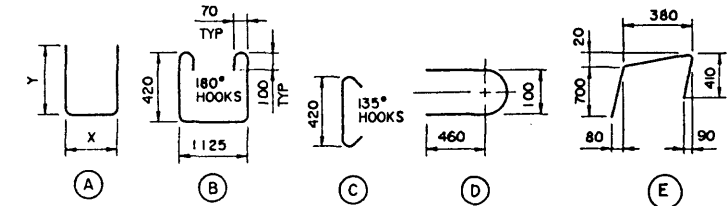


BAR LIST: FOR SQUARE GIRDER							
MARK	SIZE	NO	TYPE	X	Y	LENGTH	MASS
C1003	10	3	STR			9 900	23
C1008	10	2	A	310	600	1 510	2
C1501	15	48	E			1 455	110
G1001	10	44	A	1 125	300	1 725	60
G1003	10	43	B			2 220	75
G1004	10	84	C			620	41
G1006	10	6	D			1 020	5
G1007	10	2	A	1 000	300	1 600	3
G1010	10	5	STR			9 900	39
G1011	10	2	STR			9 800	15

TOTAL kg : 373

**BAR TYPES**

(ALL BAR DIMENSIONS ARE OUT TO OUT)



**GENERAL NOTES**

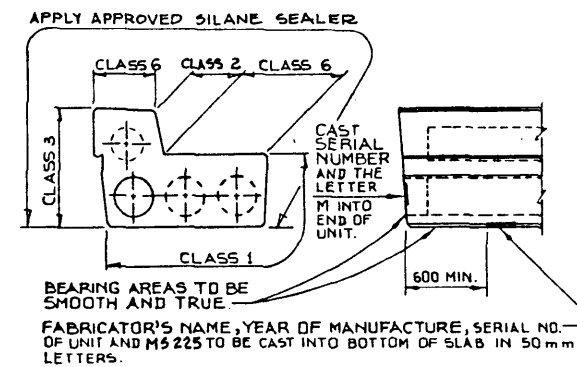
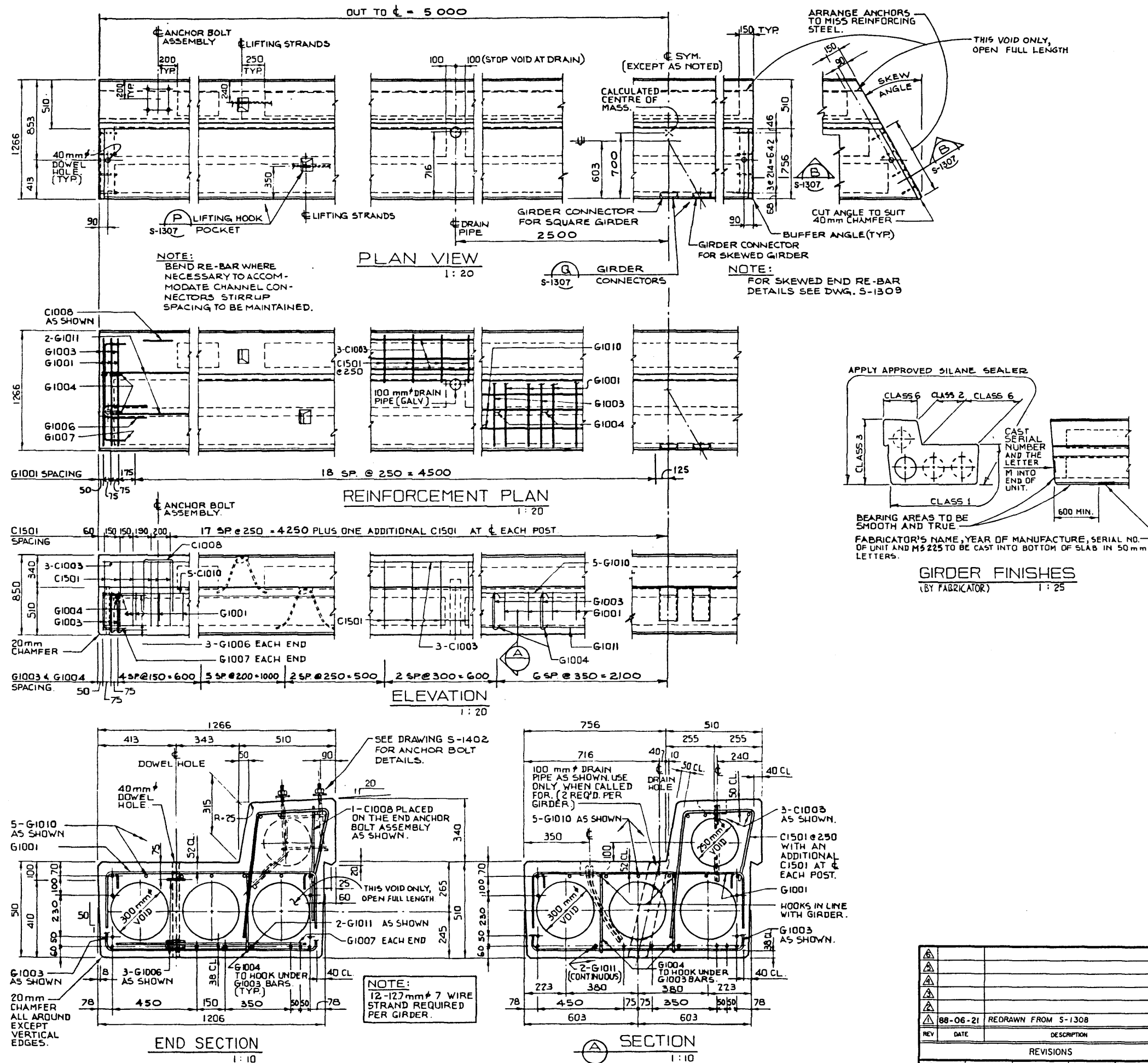
- ALL DRAWING REFERENCES ARE TO CURRENT DRAWINGS.
- DESIGN
  - AASHTO 1973 SPECIFICATIONS PLUS INTERIMS TO 1976 EXCEPT AS MODIFIED BELOW:
    - ALLOWABLE TENSION AT MIDSPAN IS 80% OF MODULUS OF RUPTURE.
    - NO TENSION ALLOWED IN DECK SURFACE.
    - WEB REINFORCEMENT - ACCORDING TO ACI 318-71, BUT NOT LESS THAN AASHTO MINIMUM.
    - CAPACITY REDUCTION FACTORS ACCORDING TO CSA S6-1974.
