



Mr. Alexander Hinton
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Fremont County

Date: May 7, 2024

MAY 20 2024

Subject: Mount Analysis Report

Planning & Zoning

AT&T Designation:

Site USID: 50699-A
Site FA: 10099191
Site ID: COU6039
Site Name: HIGHWAY 50 & HIGHWAY 120

Site Address: 1380 East Highway 50, Penrose, Fremont County, CO 81240
Site Coordinates: Latitude: 38° 24' 18.36" N, Longitude: 104° 59' 20.04" W

Tower Description: 100 ft – Monopole [Wireless Structures]
Mount Description: 12.5 ft – Profile Platform 1990#

Morrison Hershfield Project Number: SML-073R2 / 2401983

Dear Mr. Hinton,

Morrison Hershfield is pleased to submit this "Mount Analysis Report" to determine the structural integrity of existing antenna mounting system for the existing and proposed antenna and equipment on the above mentioned supporting tower structure. Analysis of the existing supporting tower structure is to be completed by others and therefore is not part of this analysis.

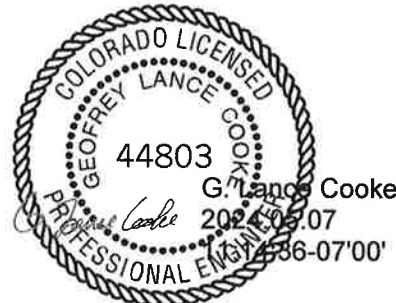
This mount analysis has been performed in accordance with the TIA-222-H Standard and the 2021 International Building Code based upon an ultimate 3-second gust wind speed of 106 mph. Applicable standard references and design criteria are listed in Section 2 - Analysis Criteria.

Our analysis demonstrates that the existing mounts **ARE in conformance** with the requirements of the above noted standards under the effects of loading described **provided the changes listed in the "Recommendations" section of this report have been installed.**

Summary of Results		
Mount Components	64.4%	Conditional Sufficient

We at *Morrison Hershfield* appreciate the opportunity of providing our continuing professional services to you and Smartlink, LLC. If you have any questions or need further assistance on this or any other projects please give us a call.

Respectfully submitted by:
 Morrison Hershfield



G. Lance Cooke, P.E. (CO License No. 44803)
 Senior Engineer

EXP 10/31/25

1.0 INTRODUCTION

This tower is a 100 ft monopole designed by Wireless Structures Consulting, PC. Existing and proposed antennas and equipment are to be installed at a mount elevation of 97 ft on the existing platform mount array with a face width of 12.5 ft.

2.0 ANALYSIS CRITERIA

The following design parameters have been used in our analysis:

Design Standard:	2021 International Building Code ANSI/TIA-222-H, Structural Standard for Antenna Supporting Structures and Antennas and Small Wind Turbine Support Structures ASCE 7-16, Minimum Design Loads and Associated Criteria for Buildings and Other Structures AISC 325-17 Steel Construction Manual, 15 th Edition	
Design Wind Speed:	106 mph (Ultimate 3-sec gust) with no radial ice	
Risk Category:	II	
Exposure Category:	C	
Topographic Factor, K_{zt} :	1.0	
Design Ice Thickness:	0.25 in	[Neglected]
Wind Speed with Ice:	50 mph (Nominal 3-sec gust)	[Neglected]
Seismic S_s :	0.227	
Seismic S_1 :	0.065	
Live Loading Wind Speed:	30 mph (Nominal 3-sec gust)	
Man Live Load at Mid/End-Points:	250 lb.	
Man Live Load at Mount Pipes:	500 lb.	

The mount analysis was based on the following documentation:

Table 1 – Documentation

Document	Description	Source
Mount Assembly Drawings	Site Pro 1, Part No. HRK12, dated 07/13/2014	MH
Mount Analysis Report	TRYLON, Project No. 156269, dated 12/16/2019	AT&T FileNet
Preliminary Construction Drawings	Morrison Hershfield., Site ID: COU6039, dated 04/22/2024	MH
DE130 Scoping Checklist Form	Smartlink, LLC., Site ID: COU6039, dated 03/28/2024	Client

3.0 ANALYSIS LOADING

The existing and proposed antennas, transmission lines and other equipment considered in this analysis were provided by the client and are noted in Table 2.

Table 2 – Antenna Loads

Mount C.L (ft)	Antenna C.L (ft)	Antenna Description	Location	TX-Lines	Note
PROPOSED					
97.0	98.0	(3) Ericsson AIR6419 B77D+AIR6419 B77G (STACKED) Panel	10°/130°/275°	(1) DC (1) Fiber	1
		(3) Ericsson 4490 B5/B12A RRH	-		2
		(3) Ericsson 4478 B14 RRH			
		(3) Ericsson 4890 B25/B66 RRH			
		(1) Raycap DC9-48-60-24-8C-EV Squid			
		*(6) Rosenberger D218RRUDSM Dual RRU Mount			
		(5) P2.5STD, 10 ft Long Pipe Mount			
** (3) P2.5STD, 6 ft Long Pipe Mount					
EXISTING					
97.0	98.0	(6) CCI TPA65R-BU8D Panel	10°/130°/275°	(4) DC (2) Fiber	3
		(2) Raycap DC6-48-60-18-8F Squid	-		
		(3) Powerwave P65-15-XLH-RR Panel	10°/130°/275°	(12) 1-5/8"	4
		(3) Nokia RRH 4T4R B5 160W RRH	-		
		(3) Nokia Dual RRH 4T4R B12/14 320W AHLBA RRH			
(3) Nokia Dual RRH 4T4R B25/66 320W AHFIB RRH					

Note: Any discrepancies in loading from this listing should be brought to Morrison Hershfield's attention; results of this assessment cannot be used if the loading is different.

1. Proposed antennas and equipment to replace existing or be installed on the existing mount array.
2. Proposed RRHs to be installed on the new *Dual RRU Mounts and new P2.5STD, 6 ft Long Pipe Mounts.
3. Existing antennas and equipment to remain.
4. Existing antenna and equipment to be removed and have not been considered in this analysis.

4.0 ANALYSIS PROCEDURE

RISA-3D (version 22.0.0), a commercially available analysis software package, was used to create a three-dimensional model of the antenna mounting system and calculate member stresses for various loading cases.

A tool internally developed by Morrison Hershfield, was used to calculate wind loading on all appurtenances, dishes and mount members for various loading cases in accordance with ASCE 7-16 standard, selected output from the analysis is included in the attachments.

This analysis was performed in accordance with *AT&T's Mount Technical Directive – R22*.

