

NC 3 (Mooresville Road)
Kannapolis Parkway to Dale Earnhardt Boulevard/Loop Road (SR 1691)
Kannapolis, Cabarrus County
WBS ELEMENT 39010
S.T.I.P. PROJECT U-3440

**ADMINISTRATIVE ACTION
STATE FINDING OF NO SIGNIFICANT IMPACT**

N. C. DEPARTMENT OF TRANSPORTATION
Submitted pursuant to 42 U.S.C. 4332(2) (c)



APPROVED:



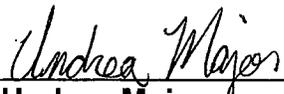
1.27.2015 Jennifer Harris
Date for Richard Hancock, PE, Manager
Project Development and Environmental Analysis Unit, NCDOT

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January 2015

Documentation prepared in the Project Development and Environmental Analysis Unit
by:

1/27/15
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Project Development Engineer

1-27-15
Date 
John Conforti, REM
Project Development Group Leader

PROJECT COMMITMENTS

NC 3 (Mooresville Road)

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Project Development & Environmental Analysis Unit

A Memorandum Of Agreement (MOA) has been completed between North Carolina Department of Transportation (NCDOT), the United States Army Corps of Engineers (USACE), and the North Carolina Historic Preservation Office (NC-HPO). The MOA is included in Appendix B of this Finding of No Significant Impact document. The MOA covers terms for the proposed project construction, impacts and mitigation for the historic resources.

City Of Kannapolis / NCDOT

A Municipal Agreement between NCDOT and the City of Kannapolis will be made to cover the terms of cost sharing for the construction cost and maintenance of sidewalks on both sides of NC 3.

City Of Kannapolis / Hydraulics Unit / Roadway Design Unit

The construction of the new bridge over Irish Buffalo Creek will have a vertical clearance tolerance that will accommodate passage for the proposed future greenway along the creek planned by the City of Kannapolis.

Hydraulics Unit

The Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP), to determine status of project with regard to applicability of NCDOT's Memorandum of Agreement, or approval of a Conditional Letter of Map Revision (CLOMR) and subsequent final Letter of Map Revision (LOMR). NCDOT will comply with all stormwater requirements through the Post-Construction Stormwater Program under the Department's NPDES Stormwater Permit (NCS000250).

Division 10

This project involves construction activities on or adjacent to FEMA-regulated stream(s). Therefore, the Division shall submit sealed as built construction plans to the Hydraulics Unit upon completion of project construction, certifying that the drainage structure(s) and roadway embankment that are located within the 100-year floodplain were built as shown in the construction plans, both horizontally and vertically.

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STATE FINDING OF NO SIGNIFICANT IMPACT

Prepared by the
Project Development and Environmental Analysis Unit
North Carolina Department of Transportation

1. TYPE OF ACTION

This is a North Carolina Department of Transportation (NCDOT) administrative action, State Finding of No Significant Impact (SFONSI). NCDOT has determined that this project will not have any significant impact on the human or natural environment. This SFONSI is based on the June 2011 Environmental Assessment (EA) which has been independently evaluated by the Federal Highway Administration (FHWA) and determined to adequately discuss the environmental issues and impacts of the proposed project. The EA provides sufficient evidence and analysis for determining that an Environmental Impact Statement is not required.

2. DESCRIPTION OF THE PROPOSED ACTION

2.1. General Description

The NCDOT proposes to improve NC 3 (Mooresville Road) from the Kannapolis Parkway to Dale Earnhardt Boulevard/Loop Road (SR 1691). The proposed improvements will widen Mooresville Road to a four lane divided facility. The typical section will consist of two 11 foot travel lanes and a 5 foot bicycle lane in each direction, with a 23.5 foot wide grass median. Sidewalks are proposed on both sides of the proposed facility for the entire length of the project. The project is approximately 2.6 miles in length (see Figure 1, Appendix A).

This project is included in the NCDOT Draft 2015-2025 State Transportation Improvement Program (STIP). Right of way acquisition is scheduled for May 2015 and construction is scheduled for October 2016. The STIP includes a total funding of \$31,040,000 for the project, including \$10,400,000 for right of way acquisition, \$18,500,000 for construction, \$1,600,000 for mitigation and \$540,000 in prior years cost.

2.2 Summary of Purpose and Need

The primary purpose of the proposed project is to reduce delays along NC 3/Mooresville Road. NC 3/Mooresville Road is experiencing congestion which is expected to reach level of service F in the immediate future. The proposed improvements will be of benefit providing an increased ease of travel between the Kannapolis Parkway and downtown Kannapolis.

3. **ALTERNATIVES CONSIDERED**

3.1 No-Build Alternative

It was determined that the No-Build Alternative would not meet the purpose and need of the project. It would not improve the ease of travel between the Kannapolis Parkway and downtown Kannapolis; therefore, the No-Build Alternative was not recommended.

3.2 Build Alternatives

Three build alternatives were developed initially for the entire length of the project. The three build alternatives considered are: North Side Widening, South Side Widening, and a Best-Fit Widening. Symmetrical widening was not considered because of potential impacts on existing residential development, commercial development, as well as natural resources. A historic architecture investigation found two historic districts eligible for listing in the National Register of Historic Places (NRHP), therefore, additional build options were developed as potential avoidance alternatives to these eligible resources. The avoidance alternatives only involve the portion of the project in the Area of Potential Effect (APE) for the two historic districts with boundaries beginning west of Cypress Avenue along NC 3/Mooresville Road. The avoidance alternatives were developed to the north and to the south of the historic districts through an iterative process as each alternative increased the APE. Each avoidance alternative would serve as a segment option for the ending terminus of the initially developed build alternatives. The avoidance alternatives considered are: South Avoidance Alternative 1, South Avoidance Alternative 2, North Avoidance Alternative 1, and North Avoidance Alternative 2 (see Appendix A, Figures 2a-2d).

Each alternative was evaluated based on its consistency with the purpose and need of the project, as well as its potential impact to the human, cultural and natural environments. In addition, public meetings were held in an effort to incorporate public input into the decision making process. The following alternatives were considered:

Alternatives developed for the entire length of the project:

North Side Widening – Alternative A
South Side Widening – Alternative B
Best Fit Widening - Selected Alternative

Ending terminus segments developed to avoid the historic districts:

Historic District South Avoidance Alternative 1
Historic District South Avoidance Alternative 2
Historic District North Avoidance Alternative 1
Historic District North Avoidance Alternative 2

4. SELECTED ALTERNATIVE

4.1 Selected Alternative

The selected alternative is a combination of the alternatives, A (north side widening) and B (south side widening), considered in the EA (see Appendix A, Figure 3). The combination of the two alternatives provides a best-fit alignment that will avoid and/or minimize impacts to the natural and human environment to the maximum extent practicable by utilizing the existing pavement and structures. Additional information acquired subsequent to the publishing of the EA was considered in the development and design of the recommended alternative. More details can be found in Section 9 of this document entitled Additions and Revisions to the EA.

4.2 Proposed Cross Sections

The proposed cross section for the project is a complete streets design as requested by the City of Kannapolis. The typical section of the four lane complete street design provides for two 11 foot travel lanes with a 5 foot bicycle lane in each direction, including a 23.5 foot wide grass median.

4.3 Proposed Bridge over Irish Buffalo Creek

The widening of NC 3 will require the replacement of Bridge No. 36 over Irish Buffalo Creek. The proposed replacement will be two structures, each providing a total bridge length of approximately 130 feet. A 36.5 foot minimum clear structure width is recommended for each proposed bridge. This will provide two 11 foot travel lanes and a 5 foot bicycle lane for each structure which will match the proposed superstreet cross section. Sidewalks are also proposed along the outside of each structure. Sufficient vertical clearance will be provided to accommodate the proposed future greenway planned by the City of Kannapolis.

4.4 Bicycle and Pedestrian Accommodations

Five foot bicycle lanes are proposed for the project in each direction to accommodate bicycle traffic. In addition, sidewalks are proposed on both sides of the facility. In accordance with the NCDOT Pedestrian Policy Guidelines, the NCDOT will fund 70% of the construction cost of the sidewalk, up to 5% of the total project cost. The City of Kannapolis will be responsible for the remaining cost of the sidewalk construction and maintenance once the construction is complete.

4.5 Design Speed

The project will be designed to meet design speeds of 50 mph outside of Kannapolis city limits and 40 mph within the city limits. Design speed is a correlation of the physical features of a highway, which influence vehicle operation and reflect the degree of safety and mobility desired along a highway. Design speed is not to be interpreted as the recommended or posted speed.

5. **SUMMARY OF PROJECT IMPACTS**

5.1 Project Benefits

The proposed project is expected to improve traffic movement, reduce accidents, reduce delays, and increase accessibility within this area of the County. These improvements will benefit the region by increasing convenience and ease of travel for NC 3/Mooresville Road between Kannapolis Parkway and downtown Kannapolis. The ease of access to the NC Research campus is an added benefit that the City of Kannapolis supports.

5.2 Environmental Effects

No impacts to archaeological resources will occur. No federally-protected species will be affected by the project. No noise abatement measures are recommended for the project. Residential and business relocations are estimated at 30 and 9 respectively. The total estimated impact to jurisdictional waters of the United States is 2,288 linear feet of stream and 0.05 acre of wetlands. The selected alternative (best-fit alignment) will have an adverse effect on the Juniper-Pine-Mooresville-Chestnut Mill Village and the Frog Hollow Mill Village historic districts. Mitigation measures for these historic resources are addressed in the Memorandum of Agreement (MOA) signed by the United States Army Corps of Engineers, the State Historic Preservation Office, and the NCDOT and recorded with the Advisory Council on Historic Preservation. The City of Kannapolis and residents of the historic districts participated in the development of the MOA (see Appendix B).

Summaries of the environmental effects are shown in Table 1 (below). Stream and wetland impacts are shown in Table 2 and Table 3, respectively

(page 7 of this document). The tables reflect updated impacts based on a more detailed design developed since the approval of the Environmental Assessment.

Table 1. Summary of Estimated Environmental Effects

	Selected Alternative
Project Length (miles)	2.6
Railroad Crossing	0
Historic Effects	AE-JPMCMV and FHMV
Archeological Sites	0
Federally-Protected Species	2 (no effect)
Residential Relocations	30
Business Relocations	9
Stream Impacts	2288 linear ft
Wetlands Impacts	0.05 acre
Environmental Justice Potential	No

Notes: Biological Conclusions – No Effect for Carolina Heelsplitter and Schweinitz’s sunflower

AE- Adverse Effect, JPMCMV- Juniper-Pine-Mooresville-Chesnut-Mill Village Historic District (National Register), FHMV- Frog Hollow Mill Village Historic District

The environmental effects of the proposed widening and improvements of NC 3 from the Kannapolis Parkway to Dale Earnhardt Boulevard/Loop Road are summarized in Table 1 (above). On the basis of planning and environmental studies, it is anticipated that this project will not have a significant detrimental effect on the quality of the human and natural environment. The proposed project will cause no significant changes in route classification and land use and is not controversial in nature.

6. JURISDICTIONAL FINDINGS

The jurisdictional findings were updated for the selected alternative due to design revisions as a result of the final design plan preparation. The impacts to the jurisdictional resources are shown in Tables 2 and 3 (page 7). Figure 5 (see Appendix A) shows the locations of the jurisdictional wetland and streams.

6.1 Streams

Each alternative will cross 9 streams and the potential stream impacts associated with each alternative can be found in Table 2 (page 7). Stream impacts at preliminary design were estimated to be 3,322 linear feet for Alternative A, 2,756 linear feet for Alternative B, and 2,463 linear feet for the selected alternative (best-fit alignment). The best-fit alignment is estimated to impact a total of 2,288 linear feet of jurisdictional streams under the most current design.

6.2 Wetlands

The selected alternative (best-fit alignment) will impact 0.05 acre of jurisdictional wetlands. The wetland (WA) is a riparian, headwater forest and has a quality rating of 40.

6.3 Avoidance and Minimization

Due to the extent of streams, wetlands and other environmental features within the project study area, and the location of the existing roadways, total avoidance is not possible. Total Jurisdictional impacts are estimated to be 1,804 linear ft of perennial stream, 484 linear feet of intermittent stream, and 0.05 acre of wetland, see Table 2 and Table 3 (page 7). Impacts have been minimized to the maximum extent practicable.

After review of the project area and the existing hydraulic structures, the following avoidance and minimization efforts were agreed upon by the project merger team:

- Dual bridges will span the major stream (Irish Buffalo Creek).
- The grade of the dual bridges over Irish Buffalo Creek will be raised to accommodate the proposed greenway
- 5 total structures will be replaced (1 bridge, 2 culverts, and 2 pipes).
- Where major culvert structures are being replaced, the use of sills and baffles will be incorporated to maintain low flow passage of water and aquatic life
- Streams will be relocated in lieu of piping where practicable
- The unregistered landfill in the southwest quadrant of the NC 3 / Mooresville Road and Bethpage Road intersection will be avoided with an alignment shift to the north of the existing NC 3 facility
- A portion of the unnamed tributary to Irish Buffalo Creek (S6) Site 8 will be avoided on the north side of NC 3 to minimize impacts to the jurisdictional feature
- The unnamed tributary to Miller Branch (S1) Site 1 will be relocated
- The unnamed tributary to Irish Buffalo Creek (S2) Site 4 will be relocated

An MOA has been developed to mitigate impacts to the districts eligible for National Register of Historic Places (NRHP) (see Appendix D)

Table 2
Summary of Stream Impacts (in feet)

Site No.	Map ID	Stream Name	Alternative A North Side	Alternative B South Side	Selected Alternative	Classification
1	S1	UT1 to MB	524 (495)	484 (60)	449 [300]	Perennial
2	MB	Miller Branch	198 (105)	226 (118)	174 [214]	Perennial
3	IBC	Irish Buffalo Creek	0 (122)	0 (122)	0 [25]	Perennial
4	S2	UT1 to IBC	268 (462)	211 (383)	219 [484]	Intermittent
5	S3	UT2 to IBC	212 (162)	158 (171)	163 [134~]	Perennial
6	S4	UT3 to IBC	225 (98)	221 (95)	209 [172]	Perennial
7	S5	UT4 to IBC	152 (226)	149 (208)	149 [117^]	Perennial
8	S6	UT5 to IBC	725 (186)	733 (151)	540 [315]	Perennial
9	S7	UT6 to IBC	1018 (472)	574 (10)	560 [527#]	Perennial
			3322 (*2328)	**2756 (*1318)	**2463 [*2288]	TOTAL

* Total Impacts originally shown in the EA, calculated using a 145 foot corridor width prior to the availability of preliminary design.

** Total Impacts rounded to the nearest foot based on preliminary design + 25 feet beyond the slope stake limits.

*** Total Impacts rounded to the nearest foot based on 30% design plans

() Impacts estimated for the EA

[] Impacts estimated from 30% plans

~ Includes 14 feet of bank stabilization

^ Includes 12 feet of bank stabilization

Includes 68 feet of bank stabilization

Table 3
Summary of Wetland Impacts (in acres)

Map ID	NCWAM Classification	Hydrologic Classification	NCDWQ Wetland Rating	Area
WA	Headwater Forest Wetland	Riparian	40	0.05
			TOTAL	0.05

7. COMMENTS AND COORDINATION

7.1 Circulation of the Environmental Assessment

The EA was approved by the North Carolina Department of Transportation and the Federal Highway Administration on June 30, 2011. The approved EA was sent to the following federal, state and local agencies for review and comment. An asterisk indicates a response was received from that agency.

- * U.S. Environmental Protection Agency
- * U.S. Army Corps of Engineers-Wilmington
- U.S. Fish and Wildlife Service-Raleigh
- * N.C. State Clearinghouse
- * N.C. Department of Environment and Natural Resources
 - N.C. Wildlife Resources Commission
 - Division of Environmental Health
- N.C. Department of Cultural Resources
 - * State Historic Preservation Office
- * N.C. Department of Public Safety
- * Cabarrus County Board of Commissioners
- * City of Kannapolis

7.2 Comments Received on the Environmental Assessment

Written comments on the Environmental Assessment were received from several agencies. The following are excerpts of the substantive comments with responses, where appropriate.

7.2.1 U.S. Environmental Protection Agency

Comment:

The EPA understands that there may be a potential adverse effect to a historic district from either alternative under consideration. EPA requests that the transportation agencies continue to work with the permitting agencies, SHPO, and USFWS on relevant matters for the selection of a preferred alternative and appropriate avoidance and minimization measures.

Response:

NCDOT has continued to coordinate avoidance, minimization, and mitigation opportunities for the adverse effect to the historic districts affected by the proposed project design. NCDOT will continue to work with the agencies on relevant matters through a Memorandum of Agreement to ensure agreed upon measures will be adhered to in the development of the project.

7.2.2 U.S. Army Corps of Engineers

Comment:

Information regarding the impacts to the natural environment associated with each alternative, including the new location alternatives, should be discussed in the final EA.

Response:

The estimated impacts associated with each alternative can be found in Tables 2 and 3 (page 7 of this document). The new location avoidance alternatives can be found in Table 5 (page 36). These impacts are discussed in the summary of environmental impacts section of this document (page 5) and the Avoidance Consideration and Alternate Recommendation section (page 37).

Comment:

Any discharge of excavated or fill material into waters of the United States and/or any adjacent wetlands would require Department of the Army (DA) permit authorization. The type of DA authorization required (i.e., general or individual permit) will be determined by the location, type, and extent of jurisdictional area impacted by the

project, and by the project design and construction limits. It is anticipated that a section 404 Individual Permit may be required based on the amount and locations of impacts to jurisdictional waters of the U.S.

Response:

This comment has been noted. NCDOT will submit a permit application that will reflect the type and extent of jurisdictional area impacted by the project.

Comment:

The project is proposed to enter the NEPA/404 Merger Process at the combined Concurrence Point 2A/4A meeting. However, without the natural environment impact summary referenced, I cannot support the elimination of alternatives typically done at Concurrence Point 2. Therefore, additional coordination may be needed prior to any abbreviated Merger component associated with this project.

Response:

Additional coordination has ensued subsequent to the merger screening and publishing of the Environmental Assessment for this project. The merger team met and concurred on Bridging Decisions, Alternative Alignment, Avoidance and Minimization measures on December 18, 2013. The merger team also reviewed the 30% design plans for the project at that time. NCDOT PDEA will continue to coordinate to provide supplemental information to support decisions that have been made and/or that need to be made to continue the development of this project. Impacts for each alternative can be found in Tables 2 and 3 (page 7) and Table 4 (page 32) of this document.

Comment:

Compensatory Mitigation shall be provided in accordance with both the 2008 Mitigation Rule and the Memorandum of Agreement (MOA) between the North Carolina Department of Transportation and the U. S. Army Corps of Engineers, Wilmington District. Please include a conceptual compensatory mitigation proposal within the final EA showing compliance with these requirements.

Response:

In the current design plan, avoidance of wetlands has taken place where practicable. The 0.05 acre of wetland impact is unavoidable due to the presence of the undocumented landfill located in the southeast quadrant of the NC 3/Mooresville Road – Bethpage Road intersection near Irish Buffalo Creek. The unnamed tributary to Miller Branch (S1) and the unnamed tributary to Irish Buffalo Creek (S2) will be relocated outside of the area of impact per the merger team CP4A/4B meeting

agreement to minimize impacts to these features. NCDOT Onsite Mitigation group has determined that no onsite mitigation is recommended as of May 9, 2012. Mitigation opportunities will be explored through the EEP program.

Comment:

A jurisdictional determination is required prior to permitting and an onsite review of jurisdictional features should be scheduled prior to submittal of a 404 permit application.

Response:

Jurisdictional determination was established for the project during a field visit in February 2009 and confirmed by the US Army Corps of Engineers in November 2009 (see JD Verification included in Appendix C). The jurisdictional determination expired November 2014. A new field visit will be scheduled for jurisdictional determination prior to submittal of a 404 permit application.

7.2.3 NC DENR-Division of Water Resources

Comment:

Irish Buffalo Creek is a Class C, 303(d) Waters of the State. Irish Buffalo Creek is on the 303(d) list for impaired use for aquatic life due to its turbidity. NCDWQ is very concerned with sediment and erosion impacts that could result from this project. NCDWQ recommends that the most protective sediment and erosion control BMPs be implemented in accordance with Design Standards in Sensitive Watersheds (15A NCAC 04B .0124) to reduce the risk of further impairment to Irish Buffalo Creek.

Response:

NCDOT will ensure the use effective sediment and erosion control measures during construction, including but not limited to silt fences and sediment basins. Proper installation and adequate maintenance of control measures will be addressed to maximize effectiveness. The timely cover of cleared land (temporary or permanent) will be emphasized. Design Standards in Sensitive Watersheds will be implemented for areas of the project draining to Irish Buffalo Creek.

Comment:

NCDWQ requests that road design plans provide treatment of the stormwater runoff through best management practices as detailed in the most recent version of NCDWQ Stormwater Best Management Practices.

Response:

NCDOT will adhere to Best Management Practices for stormwater runoff and stormwater management in the final design plans for this project. NCDOT will comply with all stormwater requirements through the Post-Construction Stormwater Program under the Department's NPDES Stormwater Permit (NCS000250).

Comment:

The Environmental Assessment indicates that there are two (2) alternatives being considered for this project, Alternative A (widening to the north of NC 3) is proposed to impact 2,300 linear feet of stream. Alternative B (widening to the south of NC 3) is proposed to impact 1,300 linear feet of stream. Neither the document nor the figures provided in the document, clearly indicate where the additional 1,000 feet of stream impact will occur under Alternative A. Future documentation should clearly depict the proposed jurisdictional impacts associated with the project.

Response:

The current impacts based on the latest design for the project were disclosed and discussed in the December 18, 2013 Merger Team meeting for CP4A/4B. The jurisdictional impacts have been quantified and are depicted in Tables 2 and 3 (page 7) of this document along with the estimated impacts from the EA.

Comment:

The environmental document should provide a detailed and itemized presentation of the proposed impacts to wetlands and streams with corresponding mapping. If mitigation is necessary as required by 15A NCAC 2H.0506(h), it is preferable to present a conceptual (if not finalized) mitigation plan with the environmental documentation. Appropriate mitigation plans will be required prior to issuance of a 401 Water Quality Certification.

