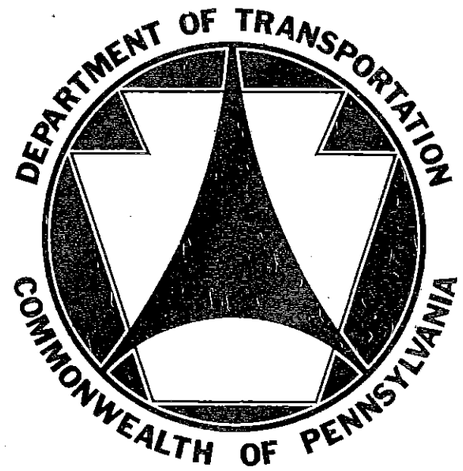
TC-7700 SERIES

TC-7713

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION



TRAFFIC STANDARDS
SIGNING

[redacted]

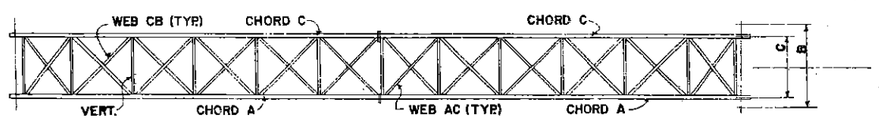
3-30-71

PUB- PUB-111

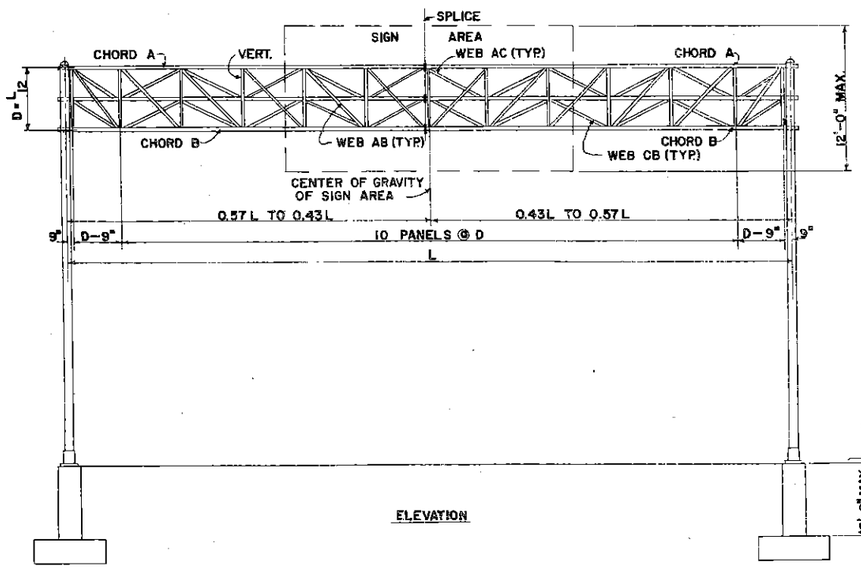
BUREAU OF TRAFFIC ENGINEERING

FORM 4237 REV 3-67

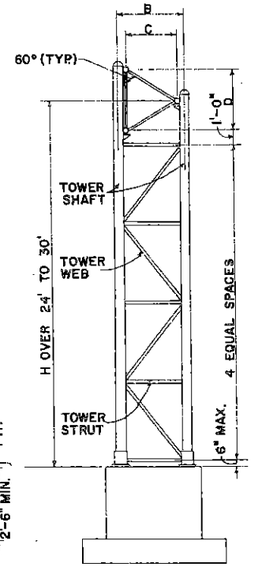
DISTRICT	COUNTY	ROUTE	SECTION	SHEET

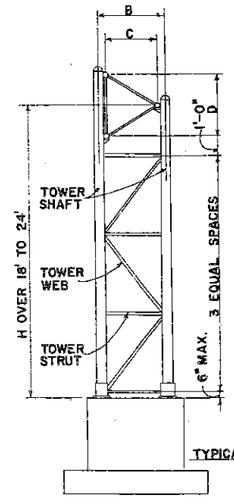


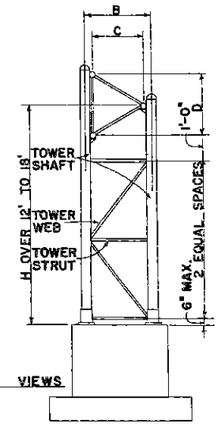
PLAN

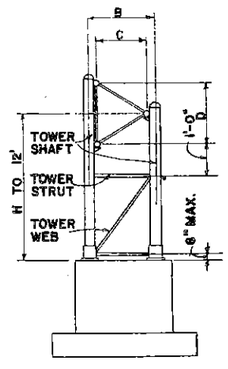


ELEVATION









TYPICAL END VIEWS

L	SIGN AREA	TRUSS MEMBERS CHORDS A OR B	CHORDS C	WEBS AB	WEBS AC OR CB	VERT.	TOWER MEMBERS SHAFTS H TO 12'	SHAFTS H OVER 12' TO 18'	SHAFTS H OVER 18' TO 24'	SHAFTS H OVER 24' TO 30'	WEB	STRUT	E	PEDESTAL BARS "P" H TO 12'	BARS "P" H OVER 12' TO 18'	BARS "P" H OVER 18' TO 24'	BARS "P" H OVER 24' TO 30'	FOOTING TYPE H TO 12'	H OVER 12' TO 18'	H OVER 18' TO 24'	H OVER 24' TO 30'
OVER 50' TO 60'	150																				
	200	3½"x5/16	3½"x5/16	2½"x5/16	2½"x5/16	1¾"x5/16	6"x5/16	7"x5/16	9"x5/16	10½"x5/16	3"x5/16	3½"x5/16	7'-6"	18 #4	19 #4	22 #4	18 #5	411	511	514	613
	250	3½"x5/16	3½"x5/16	2½"x5/16	2½"x5/16	1¾"x5/16	6½"x5/16	7½"x5/16	9½"x5/16	11"x5/16	3"x5/16	3½"x5/16	7'-6"	18 #4	20 #4	24 #4	20 #5	510	512	612	614
	300	3½"x5/16	3½"x¼	2½"x5/16	2½"x¼	1¾"x5/16	6½"x5/16	8½"x5/16	10½"x5/16	10½"x¼	3½"x5/16	3½"x5/16	7'-6"	18 #4	22 #4	20 #5	24 #5	511	612	613	714
	350	3½"x5/16	3½"x¼	2½"x5/16	2½"x¼	1¾"x5/16	7½"x5/16	9½"x5/16	10½"x¼	12½"x¼	3½"x5/16	3½"x5/16	7'-6"	20 #4	18 #5	22 #5	20 #6	512	613	614	715
	400	3½"x5/16	3½"x¼	2½"x5/16	2½"x¼	1¾"x5/16	7½"x5/16	9½"x5/16	10½"x¼	12½"x¼	3½"x5/16	3½"x5/16	7'-6"	22 #4	20 #5	18 #6	22 #6	512	613	714	715
	450	3½"x¼	3½"x¼	2½"x5/16	2½"x5/16	1¾"x5/16	8½"x5/16	10½"x5/16	10½"x¼	11½"x5/16	3½"x5/16	3½"x5/16	7'-6"	24 #4	22 #5	20 #6	24 #6	613	614	715	716
	500																				
	550																				
	600	4¾"x5/16	4¾"x5/16	2½"x5/16	2½"x5/16	1¾"x5/16	8½"x5/16	11½"x5/16	12½"x¼	12½"x⅜	3½"x5/16	2½"x5/16	7'-6"	22 #5	20 #6	24 #6	22 #7	613	715	717A	817
OVER 60' TO 70'	150	3½"x5/16	3½"x5/16	2½"x5/16	2½"x5/16	2½"x5/16	6½"x5/16	7½"x5/16	9½"x5/16	10½"x5/16	3½"x5/16	2½"x5/16	8'-6"	20 #4	20 #4	20 #4	22 #4	510	511	612	613
	200	3½"x5/16	3½"x5/16	2½"x5/16	2½"x5/16	2½"x5/16	6½"x5/16	7½"x5/16	9½"x5/16	11"x5/16	3½"x5/16	2½"x5/16	8'-6"	20 #4	20 #4	22 #4	26 #4	510	512	613	614
	250	3½"x5/16	3½"x¼	2½"x5/16	2½"x¼	2½"x5/16	7"x5/16	8½"x5/16	10½"x5/16	10½"x¼	3½"x5/16	2½"x5/16	8'-6"	20 #4	20 #4	26 #4	20 #5	511	612	613	714
	300	3¼"x5/16	3¼"x¼	2½"x5/16	2½"x¼	2½"x5/16	7"x5/16	9"x5/16	11"x5/16	11"x¼	3½"x5/16	2½"x5/16	8'-6"	20 #4	22 #4	28 #4	24 #5	511	613	614	715
	350	3½"x5/16	3½"x¼	2½"x5/16	2½"x¼	2½"x5/16	7½"x5/16	9"x5/16	10½"x¼	12"x¼	3½"x5/16	2½"x5/16	8'-6"	20 #4	26 #4	22 #5	26 #5	512	613	615	715
	400	3½"x5/16	3½"x¼	2½"x5/16	2½"x¼	2½"x5/16	7½"x5/16	9½"x5/16	10½"x¼	12½"x¼	3½"x5/16	2½"x5/16	8'-6"	22 #4	28 #4	24 #5	28 #5	512	614	715	716
	450	4"x5/16	4"x¼	2½"x5/16	2½"x¼	2½"x5/16	8½"x5/16	10½"x¼	12"x¼	12½"x¼	3½"x5/16	2½"x5/16	8'-6"	24 #4	20 #5	26 #5	22 #6	613	614	715	716
	500	4"x5/16	4"x¼	2½"x5/16	2½"x¼	2½"x5/16	8½"x5/16	10½"x¼	12"x¼	12½"x¼	3½"x5/16	2½"x5/16	8'-6"	26 #4	22 #5	28 #5	24 #6	613	715	716	817
	550	4¼"x5/16	4¼"x¼	2½"x5/16	2½"x¼	2½"x5/16	8½"x5/16	11"x¼	12"x¼	12½"x⅜	3½"x5/16	2½"x5/16	8'-6"	28 #4	24 #5	22 #6	26 #6	614	715	716	817
	600	4¼"x5/16	4¼"x¼	2½"x5/16	2½"x¼	2½"x5/16	9"x5/16	10½"x¼	12"x¼	12½"x⅜	3½"x5/16	2½"x5/16	8'-6"	20 #5	26 #5	24 #6	20 #7	614	716	817	818
	650	4½"x¼	4½"x¼	2½"x5/16	2½"x5/16	2½"x5/16	9"x5/16	10½"x¼	12"x¼	12½"x⅜	3½"x5/16	2½"x5/16	8'-6"	22 #5	28 #5	26 #6	30 #6	614	716	717a	818a
OVER 70' TO 80'	200	3½"x5/16	3½"x5/16	2½"x5/16	2½"x5/16	2½"x5/16	6½"x5/16	8½"x5/16	9½"x5/16	10½"x5/16	3½"x5/16	2½"x5/16	9'-6"	22 #4	22 #4	22 #4	24 #4	511	512	612	614
	250	3½"x5/16	3½"x5/16	2½"x5/16	3"x5/16	2½"x5/16	6½"x5/16	8½"x5/16	10½"x5/16	10½"x¼	3½"x5/16	2½"x5/16	9'-6"	22 #4	22 #4	24 #4	28 #4	511	513	613	615
	300	3½"x5/16	3½"x5/16	2½"x5/16	3"x5/16	2½"x5/16	7"x5/16	9"x5/16	10½"x¼	12"x¼	3½"x5/16	2½"x5/16	9'-6"	22 #4	22 #4	28 #4	22 #5	512	613	614	715
	350	3¾"x5/16	3¾"x¼	2½"x5/16	3"x5/16	2½"x5/16	7½"x5/16	9"x5/16	10½"x¼	11½"x¼	3½"x5/16	2½"x5/16	9'-6"	22 #4	24 #4	30 #4	24 #5	512	614	615	715
	400	4½"x5/16	4½"x5/16	2½"x5/16	3"x5/16	2½"x5/16	7½"x5/16	9½"x5/16	10½"x¼	11½"x5/16	3½"x5/16	2½"x5/16	9'-6"	22 #4	26 #4	22 #5	26 #5	513	614	617	716
	450	4¼"x5/16	4¼"x¼	2½"x5/16	3"x5/16	2½"x5/16	8½"x5/16	10½"x¼	12"x¼	12½"x5/16	3½"x5/16	2½"x5/16	9'-6"	22 #4	30 #4	24 #5	22 #6	515	614	715	717
	500	4½"x5/16	4½"x¼	2½"x5/16	3"x5/16	2½"x5/16	8½"x5/16	10½"x¼	12"x¼	12½"x5/16	3½"x5/16	2½"x5/16	9'-6"	24 #4	22 #5	26 #5	24 #6	516	616	716	718
	550	4¾"x5/16	4¾"x¼	2½"x5/16	3"x5/16	2½"x5/16	9"x5/16	10½"x¼	12"x¼	12½"x5/16	3½"x5/16	2½"x5/16	9'-6"	26 #4	22 #5	28 #5	24 #6	613	616	717	817
	600	4¾"x5/16	4¾"x¼	2½"x5/16	3"x5/16	2½"x5/16	9"x5/16	10½"x¼	12"x¼	12½"x5/16	3½"x5/16	2½"x5/16	9'-6"	26 #4	24 #5	22 #6	26 #6	614	716	717	818
	650	5½"x5/16	5½"x5/16	2½"x5/16	3"x5/16	2½"x5/16	9"x5/16	10½"x¼	12"x5/16	12½"x5/16	3½"x5/16	2½"x5/16	9'-6"	20 #5	26 #5	24 #6	26 #6	614	716	718	818

NOTE:
DESIGN TABLES ON SHEETS 1 THRU 6 AND SHEET 11 AS SHOWN ARE BASED ON A WIND PRESSURE OF 25 lbs. PER SQ. FT.
FOR OTHER WIND PRESSURES DETERMINE AN EQUIVALENT SIGN AREA AS FOLLOWS
EQUIVALENT SIGN AREA = $\frac{\text{ACTUAL SIGN AREA} \times \text{WIND LOAD}}{25}$
DESIGN TABLES MAY THEN BE USED DIRECTLY BY SUBSTITUTING "EQUIVALENT SIGN AREA" FOR COLUMNS LABELED "SIGN AREA."

NOTES
BARS P AS TABULATED ARE THE TOTAL NUMBER OF VERTICAL BARS IN THE PEDESTAL.
FOR DETAILS OF TRUSS SEE STD. DRAWINGS (SHEET 8)
FOR DETAILS OF PEDESTAL AND FOOTING SEE STD. DRAWINGS (SHEET 7).
B= 0.866 D + CHORD DIAMETER + TOWER SHAFT DIAMETER + $3\frac{15}{16}$".
ALL MATERIAL UNLESS OTHERWISE SPECIFIED SHALL BE STRUCTURAL ALUMINUM 6061-T6.
FOR TRUSS CAMBER SEE SHEET 8.
FOR GENERAL NOTES SEE SHEET 7
FOR DETAILS OF LIGHT SUPPORTS AND HAND HOLE SEE SHEET 12.

PREPARED BY
BROOKHART & TYO
CONSULTING ENGINEERS
HARRISBURG, PENNA.

REVISIONS
3-30-71

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC ENGINEERING

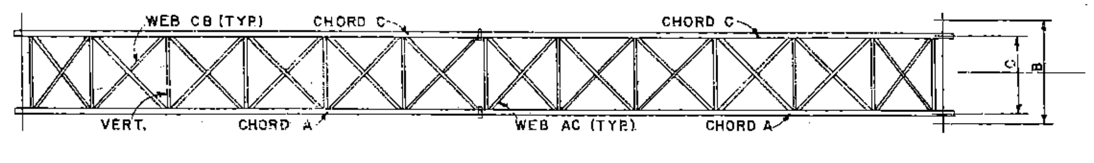
OVERHEAD SIGN STRUCTURES
50' TO 80' SPANS
LOADING CONDITION I

APPROVED _____ CHIEF TRAFFIC ENGINEER DATE [redacted]
APPROVED _____ CHIEF ENGINEER DATE [redacted]

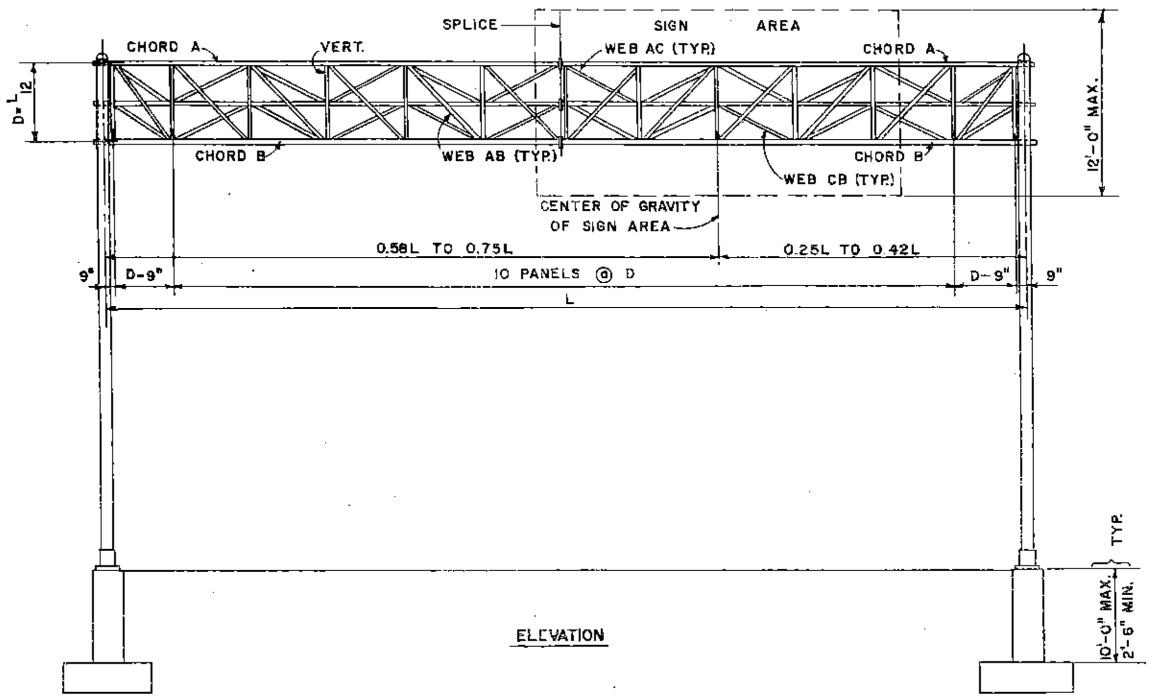
SHEET	TRAFFIC STANDARD	No.
11 OF 12		7713

