

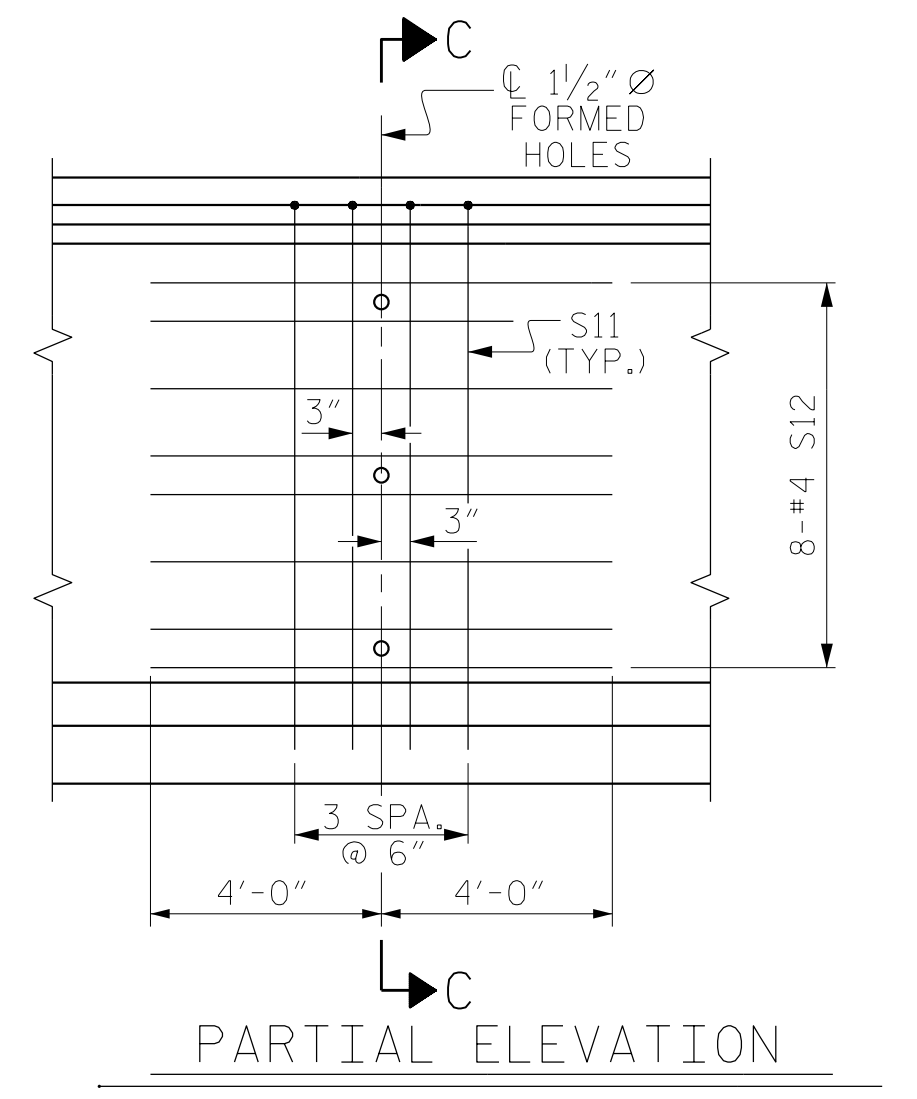
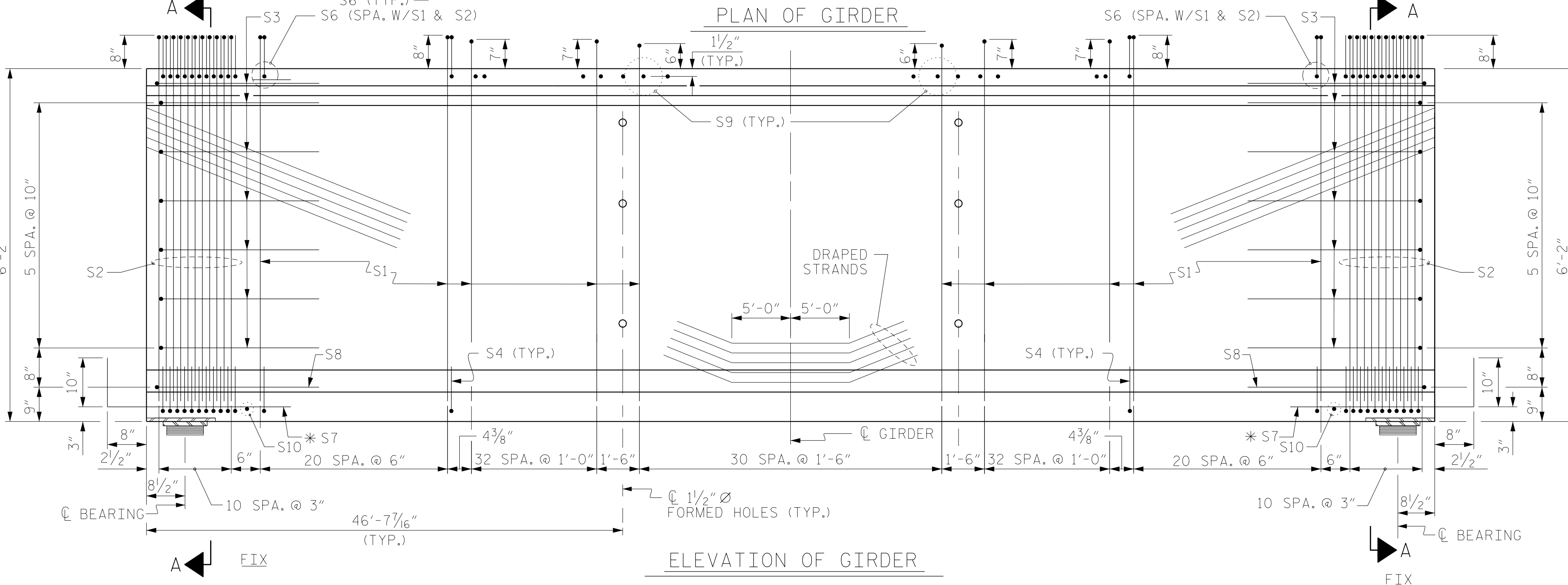
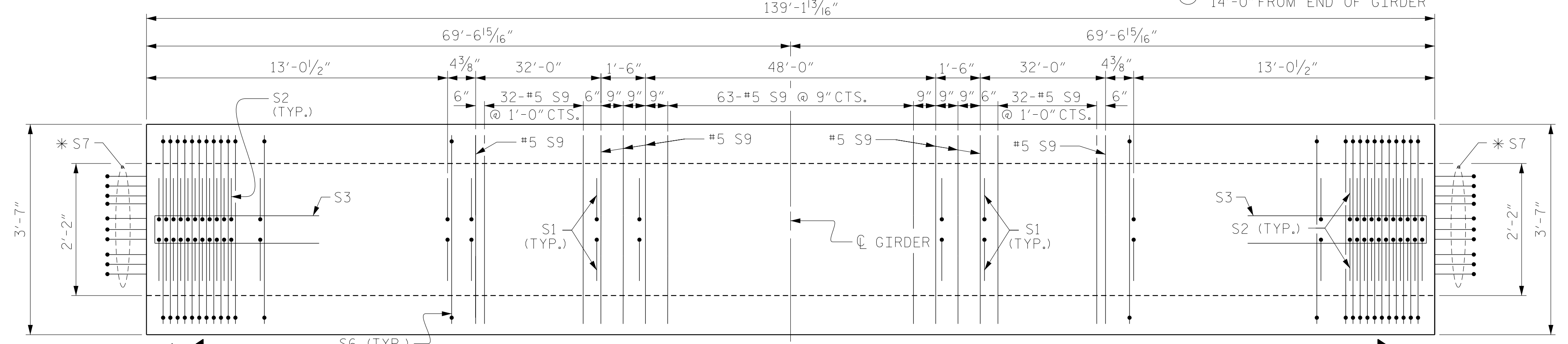
- DEBONDING LEGEND**
- FULLY BONDED STRANDS
 - ◊ STRANDS DEBONDED FOR 8'-0" FROM END OF GIRDER
 - ▲ STRANDS DEBONDED FOR 10'-0" FROM END OF GIRDER
 - STRANDS DEBONDED FOR 12'-0" FROM END OF GIRDER
 - ◎ STRANDS DEBONDED FOR 14'-0" FROM END OF GIRDER

