

North Carolina Department of Transportation
PROJECT ENVIRONMENTAL CONSULTATION FORM
I. D. No. B-5549

I. GENERAL INFORMATION

- a. Consultation Phase: Right-of-Way
- b. Project Description: Replacement of Catawba County Bridge No. 327 on Falling Creek Road over Falling Creek. The bridge is owned and being replaced by the City of Hickory.
- c. State Project: 55047.1.1
Federal Project: BRSTP-1216(21)
- d. Document Type: Programmatic Categorical Exclusion (PCE)
Date: 7/31/14

II. CONCLUSIONS

The above environmental document has been reevaluated as required by 23 CFR 771. It was determined that the current proposed action is essentially the same as the original proposed action. Proposed changes, if any, are noted below in Section III. It has been determined that anticipated social, economic, and environmental impacts were accurately described in the above referenced document(s) unless noted otherwise herein. Therefore, the original Administration Action remains valid.

III. CHANGES IN PROPOSED ACTION AND ENVIRONMENTAL CONSEQUENCES

During final design the clear roadway width changed due to the addition of a concrete parapet under the C411 barrier rail. The following paragraph describes the revisions. The overall width of the bridge did not change and there were no additional environmental impacts.

The replacement structure will be a bridge approximately 92-feet long providing a minimum 45' out-to-out width, 36' 10-1/2" of clear roadway width. The bridge will include two 12-foot travel lanes, an 8-foot shoulder on the south side and a 10' 4-1/2" shoulder which includes a 5'-6" sidewalk with 2'-6" curb and gutter approaches on the north side. Texas Classic Rails will be provided on the proposed bridge. 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.

North Carolina Department of Transportation
PROJECT ENVIRONMENTAL CONSULTATION FORM
I. D. No. B-5549

The approach roadway will extend approximately 300-feet from the east end of the new bridge and 250-feet from the west end of the new bridge. The approaches will be widened to include a 32-foot pavement width providing two 12-foot travel lanes and 8-foot shoulders (including 4 foot paved), 11-foot shoulders where guardrail is included. The roadway is classified as a rural local route and will be designed with a 40 mile per hour design speed. Traffic will be detoured off-site during construction. The detour route is 29th Avenue NE and North Center Street/NC 127.

According to the current list of endangered species in Catawba County, last updated September 22, 2010, no endangered species have been added since the PCE documentation.

IV. LIST OF ENVIRONMENTAL COMMITMENTS

NCDOT will implement all practical measures and procedures to minimize and avoid environmental impacts.

NCDOT will continue to remain in contact with USFWS to determine how to address the potential effects of dealing with Northern long-eared bats, if necessary.

Since the project involves work within the adopted regulatory floodway of Falling Creek, it will need to be shown the hydraulic analysis will not result in any increase in flood levels. Also, a revised floodway boundary within the project area will need to be completed.

The N.C. Wildlife Resource Commission and U.S. Fish and Wildlife Service requested they prefer any replacement structure to be a spanning structure.

The Dwarf-flowered heartleaf and Schweinitz's Sunflower,
Biological Conclusion: No Effect.

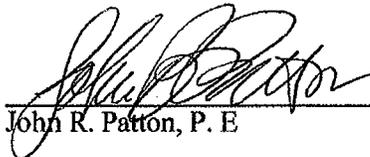
**North Carolina Department of Transportation
PROJECT ENVIRONMENTAL CONSULTATION FORM
I. D. No. B-5549**

V. COORDINATION

TGS personnel have discussed current project proposals with others. Please note who was coordinated with and the date. This section is to be filled out by the project manager and does not require signatures.

Design Engineer: Jimmy Terry, PE 10/1/14
Date

VI. CITY OF HICKORY CONCURRENCE



John R. Patton, P. E

10-01-14
Date



Clifton T. Register, PE - Project Engineer
Thompson-Gordon-Shook Engineers, Inc. (TGS Engineers)

