

12.70mm Ø L. R. GRADE 270 STRANDS		
AREA (mm ²)	ULTIMATE STRENGTH (KN PER STRAND)	APPLIED PRESTRESS (KN PER STRAND)
98.71	183.7	137.8

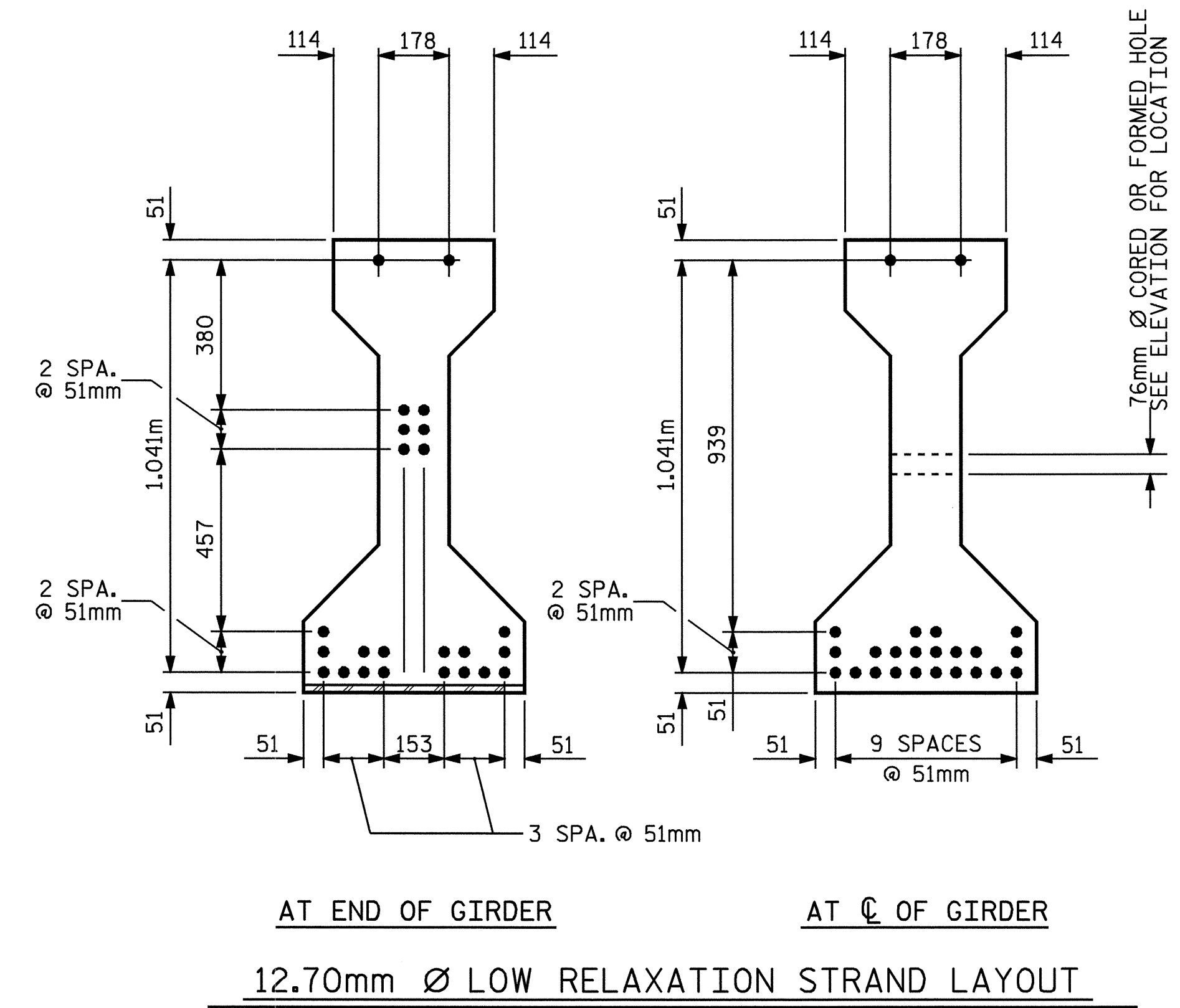
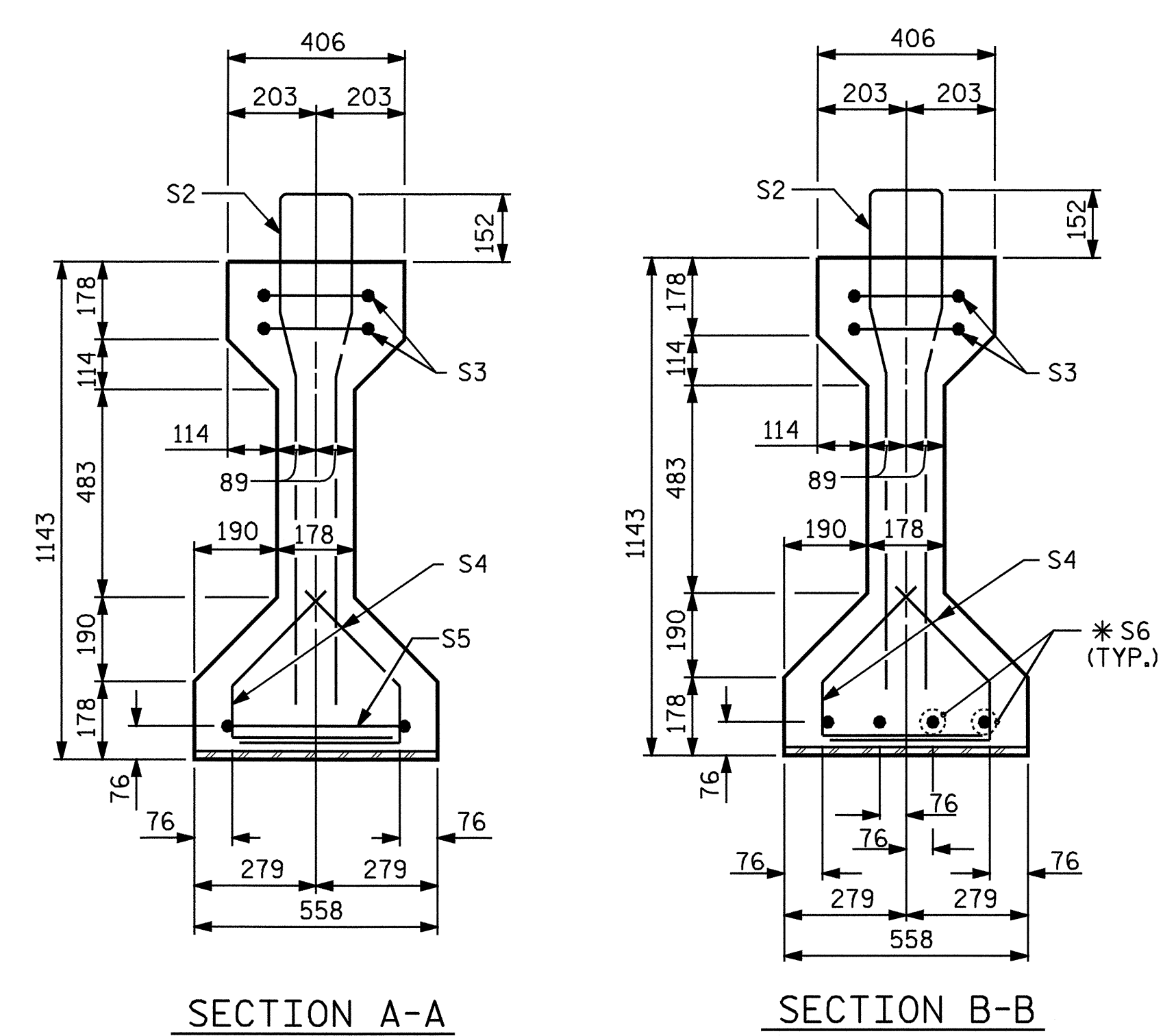
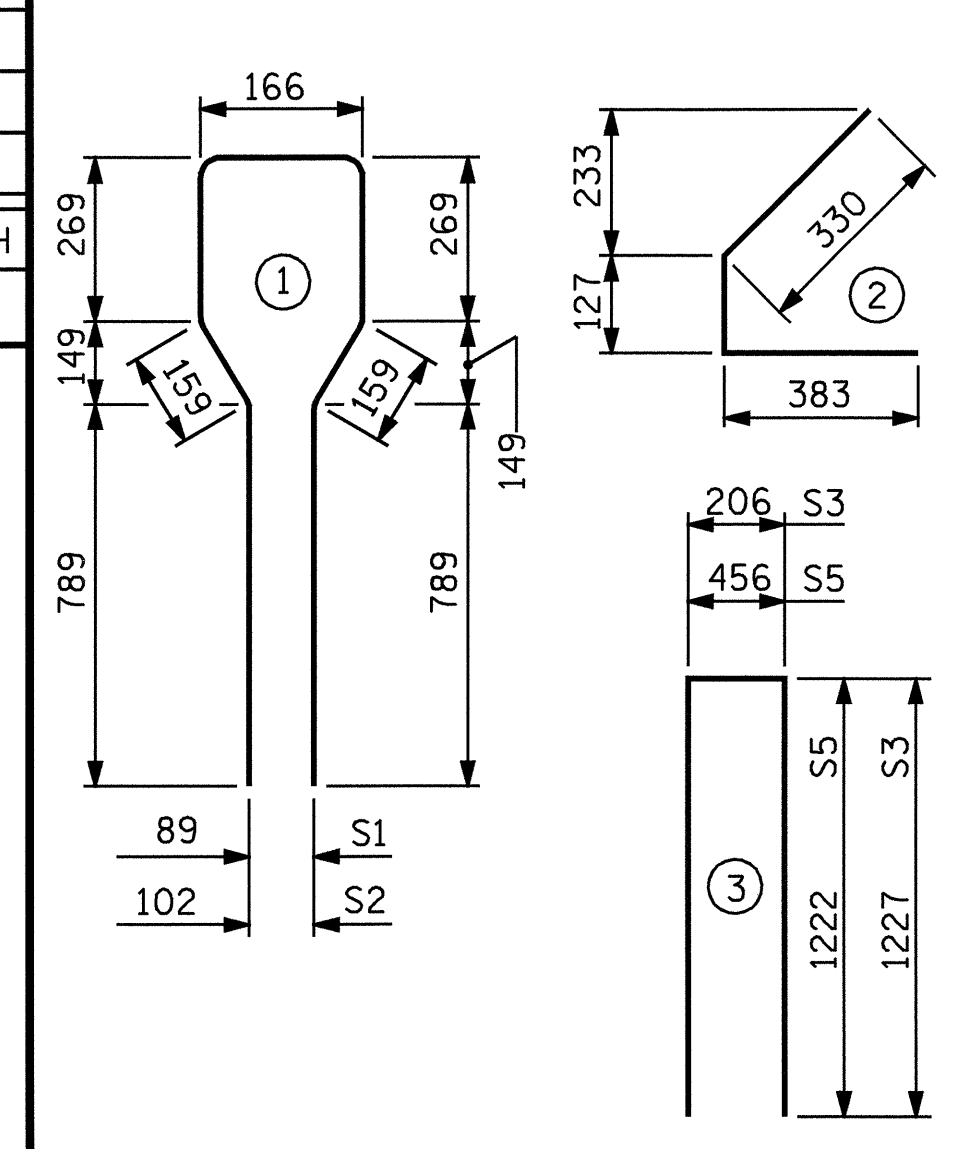
QUANTITIES FOR ONE GIRDER		
REINFORCING STEEL (kg)	34.5 MPa CONCRETE (m ³)	12.70mm Ø L.R. STRANDS (No.)
351	6.7	24

