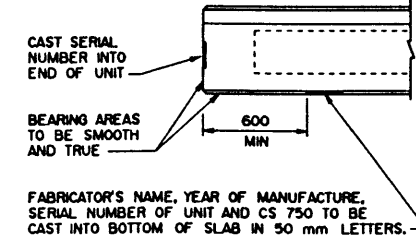
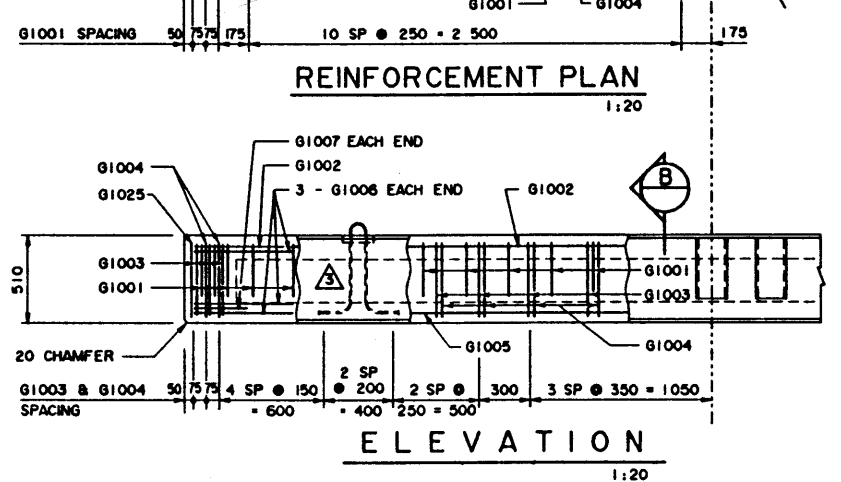
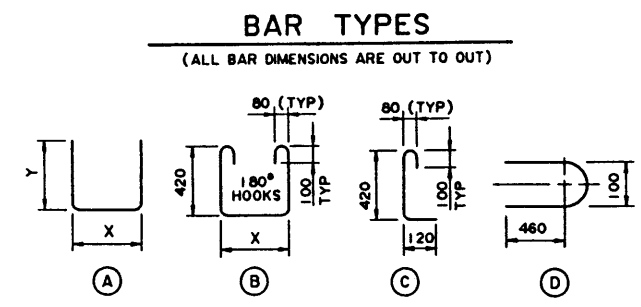
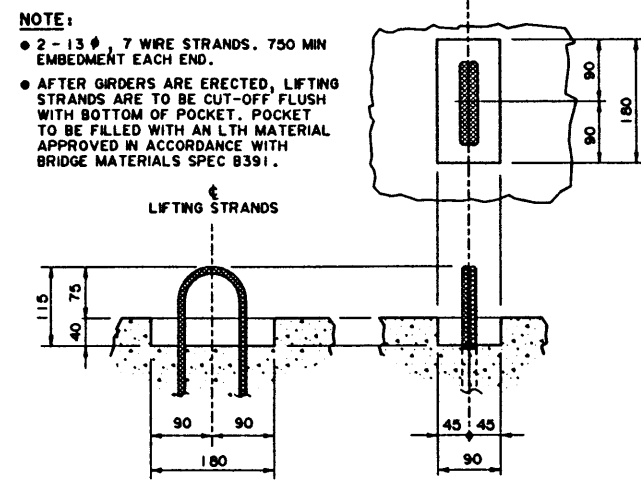
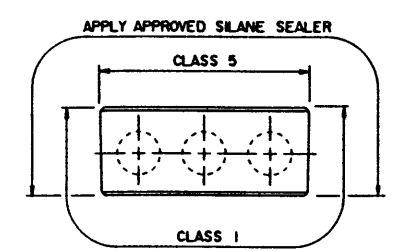
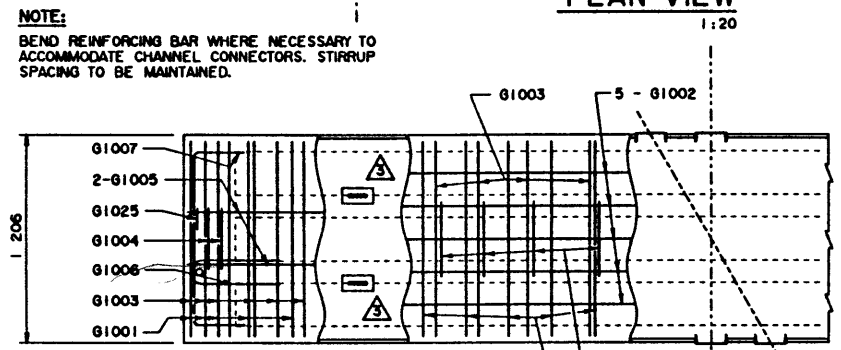
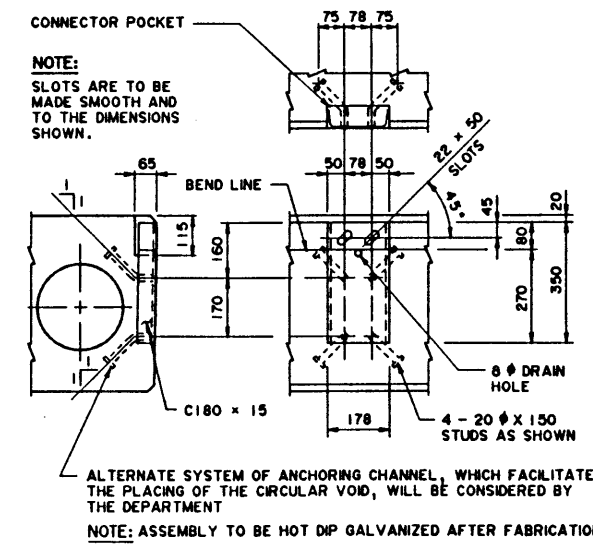


