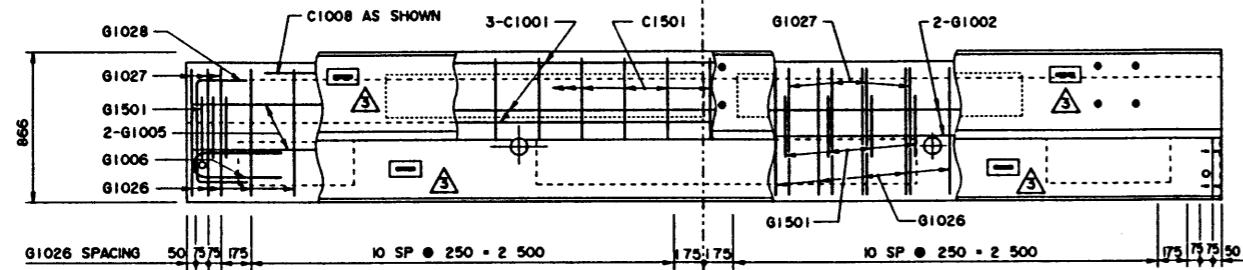
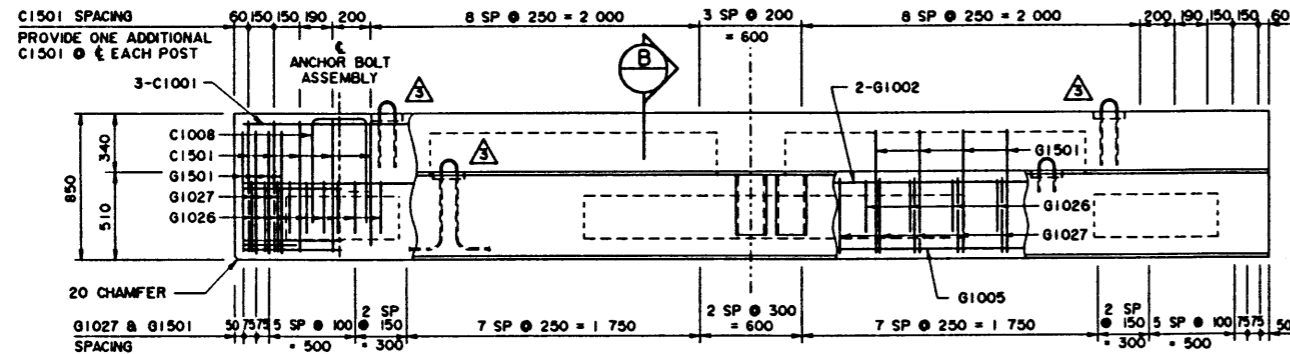


PLAN VIEW
1:20

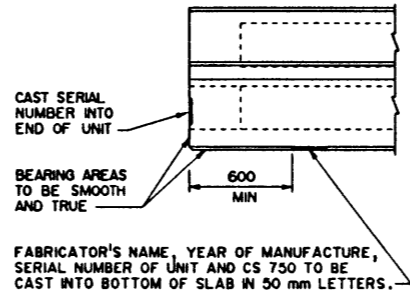
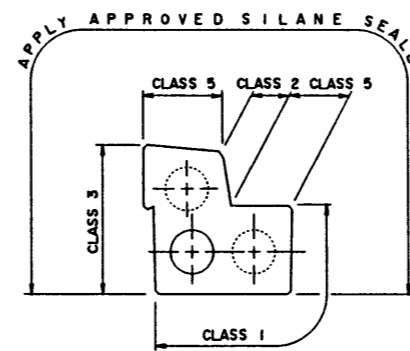
NOTE:
BEND REINFORCING BAR WHERE NECESSARY TO ACCOMMODATE CHANNEL CONNECTORS. STIRRUP SPACING TO BE MAINTAINED.



