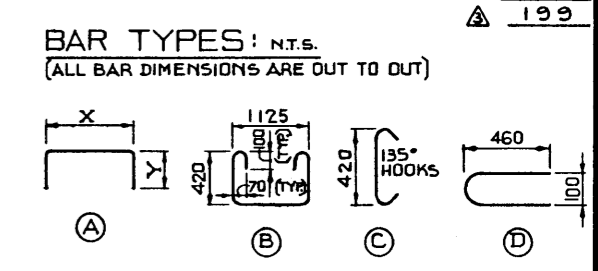
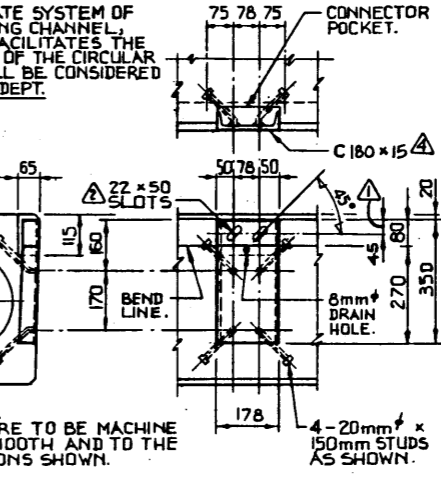
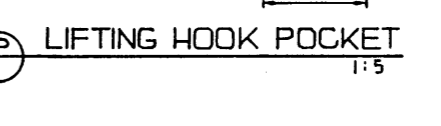
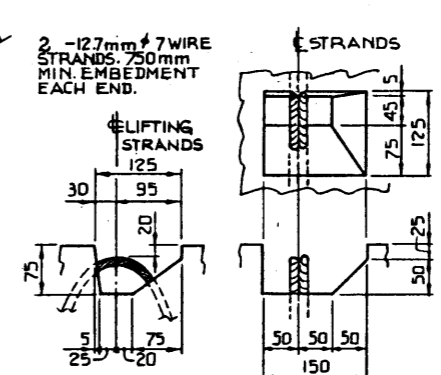
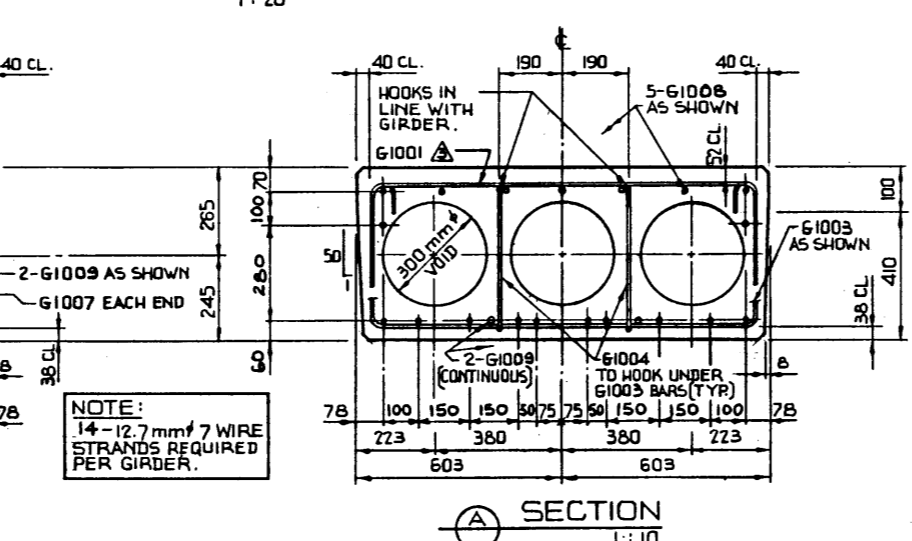
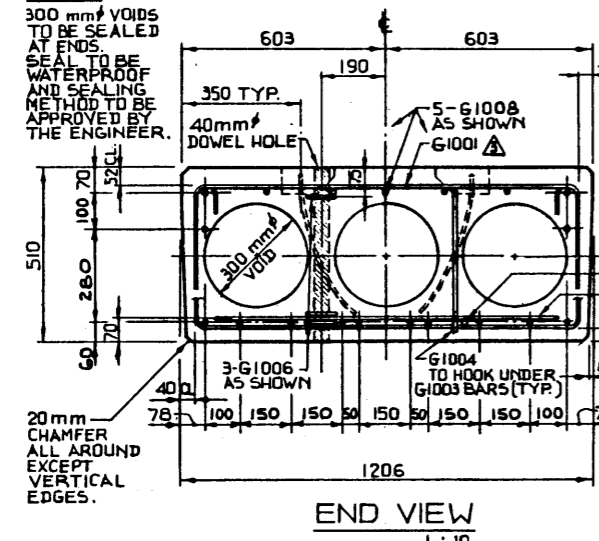
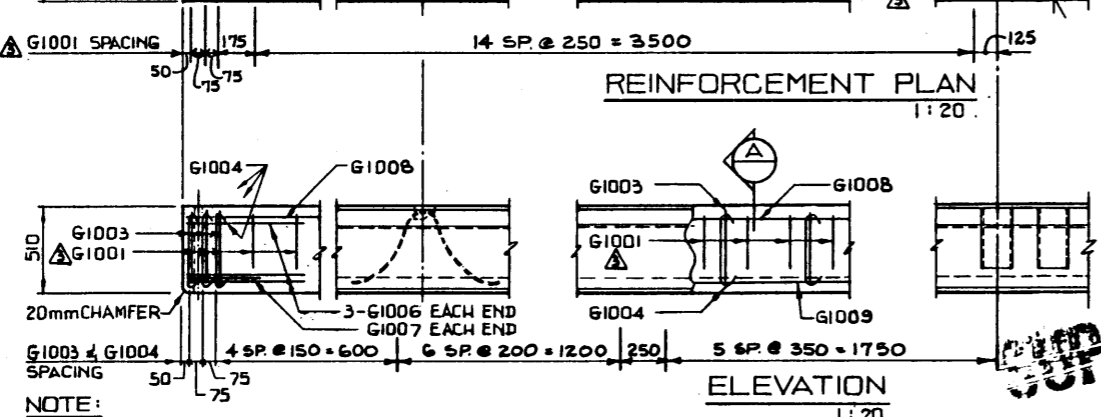
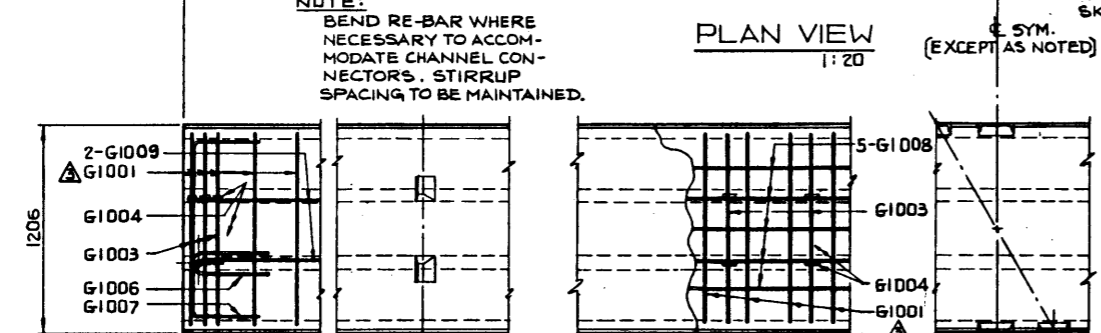


