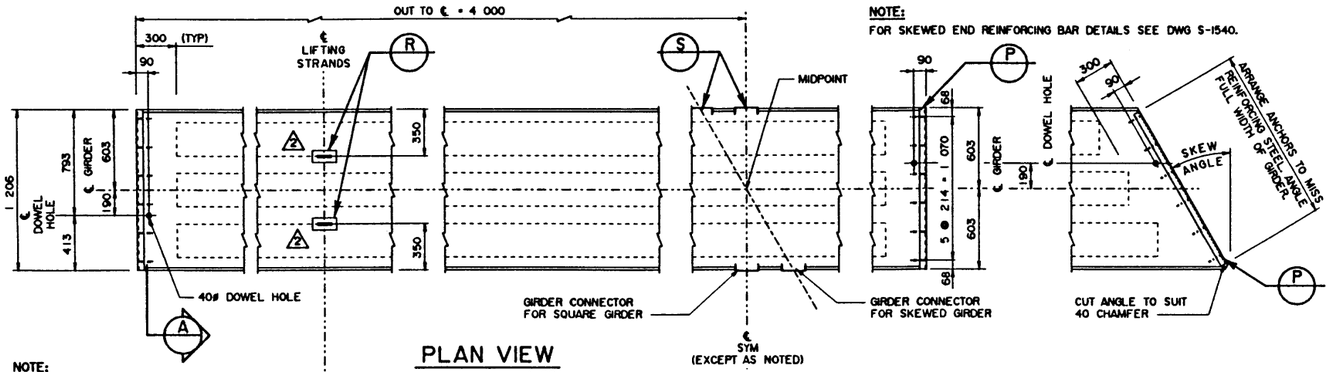
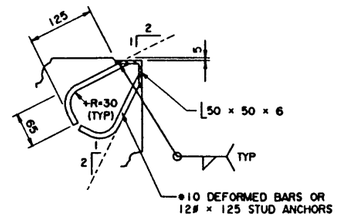


PLAN VIEW
1:20

NOTE:
FOR SKEWED END REINFORCING BAR DETAILS SEE DWG S-1540.

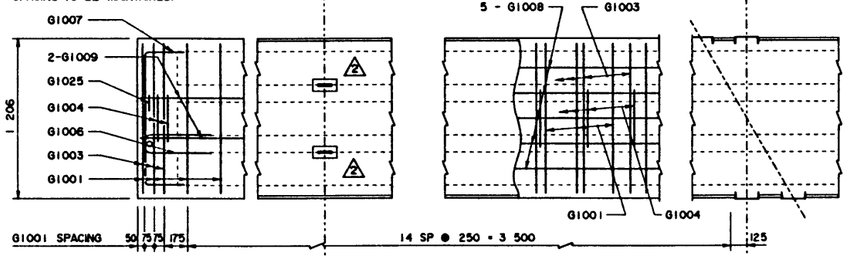


NOTE:
ASSEMBLY TO BE HOT DIP GALVANIZED AFTER FABRICATION.

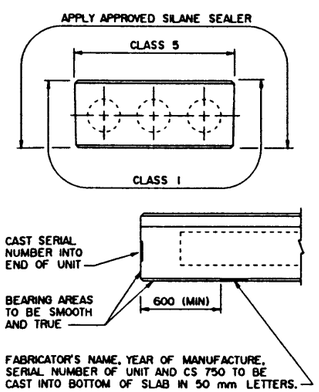
BAR LIST: FOR SQUARE GIRDER							
MARK	SIZE	NO	TYPE	X	Y	LENGTH	MASS
G1001	10	36	A	1 125	300	1 725	49
G1003	10	37	B	1 125		2 220	64
G1004	10	35	B	420		1 520	42
G1006	10	6	D			1 020	5
G1007	10	2	A	1 000	300	1 600	3
G1008	10	5	STR			7 900	31
G1009	10	2	STR			7 800	12
G1025	10	2	C			670	1

