

R-5706 Merger Status Update

April 21, 2022

Project Introduction

The North Carolina Department of Transportation (NCDOT) proposes to widen NC 73 (Davidson-Concord Road/Davidson Highway) from SR 2693 (Davidson-Concord Road) to US 29 (Concord Parkway North) from two to four lanes, including a median and curb and gutter (Appendix A, Figures 1 and 2). The project is listed in the State Transportation Improvement Program (STIP) as Project No. R-5706 and is comprised of two sections. R-5706A extends from Davidson-Concord Road to SR 1394 (Poplar Tent Road) near the Mecklenburg County-Cabarrus County line and is approximately 2.4 miles long. R-5706B extends approximately 8.9 miles from Poplar Tent Road to US 29 in Cabarrus County. The two sections are being evaluated under one environmental document but have separate right-of-way and construction schedules (Table 1).

Table 1 – Project Schedule (Subject to Change)

	Schedule
Complete NEPA Document for R-5706	August 2022
Begin ROW Acquisition for R-5706A	August 2023
Begin Construction of R-5706A	April 2026
Begin ROW Acquisition for R-5706B	August 2028
Begin construction of R-5706B	Post FY 2040

Project Purpose and Need

The current year (2017) annual average daily traffic (AADT) along NC 73 ranges from 12,800 vehicles per day (vpd) to 24,800 vpd. In 2040, NC 73 is expected to carry between 22,400 vpd and 46,800 vpd. Population and employment growth will increase travel demand along NC 73, with most sections of the roadway forecasted to increase in traffic volumes by approximately 75-80 percent in 2040.

NC 73 is currently congested during peak commuting hours with poor level of service (LOS). The corridor currently operates at LOS E during AM and PM peak hours. Without the proposed improvements, the corridor will continue to operate at LOS E in 2040 during peak hours. With the proposed improvements, the corridor is expected to operate at LOS C during AM peak hour and LOS D during PM peak hour.

The existing NC 73 corridor currently experiences safety issues likely associated with intersection conflicts and high traffic volumes. The total and non-fatal injury crash rates along NC 73 exceeded the statewide and critical crash rates for the five-year period analyzed (October 2012 to September 2017). The most widely-occurring type of crash along the corridor, including at signalized intersections, was rear-end crashes, which are typically associated with congested conditions.

West of I-85, NC 73 provides the only direct route between the Davidson, Cornelius, Huntersville and western Kannapolis areas and I-85 north of I-485 in the Charlotte region. Other east-west connections are provided through local routes, but these are often indirect and primarily serve local traffic.

East of I-85, NC 73 is a critical route serving Concord's and Kannapolis' mobility between I-85 and US 29.

The purpose of the project is to increase mobility between SR 2693 (Davidson-Concord Road) and I-85 and between US 29 (Concord Parkway North) and I-85, reduce congestion at the intersections, improve traffic operations along NC 73 with an operational target of LOS D in the 2040 design year, and provide bicycle and pedestrian facilities.

The LEDPA satisfies the project's purpose and need. The corridor 2040 build Level of Service (LOS) is anticipated to be LOS C in the AM peak hour and LOS D in the PM peak hour (Table 2). Intersection LOS information is included in Appendix B.

Table 2 – R-5706 Corridor LOS

	2017 Existing		2040 No Build		2040 Build	
	AM	PM	AM	PM	AM	PM
LOS	E	E	E	E	C	D

Proposed Typical Sections

The proposed typical sections are:

- From Davidson-Concord Road to I-85, four 12-foot lanes are proposed with a 30-foot median, 10-foot multi-use paths in both directions, and two-foot curb and gutter. The proposed right-of-way width is approximately 120 feet and the proposed construction easement ranges from 30-150 feet. The posted speed limit would be 45 miles per hour.
- From I-85 to US 29, four 11-foot lanes are proposed with a 23-foot median, five-foot bike lanes in both directions, five-foot sidewalks in both directions, and two-foot curb and gutter. The proposed right-of-way width is approximately 100 feet and the proposed construction easement ranges from 20-110 feet. The posted speed limit would range between 35 and 45 miles per hour.

These typical sections are displayed in Appendix B, Figure 3.

Merger Concurrence Points to Date

R-5706 entered the Merger process in 2018 and concurrence has been achieved for Concurrence Points (CP) 1, 2, 2A, 3, and 4A (Table 3). After concurrence was achieved for CP 3 in June 2019, revisions to the Least Environmentally Damaging Practicable Alternative (LEDPA) necessitated a reevaluation of CP 3 during a combined CP 3/CP 4A meeting in December 2019.

Table 3 – Existing Concurrence Points Met

Concurrence Point	Meeting Held	Concurrence Achieved
1	July 2018	August 2018
2	October 2018	October 2018
2A	October 2018	October 2018
3	May 2019	June 2019
3 (Updated)	December 2019	January 2020
4A	December 2019	January 2020

Copies of the merger meeting summaries for each concurrence point are included in Appendix C.

Design Changes Since CP 4A

Minor changes to the preliminary design have been made since CP 4A, including shifting several u-turn bulbs and revising the entrance to Christ the King High School. In addition, as R-5706A and R-5706B are now proposed to have different construction schedules, the R-5706A design now features a design tie-in at the eastern project terminus to provide a transition between the proposed four-lane and existing two-lane sections. None of these design changes are anticipated to result in additional impacts to natural or historic resources.

Project Changes Since CP 4A

Funding

During the previous concurrence points, R-5706 was programmed with state funds. In January 2022, the project funding changed to federal funds.

Merger Team

Considering that the project was previously programmed with state funds, the Federal Highway Administration (FHWA) has not been involved with R-5706 Merger team decisions to date. As a result of the change to federal funding, FHWA will participate as a Merger Team member. Therefore, a determination is to be made with respect to FHWA's concurrence of past Merger Team decisions.

Environmental Document Type

A State Environmental Assessment was in preparation for R-5706 prior to project suspension in May 2020. Due to the funding change, the project must adhere to the National Environmental Policy Act and a Type III Categorical Exclusion (CE) document will be prepared.

Section 106 and Section 4(f)

The funding change necessitates changes to the project Section 106 coordination and requires the project to undergo Section 4(f) coordination. Within the project Area of Potential Effects (APE), two properties that have been determined eligible for the NRHP were identified: Bradford Farm (MK1283) and the Jesse and Mary K Washam Farm (MK2455). R-5706 was re-screened by NCDOT's Historic Architecture and Archaeology teams in early 2022. An updated Effects Assessment Required Form was issued by the Historic Architecture team noting an effects assessment would be required for Bradford Farm and the Jesse and Mary K Washam Farm. No additional properties eligible for the NRHP were identified. The review completed by the Archaeology team indicated no additional archaeology survey would be required.