BAR LIST: FOR SQUARE GIRDER							
MARK	SIZE	NO.	TYPE	X	Y	LENGTH	MASS
G1001	10	36	A	1125	300	1725	49
G1008	10	5	STR.			7900	31
G1003	10	37	B			2220	64
G1004	10	72	C			620	35
G1009	10	2	STR.			7800	12
G1006	10	6	D			1020	5
G1007	10	2	A	1000	300	1600	3
						TOTAL kg:	193
							193



GENERAL NOTES:

DESIGN:

- A.S.H.T.O. 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 A.C.I. 318-71, BUT NOT LESS THAN A.S.H.T.O. MINIMUM.
- CAPACITY REDUCTION FACTORS ACCORDING TO C.S.A. 56-1974.

LOADING:

- LIVE LOAD - BRIDGE BRANCH MS-23 ONE WHEEL LINE PER GIRDER.
- DEAD LOAD - GIRDER = 0.780 t/m WEARING SURFACE = 0.150 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/m<sup>3</sup>
- PRESTRESSING STEEL SHALL BE 12.7mm #7 WIRE STRESS-RELIEVED STRAND (f<sub>s</sub> = 1860 MPa). 12.7mm #7 WIRE LOW RELAX. STRAND (f<sub>s</sub> = 1860 MPa) MAY BE SUBSTITUTED FOR STRESS-RELIEVED STRAND ON A ONE FOR ONE BASIS AT THE SAME INITIAL STRESS. THE ENGINEER SHALL BE NOTIFIED IF SUBSTITUTION IS MADE.

FABRICATION:

- GIRDERS SHALL CONFORM TO THE REQUIREMENTS OF THE ALBERTA BRIDGE BRANCH SPECIFICATION FOR THE MANUFACTURE OF PRESTRESSED CONCRETE BRIDGE UNITS.
- FORCE IN PRESTRESSING STEEL: INITIAL TENSIONING LOAD = 128.6 kN/STRAND. DESIGN LOAD AFTER LOSSES = 102.2 kN/STRAND.
- ALL GALVANIZING SHALL CONFORM TO A.S.T.M. SPEC. A153.
- BEND OR SHIFT REINFORCING WHERE REQUIRED TO CLEAR GIRDER CONNECTORS AND LIFTING HOOK ASSEMBLIES. STIRRUP SPACING IS TO BE MAINTAINED.

ERECTION:

- ANY FREE SPACE BETWEEN CONNECTORS SHALL BE FILLED WITH WASHERS.
- CALCULATED MASS OF ONE GIRDER IS 6.30t.

**SUPERSEDED**

**SUPERSEDED**

NO.	DATE	DESCRIPTION	BY
85-10-23		GIRDER FINISHES - BY FABRICATOR	JCY
84-01-31		CONNECTOR CHANNEL DESIGNATION	T.D.M.
79 03 20		4-G1001 ADDED (GIRDER FINISHES)	R.G.B.
78 07 20		CONNECTOR SLOTS & GIRDER MARKINGS	R.G.B.
78 05 11		DIMENSION ADDED	R.W.L.

DESIGNED: R.W.L. DRAWN BY: V.G.B. DATE: 78 02 15 CHECKED BY: DATE: STREAM: LOCATION: HWY. NO.: SCALE: FILE NO.: SHEET: 5-1304

Albera TRANSPORTATION BRIDGE BRANCH METRIC

PRESTRESSED CONCRETE 8 m TYPE SM-510 INTERIOR GIRDER

DATE: MAR 23 78

DESIGN: R.W.L. DRAWN: M.M.F. 78 02 10