J. H. WEBB CO., PHILA., PA.

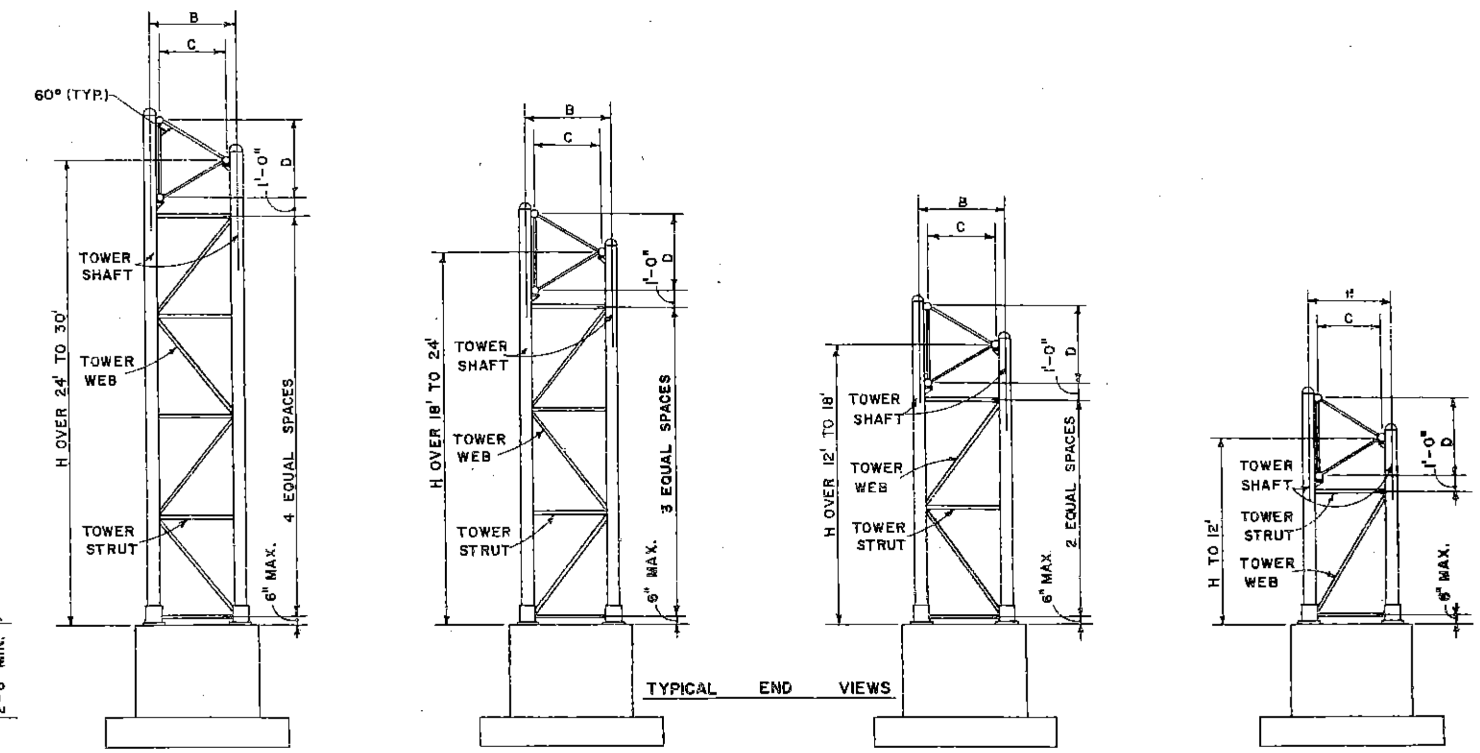
TRACED BY J.B.K.
DESIGN BY



PLAN



ELEVATION



TYPICAL END VIEWS

L	SIGN AREA	TRUSS MEMBERS: CHORDS A OR B	CHORDS C	WEBS AB	WEBS AC OR CB	VERT.	TOWER MEMBERS: SHAFTS H TO 12'	SHAFTS H OVER 12' TO 18'	SHAFTS H OVER 18' TO 24'	SHAFTS H OVER 24' TO 30'	WEB	STRUT	PEDESTAL: E	BARS "P" H TO 12'	BARS "P" H OVER 12' TO 18'	BARS "P" H OVER 18' TO 24'	BARS "P" H OVER 24' TO 30'	FOOTING TYPE: H TO 12'	H OVER 12' TO 18'	H OVER 18' TO 24'	H OVER 24' TO 30"
OVER 50' TO 60'	150																				
	200																				
	250	3"ϕ x 3/16	3"ϕ x 3/16	2"ϕ x 3/16	2 1/4"ϕ x 3/16	1 3/4"ϕ x 3/16	6 1/2"ϕ x 3/16	8"ϕ x 3/16	10"ϕ x 3/16	10"ϕ x 1/4	3"ϕ x 3/16	1 3/4"ϕ x 3/16	7'-6"	18 #4	22 #4	20 #5	24 #5	511	513	614	615
	300	3"ϕ x 3/16	3"ϕ x 3/16	2"ϕ x 3/16	2 1/4"ϕ x 3/16	1 3/4"ϕ x 3/16	7"ϕ x 3/16	8 1/2"ϕ x 3/16	10 1/2"ϕ x 3/16	11"ϕ x 1/4	3"ϕ x 3/16	1 3/4"ϕ x 3/16	7'-6"	20 #4	18 #5	22 #5	20 #6	512	514	615	616
	350																				
	400																				
	450	3 1/4"ϕ x 3/16	3 1/4"ϕ x 1/4	2"ϕ x 3/16	2 1/4"ϕ x 3/16	1 3/4"ϕ x 3/16	8"ϕ x 3/16	10"ϕ x 3/16	11"ϕ x 1/4	12"ϕ x 5/16	3 1/4"ϕ x 3/16	1 3/4"ϕ x 3/16	7-6"	20 #5	18 #6	22 #6	20 #7	514	615	617	718
	500																				
	550																				
	600																				
OVER 60' TO 70'	150	3"ϕ x 3/16	3"ϕ x 3/16	2"ϕ x 3/16	2 1/2"ϕ x 3/16	2"ϕ x 3/16	6"ϕ x 3/16	7"ϕ x 3/16	9"ϕ x 3/16	10 1/2"ϕ x 3/16	3"ϕ x 3/16	2 1/4"ϕ x 3/16	8'-6"	20 #4	20 #4	22 #4	26 #4	411	512	513	614
	200	3"ϕ x 3/16	3"ϕ x 3/16	2"ϕ x 3/16	2 1/2"ϕ x 3/16	2"ϕ x 3/16	6"ϕ x 3/16	7 1/2"ϕ x 3/16	9 1/2"ϕ x 3/16	11"ϕ x 3/16	3"ϕ x 3/16	2 1/4"ϕ x 3/16	8'-6"	20 #4	20 #4	24 #4	20 #5	412	513	515	615
	250	3"ϕ x 3/16	3"ϕ x 3/16	2"ϕ x 3/16	2 1/2"ϕ x 3/16	2"ϕ x 3/16	6 1/2"ϕ x 3/16	8 1/2"ϕ x 3/16	10 1/2"ϕ x 3/16	10 1/2"ϕ x 1/4	3"ϕ x 3/16	2 1/4"ϕ x 3/16	8'-6"	20 #4	22 #4	20 #5	24 #5	512	514	614	616
	300	3 1/4"ϕ x 3/16	3 1/4"ϕ x 3/16	2"ϕ x 3/16	2 1/2"ϕ x 3/16	2"ϕ x 3/16	7"ϕ x 3/16	9"ϕ x 3/16	11"ϕ x 3/16	11"ϕ x 1/4	3"ϕ x 3/16	2 1/4"ϕ x 3/16	8'-6"	20 #4	26 #4	22 #5	20 #6	512	515	615	617
	350	3 1/4"ϕ x 3/16	3 1/4"ϕ x 1/4	2"ϕ x 3/16	2 1/2"ϕ x 3/16	2"ϕ x 3/16	7 1/2"ϕ x 3/16	9 1/2"ϕ x 3/16	10"ϕ x 1/4	11"ϕ x 5/16	3"ϕ x 3/16	2 1/4"ϕ x 3/16	8'-6"	22 #4	20 #5	20 #6	22 #6	513	615	616	717
	400	3 1/4"ϕ x 3/16	3 1/4"ϕ x 1/4	2"ϕ x 3/16	2 1/2"ϕ x 3/16	2"ϕ x 3/16	7 1/2"ϕ x 3/16	9 1/2"ϕ x 3/16	10 1/2"ϕ x 1/4	11"ϕ x 5/16	3"ϕ x 3/16	2 1/4"ϕ x 3/16	8'-6"	24 #4	22 #5	28 #5	24 #6	514	616	617	718
	450	3 1/4"ϕ x 1/4	3 1/4"ϕ x 1/4	2"ϕ x 3/16	2 1/2"ϕ x 3/16	2"ϕ x 3/16	8 1/2"ϕ x 3/16	11"ϕ x 3/16	12"ϕ x 1/4	12"ϕ x 3/8	3 1/4"ϕ x 3/16	2 1/4"ϕ x 3/16	8'-6"	20 #5	26 #5	22 #6	26 #6	614	616	717	719a
	500																				
	550																				
	600																				
OVER 70' TO 80'	150	3 1/2"ϕ x 3/16	3 1/2"ϕ x 3/16	2 1/2"ϕ x 3/16	3"ϕ x 3/16	2 1/4"ϕ x 3/16	6"ϕ x 3/16	7"ϕ x 3/16	9"ϕ x 3/16	10 1/2"ϕ x 3/16	3"ϕ x 3/16	2 1/4"ϕ x 3/16	9'-6"	22 #4	22 #4	22 #4	24 #4	411	512	612	614
	200	3 1/2"ϕ x 3/16	3 1/2"ϕ x 3/16	2 1/2"ϕ x 3/16	[illegible]	2 1/4"ϕ x 3/16	6 1/2"ϕ x 3/16	8"ϕ x 3/16	9 1/2"ϕ x 3/16	10"ϕ x 1/4	3"ϕ x 3/16	2 1/4"ϕ x 3/16	9'-6"	22 #4	22 #4	24 #4	28 #4	413	513	516	615
	250	3 1/2"ϕ x 3/16	3 1/2"ϕ x 3/16	2 1/2"ϕ x 3/16	3"ϕ x [illegible]	2 1/4"ϕ x 3/16	6 1/2"ϕ x 3/16	8 1/2"ϕ x 3/16	10 1/2"ϕ x 3/16	10 1/2"ϕ x 1/4	3"ϕ x 3/16	2 1/4"ϕ x 3/16	9'-6"	22 #4	22 #4	28 #4	22 #5	415	514	615	616
	300	3 1/2"ϕ x 3/16	3 1/2"ϕ x 3/16	2 1/2"ϕ x 3/16	3"ϕ x 3/16	2 1/4"ϕ x 3/16	6 1/2"ϕ x 3/16	9"ϕ x 3/16	11"ϕ x 3/16	11"ϕ x 1/4	3"ϕ x 3/16	2 1/4"ϕ x 3/16	9'-6"	22 #4	26 #4	30 #4	24 #5	416	515	615	617
	350	3 1/2"ϕ x 3/16	3 1/2"ϕ x 1/4	2 1/2"ϕ x 3/16	3"ϕ x 3/16	2 1/4"ϕ x 3/16	7 1/2"ϕ x 3/16	9 1/2"ϕ x 3/16	10"ϕ x 1/4	12"ϕ x 1/4	3"ϕ x 3/16	2 1/4"ϕ x 3/16	9'-6"	22 #4	28 #4	24 #5	28 #5	513	614	616	619
	400	4"ϕ x 3/16	4"ϕ x 3/16	2 1/2"ϕ x 3/16	3"ϕ x 3/16	2 1/4"ϕ x 3/16	7 1/2"ϕ x 3/16	10"ϕ x 3/16	10 1/2"ϕ x 1/4	11"ϕ x 5/16	3"ϕ x 3/16	2 1/4"ϕ x 3/16	9'-6"	24 #4	30 #4	26 #5	22 #6	514	615	617	718
	450	4"ϕ x 3/16	4"ϕ x 1/4	2 1/2"ϕ x 3/16	3"ϕ x 3/16	2 1/4"ϕ x 3/16	8"ϕ x 3/16	10 1/2"ϕ x 3/16	11"ϕ x 1/4	12"ϕ x 5/16	3 1/4"ϕ x 3/16	2 1/4"ϕ x 3/16	9'-6"	26 #4	22 #5	20 #6	24 #6	515	616	618	718a
	500																				
	550																				
	600	4"ϕ x 3/16	4"ϕ x 1/4	2 1/2"ϕ x [illegible]	3"ϕ x 3/16	2 1/4"ϕ x 3/16	8 1/2"ϕ x 3/16	10"ϕ x 1/4	11"ϕ x 5/16	12"ϕ x 3/8	3 1/2"ϕ x 3/16	2 1/4"ϕ x 3/16	9'-6"	22 #5	28 #5	26 #6	30 #6	615	717	719a	820a

NOTES

BARS "P" AS TABULATED ARE THE TOTAL NUMBER OF VERTICAL BARS IN THE PEDESTAL.
FOR DETAILS OF TRUSS SEE STD. DRAWINGS (SHEET 8).
FOR DETAILS OF PEDESTAL AND FOOTING SEE STD. DRAWINGS (SHEET 7).
B = 0.866 D + CHORD DIAMETER + TOWER SHAFT DIAMETER + 3 1/2.
ALL MATERIAL UNLESS OTHERWISE SPECIFIED SHALL BE STRUCTURAL ALUMINUM 6061-T6
FOR TRUSS CAMBER SEE SHEET 8.
FOR GENERAL NOTES SEE SHEET 7.
FOR DETAILS OF LIGHT SUPPORTS AND HAND HOLE SEE SHEET 12.

REVISIONS
3-30-71

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC ENGINEERING

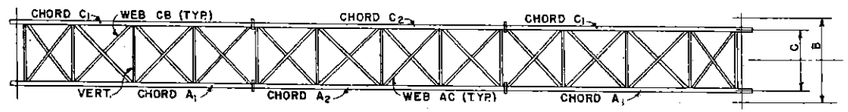
OVERHEAD SIGN STRUCTURES
50' TO 80' SPANS
LOADING CONDITION II

APPROVED [signature] CHIEF TRAFFIC ENGINEER DATE 5/15/61
APPROVED [signature] CHIEF ENGINEER DATE 5/15/61

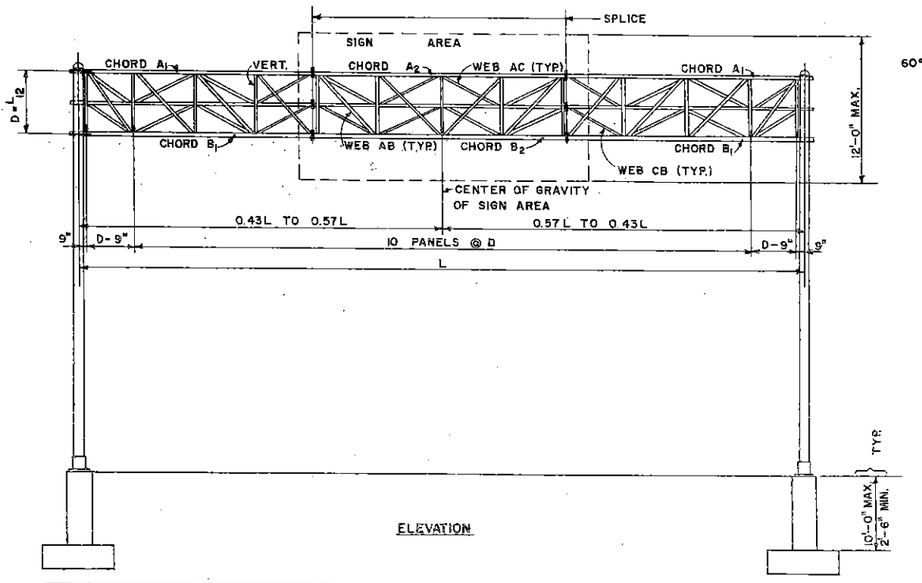
SHEET 2 of 12 | TRAFFIC STANDARD | No. 7713

TRACED BY J.A.K.

DISTRICT	COUNTY	ROUTE	SECTION	SHEET



PLAN



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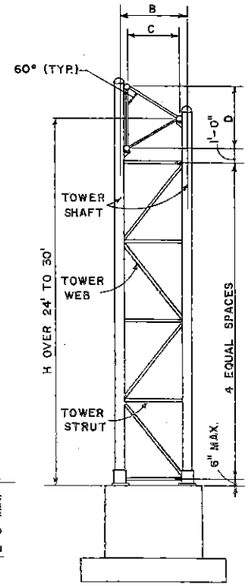
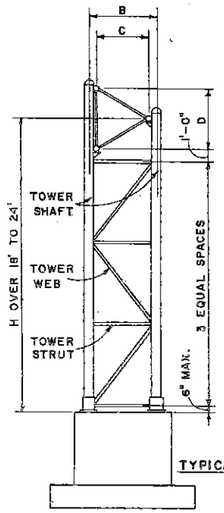
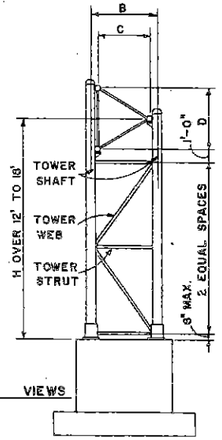
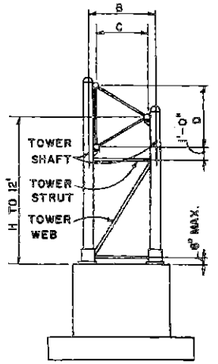