Response:

Proposed impacts to wetlands and streams can be found in Tables 2 and 3 of this document. Please see Figure 5 in Appendix A for jurisdictional feature locations along the project. An estimated impact for each jurisdictional feature was presented at the merger meeting December 18, 2013. Meeting minutes can be found in Appendix C of this document. NCDOT Onsite Mitigation group has determined that no onsite mitigation is recommended as of May 9, 2012. Mitigation opportunities will be explored through the EEP program.

Comment:

Environmental Assessment alternatives shall consider design criteria that reduce the impacts to streams and wetlands from storm water runoff. These alternatives shall include road designs that allow for treatment of the storm water runoff through best management practices as detailed in the most recent version of NCDWQ's Stormwater Best management Practices Manual, July 2007, such as grass swales, buffer areas, preformed scour holes, retention basins, etc.

Response:

NCDOT will adhere to Best Management Practices for stormwater runoff and stormwater management in the final design plans for this project.

Comment:

After the selection of the preferred alternative and prior to an issuance of the 401 Water Quality Certification, the NCDOT is respectfully reminded that they will need to demonstrate the avoidance and minimization of impacts to wetlands (and streams) to the maximum extent practical. In accordance with the Environmental Management Commission's rules {15A NCAC 2H.0506(h)}, mitigation will be required for impacts of greater than 1 acre to wetlands. In the event that mitigation is required, the mitigation plan shall be designed to replace appropriate lost functions and values. The NC Ecosystem Enhancement Program may be available for use as wetland mitigation.

Response:

NCDOT has coordinated avoidance and minimization with the NEPA 404 Merger Team on December 18, 2013. As the design plans have progressed, NCDOT has continued to minimize impacts to the maximum extent practicable. Anticipated mitigation will be sought through the Ecosystem Enhancement Program (EEP).

Comment:

In accordance with the Environmental Management Commission's Rules {15A NCAC 2H.0506(h)}, mitigation will be required for impacts of greater than 150 linear feet to any single stream. In the event that mitigation is required, the mitigation plan shall be designed to replace appropriate lost functions and values. The NC Ecosystem Enhancement Program may be available for use as stream mitigation.

Response:

NCDOT has evaluated this project and determined that no onsite mitigation is available for this project. For required mitigation, NCDOT will develop and disclose the mitigation plan prior to issuance of any permits. Anticipated mitigation will be sought through the Ecosystem Enhancement Program (EEP).

Comment:

Future documentation, including the 401 Water Quality Certification applications, shall include an itemized listing of the proposed wetland and stream impacts with corresponding mapping.

Response:

Please refer to Tables 2 and 3 (page 4) to see the itemized listing of proposed stream and wetland impacts associated with the preferred alternative. See Figures 5 and 5a in Appendix A for the corresponding mapping.

Comment:

NCDWQ is very concerned with sediment and erosion impacts that could result from this project. NCDOT shall address these concerns by describing the potential impacts that may occur to the aquatic environments and any mitigating factors that reduce the impacts.

Response:

NCDOT will ensure the use of effective sediment and erosion control measures during construction, including but not limited to silt fences and sediment basins. Proper installation and adequate maintenance of control measures will be addressed to maximize effectiveness. The timely cover of cleared land (temporary or permanent) will be emphasized. In an area where the roadway fill is in a wetland, NCDOT will implement erosion control measures that have a minimal footprint and do not require excavation to construct.

Comment:

An analysis of cumulative and secondary impacts anticipated as a result of this project is required. The type and detail of analysis should conform to the NC Division of Water Quality Policy on the assessment of secondary and cumulative impacts dated April 10, 2004.

Response:

The widening of NC 3/Mooresville Road from the Kannapolis Parkway to Loop Road (SR 1691) and the analysis of the potential indirect and cumulative effects of this project suggest that development activities in the area would occur with or without project construction. Non-residential development has occurred primarily in the FLUSA within the town limits of Kannapolis in several commercial nodes, the NC Research Campus and within the targeted development area of Coddle Creek. While these development trends are expected to continue, the rate of development will be determined by market forces. Current State and local policies and regulations will mitigate the potential for impacts of minor related impacts. As a result, this project is anticipated to have minimal effect on stormwater runoff or water quality within the area. Overall, this project is expected to result in minimal indirect effects, and will not result in a significant change in impervious surface (Indirect and Cumulative Effects Assessment; July 2010).

Comment:

NCDOT is respectfully reminded that all impacts, including but not limited to, bridging, fill, excavation and clearing, and rip rap to jurisdictional wetlands, streams, and riparian buffers need to be included in the final impact calculations. These impacts, in addition to any construction impacts, temporary or otherwise, also need to be included as part of the 401 Water Quality Certification Application.

Response:

Comment noted.

Comment:

Where streams must be crossed, NCDWQ prefers bridges be used in lieu of culverts. However, we realize that economic considerations often require the use of culverts. Please be advised that culverts should be countersunk to allow unimpeded passage by fish and other aquatic organisms. Moreover, in areas where high quality wetlands or streams are impacted, a bridge may prove preferable. When applicable, NCDOT shall not install the bridge bents in the creek, to the maximum extent practical.

Response:

Comment noted.

Comment:

Whenever possible, NCDWQ prefers spanning structures. Spanning structures usually do not require work within the stream or grubbing of the stream banks and do

not require stream channel realignment. The horizontal and vertical clearances provided by bridges shall allow for human and wildlife passage beneath the structure. Fish passage and navigation by canoeists and boaters shall not be blocked. Bridge supports (bents) shall not be placed in the stream when possible.

Response:

Comment noted.

Comment:

Bridge deck drains shall not discharge directly into the stream. Stormwater shall be directed across the bridge and pre-treated through site appropriate means (grassed swales, pre-formed scour holes, vegetated buffers, etc.) before entering the stream. Please refer to the most current version of NCDWQ's Stormwater Best Management Practices.

Response:

Comment noted.

Comment:

Sediment and erosion control measures shall not be placed in wetlands or streams.

Response:

In an area where the roadway fill is in a wetland, NCDOT will implement erosion control measures that have a minimal footprint and do not require excavation to construct.

Comment:

Borrow/waste areas should avoid wetlands to the maximum extent practical. Impacts to wetlands in borrow/waste areas will need to be presented in the 401 Water Quality Certification and could precipitate compensatory mitigation.

Response:

Comment noted.

Comment:

The 401 Water Quality Certification application will need to specifically address the proposed methods for storm water management. More specifically, storm water shall not be permitted to discharge directly into streams or surface waters.

Response:

Comment noted.

Comment:

Based on the information presented in the document, the magnitude of impacts in wetlands and streams may require a Nationwide (NW) Permit application to the Corps of Engineers and corresponding 401 Water Quality Certification. Please be advised that a 401 Water Quality Certification requires satisfactory protection of water quality to ensure that water quality standards and no wetland or stream uses are lost. Final permit authorization will require the submittal of a formal application by the NCDOT and written concurrence from NCDWQ. Please be aware that any approval will be contingent on appropriate avoidance and minimization of wetland and stream impacts to the maximum extent practical, the development of an acceptable storm water management plan, and the inclusion of appropriate mitigation plans where appropriate.

Response:

Based on the anticipated impacts associated with this project, it is anticipated that an Individual Permit Application will be submitted with a corresponding Water Quality Certification. Wetland and stream impacts have been avoided and/or minimized to the maximum extent practicable. Mitigation plans will be included where appropriate prior to the issuance of required permits.

Comment:

If concrete is used during construction, a dry work area shall be maintained to prevent direct contact between curing concrete and stream water. Water that inadvertently contacts uncured concrete shall not be discharged to surface waters due to the potential for elevated pH and possible aquatic life and fish kills.

Response:

Comment noted.

Comment:

If temporary access roads or detours are constructed, the site shall be graded to its preconstruction contours and elevations. Disturbed areas shall be seeded or mulched to stabilize the soil and appropriate native woody species shall be planted. When using temporary structures the area shall be cleared but not grubbed. Clearing the area with chain saws, mowers, bush-hogs, or other mechanized equipment and leaving the stumps and root mat intact allows the area to re-vegetate naturally and minimizes soil disturbance.

Response:

Comment noted.

Comment:

Unless otherwise authorized, placement of culverts and other structures in waters and streams shall be placed below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches, and 20 percent of the culvert diameter for culverts having a diameter less than 48 inches, to allow low flow passage of water and aquatic life. Design and placement of culverts and other structures including temporary erosion control measures shall not be conducted in a manner that may result in dis-equilibrium of wetlands or streambeds or banks adjacent to or upstream and downstream of the above structures. The applicant is required to provide evidence that the equilibrium is being maintained if requested in writing by NCDWQ. If this condition is unable to be met due to bedrock or other limiting features encountered during construction, please contact NCDWQ for guidance on how to proceed and to determine whether or not a permit modification will be required.

Response:

Comment noted. The Merger Team met December 18, 2013 and concurred on the use of sills and baffles where major culverts are being replaced to maintain low flow passage of water and aquatic life. Streams will be relocated in lieu of piping where practicable.

Comment:

If multiple pipes or barrels are required, they shall be designed to mimic natural stream cross section as closely as possible including pipes or barrels at flood plain elevation, floodplain benches, and/or sills may be required where appropriate. Widening the stream channel should be avoided. Stream channel widening at the inlet or outlet end of structures typically decreases water velocity causing sediment deposition that requires increased maintenance and disrupts aquatic life passage.

Response:

Comment noted. In accordance to the merger meeting held December 18, 2013, NCDOT design hydraulic structures to mimic natural stream cross section where appropriate to ensure low flow aquatic life passage.

Comment:

If foundation test borings are necessary; it shall be noted in the document. Geotechnical work is approved under General 401 Certification Number 3687/Nationwide Permit No. 6 for Survey Activities.

Response:

Comment noted.

Comment:

All work in or adjacent to stream waters shall be conducted in a dry work area. Approved BMP measures from the most current version of NCDOT Construction and Management Activities manual such as sandbags, rock berms, cofferdams and other diversion structures shall be used to prevent excavation in flowing water.

Response:

Comment noted.

Comment:

While the use of National Wetland Inventory (NWI) maps and soil survey maps are useful tools, their inherent inaccuracies require that qualified personnel perform onsite wetland delineations prior to permit approval.

Response:

Comment noted. Jurisdictional determination was established for the project during a field visit in February 2009 and confirmed by the US Army Corps of Engineers in November 2009 (see JD Verification included in Appendix C). The jurisdictional determination expired in November 2014. A new field visit will be scheduled for jurisdictional determination prior to submittal of a 404 permit application.

Comment:

Heavy equipment should be operated from the bank rather than in stream channels in order to minimize sedimentation and reduce the likelihood of introducing other pollutants into streams. This equipment shall be inspected daily and maintained to prevent contamination of surface waters from leaking fuels, lubricants, hydraulic fluids, or other toxic materials.

Response:

Comment noted.

Comment:

Riprap shall not be placed in the active thalweg channel or placed in the streambed in a manner that precludes aquatic life passage. Bioengineering boulders or structures should be properly designed, sized and installed.

Response:

Comment noted.

Comment:

Riparian vegetation (native trees and shrubs) shall be preserved to the maximum extent possible. Riparian vegetation must be reestablished within the construction limits of the project by the end of the growing season following completion of construction.

Response:

Comment noted.

7.2.4 NC Department of Public Safety

Comment:

The North Carolina Executive Order 123 directs NCDOT to coordinate with and follow the FEMA floodplain management requirements which are found in the Federal Executive Order 11988. To ensure NCDOT compliance with EO 11988 and the 44 CFR the NCDOT Hydraulics Section and the NC Floodplain Mapping Program have a Memorandum of Agreement (MOA). Please coordinate with Mr. David Chang, NCDOT Hydraulics, to coordinate the elements of this project which fall within the MOA.

Response:

NCDOT Hydraulics Unit will continue to work through the design elements of this project through final design.

Comment:

The proposed project crosses the regulatory special hazard areas (SFHA) of Miller Branch, Irish Buffalo Creek, and Irish Buffalo Creek Tributary 3. Please see Flood Insurance Rate Map panels 5603 and 5613. A hydraulic analysis is required for any new, replacement or modification to an existing hydraulic structure that is within the regulatory floodway or non-encroachment area of these SFHAs. This includes the replacement of the NC 3 bridges over each SFHA.

Response:

Comment noted. The NCDOT Hydraulics Unit will analyze proposed structures within special hazard areas of this project.

Comment:

New or replacement structures that do not cause an increase in the Base Flood Elevation (BFE) would be reviewed under the MOA. New or replacement structures that cause an increase in the Base Flood Elevation (BFE) will require approval of a Conditional Letter of Map Revision prior to construction.

Response:

Comment noted. The NCDOT Hydraulic Design Unit will evaluate new and replacement structures in accordance with Base Flood Elevation under the MOA and coordinate the appropriate response prior to construction.

7.3 Public Hearing Certification

In accordance with 23 U.S.C. 128, the North Carolina Department of Transportation certifies that a public hearing for the subject project has been held and the social, economic, and environmental impacts, consistency with local community planning goals and objectives, and comments from individuals have been considered in the selection of the preferred alternative for the project.

Following circulation of the EA, NCDOT held a combined public hearing on July 9, 2013 at the Cabarrus Health Alliance Building located in Kannapolis. An open house was conducted from 4:00 pm to 6:30 pm and a formal hearing from 7:00 pm to 8:30 pm. Approximately 80 people attended.

7.4 Comments Received During and Following the Public Hearing

The property owners and residents that attended the public hearing had varied opinions about the project. Much of the hearing centered on right of way and relocation procedures, and access movements at intersections. Public concerns involved the effect the proposed traffic would have on neighboring thoroughfares and the historic districts. NCDOT representatives addressed questions and concerns at the hearing. The major public concern was identifying the need versus benefit as it pertains to the NC Research Campus.

7.4.1 The following is a representative summary of the Public Hearing Comments:

One citizen spoke at the formal hearing:

Comment:

Dr. John Atkinson had questions regarding the NC 3 and Bethpage Road Intersection and the ability to make a left turn from Bethpage Road. He mentioned Walter Safrit Park is located off Bethpage Road and there will be access concerns without having a full access movement at the NC 3 intersection. He stated that the fire station responsible for responding to the project area is located on Richard Avenue approximately 1 mile from NC 3 by way of Bethpage Road. The City has expressed their intent to construct a new fire station on Bethpage Road. Dr. Atkinson also asked if the roundabout intersection design at Franklin Avenue and NC 3 will include improvements to the roads leading to the Fred Wilson School.

Response:

The design will provide for a directional crossover at the Bethpage Road and NC 3 intersection. Vehicles traveling westbound on NC 3 will be allowed to make a left turn onto Bethpage Road. Vehicles approaching NC 3 from Bethpage Road will only be able to make a right turn. A directional crossover will be provided approximately 900 feet east of Bethpage Road providing a location for a u-turn

movement for vehicles desirous of travelling in the westbound direction. Directional crossovers provide safer movements and more efficient traffic flow on the main roadway corridor as opposed to full movement crossovers. In addition, the median curbs and islands are considered mountable and can be crossed by most emergency response vehicles.

The proposed roundabout offers safe and efficient traffic movement through the corridor and eliminates the need for a traffic signal. The design includes sidewalk and accommodates pedestrian movements safely. Improvements to the roads leading to the Fred Wilson School are beyond the scope of this project. City street improvements will remain within the NC 3 corridor limits.

7.4.2 The City of Kannapolis provided the following comments:

General Comments

Comment:

The Complete Street typical section with 11 ft travel lanes and 5 ft bike lanes is preferred.

Response:

A 5 ft bicycle lane will be provided in conjunction with two 11 ft travel lanes in each direction based on the Complete Street guidelines for the entire length of the project.

Comment:

A landscaped streetscape is desired with the planting of trees between the sidewalk and the back of the curb and within the median.

Response:

A landscaped roadway corridor can be provided within the confines of the corridor and right of way available. A municipal agreement will be required with the City agreeing to pay the betterment cost for any enhancements. The City will also be responsible for the maintenance of the streetscape. Landscaping is generally placed along the corridor by encroachment after construction has been completed during the appropriate planting season. A percentage of the project construction cost is set aside to pay for landscaping, however it is generally not sufficient for a comprehensive streetscape.

Comment:

Decorative mast arm signals and decorative lighting is desired.

Response:

Decorative mast arm signals and decorative lighting can be provided within the confines of the corridor and right of way available. A municipal agreement will be required with the City agreeing to pay the cost of any enhancements. Decorative lighting is generally coordinated locally with the power company and placed within the corridor by encroachment.

Comment:

Include pedestrian crosswalks at all side streets and across NC 3 at signalized intersections.

Response:

Appropriate crosswalks and pedestrian accommodations can be coordinated further during the development of the right of way plans.

Comment:

Provide bus stop locations as coordinated locally.

Response:

Bus stop locations can be coordinated further during the development of right of way plans.

Comment:

Provide sidewalk on both sides of the roadway for the entire project limits (including along the bridge).

Response:

Sidewalk will be provided throughout the project limits. The appropriate cost share agreement will apply.

Specific Location Comments

Comment:

Provide a full median break for access to Castle & Cooke property between Bethpage Road and Charlie Walker Road.

Response:

No control of access is currently proposed for the NC 3 corridor. Access to property can be evaluated further as development occurs.

Comment:

Design the bridge at Irish Buffalo Creek to provide greenway accommodations.

Response:

The bridge at Irish Buffalo Creek will be constructed with adequate clearance to accommodate the proposed greenway.

Comment:

Realign and provide a full movement intersection at Bethpage Road with a traffic signal. There is a plan to construct a new fire station on Bethpage Road.

Response:

The design will provide for a directional crossover at the Bethpage Road and NC 3 intersection. Vehicles traveling westbound on NC 3 will be allowed to make a left turn onto Bethpage Road. Vehicles approaching NC 3 from Bethpage Road will only be able to make a right turn. A directional crossover will be provided approximately 900 feet east of Bethpage Road providing a location for a u-turn movement for vehicles desirous of travelling in the westbound direction. Directional crossovers provide safer movements and more efficient traffic flow on the main roadway corridor as opposed to full movement crossovers. In addition, the median curbs and islands are considered mountable and can be crossed by most emergency response vehicles.

Comment:

Provide median crossovers spaced in accordance with NCDOT policy (add additional)

Response:

The plans will be reviewed to ensure median and directional crossovers are spaced in accordance with current policies and guidelines

Comment:

Re-grade the intersection with Rainbow Drive to provide a better vertical alignment.

Allow the signal to remain at this intersection.

Response:

Improvements are proposed for Rainbow Drive. The design of the vertical alignment will be appropriate for the proposed conditions. It is anticipated the traffic signal will remain at Rainbow Drive.

Comment:

Update mapping to reflect recently constructed buildings.

Response:

The plans will be updated to include recent development.

Comment:

Include needed improvements to Loop Road and Watson Crick Drive in the design.

Response:

The design has accommodated extending NC 3 to tie to Watson Crick Drive.

Comment:

Add directional signage is needed on Mason Street to direct motorists to NC 3.

Response:

Signage will be provided in accordance with policy and design guidelines. It has been noted that directional signage has been requested for Mason Street to direct motorists to NC 3.

Comment:

Include a traffic signal at the intersection of Franklin Avenue and Pine Street.

Response:

The inclusion of a signal at the intersection of Pine Street and Franklin Avenue is beyond the scope of this project.

Comment:

Extend curb and gutter from NC 3 on Franklin Avenue to Pine Street.

Response:

Extending the curb and gutter to Pine Street is beyond the scope of work for this project.

Utility Comments

Comment:

Bury all utilities from Kannapolis Parkway to Loop Road.

Response:

The Department will coordinate with the City to determine the feasibility of burying utilities. It should be noted that the cost of burying utilities are in general more expensive by a factor of 4 for each utility owner. The City would be responsible for paying the betterment cost. The coordination required to bury the utilities could potentially cause delays in the project schedule.

Comment:

Install conduit for future installations in the roundabout and median.

Response:

Conduit can be provided for future installations in the median and roundabout. Further coordination will be required with the City during the development of the right of way plans.

Comment:

Install irrigation throughout the project.

Response:

An irrigation system can be provided throughout the project. The cost and maintenance will be the responsibility of the City.

7.4.3 Written Comments:

Comment:

Ms. Jill Brim writing as a member of the YMCA expressed concerns regarding a lack of a full movement crossover at Bethpage Road. Ms. Brim also mentioned concerns regarding access to Walter Safrit Park. Furthermore she noted with no left turn onto NC 3, vehicle would need to travel over one mile through a neighborhood to reach NC 3.

Response:

The decision has been made to proceed with a directional crossover at the Bethpage Road / NC 3 intersection. Vehicles traveling westbound on NC 3 will be allowed to make a left turn onto Bethpage Road. Vehicles approaching NC 3 from Bethpage Road will only be able to make a right turn. A directional crossover will be provided approximately 900 ft east of Bethpage Road to provide a location for a u-turn movement for vehicles that desire to travel in the westbound direction. While not direct, the left turn movement from Bethpage Road has been relocated by way of a directional crossover and u-turn movement on NC 3. With the u-turn movement provided on NC 3, it will be more direct to make a right turn and then make the u-turn movement, than traveling through the neighborhood.

Comment:

Ms. Anna Lindsay Yarbrough representing STI Turf Care Equipment expressed concerns regarding right of way impacts to their property and the disruption during construction. Concerns include limited space, access for large trucks, the loss of a driveway access on Rainbow Drive and getting rear access to Grant Avenue.

Response:

Further coordination will be required during the right of way acquisition phase of the project. NCDOT will continue to work through the final design phase to minimize impacts to businesses and residents to the maximum extent practicable.

Comment:

Mr. John R. Finder, Sr. supports the project. He expressed concerns regarding a culvert intake that extends onto his property (located at NC 3 and Rainbow Drive). He wants to be contacted during design to discuss his concerns.

Comment:

Ms. Lynn A. Cauble expressed concerns regarding a creek that runs under NC 3 in the vicinity of Charlie Walker Road and how that may affect the bridge that provides access to the residence.

Comment:

Mr. John Cauble expressed concerns regarding a creek that runs under NC 3 in the vicinity of Charlie Walker Road and how that may affect the bridge that provides access to the residence. He mentioned the health concerns for one of the family members and the ability for emergency responders to access the residence.

Response:

(For the 3 previous comments) The drainage design will be done in a manner to not redirect or raise the water level in any of the surrounding area. It is not anticipated that the property mentioned will be adversely affected by this project. It should also be noted that the improvement to the access for the property is outside the U-3440 project limits and improvement in this area would be beyond the scope of this project. It is recommended that the property owner contact the City to determine if assistance is available to address their concerns.

