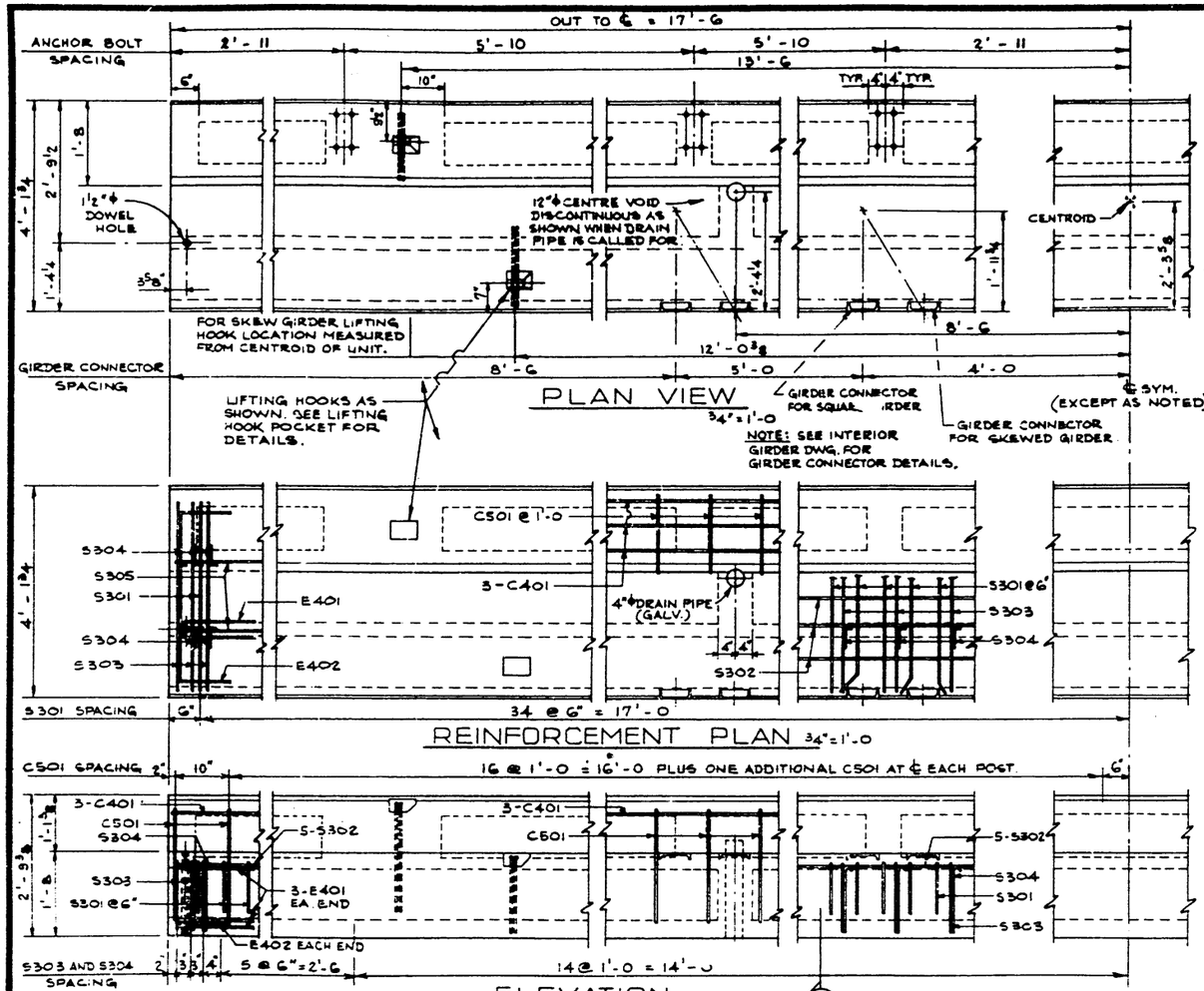


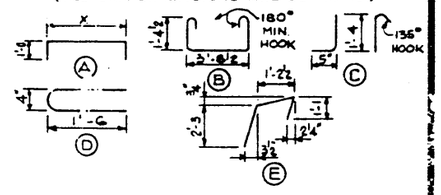

## BAR LIST: FOR UNSKEWED GIRDER

| MARK | SIZE | NO. | TYPE | X | Y | LENGTH | WEIGHT |
|---|---|---|---|---|---|---|---|
| S 301 | 3 | 69 | A | 3'-8½" | | 8'-9 | 149 |
| S 302 | 3 | 10 | STR. | | | 17'-10 | 67 |
| S 303 | 3 | 45 | B | | | 7'-4 | 124 |
| S 304 | 3 | 88 | C | | | 2'-1 | 69 |
| S 305 | 3 | 4 | STR. | | | 17'-8 | 27 |
| E 401 | 4 | 6 | D | | | 3'-4 | 13 |
| E 402 | 4 | 2 | A | 3'-4 | | 5'-4 | 7 |
| | | | | | | | |
| C 401 | 4 | 3 | STR. | | | 34'-8 | 69 |
| C 501 | 5 | 42 | E | | | 4'-7 | 201 |
| | | | | | | | |

TOTAL LBS: 726

## BAR TYPES N.T.S.

(ALL BAR DIMENSIONS ARE OUT TO OUT)




## GENERAL NOTES

DESIGN:

- A.A.S.H.O. 1973 SPECIFICATION EXCEPT AS MODIFIED BELOW.
  - ALLOWABLE TENSION AT ℄ 80% MODULUS OF RUPTURE.
  - NO TENSION IN DECK SURFACE.
  - WEB REINFORCEMENT - ACCORDING TO A.C.I. 318-71 BUT NOT LESS THAN A.A.S.H.O. MINIMUM.
- LOADING LIVE LOAD - A.A.S.H.O. HS-25-44 ONE WHEEL LINE PER GIRDER
  DEAD LOAD - GIRDER = 0.663 KIPS/FT.
  WEARING SURFACE = 0.063 KIPS/FT.

MATERIALS:

- CONCRETE IN GIRDER SHALL BE MADE OF LIGHTWEIGHT COARSE AGGREGATE AND SAND FINES.
- CONCRETE 28 DAY STRENGTH 5,000 PSI.
- RELEASE STRENGTH 4,000 PSI.