TYPICAL END VIEWS

L	SIGN AREA	TRUSS MEMBERS: CHORDS: A1 OR B1	CHORDS: C1	CHORDS: A2 OR B2	CHORDS: C2	WEBS: AB	WEBS: AC OR CB	VERT.	TOWER MEMBERS: SHAFTS: H TO 12'	SHAFTS: H OVER 12' TO 18'	SHAFTS: H OVER 18' TO 24'	SHAFTS: H OVER 24' TO 30'	WEB	STRUT	PEDESTAL: E	PEDESTAL: BARS "P": H TO 12'	BARS "P": H OVER 12' TO 18'	BARS "P": H OVER 18' TO 24'	BARS "P": H OVER 24' TO 30'	FOOTING: H TO 12'	TYPE: H OVER 12' TO 18'	TYPE: H OVER 18' TO 24'	TYPE: H OVER 24' TO 30'
OVER 80' TO 90'	750	4½"ϕ x 7/16	4½"ϕ x 5/16	4½"ϕ x 5/16	4½"ϕ x 5/16	2¾"ϕ x 5/16	3½"ϕ x 5/16	2½"ϕ x 5/16	8½"ϕ x 7/16	11"ϕ x ¼	12"ϕ x 5/16	14"ϕ x 5/16	3½"ϕ x 5/16	2½"ϕ x 5/16	10'-0"	22 #5	30 #5	38 #5	32 #6	615	716	818	820
	200	3¾"ϕ x 5/16	3¾"ϕ x 5/16	3¾"ϕ x 5/16	3¾"ϕ x 5/16	2½"ϕ x 5/16	3½"ϕ x 5/16	2½"ϕ x 5/16	6½"ϕ x 5/16	8"ϕ x 5/16	10"ϕ x 5/16	10"ϕ x ½	3"ϕ x 5/16	2½"ϕ x 5/16	10'-0"	24 4	24 #4	24 #4	24 #4	510	612	613	714
	250	3¾"ϕ x 5/16	3¾"ϕ x 5/16	3¾"ϕ x 5/16	3¾"ϕ x 5/16	2¾"ϕ x 5/16	3½"ϕ x 5/16	2½"ϕ x 5/16	7"ϕ x 5/16	8½"ϕ x 5/16	10½"ϕ x 5/16	10½"ϕ x ½	3½"ϕ x 5/16	2½"ϕ x 5/16	10'-0"	24 #4	24 #4	24 #4	30 #4	511	514	614	616
	300	3¾"ϕ x 5/16	3¾"ϕ x 5/16	3¾"ϕ x 5/16	3¾"ϕ x 5/16	2¾"ϕ x 5/16	3¾"ϕ x 5/16	2½"ϕ x 5/16	7"ϕ x 5/16	9"ϕ x 5/16	11"ϕ x 5/16	11"ϕ x ½	3"ϕ x 5/16	2½"ϕ x 5/16	10'-0"	24 #4	24 #4	26 #4	32 #4	512	613	615	715
	350	3½"ϕ x 5/16	3½"ϕ x 5/16	3½"ϕ x ¼	3½"ϕ x ¼	2¾"ϕ x 5/16	3½"ϕ x 5/16	2½"ϕ x 5/16	7½"ϕ x 5/16	9½"ϕ x 5/16	10"ϕ x ¼	12"ϕ x ½	3"ϕ x 5/16	2½"ϕ x 5/16	10'-0"	24 #4	24 #4	30 #4	24 #5	512	613	616	716
	400	4"ϕ x 5/16	4"ϕ x 5/16	4"ϕ x ¼	4"ϕ x ¼	2¾"ϕ x 5/16	3½"ϕ x 5/16	2½"ϕ x 5/16	7½"ϕ x 5/16	9½"ϕ x 5/16	10½"ϕ x ¼	12"ϕ x ½	3"ϕ x 5/16	2½"ϕ x 5/16	10'—0"	22 #5	26 #4	22 #5	26 #5	612	614	715	716
	450	4"ϕ x 5/16	4"ϕ x 5/16	4"ϕ x ¼	4"ϕ x ¼	2¾"ϕ x 5/16	3½"ϕ x 5/16	2½"ϕ x 5/16	8"ϕ x 5/16	10½"ϕ x 5/16	11"ϕ x ¼	12"ϕ x 5/16	3"ϕ x 5/16	2½"ϕ x 5/16	10'-0"	24 #4	28 #4	24 #5	28 #5	514	614	715	717
	500	4½"ϕ x 5/16	4½"ϕ x 5/16	4½"ϕ x ¼	4½"ϕ x ¼	2¾"ϕ x 5/16	3½"ϕ x 5/16	2½"ϕ x 5/16	8½"ϕ x 5/16	10½"ϕ x 5/16	12"ϕ x ¼	12"ϕ x 5/16	3"ϕ x 5/16	2½"ϕ x 5/16	10'-0"	24 #4	30 #4	26 #5	30 #5	514	714	716	718
	550																						
	600	4"ϕ x ¼	4"ϕ x ¼	4"ϕ x 5/16	4"ϕ x 5/16	2¾"ϕ x 5/16	3½"ϕ x 5/16	2½"ϕ x 5/16	9"ϕ x 5/16	10"ϕ x ¼	11"ϕ x 5/16	12"ϕ x ⅜	3½"ϕ x 5/16	2½"ϕ x 5/16	10'-0"	28 #4	24 #5	22 #6	26 #6	614	715	717	818
OVER 90' TO 100'	800	5½"ϕ x 5/16	5½"ϕ x 5/16	5½"ϕ x ¼	5½"ϕ x ¼	3½"ϕ x 5/16	3½"ϕ x 5/16	2½"ϕ x 5/16	10"ϕ x 5/16	11"ϕ x ¼	12"ϕ x ⅜	14"ϕ x ⅜	3½"ϕ x 5/16	2½"ϕ x 5/16	10'-0"*	34 #4	28 #5	26 #6	30 #6	616	717	818	919
	200	4"ϕ x 5/16	4"ϕ x 5/16	4"ϕ x 5/16	4"ϕ x 5/16	3"ϕ x 5/16	3½"ϕ x 5/16	2¾"ϕ x 5/16	6½"ϕ x 5/16	8½"ϕ x 5/16	10½"ϕ x 5/16	10½"ϕ x ½	3½"ϕ x 5/16	2¾"ϕ x 5/16	11'-0"	24 #4	24 #4	24 #4	30 #4	512	613	615	715
	250	4"ϕ x 5/16	4"ϕ x 5/16	4"ϕ x ¼	4"ϕ x ¼	3"ϕ x 5/16	3½ ϕx 5/16	2¾"ϕ x 5/16	7"ϕ x 5/16	9"ϕ x 5/16	11"ϕ x 5/16	11"ϕ x ½	3½"ϕ x 5/16	2½"ϕ x 5/16	11'—0"	24 #4	24 #4	24 #4	30 #4	512	613	615	715
	300	4"ϕ x 5/16	4"ϕ x 5/16	4"ϕ x ¼	4"ϕ x ¼	3"ϕ x 5/16	3½"ϕ x 5/16	2¾"ϕ x 5/16	7½"ϕ x 5/16	9"ϕ x 5/16	10"ϕ x ¼	12"ϕ x ¼	3½"ϕ x 5/16	2¾"ϕ x 5/16	11'—0"	24 #4	24 #4	26 #4	34 #4	512	613	714	715
	350																						
	400	4" ϕ x 5/16	4" ϕ x 5/16	4"ϕ x ¼	4"ϕ x ¼	3"ϕ x 5/16	3½"ϕ x 5/16	2¾"ϕ x 5/16	8"ϕ x 5/16	10"ϕ x 5/16	11"ϕ x ¼	12"ϕ x 5/16	3½"ϕ x 5/16	2¾"ϕ x 5/16	11'— 0"	24 #4	26 #4	32 #4	26 #5	514	614	715	717
	450	4½"ϕ x 5/16	4½"ϕ x 5/16	4½"ϕ x ¼	4½"ϕ x ¼	3"ϕ x 5/16	3½"ϕ x 5/16	2¾"ϕ x 5/16	8"ϕ x 5/16	10½"ϕ x 5/16	12"ϕ x ¼	12"ϕ x 5/16	3½"ϕ x 5/16	2¾"ϕ x 5/16	11'— 0"	24 #4	28 #4	34 #4	28 #5	613	615	716	718
	500	4½"ϕ x 5/16	4½"ϕ x 5/16	4½"ϕ x ¼	4½"ϕ x ¼	3"ϕ x 5/16	3½"ϕ x 5/16	2¾"ϕ x 5/16	8½"ϕ x 5/16	11"ϕ x ¼	12"ϕ x ⅜	12"ϕ x ⅜	3½"ϕ x 5/16	2¾"ϕ x 5/16	11' — 0"	24 #4	30 #4	26 #5	30 #5	613	616	716	719
	550	4½"ϕ x 5/16	4½"ϕ x 5/16	4½"ϕ x ¼	4½"ϕ x ¼	3½"ϕ x 5/16	3½"ϕ x 5/16	2¾"ϕ x 5/16	9"ϕ x 5/16	10"ϕ x ¼	11"ϕ x 5/16	12"ϕ x ⅜	3½"ϕ x 5/16	2¾"ϕ x 5/16	11' — 0"	26 #4	32 #4	26 #5	32 #5	614	715	717	818
	600	5"ϕ x 5/16	5"ϕ x 5/16	5"ϕ x ¼	5"ϕ x ¼	3"ϕ x 5/16	3½"ϕ x 5/16	2¾"ϕ x 5/16	9"ϕ x 5/16	10"ϕ x ¼	11"ϕ x 5/16	12"ϕ x ⅜	3½"ϕ x 5/16	2¾"ϕ x 5/16	11'-0"	26 #4	34 #4	28 #5	26 #6	614	715	718	818
OVER 100' TO 110'	750	5½"ϕ x 5/16	5½"ϕ x ¼	5½"ϕ x ¼	5½"ϕ x ¼	3¼"ϕ x 5/16	4"ϕ x 5/16	3"ϕ x 5/16	9½"ϕ x 5/16	11"ϕ x ¼	12"ϕ x ⅜	14"ϕ x ⅜	3½"ϕ x 5/16	3"ϕ x 5/16	11'- 6"	34 #4	28 #5	34 #5	40 #5	616	717	818	820
	200																						
	250	4½"ϕ x 5/16	4½"ϕ x 5/16	4½"ϕ x 5/16	4½"ϕ x 5/16	3½"ϕ x 5/16	4"ϕ x 5/16	3"ϕ x 5/16	7"ϕ x 5/16	9"ϕ x 5/16	11"ϕ x 5/16	11"ϕ x ¼	3½"ϕ x 5/16	3"ϕ x 5/16	11'- 6"	26 #4	26 #4	26 #4	30 #4	513	613	615	715
	300	4½"ϕ x 5/16	4½"ϕ x 5/16	4½"ϕ x 5/16	4½"ϕ x 5/16	3¼"ϕ x 5/16	4"ϕ x 5/16	3"ϕ x 5/16	7½"ϕ x 5/16	9½"ϕ x 5/16	10"ϕ x ¼	12"ϕ x ¼	3½"ϕ x 5/16	3"ϕ x 5/16	11'- 6"	26#4	26#4	28 #4	34 #4	513	613	616	716
	350	4½"ϕ x 5/16	4½"ϕ x 5/16	4½"ϕ x ¼	4½"ϕ x ¼	3½"ϕ x 5/16	4"ϕ x 5/16	3"ϕ x 5/16	8"ϕ x 5/16	10"ϕ x 5/16	10½"ϕ x ¼	11"ϕ x 5/16	3½"ϕ x 5/16	3"ϕ x 5/16	11'- 6"	26 #4	26 #4	28 #4	36 #4	513	614	715	716
	400	4½"ϕ x 5/16	4½"ϕ x 5/16	4½"ϕ x ¼	4½"ϕ x ¼	3½"ϕ x 5/16	4"ϕ x 5/16	3"ϕ x 5/16	8"ϕ x 5/16	10"ϕ x 5/16	11"ϕ x ¼	12"ϕ x 5/16	3½"ϕ x 5/16	3"ϕ x 5/16	11'- 6"	26 #4	26 #4	32 #4	26#5	515	614	715	718
	450	4½"ϕ x 5/16	4½"ϕ x 5/16	4½"ϕ x ¼	4½"ϕ x ¼	3¼"ϕ x 5/16	4"ϕ x 5/16	3"ϕ x 5/16	8½"ϕ x 5/16	10½"ϕ x 5/16	12"ϕ x ¼	12"ϕ x 5/16	3½"ϕ x 5/16	3"ϕ x 5/16	11'- 6"	26 #4	28 #4	36 #4	28 #5	613	616	716	719
	500	4½"ϕ x 5/16	4½"ϕ x 5/16	4½"ϕ x ¼	4½"ϕ x ¼	3¼"ϕ x 5/16	4"ϕ x 5/16	3"ϕ x 5/16	8½"ϕ x 5/16	11" ϕ x 5/16	12"ϕ x ¼	12"ϕ x 5/16	3½"ϕ x 5/16	3"ϕ x 5/16	11'- 6"	26 #4	30 #4	26 #5	30 #5	613	714	716	817
	550	4¾"ϕ x 5/16	4¾"ϕ x 5/16	4¾"ϕ x ¼	4¾"ϕ x ¼	3¼"ϕ x 5/16	4"ϕ x 5/16	3"ϕ x 5/16	9"ϕ x 5/16	10"ϕ x ¼	11"ϕ x 5/16	12"ϕ x ⅜	3½"ϕ x 5/16	3"ϕ x 5/16	11'- 6"	26 #4	32 #4	28 #5	32 #5	614	715	716	818
	600	5"ϕ x 5/16	5"ϕ x 5/16	5"ϕ x ¼	5"ϕ x ¼	3¼"ϕ x 5/16	4"ϕ x 5/16	3"ϕ x 5/16	9"ϕ x 5/16	10"ϕ x ¼	11"ϕ x 5/16	12"ϕ x ⅜	3½"ϕ x 5/16	3"ϕ x 5/16	11'- 6"	26 #4	26 #5	28 #5	26 #6	614	716	817	818
	650	5½"ϕ x 5/16	5¼"ϕ x 5/16	5½"ϕ x ¼	5¼"ϕ x ¼	3¼"ϕ x 5/16	4"ϕ x 5/16	3"ϕ x 5/16	9½"ϕ x 5/16	10½"ϕ x ¼	12"ϕ x 5/16	14"ϕ x ⅜	3½"ϕ x 5/16	3"ϕ x 5/16	11'- 6"	26 #4	36 #4	30 #5	26 #6	614	716	817	819

*11'-6" with 14"ϕ Shaft.

NOTES
BARS "P" AS TABULATED ARE THE TOTAL NUMBER OF VERTICAL BARS IN THE PEDESTAL.
FOR DETAILS OF TRUSS SEE STD. DRAWINGS (SHEET 9).
FOR DETAILS OF PEDESTAL AND FOOTING SEE STD. DRAWINGS (SHEET 7).
B= 0.866 D + CHORD DIAMETER + TOWER SHAFT DIAMETER + 3 1/2".
ALL MATERIAL UNLESS OTHERWISE SPECIFIED SHALL BE STRUCTURAL ALUMINUM 6061-T6.
FOR TRUSS CAMBER SEE SHEET 8.
FOR GENERAL NOTES SEE SHEET 7.
FOR DETAILS OF LIGHT SUPPORTS AND HAND HOLE SEE SHEET 12.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC ENGINEERING

OVERHEAD SIGN STRUCTURES 80' TO 110' SPANS LOADING CONDITION I

APPROVED _____ CHIEF TRAFFIC ENGINEER DATE 5/15/61

APPROVED _____ CHIEF ENGINEER DATE 5/15/61

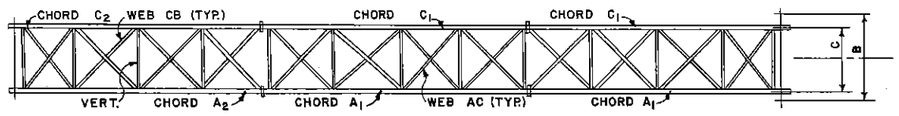
REVISIONS
3-30-71

SHEET	TRAFFIC STANDARD	No.
3 OF 12		7713

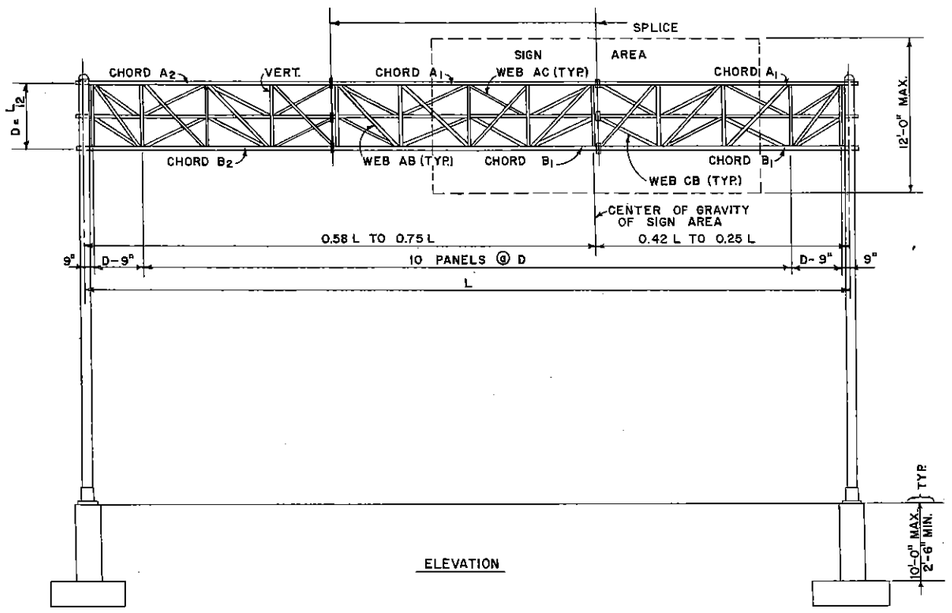
TRACED BY J.A.K.

