



SWISS

Version 1.2.3

Span Wire Signal Support Design

PROJECT DETAIL

Project Date: 02/28/2018

Author: GRS

Last Revision Date: 02/20/2020

Filename: 180228 Meijer Drive and 25A.xml

Comments:

- 12 INCH LENSES
- POLYCARBONATE SIGNAL HEADS WITH BACKPLATES, TETHERED
- FUTURE SBLT 5-SECTION HEAD INCLUDED
- FUTURE WB SIGNAL HEADS INCLUDED
- CHECKED, NAU 2/20/20



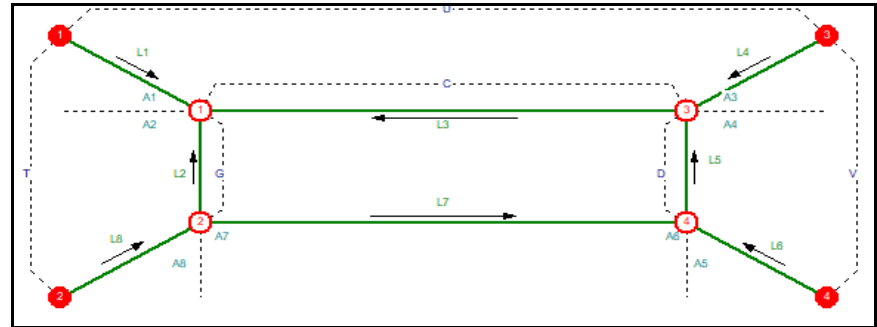
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INPUT VALUES

Sequence #: 1
 Configuration Type: Box
 Problem Identification: Box



Angles (Degrees)							
[A 1]	[A 2]	[A 3]	[A 4]	[A 5]	[A 6]	[A 7]	[A 8]
29.00	90.00	29.00	90.00	45.00	90.00	90.00	45.00

Span Lengths (ft)							
[L 1]	[L 2]	[L 3]	[L 4]	[L 5]	[L 6]	[L 7]	[L 8]
38.00	62.00	108.00	38.00	62.00	32.00	108.00	32.00

Elevation Differences (ft)		
[C]	[D]	[G]
0.00	0.00	0.00

Base Elevations (ft)				
[Pavement]	[Pole 1]	[Pole 2]	[Pole 3]	[Pole 4]
940.14	940.52	935.42	939.04	935.26

Signals and Signs		Wire Weights (lbs)
{Distance (ft) / Weight (lbs)}		(Assumed)
Span 1	No signals or signs attached at this span.	57.00 Span 1
Span 2	[27.00/19.00], (33.00/49.30), (44.00/49.30), (55.00/73.00)	93.00 Span 2
Span 3	(30.00/73.00), (42.00/49.30), (54.00/73.00), [57.00/19.00], [70.00/19.00], [83.00/19.00]	162.00 Span 3
Span 4	No signals or signs attached at this span.	57.00 Span 4
Span 5	(7.00/49.30), (20.00/73.00), [26.00/19.00], [61.00/19.00]	93.00 Span 5
Span 6	No signals or signs attached at this span.	48.00 Span 6
Span 7	(22.00/49.30), (31.00/49.30), (40.00/49.30), (53.00/49.30)	162.00 Span 7
Span 8	No signals or signs attached at this span.	48.00 Span 8

Design Data					
Min. SAG (ft):	5.82	Max. SAG (ft):	9.71	Minimum Clearance (ft):	22.00
Sum of Loads (lbs):	800.40	Sum of Areas (ft):	63.30	Wire Weight (lbs/ft):	1.50
				Box Warp Enabled:	No



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RESULT OF FINAL CALCULATION [MAX SAG]