REINFORCEMENT PLAN
1:20



ELEVATION
1:20

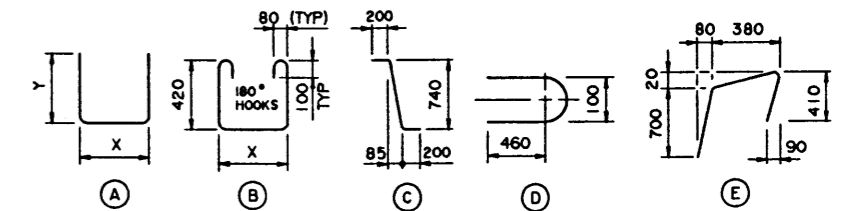


GIRDER FINISHES
(BY FABRICATOR)
1:20

| BAR LIST: FOR SQUARE GIRDER | | | | | | | |
|-----------------------------|------|----|------|-----|-----|--------|------|
| MARK | SIZE | NO | TYPE | X | Y | LENGTH | MASS |
| C1001 | 10 | 3 | STR | | | 5 900 | 14 |
| C1008 | 10 | 2 | A | 310 | 600 | 1 510 | 2 |
| C1501 | 15 | 31 | E | | | 1 455 | 71 |
| G1006 | 10 | 6 | D | | | 1 080 | 5 |
| G1002 | 10 | 2 | STR | | | 6 000 | 9 |
| G1005 | 10 | 2 | STR | | | 5 900 | 9 |
| G1026 | 10 | 29 | A | 725 | 300 | 1 325 | 30 |
| G1027 | 10 | 35 | B | 725 | | 1 820 | 50 |
| G1028 | 10 | 2 | A | 600 | 300 | 1 200 | 2 |
| G1501 | 15 | 35 | C | | | 1 140 | 63 |

TOTAL kg : 255

BAR TYPES
(ALL BAR DIMENSIONS ARE OUT TO OUT)



GENERAL NOTES

- ALL DRAWING REFERENCES ARE TO CURRENT DRAWINGS.
- DESIGN
 - CAN/CSA-56-88 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-56-88; CS-750
0.8 WHEEL LINES PER GIRDER
 - DEAD LOAD - GIRDER = 0.86 t/m
WEARING SURFACE = 0.09 t/m

