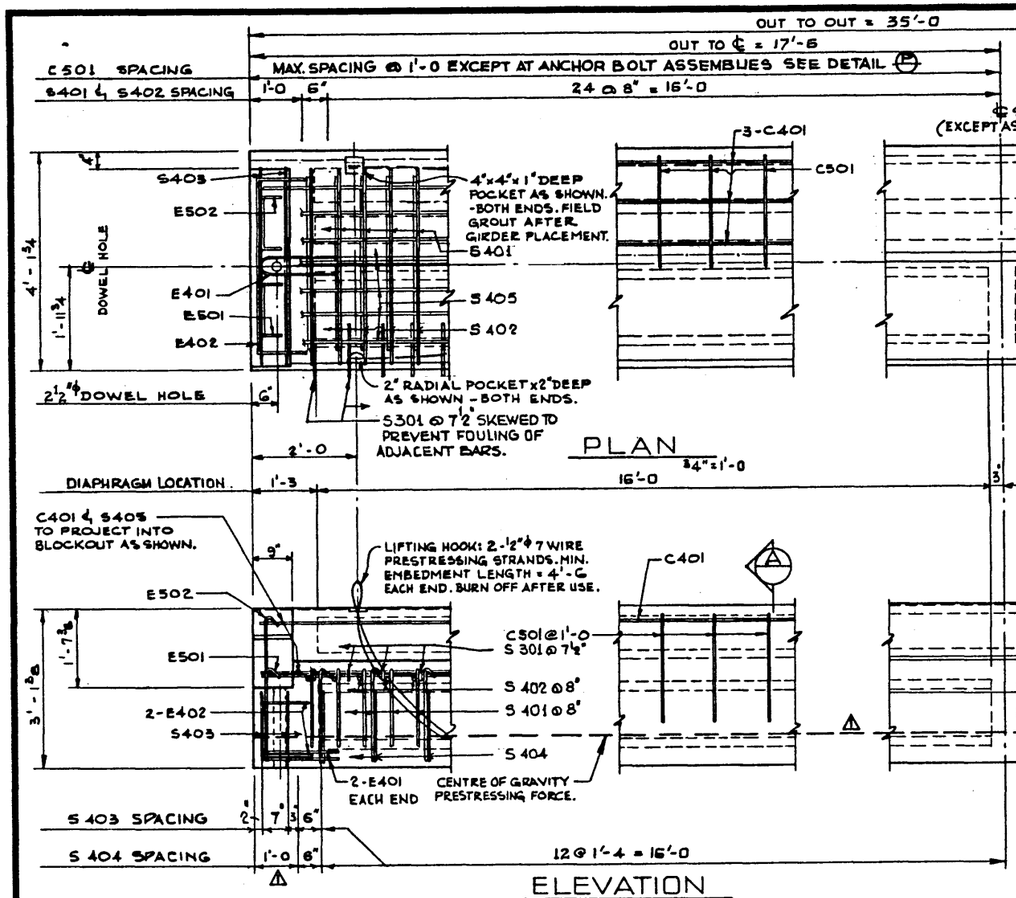
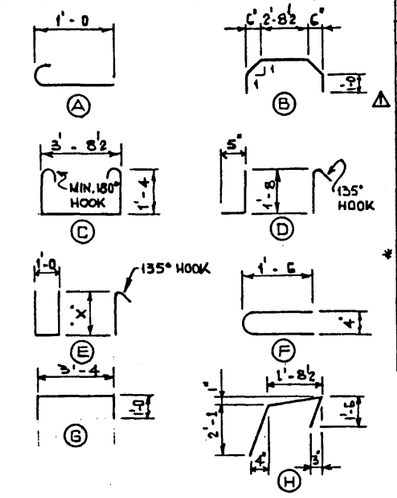


BAR TYPES N.T.S.

(ALL BAR DIMENSIONS ARE OUT TO OUT)



BAR LIST: FOR UNSKEWED GIRDER

MARK	SIZE	NO.	TYPE	X	Y	LENGTH	WEIGHT
S 301	3	54	A			1'-5	29
S 401	4	51	B			6'-2	210
S 402	4	51	STR.			3'-4	114
S 403	4	51	C			7'-3	150
S 404	4	27	D			2'-6	45
S 405	4	7	STR			34'-8	162
E 401	4	4	F			3'-4	9
E 402	4	4	G			5'-4	14
E 501	5	2	E	1'-8½		6'-4	11
E 502	5	2	E	2'-8		7'-3	15
C 401	4	3	STR			34'-8	69
* C 501	5	46	H			5'-4	256

TOTAL LBS: 1091

* ASSUMED 4 POSTS

△ 1084

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. 15-25-44
  0.70 WHEEL LINE PER GIRDER
  DEAD LOAD - GIRDER = 0.88 KIPS/FT.
  WEARING SURFACE = 0.10 KIPS/FT.

