

CATEGORICAL EXCLUSION ACTION CLASSIFICATION FORM

STIP Project No.	B-5346
W.B.S. No.	46060.1.1
Federal Project No.	<u>BRZ-1529(010)</u>

A. Project Description:

The purpose of this project is to replace Alamance County Bridge No. 3 on SR 1529 (Durham Street Extension) over Dry Creek. Bridge No. 3 is 52 feet long. The replacement structure will be a bridge approximately 80 feet long providing a minimum 30-foot 10-inches clear deck width. The bridge will include two 11-foot lanes and 4-foot 5-inch offsets. The bridge length is based on preliminary design information and is set by hydraulic requirements. The roadway grade of the new structure will be approximately the same as the existing structure.

The approach roadway will extend approximately 118 feet from the northwest end of the new bridge and 92 feet from the southeast end of the new bridge. The approach to the northwest will be widened to include a 33- to 22-foot variable pavement width providing two 11-foot lanes. An 11-foot right turn only lane will be provided at Durham Meadows Drive. Six-foot shoulders with two-foot paved will be provided on each side (9-foot shoulders where guardrail is included). The roadway will be designed as a Rural Local Route using Sub Regional Tier Guidelines with a 50 mile per hour design speed.

Traffic will be detoured off-site during construction (see Figure 1).

B. Purpose and Need:

This project is needed based on NCDOT Bridge Management Unit records indicating Bridge No. 3 has a sufficiency rating of 53.25 out of a possible 100 for a new structure.

The bridge is considered functionally obsolete due to deck geometry appraisal of 2 out of 9 according to Federal Highway Administration (FHWA) standards.

The superstructure and substructure of Bridge No. 3 have timber elements that are sixty-two years old. Timber components have a typical life expectancy between 40 to 50 years due to the natural deterioration rate of wood. Rehabilitation of a timber structure is generally practical only when a few elements are damaged or prematurely deteriorated. However, past a certain degree of deterioration, most timber elements become impractical to maintain and upon eligibility are programmed for replacement. Timber components of Bridge No. 3 are experiencing an increasing degree of deterioration that can no

longer be addressed by reasonable maintenance activities, therefore the bridge has reached the end of its useful life and will need to be replaced.

C. Proposed Improvements:

Circle one or more of the following Type II improvements which apply to the project:

1. Modernization of a highway by resurfacing, restoration, rehabilitation, reconstruction, adding shoulders, or adding auxiliary lanes (e.g., parking, weaving, turning, climbing).
 - a. Restoring, Resurfacing, Rehabilitating, and Reconstructing pavement (3R and 4R improvements)
 - b. Widening roadway and shoulders without adding through lanes
 - c. Modernizing gore treatments
 - d. Constructing lane improvements (merge, auxiliary, and turn lanes)
 - e. Adding shoulder drains
 - f. Replacing and rehabilitating culverts, inlets, and drainage pipes, including safety treatments
 - g. Providing driveway pipes
 - h. Performing minor bridge widening (less than one through lane)
 - i. Slide Stabilization
 - j. Structural BMP's for water quality improvement

2. Highway safety or traffic operations improvement projects including the installation of ramp metering control devices and lighting.
 - a. Installing ramp metering devices
 - b. Installing lights
 - c. Adding or upgrading guardrail
 - d. Installing safety barriers including Jersey type barriers and pier protection
 - e. Installing or replacing impact attenuators
 - f. Upgrading medians including adding or upgrading median barriers
 - g. Improving intersections including relocation and/or realignment
 - h. Making minor roadway realignment
 - i. Channelizing traffic
 - j. Performing clear zone safety improvements including removing hazards and flattening slopes
 - k. Implementing traffic aid systems, signals, and motorist aid
 - l. Installing bridge safety hardware including bridge rail retrofit

3. Bridge rehabilitation, reconstruction, or replacement or the construction of grade separation to replace existing at-grade railroad crossings.
 - a. Rehabilitating, reconstructing, or replacing bridge approach slabs
 - b. Rehabilitating or replacing bridge decks
 - c. Rehabilitating bridges including painting (no red lead paint), scour repair, fender systems, and minor structural improvements
 - d. Replacing a bridge (structure and/or fill)

