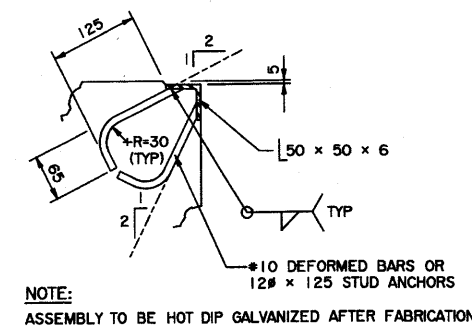
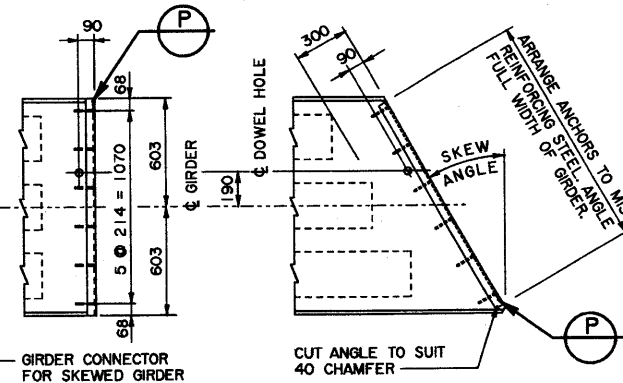
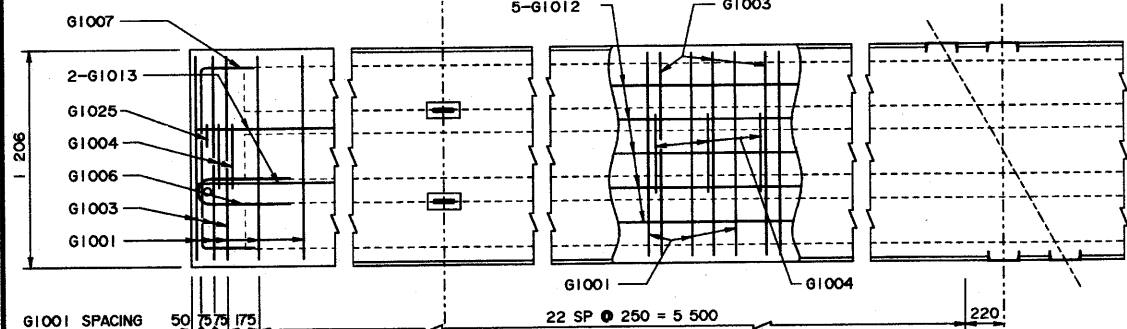


NOTE:
FOR SKEWED END REINFORCING BAR DETAILS SEE DWG S-1677-01

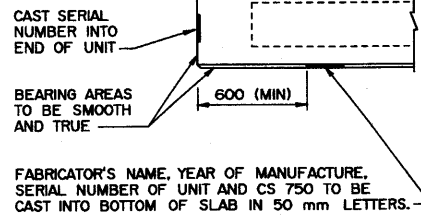
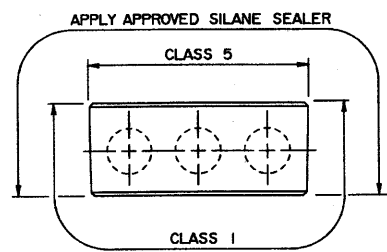


(P) BUFFER ANGLE
1:5

NOTE:
BEND REINFORCING BAR WHERE NECESSARY TO ACCOMMODATE CHANNEL CONNECTORS. STIRRUP SPACING TO BE MAINTAINED.