10/1/2014
Date

VII. NCDOT CONCURRENCE



Project Planning Engineer

10-2-14
Date



Manager, Project Development and Environmental
Analysis Branch

10/3/14
Date

VIII. FHWA CONCURRENCE



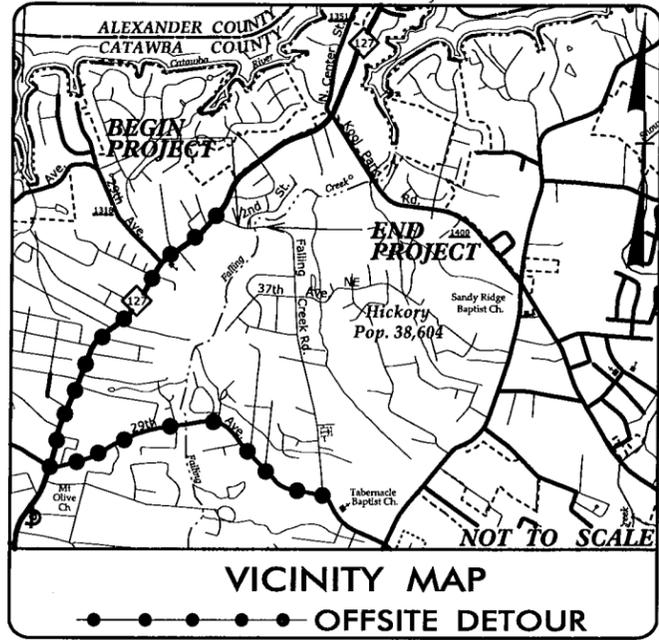
Federal Highway Administration
Division Administrator

Date

TIP PROJECT: B-5549

CONTRACT: 7500017050

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

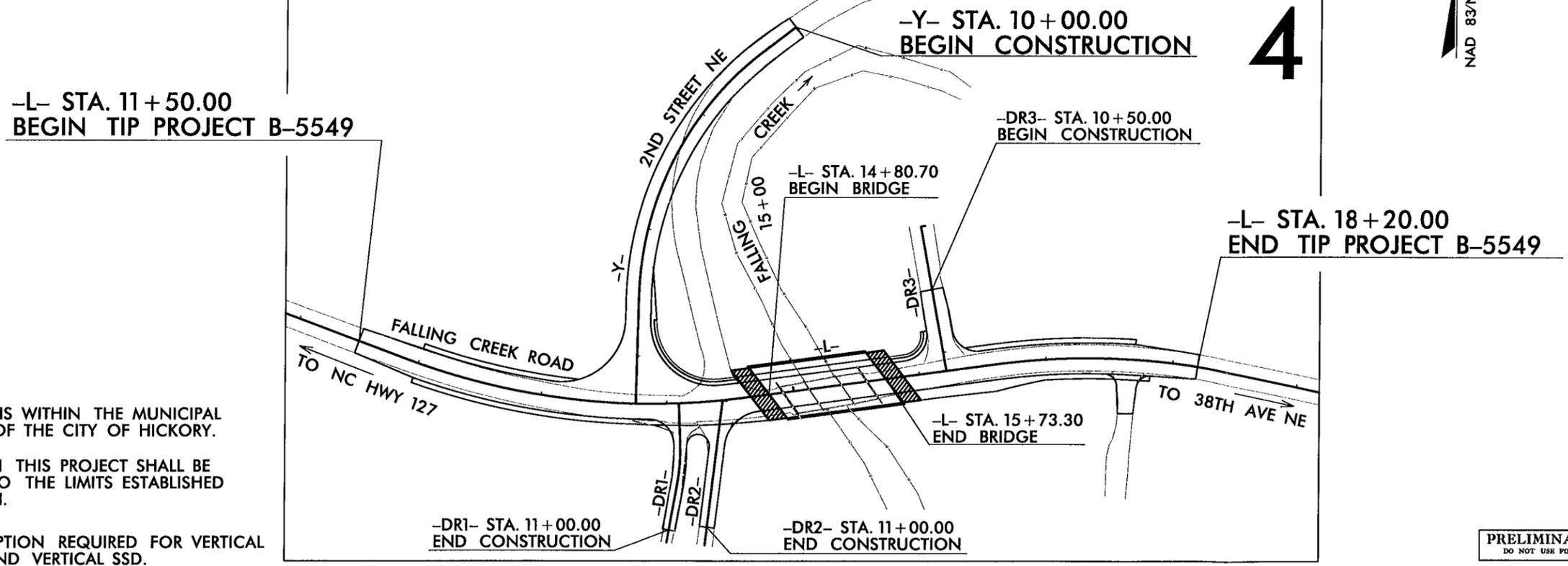


CITY OF HICKORY CATAWBA COUNTY

**LOCATION: BRIDGE #170327 OVER FALLING CREEK ON
FALLING CREEK ROAD**

TYPE OF WORK: GRADING, PAVING, DRAINAGE, AND STRUCTURE

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5549	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
55047.1.1	BRSTP-1216(21)	PE	
55047.2.1	BRSTP-1216(21)	RW & UTIL	



THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF THE CITY OF HICKORY.

