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09.08/99

**TIP PROJECT: R-5734A**

**CONTRACT: C204130**

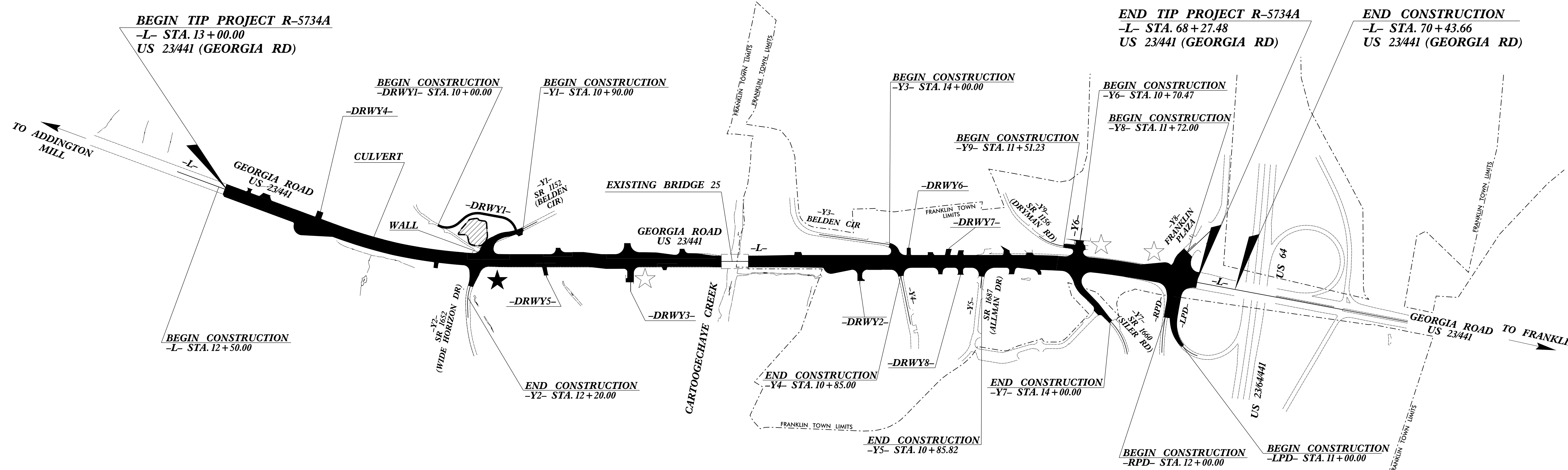
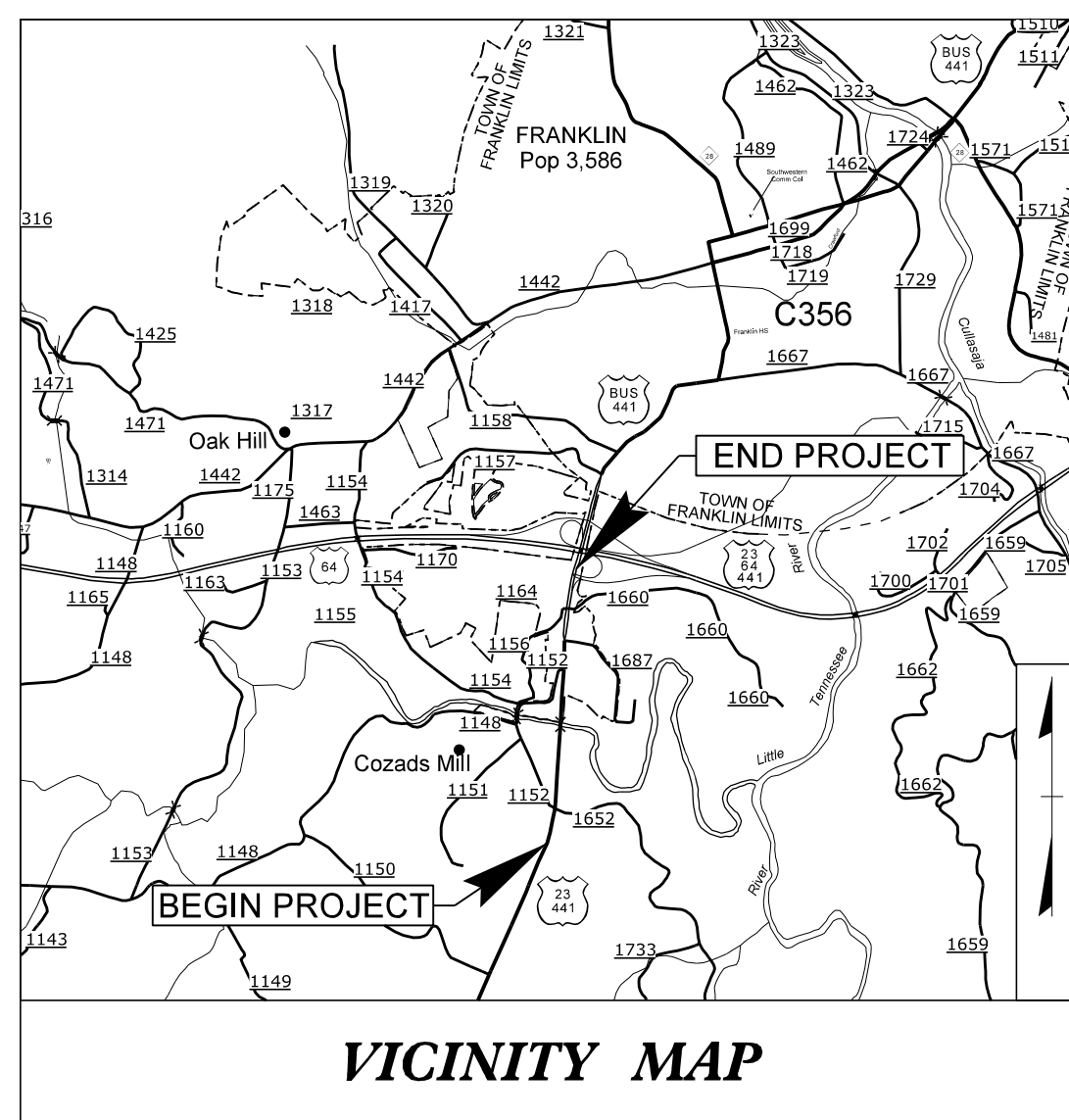
STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

