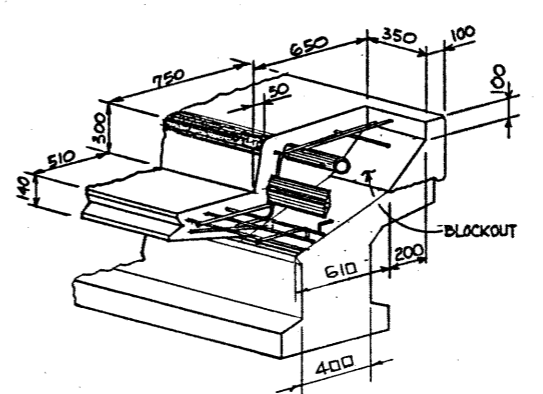
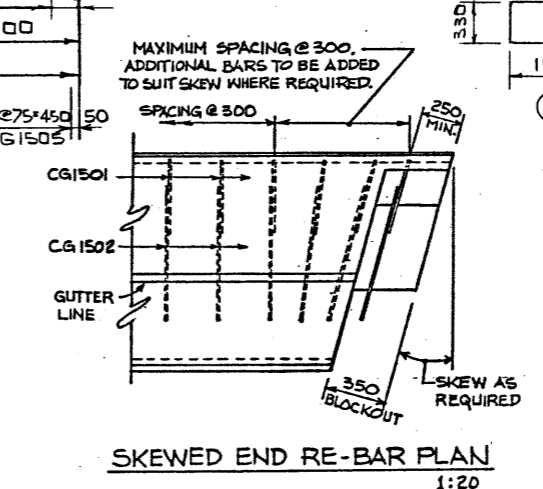
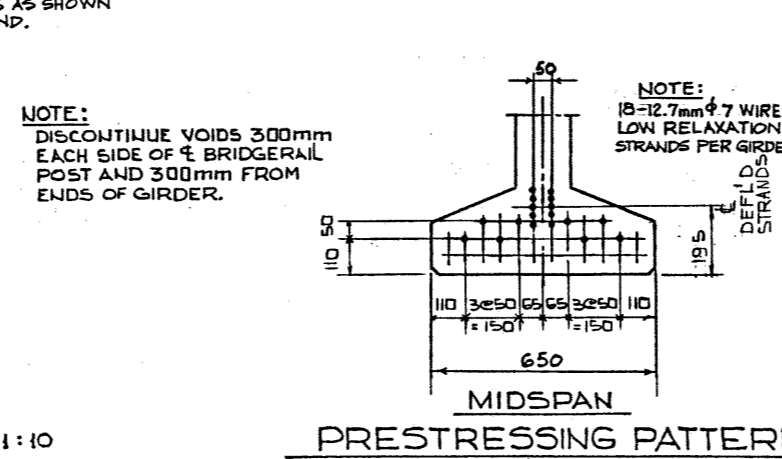
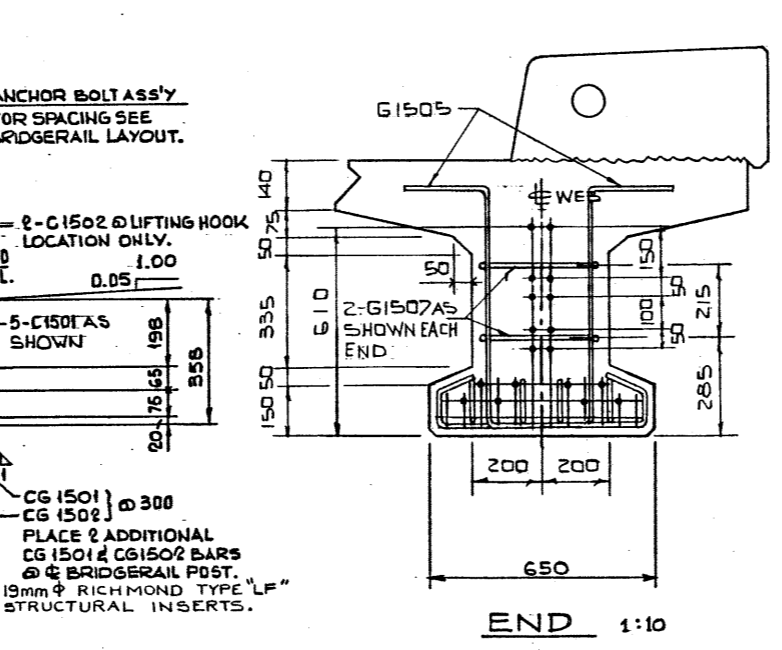
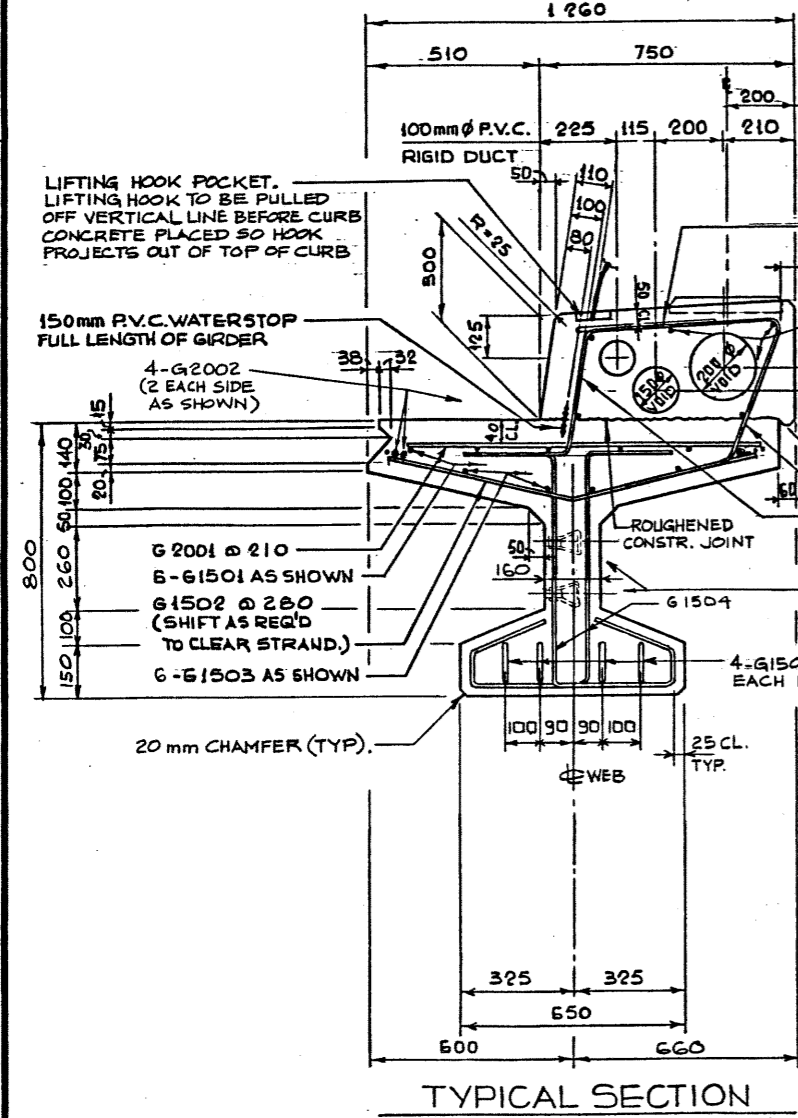


