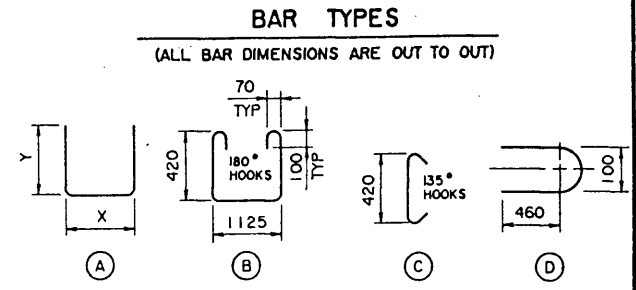
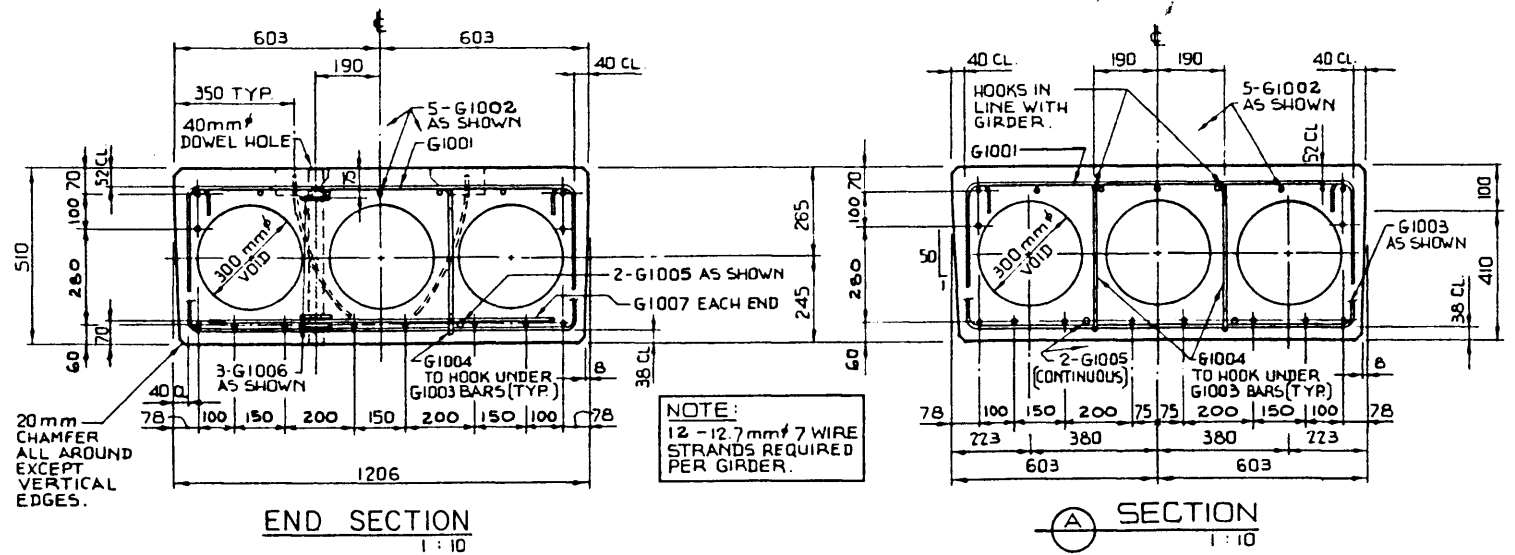
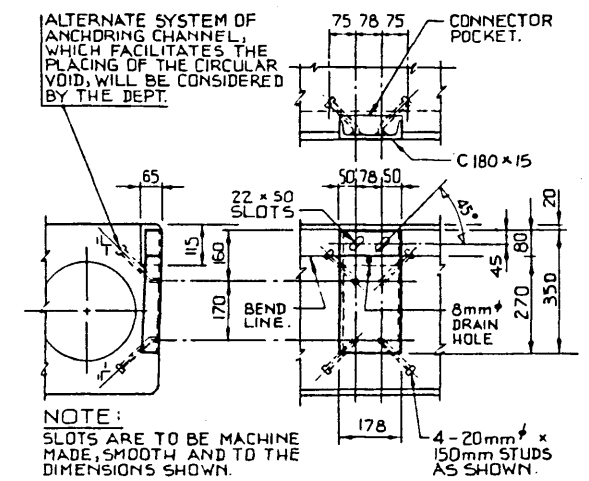
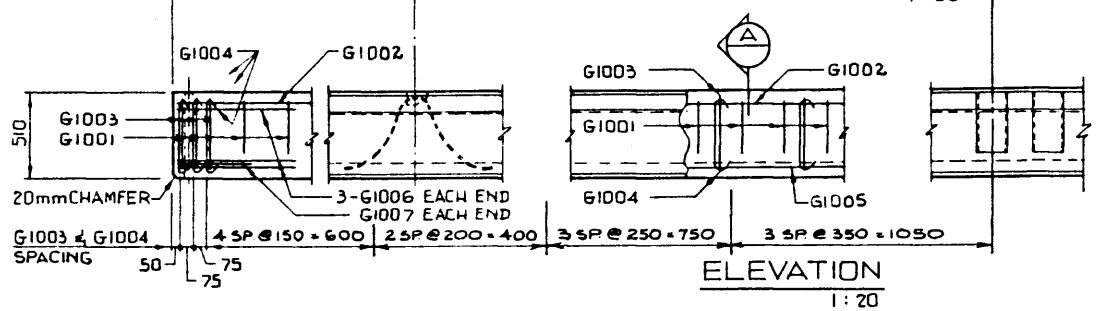