4. Transportation corridor fringe parking facilities.
5. Construction of new truck weigh stations or rest areas.
6. Approvals for disposal of excess right-of-way or for joint or limited use of right-of-way, where the proposed use does not have significant adverse impacts.
7. Approvals for changes in access control.
8. Construction of new bus storage and maintenance facilities in areas used predominantly for industrial or transportation purposes where such construction is not inconsistent with existing zoning and located on or near a street with adequate capacity to handle anticipated bus and support vehicle traffic.
9. Rehabilitation or reconstruction of existing rail and bus buildings and ancillary facilities where only minor amounts of additional land are required and there is not a substantial increase in the number of users.
10. Construction of bus transfer facilities (an open area consisting of passenger shelters, boarding areas, kiosks and related street improvements) when located in a commercial area or other high activity center in which there is adequate street capacity for projected bus traffic.
11. Construction of rail storage and maintenance facilities in areas used predominantly for industrial or transportation purposes where such construction is not inconsistent with existing zoning and where there is no significant noise impact on the surrounding community.
12. Acquisition of land for hardship or protective purposes, advance land acquisition loans under section 3(b) of the UMT Act. Hardship and protective buying will be permitted only for a particular parcel or a limited number of parcels. These types of land acquisition qualify for a CE only where the acquisition will not limit the evaluation of alternatives, including shifts in alignment for planned construction projects, which may be required in the NEPA process. No project development on such land may proceed until the NEPA process has been completed.
13. Acquisition and construction of wetland, stream and endangered species mitigation sites.
14. Remedial activities involving the removal, treatment or monitoring of soil or groundwater contamination pursuant to state or federal remediation guidelines.

D. Special Project Information:

The estimated costs, based on 2016 prices, are as follows:

Structure	\$ 288,000
Roadway Approaches	\$ 187,000
Structure Removal	\$ 23,000
Misc. & Mob.	\$ 132,000
Eng. & Contingencies	\$ 95,000
Total Construction Cost	\$ 725,000
Right-of-way Costs	\$ 16,000
Utility Costs	\$ 70,000
Total Project Cost	\$ 811,000

Estimated Traffic:

Current	-	2600 vpd
Year 2035	-	3500 vpd
TTST	-	1%
Dual	-	3%

Accidents: Traffic Engineering has evaluated a recent five-year period (December 2007 to November 2012) and found three accidents occurring in the vicinity of the project. The accidents were reported as a sideswipe, a rear ending with a slow vehicle and a left turn movement. None were associated with the geometry of the bridge or its approach roadways.

Design Exceptions: There are no anticipated design exceptions for this project.

Pedestrian and Bicycle Accommodations: This portion of SR 1529 is not a part of a designated bicycle route nor is it listed in the State Transportation Improvement Program (STIP) as a bicycle project. There are no plans for either pedestrian, greenway, or bicycle facilities in the area according to Alamance County officials. Neither permanent nor temporary bicycle or pedestrian accommodations are required for this project.

Bridge Demolition: Bridge No. 3 is constructed entirely of timber and concrete and should be possible to remove with no resulting debris in the water based on standard demolition practices.

Alternatives Discussion:

No Build – The no build alternative would result in eventually closing the road which is unacceptable given the volume of traffic served by SR 1529.

Rehabilitation – The bridge was constructed in 1954 and the timber materials within the bridge are reaching the end of their useful life. Rehabilitation would

require replacing the timber components which would constitute effectively replacing the bridge.

Offsite Detour – Bridge No. 3 will be replaced on the existing alignment. Traffic will be detoured offsite (see Figure 1) during the construction period. NCDOT Guidelines for Evaluation of Offsite Detours for Bridge Replacement Projects considers multiple project variables beginning with the additional time traveled by the average road user resulting from the offsite detour. The offsite detour for this project would include SR 1642 (Macarthur Lane), NC 87 (Ossipee Road), and SR 1547 (Routh Road). The majority of traffic on the road is through traffic. The detour for the average road user would result in 6 minutes additional travel time (3.3 miles additional travel). Up to a 6-month duration of construction is expected on this project.

Based on the Guidelines, the criteria above indicate that on the basis of delay alone, the detour is acceptable. Alamance County Fire Marshall along with Alamance-Burlington Schools have indicated that the detour is acceptable. NCDOT Division 7 has indicated the condition of all roads and bridges on the offsite detour are acceptable and concurs with the use of the detour.

Pavement will be added on the offsite detour at the SR 1547 (Routh Road) intersection with SR 1529 (Durham Street) to reduce the skew for the left turn movement to northbound SR 1529. This intersection will be re-stripped.

Onsite Detour – An onsite detour was not evaluated due to the presence of an acceptable offsite detour.

Staged Construction – Staged construction was not considered because of the availability of an acceptable offsite detour.

