

# INTERIM DESIGN B STRUCTURE COMPUTATION SHEET

**\* NO WALKWAY**  
(SEE GENERAL NOTE 1)

REVISED  
1-20-2016

LOW S.P. \_\_\_\_\_ OH SIGN NO. \_\_\_\_\_

DESIGNED BY: \_\_\_\_\_ DATE: \_\_\_\_\_ CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

REVISED BY: \_\_\_\_\_ DATE: \_\_\_\_\_ CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

SIGN PANEL AREA: \_\_\_\_\_

EO PANEL AREA: \_\_\_\_\_

**TOTAL SIGN PANEL AREA**  **SQ FT**  
SIGN PANEL AREA + EO PANEL AREA

PANEL MOUNTING POST STEEL: NO. OF POSTS \_\_\_\_\_ X \_\_\_\_\_ = \_\_\_\_\_ POUNDS  
POSTS REQUIRED (BASED ON PANEL WIDTH) SEE CHART ON ST-10      POST WEIGHT (BASED ON PANEL HEIGHT) SEE CHART ON ST-2

PANEL MOUNTING POST STEEL: NO. OF POSTS \_\_\_\_\_ X \_\_\_\_\_ = \_\_\_\_\_ POUNDS  
POSTS REQUIRED      POST WEIGHT

PANEL MOUNTING POST STEEL: NO. OF POSTS \_\_\_\_\_ X \_\_\_\_\_ = \_\_\_\_\_ POUNDS  
POSTS REQUIRED      POST WEIGHT

**TOTAL PANEL MOUNTING POST STEEL \_\_\_\_\_ POUNDS**

SPAN LENGTH: \_\_\_\_\_ TRUSS TYPE    A    B    C

TRUSS STEEL: \_\_\_\_\_ FT x [ 123(A) ] [ 168 (B) ] [ 196 (C) ] (CIRCLE ONE) = \_\_\_\_\_ POUNDS  
SPAN LENGTH

	LEFT POST		RIGHT POST		POST TYPE
	ORIGINAL	REVISED	ORIGINAL	REVISED	
LOW STEEL (1)	_____	_____	_____	_____	
ELEV A	-	_____	-	_____	
Y DIMENSION	+	_____	+	_____	
(DISTANCE FROM CENTER OF TRUSS TO TOP OF TRUSS)	+	3.00	+	3.00	
(2)	-	1.33	(2) -	1.33	
POST HEIGHT	=	_____	=	_____	POST TYPE

POST STEEL: \_\_\_\_\_ ( \_\_\_\_\_ + \_\_\_\_\_ ) + \_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_ POUNDS  
LBS/FT from ST-2 CHART      LEFT POST HT      RIGHT POST HT      LEFT POST CONSTANT CONSTANT PER POST (from ST-2 CHART)      RIGHT POST CONSTANT

## CONCRETE FOOTING QUANTITIES:

SHAFT FOOTING (LEFT): \_\_\_\_\_ CUBIC YARDS      SHAFT FOOTING (RIGHT): \_\_\_\_\_ CUBIC YARDS  
BASED ON POST TYPE SEE CHART ON ST-3      BASED ON POST TYPE SEE CHART ON ST-3

SPREAD FOOTING (LEFT): \_\_\_\_\_ + ( 0.46 x \_\_\_\_\_ ) = \_\_\_\_\_ CUBIC YARDS  
CONSTANT OF 9.3 or 16.7 BASED ON POST TYPE, SEE CHART ON ST-3      "G" PEDESTAL HEIGHT

SPREAD FOOTING (RIGHT): \_\_\_\_\_ + ( 0.46 x \_\_\_\_\_ ) = \_\_\_\_\_ CUBIC YARDS  
"G"

MEDIAN FOOTING (LEFT) \_\_\_\_\_ EACH      MEDIAN FOOTING (RIGHT) \_\_\_\_\_ EACH

(1) LOW STEEL (WHEN DESIGNING FOR FUTURE WALKWAYS) IS BOTTOM OF PANEL MOUNTING POST ON THE TALLEST SIGN PANEL.

(2) WHEN DESIGNING STRUCTURE WHICH WILL ACCOMMODATE A FUTURE WALKWAY, YOU MUST SUBTRACT THIS DISTANCE (1.33 FEET)

(FROM BOTTOM OF PANEL MOUNTING POST TO BOTTOM OF FUTURE WALKWAY) WHEN COMPUTING POST HEIGHT. \* SEE SECTION DRAWING ON ST-1

### GENERAL NOTES:

- CURRENT MnDOT POLICY IS TO DESIGN ALL OH SIGN STRUCTURES TO BE EASILY RETROFITTED WITH A WALKWAY MEETING 17'-4" CLEARANCE ABOVE ROADWAY.
- FOR DETAILS ON "Y DIMENSION" SEE SHEET ST-1. FOR DETAILS ON "G" (SPREAD FOOTING PEDESTAL HEIGHT) SEE ST-3.
- PANEL MOUNTING POSTS EXTEND 3 INCHES BELOW THE BOTTOM EDGE OF SIGN PANELS (as per SECTION A-A DRAWING ON ST-10)
- FOR SINGLE POST STRUCTURES (CANTILEVERS) DESIGNATE OH POST AS "LEFT POST" FOR CONSISTENCY WITH TABULATION CHART DIAGRAM
- ELEV A = ELEVATION AT BOTTOM OF OH POST'S BASE PLATE. FOR COMPUTATION, POST HEIGHT IS MEASURED FROM ELEV. A TO TOP OF TRUSS.