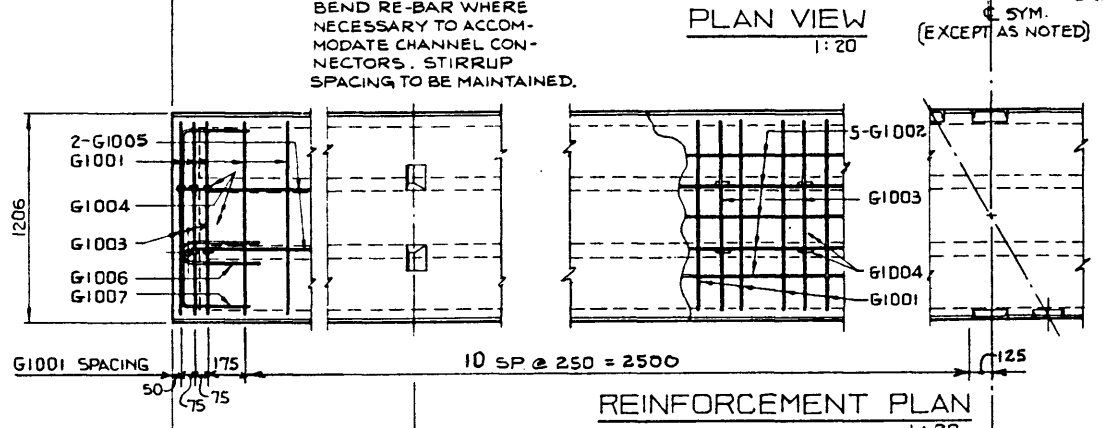
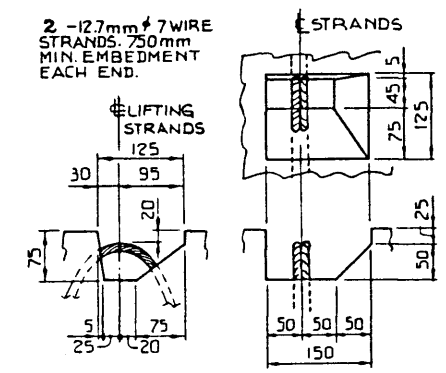
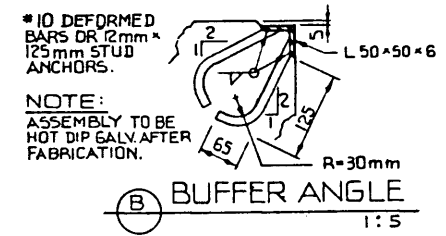
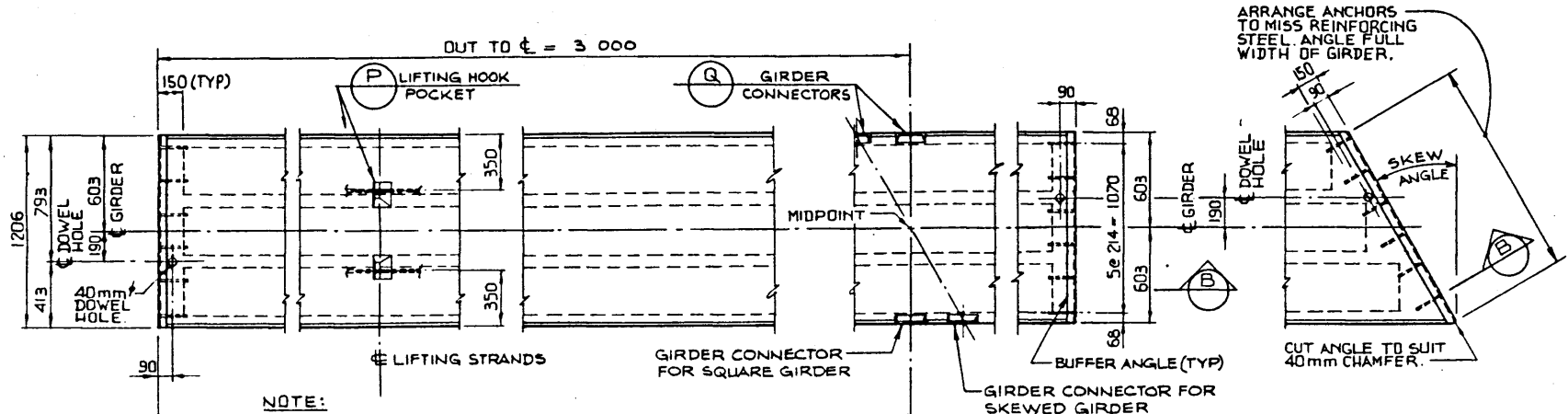