FORM 4537 REV 3-61

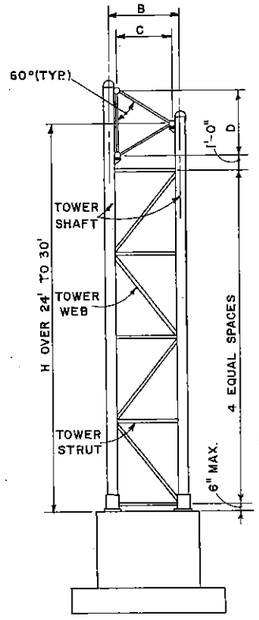
DISTRICT	COUNTY	ROUTE	SECTION	SHEET

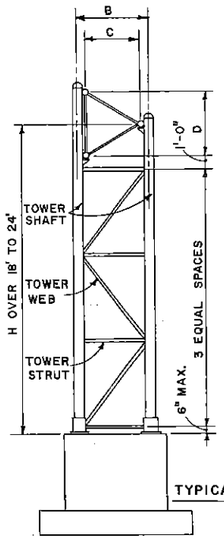


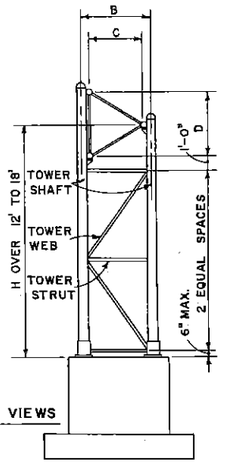
PLAN

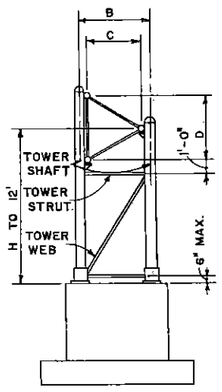


ELEVATION









TYPICAL END VIEWS

L	SIGN AREA	TRUSS MEMBERS: CHORDS: A_1 OR B_1	C_1	A_2 OR B_2	C_2	WEBS: AB	AC OR CB	VERT.	TOWER MEMBERS: SHAFT: H TO 12'	H OVER 12' TO 18'	H OVER 18' TO 24'	H OVER 24' TO 30'	WEB	STRUT	PEDESTAL: E	BARS "P": H TO 12'	H OVER 12' TO 18'	H OVER 18' TO 24'	H OVER 24' TO 30'	FOOTING: H TO 12'	H OVER 12' TO 18'	TYPE: H OVER 18' TO 24'	H OVER 24' TO 30'
OVER 80' TO 90'	150	3 3/4 φ x 3/16	3 3/4 φ x 3/16	3 3/4 φ x 3/16	3 3/4 φ x 3/16	2 3/4 φ x 3/16	3 1/4 φ x 3/16	2 1/2 φ x 3/16	6" φ x 3/16	7 1/2 φ x 3/16	9 1/2 φ x 5/16	11" φ x 3/16	3" φ x 3/16	2 1/2 φ x 3/16	10'-0"	24 #4	24 #4	24 #4	24 #4	412	512	514	614
	200																						
	250	3 3/4 φ x 3/16	3 3/4 φ x 3/16	3 3/4 φ x 3/16	3 3/4 φ x 3/16	2 3/4 φ x 3/16	3 1/4 φ x 3/16	2 1/2 φ x 3/16	6 1/2 φ x 3/16	8 1/2 φ x 3/16	10 1/2 φ x 3/16	10 1/2 φ x 1/4	3" φ x 3/16	2 1/2 φ x 3/16	10'-0"	24 #4	24 #4	26 #4	26 #4	512	514	615	616
	300	3 3/4 φ x 3/16	3 3/4 φ x 3/16	3 3/4 φ x 3/16	3 3/4 φ x 3/16	2 3/4 φ x 3/16	3 1/4 φ x 3/16	2 1/2 φ x 3/16	7" φ x 3/16	8 1/2 φ x 3/16	11" φ x 3/16	11" φ x 1/4	3" φ x 3/16	2 1/2 φ x 3/16	10'-0"	24 #4	24 #4	30 #4	24 #5	416	516	615	617
	350	3 3/4 φ x 3/16	3 3/4 φ x 1/4	3 3/4 φ x 3/16	3 3/4 φ x 3/16	2 3/4 φ x 3/16	3 1/4 φ x 3/16	2 1/2 φ x 3/16	7 1/2 φ x 3/16	9 1/2 φ x 3/16	10" φ x 1/4	12" φ x 1/4	3" φ x 3/16	2 1/2 φ x 3/16	10'-0"	24 #4	26 #4	24 #5	26 #5	513	516	616	619
	400	3 3/4 φ x 1/4	3 3/4 φ x 1/4	3 3/4 φ x 3/16	3 3/4 φ x 3/16	2 3/4 φ x 3/16	3 1/4 φ x 3/16	2 1/2 φ x 3/16	7 1/2 φ x 3/16	10" φ x 3/16	10 1/2 φ x 1/4	11" φ x 1/4	3 1/4 φ x 3/16	2 1/2 φ x 3/16	10'-0"	24 #4	30 #4	26 #5	30 #5	514	616	617	719a
	450	3 3/4 φ x 1/4	3 3/4 φ x 1/4	3 3/4 φ x 3/16	3 3/4 φ x 3/16	2 3/4 φ x 3/16	3 1/4 φ x 3/16	2 1/2 φ x 3/16	8" φ x 3/16	10 1/2 φ x 3/16	11" φ x 1/4	12" φ x 5/16	3 1/4 φ x 3/16	2 1/2 φ x 3/16	10'-0"	24 #4	22 #5	28 #5	34 #5	515	616	717	719a
	500	3 3/4 φ x 1/4	3 3/4 φ x 1/4	3 3/4 φ x 3/16	3 3/4 φ x 3/16	2 3/4 φ x 3/16	3 1/4 φ x 3/16	2 1/2 φ x 3/16	8" φ x 3/16	10 1/2 φ x 3/16	12" φ x 1/4	12" φ x 5/16	3 1/4 φ x 3/16	2 1/2 φ x 3/16	10'-0"	26 #4	24 #5	22 #6	26 #6	515	716	718	719a
	550	4" φ x 1/4	4" φ x 1/4	4" φ x 3/16	4" φ x 3/16	2 3/4 φ x 3/16	3 1/4 φ x 3/16	2 1/2 φ x 3/16	8 1/2 φ x 3/16	11" φ x 3/16	12" φ x 1/4	12" φ x 5/16	3 1/2 φ x 3/16	2 1/2 φ x 3/16	10'-0"	20 #5	26 #5	34 #5	38 #5	516	617	718	720
	600																						
OVER 90' TO 100'	150	4" φ x 3/16	4" φ x 3/16	4" φ x 3/16	4" φ x 3/16	3" φ x 3/16	3 1/2 φ x 3/16	2 3/4 φ x 3/16	6 1/2 φ x 3/16	8" φ x 3/16	10" φ x 3/16	10" φ x 1/4	3 1/4 φ x 3/16	2 3/4 φ x 3/16	11'-0"	24 #4	24 #4	24 #4	26 #4	414	513	613	615
	200	4" φ x 3/16	4" φ x 3/16	4" φ x 3/16	4" φ x 3/16	3" φ x 3/16	3 1/2 φ x 3/16	2 3/4 φ x 3/16	7" φ x 3/16	8 1/2 φ x 3/16	10 1/2 φ x 3/16	10 1/2 φ x 1/4	3 1/4 φ x 3/16	2 3/4 φ x 3/16	11'-0"	24 #4	24 #4	24 #4	30 #4	512	514	614	616
	250	4" φ x 3/16	4" φ x 3/16	4" φ x 3/16	4" φ x 3/16	3" φ x 3/16	3 1/2 φ x 3/16	2 3/4 φ x 3/16	7" φ x 3/16	9" φ x 3/16	11" φ x 3/16	12" φ x 1/4	3 1/4 φ x 3/16	2 3/4 φ x 3/16	11'-0"	26 #4	26 #4	28 #4	34 #4	512	515	615	618
	300	4" φ x 3/16	4" φ x 3/16	4" φ x 3/16	4" φ x 3/16	3" φ x 3/16	3 1/2 φ x 3/16	2 3/4 φ x 3/16	7 1/2 φ x 3/16	9 1/2 φ x 3/16	10" φ x 1/4	11" φ x 1/4	3 1/4 φ x 3/16	2 3/4 φ x 3/16	11'-0"	26 #4	26 #4	30 #4	26 #5	514	615	616	717
	350	4" φ x 3/16	4" φ x 1/4	4" φ x 3/16	4" φ x 3/16	3" φ x 3/16	3 1/2 φ x 3/16	2 3/4 φ x 3/16	7 1/2 φ x 3/16	10" φ x 3/16	10 1/2 φ x 1/4	11" φ x 5/16	3 1/4 φ x 3/16	2 3/4 φ x 3/16	11'-0"	26 #4	26 #4	34 #4	28 #5	514	615	617	717
	400	4" φ x 3/16	4" φ x 1/4	4" φ x 3/16	4" φ x 3/16	3" φ x 3/16	3 1/2 φ x 3/16	2 3/4 φ x 3/16	8" φ x 3/16	10" φ x 3/16	11" φ x 1/4	12" φ x 5/16	3 1/4 φ x 3/16	2 3/4 φ x 3/16	11'-0"	26 #4	30 #4	24 #5	30 #5	514	616	618	718
	450																						
	500	4" φ x 1/4	4" φ x 1/4	4" φ x 3/16	4" φ x 3/16	3" φ x 3/16	3 1/2 φ x 3/16	2 3/4 φ x 3/16	8 1/2 φ x 3/16	11" φ x 3/16	12" φ x 1/4	12" φ x 3/8	3 1/4 φ x 3/16	2 3/4 φ x 3/16	11'-0"	26 #4	34 #4	30 #5	26 #6	517	617	718	720
	550	4 1/4 φ x 1/4	4 1/4 φ x 1/4	4 1/4 φ x 3/16	4 1/4 φ x 3/16	3" φ x 3/16	3 1/2 φ x 3/16	2 3/4 φ x 3/16	9" φ x 3/16	10" φ x 1/4	11" φ x 5/16	12" φ x 3/8	3 1/4 φ x 3/16	2 3/4 φ x 3/16	11'-0"	28 #4	26 #5	32 #5	26 #6	517	618	718	819
	600	4 1/4 φ x 1/4	4 1/4 φ x 1/4	4 1/4 φ x 3/16	4 1/4 φ x 3/16	3 1/2 φ x 3/16	3 1/2 φ x 3/16	2 3/4 φ x 3/16	9" φ x 3/16	10" φ x 1/4	12" φ x 1/4	12" φ x 3/8	3 1/2 φ x 1/4	2 3/4 φ x 1/4	11'-0"	30 #4	26 #5	32 #5	28 #6	615	717	818	820b
OVER 100' TO 110'	150	4 1/2 φ x 3/16	4 1/2 φ x 3/16	4 1/2 φ x 3/16	4 1/2 φ x 3/16	3 1/4 φ x 3/16	4" φ x 3/16	3" φ x 3/16	6 1/2 φ x 3/16	8" φ x 3/16	10" φ x 3/16	10" φ x 1/4	3 1/2 φ x 3/16	3" φ x 3/16	11'-6"	26 #4	26 #4	26 #4	26 #4	413	513	614	615
	200																						
	250	4 1/2 φ x 3/16	4 1/2 φ x 3/16	4 1/2 φ x 3/16	4 1/2 φ x 3/16	3 1/2 φ x 3/16	4" φ x 3/16	3" φ x 3/16	7" φ x 3/16	9" φ x 3/16	10" φ x 1/4	12" φ x 1/4	3 1/2 φ x 3/16	3" φ x 3/16	11'-6"	26 #4	26 #4	28 #4	34 #4	514	516	616	618
	300	4 1/2 φ x 3/16	4 1/2 φ x 3/16	4 1/2 φ x 3/16	4 1/2 φ x 3/16	3 1/4 φ x 3/16	4" φ x 3/16	3" φ x 3/16	7 1/2 φ x 3/16	9 1/2 φ x 3/16	10 1/2 φ x 1/4	12" φ x 1/4	3 1/2 φ x 3/16	3" φ x 3/16	11'-6"	26 #4	26 #4	30 #4	26 #5	514	614	616	717
	350	4 1/2 φ x 3/16	4 1/2 φ x 3/16	4 1/2 φ x 3/16	4 1/2 φ x 3/16	3 1/4 φ x 3/16	4" φ x 3/16	3" φ x 3/16	8" φ x 3/16	10" φ x 3/16	10 1/2 φ x 1/4	11" φ x 5/16	3 1/2 φ x 3/16	3" φ x 3/16	11'-6"	26 #4	26 #4	34 #4	28 #5	514	615	618	718
	400	4 1/2 φ x 3/16	4 1/2 φ x 3/16	4 1/2 φ x 3/16	4 1/2 φ x 3/16	3 1/4 φ x 3/16	4" φ x 3/16	3" φ x 3/16	8" φ x 3/16	10 1/2 φ x 3/16	11" φ x 1/4	12" φ x 5/16	3 1/2 φ x 3/16	3" φ x 3/16	11'-6"	26 #4	30 #4	36 #4	30 #5	515	616	619	718
	450	4 1/2 φ x 1/4	4 1/2 φ x 1/4	4 1/2 φ x 3/16	4 1/2 φ x 3/16	3 1/4 φ x 3/16	4 1/4 φ x 3/16	3 1/2 φ x 3/16	8 1/2 φ x 3/16	10 1/2 φ x 3/16	12" φ x 1/4	12" φ x 5/16	3 1/2 φ x 3/16	3" φ x 3/16	11'-6"	26 #4	32 #4	26 #5	32 #5	516	617	717	719
	500	4 1/2 φ x 1/4	4 1/2 φ x 1/4	4 1/2 φ x 3/16	4 1/2 φ x 3/16	3 1/4 φ x 3/16	4" φ x 3/16	3 1/2 φ x 3/16	9 1/2 φ x 3/16	11" φ x 1/4	12" φ x 1/4	12" φ x 3/8	3 1/2 φ x 3/16	3" φ x 3/16	11'-6"	28 #4	36 #4	30 #5	26 #6	615	716	718	819
	550	4 1/2 φ x 1/4	4 1/2 φ x 1/4	4 1/2 φ x 3/16	4 1/2 φ x 3/16	3 1/4 φ x 3/16	4" φ x 3/16	3" φ x 3/16															
	600	4 1/2 φ x 1/4	4 1/2 φ x 1/4	4 1/2 φ x 3/16	4 1/2 φ x 3/16	3 1/4 φ x 3/16	4" φ x 3/16	3" φ x 3/16															

NOTES

BARS "P" AS TABULATED ARE THE TOTAL NUMBER OF VERTICAL BARS IN THE PEDESTAL.
FOR DETAILS OF TRUSS SEE STD. DRAWINGS (SHEET 8).
FOR DETAILS OF PEDESTAL AND FOOTING SEE STD. DRAWINGS (SHEET 7).
B = 0.866 D + CHORD DIAMETER + TOWER SHAFT DIAMETER + 3 1/2
ALL MATERIALS UNLESS OTHERWISE SPECIFIED SHALL BE STRUCTURAL ALUMINUM 6061-T6.
FOR TRUSS CAMBER SEE SHEET 8.
FOR GENERAL NOTES SEE SHEET 7.
FOR DETAILS OF LIGHT SUPPORTS AND HAND HOLE SEE SHEET 12.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC ENGINEERING

OVERHEAD SIGN STRUCTURES 80' TO 110' SPANS LOADING CONDITION II

APPROVED E. T. Hicks, CHIEF TRAFFIC ENGINEER DATE 5/15/61
APPROVED Rudolph Sloan, CHIEF ENGINEER DATE 5/15/61

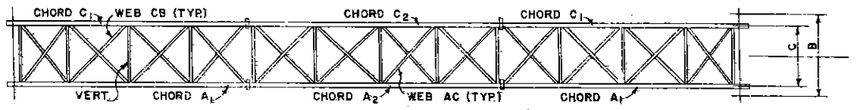
REVISIONS
3-30-71

SHEET 4 of 12 | TRAFFIC STANDARD | 7713

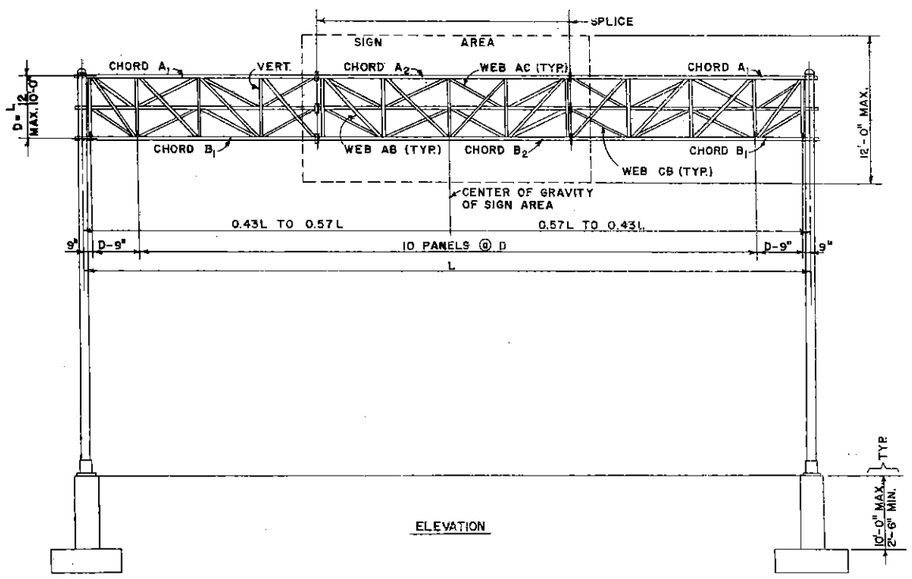
TRACED BY J.A.K.
FINAL BY

J. H. WEIL CO., PHILA., PA.

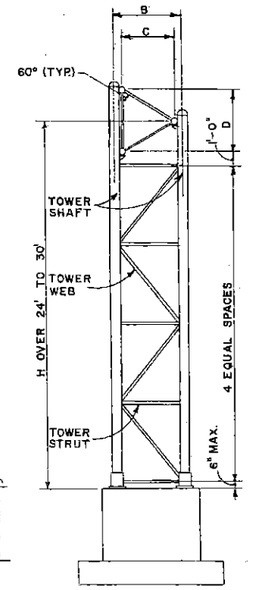
DISTRICT	COUNTY	ROUTE	SECTION	SHEET

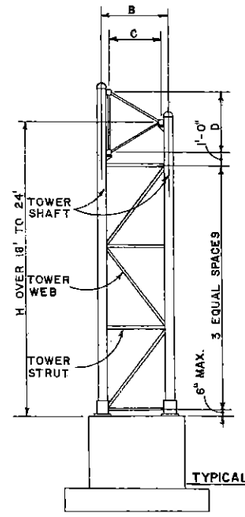


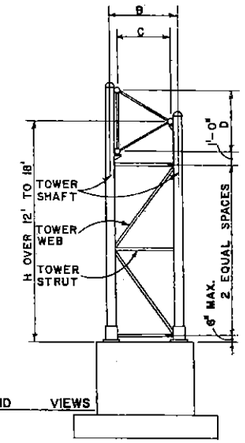
PLAN

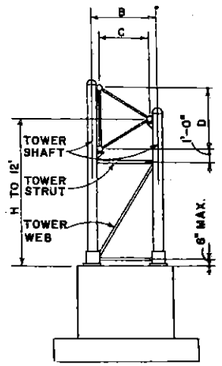


ELEVATION









TYPICAL END VIEWS

L	SIGN AREA	TRUSS MEMBERS: CHORDS A1 OR B1	C1	A2 OR B2	C2	WEBS: AB	AC OR CB	VERT.	TOWER MEMBERS: SHAFTS H TO 12'	H OVER 12' TO 18'	H OVER 18' TO 24'	H OVER 24' TO 30'	WEB	STRUT	PEDESTAL: E	BARS "P" H TO 12'	H OVER 12' TO 18'	H OVER 18' TO 24'	H OVER 24' TO 30'	FOOTING TYPE: H TO 12'	H OVER 12' TO 18'	H OVER 18' TO 24'	H OVER 24' TO 30'
OVER 110' TO 120'	150																						
	200	4½"ϕ x 3/16	4½"ϕ x 3/16	4½"ϕ x 3/16	4¾"ϕ x 5/16	3½"ϕ x 3/16	4½"ϕ x 3/16	3"ϕ x 3/16	7"ϕ x 3/16	9"ϕ x 3/16	11"ϕ x 3/16	11"ϕ x ¼	3½"ϕ x 3/16	3¼"ϕ x 3/16	12'-6"	28 #4	28 #4	28 #4	28 #4	514	614	614	715
	700	5¼"ϕ x 3/16	5⅛"ϕ x 3/16	5¼"ϕ x ¼	5¼"ϕ x ¼	3½"ϕ x 3/16	4¼"ϕ x 3/16	3"ϕ x 3/16	9½"ϕ x 3/16	10½"ϕ x ¼	12"ϕ x 5/16	14"ϕ x ⅜	4"ϕ x 3/16	3¼"ϕ x ¼	12'-6"	28 #4	26 #5	30 #5	28 #6	615	716	818	918
	300																						
	350																						
	400	4½"ϕ x 3/16	4¾"ϕ x 3/16	4¾"ϕ x ¼	4¾"ϕ x ¼	3½"ϕ x 3/16	4¼"ϕ x 3/16	3"ϕ x 3/16	8"ϕ x 3/16	10½"ϕ x 3/16	11"ϕ x ¼	12"ϕ x 5/16	3½"ϕ x 3/16	3¼"ϕ x 3/16	12'-6"	28 #4	28 #4	32 #4	38 #4	514	615	716	816
	450	4¾"ϕ x 3/16	4¾"ϕ x 3/16	4¾"ϕ x ¼	4¾"ϕ x ¼	3½"ϕ x 3/16	4¼"ϕ x 3/16	3"ϕ x 3/16	8½"ϕ x 3/16	10½"ϕ x 3/16	12"ϕ x ¼	12"ϕ x 5/16	3½"ϕ x 3/16	3¼"ϕ x 3/16	12'-6"	28 #4	28 #4	34 #4	28 #5	516	616	716	719
	500	4¾"ϕ x 3/16	4¾"ϕ x 3/16	4¾"ϕ x ¼	4¾"ϕ x ¼	3½"ϕ x 3/16	4¼"ϕ x 3/16	3"ϕ x 3/16	8½"ϕ x 3/16	11"ϕ x 3/16	12"ϕ x ¼	12"ϕ x ⅜	3½"ϕ x 3/16	3¼"ϕ x 3/16	12'-6"	28 #4	32 #4	38 #4	30 #5	614	618	717	817
	550	5"ϕ x 3/16	5"ϕ x 3/16	5"ϕ x ¼	5"ϕ x ¼	3½"ϕ x 3/16	4¼"ϕ x 3/16	3"ϕ x 3/16	9"ϕ x 3/16	10"ϕ x ¼	11"ϕ x 5/16	12"ϕ x ⅜	3½"ϕ x 3/16	3¼"ϕ x 3/16	12'-6"	28 #4	32 #5	28 #5	32 #5	614	715	718	818
	600	5"ϕ x 3/16	5"ϕ x ¼	5"ϕ x ¼	5"ϕ x ¼	3½"ϕ x 3/16	4¼"ϕ x 3/16	3"ϕ x 3/16	9"ϕ x 3/16	10½"ϕ x ¼	12"ϕ x 5/16	12"ϕ x ⅜	3½"ϕ x 3/16	3¼"ϕ x 3/16	12'-6"	28 #4	34 #4	28 #5	34 #5	614	717	817	918
	650	5"ϕ x 3/16	5"ϕ x ¼	5¼"ϕ x ¼	5¼"ϕ x ¼	3½"ϕ x 3/16	4¼"ϕ x 3/16	3"ϕ x 3/16	9½"ϕ x 3/16	10½"ϕ x 3/16	12"ϕ x 5/16	14"ϕ x ⅜	3½"ϕ x 3/16	3¼"ϕ x 3/16	12'-6"	26 #4	36 #4	30 #5	36 #5	615	717	818	918
	750	6"ϕ x 3/16	6"ϕ x 3/16	6"ϕ x ¼	6"ϕ x ¼	3½"ϕ x 3/16	4¼"ϕ x 3/16	3"ϕ x 3/16	10"ϕ x 3/16	11"ϕ x ¼	12"ϕ x ⅜	14"ϕ x ⅜	3½"ϕ x 3/16	3¼"ϕ x 3/16	12'-6"	30 #4	26 #5	32 #5	28 #6	616	717	818	919
OVER 120' TO 130'	250																						
	300																						
	350	5"ϕ x 3/16	5"ϕ x 3/16	5"ϕ x 3/16	5"ϕ x ¼	3½"ϕ x 3/16	4½"ϕ x 3/16	3"ϕ x 3/16	8"ϕ x 3/16	10½"ϕ x 3/16	11"ϕ x ¼	12"ϕ x 5/16	3½"ϕ x 3/16	3"ϕ x 3/16	12'-6"	28 #4	28 #4	30 #4	38 #4	614	615	716	817
	400	5"ϕ x 3/16	5"ϕ x 3/16	5"ϕ x ¼	5"ϕ x ¼	3½"ϕ x 3/16	4½"ϕ x 3/16	3"ϕ x 3/16	8½"ϕ x 3/16	10½"ϕ x 3/16	12"ϕ x ¼	12"ϕ x 5/16	3½"ϕ x 3/16	3"ϕ x 3/16	12'-6"	28 #4	28 #4	34 #4	28 #5	516	616	716	817
	450																						
	500																						
	550																						
	600																						
	650	6"ϕ x 3/16	6"ϕ x 3/16	6"ϕ x ¼	6"ϕ x ¼	3½"ϕ x 3/16	4½"ϕ x 3/16	3"ϕ x 3/16	9½"ϕ x 3/16	10½"ϕ x ¼	12"ϕ x 5/16	14"ϕ x ⅜	3½"ϕ x 3/16	3"ϕ x 3/16	12'-6"	28 #4	36 #4	30 #5	36 #5	616	716	817	918
OVER 130' TO 140'	200																						
	250																						
	300																						
	350																						
	400	5"ϕ x 3/16	5"ϕ x 3/16	5"ϕ x ¼	5"ϕ x ¼	3½"ϕ x 3/16	4½"ϕ x 3/16	3"ϕ x 3/16	[illegible]	11"ϕ x 3/16	12"ϕ x ¼	12"ϕ x 5/16	3½"ϕ x 3/16	3"ϕ x 3/16	12'-6"	28 #4	28 #4	34 #4	28 #5	614	616	716	817
	450																						
	500																						
	550																						
	600																						

NOTES

BARS "P" AS TABULATED ARE THE TOTAL NUMBER OF VERTICAL BARS IN THE PEDESTAL.
FOR DETAILS OF TRUSS SEE STD. DRAWING (SHEET 8).
FOR DETAILS OF PEDESTAL AND FOOTING SEE STD DRAWINGS (SHEET 7).
R = 0.866D + CHORD DIAMETER + TOWER SHAFT DIAMETER + 3½"
ALL MATERIAL UNLESS OTHERWISE SPECIFIED SHALL BE STRUCTURAL ALUMINUM 6061-T6.
FOR TRUSS CAMBER SEE SHEET 8.
FOR GENERAL NOTES SEE SHEET 7.
FOR DETAILS OF LIGHT SUPPORTS AND HAND HOLE SEE SHEET 12

