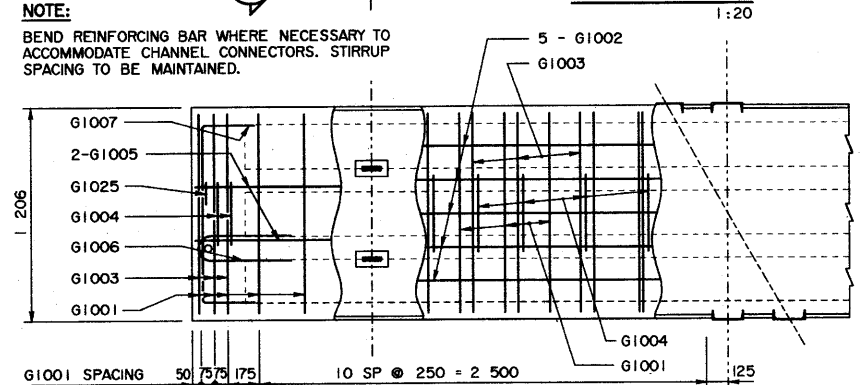
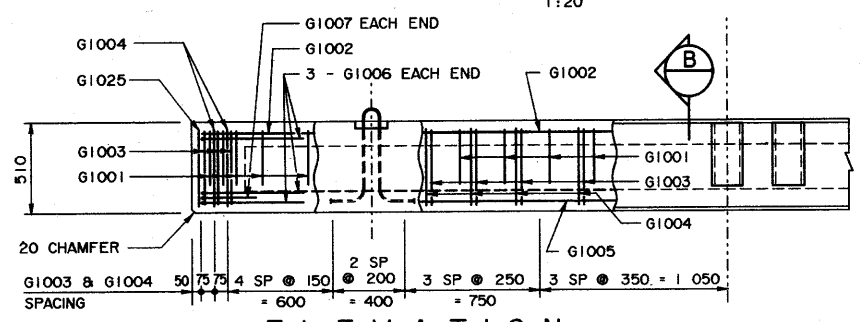


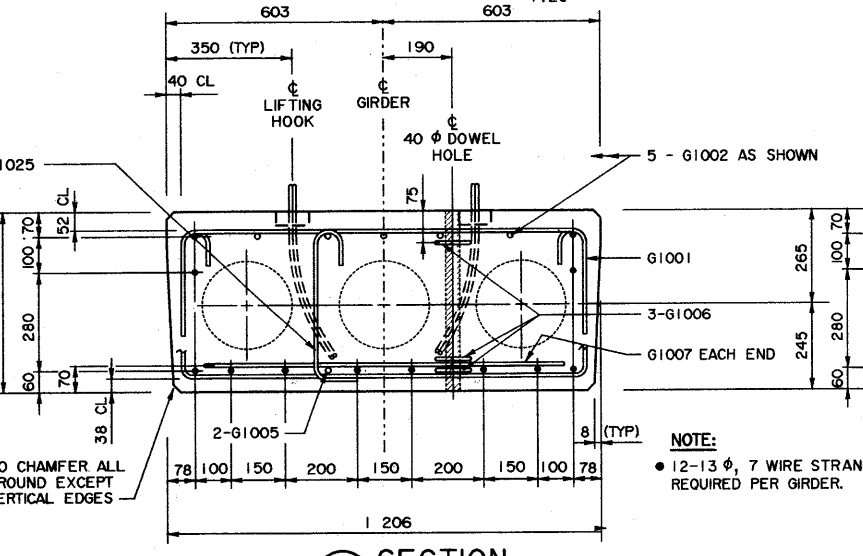
BAR LIST: FOR SQUARE GIRDER							
MARK	SIZE	NO	TYPE	X	Y	LENGTH	MASS
G1001	10	28	A	1 125	300	1 725	38
G1002	10	5	STR			5 900	23
G1003	10	29	B	1 125		2 220	51
G1004	10	27	B	420		1 520	32
G1005	10	2	STR			5 800	9
G1006	10	6	D			1 020	5
G1007	10	2	A	1 000	300	1 600	3
G1025	10	2	C			670	1
						TOTAL kg :	162