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.

DESIGN EXCEPTION REQUIRED FOR VERTICAL CURVATURE AND VERTICAL SSD.

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

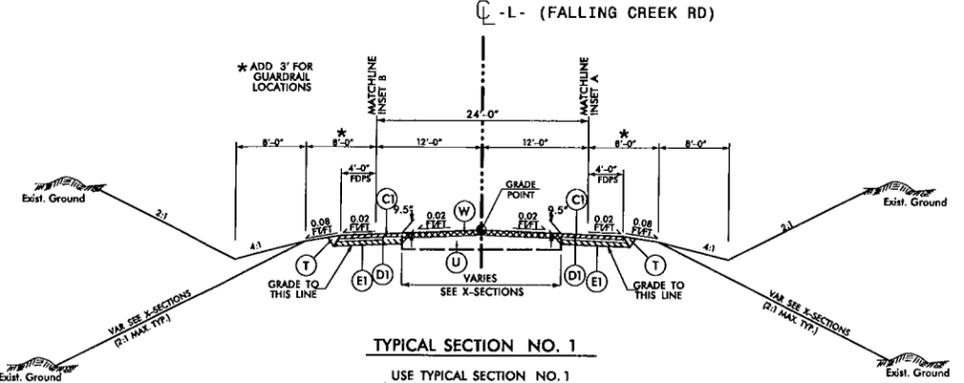
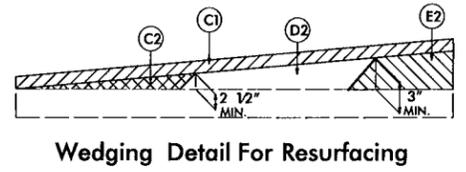
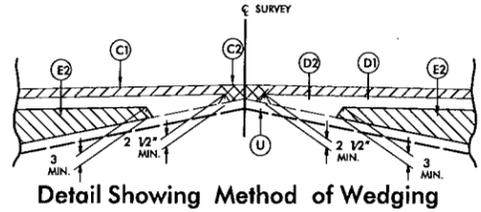
<p>GRAPHIC SCALES</p> <p>20 10 0 20 40 PLANS</p> <p>20 10 0 20 40 PROFILE (HORIZONTAL)</p> <p>4 2 0 4 8 PROFILE (VERTICAL)</p>	<p>DESIGN DATA</p> <p>ADT 2016 = 3,420 ADT 2036 = 5,000 DHV = 7 % D = 50 % T = 3 % *</p> <p>* (TTST 2% + DUAL 1%) V = 40 MPH FUNC CLASS = RURAL LOCAL REGIONAL TIER</p>	<p>PROJECT LENGTH</p> <p>LENGTH ROADWAY TIP PROJECT B-5549 = 0.109 MILES LENGTH STRUCTURE TIP PROJECT B-5549 = 0.018 MILES TOTAL LENGTH TIP PROJECT B-5549 = 0.127 MILES</p>	<p>PLANS PREPARED BY: TGS TGS ENGINEERS 804-C N. LAFAYETTE ST SHELBY, NC 28150 PH (704) 476-0003 CORP. LICENSE NO.: C-0275 2012 STANDARD SPECIFICATIONS</p> <p>RIGHT OF WAY DATE: September 12, 2014</p> <p>LETTING DATE:</p>	<p>PLANS PREPARED FOR: CITY OF HICKORY 76 N CENTER ST HICKORY, NC 28601 (828) 323-7400</p> <p>LEONARD G. FLETCHER, P.E. PROJECT ENGINEER</p> <p>JIMMY L. TERRY, P.E. PROJECT DESIGN ENGINEER</p>	<p>HYDRAULICS ENGINEER</p> <p>SIGNATURE: _____ P.E.</p> <p>ROADWAY DESIGN ENGINEER</p> <p>SIGNATURE: _____ P.E.</p>	<p>MAYOR: RUDY WRIGHT 76 N CENTER ST HICKORY, NC 28601 (828) 323-7400</p> <p>CITY MANAGER: MICK W. BERRY 76 N CENTER ST HICKORY, NC 28601 (828) 323-74012</p>
---	--	---	--	--	---	---

