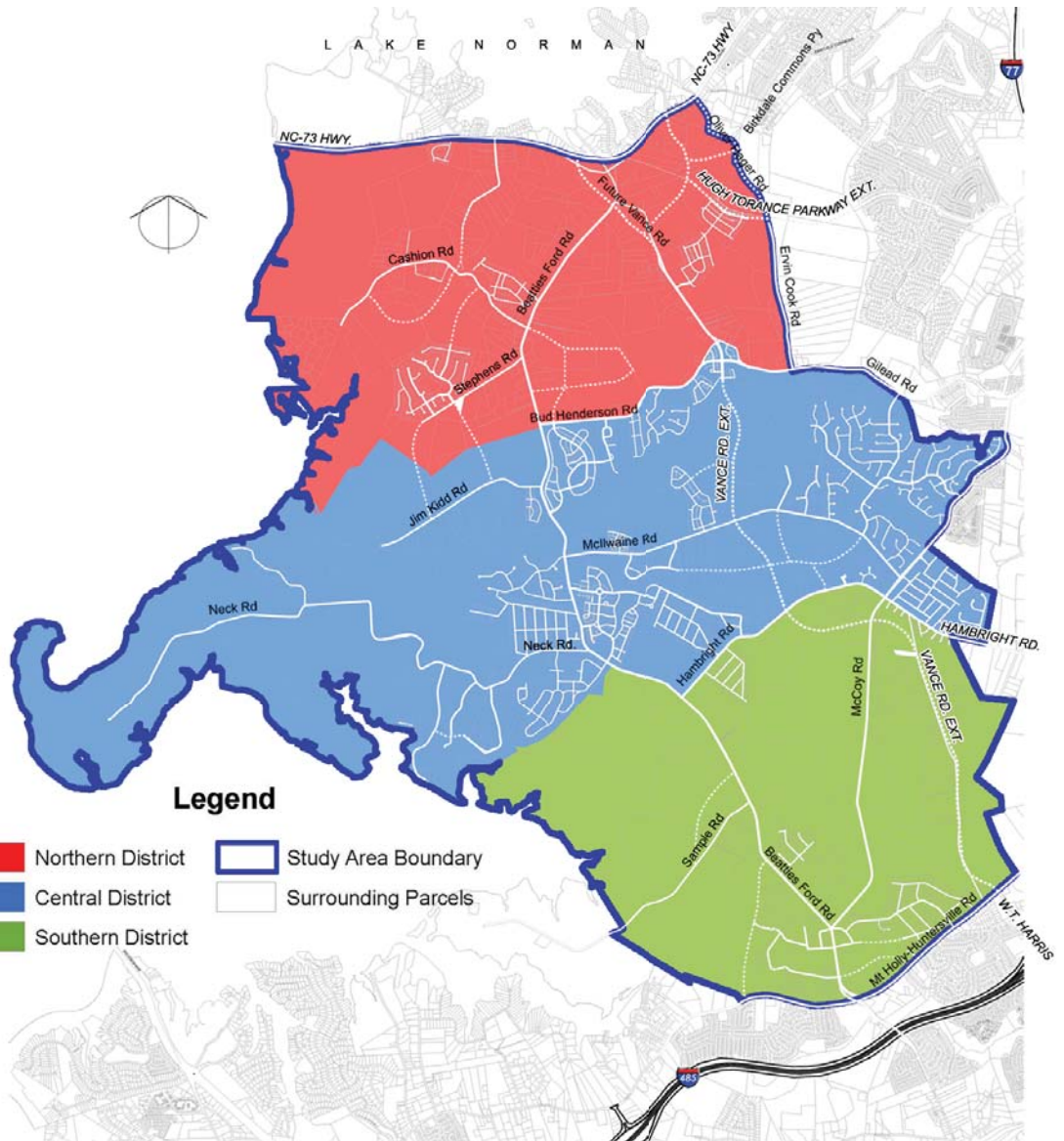
*Long an agricultural community, metropolitan growth did not impact the Town of Huntersville until the late 1980's. For the next decade, Huntersville's population would grow by 728%. Each year, the Town continues to experience abundant growth, as its advantageous location, small town charm, amenities, and lake access no longer remain a local secret. The town's population currently exceeds 40,000 people in approximately 64 square miles.*

The BFRCSAP study area contains approximately 14,000 acres and is defined as follows:

- On the north by NC 73;
- On the east, the boundary follows north to south from NC 73 along Oliver Hager Road, Ervin Cook Road, and Gilead Road to McCoy Road; it continues southward briefly along McCoy Road at the northeast side of the Cedarfield subdivision, from where it proceeds southward to Mt. Holly-Huntersville Road behind the subdivisions and properties that abut the east side of the Vance Road major thoroughfare alignment;
- On the south by Mt. Holly-Huntersville Road; and
- On the west by the town limits and the shorelines of the Catawba River and Mountain Island Lake.

To facilitate the planning process the study area was divided into three districts:

- *North* – NC 73 to Bud Henderson Road
- *Central* – Bud Henderson Road to Hambright Road
- *South* – Hambright Road to Mt. Holly Huntersville Road



## 1.2 The Study Area

The Beatties Ford Road Corridor Study Area was initially defined to include the land area between the Town’s western boundary on the Catawba River and the land located just east of Beatties Ford Road. Based on comments received at the initial Community Open House (May 10, 2007), which illustrated a desire to expand the study to neighborhoods along the Vance Road alignment, the study area was expanded to encompass additional residential areas to the east of the future Vance Road between Gilead Road and McCoy Road.

The project study area covers approximately 14,000 acres of gently rolling terrain located within northern Mecklenburg

County. The area is much celebrated for its pastoral, agrarian landscapes. The Catawba River borders the study area to the west providing rich bottom-lands of environmentally sensitive landscapes. The scenic Beatties Ford Road bisects the study area paralleling the planned Vance Road Extension alignment to the east. Low to moderate density residential subdivisions border Beatties Ford Road to the east and west. Commercial development is limited to several small businesses in the northern section of the study area. Institutional uses include the Gilead Fire Department in the north, the Long Creek Fire Department in the south, with a high school, middle school, and elementary school also present.

## 1.3 Previous Studies

The Beatties Ford Road Small Area Plan builds upon several previous planning initiatives, including the following:

### 1.3.1 NC 73 Transportation/Land Use Corridor Plan

The *NC 73 Transportation/Land Use Corridor Plan* is a coordinated land use and multi-modal transportation plan for a 35 mile corridor, integrating local land use plans with strategic regional transportation needs. The plan is the product of a coordinated, multi-jurisdictional transportation and land use planning effort. The plan represents the first wide-scale effort by NCDOT to integrate land use and transportation planning. A Memorandum of Understanding (MOU), between the jurisdictions involved in the planning process, was adopted July 19, 2004.

### 1.3.2 Beatties Ford Road and Mt. Holly Huntersville Road Small Area Plan

The *Beatties Ford Road and Mt. Holly Huntersville Road Small Area Plan* offers transportation and land use recommendations for the study area including retail/commercial development at the intersection of Beatties Ford Road and Mt. Holly Huntersville Road; and a mixed use low intensity “urban village”

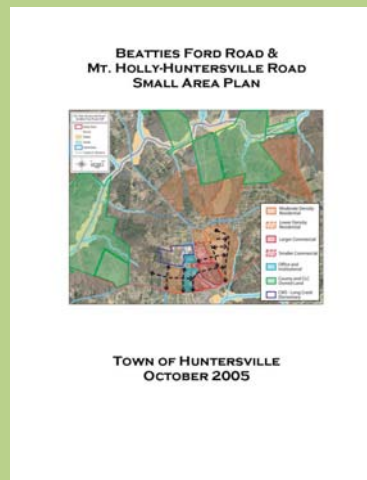
adjacent to Long Creek Elementary School. The plan was adopted on October 17, 2005.

### 1.3.3 Vance Road Extension Alignment Study

Prior to 2001, the “Vance Road Extension” was illustrated on the Mecklenburg County Thoroughfare Plan in a very general alignment from Mt. Holly-Huntersville Road northward to NC 73. Between 2001 and 2004, the Town undertook a major study to define a more specific road alignment and amend the Thoroughfare Plan. This alignment study was driven in large part by community desires to relieve traffic pressures on Beatties Ford Road. The resulting Vance Road Extension Alignment Study, adopted by the Town Board May 3, 2004, culminated in the adoption of the proposed alignment by the Mecklenburg-Union Metropolitan Planning Organization (MUMPO) as an amendment to the Thoroughfare Plan on May 19, 2004.

### 1.3.4 Beatties Ford Road Protection/Enhancement Strategy Plan

Concurrent with the Vance Road Extension Alignment Study, this study was prepared to set forth strategies for the protection and enhancement of Beatties Ford Road as an historic rural road that is not intended to function as a major route for through



traffic. Though not formally adopted by the Town Board, the plan included the following recommendations:

- Widen existing travel lanes to 12 feet, along with bike lanes, shoulders, and minor adjustments to the road alignment to improve safety.
- The use of roundabouts at the intersections of Gilead, Bud Henderson, McIlwaine, Neck, Hambright, and McCoy Roads as traffic-calming and place-making elements.
- Roadway, bikeway and drainage

enhancements in the area defined by the walls of the Hopewell Presbyterian Church and Cemetery in order to improve circulation while retaining the historic character of the area.

- The relocation of Sample Road northward to reduce traffic impacts on the Hopewell Presbyterian Church and Cemetery.
- A 100-foot wide natural buffer along both sides of the right of way.
- Ten-foot wide multi-use trails within the 100-foot buffers.



## 1.4 The Planning Process

In preparing the Beatties Ford Road Corridor Small Area Plan (BFRCSAP), Town staff and consultants worked cooperatively utilizing a highly participatory process that emphasized concentrated team working sessions and involvement of the community. The major elements of this process included:

- **Steering Committee:** The primary component of the community's involvement was the appointment of a Steering Committee made up of stakeholders from the study area. The Steering Committee's primary responsibilities were: (1) to assist the planning team in finding and addressing key issues; (2) to act as a conduit of information and ideas to and from the community; and (3) to ensure that the plan's vision best reflects the collective interests of the community. The Steering Committee met on five occasions: May 10, June 5, June 8, July 30, and August 2, 2007.
- **Open House, May 10, 2007:** A general

Community Open House was held at Huntersville's Town Hall as the first step in obtaining input from community members and stakeholders about their concerns, desires, and objectives. The open house process included base mapping/data analysis presentation, breakout groups, group presentations and a survey questionnaire.

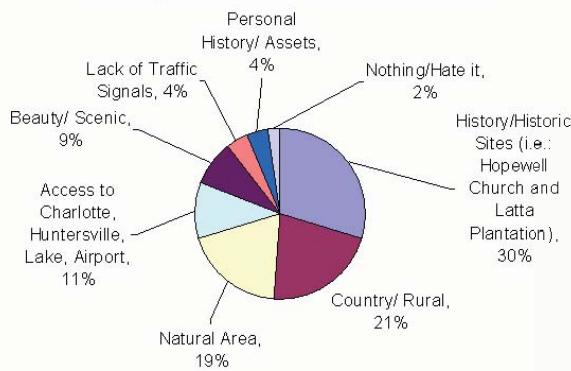
- **Community Charrette - June 5 - 7, 2007:** The planning team assembled in Town Hall over this three day period for an intensive, open work session aimed at identifying alternatives and refining the major components of the Plan. Activities during the Charrette included: a group tour of the study area; interviews with major property owners, developers and other stakeholders; development of alternative plan concepts for key segments of the study area; and a participatory community workshop. The process culminated with a community presentation of the findings concepts and plan alternatives that were developed during the session.



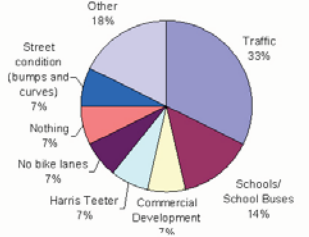
## 1.4.1 BFR Small Area Plan Survey

During an open house on May 10, 2007, a survey of community members present was conducted by the Consulting team. The survey was intended to gather input on a variety of issues pertaining to what was special about the corridor, as well as concerns over future development of the corridor. A total of 34 individuals responded to the survey.

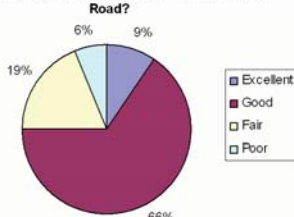
**What do you like most about Beatties Ford Road?**



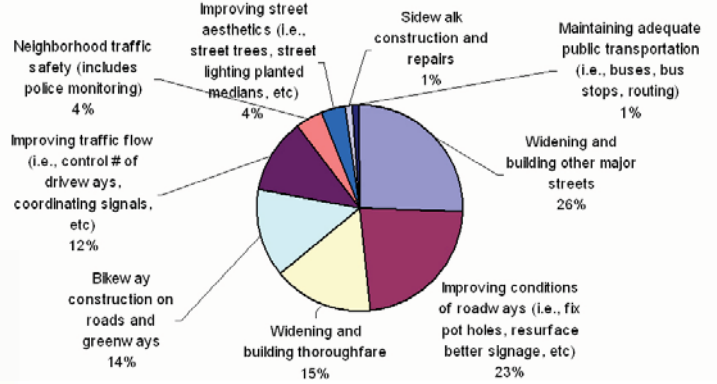
**What do you dislike most about Beatties Ford Road?**



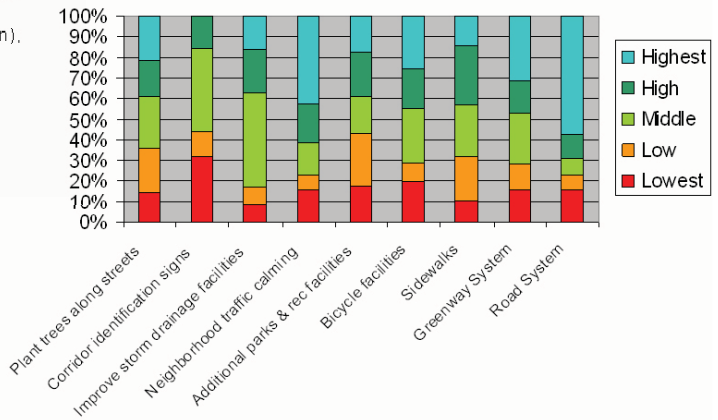
**Overall how do you rate traveling on Beatties Ford Road?**



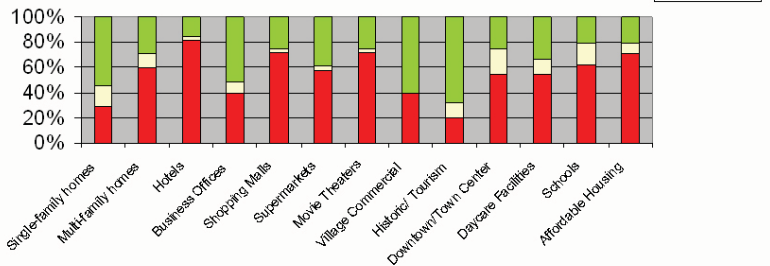
**If you had \$100 to spend on transportation improvements, how would you spend it?**



**Rate the importance of the list of improvements that should be made by the town:**



**What do you think about the addition of the following uses in the future of BRF?**



## About the Respondents:

- 64% have lived in Huntersville for more than 10 years.
- 41% live between NC 73 and Bud Henderson Road.
- 34% live between Bud Henderson and Hambright Road.
- 25% live between Hambright to Mt.Holly Huntersville.
- There were a large predominance of single family home owners.
- 15% did not live in Huntersville.
- 64% of respondents do not work in Huntersville.





## 2.0

# Historical Context

## 2.1 History of the Beatties Ford Road Corridor

*Thirty-one percent of respondents to the BFR Small Area Survey wrote that the history and historical sites in the area is their favorite thing about the Beatties Ford Road.*



*The Cedar Grove Plantation (Torance House) was built in 1831 by James Torance.\**



*The well at the Davidson family homestead of Rural Hill. \**

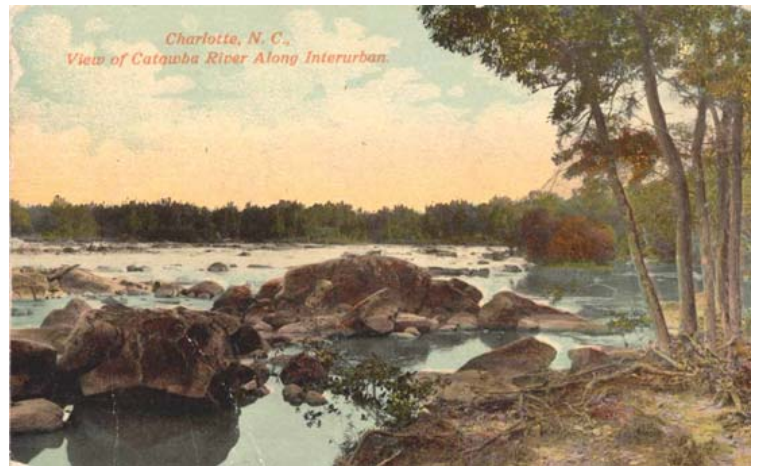
*\* Images from: *The Charlotte-Mecklenburg Story, the Public Library of Charlotte and Mecklenburg County* (accessed 3 September 2007, <http://www.cmstory.org/>).*

Beatties Ford Road is one of the oldest rural routes still in use in Mecklenburg County. The road is named after the old Catawba fording point that it once led to (now submerged under Lake Norman), which was used by John Beatty, a farmer from Pennsylvania who was among the first of the Scots-Irish to settle in the area in 1741. This wave of Scots-Irish settlers established the Hopewell Presbyterian Church on Beatties Ford around 1750, with the present structure dating back to 1833, being the second oldest brick church in North Carolina. The cemetery of the church and the rock walls associated with both sites are now the most memorable and visible landmark of the BFRCSAP study area. The historical significance of the Hopewell Church Cemetery is based on the fact that many of the important figures of Mecklenburg County's early history area buried there.

The Beatties Ford Road Corridor area has a rich cultural legacy rooted in the American Revolutionary War. A number of historic markers along Beatties Ford Road announce the burial grounds and homesteads of Revolutionary era notables. This proud history may owe much to the prickly reputation of the liberty-loving Scots-Irish settlers of Mecklenburg County. Indeed, so much insurrectionist subterfuge and mobilization had taken place right under the nose the British general Lord Charles Cornwallis during his army's occupation of Charlotte that Cornwallis had labeled Mecklenburg County a fertile "hornet's nest" of rebel activity. Many eager volunteers for the



*Marker honoring the memory of Gen. William Lee Davidson at the Cemetery of the Hopewell Presbyterian Church.*



*A 1915 postcard showing the Catawba River in Mecklenburg County. \**

Patriot cause were drawn from the farms of Mecklenburg (and surrounding area) through the fruitful recruiting efforts of a local patriot leader named General William Lee Davidson – for whom the Town of Davidson and Davidson College are named.

Cowan's Ford, in the northwest corner of the BFRCSAP study area and currently the site of the Cowan's Ford Station hydroelectric dam of Lake Norman, is the site of Gen. Davidson's death at the Battle of Cowan's Ford, February 1, 1781. In a tribute befitting the moniker "hornet's nest", Davidson's contingent of rebel troops, outnumbered by more than five to one, was tasked by Gen. Nathanael Greene to harass and waylay the British at the crossing of the Catawba River during the British pursuit of Greene's army. While the attempt met with only minor success, the rebel militia managed to inflict over 100 casualties on the British force at the fording. Gen. Davidson was one of the four Americans killed at the battle. He was buried nearby in the cemetery of the Hopewell Presbyterian Church.

While it may have been a minor reckoning in the scope of the Revolution, the Battle of Cowan's Ford was an event that helped provide a turning point for Cornwallis's southern campaign, as it typified the kind of wearying skirmishes the British faced in the Piedmont, eroding any strategic advantage the British gained in the southern campaign. One after another, each skirmish and battle signaled a providential tide of favor toward the fortunes of the Patriot cause, raising American hopes, stifling Loyalist sentiment, and taking a

collective toll on the British army and the morale of its troops. In effect, General Greene's cunning war of attrition in the Piedmont made North Carolina the southern bastion of the American war effort, and would in the end prove to be Cornwallis's undoing. While the British only technically lost a few battles, the resoluteness of the American resistance here, as exemplified with the Battle of Cowan's Ford, is summed up by Greene's motto: "We fight, get beat, rise, and fight again." Perhaps in outright frustration, Cornwallis made the ill-fated decision to go northward to cut off the Virginian supply lines into the rebellious Carolinas. With Cornwallis's departure, Gen. Greene was freed to retake South Carolina and pin down the remaining British forces in Charleston. Eight months after the Battle of Cowan's Ford, the end of the Revolutionary War was sealed when Cornwallis surrendered at Yorktown, Virginia on October 19, 1781.

Major John Davidson, a leader of the Mecklenburg County militia and distant cousin of General William Lee Davidson, is another local Revolutionary era notable. He established the Davidsons' "Rural Retreat" homestead in 1761, now the Rural Hill historic estate on Neck Road administered by the Catawba Valley Scottish Society. John Davidson is one of the representatives who signed a list of resolves against British abuses that would later be called the "Mecklenburg Declaration of Independence" (the "Ol' Meck Dec"), signed on May 20, 1775. The Resolves were taken to the Continental Congress in Philadelphia and may have served as the model (if not the actual



*Richard Barry Homestead.*

precursor) for the 1776 Declaration of Independence. John Davidson now lies buried along with other members of his family in the Rural Hill Burying Ground on Neck Road.

As previously noted, many Revolutionary War notables are buried in the Hopewell Church Cemetery. Among these notables are Captain James Knox, who was among the earliest Patriot partisans in the colonial military who refused to obey the orders of the Tory Governor William Tryon to collect taxes. Captain Knox is the grandfather of President James Knox Polk. Frances Bradley (the namesake of Bradley Middle School) is also buried here. Bradley's farm may have been the site of a skirmish where a plucky band of 14 Patriots sent to flight and humiliated at least 100 British troops foraging the local farms for food and supplies during their stay in Charlotte. This is the event that earned the county's nickname "the hornet's nest". Four signers of the Mecklenburg Resolves lie buried in the Hopewell Church Cemetery as well. They include John McKnitt Alexander, the secretary of the meeting that drafted the Resolves, William Graham, Matthew McClure and Richard Barry (whose home, incidentally, served as the first meeting house of the Hopewell Presbyterian Church during its early years). The grave sites of John Beatty, the namesake of Beatties Ford Road, and Captain John Long, the namesake of Long Creek (and Long Creek Elementary) can be found here, as well as the grave sites of the Latta family (of Latta Plantation) and the Torance family (of the Hugh Torance historic properties on Gilead Road).

## 2.2 Historic Sites and Historic Design Precedent

### 2.2.1 Historic Sites

The abundance and a diversity of natural resources in the study area has attracted settlers to the Beatties Ford Road area for over 200 years. Among the historically significant properties within the study area are the Latta Plantation on Sample Road and Rural Hill Plantation on Neck Road. Several smaller historic home, church, school and plantation sites are also located throughout the study area (which are shown on the map on the facing page). The low-lying rock wall of the Hopewell Presbyterian Church has become the main visual monument of the area, and is treasured by local residents for that reason. In effect, the wall has become a memorial representing the history and culture of the community.

### 2.2.2 Historic Design Precedent

The use of distinctive types of stone and patterning of the stone in the walls at Hopewell Presbyterian Church and Cemetery, as well as in historical monuments and a few other select locations, has created a unique design vernacular for the Beatties Ford Road Corridor Study Area. The design character that is reflected by the walls in the Hopewell Presbyterian Church area (and the walls surrounding the cemetery on Neck Road as well) are frequently referred to as the defining character of the corridor. Fortunately, some of the more recent subdivisions along the Road have used stone elements that are to some degree respectful of this historic design character. Given this historic architectural character, consideration should be given to the use of stone walls, posts, retaining walls and other hardscape features as part of the design vernacular for the study area, as well as for the retrofitting of existing development that is inconsistent with the historic design character of the BFR Corridor.

Homes and Homesteads of Historic Significance in the Study Area Include:

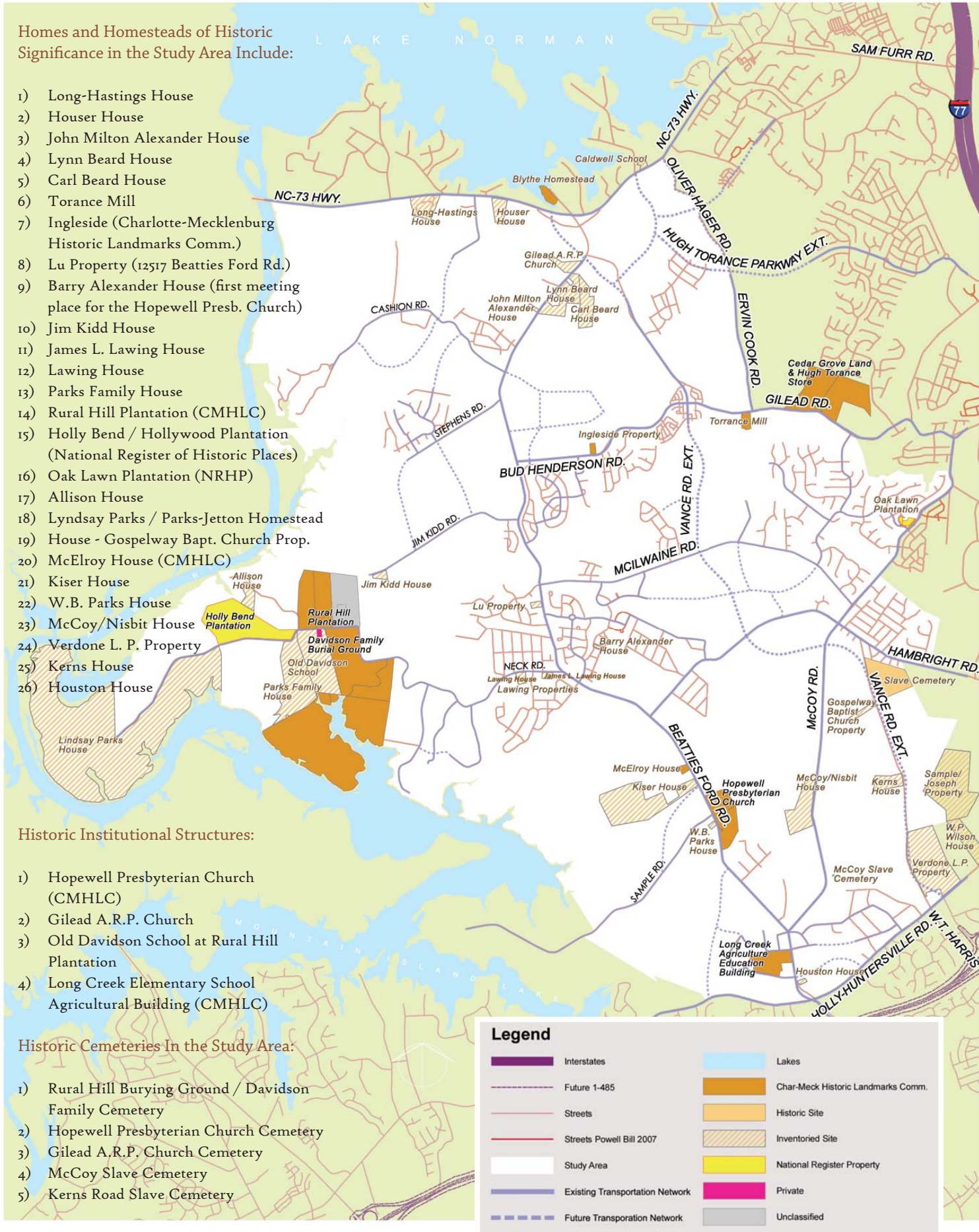
- 1) Long-Hastings House
- 2) Houser House
- 3) John Milton Alexander House
- 4) Lynn Beard House
- 5) Carl Beard House
- 6) Torance Mill
- 7) Ingleside (Charlotte-Mecklenburg Historic Landmarks Comm.)
- 8) Lu Property (12517 Beatties Ford Rd.)
- 9) Barry Alexander House (first meeting place for the Hopewell Presb. Church)
- 10) Jim Kidd House
- 11) James L. Lawing House
- 12) Lawing House
- 13) Parks Family House
- 14) Rural Hill Plantation (CMHLC)
- 15) Holly Bend / Hollywood Plantation (National Register of Historic Places)
- 16) Oak Lawn Plantation (NRHP)
- 17) Allison House
- 18) Lyndsay Parks / Parks-Jetton Homestead
- 19) House - Gospelway Bapt. Church Prop.
- 20) McElroy House (CMHLC)
- 21) Kiser House
- 22) W.B. Parks House
- 23) McCoy/Nisbit House
- 24) Verdone L. P. Property
- 25) Kerns House
- 26) Houston House

Historic Institutional Structures:

- 1) Hopewell Presbyterian Church (CMHLC)
- 2) Gilead A.R.P. Church
- 3) Old Davidson School at Rural Hill Plantation
- 4) Long Creek Elementary School Agricultural Building (CMHLC)

Historic Cemeteries In the Study Area:

- 1) Rural Hill Burying Ground / Davidson Family Cemetery
- 2) Hopewell Presbyterian Church Cemetery
- 3) Gilead A.R.P. Church Cemetery
- 4) McCoy Slave Cemetery
- 5) Kerns Road Slave Cemetery



**Legend**

	Interstates		Lakes
	Future 1-485		Char-Meck Historic Landmarks Comm.
	Streets		Historic Site
	Streets Powell Bill 2007		Inventoried Site
	Study Area		National Register Property
	Existing Transportation Network		Private
	Future Transportation Network		Unclassified



## 3.0

# Planning Context

## 3.1 Town’s Planning Framework



In 1996, the Town of Huntersville adopted a new “form-based” land use and development code based upon the principles of traditional town planning. Since that time, the Town has established a well-defined pattern of land use intensity and density, with higher density focused along the I-77 corridor and lower density at the outer limits of the town’s eastern and western borders. The Town has also completed a number of small area and thoroughfare planning studies that have helped to define the future character of the Beatties Ford Road study area.

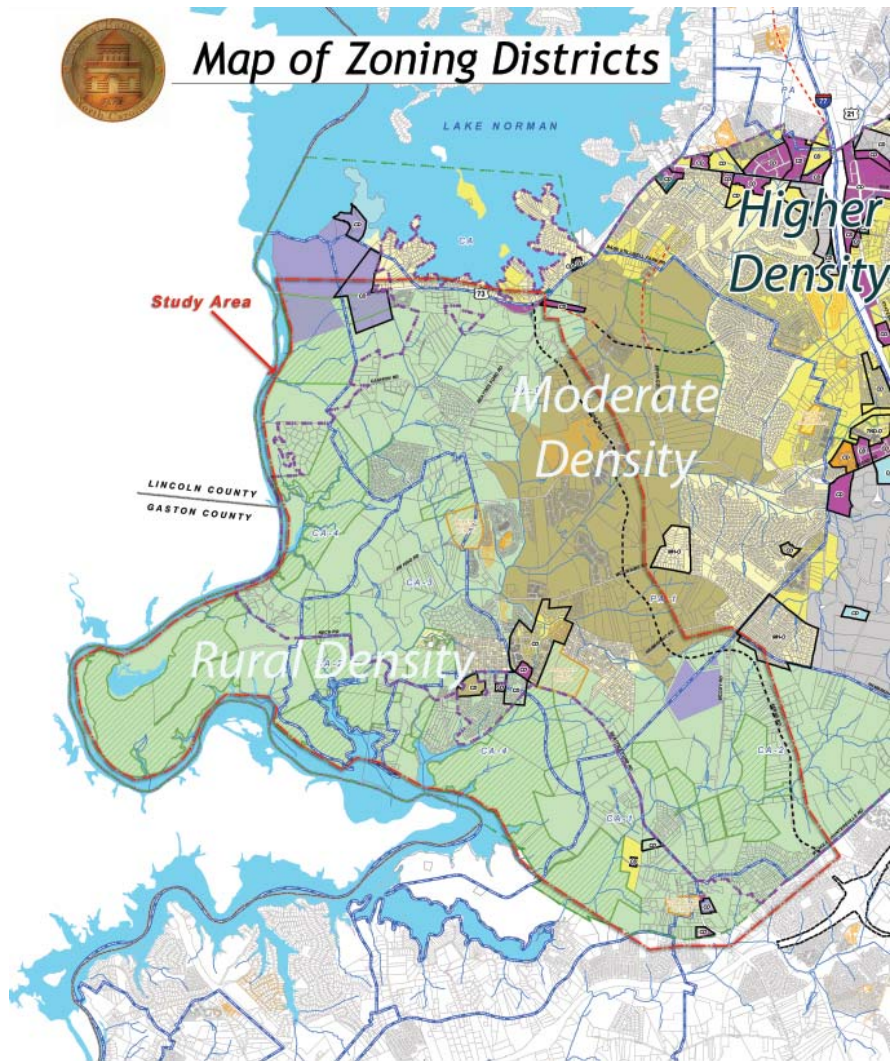
## 3.2 Established Zoning

The planning policies of the Town are strongly reflected in its Zoning pattern. The official “Map of Zoning Districts” can be translated into three bands or tiers, focusing on the I-77 / SR-115 - Old Statesville Road corridor and extending in density gradations to the west and east. For purposes of this study, these gradations or tiers can be defined in a relative sense:

- **Higher Density Core:** The I-77 / NC-115 corridor defines a higher density “core” area. The more intensive commercial, residential and office uses in the Town are concentrated within and flanking this linear core. The Town’s development of transit-oriented planning standards



## Map of Zoning Districts



to support its participation in the North Corridor Commuter Rail program is further indication of a commitment to continue the focus of higher intensity activities in this “core” area.

- **Moderate Density Tier:**

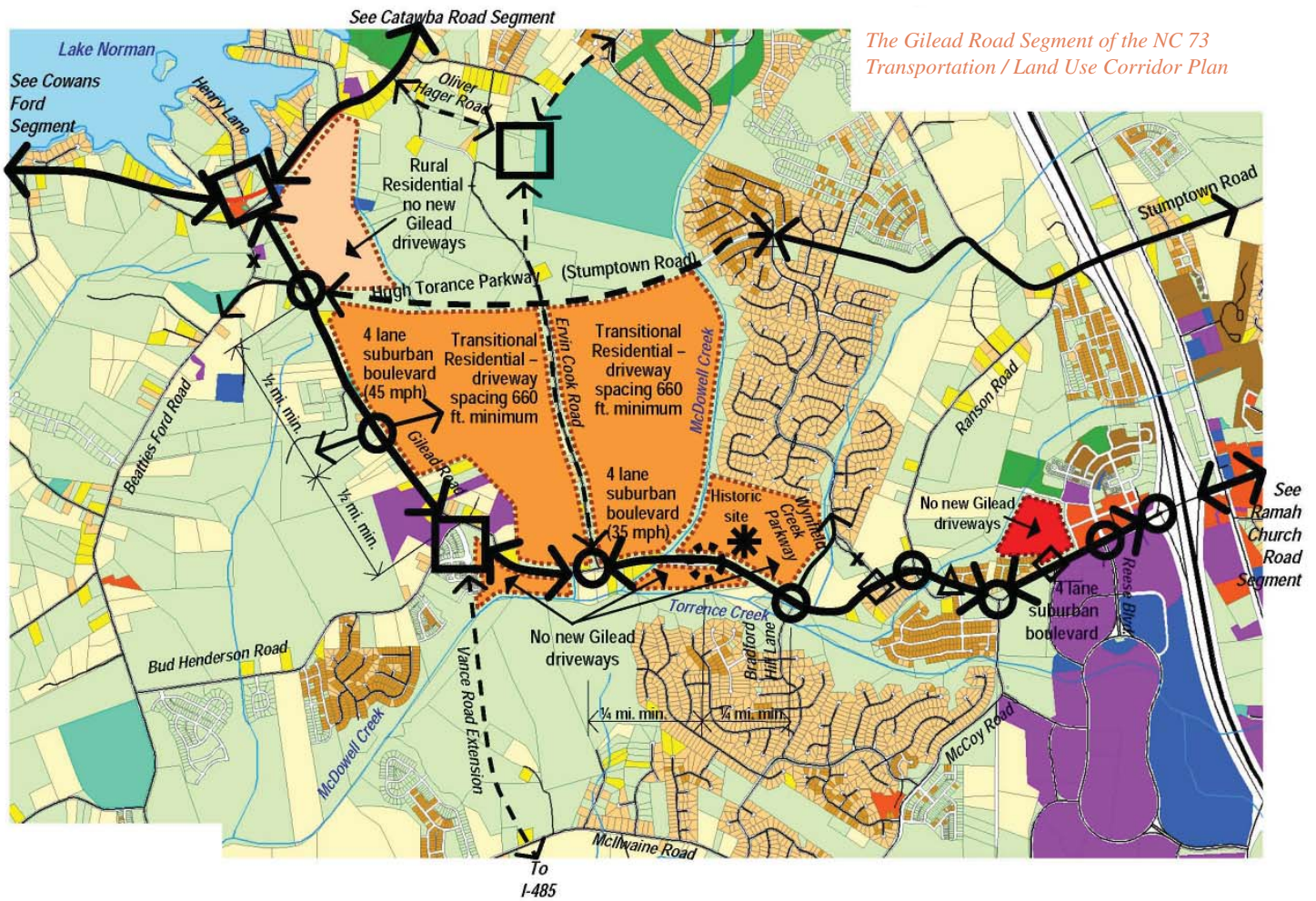
The higher density core area is flanked by north-south tiers that are predominantly residential in character and classified under the Transitional Residential (TR) and General Residential (GR) zoning classifications. In the BFR Corridor study area, the area east of BFR and above Hambright Road is predominantly classified as Transitional Residential. According to the Zoning Ordinance, “The Transitional Residential District serves as a bridge between rural zones and more urbanized development.”