New Alignment – Given that the alignment for SR 1529 is acceptable, a new alignment was not considered as an alternative.

Other Agency Comments:

The **NC Division of Water Quality** stated project is within the Jordan Lake Basin and a buffer mitigation plan must be provided prior to approval of the Water Quality Certification.

Response: This project is part of the Jordan Lake Drainage Basin; therefore, the Jordan Lake Riparian Buffer Rules will apply to this project.

The **N.C. Wildlife Resource Commission** recommended replacing the bridge with a bridge.

Response: NCDOT will be replacing the existing bridge with a new bridge.

The **U.S. Fish & Wildlife Service** and the **Army Corps of Engineers** had no special concerns for this project.

Public Involvement:

A letter was sent on February 4, 2013 by the Project Development and Environmental Analysis Unit to all property owners affected directly by this project. Property owners were invited to comment. No comments have been received to date.

E. Threshold Criteria

The following evaluation of threshold criteria must be completed for Type II actions

<u>ECOLOGICAL</u>	<u>YES</u>	<u>NO</u>
(1) Will the project have a substantial impact on any unique or important natural resource?	<input type="checkbox"/>	<u>X</u>
(2) Does the project involve habitat where federally listed endangered or threatened species may occur?	<input type="checkbox"/>	<u>X</u>
(3) Will the project affect anadromous fish?	<input type="checkbox"/>	<u>X</u>
(4) If the project involves wetlands, is the amount of permanent and/or temporary wetland taking less than one-tenth (1/10) of an acre and have all practicable measures to avoid and minimize wetland takings been evaluated?	<u>X</u>	<input type="checkbox"/>
(5) Will the project require the use of U. S. Forest Service lands?	<input type="checkbox"/>	<u>X</u>
(6) Will the quality of adjacent water resources be adversely impacted by proposed construction activities?	<input type="checkbox"/>	<u>X</u>
(7) Does the project involve waters classified as Outstanding Resources Waters (ORW) and/or High Quality Waters (HQW)?	<input type="checkbox"/>	<u>X</u>
(8) Will the project require fill in waters of the United States in any of the designated mountain trout counties?	<input type="checkbox"/>	<u>X</u>
(9) Does the project involve any known underground storage tanks (UST's) or hazardous materials sites?	<input type="checkbox"/>	<u>X</u>

PERMITS AND COORDINATION

- | | <u>YES</u> | <u>NO</u> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------|
| (10) If the project is located within a CAMA county, will the project significantly affect the coastal zone and/or any "Area of Environmental Concern" (AEC)? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| (11) Does the project involve Coastal Barrier Resources Act resources? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| (12) Will a U. S. Coast Guard permit be required? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| (13) Could the project result in the modification of any existing regulatory floodway? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (14) Will the project require any stream relocations or channel changes? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

SOCIAL, ECONOMIC, AND CULTURAL RESOURCES

- | | <u>YES</u> | <u>NO</u> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------|
| (15) Will the project induce substantial impacts to planned growth or land use for the area? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| (16) Will the project require the relocation of any family or business? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| (17) Will the project have a disproportionately high and adverse human health and environmental effect on any minority or low-income population? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| (18) If the project involves the acquisition of right of way, is the amount of right of way acquisition considered minor? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (19) Will the project involve any changes in access control? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| (20) Will the project substantially alter the usefulness and/or land use of adjacent property? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| (21) Will the project have an adverse effect on permanent local traffic patterns or community cohesiveness? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| (22) Is the project included in an approved thoroughfare plan and/or Transportation Improvement Program (and is, therefore, in conformance with the Clean Air Act of 1990)? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (23) Is the project anticipated to cause an increase in traffic volumes? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| (24) Will traffic be maintained during construction using existing roads, staged construction, or on-site detours? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

- (25) If the project is a bridge replacement project, will the bridge be replaced at its existing location (along the existing facility) and will all construction proposed in association with the bridge replacement project be contained on the existing facility? X
- (26) Is there substantial controversy on social, economic, or environmental grounds concerning the project? X
- (27) Is the project consistent with all Federal, State, and local laws relating to the environmental aspects of the project? X
- (28) Will the project have an "effect" on structures/properties eligible for or listed on the National Register of Historic Places? X
- (29) Will the project affect any archaeological remains which are important to history or pre-history? X
- (30) Will the project require the use of Section 4(f) resources (public parks, recreation lands, wildlife and waterfowl refuges, historic sites, or historic bridges, as defined in Section 4(f) of the U. S. Department of Transportation Act of 1966)? X
- (31) Will the project result in any conversion of assisted public recreation sites or facilities to non-recreation uses, as defined by Section 6(f) of the Land and Water Conservation Act of 1965, as amended? X
- (32) Will the project involve construction in, across, or adjacent to a river designated as a component of or proposed for inclusion in the National System of Wild and Scenic Rivers? X