MATERIALS:

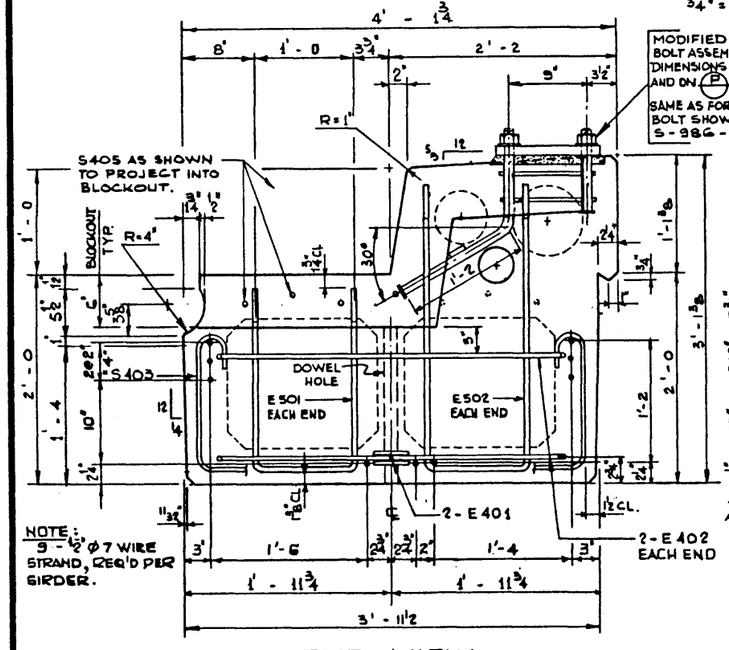
- CONCRETE IN GIRDER SHALL BE MADE OF LIGHTWEIGHT COARSE AGGREGATE AND SAND FINES.
- CONCRETE IN CURB SHALL BE MADE OF STANDARD WEIGHT AGGREGATES.
- CONCRETE 28 DAY STRENGTH 5000 PSI.
- RELEASE STRENGTH 4000 PSI.
- UNIT WEIGHT OF SEMI-LIGHTWEIGHT CONCRETE 120 LB./CU. FT.
- PRESTRESSING STEEL SHALL BE 1/2" DIAMETER - 7 WIRE 270 K STRAND.

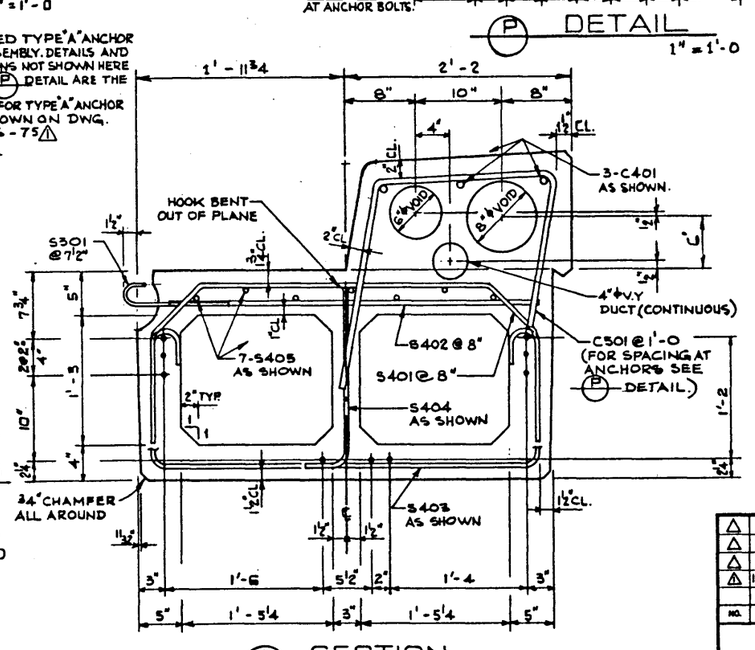
FABRICATION:

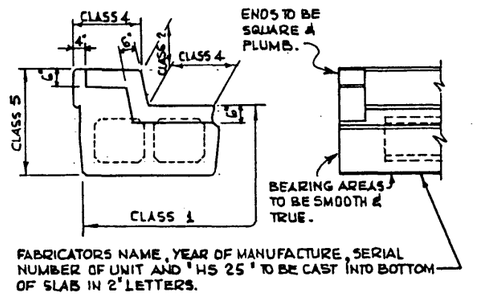
- GIRDERS SHALL CONFORM TO THE REQUIREMENTS OF THE ALBERTA BRIDGE BRANCH SPECIFICATION FOR THE MANUFACTURE OF PRESTRESSED CONCRETE BRIDGE UNITS.
- FORCE IN PRESTRESSING STEEL:
  INITIAL TENSIONING LOAD = 28.73 K/STRAND
  DESIGN LOAD AFTER LOSSES = 23.29 K/STRAND
- CURB TO BE CAST MONOLITHICALLY WITH GIRDER.
- ANCHOR BOLT ASSEMBLIES SHALL BE CAST IN GIRDER AT SPACINGS AS REQUIRED.

ERECTION:

- LIFTING FORCE AT EACH HOOK SHALL NOT EXCEED 35° FROM THE VERTICAL. GIRDER SURFACE MUST BE LEVEL AT ALL TIMES.
- CALCULATED WEIGHT OF ONE GIRDER IS 28,180 LBS.







FABRICATORS NAME, YEAR OF MANUFACTURE, SERIAL NUMBER OF UNIT AND "HS 25" TO BE CAST INTO BOTTOM OF SLAB IN 2" LETTERS.

GIRDER FINISHES

½" - 1' - 0

(1)

NO.	DATE	DESCRIPTION	BY
△			
△			
△			
△	10 DEC. 75	REF. DWG. S-986-74 TO 75, 3404 SPACING, STRAND DEFLECTION	D.K.D.

REVISIONS

APPROVED
CHIEF BRIDGE ENGINEER
DATE JAN 8 1976

Alberta HIGHWAYS AND TRANSPORT BRIDGE BRANCH

35 FT. TYPE RD-24 CURB GIRDER SEMI-LIGHTWT. CONCRETE

DESIGNED	DRAWN BY	DATE	CHECKED BY	DATE	STREAM	LOCATION	HWY. NO.	SCALE	FILE NO.	SHEET	DWG. NO.
R.G.Q. D.K.D.	V.G.B. P.SZ.	MAY'74						SHOWN		..... OF	S-1214

M.P. 213