- LOADING:
  - LIVE LOAD - CSA CAN3-S6-M78; MS225-77
  - DEAD LOAD - GIRDER
  - WEARING SURFACE AND BRIDGERAIL
- 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/m<sup>3</sup>.
  - PRESTRESSING STEEL SHALL BE 12.7 mm # 7 WIRE LOW RELAXATION STRAND (f<sub>s</sub> = 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
  - DESIGN LOAD AFTER LOSSES
- CURB TO BE CAST MONOLITHICALLY WITH GIRDER.
- ANCHOR BOLT ASSEMBLIES SHALL BE CAST IN GIRDER AT SPACINGS SHOWN ON DRAWING S-1309-88.
- 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 10,56 t.

WORK THESE DRAWINGS TOGETHER : S-1307, S-1308 AND S-1309.

REVISIONS				DESIGNED	DRAWN	DATE	CHECKED	DATE	STREAM	LOCATION	HIGHWAY	FILE	SHEET	DRAWING
REV	DATE	DESCRIPTION	BY	RWL	VGB WS	88-06-21							2 of 3	S-1308-88



**GIRDER FINISHES**  
(BY FABRICATOR) 1:25

**Alberta TRANSPORTATION AND UTILITIES**  
BRIDGE ENGINEERING BRANCH

**PRESTRESSED CONCRETE**  
**10 m TYPE SM-510**  
**CURB GIRDER**