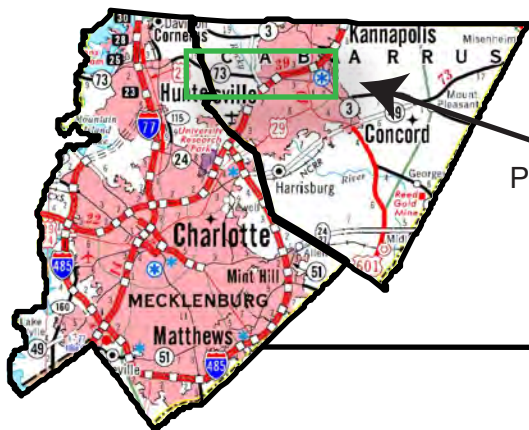
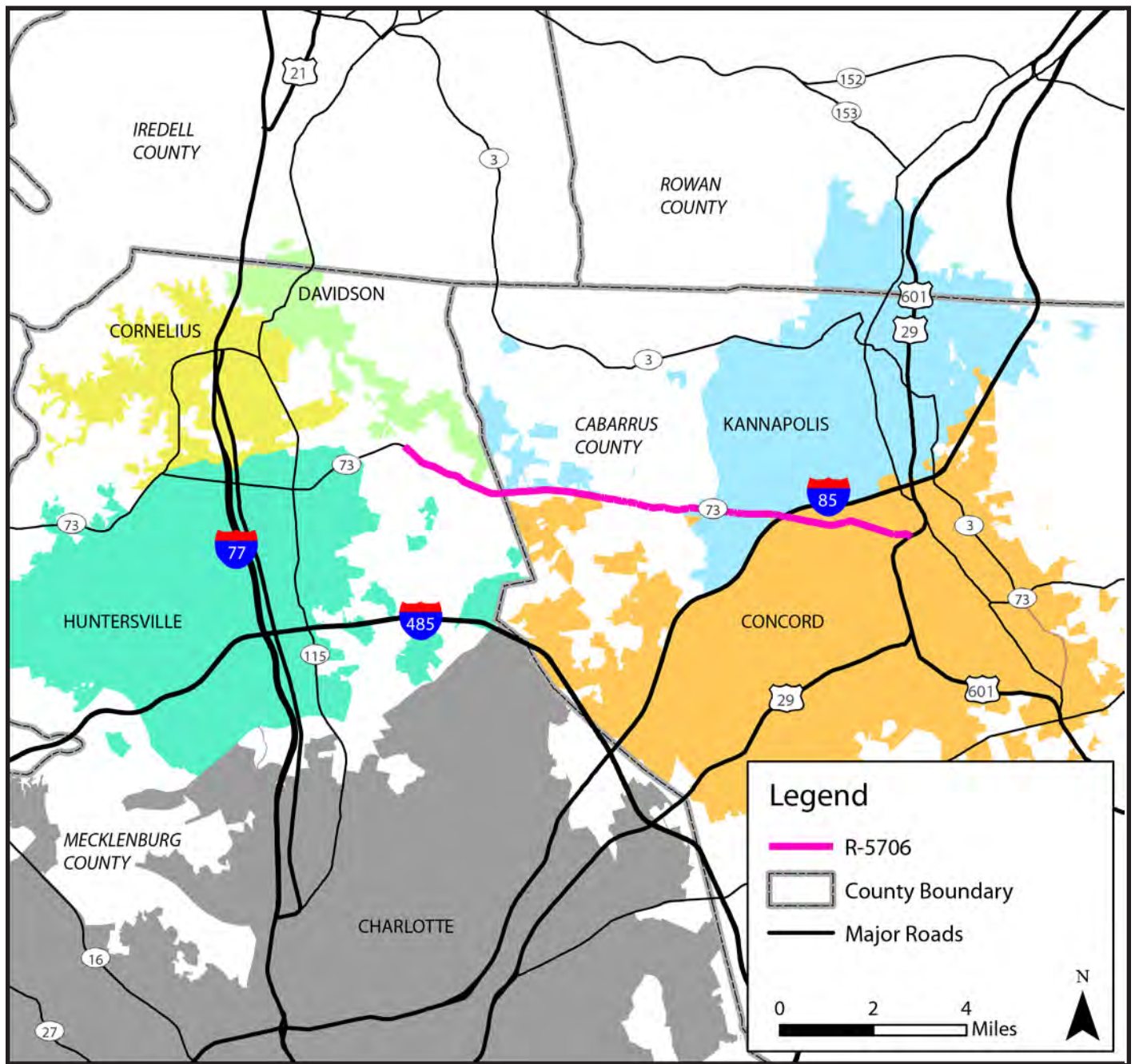
In a December 30, 2019 letter, the State Historic Preservation Office (SHPO) concurred with a United States Army Corps of Engineers (USACE) determination that no historic properties would be impacted by the project, pursuant to Section 106 of the National Historic Preservation Act (Appendix D). This determination was made because the eligible properties are located outside of the identified Clean Water Act Section 404 permit areas. The change in project funding now requires the project to undergo Section 106 coordination for the two properties in addition to Section 4(f) coordination.

The Charlotte-Mecklenburg Historic Landmarks Commission identifies these two properties, as well as two additional properties (Cashion and Moore Family Cemetery; and Bradford Store), as local historic landmarks. Coordination has already begun with the Commission to assess impacts the project may

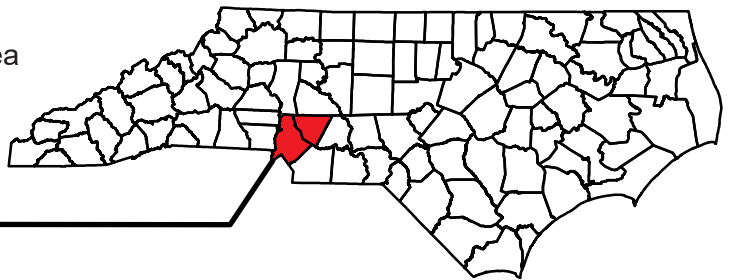
have on the four local historic landmarks, with design changes having been made to reduce impacts to both properties. A Certificate of Appropriateness will need to be obtained from the Commission prior to right-of-way acquisition.

Section 4(f) coordination will also be required due to anticipated impacts to Bradford Park, White Community Park, Westside Park, and Charlotte Soccer Academy North (Red Ventures Soccer Complex), and planned greenways.