REVISIONS
3-30-71

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC ENGINEERING

OVERHEAD SIGN STRUCTURES 110' TO 140' SPANS LOADING CONDITION I

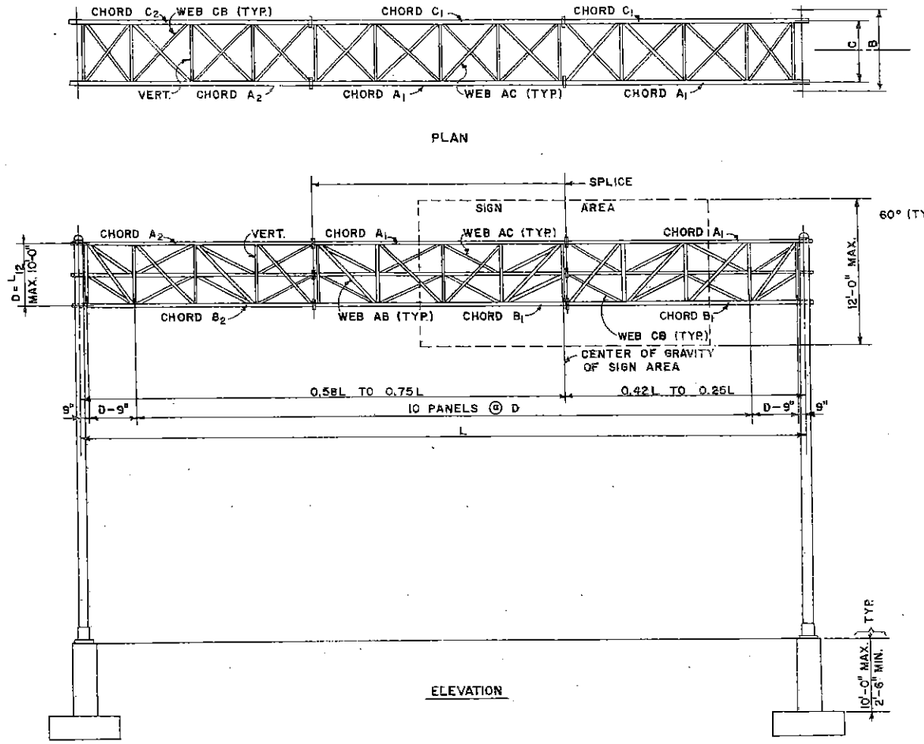
APPROVED _____ CHIEF TRAFFIC ENGINEER DATE _____

APPROVED _____ CHIEF ENGINEER DATE _____

SHEET	TRAFFIC STANDARD	No.
5 OF 12		7713

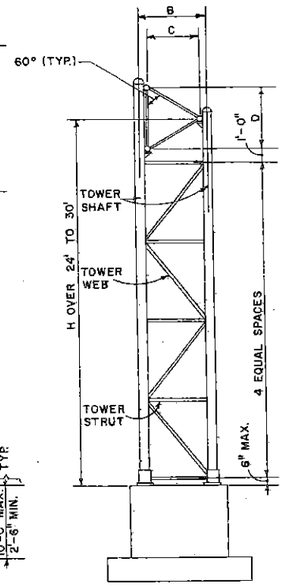
CHECKED J.A.K.
DRAWN BY

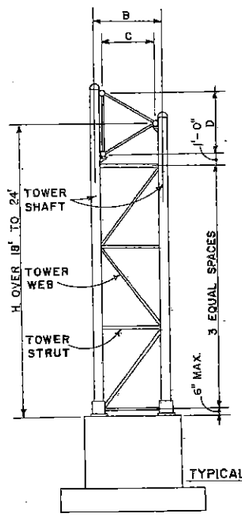
DISTRICT	COUNTY	ROUTE	SECTION	SHEET

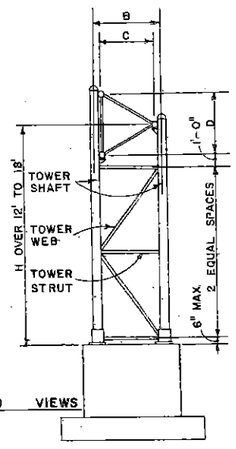


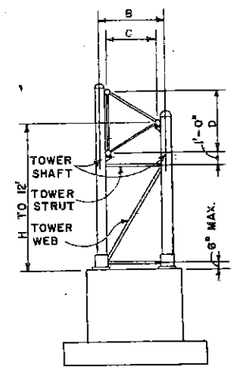
PLAN

ELEVATION









TYPICAL END VIEWS

L	SIGN AREA	TRUSS MEMBERS: CHORDS A1 OR B1	CHORDS C1	CHORDS A2 OR B2	CHORDS C2	WEBS AB	WEBS AC OR CB	VERT.	TOWER MEMBERS: SHAFTS H TO 12'	SHAFTS H OVER 12' TO 18'	SHAFTS H OVER 18' TO 24'	SHAFTS H OVER 24' TO 30'	WEB	STRUT	PEDESTAL E	PEDESTAL BARS "P" H TO 12'	PEDESTAL BARS "P" H OVER 12' TO 18'	PEDESTAL BARS "P" H OVER 18' TO 24'	PEDESTAL BARS "P" H OVER 24' TO 30'	FOOTING TYPE H TO 12'	FOOTING TYPE H OVER 12' TO 18'	FOOTING TYPE H OVER 18' TO 24'	FOOTING TYPE H OVER 24' TO 30'
OVER 110' TO 120'	150																						
	200	4 3/4 x 3/16	4 3/4 x 3/16	4 3/4 x 3/16	4 3/4 x 3/16	3 1/2 x 3/16	4 1/4 x 3/16	3 x 3/16	7 x 3/16	9 x 3/16	11 x 3/16	12 x 1/4	3 1/2 x 3/16	3 1/4 x 3/16	12'-6"	28 #4	28 #4	28 #4	30 #4	514	614	615	716
	250	4 3/4 x 3/16	4 3/4 x 3/16	4 3/4 x 3/16	4 3/4 x 3/16	3 1/2 x 3/16	4 1/4 x 3/16	3 x 3/16	7 1/2 x 3/16	9 x 3/16	10 x 1/4	12 x 1/4	3 1/2 x 3/16	3 1/4 x 3/16	12'-6"	28 #4	28 #4	28 #4	32 #4	514	614	616	716
	300	4 3/4 x 3/16	4 3/4 x 3/16	4 3/4 x 3/16	4 3/4 x 3/16	3 1/2 x 3/16	4 1/4 x 3/16	3 x 3/16	7 1/2 x 3/16	9 1/2 x 3/16	10 1/2 x 1/4	11 x 3/16	3 1/2 x 3/16	3 1/4 x 3/16	12'-6"	28 #4	28 #4	30 #4	36 #4	514	614	617	717
	350	4 3/4 x 3/16	4 3/4 x 3/16	4 3/4 x 3/16	4 3/4 x 3/16	3 1/2 x 3/16	4 1/4 x 3/16	3 x 3/16	8 x 3/16	10 x 3/16	11 x 1/4	12 x 3/16	3 1/2 x 3/16	3 1/4 x 3/16	12'-6"	28 #4	28 #4	34 #4	26 #5	514	615	716	718
	400	4 3/4 x 3/16	4 3/4 x 3/16	4 3/4 x 3/16	4 3/4 x 3/16	3 1/2 x 3/16	4 1/4 x 3/16	3 x 3/16	8 x 3/16	10 1/2 x 1/4	12 x 1/4	12 x 5/16	3 1/2 x 3/16	3 1/4 x 3/16	12'-6"	28 #4	28 #4	36 #4	30 #5	515	616	717	719
	450	4 3/4 x 3/16	4 3/4 x 1/4	4 3/4 x 3/16	4 3/4 x 3/16	3 1/2 x 3/16	4 1/4 x 3/16	3 x 3/16	9 x 3/16	10 x 1/4	12 x 1/4	12 x 3/8	3 1/2 x 3/16	3 1/4 x 3/16	12'-6"	28 #4	32 #4	28 #5	32 #5	615	617	718	720
	500	5 x 3/16	5 x 1/4	5 x 3/16	5 x 3/16	3 1/2 x 3/16	4 1/4 x 3/16	3 x 3/16	9 x 3/16	10 x 1/4	12 x 1/4	12 x 3/8	3 1/2 x 3/16	3 1/4 x 3/16	12'-6"	28 #4	32 #4	28 #5	34 #5	615	617	719	820
	550	4 3/4 x 1/4	4 3/4 x 1/4	4 3/4 x 3/16	4 3/4 x 3/16	3 1/2 x 3/16	4 1/4 x 3/16	3 x 3/16	9 x 3/16	10 x 1/4	11 x 5/16	12 x 3/8	3 1/2 x 3/16	3 1/4 x 3/16	12'-6"	28 #4	36 #4	30 #5	36 #5	519	618	719	820
	600																						
OVER 120' TO 130'	150																						
	200																						
	250																						
	300																						
	350	5 x 3/16	5 x 3/16	5 x 3/16	5 x 3/16	3 1/2 x 3/16	4 1/2 x 3/16	3 x 3/16	8 x 3/16	10 1/2 x 3/16	11 x 1/4	12 x 5/16	3 1/2 x 3/16	3 x 3/16	12'-6"	28 #4	28 #4	34 #4	28 #5	515	616	619	718
	400	5 x 3/16	5 x 1/4	5 x 3/16	5 x 3/16	3 1/2 x 3/16	4 1/2 x 3/16	3 x 3/16	8 1/2 x 3/16	11 x 3/16	12 x 1/4	12 x 5/16	3 1/2 x 3/16	3 x 3/16	12'-6"	28 #4	30 #4	38 #4	30 #5	516	616	718	719
	450	5 1/2 x 3/16	5 1/2 x 1/4	5 1/2 x 3/16	5 1/2 x 3/16	3 1/2 x 3/16	4 1/2 x 3/16	3 x 3/16	8 1/2 x 3/16	11 x 3/16	12 x 1/4	12 x 3/8	3 1/2 x 3/16	3 x 3/16	12'-6"	28 #4	32 #4	28 #5	32 #5	616	617	718	820
	500																						
	550																						
	600																						
OVER 130' TO 140'	150																						
	200																						
	250																						
	300																						
	350																						
	400																						
	450																						
	500																						
	550																						
	600																						

NOTES

BARS "P" AS TABULATED ARE THE TOTAL NUMBER OF VERTICAL BARS IN THE PEDESTAL.

FOR DETAILS OF TRUSS SEE STD. DRAWINGS (SHEET 8).

FOR DETAILS OF PEDESTAL AND FOOTING SEE STD. DRAWINGS (SHEET 7).

B = 0.866 D + CHORD DIAMETER + TOWER SHAFT DIAMETER + 3½.

ALL MATERIAL UNLESS OTHERWISE SPECIFIED SHALL BE STRUCTURAL ALUMINUM 6061-T6.

FOR TRUSS CAMBER SEE SHEET 8.

FOR GENERAL NOTES SEE SHEET 7.

FOR DETAILS OF LIGHT SUPPORTS AND HAND HOLE SEE SHEET 12.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC ENGINEERING

OVERHEAD SIGN STRUCTURES 110' TO 140' SPANS LOADING CONDITION II

APPROVED _____ CHIEF TRAFFIC ENGINEER DATE 5/15/81

APPROVED _____ CHIEF ENGINEER DATE 5/15/81

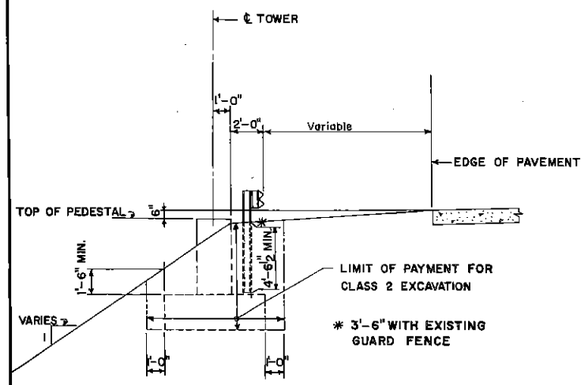
REVISIONS
3-30-71

SHEET	TRAFFIC STANDARD	No.
6 OF 12		7713

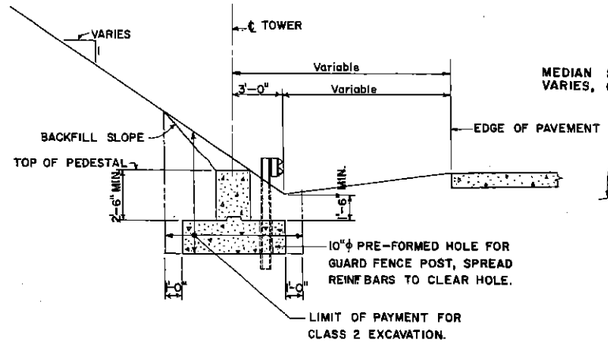
TRACED BY J.A.K.
TRIAL BY ... DATE ...

J. M. WEIL CO., PHILA., PA.

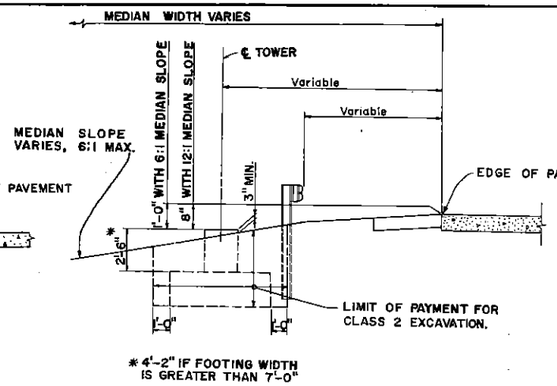
FORM 4237 REV 5-61



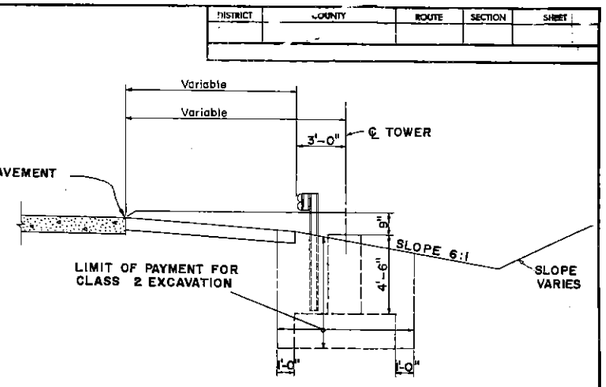
TYPICAL SHOULDER INSTALLATION IN FILL



TYPICAL SHOULDER INSTALLATION IN CUT



TYPICAL GRADED MEDIAN INSTALLATION

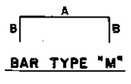


TYPICAL SHOULDER INSTALLATION IN CUT WITH SWALE

DISTRICT	COUNTY	ROUTE	SECTION	SHEET

FOOTING				FOOTING REINFORCEMENT									
TYPE	DIMENSION		CU.YDS.	"L" BARS				"T" BARS				WT. OF
	F	G	CONC.	NO. L1	NO. L2	SIZE	LENGTH	NO. T1	NO. T2	SIZE	LENGTH	BARS
917	9'-0"	17'-0"	11.3	12	9	4	16'-6"	17	17	4	8'-6"	425
1019	10'-0"	19'-0"	14.1	10	10	4	18'-6"	19	19	4	9'-6"	488
411	4'-0"	11'-0"	3.3	4	4	4	10'-6"	11	11	4	3'-6"	108
412	4'-0"	12'-0"	3.6	4	4	4	11'-6"	12	12	4	3'-6"	118
413	4'-0"	13'-0"	3.9	4	4	4	12'-6"	13	13	4	3'-6"	128
414	4'-0"	14'-0"	4.2	4	4	4	13'-6"	14	14	4	3'-6"	138
415	4'-0"	15'-0"	4.4	4	4	4	14'-6"	15	15	4	3'-6"	148
416	4'-0"	16'-0"	4.7	4	4	4	15'-6"	16	16	4	3'-6"	158
1018	10'-0"	18'-0"	13.3									
510	5'-0"	10'-0"	3.7	5	5	4	9'-6"	10	10	4	4'-6"	124
511	5'-0"	11'-0"	4.1	5	5	4	10'-6"	11	11	4	4'-6"	136
512	5'-0"	12'-0"	4.4	5	5	4	11'-6"	12	12	4	4'-6"	149
513	5'-0"	13'-0"	4.8	5	5	4	12'-6"	13	13	4	4'-6"	162
514	5'-0"	14'-0"	5.2	6	5	4	13'-6"	14	14	4	4'-6"	183
515	5'-0"	15'-0"	5.6	5	5	4	14'-6"	15	15	4	4'-6"	187
516	5'-0"	16'-0"	5.9	5	5	4	15'-6"	16	16	4	4'-6"	200
612	6'-0"	12'-0"	5.3	6	6	4	11'-6"	12	12	4	5'-6"	180
613	6'-0	13'-0"	5.8	6	6	4	12'-6"	13	13	4	5'-6"	196
614	6'-0"	14'-0"	6.2	6	6	4	13'-6"	14	14	4	5'-6"	211
615	6'-0"	15'-0"	6.7	7	6	4	14'-6"	15	15	4	5'-6"	246
616	6'-0"	16'-0"	7.1	7	6	4	15'-6"	16	16	4	5'-6"	283
617	6'-0"	17'-0"	7.6	9	6	4	16'-6"	17	17	4	5'-6"	279
618	6'-0"	18'-0"	8.0	9	6	4	17'-6"	18	18	4	5'-6"	307
619	6'-0"	19'-0"	8.4	9	6	4	18'-6"	19	19	4	5'-6"	325
918	9'-0"	18'-0"	12.0	9	9	4	17'-6"	18	18	4	8'-6"	415
920	9'-0"	20'-0"	13.4	10	6	5	19'-6"	20	20	4	8'-6"	553
714	7'-0"	14'-0"	7.3	7	7	4	13'-6"	14	14	4	6'-6"	248
715	7'-0"	15'-0"	7.8	7	7	4	14'-6"	15	15	4	6'-6"	276
716	7'-0"	16'-0"	8.3	9	7	4	15'-6"	16	16	4	6'-6"	284
717	7'-0"	17'-0"	8.8	9	7	4	16'-6"	17	17	4	6'-6"	324
718	7'-0"	18'-0"	9.3	9	7	4	17'-6"	18	18	4	6'-6"	344
719	7'-0"	19'-0"	9.8	8	7	4	18'-6"	19	19	4	6'-6"	350
817A	8'-0"	17'-0"	10.1	8	8	4	16'-6"	17	17	4	7'-6"	347
816	8'-0"	16'-0"	9.5	8	8	4	15'-6"	16	16	4	7'-6"	247
817	8'-0"	17'-0"	10.1	12	8	4	16'-6"	17	17	4	7'-6"	380
818	8'-0"	18'-0"	10.7	11	8	4	17'-6"	18	18	4	7'-6"	403
818A	8'-0"	18'-0"	10.7	14	9	4	17'-6"	18	18	4	7'-6"	450
819	8'-0"	19'-0"	11.3	10	8	4	18'-6"	19	19	4	7'-6"	413
820	8'-0"	20'-0"	11.9	11	8	4	19'-6"	20	20	4	7'-6	448
517	5'-0"	17'-0"	6.3	5	5	4	16'-6"	17	17	4	4'-6"	212
918	9'-0"	18'-0"	12.0	9	9	4	17'-6"	18	18	4	8'-6"	415
720	7'-0"	20'-0"	10.4	9	5	5	19'-6"	20	20	4	6'-6"	458
718A	7'-0"	18'-0"	9.3	10	7	4	17'-6"	18	18	4	6'-6"	355
719A	7'-0"	19'-0"	9.8	13	7	4	18'-6"	19	19	4	6'-6"	412
519	5'-0"	19'-0"	7.0	5	5	4	18'-6"	19	19	4	4'-6"	238
717A	7'-0"	17'-0"	8.8	11	7	4	16'-6"	17	17	4	6'-6"	356
919	9'-0"	19'-0"	12.7	10	9	4	18'-6"	19	19	4	8'-6"	481
820A	8'-0"	20'-0"	11.9	10	9	5	19'-6"	20	20	4	7'-6"	566
820B	8'-0	20'-0"	11.9	8	5	5	19'-6"	20	20	4	7'-6"	465

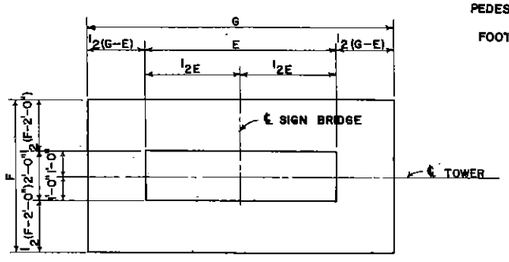
PEDESTAL	PEDESTAL REINF.				
E	CU.YDS. CONC.	*4 BARS TYPE "M" LENGTH	A	B	WT. PER PAIR
7'-6"	0.56K	9'-10"	7'-0"	1'-5"	13 lbs.
8'-6"	0.63K	10'-10"	8'-0"	1'-5"	14
9'-6"	0.70K	11'-10"	9'-0"	1'-5"	15
10'-0"	0.74K	12'-4"	9'-6"	1'-5"	16
11'-0"	0.81K	13'-4"	10'-6"	1'-5"	17
11'-6"	0.85K	13'-10"	11'-0"	1'-5"	18
12'-6"	0.93K	14'-10"	12'-0"	1'-5"	20
13'-0"	0.96K	15'-4"	12'-6"	1'-5"	20



BAR TYPE "M"

NOTE:

FOR DIMENSION "K" AND "E" AND NUMBER OF BARS "M", SEE GENERAL PLAN FOR INDIVIDUAL STRUCTURE.