Comment:

Mr. Bill Watts thinks that a roundabout is not needed at NC 3/ Franklin Avenue and that a traffic signal will be sufficient.

Response:

A roundabout offers safe and efficient traffic movement through the corridor and eliminates the need for a traffic signal. It is also within the context of what is desired by the City in regards to streetscape, pedestrian and bicycle accommodations.

Comment:

Mr. Edward Nelson would like the curb and gutter extended up Rainbow Drive in order to do away with the ditch line.

Response:

Improvements to NC 3 can be accomplished without the requirement to extend the curb and gutter further along Rainbow Drive than what was shown on the hearing map. Verification will be made during the development of the right of way plans.

Comment:

Ms. Sandy Fulmer had questions and concerns that were not related to the U-3440 project. Her question pertained to the lowering of the speed limit on a roadway in the vicinity of the U-3440 project.

Response:

The question was forwarded to the appropriate departmental staff.

Comment:

Ms. Erica Powel owns two properties on Mason Street and expressed concerns regarding access and drainage.

Response:

The drainage design will be done in a manner as to not redirect or raise the water level in any of the surrounding area. It is not anticipated that the property mentioned will be adversely affected by this project. The design will be evaluated during the right of way phase of plan development to determine if it feasible to add a turnaround at the end of Mason Street.

Comment:

Mr. Jimmy Wilkinson owns rental property (near Tucker Avenue) that will be taken. Mr. Wilkinson stated that the homes across the road are vacant and suggested that it would be beneficial to shift the roadway improvements to the other side of the road.

Response:

The project has been designed in a manner that minimizes impacts to properties to the extent practicable while taking into consideration environmental and design constraints. The proposed alignment of NC 3 will remain as shown on the hearing map. The design will be evaluated during the right of way phase of plan development to determine if property impacts can be further reduced.

Comment:

Mr. Lester Wilkinson concerns regarding access for farm equipment crossing the north and south side on NC 3 in the vicinity of Bethpage Road. He recommends the NC 3 / Bethpage Road intersection be made into a full movement intersection. Mr. Wilkinson also stated it will difficult for tractor trailers to make u-turns without a

full movement crossover at Bethpage Road.

Response:

The decision has been made to proceed with a directional crossover at the Bethpage Road / NC 3 intersection. Vehicles traveling westbound on NC 3 will be allowed to make a left turn onto Bethpage Road. Vehicles approaching NC 3 from Bethpage Road will only be able to make a right turn. A directional crossover will be provided approximately 900 feet east of Bethpage Road to provide a location for a u-turn movement for vehicles that desire to travel in the westbound direction. The u-turn bulb out will be designed to accommodate the majority of vehicle types. The expectation is for tractor and trailer drivers to plan their route when movements have been restricted.

The following is a list of other issues discussed at the Public Hearing Meeting:

Comment:

Can a 40 mph design speed be utilized between the roundabout and Loop Road?

Response:

The segment in question is currently posted at 35 mph. With the lower speed of the roundabout and the signalized intersection at Loop Road, it is appropriate to utilize a 40 mph design speed for this segment of NC 3.

Comment:

Between the roundabout and Loop Road, there are impacts to historic resources. Further coordination will be needed with the local community and the NC-HPO to determine the appropriate mitigation required to satisfy 4(f) guidelines.

Response:

As part of Section 106 process, coordination has and will continue to take place with the NC-HPO, the US Army Corps of Engineers (USACE) and other agencies, including correspondence with the City of Kannapolis and the residents of the historic districts. Federal funds were removed from the project in 2013. With no federal funds involved, the proposed project no longer requires a Section 4(f) Evaluation.

8. NEPA/404 MERGER TEAM COORDINATION

The NEPA/404 merger process was implemented on this project to allow early and frequent coordination to take place with NCDOT, FHWA, USACE, the North Carolina Division of Water Quality (NCDWR) and other resource agencies. The lead agencies for the project, the FHWA, USACE, NCDWR and NCDOT determined to enter a partial merger process beginning with Concurrence Points 2A and 4A. Early coordination is essential considering the project and anticipated impacts. Early coordination allows the permitting and approving agencies to identify and resolve issues that may be problematic earlier in the planning process. Federal funds were removed from the project in 2013. With no federal funds involved, the FHWA will not be required to participate in the approval process of the final environmental document.

Review of Concurrence Points

Concurrence Point 2A/4A/4B – Bridging Decisions and Alignment Review/Avoidance and Minimization (Approved December 18, 2013).

A NEPA/404 merger meeting was held December 18, 2013 to discuss bridge length, alignment review and avoidance and minimization of environmental impacts. The merger team agreed to replace the bridge at Irish Buffalo Creek with dual bridges each having a 36.5 foot clear deck width and an approximate length of 130 feet. The grade will be raised on the bridges to accommodate the proposed greenway. The summary of major Hydraulic structures can be found in Table 4 (below).

**Table 4
Summary of Major Hydraulic Structure Recommendations**

Stream ID	Stream Name & Class	Proposed Structure	Structure Dimensions
MB	Miller Branch, Perennial	RCBC	10ft x 9ft
IBC	Irish Buffalo Creek, Perennial	Dual Bridges	130ft
S4	UT3 to Irish Buffalo Creek, Perennial	RCP	66 inches
S6	UT5 to Irish Buffalo Creek, Perennial	Double Barreled RCBC	8ft x 10ft
S7	UT6 to Irish Buffalo Creek, Perennial	RCP	66 inches

The merger team concurred upon the replacement of 5 total structures (3 major structures and 2 minor structures) shown in Table 4 (above). The implementation of sills and baffles will be incorporated into the replacement of major culvert structures to maintain low flow passage of water and aquatic life. Impacts to waters of the United States based on updated design plans are estimated to be 1804 feet of perennial stream, 484 feet of intermittent stream and 0.05 acre of wetland. Streams will be relocated in lieu of piping where practicable. The unnamed tributary to Miller Branch (S1) at Site 1 and the unnamed tributary to Irish Buffalo Creek (S2) at Site 4 will both be

relocated. The unregistered landfill in the southwest quadrant of the NC 3 and Bethpage Road intersection will be avoided with an alignment shift to the north of the existing NC 3 facility.

9. ADDITIONS AND REVISIONS TO THE ENVIRONMENTAL ASSESSMENT

9.1 Cost Estimates

Based on the selection of the preferred alternative and design revisions to reduce wetland and relocation impacts, the total cost is estimated to be \$31,040,000 for the project, including \$10,400,000 for right of way acquisition, \$18,500,000 for construction, 1,600,000 for mitigation and \$540,000 in prior years cost.

9.2 Typical Section

The typical section will be consistent with the Complete Streets Guidance at the request of the City of Kannapolis. The typical section will provide for two 11 foot travel lanes and a 5 foot bicycle lane in each direction with a 23.5 foot grass median. The typical section for the dual bridges over Irish Buffalo Creek will provide two 11 foot travel lanes and a 5 foot bicycle lane for each bridge. Sidewalk will be provided along each side of the facility for the entire length of the project.

9.3 Federal Agency Involvement and Section 4(f) Evaluation

Federal funds were removed from the proposed project in 2013. With no federal funds involved, the FHWA will not be required to participate in the approval process of the final environmental document. The proposed project no longer requires a Section 4(f) Evaluation to demonstrate that there are no prudent and/or feasible alternatives to the use of land from the National Historic Register Eligible Juniper-Pine-Mooresville-Chestnut Mill Village and the Frog Hollow Mill Village Historic Districts.

Though the project's federal funds were removed, federal permits are required by the United States Army Corps of Engineers. In a letter dated May 28, 2014, the USACE formally assumed responsibility as the lead federal agency for the proposed project. The aforementioned letter also serves as formal notification of the adverse effect finding to the Frog Hollow Mill Village and the Juniper-Pine-Mooresville-Chestnut Mill Village Historic Districts. See Appendix B

9.4 Section 106 Coordination

Section 106 of the National Historic Preservation Act of 1966 (NHPA) requires Federal agencies to take into account the effects of their undertakings (federally-funded, licensed, or permitted) on properties included in or eligible for inclusion in the National Register of Historic Places (NRHP) and to afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment. The historic preservation review process mandated by Section 106 is outlined in regulations issued by ACHP.

Revised regulations, "Protection of Historic Properties" (36 CFR Part 800), became effective August 5, 2004. Section 106 applies to project which are federally-funded or which require a federal permit. Since USACE, is the lead federal agency, and an individual permit is anticipated, this project is subject to Section 106 compliance.

9.4.1 Historic Architecture

There are two historic districts which are eligible for listing in the NRHP along the project corridor. This evaluation outlines coordination that has occurred and the measures proposed to minimize harm to these resources in accordance with Section 106 of the National Historic Preservation Act of 1966 as amended and implemented by the Advisory Council on Historic Preservation's regulations for compliance codified as 36 CFR Part 800.

The Frog Hollow Mill Village and the Juniper-Pine-Mooresville-Chestnut Mill Village Historic Districts each have properties located on both sides of NC 3/Mooresville Road. NCDOT submitted a Historic Resources Survey to the North Carolina Historic Preservation Office (NC-HPO) on April 30, 2009. In that report NCDOT recommended that the Juniper-Pine-Mooresville-Chestnut Mill Village Historic District was eligible under Criterion A. In a letter dated June 8, 2009, NC-HPO concurred with that finding and also recommended that a portion of the Frog Hollow Mill Village Historic District to be eligible under Criterion C. In that letter, NC-HPO also delineated future study areas to be examined in the event of an expansion of the APE. On October 12, 2010, NCDOT, NC-HPO and FHWA determined that the project would have an adverse effect on the two National Register-eligible districts. Subsequently, two avoidance alternatives were developed, South Avoidance Alternative 1 and North Avoidance Alternative 1. These avoidance alternatives expanded the area of potential effects, therefore further survey of the designated future study areas were warranted. Since the publishing of the EA, additional properties have been included in each of the National Register-eligible districts. New district boundaries have been established for the Frog Hollow Mill Village and the Juniper-Pine-Mooresville-Chestnut Mill Village Historic Districts. Each avoidance alternative, South Avoidance Alternative 1 and North Avoidance Alternative 1, impacted properties within the newly established historic district boundaries. Two additional alignments were developed as avoidance alternatives to the newly established historic district boundaries. The additional alignments were labeled as South Avoidance Alternative 2 and North Avoidance Alternative 2. After the development of the additional avoidance alternatives, another evaluation of properties revealed new properties to be included in the Frog Hollow Mill Village Historic District. A new boundary was established for the Frog Hollow Mill Village. The South Avoidance Alternative 2 impacts properties within the revised Frog Hollow Mill Village Historic District boundary.

9.4.2 Impacts to the NRHP Eligible Districts

The Juniper-Pine-Mooresville-Chestnut Mill Village and Frog Hollow Mill Village Historic Districts are located within the project limits on the north and south side of

Mooresville Road from Pine Street to Dale Earnhardt Boulevard/Loop Road (see Appendix A, Figures 2A-2D,). The Best-Fit alignment (the selected widening alternative) will impact the NRHP eligible districts (see Appendix A, Figures 3D and 3E)

Eighteen (18) contributing structures from the Juniper-Pine-Mooresville-Chestnut Mill Village and Frog Hollow Mill Village Historic Districts are estimated to be displaced by the selected widening alternative. These structures are located on both the north and south side of NC 3/Mooresville Road. A total of 34 properties within the districts will be affected by right of way acquisition of property.

9.4.3 Planning and Coordination to Minimize Harm

Coordination was established and input received from the USACE, NC-HPO, City of Kannapolis officials, stakeholders, and concerned citizens to discuss alternatives and measures to minimize harm to the NRHP eligible districts. The measures that were considered reasonable were evaluated and incorporated into the design of the project and/or included in the MOA.

Coordination with the NC-HPO has been ongoing since the beginning of the project. An early coordination memorandum regarding the proposed improvements and NRHP listed properties along the project corridor was received from the HPO on November 8, 2007. NCDOT and FHWA also held meetings with representatives of the NC-HPO to discuss alternatives and measures to minimize harm to resources during project development. Additional meetings involving the USACE, NC-HPO, the City of Kannapolis local officials, citizens and residents of both the Frog Hollow Mill Village and Juniper-Pine-Mooresville-Chestnut Mill Village Historic Districts. These meetings were held on the following dates:

- September 27, 2010 (NC-HPO Coordination)
- October 12, 2010 (NC-HPO Coordination)
- July 9, 2013 (Public Hearing)
- December 18, 2013 (NEPA/404 Merger Team CP2A/4A/4B Meeting)
- May 14, 2014 (MOA Process Development with the NC-HPO and the USACE)
- July 8, 2014 (public meeting with residents of the NRHP eligible districts)
- September 2, 2014 (Implementation of Crosswalks within the NRHP eligible districts with the NC-HPO and the USACE)

**Table 5
Summary of Estimated Impacts Comparison for Alternates to the Historic Districts**

	Northern Avoidance Alternative 1	Northern Avoidance Alternative 2	Southern Avoidance Alternative 1	Southern Avoidance Alternative 2	Selected Alternative
Parcels	84	55	67	46	34
Residential Relocations	53	38	31	15	18
Business Relocations	5	5	2	2	0
RW Cost	*10,975,000	*9,325,000	*7,325,000	*3,575,000	*3,090,000
Jurisdictional Stream Impacts	**350 lf	**350 lf	**620 lf	**620 lf	**560 lf
Jurisdictional Wetland Impacts	0	0	0	0	0

* These figures do not include utility involvement or permanent utility easement

** Estimated Impacts rounded to the nearest foot based on preliminary design

^ These figures provided by NCDOT Right of Way Unit

9.4.4 Avoidance Consideration and Alternate Recommendation

The four (4) avoidance alternatives did not proceed beyond the functional design phase considering the anticipated impacts to the human and natural environment at a functional design level. Each south avoidance alternative was anticipated to incur additional jurisdictional impacts to Streams S6 and S7 as they each transitioned from NC 3/Mooresville Road to the south toward Miller Street. Any further alignment shift of the south avoidance alternatives would place the alternatives in a FEMA floodplain. The fill within the floodplain would cause even more impacts due to flooding. Each north avoidance alternative would relocate a portion of Stream S6 as an additional jurisdictional impact. Both of the north avoidance alternatives would be very disruptive to residents as they each would involve a higher number of relocations due to the realignment of NC 3/Mooresville Road through a cohesive subdivision. Based on the disruptive nature of the avoidance alternatives along with new jurisdictional impacts to waters of the United States the selected alternative (widening the existing facility) is recommended.

10. BASIS FOR FINDING OF NO SIGNIFICANT IMPACT (FONSI)

Based upon a study of the impacts of the proposed project as documented in the Environmental Assessment, and upon comments from federal, state, and local agencies, it is the finding of the NCDOT that the project will not have a significant impact upon the quality of the human or natural environment. No significant impacts on natural, ecological, cultural or scenic resources are expected. In view of the above evaluation, it has been determined that a State Finding of No Significant Impact is applicable for this project. Neither an Environmental Impact statement nor further analysis is required.

Appendix A

Figures

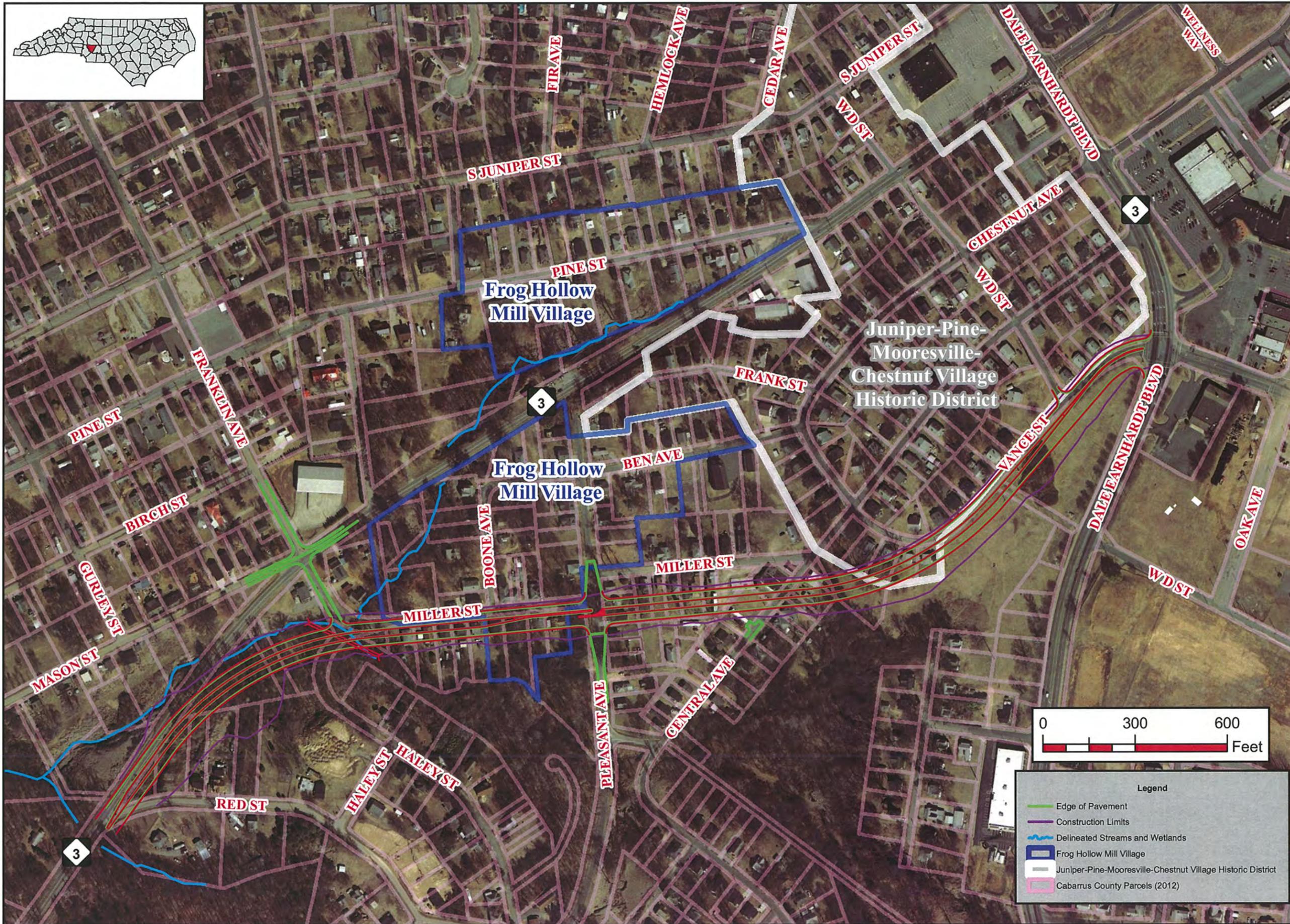


NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS BRANCH

VICINITY MAP
 NC 3 WIDEN TO MULTI LANES
 FROM PROPOSED KANNAPOLIS PARKWAY (U-2009) TO LOOP RD (SR 1691)
 CABARRUS COUNTY
 TIP PROJECT U-3440

County:	CABARRUS	
Div:	10	TIP# U-3440
WBS:	39010.1.1	
Date:	OCT 2011	

Figure 1



NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROJECT DEVELOPMENT AND
ENVIRONMENTAL ANALYSIS UNIT

HISTORIC DISTRICT SOUTH
AVOIDANCE ALTERNATE 1 MAP
NC 3 WIDEN TO MULTI LANES
FROM PROPOSED KANNAPOLIS
PARKWAY (U-2009) TO LOOP RD
(SR 1691)
CABARRUS COUNTY
TIP PROJECT U-3440



County:
CABARRUS

Div: 10 TIP# U-3440

WBS:
39010.1.1

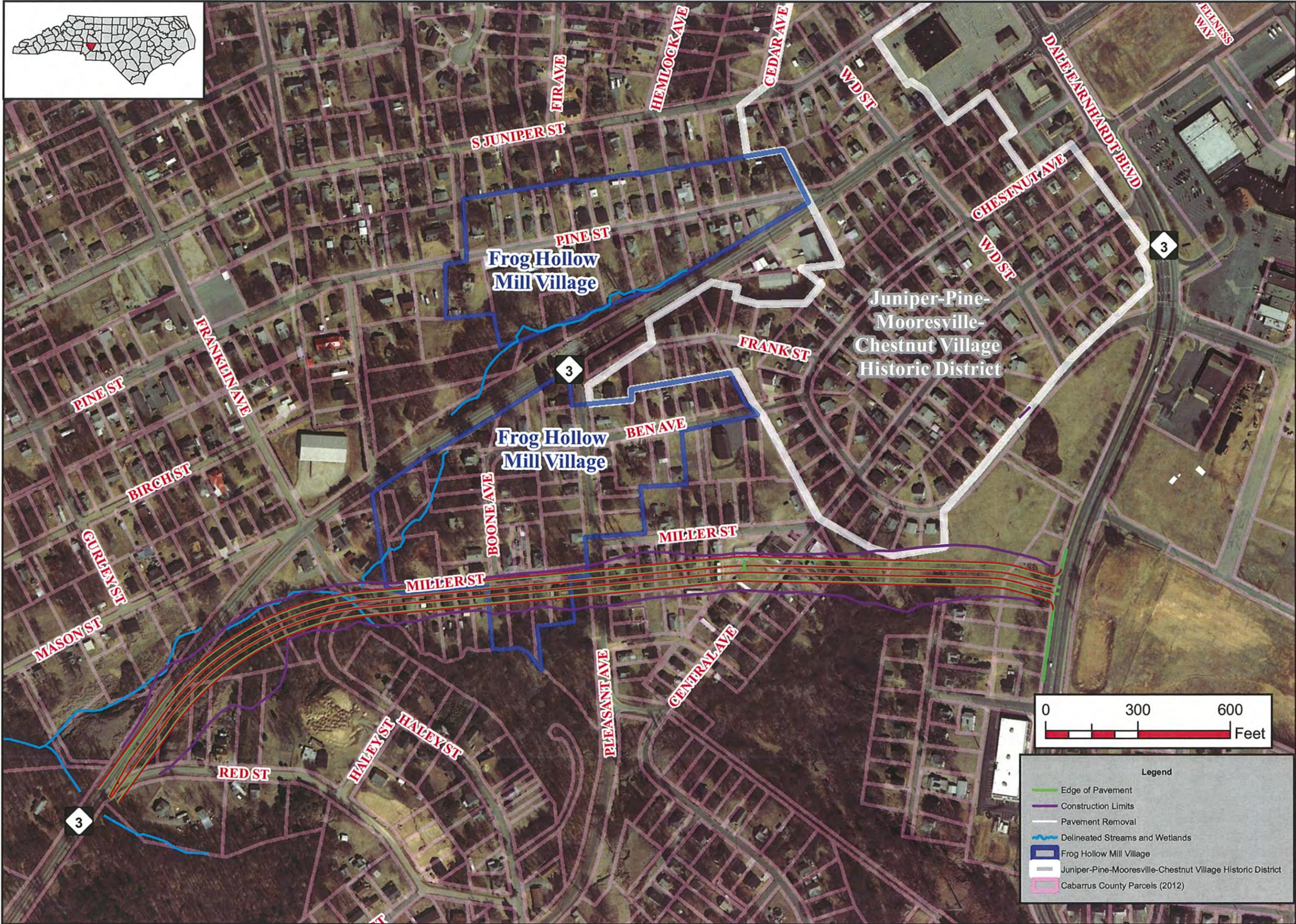
Date:
October 2014

Figure
2a

0 300 600 Feet

Legend

- Edge of Pavement
- Construction Limits
- Delineated Streams and Wetlands
- Frog Hollow Mill Village
- Juniper-Pine-Mooresville-Chestnut Village Historic District
- Cabarrus County Parcels (2012)



NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROJECT DEVELOPMENT AND
ENVIRONMENTAL ANALYSIS UNIT

HISTORIC DISTRICT SOUTH
AVOIDANCE ALTERNATE 2 MAP
NC 3 WIDEN TO MULTI LANES
FROM PROPOSED KANNAPOLIS
PARKWAY (U-2009) TO LOOP RD
(SR 1691)
CABARRUS COUNTY
TIP PROJECT U-3440



County:
CABARRUS

Div: 10 TIP# U-3440

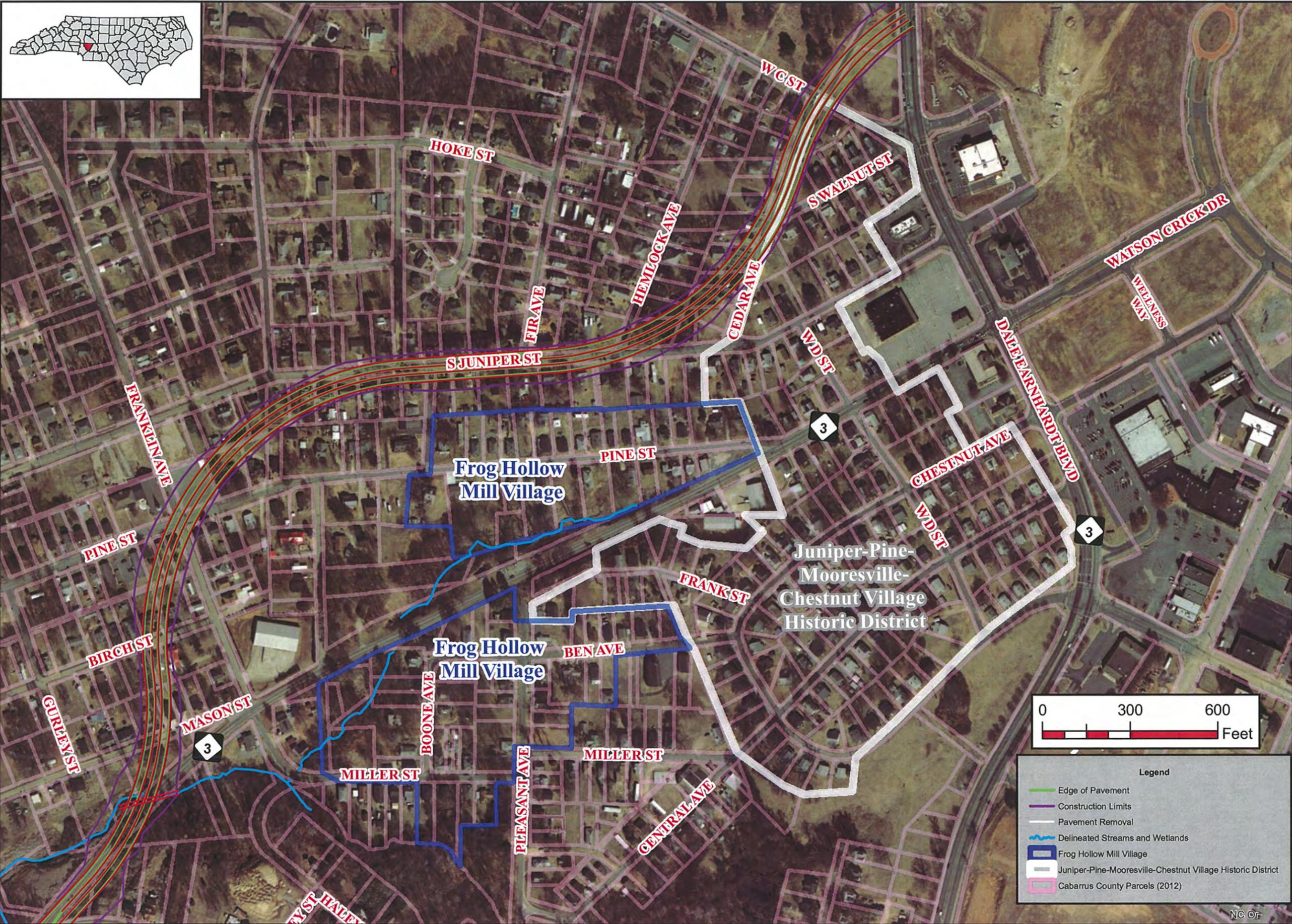
WBS:
39010.1.1

Date:
October 2014

Figure
2b

Legend

- Edge of Pavement
- Construction Limits
- Pavement Removal
- ~ Delineated Streams and Wetlands
- Frog Hollow Mill Village
- Juniper-Pine-Mooresville-Chestnut Village Historic District
- Cabarrus County Parcels (2012)



NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROJECT DEVELOPMENT AND
ENVIRONMENTAL ANALYSIS UNIT

HISTORIC DISTRICT NORTH
AVOIDANCE ALTERNATE 1 MAP
NC 3 WIDEN TO MULTI LANES
FROM PROPOSED KANNAPOLIS
PARKWAY (U-2009) TO LOOP RD
(SR 1691)
CABARRUS COUNTY
TIP PROJECT U-3440



County:
CABARRUS

Div: 10 TIP# U-3440

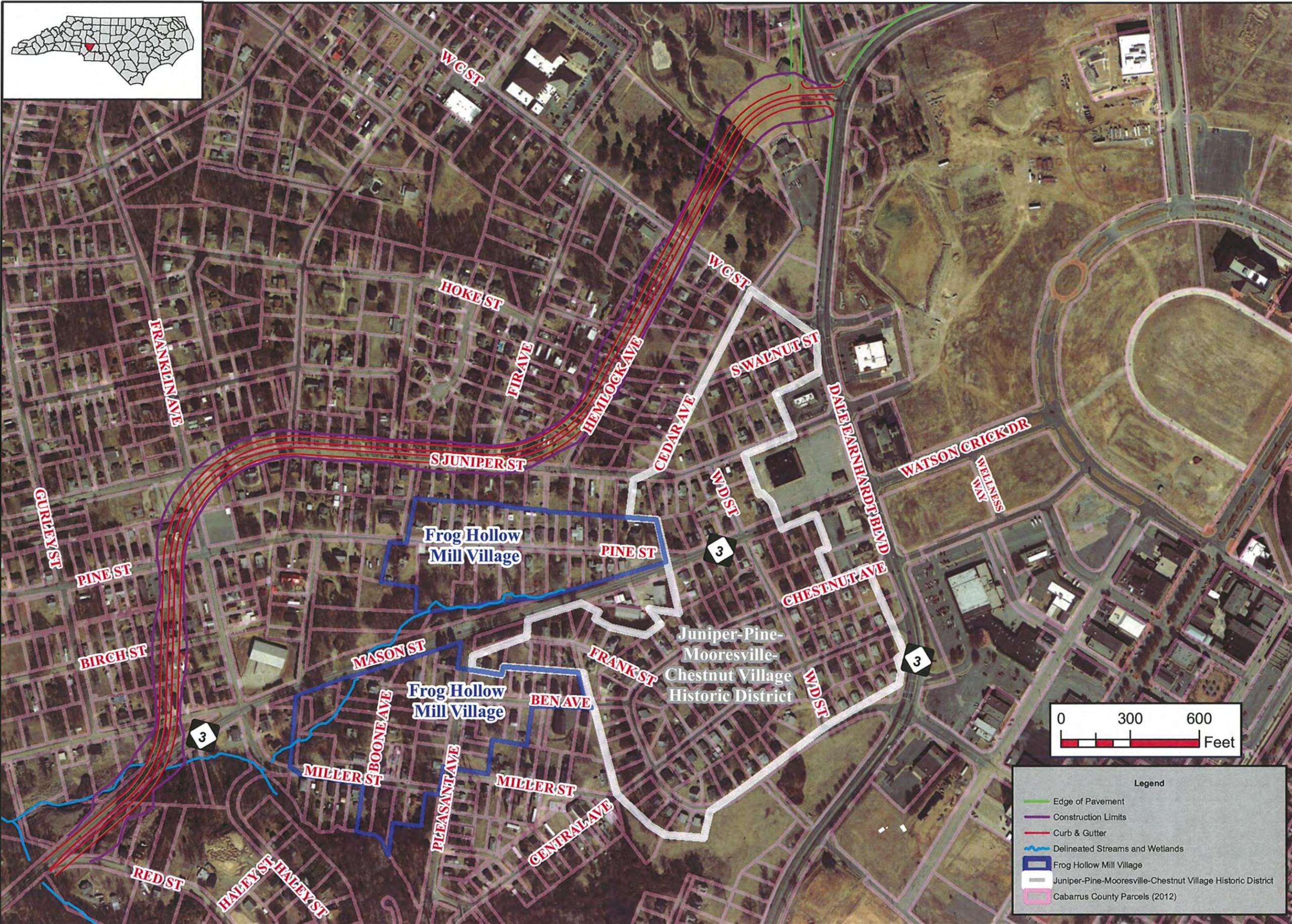
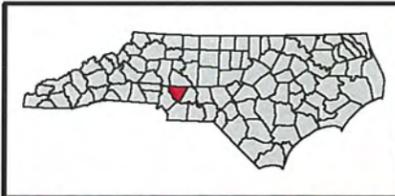
WBS:
39010.1.1

Date:
October 2014

Figure
2c

Legend

- Edge of Pavement
- Construction Limits
- Pavement Removal
- Delineated Streams and Wetlands
- Frog Hollow Mill Village
- Juniper-Pine-Mooresville-Chestnut Village Historic District
- Cabarrus County Parcels (2012)



NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROJECT DEVELOPMENT AND
ENVIRONMENTAL ANALYSIS UNIT

HISTORIC DISTRICT NORTH
AVOIDANCE ALTERNATE 2 MAP
NC 3 WIDEN TO MULTI LANES
FROM PROPOSED KANNAPOLIS
PARKWAY (U-2009) TO LOOP RD
(SR 1691)
CABARRUS COUNTY
TIP PROJECT U-3440



County:
CABARRUS

Div: 10 TIP# U-3440

WBS:
39010.1.1

Date:
October 2014

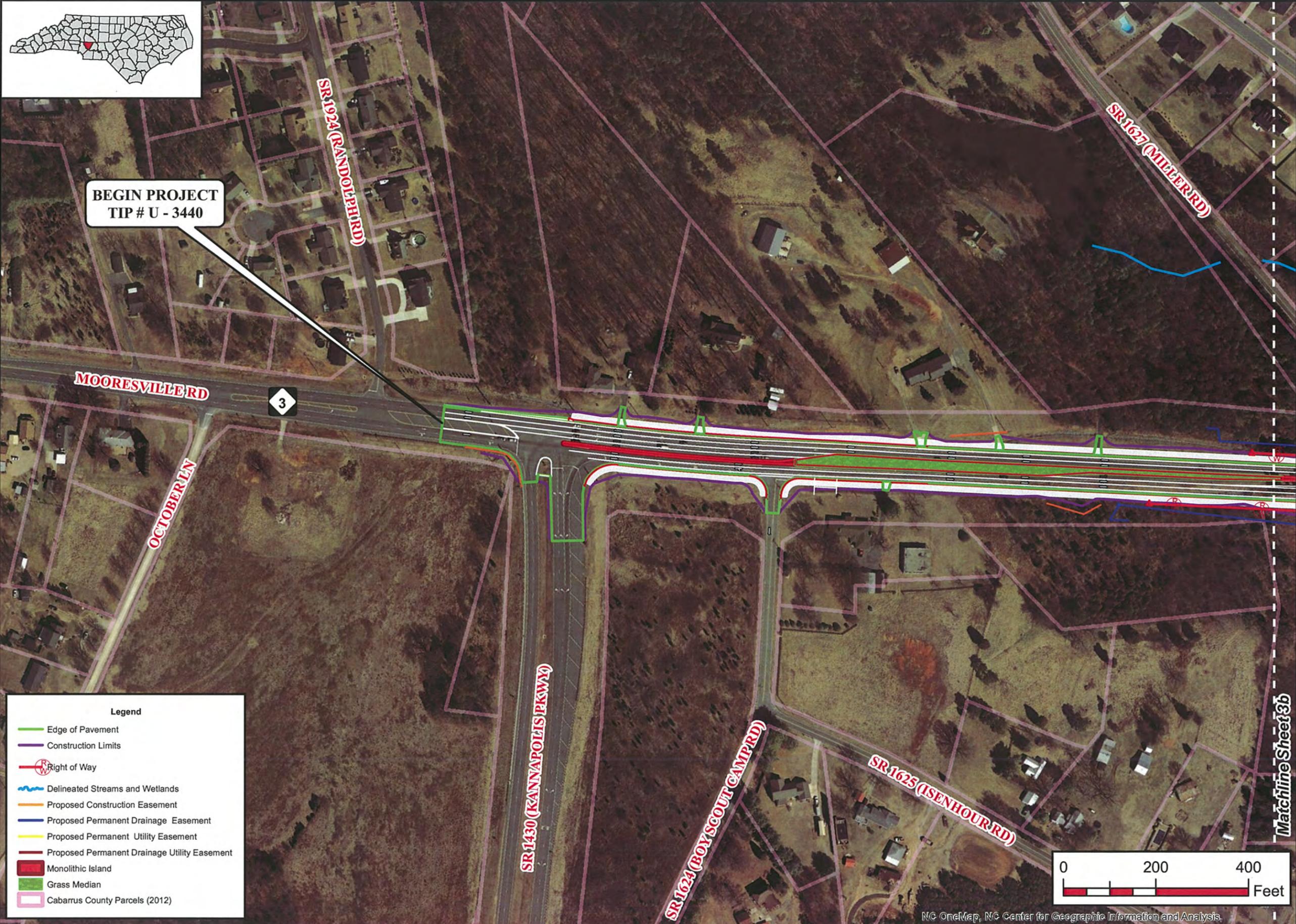
Figure
2d

Legend

- Edge of Pavement
- Construction Limits
- Curb & Gutter
- Delineated Streams and Wetlands
- Frog Hollow Mill Village
- Juniper-Pine-Mooresville-Chestnut Village Historic District
- Cabarrus County Parcels (2012)



BEGIN PROJECT
TIP # U - 3440



Legend

- Edge of Pavement
- Construction Limits
- Right of Way
- Delineated Streams and Wetlands
- Proposed Construction Easement
- Proposed Permanent Drainage Easement
- Proposed Permanent Utility Easement
- Proposed Permanent Drainage Utility Easement
- Monolithic Island
- Grass Median
- Cabarrus County Parcels (2012)



NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROJECT DEVELOPMENT AND
ENVIRONMENTAL ANALYSIS UNIT

AERIAL AND DESIGN MAP
NC 3 WIDEN TO MULTI LANES
FROM PROPOSED KANNAPOLIS
PARKWAY (U-2009) TO LOOP RD
(SR 1691)
CABARRUS COUNTY
TIP PROJECT U-3440



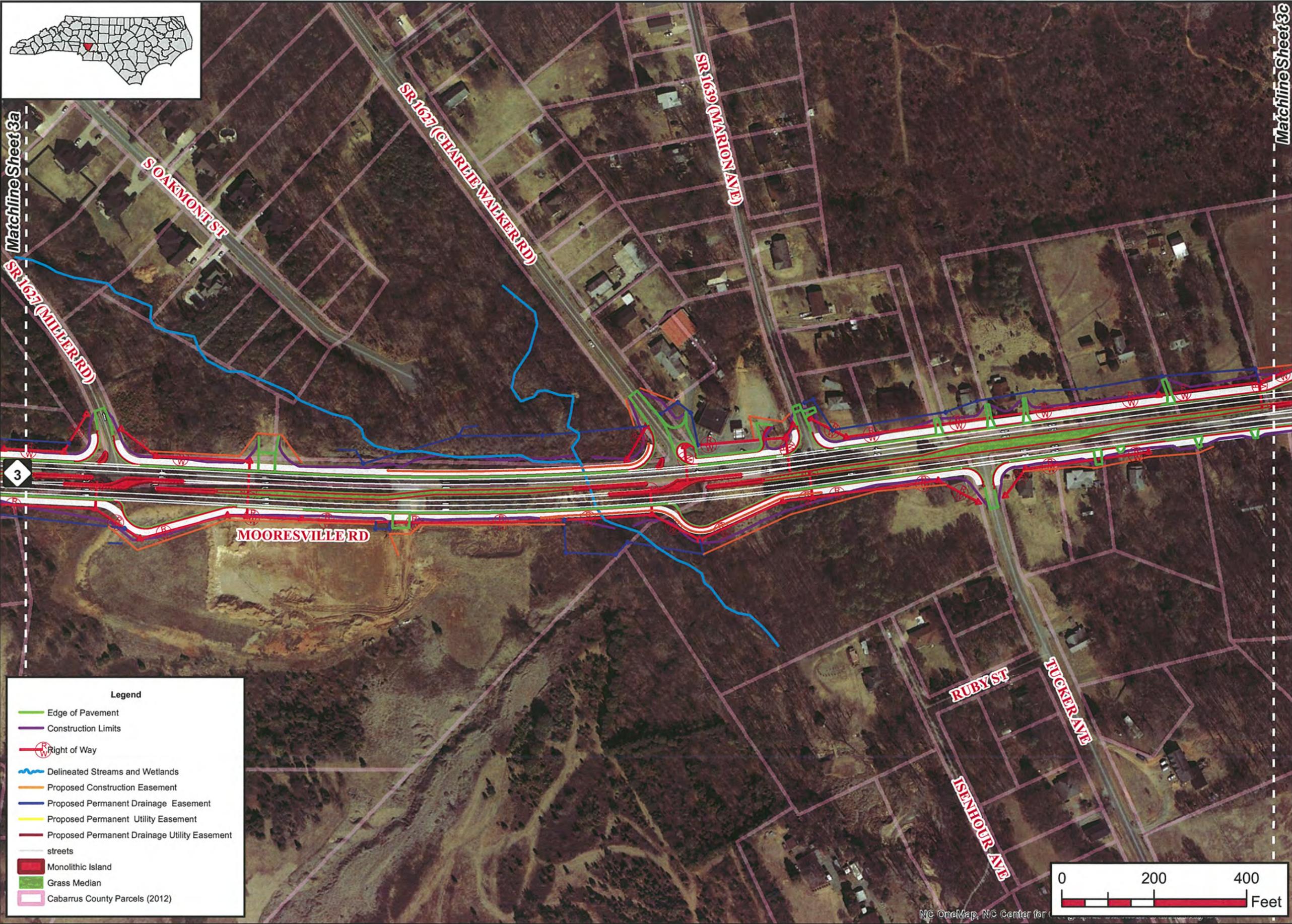
County:
CABARRUS

Div: 10 TIP# U-3440

WBS:
39010.1.1

Date:
October 2014

**Figure
3a**



Matchline Sheet 3a

Matchline Sheet 3c

Legend

- Edge of Pavement
- Construction Limits
- Right of Way
- Delineated Streams and Wetlands
- Proposed Construction Easement
- Proposed Permanent Drainage Easement
- Proposed Permanent Utility Easement
- Proposed Permanent Drainage Utility Easement
- streets
- Monolithic Island
- Grass Median
- Cabarrus County Parcels (2012)



NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROJECT DEVELOPMENT AND
ENVIRONMENTAL ANALYSIS UNIT

AERIAL AND DESIGN MAP
NC 3 WIDEN TO MULTI LANES
FROM PROPOSED KANNAPOLIS
PARKWAY (U-2009) TO LOOP RD
(SR 1691)
CABARRUS COUNTY
TIP PROJECT U-3440