F. Additional Documentation Required for Unfavorable Responses in Part E

Response to Question 2:

Northern Long-eared Bat: The USFWS has developed a programmatic biological opinion (PBO) in conjunction with the Federal Highway Administration (FHWA), the USACE, and NCDOT for the northern long-eared bat (NLEB) in eastern North Carolina. The PBO covers the entire NCDOT program in Divisions 1-8, including all NCDOT projects and activities. The programmatic determination for NLEB for the NCDOT program is "May Affect, Likely to Adversely Affect". The PBO provides incidental take coverage for NLEB and will ensure compliance with Section 7 of the Endangered Species Act for five years for all NCDOT projects with a federal nexus in Divisions 1-8, which includes Alamance County, where STIP B-5346 is located.

Response to Question 13:

Alamance County is a participant in the National Flood Insurance Program, administered by the Federal Emergency Management Agency (FEMA). The project is within a **Flood Hazard Zone, designated as Zone AE, for which the 100-year base flood elevations and corresponding regulatory floodway have been established.** 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). 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.

G. CE Approval

STIP Project No.	<u>B-5346</u>
W.B.S. No.	<u>46060.1.1</u>
Federal Project No.	<u>BRZ-1529(010)</u>

Project Description:

The purpose of this project is to replace Alamance County Bridge No. 3 on SR 1529 (Durham Street Extension) over Dry Creek. Bridge No. 3 is 52 feet long. The replacement structure will be a bridge approximately 80 feet long providing a minimum 30-foot 10-inches clear deck width. The bridge will include two 11-foot lanes and 4-foot 5-inch offsets. The bridge length is based on preliminary design information and is set by hydraulic requirements. The roadway grade of the new structure will be approximately the same as the existing structure.

The approach roadway will extend approximately 118 feet from the northwest end of the new bridge and 92 feet from the southeast end of the new bridge. The approach to the northwest will be widened to include a 33- to 22-foot variable pavement width providing two 11-foot lanes. An 11-foot right turn only lane will be provided at Durham Meadows Drive. Six-foot shoulders with two-foot paved will be provided on each side (9-foot shoulders where guardrail is included). The roadway will be designed as a Rural Local Route using Sub Regional Tier Guidelines with a 50 mile per hour design speed.

Traffic will be detoured off-site during construction (see Figure 1).

Categorical Exclusion Action Classification:

TYPE II(A)
 TYPE II(B)

Approved:

<u>1/26/17</u> Date	<u>Beverly G. Robinson</u> Beverly G. Robinson, Project Engineer Project Development & Environmental Analysis Unit
<u>1/26/17</u> Date	<u>Theresa Ellerby</u> Theresa Ellerby, Project Planning Engineer Project Development & Environmental Analysis Unit
<u>1-25-17</u> Date	<u>Clifton T. Register</u> Clifton T. Register, PE, Project Manager TGS Engineers



For Type II(B) projects only:

<u>1/27/17</u> Date	<u>John F. Sullivan, III</u> John F. Sullivan, III, PE, Division Administrator Federal Highway Administration
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PROJECT COMMITMENTS

**Alamance County
Bridge No. 3 on SR 1529
Over Dry Creek
Federal Aid Project No. BRZ-1529(010)
WBS No. 46060.1.1
STIP No. B-5346**

Division 7 Construction, Resident Engineer's Office – Offsite Detour

In order to have time to adequately reroute school busses, Alamance-Burlington Schools will be contacted (336-438-4000 extension 20405) at least one month prior to road closure.

Alamance County Fire Marshall (336-570-4075) and the Alamance County Emergency Management (336-228-1312) will be contacted at least one month prior to road closure to make the necessary temporary reassignments to primary response units.

Hydraulics Unit – FEMA Coordination

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).