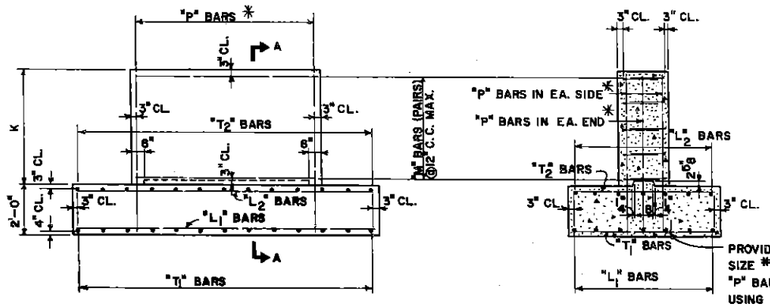


PLAN OF FOUNDATION

SCALE: $\frac{3}{16}$" = 1'-0"

* TOTAL NUMBER AND SIZE OF THESE BARS ARE GIVEN IN TABLES ON SHEETS 1 TO 6 AND ON THE GENERAL PLAN & ELEVATION SHEET FOR EACH STRUCTURE. OF THIS NUMBER OF BARS, ONE IS PLACED IN EACH END OF THE PEDESTAL AND ONE HALF OF THE REMAINING BARS ARE PLACED IN EACH SIDE.

TABLE "P"			
BAR SIZE	WEIGHT LBS./FT.	A	LENGTH
4	.668	0	K + 1'-8"
5	1.043	0	K + 1'-8"
6	1.502	8	K + 2'-1"
7	2.044	10	K + 2'-3"
8	2.670	1'-1"	K + 2'-6"
9	3.400	1'-3"	K + 2'-8"
10	4.303	1'-5"	K + 2'-10"
11	5.313	1'-7"	K + 3'-0"



ELEVATION

SECTION A-A

PROVIDE HOOK ON ALL "P" BARS SIZE #6 AND LARGER, SEE TABLE "P" "P" BARS MAY BE DOWELED TO FOOTING USING 30 DIA. MIN. LAP. HOWEVER NO COMPENSATION WILL BE ALLOWED FOR ADDITIONAL STEEL INVOLVED.

TYPICAL PLAN VIEW

GENERAL NOTES:

- ALL TUBES, PLATES AND STRUCTURAL SHAPES SHALL BE ALUMINUM ALLOY 6061-T6 (ASTM-B235-57T, ALLOY GSIIA).
  ALL CASTINGS SHALL BE ALUMINUM ALLOY 356-T6 (ASTM-B108-57T OR B26-57T, ALLOY SG 70A).
  ALUMINUM BOLTS SHALL BE ALUMINUM ALLOY 2024-T4 (ASTM B211 ALLOY CG42A).
  FLAT AND BEVELED WASHERS SHALL BE ALUMINUM ALLOY 2024-T4 (ASTM 209 ALLOY CLAD CG42A).
  SPRING LOCK WASHERS SHALL BE ALUMINUM ALLOY 7075-T6 (ASTM B211 ALLOY 2G62A).
  ALL STEEL COMPONENTS SHALL BE STRUCTURAL STEEL ASTM A7 OR A36, UNLESS NOTED.
- ALL WORKMANSHIP SHALL BE IN ACCORDANCE WITH P.D.H. SPECIFICATIONS, CURRENT FORMS 408 AND 409 AND ASCE PAPER 970, SPECIFICATIONS FOR STRUCTURES OF ALUMINUM ALLOY 6061-T6.
- ALL CONCRETE FOR PEDESTALS AND FOOTINGS SHALL BE CLASS B.
- STEEL REINFORCEMENT BARS ARE DESIGNED FOR F_S = 18,000 lbs. PER SQ. IN. AND DETAILED AS PER A.C.I. CODE. STRESSED BARS SHALL BE LAPPED 30 DIAMETERS & UNSTRESSED BARS 24 DIA. EXCEPT AS NOTED. PROVIDE 3" COVER ON REINFORCEMENT BARS UNLESS OTHERWISE NOTED.
- DESIGN SPECIFICATIONS ARE BASED ON U.S. BUREAU OF PUBLIC ROADS "STRUCTURAL REQUIREMENTS FOR HIGHWAY SIGNS."
- MAXIMUM FOUNDATION BEARING PRESSURE EQUALS 1½ TONS PER SQ. FT.
- THE FOOTINGS MAY BE ORDERED BY THE ENGINEER TO BE AT ANY ELEVATION OR OF ANY DIMENSIONS NECESSARY TO PROVIDE A PROPER FOUNDATION.
- EXPOSED CONCRETE EDGES SHALL BE CHAMFERED 1" X 1" UNLESS SPECIFIED OR DIRECTED BY THE ENGINEER OTHERWISE.
- ALL ANCHOR BOLTS FOR BEARINGS SHALL BE SET BY TEMPLATE IN FORMS BEFORE CONCRETE IS POURED. DRILLING OF HOLES FOR ANCHOR BOLTS IN PEDESTALS WILL NOT BE PERMITTED.
- WELDING SHALL CONFORM TO SECTION L "FABRICATION" OF ASCE PAPER 970, SPECIFICATIONS FOR STRUCTURES OF ALUMINUM ALLOY 6061-T6. WELD WIRE SHALL BE ALUMINUM ALLOY 5556.

REVISIONS	
R-2	10/23/75
	3-30-71

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC ENGINEERING

OVERHEAD SIGN STRUCTURES SPANS OVER 50'
FOUNDATION DETAILS

APPROVED [redacted]

APPROVED [redacted]

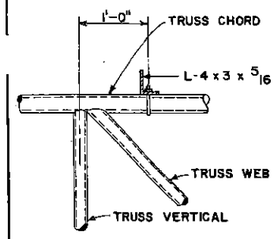
SHEET	TRAFFIC STANDARD	No.
7 of 12		7713

TRACED BY J.A.K.
FINAL BY

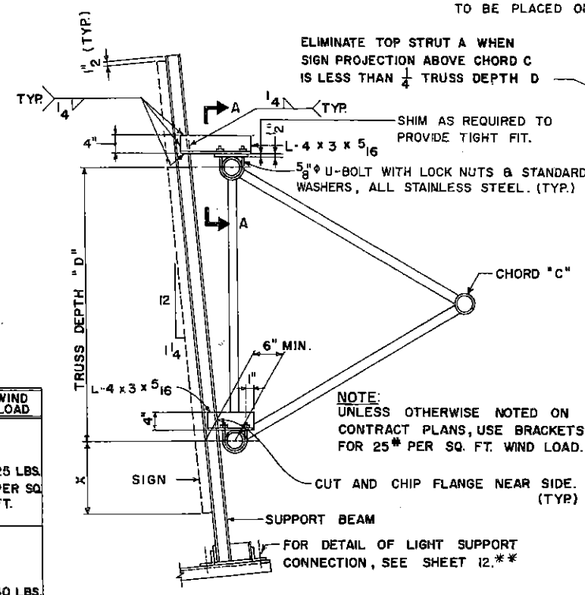
FORM 4937 REV 3-61

NOTE: APPLY TORQUE OF 25 FT.-LBS TO ALL $\frac{5}{8}$"ϕ U-BOLTS CONNECTING SIGN SUPPORT STRUTS TO TRUSS WHEN ERECTING IN FIELD. (THIS NOTE TO BE PLACED ON SHOP ERECTION DRAWINGS.)

DISTRICT	COUNTY	ROUTE	SECTION	SHEET

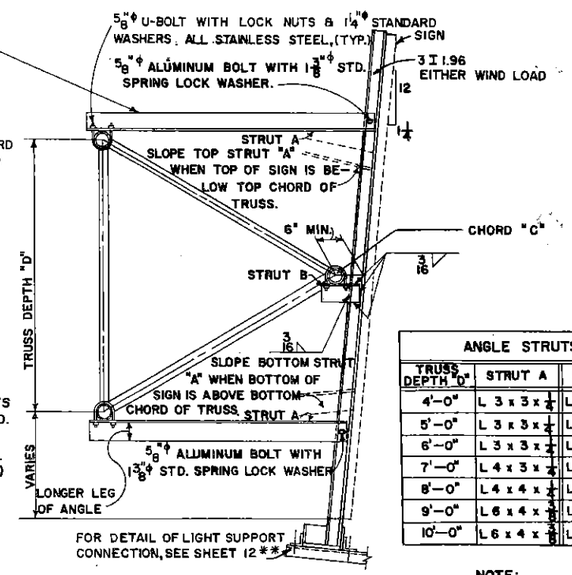


SECTION A-A



SIGN MOUNTED ON FRONT OF TRUSS

ELIMINATE TOP STRUT A WHEN SIGN PROJECTION ABOVE CHORD C IS LESS THAN ¼ TRUSS DEPTH D



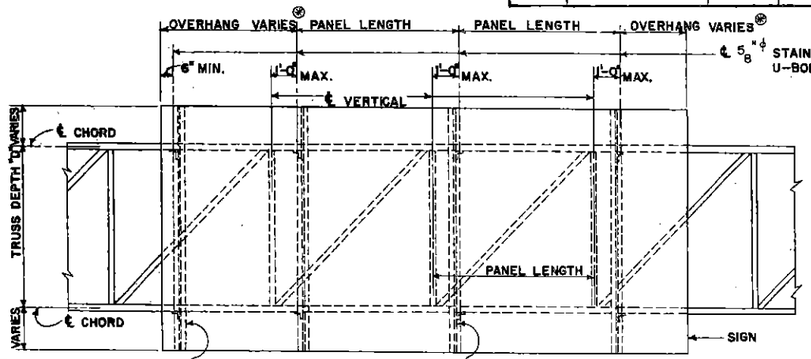
SIGN MOUNTED ON REAR OF TRUSS

ANGLE STRUTS		
TRUSS DEPTH "D"	STRUT A	STRUT B
4'-0"	L 3 x 3 x ¼	L 3 x 3 x ¼
5'-0"	L 3 x 3 x ¼	L 3 x 3 x ¼
6'-0"	L 3 x 3 x ¼	L 3 x 3 x ¼
7'-0"	L 4 x 3 x ¼	L 4 x 3 x ¼
8'-0"	L 4 x 4 x ¼	L 4 x 3 x ¼
9'-0"	L 6 x 4 x ⅜	L 4 x 3 x ¼
10'-0"	L 6 x 4 x ⅜	L 4 x 3 x ¼

NOTE:
ANGLE STRUTS ADEQUATE FOR WIND PRESSURES TO 40 LBS. PER SQ. FT.

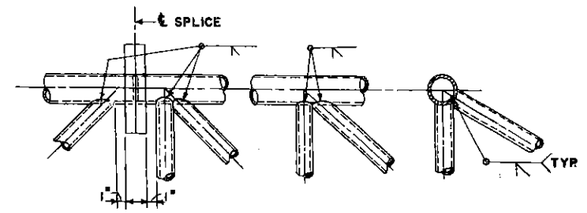
"D"	X	SUPPORT BEAM	WIND LOAD
4.0' To 8.0'	0 To 4.0'	3 I 1.96	25 LBS. PER SQ. FT.
8.1' To 9.0'	0 To 1.5'	4 I 2.64	
9.1' To10.0'	0 To 2.5'	5 I 3.43	
4.0' To 7.0'	0 To 4.0'	3 I 1.96	40 LBS. PER SQ. FT.
7.1' To 8.0'	0 To 1.5'	4 I 2.64	
7.1' To 8.0'	1.6' To 2.0'	3 I 1.96	
8.1' To 9.0'	0 To 1.5'	5 I 3.43	
9.1' To 10.0'	0 To 1.5'	6 I 4.30	

SIGN SUPPORT BRACKET DETAILS



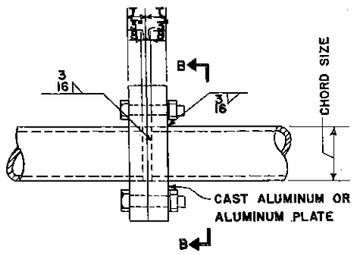
NOTE:
SIGN MOUNTED ON REAR OF TRUSS SIMILAR.

TYPICAL SIGN SUPPORT BRACKET SPACING

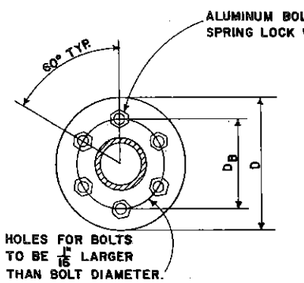


TYPICAL TRUSS JOINTS

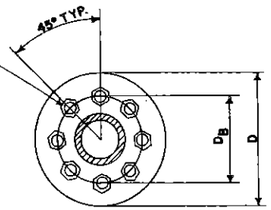
**FOR SPECIAL LIGHT FIXTURE SUPPORT DETAILS FOR STRUCTURE MOUNTED ON HIGHWAY BRIDGE SEE SHEET 12A.



CHORD SPLICE



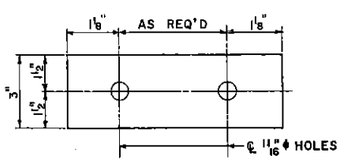
SECTION B-B, 6 BOLTS



SECTION B-B, 8 BOLTS

CHORD SPLICE							
CHORD SIZE	D	D_B	BOLTS	CAST ALUMINUM T	CAST ALUMINUM WEIGHT-LBS.*	ALUMINUM PLATE T	ALUMINUM PLATE WEIGHT-LBS.*
3"ϕ	7½"	5"	6-¾"ϕ	1⅛"	8.8	13/16"	6.6
3¼"ϕ	8"	5½"	6-¾"ϕ	1¼"	10.9	7/8"	7.9
3½"ϕ	8"	5½"	6-¾"ϕ	1¼"	10.6	7/8"	7.6
3¾"ϕ	8½"	6"	6-¾"ϕ	1¼"	11.9	7/8"	8.5
4"ϕ	8½"	6"	6-¾"ϕ	1¼"	11.5	7/8"	8.2
4¼"ϕ	9"	6½"	6-¾"ϕ	1¼"	12.8	7/8"	9.1
4½"ϕ	9"	6½"	6-¾"ϕ	1⅜"	12.3	7/8"	8.8
4¾"ϕ	9½"	7"	6-¾"ϕ	1½"	13.7	15/16"	10.4
5"ϕ	9½"	7"	8-¾"ϕ	1½"	13.6	15/16"	10.5
5¼"ϕ	10"	7½"	8-¾"ϕ	1⅝"	16.4	15/16"	11.5
5½"ϕ	10"	7½"	8-¾"ϕ	1⅝"	15.8	15/16"	11.1
6"ϕ	10½"	8"	8-¾"ϕ	1¾"	16.8	15/16"	11.8
6½"ϕ	1'-0"	9"	8-⅞"ϕ	1½"	24.9	1"	17.0
7"ϕ	1'-0½"	9½"	8-⅞"ϕ	1½"	26.1	1"	17.9

*WEIGHT TABULATED IS THE WEIGHT OF ENTIRE SPLICE INCLUDING BOLTS.



SHIM DETAIL

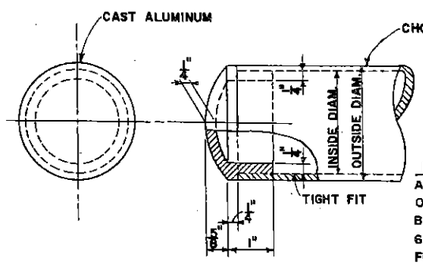
PROVIDE 1 AT ¼", 3 AT ⅛" AND 1 AT 1/16" THICKNESS FOR EACH UPPER SIGN SUPPORT STRUT.

WEIGHT OF STAINLESS STEEL U-BOLTS IN LBS.‡		
CHORD SIZE	5/8"ϕ U-BOLTS SIGNS TO CHORDS	5/8"ϕ U-BOLTS CHORDS TO TRUSS SEATS
3"ϕ	1.19	1.20
3¼"ϕ	1.25	1.25
3½"ϕ	1.30	1.31
3¾"ϕ	1.36	1.37
4"ϕ	1.41	1.42
4¼"ϕ	1.47	1.48
4½"ϕ	1.53	1.53
4¾"ϕ	1.58	1.60
5"ϕ	1.64	1.66
5¼"ϕ	1.69	1.70
5½"ϕ	1.75	1.76
6"ϕ	1.86	1.87
6½"ϕ	1.97	1.98
7"ϕ	2.06	2.09

‡WEIGHT OF ONE U-BOLT WITH HEX. NUTS AND WASHERS AS CALLED FOR ON DRAWING.

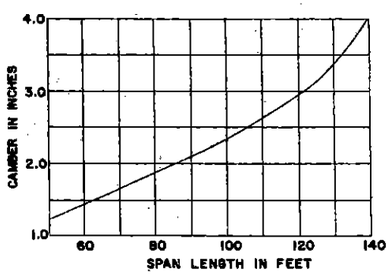
WEIGHT OF END CAPS	
CHORD SIZE	WEIGHT - LBS.
3"ϕ	.4
3¼"ϕ	.5
3½"ϕ	.6
3¾"ϕ	.6
4"ϕ	.7
4¼"ϕ	.8
4½"ϕ	.8
4¾"ϕ	.9
5"ϕ	1.0
5¼"ϕ	1.1
5½"ϕ	1.2
6"ϕ	1.3
6½"ϕ	1.5
7"ϕ	1.7

NOTE:
FOR DETAILS OF MOUNTING SIGNS TO SIGN SUPPORT BRACKETS SEE STANDARD DRAWING 7716.



CHORD END CAP DETAIL

NOTES:
ALL MATERIAL UNLESS OTHERWISE SPECIFIED SHALL BE STRUCTURAL ALUMINUM 6061-T6.
FOR GENERAL NOTES SEE SHEET 7.



CAMBER DIAGRAM

REVISIONS
8-4-71
3-30-71

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC ENGINEERING

OVERHEAD SIGN STRUCTURES
SPANS OVER 50'
TRUSS DETAILS

APPROVED _____ CHIEF TRAFFIC ENGINEER DATE 5/15/61

APPROVED _____ CHIEF ENGINEER DATE 5/15/61

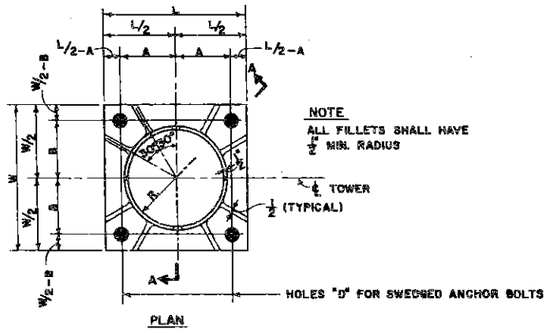
SHEET 8 of 12

TRAFFIC STANDARD No. 7713

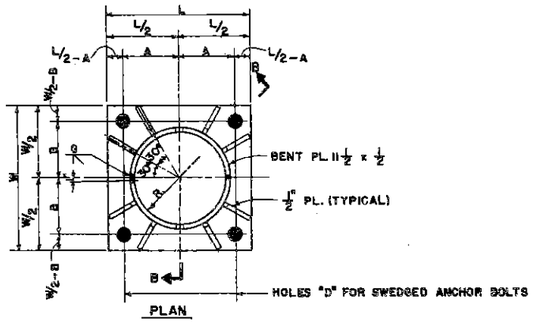
J. H. WEIK CO., PHILA., PA.

