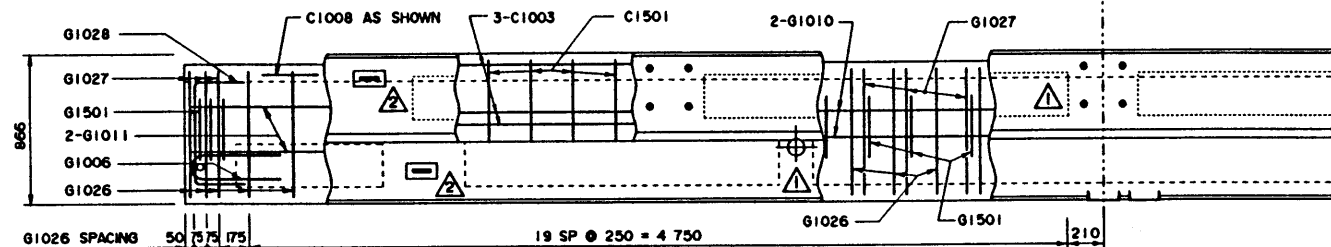
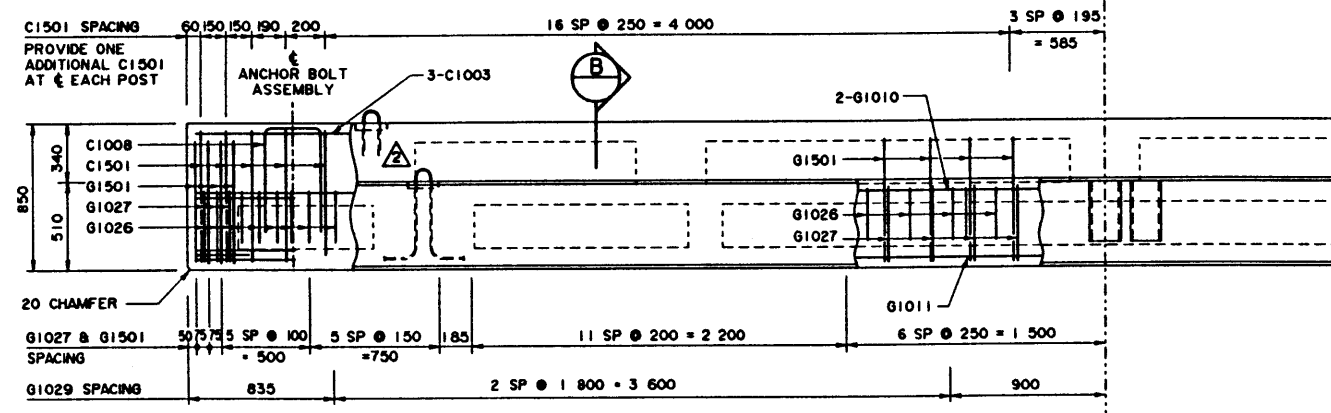


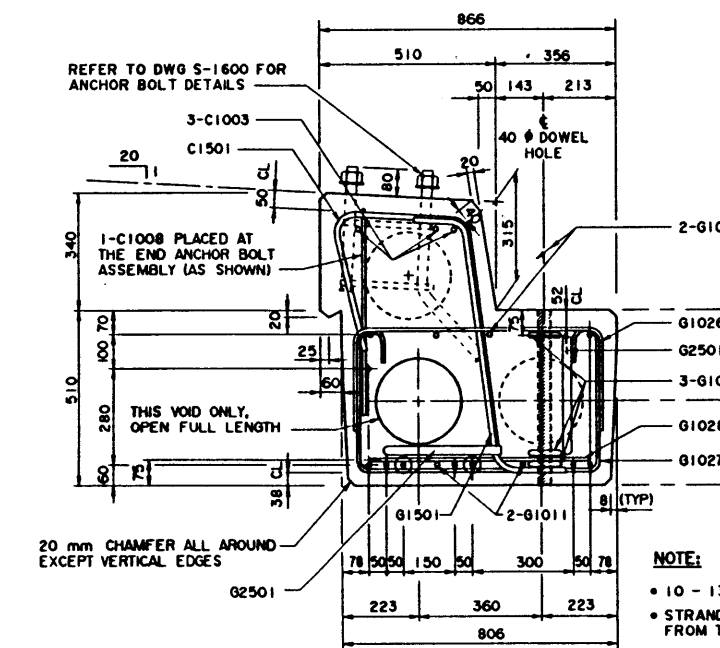
NOTE:
BEND REINFORCING BAR WHERE NECESSARY TO ACCOMMODATE CHANNEL CONNECTORS. STIRRUP SPACING TO BE MAINTAINED.