Division Construction - FEMA

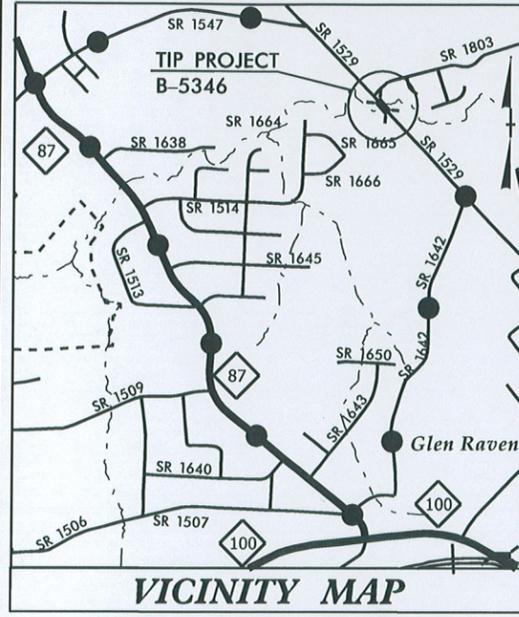
This project involves construction activities on or adjacent to FEMA-regulated stream(s). Therefore, the Division shall submit sealed as-built construction plans to the Hydraulics Unit upon completion of project construction, certifying that the drainage structure(s) and roadway embankment that are located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

Hydraulics Unit, Natural Environment Section – Buffer Rules

The Jordan Lake Water Supply Watershed Buffer Rule applies to this project.

09/08/19

See Sheet 1A For Index of Sheets
See Sheet 1B For Conventional Symbols

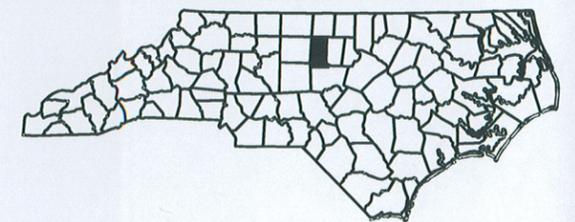


TIP PROJECT: B-5346

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
ALAMANCE COUNTY

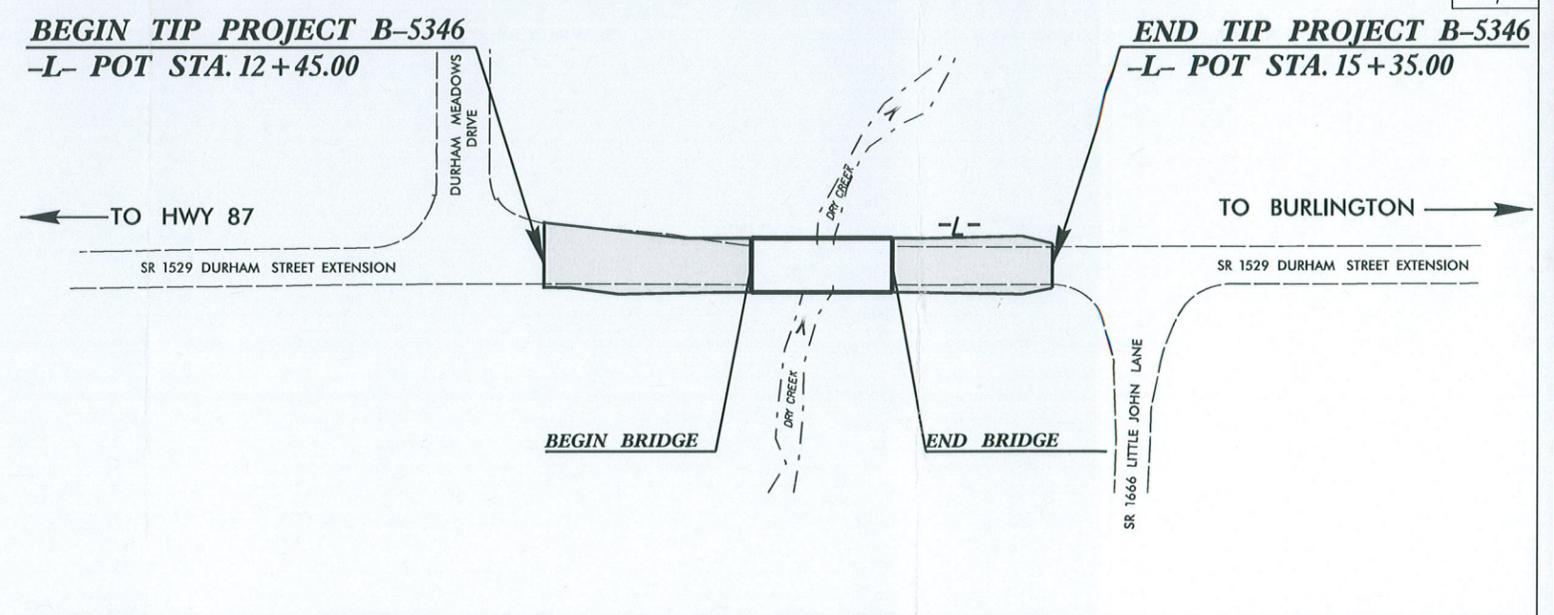
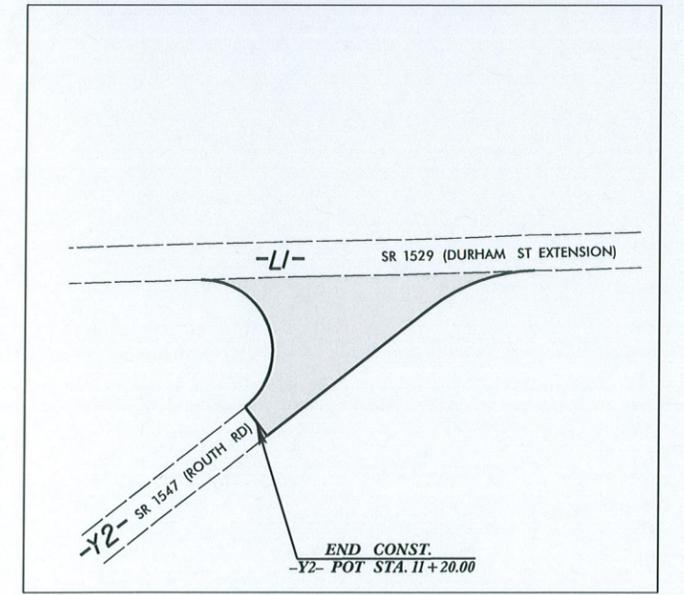
LOCATION: BRIDGE No.3 OVER DRY CREEK ON
SR 1529 (DURHAM STREET EXTENSION)
TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND STRUCTURE