TRACED BY J.A.K.
FINAL BY

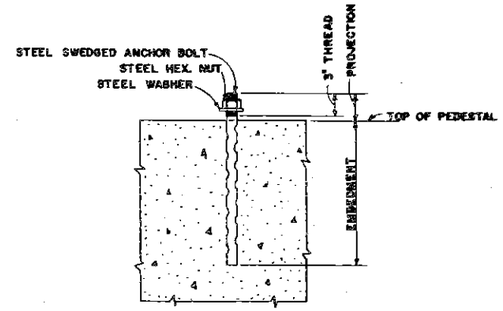
DISTRICT	COUNTY	ROUTE	SECTION	SHEET



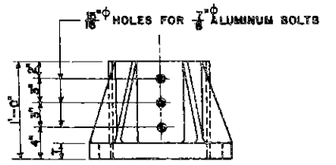
PLAN



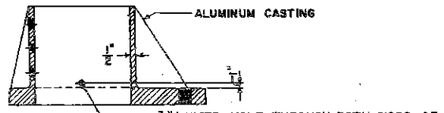
PLAN



ANCHOR BOLT DETAIL

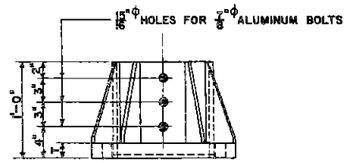


ELEVATION

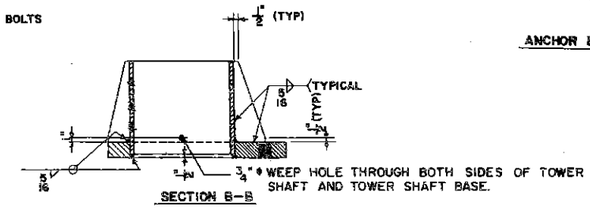


SECTION A–A

TOWER SHAFT BASE CASTING



ELEVATION



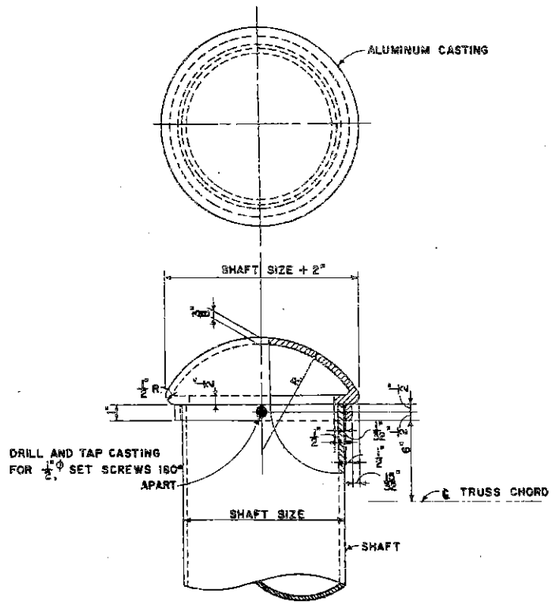
SECTION B–B

ALTERNATE BUILT UP TOWER SHAFT BASE

TOWER SHAFT BASES									STEEL ANCHOR BOLTS ‡ ‡‡				
SHAFT SIZE	R	L	W	T	A	S	HOLE DIAM. D	WEIGHT ‡	BOLT DIAM.	WASHER SIZE	EMBED-MENT	PROJ-ECTION	WEIGHT 4 BOLTS
6"Φ x 1/2	3 1/2	1'-0"	1'-0"	1 1/2	4 1/2	4 1/2	1 1/4	31.7	1"	2 1/2 Φ x 1/8	1'-6"	3"	21.4
6 1/2"Φ x 1/2	3 1/2	1'-0"	1'-0"	1 1/2	4 1/2	4 1/2	1 1/4	32.4	1"	2 1/2 Φ x 1/8	1'-6"	3"	21.4
7"Φ x 1/2	3 1/2	1'-0"	1'-0"	1 1/2	4 1/2	4 1/2	1 1/4	32.0	1"	2 1/2 Φ x 1/8	1'-5"	3"	21.4
7 1/2"Φ x 1/2	3 1/2	1'-0"	1'-0"	1 1/2	4 1/2	4 1/2	1 1/4	31.6	1"	2 1/2 Φ x 1/8	1'-5"	3"	21.4
8"Φ x 1/2	4 1/2	1'-0"	1'-0"	1 1/2	4 1/2	4 1/2	1 1/4	31.2	1"	2 1/2 Φ x 1/8	1'-6"	3"	21.4
8 1/2"Φ x 1/2	4 1/2	1'-2"	1'-2"	1 1/2	5"	5"	1 1/4	42.3	1"	2 1/2 Φ x 1/8	2'-0"	3 1/2"	27.0
9"Φ x 1/2	4 1/2	1'-2"	1'-2"	1 1/2	5"	5"	1 1/4	41.6	1"	2 1/2 Φ x 1/8	2'-0"	3 1/2"	27.0
9 1/2"Φ x 1/2	4 1/2	1'-2"	1'-2"	1 1/2	5"	5"	1 1/4	40.8	1"	2 1/2 Φ x 1/8	2'-0"	3 1/2"	27.0
10"Φ x 1/2	5 1/2	1'-2"	1'-2"	1 1/2	5"	5"	1 1/4	39.9	1"	2 1/2 Φ x 1/8	2'-0"	3 1/2"	27.0
10 1/2"Φ x 1/2	5 1/2	1'-4"	1'-4"	1 1/2	6"	6"	1 1/4	53.7	1 1/8"	2 1/2 Φ x 1/8	2'-6"	3 1/2"	41.8
11"Φ x 1/2	5 1/2	1'-4"	1'-4"	1 1/2	6"	6"	1 1/4	52.5	1 1/8"	2 1/2 Φ x 1/8	2'-6"	3 1/2"	41.8
10"Φ x 1	5 1/2	1'-4"	1'-4"	1 1/2	6"	6"	1 1/4	54.8	1 1/8"	2 1/2 Φ x 1/8	2'-6"	3 1/2"	41.8
10 1/2"Φ x 1	5 1/2	1'-4"	1'-4"	1 1/2	6"	6"	1 1/4	53.7	1 1/8"	2 1/2 Φ x 1/8	2'-6"	3 1/2"	41.8
11"Φ x 1	5 1/2	1'-4"	1'-4"	1 1/2	6"	6"	1 1/4	52.5	1 1/8"	2 1/2 Φ x 1/8	2'-6"	3 1/2"	41.8
12"Φ x 1/2	6 1/2	1'-6"	1'-6"	2"	7"	7"	1 1/4	87.9	1 1/4"	3"Φ x 1/8	2'-6"	4"	51.7
11"Φ x 1	6 1/2	1'-6"	1'-6"	2"	7"	7"	1 1/4	70.9	1 1/4"	3"Φ x 1/8	2'-6"	4"	51.7
12"Φ x 1	6 1/2	1'-6"	1'-6"	2"	7"	7"	1 1/4	67.9	1 1/4"	3"Φ x 1/8	2'-6"	4"	51.7
12"Φ x 2	6 1/2	1'-8"	1'-6"	2"	8"	7"	1 1/4	75.8	1 1/2"	3 1/2"Φ x 1/8	2'-6"	4 1/2"	73.9
14"Φ x 1	7 1/2	1'-10"	1'-8"	2 1/2"	9"	8"	2"	95.8	1 1/4"	4"Φ x 1/8	2'-6"	4 1/2"	96.1

TOWER SHAFT CAPS		
SHAFT SIZE	R	WEIGHT
5"Φ	6"	4.3
6 1/2"Φ	6"	4.8
7"Φ	6"	5.4
7 1/2"Φ	6"	8.0
8"Φ	6"	6.6
8 1/2"Φ	7"	6.9
9"Φ	7"	7.6
9 1/2"Φ	7"	8.3
10"Φ	7"	9.1
10 1/2"Φ	8"	9.3
11"Φ	8"	10.1
12"Φ	8"	11.9
14"Φ	10"	14.2

‡ WEIGHT AS TABULATED ARE FOR ALUMINUM CASTING
WEIGHT OF BUILT UP BASE IS APPROXIMATELY THE SAME
‡‡ ANCHOR BOLTS SHALL BE STRUCTURAL STEEL A.S.T.M.–A449



TOWER SHAFT CAP

NOTES:
ALL MATERIAL UNLESS OTHERWISE SPECIFIED SHALL BE STRUCTURAL ALUMINUM 6061–T6.
FOR GENERAL NOTES SEE SHEET 7.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC ENGINEERING

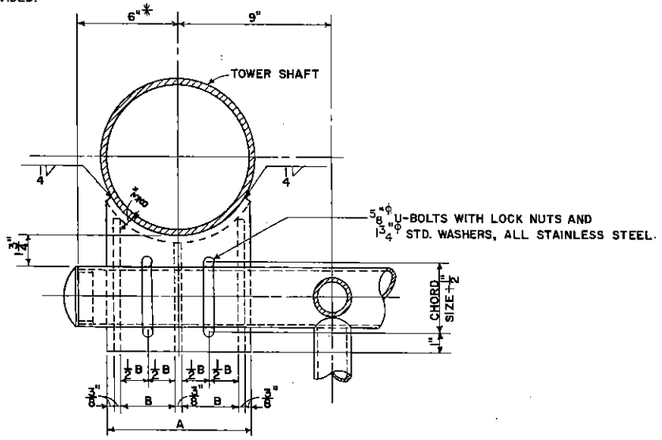
OVERHEAD SIGN STRUCTURES
SPANS OVER 50'
TOWER SHAFT BASES
CAPS & ANCHOR BOLTS

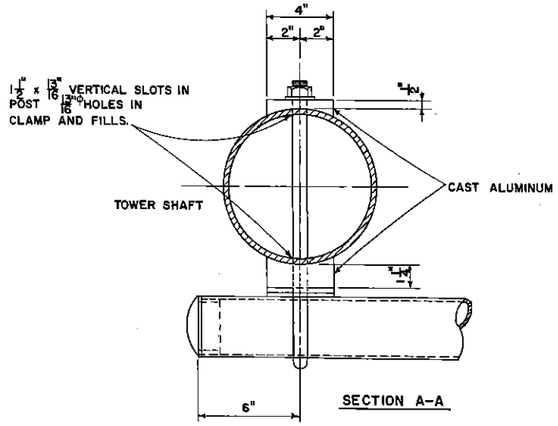
APPROVED [redacted] DATE [redacted]
APPROVED [redacted] DATE [redacted]

SHEET	TRAFFIC STANDARD	No.
9 of 12		7713

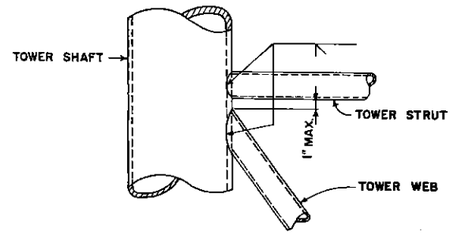
DISTRICT	COUNTY	ROUTE	SECTION	SHEET

*PROVISIONS FOR ±3" IN SPAN LENGTH HAS BEEN PROVIDED.

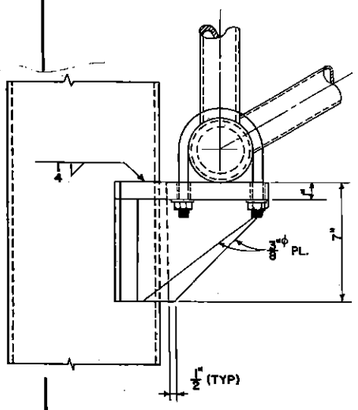


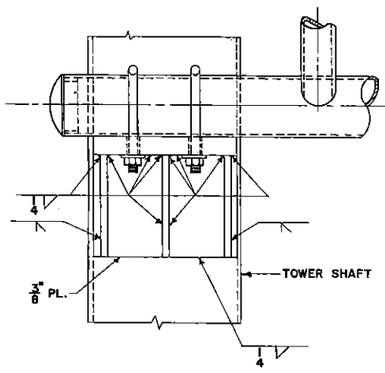


SECTION A-A

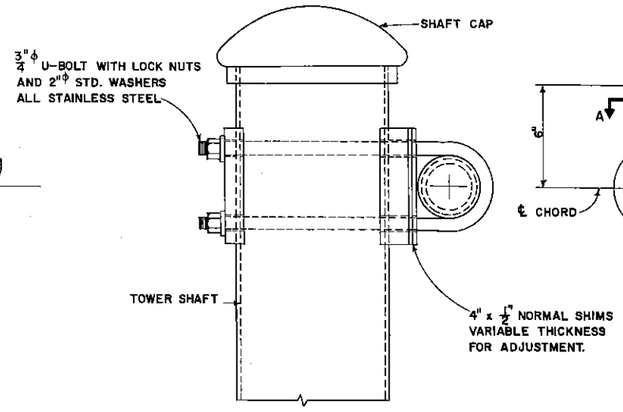


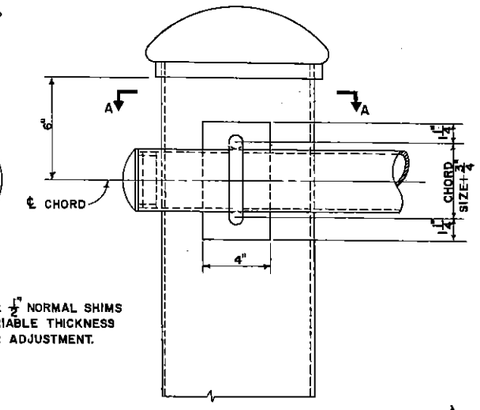
TYPICAL TOWER JOINT



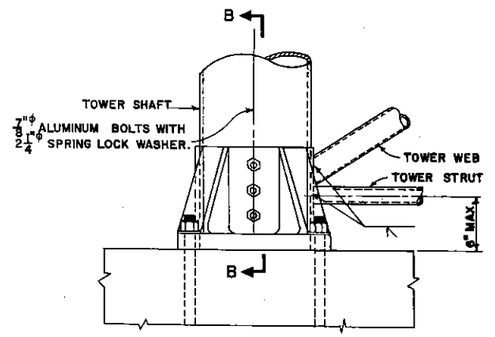


TRUSS SEAT DETAILS

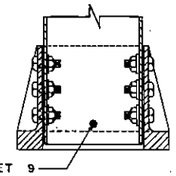




UPPER CHORD CLAMP DETAILS



CONNECTION TO SHAFT BASE



SECTION B-B

TRUSS SEAT								UPPER CHORD CLAMP										
SHAFT SIZE	DIMENSION		WEIGHT OF ALUMINUM IN LBS. FOR CHORD SIZE*					WEIGHT OF ALUMINUM IN LBS. FOR CHORD SIZE*					WEIGHT OF 1 STAINLESS STEEL U-BOLT IN LBS. FOR CHORD SIZE*‡				
	A	B	3"φ	4"φ	5"φ	6"φ	7"φ	3"φ	4"φ	5"φ	6"φ	7"φ	3"φ	4"φ	5"φ	6"φ	7"φ
6"φ	5 7/16"	2"	8.0	9.0	9.9	10.9	11.8	6.5	7.5	8.6	9.7	10.8	3.9	4.2	4.5	4.9	5.2
6 1/2"φ	6 1/4"	2 5/16"	8.4	9.4	10.4	11.4	12.4	6.4	7.4	8.5	9.5	10.6	4.0	4.3	4.7	5.0	5.3
7"φ	6 3/4"	2 7/16"	9.0	9.9	11-0	12.1	13.1	6.3	7.3	8.4	9.4	10.4	4.2	4.5	4.8	5.1	5.4
7 1/2"φ	7 1/8"	2 5/8"	9.3	10.4	11.5	12.5	13.6	6.2	7.2	8.3	9.3	10.3	4.3	4.6	4.9	5.2	5.6
8"φ	7 5/8"	2 7/8"	9.8	10.9	12.1	13.2	14.3	6.1	7.2	8.2	9.2	10.2	4.4	4.7	5.0	5.4	5.7
8 1/2"φ	8"	3 1/16"	10.2	11.4	12.6	13.7	15.0	6.1	7.1	8.1	9.1	10.1	4.5	4.8	5.2	5.5	5.8
9"φ	8 1/2"	3 5/16"	10.8	12.0	13.2	14.4	15.6	6.0	7.0	8.0	9.0	10.0	4.7	5.0	5.3	5.6	5.9
9 1/2"φ	8 7/8"	3 1/2"	11.2	12.4	13.7	14.9	16.2	6.0	7.0	8.0	9.0	10.0	4.8	5.1	5.4	5.7	6.1
10"φ	9 1/4"	3 11/16"	11.6	12.9	14.2	15.4	16.7	6.0	7.0	7.9	8.9	9.9	4.9	5.2	5.5	5.9	6.2
10 1/2"φ	9 3/4"	3 15/16"	12.1	13.4	14.8	16.1	17.4	5.9	6.9	7.9	8.9	9.8	5.0	5.3	5.7	6.0	6.3
11"φ	10 1/8"	4 1/8"	12.6	13.9	15.3	16.7	18.0	6.0	6.9	7.9	8.8	9.8	5.2	5.5	5.8	6.1	6.4
12"φ	11"	4 9/16"	13.6	15.0	16.4	17.9	19.3	5.8	6.8	7.8	8.8	9.7	5.4	5.7	6.0	6.4	6.7
14"φ	12 3/4"	5 7/16"	15.5	17.1	18.8	20.4	22.0	5.7	6.7	7.6	8.6	9.6	5.9	6.2	6.5	6.9	7.2

*FOR WEIGHT WHERE CHORD SIZE FALLS BETWEEN THOSE TABULATED USE WEIGHT FOR THE NEXT HIGHER TABULATED CHORD SIZE.

‡INCLUDES WEIGHT OF WASHERS AND NUTS.

NOTES:

U-BOLTS ARE NOT TO BE TIGHTENED UNTIL ENTIRE SIGN LOAD HAS BEEN PLACED ON SPAN.
ALL MATERIAL UNLESS OTHERWISE SPECIFIED SHALL BE STRUCTURAL ALUMINUM 6061-T6
FOR GENERAL NOTES SEE SHEET 7.

REVISIONS
3-30-71

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC ENGINEERING

OVERHEAD SIGN STRUCTURES
SPANS OVER 50'
TOWER DETAILS

APPROVED [redacted] TE
APPROVED [redacted] TE

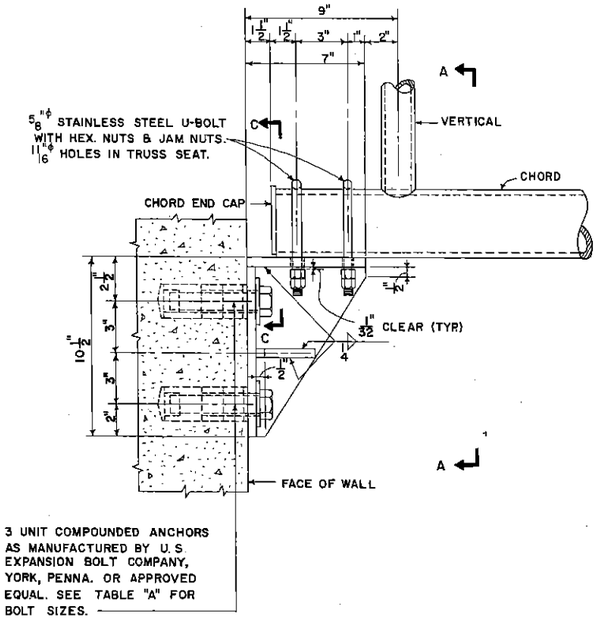
SHEET	TRAFFIC STANDARD	No. 7713
10 of 12		

TRACED BY L.A.K.
CHKD BY

J. E. WIX CO., HBG., PA.

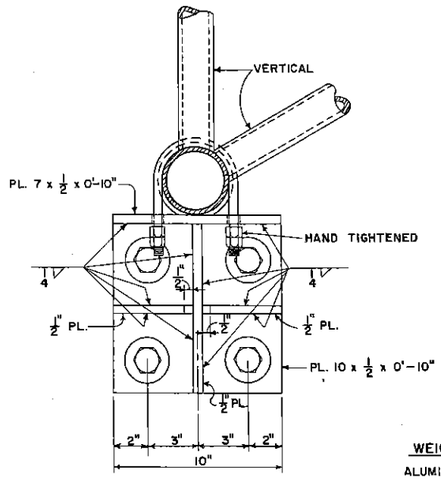
FORM 4237 REV 3-61

DISTRICT	COUNTY	ROUTE	SECTION	SHEET

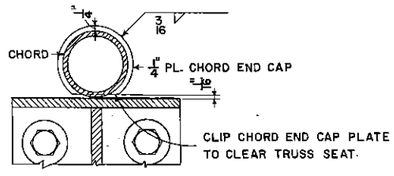


3 UNIT COMPOUNDED ANCHORS AS MANUFACTURED BY U.S. EXPANSION BOLT COMPANY, YORK, PENNA. OR APPROVED EQUAL. SEE TABLE "A" FOR BOLT SIZES.

EXPANSION TRUSS SEAT



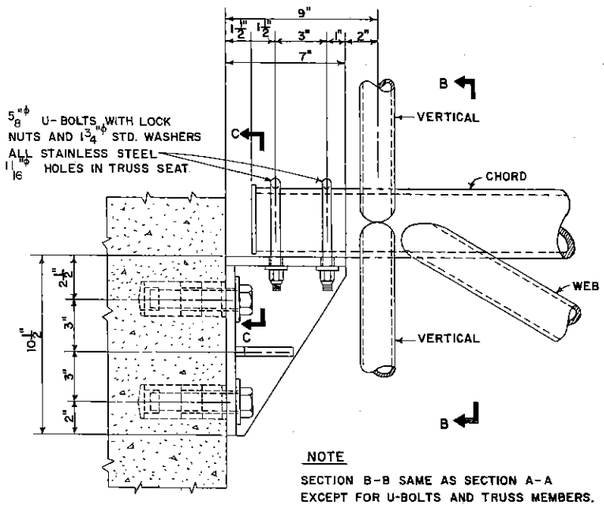
SECTION A-A



SECTION C-C

WEIGHTS

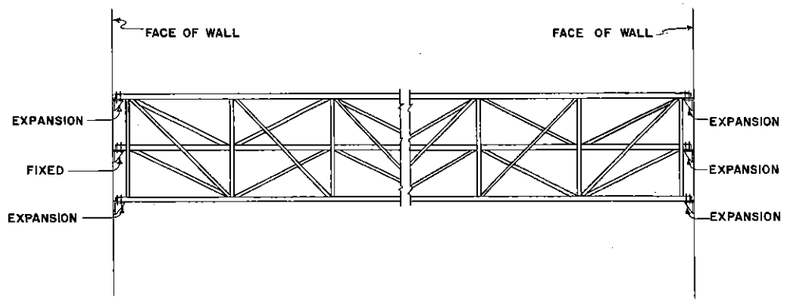
ALUMINUM FOR EACH TRUSS SEAT = 11.1 LBS.
FOR GALVANIZED STEEL ANCHOR BOLTS SEE TABLE A.
FOR WEIGHT OF STAINLESS STEEL U-BOLTS SEE SHEET 8.