5.0 ASSUMPTIONS

- 1) The antenna mounting system was properly fabricated, installed and maintained in good condition in accordance with its original design, TIA Standards, and/or manufacturer's specifications.
- 2) The configuration of antennas, mounts, and other appurtenances are as specified.
- 3) All member connections are assumed to have been designed to meet or exceed the load carrying capacity of the connected members unless otherwise specified in this report.
- 4) The analysis will be required to be revised if the existing conditions in the field differ from those shown in the above-referenced documents or assumed in this analysis. No allowance was made for any damaged, missing, or rusted members.
- 5) Steel grades have been assumed as follows, unless noted otherwise:

Channel, Angle, Plate	ASTM A36 (GR 36)
Solid Round	ASTM A529 (GR 50)
HSS (Rectangular)	ASTM 500 (GR B-50)
HSS (Round)	ASTM 500 (GR C-46)
Pipe	ASTM A53 (GR 35)
Connection Bolts	ASTM A325
U-Bolts	ASTM A307
Unistrut – P1000	ASTM A570 (GR 33)
- 6) The existing mount geometry and member sizes are taken from the mount analysis report by TRYLON, Project No. 156269, dated 12/16/2019, and is considered to be correct.
- 7) **The proposed mount geometry and member sizes are taken from the assembly drawings by Site Pro 1, Drawing No. HRK12, dated 07/13/2014, and is considered to be correct.**
- 8) The existing and proposed loading are taken from the DE130 Scoping Checklist Form provided by Smartlink Group, LLC, Site ID: COU6039, dated 03/28/2024, and is considered to be correct.

This analysis may be affected if any assumptions are not valid or have been made in error. Morrison Hershfield should be notified to determine the effect on the structural integrity of the antenna mounting system.

6.0 SUMMARY OF RESULTS

The following tables summarize the location and utilized percentage of available capacity for each component of the mount. With consideration to the appropriate safety factors, 100% represents the full capacity of the component. Percentages below 100% indicate available capacity and conformance of the component. Percentages above 100% indicate an overstressed situation requiring structural modification to ensure conformance with the applicable codes and standards.

Based on our analysis, the maximum force on any of the connections of the mount assemblies to the tower are much less than the minimum required 10-kips; therefore, by inspection, all connections are determined to be sufficient for the proposed loading

Based on the Section 2.7.7.1 and the Section 16.7 of TIA-222-H, the seismic forces calculated for any given mount member and/or appurtenance on a mounting system is well below the wind forces calculated at the given elevation. Hence, the seismic analysis has not been performed in the respective mount analysis.

Based on our analysis results, the existing mounts **ARE within capacity** to support the loads under the current loading scenario.

Table 3 – Mount Component Stresses vs. Capacity (Platform, Conditional Sufficient)

Notes	Component	Critical Member	Mount Centerline (ft)	% Capacity	Pass / Fail
1	Main Horizontal	M2	97.0	14.5	Pass
1	Horizontal Support	M7	97.0	12.2	Pass
1	Outrigger Arm	M12	97.0	31.6	Pass
1	Main Horizontal Support	M14	97.0	20.9	Pass
1	Grating Support	M17	97.0	16.1	Pass
1	Mast Pipe (E)	M22	97.0	31.7	Pass
1	Mast Pipe (P)	M31	97.0	26.0	Pass
1	RRH Pipe (P)	M35	97.0	21.1	Pass
1	Standoff (P)	M38	97.0	51.2	Pass
1	Top Rail (P)	M42	97.0	28.7	Pass
1	Top Rail Support (P)	M45	97.0	64.4	Pass

Structure Rating (max from all components) =	64.4%
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Notes:

1. All Sectors are Typical upon completion of the changes listed in the "Recommendations" section of this report.
2. All sectors are typical.

7.0 RECOMMENDATIONS

The existing mount has sufficient capacity to support the proposed loading configuration. In order for the results of the analysis to be considered valid, the loading modification listed below must be completed.

- 1) Add (1) Site Pro 1 #HRK12 reinforcement kit with a vertical offset of 36" above the existing low-profile platform.

No structural modifications are required at this time, provided that the above-listed changes are implemented.

ATTACHMENTS: Software Input Calculations, Wire Frame & Rendered Models and Software Analysis Output

SOFTWARE INPUT CALCULATIONS

ASCE Hazards Report

Address:
No Address at This Location

Standard: ASCE/SEI 7-16
Risk Category: II
Soil Class: D - Default (see Section 11.4.3)

Latitude: 38.4051
Longitude: -104.9889
Elevation: 5241.863989173369 ft (NAVD 88)



Wind

Results:

Wind Speed	106 Vmph
10-year MRI	77 Vmph
25-year MRI	83 Vmph
50-year MRI	88 Vmph
100-year MRI	93 Vmph

Data Source: ASCE/SEI 7-16, Fig. 26.5-1B and Figs. CC.2-1–CC.2-4, and Section 26.5.2

Date Accessed: Thu May 02 2024

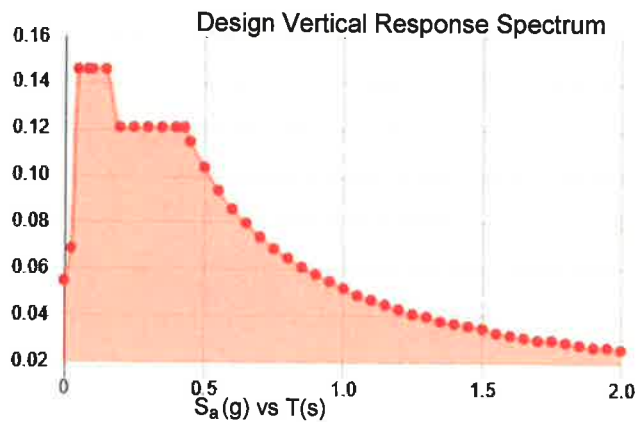
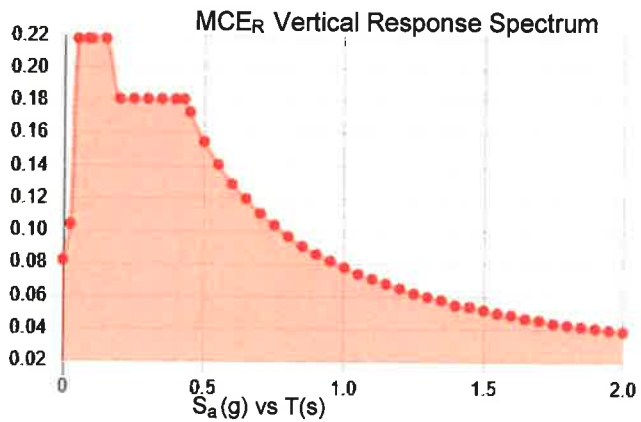
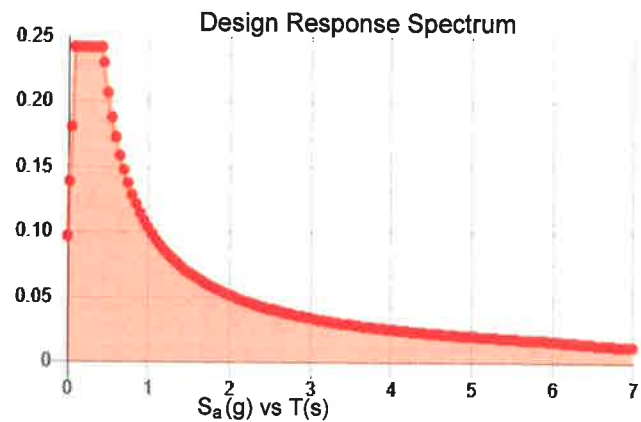
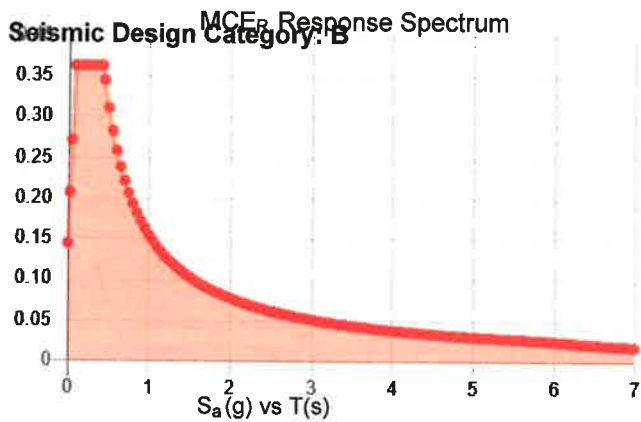
Value provided is 3-second gust wind speeds at 33 ft above ground for Exposure C Category, based on linear interpolation between contours. Wind speeds are interpolated in accordance with the 7-16 Standard. Wind speeds correspond to approximately a 7% probability of exceedance in 50 years (annual exceedance probability = 0.00143, MRI = 700 years).

