

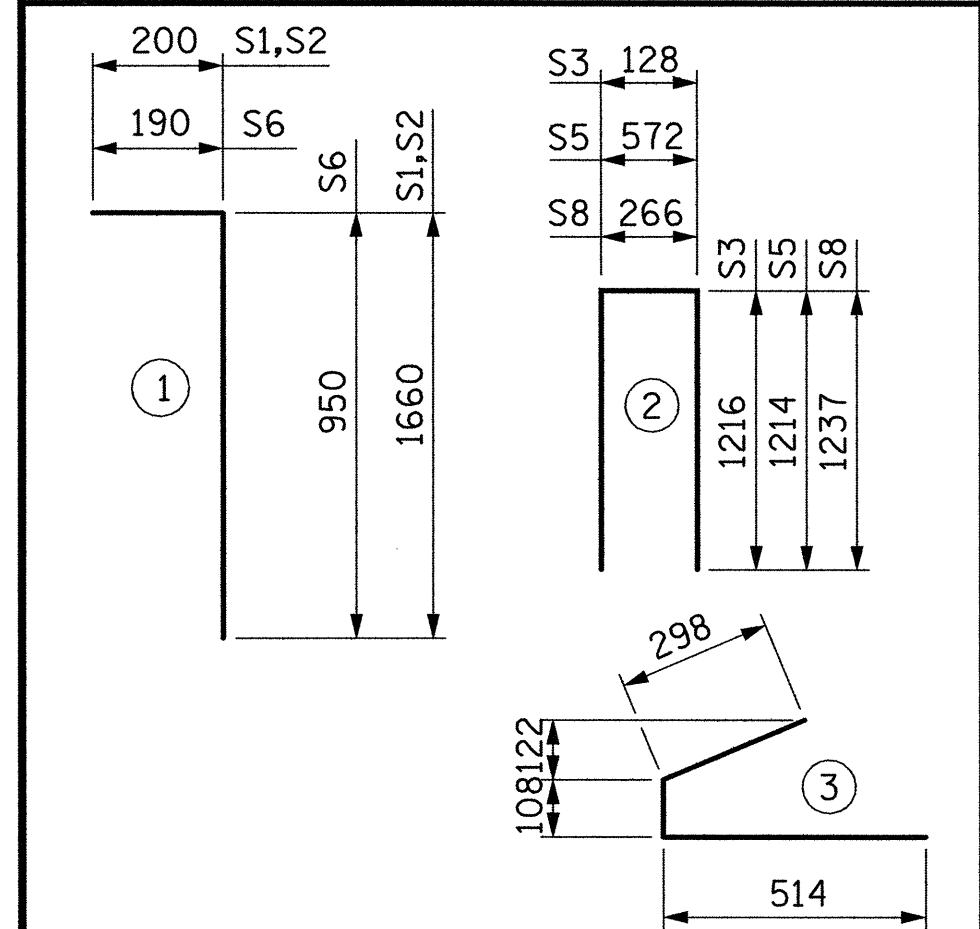
- DEBONDING LEGEND
- FULLY BONDED STRANDS
 - ◻ STRANDS DEBONDED FOR 1.220m FROM END OF GIRDER
 - ◊ STRANDS DEBONDED FOR 3.050m FROM END OF GIRDER
 - ◐ STRANDS DEBONDED FOR 9.150m FROM END OF GIRDER
- 76mm Ø CORED OR FORMED HOLE SEE ELEVATION FOR LOCATION

15.24mm Ø L. R. GRADE 270 STRANDS		
AREA (mm ²)	ULTIMATE STRENGTH (KN PER STRAND)	APPLIED PRESTRESS (KN PER STRAND)
140.00	260.4	195.3

REINFORCING STEEL FOR ONE GIRDER					
BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT
S1	228	#13	1	1860	422
S2	24	#16	1	1860	69
S3	12	#13	2	2560	31
S4	84	#13	3	920	77
S5	1	#16	2	3000	5
S6	252	#16	1	1140	446
*S7	20	#16	STR	1120	35
S8	2	#16	2	2740	9
S9	2	#10	STR	560	1