# MACON COUNTY

**LOCATION: US 23/441 (GEORGIA ROAD) FROM SR 1652 (WIDE HORIZON DR.)/SR 1152 (BELDEN CIRCLE) TO US 64**

**TYPE OF WORK: DRAINAGE, PAVING, GRADING, CULVERT, AND SIGNALS**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-5734A		
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
50192.1.1	N/A	P.E.	
50192.2.1	N/A	RW, UTIL.	
50192.3.1	N/A	CONST.	



## STRUCTURES

**DESIGN DATA**

ADT 2020 =	26,600
ADT 2040 =	34,200
K =	8 %
D =	55 %
T =	7 % *
V =	50 MPH
* (TTST = 3%+DUALS 4%)	
FUNC CLASS =	ARTERIAL
REGIONAL TIER	

**PROJECT LENGTH**

LENGTH ROADWAY TIP PROJECT R-5734A	=	1.047 MILES
TOTAL LENGTH TIP PROJECT R-5734A	=	1.047 MILES

**LETTING DATE:**  
NOVEMBER 20, 2018

Prepared In The Offices of:

**Stantec**  
Stantec Consulting Services Inc.  
801 Jones Franklin Road  
Suite 300  
Raleigh, NC 27606  
Tel. (919) 851-6886 Fax. (919) 851-7024  
www.stantec.com License No. F-3672