APPENDIX A
FIGURES



Project Area



Project Vicinity Map

Widening of NC 73 from Davidson - Concord Road to US 29

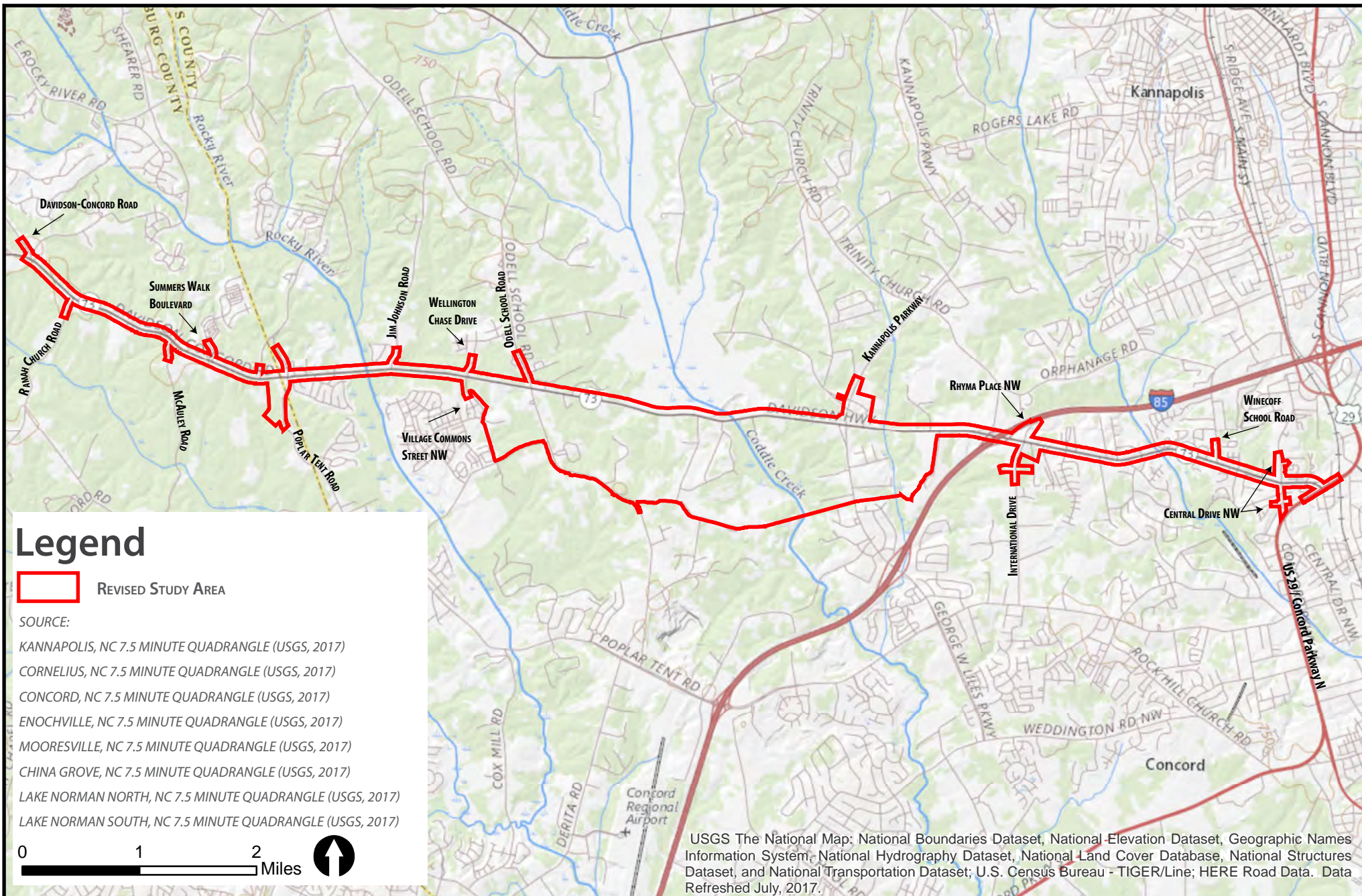
STIP Project R-5706 | WBS #: 46378.1.1

Mecklenburg and Cabarrus Counties

April 2022

Figure 1



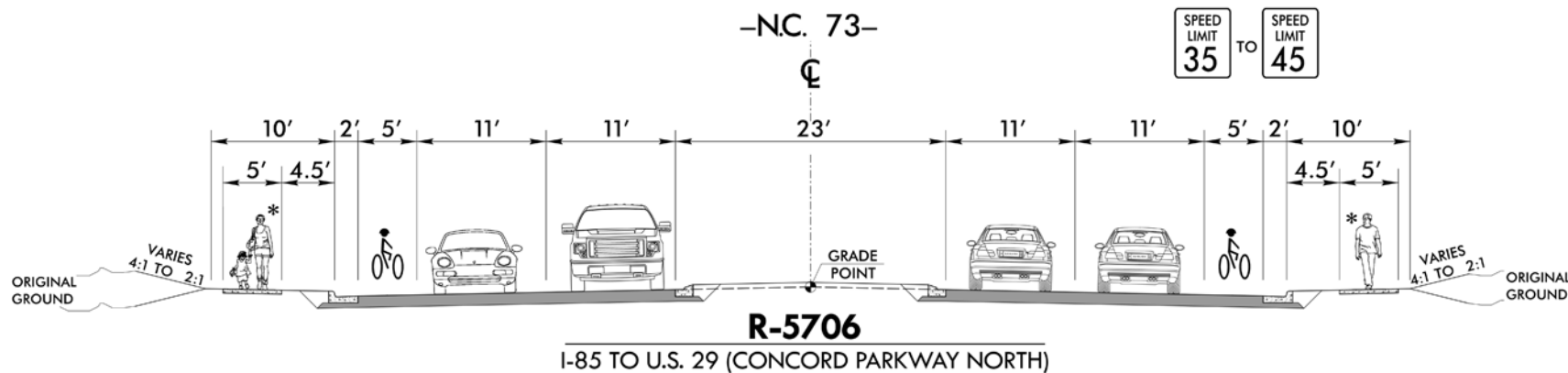
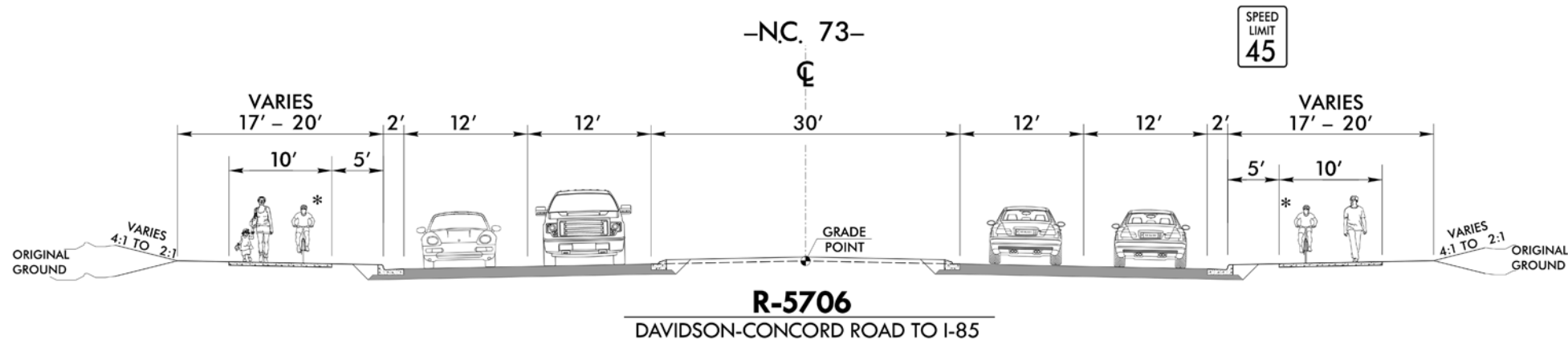


Study Area Map

Widening of NC 73 from Davidson-Concord Road to US 29

TIP No: R-5706 | WBS #: 46378.1.1
Mecklenburg and Cabarrus Counties
April 2022

FIGURE 2



*Sidewalk and Multi-Use Paths

The construction of sidewalks and multi-use paths are contingent upon municipal agreements



Proposed Typical Sections

Widening of NC 73 from Davidson - Concord Road to US 29
STIP Project R-5706 | WBS #: 46378.1.1
Mecklenburg and Cabarrus Counties
April 2022

Figure 3

APPENDIX B
INTERSECTION LEVEL OF SERVICE

R-5706 Intersections Level of Service (LOS)

Intersection ¹	AM Peak			PM Peak		
	2017 Existing	2040 No Build	2040 Build	2017 Existing	2040 No Build	2040 Build
NC 73 & Bradford Park	A	A	C	A	C	D ²
NC 73 & U-Turn #2	Not Available	Not Available	C	Not Available	Not Available	C
NC 73 & U-Turn #3	Not Available	Not Available	C	Not Available	Not Available	C
NC 73 EB & Poplar Tent Road	F	F	C	E	F	C
NC 73 WB & Shiloh Church Road	F	F	C	E	F	B
NC 73 & Odell School Road	E	F	B/A ³	E	F	A/A ³
NC 73 & U-Turn #4	Not Available	Not Available	B	Not Available	Not Available	B
NC 73 & U-Turn #5	Not Available	Not Available	B	Not Available	Not Available	B
Kannapolis Parkway & Macedonia Church Road (Signalized) ⁴	Not Available	Not Available	D	Not Available	Not Available	C
Macedonia Church Road & Roger Dale Carter Drive (Roundabout) ⁴	Not Available	Not Available	A	Not Available	Not Available	A
NC 73 & Roger Dale Carter Drive (Signalized) ⁴	Not Available	Not Available	B	Not Available	Not Available	B
NC 73 & SW Quadrant (Signalized) ⁵	Not Available	Not Available	B	Not Available	Not Available	C
SW Quadrant Roundabout (Roundabout) ⁵	Not Available	Not Available	A	Not Available	Not Available	A
Kannapolis Parkway & SW Quadrant (Signalized) ⁵	Not Available	Not Available	C	Not Available	Not Available	B
NC 73 & SE Quadrant Slip Ramp ⁶	Not Available	Not Available	C	Not Available	Not Available	B

R-5706 Intersections Level of Service (LOS)

Intersection ¹	AM Peak			PM Peak		
	2017 Existing	2040 No Build	2040 Build	2017 Existing	2040 No Build	2040 Build
NC 73 & Stanley Drive	A	B	C	A	B	B
NC 73 & U-Turn #6	Not Available	Not Available	C	Not Available	Not Available	B
NC 73 & U-Turn #8	Not Available	Not Available	B	Not Available	Not Available	C
NC 73 & U-Turn ⁷	A	A	B	A	A	A
NC 73 & Trinity Church Road	B	D	F	C	E	D
NC 73 & I-85 SB Ramp – Right Turn	A	B	B	A	B	B
NC 73 & I-85 SB Ramp – Left Turn	C	B	B	C	B	B
NC 73 & I-85 NB Ramp – Right Turn	B	B	A	A	C	C
NC 73 & I-85 NB Ramp – Left Turn	B	B	B	B	B	B
NC 73 & International Drive	C	F	C	C	E	C
International Drive Northern Roundabout	Not Available	Not Available	A	Not Available	Not Available	A
International Drive Southern Roundabout	Not Available	Not Available	B	Not Available	Not Available	C
NC 73 & U-Turn #9	Not Available	Not Available	D	Not Available	Not Available	B
NC 73 & Winecoff Road	F	F	B	D	F	B
NC 73 & U-Turn #9	Not Available	Not Available	B	Not Available	Not Available	D
NC 73 & Central Drive	E	F	C	D	F	C
Central Drive Northern Roundabout	Not Available	Not Available	A	Not Available	Not Available	A
Central Drive Southern Roundabout	Not Available	Not Available	Not Available	Not Available	Not Available	A

R-5706 Intersections Level of Service (LOS)

Intersection ¹	AM Peak			PM Peak		
	2017 Existing	2040 No Build	2040 Build	2017 Existing	2040 No Build	2040 Build
NC 73 & US 29	D	F	F	D	F	E

¹A number of new intersections are proposed as part of R-5706 in locations where no intersection currently exists, including at proposed U-turn location. Therefore, Existing and No-Build scenarios are not available at these locations and are noted in the table.