| BAR LIST ONE SQUARE GIRDER | | | | | | | | | | |
|----------------------------|------|-----|------|-----|-----|--------|------------------|------|--|--|
| MARK | SIZE | NO. | TYPE | X | Y | LENGTH | MASS | | | |
| G 1501 | 15 | 12 | STR. | | | 6750 | 127 | | | |
| G 1502 | 15 | 44 | A | | | 980 | 62 | | | |
| G 1503 | 15 | 6 | STR. | | | 11900 | 112 | | | |
| G 1504 | 15 | 62 | B | | | 1655 | 161 | | | |
| G 1505 | 15 | 48 | F | | | 1615 | 122 | | | |
| G 1506 | 15 | 8 | C | 945 | 110 | 2065 | 26 | | | |
| G 1507 | 15 | 4 | G | | | 3330 | 21 | | | |
| G 2001 | 20 | 58 | STR. | | | 960 | 131 | | | |
| G 2002 | 20 | 4 | STR. | | | 11900 | 112 | | | |
| C 1501 | 15 | 5 | STR. | | | 11900 | 93 | | | |
| C 1502 | 15 | 4 | C | 400 | 110 | 970 | 6 | | | |
| | | | | | | | TOTAL kg: | 270 | | |
| | | | | | | | TOTAL kg: | 880 | | |
| | | | | | | | GIRDER TOTAL kg: | 1150 | | |

- INDICATES EPOXY COATED PLAIN

* QUANTITY BASED ON 4 ANCHOR BOLT ASSEMBLIES. SEE BRIDGERAIL LAYOUT FOR ACTUAL NUMBER OF ANCHOR BOLT ASSEMBLIES.