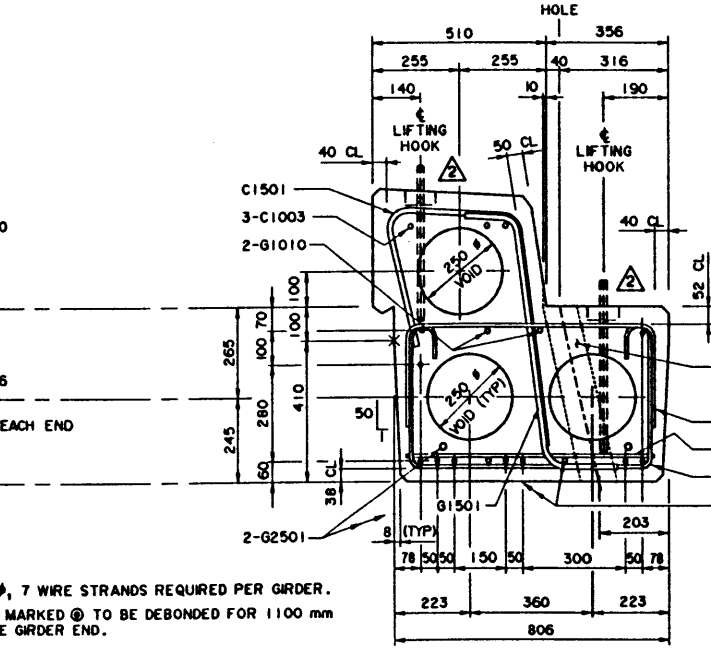
REINFORCEMENT PLAN
1:20



ELEVATION
1:20

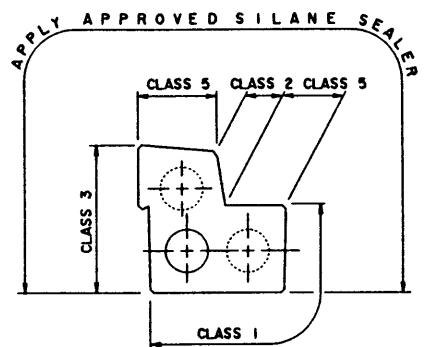
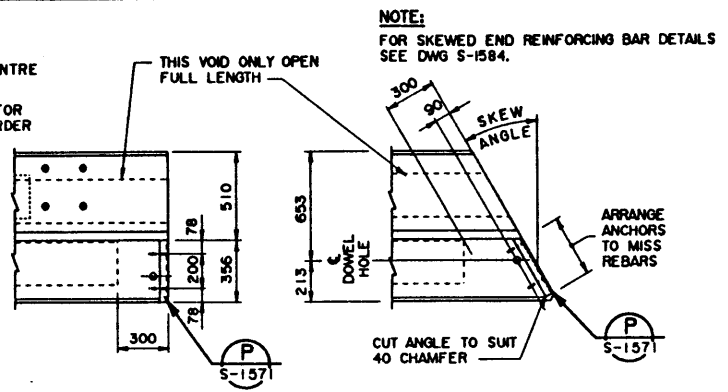


SECTION A
1:10



SECTION B
1:10

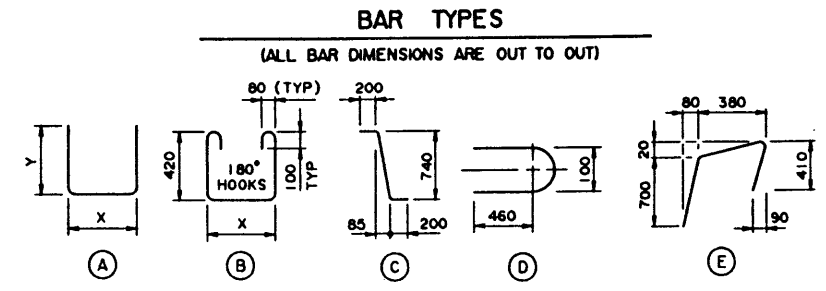
NOTE:
• 10 - 13 #, 7 WIRE STRANDS REQUIRED PER GIRDER.
• STRANDS MARKED @ TO BE DEBONDED FOR 1100 mm FROM THE GIRDER END.



GIRDER FINISHES
(BY FABRICATOR) 1:20

BAR LIST: FOR SQUARE GIRDER							
MARK	SIZE	NO	TYPE	X	Y	LENGTH	MASS
C1003	10	3	STR			10 570	25
C1008	10	2	A	310	600	1 510	2
C1501	15	52	E			1 455	119
G1006	10	6	D			1 080	5
G1010	10	2	STR			10 570	17
G1011	10	2	STR			10 470	16
G1026	10	47	A	725	300	1 325	49
G1027	10	61	B	725		1 820	87
G1028	10	2	A	600	300	1 200	2
G1029	10	6	STR			700	3
G1501	15	61	C			1 140	109
G2501	25	2	A	10 520	350	11 220	88

TOTAL kg : 522



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
 - 0.8 WHEEL LINES PER GIRDER
 - DEAD LOAD - GIRDER = 0.86 t/m
 - WEARING SURFACE = 0.09 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 13 #, 7 WIRE LOW RELAXATION STRAND (f_{pu} = 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
 - CURB SHALL BE CAST MONOLITHICALLY WITH GIRDER.
 - ANCHOR BOLT ASSEMBLIES SHALL BE CAST IN GIRDER AT SPACINGS SHOWN ON DRAWING S-1573.
 - ALL GALVANIZING SHALL CONFORM TO ASTM SPEC A123 OR A153 AS APPLICABLE.
 - BEND OR SHIFT REINFORCING WHERE REQUIRED TO CLEAR GIRDER CONNECTORS AND LIFTING HOOK ASSEMBLIES. STIRRUP SPACING SHALL BE MAINTAINED. FOR CONNECTOR AND LIFTING HOOK LOCATIONS SEE DWG S-1573.
- ERECTION**
 - ANY FREE SPACE BETWEEN CONNECTORS SHALL BE FILLED WITH DROP-IN WASHERS.
 - CALCULATED MASS OF ONE GIRDER IS 9.6 t.

REV	DATE	REVISIONS	BY							
DESIGNED	DRAWN	DATE	CHECKED	DATE	STREAM	LOCATION	HIGHWAY	FILE	SHEET	DRAWING
LEA	VMV	93-09-17	SBD	94-05-16					2 of 4	S-1572

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

Alberta TRANSPORTATION AND UTILITIES
BRIDGE ENGINEERING BRANCH
PRESTRESSED CONCRETE
10.67 m TYPE SC-510
CURB GIRDER

FILE NO: 11572-13-103 UPDATE: APR 14, 1995
TIME: 13:00 HR