²Delay is based on the worst movement for unsignalized intersections.

³Build results represent the signalized eastbound and westbound left turn crossovers at the main NC 73 & Odell School Road intersection.

⁴Only the Build LOS was evaluated at these intersections to help determine the appropriate design related to the NC 73 and Kannapolis Parkway Northeast Quadrant Intersection.

⁵NC 73 and Kannapolis Parkway Southwest Quadrant Intersection.

⁶NC 73 and Kannapolis SE Slip Ramp.

⁷Location just east of Biscayne Drive.

APPENDIX C
MERGER MEETING SUMMARIES



MEMO

TO: Meeting Attendees
FROM: Theresa Ellerby (NCDOT) and Adam Karagosian (WSP)
SUBJECT: R-5706 External Scoping and Concurrence Point 1 Meeting Summary
DATE: July 19, 2018

Meeting Attendees:

- Theresa Ellerby (NCDOT PMU)
- Beverly Robinson (NCDOT PMU)
- Jennifer Martin (NCDOT PMU)
- John Jamison (NCDOT EPU)
- Stuart Basham (NCDOT – Division 10)
- Scott Cole (NCDOT – Division 10) via telephone
- Robert Patterson (NCDWR)
- Bill Elem (NCDOT – Hydraulics)
- Herman Huang (NCDOT – Community Studies)
- Brian Lipscomb (NCDOT – Hydraulics)
- Bryan Lopez (NCDOT - Bicycle and Pedestrian Transportation) via telephone
- Kenny Hill (NCDOT Division 10 – ROW) via telephone
- Carla Dagnino (NCDOT EAU ECAP)
- Nicholle Braspennickx (UASCE)
- Donna Hood (NCDWR)
- Marella Buncick (USFWS)
- Monte Matthews (USACE)
- Marla Chambers (NCWRC)
- Phil Conrad (CRMPO) via telephone
- Mark Kinkaid (City of Concord) via telephone
- Sue Hyde (City of Concord) via telephone
- Travis Johnson (Town of Davidson) via telephone
- Bill Coxe (Town of Huntersville) via telephone
- Jack Simoneau (Town of Huntersville) via telephone
- Zac Gordon (City of Kannapolis) via telephone
- Wilmer Melton (City Kannapolis) via telephone
- Jonathan Marshall (Cabarrus County) via telephone
- Phil Collins (Cabarrus County) via telephone
- Adam Karagosian (WSP)
- Brock LaForty (WSP)
- Katharine Mather (WSP)
- Sarath Chandra Gorthy (WSP) via telephone



Introduction and Summary

After introductions, Theresa Ellerby provided a brief description of the project. Adam Karagosian of WSP then presented a PowerPoint of the project, providing a detailed summary of project activities to date and information regarding the project and project study area during the External Scoping portion of the meeting. Comments from each participating unit, agency, and town/city followed, as described below. Subsequently, the Merger Team met regarding Concurrence Point 1.

Comments Received during External Scoping:

- Bill Coxe with the Town of Huntersville asked if McAuley Road was studied in the historic analysis report as McAuley Road from Davidson-Concord Road to Huntersville Concord Road is considered historic in nature and is the only state-maintained gravel road in the Charlotte region. WSP to follow up on this.
- Division 10 did not present any issues or concerns. Stuart Basham noted the outreach NCDOT and WSP have conducted with the municipalities along the corridor for input on intersection treatments and bicycle and pedestrian accommodations.
- STIP: No representative present.
- Roadway Design: No representative present.
- Structures Unit: No representative present.
- Brian Lipscomb with the Hydraulics Unit noted the water supply watershed raises concerns for water quality impacts and that storm water management may have to be designed in accordance with Design Standards in Sensitive Watersheds.
- WZTC: No representative present.
- Utilities: No representative present.
- PICSviz: Herman Huang noted functional design needs to be available before impacts can be assessed for the Community Impact Assessment (CIA).
- Carla Dagnino with EAU ECAP noted the impacts the project could have on High Quality Waters given the Waters Supply Watershed present near the Coddle Creek reservoir.
- Roadside: No representative present.
- Bryan Lopez with Bicycle and Pedestrian Transportation noted overall support of proposed facilities. Bryan expressed concern for typical section showing 4-foot bike lanes on a 45-mph facility. Asked if a buffer/barrier could be added. Theresa Ellerby asked if Bryan Lopez could send these comments in a memorandum.
- Congestion Management: No representative present.
- STIP: No representative present.
- Kenny Hill with Division 10 ROW office noted it would be best if the cemeteries along the corridor could be avoided.
- Location and Surveys: No representative present.
- Bill Coxe with the Town of Huntersville indicated overall approval with project development thus far. Bill noted the historic nature of Bradford Store and asked if that resource would be captured somewhere else if not in the historic analysis. Bill noted Hanna Cockburn was to get back to him on clarification of new policy/guidelines related to cost-sharing for multi-use paths.
- Travis Johnson with the Town of Davidson noted the White Community Park land owned by Mecklenburg County at 1650 Davidson-Concord Road, but was not sure on the park's development status. Theresa Ellerby asked if the park has had LWCF funding. WSP will confirm by contacting Parks and Recreation.
- Travis Johnson indicated the Town would ideally like to see a 12-foot multi-use path rather than a 10-foot path.

- Zac Gordon with the City of Kannapolis noted his agreement with the proposed bike and pedestrian accommodations.
- Mark Kinkaid with the City of Concord noted a greenway is planned alongside Rocky River. Mark informed that land has been purchased around the intersection of NC 73 for greenway accommodation and asked if accommodations under the bridge were being taken into consideration as part of this project. Mark suggested adding the greenway along Rocky River and Irish Buffalo Creek to the Environmental Features Map.
- Wilmer Melton with Kannapolis noted that Kannapolis purchased land north of NC 73 along Rocky River for the planned greenway. The greenway north of NC 73 would be the responsibility of Kannapolis and south of NC 73 would be the responsibility of Concord.
- Sue Hyde with the City of Concord noted that a second raw water line is planned from the Coddle Creek reservoir to the WWTP across NC 73. Sue noted that preliminary plans are available for a potential large development behind Odell Elementary School in the vicinity of a potential alternative alignment. Sue offered to share the plans.
- Sue Hyde noted land across from Jim Johnson Road is in the process of being acquired for a new park with construction scheduled for 2021. No Land and Water Conservation Fund are expected to be used.
- Johnathan Marshall with Cabarrus County indicated some funding from Clean Water Trust Fund through Catawba Lands Conservancy may be available to acquire land for the Rocky River Greenway. Mark Kinkaid clarified that CWMTF funding is not available.
- Jonathan Marshall asked about the anticipated schedule for making a decision on the alternatives to be considered at the Coddle Creek Reservoir. The decision on which alternatives to study will be made sometime in Fall 2018 at CP 2 and the selected preferred alternative (Least Environmentally Damaging Practicable Alternative) will be determined at CP 3.
- Marella Buncick with USFWS noted two Bald Eagle Nests are located at the Reservoir. While Bald Eagles are no longer on the Endangered Species List, they are still protected under the Bald and Golden Eagle Protection Act. Marella suggested that the location of mitigation sites along Coddle Creek, Irish Buffalo Creek, and Afton Run be identified to determine if they are in the study area. Marella also suggested checking with DMS to determine if any proposed mitigation sites are located in the project study area.
- Marla Chambers with NCWRC emphasized the importance of stormwater treatment due to Coddle Creek Reservoir. Marla suggested low impact development be considered, including pervious pavement for multi-use paths and other bicycle and pedestrian facilities. Marla also noted concern for the Carolina Darter, a state protected species.
- Monte Matthews with the USACE noted all environmental justice would need to be coordinated through the USACE. Monte stated that the Corps will follow the EPA's guidelines for EJ communities. Nicholle Braspenickx requested the archeological and historic analysis report and the Community Characteristics Report (CCR) be sent to her.
- Monte and Nicholle emphasized that the Corps would likely consider historic properties in the permit areas and not necessarily all historic properties throughout the corridor.
- Donna Hood with NCDWR noted hazardous spill basins will likely be needed by the Reservoir and extra protections for streams may also be required.
- Donna suggested coordination with the Energy, Mineral, and Land Resources Division of NCDEQ for the Howell Dam should be conducted. Zahid Khan would be the regional contact for the dam.
- CRTPO: No representative present.