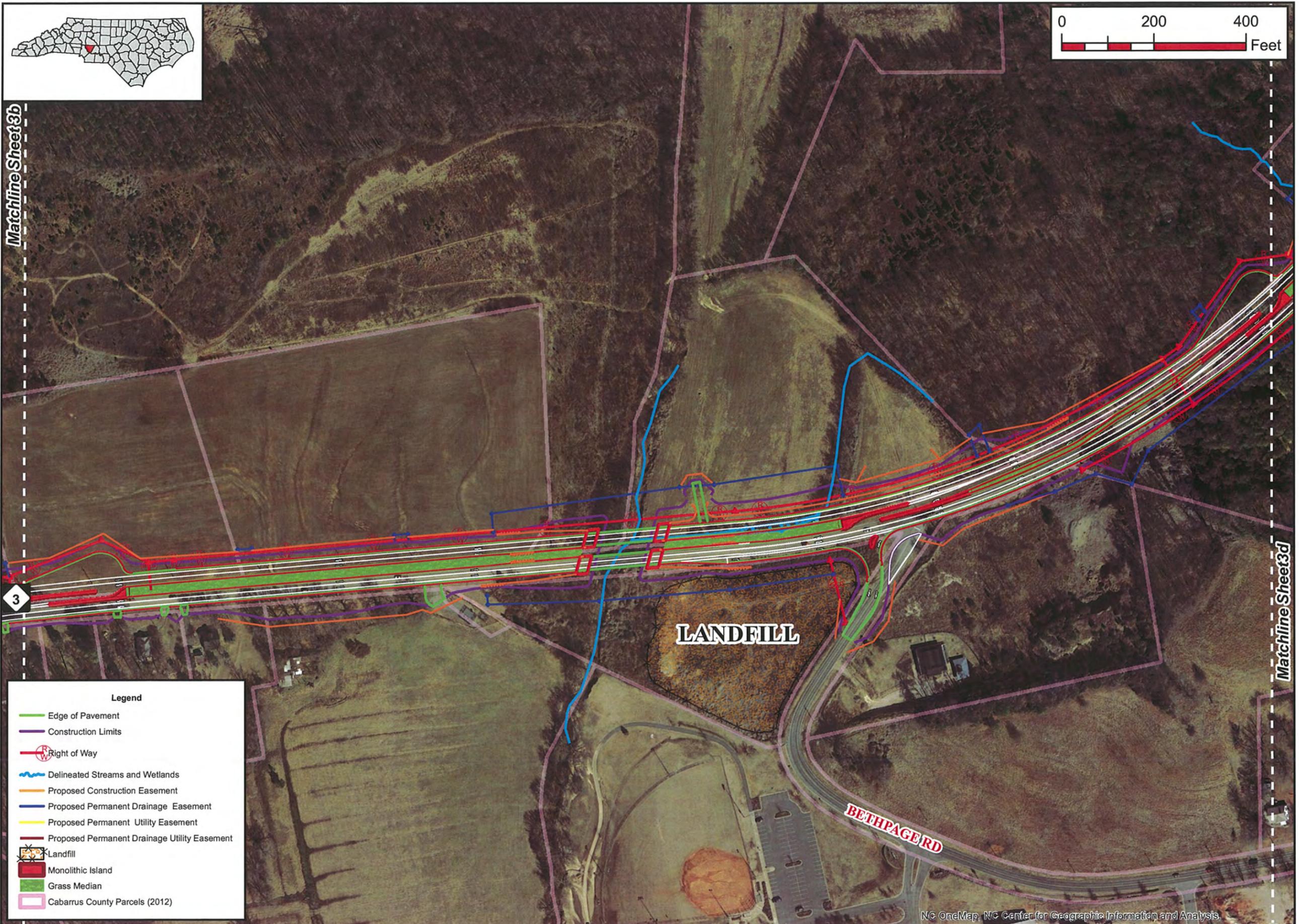
County:
CABARRUS

Div: 10 TIP# U-3440

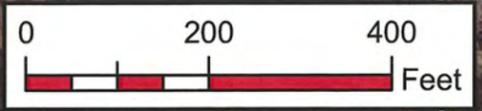
WBS:
39010.1.1

Date:
October 2014

**Figure
3b**



Matchline Sheet 3b



3

Matchline Sheet 3d

- Legend**
- Edge of Pavement
 - Construction Limits
 - Right of Way
 - Delineated Streams and Wetlands
 - Proposed Construction Easement
 - Proposed Permanent Drainage Easement
 - Proposed Permanent Utility Easement
 - Proposed Permanent Drainage Utility Easement
 - Landfill
 - Monolithic Island
 - Grass Median
 - Cabarrus County Parcels (2012)



NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROJECT DEVELOPMENT AND
ENVIRONMENTAL ANALYSIS UNIT

AERIAL AND DESIGN MAP
NC 3 WIDEN TO MULTI LANES
FROM PROPOSED KANNAPOLIS
PARKWAY (U-2009) TO LOOP RD
(SR 1691)

CABARRUS COUNTY
TIP PROJECT U-3440



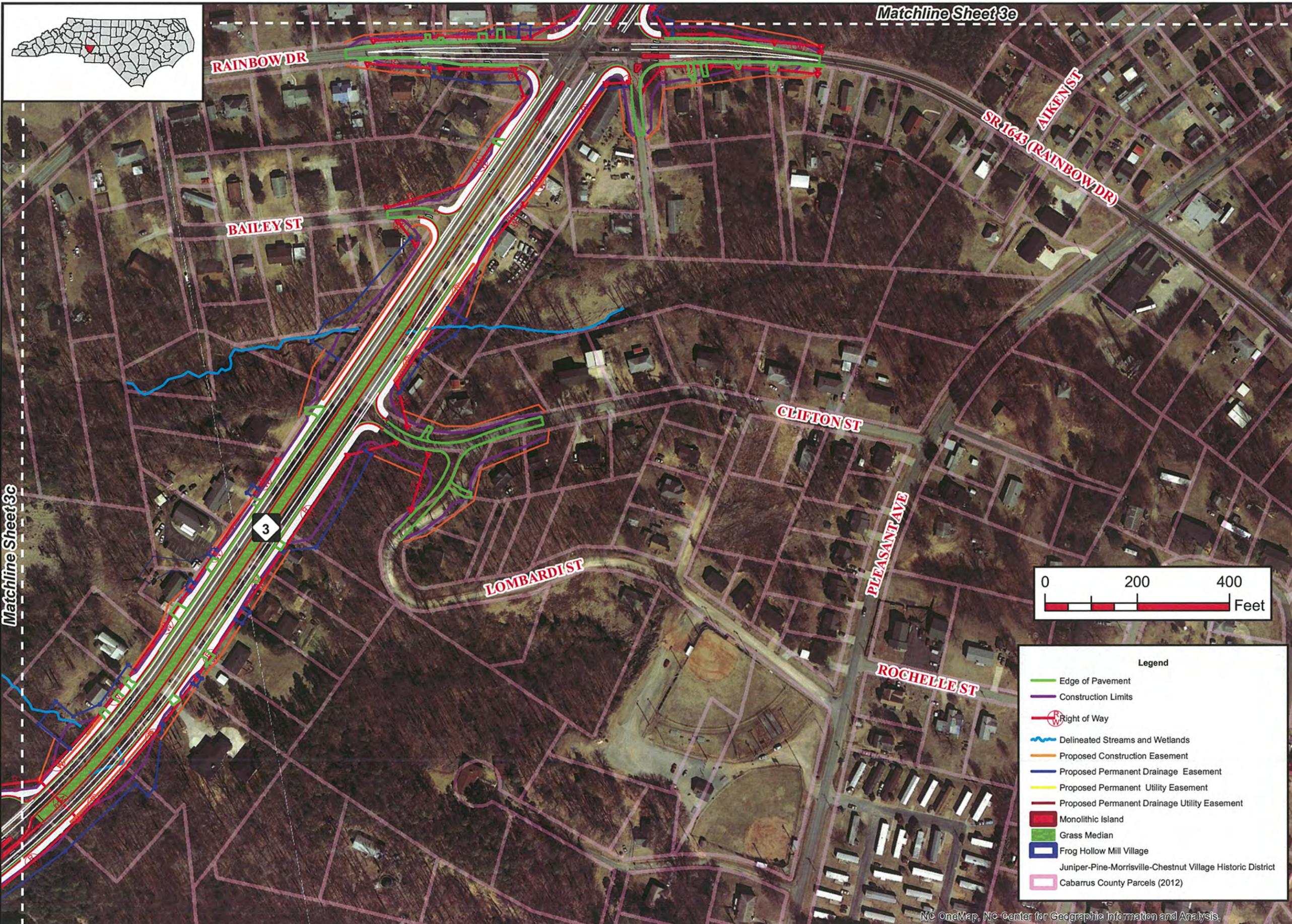
County:
CABARRUS

Div: 10 TIP# U-3440

WBS:
39010.1.1

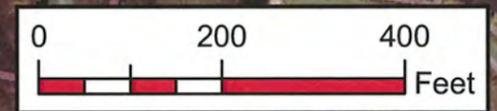
Date:
October 2014

Figure
3c



Matchline Sheet 3c

Matchline Sheet 3e



Legend

- Edge of Pavement
- Construction Limits
- Right of Way
- Delineated Streams and Wetlands
- Proposed Construction Easement
- Proposed Permanent Drainage Easement
- Proposed Permanent Utility Easement
- Proposed Permanent Drainage Utility Easement
- Monolithic Island
- Grass Median
- Frog Hollow Mill Village
- Juniper-Pine-Morrisville-Chestnut Village Historic District
- Cabarrus County Parcels (2012)

NC OneMap, NC Center for Geographic Information and Analysis.



NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS UNIT

AERIAL AND DESIGN MAP
NC 3 WIDEN TO MULTI LANES FROM PROPOSED KANNAPOLIS PARKWAY (U-2009) TO LOOP RD (SR 1691)

CABARRUS COUNTY
TIP PROJECT U-3440



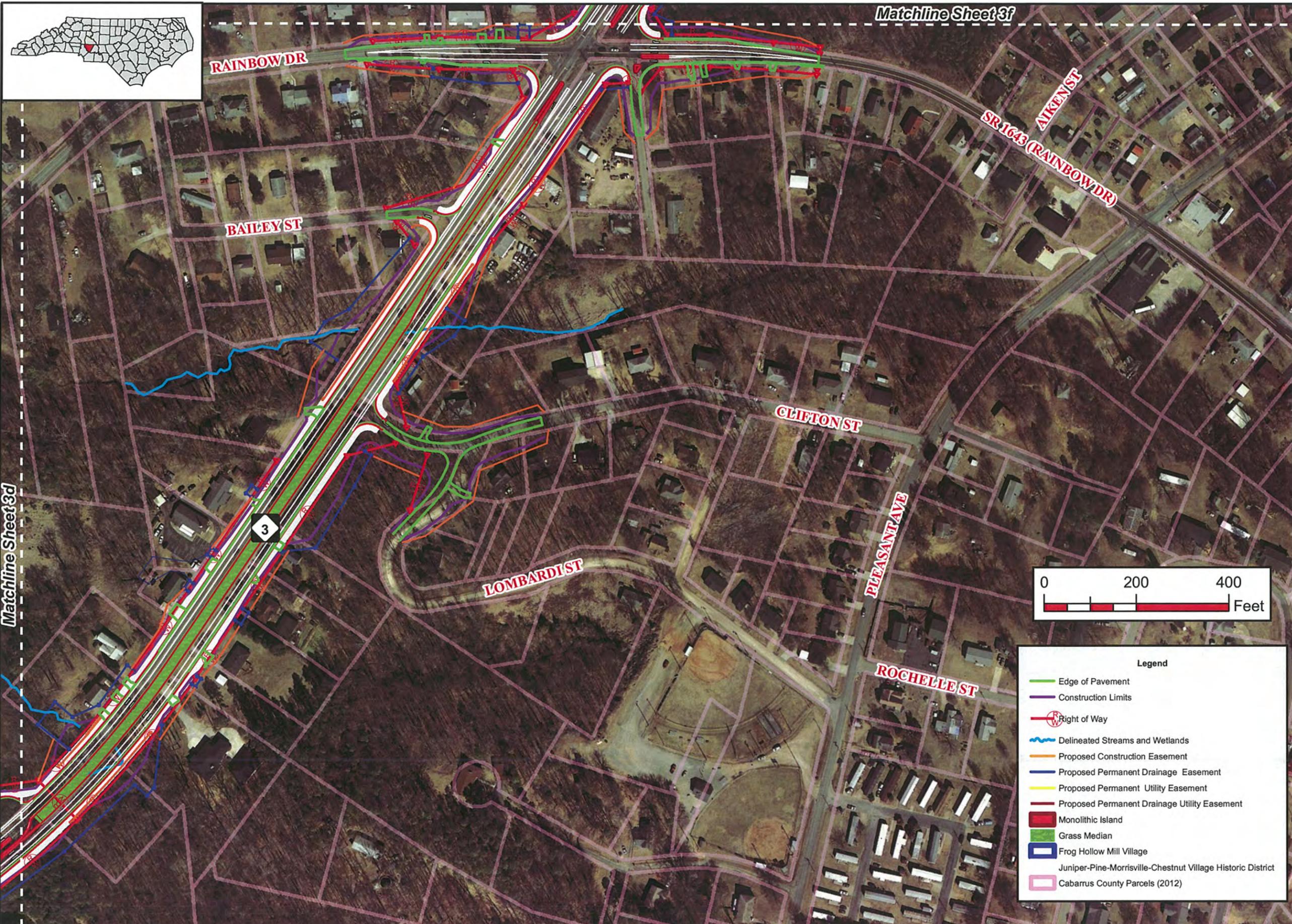
County: CABARRUS

Div: 10 TIP# U-3440

WBS: 39010.1.1

Date: October 2014

Figure 3d



Matchline Sheet 3d

Matchline Sheet 3f



- Legend**
- Edge of Pavement
 - Construction Limits
 - Right of Way
 - Delineated Streams and Wetlands
 - Proposed Construction Easement
 - Proposed Permanent Drainage Easement
 - Proposed Permanent Utility Easement
 - Proposed Permanent Drainage Utility Easement
 - Monolithic Island
 - Grass Median
 - Frog Hollow Mill Village
 - Juniper-Pine-Morrisville-Chestnut Village Historic District
 - Cabarrus County Parcels (2012)



NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROJECT DEVELOPMENT AND
ENVIRONMENTAL ANALYSIS UNIT

AERIAL AND DESIGN MAP
NC 3 WIDEN TO MULTI LANES
FROM PROPOSED KANNAPOLIS
PARKWAY (U-2009) TO LOOP RD
(SR 1691)
CABARRUS COUNTY
TIP PROJECT U-3440



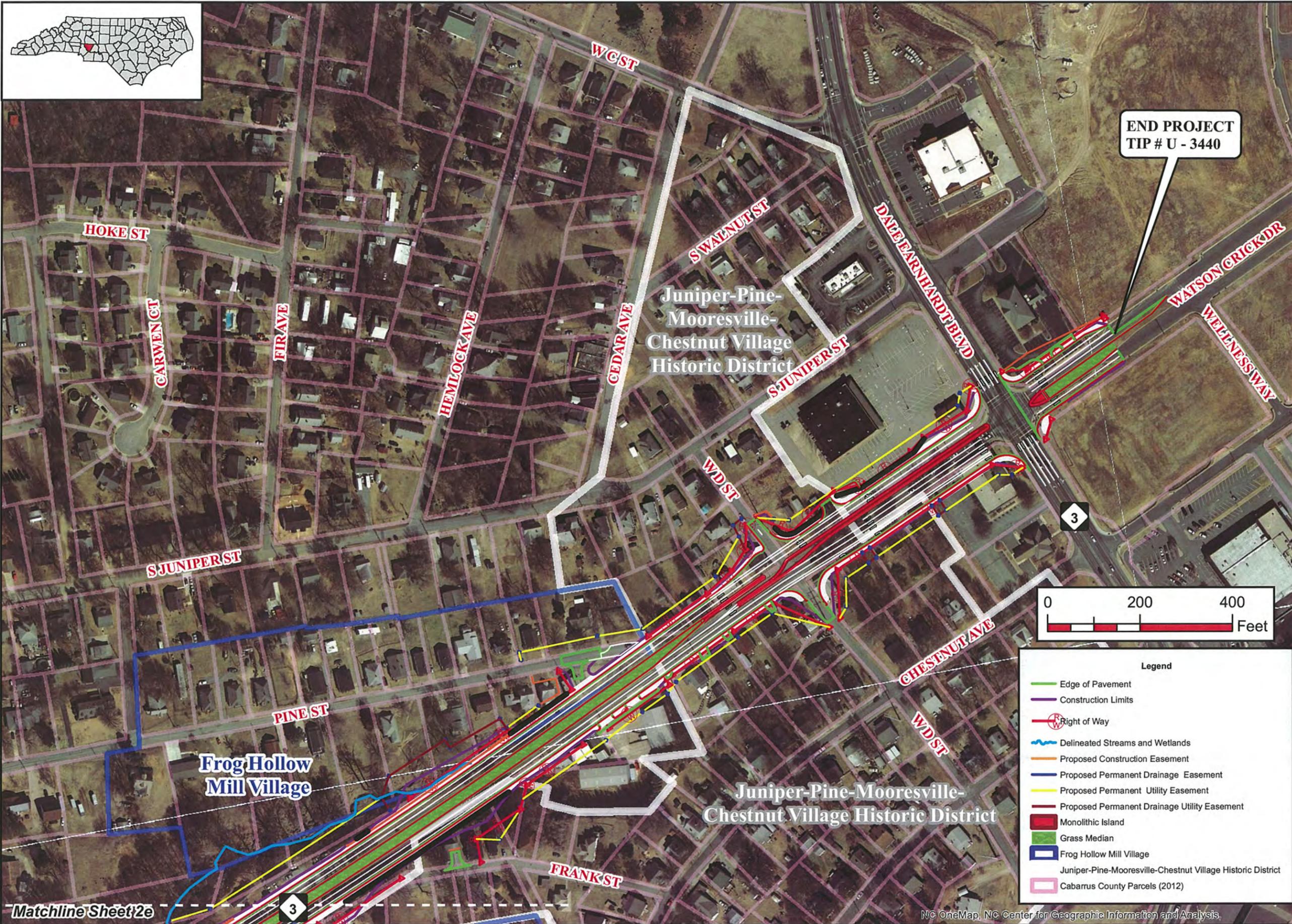
County:
CABARRUS

Div: 10 TIP# U-3440

WBS:
39010.1.1

Date:
October 2014

Figure
3e



Matchline Sheet 2e

NC OneMap, NC Center for Geographic Information and Analysis.



NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROJECT DEVELOPMENT AND
ENVIRONMENTAL ANALYSIS UNIT

AERIAL AND DESIGN MAP
NC 3 WIDEN TO MULTI LANES
FROM PROPOSED KANNAPOLIS
PARKWAY (U-2009) TO LOOP RD
(SR 1691)

CABARRUS COUNTY
TIP PROJECT U-3440



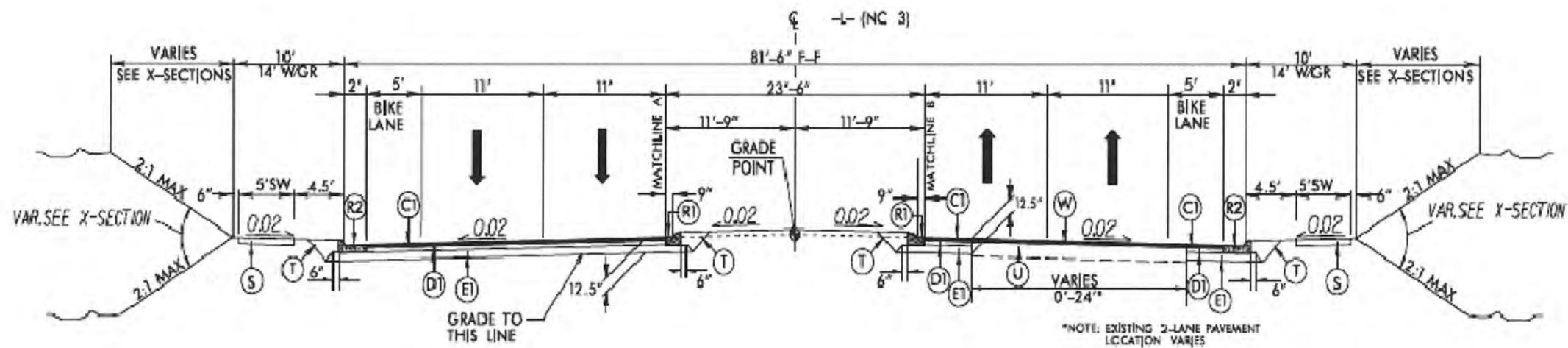
County:
CABARRUS

Div: 10 TIP# U-3440

WBS: 39010.1.1

Date: October 2014

Figure
3f



**PROPOSED TYPICAL SECTION
COMPLETE STREETS DESIGN**



NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROJECT DEVELOPMENT AND
ENVIRONMENTAL ANALYSIS UNIT

TYPICAL SECTION MAP
NC 3 WIDEN TO MULTI LANES
FROM PROPOSED KANNAPOLIS
PARKWAY (U-2009) TO LOOP RD
(SR 1691)
CABARRUS COUNTY
TIP PROJECT U-3440



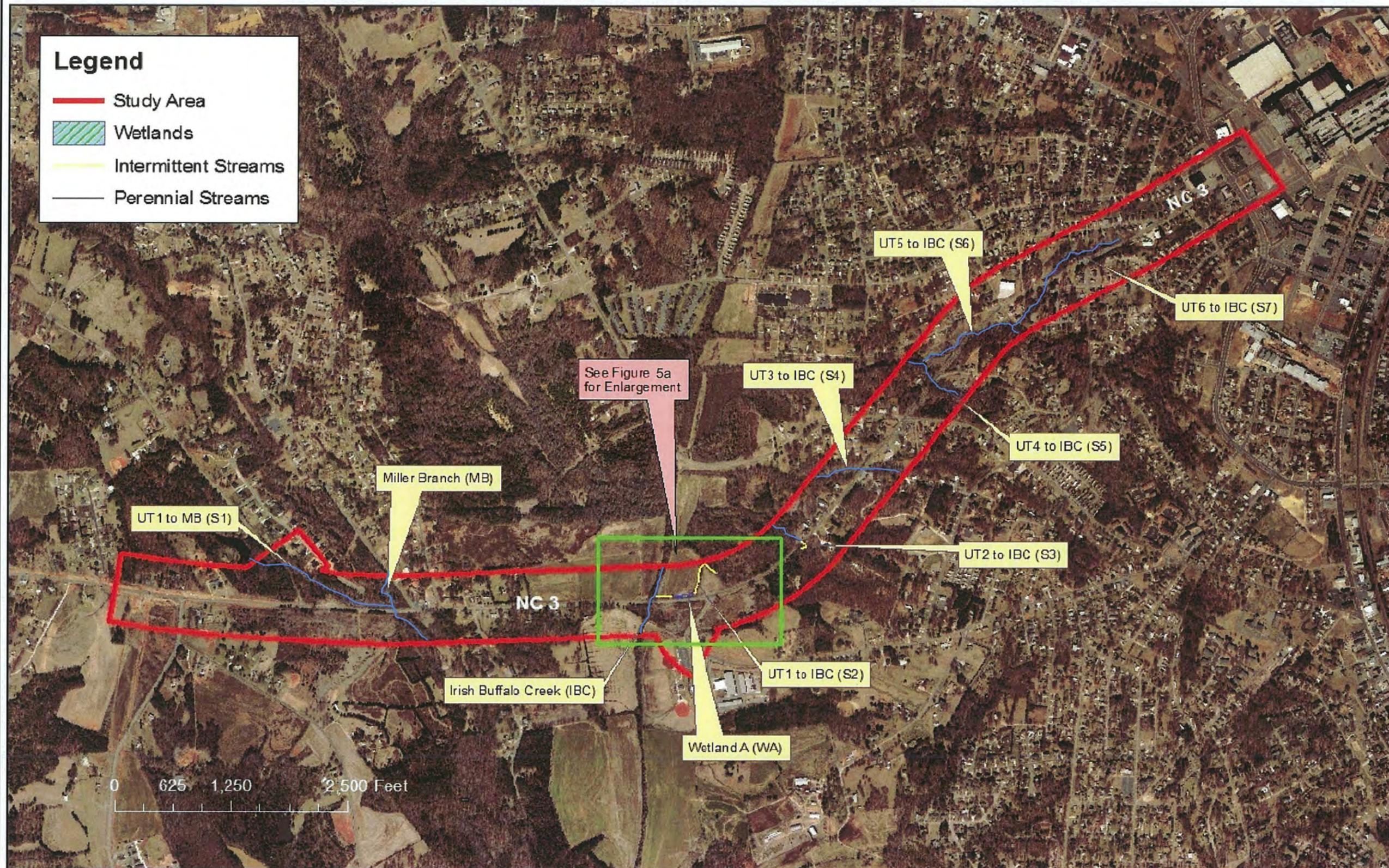
County:
CABARRUS

Div: 10 TIP# U-3440

WBS:
39010.1.1

Date:
October 2014

Figure
4



NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROJECT DEVELOPMENT AND
ENVIRONMENTAL ANALYSIS UNIT

NATURAL ENVIRONMENT MAP
NC 3 WIDEN TO MULTI LANES
FROM PROPOSED KANNAPOLIS
PARKWAY (U-2009) TO LOOP RD
(SR 1691)
CABARRUS COUNTY
TIP PROJECT U-3440