Site is not in a hurricane-prone region as defined in ASCE/SEI 7-16 Section 26.2.

Site Soil Class: D - Default (see Section 11.4.3)

Results:

S_S :	0.227	S_{D1} :	0.104
S_1 :	0.065	T_L :	6
F_a :	1.6	PGA :	0.124
F_v :	2.4	PGA _M :	0.193
S_{MS} :	0.363	F_{PGA} :	1.552
S_{M1} :	0.155	I_e :	1
S_{DS} :	0.242	C_v :	0.753



Data Accessed: Thu May 02 2024

Date Source:

USGS Seismic Design Maps based on ASCE/SEI 7-16 and ASCE/SEI 7-16 Table 1.5-2. Additional data for site-specific ground motion procedures in accordance with ASCE/SEI 7-16 Ch. 21 are available from USGS.

Ice

Results:

Ice Thickness: 0.25 in.

Concurrent Temperature: 5 F

Gust Speed 50 mph

Data Source: Standard ASCE/SEI 7-16, Figs. 10-2 through 10-8

Date Accessed: Thu May 02 2024

Ice thicknesses on structures in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

In the mountain west, ice thicknesses may exceed the mapped values in the foothills and passes. However, at elevations above 5,000 ft, freezing rain is unlikely.

Values provided are equivalent radial ice thicknesses due to freezing rain with concurrent 3-second gust speeds, for a 500-year mean recurrence interval, and temperatures concurrent with ice thicknesses due to freezing rain. Thicknesses for ice accretions caused by other sources shall be obtained from local meteorological studies. Ice thicknesses in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

The ASCE Hazard Tool is provided for your convenience, for informational purposes only, and is provided "as is" and without warranties of any kind. The location data included herein has been obtained from information developed, produced, and maintained by third party providers; or has been extrapolated from maps incorporated in the ASCE standard. While ASCE has made every effort to use data obtained from reliable sources or methodologies, ASCE does not make any representations or warranties as to the accuracy, completeness, reliability, currency, or quality of any data provided herein. Any third-party links provided by this Tool should not be construed as an endorsement, affiliation, relationship, or sponsorship of such third-party content by or from ASCE.

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Client:	Smartlink, LLC
Job Number:	SML-073R2 / 2401983
Site #:	50639-A
Site Name:	HIGHWAY 50 & HIGHWAY 120
Description:	Platform Analysis
Date:	05/07/24
Engineer:	VG

Vult	106 mph
V1	50 mph
t	0.00 in
Z	97 ft
Zp	5242 ft
Kp	I
	C
	C
	I

Ultimate Wind Speed:
 Basic Wind Speed with Ice:
 Design Ice Thickness:
 Mount Center Line:
 Mean Elevation of Base of Structure above Sea Level:
 Risk Category:
 Exposure Category:
 Topographic Category:

z_g = 900
 α = 9.50
 K_{zmax} = 0.85
 K_c = 1.00
 K_d = 1.26
 K_e = 0.95
 G_w = 1.00
 K_s = 0.90
 Per TIA-222-H
 Section 16.6

z_g = 900
 α = 9.50
 K_{zmax} = 0.85
 K_c = 1.00
 K_d = 1.26
 K_e = 0.95
 G_w = 1.00
 K_s = 0.90
 Per TIA-222-H
 Section 16.6

Exposure Category
 Coefficients:
 Velocity Pressure Coefficient:
 Wind Direction Probability Factor:
 Gust Factor:
 Shielding Factor:
 Ground Elevation Factor:

z_g = 900
 α = 9.50
 K_{zmax} = 0.85
 K_c = 1.00
 K_d = 1.26
 K_e = 0.95
 G_w = 1.00
 K_s = 0.90
 Per TIA-222-H
 Section 16.6

z_g = 900
 α = 9.50
 K_{zmax} = 0.85
 K_c = 1.00
 K_d = 1.26
 K_e = 0.95
 G_w = 1.00
 K_s = 0.90
 Per TIA-222-H
 Section 16.6

z_g = 900
 α = 9.50
 K_{zmax} = 0.85
 K_c = 1.00
 K_d = 1.26
 K_e = 0.95
 G_w = 1.00
 K_s = 0.90
 Per TIA-222-H
 Section 16.6