Comments Received During Concurrence Point 1:

- Nicholle suggested bicycle and pedestrian facilities not be listed as a "secondary project purpose", but rather indicate bicycle and pedestrian facilities will be provided in the project purpose.

- Several agencies inquired why mobility to and from specific municipalities was written in the project purpose and if this could be replaced with a general statement on mobility along the corridor.
- Several agencies inquired why the study area south of Howell Reservoir was so extensive. Brock clarified this was to accommodate any potential alignments oriented south of the reservoir. Agencies also inquired if the study area around the y-lines would be large enough to encompass possible intersection treatments.
- Several agencies raised questions about Control of access. Stuart Basham noted that control of access would not be provided along the corridor except at bulb outs.
- The Merger Team agreed the study area should be revised if the study area around any y-lines needs to be expanded.
- The Merger Team agreed the project purpose would be edited to include language on improving general mobility along the project corridor and bicycle and pedestrian transportation would no longer be referred to as a secondary project purpose but rather that facilities would be provided for these modes.
- WSP will revise the project study area and project purpose. The revised Concurrence Point 1 Form would be sent electronically to agencies and signed via DocuSign.



MEMO

TO: Meeting Attendees
FROM: Theresa Ellerby (NCDOT) and Adam Karagosian (WSP)
SUBJECT: R-5706 Concurrence Point 2/2A Meeting Summary
DATE: October 10, 2018

Meeting Attendees:

- Theresa Ellerby (NCDOT PMU)
- Beverly Robinson (NCDOT PMU)
- John Jamison (NCDOT EPU)
- Stuart Basham (NCDOT – Division 10) via Skype/telephone
- Scott Cole (NCDOT – Division 10)
- Stephen Morgan (NCDOT – Hydraulics)
- Herman Huang (NCDOT – Community Studies)
- Don Hampton (NCDOT – Utilities)
- Mike Reese (NCDOT – Congestion Management) via Skype/telephone
- Erin Cheely (NCDOT EAU ECAP)
- Carla Dagnino (NCDOT EAU ECAP)
- Andy Bailey (NCDOT Planning and Forecasting) via Skype/telephone
- Mark Staley (NCDOT Roadside Environment) via Skype/telephone
- Nicholle Braspennickx (UASCE)
- Donna Hood (NCDWR)
- Marella Buncick (USFWS)
- Monte Matthews (USACE) via Skype/telephone
- Marla Chambers (NCWRC) via Skype/telephone
- Phil Conrad (CRMPO) via Skype/telephone
- Candice Rorie (CRTPO) via Skype/telephone
- Phillip Graham (City of Concord) via Skype/telephone
- Devin Huston (City of Concord) via Skype/telephone
- Adam Karagosian (WSP)
- Brock LaForty (WSP)
- Katharine Mather (WSP)
- Jennifer Starnes (WSP)
- Jay Watson (WSP)
- Sandy Smith (Axiom Environmental)



Introduction and Summary

A Concurrence Point 2/2A Merger meeting was held at the NCDOT Century Center on October 10, 2018 at 10:00 AM for the NC 73 Widening from Davidson-Concord Road to US 29 in Mecklenburg and Cabarrus Counties, STIP Project Number R-5706.

Theresa Ellerby started the meeting by welcoming attendees. After introductions, Adam Karagosian of WSP began a PowerPoint presentation of the project. The presentation included a summary of project activities to date, information regarding CP 1 and project purpose and need, mapping and impact tables pertaining to CP 2, and information regarding major structures for CP 2A. Discussions took place throughout the delivery of the presentation.

Project Discussion – CP 2:

- Adam explained that the impacts table in the meeting packet changed to reflect information at the intersections currently being analyzed, as well as the addition of a stream in the eastern end of the corridor that was inadvertently left off the original materials provided. Adam indicated that impact information for the intersection analysis and the concept alignments included in the original packet were prepared independently; the information provided in the revised packet more accurately reflects potential impacts for the concept alignments. Adam provided an updated packet to those present and indicated the revised packet would be made available on DOT's Merger transfer site.
- Marella Buncick of the USFWS stated that the Atlantic pigtoe mussel is being proposed for listing on the endangered species list. It would be about a year before it is officially listed. Marella suggested that the species should be addressed in the documents even if it is not yet listed. Adam Karagosian of WSP indicated that a mussel survey has been completed but was not sure if the survey included Atlantic pigtoe. Erin Cheely of NCDOT ECAP stated she will check to see if the survey report included an assessment of Atlantic pigtoe.
- Marella stated her concern that 30 ft. raised concrete medians could have a negative impact on water quality and requested that the project consider innovative methods for storm water control. Donna Hood of NCDWR indicated that hazardous spill basins would be required near the reservoir and recently the agencies have required the hazardous spill basins to also include infiltration for storm water.
- Adam noted that the typical sections were developed in coordination with the local jurisdictions. Phillip Graham of the City of Concord stated that during DOT's presentation to the local officials the previous week the local officials mentioned their preference for multi-use paths rather sidewalks and bike lanes. The City of Concord City Council would have to formally approve a change in the local policy to change from the currently approved sidewalks to multi-use paths.
- Catawba Lands Conservancy has an easement in the western end of the project. Another easement owned by the Land Trust for North Carolina and Cabarrus Soil and Water Conservation District is also located in the study area. Adam indicated the alignment was set at the Land Trust



for N.C. easement to minimize impacts to a pond on the south side of NC 73 but that the alignment could probably be adjusted in this location to avoid the easement and impact more of the pond. Marella suggested making sure the extent and restrictions on the easements are identified and avoiding the easements if possible. Marella stated that it can take a very long time to work out an agreement to impact the easements.

- Marella mentioned that NCDMS mitigation sites are known along Afton Run but she was not aware if these sites are located in the study area. Marella also indicated that mitigation sites could be present along Coddle Creek. Adam stated that WSP checked the NCNHP website and no managed areas owned by NCDMS were identified by NCNHP. Adam recalled that two mitigation sites may be along Afton Run south of the study area. Adam stated that WSP would recheck the study area for mitigation site. Sandy Smith of Axiom noted he did not see any indications of mitigation sites during field work.
- Adam pointed out that the alignment was set in the vicinity of Rocky River to minimize impacts to a wetland on the west side of the river. A parallel stream is located on both sides of NC 73 in this location so there is no avoiding a stream impact here. Sandy Smith of Axiom stated that the two parallel streams are nothing more than roadside ditches and are of low quality. Sandy stated that many of the streams in the project area are heavily influenced by development and storm water.
- Marla Chambers of NCWRC noted that Concept 3 hits a wetland (Wetland WAD) west of Odell School but shifting the alignment to the south could avoid this wetland. Adam indicated that the alignment was set here to avoid a house and in consideration of the Odell School entrance in this location. Adam stated that moving the alignment in this location while still avoiding the house may create an issue with the curve radius. WSP will recheck this area to see if avoiding this wetland is possible while still avoiding the house. Sandy indicated that the wetland appears to be an old storm water pond that naturalized and did not think it is of high quality. Phillip Graham indicated that this location is on a property that is currently being considered by the City of Concord for annexation due to a proposed mixed-use development.
- Marella questioned why the meeting packet states that Concept 4 minimizes impacts to streams when it has the most stream impacts. Adam clarified that Concept 4 was designed to avoid Howell Reservoir and that it does have the most stream impacts but the alignment was set to minimize impacts within the alignment by crossing streams at near 90-degrees and by avoiding some streams.
- Marella suggested potentially finding an alignment that combines Concepts 3 and 4 to reduce the number of concepts being considered.
- Following discussion Adam read the CP 2 form aloud. All Merger Team members present stated their verbal concurrence with CP 2. WSP will send the CP 2 form via DocuSign.