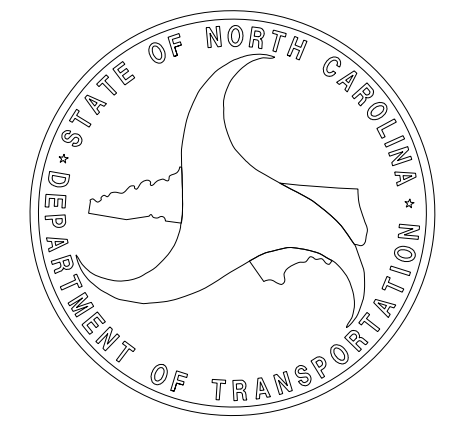
**SUNGATE DESIGN GROUP, P.A.**  
905 JONES FRANKLIN ROAD  
RALEIGH, NORTH CAROLINA 27606  
TEL (919) 859-2243  
ENG FIRM LICENSE NO. C-890

for the North Carolina Department of Transportation

2018 STANDARD SPECIFICATIONS STANTEC CONTACT

**TOMMY DUDECK, P.E.**  
PROJECT ENGINEER

**NICHOLAS D'AIUTO, P.E.**  
PROJECT DESIGN ENGINEER



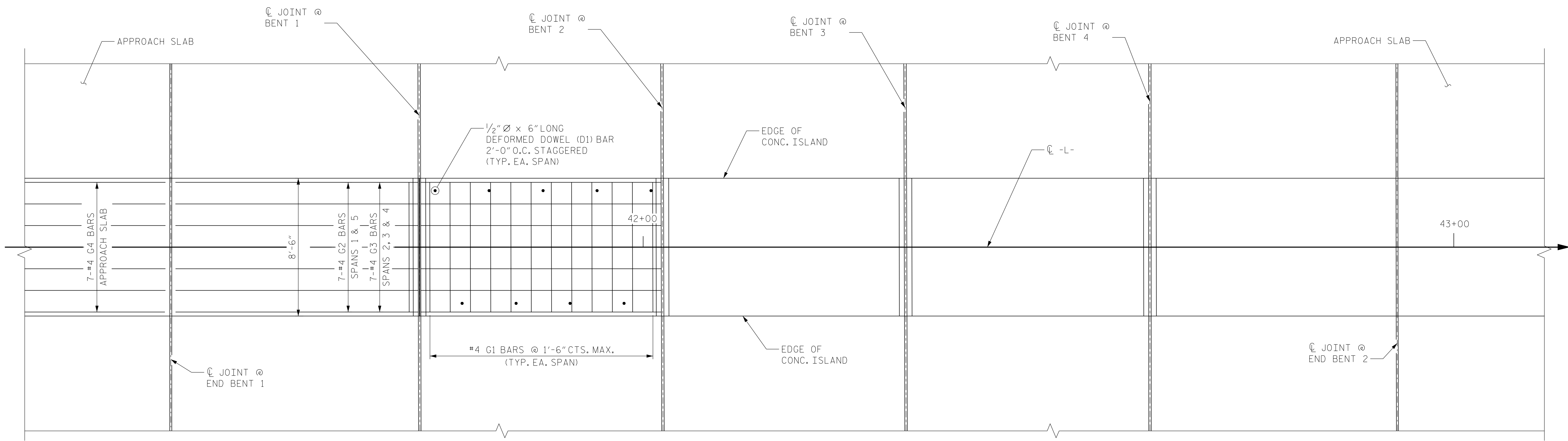
\$\$\$\$\$ SYSTEM \$\$\$\$\$\$  
\$\$\$\$\$ DGN \$\$\$\$\$\$  
\$\$\$\$\$ USER NAME \$\$\$\$\$\$

**BILL OF MATERIAL**

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
D1	181	#4	STR	6"	60
G1	117	#4	STR	7'-2"	560
G2	14	#4	STR	29'-10"	279
G3	21	#4	STR	29'-7"	415
G4	14	#4	STR	14'-9"	138
TOTAL REINFORCING STEEL				LBS.	1452
CLASS AA CONCRETE BREAKDOWN					
TOTAL CONC. ISLAND				C. Y.	21.7