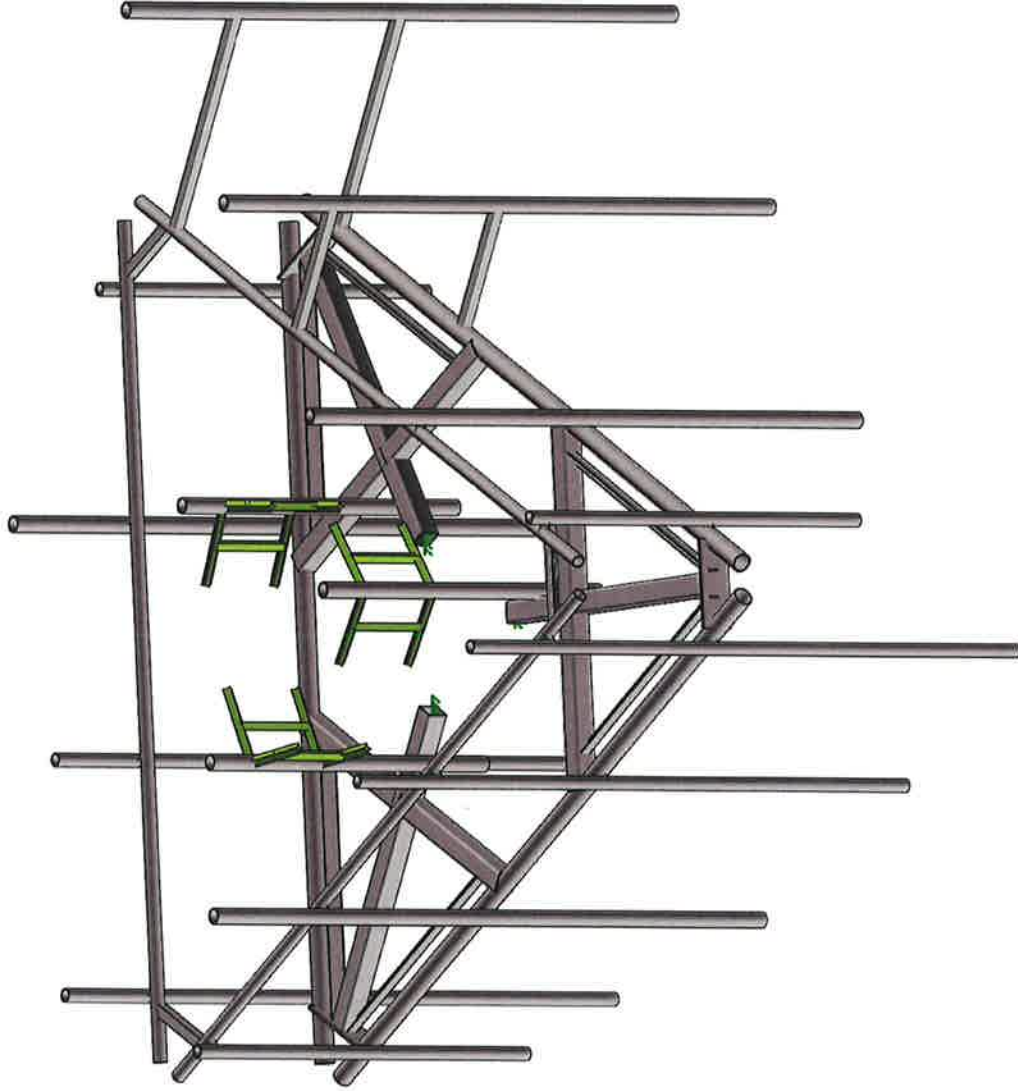
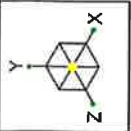
POSITION	MEMBER LABEL	LOAD ACTING POINT # 1	LOAD ACTING POINT # 2	ANTENNA MODEL	QUANTITY	Flat or Round	Appearance Shielding Effect	Appearance Shielding Factor (Normal)	Appearance Shielding Factor (Transverse)	Length	Width (Normal)	Length	Thickness (Transverse)	Rad Center	Azimuth
Antenna A1	M22	9	87	TPA6SR-BUBD	1	F	No	1	1	96	21	96	7.8	98.0	10
Antenna A2	M28	9	36	AIR 6419 B77D	1	F	No	1	1	28.2	16.1	28.2	7.3	98.0	10
Antenna a2	M29	66	93	AIR 6419 B77G	1	F	No	1	1	27.95	15.75	27.95	6.68	98.0	10
Antenna A3	M22	9	87	TPA6SR-BUBD	1	F	No	1	1	96	21	96	7.8	98.0	10
Antenna B1	M27	9	87	TPA6SR-BUBD	1	F	No	1	1	96	21	96	7.8	98.0	10
Antenna B2	M23	9	36	AIR 6419 B77D	1	F	No	1	1	28.2	16.1	28.2	7.3	98.0	130
Antenna B2	M23	66	93	AIR 6419 B77G	1	F	No	1	1	27.95	15.75	27.95	6.68	98.0	130
Antenna B3	M31	9	87	TPA6SR-BUBD	1	F	No	1	1	96	21	96	7.8	98.0	130
Antenna C1	M30	9	87	TPA6SR-BUBD	1	F	No	1	1	96	21	96	7.8	98.0	130
Antenna C2	M29	9	36	AIR 6419 B77D	1	F	No	1	1	28.2	16.1	28.2	7.3	98.0	275
Antenna C3	M33	9	37	TPA6SR-BUBD	1	F	No	1	1	96	21	96	7.8	98.0	275
RRH A1	M61	7.5	7.5	4478 B14	1	F	No	1	1	20.6	15.6	20.6	7	98.0	100
RRH A2	M61	7.5	7.5	4478 B14	1	F	No	1	1	16.5	13.4	16.5	7.7	98.0	100
RRH A3	M64	7.5	7.5	4490 B5/B12A	1	F	No	1	1	20.6	15.7	20.6	7	98.0	220
RRH B1	M57	7.5	7.5	4478 B14	1	F	No	1	1	16.5	13.4	16.5	7.7	98.0	220
RRH B2	M57	7.5	7.5	4478 B14	1	F	No	1	1	20.6	15.7	20.6	7	98.0	220
RRH B3	M50	7.5	7.5	4890 B25/B66	1	F	No	1	1	20.6	15.6	20.6	7	98.0	5
RRH C1	M67	7.5	7.5	4478 B14	1	F	No	1	1	16.5	13.4	16.5	7.7	98.0	5
RRH C2	M67	7.5	7.5	4478 B14	1	F	No	1	1	20.6	15.7	20.6	7	98.0	5
RRH C3	M70	7.5	7.5	4490 B5/B12A	1	F	No	1	1	31.25	11	31.25	11	98.0	10
SQUID A1	M64	7.5	7.5	DC6-48-60-18-8F	1	R	No	1	1	31.25	11	31.25	11	98.0	10
SQUID B1	M60	7.5	7.5	DC6-48-60-18-8F	1	R	No	1	1	31.25	11	31.25	11	98.0	130
SQUID C1	M70	7.5	7.5	DC3-48-60-24-8C-EV	1	R	No	1	1	31.4	10.24	31.4	10.24	98.0	275