- **Low Density, or Rural, Tiers:**

Finally, the outermost areas of the Town are well defined as being rural in character and the Rural (R) zoning district is dominant. As codified in the Zoning Ordinance, the Rural District, "... is provided to encourage the development of neighborhoods and rural compounds that set aside significant natural vistas and landscape features for permanent conservation. Development typologies associated with the Rural District are farms, the single house, the conservation subdivision, the farmhouse cluster, and the residential neighborhood.”

Due to the presence of critical watershed areas and streams, particularly Gar Creek, the areas east of BFR and south of Hambright are also primarily designated Rural. Other zoning districts within the study area are General Residential, Highway Commercial (Conditional and non-conditional Districts), Neighborhood Residential (Conditional District) and Special Purpose. See the "Zoning and Current Developments Map" on page 23 for further details.

Within the western rural area of the Town of Huntersville, where the Beatties Ford Road Corridor is located, the majority of the land is designated as Rural with a very extensive portion of the land lying within various park, open space and preservation areas or easement overlays. Lands west of BFR and many that are directly abutting BFR on the east are classified as Rural.



### 3.3 Approved Planning Studies

The following three adopted area plans/corridor studies help define the context of the Beatties Ford Road Corridor Small Area Plan. The intent of this current study is not to duplicate or replace previous plans already adopted for Beatties Ford Road. Rather to build on previous planning by addressing gaps that must be filled and updating plans where necessary.

#### 3.3.1 Vance Road Alignment Study

The Vance Road Major Extension Alignment Study (Adopted by the Town Board May 3, 2004) defines the alignment of the major thoroughfare that will serve the long-term north-south transportation needs for the area of Town on the west side of I-77. For the most part, the corridor serves the Moderate Density Tier as described above. At its southern end,

the alignment ties into the alignment of Harris Boulevard and will provides direct access to I-485, which is currently under construction. The location of the corridor was driven largely by its ability to serve the moderate density tier. It is also envisioned as providing north-south traffic capacity that complements the function of I-77 and provides linkage between the SR-73 corridor to the north and the core of the Charlotte region to the south. Vance Road is also intended to provide long-term traffic congestion relief for BFR, allowing it to continue to function as a 2-lane local road consistent with its historic character.

#### 3.3.2 NC 73 Transportation / Land Use Corridor Plan

The NC 73 Corridor Plan (Adopted by the Town Board July 19, 2004) established the transportation and land use pattern for the



northern end of the Beatties Ford Road corridor. The Plan calls for continuation of the rural residential land use character in the Beatties Ford area and identifies the need to modify the intersection of NC 73 and Beatties Ford Road. The Plan also suggests that the Hugh Torance Parkway follow a more southerly alignment than that currently shown on the Major Thoroughfare Plan. The Plan also calls for access management standards throughout the length of NC 73.

### 3.3.3 Mt. Holly-Huntersville Road Small Area Plan

The Mount Holly-Huntersville Beatties Ford Road Small Area Plan (Adopted by the Town Board October 17, 2005) established the future land use and local area circulation pattern for the Long Creek Community on the southern end of the Beatties Ford Road corridor. The Plan calls for a commercial node on either side of Beatties Ford Road north of Mt. Holly-Huntersville Road. This concentration of commercial uses at this intersection is reinforced by similar land use designations by the City of Charlotte on the south side of Mt. Holly-Huntersville Road.



*Above: Building Typologies of the Long Creek Community*



*Aerial Perspective of Long Creek Elementary and Residential Courtyard, as proposed by the Beatties Ford/ Mt. Holly-Huntersville Small Area Plan*

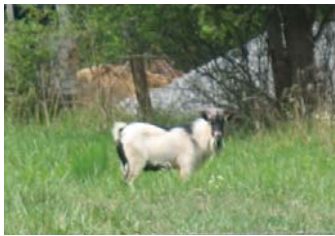


## 4.0

# Existing Conditions Analysis

## 4.1 Environment

*Schweinitz's Sunflower, (Helianthus schweinitzii), pictured above, is a federally protected vascular species that thrives in the prairie along McCoy Road. (Photo courtesy the Mecklenburg County Division of Natural Resources).*



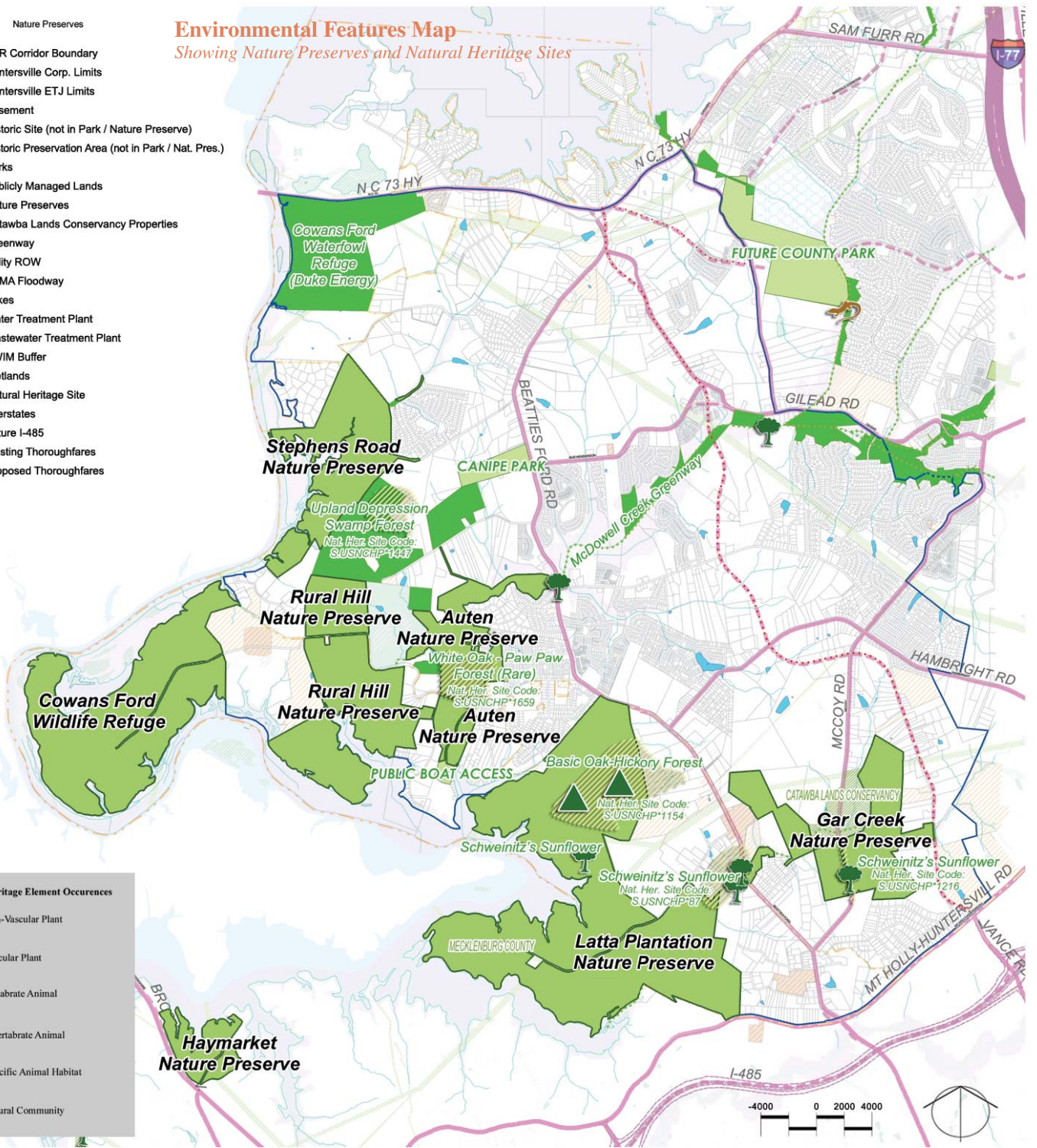
Environmental impacts are inevitable as development continues within the study area. Minimizing and managing these impacts will be imperative as development alternatives are contemplated for the BFR Corridor Study area. The environmental features map displays significant natural resources noted within the study area using data provided by the Mecklenburg County Park and Recreation Department's Division of Natural Resources and a statewide database managed by the Center for Geographic Information and Analysis (CGIA) within the North Carolina Department of Environmental and Natural Resources. This information represents best available data for screening potential environmental and cultural impacts associated with future development alternatives.

The study area includes several bodies of water draining toward Lake Norman and the Catawba River. Pristine natural preserves co-exist with these bodies of water between Beatties Ford Road and the Catawba River - including the Auten Preserve, Latta Plantation, Cowans Ford, Rural Hill, and Gar Creek - that contribute to the uniqueness of the study area. In total, approximately 24% (around 3,400 acres) of the study area is under public or private conservation easements. Included are about 55 acres along McDowell Creek that are designated for permanent conservation under the control of Mecklenburg County and which will be used to create a greenway that will link nearby residents with the Auten Natural Preserve.

## Environmental Features Map

Showing Nature Preserves and Natural Heritage Sites

- Legend**
- Nature Preserves
  - BFR Corridor Boundary
  - Huntersville Corp. Limits
  - Huntersville ETJ Limits
  - Easement
  - Historic Site (not in Park / Nature Preserve)
  - Historic Preservation Area (not in Park / Nat. Pres.)
  - Parks
  - Publicly Managed Lands
  - Nature Preserves
  - Catawba Lands Conservancy Properties
  - Greenway
  - Utility ROW
  - FEMA Floodway
  - Lakes
  - Water Treatment Plant
  - Wastewater Treatment Plant
  - SWIM Buffer
  - Wetlands
  - Natural Heritage Site
  - Interstates
  - Future I-485
  - Existing Thoroughfares
  - Proposed Thoroughfares



- Natural Heritage Element Occurrences**
- Non-Vascular Plant
  - Vascular Plant
  - Vertebrate Animal
  - Invertebrate Animal
  - Specific Animal Habitat
  - Natural Community

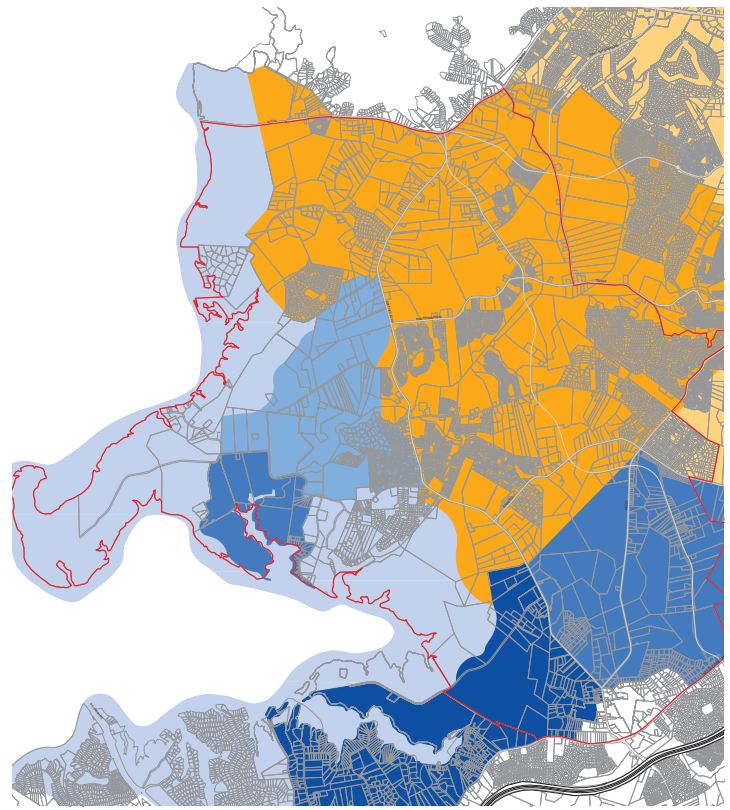
Several unusual natural communities and rare plant species, including one federally listed endangered plant, are known to occur in the study area. The nature preserves were all purchased by Mecklenburg County with the intention to preserve the long-term viability of plant and animal populations, provide water quality buffers in the Mountain Island Lake watershed, or protect other significant, ecological, geological or archaeological resources. The Latta Plantation Nature Preserve

protects a rare basic oak-hickory forest that is one of the top five examples of this natural community in the state. An upland depression swamp forest community occurs adjacent to Stephens Road in land currently owned by the Charlotte Mecklenburg Utilities Department. In the Auten Nature Preserve, a white oak – paw paw forest occurs just north of Neck Road that is not known to occur anywhere else in the county. Encroaching of development could threaten the remaining plant and

natural communities within the study area.

The Mecklenburg County Park and Recreation Department’s Division of Natural Resources manages a restored 355-acre wildlife habitat and watershed protection area within the study area known as Gar Creek Nature Preserve. A portion of the property along the east side of McCoy Road, running parallel to Gar Creek and south of the historic slave cemetery, is intensively managed to encourage reintroduction of an ecologically diverse plant and animal community. Today, a remnant Piedmont prairie at that location has been expanded into a larger prairie/savannah habitat that supports the proliferation of the federally-listed Schweinitz’s Sunflower (i.e., *Helianthus Schweinitzii*). This plant is primarily found near the power line easement running along McCoy Road. Because considerable resources that have been invested in this roadside ecological community, it is the desire of the Division of Natural Resources that future plans for this area keep the natural buffer along McCoy Road intact in order to preserve the natural heritage site of the Schweinitz’s Sunflower.

Collectively, the environmental features noted in the study area serve as the fingerprint for a community that makes it unique among the surrounding landscape. This unique sense of place enjoyed by residents and visitors alike should be celebrated in the design alternatives envisioned for a more sustainable future.



Mountain Island Lake Watershed Areas



## 4.2 Watersheds and Topography

Watersheds in North Carolina are protected under the Water Supply Watershed Classification and Protection Act (G.S. 143-214.5) intended to safeguard the State’s surface water drinking supplies. The study area lies almost entirely within the area protected under the Mountain Island Lake (MIL) Watershed Overlay District adopted by the Town of Hunters-

Table 1.1 Supplemental Development Restrictions for Critical Watershed Areas

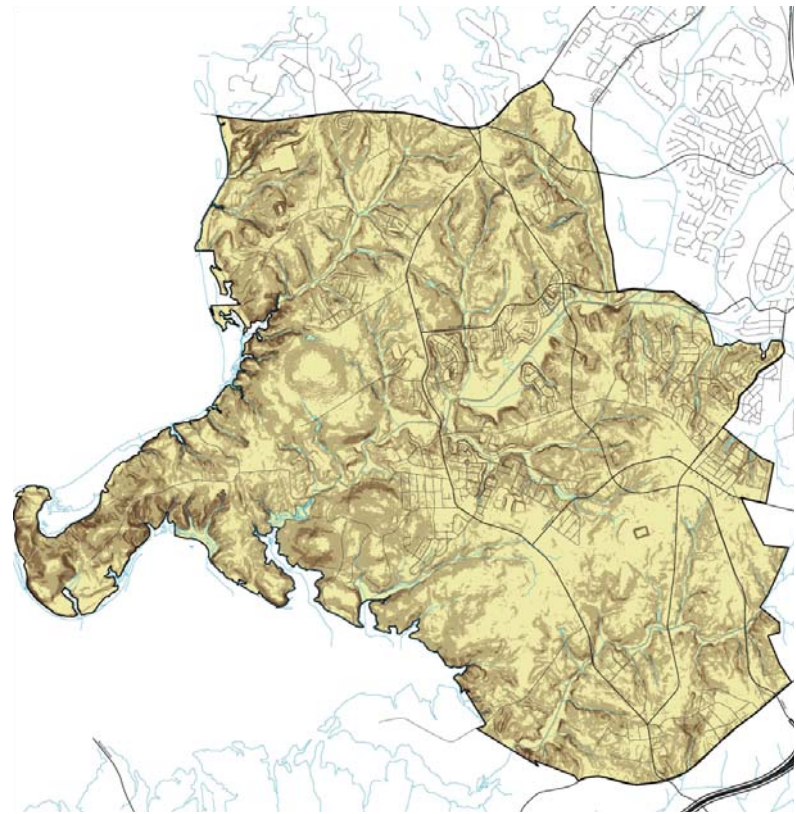
Name	Map ID	Max. Impervious Area Coverage	Buffer Size
Critical Area 1	CA1	6%	100 ft. or 100-yr floodplain boundary, whichever is greater
Critical Area 2	CA2	12%	100 ft. or 100-yr floodplain boundary, whichever is greater
Critical Area 3	CA3	12%	100 ft. or 100-yr floodplain boundary, whichever is greater
Critical Area 4	CA4	24%	100 feet

ville to implement the State’s legislation. Subareas established in the Town’s MIL Overlay District classify land as ‘critical’ or ‘protected’ to administer development controls that ensure high-quality surface drainage into Mountain Island Lake. Regulations in the overlay district supplement all requirements of the underlying zoning district.

A detailed summary of the two sub-areas in the MIL Overlay District follows:

**Critical Areas:** Critical areas (noted CA-1 through CA-4) represent the highest standards enforced by the Town of Huntersville for protecting the quality and quantity of surface water run-off. These areas are generally closest to the shoreline, and represent a greater risk of water quality degradation from pollution. Limitations for impervious surface coverage and undisturbed buffer requirements vary for each of the different critical area subcategories. Table 1.1 summarizes impervious surface limitations and buffer size requirements for critical areas CA-1 through CA-4 identified within the study area.

**Protected Areas:** Protected areas (noted PA-1 and PA-2) allow development with fewer restrictions than in critical areas because the risk of water quality degradation from pollution is less. Protected watershed areas generally lie north and west of Stephens Road and Beatties Ford Road within the study area. Limitations for impervious surface coverage and undisturbed buffer requirements vary for each protected area subcategory and whether the low-density or high-density option is chosen.



Slope Intensity Map

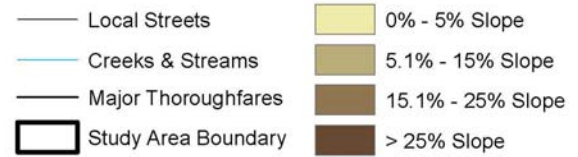


Table 1.2 summarizes impervious surface limitations and buffer size requirements for protected areas PA-1 and PA-2 identified within the study area

**Topography:** The study area is generally flat with steep slope areas (i.e., greater than 15%) isolated to the extreme southern and western edges near the Catawba River, and along interior creeks and streams such as McDowell Creek and Gar Creek.

Table 1.2 Supplemental Development Restrictions for Protected Watershed Areas

Name	Map ID	Max Impervious Area Coverage		Buffer Size
		Low Density Options	High Density Option A	
Protected Area 1	PA1	24%B / 36%C	70%	50 feet 100 feet
Protected Area 2	PA2	24%B / 36%C	70%	30 feet 100 feet

Notes:  
A = Where permitted in the underlying zoning category.  
B = With a curb and gutter street section.  
C = Without a curb and gutter street section.



## 4.3 Transportation

### 4.3.1 Existing Conditions

The transportation network within the Beatties Ford Road Small Area Plan study area is primarily composed of public streets that are fed by a system of minor thoroughfares, most important of which is Beatties Ford Road. The study area is bounded by two major thoroughfares, NC 73 (Sam Furr Road) and Mount Holly-Huntersville Road, on the north and south respectively. Gilead Road and the planned, four-lane future extension of Vance Road (W.T. Harris) are also designated major thoroughfares (the sections of Kerns Road and Gilead Road that will become part of the Vance Road extension are currently only two lanes). Until the building of the Vance Road extension, the study area network will remain focused on Beatties Ford Road, which serves as the main north-south roadway through the area.

In addition to providing access within the study area, Beatties Ford Road also provides regional north-south mobility. BFR exists as a two-lane road with auxiliary turn lanes at major intersections and is the only parallel road west of I-77 in the study area. Major intersections within the study area (from north to south) include: NC 73, Gilead Road, Bud Henderson Road, McIlwaine Road, Hambright Road, McCoy Road, and Mt. Holly-Huntersville Road.

The remaining street network within the

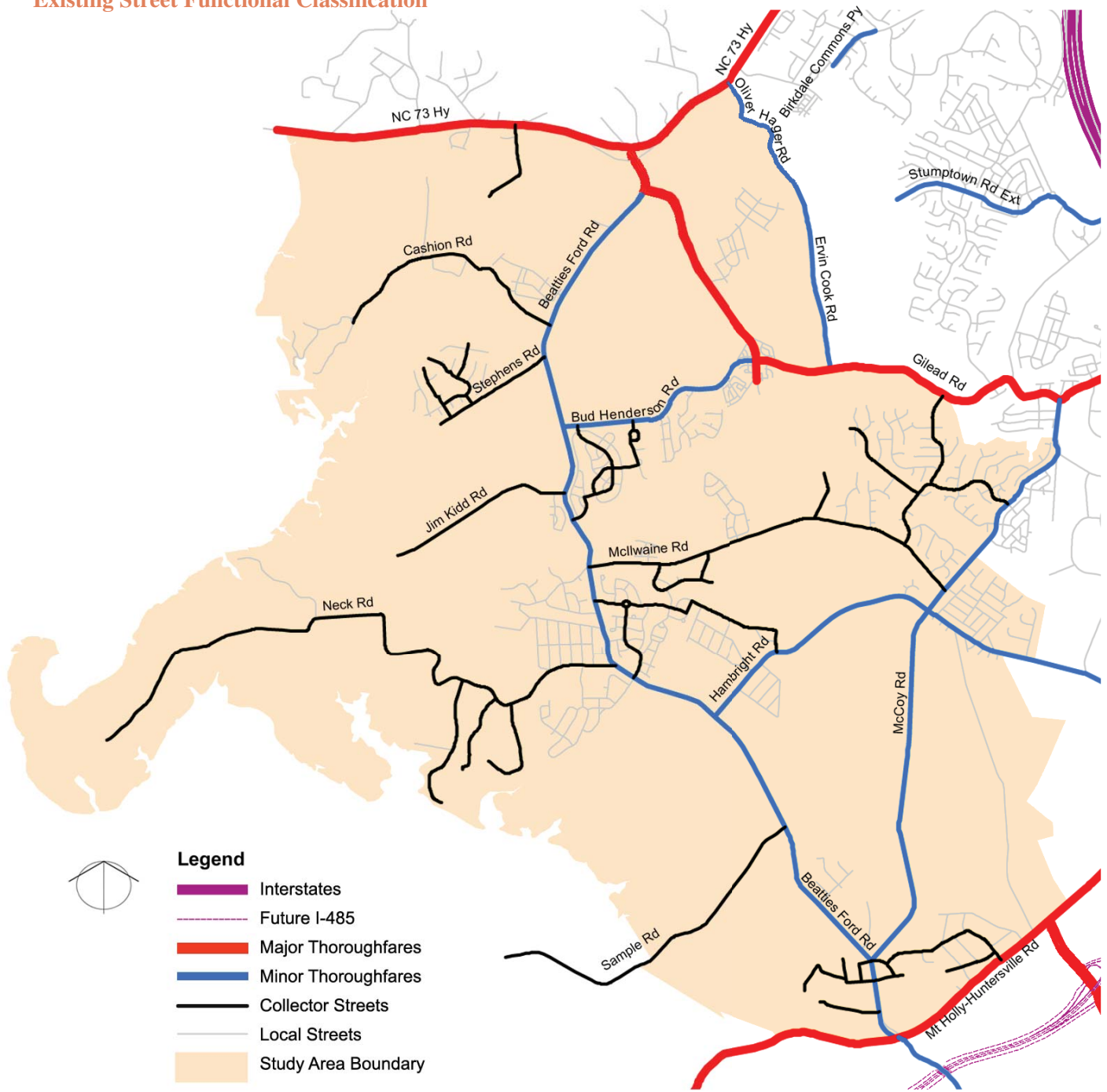
study area provides east-west connectivity primarily to residential land-uses. The majority of these streets are two lane roadways that connect to major or minor thoroughfares. Physical constraints such as the Catawba River and the nature preserves to the west prohibit the extension of these streets. These barriers increase the reliance on Beatties Ford Road as the principal regional and local transportation route within the study area.

### 4.3.2 NC 73 Corridor Planning

With the high rate of growth that northern Mecklenburg County has experienced over the past few years, traffic on the major arterials has dramatically increased, resulting in a drop in available roadway capacity. At the same time funding for roadway improvements has not kept pace with the need. In an effort to understand roadway capacity needs and to develop potential solutions, multiple plans have been developed for the NC 73 corridor. The most prominent of these plans is the *NC 73 Transportation/Land Use Corridor Plan*, which focused on the 35 miles of stretch of NC 73 between I-85 in Cabarrus County and US 321 in Lincoln County. The Town of Huntersville signed a “Memorandum of Understanding (MOU)” endorsing this plan on July 19, 2004.

Given the length of the corridor studied, NC 73 was divided into 15 different study

## Existing Street Functional Classification



areas or segments (see page 12 above for a map of the Gilead Road segment). The Gilead Road segment in the study area is incorporated in this plan in the discussion for the future alignment of the Vance Road extension. The Cowans Ford Segment covers NC 73 from Club Drive in Lincoln County to McGuire Nuclear Station Road in Mecklenburg County for a section length of 2.1 miles. The NC 73 plan recommends that NC 73 be widened to a 4-lane rural shoulder-and-ditch boulevard

with a 38-foot median and 11-foot travel lanes. Within the vicinity of the study area for the Cowans Ford segment, the plan recommends that the existing signal at McGuire Nuclear Station Road remain. No other signalized or unsignalized intersections are recommended between McGuire Nuclear Station Road and the Catawba River bridge. The Catawba Road segment is 3.1 miles in length and covers the area between McGuire Nuclear Station Road and West Catawba Avenue.



*Recent school additions have increased traffic pressures on Beatties Ford Road; shown above is the traffic at Hopewell High School (6:55-7:05 A.M.)*

The NC 73 plan recommends a 6-lane suburban curb and gutter boulevard with a 16-foot median and 11-foot travel lanes. The plan also recommends that a 5-foot bike lane be included in the typical section. The NC 73 plan calls for 4 new signalized intersections along the corridor, at Hagers Ferry Road, Terry Lane, Windaliere Drive, and a new location between Hagers Ferry Road and Henry Lane. The NC 73 plan recommends a minimum spacing of ½ mile between signalized intersections.

#### 4.3.3 Current Issues

Throughout the planning process, planners were challenged with the task of developing a long-range vision for transportation mobility within the study area. Complicating this task is the fact that the roads in the study area serve many functions including the regional movement of commuters. The existing MUMPO Thoroughfare Plan identifies projects within the study area that must be accounted for including the Vance Road and Hugh Torance Parkway extensions. Both of these roads are on the adopted Thoroughfare Plan and represent projects that respond to the growing traffic volumes in the northern Mecklenburg County area. The Hugh Torance Parkway alignment as depicted on the adopted Thoroughfare Plan includes an extension from the grade separation at I-77 westward to existing NC 73. This current alignment also includes a realignment of NC 73 at the confluence with the future parkway extension so that the predominant movement is a through movement from NC 73 directly to Hugh Torance (see the alignment marked for deletion in the NC 73 transportation system map on page 35 below). Since

the adoption of the Thoroughfare Plan, local and regional planners recognize the deficiency of this configuration at NC 73.

The proposed Thoroughfare Plan alignment fails to address the predominant commuter movements on Highway 73 seeking access to I-77. The resulting alignment leads motorists to a grade separation rather than an interchange with I-77 thereby requiring motorists to turn onto alternate routes in order to achieve their ultimate destination of nearby freeways. Similarly, the Thoroughfare Plan includes a Vance Road extension alignment that would intersect the Hugh Torance/Highway 73 alignment at a “T” intersection connecting Sam Furr Road to the north with I-485 to the south. Planners all agree that the resulting confluence of these two roadways with resulting turning movements would likely create a need for future grade separation of this intersection. Furthermore, the alignment of the Hugh Torance Parkway and Vance Road extensions traverse through the middle of property owned by the Beard family. The small area planning process identified the Beard Family’s property as a location where preservation rather than future development is preferred. The construction of arterials through the middle of this property represents a direct impact to the goal of preservation. The property is already severely limited due to topography and utility easements. Therefore a goal of the BFRCSAP transportation strategy is to develop a set of alternative alignments for these two roadways that achieves the following:

- (a) Provides regional connections which encourage commuters to divert to a new Vance Road Extension;



- (b) Encourages the preservation of Beatties Ford Road from further through trip impacts, thereby lessening the need for capacity improvements;
- (c) Maintains a Highway 73 direct alignment with interchange access to I-77;
- (d) Minimizes impacts to the Beard family property.

Another outstanding issue to be resolved involves the proposed realignment of Sample Road to avoid impacting the historically prized rock walls at the current intersection of Sample Road with Beatties Ford Road. The restricted sightlines caused by the walls and the constricted condition of the intersection remain a safety issue, which will become more problematic with the induced traffic resulting from the new subdivision now being planned for Sample Road.

#### 4.3.4 Beatties Ford Road's History of Disjointed Improvements

Beatties Ford Road is predominantly a two-lane roadway connecting north-south between Highway 73 and Mt. Holly-Huntersville Road. This road has been characterized as scenic for a number of reasons predominately related to the pastoral environment through which it



*The most significant traffic back-up occurs on Beatties Ford Road between NC 73 and Gilead Road during the evening commute*

passes as well as for the many historic features located along the corridor. However, like many rural routes, this roadway has begun to experience peak hour traffic impacts related to commuter movements as well as new developments in the vicinity. The recent addition of schools, parks and retail land uses will generate increased amounts of traffic.

Beatties Ford Road falls under the maintenance responsibility of NCDOT. As development has occurred, the Town of Huntersville and NCDOT have been party to countless review and approvals of traffic studies and subdivision plans. With each application comes a responsibility of agencies to ensure that improvements appropriate to mitigate the proposed development are implemented. Over time, an incremental series of improvements have been made to the corridor. In the absence of an adopted vision for the roadway an ad-hoc approach to corridor improvements has occurred. The result is a series of improvements that do not include continuity of section, edge treatment or continuous facilities for bike and pedestrians. A clearly stated goal of this plan was therefore to recommend a preferred typical roadway section, so that future continuity can be achieved. It also important to note that the public outreach documented the desire of the community to maintain the rural feel of the roadway and a desire to preserve the two lane cross-section. With this in mind, the construction of the Vance Road Extension has been characterized as a high priority. The construction of the Vance Road Extension will encourage the displacement of through trips on Beatties Ford Road making possible the goal of maintaining its two-lane section.



*Intersection of Sample Road and Beatties Ford Road (showing the limited sightline)*



*The Duke right of way in the Latta Plantation Nature Preserve*

## 4.4 Infrastructure

An important characteristic of the Corridor study area is its importance to the support of major infrastructure facilities, a fact that poses significant planning challenges, particularly bearing on future transportation projects. In close proximity are the Duke Energy power stations (the Lake Norman Hydroelectric Station and McGuire Nuclear Plant) and support facilities. A water treatment facility is located just east of Oliver Hager Road. High tower transmission lines extending to the Duke Energy switchyard in the northwest corner of the study area (on the south side of NC 73) present planning challenges for the siting of new thoroughfares and the site planning of new development in the northern areas. In the south, just north of the Gar Creek Nature Preserve, a Piedmont Natural Gas facility will similarly restrict transportation and development planning in its immediate vicinity.

Along Jim Kidd Road in the study area are a number of properties owned by the Charlotte-Mecklenburg Utilities Department, including a waste water treatment plant along McDowell Creek and a farm parcel that will potentially be dedicated to a reclaimed water demonstration facility. The location of major water and sewer transmission lines within the study area support higher-density growth patterns generally east of Beatties Ford Road or along NC 73 and Mount Holly-Huntersville Road.

## 4.5 Current Developments

A number of recent commercial reviews and current rezoning proposals are outstanding and are awaiting the consideration of the Town Board. These locations are highlighted in red and marked as "pending" or "under review" in the Zoning and Current Developments Map show at right.

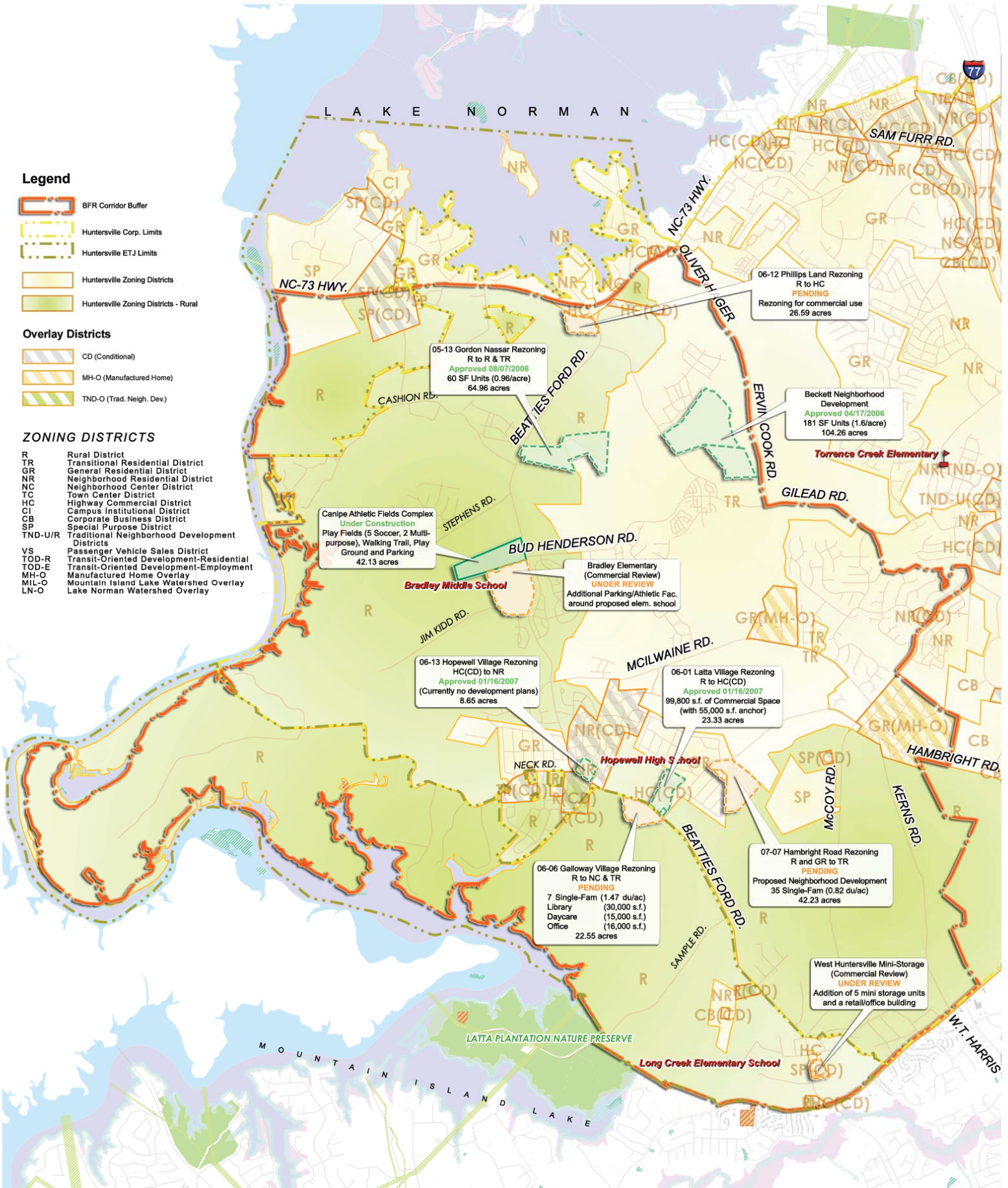
### 4.5.1 Recent Developments

**Parks:** The Town is currently developing Richard Barry Memorial Park on the west side on Beatties Ford Road opposite the Bud Henderson T-intersection. The park is primarily intended for active (i.e. ballfield) use, but also includes a playground, walking trails and a natural area. The site plan provides a setback of approximately 100 feet from BFR. The plan also provides pedestrian and vehicular linkages to the Bradley schools mentioned below.