REINFORCING STEEL FOR ONE GIRDER					
BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT
S1	60	#13	1	2600	155
S2	18	#19	1	2600	105
S3	4	#13	3	2660	11
S4	84	#13	2	840	70
S5	1	#13	3	2900	3
*S6	4	#16	STR	1120	7

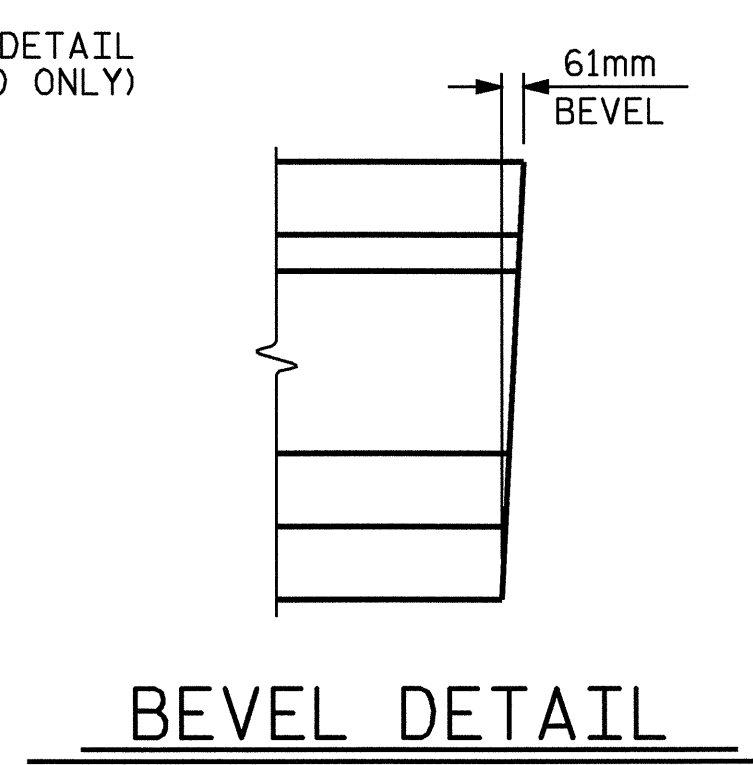
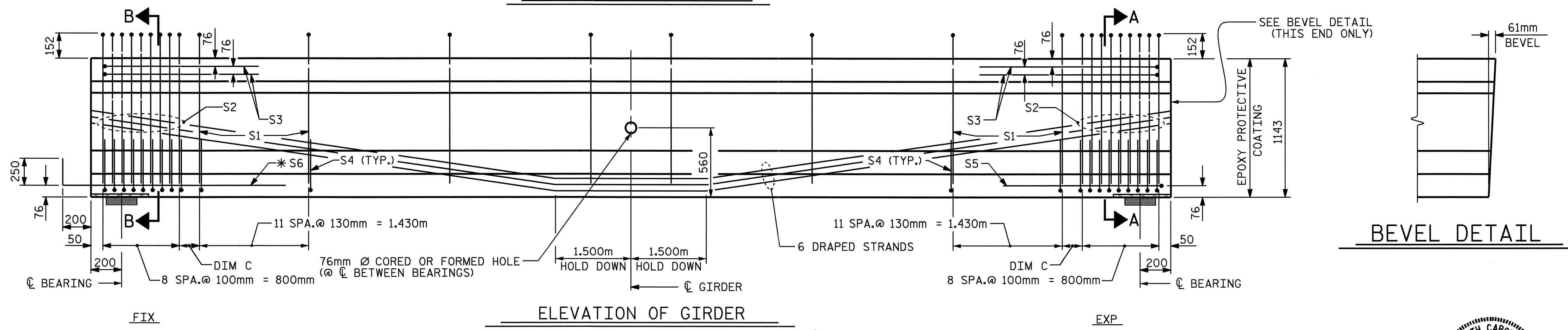
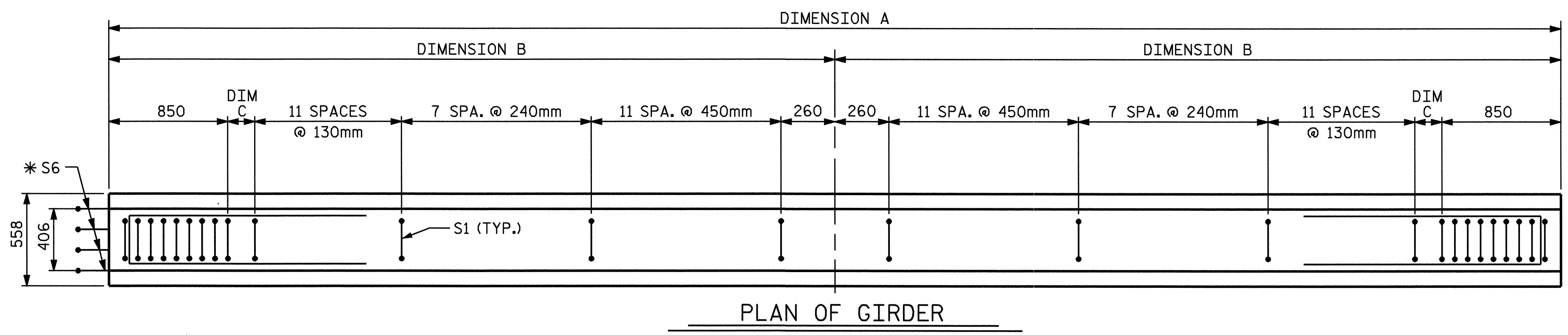
GIRDERS REQUIRED	
NUMBER	LENGTH
GIRDER 1	18.542m
GIRDER 2	18.506m
GIRDER 3	18.490m
GIRDER 4	18.490m
GIRDER 5	18.506m
GIRDER 6	18.542m
6 GIRDERS	TOTAL LENGTH
	111.076m