WIND FORCE CALCULATIONS - NO ICE

WIND FORCES CALCULATIONS - NO ICE

MEMBER LABEL	ELEMENT TYPE	DESCRIPTION	Flat or Round	Width or O.D. of Member in	Length of Member in	Wind Flow Type / Surface	A _N ft ² /ft	A _T ft ² /ft	Aspect Ratio	C _{90N}	C _{90T}	C _{eAfront} ft ²	C _{eAside} ft ²	Wwind Pressure, P psf
M1	Main Horizontal	HSS3.500X0.188	R	3.50	150.00	Subcritical	0.29	0.29	42.86	1.200	1.200	0.350	0.350	25.58
M2	Main Horizontal	HSS3.500X0.188	R	3.50	150.00	Subcritical	0.29	0.29	42.86	1.200	1.200	0.350	0.350	25.58
M3	Main Horizontal	HSS3.500X0.188	R	3.50	150.00	Subcritical	0.29	0.29	42.86	1.200	1.200	0.350	0.350	25.58
M4	Horizontal Support	HSS4X4X4	F	4.00	33.40	Flat Surface	0.33	0.33	8.35	1.423	1.423	0.474	0.474	25.58
M5	Horizontal Support	HSS4X4X4	F	4.00	33.40	Flat Surface	0.33	0.33	8.35	1.423	1.423	0.474	0.474	25.58
M6	Horizontal Support	HSS4X4X4	F	4.00	33.40	Flat Surface	0.33	0.33	8.35	1.423	1.423	0.474	0.474	25.58
M7	Horizontal Support	HSS4X4X4	F	4.00	33.40	Flat Surface	0.33	0.33	8.35	1.423	1.423	0.474	0.474	25.58
M8	Horizontal Support	HSS4X4X4	F	4.00	33.40	Flat Surface	0.33	0.33	8.35	1.423	1.423	0.474	0.474	25.58
M9	Horizontal Support	HSS4X4X4	F	4.00	33.40	Flat Surface	0.33	0.33	8.35	1.423	1.423	0.474	0.474	25.58
M10	Outfitter Arm	HSS4X4X4	F	4.00	62.00	Flat Surface	0.33	0.33	15.50	1.673	1.673	0.558	0.558	25.58
M11	Outfitter Arm	HSS4X4X4	F	4.00	62.00	Flat Surface	0.33	0.33	15.50	1.673	1.673	0.558	0.558	25.58
M12	Outfitter Arm	HSS4X4X4	F	4.00	62.00	Flat Surface	0.33	0.33	15.50	1.673	1.673	0.558	0.558	25.58
M13	Main Horizontal Support	PL6X1/2	F	6.00	16.00	Flat Surface	0.50	0.50	2.67	1.225	1.225	0.612	0.612	25.58
M14	Main Horizontal Support	PL6X1/2	F	6.00	16.00	Flat Surface	0.50	0.50	2.67	1.225	1.225	0.612	0.612	25.58
M15	Main Horizontal Support	PL6X1/2	F	6.00	16.00	Flat Surface	0.50	0.50	2.67	1.225	1.225	0.612	0.612	25.58
M16	Grating Support	L2X2X3	F	2.00	50.81	Flat Surface	0.17	0.17	25.40	2.000	2.000	0.333	0.333	25.58
M17	Grating Support	L2X2X3	F	2.00	50.81	Flat Surface	0.17	0.17	25.40	2.000	2.000	0.333	0.333	25.58
M18	Grating Support	L2X2X3	F	2.00	50.81	Flat Surface	0.17	0.17	25.40	2.000	2.000	0.333	0.333	25.58
M19	Grating Support	L2X2X3	F	2.00	50.81	Flat Surface	0.17	0.17	25.40	2.000	2.000	0.333	0.333	25.58
M20	Grating Support	L2X2X3	F	2.00	50.81	Flat Surface	0.17	0.17	25.40	2.000	2.000	0.333	0.333	25.58
M21	Grating Support	L2X2X3	F	2.00	50.81	Flat Surface	0.17	0.17	25.40	2.000	2.000	0.333	0.333	25.58
M22	Mast Pipe (E)	HSS2.375X0.188	R	2.38	120.00	Subcritical	0.20	0.20	50.53	1.200	1.200	0.238	0.238	25.58
M23	Mast Pipe (E)	HSS2.375X0.188	R	2.38	120.00	Subcritical	0.20	0.20	50.53	1.200	1.200	0.238	0.238	25.58
M24	Mast Pipe (E)	HSS2.375X0.188	R	2.38	72.00	Subcritical	0.20	0.20	30.32	1.200	1.200	0.238	0.238	25.58
M25	Mast Pipe (E)	HSS2.375X0.188	R	2.38	72.00	Subcritical	0.20	0.20	30.32	1.200	1.200	0.238	0.238	25.58
M26	Mast Pipe (E)	HSS2.375X0.188	R	2.38	72.00	Subcritical	0.20	0.20	30.32	1.200	1.200	0.238	0.238	25.58
M27	Mast Pipe (E)	HSS2.375X0.188	R	2.38	120.00	Subcritical	0.20	0.20	50.53	1.200	1.200	0.238	0.238	25.58
M28	Mast Pipe (E)	HSS2.375X0.188	R	2.38	120.00	Subcritical	0.20	0.20	50.53	1.200	1.200	0.238	0.238	25.58
M29	Mast Pipe (P)	PIPE_2.5	R	2.88	120.00	Subcritical	0.24	0.24	41.74	1.200	1.200	0.288	0.288	25.58
M30	Mast Pipe (P)	PIPE_2.5	R	2.88	120.00	Subcritical	0.24	0.24	41.74	1.200	1.200	0.288	0.288	25.58
M31	Mast Pipe (P)	PIPE_2.5	R	2.88	120.00	Subcritical	0.24	0.24	41.74	1.200	1.200	0.288	0.288	25.58
M32	Mast Pipe (P)	PIPE_2.5	R	2.88	120.00	Subcritical	0.24	0.24	41.74	1.200	1.200	0.288	0.288	25.58
M33	Mast Pipe (P)	PIPE_2.5	R	2.88	60.00	Subcritical	0.24	0.24	20.87	1.108	1.108	0.266	0.266	25.58
M34	RRH Pipe (P)	PIPE_2.5	R	2.88	60.00	Subcritical	0.24	0.24	20.87	1.108	1.108	0.266	0.266	25.58
M35	RRH Pipe (P)	PIPE_2.5	R	2.88	60.00	Subcritical	0.24	0.24	20.87	1.108	1.108	0.266	0.266	25.58
M36	RRH Pipe (P)	PIPE_2.5	R	2.88	60.00	Subcritical	0.24	0.24	20.87	1.108	1.108	0.266	0.266	25.58
M37	Standoff (P)	HSS2X2X2	F	2.00	25.00	Flat Surface	0.17	0.17	12.50	1.568	1.568	0.261	0.261	25.58
M38	Standoff (P)	HSS2X2X2	F	2.00	43.00	Flat Surface	0.17	0.17	21.50	1.883	1.883	0.314	0.314	25.58
M39	Standoff (P)	HSS2X2X2	F	2.00	25.00	Flat Surface	0.17	0.17	12.50	1.568	1.568	0.261	0.261	25.58
M40	Standoff (P)	HSS2X2X2	F	2.00	43.00	Flat Surface	0.17	0.17	21.50	1.883	1.883	0.314	0.314	25.58
M41	Top Rail (P)	PIPE_2.0	R	2.38	150.00	Subcritical	0.20	0.20	63.16	1.200	1.200	0.238	0.238	25.58
M42	Top Rail (P)	PIPE_2.0	R	2.38	150.00	Subcritical	0.20	0.20	63.16	1.200	1.200	0.238	0.238	25.58
M43	Top Rail (P)	PIPE_2.0	R	2.38	150.00	Subcritical	0.20	0.20	63.16	1.200	1.200	0.238	0.238	25.58
M44	TopRail Support (P)	L2X2X4	F	2.00	16.00	Flat Surface	0.17	0.17	8.00	1.411	1.411	0.235	0.235	25.58
M45	TopRail Support (P)	L2X2X4	F	2.00	16.00	Flat Surface	0.17	0.17	8.00	1.411	1.411	0.235	0.235	25.58
M46	TopRail Support (P)	L2X2X4	F	2.00	16.00	Flat Surface	0.17	0.17	8.00	1.411	1.411	0.235	0.235	25.58

