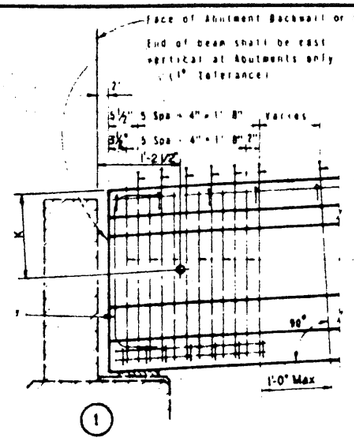
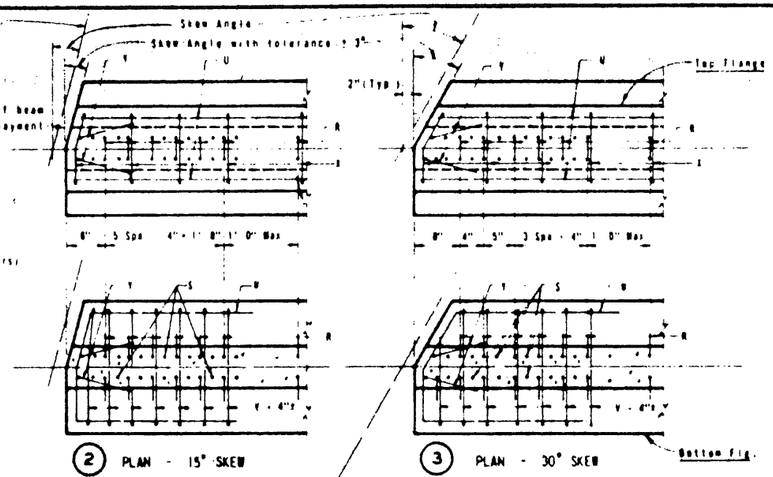


① ELEV. OF BM AT ABUTMENT



② PLAN - 15° SKEW

③ PLAN - 30° SKEW

NOTE

Reinforcing patterns shown above are to be used as guides in determining the reinforcement for the actual beam type and skew angle used. In general, the distances between consecutive Bars R and or S shall be 2". This spacing may be varied in order to avoid diafram holes. However, a minimum cross sectional area equivalent to that of Bars R and S in square beam ends shall be provided

DETAILS OF SKEWED BEAM ENDS

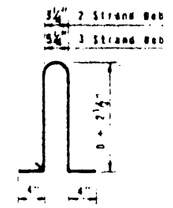
ADDITIONAL BARS R

BRIDGE	SPAN	M	BRIDGE	SPAN	M
SSW RAILWAY	54'-4 1/2"	51			

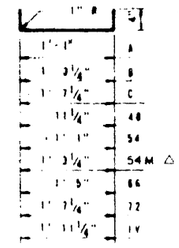
△

NOTE

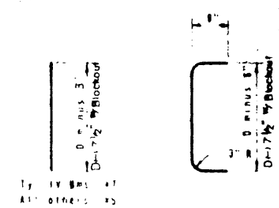
It is permissible for bars or strands to come in contact with materials used in forming anchor and diafram holes



BARS R - #4 △



BARS V - #3



Try IV Bms at All others #5

BARS S

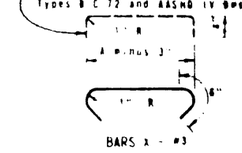
Splices permitted (40" Min C C Splices) No portion of bar less than 10"