Project Discussion – CP 2A:

- Donna stated her concern that any alignment change to avoid impacts as discussed earlier in the meeting would affect concurrence of the alignments. Theresa indicated that the alignment shifts would be minor and any changes west and east of the reservoir in the best fit sections should not be a concern related to concurrence.
- Erin pointed out that the impact area depicted in Concept 3 extends slightly beyond the project study area boundary south of Odell School Road and Untz Road. Sandy indicated that the roads are on a ridge and there are not likely additional jurisdictional resources in these areas. Axiom will review these areas for jurisdictional resources and protected species and include the findings as part of the NRTR update they are preparing for the project.
- Adam presented each of the major structure crossings.
- It was noted during the discussion that a cost comparison is typically included as part of CP 2A to help inform decisions of bridges vs. culverts. Costs have not yet been developed for this project.
- Marella questioned whether a bridge or larger culvert at stream SBA (UT to Rocky River) is warranted due to development in the area. Jay Watson of WSP indicated the culvert at SBA would be 180 feet in length. Sandy indicated this stream is 15 feet deep and only about 7 feet wide. Nicholle Braspennickx of the Corps of Engineers indicated the Corps is good with a culvert at this location.
- Marella questioned whether the crossing in Concept 4 of stream SK should be a bridge. Marella suggested that a bridge or larger culvert could be warranted due to potential future development in the area. This culvert is not a major structure ($\geq 72"$) so no specific information regarding the structure was presented. Adam stated that he thought the culverts in Concept 4 south of the reservoir are no more than 60 inches. Jay also indicated that future development plans are taken into consideration when sizing culverts.
- A discussion took place regarding the Afton Run crossing. Marella suggested that a bridge could be warranted considering how large the proposed double box would be and that there is much developable land in the drainage area. Marla also indicated that a bridge would be preferred at this location because there is a large floodplain in this location and the area may provide a good travel corridor for wildlife. Erin indicated that any cost comparison between a bridge vs. a culvert should take the cost for stream mitigation into consideration (at 2:1 ratio). WSP will analyze the crossing to size a bridge and do a cost comparison.
- The crossing of the reservoir in Concepts 1 and 2 was discussed. The bridge concept (Concept 1) was not included on the CP 2A form because it is not known which alignment concept will be chosen. Adam showed a concept design of the bridge crossing, which includes three bridges over the fingers on the south side of NC 73.



Following the presentation and discussion, all Merger Team Members present agreed with 6 of the 7 major structure recommendations on the CP 2A form, with the Afton Run crossing requiring additional analysis. WSP will analyze the Afton Run crossing, provide information on the findings to the Merger Team, and update the recommended structure at this location, if warranted. WSP will then send an updated CP 2A form. The crossing of Reservoir with three bridges may also be added to the CP 2A form if this concept is chosen.



MEMO

TO: Meeting Attendees
FROM: Theresa Ellerby (NCDOT) and Adam Karagosian (WSP)
SUBJECT: R-5706 Concurrence Point 3 Meeting Summary
DATE: June 3, 2019

Meeting Attendees:

- Theresa Ellerby (NCDOT PMU)
- Beverly Robinson (NCDOT PMU)
- Kevin Moore (NCDOT PMU)
- John Jamison (NCDOT EPU)
- Stuart Basham (NCDOT – Division 10) via Skype/telephone
- Erin Cheely (NCDOT EAU ECAP)
- Brook Anderson (NCDOT – Hydraulics)
- Michelle Berry (NCDOT – Hydraulics)
- Shelby Reap (NCDOT – EAU)
- Paul J. Mohler (NCDOT – EAU)
- Nicholle Braspennickx (UASCE)
- Donna Hood (NCDWR)
- Monte Matthews (USACE)
- Marla Chambers (NCWRC)
- Robert Patterson (DWR) – via Skype/telephone
- Amanetta Somerville (USEPA) – via Skype/telephone
- Renee Gledhill-Earley (SHPO) – via Skype/telephone
- Adam Karagosian (WSP)
- Brock LaForty (WSP)
- Katharine Mather (WSP)
- Jennifer Starnes (WSP)
- Sandy Smith (Axiom Environmental)

Introduction and Summary

A Concurrence Point (CP) 3 Merger meeting was held at the NCDOT Century Center on May 15, 2019 at 1:00 PM for the NC 73 Widening from Davidson-Concord Road to US 29 in Mecklenburg and Cabarrus Counties, STIP Project Number R-5706.

Theresa Ellerby started the meeting by welcoming attendees and asked Nicholle Braspenickx if she would like to facilitate. Nicholle kicked off introductions. Theresa requested the meeting begin with discussions pertaining to historic resources. Nicholle began a discussion pertaining to historic resources and Section 106 compliance. Subsequently, Adam Karagosian presented a PowerPoint presentation of the project. The presentation included a summary of project activities to date, discussion of study area changes, an overview of CP 1, an overview of CP2 and CP2A, and a discussion of the four alternatives pertaining to CP 3. Mapping and an impact comparison table was shared during the presentation. Discussions took place throughout the delivery of the presentation. A summary of the discussion is provided below.

Project Discussion – CP 3:

- Shelby Reap provided an overview of the four local historic landmarks in the study area and coordination to date with the Charlotte-Mecklenburg Local Landmarks Commission. The sites are Bradford Farm, Bradford Store, Washam Farm, and the Cashion and Moore Cemetery. The Bradford Farm and Washam Farm are also determined eligible for the National Register of Historic Places. Design adjustments are being evaluated to minimize impacts to these two sites. Design adjustments will result in additional impacts to the Bradford Store property but would stay well off of the store building. Adam noted no archaeological sites in the study area were Determined Eligible, but the Columbus AME Zion Church cemetery and the Cashion and Moore Cemetery are potentially-eligible. Design will avoid these cemeteries.

Design changes at these historic properties are likely to result in impacts to a manufactured home community on the north side of NC 73 that has the possibility to produce environmental justice impacts. Theresa noted the project team is working with the Community Studies Group for further engagement to that community and other communities in the study area. Nicholle asked how far away the closest permit site was to the cemetery. Adam noted the nearest impact site is approximately 900 feet from the cemetery to the east. Shelby explained next steps would be to present the revised design to the Charlotte-Mecklenburg Historic Landmarks Commission, get their feedback, and address any comments.

Renee Gledhill-Earley noted a Certificate of Appropriateness will be needed from the Commission and impacts to the landmarks are a local issue rather than a Corps issues. Adam pointed out that impacts to the cemetery and local landmarks are the same across all four alternatives. Theresa noted that the Commission representative suggested their concerns are more for impacts to the Bradford farm property and the house on that property.

- Adam provided an overview of the study area changes since CP 1 that incorporate minor changes at several locations to account for slope stakes +40' limits and/or slight alignment adjustments, as well as an expanded study area northeast of the NC 73/Kannapolis Parkway intersection. Sandy Smith noted a small amount of field work remains for the expanded sections. Brock LaForty noted the expansion at Kannapolis Parkway is due to traffic considerations. Sandy noted there will be a stream delineation in the expanded study area for Kannapolis Parkway. Adam

asked how the Merger Team wanted to address the study area changes for the CP 1 form. The Merger Team agreed that a memorandum should be provided detailing the study area changes and including the original and revised study area maps as attachments. Re-signing of the CP 1 form will not be necessary.

- Adam presented a comparison of impacts to the human and natural environment for the four alternatives. Monte Matthews asked if the project team could provide the Corps with what is currently known about the presence of environmental justice populations in the study area. WSP agreed to provide this information.
- Adam noted that the typical section for R-5706 in Cabarrus County calls for sidewalks and bike lanes, but that the local jurisdictions recently expressed their preference for multi-use paths. A decision on switching to multi-use paths has not been made and evaluations are underway. Impacts would be slightly greater if a multi-use path is provided, and would be the same for all alternatives.
- Adam pointed out that the construction cost estimate submitted with the original CP 3 packet did not have the cost from the R-5706A project. The revised costs for each alternative, including the R-5706A cost, was presented. This cost addition is the same for all alternatives. Theresa noted that not all utility costs are included in the cost estimate.
- Adam provided a summary of public involvement, and noted that the majority of public comments pertained to opposition to Alternatives 3 and 4, including a petition signed by 220 people. Overall, more than 200 comments were received via comment form and email, and numerous telephone calls and letters were also received. Nicholle noted most of the public comments from the 404 Permit comment period (ending May 24) oppose Alternatives 3 and 4.
- Marla Chambers asked if yet-to-be-completed plant surveys in the study area expansion may change Threatened and Endangered Species impacts between alternatives. Erin Cheely noted the study area expansions are in developed areas and due to the locations of the expansions any new impacts would be the same for all four alternatives. Sandy concurred that the expanded areas are primarily in maintained areas.
- Adam provided an overview of potential impacts to jurisdictional resources across the four alternatives. Sandy reminded the attendees the delineations shown are preliminary and not approved. Sandy noted wetlands WO and WG were redelineated and are larger than what was originally delineated to the west of Poplar Tent Road. Since the original delineations, two new hydric soil indicators have been added for wetland determinations and hydrologic conditions are much wetter this year than when fieldwork was initially conducted. Sandy noted two new streams have been delineated in the expanded study area on the south end of Poplar Tent Road. Sandy noted Alternative 3 would have impacts west of Odell Elementary School. Donna Hood noted the school's previous facility had an independent wastewater discharge facility on site.

- Adam provided an overview of how the four alternatives either cross or bypass Howell Reservoir. Erin noted Alternatives 1 or 2 would be preferable considering natural resource and right-of-way impacts. Donna asked about the effect Alternative 2 would have on existing utilities and concerns of the Division of Energy, Mineral, and Land Resources (DEMLR) pertaining to causeway impacts. Brock mentioned utility information is not yet known and surveys are underway to identify pipes under the existing causeway. Brock also mentioned that DEMLR's expressed concerns regarding potential construction impacts of Alternative 2. Donna expressed concerns over the potential construction impacts associated with Alternative 2 and noted there would be less potential for risks with Alternative 1 compared to Alternative 2. Brock agreed, noting bridging would allow for greater flexibility, as well.
- Adam initiated discussion with the Merger Team on the selection of the Least Environmentally Damaging Practicable Alternative (LEDPA). Nicholle noted Alternative 1 appears to be preferred but a final decision would occur after the 404 Permit comment period ends on May 24. Donna agreed Alternative 1 appears to be the least environmentally damaging alternative. Amanetta Somerville agreed Alternative 1 appears to be LEDPA but suggested to delay signing the Concurrence Form until after the 404 Permit comment period ends. Marla agreed with Alternative 1 as the LEDPA. Representatives from USFWS, CRTPO, and CRMPO were not present at the meeting. Renee (SHPO) left the meeting prior to the LEDPA discussion.

The Merger Team agreed to wait until after the 404 Permit comment period ends, May 24, 2019, to send the Concurrence Point form for signature via DocuSign. Theresa asked how the outcome of this meeting should be communicated to the public prior to May 24. Stuart Basham indicated his concern for notifying the public of the preferred alternative prior to the end of the 404 Permit comment period. The Merger Team agreed to inform members of the public that the decision of the LEDPA would be finalized after the end of the comment period.

Action Items

- WSP to prepare a memo and mapping of the study area change to accompany the CP 3 form.
- WSP to provide EJ information to the Corps.
- Axiom to complete fieldwork of the expanded areas and update the NRTR.

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MEMO

TO: Meeting Attendees

FROM: Adam Karagosian

SUBJECT: R-5706 Concurrence Point 3 and Concurrence Point 4A Meeting Summary

DATE: December 20, 2019

Meeting Attendees:

- Theresa Ellerby (NCDOT PMU)
- Beverly Robinson (NCDOT PMU)
- Kevin Moore (NCDOT PMU)
- Nora McCann (NCDOT PMU)
- John Jamison (NCDOT EPU)
- Mike Sanderson (NCDOT EPU)
- Erin Cheely (NCDOT EAU ECAP)
- Michael Turchy (NCDOT EAU ECAP)
- Douglas Kretchman (NCDOT Roadway)
- Natalia Arbelaez (NCDOT – Trainee [TEA])
- Larry Thompson (NCDOT Division 10) – via Skype/telephone
- Tim Boland (NCDOT Division 10) – via Skype/telephone
- Nicholle Braspennickx (UASCE)
- Donna Hood (NCDWR)
- Marla Chambers (NCWRC) – via Skype/telephone
- Robert Patterson (DWR) – via Skype/telephone
- Amanetta Somerville (USEPA) – via Skype/telephone
- Claire Ellwanger (USFWS) – via Skype/telephone
- Phil Conrad (CRMPO) – via Skype/telephone
- Adam Karagosian (WSP)
- Brock LaForty (WSP)
- Jennifer Starnes (WSP)
- Katharine Mather (WSP)

Introduction

A Concurrence Point 3 and Concurrence Point 4A Merger meeting was held at the NCDOT Century Center on December 11, 2019 at 1:00 PM for the NC 73 Widening from Davidson-Concord Road to US 29 in Mecklenburg and Cabarrus Counties, STIP Project Number R-5706. This meeting was a re-visit of the July 2019 CP 3 concurrence and the first meeting with the full Merger Team for CP 4A.

Nicholle Braspenickx started the meeting by welcoming attendees and introducing the project. After introductions, Adam Karagosian began a PowerPoint presentation of the project. The presentation included a summary of project activities to date, information regarding past Merger concurrence points, a revisit of CP 3 including a review of design changes since CP 3 was achieved in June 2019 and discussion of avoidance and minimization efforts pertaining to CP 4A. Mapping and an avoidance and minimization table were reviewed during the presentation. Discussions took place throughout the delivery of the presentation.

Summary of Discussion

- The previous CP 3 meeting was held on May 15, 2019 and the last signature on the CP 3 form was obtained on June 7, 2019. The revised design is now referred to as Alternative 1 (Modified). Amanetta Somerville asked if CP 3 was to be reevaluated since the design changed and since impacts for Alternative 1 (Modified), particularly at the reservoir, have changed. Amanetta asked if Alternative 1 (Modified) is still considered the LEDPA. During the discussion it was clarified that re-confirmation of CP 3 concurrence would be requested at this meeting.
- Changes at the following five (5) locations were detailed and discussed during the meeting, including a review of figures included in the merger meeting packet:
 - NC 73 realignment at historic properties in the western end of the corridor
 - Change from sidewalk/bike lanes to multi-use paths between Poplar Tent Road and I-85
 - Redesign of the Poplar Tent intersection
 - Redesign of the Kannapolis Parkway intersection
 - Realignment and change of bridge design at the Howell (aka, Coddle Creek) Reservoir
- The alignment shift at the four historic properties (all local historic landmarks) has been designed to minimize impacts to the historic properties and to obtain a Certificate of Appropriateness (COA) from the Charlotte-Mecklenburg Historic Landmarks Commission. Adam noted that two of the historic properties are eligible for the National Register of Historic Places (Washam Farm and Bradford Farm). The alignment shift would result in eight (8) additional residential relocations in the manufactured home community near Stanley McElrath Road.
- Adam provided a summary of the small group meeting that was held with the manufactured home community. One family attended and the family indicated that residents in the community own their homes but not their land. The family was Spanish-speaking with their daughter providing interpretation. The family indicated the community is close-knit and established.
- The realignment in this area will not result in additional impacts to waters of the U.S.
- Donna Hood asked if the alignment change would be sufficient to received approval from the Commission and how often the Commission meets. Adam replied that the Commission meets monthly. WSP and NCDOT have been coordinating with the Commission's staff planner who could not provide guarantee of COA approval but who indicated that the redesign in the area

seemed to sufficiently address his concerns. The project team has decided to wait until closer to the right-of-way date to apply for the COA since the COA expires after six months and would need to be re-applied for.

- Erin Cheely reminded the meeting attendees that the impacts associated with the alignment shift at the historic properties are applicable to all four studied alternatives. Adam elaborated that 4 of the 5 design change areas are applicable to all four alternatives, with the change at the reservoir bridge affecting only Alternative 1.
- The typical section from Poplar Tent Road to I-85 has been changed to include multi-use paths (MUPs) rather than sidewalks and bicycle lanes at the request of the local municipalities. The conversion to MUPs will result in additional stream and wetland impacts at three locations.
- The NC 73/Poplar Tent Road intersection has been changed to now includes a reduced conflict intersection (RCI) design instead of a quadrant intersection that was presented to the Merger Team in May 2019. The design change will eliminate impacts to two streams (SPA and SPB) that would have occurred as a result of the quadrant roadway design; these streams were not delineated at the time of the May 2019 CP 3 meeting. Wetland impacts have increased in this area as a result of an expanded wetland delineation and not as a result of the design change. Donna asked if the project would still avoid the cemetery next to Columbus Chapel AME Zion Church. Adam indicated this is still the case. Marla Chambers of NCWRC asked if the RCI design will still have right-in, right-out turning movements. This remains the case. Adam explained how the previous quadrant design worked.
- The design at the NC 73/Kannapolis Parkway intersection now features a quadrant roadway in the northeast quadrant, a longer quadrant roadway in the southwest quadrant, and ramps in the northwest and southeast. Donna asked who initiated this change. Adam replied this was a collaborative decision, with input from the Division, and that the new intersection design improves traffic operations, is more symmetrical, and reduces driver confusion. Adam noted additional wetland and stream impacts in the northeast and southeast quadrants as a result of the redesign.
- The design of the bridge traversing Howell Reservoir associated with Alternative 1 was reviewed. The design presented for CP3 in May 2019 as Alternative 1 proposed a two-lane bridge for east-bound traffic and west-bound traffic being maintained on the existing causeway. Since May 2019, survey data has been completed that indicated this approach would be problematic in terms of constructability due to issues related to drainage needs and utility conflicts on the causeway. Maintaining westbound traffic on the causeway would require excavation in the causeway for drainage installation and utility relocation, which would create an erosion and sedimentation concerns for the reservoir (a public water supply). Theresa Ellerby noted that the NCDEQ Mooresville office staff (DEMLR) and NCDEQ Dam Safety previously expressed concern with excavation in the causeway. In addition, to construct the needed drainage, the profile of the reservoir would likely need to be raised, which would require fill in the Reservoir. Adam also

noted that shifting the alignment to the south (whether for a 2-lane or a 4-lane bridge) was deemed necessary in order to avoid impacting the causeway embankment and culverts beneath the causeway that were unknown at the time of the May 2019 CP 3 meeting. As a result of these constructability issues, a 4-lane bridge to carry both eastbound and westbound traffic is now proposed and is on an alignment shifted slightly to the south to minimize impacts to the reservoir and causeway. The new design is included as part of Alternative 1 (Modified).

- The proposed 4-lane bridge design would increase open water fill as compared to what was presented as part of Alternative 1 at the May 2019 CP3 meeting. The open water fill is the result of bridge substructure that was not accounted for during previous CP 3 review. Adam noted that the previous 2-lane bridge design would have resulted in 0.24 acre of open water impacts (not previously reported) and that the 4-lane bridge design results in 0.28 acre of open water impacts. Adam noted that these open water impact numbers are conservative and represent a 15-ft wide impact area across the width of the bridge at each bent location.
- Donna asked if the reservoir bridge design change produced any additional human impacts. Adam replied 2-3 more residential relocations are expected with the revised design. Adam explained that a small group meeting was held with the property owners at the reservoir on 12/10/19 to inform them of the change. Owners to be impacted by the design, including the owners to be relocated as a result of the realignment, were present at the meeting.
- A comparison of impacts for all four studied alternatives was presented, including the Alternative 1 (Modified) design. Cost estimates and relocation reports will be updated to incorporate the design changes. Amanetta asked if minority and low-income impacts had changed due to the design changes. Adam indicated more will be known when the updated relocation report is completed but noted he would expect any increases in impacts would be due to realignment at the manufactured home park, which are the same for all four alternatives.
- Adam asked for CP 3 comment from each agency. The following comments were provided:
- USACE: Nicholle indicated she cannot comment on concurrence until the public notice period has ended. Nicholle expects to get the public notice out soon. She indicated signing CP 3 would likely not be possible until mid-January 2020. The public notice will only be sent to properties adjacent to the design changes. Nicholle also indicated she will factor in Environmental Justice impacts in her decision.
- DWR: Donna provided support for Alternative 1 (Modified) and stressed that the alternative's constructability at the reservoir was a main factor. Donna stated she is less concerned about water quality impacts to ponds and on the south side of the Reservoir than fill impacts to the north side of the Reservoir. She noted she has some concerns about impacts from shading and fill impacts from the bridge bents. Donna noted if public comments regarding stormwater were received, that she expects these comments to be addressed in design.

- EPA: Amanetta asked that justification be provided as to why Alternative 1 (Modified) is better than the other studied alternatives. Erin reminded the meeting attendees of the strong opposition to Alternatives 3 and 4 during the public comment period in early 2019. Theresa suggested a memorandum to document the justification. Amanetta indicated this would be sufficient. Theresa indicated that justification for selecting Alternative 1 should be in the meeting minutes from the May 2019 CP 3 meeting.
- USFWS: Claire Ellwanger did not have comments.
- NCWRC: Marla provided support for Alternative 1 (Modified) and encouraged further avoidance and minimization efforts as the project moves through final design. Marla encouraged more stringent storm water management, especially near the reservoir.
- SHPO: a representative from SHPO was not present at the meeting.
- CRMPO: Phil did not have comments.
- CRTPO: a representative from CRTPO was not present at the meeting.

Project Discussion - Concurrence Point 4A:

- Adam walked the meeting attendees through the corridor, noting features of concern, and what design measures were taken to minimize and avoid impacts. Impact maps were reviewed in conjunction with the avoidance and minimization table.
- Donna asked if there was the potential to impact the Odell Fire Station site. Jennifer Starnes indicated the station would likely not be impacted.
- Donna asked if design details were known for the bridge structure over Coddle Creek. Jennifer noted the bridge over Coddle Creek would be a dual bridge and that the existing bridge would be replaced.
- Donna asked if the roundabout from the bow-tie intersection design at International Drive would impact the stream to the north. Jennifer noted the impact would be from the roundabout approach rather than the roundabout itself.
- Theresa asked Nicholle if it would be appropriate to move forward with comment on CP4A. Nicholle indicated it would be. Adam asked for comments from each agency. Agency comments were as follows:
- USACE: Nicholle asked if the avoidance and minimization measures presented in Table 15 of the meeting packet could also be presented in a narrative summary. Erin indicated that the CP 4A form would provide bullets of avoidance and minimization measures. Erin noted that she likes the way the avoidance and minimization table not only identifies avoidance and minimization measures taken but also provides detail as to why and where such measures could not be taken.

- DWR: Donna noted the project team has done what can be done to avoid and minimize impacts and for further measures to be taken in final design where possible. Donna also indicated she understands why certain human impacts could not be avoided.
- EPA: Amanetta did not have comments.
- USFWS: Claire did not have comments.
- NCWRC: Marla noted the CP 4A form should only include the avoidance and minimization measures for jurisdictional waters of the U.S. Erin noted that DOT sometimes includes avoidance and minimization for other impacts, as well, and these are separated from the waters of the U.S. information.
- SHPO: a representative from SHPO was not present at the meeting.
- CRMPO: Phil Conrad did not have comments.
- CRTPO: a representative from CRTPO was not present at the meeting.

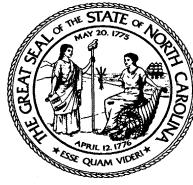
Next Steps:

- NCDOT and WSP will prepare a memorandum explaining why Alternative 1 (Modified) remains the LEDPA with design changes taken into consideration. Alternative 1 (Modified) will be compared to Alternatives 2, 3, and 4 noting the public comments previously presented at the May 2019 CP3 meeting included. The memorandum will also include a history of the design and CP 3 decision making.
- Amanetta asked for a timeframe for the memorandum and the Revised CP3 form and the CP4A form. Nicholle indicated the public notice needed to be sent and closed before she can sign CP 3 and CP 4A. She anticipates this to be in mid-January. Theresa noted a memorandum will be prepared within a week. Amanetta reminded the Merger team about the possibility of a federal government shutdown that could begin on December 20.
- Beverly Robinson of NCDOT indicated the memorandum should not include the same level of detail as the meeting minutes.

AHK/TTE.km

APPENDIX D

SHPO CORRESPONDENCE TO US ARMY CORPS OF ENGINEERS



**North Carolina Department of Natural and Cultural Resources
State Historic Preservation Office**

Ramona M. Bartos, Administrator

Governor Roy Cooper
Secretary Susi H. Hamilton

Office of Archives and History
Deputy Secretary Kevin Cherry

December 30, 2019

Nicholle Braspennickx
USACE Regulatory Program
151 Patton Avenue, Room 208
Asheville, NC 28801-5000

Nicholle.M.Braspennickx@usace.army.mil

Re: Widen NC 73 from SR 2693 to US 29, R-5706 A&B, SAW-2018-01447,
Cabarrus and Mecklenburg Counties, ER 18-1310

Dear Ms. Braspennickx:

We are in receipt of your December 16, 2019, Public Notice for the above-referenced undertaking and note the changes to the project. Based on the materials provided, we continue to concur with your finding that no historic properties will be affected.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, contact Renee Gledhill-Earley, environmental review coordinator, at 919-814-6579 or environmental.review@ncdcr.gov. In all future communication concerning this project, please cite the above referenced tracking number.

Sincerely,

A handwritten signature in blue ink that reads "Renee Gledhill-Earley".

for Ramona M. Bartos
Deputy State Historic Preservation Officer