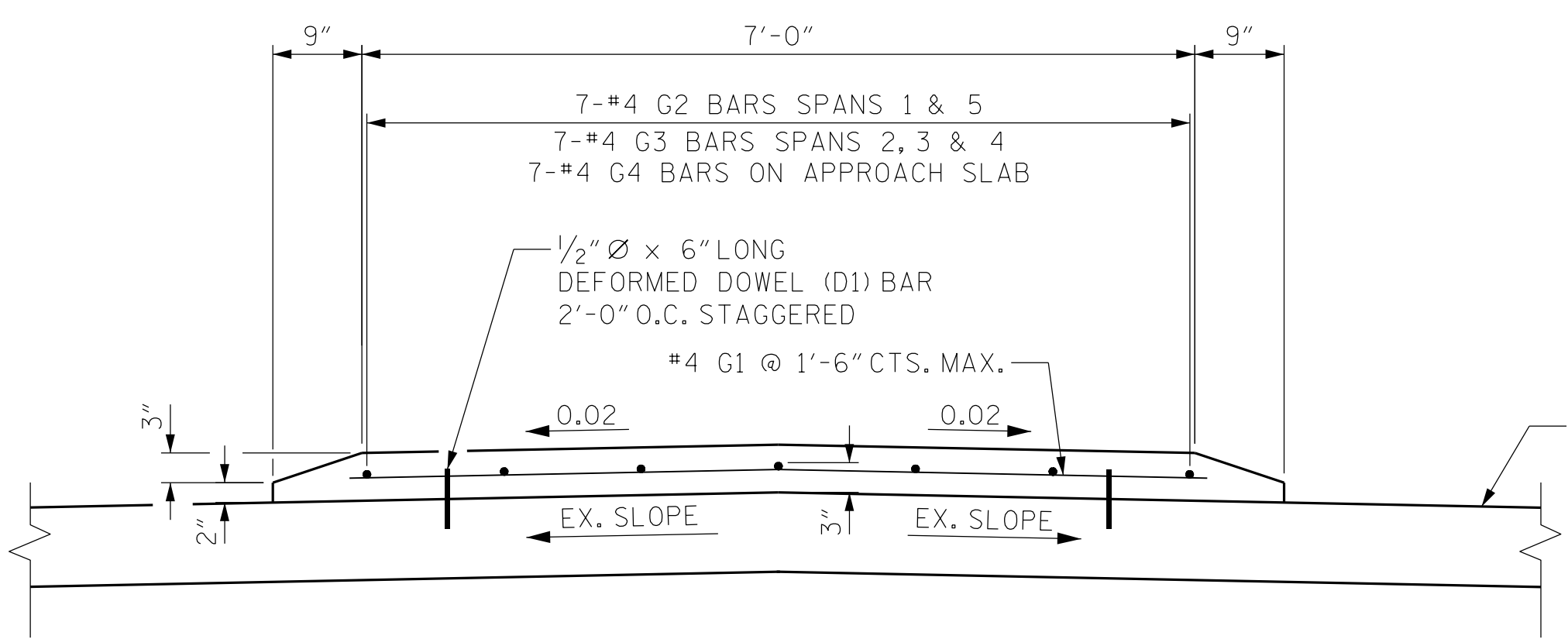
**NOTES:**

ALL REINFORCING STEEL IN THE CONCRETE MEDIAN SHALL BE EPOXY COATED. FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.  
 GROOVED CONTRACTION JOINTS, 1/2" IN DEPTH, SHALL BE TOOLED IN ALL EXPOSED FACES OF THE CONCRETE MEDIAN IN ACCORDANCE WITH ARTICLE 825-10(B) OF THE STANDARD SPECIFICATIONS. PLACE CONTRACTION JOINTS AT 30' INTERVALS AND GROOVED JOINTS, 1" IN DEPTH, AT 10' INTERVALS BETWEEN CONTRACTION JOINTS. SEE ROADWAY STANDARD 852.01 FOR FUTURE INFORMATION. FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.  
 #4 G1 BARS SHALL BE FIELD BENT AS REQUIRED. FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.  
 D1 DOWELS TO BE POSITIONED TO NOT INTERFERE WITH BARS IN DECK SLAB. FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.  
 THE DEPARTMENT HAS THE OPTION TO REPLACE THE ASPHALT WEARING SURFACE ON THE APPROACH SLABS IN THE EVENT THE APPROACH SLAB SURFACE HAS AN UNSUITABLE RIDING SURFACE.