County:
CABARRUS

Div: 10 TIP# U-3440

WBS:
39010.1.1

Date:
January 2015

Figure
5



NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROJECT DEVELOPMENT AND
ENVIRONMENTAL ANALYSIS UNIT

NATURAL ENVIRONMENT MAP
NC 3 WIDEN TO MULTI LANES
FROM PROPOSED KANNAPOLIS
PARKWAY (U-2009) TO LOOP RD
(SR 1691)
CABARRUS COUNTY
TIP PROJECT U-3440



County:
CABARRUS

Div: 10 TIP# U-3440

WBS:
39010.1.1

Date:
January 2015

Figure
5a

Appendix B
Cultural Resources Memorandum of Agreement

**MEMORANDUM OF AGREEMENT
AMONG THE UNITED STATES ARMY CORPS OF ENGINEERS,
THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION,
AND
THE NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER
FOR
WIDENING OF NC 3 FROM KANNAPOLIS PARKWAY TO LOOP ROAD IN
KANNAPOLIS, CABARRUS COUNTY, NORTH CAROLINA
NCDOT TIP U-3440**

WHEREAS, the United States Army Corps of Engineers (USACE) is considering the issuance of a permit to the North Carolina Department of Transportation (NCDOT) for the widening of NC 3 in Cabarrus County, North Carolina (the Undertaking); and

WHEREAS, the USACE has determined that the Undertaking will have an adverse effect upon the Juniper-Pine-Mooresville-Chestnut Mill Village and Frog Hollow Mill Village, two historic districts determined eligible for listing in the National Register of Historic Places (NRHP); and

WHEREAS, the USACE has consulted with the North Carolina State Historic Preservation Officer (SHPO) pursuant to 36 CFR Part 800, regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470f); and

WHEREAS, the USACE has notified the Advisory Council on Historic Preservation (Council) of the adverse effect and the Council has declined to comment or participate in the consultation; and

WHEREAS, NCDOT has participated in the consultation and has been invited by the USACE and North Carolina SHPO to be a signatory to this Memorandum of Agreement (MOA); and

WHEREAS, the City of Kannapolis (City) has participated in the consultation and has been invited by the USACE and North Carolina SHPO to be a concurring party to this MOA;

NOW, THEREFORE, the USACE, NCDOT and the North Carolina SHPO agree that the Undertaking shall be implemented in accordance with the following stipulations in order to take into account the effects of the Undertaking on the historic property.

STIPULATIONS

The USACE shall ensure that the following measures are made part of any permit issued to NCDOT for the Undertaking:

I. Photographic Recordation

Prior to the initiation of construction, NCDOT will record the existing conditions of Juniper-Pine-Mooresville-Chestnut Mill Village Historic District and Frog Hollow Mill Village Historic District located adjacent to or affected by the project area in accordance with the attached Historic Structures and Landscape Recordation Plan (Appendix A).

The results of the photographic recordation will be submitted to the North Carolina SHPO in advance of any work taking place. The SHPO shall have fifteen (15) days from receipt of the materials to review and comment. If no comments are received by NCDOT after the 15 days, work may commence.

Copies of the documentation will be deposited in the files of the North Carolina SHPO, NCDOT Historic Architecture Group, and the City.

II. Conduct Oral History and Gather Documentary Materials

NCDOT will work with the residents of the two historic districts and Kannapolis History Associates to compile a collective history of the former mill villages. NCDOT will work in consultation with the SHPO to develop a scope of work for a contract with a cultural resources consultant. NCDOT will draft the scope of work and provide it to SHPO and the City, who will have ten (10) days to offer comments. At a minimum, the consultant will be responsible for the following tasks:

1. Gathering oral histories from residents of the Juniper-Pine-Mooresville-Chestnut Mill Village and Frog Hollow Mill Villages. The consultant will determine the number and content of the interviews as well as the interviewees.
2. Providing training to residents of the Kannapolis community in how to conduct oral history projects and gather documentary materials.
3. Compiling documentary materials and digitizing images such as photos, scrapbooks, and other artifacts.
4. Preparing the materials so that they may be deposited at the North Carolina State Archives for public access.

III. Develop an Interpretive Exhibit

NCDOT, in consultation with the SHPO and in cooperation with the City, will develop an interpretive exhibit, which explores the history of Kannapolis as a mill town including mill housing. The exhibit will utilize the oral histories, historic photographs, and other gathered materials to convey the history of Canon Mills and its relationship with the workers and residents of Kannapolis, giving special attention to the history and development of the City's many mill villages. The location of the exhibit and the duration of its availability to the public will be determined among the NCDOT, SHPO, and the City. The exhibit materials will be collected and donated to

the City for their use within twelve (12) months after the consultant receives the notice to proceed with the documentation project.

IV. Retaining Walls

Any retaining walls constructed within the boundaries of the historic district will be stamped and stained or painted to resemble bricks. NCDOT will provide design plans and visual representations of the retaining walls to the USACE, SHPO, and the City for comment prior to construction.

V. Pedestrian Crosswalk

1. To maintain the historic and long-term connectivity between the historic districts, which straddle both sides of NC 3, NCDOT shall install and maintain a pedestrian crosswalk at the intersections of NC 3 and Loop Road/Dale Earnhardt Boulevard.
2. NCDOT shall also install a crosswalk at NC 3 and existing Pine Street. Pine Street will become a cul-de-sac. Therefore, NCDOT will create a pedestrian tie-in from Pine Street to the sidewalk on the opposite side of NC 3. NCDOT will provide design plans to USACE, SHPO, and the City for comment prior to construction.
3. NCDOT will provide the USACE, SHPO, and City with visual representation of the sidewalk, median, and pavement treatments for comment prior to construction. Both crosswalks will be stamped and stained to resemble bricks paving.

VI. Unanticipated Discovery

In accordance with 36 CFR 800.11(a), if NCDOT identifies additional cultural resource(s) during construction and determine them to be eligible for the NRHP, all work will be halted within the limits of the NRHP-eligible resource(s) and the USACE and North Carolina SHPO contacted. If after consultation with the Signatory Parties additional mitigation is determined necessary, the NCDOT, in consultation with the Signatory Parties, will develop and implement appropriate protection/mitigation measures for the resource(s). Inadvertent or accidental discovery of human remains will be handled in accordance with North Carolina General Statutes 65 and 70.

VII. Dispute Resolution

Should any of the Signatory or Parties object within (30) days to any plans or documentation provided for review pursuant to this Agreement, the USACE shall consult with the objecting party(ies) to resolve the objection. If the USACE or the objecting party(ies) determines that the objection cannot be resolved, the USACE will forward all documentation relevant to the dispute to the Council. Within thirty (30) days after receipt of all pertinent documentation, the Council will either:

1. Provide the USACE with recommendations, which the USACE will take into account in reaching a final decision regarding the dispute, or
2. Notify the USACE that it will comment pursuant to 36 CFR Section

800.7(c) and proceed to comment. Any Council comment provided in response to such a request will be taken into account by the USACE in accordance with 36 CFR Section 800.7 (c) (4) with reference to the subject of the dispute.

Any recommendation or comment provided by the Council will be understood to pertain only to the subject of the dispute; USACE and NCDOT's responsibility to carry out all of the actions under this agreement that are not the subject of the dispute will remain unchanged.

VIII. Amendments

Should any of the Signatory Parties to this MOA believe that its terms cannot be carried out or that an amendment to the terms must be made, that party(ies) shall immediately consult with the other party(ies) to develop amendments in accordance with 36 CFR 800.6(c)(7). If an amendment cannot be agreed upon, the dispute resolution process set forth in Stipulation IV will be followed.

IX. Termination

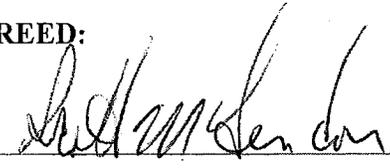
Any of the Signatory Party(ies) may terminate the agreement by providing notice to the other parties, provided that the signatories will consult during the period prior to termination to seek agreement on amendments or other actions that would avoid termination. Termination of this MOA will require compliance with 36 CFR 800. This MOA may be terminated by the execution of a subsequent MOA that explicitly terminates or supersedes its terms.

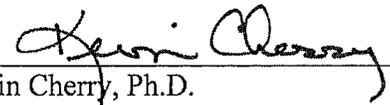
X. Duration

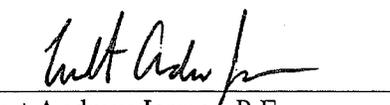
Unless terminated pursuant to Stipulation VI above, this MOA will be in effect until USACE, in consultation with the other Signatory Parties, determines that all of its terms have satisfactorily been fulfilled or if NCDOT is unable or decides not to construct the Undertaking.

Execution of this MOA by USACE, NCDOT, and the North Carolina SHPO, and implementation of its terms, evidence that USACE has afforded the Council an opportunity to comment on the Undertaking, and that USACE has taken into account the effects of the Undertaking on the historic properties.

AGREED:

By:  Date: 14 Nov 2014
Kevin P. Landers, Sr., Colonel
US Army District Commander
United States Army Corps of Engineers, Wilmington District

By:  Date: 10/22/14
Kevin Cherry, Ph.D.
North Carolina State Historic Preservation Officer
North Carolina Department of Cultural Resources

By:  Date: 10/20/14
Robert Andrew Joyney, P.E.
Human Environment Section Head
North Carolina Department of Transportation

**MEMORANDUM OF AGREEMENT
AMONG THE UNITED STATES ARMY CORPS OF ENGINEERS,
THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION,
AND
THE NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER
FOR
WIDENING OF NC 3 FROM KANNAPOLIS PARKWAY TO LOOP ROAD IN
KANNAPOLIS, CABARRUS COUNTY, NORTH CAROLINA
NCDOT TIP U-3440**

FILED:

By: _____
Advisory Council on Historic Preservation

Date: _____

**MEMORANDUM OF AGREEMENT
AMONG THE UNITED STATES ARMY CORPS OF ENGINEERS,
THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION,
AND
THE NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER
FOR
WIDENING OF NC 3 FROM KANNAPOLIS PARKWAY TO LOOP ROAD IN
KANNAPOLIS, CABARRUS COUNTY, NORTH CAROLINA
NCDOT TIP U-3440**

Execution of this Memorandum of Agreement by FHWA, NCDOT, the North Carolina SHPO, and the EBCI, its subsequent filing with the Council, and implementation of its terms evidence that FHWA has afforded the Council an opportunity to comment on the Undertaking, and that FHWA has taken into account the effects of the Undertaking on the historic properties.

CONCUR:



Mike Legg
City Manager, City of Kannapolis

Date: 10-28-14

APPENDIX A

Historic Structures and Landscape Recordation Plan For Widening of NC 3 from Kannapolis Parkway to Loop Road in Kannapolis, Cabarrus County, North Carolina NCDOT TIP U-3440

Photographic Requirements

- Elevations and oblique views of the 34 properties affected by the U-3440 project within the historic districts of Juniper-Pine-Mooresville-Chestnut Mill Village and Frog Hollow Mill Village.
- Representative streetscapes within the affected areas of historic districts.

Photographic Format

- Color digital images (all views). Images are to be shot on a SLR digital camera with a minimum resolution of 6 megabyte pixels, at a high quality (preferably RAW) setting, to be saved in TIF format as the archival masters and labeled according to the State Historic Preservation Office standards.
- Images provided to the City will be in JPEG format.
- All processing to be done to archival standards.
- Labeled map with a key to the shots and photographs.
- The accompanying printed inventory of the images – including subject, location, date, and photographer information for each image – is to be completed according to the State Historic Preservation Office standards.

Copies and Curation

- One (1) set of all above mentioned photographic documentation, including a compact disc of labeled images, will be deposited with the North Carolina Office of Archives and History/Historic Preservation Office to be made a permanent part of the statewide survey and iconographic collection.
- One (1) contact sheet shall be deposited in the files of the Historic Architecture Group of NCDOT.
- One (1) set of all above mentioned photographic documentation, including a compact disc of labeled images, will be deposited with the City of Kannapolis for their records.

Appendix C
Comments Received for the EA from Local,
State, and Federal Agencies



REPLY TO
ATTENTION OF:

DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS
69 DARLINGTON AVENUE
WILMINGTON, NORTH CAROLINA 28403-1343

May 28, 2014

Regulatory Division

Action ID: SAW-2012-00417

John T. Eddins, Ph.D.
Advisory Council on Historic Preservation
Office of Federal Agency Programs
Federal Permitting, Licensing, and Assistance Section
1100 Pennsylvania Avenue, NW Suite 803
Washington, D.C., 20004

Dear Dr. Eddins:

The North Carolina Department of Transportation (NCDOT) proposes to construct the NC 3 (Mooresville Road) widening project in Kannapolis, Cabarrus County, under State Transportation Improvement Program Project Numbers U-3440. The project is subject to compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, and implemented by the Advisory Council on Historic Preservation's regulations for compliance codified as 36 CFR Part 800. Originally the project was to receive funding from the Federal Highway Administration (FHWA) and FHWA was to be the lead federal agency. However NCDOT has notified the U. S. Army Corps of Engineers (USACE) that FHWA will no longer be providing funding for this project and as such, and because implementation of this project will require authorization under Section 404 of the Clean Water Act, USACE, Wilmington District is serving as the lead Federal agency with respect to ensuring compliance with Section 106 of the NHPA.

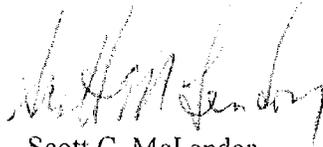
After consultation with the North Carolina State Historic Preservation Office, it was determined that the subject project would have an adverse effect on the Juniper-Pine-Mooresville-Chestnut Mill Village and the Frog Hollow Mill Village, which is determined eligible for the National Register of Historic Places under Criterion A and Criteria C respectively. Furthermore an additional future study area was delineated that could result in potential affect should the project undergo an expansion into this area. Subsequently, the NCDOT prepared a notification of adverse effect as required by the Council in Part 800.6(a)(1). This documentation does not proffer a formal invitation to the Council for participation in the consultation because none of the circumstances specified in Part 800.6(1)(i)(A)-(C) exist for the project.

Please consider this letter to be formal notification that the USACE is now the lead Federal agency and notification, in accordance with 36 CFR Part 800.6(a)(1), of the adverse effect

finding for the subject project. Enclosed you will find, for your reference, the supporting documentation for this finding, which was previously submitted to your office by FHWA.

If you have any questions or need additional information, please contact Crystal Amschler, Project Manager, Asheville Regulatory Field Office, at (828) 271-7980, ext 231.

Sincerely,



Scott C. McLendon
Chief, Wilmington Regulatory Division

Enclosure

cc (with enclosure):

Ms. LaShavio Johnson
Advisory Council on Historic Preservation
Office of Federal Agency Programs
1100 Pennsylvania Avenue, NW, Suite 803
Washington, D.C., 20004

North Carolina State Historic Preservation Office
Attn: Ms. Renee Gledhill-Earley
4617 Mail Service Center
Raleigh, North Carolina 27699-4617

cc (w/o enclosure):

Ms. Mary Pope Furr, Architectural Historian
Human Environment Section
1598 Mail Service Center
Raleigh, North Carolina 27699-1598

Mr. Undrea Major
Project Development and Environmental Analysis
1598 Mail Service Center
Raleigh, North Carolina 27699-1598

CESAW-RG-A/Amschler
CESAW-RG/Wicker



North Carolina
Department of Administration

Beverly Eaves Perdue, Governor

Moses Carey, Jr., Secretary

April 4, 2012

Mr. Undrea Major
North Carolina Department of Transportation
Project Development and Environmental Analysis Unit
1548 Mail Service Center
Raleigh, North Carolina 27699-1548

Re: SCH File # 12-E-4220-0223; EA; Proposed project to widen NC 3 - Mooresville Road from Kannapolis Parkway to Dale Earnhardt Boulevard-Loop Road-SR 1691. STIP U-3440

Dear Mr. Major:

The above referenced environmental impact information has been submitted to the State Clearinghouse under the provisions of the National Environmental Policy Act. According to G.S. 113A-10, when a state agency is required to prepare an environmental document under the provisions of federal law, the environmental document meets the provisions of the State Environmental Policy Act. Attached to this letter for your consideration are the comments made by agencies in the course of this review.

If any further environmental review documents are prepared for this project, they should be forwarded to this office for intergovernmental review.

Should you have any questions, please do not hesitate to call.

Sincerely,

A handwritten signature in black ink, appearing to read "W. E. H. Creech".

William E. H. Creech

Attachments

cc: Region F

Mailing Address:
1301 Mail Service Center
Raleigh, NC 27699-1301

Telephone: (919)807-2425
Fax (919)733-9571
State Courier #51-01-00
e-mail state.clearinghouse@doa.nc.gov

Location Address:
116 West Jones Street
Raleigh, North Carolina



North Carolina Department of Environment and Natural Resources

Beverly Eaves Perdue
Governor

Dee Freeman
Secretary

MEMORANDUM

TO: Zeke Creech
State Clearinghouse

FROM: Melba McGee *h*
Environmental Review Coordinator

RE: 12-0223 EA Improvements to Widen NC 3 from Kannapolis Parkway
to Dale Earnhardt Boulevard/Loop Road in Cabarrus County

DATE: April 3, 2012

The Department of Environment and Natural Resources has reviewed the proposed information. The applicant is encouraged to consider the attached recommendations and continue to work with our agencies during the NEPA Merger Process. The NC Wildlife Resources Commission was unable to comment during the review timeframe. Should comments be submitted, they will be provided to you for your file.

Thank you for the opportunity to review.

Attachments



North Carolina Department of Environment and Natural Resources
Division of Water Quality

Beverly Eaves Perdue
Governor

Charles Wakild
Director

Dee Freeman
Secretary

Date: March 22, 2012

To: Melba McGee, Environmental Coordinator, Office of Legislative and Intergovernmental Affairs

From: Polly Lespinasse, Division of Water Quality, Mooresville Regional Office

Subject: **Comments on the Environmental Assessment Related to the Proposed Improvements to Widen NC 3 (Mooresville Road) from Kannapolis Parkway to Dale Earnhardt Boulevard/Loop Road (SR 1691), Federal Aid Project No. STP-003(6), STIP Project No. U-3440, WBS Element 39010, Cabarrus County, DENR Project No. 12-0223, Due Date 3/28/12**

This office has reviewed the referenced document dated June 2011. The NC Division of Water Quality (NCDWQ) is responsible for the issuance of the Section 401 Water Quality Certification for activities that impact Waters of the U.S., including wetlands. It is our understanding that the project as presented will result in impacts to jurisdictional wetlands, streams, and other surface waters. NCDWQ offers the following comments based on review of the aforementioned document:

Project Specific Comments:

1. Irish Buffalo Creek is a Class C, 303(d) Waters of the State. Irish Buffalo Creek is on the 303(d) list for impaired use for aquatic life due to turbidity. NCDWQ is very concerned with sediment and erosion impacts that could result from this project. NCDWQ recommends that the most protective sediment and erosion control BMPs be implemented in accordance with *Design Standards in Sensitive Watersheds* (15A NCAC 04B .0124) to reduce the risk of further impairment to Irish Buffalo Creek. NCDWQ requests that road design plans provide treatment of the storm water runoff through best management practices as detailed in the most recent version of NCDWQ *Stormwater Best Management Practices*.
2. The Environmental Assessment indicates that there are two (2) alternatives being considered for this project. Alternative A (widening to the north of NC 3) is proposed to impact 2,300 linear feet of stream. Alternative B (widening to the south of NC 3) is proposed to impact 1,300 linear feet of stream. Neither the document, nor the figures provided in the document, clearly indicate where the impact of an additional 1,000 feet will occur under Alternative A. Future documentation should clearly depict the proposed jurisdictional impacts associated with the project.

General Comments:

3. The environmental document should provide a detailed and itemized presentation of the proposed impacts to wetlands and streams with corresponding mapping. If mitigation is necessary as required by 15A NCAC 2H.0506(h), it is preferable to present a conceptual (if not finalized) mitigation plan with the environmental documentation. Appropriate mitigation plans will be required prior to issuance of a 401 Water Quality Certification.
4. Environmental assessment alternatives shall consider design criteria that reduce the impacts to streams and wetlands from storm water runoff. These alternatives shall include road designs that allow for treatment of the storm water runoff through best management practices as detailed in the most recent version of NCDWQ's *Stormwater Best Management Practices Manual*, July 2007, such as grassed swales, buffer areas, preformed scour holes, retention basins, etc.