Sequence #: 1 Configuration Type: Box Problem Identification: Box

Span Results

	[SPAN 1]	[SPAN 2]	[SPAN 3]	[SPAN 4]	[SPAN 5]	[SPAN 6]	[SPAN 7]	[SPAN 8]
Tension Relations: -----	1.14335	0.55431	1.00000	1.14335	0.55431	0.78391	0.55431	0.78391
Elevation Differences (ft) -----	5.31	0.00	0.00	4.62	0.00	5.22	0.00	5.47
Reaction at the end of the span (lbs) -----	374.65	-180.76	-193.89	322.68	-102.28	298.67	-147.65	314.39
Distance from end to low point (ft) -----	0.00	29.00	54.00	0.00	42.00	0.00	65.56	0.00
SAG below end of span (ft) -----	0.00	1.76	2.92	0.00	1.49	0.00	4.24	0.00

Pole Results

	[POLE 1]	[POLE 2]	[POLE 3]	[POLE 4]
Stringing Tension (lbs): -----	2887.41	1979.68	2887.41	1979.68
Attachment Height above pole base (ft) -----	31.17	36.43	31.96	36.34
Attachment Elevation (ft) -----	971.69	971.85	971.00	971.60
Base Moment (ft/lbs) -----	343373.	275189.	352143.	274478.

Other information

Calculated Design Factor : 3.82

System is in balance

Distance between Highest and Lowest Point (ft) : 9.71

Max. Wire Load (lbs): 11140.04

Height of each signal or sign attachment point above the lowest (ft)

- Span 1 No signals or signs attached at this span.
- Span 2 [2.64], (2.48), (2.66), (3.36)
- Span 3 (1.89), (1.44), (1.32), [1.39], [1.85], [2.50]
- Span 4 No signals or signs attached at this span.
- Span 5 (3.51), (2.75), [2.78], [4.16]
- Span 6 No signals or signs attached at this span.
- Span 7 (1.17), (0.38), (0.00), (0.06)
- Span 8 No signals or signs attached at this span.



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RESULT OF FINAL CALCULATION [MIN SAG]

Sequence #: 1 Configuration Type: Box Problem Identification: Box

Span Results

	[SPAN 1]	[SPAN 2]	[SPAN 3]	[SPAN 4]	[SPAN 5]	[SPAN 6]	[SPAN 7]	[SPAN 8]
Tension Relations: -----	1.14335	0.55431	1.00000	1.14335	0.55431	0.78391	0.55431	0.78391
Elevation Differences (ft) -----	3.18	0.00	0.00	2.77	0.00	3.13	0.00	3.28
Reaction at the end of the span (lbs) -----	374.65	-180.76	-193.89	322.68	-102.28	298.67	-147.65	314.39
Distance from end to low point (ft) -----	0.00	29.00	54.00	0.00	42.00	0.00	65.56	0.00
SAG below end of span (ft) -----	0.00	1.05	1.75	0.00	0.89	0.00	2.54	0.00

Pole Results

	[POLE 1]	[POLE 2]	[POLE 3]	[POLE 4]
Stringing Tension (lbs): -----	4817.31	3302.86	4817.31	3302.86
Attachment Height above pole base (ft) -----	27.34	32.54	28.41	32.55
Attachment Elevation (ft) -----	967.86	967.96	967.45	967.81
Base Moment (ft/lbs) -----	502582.	410097.	522251.	410194.

Other information

Calculated Design Factor : 3.82

System is in balance

Distance between Highest and Lowest Point (ft) : 5.82

Max. Wire Load (lbs): 18455.25

Height of each signal or sign attachment point above the lowest (ft)

- Span 1 No signals or signs attached at this span.
- Span 2 [1.58], (1.48), (1.59), (2.01)
- Span 3 (1.13), (0.86), (0.79), [0.83], [1.11], [1.50]
- Span 4 No signals or signs attached at this span.
- Span 5 (2.10), (1.65), [1.66], [2.50]
- Span 6 No signals or signs attached at this span.
- Span 7 (0.70), (0.23), (0.00), (0.03)
- Span 8 No signals or signs attached at this span.