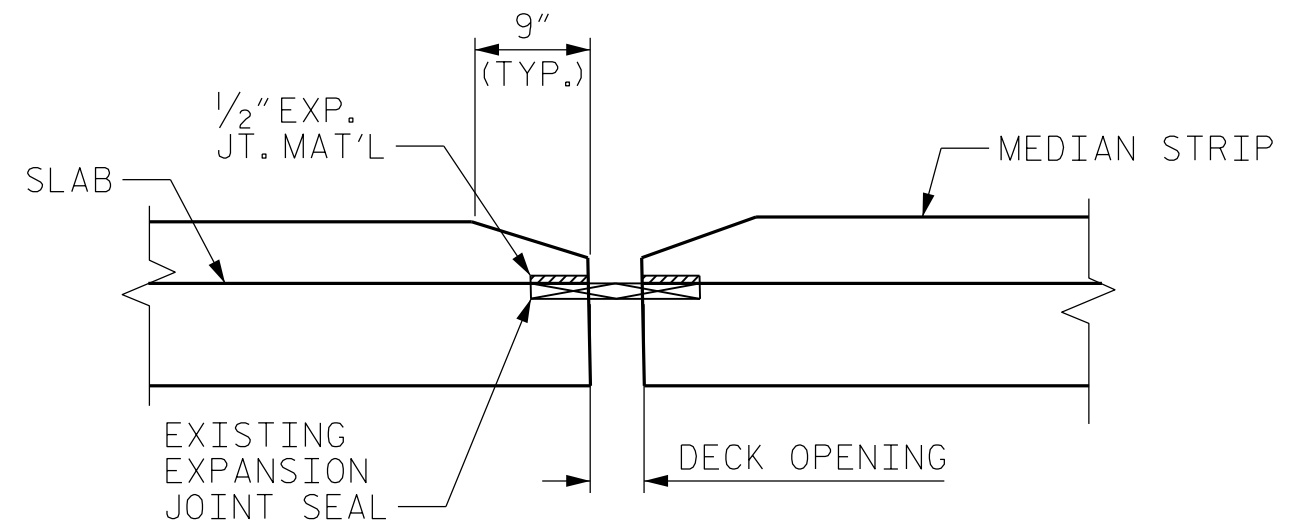


**PLAN**

NOT TO SCALE



**SECTION THRU CONCRETE ISLAND**



**CONCRETE ISLAND AT EXPANSION JOINT**

PROJECT NO. R-5734A  
MACON COUNTY  
 STATION: 42+00.00 -L-

EXISTING BRIDGE NO. 550025

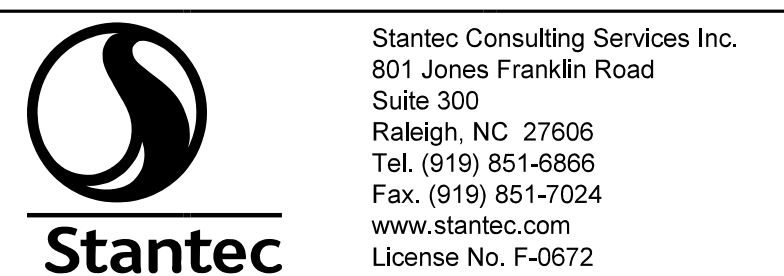
STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

**MONOLITHIC CONCRETE ISLAND DETAILS**



REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-1
1			3			TOTAL SHEETS
2			4			1

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



DRAWN BY: N. D'AIUTO DATE: 09/11/17  
 CHECKED BY: V. E. FRAGA DATE: 09/18/17  
 DESIGN ENGINEER OF RECORD: T.R. DUDECK DATE: 07/06/18

U:\Structures\Drawings\Bridges\Final\B5734-SMU-BR-L.dgn 7/6/2018 2:47:48 PM ndiuto