BAR LIST: FOR SQUARE GIRDER							
MARK	SIZE	NO	TYPE	X	Y	LENGTH	MASS
G1001	10	29	A	1 125	300	1 725	39
G1002	10	5	STR			6 000	24
G1003	10	29	B	1 125		2 220	51
G1004	10	27	B	420		1 520	32
G1005	10	2	STR			5 900	9
G1006	10	6	D			1 080	5
G1007	10	2	A	1 000	300	1 600	3
G1025	10	2	C			670	1
TOTAL kg :							164



GIRDER FINISHES
(BY FABRICATOR)
1:20



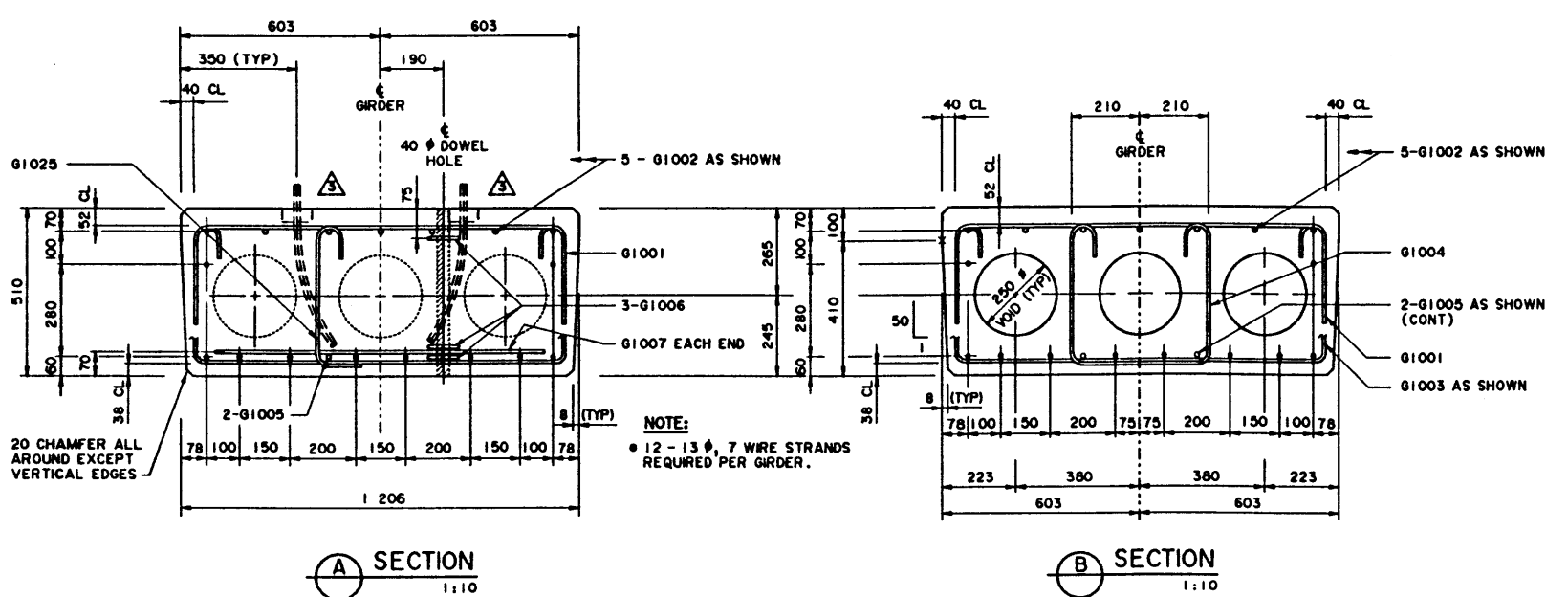
GENERAL NOTES

- ALL DRAWING REFERENCES ARE TO CURRENT DRAWINGS.
- DESIGN**
- CAN/CSA-S6-88 SPECIFICATIONS EXCEPT AS MODIFIED BELOW:
 - ALLOWABLE TENSION AT MIDSPAN IS 40% OF MODULUS OF RUPTURE (SEVERE EXPOSURE CONDITIONS).
 - NO TENSION ALLOWED IN DECK SURFACE.
- **LOADING:**
 - LIVE LOAD - CAN/CSA-S6-88; CS-750 ONE WHEEL LINE PER GIRDER
 - DEAD LOAD - GIRDER = 0.93 t/m
 - WEARING SURFACE = 0.24 t/m

- MATERIALS**
- CONCRETE SHALL CONTAIN SILICA FUME AND BE MADE OF LIGHTWEIGHT COARSE AGGREGATE AND NATURAL SAND FINES. UNIT WEIGHT OF SEMI-LIGHTWEIGHT CONCRETE SHALL BE 1920 kg/m³.
- 28 DAY CONCRETE STRENGTH - 35 MPa
- RELEASE STRENGTH - 28 MPa
- PRESTRESSING STEEL SHALL BE 12 #, 7 WIRE LOW RELAXATION STRAND (f_{pu} = 1 860 MPa).