**Hopewell High School:** Hopewell is located on the east side of BFR approximately 600 feet north of Hambright Road. The site plan incorporates a landscaped setback from BFR that is approximately 100 feet deep. It also provides a driveway connection to the Tanners Creek subdivision to the north and a stub-out for connection to the large property to the south (the site of the proposed Latta Village commercial development described in section 4.6.3 following).

**Bradley Francis Middle School:** This school, located just north of Jim Kidd Road between the Douglas Park Neighborhood and the Richard Barry Memorial Park under construction, has access to both Jim Kidd Road and Beatties Ford Road. The site plan provides a 100-foot landscaped buffer along BFR. The athletic fields behind the school and those under construction at the park site will effectively constitute a recreation/sports complex of considerable size.

Zoning and Current Developments Map - Showing the Recently Approved and Proposed Developments



**Legend**

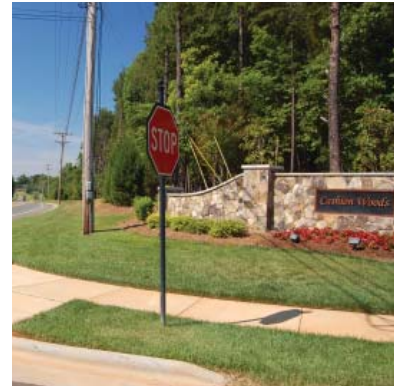
- BFR Corridor Buffer
- Huntersville Corp. Limits
- Huntersville ETJ Limits
- Huntersville Zoning Districts
- Huntersville Zoning Districts - Rural

**Overlay Districts**

- CD (Conditional)
- MH-O (Manufactured Home)
- TND-O (Trad. Neighbor. Dev.)

**ZONING DISTRICTS**

- R Rural District
- TR Transitional Residential District
- GR General Residential District
- NR Neighborhood Residential District
- NC Neighborhood Center District
- TC Town Center District
- HC Highway Commercial District
- CI Campus Institutional District
- CB Corporate Business District
- SP Special Purpose District
- TND-U/R Traditional Neighborhood Development Districts
- VS Passenger Vehicle Sales District
- TOD-R Transit-Oriented Development-Residential
- TOD-E Transit-Oriented Development-Employment
- MH-O Manufactured Home Overlay
- MIL-O Mountain Island Lake Watershed Overlay
- LN-O Lake Norman Watershed Overlay



**Bradley Elementary School:** This new elementary school is under construction at the northern end of the Bradley M.S. site. Based on the site plan, the development will continue the 100-foot wide setback from BFR.

**Long Creek Elementary School Expansion:** Long Creek is located near the south end of the Corridor on the west side of BFR. Plans for replacement or partial replacement of the multi-building campus are in the pre-design phase with an expected occupancy date of 2009.

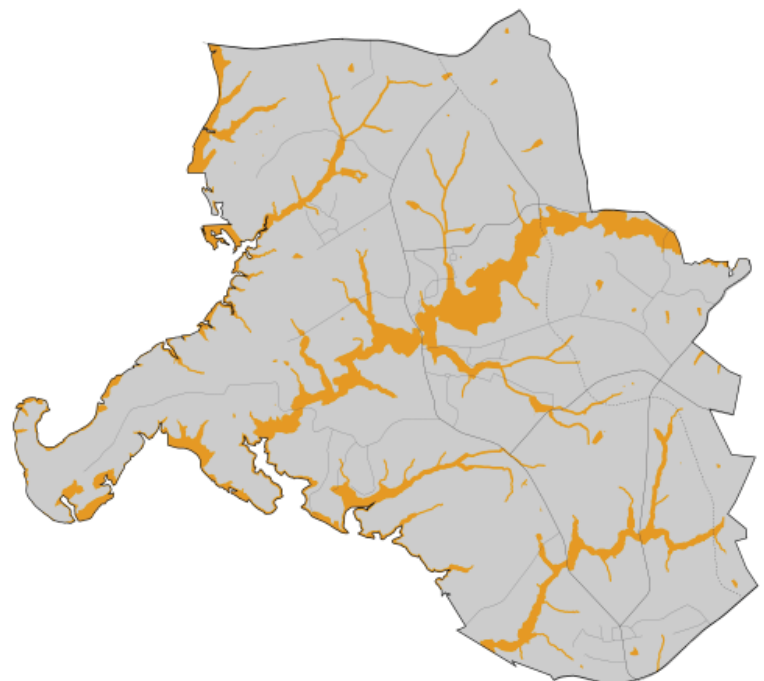
#### 4.5.2 Approved Developments

**Latta Village:** In November 2006, the Town approved a conditional district rezoning request for Latta Village, a 99,800 square foot commercial center on approximately 23 acres at the northeast corner of Beatties Ford Road and Hambright Road. The site plan for Latta Village provides a driveway connection to Hopewell High School; thereby giving some vehicular traffic access to and from Hambright Road without using Beatties Ford Road. The site plan also provides a setback of approximately 100 feet from Beatties Ford Road and a pedestrian/bicycle trail within the setback.

**Holly Crossing:** In August 2006, the Town approved a conditional district rezoning for Holly Crossing, a 30,000 square foot commercial development on approximately 5 acres at the northwest corner of the Mt. Holly-Huntersville/Beatties Ford Road intersection. The approved plan calls for a future road connection west of the site.

#### 4.5.3 Subdivisions

There are 35 single-family subdivisions in the Beatties Ford Road Corridor Small Area Plan study area, containing a total of 6,829 lots. Ten farm house clusters are located in the Rural District areas, containing a total of 63 lots. Currently, 17 subdivisions are under construction and two (Arbormere and the recently approved subdivision on the Nassar-Gordon property) remain in their planning stages. A total of 1,706 platted lots remain available for development in the approved subdivisions. A map showing the existing development status of subdivisions is found in Appendix B of this document (Section 8.o).



(i) **Hydrological Constraints** (SWIM Buffers, FEMA Floodplains, Lakes, Ponds, and Wetlands)  
2,320 Acres: **17%** Coverage

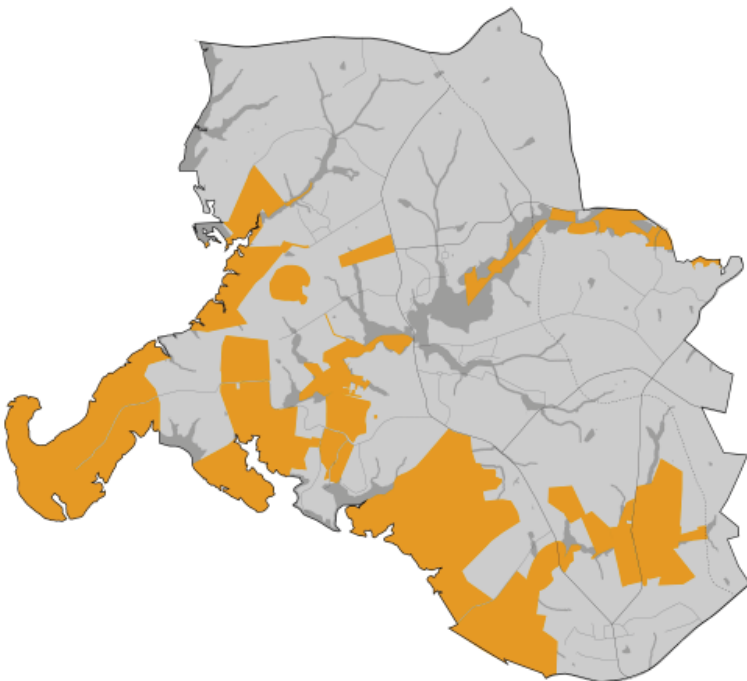
## 4.6 Constrained Conditions Analysis

Evaluation of the multiple environmental, cultural, regulatory and developmental factors pertaining to the BFR Corridor reveals the fact that a very high percentage of the land in the BFRCSAP study area may be classified as “Highly Constrained” to moderate and high density future development. For the purposes of this study, “highly constrained” lands consist of those lands on which the development of commercial and moderate to high density uses is virtually precluded by a variety of constraints, both physical and regulatory. Almost 70% of the lands constituting the study area are under some constraint, which are isolated and depicted in orange in the successive series of constraint maps below and following (note that many of the constraints overlap). These constraint conditions include the following:

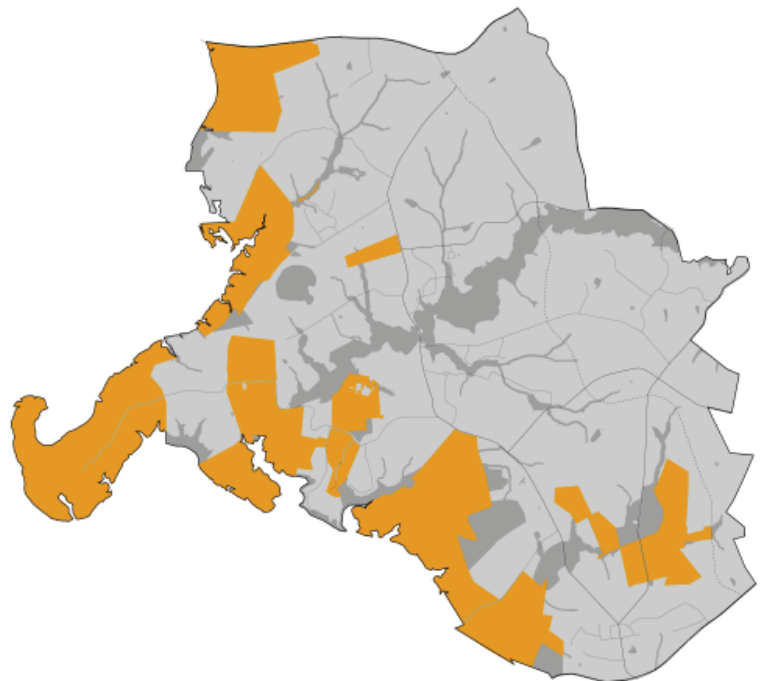
- **Hydrological Constraints:** SWIM Buffers, FEMA Floodplains, Lakes, Ponds and Wetlands.
- **Conservation Easement:** N.C. Natural Heritage Sites, Catawba Lands Conservancy, Mecklenburg County

Nature Preserves.

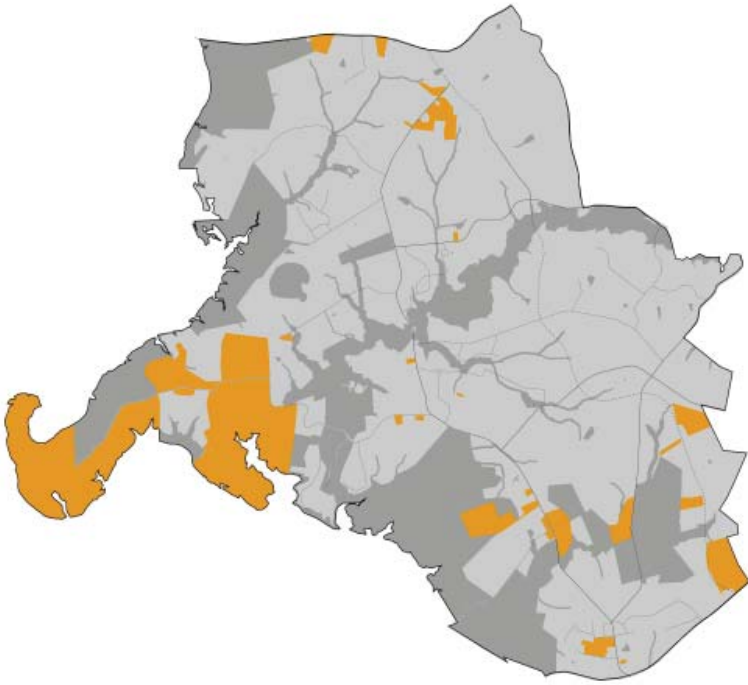
- **Parks:** Public recreation and protected open space, such as Latta Plantation (as noted in the Town of Huntersville GIS layer for parks).
- **Historic Properties:** Historically designated areas or under consideration for historic designation (see Section 2.2 above).
- **Infrastructure:** Utility rights-of-way permanent easements, and properties owned by the Charlotte-Mecklenburg Utilities Department.
- **Stable Development:** Current subdivisions and farm clusters, developed parcels less than 3 acres in size, schools, churches, and other institutions. Also included are the lands adjacent to and including the Piedmont Natural Gas storage facility, which occupies a large parcel and effectively precludes development in an even larger area.
- **Critical Watershed Areas:** While not completely restricting development, impervious area restrictions will effectively preclude moderate to high density development.



**(ii) Conservation Easement** (N.C. Natural Heritage Sites, Catawba Lands Conservancy, Nature Preserves)  
3,400 Acres: 24% Coverage

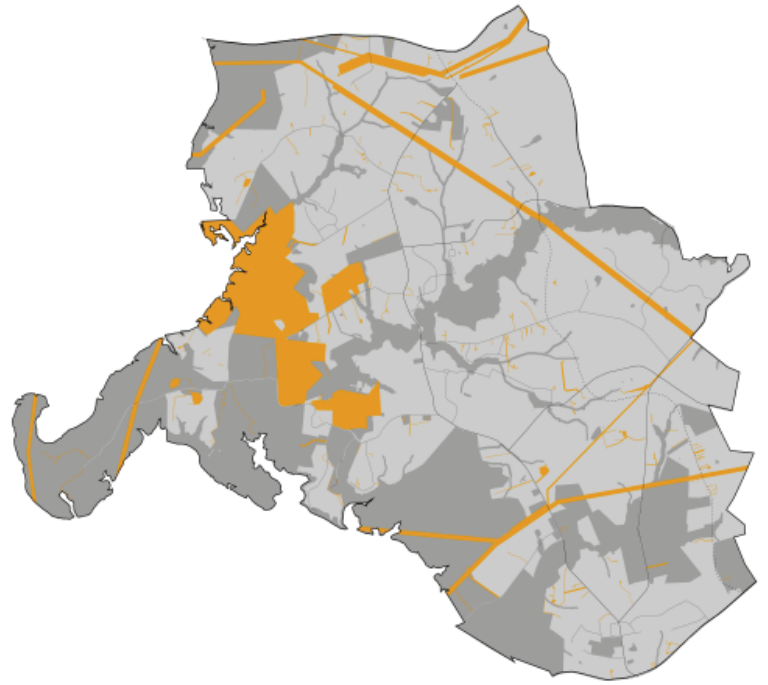


**(iii) Parks** (include all formal passive and recreational areas noted in the Town of Huntersville GIS layer for parks)



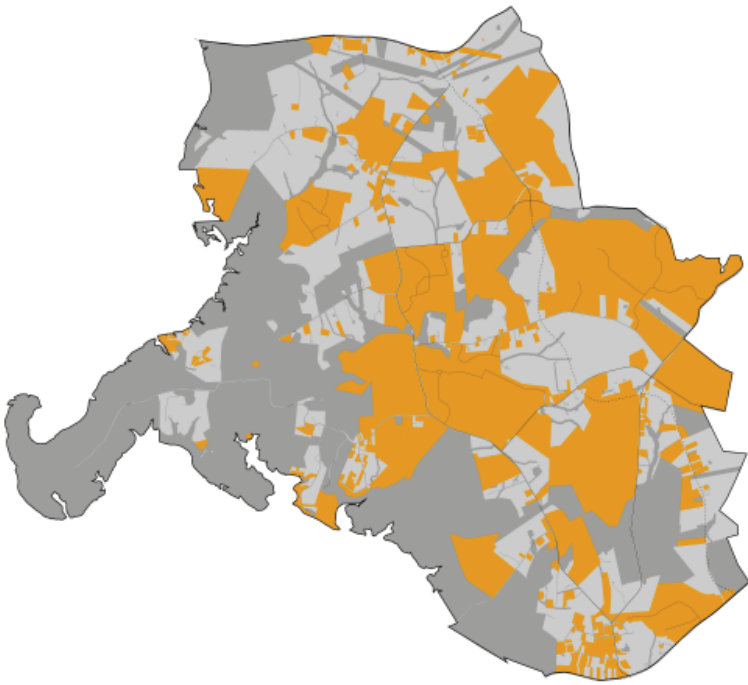
**(iv) Historic Properties**

1,450 Acres: **10%** Coverage

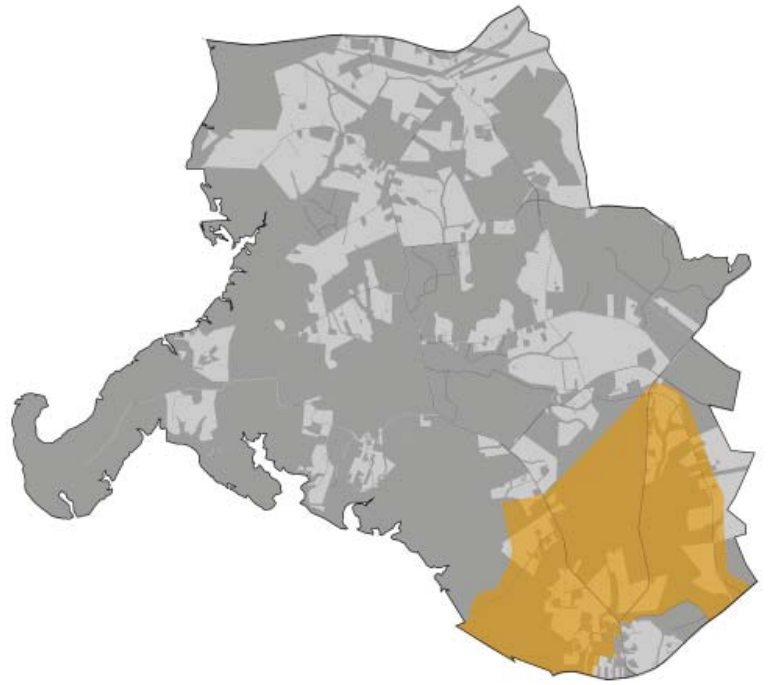


**(v) Infrastructure** (permanent easements, utility ROW, and land owned by CMUD)

1,240 Acres: **9%** Coverage

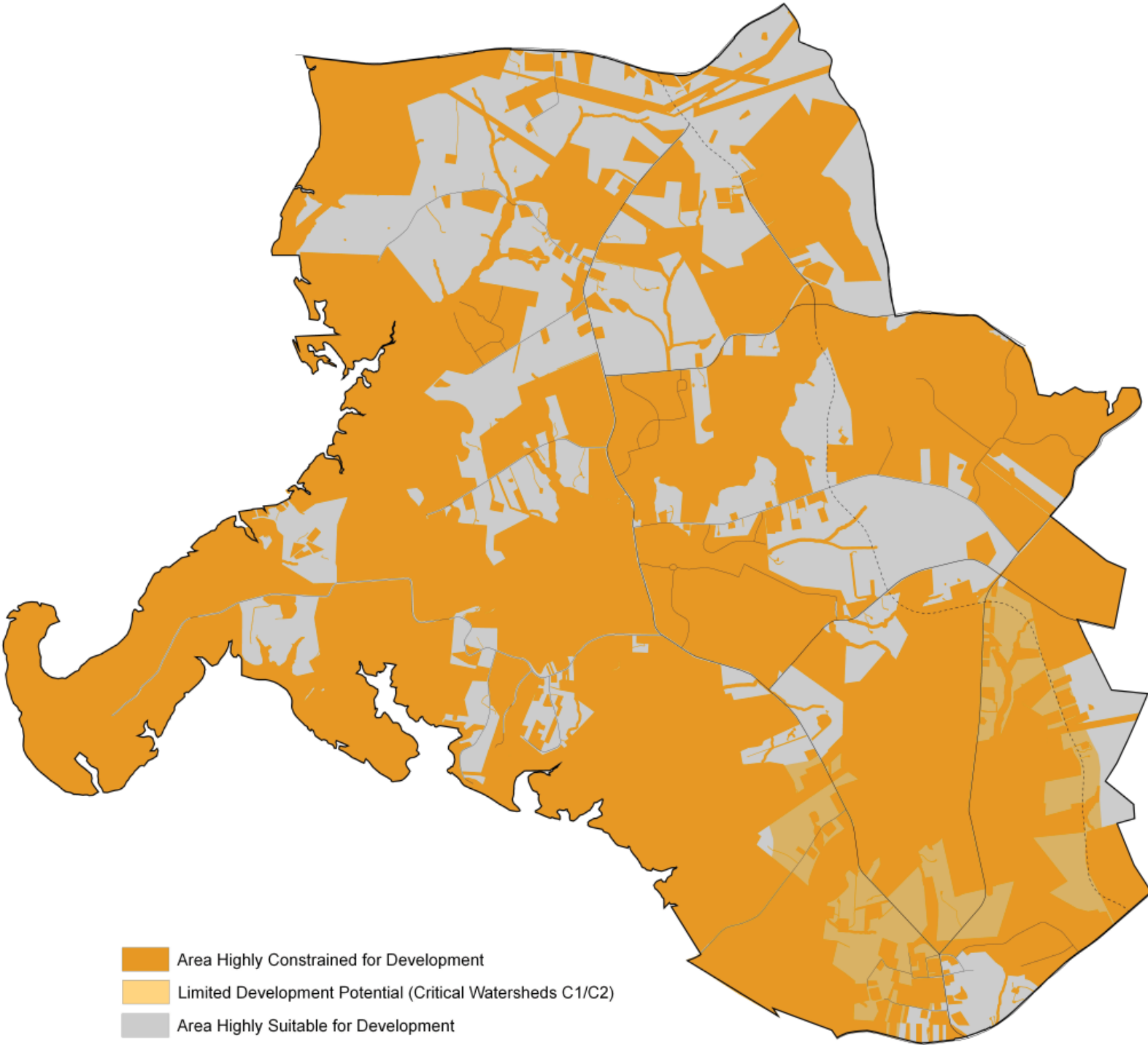


**(vi) Stable Development** (current subdivisions, developed land < 3 acres, schools, churches, farm clusters, Piedmont Natural Gas, and approved retail locations)  
4,820 Acres: **35%** Coverage



**(vii) Critical Watershed (CA1 & CA2)**

2,300 Acres: **16%** Coverage



**Aggregate Constrained Lands (Minus Overlap):**  
9,707 Acres out of 13,926 Total Acres

**Percent of Study Area Constrained to Development: 69.70%**  
**Percent of Study Area Available to Development: 30.10%**

## Market Study

### Retail Demand

**Planning Area:** By 2017, the retail spending potential of the Beatties Ford Road Corridor Study Planning Area households could reach a level to support an estimated 711,000 square feet. This spending could occur throughout Mecklenburg and adjacent counties. However, a significant share of the Planning Area's retail expenditures would be captured in rapidly developing north Mecklenburg centers.

**Beatties Ford/Hambright roads:** Based on household expenditure potential, site capture rates, inflow factors, and industry average sales per square foot, the supportable retail space at the Beatties Ford Road/Hambright Road intersection could reach nearly 107,000 square feet by 2017. The largest component is supermarkets and bakeries at 47,938 square feet (45% of the total).

**Beatties Ford Road/NC 73 (without Hambright):** If no retail center is constructed at the Beatties Ford Road/Hambright Road intersection, the NC 73 site could support a total of 113,243 square feet of retail by 2017, including 55,143 square feet of supermarket demand.

**Beatties Ford Road/NC 73 (with Hambright):** If the approved 99,800-square foot Latta Village or a comparable supermarket-anchored center is constructed at the Beatties Ford Road/Hambright Road intersection, it would have a measurable but minor impact on retail sales potential at NC 73. The 2017 demand could reach 102,591 square feet, with a 45,881-square foot grocery store.





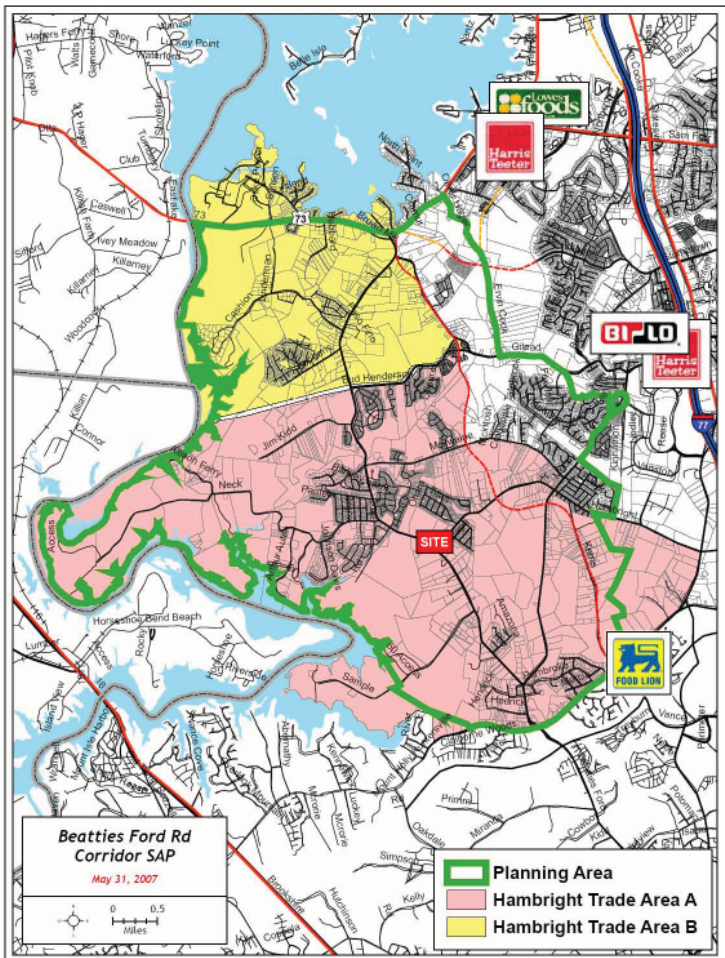
## Office Demand

The Planning Area could support about 97,000 square feet of multi-tenant office space over the next ten years. Almost 50,000 square feet could be located at NC 73/Beatties Ford Road, with nearly 30,000 square feet supportable at Hambricht/Beatties Ford roads. The remaining 17,000 square feet would be dispersed throughout the Planning Area.

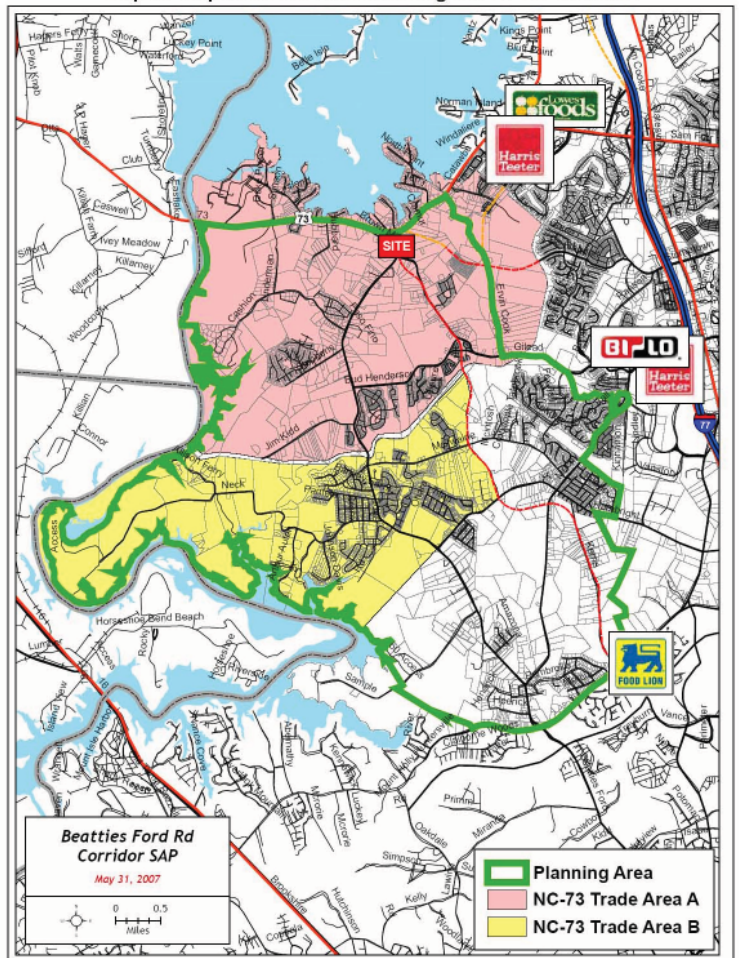
## Summary

In total, 135,910 square feet of retail and office space could be supported by 2017 at the Beatties Ford and Hambricht roads intersection. The NC 73/Beatties Ford Road intersection could support between 151,073 and 161,725 square feet of retail and office space, depending upon the presence of those uses at Hambricht Road.

Trade Areas with Commercial Center at Hambricht Road (no NC 73 Center)



Trade Areas with Commercial Center at NC 73 (no Hambricht Center)



## Supportable Retail and Office Square Feet, 2017

Location	Retail	Office	Total
Hambricht Road	106,821	29,089	135,910
NC-73 (without Hambricht)	113,243	48,482	161,725
NC-73 (with Hambricht)	102,591	48,482	151,073

Source: Warren & Associates



## 6.0

# Small Area Plan

## 6.1 Planning and Design Goals



In response to public input and in the context of opportunities and constraints identified during the planning process, the following planning and design goals were developed to define the direction of future development within the BFR study area, consistent with the established goals and values of the Town of Huntersville.



Each of these goals must be incorporated into the design of place, which, in turn, must guide implementation of the small area plan. The small area plan must be sufficiently prescriptive to assure the Town that the design intent of traditional town planning is the end result, but flexible enough to encourage design and technological innovation. A more specific application of these goals must be completed as development or redevelopment areas become more defined and the small area plan evolves.



These goals include:

**Preserve the existing rural character:** The study area will continue to develop as a low density, predominantly residential district, as established by the Town's overall planning framework. Future commercial development within the study area should be focused at NC 73 and at Mount Holly - Huntersville Road, with an additional center at the intersection of Hambright Road with BFR. In conjunction with development of the Vance Road Extension, additional commercial development along Vance Road should be given consideration, primarily at the intersection of Vance Road with existing cross streets.

**Preservation and Open Space Character:** The predominant open space character and preservation of natural areas should continue and be enhanced through the provision of broad buffers along Beatties Ford Road, and acquisition of critical land parcels where possible.

**Beatties Ford Road Identity:** The Beatties Ford Road Protection/Enhancement Strategy, January 2004 provides specific recommendations for the preservation of the cultural significance of Beatties Ford Road. The proposed expansion of Vance Road from Mt. Holly Huntersville Road north to NC 73 will provide additional system linkages and north-south paralleling capacity to the Town's transportation network; therefore encourage, plan the identity of Beatties Ford Road to remain a two lane scenic byway traversing northern Mecklenburg rural landscape fabric.

**Mixed-Use/Hamlet Centers:** In an effort to preserve its small town quality, the Town of Huntersville has been among the most progressive municipalities in incorporating traditional Town Planning design standards into its ordinances. This plan calls for mixed-use/hamlet centers at the commercial nodes identified in



this plan in order to provide a social and economic focus that fosters a discernible sense of place. A more thorough discussion of Mixed Use Centers is found in Section 6.4.

**Open Space Preservation:** Preserving land protects municipal resources both directly and indirectly. A park or preserve may protect an aquifer or a plant or animal species and, by saving land from development, reduces demand on the community's resources. The predominant image of open space character and natural areas preservation should continue and be enhanced through the provision of broad buffers along Beatties Ford Road. Identify partnerships with non profit organizations, park and recreation service providers, property owners and land trusts in the purchase and planning of open space systems.

**Pedestrian Access:** Design for pedestrian dimensions and distances through compact form, layout, and streetscape characteristics.

**Transportation:** Recognize roads as the framework for improved community livability. Roads offer an opportunity to enhance a community's attractiveness, build its local economy, preserve its character and provide for the mobility, comfort and safety of its inhabitants.



*Long Creek Elementary School, 6:45 a.m.*

## 6.2 Transportation Framework

The streets, sidewalks, and bikeways within a community determine, in large part, the urban form and mobility of the area. In fact, in many towns, the right of way utilized by streets represents the largest area of publicly owned land. Streets, sidewalks, and bikeways provide critical connections between homes, jobs, schools, restaurants, parks, shops, and many other destinations. As the primary means of moving goods, services, and people between destinations within the public right of way, streets, sidewalks and bike paths/lanes are a tangible reflection of how a community invests in mobility options for its residents.

The existing transportation network in the Beatties Ford Road Corridor Study Area continues to be strained as new residents move into the area in ever-increasing numbers. Prior to the widespread introduction of the automobile in the early part of the 20<sup>th</sup> century, streets formed interconnected grid patterns in the urban core and rural routes evolved from farm to market corridors to primarily commuter corridors. Typically, as the population increases from rural to suburban densities and alternate routes are not added, improvements to the capacity of existing roadways are required. In lieu of widening valued scenic or historic corridors, some communities have elected to construct alternative routes that bypass these scenic corridors. These alternative routes improve access to adjacent land, which in turn enhances the area's attractiveness for development. With this new development comes increased congestion and the assumption that wider or alternative routes are needed. This cyclical pattern

is repeated until the effectiveness of the transportation network begins to deteriorate, resulting in the need for significant network improvements.

An efficient transportation system connects neighborhoods and activity centers via a network of streets, paths, and trails that are safe and supportive of pedestrians, bicyclists, transit patrons, cars, and trucks. Such a system offers choice for short and long trips alike and promotes convenient movement of people and goods.

The vision for the Beatties Ford Road Corridor recognizes that as the area transitions from agrarian/rural character to suburban densities, there will be a need for additional transportation facilities. This vision includes an interconnected network of community-friendly streets that provides for the safe, effective, and efficient movement of all modes of travel including walking, cycling, riding, and driving. All new and improved transportation options should respect the relationship between land use and transportation by supporting established neighborhoods while anticipating new growth and changing travel patterns. In addition, the community has clearly stated its desire to preserve the rural character of Beatties Ford Road and the study area.

### 6.2.1 Vision for a New Transportation System

**Complete Streets:** The elements that encompass great streets are similar to the features found on streets built at the turn of

the 20th Century. These “complete streets” have balanced land use development with transportation facilities to create a safe, efficient, walkable, and interconnected transportation network. The logic behind complete streets extends beyond the edge of the pavement to encompass the sidewalk, buildings, and everything in between. Complete streets shift the focus from the movement of vehicles to the movement of people, in turn balancing the use of the travelway with the use of the pedestrian realm within the intended framework of the street’s context:

- The travelway encompasses that portion of the public right of way between the curbs/ that is dedicated partially or exclusively to travel. The travelway incorporates the main travel lanes, auxiliary turn lanes, bike lanes, bus lanes and stops, parking lanes and roadway shoulders.
- The pedestrian realm is the space that extends between the building face, or front of the private property, and the travelway.
- The context of a street includes the buildings and sites adjacent to the street, or right of way. This area is described in terms of land use, physical form, and intensity.

These factors fundamentally shape the context zone, both in terms of how people use the street and how travelers perceive the street.

### Transportation Planning for Rural Preservation Areas:

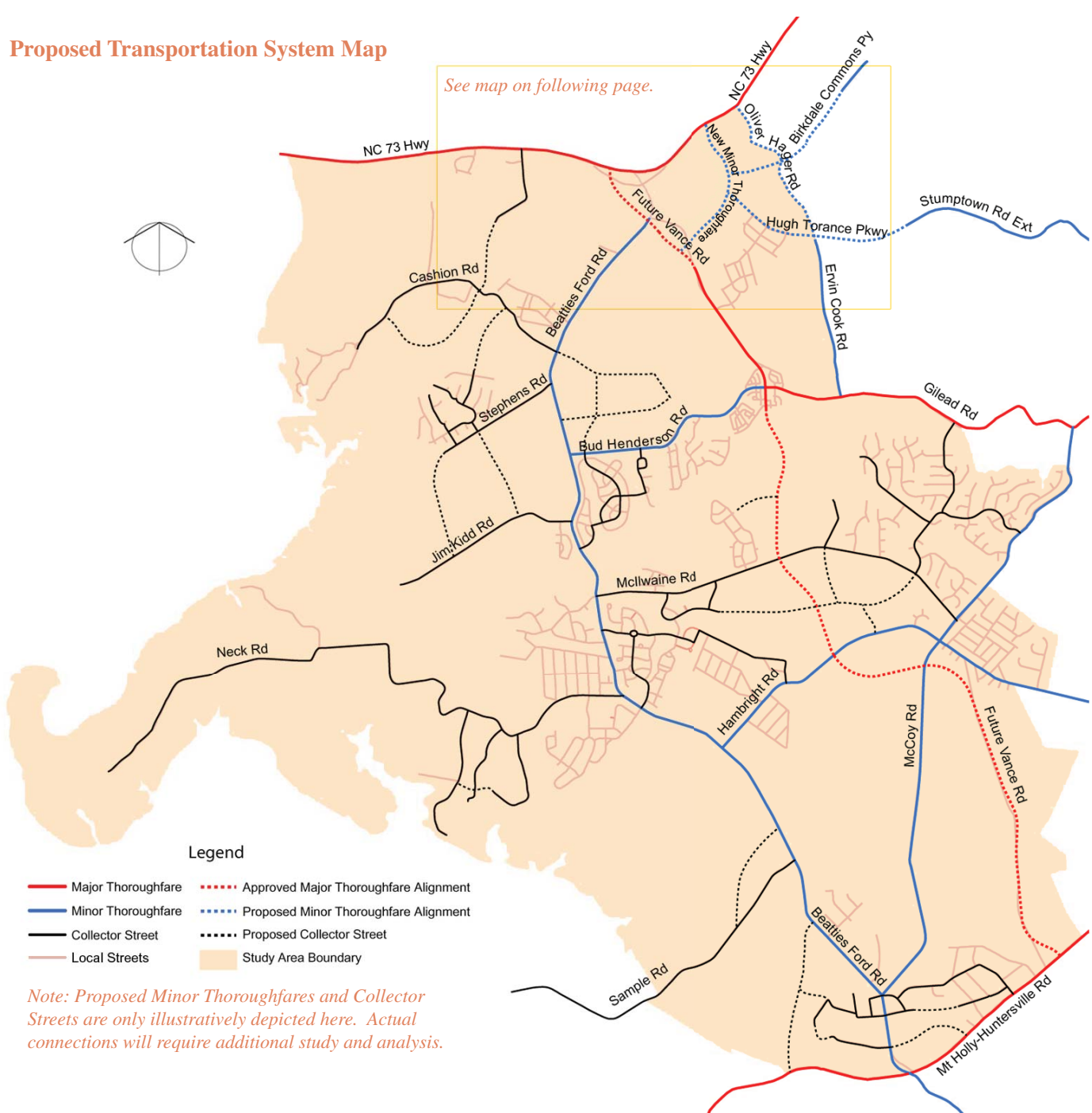
Transportation improvements in rural areas that are undergoing transition require a new way of thinking. It is generally accepted that the movement of commuters to and from work is important along with the provision of efficient traffic routes that lead into the center city from outlying areas. However, when these same streets pass through special areas of our communities (i.e. those that include cultural, historic and environmentally sensitive features), it is important that their design reflect the balanced needs and vision for the area. The paramount goal in transportation planning should not be simply “getting there faster”. Likewise, the construction or expansion of streets such as Vance Road Extension and Hugh Torance Parkway are intended to provide relief to increasing congestion by providing routes that pass near, but not through, the preservation areas of the study area. By carefully locating and designing these alternative routes, traffic volumes will likely be displaced from preservation roadways such as Beatties Ford Road.

The Vance Road Extension and NC 73 are intended to carry the predominant volume of future traffic within the study area. The presence of these streets will make a significant contribution to moving traffic through the area. Importantly, however, these roads must also insulate,

*Hopewell High School, 7:05 a.m.*



## Proposed Transportation System Map



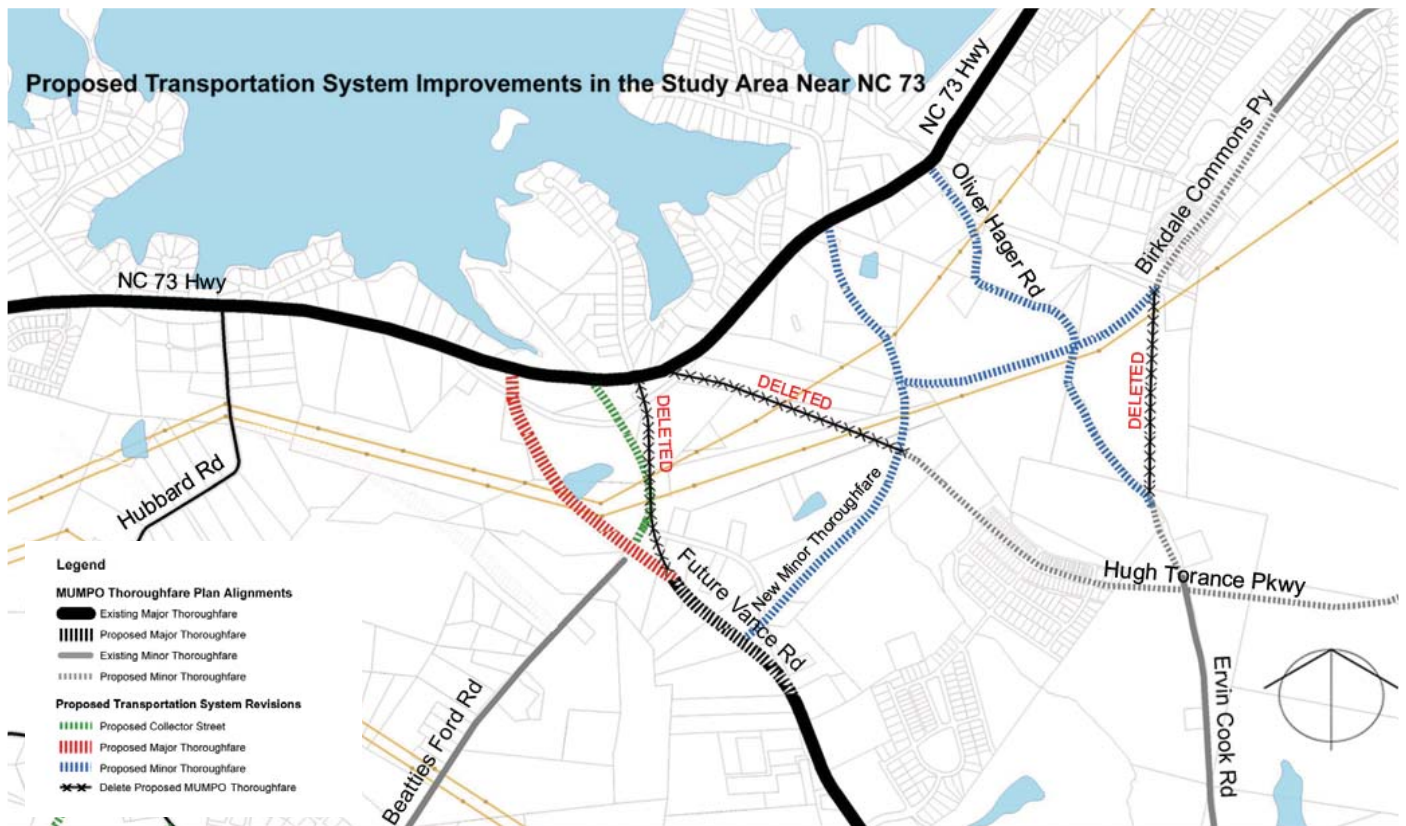
to the greatest extent possible, local and collector streets from the rising burden of peak hour commuter traffic. Therefore, the combination of appropriate roadway design, effective roadway alignments, and access management will play a vital role in preserving the character of the Beatties Ford Road study area.

The recommended facilities and policies that follow represent the collective vision of a context sensitive transportation system which equally balances all modes of transportation for the study area. With this plan must come the understanding

that implementation will be challenging and time-consuming and will require long-term support by residents, business owners, local staff, MUMPO and NCDOT.

### 6.2.2 Roadway Recommendations

**Connectivity:** In a rural preservation area such as the Beatties Ford Road Study Area, connectivity plays an important role and is best achieved through a combination of small and large streets. Street connectivity refers to the directness of routes and



the density of connections within a transportation system. As connectivity increases, travel distances decrease and route options increase, allowing the transportation system to be used more efficiently by pedestrians, bicyclists, transit, and automobiles. Connectivity improves circulation and allows for street designs that can be responsive to the practical needs of an area.

Rather than widening valued streets like Beatties Ford Road, the construction of larger streets such as Vance Road Extension and Hugh Torance Parkway can satisfy the capacity and mobility needs of the region without compromising scenic corridors. The construction of these larger streets may likewise assume a more suburban form with multiple lanes, no parking, and dedicated turn-lanes. At the same time, Beatties Ford Road and other farm-to-market routes can maintain their rural two-lane section with accommodations for cyclists and pedestrians either on multi-use paths or on-road, consistent with the Town of Huntersville Greenway, Trails, and Bike Master Plan.

Against this backdrop, revisions to the

planned thoroughfare alignments were discussed and evaluated during the BFRCSAP charrette. Collaboration with NCDOT, MUMPO, and Town officials, resulted in proposed revisions to the existing Thoroughfare Plan for the northern part of the study area. In essence, any potential revision to the current Thoroughfare Plan alignments should accomplish the following:

- (a) Provide regional connections that encourage commuters to divert to a new Vance Road Extension;
- (b) Encourage the preservation of Beatties Ford Road from further through trip impacts, thereby lessening the need for capacity improvements;
- (c) Maintain a NC 73 direct alignment with interchange access to I-77
- (d) Minimize impacts to the Beard family property.

Consideration of the previous criteria in conjunction with data related to physical constraints (streams, topography, utilities, etc) led to recommendations for the following roadway facilities: Beatties Ford Road, Vance Road Extension, and

Hugh Torance Parkway. The following pages describe the existing and proposed recommendations for each of these corridors.

**Collector Street Planning:** The primary purpose of the collector street system is to collect traffic from neighborhoods and distribute it to the system of major and minor thoroughfares throughout an area. In general, collector streets have two lanes and often have exclusive left-turn lanes at intersections with major and minor thoroughfares and less frequently at intersections with other collectors. Collector streets rarely are constructed and funded by the state. Responsibility for collector streets usually falls to the local government and developers for funding, design, and construction.

**Assessment of Collector Street Spacing Needs:** Different spacing standards for collector streets are necessary for different development types and intensities. Understanding this reality, a theoretical model largely influenced by land use intensity ranges developed by Kimley-Horn shows the desired collector street spacing for different land use intensities.

An appropriate set of collector street spacing guidelines is needed to be determined for the BFRCSAP area. A distance of 1,500 to 3,000 feet between collector streets is appropriate in a suburban setting, while unincorporated and incorporated areas tend to have different development potential, mostly incumbent upon environmental constraints and the availability of municipal water and sewer service.

**Study and Results:** The results show that a 3,000' grid is typically the most appropriate for the mixed suburban and rural development pattern that prevails in the small town and rural areas of Mecklenburg County. For more intense development, a 750' grid proves optimal, but this is independent of the costs that would be incurred to build a network of such intensity.

**Recommendations for Local Streets:** One connection along a collector should be in place every 750-1,500 feet. There are cases that will necessitate a variation in this guideline. Approval for these cases will be the responsibility of the Town Engineer and State Division Engineer who will consider traffic impacts, land access, property rights, and environmental conditions.

**Recommendations for Collector Streets:** One public street intersection along a collector or an arterial should be in place every 1,200 to 2,000 feet in a suburban context and every 500 feet to 1,000 feet in the context of heavily developed areas or the central business district. As determined by the Town Engineer, variations in spacing requirements will depend on traffic impacts, land access, property rights, and environmental conditions.

**Identifying Future Collector Street Connectors:** The following guidelines are used to developing the draft collector street network:

- Avoid steep slopes and otherwise unsuitable topography
- Minimize impact to the built environment
- Avoid FEMA designated floodplains
- Minimize the number of wetland (National Wetland Inventory) impacts
- Minimize the amount of each wetland impact (i.e., don't cross a wide wetland when a narrower one can be crossed)
- Minimize the frequency of stream crossings
- Minimize the number of high-quality (larger) stream crossings
- Minimize the length of stream crossings
- Minimize school impacts



- Minimize the number and size of each impact to other environmental features such as historic features and districts, threatened and endangered species, hazardous waste sites, and superfund sites
- Avoid impacts to parks and designated open spaces
- Minimize the number of new facilities in critical watershed areas
- Be responsive to existing and planned development patterns
- Look for existing stub streets
- Develop feasible connections (A to B)
- Consider Land Use Plan goals for area development
- Consider land use potential and plan collectors according to established spacing guidelines.

**Design Guidelines:** Designing a street with appropriate horizontal and vertical alignment is important. The following horizontal and vertical design features – based on standards published by A Policy on Geometric Design of Highways and Streets, 2001, American Association of State Highway and Transportation Officials (AASHTO) – are recommended for the design of future collector streets.

Design speed should be 35 miles per hour, and the maximum recommended grade is 8%. The maximum degree of horizontal curvature is 10 degrees ( $R_{min} = 573$  feet).

**General Connectivity:** The Town’s current policy is to require (or reserve the option) connectivity between adjoining parcels, as development occurs. This policy should be continued consistent with the planning, transportation and design goals included in this plan.

**Future Collector Street Network:** Utilizing the tools discussed above, a future collector street network was developed. This future network is shown in the Proposed Transportation System Map on page 34. In comparison to the existing network (shown on page 19) the future collector street network is intended to improve transportation mobility options within the study area. Key outcome goals of this plan include improving accessibility to higher intensity residential areas and activity centers and avoiding or minimizing impacts to sensitive areas for the preservation of the natural environment. Ultimately, the future collector street network will provide a greater level of connectivity and mobility to the residents of Huntersville by reducing the travel time between local streets and arterial streets.

## LANDSCAPING FOR WATER QUALITY IN TRANSPORTATION NETWORKS

### USE OF RAIN GARDENS

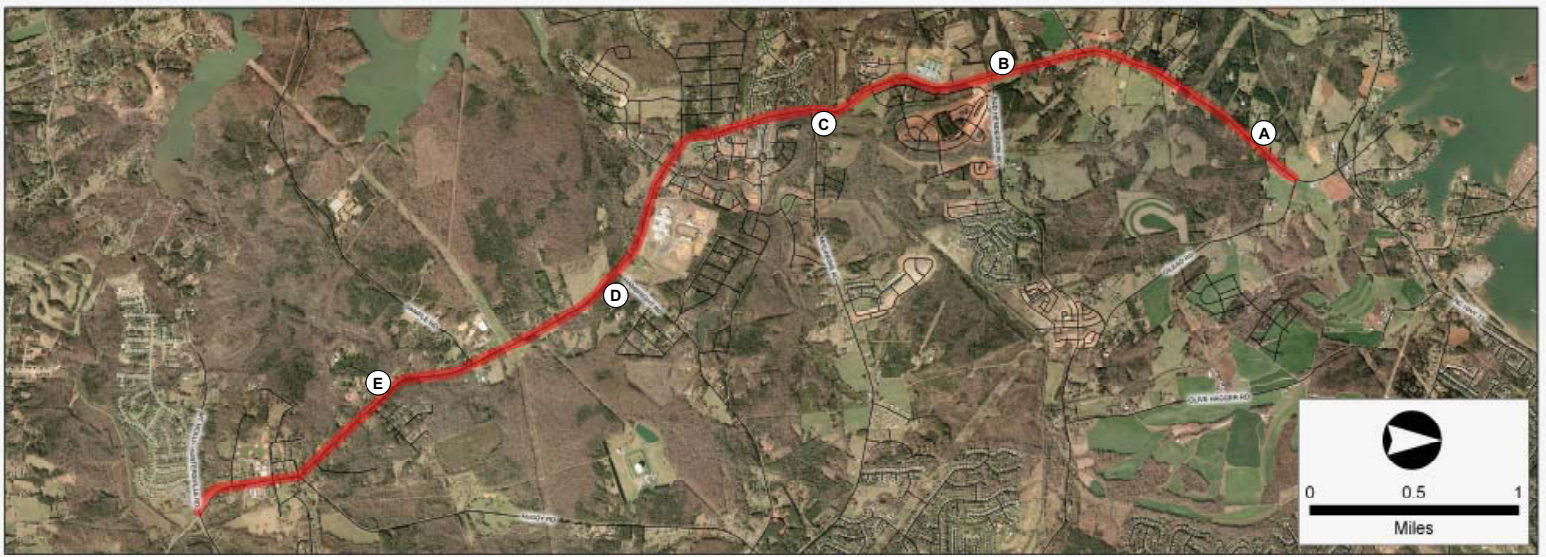
*Rain gardens are landscape features in which the land is shaped like a basin, aiding in capturing storm water. The area is planted with appropriate plant species to aid in filtration of runoff.*

- Rain gardens filter run off pollution
- Recharge ground water
- Improve water quality
- Reduce mosquito breeding
- Create habitat for birds and butterflies
- Enhance and beautify the landscape
- May be used in residential settings, roadside and in parking lots

The study area has valuable environmental resources. It is in critical proximity to the Mountain Island Lake watershed, natural preserves, and delicate plant and animal species. Protection of water quality along Beatties Ford, particularly in the wake of new development factors is important to the health of the corridor.



Arvidson, Adam R. “Stormwater Special: Green Streets.” *Landscape Architecture* Sept. 2006: 56-57.



### 6.2.2.1 Beatties Ford Road Corridor Profile

Beatties Ford Road is a minor thoroughfare between Mt. Holly–Huntersville Road and Gilead Road that measures approximately 6.35 miles in length. The typical section includes two eleven-foot travel lanes with no accommodations for pedestrians or bicyclists. The posted speed limit for the entire corridor is 45 miles per hour. Drainage reflects development intensities: open swale in rural areas and curb-and-gutter near newer subdivisions, and center left turn lanes exist (or are planned) to serve adjacent schools and the new regional park. Right of way within the corridor varies between 50 – 70 feet; however, the area of influence for the corridor is between 250 – 270 feet because of the Town’s policy to preserve a 100-foot buffer on each side of the corridor.

**Corridor Vision:** Beatties Ford Road is the signature north-south corridor within the study area, which serves a dual role as minor thoroughfare moving traffic through the region and gateway corridor

to the rural area of western Huntersville. Public sentiment expressed during the charrette suggests that the corridor should be preserved as a two-lane, country road that reinforces the rural character of the area.

**Recommended Plan:** The illustration on the following page represents the preferred cross section recommended for Beatties Ford Road. This typical cross section should be considered for more detailed planning studies that result in conceptual design plans and a design palette for streetscape improvements. Its application to specific locations will depend largely on driveway locations, intersection treatments, existing development, and adjacent land uses.

The entire length maintains a two-lane, undivided rural cross section with 11-foot travel lanes, 5-foot paved shoulders, and 7-foot grass shoulders, along with the Town required double-row of street trees. Open drainage, a meandering 10-foot multi-use path, and wide landscape buffers are provided along both sides of

## QUICK FACTS Beatties Ford Road

Length = 6.35 miles  
 ROW = 50 – 70 ft. (250 – 270 ft. Area of Influence)  
 Existing Traffic Volume = 8,275 AADT (2005)  
 Posted Speed Limit = 45 MPH

the street. The posted speed limit remains at 45 miles per hour.

**Access Management:** The two-lane, undivided cross section recommended for Beatties Ford Road limits the application of access management. Two applications that should be considered to safeguard mobility include: (1) regulating the number, location, and spacing of driveways; and (2) restricting left turn movements for certain properties along the corridor based on development intensity or safety concerns. Restriction of turning movements along the corridor should be reinforced with physical barriers, such as a raised island for right-in/right-out driveways.

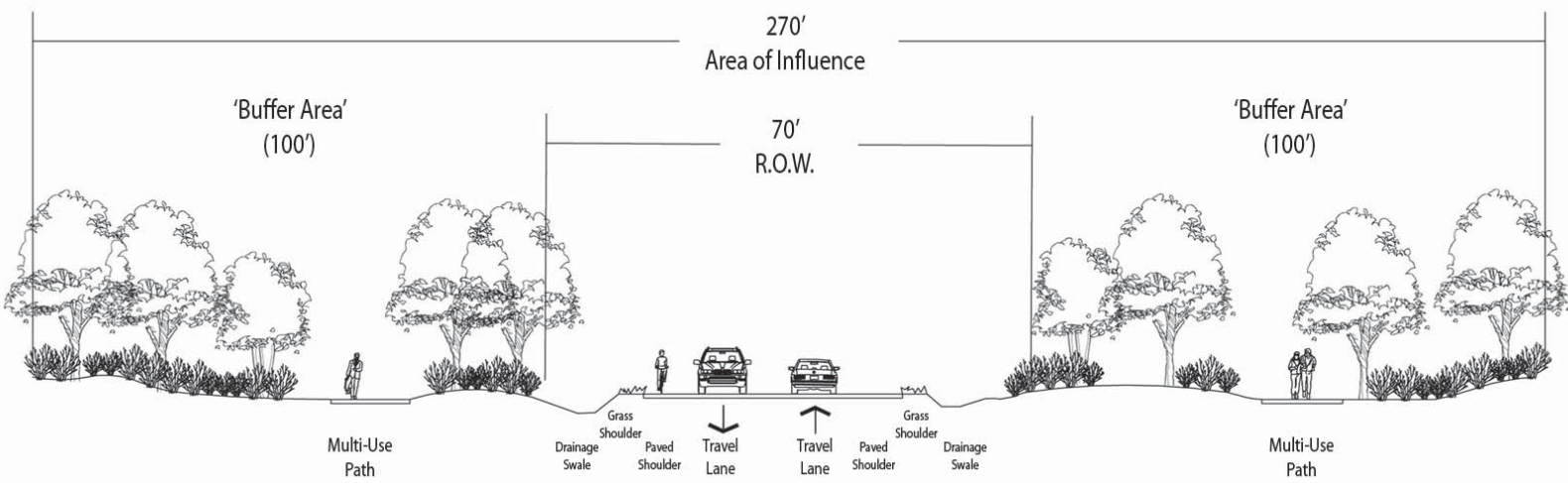
**Intersection Treatment:** Intersection treatments along the corridor may include two-way stop control, traffic signals, or roundabouts. More detailed study should be performed for the following intersections with Beatties Ford Road to determine appropriate intersection treatments: Gilead Road, Bud Henderson Road, McIlwaine Road, Hambright Road and Mt. Holly-Huntersville Road. Additional studies leading to recommended treatments will involve public input, travel demand forecasting, traffic modeling and simulation, and functional design.

**Land Use Considerations:** Town officials

should consider adopting a special overlay district for the Beatties Ford Road corridor that codifies the 100-foot preservation buffer requirement. More detailed study should also be performed to develop design guidelines for protecting the historic corridor as an efficient, two-lane facility.



*Right: Photo Key corresponding to aerial map on previous page.*



**Beatties Ford Road Preferred Cross Section**



(A)

Road by providing a quicker, more direct route between NC Highway 73 and Mt. Holly - Huntersville Road. The corridor should emphasize safety, mobility, and aesthetic elements consistent with the intent of the gateway corridor.

### 6.2.2.2 Future Vance Road Extension Corridor Profile

Vance Road is a planned major thoroughfare between Mt. Holly - Huntersville Road and NC Highway 73 that measures approximately 10.48 miles in length. This project is included in the Mecklenburg-Union County Metropolitan Planning Organization (MUMPO) Long Range Transportation and Thoroughfare Plans as an unfunded priority. The entire corridor will accommodate four lanes of travel and a 45 mile per hour posted speed limit. The typical section right of way is 100 feet.

**Corridor Vision:** Vance Road provides additional north-south connectivity to the regional transportation system and helps preserve the rural character of Beatties Ford

**Recommended Plan:** The illustration on the following page represents the typical cross section developed for Vance Road in the previously approved Vance Road Thoroughfare Study. Application of this cross section to specific locations will depend largely on driveway locations, intersection treatments, and adjacent land uses.

The recommended cross section for Vance Road maintains four lanes of travel and a 45 mile per hour posted speed limit. This cross section calls for a four-lane, median divided facility with 11-foot inside travel lanes and 14-foot wide outside travel lanes (to accommodate bicyclists). Curb-and-gutter is provided at both the center median (1 1/2 feet) and outside pavement edge (2 1/2 feet). Street trees are planted in the center median with opportunities for

## QUICK FACTS Future Vance Road

Length = 10.48 miles

ROW = 100 ft.

Existing Traffic Volume = N/A (New Planned Road)

Posted Speed Limit = 45 MPH

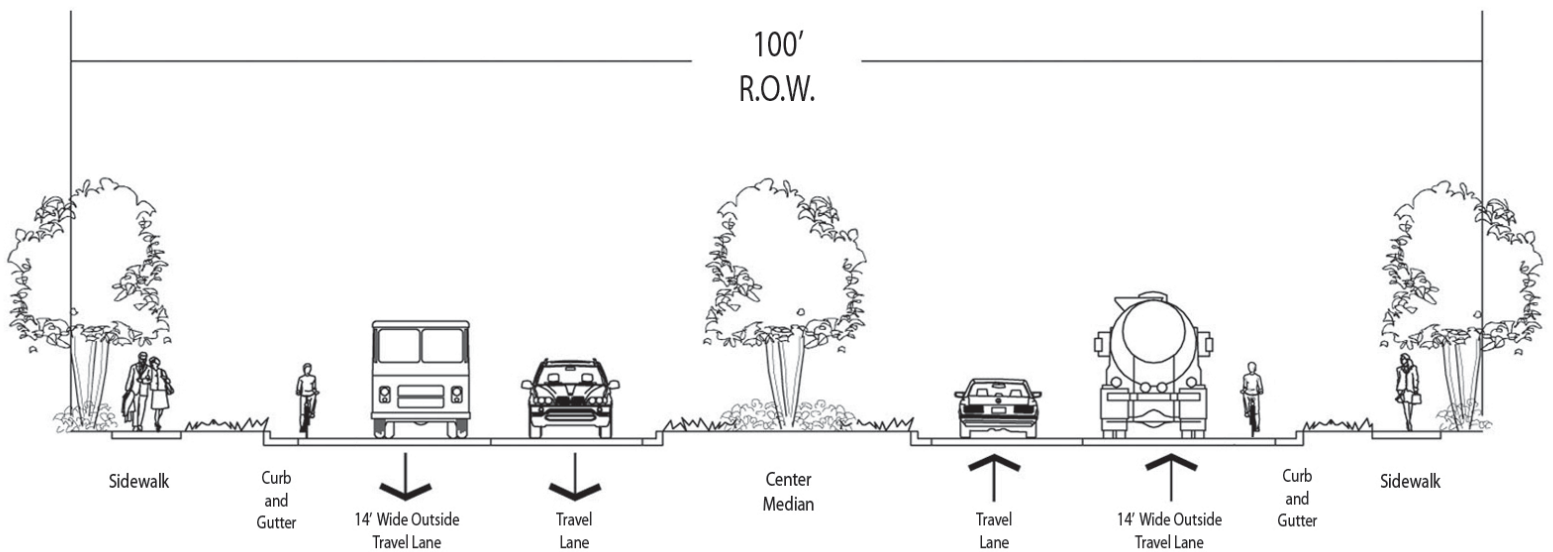
left turn lanes at key locations. Street trees and sidewalks are also provided along both sides of the street. The posted speed limit is recommended at 45 miles per hour.

recommended treatments will involve public input, travel demand forecasting, traffic modeling and simulation, and functional design.

**Access Management:** The four-lane, divided median cross section recommended for Vance Road reinforces safety and mobility in the corridor with access management. The center median increases safety and vehicle capacity by separating opposing vehicle flows and restricting turning movements to locations with dedicated left turn lanes. Restrictions on the number, location, and spacing of driveways along the corridor minimizes congestion and collisions. More detailed study and recommendations for site-specific access management treatments should complement previous studies for the corridor completed by the Town of Huntersville.

**Land Use Considerations:** Town officials will need to balance development along the new corridor with its purpose to serve regional mobility. More detailed study should be completed to identify a future land use plan that identifies preferred land use types and development patterns for the corridor.

**Intersection Treatments:** Intersection treatments along the corridor may include traffic signals or roundabouts. More detailed study should be performed for the following intersections with Vance Road to determine appropriate intersection treatments: NC Highway 73, Gilead Road, McIlwaine Road, Hambright Road, McCoy Road and Mt. Holly-Huntersville Road. Additional studies leading to



**Vance Road Typical Cross Section**



### 6.2.2.3 Hugh Torance Parkway Extension Corridor Profile

Hugh Torance Parkway Extension is a planned minor thoroughfare between NC Highway 73 and the western terminus of existing Hugh Torance Parkway that measures approximately 1.99 miles in length. This project is included in the Mecklenburg-Union County Metropolitan Planning Organization (MUMPO) Long Range Transportation and Thoroughfare Plans as an unfunded priority. The entire corridor will accommodate four lanes of travel and a 35 mile per hour posted speed limit. The typical section includes on-street parking and a planned median. Right of way within the corridor is planned to be 100 feet.

**Corridor Vision:** The extension of Hugh Torance Parkway, westward from Wynfield Creek Parkway, is included in both the MUMPO Long Range Transportation Plan and Thoroughfare Plan. Construction of the road’s extension should reinforce the context of surrounding neighborhoods and the community’s desire not to create another “suburban-scale”

through street. Treatments included in the cross section should incorporate the principles of complete street design.

**Recommended Plan:** The illustration on the following page represents the typical cross section recommended for the extension of Hugh Torance Parkway. This typical cross section should be considered for more detailed planning studies that result in conceptual design plans and a design palette for streetscape improvements. Its application to specific locations will depend largely on driveway locations, intersection treatments, and adjacent land uses.

The entire length maintains a two-lane, cross section with 11-foot travel lanes and 5' bike lanes. Curb-and-gutter is provided at the outside pavement edge (2 ½ feet). This section includes opportunities for left turn lanes at key locations. Street trees and sidewalks are also provided along both sides of the street. The recommended posted speed limit is 35 miles per hour.

**Access Management:** The two-lane cross section recommended for Hugh

## QUICK FACTS

### Hugh Torance Parkway Extension

Length = 1.99 miles

ROW = 100 ft.

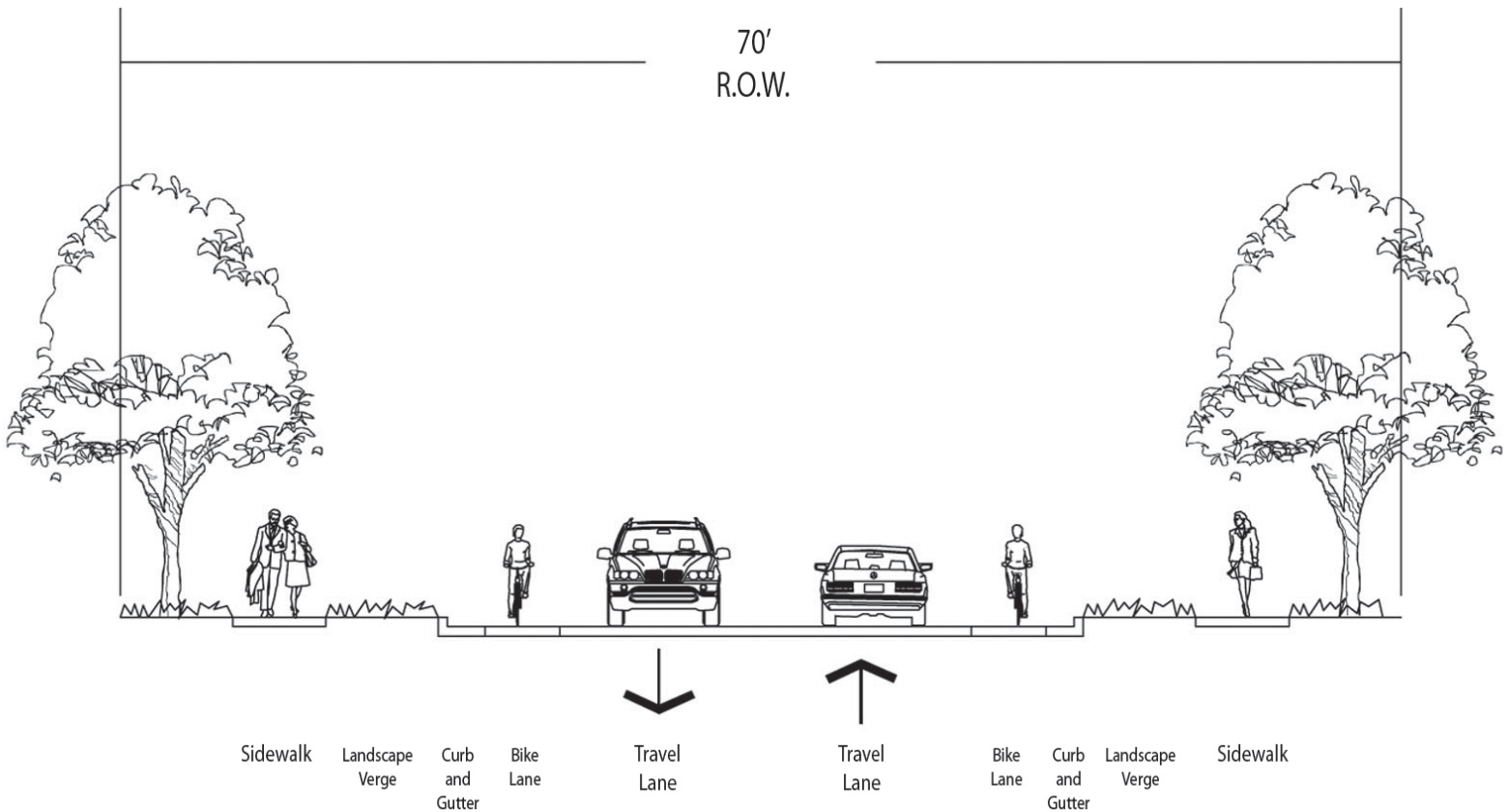
Existing Traffic Volume = N/A (New Planned Road)

Posted Speed Limit = 35 MPH

Torance Parkway reinforces safety and mobility in the corridor by providing access management and by restricting turning movements to locations with dedicated left turn lanes. Restrictions on the number, location, and spacing of driveways along the corridor minimizes congestion and collisions. More detailed study and recommendations for site-specific access management treatments should complement previous studies for the corridor completed by the Town of Huntersville.

traffic modeling and simulation, and functional design.

**Intersection Treatments:** Intersection treatments along the corridor may include two-way stop control, traffic signals, or roundabouts. More detailed study should be performed for the following intersections with Beatties Ford Road to determine appropriate intersection treatments: Oliver Hager Road and NC Highway 73. Additional studies leading to recommended treatments will involve public input, travel demand forecasting,



**Hugh Torance Typical Cross Section**

## 6.3 Community Design and Land Use

The subjects of land use, growth management and preservation have been topics of significant discussion in Huntersville. The challenge facing the Town is how to continue building consensus on a vision that balances the need to accommodate development and the reality of the market place with preservation of the Town's natural and cultural resources.

Over the last seven years the study area has been growing at a rapid rate. The study area is estimated to contain 8,666 residents, a 183% increase from 3,063 residents in the year 2000. As the study area continues to develop and expand, valuable natural and cultural resources could be lost, affecting the overall quality of life in the western part of the Town of Huntersville

Infrastructure and land use development are inextricable. New interstate highways, rail transit lines and water and sewer services increase both accessibility and land values. No growth polices and moratoria are only temporary solutions. Instead, the Town's efforts should be focused on devising effective growth management strategies. The Town's adoption of its Strategic Land Plan and performance based zoning code with traditional town planning standards was the first step towards a growth management strategy.

One such strategy that the Town is currently pursuing is the adoption of an Adequate Public Facilities Ordinance (APFO), which matches the available capital facilities for the delivery of Police, Fire and Parks & Recreation services with the demand for those facilities.

With the use of GIS based software various maps were presented during a three day charrette to bring focus on growth management issues within the study area. Based upon existing, approved and pending developments, land use and zoning were mapped along with the extensive land areas that present



constraints to development. As a result of this analysis, it became clear that the study area's community design and land use framework would have at its core a strategic open space and land preservation initiative.

### 6.3.1 Design Guidelines

The following community design and land use elements are recommended for the study area:

**Neo-Traditional Pattern:** Continue to strengthen neo-traditional development standards. The neo-traditional pattern maintains the traditional town development pattern, yet responds to today's market demands. The neo-traditional pattern requires that each community village have a retail core, a base of commercial space to address some if not all of the commercial demand of its residents. Each time residents are able to access these amenities in close proximity to their homes, the number of vehicle trips are reduced, traffic congestion is mitigated and a greater sense of community develops.



### Focused Growth Corridors and Nodes:

Future growth within the study area should be directed to areas with existing infrastructure capacity or locations where infrastructure extensions or improvements can be made most logically and economically. These locations include:

- Vance Road Corridor Extension
- Long Creek Community (as specified by the Beatties Ford / Mt. Holly-Huntersville Small Area Plan)
- NC 73 Corridor

**Open Space Preservation:** The character of the built environment and its relationship to the natural landscape forms the image and identity of Huntersville. The Town is at a critical juncture regarding the need to develop a Comprehensive Open Space and Protection Strategy. Growth within the study area is occurring at rapid levels. As land development continues to encroach on previously undeveloped land areas within the Beatties Ford Corridor Study Area, the supply of existing open space is reduced. This condition increases the need to preserve open space, while at the same time making open space protection more expensive due to rising land values resulting from this increased demand for land development.

Six of Mecklenburg County's fourteen nature preserves are located within the study area. Yet there is no strategic guidance for open space conservation on a regional level. The Open Space Framework and Implementation section of this report provides specific recommendations and approaches to this issue.

**Mixed and Multiple Uses:** A mixture of land uses, housing, jobs and incomes creates a more balanced community, reduces traffic and creates a better fiscal balance. Use of a village land use classification pattern that reduces reliance on the automobile by allowing a variety of land uses is also a valuable tool in promoting this type of community. The building blocks of a village are neighborhoods which incorporate housing, shops, employment, schools, parks and civic facilities essential

to the daily life of residents.

New mixed-use retail and office centers should be located at the north (NC 73) and south (Mt. Holly - Huntersville Road) ends of the corridor in "hamlet" centers. A hamlet can be defined as a discernible place with a focal point and boundary that maintains and fosters primarily residential, institutional (i.e. places of worship, schools) or recreational activities. 50% or more of its land is dedicated to open space (either a preserve or reserve). It is organized in accordance with a pedestrian scale. Its boundary is typically an agricultural or natural area.

There are a number of uses that are compatible within the neighborhood core as permitted in the Town's Neighborhood Residential (NR) District zoning classification. To enhance these neighborhoods, a percentage of retail in the neighborhood core should be prescribed within the zoning code. Design elements and standards should also be established to ensure retail viability of the core.

Design elements should include:

- Architectural detailing of storefronts
  - Main street shops
  - On street parking
- Building heights two- four stories
- Streetscapes with human and architectural interest
- Mixed use: residential or office over retail
- Site planning for new commercial and mixed-use development is to employ a village-grid development pattern that can easily be adapted or transition between residential, open space, mixed-use and civic uses over time.
- Public/civic open space with green linkages to adjacent neighborhood and parks



*Above: Sketch of the Holly Bend Plantation on Neck Road, on the National Register of Historic Places.*

### 6.3.2 Architectural Framework for Community Design

Design standards for commercial development are to reference the rural and historical features of the Beatties Ford Road Corridor. New commercial and civic structures are recommended to be composed of brick and employ Neoclassical/Palladian details in the style reminiscent of Federalist civic architecture, such as that of the historic churches in the area. Regional precedents of Federalist civic buildings (or older Georgian Colonial precedents) are to be found throughout Virginia and the Carolinas, and it is worth mentioning those structures that have been preserved in downtown Alexandria, Virginia, Old Salem in Winston-Salem, and Edenton, N.C. (a fine example is St. Paul’s Episcopal Church in Edenton, the oldest brick church in use in North Carolina). The buildings defining the

William J. Bowman Square in Vermillion are contemporary examples in Huntersville that incorporate references to Federalist architecture. The Hopewell Presbyterian Church will serve as the precedent for Federalist period architecture in the study area. Like many of the historic, rural homes in the area, this architecture emphasizes the human scale and exhibits stately restraint in building massing and in the handling of architectural elements and ornamental details.

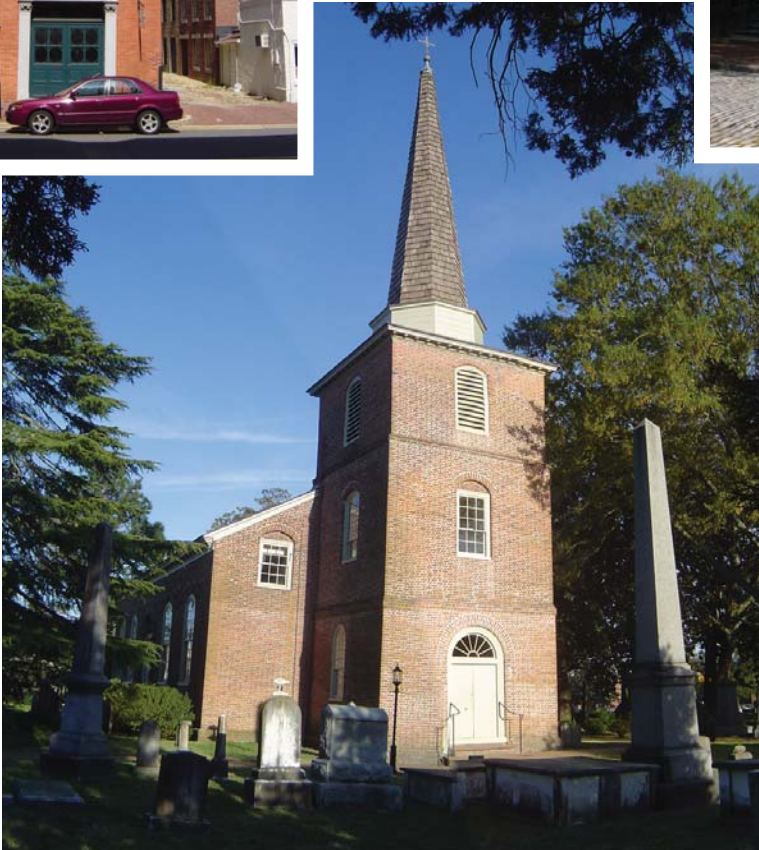
In order to honor the historic heritage of the Corridor, building elements shall employ the following features and physical guidelines:

- Signage, lighting, and awnings are to be integrated into frieze band above the first story
- Primary building materials are to be masonry, wood, and/or fiber cement board
- Building elements such as frieze, cornice, and columns are to have architecturally correct proportions
- Wood frame windows & mullions
- Significant buildings are to be emphasized by unique architectural features such as towers, clerestory windows, pyramid roofs, and deep overhangs
- Tower elements, either freestanding

## SUGGESTED ARCHITECTURAL MATERIALS

Material used for future enhancements of BFR Corridor should reflect the rich historical heritage of the region. Natural materials such as brick, stone, and wood should be used as they reflect a continuity with the historical framework of the area.





*Above and left: Examples of civic structures and treatments. Above left to right: a firehouse in Alexandria, Virginia; intersection monument, Alexandria, Virginia; Freemason Street in Norfolk, Virginia.*

*Left: The oldest brick church in use in North Carolina - the St. Paul Episcopal Church in Edenton, N.C., exhibiting the character of late Georgian architecture.*

*Below: The Historic Hopewell Presbyterian Church.*



or part of a larger building, are located to terminate street vistas, emphasize significant street intersections, and highlight major open spaces

- Masonry details, such as rowlock sills, reveals, stretcher coursing, and corbels, are used to highlighting major building elements
- Traditional storefronts with wood mullions, solid or glass transom, and wood or masonry base
- Entrances are to be defined by features such as awnings, overhangs, lintels,

pediments, porches, and recessed facades

- Wide (10'+) sidewalks with textured bands and joint spacing to relate to the building's column/bay spacing
- Split rail wood fencing with stone columns to reflect local historic features (example of a gateway pillar illustrated at right)

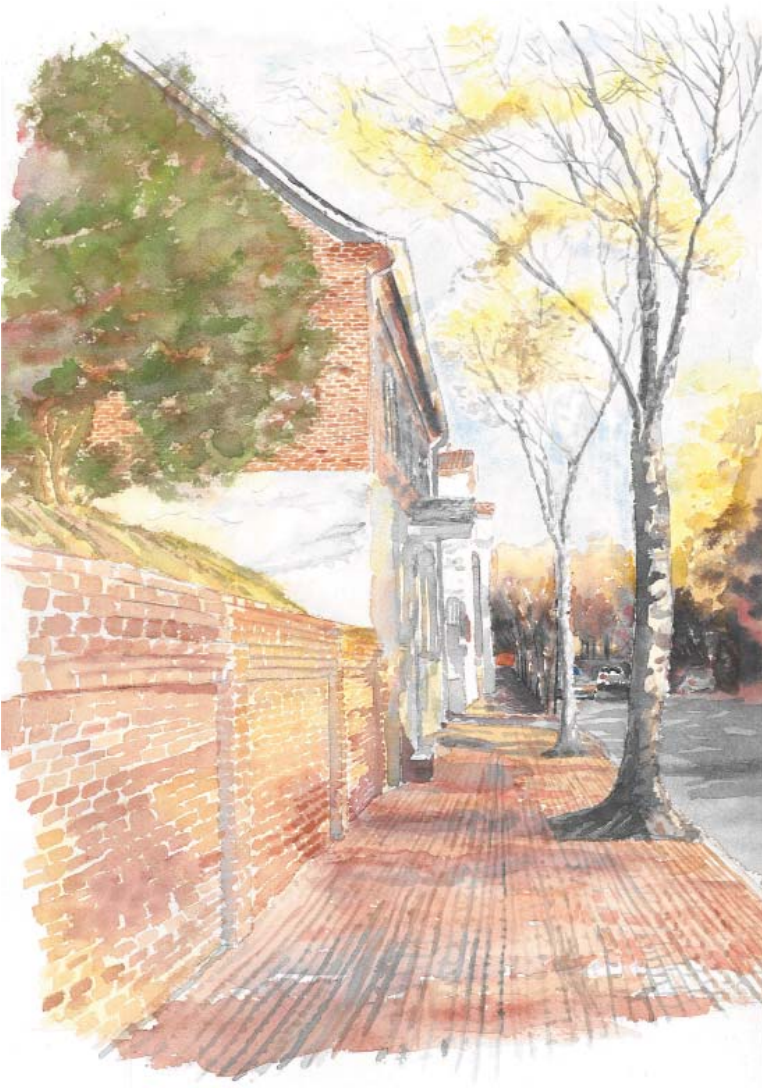


## 6.4 Mixed Use / Hamlet Centers

At the May 10<sup>th</sup> open house, public consensus favored the adoption of a mixed-use/hamlet center development concept for those areas designated as appropriate locations for commercial uses. A mixed-use/hamlet center development pattern would require that the following issues be addressed:

- Density/scale
- Land use pattern
- Functional relationships
- Overall image and identity
- Green space system
- Transportation

A "hamlet" can be defined as a discernible place with a focal point and boundary that maintains and fosters residential, commercial, institutional (i.e. places of worship, schools) or recreational uses and activities. It is organized in accordance with a pedestrian scale to permit and encourage non-vehicular transportation options (i.e. walking and biking).



*Old Salem in Winston-Salem (left) is an example of a district demonstrating the character of a potential Hamlet Center. The streetscape for the Long Creek Hamlet Center (above) draws from the character of Old Salem and honors the brick vernacular architecture of the BFRCSAP Corridor. At right is a detail of the base rustication of the Cedar Grove Plantation House.*



*Below are structures that represent the rural heritage of the BFRCSAP corridor; pictured left to right are: a cabin in the Long Creek Community, the Historic Torrance Store, the well of the McCoy-Nisbit House.*



### 6.4.1 Beatties Ford Road/Highway 73 Development

A mixed use commercial center containing retail, multi-family residential, and civic uses is proposed at the northern end of the study area where Beatties Ford Road, Vance Road and NC 73 intersect. The location and composition of this center will be subject to final determination of the road network recommended by this plan by MUMPO and the Town.

### 6.4.2 Latta Village:

On January 16, 2007, the Town Board approved a commercial center with approximately 100,000 square feet on 23 acres. The approved plan is anchored by a 55,600 square feet grocery store. An internal grid pattern has been established with the introduction of public streets that provides connections to the Hopewell High School property and Hambright Road .

### 6.4.3 Long Creek Community:

In 2005, The Town of Huntersville retained the services of Gemini Studios, Warren Associates and the Littlejohn Group to prepare a market based vision for the intersection of Mt. Holly-Huntersville and Beatties Ford Road. The focus of the plan was to create a new “urban village” centered on the Long Creek Elementary School. The plan identified a number of initiatives that are relevant to The Beatties Ford Road Corridor Small Area Plan, including:

- Focusing retail development on Mt. Holly- Huntersville Road (25,000 – 50,000 square feet demand by the year 2015)
- Making the Long Creek Elementary School the focal point of the future Long Creek hamlet center
- Increasing residential development
- Developing a roundabout at McCoy and Beatties Ford Road

The Long Creek Elementary School reconstruction provides significant opportunity for redevelopment of the Long Creek area. Residential uses will be single-family, with a future potential for some attached housing in response to changes in the market. The following sketches and plans support the recommended initiatives of the Mt. Holly-Huntersville/Beatties Ford Road Small Area Plan for residential and commercial uses.



*Above and right: sketch concepts for the Long Creek Hamlet Center. The architecture and rural motifs of the BFR Corridor are referenced.*





## 6.5 Open Space and Preservation

During the public participation process for the BFRCSAP, preservation of the historic, rural heritage of the Corridor was a primary concern raised by stakeholders and the public. Continuing preservation of the natural lands and farms of the Corridor will not only preserve the qualities that make the Corridor distinct, protecting the quality of life for the Town of Huntersville, but also serve the greater region through recreation, education, and the continued conservation of the region's air and water quality, local wildlife and ecological diversity. Conservation planning presents physical solutions and policies for smart growth that should not be misconstrued as "anti-growth". Conservation strategies are necessary mechanisms of responsible civic management and planning to sustain the economy, resources, public health and future growth of the region. To help gather public support and resources to implement a conservation vision, this plan proposes an open space framework for the BFR Corridor with two primary aims: (1) to designate specific areas for preservation and (2) to build a cohesive open space network, presenting a conceptual framework for integrating these pristine areas with the community. The following framework will highlight and strengthen community assets that the Town of Huntersville, Mecklenburg County and their citizens can support and protect for generations.

### 6.5.1 Open Space Preservation

The primary goal of this plan is to create a preservation vision for the BFR Corridor. Preservation of the area's historic and rural lands is not only important for preserving the character and quality of life of the Corridor, it is necessary for the preservation of regional assets, namely, the distinct natural communities that still exist in these lands and the critical watersheds, aquatic and riparian habitats that convey and filter water to the inlet of the drinking water supply system for the Town of Huntersville and other communities served by Mountain Island Lake.

Six of the fourteen nature preserves in Mecklenburg County are located within the study area. A number of natural heritage sites are located both inside and outside the County owned nature preserves. Added to these protected areas is a Duke Energy facility just south of NC 73 and adjacent to the Catawba River, which provides conservation areas that function as a waterfowl refuge along the river. These nature preserves form an almost unbroken string of preservation lands along the Catawba River, creating a dominant green border of natural open space to permanently encompass most of the meandering western edge of the study area. With the exception of a few subdivisions, farm house clusters and the CMUD Waste Water Treatment Plant,

the area between the “green border” and Beatties Ford Road is still largely rural, comprised of farms and large private properties that retain scenic pastures. This rural zone is strongly segmented between the rural roads that serve it, and all but one of the roads dead-end without allowing public access to the river, contributing to the inaccessible character of the area. The main public open space facilities serving the western portion of the study area are the Latta Plantation Nature Preserve, the Public Boat Access south of the Auten Nature Preserve, a small observation and picnic facility in the Cowans Ford Wildlife Refuge, and the Richard Barry Memorial Park Athletic Fields Facility now being constructed opposite the BFR and Bud Henderson intersection. Outside of



these facilities, the area lacks the accessible, interconnected open space network to link its natural assets to the community. While pursuit of these links is advised (as discussed in

Section 6.5.3 following), the focus of new initiatives in lands west of BFR should be to retain preservation goals and to limit recreational use to those areas where preservation interests can support them. An emphasis must be placed on passive and low-impact uses, such as hiking trails, observation decks, boardwalks and similar uses, that minimally impact the environment and allow users to safely enjoy the area’s natural environment.

The areas east of BFR still contain many rural properties, but the prevalence of new subdivision development is greater, especially between Bud Henderson and Hambright Roads, giving the area a predominantly suburban character. The area above Bud Henderson (with the exception of the Beard Family properties on the northern end) is anticipated to become further developed as well. Subdivision

development south of Hambright Road will become more limited due to the critical watershed and constraint conditions discussed above and because of the need to keep sufficient buffers around the Piedmont Natural Gas Facility. This area is therefore anticipated to retain its rural character in the long term. The exception will be the residential development that is anticipated to encompass the hamlet center at Beatties Ford and Mount Holly-Huntersville Roads.

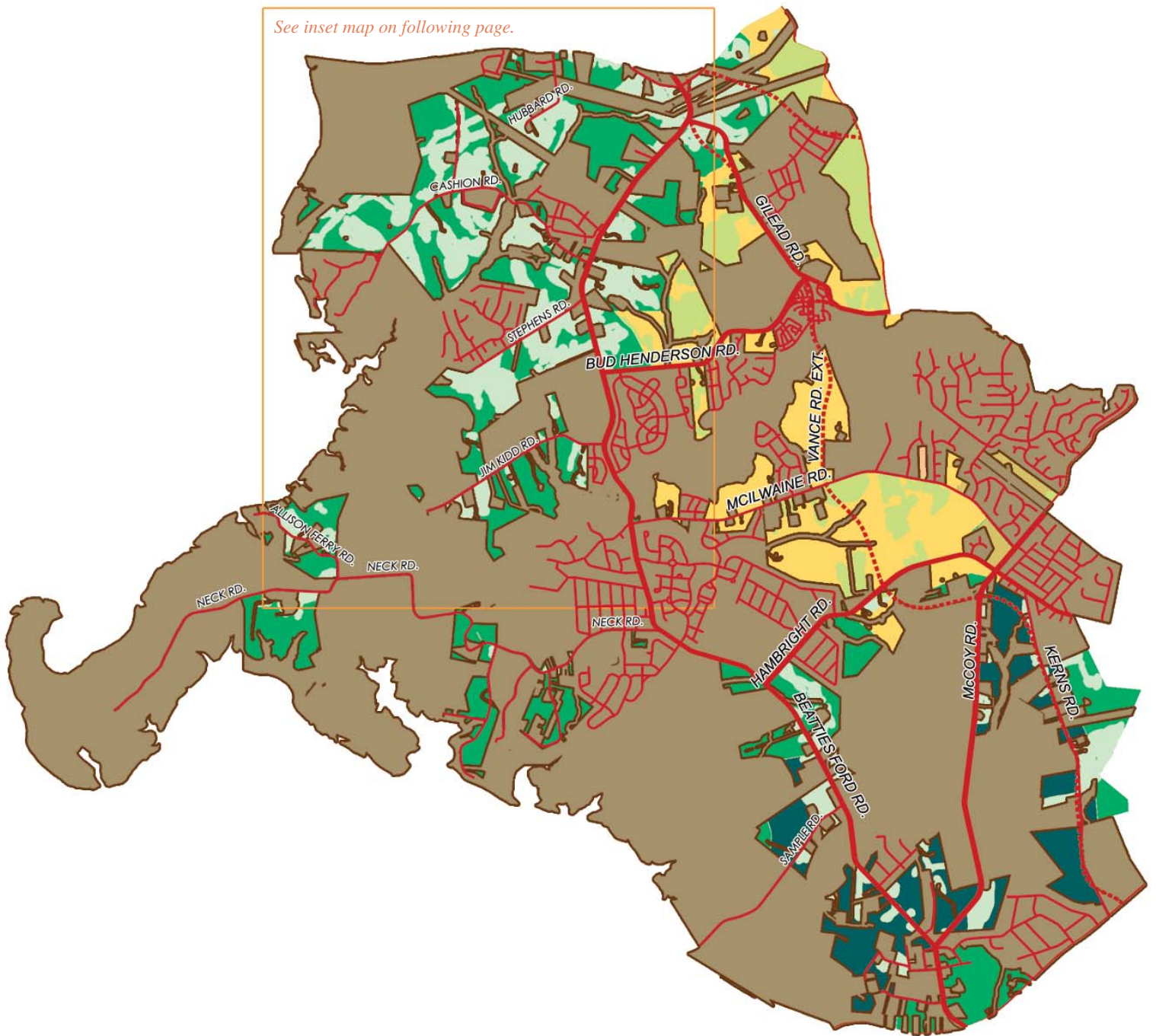
For purposes of preservation, the BFRCSAP recommends that the existing Rural zoning be maintained. Development must also be consistent with water quality standards as specified by the Mountain Island Lake Watershed Ordinance. Furthermore, this plan recommends development standards that emphasize conservation of natural lands and existing viewsheds. The Town of Huntersville is encouraged to pursue options for obtaining conservation easements in parcels where farm use is threatened.

## 6.5.2 Open Space Uses

### 6.5.2.1 Open Space Districts

Beatties Ford Road (above Hambright Road) is conceptually the boundary between the “residential” section of the Corridor and the “farm/preservation” section west of BFR and below Hambright. In the west, the focus on preservation will create passive areas of natural and scenic beauty for public enjoyment. In the east, the greenways and pedestrian/bikeway networks that are currently being planned for the BFR Corridor will help unify the open space network of the eastern communities of the study area, creating an accessible and cohesive system of recreational spaces. Most new subdivision development in the eastern half of the study area has been exceptional from a public realm standpoint, both in terms of creating integral open space amenities as well as realizing well-linked, walkable street networks that serve the greater community and have the potential

See inset map on following page.



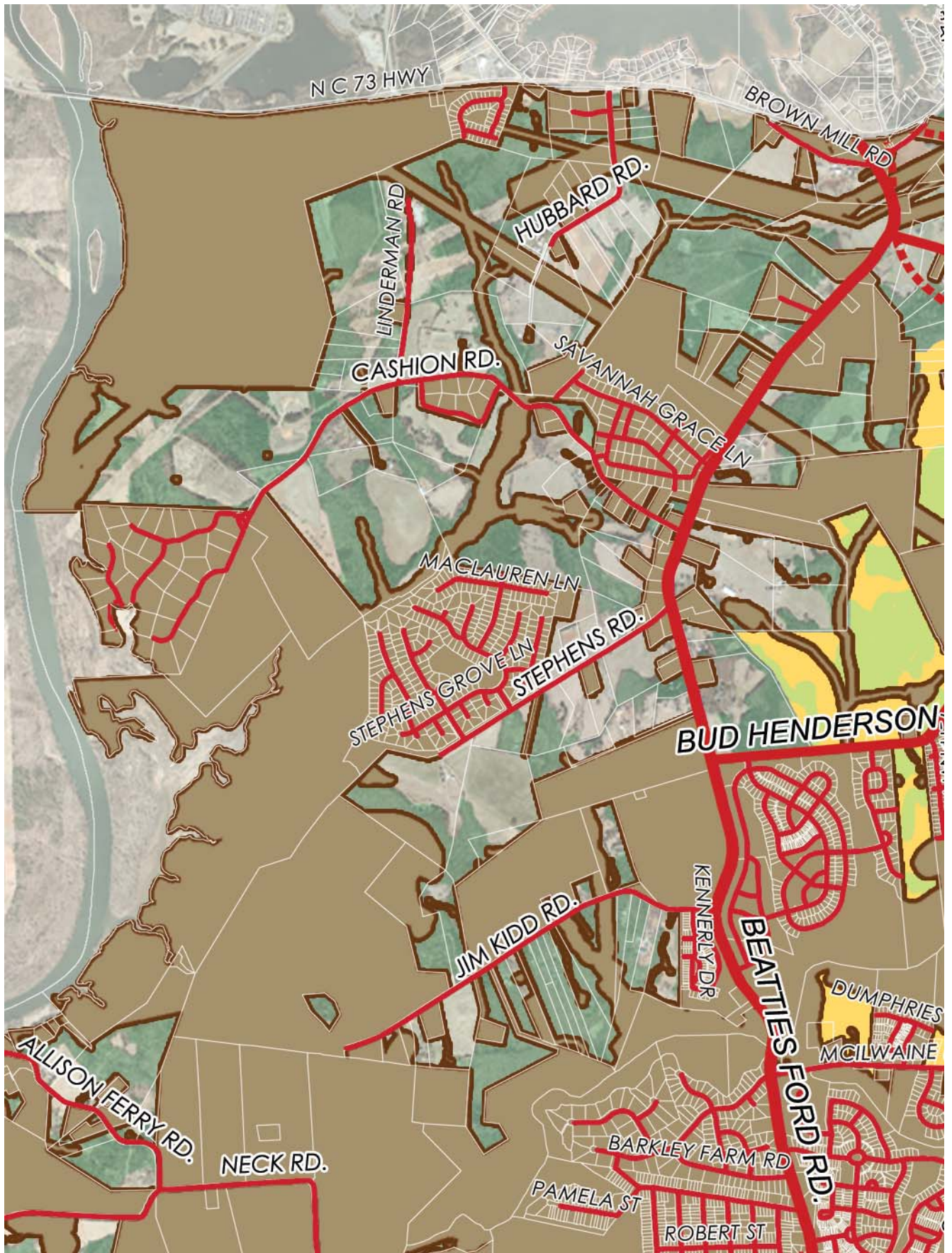
### Vulnerable Viewsheds Map

The Vulnerable Viewsheds map highlights the properties with scenic open fields that are currently unconstrained to future development. As shown, these properties are mainly concentrated in the northern part of the study area along Jim Kidd Road, Stephens Road, Cashion Road and Linderman Road (a close-up of the area is shown left). A cluster of vulnerable properties is also concentrated in the southern part of the study area, but most of these fields are in the Critical Watershed areas, which will serve to preclude high-impact development in these areas. A further inventory analysis is recommended to identify strategic focus areas for preservation, based upon the areas identified in this plan.

#### Legend

- Stable Lands (Constrained to Development)
- Vulnerable Lands in Rural District
- Vulnerable Lands Restricted by Critical Watershed
- Threatened Scenic / Open Fields in Rural District
- Scenic/Open Fields not in Rural District
- Undeveloped Land in Transitional Residential (TR) District
- Undeveloped Land in Neighborhood Residential (NR) District
- Undeveloped Land in General Residential (GR) District





to link further with future street and open space networks. The eastern half of the study area is well suited to provide the open space and recreational needs of its residents for generations to come.

The study area can be divided into three distinct open space zones that will characterize the function and use of park and recreation facilities within them:

- **River Lands:** Nature Preserves, natural heritage sites and historic properties along the Catawba River, including the critical watershed districts to provide limited and controlled uses for recreation and emphasize preservation.
- **Farm Lands:** Farms and rural properties that exist roughly between the preservation lands and BFR to provide private farm uses, farm parks and/or recreational equestrian uses.
- **Hamlet Center and Residential Open Space District:** Community serving open space systems and trails, primarily in the eastern half of the Corridor.

#### 6.5.2.2 Active Use Parks

Currently, the only major park in operation with significant active recreational and event facilities is the Latta Nature Preserve. The Richard Barry Memorial Park now under construction is scheduled for completion by early 2008. A future park facility is being planned in the vicinity of the water treatment plant just east of the BFRCSAP study area boundary at Oliver Hager Road. The

Capital Improvement Plan of the County has also designated a future district park for the BFR Corridor study area (a district park is a park accommodating playing fields and other active uses, such as Freedom Park in Charlotte). This plan strongly recommends that a designated site for the future district park avoid a location adjacent to Beatties Ford Road. Rather, an available property along the future Vance Road Extension is advisable, since the facility can then be served in the future by a major thoroughfare and keep additional traffic off BFR.

**Farm Park:** Local property owners are in discussions with Charlotte-Mecklenburg Utilities over a strategy to preserve part of the Jim Kidd Farm property (now owned by CMUD) and other adjoining properties for farm uses by creating a working “farm park” on Jim Kidd Road. Such a park will serve as a demonstration and educational center that preserves the property as an active farm for future generations. CMUD is also considering the integration of a water reclamation project on the Jim Kidd property. This plan endorses active cooperation between CMUD, local property owners, the Mecklenburg County Park and Recreation Department, and the Town of Huntersville to pursue the realization of the proposed park in order to: (1) support water quality and reclamation, (2) to create controlled access points to the adjacent nature preserves, and (3) to preserve existing farm uses and open space (including the protection of the upland depression swamp forest Natural Heritage Site that is partly located in the Jim Kidd property).





### 6.5.3 Non-vehicular Transportation

Creating access to important community destinations, natural areas and historic sites through a diversity of modal choices helps build community ownership, improve public health and support local identity and quality of life. Creating access to natural areas cements public ownership of these lands and is actually significant to the continued maintenance of these areas. A balance must be maintained between the need to create public access to natural lands and the need to protect the natural communities that they preserve; however, through careful and collaborative planning, solutions for achieving both goals can be found.

During the course of public meetings for the BFRCSAP, members of the public expressed their desire for greater access to the open space resources within the study area. While creating access to some natural areas may not be feasible today, a planning framework must have the foresight to anticipate options for public access in the future. This plan proposes and discusses the features and guidelines of several options to link together and create access to the Corridor's existing nature preserves, parks, and rural conservation areas:

- (a) the extension of the recreational/multi-use trail network, especially along the greenways,
- (b) the creation of equestrian trails outside of the nature preserves,
- (c) the enhancement of recreational use of Mountain Island Lake, and
- (d) the planning and use of the bikeway network.

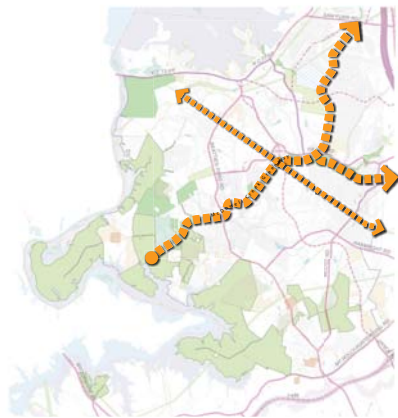
Together with well-linked and pedestrian

friendly street networks, any combination of the above travel options can be utilized to create a comprehensive open space system. Planning enhanced networks for non-vehicular access will create an accessible and well-integrated open space network that will serve the communities of the Corridor for generations to come.

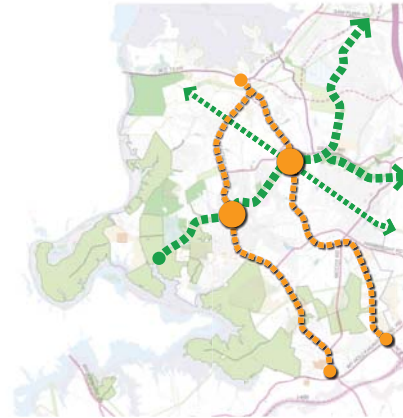
**Green Infrastructure Connectivity:** Planning for open spaces must be coordinated with a strategy to create a well-linked open space network throughout the entire study area. Therefore, augmenting the connectivity policy for new development to extend green infrastructure through the use of pedestrian, equestrian, greenway and bikeway connections would facilitate the goals of creating a robust open space network to serve future generations. Even where planned green infrastructure and non-vehicular networks remain undeveloped, a connectivity policy should require the dedication of easements for future public right of ways including those of trails. In particular, any proposed development should not bar public access to the Catawba River/Mountain Island Lake and the Nature Preserves. Any new development either preventing or discouraging such access to the public should be considered inconsistent with the Town's connectivity policy.

#### 6.5.3.1 Recreational and Multi-Use Trail Network:

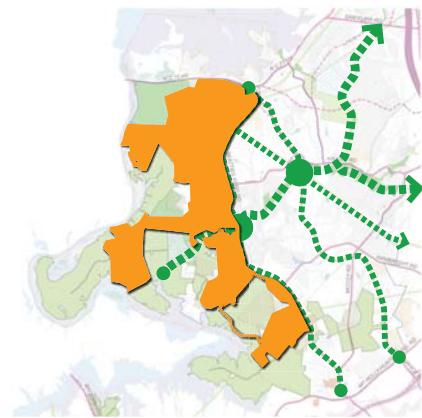
The extension of the McDowell Creek Greenway from Gilead Road to Beatties Ford Road is the study area's most extensive green infrastructure component being planned to date. This trail will serve as the study area's main east to west, non-vehicular spine and will provide a



(i) East-West Greenways



(ii) North-South Multi-Use Corridors



(iii) Equestrian Use Corridor

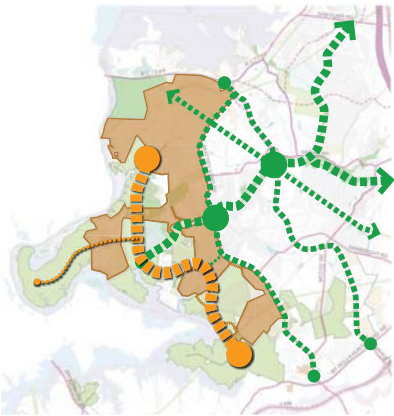
connection to the greater greenway trail network of northern Mecklenburg County and the surrounding region. It is currently being considered as an important link in the proposed, 15-county-wide Carolina Thread Trail network. Extension of the Greenway across Beatties Ford Road through the Auten Nature Preserve and on to Neck Road near the Rural Hill Nature Preserve would extend this “green” link to the areas in the western part of the study area (and would also help with the Carolina Thread Trail effort). Secondary greenway trails along the McDowell Creek branches extending north and south of the Greenway on both sides of Beatties Ford Road would dramatically reinforce the potential of this Greenway to link the communities of the Corridor. In addition, a (tier two) multi-use trail is being planned along one of the utility rights-of-way in the north, which would connect to the McDowell Creek Greenway in the east to create a comprehensively linked linear park system.

In addition to the greenways, the plans to enhance the thoroughfares and McIlwaine Road for pedestrian and bike use will ensure that the areas east of Beatties Ford Road will be well-linked east to west and north-south for non-vehicular travel.

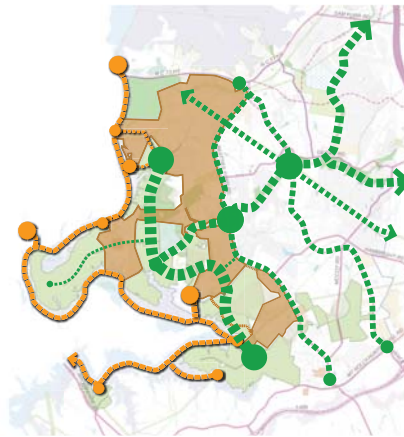
North to south, this plan proposes three non-vehicular transportation corridors. In the center, the multi-use trail corridor utilizing the 100-foot buffers along both sides of Beatties Ford Road would serve as the primary north-south pedestrian/bikeway conduit linking the residential neighborhoods along the corridor. For the neighborhoods in the eastern part

of the study area, a continuous corridor of bikeway and pedestrian amenities is planned along both sides of the future Vance Road Extension.

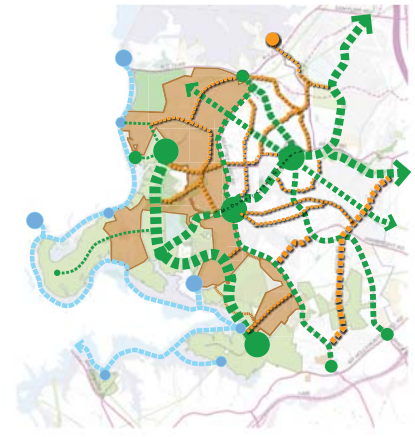
For the western part of the study area, a Riverland recreational trail corridor creating a comprehensively linked hiking trail system (and linking with the Carolina Thread Trail system) is recommended to be studied as an option in a comprehensive park and recreation master plan for the study area's nature preserves. Participants in the BFRCSAP workshops noted the general inaccessibility to lands in the western part of the study area. The study area to the west of Beatties Ford Road is segmented north to south between the main rural roads of the area, consisting of seven distinct, unconnected viewshed sub-areas. Unlike the eastern portion of the study area, these sub-areas are not well-suited to accommodate a well-linked open space system. North to south, absence of essential public links (street, road and easement/utility right of way) hinder greater connectivity. East to west, the rural roads lack the right of way width to provide sidewalks and bikeways and other similar amenities needed to extend the pedestrian and trail network from the east. Changing the road sections for non-vehicular travel through easement acquisition may also threaten the rural character of the roads. A recreational corridor linking the string of preservation lands along the river, therefore, would provide a minimally intrusive alternative to connect the western communities of the study area with one another. This recreational trail corridor would tie into the two east-west greenways and



(iv) Riverland Recreational Trail Corridor



(v) Catawba River Blueway



(vi) Completed Trail Network

create local access to public lands and the river. Public access points to the trail corridor should be provided at all local roads that currently dead-end. This plan recommends that a comprehensive master plan be undertaken by the County to determine the nature of public uses in the nature preserves and to evaluate the feasibility for creating an unbroken north-south trail corridor.

### 6.5.3.2 Equestrian Use Corridor

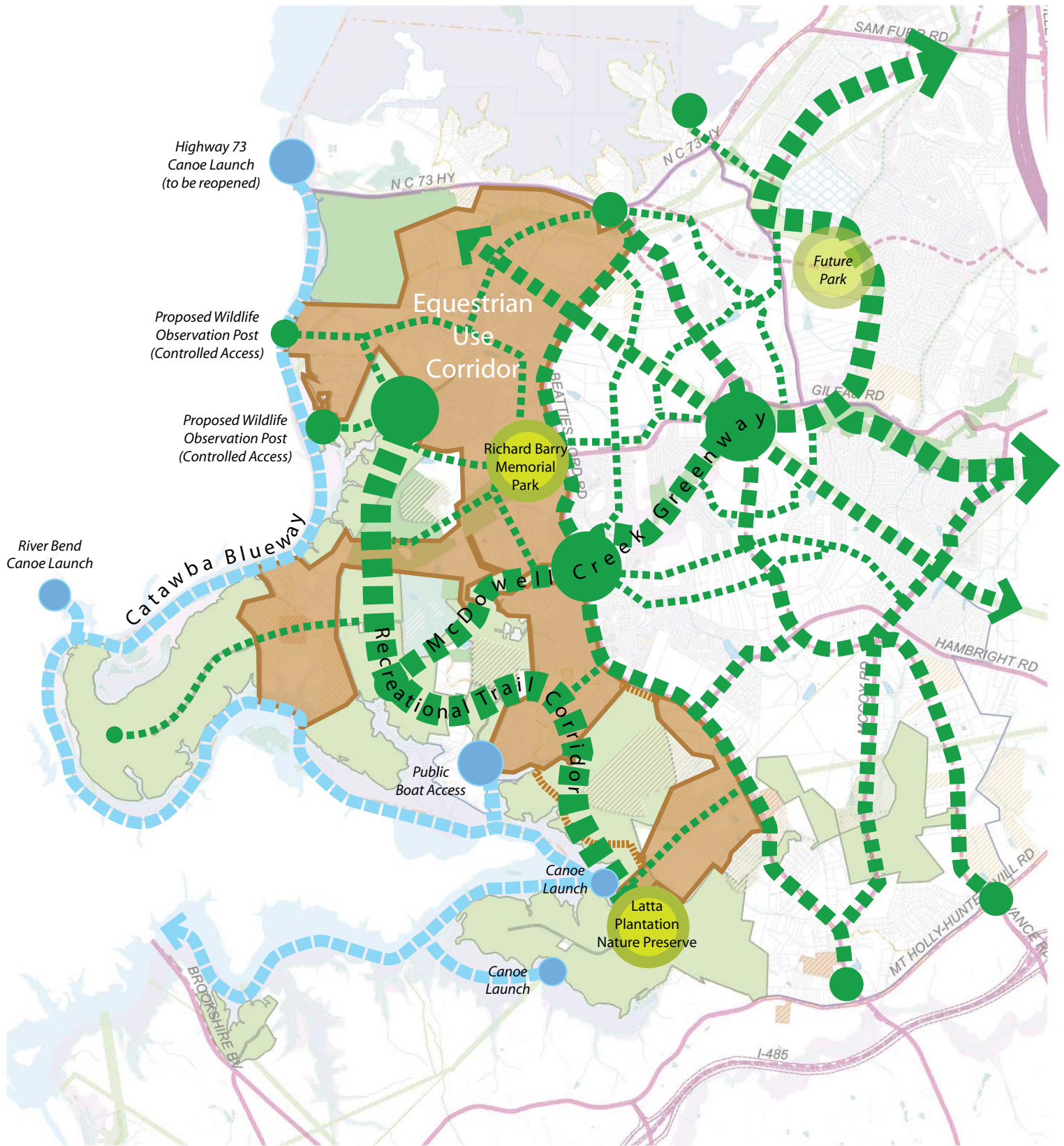
In order to encourage equestrian-related uses and to highlight the special character the Corridor, an equestrian use corridor is recommended to extend north to south along the Beatties Ford Road Corridor, in the farm lands between the western nature preserves and Beatties Ford Road, extending where possible into the westernmost areas of the study area and including the Latta Equestrian Center on the Latta Plantation Nature Preserve. Horse trails on public lands and rights-of-way are encouraged to be considered in the equestrian use zone, but any proposed trail system must be located to avoid natural heritage sites and the sensitive areas of nature preserves (as determined by the Mecklenburg County Park and Recreation Department), since horses facilitate the spread of invasive species detrimental to the natural communities found in these areas. Given this reality, the ability to accommodate an equestrian trail system in the western part of the study area using public lands is greatly hindered. Nevertheless, collaboration with both public and private landowners of property outside the nature preserves

may help realize the creation of such a system.

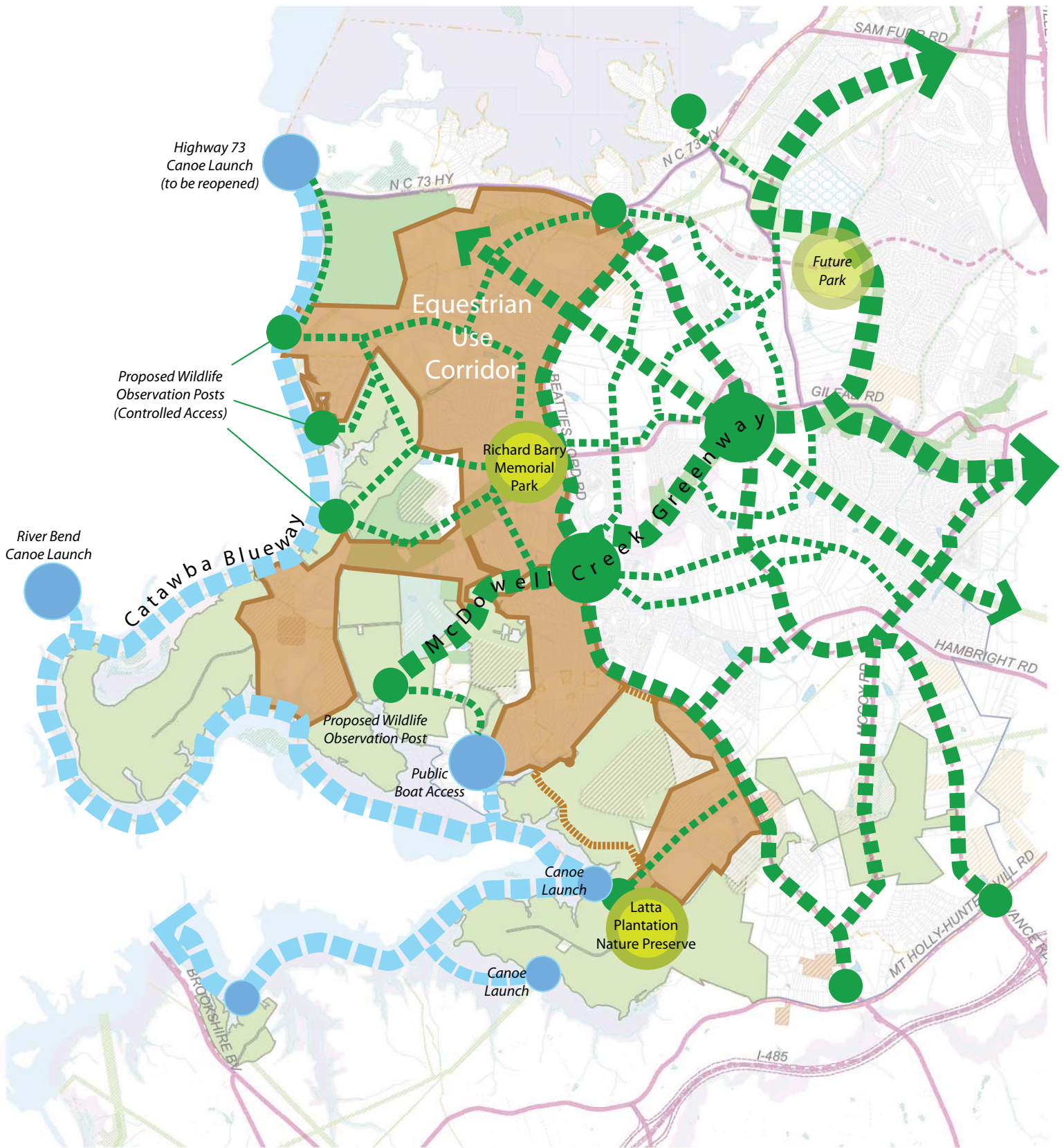
The siting of equestrian trailheads would be an important determination for evaluating the feasibility of equestrian trails. Trailheads need adequate parking facilities for the temporary storage and easy maneuvering of vehicles with horse trailers. Acquisition of a property for the trailhead either by purchase or by collaborating with a private entity such as South Lake Farm may be an option for consideration in proposing a trail system, especially if such an acquisition or partnership can help preserve endangered viewsheds.

This plan, however, will not make a specific recommendation for proposed alignments of an equestrian trail system, but it does recommend its further consideration by the Town of Huntersville, the Mecklenburg County Park and Recreation Department, local landowners, stakeholders and the public in order to enhance public enjoyment of the Beatties Ford Road Corridor, promoting equestrian related recreational use and tourism. If feasible, such a unique amenity would truly solidify the image of this area as a signature rural and historic area of Mecklenburg County and help galvanize further support for its continued preservation as such.

**Latta Equestrian Center:** Consideration should be given to augmenting the facilities and resources available to the Latta Equestrian Center in the Latta Plantation Nature Preserve. The existing Latta Equestrian Center contains parking



**Open Space Network - Option A**  
 Showing the Proposed Recreational Trail Corridor in the West



**Open Space Network - Option B**  
 Emphasis on Creating Blueway Access; No Recreational Trail Corridor

facilities, lighted arenas, stalls, show grounds and a tack shop. The Duke utility right of way inside the preserve is being utilized for equestrian trails and grazing land. Currently, the Latta Equestrian Center cannot meet the current (and increasing) demand for pastureland, stalls, parking and show ground facilities. If the Center were to realize its goal of constructing a covered arena, it would have to roughly double the size of its current land area and facilities in order to meet the demand it would attract from the region. Currently the nearest show ground facilities with covered arenas are in the Raleigh and Atlanta regions. As such, the Center could anticipate being booked year-round for shows if it contained a covered arena.

To meet this demand, consideration should be given to the purchase of property under the Duke Energy utility right of way by the County to meet four goals: (1) to enable a realignment of Sample Road

to avoid disturbance to the Hopewell Presbyterian Church walls creating a safer exit and entryway for vehicles and horse trailers, (2) to expand the grounds available for use of the Latta Equestrian Center, (3) to retain at least part of the acquired right of way for grazing horses, and (4) to create a visible presence of the Latta Equestrian Center on Beatties Ford Road.

### 6.5.3.3 Catawba Blueway

Currently, a number of boating and canoe access points are located along the Catawba River / Mountain Island Lake, which comprises the western boundary of the study area. Two canoe/kayak access points are provided on Latta Plantation and a public boat access area is located just south of the Auten Nature Preserve. Other canoe/kayak access points have been silted over or fallen to neglect. As part of the Duke Energy Catawba/Wateree Comprehensive Relicensing Agreement

## EQUESTRIAN TRAIL GUIDELINES



*The primary consideration in trail design is the safety of the horse and its rider. The special needs of horses, both physical and psychological, must always be kept in mind. Consideration to riders with special needs must also be considered; therefore, trails should be designed to remove any obstruction and hazards that would require a rider to dismount to avoid an obstruction or to lead the horse around it. Safety considerations include:*

- A 12-foot minimum vertical clearance.
- An 8-foot minimum cleared trail width.
- A 4-foot minimum tread width (8 to 10 feet recommended by Latta

Plantation personnel).

- A continuous trail surface composed of soil or un-compacted material such as pit gravel (crushed stone).
- Removal of brush and stumps in the cleared trail zone, along with periodic removal of items such as fallen branches, large rocks, litter/shiny objects and other such low-lying objects that may disturb or injure a horse.
- Provision of adequate drainage to prevent the accumulation of standing water on the tread surface.
- Adequate road warning signage at intersections and along roadways to inform vehicular traffic of horse traffic and approaching trail crossings.
- Directional signage for riders and the provision of trail maps at trailheads.
- Slopes may present challenges to horses due to bearing loads. A maximum grade of 10 percent for slopes greater than 100 feet and a maximum grade of 20 percent for slopes less than 100 feet is recommended. The creation of switchbacks along sloping terrain may be necessary.
- At intersections and crossings over paved or hard surfaces, care must be made to make sure the pavement surface is not slippery to horses. Painted surfaces can pose a special hazard to horses in this regard.
- Insulation from any noises or visual objects that may agitate horses is recommended. Signage, warning strips and other such objects



(CRA), the Highway 73 Access Area, located near the NC 73 bridge and the Cowan's Ford Hydroelectric Station in the north, will be rehabilitated and enhanced for public recreational use. Approximately two acres of land is designated at the site for ten gravel parking spaces and a future launch area, thus creating a trailhead for a blueway that would tie in to the proposed Carolina Thread Trail system. The CRA also supports Duke Energy's coordination with public agencies to provide further recreational facilities and assistance in extending existing multi-use trail systems along Mountain Island Lake. At the River Bend Access Area (on the bank opposite of the Cowans Ford Wildlife Refuge at the end of Neck Road) the City of Mount Holly is considering options for recreational development, including a potential campground and a bath house to support a swimming facility.

This plan encourages the implementation of the CRA's public recreation and access

plans, as well as its updates to the viewshed, land use and building standards provided by the Catawba/Wateree Shoreline Management Plan (SMP) and Shoreline Management Guidelines (SMG), in order to support the continued preservation and recreational enhancement of the Catawba River. Furthermore, the Town of Huntersville and Mecklenburg County are encouraged to study options to create recreational use of the preservation lands along the river by providing trails and/or additional observational decks or boardwalks for wildlife observation.

According to the Shoreline Management Plan, the section of Mountain Island Lake from Cowans Ford Dam downstream to the Riverbend Steam Station is off limits for new private/commercial boating access. Although construction outside of the lake boundary is allowed, development within the lake boundary (i.e., the full pond contour elevation of 647.5 ft above mean sea level) is prohibited.

in the horse's sightline should not be overly bright, reflective or shiny as these can spook horses or cause them to become agitated, especially near vehicular traffic.

- The provision of bollards to prevent vehicles from accessing the trail as well as the prohibition of off-road vehicles on horse trails. Signage stating the prohibition of off-road vehicles – and if pertinent, communicating associated fines for infractions – should be posted at all major trail access points. Bollards are recommended to be 3 feet in height and spaced a minimum of 5 feet away from an adjacent bollard or vertical surface. A bollard must be designed to be weather-resistant, to have a round cross-section and a top with smoothed edges, and to be composed of durable, homogenous, non-splintering material that does not contain any edges, attached components and small projections that may catch on or scrape a horse



or rider. Lighted bollards and bollards with reflective strips or bright colors are not recommended.

- Horses like clear sightlines to be maintained between themselves and other moving bodies, such as vehicles and other horses. Care must be made to make sure that sightlines to approaching traffic are maintained around curves and corners and at the approach to roadways, roadway crossings and trail branches. If providing parallel trail branches with jumps, a wide berth between the main trail and the jump trail is recommended, but with care that unobstructed sightlines are maintained between parallel trails.
- Fencing, buffers, and/or berms are recommended between the trail and an adjacent roadway (especially in areas where vehicular traffic typically exceeds 35 miles per hour) so long as clear sightlines to approaching traffic are not obstructed.
- For long trail runs, consider the placement of mileposts and first-aid stations and/or call-boxes.
- Avoid the placement of trail crossings on the curves of roads.





#### 6.5.3.4 Bikeways

The existing bikeway plan of the Town of Huntersville, if implemented, will serve the BFR Corridor residents well. Beatties Ford Road, south of the Bud Henderson Road intersection, and the future Vance Road Extension, are the current County-designated “Tier One Bikeways”. Beatties Ford Road north of Bud Henderson and Bud Henderson/Gilead, McIlwaine, Hambright, McCoy and Mt. Holly-Huntersville Roads are designated by the Town of Huntersville as “Tier Two Bikeways” for the study area. Tier One Bikeways are considered high priority locations for bicycle improvements. Tier Two Bikeways are recommended to compliment Tier One routes. Development of these routes should be completed in the future when the opportunity arises.

Currently, the primary challenges facing cyclists are the high volumes and speeds of traffic on the roads. The discontinuity of bike lanes on Beatties Ford Road and the provision of a lane on only one side of the road were also deficits repeatedly noted by users and Corridor residents present at the BFRCSAP workshops. However, cyclists do not necessarily need designated or striped bike lanes so much as wide enough road widths to accommodate them alongside vehicles. Many experienced road cyclists, in fact, favor wide lane widths over bike lanes, as marked bike lanes discourage vehicular traffic from giving better consideration to cyclists – especially where cyclists like to travel in groups. These cyclists are typically happier with long sight distances, warning and “share the road” signage, and/or enforcement of speed limits.



*Historic Hopewell Section - Before*



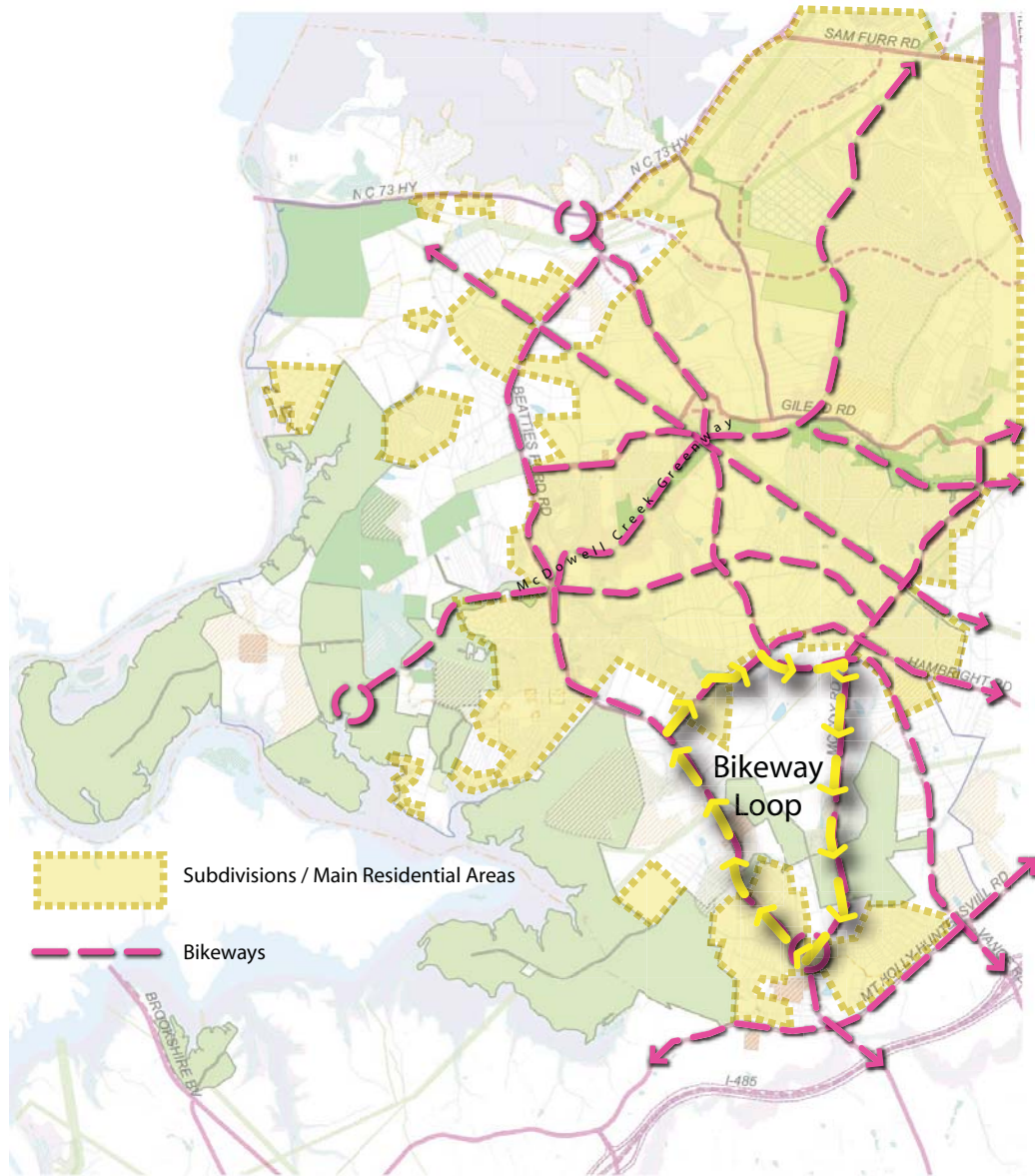
*Historic Hopewell Section - After*

The Mecklenburg County Park and Recreation Department should consider enhancing bikeway access to the parks and nature preserves in the area as well providing multi-use trails inside the preserves to allow the public to better enjoy the unique environments of the area. The Auten Nature Preserve, which has been recently expanded along McDowell Creek to Beatties Ford Road, is ideally situated to allow cyclists to access the preserve via Beatties Ford Road and the multi-use trail of the McDowell Creek Greenway now under construction.

**Bikeway Loop:** Residents of the southern district of the study area proposed and enthusiastically endorsed the idea of creating a “bikeway loop” to accommodate local cyclists. Such a loop would travel clockwise using the triangle formed by the intersections of Beatties Ford, Hambright, and McCoy Roads. The scenic qualities of these roads, gentle slopes, low

density of surrounding development, and the relatively few intersections and driveways accessing the roads comprising the loop (especially to the inside curb), make the bikeway loop a reasonable and promising proposal.

The proposed bike loop may pose a few challenges to designers, however, necessitating the consideration of parking facilities for cyclists, the adding of paved width to the road section, and provisions to make sure that sight distances are adequate on the bends of Beatties Ford (between the Brasilia Park subdivision and the Hopewell Church), on Hambright Road (just east of the Norman Park subdivision), and on McCoy Road (just south of the McCoy Slave Cemetery). Groups of cyclists are more likely to utilize roads with generous widths and/or roads with infrequent traffic where sight distances allow vehicles to easily share the road with cyclists. Bike lanes and traffic calming measures such as a stamped section of pavement would need to be added to the section of road traveling adjacent to the walls of the Hopewell Church Cemetery on Beatties Ford Road, as was recommended by the Beatties Ford Road Protection / Enhancement Strategy Plan. Because of the constrained width of the road section between the rock walls, bike lanes are recommended in the Hopewell Church area. Bike lanes are also necessary for curves with limited sight distances, but are not necessary for the remainder of the loop for the reasons mentioned above. Along with adequate warning signage around the loop and on the roads approaching the loop, it is



recommended that advertising/branding of the loop be pursued. The provision of bike parking in the Latta Village shopping center should also be encouraged.

On McCoy Road, this plan recommends that pavement not be added to the outside (eastern) lane of the road to accommodate bicyclists, as this would be detrimental to the natural buffer protecting the habitat of the federally listed Schweinitz's Sunflower, which is found underneath the power-line running parallel to McCoy Road on this side. This will not adversely affect the bikeway loop, since the loop will travel clockwise on the opposite side of the road. Adding a bikeway pavement width to the inside (western) lane of McCoy Road is recommended, however.



## 7.0

# Implementation



Successful implementation of the Beatties Ford Road Corridor Small Area Plan will require the commitment and managed efforts of Town leaders, stakeholders, landowners, residents, County and State government officials and affiliated agencies. The following implementation initiatives and strategies are recommended.



## 7.1 Transportation

The following action items are recommended to ensure a uniform implementation of the plan:

- Adopt the Beatties Ford Road Small Area Plan
- Coordinate with NCDOT on an agreed upon vision for Beatties Ford Road to ensure continuity of street sections as continued development occurs
- Conduct all necessary feasibility studies and request corresponding amendments (if deemed appropriate) to the MUMPO Thoroughfare Plan for the Vance Road Extension and Hugh Torrance Parkways
- Refine and adopt the connectivity plan depicted in the collector street element of the small area plan so that street connections can be incrementally implemented as development occurs.
- Evaluate current connectivity policies and amend if necessary to ensure the implementation of a comprehensive

interconnected collector street network.

- Continue coordination with Town officials, NCDOT, and MUMPO in an effort to expedite the construction of the Vance Road Extension.

### 7.1.1 Required Further Studies

The following represents additional studies necessary to implement the recommendations of the Plan:

**Conduct a Small Area Plan Traffic Study:** This study should include travel demand forecasting, regional modeling, and traffic analysis at critical intersection in an effort to more accurately predict the capacity needs of area roadways and to test the configuration of roadway alignments and intersection treatments.

**Vance Road Extension Modification and Hugh Torance Parkway Feasibility Study:** The purpose of this study will be to evaluate the proposed alignments identified during the charrette. The feasibility study should include sufficient detail to confirm a preferred alignment that can be presented to MUMPO for consideration. As a part of this task, the Town should collaborate with NCDOT and MUMPO on the development of functional designs for critical intersections (most notably the Highway 73/Vance Road Extension intersection) and confirm a preferred intersection design configuration so that adequate ROW can be preserved incrementally as development occurs. This task should involve travel demand forecasting, traffic modeling and simulation and functional design.

**Roundabout Functional Design and Analysis:** The potential for roundabouts at various locations within the study area has been suggested through previous planning studies as well during the BFR Corridor Small Area planning process. This plan recommends the placement of a roundabout at BFR and McCoy Road. The Town should collaborate with NCDOT on

the development of a functional design for this roundabout and confirm the ability of this intersection treatment to adequately handle projected traffic volumes. This task should involve travel demand forecasting, traffic modeling, simulation and functional design.

**Greenway Master Planning/ Feasibility Study:** The greenway recommendations contained in this plan should be reviewed by the Town's Greenway, Trails and Bikeway Commission and be incorporated in the Town's "Greenway, Trails and Bikeways Master Plan", if deemed appropriate.

## 7.2 Land Use and Zoning

The following items are recommended to ensure a uniform implementation of the land use element of the plan:

- Implement and adopt land use, transportation and zoning recommendations as identified in the Beatties Ford Road Corridor Small Area Plan (refer to plan on overleaf).
- Codify 100' buffer on both side of Beatties Ford Road.
- Support rezoning of property, located in the west quadrant of Beatties Ford Road and NC 73, from Residential to Conditional Highway Commercial.
- Prescribe a base of core community retail within Neighborhood Center District zoning designation.
- Continue the low density residential development pattern within the study area.
- Focus commercial development at (NC-73 and Mt. Holly Huntersville Road) with a commercial center in the northeastern quadrant of Beatties Ford Road and Hambright Road.
- Modify existing regulations as needed for consistency with the Beatties Ford Road Corridor Small Area Plan

# Beatties Ford Road Corridor Land Use and Transportation Master Plan



## Land Use

- BFRCSAP Study Area Boundary
- Residential Area / Subdivisions
- Equestrian Use Corridor
- Nature Preserve / Passive Open Space
- Active Use Park
- Mixed-Use / Hamlet Center

## Proposed Transportation System

- Existing Major Thoroughfare
- Existing Minor Thoroughfare
- Proposed Major Thoroughfare
- Proposed Minor Thoroughfare
- Existing Collector Street
- Proposed Collector Street

## Proposed Non-Vehicular Network

- Primary Greenway / Trail
- Secondary Trail
- Blueway
- Boat Access / Canoe Launch

## 7.3 Open Space Preservation

Where farm/grazing use is threatened, strategies for preserving these special properties requires special consideration. The most important consideration would be to encourage continued cooperation with private land conservation groups, such as the Catawba Lands Conservancy (CLC) to acquire and manage conservation easements and land in the Rural (R) district lands of the Corridor. The following strategies are examples of the tools that can also be used to secure conservation easement and open space and are recommended for further study:

- Define and implement strategies for the green infrastructure as identified in the plan
- Gaining viewshed protection and/or continued farm use during the land development agreement process
- Outright property acquisitions – if necessary, through public-private partnerships and partnerships with land conservancy agencies
- Use bonus and incentive zoning to exceed open space requirements or convey conservation easement to the Town.
- Applying for grant funding: possible sources can include the Transportation Equity Act for the 21st Century (TEA-21), the North American Wetlands Conservation Act (NAWCA), the Wetlands Reserve Program, the Interagency Committee for Outdoor Recreation (IAC), and other such federal and state programs
- Acquisition of properties by the Charlotte Mecklenburg Utilities Department (CMUD)
- Leveraging and facilitating acquisitions by the County for public parks, greenways and nature preserves
- Creating donorship programs and/or leveraging acquisitions
- Supporting the Carolina Thread Trail initiative and other similar programs
- Seeking corporate donations and/or sponsorships to secure revenues

- available for acquisitions
- Apply real estate excise taxes (REET) for acquisition/maintenance of conservation areas.
- Bond referendum or property tax levy to fund a Rural, Historic and Critical Preservation Program (funding land acquisition and historic heritage/ecological preservation) for the Town of Huntersville
- Finding a preservation use location for a non-profit, or putting together a coalition of investors/organizations/foundations committed to a preservation use of property; one possibility to consider is an equine rescue center for abused and neglected horses, which is lacking in the area (the nearest is in China Grove, N.C.)
- Finding other regulatory measures, such as defining viewshed standards in Rural zoned areas for conservation subdivisions or creating a Scenic Roadway Overlay Zoning District for the threatened areas
- Working closely with the Mecklenburg County Park and Recreation Department, the Mecklenburg County School Board and other agencies to expand recreational lands and services; joint use of facilities shall be used as a major strategy for efficient use of public funds and to provide additional opportunities to reduce traffic



# Market Study

## Beatties Ford Road Corridor Retail and Office Market Potential

Huntersville, NC

Prepared July 2007 by:

Warren and Associates  
223 N. Graham Street  
Suite 200  
Charlotte, NC 28202



## Appendix A

*Based on continued strong income growth, Planning Area households could earn an average of \$148,808 annually by 2017.*





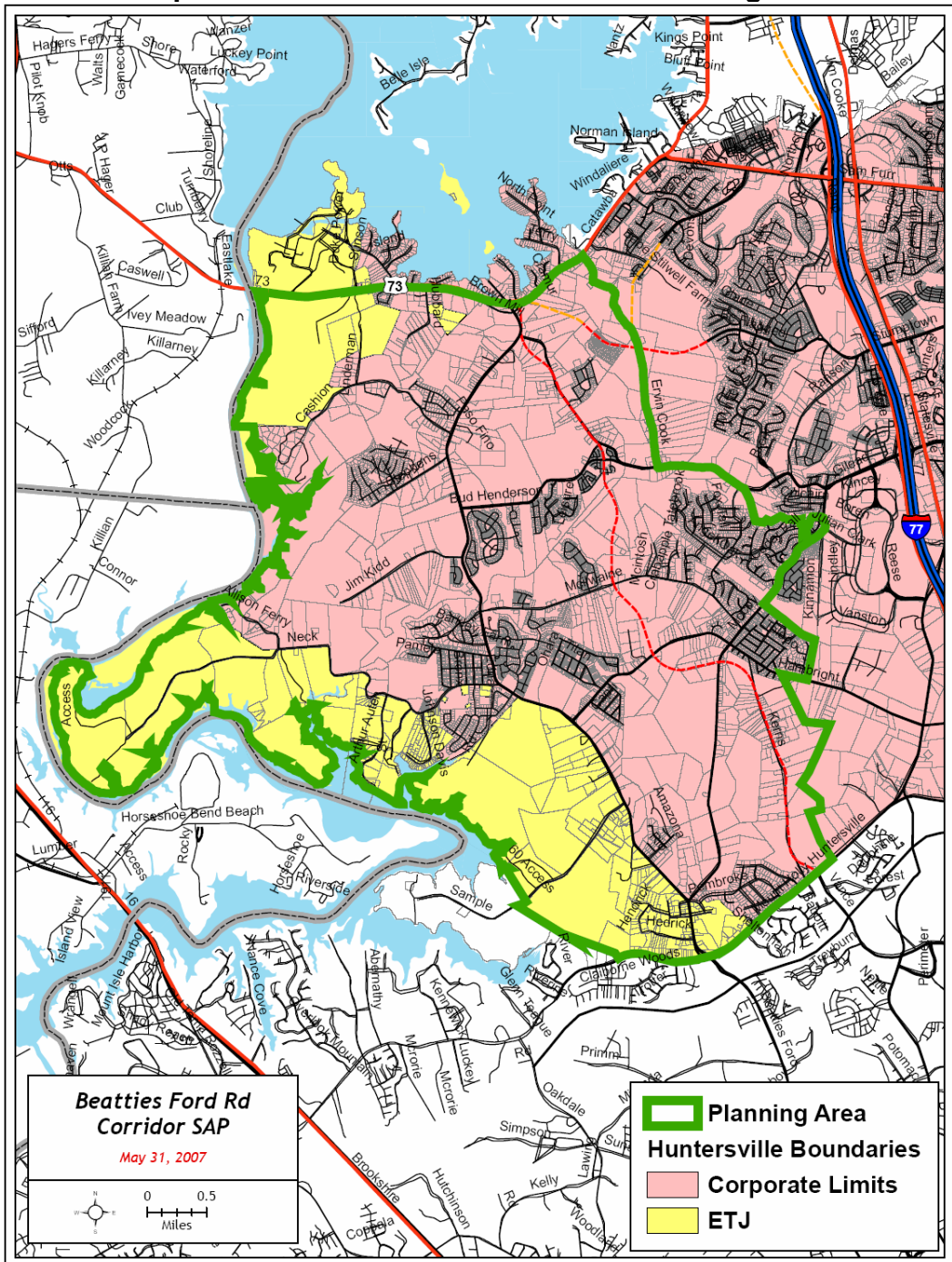
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# 1. Introduction

Warren & Associates was retained by Neighboring Concepts to conduct a retail and office market analysis for the Beatties Ford Road Corridor Small Area Plan in Huntersville, North Carolina. The Planning Area is bounded generally by NC-73 on the north, the proposed Vance Road Extension on the east, Mount-Holly Huntersville Road on the south, and the Catawba River on the west (Map 1).

**Map 1: Beatties Ford Road Corridor Planning Area**



## 2. Retail Market Potential

The retail market potential for the Beatties Ford Road Corridor Small Area Plan was estimated for 2007 and forecasted through 2017. As part of this assignment, demographic trends, residential development activity, and competitive centers were evaluated. Demographic and retail spending forecasts were then generated for the Planning Area.

Two specific locations are deemed most appropriate for retail development within the Planning Area:

- Beatties Ford/Hambright roads
- Beatties Ford Rd./NC-73

Separate trade areas were defined and analyzed for each of these sites. Retail expenditure potentials were forecasted for the trade areas, with specific capture rates applied to the prospective sites.

### 2.1 Planning Area

The Planning Area is shown on Map 1. It contains a mix of newer subdivisions, historic sites, and protected natural areas near the Catawba River. Beatties Ford Road is the only north/south road extending through the Planning Area.

#### 2.1.1 Demographic Trends

The Planning Area has been growing at a rapid rate over the last seven years. As of 2007, the area is estimated to contain 8,666 residents, up 183% from 3,063 residents in 2000. The area now has 3,346 households, which is 187% higher than 1,168 households in 2000.

**Table 1: Demographic Trends, Planning Area, 2000-2007**

	2000	2007	2000-2007 Change	
			Number	Percent
Population	3,063	8,666	5,603	182.9%
Households	1,168	3,346	2,178	186.5%

Source: Town of Huntersville, ESRI

#### 2.1.2 Residential Development Activity

Based on data provided by the Town of Huntersville, there are 35 single family subdivisions in the Planning Area, containing a total of 6,829 lots (Table 2). There are 17 subdivisions with 1,706 lots remaining available for development.

**Table 2: Existing and Proposed  
Subdivisions, Planning Area, 2007**

<b>Subdivision</b>	<b>Total Units</b>	<b>Units Built</b>	<b>Remaining Units</b>
TANNERS CREEK	535	510	25
APPLEWOOD	56	56	0
GILEAD RIDGE	477	286	191
CARRINGTON RIDGE	444	400	44
BILTMORE PARK	402	322	80
STEPHENS GROVE	349	349	0
NORMAN PARK	326	162	164
ARBORMERE	289	0	289
LATTA SPRINGS	209	209	0
CEDARFIELD	864	864	0
CEDARFIELD PARK	98	98	0
DOUGLAS PARK	81	81	0
HENDERSON PARK	200	200	0
BECKETT	181	0	181
GRIER	239	0	239
STONEGATE FARMS	180	180	0
HAMBRIGHT WOODS	28	28	0
WESTMINSTER PARK	160	160	0
HUNTINGTON GREEN	405	405	0
BARKLEY	150	150	0
NORMAN WOODS	122	27	95
GLENWYCK	81	81	0
NASSAR GORDON	60	0	60
CASHION WOODS	69	69	0
BRASILIA PARK	57	26	31
OAKS AT MCILWAIN	105	0	105
RETREAT AT LATTA PLANTATION	70	70	0
RIVERDALE	123	0	123
HAGERS FERRY	50	50	0
ABERDEEN PARK	27	23	4
TORRENCE VILLAGE	91	91	0
LATTA SPRINGS PH2	26	0	26
VILLAGES AT GILEAD PARK	203	162	41
LATTA SPRINGS PH2	8	0	8
YORKDALE	64	64	0
<b>Total</b>	<b>6,829</b>	<b>5,123</b>	<b>1,706</b>

Source: Town of Huntersville

### 2.1.3 Demographic Forecasts

Based on recent growth trends and the availability of developable single family lots, the Planning Area is forecasted to add 1,617 households between 2007 and 2012 (Table 3). Most of these households would be accommodated on the 1,706 entitled undeveloped lots. These households are projected to contain a total of 4,189 residents.

**Table 3: Demographic Forecasts, Planning Area, 2007-2012**

	2007	2012	2007-2012 Change	
			Number	Percent
Population	8,666	12,855	4,189	48.3%
Households	3,346	4,963	1,617	48.3%

Source: Town of Huntersville, ESRI

Growth is forecasted to slow significantly between 2012 and 2017, with only 830 households added (Table 4). The 16.7% rate of increase is well below 48.3% forecasted for 2007 to 2012. The declining growth rate is attributable to the Planning Area build-out of 2,447 additional lots, including the 1,706 currently entitled developable lots. The 830 new households would contain a total of 2,150 people. By 2017, the Planning Area is expected to contain 15,005 residents in 5,793 households.

**Table 4: Demographic Forecasts, Planning Area, 2012-2017**

	2012	2017	2012-2017 Change	
			Number	Percent
Population	12,855	15,005	2,150	16.7%
Households	4,963	5,793	830	16.7%

Sources: Town of Huntersville, Kimley-Horn, and Warren & Associates

According to the Environmental Systems Research Institute (ESRI), a national demographic service, Planning Area households currently earn an average of \$104,191 per year. This income is expected to increase 19.5% to \$124,508 annually by 2012.

**Table 5: Average Household Income Forecasts, Planning Area, 2007-2012**

2007	2012	2007-2012 Change	
		Number	Percent
\$104,191	\$124,508	\$20,317	19.5%

Source: ESRI

Based on continued strong income growth, Planning Area households could earn an average of \$148,808 annually by 2017. This would represent a 19.5% increase, comparable to the previous five-year period (Table 6).

**Table 6: Average Household Income Forecasts, Planning Area, 2012-2017**

2012	2017	2012-2017 Change	
		Number	Percent
\$124,508	\$148,808	\$24,300	19.5%

Source: ESRI, Warren & Associates

Total household income is the product of the household and average income forecasts. The Planning Area total household income is forecasted to increase 77.3% from \$348.6 million in 2007 to \$618 million in 2012 (Table 7).

**Table 7: Total Household Income  
Forecasts, Planning Area, 2007-2012**

2007	2012	2007-2012 Change	
		Number	Percent
\$348,623,086	\$617,989,322	\$269,366,236	77.3%

Sources: ESRI, Warren & Associates

By 2017, the Planning Area could have total household income of \$862.1 million, a 39.5% increase from 2007 (Table 8).

**Table 8: Total Household Income  
Forecasts, Planning Area, 2012-2017**

2012	2017	2012-2017 Change	
		Number	Percent
\$617,989,322	\$862,111,814	\$244,122,492	39.5%

Sources: ESRI, Warren & Associates

#### 2.1.4 Retail Demand Forecasts

Based on the convenience and shoppers goods categories included in Table 9, the Planning Area supports a total of approximately 376,000 square feet of retail space. This space is distributed throughout Mecklenburg and adjacent counties.

**Table 9: Retail Expenditure Potential, Planning Area, 2007**

Category	% of HH Income	Planning Area	Sales	Potential
		Expenditure Potential	Per Sq. Ft.	Retail Sq. Ft.
Supermarkets & Bakeries	7.1%	\$24,653,809	\$400	61,635
Food & Drink Places	5.4%	\$18,932,223	\$325	58,253
Hardware/Home Improvement	3.9%	\$13,596,300	\$480	28,326
Furniture and Appliances	2.7%	\$9,306,540	\$300	31,022
Pharmacies	2.5%	\$8,753,885	\$515	16,998
Office Machine and Supply	2.0%	\$6,833,078	\$275	24,848
Clothing Stores	1.3%	\$4,553,447	\$275	16,558
Book Stores and News	0.5%	\$1,896,350	\$230	8,245
Sporting Goods and Toys	0.5%	\$1,710,205	\$250	6,841
Pet and Hobby	0.3%	\$1,149,718	\$200	5,749
Jewelry	0.3%	\$1,055,657	\$325	3,248
Florists and Nurseries	0.3%	\$1,028,941	\$180	5,716
Shoe Stores	0.2%	\$870,296	\$260	3,347
Paint, Wallpaper, and Glass	0.2%	\$780,396	\$300	2,601
Beauty and Barber	0.2%	\$649,308	\$230	2,823
Laundries and Dry Cleaners	0.2%	\$614,864	\$150	4,099
Gift and Novelty	0.2%	\$587,258	\$180	3,263
Automotive Supplies	0.7%	\$2,577,299	\$250	10,309
Department Stores	1.2%	\$4,251,848	\$190	22,378
Discount Stores	3.7%	\$13,013,644	\$250	52,055
Variety Stores	0.4%	\$1,367,476	\$250	5,470
Photographers, Artists	0.2%	\$693,709	\$275	2,523
<b>Total</b>	<b>34.1%</b>	<b>\$118,876,251</b>	<b>\$316</b>	<b>376,305</b>

Sources: N.C. Dept of Revenue, Town of Huntersville, Warren & Associates.

By 2012, Planning Area households could support approximately 575,000 square feet of retail space (Table 10). Again, this spending would occur over a broad geography for a mix of convenience and shoppers goods.

**Table 10: Retail Expenditure Potential, Planning Area, 2012**

<b>Category</b>	<b>% of HH Income</b>	<b>Planning Area Expenditure Potential</b>	<b>Sales Per Sq. Ft.</b>	<b>Potential Retail Sq. Ft.</b>
Supermarkets & Bakeries	7.1%	\$43,702,758	\$464	94,246
Food & Drink Places	5.4%	\$33,560,347	\$377	89,075
Hardware/Home Improvement	3.9%	\$24,101,584	\$556	43,313
Furniture and Appliances	2.7%	\$16,497,308	\$348	47,436
Pharmacies	2.5%	\$15,517,640	\$597	25,992
Office Machine and Supply	2.0%	\$12,112,707	\$319	37,995
Clothing Stores	1.3%	\$8,071,701	\$319	25,319
Book Stores and News	0.5%	\$3,361,579	\$267	12,608
Sporting Goods and Toys	0.5%	\$3,031,608	\$290	10,460
Pet and Hobby	0.3%	\$2,038,057	\$232	8,790
Jewelry	0.3%	\$1,871,319	\$377	4,967
Florists and Nurseries	0.3%	\$1,823,961	\$209	8,741
Shoe Stores	0.2%	\$1,542,737	\$301	5,118
Paint, Wallpaper, and Glass	0.2%	\$1,383,374	\$348	3,978
Beauty and Barber	0.2%	\$1,151,000	\$267	4,317
Laundries and Dry Cleaners	0.2%	\$1,089,943	\$174	6,268
Gift and Novelty	0.2%	\$1,041,007	\$209	4,989
Automotive Supplies	0.7%	\$4,568,668	\$290	15,764
Department Stores	1.2%	\$7,537,070	\$220	34,219
Discount Stores	3.7%	\$23,068,733	\$290	79,597
Variety Stores	0.4%	\$2,424,067	\$290	8,364
Photographers, Artists	0.2%	\$1,229,708	\$319	3,857
<b>Total</b>	<b>34.1%</b>	<b>\$210,726,876</b>	<b>\$366</b>	<b>575,412</b>

Sources: N.C. Dept of Revenue, Town of Huntersville, Warren & Associates.

By 2017, the retail spending potential of Planning Area households could reach a level to support an estimated 711,000 square feet (Table 11). Given the likely increase in the retail space inventory over the next ten years, a significant share of the Planning Area's sales would be captured in north Mecklenburg centers in 2017.



**Table 11: Retail Expenditure Potential, Planning Area, 2017**

<b>Category</b>	<b>% of HH Income</b>	<b>Planning Area Expenditure Potential</b>	<b>Sales Per Sq. Ft.</b>	<b>Potential Retail Sq. Ft.</b>
Supermarkets & Bakeries	7.1%	\$60,966,529	\$538	113,412
Food & Drink Places	5.4%	\$46,817,592	\$437	107,190
Hardware/Home Improvement	5.4%	\$46,472,040	\$645	72,041
Furniture and Appliances	2.7%	\$23,014,191	\$403	57,082
Pharmacies	2.5%	\$21,647,528	\$692	31,277
Office Machine and Supply	2.0%	\$16,897,554	\$370	45,721
Clothing Stores	1.3%	\$11,260,241	\$370	30,468
Book Stores and News	0.5%	\$4,689,494	\$309	15,171
Sporting Goods and Toys	0.5%	\$4,229,175	\$336	12,588
Pet and Hobby	0.3%	\$2,843,144	\$269	10,578
Jewelry	0.3%	\$2,610,541	\$437	5,977
Florists and Nurseries	0.3%	\$2,544,475	\$242	10,518
Shoe Stores	0.2%	\$2,152,160	\$349	6,159
Paint, Wallpaper, and Glass	0.2%	\$1,724,224	\$403	4,277
Beauty and Barber	0.2%	\$1,605,676	\$309	5,195
Laundries and Dry Cleaners	0.2%	\$1,520,500	\$202	7,543
Gift and Novelty	0.2%	\$1,452,233	\$242	6,003
Automotive Supplies	0.7%	\$6,373,416	\$336	18,970
Department Stores	1.2%	\$10,514,416	\$255	41,177
Discount Stores	3.7%	\$32,181,506	\$336	95,784
Variety Stores	0.4%	\$3,381,639	\$336	10,065
Photographers, Artists	0.2%	\$1,715,475	\$370	4,642
<b>Total</b>	<b>35.6%</b>	<b>\$306,613,749</b>	<b>\$431</b>	<b>711,838</b>

Sources: N.C. Dept of Revenue, Town of Huntersville, Warren & Associates.

## 2.2 Beatties Ford Road/Hambright Road Trade Area

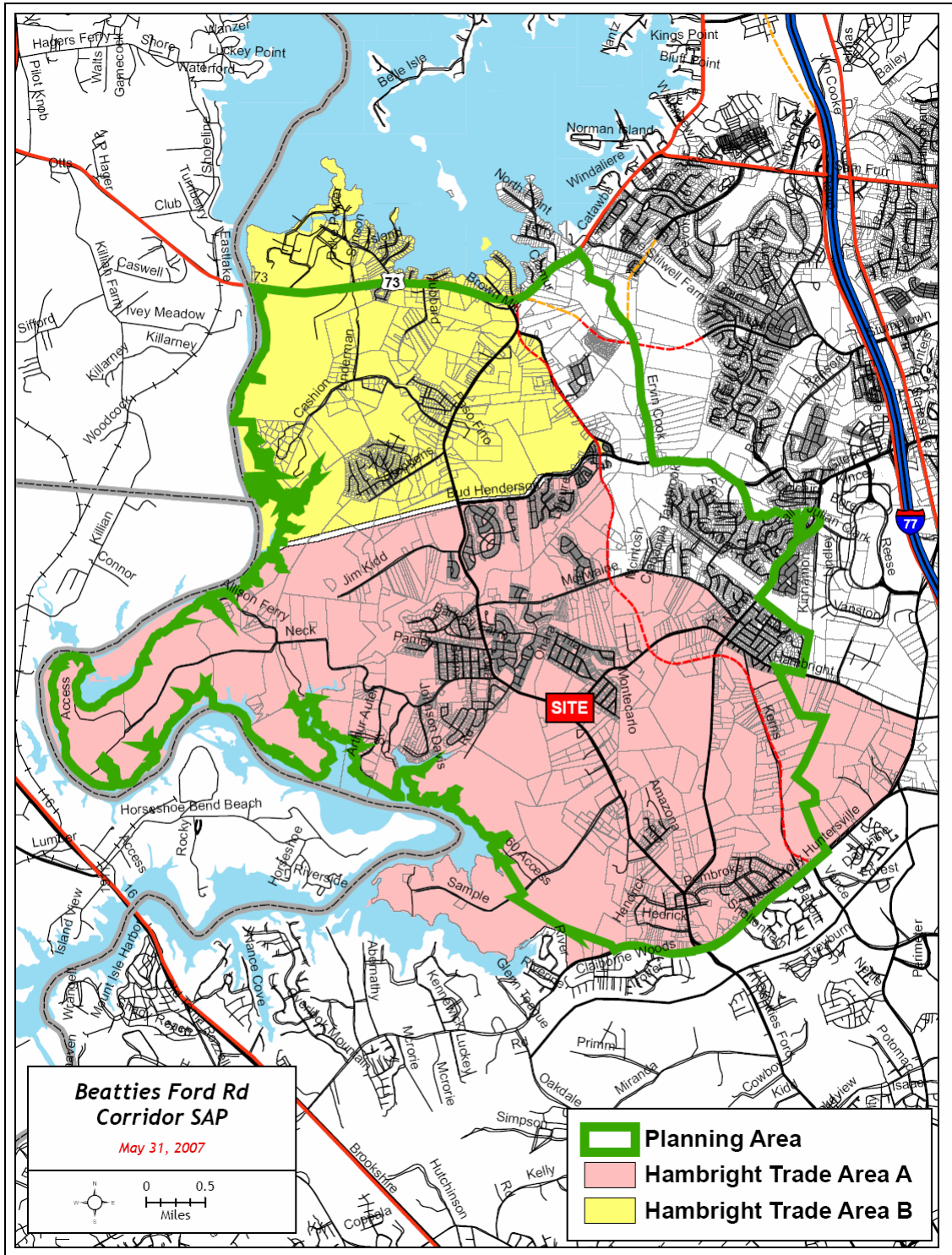
The Beatties Ford Road/Hambright Road intersection (Hambright site) is approximately 2.5 miles north of Mt. Holly/Huntersville Road and 3.5 miles south of NC-73. A site in the northeast quadrant of this intersection was recently approved for the Latta Village retail center totaling 99,800 square feet.

As shown on Map 2, the overall trade area for the Hambright site includes all of the Planning Area, but also extends east to Hambright Road and north to Lake Norman. Trade Area A, defined as north of Mt. Holly/Huntersville Road and south of Bud Henderson Road, would generate a majority of sales. Trade Area B is bounded by Bud Henderson Road on the south and Lake Norman on the north.

### 2.2.1 Household Trends

The Hambright site trade area has an estimated 3,524 households, representing a 166% increase from 1,325 households in 2000 (Table 12). The smaller Trade Area B added fewer households, but grew at a faster rate. As a result, Trade Area A's share of the composite households fell slightly from 82% to 78%.

**Map 2: Beatties Ford/Hambright Roads Site Trade Areas**



**Table 12: Household Trends,  
Beatties Ford Road/Hambright Road Trade Area, 2000-2007**

Trade Area	2000	2007	2000-2007 Change	
			Number	Percent
A	1,084	2,731	1,647	151.9%
B	241	793	552	229.0%
<b>Total</b>	<b>1,325</b>	<b>3,524</b>	<b>2,199</b>	<b>166.0%</b>

Source: ESRI, Town of Huntersville

### 2.2.2 Residential Development Activity

A total of 1,095 housing units remain undeveloped in 14 Hambright trade area subdivisions (Table 13). Trade Area A has 623 undeveloped lots in 11 subdivisions, while Trade Area B has 472 available lots in three subdivisions.

**Table 13: Existing and Proposed  
Subdivisions, Hambright Trade Area, 2007**

Subdivision	Total Units	Units Built	Units To Be Built
TANNERS CREEK	535	510	25
CARRINGTON RIDGE	444	400	44
BILTMORE PARK	402	322	80
NORMAN PARK	326	162	164
LATTA SPRINGS	209	209	0
DOUGLAS PARK	81	81	0
HENDERSON PARK	200	200	0
STONEGATE FARMS	180	180	0
WESTMINSTER PARK	160	160	0
BARKLEY	150	150	0
NORMAN WOODS	122	27	95
GLENWYCK	81	81	0
BRASILIA PARK	57	26	31
OAKS AT MCILWAINE	105	0	105
RETREAT AT LATTA PLANTATION	70	70	0
ABERDEEN PARK	27	23	4
LATTA SPRINGS PH2	26	0	26
VILLAGES AT GILEAD PARK	203	162	41
LATTA SPRINGS PH2	8	0	8
<b>Subtotal Trade Area A</b>	<b>3,386</b>	<b>2,763</b>	<b>623</b>
BAY SHORES	20	20	0
STEPHENS GROVE	349	349	0
ARBORMERE	289	0	289
NASSAR GORDON	60	0	60
CASHION WOODS	69	69	0
RIVERDALE	123	0	123
HAGERS FERRY	50	50	0
TWIN COVES	32	32	0
<b>Subtotal Trade Area B</b>	<b>992</b>	<b>520</b>	<b>472</b>
<b>Total</b>	<b>4,378</b>	<b>3,283</b>	<b>1,095</b>

Source: Town of Huntersville

### 2.2.3 Demographic Forecasts

Based on current and proposed subdivision activity, and additional lot development, the Hambright trade area is forecasted to contain 4,591 households by 2012 (Table 15). This would represent an increase of 1,067 households, or 30.3%, from 3,524 households today. Similar to the 2000-2007 trends, Trade Area B should add fewer households, but its growth rate of 56.2% is more than double the 22.7% increase for Trade Area A.

**Table 15: Household Forecasts,  
Hambright Trade Area, 2007-2012**

Trade Area	2007	2012	2007-2012 Change	
			Number	Percent
A	2,731	3,352	621	22.7%
B	793	1,239	446	56.2%
<b>Total</b>	<b>3,524</b>	<b>4,591</b>	<b>1,067</b>	<b>30.3%</b>

Source: ESRI, Town of Huntersville, Warren & Associates

The Trade Area growth rate is likely to decrease after 2012, due to a diminishing supply of developable lots. In fact, both trade areas are forecasted to build-out by 2017 under current zoning, with a total of 5,220 households (Table 16). The 629-household increase between 2012 and 2017 would represent a 13.7% growth rate.

**Table 16: Household Forecasts,  
Hambright Trade Area, 2012-2017**

Trade Area	2012	2017	2012-2017 Change	
			Number	Percent
A	3,352	3,695	343	10.2%
B	1,239	1,525	286	23.1%
<b>Total</b>	<b>4,591</b>	<b>5,220</b>	<b>629</b>	<b>13.7%</b>

Source: Town of Huntersville, Warren & Associates

According to ESRI, Hambright Trade Area A households could earn an average of \$123,643 annually by 2012, up 20.8% from \$102,327 in 2007 (Table 17). The Trade Area B average income would increase 14.6% from \$102,210 to \$117,175.

**Table 17: Average Household Income Forecasts,  
Hambright Trade Area, 2007-2012**

Trade Area	2007	2012	2007-2012 Change	
			Number	Percent
A	\$102,327	\$123,643	\$21,316	20.8%
B	\$102,210	\$117,175	\$14,965	14.6%

Source: ESRI

Using the same annual increase as 2007-2012, the average household income in Hambright Trade Area A could reach \$149,343 in 2017 (Table 18). Similarly, the Trade Area B average household income would increase to \$134,275.

**Table 18: Average Household Income Forecasts, Hambright Trade Area, 2012-2017**

Trade Area	2012	2017	2012-2017 Change	
			Number	Percent
A	\$123,643	\$149,343	\$25,700	20.8%
B	\$117,175	\$134,275	\$17,100	14.6%

Source: ESRI, Warren & Associates

Total household income is the basis for calculating spending potential. It is the product of households and average household income. The total household income forecasts for 2012 are \$414.5 million for Trade Area A and \$145.1 for Trade Area B (Table 19).

**Table 19: Total Household Income Forecasts, Hambright Trade Area, 2007-2012**

Trade Area	2007	2012	2007-2012 Change	
			Number	Percent
A	\$279,455,037	\$414,461,095	\$135,006,058	48.3%
B	\$81,052,530	\$145,144,003	\$64,091,473	79.1%

Source: ESRI

By 2017, total household income in Trade Area A could reach \$551.8 million, a 33.1% increase from 2012 (Table 20). Trade Area B could post a slightly stronger growth rate of 41.1% to \$204.7 million.

**Table 20: Total Household Income Forecasts, Hambright Trade Area, 2012-2017**

Trade Area	2012	2017	2012-2017 Change	
			Number	Percent
A	\$414,461,095	\$551,834,172	\$137,373,077	33.1%
B	\$145,144,003	\$204,728,325	\$59,584,322	41.1%

Source: ESRI, Warren & Associates

**2.2.4 Existing and Proposed Retail Supply**

There are no retail centers within the Hambright trade area. As shown on Map 3, the closest supermarkets are as follows:

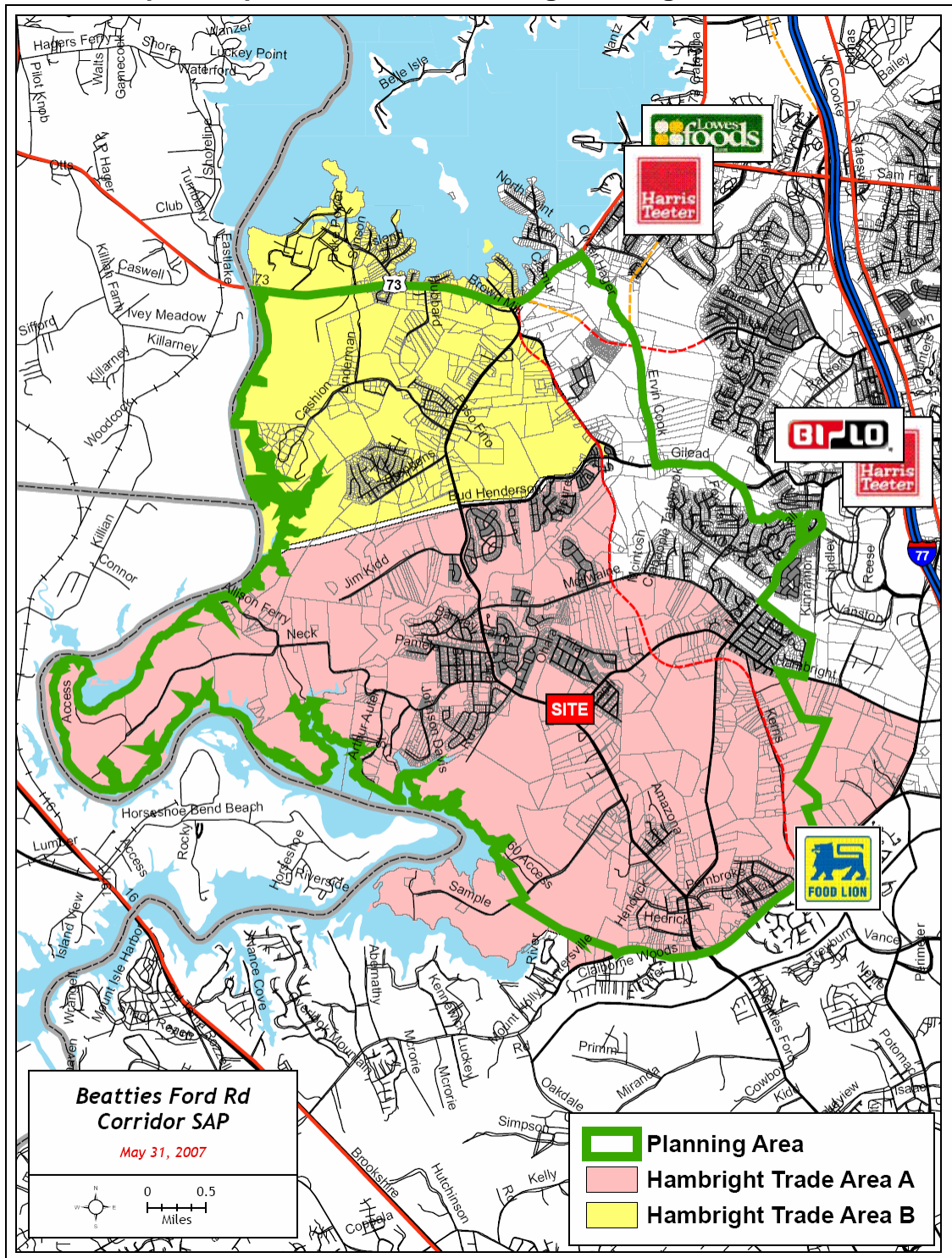
**Trade Area A**

- **Harris Teeter** at Rosedale at Gilead Road and I-77
- **Bi-Lo** at Market Square at Gilead Road and Reese Boulevard
- **Food Lion** at Harris Boulevard and Mt. Holly-Huntersville Road

**Trade Area B**

- **Harris Teeter** at Regency Square at NC-73 and W. Catawba Avenue
- **Lowe’s Foods** at Kenton Place at NC-73 and W. Catawba Avenue

**Map 3: Supermarkets Surrounding Hambright Trade Areas**



There are two planned retail centers in Trade Area A, totaling 131,800 square feet (Table 14 and Map 3). Latta Village is approved for 99,800 square feet, including a 55,600-square foot Harris Teeter supermarket, in the northeast quadrant of Beatties Ford and Hambright roads. Holly Crossing would contain 32,000 square feet of unanchored space in the northwest quadrant of Beatties Ford and Mt. Holly-Huntersville roads.

**Table 14: Proposed Retail Centers,  
Hambright Trade Area, 2007**

Center	Intersection	Square	
		Feet	Anchor
Latta Village	Hambright Road	99,800	Harris-Teeter
Holly Crossing	Mt. Holly-Huntersville Road	32,000	None
<b>Total</b>		<b>131,800</b>	

Sources: Town of Huntersville and Signature Development.

### 2.2.5 Retail Demand Forecasts

Based on household income expenditure shares, site capture rates, inflow factors, and industry average sales per square foot, the supportable retail space at the Beatties Ford Road/Hambright Road intersection is shown in Table 21. It should be noted that the total square feet would not be achievable, with several categories not large enough to support a minimum size store. Examples would include office machine and supply, and sporting goods and toys. Other categories could be combined, such as clothing and shoes.

**Table 21: Potential Retail Square Feet,  
Hambright Road Site, 2007-2017**

Category	Potential Site Sq. Ft.		
	2007	2012	2017
Supermarkets & Bakeries	31,214	41,275	47,938
Food & Drink Places	9,287	12,281	14,264
Hardware/Home Improvement	5,434	7,079	8,181
Furniture and Appliances	2,997	3,935	4,560
Pharmacies	7,342	9,639	11,169
Office Machine and Supply	2,401	3,152	3,652
Clothing Stores	1,600	2,100	2,434
Automotive Supply	2,125	2,846	3,318
Book Stores and News	1,261	1,656	1,919
Sporting Goods and Toys	661	868	1,005
Pet and Hobby	833	1,094	1,267
Jewelry	314	412	477
Florists and Nurseries	1,457	1,914	2,217
Shoe Stores	323	425	492
Paint, Wallpaper, and Glass	377	495	574
Beauty and Barber	629	830	964
Laundries and Dry Cleaners	941	1,235	1,431
Gift and Novelty	630	828	959
<b>Total</b>	<b>69,827</b>	<b>92,063</b>	<b>106,821</b>

Sources: N.C. Dept of Revenue, Town of Huntersville, Warren & Associates.

In 2007, the intersection could support 69,827 square feet. The largest component is supermarkets and bakeries at 31,214 square feet, representing approximately 45% of the total demand.

**2.3 Beatties Ford Road/NC-73 Trade Area**

The Beatties Ford Road/NC-73 intersection (NC-73 site) is on the northern boundary of the Planning Area. A site in the southeast quadrant of this intersection is being considered for a supermarket-anchored retail center.

As shown on Map 4, the overall trade area for the NC-73 site extends south to Hambright Road, east to the proposed Vance Road extension and Ervin Cook Road, north to Lake Norman, and west to the Catawba River. Trade Area A, defined as north of McDowell Creek and south of Lake Norman, would generate a majority of sales. Trade Area B is bounded by McDowell Creek on the north and Hambright Road on the south.

The NC-73 site has a slightly smaller trade area than Hambright since it has more direct competition at the NC-73/W. Catawba Avenue intersection. In addition, shoppers residing south of Hambright Road will be intercepted by centers closer to I-77 or I-485 for purchasing neighborhood and convenience goods. Due to predominant commuting patterns, they are unlikely to travel north for neighborhood and convenience services. In spite of its smaller trade area, the NC-73 site is well-positioned to capture greater sales inflow from residents outside the trade area, especially to the west in Lincoln County.

**2.3.1 Household Trends**

Based on estimates from ESRI and residential development activity provided by the Town of Huntersville, the NC-73 Trade Area contains an estimated 3,315 households (Table 22). This represents a 243% increase from 966 households in 2000. Although the larger Trade Area A added more households (1,355), Trade Area B’s growth rate was higher (273.8%).

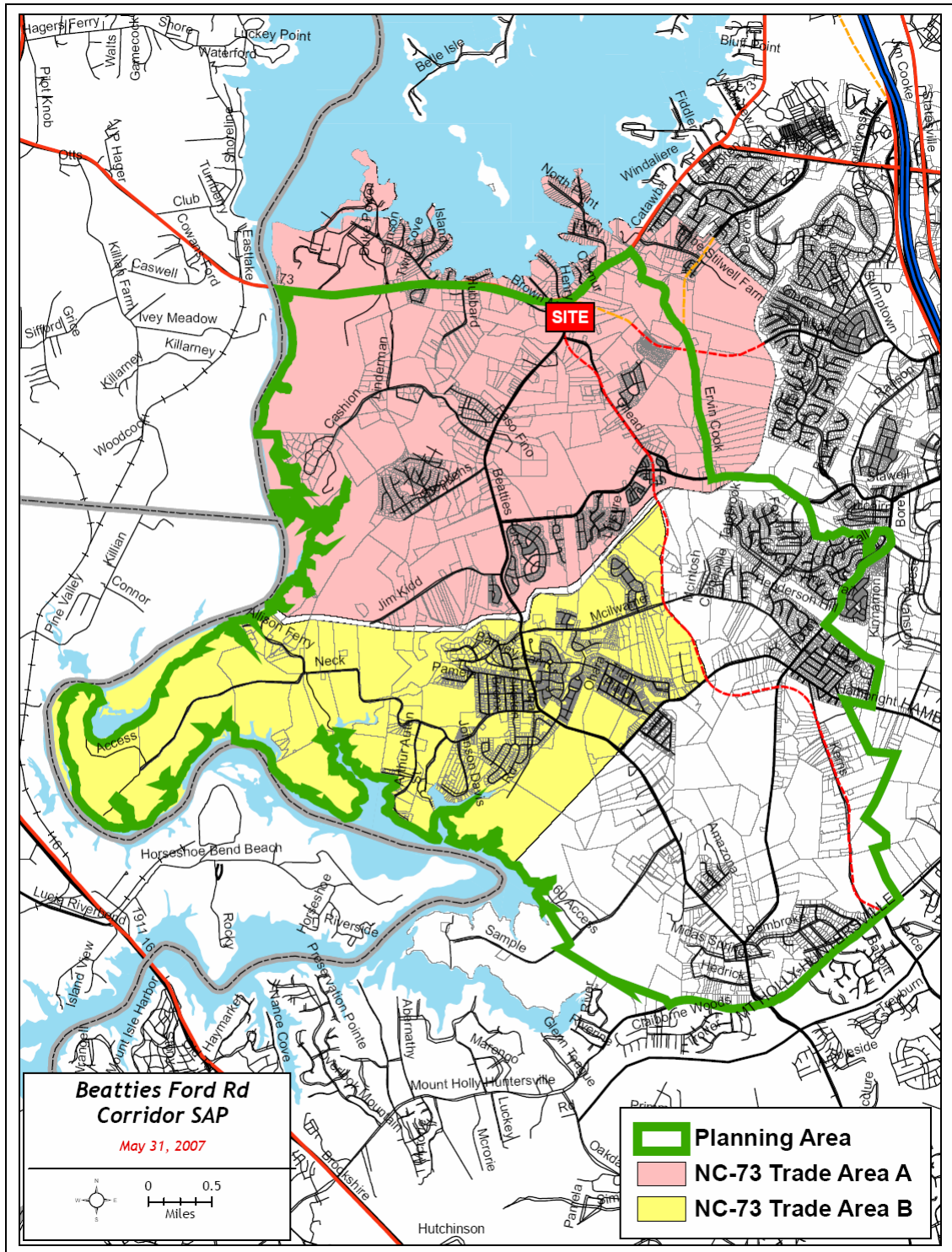
**Table 22: Household Trends,  
NC-73 Trade Area, 2000-2007**

Trade Area	2000-2007 Change			
	2000	2007	Number	Percent
A	603	1,958	1,355	224.7%
B	363	1,357	994	273.8%
<b>Total</b>	<b>966</b>	<b>3,315</b>	<b>2,349</b>	<b>243.2%</b>

Source: Town of Huntersville, ESRI



**Map 4: Beatties Ford/NC-73 Site Trade Areas**



### 2.3.2 Residential Development Activity

Based on information provided by the Town of Huntersville, there are 26 existing or proposed subdivisions in the NC-73 Trade Area, which will contain a total of 4,697 lots at build-out (Table 23). Twelve subdivisions are fully developed, with the remaining 14 having a total of 1,341 available lots. Trade Area A has 929 developable lots, or 69% of the total, and Trade Area B has the balance of 412 lots.

**Table 23: Existing and Proposed Subdivisions, NC-73 Trade Areas, 2007**

<b>Subdivision</b>	<b>Total Units</b>	<b>Units Built</b>	<b>Units To Be Built</b>
GILEAD RIDGE	477	286	191
CARRINGTON RIDGE	444	400	44
BAY SHORES	20	20	0
STEPHENS GROVE	349	349	0
ARBORMERE	289	0	289
DOUGLAS PARK	81	81	0
HENDERSON PARK	200	200	0
BECKETT	181	0	181
GLENWYCK	81	81	0
LOOKOUT POINT	70	70	0
NASSAR GORDON	60	0	60
CASHION WOODS	69	69	0
RIVERDALE	123	0	123
HAGERS FERRY	50	50	0
TWIN COVES	32	32	0
VILLAGES AT GILEAD PARK	203	162	41
<b>Subtotal Trade Area A</b>	<b>2,729</b>	<b>1,800</b>	<b>929</b>
TANNERS CREEK	535	510	25
BILTMORE PARK	402	322	80
NORMAN PARK	326	162	164
LATTA SPRINGS	209	209	0
STONEGATE FARMS	180	180	0
BARKLEY	150	150	0
OAKS AT MCILWAINE	105	0	105
ABERDEEN PARK	27	23	4
LATTA SPRINGS PH2	26	0	26
LATTA SPRINGS PH2	8	0	8
<b>Subtotal Trade Area B</b>	<b>1,968</b>	<b>1,556</b>	<b>412</b>
<b>Total</b>	<b>4,697</b>	<b>3,356</b>	<b>1,341</b>

Source: Town of Huntersville

### 2.3.3 Demographic Forecasts

Based on the available subdivision lots and recent absorption trends, the NC-73 Trade Area is forecasted to reach 4,609 households by 2012, a 39% increase (Table 24). Trade Area A would add 887 households for a 45.3% growth rate. The more rural Trade Area B would increase by 407 households, or 30%.

**Table 24: Household Forecasts,  
NC-73 Trade Area, 2007-2012**

Trade Area	2007-2012 Change			
	2007	2012	Number	Percent
A	1,958	2,845	887	45.3%
B	1,357	1,764	407	30.0%
<b>Total</b>	<b>3,315</b>	<b>4,609</b>	<b>1,294</b>	<b>39.0%</b>

Source: ESRI, Town of Huntersville, Warren & Assoc.

Similar to the Hambright Trade Area, the NC-73 Trade Area is likely to build-out prior to 2017, based on current zoning and recent lot absorption trends. As a result, the 2012-2017 household growth rate of 13.9% is significantly lower than 39% between 2007 and 2012 (Table 25). A total of 642 new households are expected between 2012 and 2017. Trade Area A's 437 new households would represent a 15.4% growth rate, while Trade Area B's 205 new households would represent an 11.6% growth rate.

**Table 25: Household Forecasts,  
NC-73 Trade Area, 2012-2017**

Trade Area	2012-2017 Change			
	2012	2017	Number	Percent
A	2,845	3,282	437	15.4%
B	1,764	1,969	205	11.6%
<b>Total</b>	<b>4,609</b>	<b>5,251</b>	<b>642</b>	<b>13.9%</b>

Source: Town of Huntersville, Warren & Assoc.

Based on information from ESRI, average household incomes in the NC-73 Trade Area are expected to increase 18.1% to 18.6% between 2007 and 2012 (Table 26). At those rates, the average household incomes in 2012 would be \$134,160 in Trade Area A and \$114,750 in Trade Area B. Lake Norman water frontage would continue to keep Trade Area A slightly more affluent.

**Table 26: Average Household Income  
Forecasts, NC-73 Trade Area, 2007-2012**

Trade Area	2007-2012 Change			
	2007	2012	Number	Percent
A	\$113,575	\$134,160	\$20,585	18.1%
B	\$96,735	\$114,750	\$18,015	18.6%

Source: ESRI

As shown in Table 27, average household incomes would increase to \$158,410 in Trade Area A and \$136,150 in Trade Area B by 2017. These forecasts assume a continuation of 2007-2012 growth rates.

**Table 27: Average Household Income Forecasts,  
NC-73 Trade Areas, 2012-2017**

Trade Area	2012-2017 Change			
	2012	2017	Number	Percent
A	\$134,160	\$158,410	\$24,250	18.1%
B	\$114,750	\$136,150	\$21,400	18.6%

Source: ESRI, Warren & Associates

Total household income for the NC-73 Trade Area is forecasted to reach \$584 million by 2012, a 65% increase from \$353.5 million in 2007 (Table 28). Trade Area A's faster household growth rate and higher average income would boost total household income 71.6% to \$381.7 million. Trade Area B would increase 54.2% to \$202.5 million.

**Table 28: Total Household Income Forecasts,  
NC-73 Trade Area, 2007-2012**

Trade Area	2007	2012	2007-2012 Change	
			Number	Percent
A	\$222,379,850	\$381,660,428	\$159,280,578	71.6%
B	\$131,269,395	\$202,456,868	\$71,187,473	54.2%

Source: ESRI

By 2017, Trade Area A could have a total household income of \$519.9 million, up 36.2% from \$381.2 million in 2012. The Trade Area B total household income would be approximately 50% lower at \$268.1 million.

**Table 29: Total Household Income Forecasts,  
NC-73 Trade Area, 2012-2017**

Trade Area	2012	2017	2012-2017 Change	
			Number	Percent
A	\$381,660,428	\$519,872,371	\$138,211,942	36.2%
B	\$202,456,868	\$268,124,280	\$65,667,412	32.4%

Source: ESRI, Warren & Associates

### 2.3.4 Existing and Proposed Retail Supply

Similar to the Hambright site, there are no existing retail centers in the NC-73 Trade Area. This increases the potential to capture spending by Trade Area residents at the NC-73 site. As shown on Map 5, the closest supermarkets are as follows:

#### Trade Area A

- **Harris Teeter** at Regency Square at NC-73 and W. Catawba Avenue
- **Lowe's Foods** at Kenton Place at NC-73 and W. Catawba Avenue

#### Trade Area B

- **Harris Teeter** at Rosedale at Gilead Road and I-77
- **Bi-Lo** at Market Square at Gilead Road and Reese Boulevard
- **Food Lion** at Harris Boulevard and Mt. Holly-Huntersville Road

Property owners at the NC-73 intersection have been negotiating with a supermarket chain to anchor a neighborhood center. However, no definitive rezoning or site plans have been submitted to the Town of Huntersville.



### 2.3.5 Retail Demand Forecasts – Without Hambright Road Center

If no retail center is constructed at the Beatties Ford Road/Hambright Road intersection, the NC-73 site could currently support an estimated 67,423 square feet, including an approximate 33,000-square foot supermarket (Table 30). Restaurants have strong demand of 8,630 square feet. As noted for the Hambright site, the total square footage would not be achievable as demand for some categories would not be adequate to support a minimum store size.

**Table 30: Potential Retail Square Feet  
Without Hambright Road Center, NC-73 Site, 2007-2017**

Category	Potential Site Sq. Ft.		
	2007	2012	2017
Supermarkets & Bakeries	32,872	47,273	55,143
Food & Drink Places	8,630	12,411	14,477
Hardware/Home Improvement	3,405	4,924	5,752
Furniture and Appliances	2,698	3,902	4,558
Pharmacies	7,707	11,067	12,905
Office Machine and Supply	2,161	3,125	3,651
Clothing Stores	1,440	2,083	2,433
Automotive Supply	2,085	2,970	3,456
Book Stores and News	1,076	1,555	1,817
Sporting Goods and Toys	595	860	1,005
Pet and Hobby	750	1,085	1,267
Jewelry	282	409	477
Florists and Nurseries	1,186	1,722	2,014
Shoe Stores	291	421	492
Paint, Wallpaper, and Glass	339	491	573
Beauty and Barber	586	850	994
Laundries and Dry Cleaners	753	1,088	1,271
Gift and Novelty	567	821	959
<b>Total</b>	<b>67,423</b>	<b>97,057</b>	<b>113,243</b>

Sources: N.C. Dept of Revenue, Town of Huntersville, Warren & Associates.

By 2012, the site could support 97,057 square feet. Supermarket demand of 47,273 square feet would be large enough to attract a regional or national chain. Restaurant demand could grow to 12,411 square feet. Pharmacy demand of 11,067 square feet would also be adequate to support a smaller store prototype.

The 2017 demand would total 108,155 square feet, including a 49,492-square foot supermarket. The supportable amount of restaurant space would reach 14,477 square feet. Pharmacy demand could reach 12,905 square feet.

### 2.3.6 Retail Demand Forecasts – With Hambright Road Center

If the approved Latta Village or a comparable supermarket-anchored center is constructed at the Beatties Ford Road/Hambright Road intersection, it would have a measurable but minor impact on retail sales potential at the NC-73 intersection. Demand from NC-73 Trade Area A residents would remain focused at the NC-73 center, and Trade Area B already has a much lower capture rate. Most of the impact would be

realized in the supermarket and pharmacy categories. The NC-73 site also benefits from significantly higher inflow sales potential than the Hambright site, generated primarily by Lincoln County residents and weekend Lake Norman traffic. This inflow sales factor would not change with a competing center at Hambright Road.

The estimated supportable square footage at NC-73 if a center is constructed at Hambright Road would total 60,793 square feet in 2007, including a 27,157-square foot supermarket (Table 31). The total could increase to 87,843 square feet by 2012. The 39,276 square feet of supermarket demand could support a smaller prototype for a regional or national chain. The 2017 demand could reach 102,591 square feet.

**Table 31: Potential Retail Square Feet  
With Hambright Road Center, NC-73 Site, 2007-2017**

Category	Potential Site Sq. Ft.		
	2007	2012	2017
Supermarkets & Bakeries	27,157	39,276	45,881
Food & Drink Places	8,630	12,411	14,477
Hardware/Home Improvement	3,405	4,924	5,752
Furniture and Appliances	2,698	3,902	4,558
Pharmacies	6,793	9,851	11,515
Office Machine and Supply	2,161	3,125	3,651
Clothing Stores	1,440	2,083	2,433
Automotive Supply	2,085	2,970	3,456
Book Stores and News	1,076	1,555	1,817
Sporting Goods and Toys	595	860	1,005
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Paint, Wallpaper, and Glass	339	491	573
Beauty and Barber	586	850	994
Laundries and Dry Cleaners	753	1,088	1,271
Gift and Novelty	567	821	959
<b>Total</b>	<b>60,793</b>	<b>87,843</b>	<b>102,591</b>

Sources: N.C. Dept of Revenue, Town of Huntersville, Warren & Associates.

It is important to note that the sales potential at the Hambright site would also decrease if two shopping centers were constructed in the Beatties Ford Road corridor, particularly in the supermarket and pharmacy categories. Essentially, residents of NC-73 Trade Area A would likely shift a portion of their spending from Hambright to NC-73.

### 3. Office Market Potential

#### 3.1 Completed Office Space

There are currently ten office developments with 10,000 square feet or more of multi-tenant space west of I-77 in Huntersville. Based on information provided by leasing agents, the ten developments contain a total of 911,427 square feet (Table 32). All of this space is located east of the Beatties Ford Road Planning Area closer to I-77 interchanges.

**Table 32: Completed Multi-Tenant Office Space,  
West of I-77 in Huntersville, June 2007**

<b>Development</b>	<b>Completed Sq. Ft.</b>	<b>Vacant Sq. Ft.</b>	<b>Vacancy Rate</b>
The Park Huntersville	390,117	76,514	19.6%
Kenton Circle	135,166	42,213	31.2%
NorthPointe Executive Park	120,000	6,617	5.5%
Physicians Plaza	104,615	12,000	11.5%
Birkdale Village	54,145	10,000	18.5%
Birkdale Professional Village	45,000	2,500	5.6%
Northcross Corporate Center	43,681	5,000	11.4%
Rosedale Medical Center	39,703	17,500	44.1%
Rosedale Commons	24,000	13,200	55.0%
Rosedale Executive Suites	20,000	4,000	20.0%
<b>Total</b>	<b>976,427</b>	<b>189,544</b>	<b>19.4%</b>

Note: Includes buildings 10,000 square feet or more.

Source: Karnes, Charlotte CPE, Real Index, and Warren & Associates

The Park Huntersville, located in the southwest quadrant of Gilead Road and I-77, comprises 43% of the inventory with 390,117 square feet. Nearly 190,000 square feet, or 19.4%, is currently vacant. Vacancy rates range from 5.6% at Birkdale Professional Village to 55% at Rosedale Commons. Much of the vacancy is concentrated in newer buildings completed over the last 18 months.

The Huntersville office inventory west of I-77 is a subset of the North submarket, which extends from the Northlake Mall area to Davidson. The current North submarket vacancy rate of 15.7% is lower than 19.4% for the Huntersville developments. Again, this is due to a comparatively newer building supply in the Huntersville inventory. A vacancy rate between 10% and 15% is generally considered low enough to justify new construction in a rapidly growing area such as the North submarket.

### 3.2 Planning Area Office Forecast

The North Submarket absorbed an average of 140,500 square feet of office space per year between 2002 and 2007. The same rate has been used to forecast 2007-2012 absorption (Table 33). The Beatties Ford Road Planning Area, which currently has no multi-tenant office space, is forecasted to capture 5% of the demand, or 35,132 square feet. This capture rate is reasonable given the current oversupply in the ten Huntersville developments west of I-77.

**Table 33: Office Net Absorption Forecast, 2007-2012**

<b>Net Absorption</b>	<b>2007- 2012</b>	<b>2012- 2017</b>	<b>2007- 2017</b>
North Submarket	702,640	772,904	1,475,544
-Planning Area	35,132	61,832	96,964
-NC-73 Site (50%)	17,566	30,916	48,482
-Hambright Site (30%)	10,540	18,550	29,089

Source: Warren & Associates



The highly visible and heavily-traveled intersection of NC-73 and Beatties Ford Road is positioned to capture 50% of the Planning Area total over the next five years, equating to 17,566 square feet. The intersection of Hambright and Beatties Ford roads could capture 30%, or 10,540 square feet. The remaining 20%, or 7,026 square feet, would be located elsewhere in the Planning Area.

Between 2012 and 2017, multi-tenant office space absorption in the North submarket could grow to 772,904 square feet, with the Planning Area forecasted to capture 8%, or 61,832 square feet. A total of 30,916 square feet could be located at NC-73/Beatties Ford Road, with another 18,550 square feet at Hambright/Beatties Ford roads.

In total, the Planning Area could support about 97,000 square feet of multi-tenant office space over the next ten years. Almost 50,000 square feet would be located at NC-73/Beatties Ford Road, with nearly 30,000 square feet supportable at Hambright/Beatties Ford roads.

# Maps



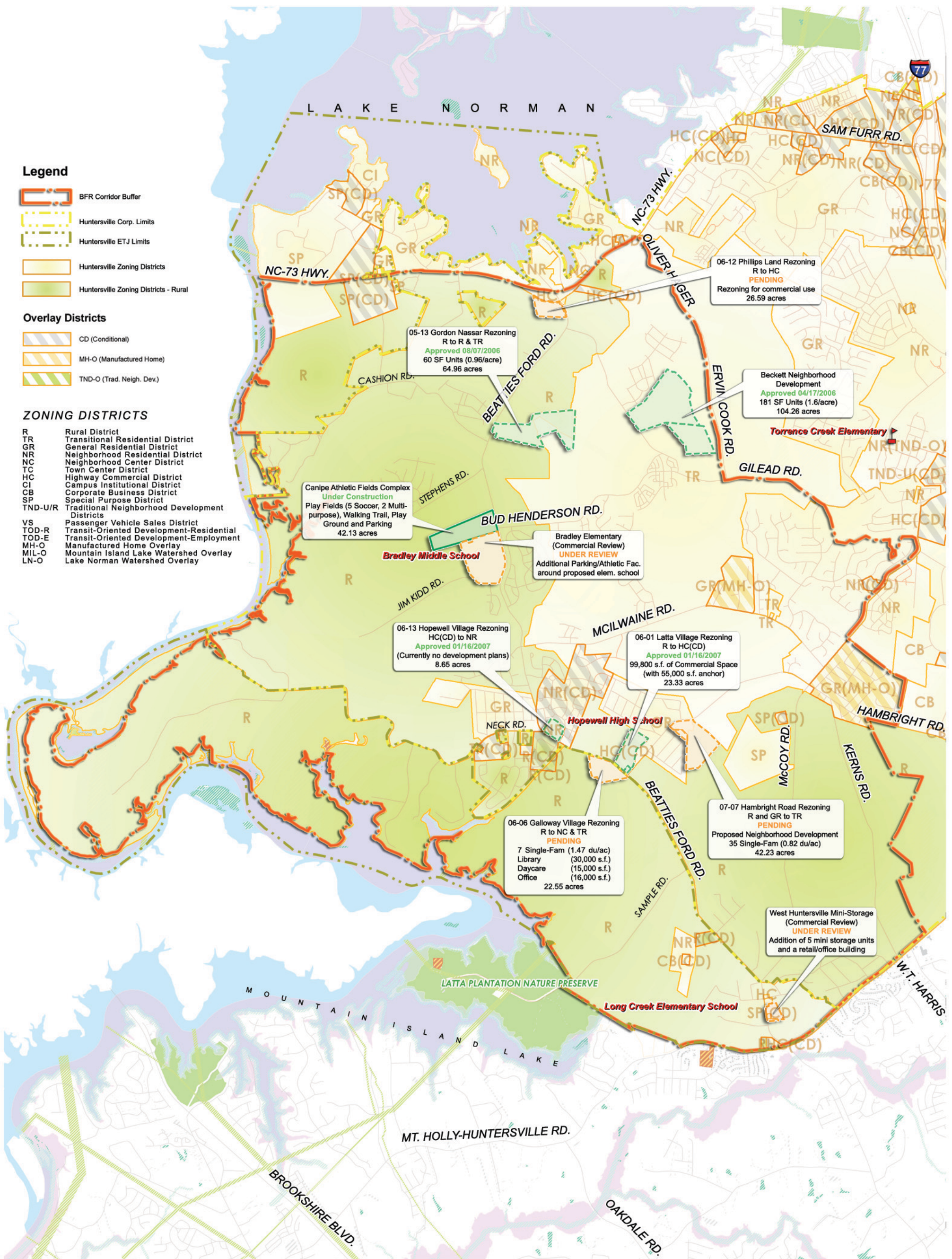
# Appendix B

**Legend**

-  BFR Corridor Buffer
-  Huntersville Corp. Limits
-  Huntersville ETJ Limits
-  Interstates
-  Future I-485
-  Existing Thoroughfares
-  Proposed Thoroughfares (Existing MUMPO Plan - to be revised)
-  Streets
-  Streets Powell Bill 2007
-  SWIM Buffer
-  Wetlands
-  FEMA Floodway
-  Greenway
-  Easement
-  2004 Building Footprint
-  Historic Preservation Area
-  Historic Site
-  Lakes
-  Parcels
-  Parks
-  Utility ROW
-  Water Treatment Plant
-  Wastewater Treatment Plant



**BEATTIES FORD ROAD CORRIDOR SMALL AREA PLAN  
STUDY AREA MAP**



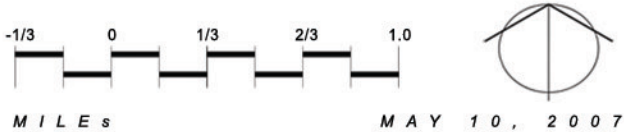
- Legend**
- BFR Corridor Buffer
  - Huntersville Corp. Limits
  - Huntersville ETJ Limits
  - Huntersville Zoning Districts
  - Huntersville Zoning Districts - Rural

- Overlay Districts**
- CD (Conditional)
  - MH-O (Manufactured Home)
  - TND-O (Trad. Neigh. Dev.)























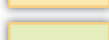
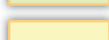



- ZONING DISTRICTS**
- R Rural District
  - TR Transitional Residential District
  - GR General Residential District
  - NR Neighborhood Residential District
  - NC Neighborhood Center District
  - TC Town Center District
  - HC Highway Commercial District
  - CI Campus Institutional District
  - CB Corporate Business District
  - SP Special Purpose District
  - TND-U/R Traditional Neighborhood Development Districts
  - VS Passenger Vehicle Sales District
  - TOD-R Transit-Oriented Development-Residential
  - TOD-E Transit-Oriented Development-Employment
  - MH-O Manufactured Home Overlay
  - MIL-O Mountain Island Lake Watershed Overlay
  - LN-O Lake Norman Watershed Overlay

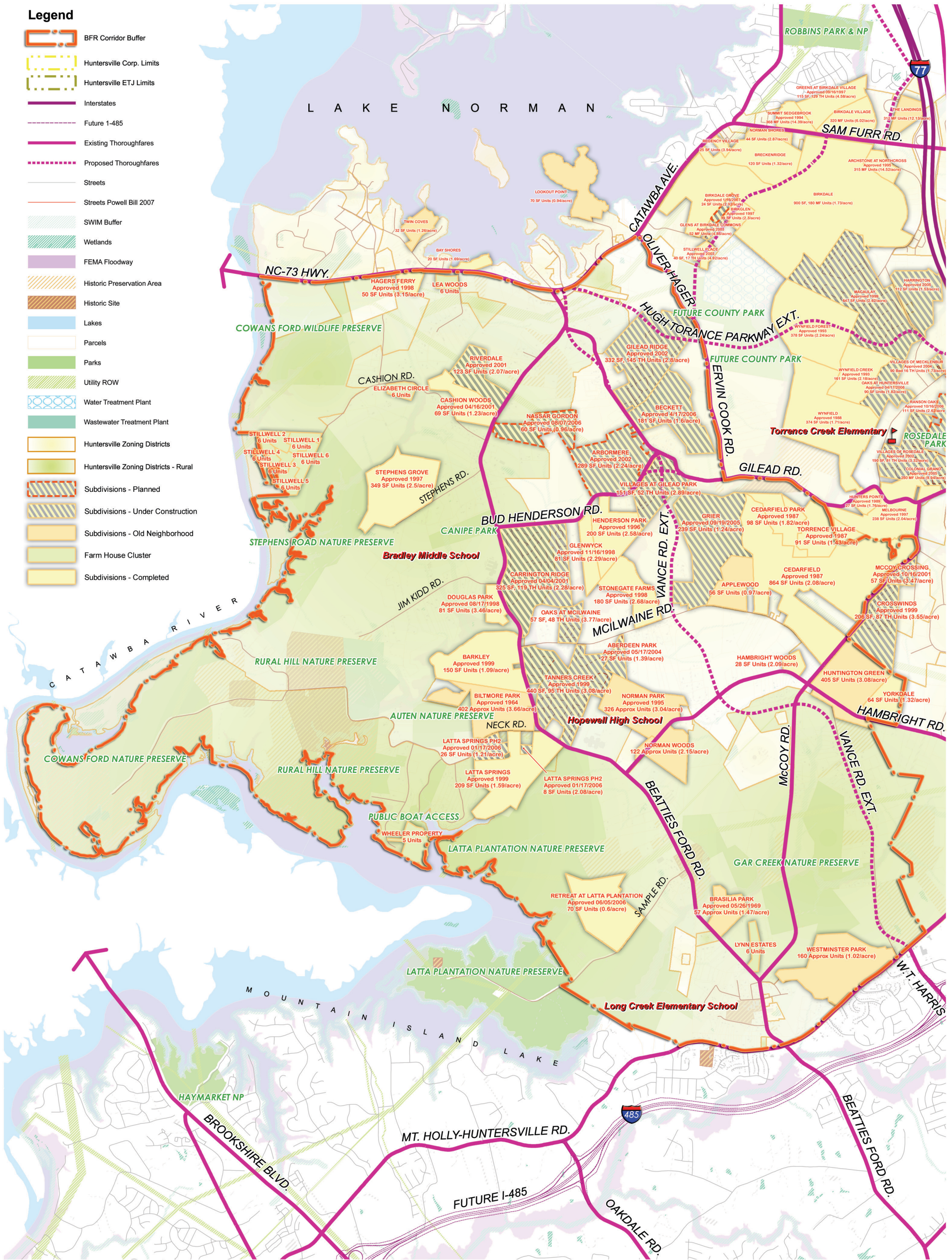
- 06-12 Phillips Land Rezoning  
R to HC  
**PENDING**  
Rezoning for commercial use  
26.59 acres
- 05-13 Gordon Nassar Rezoning  
R to R & TR  
Approved 08/07/2006  
60 SF Units (0.96/acre)  
64.96 acres
- Beckett Neighborhood Development  
Approved 04/17/2006  
181 SF Units (1.6/acre)  
104.26 acres
- Canipe Athletic Fields Complex  
**Under Construction**  
Play Fields (5 Soccer, 2 Multi-purpose), Walking Trail, Play Ground and Parking  
42.13 acres
- Bradley Elementary (Commercial Review)  
**UNDER REVIEW**  
Additional Parking/Athletic Fac. around proposed elem. school
- 06-13 Hopewell Village Rezoning  
HC(CD) to NR  
Approved 01/16/2007  
(Currently no development plans)  
8.65 acres
- 06-01 Latta Village Rezoning  
R to HC(CD)  
Approved 01/16/2007  
99,800 s.f. of Commercial Space (with 55,000 s.f. anchor)  
23.33 acres
- 06-06 Galloway Village Rezoning  
R to NC & TR  
**PENDING**  
7 Single-Fam (1.47 du/ac)  
Library (30,000 s.f.)  
Daycare (15,000 s.f.)  
Office (16,000 s.f.)  
22.55 acres
- 07-07 Hambright Road Rezoning  
R and GR to TR  
**PENDING**  
Proposed Neighborhood Development  
35 Single-Fam (0.82 du/ac)  
42.23 acres
- West Huntersville Mini-Storage (Commercial Review)  
**UNDER REVIEW**  
Addition of 5 mini storage units and a retail/office building

BEATTIES FORD ROAD CORRIDOR SMALL AREA PLAN  
ZONING AND CURRENT DEVELOPMENTS

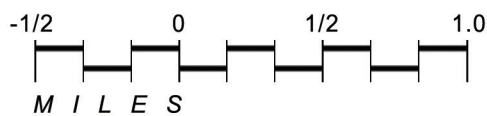


**Legend**

-  BFR Corridor Buffer
-  Huntersville Corp. Limits
-  Huntersville ETJ Limits
-  Interstates
-  Future 1-485
-  Existing Thoroughfares
-  Proposed Thoroughfares
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-  Wastewater Treatment Plant
-  Huntersville Zoning Districts
-  Huntersville Zoning Districts - Rural
-  Subdivisions - Planned
-  Subdivisions - Under Construction
-  Subdivisions - Old Neighborhood
-  Farm House Cluster
-  Subdivisions - Completed

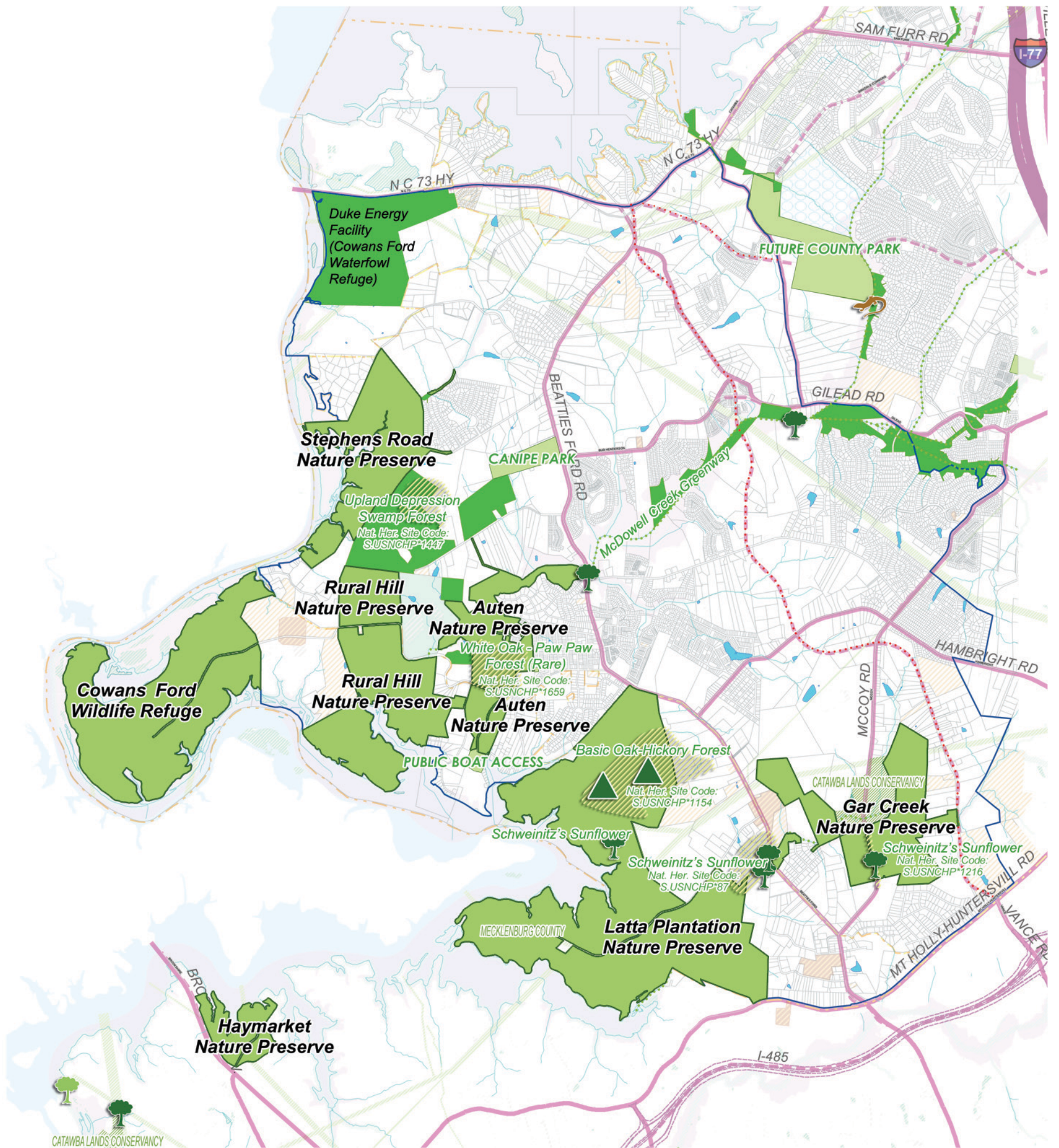


BEATTIES FORD ROAD CORRIDOR SMALL AREA PLAN  
EXISTING STATUS OF SUBDIVISIONS



Howard M. Landers Consulting, LLC

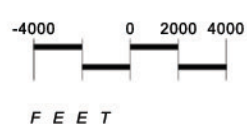




## BEATTIES FORD ROAD CORRIDOR SMALL AREA PLAN NATURAL HERITAGE AND PUBLIC LANDS

### Legend

- |   |   |  |
|---|---|--|
| <ul style="list-style-type: none"> <li> BFR Corridor Boundary</li> <li> Huntersville Corp. Limits</li> <li> Huntersville ETJ Limits</li> <li> Easement</li> <li> Historic Site (not in Park / Nature Preserve)</li> <li> Historic Preservation Area (not in Park / Nat. Pres.)</li> <li> Parks</li> <li> Publicly Managed Lands</li> <li> Nature Preserves</li> <li> Catawba Lands Conservancy Properties</li> <li> Greenway</li> </ul> | <ul style="list-style-type: none"> <li> Utility ROW</li> <li> FEMA Floodway</li> <li> Lakes</li> <li> Water Treatment Plant</li> <li> Wastewater Treatment Plant</li> <li> SWIM Buffer</li> <li> Wetlands</li> <li> Natural Heritage Site</li> <li> Interstates</li> <li> Future I-485</li> <li> Existing Thoroughfares</li> <li> Proposed Thoroughfares</li> </ul> | <h4>Natural Heritage Element Occurrences</h4> <ul style="list-style-type: none"> <li> Non-Vascular Plant</li> <li> Vascular Plant</li> <li> Vertebrate Animal</li> <li> Invertebrate Animal</li> <li> Specific Animal Habitat</li> <li> Natural Community</li> </ul> |
|---|---|--|



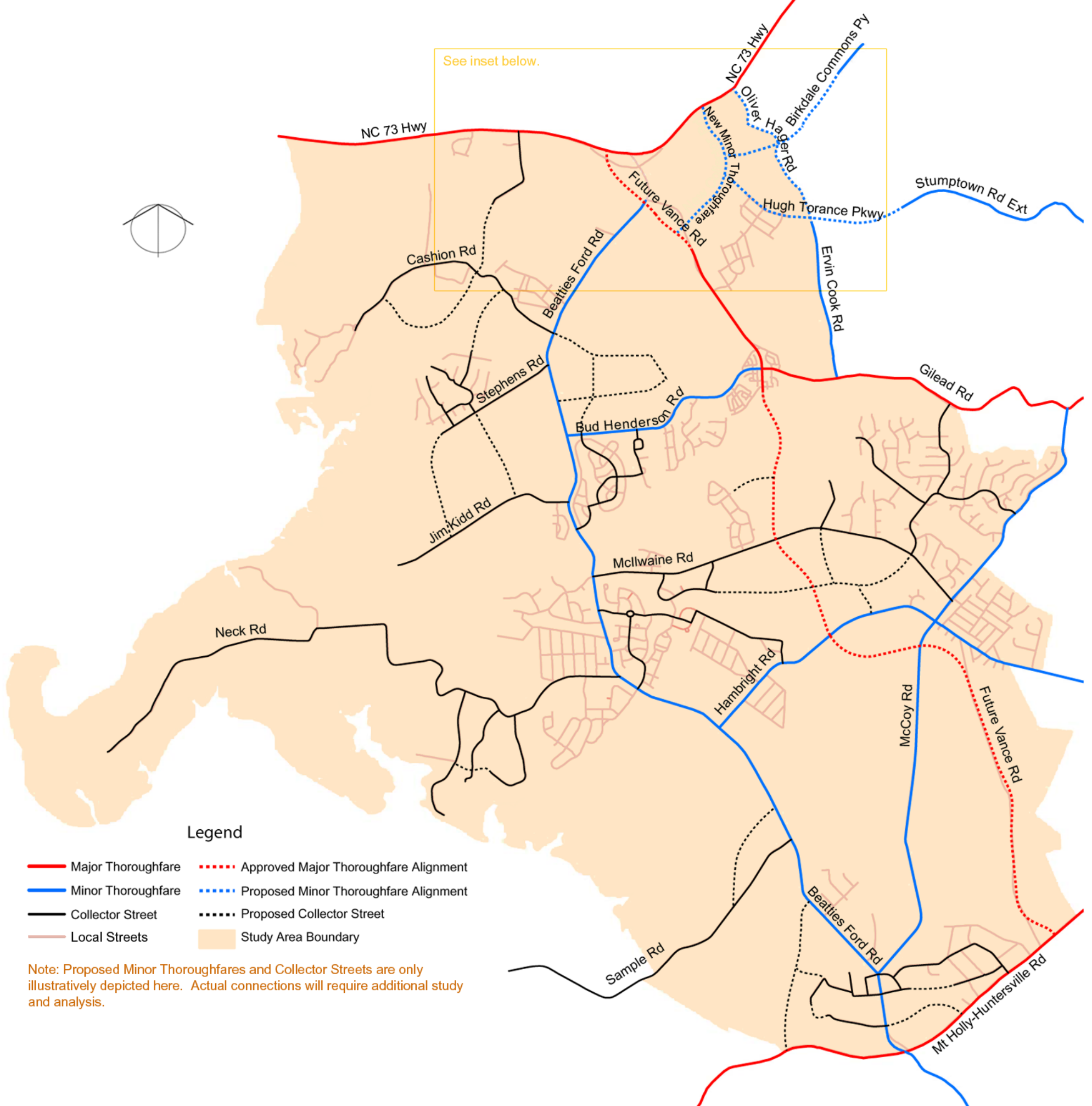
MAY 10, 2007

WARREN & ASSOCIATES  
REAL ESTATE MARKET STRATEGIES

Kimley-Horn  
and Associates, Inc.

Howard Landers Consulting, LLC



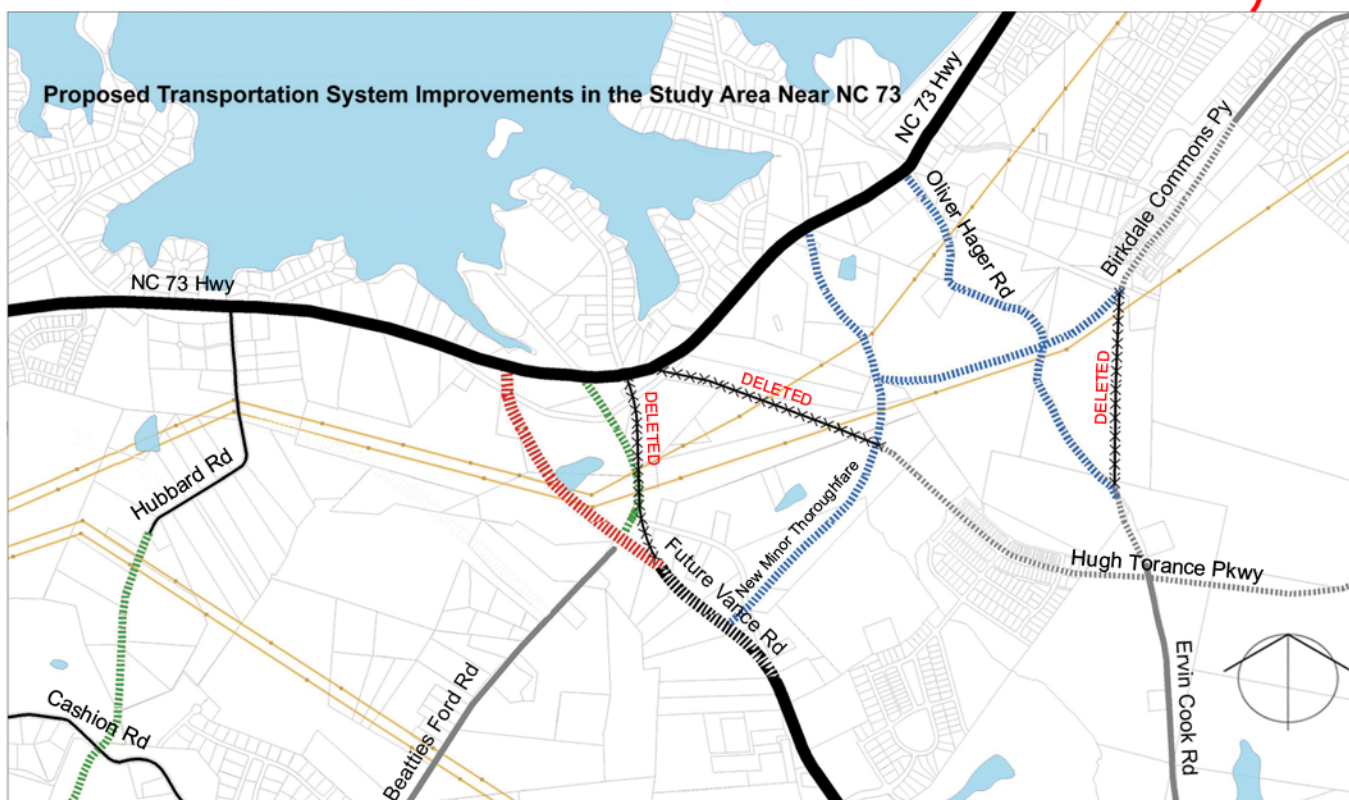


See inset below.

**Legend**

- Major Thoroughfare
- Minor Thoroughfare
- Collector Street
- Local Streets
- - - Approved Major Thoroughfare Alignment
- - - Proposed Minor Thoroughfare Alignment
- - - Proposed Collector Street
- Study Area Boundary

Note: Proposed Minor Thoroughfares and Collector Streets are only illustratively depicted here. Actual connections will require additional study and analysis.



**Legend**

- MUMPO Thoroughfare Plan Alignments**
- Existing Major Thoroughfare
  - Proposed Major Thoroughfare
  - Existing Minor Thoroughfare
  - Proposed Minor Thoroughfare
- Proposed Transportation System Revisions**
- Proposed Collector Street
  - Proposed Major Thoroughfare
  - Proposed Minor Thoroughfare
  - ✂ Delete Proposed MUMPO Thoroughfare

# BEATTIES FORD ROAD CORRIDOR SMALL AREA PLAN PROPOSED TRANSPORTATION SYSTEM MAP



**Land Use**

- BFRCSAP Study Area Boundary
- Residential Area / Subdivisions
- Equestrian Use Corridor
- Nature Preserve / Passive Open Space
- Active Use Park
- Mixed-Use / Hamlet Center

**Proposed Transportation System**

- Existing Major Thoroughfare
- Existing Minor Thoroughfare
- Proposed Major Thoroughfare
- Proposed Minor Thoroughfare
- Existing Collector Street
- Proposed Collector Street

**Proposed Non-Vehicular Network**

- Primary Greenway / Trail
- Secondary Trail
- Blueway
- Boat Access / Canoe Launch

BEATTIES FORD ROAD CORRIDOR SMALL AREA PLAN  
TRANSPORTATION AND LAND USE  
MASTER PLAN