GENERAL NOTES

DESIGN:

- C.S.A. CAN 3-S6-M78
- NO TENSION IN TOP FLANGE OF GIRDER.

LOADING:

- DEAD LOAD - GIRDER & CURB = 14.20 kN/M
- WEARING SURFACE, SHEAR KEYS, RAILS = 0.91 kN/M
- LIVE LOAD - C.S.A. CAN 3-S6-M78 - HS300 PLUS IMPACT - 0.95 WHEEL LINES/GIRDER

PRESTRESSING STEEL:

- PRESTRESSING STEEL SHALL BE 12.7 mm ϕ - 7 WIRE LOW RELAXATION STRAND (F_{pu} = 1860 MPa)
- INITIAL TENSIONING LOAD: 128.6 kN/STRAND
- DESIGN LOAD AFTER LOSSES: 103.4 kN/STRAND

MATERIALS:

- STANDARD WEIGHT CONCRETE WITH NOT LESS THAN 5% AIR ENTRAINMENT (WHEN MEASURED IN PLASTIC STATE) SHALL BE USED THROUGHOUT.
- 28 DAY STRENGTH: 35 MPa
- RELEASE STRENGTH: 28 MPa
- REINFORCING STEEL SHALL MEET THE REQUIREMENTS OF G30.12M GRADE 300

FABRICATION:

- GIRDERS SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT ALBERTA BRIDGE BRANCH "SPECIFICATION FOR THE MANUFACTURE OF PRESTRESSED AND PRECAST CONCRETE BRIDGE UNITS B-190M".
- ALL EXPOSED CONCRETE CORNERS TO HAVE 20 mm CHAMFER OR FILLET UNLESS OTHERWISE NOTED.
- GIRDER FORMS MUST BE ADJUSTABLE SUCH THAT THE TOP AND BOTTOM FLANGES OF THE GIRDER WILL FOLLOW THE SAME PARABOLIC CURVE WITH A MIDPOINT SAG AS SPECIFIED AT THE TIME OF CASTING.
- EXPECTED NET GIRDER CAMBER DUE TO PRESTRESS IS 10 mm.
- CURBS TO BE PLANT CAST WITH GIRDERS SIMPLY SUPPORTED.

ERECTION:

- LIFTING FORCE AT EACH HOOK MUST BE VERTICAL AT ALL TIMES.
- GIRDER SURFACE MUST BE LEVEL AT ALL TIMES.
- THEORETICAL MASS OF ONE GIRDER IS 12.4-TONNES.
- CAMBER DIFFERENTIAL TO BE ELIMINATED BEFORE WELDING FLANGE CONNECTORS, USING JACKING BEAM & LIFTING HOOKS AT MID SPAN.

NOTE: GIRDERS TO BE GIVEN ADEQUATE TEMPORARY LATERAL SUPPORT IMMEDIATELY AFTER STRIPPING AND UNTIL GIRDERS ARE CAST INTO PLACE.

SUPERSEDED

BY 5/554 AND 5/555 24-05-07

DESIGNED BY: J.A.S.

DRAWN BY: P.SZOTS

DATE: 82 03 03

M.P.-260

| DESIGNED | | DRAWN BY | | CHECKED BY | | DATE | | STREAM | | LOCATION | | MNY. NO. | | SCALE | | FILE NO. | | SHEET | | DWG. NO. | |
|-------------|--|---------------|--|------------|--|------|--|--------|--|----------|--|----------|--|-------|--|----------|--|---------|--|----------|--|
| T. MORRISON | | L.W. KOHLMANN | | | | | | | | | | | | SHOWN | | | | 5-15-11 | | | |

APPROVED

CHIEF BRIDGE ENGINEER

Alberta TRANSPORTATION BRIDGE AND STRUCTURAL ENGINEERING BRANCH METRIC

PRESTRESSED CONCRETE 12 m TYPE D.B.T. 800x1200 CURB GIRDER