TOTAL kg : 207

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

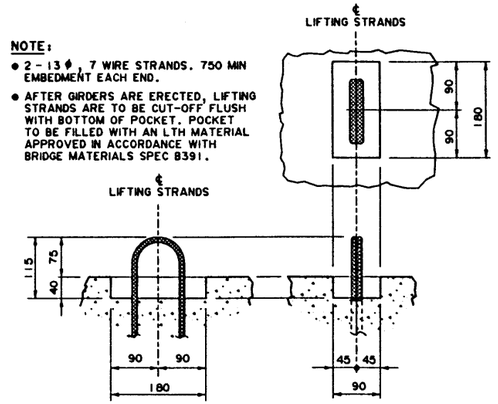


REINFORCEMENT PLAN
1:20



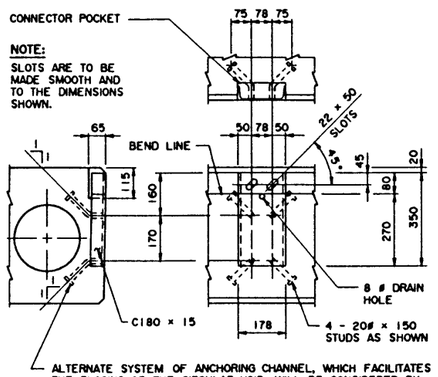
FABRICATOR'S NAME, YEAR OF MANUFACTURE, SERIAL NUMBER OF UNIT AND CS 750 TO BE CAST INTO BOTTOM OF SLAB IN 50 mm LETTERS.

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 8391.

2 R LIFTING HOOK POCKET
1:5

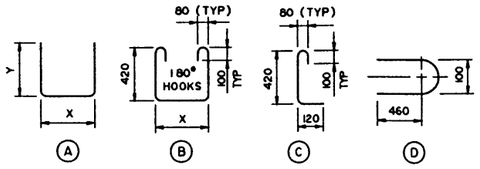


ALTERNATE SYSTEM OF ANCHORING CHANNEL, WHICH FACILITATES THE PLACING OF THE CIRCULAR VOID, WILL BE CONSIDERED BY THE DEPARTMENT

NOTE: ASSEMBLY TO BE HOT DIP GALVANIZED AFTER FABRICATION.

S 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

1 - 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 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).

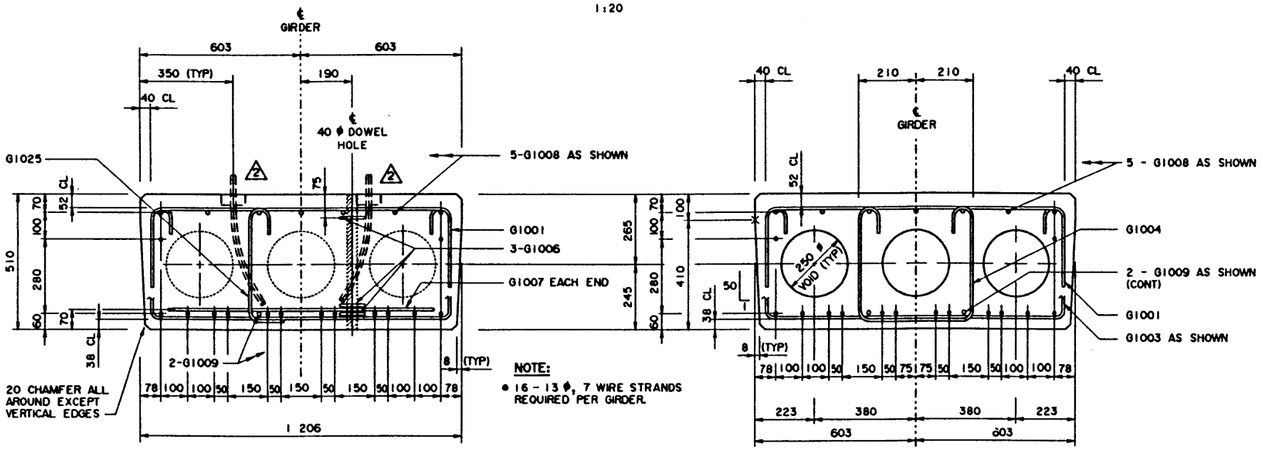
FABRICATION

3 - 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 • 110 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 7.62 t.

- WORK THESE DRAWINGS TOGETHER : S-1538, S-1539 AND S-1540 (4)



A SECTION
1:10

B SECTION
1:10

REV	DATE	REVISIONS	BY
6			
5			
4			
3	95-07-10	SPECIFICATION NOTE	LEA
2	94-04-05	LIFTING HOOK POCKET	LEA
1	92-01-10	CONCRETE MATERIALS NOTE	DHQ

ORIGINAL DRAWING APPROVED BY
N. BOYD
EXECUTIVE DIRECTOR BRIDGE ENGINEERING
AUG 23, 1990

Alberta TRANSPORTATION AND UTILITIES
BRIDGE ENGINEERING BRANCH

PRESTRESSED CONCRETE 8 m TYPE SC-510 INTERIOR GIRDER

DESIGNED	DRAWN	DATE	CHECKED	DATE	STREAM	LOCATION	HIGHWAY	FILE	SHEET	DRAWING
LEA	VMV	90-07-02	TJS	90-08-23					1 of 4	S-1538

FILE: BRIDGE S1538090.RV3 UPDATE JUL 10, 1995
TIME 1000 HR