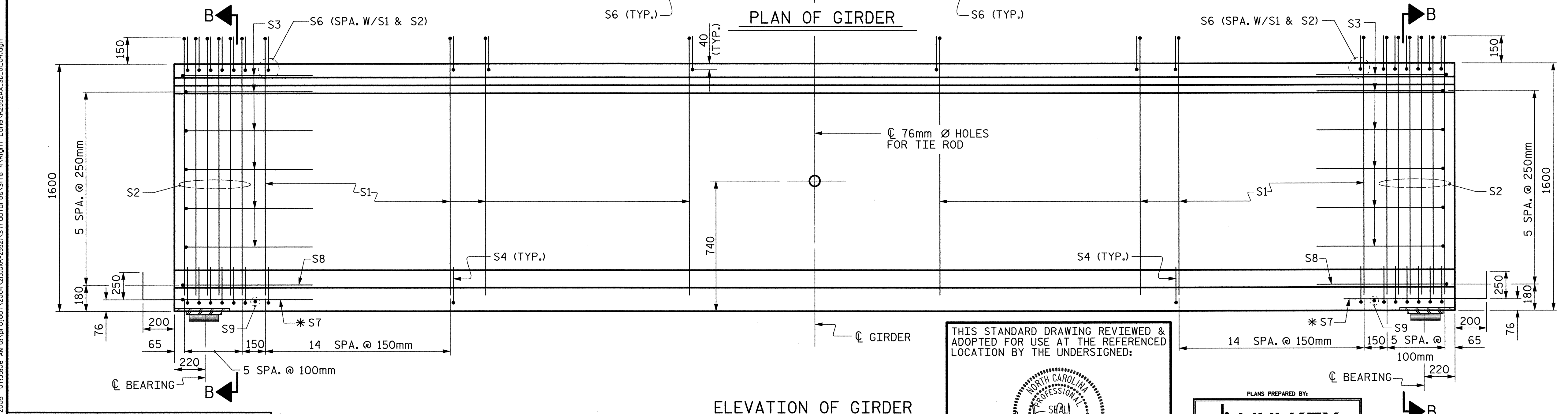
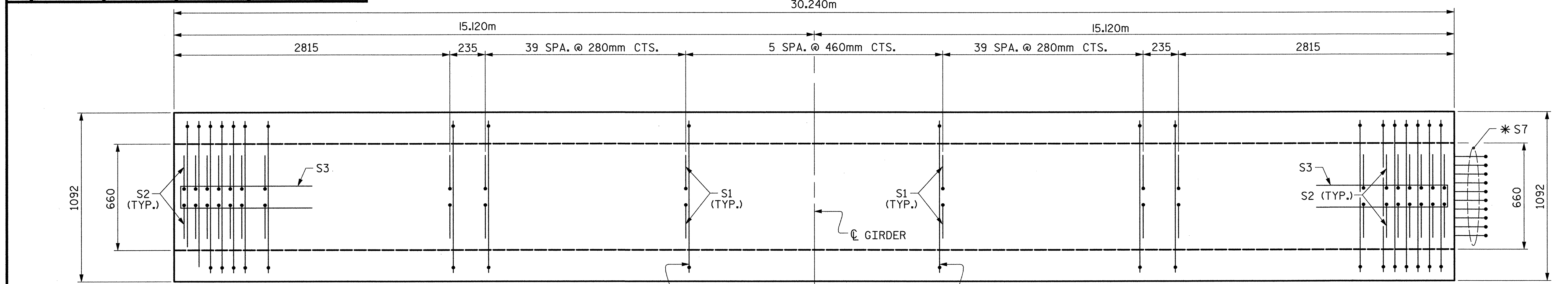
* NOTE: S7 BARS SHALL BE BENT BEFORE SHIPMENT. HEAT BENDING SHALL NOT BE ALLOWED.

BAR TYPES
ALL BAR DIMENSIONS ARE OUT-TO-OUT



QUANTITIES FOR ONE GIRDER			
SPAN	REINFORCING STEEL	50.0 MPa CONCRETE	12.70mm Ø L.R. STRANDS
	kg	m ³	No.
B&E	1095	15.0	34

GIRDERS REQUIRED			
SPAN	NUMBER	LENGTH	TOTAL LENGTH
B&E	8	30.240m	241.920m



THIS STANDARD DRAWING REVIEWED & ADOPTED FOR USE AT THE REFERENCED LOCATION BY THE UNDERSIGNED:

PROFESSIONAL ENGINEER
NORTH CAROLINA
SEAL 1474
ROBERT C. LARSON
2/11/05

PLANS PREPARED BY:
MULKEY
ENGINEERS & CONSULTANTS
PO Box 33127
RALEIGH, N.C. 27636
(919) 881-1918 FAX
WWW.MULKEYINC.COM

REFERENCE NO. BR-16

PROJECT NO. R-2552AA
WAKE - JOHNSTON COUNTY
STATION: 14+38.000 -LREV- POT
SHEET 4 OF 5

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
OPTIONAL
1600mm PRESTRESSED CONCRETE
MODIFIED BULB TEE
CONTINUOUS FOR LIVE LOAD
(WITH 15.24mm Ø PARTIALLY
DEBONDED STRANDS)
SPANS B&E (RIGHT LANE)

REVISIONS				SHEET NO.
NO.	BY:	DATE:	NO.	DATE:
1			3	
2			4	
				TOTAL SHEETS
				429

02/04/2005 07:35:06 AM G:\p\proj\2004\2310\10R-2552\Structures\Site 4\Right Lane\R2552AA_SD_G_04.dgn

ASSEMBLED BY : J. P. SHERMAN DATE : 6/04
CHECKED BY : R. C. LARSON DATE : 8/04
DRAWN BY : EEM 2/6/97 REV. 7/17/98 RWW/LES
CHECKED BY : VAP 2/6/97 REV. 8/16/99 RWW/LES
REV. 10/17/00 RWW/LES