NOTE

SECTION B-B SAME AS SECTION A-A EXCEPT FOR U-BOLTS AND TRUSS MEMBERS.

FIXED TRUSS SEAT



ELEVATION OF TYPICAL TRUSS
SHOWING FIXED AND EXPANSION SEATS

TABLE - A GALVANIZED STEEL ANCHOR BOLTS

SIGN AREA SQ. FT.	BOLT SIZE	WASHER SIZE	DIAM. HOLES IN TRUSS SEAT	WEIGHT OF 4 BOLTS WITH WASHERS LBS. *
100 TO 300	7/8"ϕ	2¼"ϕ x ¼"	15/16"ϕ	4
OVER 300 TO 400	1"ϕ	2½"ϕ x ¼"	1 5/16"ϕ	6
OVER 400 TO 600	1⅛"ϕ	2¾"ϕ x ¼"	1 5/16"ϕ	8

* DOES NOT INCLUDE WEIGHT OF EXPANSION CONES AND SLEEVES.

NOTES

ALL MATERIAL UNLESS OTHERWISE SPECIFIED SHALL BE STRUCTURAL ALUMINUM 6061-T6.
FOR GENERAL NOTES SEE SHEET 7.

REVISIONS
3-30-71

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC ENGINEERING

OVERHEAD SIGN STRUCTURES
SPANS OVER 50'
TRUSS BEARING DETAILS

APPROVED _____ CHIEF TRAFFIC ENGINEER DATE 1/6/71
APPROVED _____ CHIEF ENGINEER DATE 1/7/71

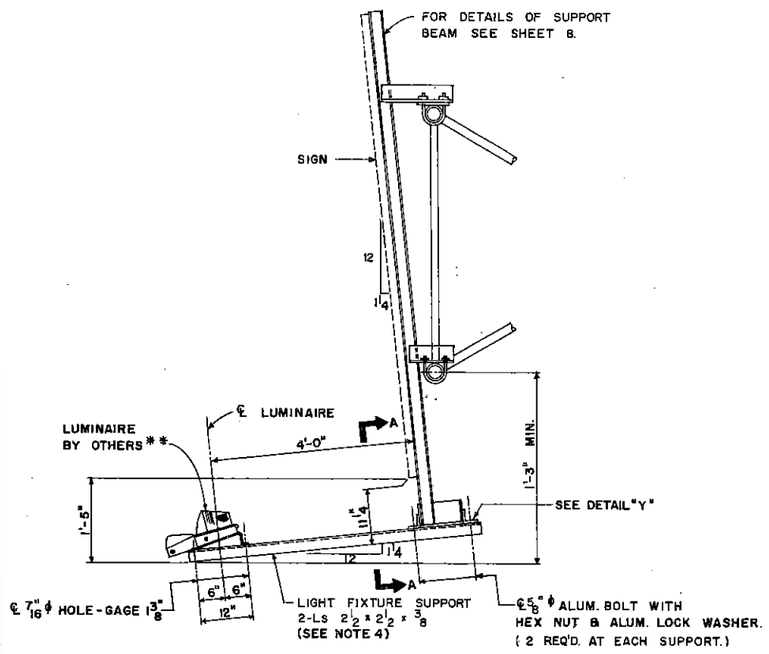
SHEET 11 of 12 | TRAFFIC STANDARD No. 7713

TRACED BY J. A. K.
FINAL BY

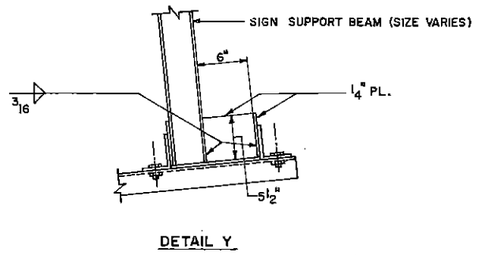
J. H. WEIL CO., PHILA. PA.

FORM 4237 REV 3-61

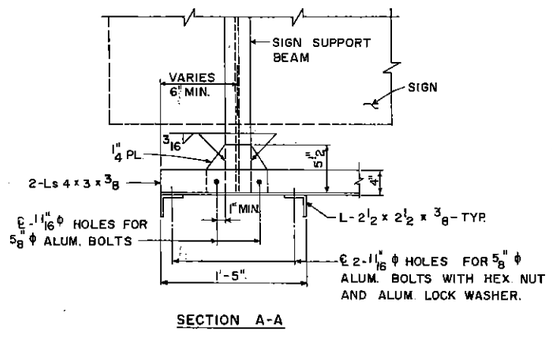
DISTRICT	COUNTY	ROUTE	SECTION	SHEET



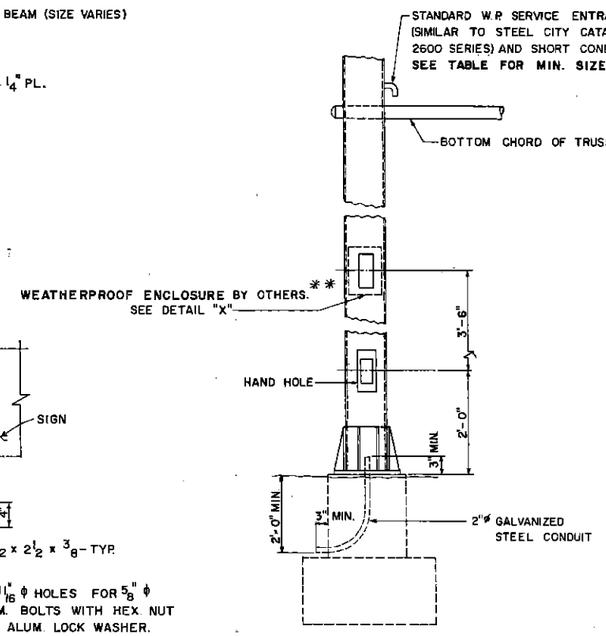
TYPICAL LIGHT FIXTURE SUPPORT DETAILS



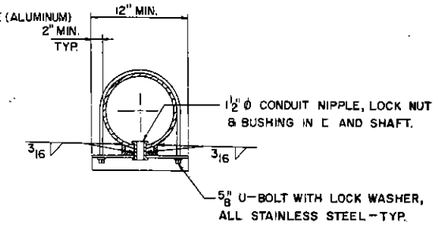
DETAIL Y



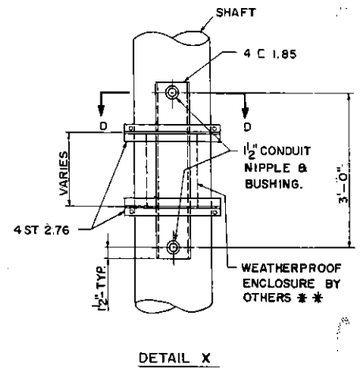
SECTION A-A



TYPICAL TOWER SHAFT DETAIL



SECTION D-D

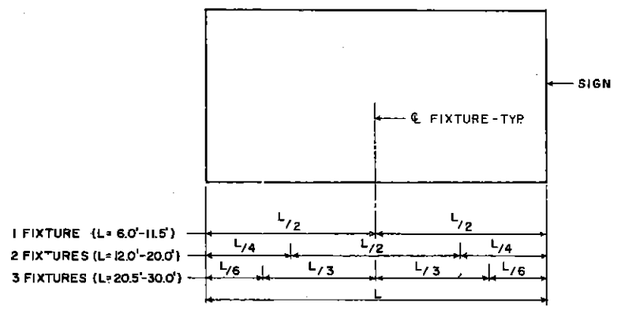


DETAIL X

** MATERIAL AND EQUIPMENT NOTED "BY OTHERS" IS TO BE FURNISHED & INSTALLED UNDER SIGNING CONTRACT WHEN ELECTRICAL WORK IS A PART OF THAT CONTRACT.

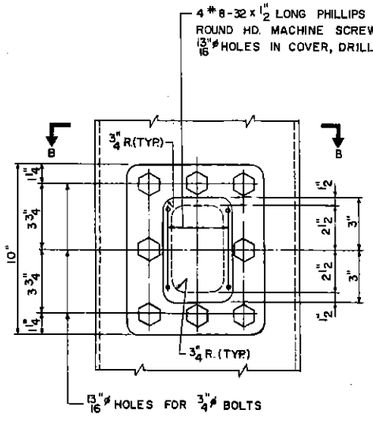
NOTES:

1. ALL MATERIAL SHALL BE ALUMINUM ALLOY 6061-T6 (A.S.T.M. B235 ALLOY GS 11A) UNLESS NOTED.
2. LAMP FIXTURES SHALL BE "WALLPACK" LUMINAIRES AS MANUFACTURED BY HOLOPHANE COMPANY INC. OR APPROVED EQUAL. FIXTURES FURNISHED BY OTHERS. **
3. ALL OUTLET FITTINGS SHALL BE 90° ELBOWS, UNLESS NOTED.
4. WHEN THE DISTANCE BETWEEN SIGN SUPPORT BEAMS IS GREATER THAN 6'-6" AND A LIGHT FIXTURE IS LOCATED MORE THAN 2'-6" LATERALLY FROM A SIGN SUPPORT BEAM, AN AUXILLARY SIGN SUPPORT BEAM SHOULD BE PLACED MIDWAY BETWEEN THE REGULAR SIGN SUPPORT BEAMS.

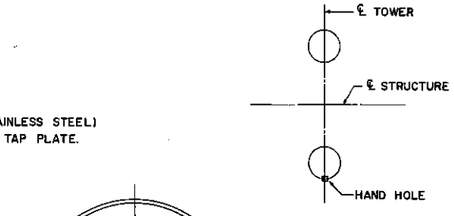


LIGHT FIXTURE SPACING

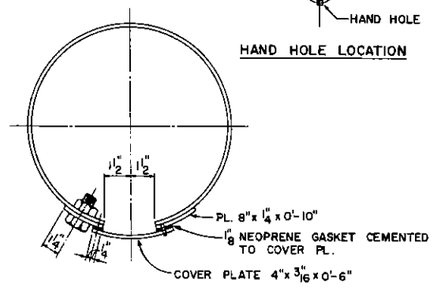
W. P. SERVICE ENTRANCE CAP	
NO. OF SIGNS	CAP SIZE
1	¾"
2	1"
3	1¼"
4	1½"
5	1½"



HAND HOLE DETAILS



HAND HOLE LOCATION



SECTION B-B

NOTE:
ALL PLATES ALUMINUM ALLOY 6061-T6 (A.S.T.M.-B 235 ALLOY GS 11A) ALL BOLTS ALUMINUM ALLOY 2024-T4 (A.S.T.M.-B211 ALLOY CG.42A)

5/8" ϕ U-BOLTS	
SHAFT SIZE	WT. LBS.*
6" ϕ	1.72
8" ϕ	2.16
10" ϕ	2.60
12" ϕ	3.05
14" ϕ	3.46

* INCLUDES WEIGHT OF NUT AND WASHERS.

REVISIONS	
	8-4-71
	3-30-71

LUMINAIRE

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC ENGINEERING

OVERHEAD SIGN STRUCTURES SPANS OVER 50'
LIGHT SUPPORT & HAND HOLE DETAILS

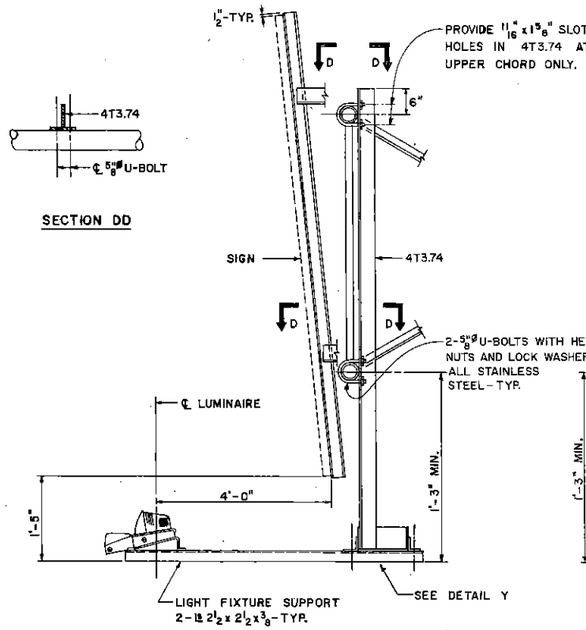
APPROVED _____ CHIEF TRAFFIC ENGINEER DATE _____

APPROVED _____ CHIEF ENGINEER DATE _____

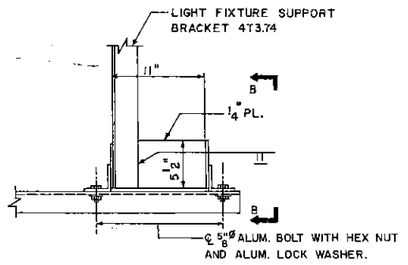
SHEET	TRAFFIC STANDARD	No.
12 OF 12		7713

TRACED BY
PROJ. BY

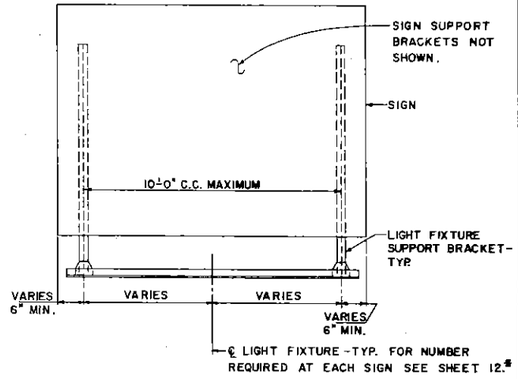
DISTRICT	COUNTY	ROUTE	SECTION	SHEET



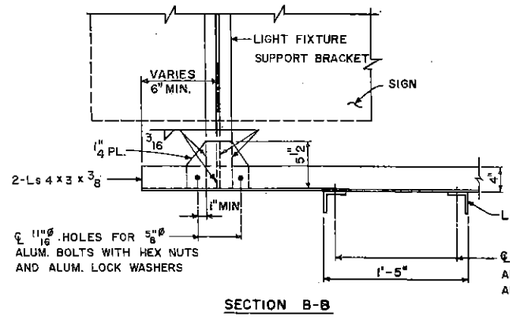
SECTION DD



DETAIL Y



LIGHT FIXTURE SUPPORT BRACKET SPACING

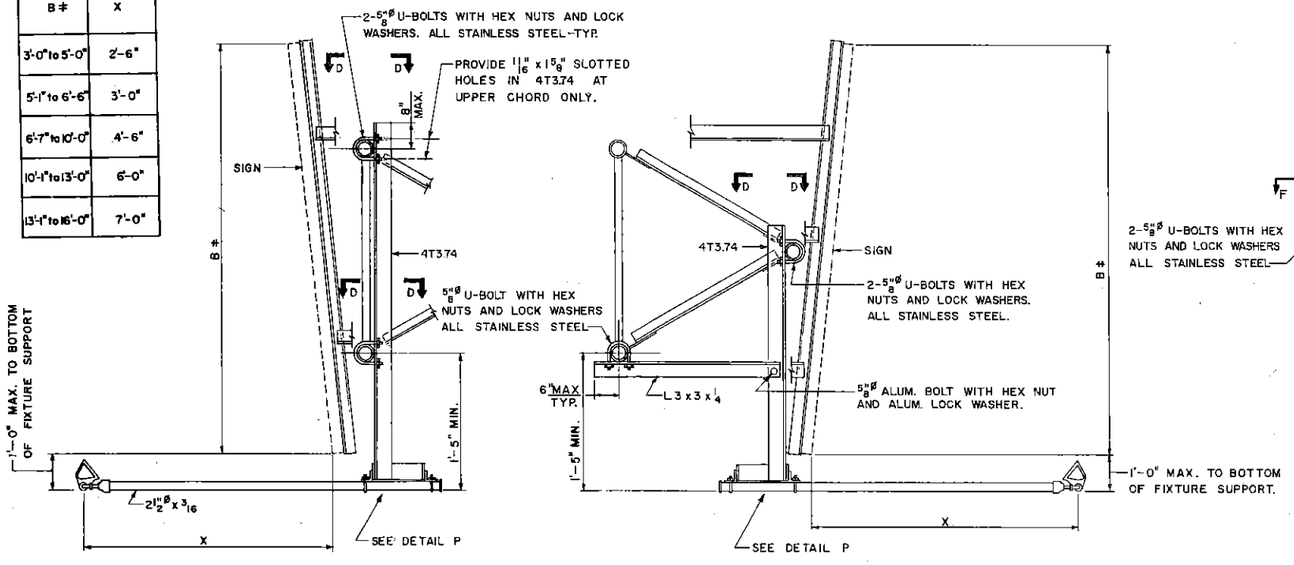


SECTION B-B

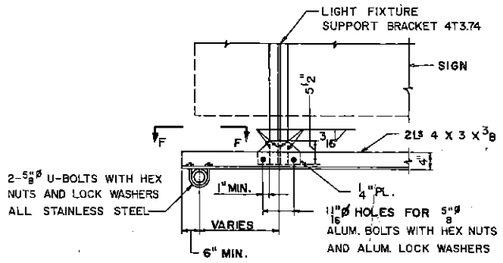
*NOTE:
WHEN THE DISTANCE BETWEEN LIGHT FIXTURE SUPPORT BRACKETS IS GREATER THAN 6'-6", AND A LIGHT FIXTURE IS LOCATED MORE THAN 2'-6" LATERALLY FROM A LIGHT FIXTURE SUPPORT BRACKET, AN AUXILLARY LIGHT FIXTURE SUPPORT BRACKET SHOULD BE PLACED MIDWAY BETWEEN THE REGULAR LIGHT FIXTURE SUPPORT BRACKETS.

SPECIAL LIGHT FIXTURE SUPPORT DETAILS - LUMINAIRE
FOR STRUCTURE MOUNTED ON HIGHWAY BRIDGE

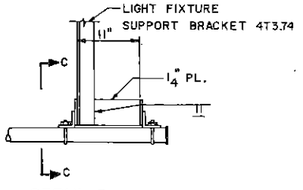
B ≠	X
3'-0" to 5'-0"	2'-6"
5'-1" to 6'-6"	3'-0"
6'-7" to 10'-0"	4'-6"
10'-1" to 13'-0"	6'-0"
13'-1" to 16'-0"	7'-0"



SPECIAL LIGHT FIXTURE SUPPORT DETAILS - FLUORESCENT
FOR STRUCTURE MOUNTED ON HIGHWAY BRIDGE

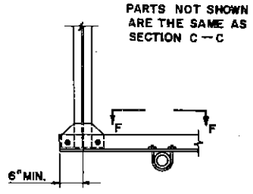


SECTION C-C

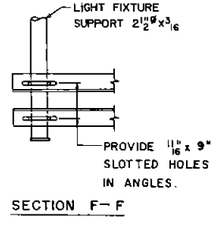


DETAIL P

NOTE:
PARTS NOT SHOWN ARE THE SAME AS SECTION C-C



ALTERNATE SECTION C-C



SECTION F-F

NOTES:
FOR NOTES AND ADDITIONAL LIGHTING DETAILS SEE SHEET 12.
APPLY TORQUE OF 25 FT-LBS. TO ALL 5/8" ϕ U-BOLTS CONNECTING LIGHT FIXTURE SUPPORT BRACKETS TO TRUSS WHEN ERECTING IN FIELD. (THIS NOTE TO BE PLACED ON SHOP ERECTION DRAWINGS.)

		8-4-71

REVISIONS

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC ENGINEERING

OVERHEAD SIGN STRUCTURES
SPANS OVER 50'
SPECIAL LIGHT SUPPORT DETAILS
FOR BRIDGE MOUNTED STRUCTURE

APPROVED _____ CHIEF TRAFFIC ENGINEER DATE _____

APPROVED _____ CHIEF ENGINEER DATE _____

SHEET	TRAFFIC	
12A OF 12	STANDARD	No. 7713