MATERIALS

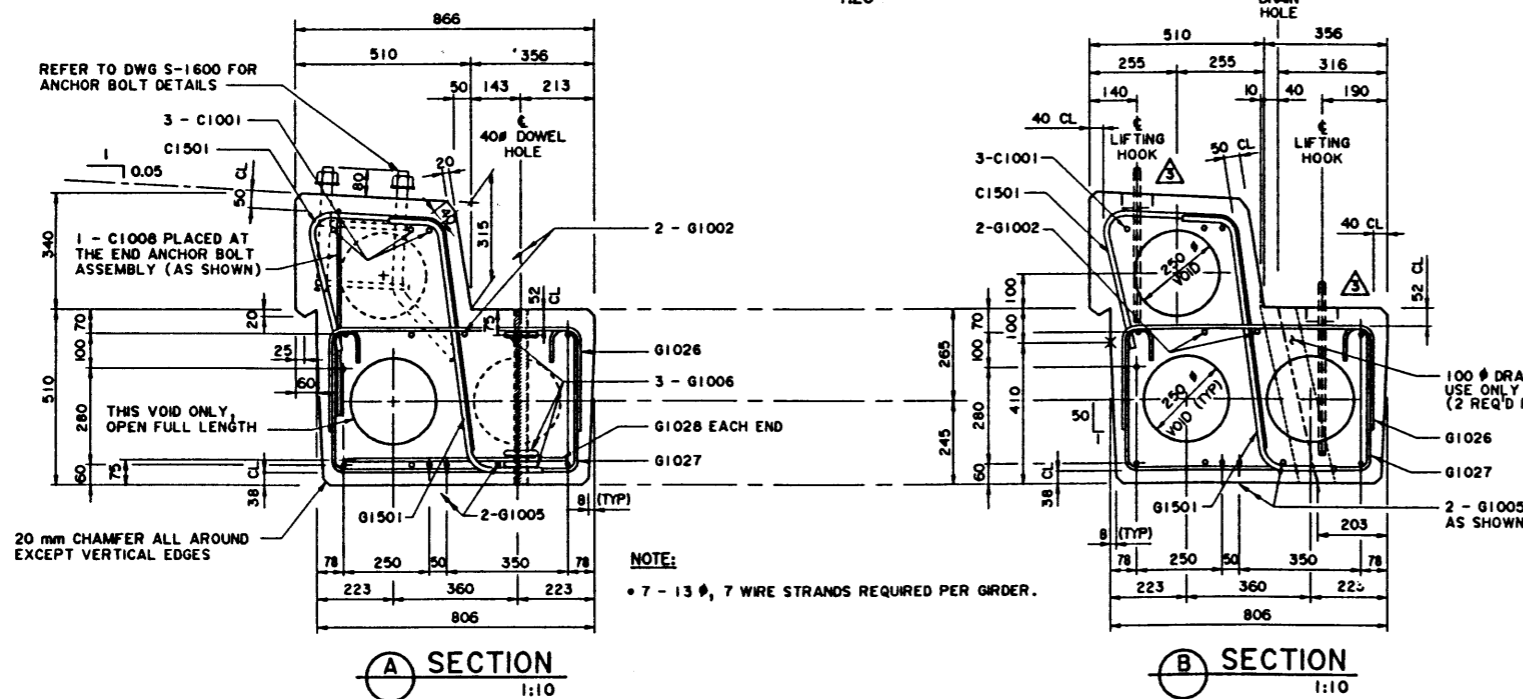
- CONCRETE SHALL CONTAIN SILICA FUME AND BE MADE OF LIGHTWEIGHT COARSE AGGREGATE AND NATURAL SAND FINES. UNIT WEIGHT OF SEMI-LIGHTWEIGHT CONCRETE SHALL BE 1920 kg/m³.
- 28 DAY CONCRETE STRENGTH - 35 MPa
- RELEASE STRENGTH - 28 MPa
- PRESTRESSING STEEL SHALL BE 13 ϕ , 7 WIRE LOW RELAXATION STRAND (f_{pu} = 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 = 113 kN/STRAND
- CURB SHALL BE CAST MONOLITHICALLY WITH GIRDER.
- ANCHOR BOLT ASSEMBLIES SHALL BE CAST IN GIRDER AT SPACINGS SHOWN ON DRAWING S-1561.
- 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-1561.

ERECTION

- ANY FREE SPACE BETWEEN CONNECTORS SHALL BE FILLED WITH DROP-IN WASHERS.
- CALCULATED MASS OF ONE GIRDER IS 5.6 t.



| REV | DATE | REVISIONS | BY |
|----------|------|--|-----|
| 95-07-10 | | SPECIFICATION NOTE | LEA |
| 94-04-05 | | LIFTING HOOK POCKET | LEA |
| 93-12-13 | | BAR LENGTH REVISED | SBD |
| 93-08-27 | | CONNECTOR AND LIFTING HOOK LOCATION NOTE, BAR LIST REVISED | LEA |

| | | | | | | | | | | |
|----------|-------|----------|---------|----------|--------|----------|---------|------|--------|---------|
| DESIGNED | DRAWN | DATE | CHECKED | DATE | STREAM | LOCATION | HIGHWAY | FILE | SHEET | DRAWING |
| LEA | VMV | 93-08-19 | SBD | 94-05-16 | | | | | 2 of 4 | S-1560 |

Alberta TRANSPORTATION AND UTILITIES
BRIDGE ENGINEERING BRANCH

PRESTRESSED CONCRETE
6.10 m TYPE SC-510
CURB GIRDER

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