BARS Y - #6

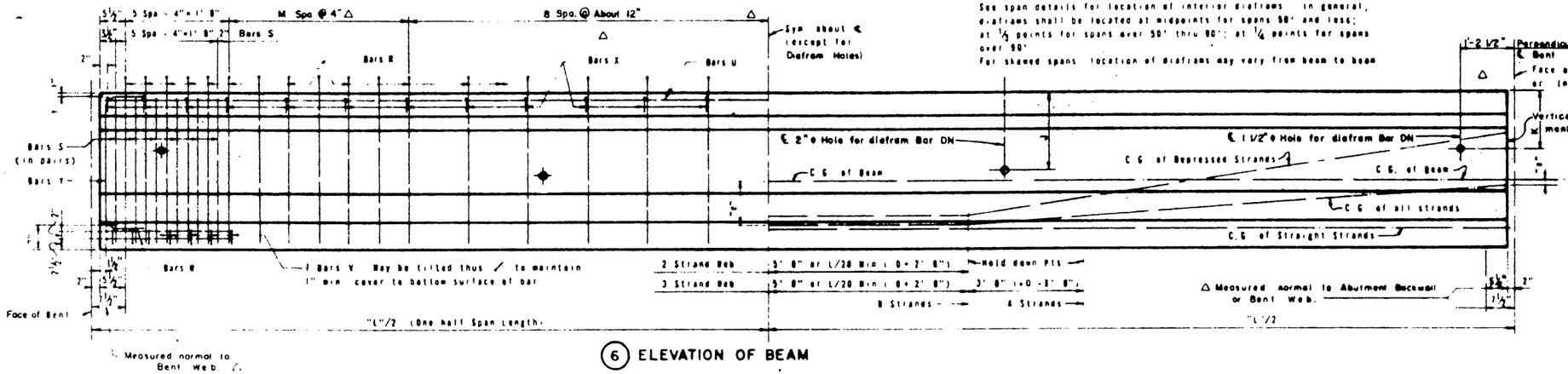
10" Min Lap

8a angle minus 3"

BARS U #5



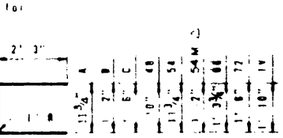
BARS X - #3



⑥ ELEVATION OF BEAM

NOTE

See span details for location of interior diaframs. In general, diaframs shall be located at midpoints for spans 50' and less; at ⅓ points for spans over 50' thru 90'; at ¼ points for spans over 90'.
For skewed spans location of diaframs may vary from beam to beam



BARS W - #5

NOTE All reinforcing bars for beams shall be ASTM Grade 60 steel

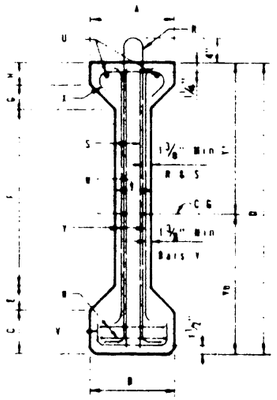
GENERAL NOTES

Designed in accordance with current A.A.S.H.T.O. Specifications

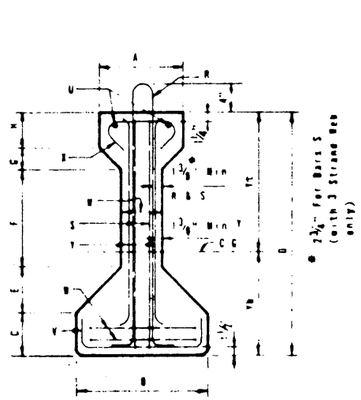
All concrete shall be Class H

Bottom corners of all beam flanges and outside corners of exterior beam ends shall be chamfered ¾" or rounded to a ¾" radius

The use of diafram holes for lifting purposes will not be permitted



⑦ TYPES 48, 54, 54M, 66, & 72 BEAMS



⑧ TYPES A, B, C, & AASHTO IV BMS.

BEAM DIMENSIONS AND SECTION PROPERTIES

BEAM TYPE	A IN	B IN	C IN	D IN	E IN	F IN	G IN	H IN	J IN	K IN	W IN	Y1 IN	Yb IN	AREA IN²	I IN⁴	WT PLF LB
A	12	16	5	28	5	11	3	4	13	15	6	15 39	12 61	275 4	22 658	287
B	12	18	6	34	5⅝	14	2⅜	5½	17	15	6½	19 07	14 93	360 3	43 177	375
C	14	22	7	40	7½	16	3½	6	21	15	7	22 91	17 09	494 9	82 602	516
48	14	14	7	48	4	29½	4	3½	31	15	6	25 13	22 87	403 4	101 950	420
54	16	16	8	54	5	32	5	4	35	15	6	28 47	25 53	493 4	164 022	514
△ 54M	18	18	8	54	5	32	5	4	39	15	8	28.20	25.79	601.4	190,522	626
66	20	20	10	66	6½	38	6½	5	43	15	7	34 93	31 07	740 9	374 688	772
72	22	22	11	72	7½	40½	7½	5½	47	15	7	38 27	33 73	863 4	532 060	899
IV	20	26	8	54	9	23	6	8	33	18	8	29 25	24 75	788 4	260 403	821

Tolerance for Dimensions J & K = (+1/2" ; -1") (Same tolerance to be applied to all holes for given diafram Bar DN)

REPRODUCED FROM

TEXAS STATE DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION

STANDARD DRAWING Gp A
Rev. 4-82

NO	REVISION	BY	DATE
△	General Revisions	TCB	10-83

TEXAS TURNPIKE AUTHORITY

DALLAS NORTH TOLLWAY

PRESTRESSED CONCRETE BEAMS
SSW RAILWAY UNDERPASS
BEAM DETAILS

HNTB — SECTION

DRAWN THD DATE 4-82 DESIGNED THD DATE 4-82
CHECKED BDH DATE 3 16 83 BY PAT NONE

STANDARD DRAWING NO 23A

CONTRACT NO. DNT-114

004154