WIRE FRAME & RENDERED MODELS



Morrison Hershfield

VG

Site#: 50699-A / HIGHWAY 50 & HIGHWAY 120

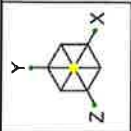
SK-1

May 07, 2024 at 09:54 PM

12.5 ft Platform.r3d



SML-073R2 / 2401983



Proposed
Rosenberger Dual
RRU Mount [TYP. of 6]

Proposed P2.5STD,
6 ft Long Pipe Mount
[TYP. of (1) per sector]

Proposed P2.5STD,
10 ft Long Pipe Mount
[TYP. of (1) per sector]

Proposed P2.5STD,
10 ft Long Pipe Mount
[TYP. of (2)]

36.00 in

Proposed Site Pro 1
#HRK12 Top Rail
reinforcement kit

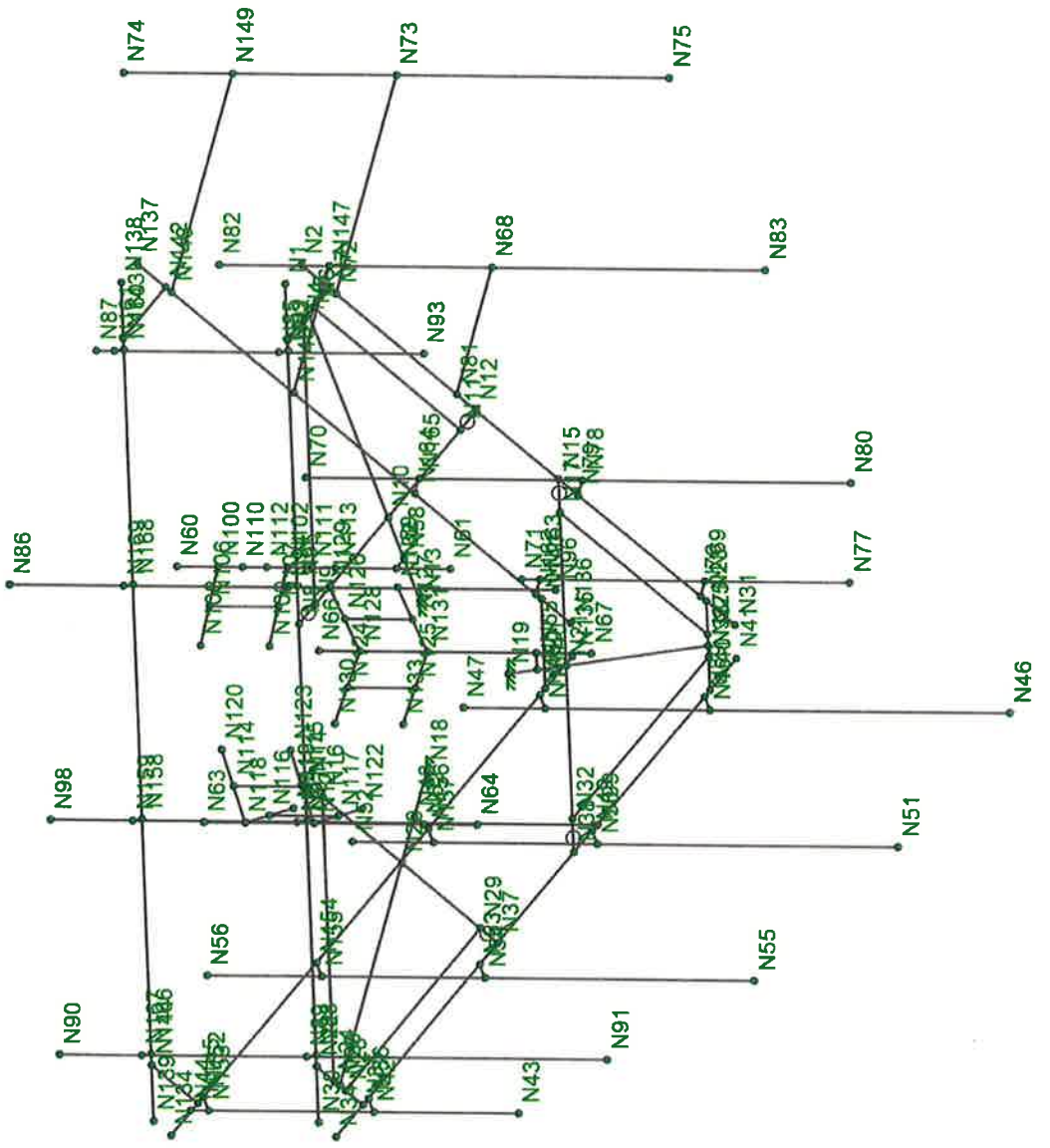
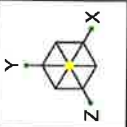
Proposed AT&T
Adjustable Crossover
Extended Kit



Morrison Hershfield
VG
SML-073R2 / 2401983

Site#: 50699-A / HIGHWAY 50 & HIGHWAY 120

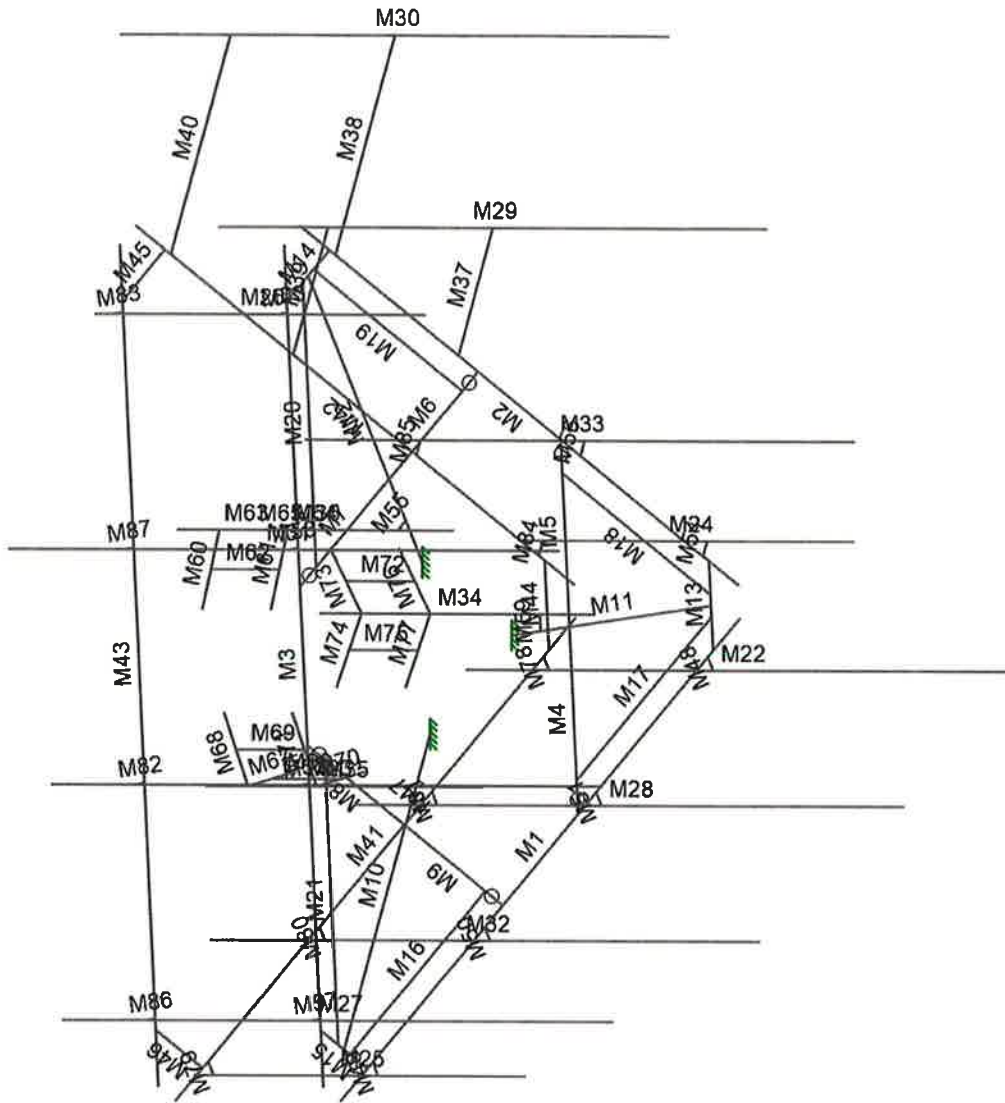
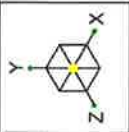
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12.5 ft Platform.r3d