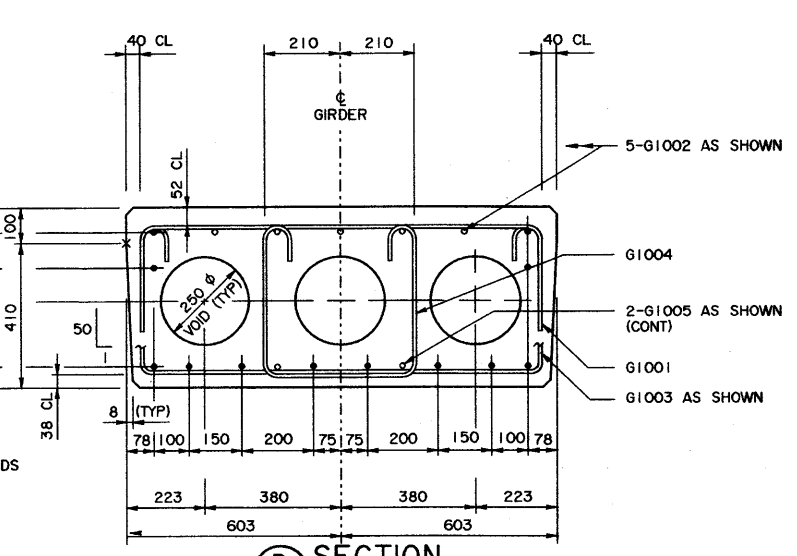
**REINFORCEMENT PLAN**  
1:20



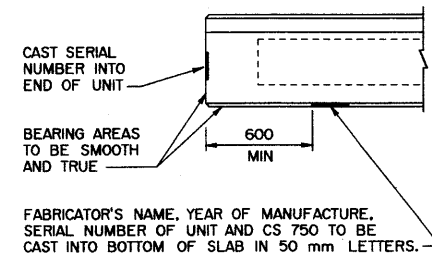
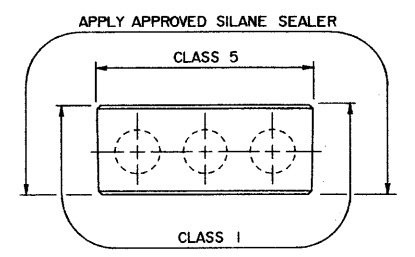
**ELEVATION**  
1:20



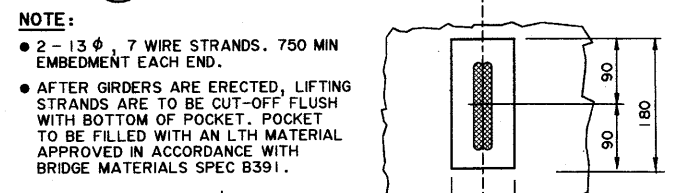
**SECTION A**  
1:10



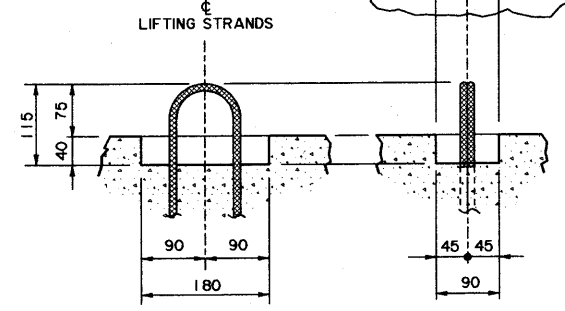
**SECTION B**  
1:10



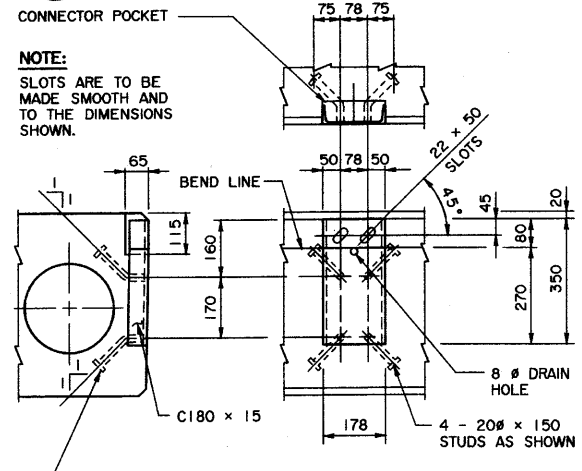
**GIRDER FINISHES**  
(BY FABRICATOR) 1:20



**BUFFER ANGLE**  
1:5

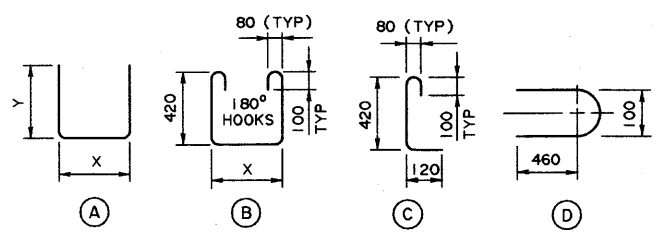


**LIFTING HOOK POCKET**  
1:5



**GIRDER CONNECTORS**  
1:10

**BAR TYPES**  
(ALL BAR DIMENSIONS ARE OUT TO OUT)



**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/m<sup>3</sup>.
- 28 DAY CONCRETE STRENGTH - 35 MPa
- RELEASE STRENGTH - 28 MPa
- PRESTRESSING STEEL SHALL BE 13 φ, 7 WIRE LOW RELAXATION STRAND (f<sub>pu</sub> = 1860 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.

**ERECTION**

- ANY FREE SPACE BETWEEN CONNECTORS SHALL BE FILLED WITH DROP-IN WASHERS.
- CALCULATED MASS OF ONE GIRDER IS 5.75 t.

REV	DATE	REVISIONS	BY

DESIGNER: RY CHECKER: CTC DATE: July 10/01

RECOMMENDED  
DIRECTOR BRIDGE ENGINEERING

APPROVED  
EXECUTIVE DIRECTOR  
TECHNICAL STANDARDS BRANCH

DATE: July 10/01

**Alberta TRANSPORTATION**

**PRESTRESSED CONCRETE**  
6 m TYPE SC-510  
INTERIOR GIRDER

DATE: 2001-04-12 SHEET: 1 of 2 DRAWING: S-1656-01

S1656-01.DWG PLOTTED 2001-04-12