* NOTE: S6 BARS SHALL BE BENT BEFORE SHIPMENT. HEAT BENDING SHALL NOT BE ALLOWED.

BAR TYPES
ALL BAR DIMENSIONS ARE OUT-TO-OUT



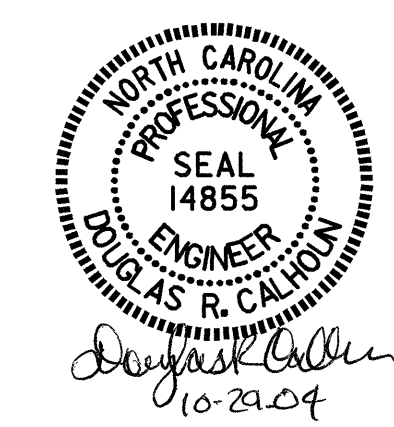
12.70mm Ø LOW RELAXATION STRAND LAYOUT



GIRDER DIMENSIONS			
	DIMENSION A	DIMENSION B	DIMENSION C
GIRDER 1 AND 6	18.542m	9.271m	101
GIRDER 2 AND 5	18.506m	9.253m	83
GIRDER 3 AND 4	18.490m	9.245m	75

PROJECT NO. B-2583
MADISON COUNTY
STATION: 11+03.000 -Y1-
SHEET 3 OF 4

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
STANDARD
AASHTO TYPE III
PRESTRESSED CONCRETE GIRDER
CONTINUOUS FOR LIVE LOAD
SPAN C



REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-83
1			3			JRA
2			4			112

ASSEMBLED BY : T.A. HARRIS DATE : 11/20/02
CHECKED BY : W.S. ARAFAT DATE : 5/16/04
DRAWN BY : ELR 8/91 REV. 5/16/97 EEM/RGW
CHECKED BY : GRP 8/91 REV. 7/17/98 RWW/LES
REV. 10/17/00 RWW/LES