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5346	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
46060.1.1	BRZ-1529(10)	P.E.	



VICINITY MAP
DETOUR ROUTE ●●●●●

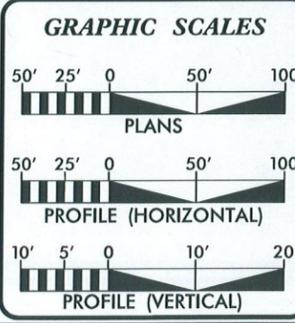
DETOUR ROUTE INTERSECTION IMPROVEMENT DETAIL



THERE IS NO CONTROL OF ACCESS ON THIS PROJECT.
THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD ____.

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

CONTRACT:



DESIGN DATA

ADT 2015 =	2591
ADT 2035 =	3500
K =	12 %
D =	65 %
T =	4 % *
V =	50 MPH
* TTST = 1% DUAL = 3%	
FUNC CLASS =	RURAL LOCAL
SUB-REGIONAL TIER	

PROJECT LENGTH

LENGTH ROADWAY T.I.P. PROJECT B-5346 =	
LENGTH STRUCTURE T.I.P. PROJECT B-5346 =	
TOTAL LENGTH OF T.I.P. PROJECT B-5346 =	0.055

Prepared in the Office of:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh NC, 27610

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: JUNE 16, 2017	JAMES A. SPEER, PE PROJECT ENGINEER
LETTING DATE: JUNE 19, 2018	NYA K. BOAYUE, PE PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

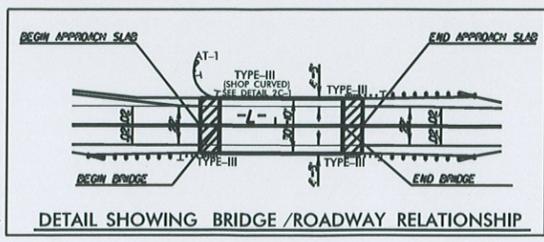
ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.