BAR LIST: FOR SQUARE GIRDER								
MARK	SIZE	NO	TYPE	X	Y	LENGTH	MASS	
G1001	10	28	A	1	125	1 725	38	
G1002	10	5	STR			5 900	23	
G1003	10	29	B			2 220	51	
G1004	10	56	C			620	27	
G1005	10	2	STR			5 800	9	
G1006	10	6	D			1 020	5	
G1007	10	2	A	1	000	300	1 600	
							TOTAL kg :	156



GENERAL NOTES

- ALL DRAWING REFERENCES ARE TO CURRENT DRAWINGS.

DESIGN

- AASHTO 1973 SPECIFICATIONS PLUS INTERIMS TO 1976 EXCEPT AS MODIFIED BELOW:
 - ALLOWABLE TENSION AT MIDSPAN IS 80% OF MODULUS OF RUPTURE.
 - NO TENSION ALLOWED IN DECK SURFACE.
 - WEB REINFORCEMENT - ACCORDING TO ACI 318-71, BUT NOT LESS THAN AASHTO MINIMUM.
 - CAPACITY REDUCTION FACTORS ACCORDING TO CSA S6-1974.

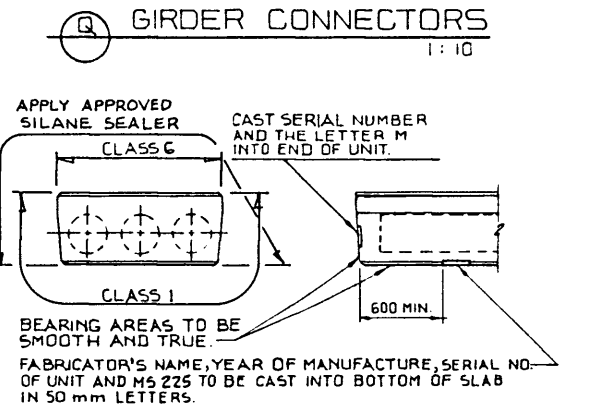
LOADING:

LIVE LOAD - CSA CAN 3-S6-M78; MS 225-77
- ONE WHEEL LINE PER GIRDER

DEAD LOAD - GIRDER = 0.78 t/m
- WEARING SURFACE = 0.15 t/m

MATERIALS

- CONCRETE IN GIRDER SHALL BE MADE OF LIGHTWEIGHT COARSE AGGREGATE AND SAND FINES.
- 28 DAY CONCRETE STRENGTH - 35 MPa
- RELEASE STRENGTH - 28 MPa
- UNIT WEIGHT OF SEMI-LIGHT WEIGHT CONCRETE 1920 kg/m³.
- PRESTRESSING STEEL SHALL BE 12.7mm #7 WIRE LOW RELAXATION STRAND (f_s = 1860 MPa).
- REINFORCING STEEL SHALL BE GRADE 400 (YIELD STRENGTH OF GRADE 300 USED IN DESIGN TO ALLOW TACK WELDING OF SHEAR REINFORCEMENT).



FABRICATION

- GIRDERS SHALL CONFORM TO THE CURRENT REQUIREMENTS OF THE BRIDGE MATERIALS SPECIFICATION FOR THE MANUFACTURE OF PRESTRESSED CONCRETE BRIDGE UNITS (SPEC B190).
- FORCE IN PRESTRESSING STEEL:
 - INITIAL TENSIONING LOAD = 129 kN/STRAND
 - DESIGN LOAD AFTER LOSSES = 112 kN/STRAND
- ALL GALVANIZING SHALL CONFORM TO ASTM SPEC A153.
- BEND OR SHIFT REINFORCING WHERE REQUIRED TO CLEAR GIRDER CONNECTORS AND LIFTING HOOK ASSEMBLIES. STIRRUP SPACING SHALL BE MAINTAINED.

ERECTION

- ANY FREE SPACE BETWEEN CONNECTORS SHALL BE FILLED WITH WASHERS.
- CALCULATED MASS OF ONE GIRDER IS 4.73 t.

WORK THESE DRAWINGS TOGETHER: S-1301, S-1302 AND S-1303.

REV	DATE	DESCRIPTION	BY
BB-06-21		REDRAWN FROM S-1301	D H O
REVISIONS			
DESIGNED	DRAWN	DATE	CHECKED
RWL	VGB WS	88-06-21	

APPROVED	
<i>mm Boyd</i>	EXECUTIVE DIRECTOR BRIDGE ENGINEERING
DATE: <u>JUNE 29, 1988</u>	

Alberta TRANSPORTATION AND UTILITIES BRIDGE ENGINEERING BRANCH										
PRESTRESSED CONCRETE 6 m TYPE SM-510 INTERIOR GIRDER										
DESIGNED	DRAWN	DATE	CHECKED	DATE	STREAM	LOCATION	HIGHWAY	FILE	SHEET	DRAWING
RWL	VGB WS	88-06-21							1 of 3	S-1301-88