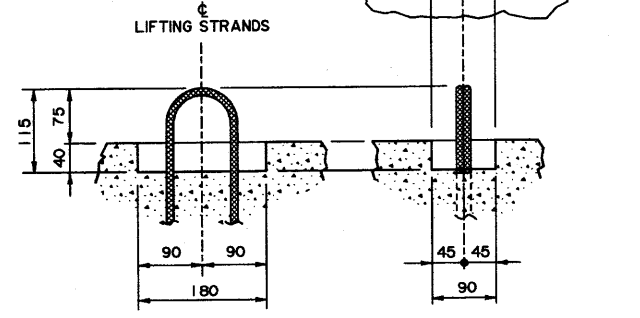


REINFORCEMENT PLAN
1:20

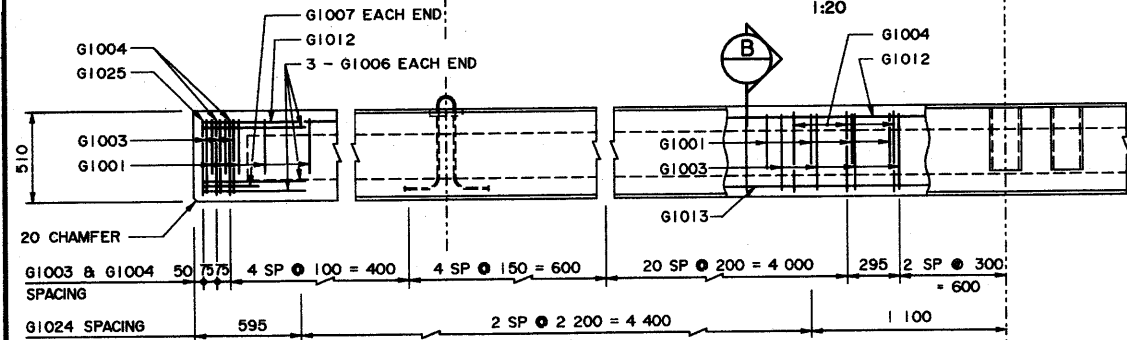


GIRDER FINISHES
(BY FABRICATOR) 1:20

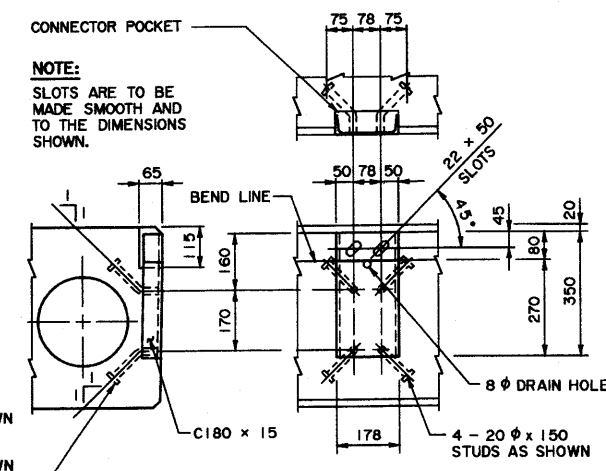
NOTE:
• 2 - 13 ϕ 7 WIRE STRANDS. 750 MIN EMBEDMENT EACH END.
• AFTER GIRDERS ARE ERECTED, LIFTING STRANDS ARE TO BE CUT-OFF FLUSH WITH BOTTOM OF POCKET. POCKET TO BE FILLED WITH AN LTH MATERIAL APPROVED IN ACCORDANCE WITH BRIDGE MATERIALS SPEC B391.