5. After the selection of the preferred alternative and prior to an issuance of the 401 Water Quality Certification, the NCDOT is respectfully reminded that they will need to demonstrate the avoidance and minimization of impacts to wetlands (and streams) to the maximum extent practical. In accordance with the Environmental Management Commission's Rules (15A NCAC 2H.0506(h)), mitigation will be required for impacts of greater than 1 acre to wetlands. In the event that mitigation is required, the mitigation plan shall be designed to replace appropriate lost functions and values. The NC Ecosystem Enhancement Program may be available for use as wetland mitigation.
6. In accordance with the Environmental Management Commission's Rules (15A NCAC 2H.0506(h)), mitigation will be required for impacts of greater than 150 linear feet to any single stream. In the event that mitigation is required, the mitigation plan shall be designed to replace appropriate lost functions and values. The NC Ecosystem Enhancement Program may be available for use as stream mitigation.
7. Future documentation, including the 401 Water Quality Certification application, shall include an itemized listing of the proposed wetland and stream impacts with corresponding mapping.
8. NCDWQ is very concerned with sediment and erosion impacts that could result from this project. NCDOT shall address these concerns by describing the potential impacts that may occur to the aquatic environments and any mitigating factors that would reduce the impacts.
9. **An analysis of cumulative and secondary impacts anticipated as a result of this project is required. The type and detail of analysis shall conform to the NC Division of Water Quality Policy on the assessment of secondary and cumulative impacts dated April 10, 2004.**
10. NCDOT is respectfully reminded that all impacts, including but not limited to, bridging, fill, excavation and clearing, and rip rap to jurisdictional wetlands, streams, and riparian buffers need to be included in the final impact calculations. These impacts, in addition to any construction impacts, temporary or otherwise, also need to be included as part of the 401 Water Quality Certification Application.
11. Where streams must be crossed, NCDWQ prefers bridges be used in lieu of culverts. However, we realize that economic considerations often require the use of culverts. Please be advised that culverts should be countersunk to allow unimpeded passage by fish and other aquatic organisms. Moreover, in areas where high quality wetlands or streams are impacted, a bridge may prove preferable. When applicable, NCDOT shall not install the bridge bents in the creek, to the maximum extent practical.
12. Whenever possible, NCDWQ prefers spanning structures. Spanning structures usually do not require work within the stream or grubbing of the streambanks and do not require stream channel realignment. The horizontal and vertical clearances provided by bridges shall allow for human and wildlife passage beneath the structure. Fish passage and navigation by canoeists and boaters shall not be blocked. Bridge supports (bents) shall not be placed in the stream when possible.
13. Bridge deck drains shall not discharge directly into the stream. Stormwater shall be directed across the bridge and pre-treated through site-appropriate means (grassed swales, pre-formed scour holes, vegetated buffers, etc.) before entering the stream. Please refer to the most current version of NCDWQ's *Stormwater Best Management Practices*.
14. Sediment and erosion control measures shall not be placed in wetlands or streams.
15. Borrow/waste areas should avoid wetlands to the maximum extent practical. Impacts to wetlands in borrow/waste areas will need to be presented in the 401 Water Quality Certification and could precipitate compensatory mitigation.
16. The 401 Water Quality Certification application will need to specifically address the proposed methods for stormwater management. More specifically, stormwater shall not be permitted to discharge directly into streams or surface waters.

17. Based on the information presented in the document, the magnitude of impacts to wetlands and streams may require a **Nationwide (NW) Permit** application to the Corps of Engineers and corresponding 401 Water Quality Certification. Please be advised that a 401 Water Quality Certification requires satisfactory protection of water quality to ensure that water quality standards are met and no wetland or stream uses are lost. Final permit authorization will require the submittal of a formal application by the NCDOT and written concurrence from NCDWQ. Please be aware that any approval will be contingent on appropriate avoidance and minimization of wetland and stream impacts to the maximum extent practical, the development of an acceptable stormwater management plan, and the inclusion of appropriate mitigation plans where appropriate.
18. If concrete is used during construction, a dry work area shall be maintained to prevent direct contact between curing concrete and stream water. Water that inadvertently contacts uncured concrete shall not be discharged to surface waters due to the potential for elevated pH and possible aquatic life and fish kills.
19. If temporary access roads or detours are constructed, the site shall be graded to its preconstruction contours and elevations. Disturbed areas shall be seeded or mulched to stabilize the soil and appropriate native woody species shall be planted. When using temporary structures the area shall be cleared but not grubbed. Clearing the area with chain saws, mowers, bush-hogs, or other mechanized equipment and leaving the stumps and root mat intact allows the area to re-vegetate naturally and minimizes soil disturbance.
20. Unless otherwise authorized, placement of culverts and other structures in waters and streams shall be placed below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches, and 20 percent of the culvert diameter for culverts having a diameter less than 48 inches, to allow low flow passage of water and aquatic life. Design and placement of culverts and other structures including temporary erosion control measures shall not be conducted in a manner that may result in dis-equilibrium of wetlands or streambeds or banks, adjacent to or upstream and downstream of the above structures. The applicant is required to provide evidence that the equilibrium is being maintained if requested in writing by NCDWQ. If this condition is unable to be met due to bedrock or other limiting features encountered during construction, please contact NCDWQ for guidance on how to proceed and to determine whether or not a permit modification will be required.
21. If multiple pipes or barrels are required, they shall be designed to mimic natural stream cross section as closely as possible including pipes or barrels at flood plain elevation, floodplain benches, and/or sills may be required where appropriate. Widening the stream channel should be avoided. Stream channel widening at the inlet or outlet end of structures typically decreases water velocity causing sediment deposition that requires increased maintenance and disrupts aquatic life passage.
22. If foundation test borings are necessary; it shall be noted in the document. Geotechnical work is approved under General 401 Certification Number 3687/Nationwide Permit No. 6 for Survey Activities.
23. Sediment and erosion control measures sufficient to protect water resources must be implemented and maintained in accordance with the most recent version of North Carolina Sediment and Erosion Control Planning and Design Manual and the most recent version of NCS000250.
24. All work in or adjacent to stream waters shall be conducted in a dry work area. Approved BMP measures from the most current version of NCDOT Construction and Maintenance Activities manual such as sandbags, rock berms, cofferdams and other diversion structures shall be used to prevent excavation in flowing water.
25. While the use of National Wetland Inventory (NWI) maps and soil survey maps are useful tools, their inherent inaccuracies require that qualified personnel perform onsite wetland delineations prior to permit approval.
26. Heavy equipment should be operated from the bank rather than in stream channels in order to minimize sedimentation and reduce the likelihood of introducing other pollutants into streams. This equipment shall be inspected daily and maintained to prevent contamination of surface waters from leaking fuels, lubricants, hydraulic fluids, or other toxic materials.
27. Riprap shall not be placed in the active thalweg channel or placed in the streambed in a manner that precludes aquatic life passage. Bioengineering boulders or structures should be properly designed, sized and installed.

Page Four

28. Riparian vegetation (native trees and shrubs) shall be preserved to the maximum extent possible. Riparian vegetation must be reestablished within the construction limits of the project by the end of the growing season following completion of construction.

NCDWQ appreciates the opportunity to provide comments on your project. Should you have any questions or require any additional information, please contact Polly Lespinasse at (704) 235-2190.

cc: Liz Hair, US Army Corps of Engineers, Asheville Field Office (electronic copy only)
Chris Millitscher, Environmental Protection Agency (electronic copy only)
Marella Buncick, US Fish and Wildlife Service (electronic copy only)
Maria Chambers, NC Wildlife Resources Commission (electronic copy only)
Sonia Carrillo, NCDWQ Central Regional Office (electronic copy only)
File Copy

INTERGOVERNMENTAL REVIEW - PROJECT COMMENTS

After review of this project it has been determined that the ENR permit(s) and/or approvals indicated may need to be obtained in order for this project to comply with North Carolina Law. Questions regarding these permits should be addressed to the Regional Office indicated on the reverse of the form. All applications, information and guidelines relative to these plans and permits are available from the same Regional Office.

	PERMITS	SPECIAL APPLICATION PROCEDURES or REQUIREMENTS	Normal Process Time (statutory time limit)
<input type="checkbox"/>	Permit to construct & operate wastewater treatment facilities, sewer system extensions & sewer systems not discharging into state surface waters.	Application 90 days before begin construction or award of construction contracts. On-site inspection. Post-application technical conference usual.	30 days (90 days)
<input type="checkbox"/>	NPDES - permit to discharge into surface water and/or permit to operate and construct wastewater facilities discharging into state surface waters.	Application 180 days before begin activity. On-site inspection. Pre-application conference usual. Additionally, obtain permit to construct wastewater treatment facility-granted after NPDES. Reply time, 30 days after receipt of plans or issue of NPDES permit-whichever is later.	90-120 days (N/A)
<input type="checkbox"/>	Water Use Permit	Pre-application technical conference usually necessary	30 days (N/A)
<input type="checkbox"/>	Well Construction Permit	Complete application must be received and permit issued prior to the installation of a well.	7 days (15 days)
<input type="checkbox"/>	Dredge and Fill Permit	Application copy must be served on each adjacent riparian property owner. On-site inspection. Pre-application conference usual. Filling may require Easement to Fill from N.C. Department of Administration and Federal Dredge and Fill Permit.	55 days (90 days)
<input type="checkbox"/>	Permit to construct & operate Air Pollution Abatement facilities and/or Emission Sources as per 15 A NCAC (2Q.0100 thru 2Q.0300)	Application must be submitted and permit received prior to construction and operation of the source. If a permit is required in an area without local zoning, then there are additional requirements and timelines (2Q.0113).	90 days
<input type="checkbox"/>	Permit to construct & operate Transportation Facility as per 15 A NCAC (2D.0800, 2Q.0601)	Application must be submitted at least 90 days prior to construction or modification of the source.	90 days
<input type="checkbox"/>	Any open burning associated with subject proposal must be in compliance with 15 A NCAC 2D.1900	N/A	60 days (90 days)
<input type="checkbox"/>	Demolition or renovations of structures containing asbestos material must be in compliance with 15 A NCAC 20.1110 (a) (1) which requires notification and removal prior to demolition. Contact Asbestos Control Group 919-707-5950.		
<input type="checkbox"/>	Complex Source Permit required under 15 A NCAC 2D.0800		
<input type="checkbox"/>	The Sedimentation Pollution Control Act of 1973 must be properly addressed for any land disturbing activity. An erosion & sedimentation control plan will be required if one or more acres to be disturbed. Plan filed with proper Regional Office (Land Quality Section) At least 30 days before beginning activity. A fee of \$65 for the first acre or any part of an acre. An express review option is available with additional fees.		20 days (30 days)
<input checked="" type="checkbox"/>	Sedimentation and erosion control must be addressed in accordance with NCDOT's approved program. Particular attention should be given to design and installation of appropriate perimeter sediment trapping devices as well as stable stormwater conveyances and outlets.		(30 days)
<input type="checkbox"/>	Mining Permit	On-site inspection usual. Surety bond filed with ENR Bond amount varies with type mine and number of acres of affected land. Any acre mined greater than one acre must be permitted. The appropriate bond must be received before the permit can be issued.	30 days (60 days)
<input type="checkbox"/>	North Carolina Burning permit	On-site inspection by N.C. Division Forest Resources if permit exceeds 4 days	1 day (N/A)
<input type="checkbox"/>	Special Ground Clearance Burning Permit - 22 counties in coastal N.C. with organic soils	On-site inspection by N.C. Division Forest Resources required "if more than five acres of ground clearing activities are involved. Inspections should be requested at least ten days before actual burn is planned."	1 day (N/A)
<input type="checkbox"/>	Oil Refining Facilities	N/A	90-120 days (N/A)
<input type="checkbox"/>	Dam Safety Permit	If permit required, application 60 days before begin construction. Applicant must hire N.C. qualified engineer to: prepare plans, inspect construction, certify construction is according to ENR approved plans. May also require permit under mosquito control program. And a 404 permit from Corps of Engineers. An inspection of site is necessary to verify Hazard Classification. A minimum fee of \$250.00 must accompany the application. An additional processing fee based on a percentage of the total project cost will be required upon completion.	30 days (60 days)

PERMITS		SPECIAL APPLICATION PROCEDURES or REQUIREMENTS	Normal Process Time (statutory time limit)
<input type="checkbox"/>	Permit to drill exploratory oil or gas well	File surety bond of \$5,000 with ENR running to State of NC conditional that any well opened by drill operator shall, upon abandonment, be plugged according to ENR rules and regulations.	10 days N/A
<input type="checkbox"/>	Geophysical Exploration Permit	Application filed with ENR at least 10 days prior to issue of permit. Application by letter. No standard application form.	10 days N/A
<input type="checkbox"/>	State Lakes Construction Permit	Application fees based on structure size is charged. Must include descriptions & drawings of structure & proof of ownership of riparian property.	15-20 days N/A
<input type="checkbox"/>	401 Water Quality Certification	N/A	60 days (130 days)
<input type="checkbox"/>	CAMA Permit for MAJOR development	\$250.00 fee must accompany application	55 days (150 days)
<input type="checkbox"/>	CAMA Permit for MINOR development	\$50.00 fee must accompany application	22 days (25 days)
<input type="checkbox"/>	Several geodetic monuments are located in or near the project area. If any monument needs to be moved or destroyed, please notify: N.C. Geodetic Survey, Box 27687 Raleigh, NC 27611		
<input checked="" type="checkbox"/>	Abandonment of any wells, if required must be in accordance with Title 15A, Subchapter 2C.0100.		
<input type="checkbox"/>	Notification of the proper regional office is requested if "orphan" underground storage tanks (USTS) are discovered during any excavation operation.		
<input type="checkbox"/>	Compliance with 15A NCAC 2H 1000 (Coastal Stormwater Rules) is required.		45 days (N/A)
<input type="checkbox"/>	Tar Pencil or Neuse Riparian Buffer Rules required.		
<p>* Other comments (attach additional pages as necessary, being certain to cite comment authority)</p> <p><i>DR - Has Open Burning need to comply with 11) 1900. Referred 3-9-2012</i></p> <p><i>APS - Properly abandon any wells as necessary per 2C. Multiple UST sites along route may need to be handled with DWM. MAP 3/9/12</i></p> <p><i>LO - No Comments</i></p>			

REGIONAL OFFICES

Questions regarding these permits should be addressed to the Regional Office marked below.

Asheville Regional Office
2090 US Highway 70
Swannanoa, NC 28778
(828) 296-4500

Mooresville Regional Office
610 East Center Avenue, Suite 301
Mooresville, NC 28115
(704) 663-1699

Wilmington Regional Office
127 Cardinal Drive Extension
Wilmington, NC 28405
(910) 796-7215

Fayetteville Regional Office
225 North Green Street, Suite 714
Fayetteville, NC 28301-5043
(910) 433-3300

Raleigh Regional Office
3800 Barrett Drive, Suite 101
Raleigh, NC 27609
(919) 791-4200

Winston-Salem Regional Office
585 Woughtown Street
Winston-Salem, NC 27107
(336) 771-5000

Washington Regional Office
943 Washington Square Mall
Washington, NC 27889
(252) 946-6481

DEPARTMENT OF ENVIRONMENT AND
NATURAL RESOURCES
DIVISION OF WATER RESOURCES
PUBLIC WATER SUPPLY SECTION

Project Number 12-0223
County Cabarrus

Inter-Agency Project Review Response

Project Name NC-DOT Type of Project EA - Proposed project to widen NC 3- Mooresville Road from Kannapolis Pkwy to Daic Earnhardt Blvd-Loop Road- SR 1691. STIP U-344f

- The applicant should be advised that plans and specifications for all water system improvements must be approved by the Division of Water Resources/Public Water Supply Section prior to the award of a contract or the initiation of construction (as required by 15A NCAC 18C .0300et. seq.). For information, contact the Public Water Supply Section, (919) 733-2321.
- This project will be classified as a non-community public water supply and must comply with state and federal drinking water monitoring requirements. For more information the applicant should contact the Public Water Supply Section, (919) 733-2321.
- If existing water lines will be relocated during the construction, plans for the water line relocation must be submitted to the Division of Water Resources, Public Water Supply Section, Technical Services Branch, 1634 Mail Service Center, Raleigh, North Carolina 27699-1634, (919) 733-2321.
- For Regional and Central Office comments, see the reverse side of this form.

Rebecca Sadosky

PWSS

03/12/2012

Review Coordinator

Section/Branch

Date

DEPARTMENT OF ENVIRONMENT AND
NATURAL RESOURCES
DIVISION OF WATER RESOURCES
PUBLIC WATER SUPPLY SECTION

Project Number
12-0223

County
Cabarrus

Inter-Agency Project Review Response

Project Name NC-DOT Type of Project EA - Proposed project to
widen NC 3- Mooresville
Road from Kannapolis Pkwy
to Dale Earnhardt Blvd-Loop
Road-SR 1691. STIP U-3446

Comments provided by:

- Regional Program Person
 Regional Supervisor for Public Water Supply Section
 Central Office program person

Name Britt Setzer-Mooresville RO Date 02/12/2012

Telephone number: 704-235-2127

Program within Division of Water Resources:

- Public Water Supply
 Other, Name of Program: _____

Response (check all applicable):

- No objection to project as proposed
 No comment
 Insufficient information to complete review
 Comments attached
 See comments below

*See comments on
"Inter Agency Project Review Response" sheet*

Return to:
Public Water Supply Section
Environmental Review Coordinator
for the
Division of Water Resources

RECEIVED
Mooresville Regional Office

MAR 15 2012

NC DENR
Public Water Supply

NORTH CAROLINA STATE CLEARINGHOUSE
DEPARTMENT OF ADMINISTRATION
INTERGOVERNMENTAL REVIEW

COUNTY: CABARRUS

F02: HIGHWAYS AND ROADS

STATE NUMBER: 12-E-4220-0223
DATE RECEIVED: 03/01/2012
AGENCY RESPONSE: 03/28/2012
REVIEW CLOSED: 04/02/2012

MS CAROLYN PENNY
CLEARINGHOUSE COORDINATOR
CC&PS - DIV OF EMERGENCY MANAGEMENT
FLOODPLAIN MANAGEMENT PROGRAM
MSC # 4719
RALEIGH NC

REVIEW DISTRIBUTION

CC&PS - DIV OF EMERGENCY MANAGEMENT
CENTRALINA COG
DENR LEGISLATIVE AFFAIRS
DEPT OF AGRICULTURE
DEPT OF CULTURAL RESOURCES
DEPT OF TRANSPORTATION

PROJECT INFORMATION

APPLICANT: N.C. Department of Transportation
TYPE: National Environmental Policy Act
Environmental Assessment

DESC: Proposed project to widen NC 3 - Mooresville Road from Kannapolis Parkway to Dale Earnhardt Boulevard-Loop Road-SR 1691. STIP U-3440

The attached project has been submitted to the N. C. State Clearinghouse for intergovernmental review. Please review and submit your response by the above indicated date to 1301 Mail Service Center, Raleigh NC 27699-1301.

If additional review time is needed, please contact this office at (919)807-2425.



AS A RESULT OF THIS REVIEW THE FOLLOWING IS SUBMITTED: NO COMMENT COMMENTS ATTACHED

SIGNED BY:

Journal White

DATE:

3/21/2012

No mention of MOA in EA.



North Carolina Department of Public Safety

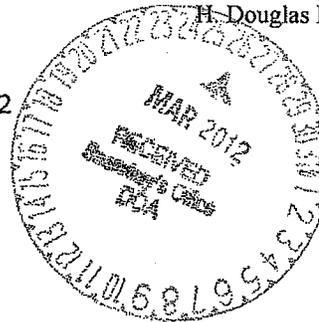
Emergency Management Geospatial and Technology Management Office

Beverly Eaves Perdue, Governor
Reuben F. Young, Secretary

H. Douglas Hoell, Jr., Director

March 21, 2012

State Clearinghouse
N.C. Department of Administration
1301 Mail Service Center
Raleigh, North Carolina 27699-1301



Subject: Intergovernmental Review State Number: 12-E-4220-0223
Proposed Project to Widen NC 3 (Mooresville Road) in Kannapolis, NC

As requested by the North Carolina State Clearinghouse, the North Carolina Department of Crime Control and Public Safety Division of Emergency Management Office of Geospatial and Technology Management (GTM) reviewed the proposed project listed above and offer the following comments:

- 1) The North Carolina Executive Order 123 directs NCDOT to coordinate with and follow the FHWA floodplain management requirements which are found in the Federal Executive Order 11988. To ensure NCDOT compliance with EO 11988 and the 44 CFR the NCDOT Hydraulics Section and the NC Floodplain Mapping Program have a Memorandum of Agreement (MOA). Please coordinate with Mr. David Chang, NCDOT Hydraulics, to coordinate the elements of this project which fall within the MOA.
- 2) The proposed project crosses the regulatory special flood hazard areas (SFHA) of Miller Branch, Irish Buffalo Creek, and Irish Buffalo Creek Tributary 3. Please see Flood Insurance Rate Map panels 5603 and 5613. A hydraulic analysis is required for any new, replacement or modification to an existing hydraulic structure that is within the regulatory floodway or non-encroachment area of these SFHAs. This includes the replacement of the NC 3 bridges over each SFHA.
- 3) New or replacement structures that do not cause an increase in the Base Flood Elevation (BFE) would be reviewed under the MOA. New or replacement structures that cause an increase in the Base Flood Elevation (BFE) will require approval of a Conditional Letter of Map Revision prior to construction.

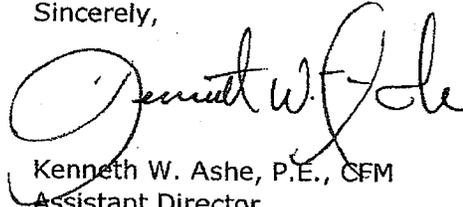
MAILING ADDRESS:
4719 Mail Service Center
Raleigh NC 27699-471
www.ncfloodmaps.com
www.ncem.org



OFFICE LOCATION:
1812 Tillery Place, Suite 105
Raleigh, NC 27604
Telephone: (919) 715-5711
Fax: (919) 715-0408

Thank you for your cooperation and consideration. If you have any questions concerning the above comments, please contact Dan Brubaker, P.E., CFM, the NC NFIP Engineer at (919) 715-5711, by email at dbrubaker@ncem.org or at the address shown on the footer of this documents.