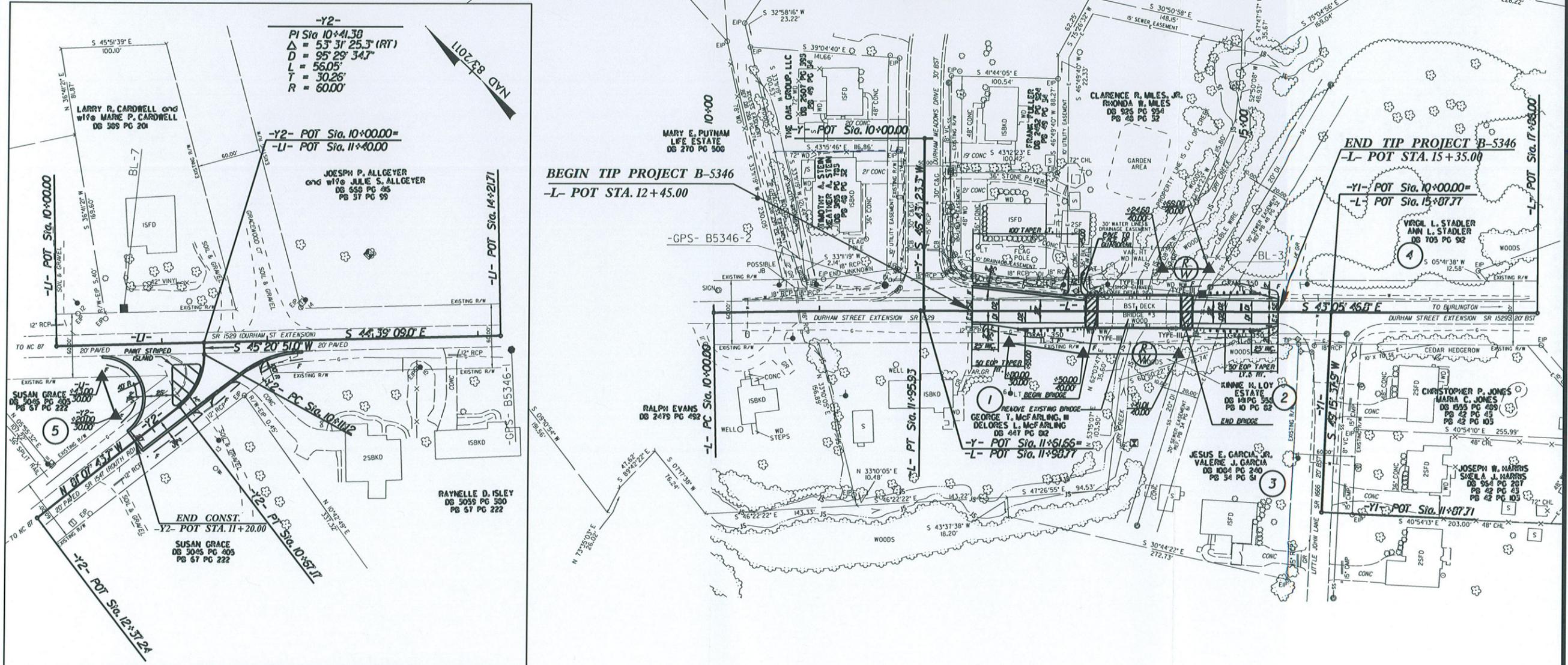
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PROJECT REFERENCE NO.	SHEET NO.
B-5346	4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



-L-
 PI Sta 10+97.97
 $\Delta = 1' 24'' 11.7''$ (RT)
 $D = 0' 42'' 59.3''$
 $L = 195.93'$
 $T = 97.97'$
 $R = 8,000.00'$

-Y2-
 PI Sta 10+41.39
 $\Delta = 53' 31'' 25.3''$ (RT)
 $D = 95' 29'' 34.7''$
 $L = 56.05'$
 $T = 30.26'$
 $R = 60.00'$



DETOUR ROUTE INTERSECTION IMPROVEMENT DETAIL
 -L- (SR 1529-DURHAM ST. EXT.) / -Y2- (SR 1547-ROUTH RD.)

NOTE: SEE SHEET 5 FOR -L- PROFILE

REVISIONS

B-17/99
 15-MAY-2016 11:00
 R:\Projects\B5346_Rdy_psh.dgn
 B5346-4



NO ARCHAEOLOGICAL SURVEY REQUIRED FORM

This form only pertains to ARCHAEOLOGICAL RESOURCES for this project. It is not valid for Historic Architecture and Landscapes. You must consult separately with the Historic Architecture and Landscapes Group.



PROJECT INFORMATION

Project No: **B-5346** County: **Alamance**
 WBS No: **46060.1.1.2** Document: **Pce**
 F.A. No: **BRZ-1529** Funding: State Federal

Federal Permit Required? Yes No Permit Type: **nw3 or nw14**

Project Description: NCDOT proposes to replace Bridge No. 0003 over Dry Creek on SR 1529 (Durham Street Extension) in Alamance County, TIP # B-5346. This is a federally funded project and will require a USACE permit. Therefore, this is a federal undertaking and Section 106 of the National Historic Preservation Act applies for archaeological review.