\$SYTIME\$\$\$\$DCNS\$\$\$\$USERNAME\$\$\$\$

8/17/99

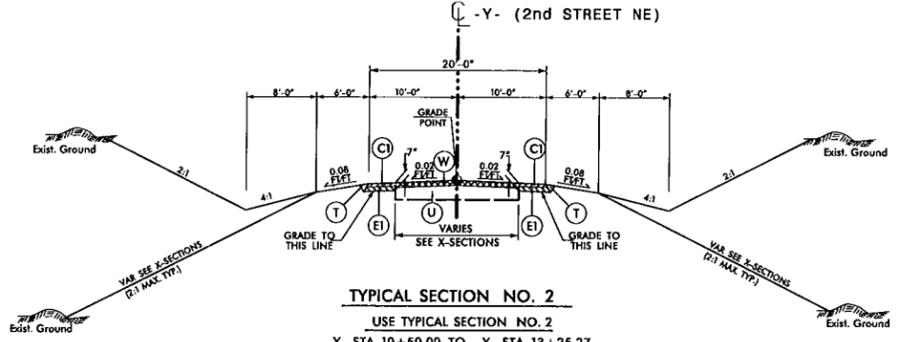
PAVEMENT SCHEDULE	
C1	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
C2	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN 1 1/2" IN DEPTH OR GREATER THAN 2" IN DEPTH.
D1	PROP. APPROX. 2 1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
D2	PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN 2 1/2" IN DEPTH OR GREATER THAN 4" IN DEPTH.
E1	PROP. APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
E2	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN 3" IN DEPTH OR GREATER THAN 5 1/2" IN DEPTH.
J	PROP. 8" AGGREGATE BASE COURSE
P	PRIME COAT AT THE RATE OF .35 GAL. PER SQ. YD.
R	PROP. 2'-6" C&G
S	4" CONCRETE SIDEWALK
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V	MILLING EXISTING PAVEMENT (SEE MILLING DETAILS THIS SHEET)
W	VARIABLE DEPTH ASPHALT PAVEMENT (SEE WEDGING DETAILS THIS SHEET)
Y1	REINFORCED CONCRETE OVERLAY
Y2	6" JOINTED CONCRETE WITH 4x4 W3xW3 WIRE REINFORCEMENT

NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.



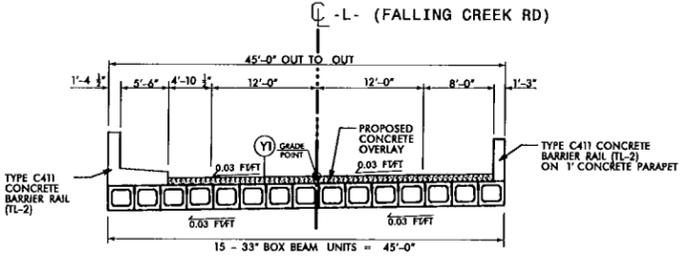
USE TYPICAL SECTION NO. 1
 -L- STA. 12+00.00 TO -L- STA. 14+80.70 (BEGIN BRIDGE)
 -L- STA. 15+73.30 (END BRIDGE) TO -L- STA. 17+70.00

NOTE: TRANSITION BETWEEN EXISTING AND TYP. SECT. NO. 1 AS FOLLOWS:
 -L- STA. 11+50.00 TO -L- STA. 12+00.00
 -L- STA. 17+70.00 TO -L- STA. 18+20.00