- REINFORCING STEEL SHALL BE GRADE 400W (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 SPECIFICATIONS FOR BRIDGE CONSTRUCTION SECTION 7 - PRECAST CONCRETE UNITS.
- FORCE IN PRESTRESSING STEEL:
 - INITIAL TENSIONING LOAD = 129 kN/STRAND
 - DESIGN LOAD AFTER LOSSES = 111 kN/STRAND
- ALL GALVANIZING SHALL CONFORM TO ASTM SPEC A123.
- BEND OR SHIFT REINFORCING WHERE REQUIRED TO CLEAR GIRDER CONNECTORS AND LIFTING HOOK ASSEMBLIES. STIRRUP SPACING IS TO BE MAINTAINED. FOR CONNECTOR AND LIFTING HOOK LOCATIONS SEE DWG S-1561.

- ERECTION**
- ANY FREE SPACE BETWEEN CONNECTORS SHALL BE FILLED WITH DROP-IN WASHERS.
- CALCULATED MASS OF ONE GIRDER IS 5.84 t.



REV	DATE	REVISIONS	BY				
DESIGNED	LEA	VMV	93-08-18	CHECKED	SBD	DATE	94-05-16

93-07-10	SPECIFICATION NOTE	LEA
94-04-05	LIFTING HOOK POCKET	LEA
93-12-13	BAR LENGTH REVISED	SBD
93-08-27	CONNECTOR & LIFTING HOOK LOCATION NOTE	LEA

DESIGNED	LEA	DRAWN	VMV	DATE	93-08-18	CHECKED	SBD	DATE	94-05-16	
STREAM		LOCATION		HIGHWAY		FILE		SHEET	1 of 4	
									DRAWN	S-1559

Alberta TRANSPORTATION AND UTILITIES
BRIDGE ENGINEERING BRANCH

PRESTRESSED CONCRETE
6.10 m TYPE SC-510
INTERIOR GIRDER

ORIGINAL DRAWING APPROVED BY
J. RAMOTAR
EXECUTIVE DIRECTOR
BRIDGE ENGINEERING
MAY 24, 1994