** SEE ELEVATION OF GIRDER FOR DIMENSIONS ALONG GIRDER

* FOR S7 BARS. SEE DETAIL "C" OF "PRESTRESSED CONCRETE GIRDER CONTINUOUS FOR LIVE LOAD DETAILS" SHEET 4 OF 4.

(S1 AND S9 BARS NOT SHOWN)

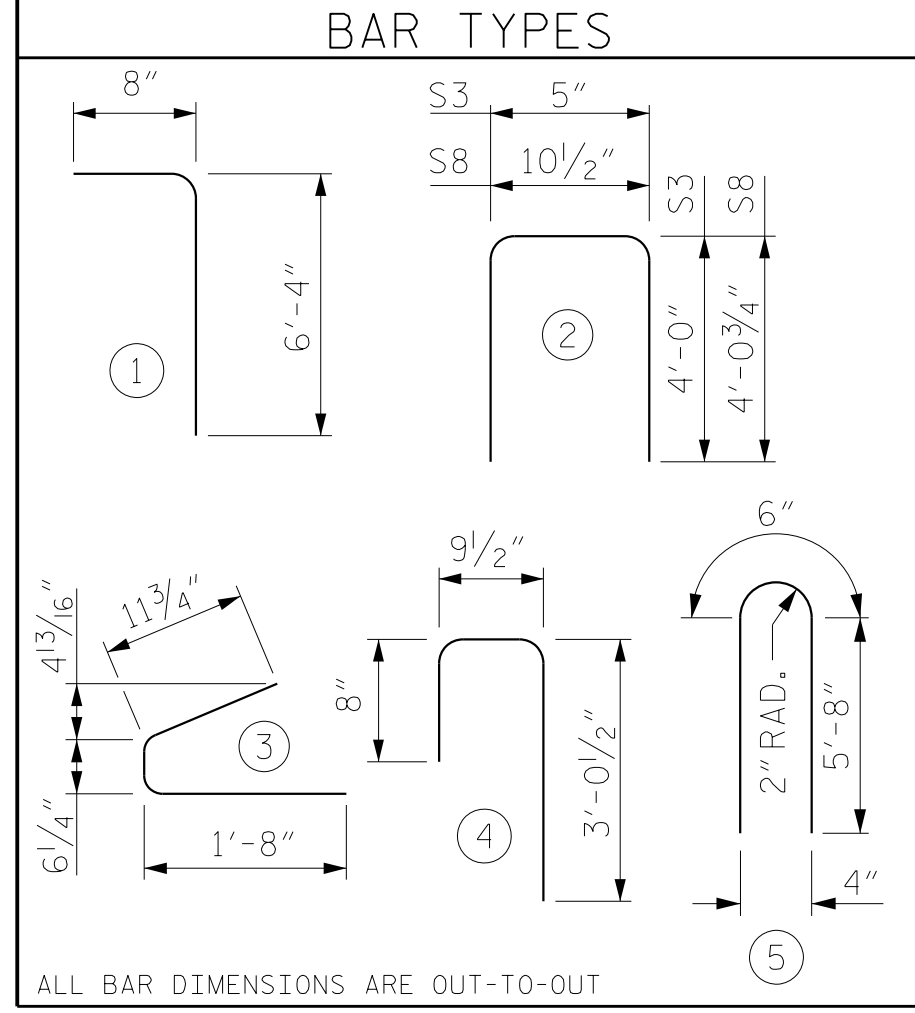
0.6" Ø LOW RELAXATION STRAND LAYOUT
THE UPLIFT FORCE DUE TO DRAPED STRANDS IS 27.2 KIPS (56 STRANDS REQUIRED)



0.6" Ø L. R. GRADE 270 STRANDS		
AREA (SQUARE INCHES)	ULTIMATE STRENGTH (LBS. PER STRAND)	APPLIED PRESTRESS (LBS. PER STRAND)
0.217	58,600	43,950

REINFORCING STEEL FOR ONE GDR					
BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT
S1	278	#4	1	7'-0"	1300
S2	44	#5	1	7'-0"	321
S3	14	#4	2	8'-5"	79
S4	116	#4	3	3'-2"	245
S6	128	#5	4	4'-6"	601
* S7	20	#5	STR	3'-8"	76
S8	2	#5	2	9'-0"	19
S9	135	#5	STR	3'-3"	458
S10	2	#3	STR	1'-10"	1
S11	8	#5	5	11'-10"	99
S12	16	#4	STR	8'-0"	86

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



QUANTITIES FOR ONE GIRDER			
REINFORCING STEEL	9000 PSI CONCRETE		0.6" Ø L.R. STRANDS
	LB.	C.Y.	No.
	3285	31.7	56

GIRDERS REQUIRED		
NUMBER	LENGTH	TOTAL LENGTH
4	139'-1 13/16"	556'-7 1/4"

PROJECT NO. R-2707C
CLEVELAND COUNTY
 STATION: 384+50.00 -L-
 SHEET 2 OF 4



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUPERSTRUCTURE
 74" PRESTRESSED CONCRETE
 MODIFIED BULB TEE
 CONTINUOUS FOR LIVE LOAD
 SPAN B
 RIGHT LANE

DRAWN BY : PDS DATE : 11/2016
 CHECKED BY : TLC DATE : 01/2017
 DESIGN ENGINEER OF RECORD: MAL DATE : 11/2016

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS						SHEET NO. S2-12
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 36
2			4			