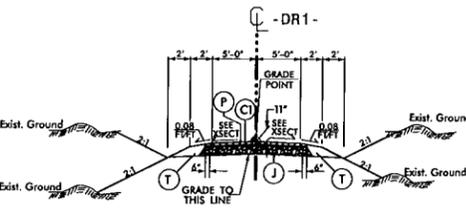


USE TYPICAL SECTION NO. 2
 -Y- STA. 10+50.00 TO -Y- STA. 13+25.27

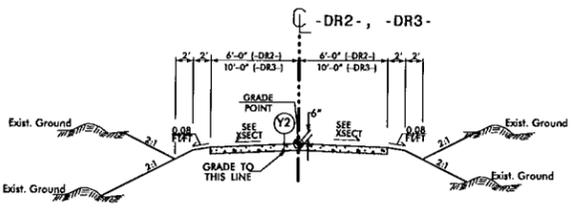
NOTE: TRANSITION BETWEEN EXISTING AND TYP. SECT. NO. 2 AS FOLLOWS:
 -Y- STA. 10+00.00 TO -Y- STA. 10+50.00



USE TYPICAL SECTION NO. 3
 -L- STA. 14+80.70 (BEGIN BRIDGE) TO -L- STA. 15+73.30 (END BRIDGE)

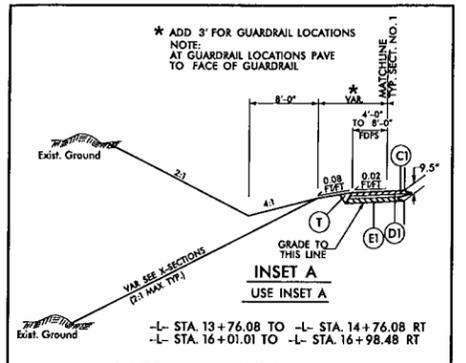


USE TYPICAL SECTION NO. 4
 -DR1- STA. 10+12.00 TO -DR1- STA. 11+00.00

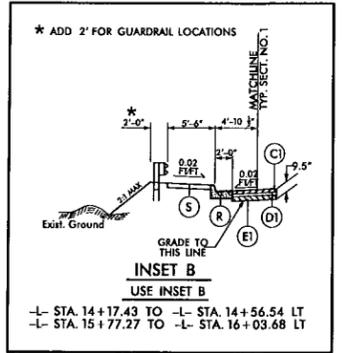


USE TYPICAL SECTION NO. 5
 -DR2- STA. 10+12.29 TO -DR2- STA. 11+00.00
 -DR3- STA. 10+50.00 TO -DR3- STA. 11+02.67

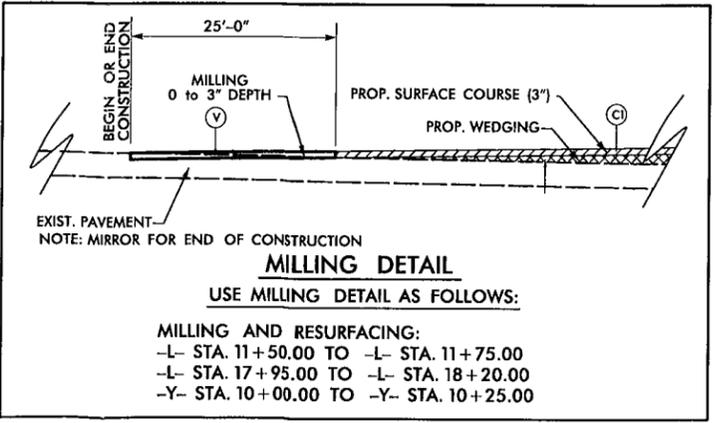
PROJECT REFERENCE NO. B-5549	SHEET NO. 2A-1
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	
TGS ENGINEERS 804-C N. LAFAYETTE ST SHELBY, NC 28150 PH (704) 476-0003 CORP. LICENSE NO.: C-0275	



USE INSET A
 -L- STA. 13+76.08 TO -L- STA. 14+76.08 RT
 -L- STA. 16+01.01 TO -L- STA. 16+98.48 RT



USE INSET B
 -L- STA. 14+17.43 TO -L- STA. 14+56.54 LT
 -L- STA. 15+77.27 TO -L- STA. 16+03.68 LT



USE MILLING DETAIL AS FOLLOWS:
 MILLING AND RESURFACING:
 -L- STA. 11+50.00 TO -L- STA. 11+75.00
 -L- STA. 17+95.00 TO -L- STA. 18+20.00
 -Y- STA. 10+00.00 TO -Y- STA. 10+25.00

REVISIONS

DATE
 TIME
 BY
 CHECKED
 APPROVED