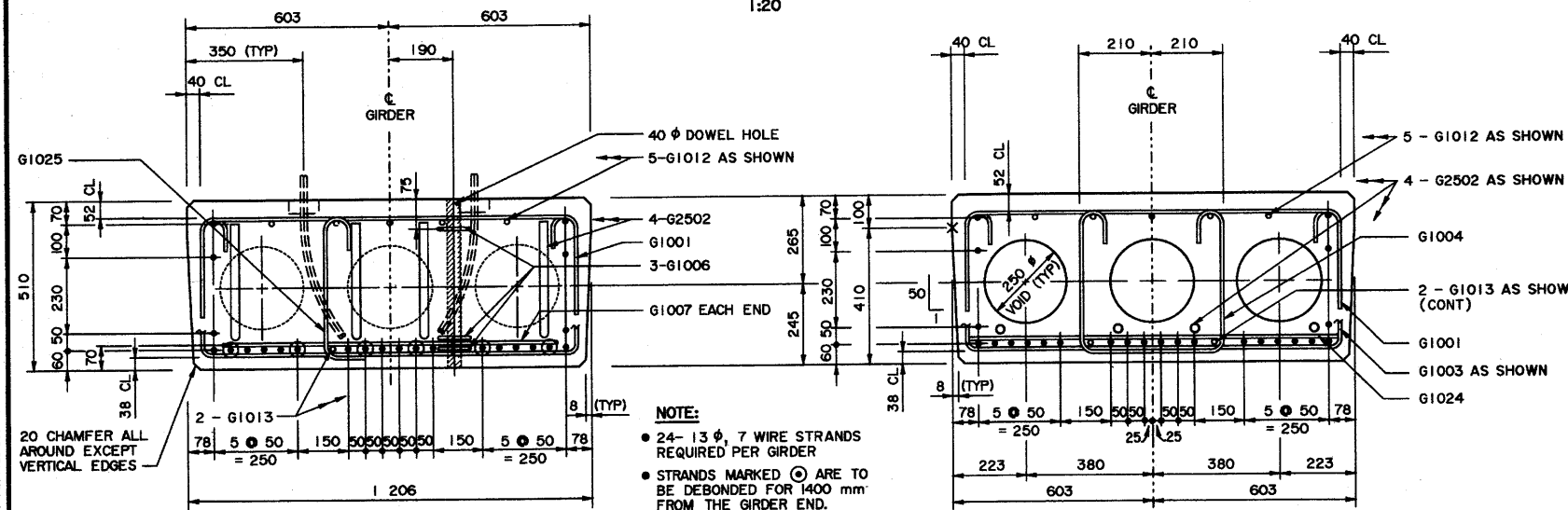
(R) LIFTING HOOK POCKET
1:5



ELEVATION
1:20



(S) GIRDER CONNECTORS
1:10



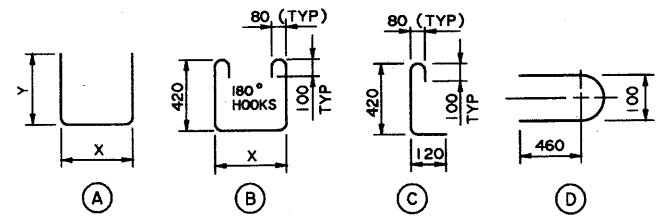
(A) SECTION
1:10

(B) SECTION
1:10

BAR LIST: FOR SQUARE GIRDER							
MARK	SIZE	NO	TYPE	X	Y	LENGTH	MASS
G1001	10	53	A	1 125	300	1 725	72
G1003	10	67	B	1 125		2 220	117
G1004	10	65	B	420		1 520	78
G1006	10	6	D			1 080	5
G1007	10	2	A	1 000	300	1 600	3
G1012	10	5	STR			12 090	47
G1013	10	2	STR			11 990	19
G1024	10	6	STR			1 100	5
G1025	10	2	C			670	1
G2502	25	4	A	12 040	350	12 740	200

TOTAL kg : 547

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 54% OF MODULUS OF RUPTURE WITH 50 mm WEARING SURFACE (66% WITH 90 mm WEARING SURFACE).
 - 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 - 40 MPa
- RELEASE STRENGTH - 28 MPa
- PRESTRESSING STEEL SHALL BE 13 ϕ , 7 WIRE LOW RELAXATION STRAND (fpu = 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 = 104 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-1677-01

ERECTION

- ANY FREE SPACE BETWEEN CONNECTORS SHALL BE FILLED WITH DROP-IN WASHERS.
- CALCULATED MASS OF ONE GIRDER IS 11.52 t.

• WORK THESE DRAWINGS TOGETHER : S-1676-01 AND S-1677-01

REV	DATE	REVISIONS	BY

DESIGNER: [Signature] CHECKER: [Signature] DATE: July 10/01

RECOMMENDED
DIRECTOR BRIDGE ENGINEERING
[Signature]
APPROVED
EXECUTIVE DIRECTOR
TECHNICAL STANDARDS BRANCH
[Signature]

Alberta TRANSPORTATION

PRESTRESSED CONCRETE
12.19 m TYPE SC-510
INTERIOR GIRDER

DATE: 2001-04-30 SHEET: 1 of 2 DRAWING: S-1676-01

S1676-01.DWG PLOTTED 2001-04-30