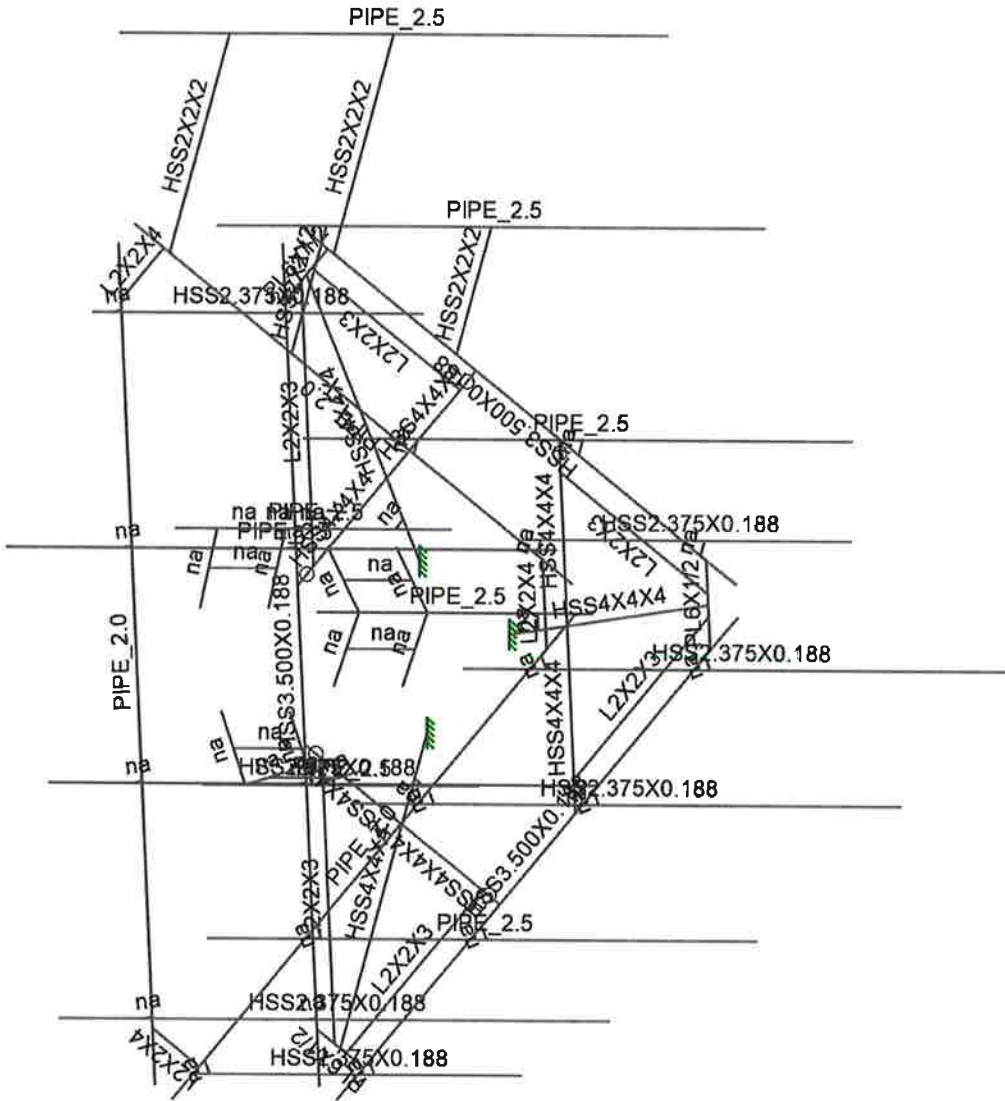
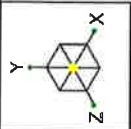
Morrison Hershfield
VG
SML-073R2 / 2401983

Site#: 50699-A / HIGHWAY 50 & HIGHWAY 120

SK-3
May 07, 2024 at 09:57 PM
12.5 ft Platform.r3d



	Morrison Hershfield VG	Site#: 50699-A / HIGHWAY 50 & HIGHWAY 120 SK-4
	SML-073R2 / 2401983	



