

Type I or II Categorical Exclusion Action Classification Form

STIP Project No.: B-5847
WBS Element: 45800.1.2
Federal Project No.: NHP-0040(023)

A. Project Description:

State Transportation Improvement Program (STIP) Project B-5847 is the proposed replacement of Bridge No. 173 on SR 1709 (Rock Barn Road) over I-40, the interchange reconfiguration with two roundabouts, and the realignment of two service roads. The project length is approximately 0.377 miles. The project is located in the City of Conover, Catawba County.

Traffic will be maintained on-site during construction. The project is shown in Figure 1.

B. Description of Need and Purpose:

The purpose of the proposed project is to replace a structurally deficient bridge. NCDOT records indicate Bridge No. 173 was built in 1957. The bridge is considered structurally deficient due to a structural evaluation of 4 out of 9 and a deck geometry of 4 out of 9 according to Federal Highway Administration (FHWA) standards. Replacement of the bridge will result in safer traffic operations.

The I-40 eastbound entrance ramp provides access to SR 1759 (Banner Road)/Old Dominion Freight Line, and the I-40 westbound entrance ramps provides access to SR 1760 (Lap Road)/UPS Freight. Both service roads predominately carry commercial trucks and are signalized. The proposed design improvements will help reduce the number of conflicts at the SR 1709 (Rock Barn Road)/I-40 EB ramps/SR 1759 (Banner Road) intersection and at the SR 1709 (Rock Barn Road)/I-40 WB ramps/SR 1760 (Lap Road) intersection. The use of roundabouts will potentially reduce the number of crashes improving safety along this section of SR 1709 (Rock Barn Road). Roundabouts are being used in this design because the I-40 eastbound and westbound entrance ramps are not in compliance with Federal Highway Administration (FHWA) standards. The proposed improvements eliminate two-way travel on the I-40 ramps mandated by FHWA.

C. Categorical Exclusion Action Classification:

Type: I(A) - Ground Disturbing Action

D. Proposed Improvements:

23 CFR 771.117 (c)

26. Modernization of a highway by resurfacing, restoration, rehabilitation, reconstruction, adding shoulders, or adding auxiliary lanes (including parking, weaving, turning, and climbing lanes), if the action meets the constraints listed in 23 CFR 771.117(e)(1-6).

28. Bridge rehabilitation, reconstruction, or replacement or the construction of grade separation to replace existing at-grade railroad crossings, if the actions meet the constraints in 23 CFR 771.117 (e)(1-6).

E. Special Project Information:

Design:

- Functional classification: Minor Arterial
- Statewide Tier Guidelines
- Design Speed: 50-mph
- Design Exception: Not Required

Estimated Costs:

Right-of-Way:	\$	200,000
Utilities:	\$	300,000
Construction:	\$	10,300,000

Total estimated costs for B-5847 is approximately \$10,800,000.

Proposed Alternative:

The proposed project is approximately 0.377-miles long. Proposed improvements include replacing and widening Bridge No. 173 over I-40. The proposed approximately 196-foot bridge will be replaced on new alignment to the east. The proposed roadway and bridge design includes:

- 54-feet 7-inches wide bridge
- 12-foot travel lane and 5-foot sidewalks on the south
- 12-foot travel lane and 10-foot multi-use path on the north
- 5-foot 6-inch median with a 4-foot monolithic island
- SR 1709 (Rock Barn Road) will be widened to include one 12-foot lane with 5-foot sidewalks setback 4-feet 5-inches from the curb and gutter on a 10-foot berm (14-feet with guardrail) along the south side in the project study area
- SR 1709 (Rock Barn Road) will be widened to include one 12-foot lane with a 10-foot multi-use path setback 5-feet 6-inches from the curb and gutter on a 20-foot 6-inch berm along the north side in the project area
- The Interchange reconfiguration includes the realignment of both service roads to ramp termini at SR 1709 (Rock Barn Road) into five-legged roundabouts
- One-way free flow slip ramps to I-40
- SR 1759 (Banner Road) and SR 1760 (Lap Road) will be widened to include two 12-foot travel lanes and 6-foot (4-foot paved) shoulders (9-feet with guardrail)

Pedestrian and Bicycle Accommodations:

There are currently no bicycle, pedestrian, or sidewalk facilities along SR 1709 (Rock Barn Road) or other roadways in the project area. There is a 3.1-foot sidewalk along both sides of existing Bridge No. 173. The City of Conover has requested a 5-foot sidewalk on the south and a 10-foot multi-use path on the north of SR 1709 and across Bridge No. 173. There were four recorded pedestrian crashes from 2011 to 2018 in the immediate study area and one bicycle crash approximately 0.5 mile from Bridge No. 173.

SR 1709 (Rock Barn Road) is designated as a minor thoroughfare needing improvements in the May 2018 Hickory MPO Comprehensive Plan and CTP Bicycle Recommendations Map.

The Western Piedmont COG 2045 Metropolitan Plan (MTP) & Comprehensive Transportation Plan (CTP) does not identify any bicycle or pedestrian recommendations along the bridge or in the project area.

A 12-foot travel lane and 5-foot sidewalks will be constructed on the southside of the bridge and a 12-foot travel lane, and a 10-foot multi-use path will be constructed on the north side of the bridge to accommodate pedestrian and bicycle traffic. According to NCDOT's Integrated Mobility Division, shared lanes in rural town areas are appropriate bikeway paths.

Public Involvement:

A local official meeting and open-house public meeting was held on Tuesday, July 12, 2022, at the Tri-City Baptist Church in Conover to share the proposed designs for STIP B-5847. Property owners in the area were notified of the meeting via postcard announcements and the local newspaper. Approximately 29 citizens attended the public meeting. Approximately 500 views were recorded on the project engagement site and 5 comments received from the community. The majority of the comments received were related to the roundabouts and need to reduce the posted speed limit.

Response: The speed limit at and within the roundabouts will be reduced to 35 MPH.

Tribal Coordination:

There are four federally recognized tribes with interests in Catawba County (Cherokee Nation, Catawba Indian Nation, Eastern Band of Cherokee Indians, and United Keetoowah Band of Cherokee Indians) that were notified of the project in February 2022. Catawba Indian Nation asked to be notified if Native American artifacts and/or human remains are located during ground disturbance activities. All tribes with interests in Catawba County will be notified if cultural materials or human remains are encountered during ground disturbance, construction, or demolition activities.

Community Impact:

The Catawba County EMS expressed concerns that road closure will negatively affect emergency response times since SR 1709 (Rock Barn Road) is a primary main route.

Response: Traffic will be maintained on site during construction.

Archaeological Resources:

An archaeological survey and evaluation was undertaken on January 5, 2022. One archaeological site, 31CT284, was recorded within the APE. This historic period site was recommended Not Eligible for the National Register of Historic Places (NRHP). No further archaeological investigations are required for the project within the current APE. A finding of No National Register Historic Places Eligible or Listed Archaeological Sites Present was rendered for this project.

Historic Architectural Resources:

A historic architectural review was conducted on February 3, 2016, and a field review in July 2016 yielded no NR, DE, SL, LD, or SS properties in the area of potential effects (APE). A review in July 2021 identified three properties in the expanded APE. No historic properties will be affected by this project. A finding of No Historic Properties Present or Affected was rendered for this project.

F. Project Impact Criteria Checklists:

F2. Ground Disturbing Actions – Type I (Appendix A) & Type II (Appendix B)				
<p>Proposed improvement(s) that fit Type I Actions (NCDOT-FHWA CE Programmatic Agreement, Appendix A) including 2, 3, 6, 7, 9, 12, 18, 21, 22 (ground disturbing), 23, 24, 25, 26, 27, 28, &/or 30; &/or Type II Actions (NCDOT-FHWA CE Programmatic Agreement, Appendix B) answer the project impact threshold questions (below) and questions 8 – 31.</p> <ul style="list-style-type: none"> • <i>If any question 1-7 is checked “Yes” then NCDOT certification for FHWA approval is required.</i> • <i>If any question 8-31 is checked “Yes” then additional information will be required for those questions in Section G.</i> 				
<u>PROJECT IMPACT THRESHOLDS</u> (FHWA signature required if any of the questions 1-7 are marked “Yes”.)			Yes	No
1	Does the project require formal consultation with U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2	Does the project result in impacts subject to the conditions of the Bald and Golden Eagle Protection Act (BGEPA)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3	Does the project generate substantial controversy or public opposition, for any reason, following appropriate public involvement?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4	Does the project cause disproportionately high and adverse impacts relative to low-income and/or minority populations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5	Does the project involve a residential or commercial displacement, or a substantial amount of right of way acquisition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6	Does the project require an Individual Section 4(f) approval?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7	Does the project include adverse effects that cannot be resolved with a Memorandum of Agreement (MOA) under Section 106 of the National Historic Preservation Act (NHPA) or have an adverse effect on a National Historic Landmark (NHL)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If any question 8-31 is checked “Yes” then additional information will be required for those questions in Section G.				
<u>Other Considerations</u>			Yes	No
8	Is an Endangered Species Act (ESA) determination unresolved or is the project covered by a Programmatic Agreement under Section 7?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
9	Is the project located in anadromous fish spawning waters?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10	Does the project impact waters classified as Outstanding Resource Water (ORW), High Quality Water (HQW), Water Supply Watershed Critical Areas, 303(d) listed impaired water bodies, buffer rules, or Submerged Aquatic Vegetation (SAV)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
11	Does the project impact Waters of the United States in any of the designated mountain trout streams?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
12	Does the project require a U.S. Army Corps of Engineers (USACE) Individual Section 404 Permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

13	Will the project require an easement from a Federal Energy Regulatory Commission (FERC) licensed facility?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>Other Considerations for Type I and II Ground Disturbing Actions (continued)</u>		Yes	No
14	Does the project include a Section 106 of the National Historic Preservation Act (NHPA) effects determination other than a No Effect, including archaeological remains?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
15	Does the project involve GeoEnvironmental Sites of Concerns such as gas stations, dry cleaners, landfills, etc.?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16	Does the project require work encroaching and adversely affecting a regulatory floodway or work affecting the base floodplain (100-year flood) elevations of a water course or lake, pursuant to Executive Order 11988 and 23 CFR 650 subpart A?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
17	Is the project in a Coastal Area Management Act (CAMA) county and substantially affects the coastal zone and/or any Area of Environmental Concern (AEC)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18	Does the project require a U.S. Coast Guard (USCG) permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
19	Does the project involve construction activities in, across, or adjacent to a designated Wild and Scenic River present within the project area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
20	Does the project involve Coastal Barrier Resources Act (CBRA) resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
21	Does the project impact federal lands (e.g., U.S. Forest Service (USFS), USFWS, etc.) or Tribal Lands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
22	Does the project involve any changes in access control or the modification or construction of an interchange on an interstate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
23	Does the project have a permanent adverse effect on local traffic patterns or community cohesiveness?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
24	Will maintenance of traffic cause substantial disruption?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
25	Is the project inconsistent with the STIP, and where applicable, the Metropolitan Planning Organization's (MPO's) Transportation Improvement Program (TIP)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
26	Does the project require the acquisition of lands under the protection of Section 6(f) of the Land and Water Conservation Act, the Federal Aid in Fish Restoration Act, the Federal Aid in Wildlife Restoration Act, Tennessee Valley Authority (TVA), Tribal Lands, or other unique areas or special lands that were acquired in fee or easement with public-use money and have deed restrictions or covenants on the property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
27	Does the project involve Federal Emergency Management Agency (FEMA) buyout properties under the Hazard Mitigation Grant Program (HMGP)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
28	Does the project include a <i>de minimis</i> or programmatic Section 4(f)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
29	Is the project considered a Type I under the NCDOT Noise Policy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
30	Is there prime or important farmland soil impacted by this project as defined by the Farmland Protection Policy Act (FPPA)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
31	Are there other issues that arose during the project development process that affected the project decision?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

G. Additional Documentation as Required from Section F:

Question 8: Federally Protected Species

Northern long-eared bat – Northern long-eared bat is found across much of the eastern and north central US and all Canadian provinces. A search of the NCNHP database on October 11, 2021, indicated no known long-eared bat occurrences within 1.0 mile of the study area. According to the North Carolina Natural Heritage Program (NHP) Biotics Database, most recently updated October 2015, the nearest NLEB hibernacula record is 43 miles west [EO ID 32171] and no known NLEB roost trees occur within 150 feet of the project area. EO 32171 represents Black Rock Cliffs Cave near Grandfather Mountain with multiple observations from 1986 to 2011. NCDOT has determined that the proposed action does not require separate consultation on the grounds that the proposed action is consistent with the final Section 4(d) rule, codified at 50 CFR § 17.40(o) and effective February 16, 2016. NCDOT may presume its determination is informed by best available information and consider Section 7 responsibilities fulfilled for the NLEB.

Question 10: Buffer Rules

Buffer Rules for the Catawba River basin only apply to the main stem of the river and do not apply to tributaries to the river. No NCDWR riparian buffer rules apply to the project.

Question 15: GeoEnvironmental Sites of Concern

Three sites of concern were identified within the proposed project study area.

Handy Stop No. 7: This site is an active gas station with 4 USTs in use. There was a groundwater incident in 2006. Soil and groundwater assessments have been performed for years. Groundwater monitoring wells were located across the site and the properties across SR 1709 (Rock Barn Road). Major clean-up activities have occurred at this site since 2016. Impacts to this site are anticipated to be low.

Speedway 9791: This site is an active truck stop gas station with 4 USTs (two gasoline USTs with 22,000 total gallons and two diesel USTs with 40,000 total gallons) in use. There was a groundwater incident in 2014 and the groundwater plume extended to the back of the property but did not cross SR 1709 (Rock Barn Road). Major clean-up activities have occurred at this site since 2016. Multiple monitoring wells are located across the property. Impacts to this site are anticipated to be low.

Old Dominion Freight Line: This property was developed as a trucking facility since the 1980s. There was a registered underground storage tank system on site for fleet use, but all USTs were removed in 1994. There was minor soil contamination during the removal. The contaminated soil was documented, removed from the site in 1997 and the incident closed. Currently there are no USTs installed on site.

Question 22: Access Control

The proposed project constructs a new two-lane bridge directly east of the existing bridge, with roundabouts in similar locations as the existing signalized intersections on SR 1709 (Rock Barn Road). The distance between the roundabouts is approximately 545-feet. The I-40 eastbound entrance ramp provides access to SR 1759 (Banner Road)/Old Dominion Freight Line, and the I-40 westbound entrance ramps provides access to SR 1760 (Lap Road)/UPS Freight. Both service roads predominately carry commercial trucks and are signalized. The proposed five-legged roundabout design improvements will help reduce the number of conflicts at the SR 1709 (Rock Barn Road)/I-40 EB ramps/SR 1759 (Banner Road) intersection and at the SR 1709 (Rock Barn Road)/I-40 WB ramps/SR 1760 (Lap Road) intersection. The use of roundabouts will potentially reduce the number of crashes improving safety along this section of SR 1709 (Rock Barn Road).

The proposed changes will result in a reduced number of conflicts within the study corridor and potentially reduce the number of crashes with the roundabouts. The improvements listed in Section E, page 2, will help to reduce collisions within the project study area.

H. Project Commitments:

NCDOT PROJECT COMMITMENTS

**STIP No. B-5847
Replace Bridge No. 173 on SR 1709 (Rock Barn Road) over I-40
Catawba County
Federal Aid No. NHP-0040(023)
WBS No. 45800.1.2**

NCDOT SMU and Division 12 Construction – Sidewalks and Multi-use Path

Coordination regarding the construction of sidewalks and a multi-use path within the proposed study area will continue with the City of Conover, and a municipal agreement will be prepared and executed by the City and NCDOT.

NCDOT GeoEnvironmental Section – Sites of Concern

Sites of concern should be reviewed by the GeoEnvironmental Section once Final Right of Way plans are complete to determine if Phase II Investigations and Right of Way Recommendations are necessary prior to right of way being acquired.

I. Categorical Exclusion Approval:

STIP Project No: B-5847
 WBS No: 45800.1.2
 Federal Project No: NHP-0040(023)

Prepared By:

10/27/2022 | 2:48 PM EDT *DocuSigned by: Stacy Oberhausen*
 Date Stacy B. Oberhausen, PE, CPM
 TGS Engineers

Prepared For:

11/1/2022 | 4:30 PM EDT *DocuSigned by: Jacquelyn Bowles, PE*
 Date Jacquelyn Bowles, PE
 NCDOT, Structures Management Unit

Reviewed By:

11/2/2022 | 7:55 AM EDT *DocuSigned by: John Jamison*
 Date John Jamison, Western Region Team Lead
 NCDOT, Environmental Policy Unit

- Approved**
 - If NO grey boxes are checked in Section F (pages 2 and 3), NCDOT approves the Type I or Type II Categorical Exclusion.
- Certified**
 - If ANY grey boxes are checked in Section F (pages 2 and 3), NCDOT certifies the Type I or Type II Categorical Exclusion for FHWA approval.
 - If classified as Type III Categorical Exclusion.

11/2/2022 | 9:39 AM EDT *DocuSigned by: Kevin Fischer, PE*
 Date Kevin Fischer, PE, Asst State Structures Engineer
 NCDOT, Structures Management Unit

FHWA Approved: For Projects Certified by NCDOT (above), FHWA signature required.

Date N/A
 for John F. Sullivan, III, PE, Division Administrator
 Federal Highway Administration

09/28/2019

TIP PROJECT: B-5847

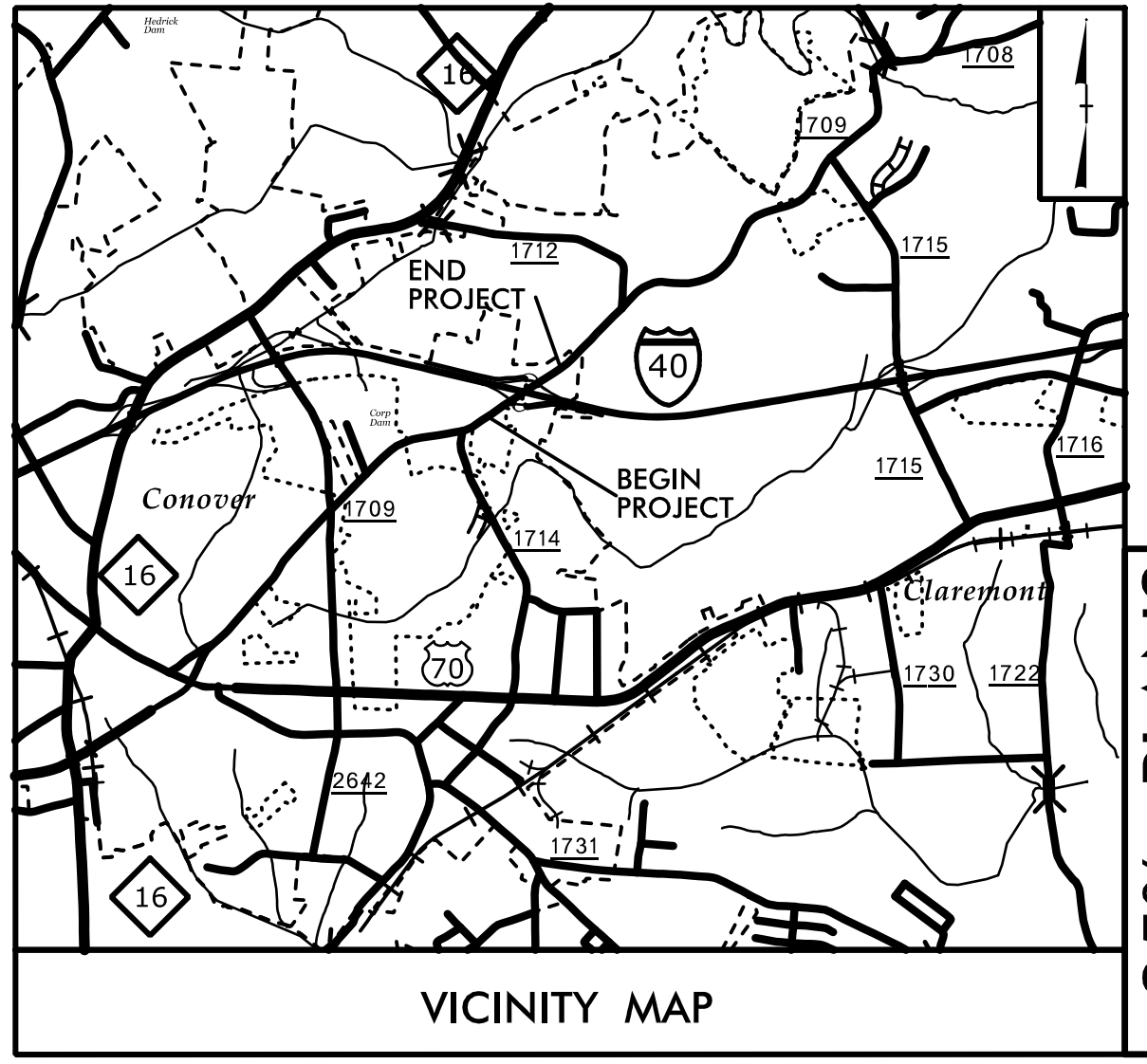
See Sheet 1A For Index of Sheets

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

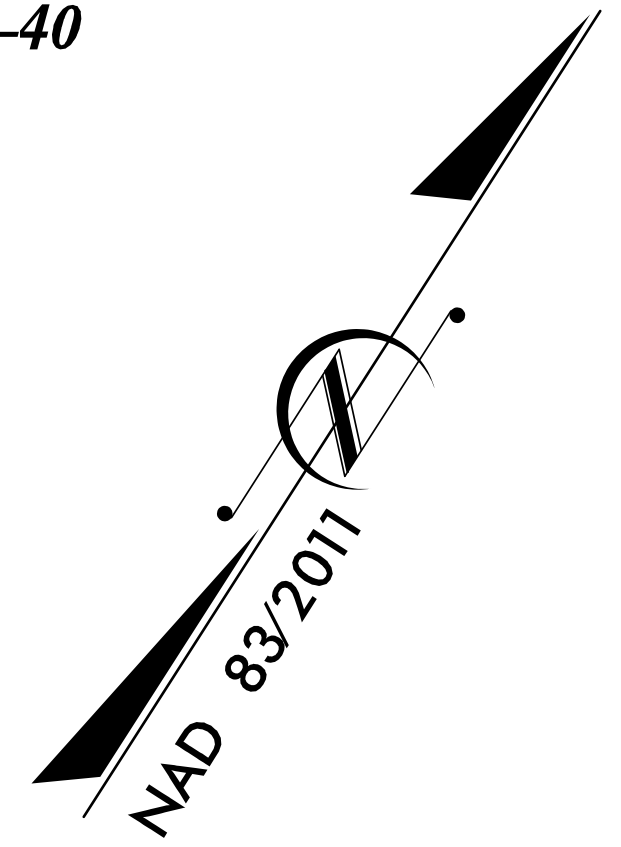
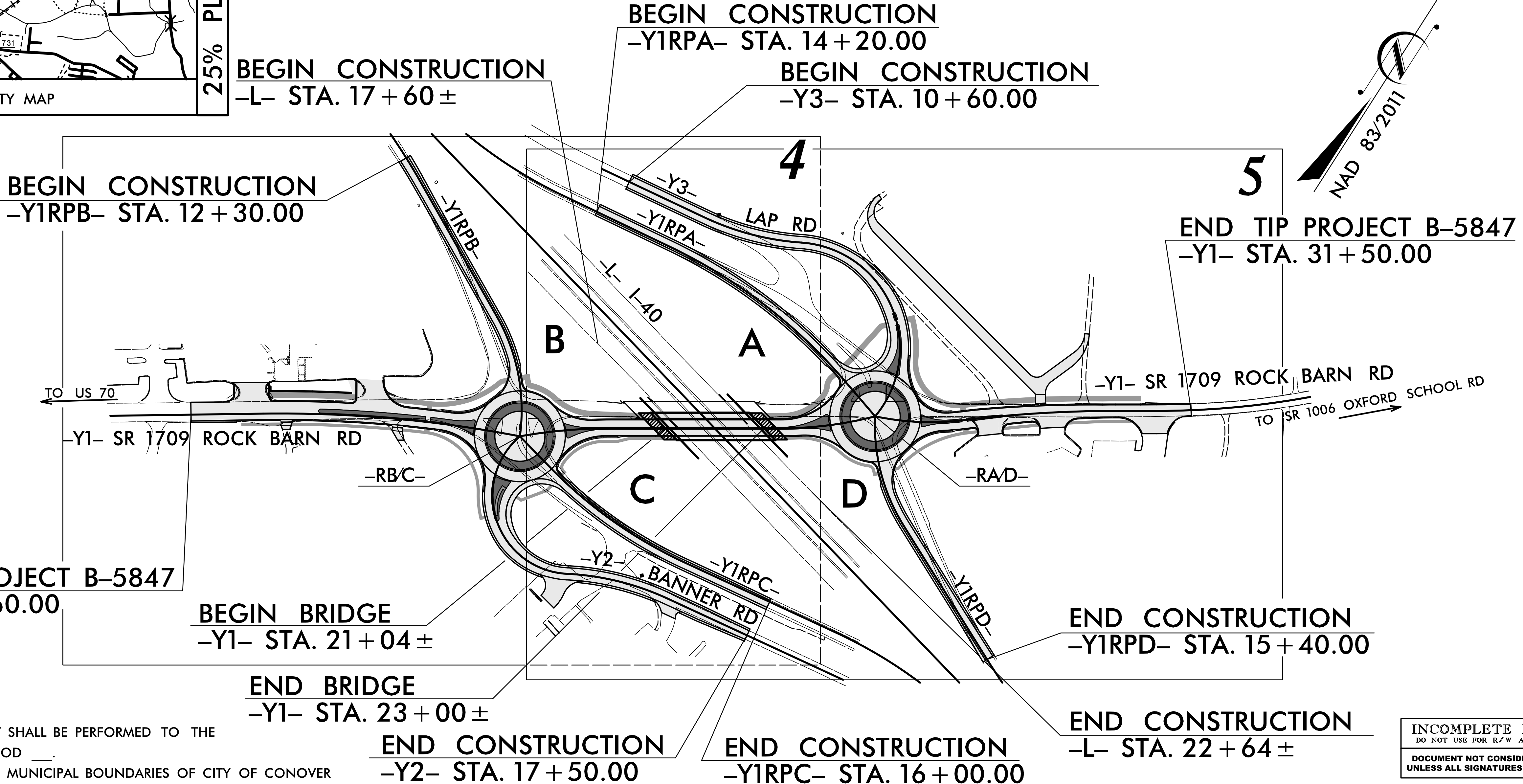
CATAWBA COUNTY

LOCATION: REPLACE BRIDGE NO.173 ON SR 1709 (ROCK BARN RD) OVER I-40
TYPE OF WORK: GRADING, PAVING, DRAINAGE, AND STRUCTURE