Preliminary design was available for this review. As a replace in place project, the undertaking is spatially confined though some limited new ROW or easements will be required according to the plans. The bridge replacement will have an offsite detour. The Area of Potential Effects (APE), for purposes of this archaeological review, is about 300 feet along SR 1529, centered on the bridge. The maximum width is about 80 feet wide near the bridge which incorporates new ROW to account for additional fill and guardrail installation, about 10 feet expansion on either side of the current 60-ft ROW.

Much of the APE has already been modified by the construction of the existing SR 1529 and bridge, several utilities, drainage and other earth moving activities like private landscaping.

SUMMARY OF CULTURAL RESOURCES REVIEW

Brief description of review activities, results of review, and conclusions:

Preliminary design mapping shows a replace-in-place project on the same alignment. As such, the APE includes expansion limited to about 10 feet to either side of the existing ROW near the bridge and creek.

USGS mapping (Lake Burlington) and aerial photography was studied (see Figures 1 and 2). The project area along SR 1529 passes through mixed rural and residential landscape with some open lots adjacent to the APE. The terrain is fairly level with no major hills, though there are visibly differences in elevations near the project area. A residence north of the bridge is closest to the project and includes landscaping at the bridge to facilitate drainage, including a reinforced ditch from the driveway and a retaining wall. Other quadrants have ditches a short distance from the road.

Dry Creek here is narrow, as would be expected for the relatively small bridge. From the north, the soil is described using an eroded notation, Helena loam (HcB2, 2-6 percent slopes). From the other side, the soil is called a Mixed alluvial land, poorly drained (Mc, 0-2 percent slopes, frequently flooded).

Virtual drive-by was available on Google Maps and Bing. No cemeteries were noted during the aerial viewing or on the USGS mapping at the project location. The roadway was marked, likely resulting from NCDOT survey work. Some utilized are clearly flagged, like the gas line on the south of the roadway.

Several historic maps of Alamance County were examined, though nothing notable was observed that would suggest an archaeological site would be present at this crossing, like a historic structure or industry.

The Office of State Archaeology was visited in November, 2016, to review archaeological mapping and to reference any known archaeological surveys and sites. While no environmental review was noted on mapping, one archaeological site, 31Am59, is mapped north of the bridge about 100 feet away. It was

"No ARCHAEOLOGY SURVEY REQUIRED" form for the Amended Minor Transportation Projects as Qualified in the 2015 Programmatic Agreement.

16-11-0022

recorded originally with the temporary site number 31Am41 and was part of an early environmental review for archaeology. The report, The Archaeological Resources in the Alamance County Complex 201 Facilities Planning Area (Bib # 642. Woodall 1976), appears to have covered the many notable water and sewage easements that traverse and pass by or through the APE. While unassessed in this report, site 31Am59 was recommended for additional work because of the stated possibility for buried deposits. The 40 x 30 meter site is mapped north of the bridge and is unlikely to be directly impacted by the bridge replacement.

For this undertaking, the proposed bridge replacement of the existing transportation facility, Bridge No. 0003, the project footprint is limited. As much of the existing APE has been modified for the current roadway, utilities and bridge, expectations are low for encountering newly discovered archaeological sites, especially any that may be intact and significant.

As a result of this review, we conclude that the likelihood of encountering intact, NRHP-eligible resources are low based on the limited new footprint of the undertaking, replacing the bridge at the existing location, the road and bridge construction disturbances from the existing facility. Archaeological site 31Am59 is to the north of the bridge but is unlikely to be affected within the APE of the project. The project should be considered compliant with Section 106. No archaeological survey is recommended for this undertaking as currently proposed.

Brief Explanation of why the available information provides a reliable basis for reasonably predicting that there are no unidentified historic properties in the APE:

The scale and nature of the project is limited to replacement of an existing bridge with a new structure at the same location. Details on design mapping make clear the extent of disturbances close to the roadway where the bridge will be replaced. Review of background archaeological information revealed a previous archaeological survey in the area that identified a site mapped a short distance north of the bridge, though it is unlikely to be impacted by the project. No archaeological survey is recommended. Therefore, this federally permitted undertaking should be considered compliant with Section 106.

SUPPORT DOCUMENTATION

See attached: Map(s) Previous Survey Info Photos Correspondence
 Photocopy of County Survey Notes Other:

FINDING BY NCDOT ARCHAEOLOGIST

NO ARCHAEOLOGY SURVEY REQUIRED



NCDOT ARCHAEOLOGIST

12/06/2016

Date