- UNIT WEIGHT OF SEMI-LIGHTWEIGHT CONCRETE 120 LB./CU. FT.
- PRESTRESSING STEEL SHALL BE 1/2" DIAMETER - 7 WIRE 270 K STRAND.

FABRICATION:

- GIRDERS SHALL CONFORM TO THE REQUIREMENTS OF THE ALBERTA BRIDGE BRANCH SPECIFICATION FOR THE MANUFACTURE OF PRESTRESSED CONCRETE BRIDGE UNITS.
- FORCE IN PRESTRESSING STEEL:
  INITIAL TENSIONING LOAD = 28.73 K/STRAND
  DESIGN LOAD AFTER LOSSES = 22.74 K/STRAND
- CURB TO BE CAST MONOLITHICALLY WITH GIRDER.
- ANCHOR BOLT ASSEMBLIES SHALL BE CAST IN GIRDER AT SPACINGS AS SHOWN.
- BEND OR SHIFT REINFORCING WHERE REQUIRED TO CLEAR GIRDER CONNECTORS, LIFTING HOOKS, & ANCHOR BOLT ASSEMBLIES. STIRRUP SPACING TO BE ADJUSTED ACCORDINGLY.

ERECTION:

- ANY FREE SPACE BETWEEN CONNECTORS SHALL BE FILLED WITH WASHERS.
- CALCULATED WEIGHT OF ONE GIRDER IS 23,990 LBS.

SUPERSEDED

SUPERSEDED BY S-1208-74 (1)

| NO. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | REVISIONS | |

APPROVED

DATE Oct 1/1974

Alberta HIGHWAYS AND TRANSPORT BRIDGE BRANCH

# 35 FT. TYPE VS-20 CURB GIRDER SEMI-LIGHTWT. CONCRETE

| DESIGNED | DRAWN BY | DATE | CHECKED BY | DATE | STRUCT. | LOCATION | HWY. NO. | SCALE | FILE NO. | SHEET | DRG. NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| R G Q | V G B | FEB. /74 | | | | | | SHOWN | | - | S-1208 |

M.P. 211