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.			
FIGURE 1			



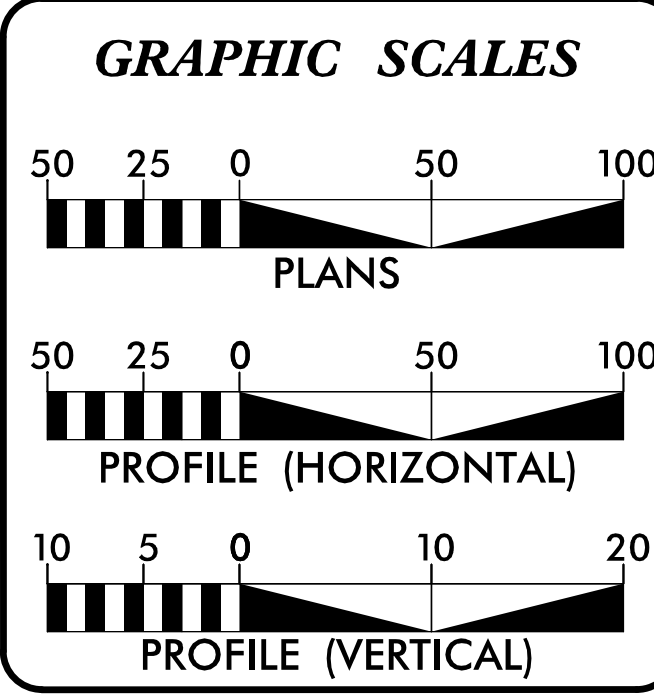
25% PLANS



CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD ____.
THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF CITY OF CONOVER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

CONTRACT:



DESIGN DATA	
I-40	SR 1709
ADT 2021 = 42,200	ADT 2021 = 12,000
ADT 2045 = 51,700	ADT 2045 = 12,600
K = 8 %	K = 9 %
D = 55 %	D = 55 %
T = 14 % *	T = 18 % *
V = 70 MPH	V = 50 MPH
* TTST = 11% DUAL = 3%	* TTST = 13% DUAL = 5%
FUNC CLASS = INTERSTATE STATEWIDE TIER	FUNC CLASS = MINOR ARTERIAL STATEWIDE TIER

PROJECT LENGTH	
LENGTH ROADWAY TIP PROJECT B-5847 (SR 1709) = 0.340 MILES	
LENGTH STRUCTURE TIP PROJECT B-5847 (SR 1709) = 0.037 MILES	
TOTAL LENGTH TIP PROJECT B-5847 = 0.377 MILES	

PLANS PREPARED BY:
TGS ENGINEERS
201 W. MARION ST
SHELBY, NC 28150
PH (704) 476-0003
CORP. LICENSE NO. C-0275

PLANS PREPARED FOR:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
1000 Birch Ridge Drive
Fayetteville, NC 27810

2018 STANDARD SPECIFICATIONS
RIGHT OF WAY DATE:
OCTOBER 21, 2022

LETTING DATE:
JANUARY 16, 2024

NCDOT CONTACT: DAVID STUTTS, PE STRUCTURES PROJECT ENGINEER

JIMMY TERRY, PE
PROJECT ENGINEER

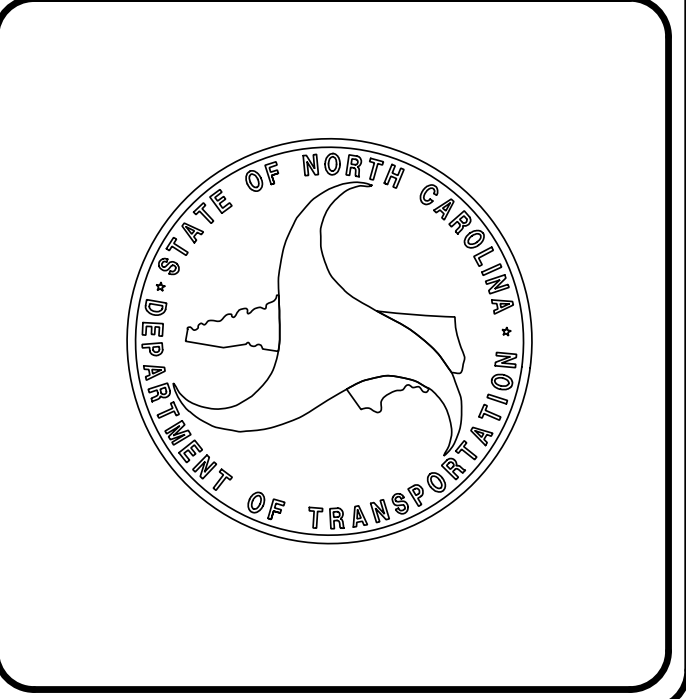
CLINTON B. PRUETT, PE
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.



4/26/2022 X:\NCDOT\B-5847\Roadway\Proj\B-5847_Rdy_t.sh.dgn User:cbpruett