Sincerely,



Kenneth W. Ashe, P.E., CFM
Assistant Director
Geospatial and Technology Management Office

cc: John Gerber, NFIP State Coordinator
Dan Brubaker, NFIP Engineer

MAILING ADDRESS:
4719 Mail Service Center
Raleigh NC 27699-471
www.ncfloodmaps.com
www.ncem.org



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1812 Tillery Place, Suite 105
Raleigh, NC 27604
Telephone: (919) 715-5711
Fax: (919) 715-0408

NORTH CAROLINA STATE CLEARINGHOUSE
DEPARTMENT OF ADMINISTRATION
INTERGOVERNMENTAL REVIEW

COUNTY: CABARRUS

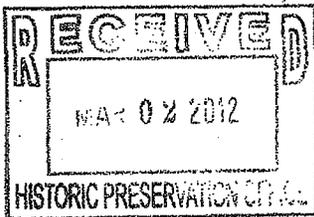
F02: HIGHWAYS AND ROADS

STATE NUMBER: 12-E-4220-0223

DATE RECEIVED: 03/01/2012

AGENCY RESPONSE: 03/28/2012

REVIEW CLOSED: 04/02/2012



MS RENEE GLEDHILL-EARLEY
CLEARINGHOUSE COORDINATOR
DEPT OF CULTURAL RESOURCES
STATE HISTORIC PRESERVATION OFFICE
MSC 4617 - ARCHIVES BUILDING
RALEIGH NC

REVIEW DISTRIBUTION

CC&PS - DIV OF EMERGENCY MANAGEMENT
CENTRALINA COG
DENR LEGISLATIVE AFFAIRS
DEPT OF AGRICULTURE
DEPT OF CULTURAL RESOURCES
DEPT OF TRANSPORTATION

PROJECT INFORMATION

APPLICANT: N.C. Department of Transportation
TYPE: National Environmental Policy Act
Environmental Assessment

DESC: Proposed project to widen NC 3 - Mooresville Road from Kannapolis Parkway to Dale Earnhardt Boulevard-Loop Road-SR 1691. STIP U-3440

The attached project has been submitted to the N. C. State Clearinghouse for intergovernmental review. Please review and submit your response by the above indicated date to 1301 Mail Service Center, Raleigh NC 27699-1301.

If additional review time is needed, please contact this office at (919)807-2425.

CH 07-2063

*(N) Previously Cleared
BJS 35/2*

Due 3/9/12

Due 3/14/12 S-RSR 4/12

AS A RESULT OF THIS REVIEW THE FOLLOWING IS SUBMITTED: NO COMMENT COMMENTS ATTACHED

SIGNED BY:

Renee Gledhill-Earley

DATE:

3-7-12



MAR 05 2012

Major, Undrea J

From: Chris Militscher <Militscher.Chris@epamail.epa.gov>
Sent: Friday, May 04, 2012 1:35 PM
To: Major, Undrea J
Cc: Hair Sarah E SAW; Lespinasse, Polly; felix.davila@dot.gov
Subject: Federal EA for U-3440, NC 3, Cabarrus Co.

Dre: EPA has reviewed the above referenced NEPA document and offers the following comments:

1. The proposed widening project is approximately 2.5 miles in length.
2. The anticipated impacts between the two alternatives (A & B, respectively) are:

Wetlands: 0 or 0
Streams: 2,300 or 1,300 linear feet
Section 4(f): 1 or 1
Federally protected species: 2 & 2
Residential relocations: 27 or 36
Business relocations: 7 or 5
Noise receptors: 41 or 37

3. EPA also understands that there may be a potential adverse effect to a historic district from either alternative under consideration.
4. This project was not placed in the NEPA/404 Merger team process by NCDOT, FHWA, USACE and NCDWQ. consideration for placing the project in Merger is potentially at CP 2A/4A.
5. EPA has not identified an environmentally preferred alternative at this time.
6. EPA requests that that the transportation agencies continue to work with the permitting agencies, SHPO and USFWS on relevant matters for the selection of a preferred alternative and appropriate avoidance and minimization measures.

Please notify us if this project is placed in the Merger process. EPA also requests a copy of the FONSI when it becomes available. Thank you for the opportunity to comment.

Christopher A. Militscher, REM, CHMM
USEPA Region 4 Office
AFC - 13th floor, NPO
61 Forsyth Street, SW
Atlanta, GA 30303
404-562-9512

April 18, 2012

Regulatory Division

Action ID: SAW-2012-00417, TIP No: U-3440

Gregory J. Thorpe, PhD. Manager
Project Development and Environmental Analysis Branch
NC Department of Transportation
1598 Mail Service Center
Raleigh, North Carolina 27699

Dear Dr. Thorpe,

Reference is made to your inquiry dated February 22, 2012 requesting comments on the Federal Environmental Assessment and Draft Section 4(F) Evaluation for the NC 3 (Mooresville Road) Kannapolis Parkway to Dale Earnhardt Boulevard/ Loop Road (SR 1691) in Kannapolis, Cabarrus County, North Carolina.

The North Carolina Department of Transportation (NC DOT) proposes to improve approximately 2.5 miles of NC 3 (Mooresville Road) from the Kannapolis Parkway to Dale Earnhardt Boulevard/ Loop Road by widening Mooresville Road to a four lane facility. The typical section will include a 12-foot inside travel lane, and a 14 foot outside travel lane in each direction, and a variable median up to 23 feet wide. Sidewalks are proposed on both sides of the roadway, within city limits. The project is listed in the 2009-2015 State Transportation Improvement Program (STIP) as U-3440. Right of Way acquisition is scheduled for Fiscal Year (FY) 2012 and construction is scheduled for FY 2013.

The stated purpose and need is to improve traffic flow and reduce delays in this area of the county. The alternatives considered included No Build, two new location alternatives, alternative modes of transportation, Transportation Systems Management (TSM), and two improve existing facility alternatives known as Alternative A and Alternative B. Both Alternatives A and B will adversely affect the combined Juniper-Pine-Mooresville-Chestnut/Frog Hollow Mill Village Historic District due to the location of the historic district on either side of NC 3. This Historic District is afforded protection under Section 4(f) of the 1966 Department of Transportation Act. As stated in the EA, a transportation plan may only use land from a Section 4(f) resource when there are no other feasible and prudent alternatives and when planning minimizes all possible harm to the resource. Partial new location alternatives were considered to avoid the historic resource, however, were discarded as

substantially environmentally disruptive due to the number of residential and business relocations required. The EA also states that the natural environment impacts and economic costs associated with relocating NC 3 would be too great to be considered a reasonable alternative, but does not include a summary of what those impacts would be. Information regarding the impacts to the natural environment associated with each alternative, including the new location alternatives, should be discussed in the final EA.

Any discharge of excavated or fill material into waters of the United States and/or any adjacent wetlands would require Department of the Army (DA) permit authorization. The type of DA authorization required (i.e., general or individual permit) will be determined by the location, type, and extent of jurisdictional area impacted by the project, and by the project design and construction limits. It is anticipated that a section 404 Individual Permit may be required based on the amount and locations of impacts to jurisdictional waters of the U.S.

The project is proposed to enter the NEPA/404 Merger Process at the Combined Concurrence Point 2A/4A Meeting. However, without the natural environment impact summary referenced above, I cannot support the elimination of alternatives typically done at Concurrence Point 2. Therefore, additional coordination may be needed prior to any abbreviated Merger component associated with this project.

Compensatory Mitigation shall be provided in accordance with both the 2008 Mitigation Rule and the Memorandum of Agreement between the North Carolina Department of Transportation and the U.S. Army Corps of Engineers, Wilmington District (MOA). Please include a conceptual compensatory mitigation proposal within the final EA showing compliance with these requirements.

It should be noted that the USACE and NC DWQ stream forms and the wetland data forms were not included in Appendix B as referenced in Section V. Environmental Effects of Proposed Action of the draft EA. The EA makes no reference to a US Army Corps of Engineers Jurisdictional Determination. As such, the locations of waters of the U.S. have not been verified by this office, thus the proposed impacts may be inaccurate as currently described in the EA. A jurisdictional determination is required prior to permitting and an onsite review of jurisdictional features should be scheduled prior to submittal of a 404 permit application.

Once complete, please forward a copy of the signed Finding of No Significant Impact (FONSI) to this office.

Should you have any further questions related to DA permits for this project, please contact me at 828-271-7980, extension 225.

Sincerely,

FILENAME: Liz SAW-2012-00417 EA response.docx/nw

CESAW-RG-A/Hair/s

MAIL

~~CESAW-RG-A/file~~

Liz Hair

Regulatory Project Manager

Asheville Regulatory Field Office

Copy Furnished:

Polly Lespinasse
North Carolina Division of Water Quality
Mooresville Regional Office
601 East Center Avenue, Suite 301
Mooresville, North Carolina 28115

Chris Militscher
US Environmental Protection Agency
Region 4 Office
AFC-13th Floor, NPO
61 Forsyth Street, SW
Atlanta Georgia 30303

Appendix D
NEPA/404 Merger Team Concurrence Forms

Section 404/NEPA Interagency Agreement
Merger Screening Decision Form

Project Title: TIP U-3440 proposes to widen existing NC 3 (Mooresville Road) to multi-lanes from Kannapolis Parkway (TIP U-2009) to Loop Road (SR 1691) for a distance of 2.5 miles. The project is located in the City of Kannapolis in Cabarrus County.

U-3440 Merger Process Decision:

- Remove from Merger 01 Process
- Merger 01 Process
- Partial Merger 01 Process (check all that apply below)
- Concurrence Point 1: Purpose and Need and Study Area Defined
- Concurrence Point 2: Detailed Study Alternatives (DSA)
- Concurrence Point 2A: Bridging Decisions and Alignment Review
- Concurrence Point 3: LEDPA/Preferred Alternative Selection
- Concurrence Point 4A: Avoidance and Minimization
- Concurrence Point 4B: 30 Percent Hydraulic Review
- Concurrence Point 4C: Permit Drawings Review

The project team has concurred with the Merger 01 process decision to be carried forward for the proposed project as indicated above.

Name	Agency	Date
<i>Ronald G Lucas, Jr.</i>	FHWA	4-22-08
<i>Steven W. Ford</i>	USACE	4-22-08
<i>Kristina J. Solberg</i>	NCDOT	4-22-08
<i>Kelly Desjardis</i>	NCDWQ	4-22-08

**Section 404/NEPA Merger Project Team Meeting Agreement
Concurrence Point No. 2A – Bridging Decisions and Alignment Review**

NC 3 Mooresville Road Improvements
From Kannapolis Parkway to Dale Earnhardt Boulevard/Loop Road (SR 1691)
Cabarrus County, North Carolina
Federal Aid Project No. STP-00003(6)
WBS Element No. 39010
TIP Project No. U-3440

After review of the project area and the existing hydraulic structures, the following hydraulic structures are recommended for the subject project.

Stream ID	Stream Name & Class	Proposed Structure	Structure Dimensions
MB	MB (Miller Branch), Perennial	RCBC	10ft x 9ft
IBC	IBC (Irish Buffalo Creek), Perennial	Dual Bridges	130ft long
S4	Unnamed Tributary (UT3) to IBC, Perennial	RCP	66 inches
S6	Unnamed Tributary (UT5) to IBC, Perennial	Double-Barreled RCBC	8ft x 10ft
S7	Unnamed Tributary (UT6) to IBC, Perennial	RCP	66 inches

The Project Team has concurred with the bridging decisions and alignment review as proposed in the table above for the STIP U-3440 project on this date December 18, 2013.

USACE FUEMMELEER.AMAND
A.JONES.1242835090

NCDOT Andrea Major

USEPA Mike D.

USFWS Matt J. Justice

NCDWQ Ray Shaw

NCWRC Marta Chambers 12/20/2013

FHWA _____

SHPO Renee Medhill-Easley

CRMPO Phil Conrad

**Section 404/NEPA Merger Project Team Meeting Agreement
Concurrence Point No. 4A – Avoidance and Minimization**

NC 3 Mooresville Road Improvements
From Kannapolis Parkway to Dale Earnhardt Boulevard/Loop Road (SR 1691)
Cabarrus County, North Carolina
Federal Aid Project No. STP-00003(6)
WBS Element No. 39010
TIP Project No. U-3440

After review of the project area and the existing hydraulic structures, the following avoidance and minimization efforts have been documented for the subject project.

The subject project has 3 major structures crossing waters of the United States. It is recommended to replace 5 total structures (2 minor), as noted in the table below. The proposed bridges will span Irish Buffalo Creek. The grade of the bridge at Irish Buffalo Creek will be raised to accommodate the proposed greenway. Impacts to waters of the United States are estimated to be 2,244 feet of perennial stream, 219 feet of intermittent stream and 0.05 acres of wetland. The unnamed tributary to Miller Branch (Site 1) will be relocated to minimize impacts to the feature. The unnamed tributary to Irish Buffalo Creek (Site 4) will be relocated to minimize impacts to the feature. A portion of the unnamed tributary to Irish Buffalo Creek (Site 8) will be avoided on the north side of the facility to minimize impacts to the feature. The unnamed tributary to Irish Buffalo Creek (Site 8) will be avoided at Miller Street on the south side of NC 3. The typical section will be reduced within the historic district to provide 11 foot inside travel lanes and 13 foot outside travel lanes.

Stream ID	Stream Name & Class	Proposed Structure	Structure Dimensions
MB	Miller Branch, Perennial	RCBC	10ft. x 9ft.
IBC	Irish Buffalo Creek, Perennial	Dual Bridges	130 ft.
S4	Unnamed Tributary (UT3) to IBC, Perennial	RCP	66 inches
S6	Unnamed Tributary (UT5) to IBC, Perennial	Double-Barreled RCBC	8ft. x 10ft.
S7	Unnamed Tributary (UT6) to IBC, Perennial	RCP	66 inches

- Where major culvert structures are being replaced, the use of sills and baffles will be incorporated to maintain low flow passage of water and aquatic life
- Streams will be relocated in lieu of piping where practicable
- The unregistered landfill in the southwest quadrant of the NC 3 and Bethpage Road intersection will be avoided with an alignment shift to the north of the existing facility

The Project Team has concurred with the Avoidance and Minimization efforts to jurisdictional features and other important resources for the preferred alternative on this date December 18, 2013. Further opportunities to minimize impacts to the human and natural environments will continue to be explored through final design.

USACE FUEMMELEER.AMAND
A.JONES.1242835090 DEPARTMENT OF ARMY
ENGINEERING CENTER
3901 RINGBROOK DRIVE
FORT BELLEVILLE, ILLINOIS 62205-4342
314.714.3900

NCDOT Christina Yelton

USEPA Lee A. Jones

USFWS Mark C. Bencine

NCDWQ Barbara

NCWRC Marla Chambers 12/20/2013

FHWA [Signature]

SHPO Renee Medkiff-Early

CRMPO Phil Conrad

NCDOT Project: U-3440 / 39010.1.1

NC 3 Mooresville Road, Cabarrus County

Draft Meeting Minutes Concurrence Point 4A, 4B, 4C

Meeting Location : NCDOT Structure Design Conference Room

December 18, 2013

Attendees:

Jennifer Harris	NCDOT - PDEA	jharris1@ncdot.gov	919-707-6025
Bill Barrett	NCDOT - NES	wabarrett@ncdot.gov	919-707-6103
Carla Dagnino	NCDOT - NES	cdagnino@ncdot.gov	919-707-6110
John Conforti	NCDOT - PDEA	jgconforti@ncdot.gov	919-707-6015
Stephen Morgan	NCDOT - Hydro	smorgan@ncdot.gov	919-707-6739
Steve Bondor	Stantec - Hydro	steven.bondor@stantec.com	919-532-2305
Laura Sutton	NCDOT -Structures	lsutton@ncdot.gov	919-707-6551
Katrina Washington	NCDOT - Roadway	kwashington@ncdot.gov	919-707-6343
Brenda Moore	NCDOT - Roadway	blmoore@ncdot.gov	919-707-6285
Undrea Major	NCDOT - PDEA	ujmajor@ncdot.gov	919-707-6028
Alan Johnson	NCDWR	Alan.Johnson@ncdenr.gov	704-663-1699
Amanda Fuemmeler	USACE	Amanda.Fuemmeler@usace.army.mil	828-271-7980
Marella Buncick	USFWS	marell_buncick@fws.gov	828-258-3939
Marla Chambers	NC WRC	marla.chambers@ncwildlife.org	704-485-8291
Scott Allen	NCDOT Div. 10	sallen@ncdot.gov	704-983-4400

1. Agencies noted that all streams in this project are included in the 303d impaired list for turbidity and that direct discharge from the roadway drainage systems should be avoided if possible.

2. Stream S1 / Plan Sheet 6 / L sta 39+50 LT – requested that NCDOT attempt to relocate the 42” pipe outfall to the opposite side of the roadway to allow flow in a ditch prior to discharge into stream S1.
3. Stream MB / Plan Sheet 6 / L sta 40+60 – requested that baffles inside 10’ x 8 box culvert include a low flow opening that matches stream width instead of 10’ width of box culvert. NCDOT noted that design will include 6’ wide low flow opening in the baffles.
4. Stream S2 / Plans Sheet 8 / L sta 70+00 LT - requested that NCDOT attempt to reduce the length of the 48” pipe below the access drive.
5. Stream S4 / Plan Sheet 10 / L sta 98+00 RT – requested that NCDOT attempt to add base ditch at top of bank for 15” CSP outfall, add bank stabilization, and align perpendicular to bank.
6. Stream S5 / Plan Sheet 11 / L sta 109+75 – NCDOT will add riprap bank protection at each end of 36” RCP cross pipe.
7. Stream S6 / Plan Sheet 12
 - a. L Sta 115+50 LT – requested that NCDOT attempt to move 24” CSP outfall from left side to right side of road allow flow in a lateral ditch prior to discharge into stream.
 - b. Y15 Sta 11+70 RT - requested that NCDOT attempt to move 18” CSP outfall from bottom of stream to top of bank in a ditch. NCDOT noted that there is not adequate space at top of bank however the outfall could be moved to the left side of the road at the top of bank in a ditch. Bank stabilization will be added to end of the outfall ditch.
8. Stream S7 / Plan Sheet 12 / L sta 125+00 RT – requested that NCDOT move 18” CSP outfall approximately 20’ from stream.
9. Stream S7 / Plan Sheet 13
 - a. L sta 128+20 LT - requested that NCDOT add some type of treatment device at outfall of 24” CSP. No device is possible however due to steep slopes.
 - b. L sta 135+00 LT – discussed feasibility of extending retaining wall to sta 134+80; upon further investigation however all parties agreed the stream was too close to the roadway for a retaining wall to avoid stream impact.
10. All parties agreed that this meeting could serve as the 4B and 4C meetings and that NCDOT would forward revised drainage plans to the agencies before submittal of the permit drawings. The original drainage design as presented during this meeting will be included with the revised design to allow comparison. Therefore no additional meeting would be required.

**U.S. ARMY CORPS OF ENGINEERS
WILMINGTON DISTRICT**

Action Id. SAW-2009-0907

County: Cabarrus

U.S.G.S. Quad: Kannapolis

NOTIFICATION OF JURISDICTIONAL DETERMINATION

Property Owner/Agent: NC Department of Transportation, Attn: Gregory J. Thorpe

Address: Project Development and Environmental Analysis

1598 Mail Service Center

Raleigh, NC 27699-1548

Telephone No.: 919-715-1334

Property description:

Size (acres) 348 approx.

Nearest Town Kannapolis

Nearest Waterway Irish Buffalo Creek

River Basin Yadkin

USGS HUC 03040105

Coordinates N 35.4876 W 80.6532

Location description Mooresville Road Improvements (NC 3), Kannapolis Parkway to SR 1691, U-3440

Indicate Which of the Following Apply:

A. Preliminary Determination

Based on preliminary information, there may be wetlands on the above described property. We strongly suggest you have this property inspected to determine the extent of Department of the Army (DA) jurisdiction. To be considered final, a jurisdictional determination must be verified by the Corps. This preliminary determination is not an appealable action under the Regulatory Program Administrative Appeal Process (Reference 33 CFR Part 331).

B. Approved Determination

There are Navigable Waters of the United States within the above described property subject to the permit requirements of Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.

There are waters and wetlands on the above described property subject to the permit requirements of Section 404 of the Clean Water Act (CWA)(33 USC § 1344). Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.

We strongly suggest you have the wetlands on your property delineated. Due to the size of your property and/or our present workload, the Corps may not be able to accomplish this wetland delineation in a timely manner. For a more timely delineation, you may wish to obtain a consultant. To be considered final, any delineation must be verified by the Corps.

The waters and wetlands on your property have been delineated and the delineation has been verified by the Corps. We strongly suggest you have this delineation surveyed (GPS). Upon completion, this survey should be reviewed and verified by the Corps. Once verified, this survey will provide an accurate depiction of all areas subject to CWA jurisdiction on your property which, provided there is no change in the law or our published regulations, may be relied upon for a period not to exceed five years.

The surface waters and/or wetlands have been delineated and surveyed and are accurately depicted on the maps and GPS surveys from Jason Dilday, NCDOT-NEU, dated 19 February 2009. Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.

There are no waters of the U.S., to include wetlands, present on the above described property which are subject to the permit requirements of Section 404 of the Clean Water Act (33 USC 1344). Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.

The property is located in one of the 20 Coastal Counties subject to regulation under the Coastal Area Management Act (CAMA). You should contact the Division of Coastal Management in Washington, NC, at (252) 946-6481 to determine their requirements.

Action ID: _____

SAW-2009-0907

Placement of dredged or fill material within waters of the US and/or wetlands without a Department of the Army permit may constitute a violation of Section 301 of the Clean Water Act (33 USC § 1311). If you have any questions regarding this determination and/or the Corps regulatory program, please contact Steven Lund at 828-271-7980.

C. Basis For Determination

Stream Identification Forms, Stream Quality Assessment Worksheets, Wetland Determination Forms and Jurisdictional Determination Forms included with the submittals of 3 February and 19 February 2009.

D. Remarks

Irish Buffalo Creek and unnamed tributaries are relatively permanent waters (RPWs) flowing to the Rocky River, a traditionally navigable water (TNW).

E. Appeals Information (This information applies only to approved jurisdictional determinations as indicated in B. above)

This correspondence constitutes an approved jurisdictional determination for the above described site. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and request for appeal (RFA) form. If you request to appeal this determination you must submit a completed RFA form to the following address:

District Engineer, Wilmington Regulatory Division
Attn: Steven Lund, Project Manager,
Asheville Regulatory Field Office
151 Patton Avenue, Room 208
Asheville, North Carolina 28801-5006

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR part 331.5, and that it has been received by the District Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address within 60 days of the date of this verification.

It is not necessary to submit an RFA form to the District Office if you do not object to the determination in this correspondence.

Corps Regulatory Official: Steven W. Lund

Date: November 30, 2009

Expiration Date: November 30, 2014

The Wilmington District is committed to providing the highest level of support to the public. To help us ensure we continue to do so, please complete the attached customer Satisfaction Survey or visit <http://www.saw.usace.army.mil/WETLANDS/index.html> to complete the survey online.

Copy furnished: