**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.
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.
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.

- 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.
1.4.1 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?**
- Natural Area, 19%
- Country/Rural, 21%
- Historical/Scenic, 9%
- Lack of Traffic, 4%
- Personal History/Assets, 4%
- Nothing/Hate it, 2%

**What do you dislike most about Beatties Ford Road?**
- Traffic, 30%
- Direct competition (merch and curve), 7%
- Nothing, 7%
- No blue laws, 7%
- Harris Teeter, 7%
- Commercial Development, 7%
- Schools/Local Buses, 14%

**Overall how do you rate traveling on Beatties Road?**
- Good, 6%
- Fair, 9%
- Poor, 99%

**If you had $100 to spend on transportation improvements, how would you spend it?**
- Widening and building thoroughfare 15%
- Bicycle facilities, sidewalks, greenways, 14%
- Improving conditions of roadways (i.e., fix potholes, resurface, better signage, etc. 23%
- Maintaining adequate public transportation (i.e., buses, bus stops, routing) 1%
- Sidewalk construction and repair 1%
- Improving street aesthetics (i.e., street trees, street lighting, planted medians, etc.) 4%
- Improving traffic flow (i.e., control of driveways, coordinating signals, etc.) 12%
- Survey construction on roads and greenways 5%

**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.
Historical Context

2.1 History of the Beatties Ford Road Corridor

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

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 (Torrance House) was built in 1831 by James Torrance.*

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

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.

Cowans Ford, in the northwest corner of the BFRCSAP study area and currently the site of the Cowans 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
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 site 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 (2357 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
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:
- Interstate
- Future 1-485
- Streets
- Streets Powell Bill 2007
- Study Area
- Existing Transportation Network
- Future Transportation Network
- Lakes
- Char-Mack Historic Landmarks Comm.
- Historic Site
- Invented Site
- National Register Property
- Private
- 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
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 provide 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.
4.0 Existing Conditions Analysis

4.1 Environment

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.

*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).*
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.

Table 1.1 Supplemental Development Restrictions for Critical Watershed Areas

<table>
<thead>
<tr>
<th>Name</th>
<th>Map ID</th>
<th>Max. Impervious Area Coverage</th>
<th>Buffer Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical Area 1</td>
<td>CA1</td>
<td>6%</td>
<td>100 ft. or 100-yr floodplain boundary, whichever is greater</td>
</tr>
<tr>
<td>Critical Area 2</td>
<td>CA2</td>
<td>12%</td>
<td>100 ft. or 100-yr floodplain boundary, whichever is greater</td>
</tr>
<tr>
<td>Critical Area 3</td>
<td>CA3</td>
<td>12%</td>
<td>100 ft. or 100-yr floodplain boundary, whichever is greater</td>
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<tr>
<td>Critical Area 4</td>
<td>CA4</td>
<td>24%</td>
<td>100 feet</td>
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</table>

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-
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. 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

<table>
<thead>
<tr>
<th>Name</th>
<th>Map ID</th>
<th>Max Impervious Area Coverage</th>
<th>Buffer Size</th>
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<td>High Density Option A</td>
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<td>PA1</td>
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<td>70%</td>
</tr>
<tr>
<td>Protected Area 2</td>
<td>PA2</td>
<td>24%B / 36%C</td>
<td>70%</td>
</tr>
</tbody>
</table>

**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
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.
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 1/2 mile between signalized intersections.

4.3.3 Current Issues

Throughout the planning process, planners where 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 road 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 motorist to a grade separation rather than an interchange with I-77 thereby requiring motorist 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 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.
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.
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 6,839 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 8.0).

(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:

- 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.
(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