INTERIM DESIGN B STRUCTURE COMPUTATION SHEET * NO WALKWAY

REV 9/26/14

(SEE GENERAL NOTE 1)

LOW S.P. _____ OH SIGN NO. _____

DESIGNED BY: _____ DATE:_____ CHECKED BY:_____ DATE:_____

REVISED BY: _____ DATE:_____ CHECKED BY:_____ DATE:_____

SIGN PANEL AREA: _____

EO PANEL AREA: _____

SPAN LENGTH: _____ TRUSS TYPE A B C

TOTAL SIGN PANEL AREA ➡ _____ SQ FT

SIGN PANEL AREA + EO PANEL AREA

	LEFT POST			RIGHT POST		
	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	_____		1.33	_____	
POST HEIGHT =	_____	_____	_____ POST TYPE	_____	_____	_____ POST TYPE

POST STEEL: _____ (_____ + _____) + _____ + _____ = _____ POUNDS

LBS/FT from ST-2 CHART; LEFT POST HT; RIGHT POST HT; LEFT POST CONSTANT; RIGHT POST CONSTANT

CONSTANT PER POST (from ST-2 CHART)

TRUSS STEEL: _____ FT x [123(A)] [168 (B)] [196 (C)] (CIRCLE ONE) = _____ POUNDS

SPAN LENGTH

PANEL MOUNTING POST STEEL: WEIGHT PER POST _____ x _____ POSTS = _____ POUNDS

POST WEIGHT (BASED ON PANEL HEIGHT) SEE CHART ON ST-2; NO. OF POSTS (BASED ON PANEL WIDTH) SEE CHART ON ST-10

PANEL MOUNTING POST STEEL: WEIGHT PER POST _____ x _____ POSTS = _____ POUNDS

PANEL MOUNTING POST STEEL: WEIGHT PER POST _____ x _____ POSTS = _____ POUNDS

TOTAL PANEL MOUNTING POST STEEL _____ POUNDS

SHAFT FOOTING (LEFT): _____ CUBIC YARDS

BASED ON POST TYPE SEE CHART ON ST-3

SHAFT FOOTING (RIGHT): _____ CUBIC YARDS

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

NOTES:

(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:

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