Morrison Hershfield

VG

SML-073R2 / 2401983

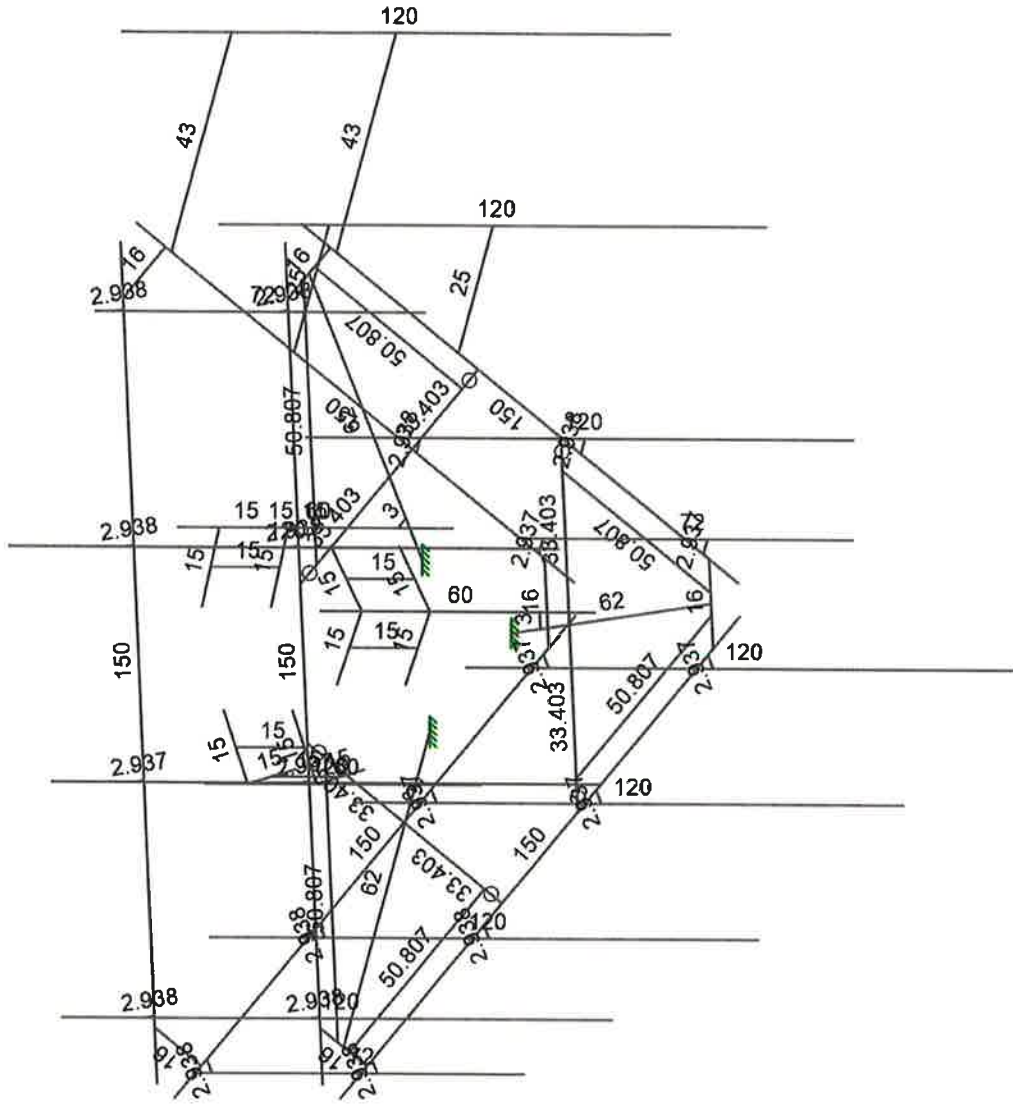
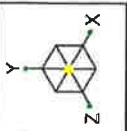
Site#: 50699-A / HIGHWAY 50 & HIGHWAY 120

SK-5

May 07, 2024 at 09:57 PM

12.5 ft Platform.r3d





Member Length (in) Displayed

IIRISA
A NETSCAPE COMPANY

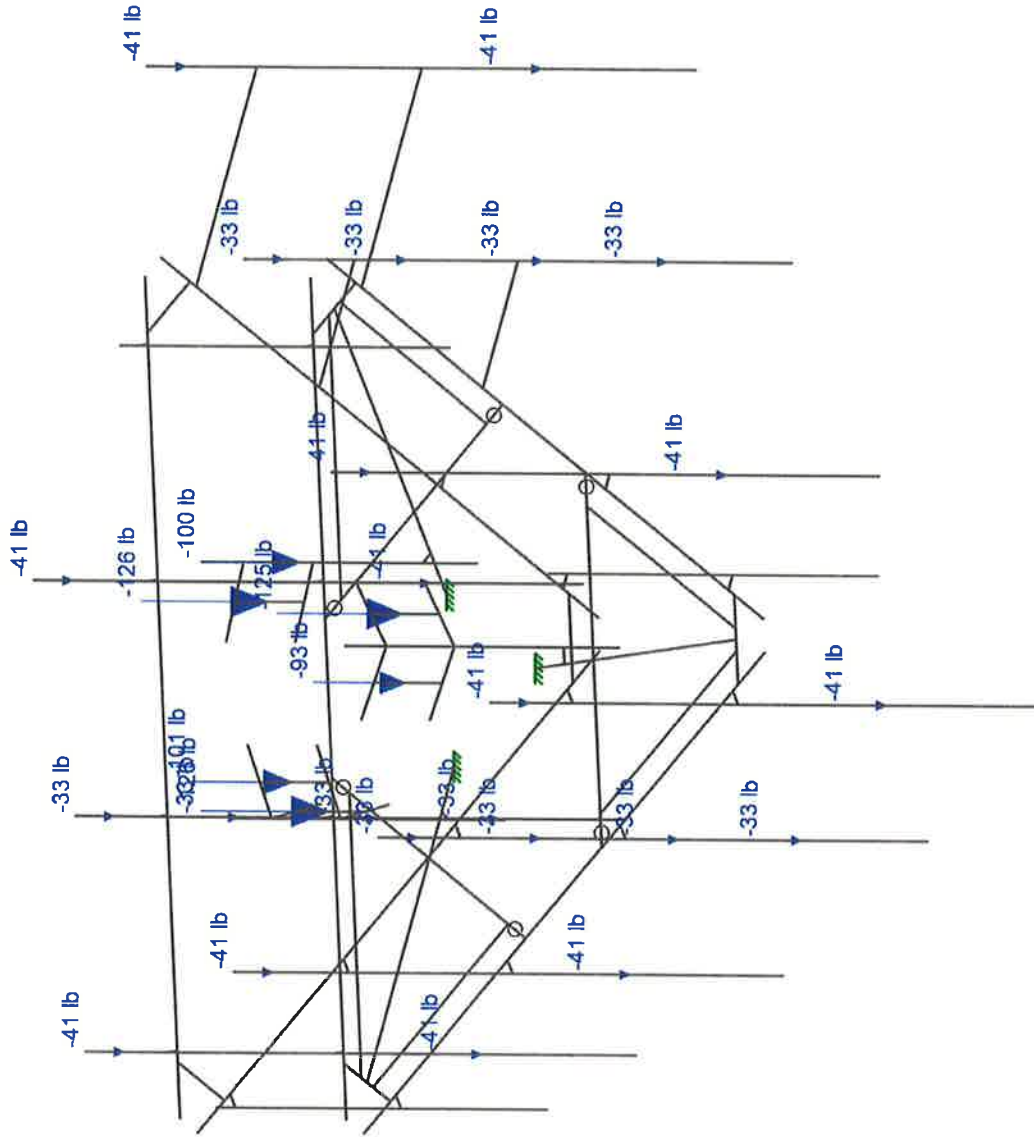
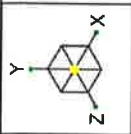
Morrison Hershfield
VG
SML-073R2 / 2401983

Site#: 50699-A / HIGHWAY 50 & HIGHWAY 120

SK-6

May 07, 2024 at 09:57 PM

12.5 ft Platform.r3d



Loads: BLC 1, DL



Morrison Hershfield
VG

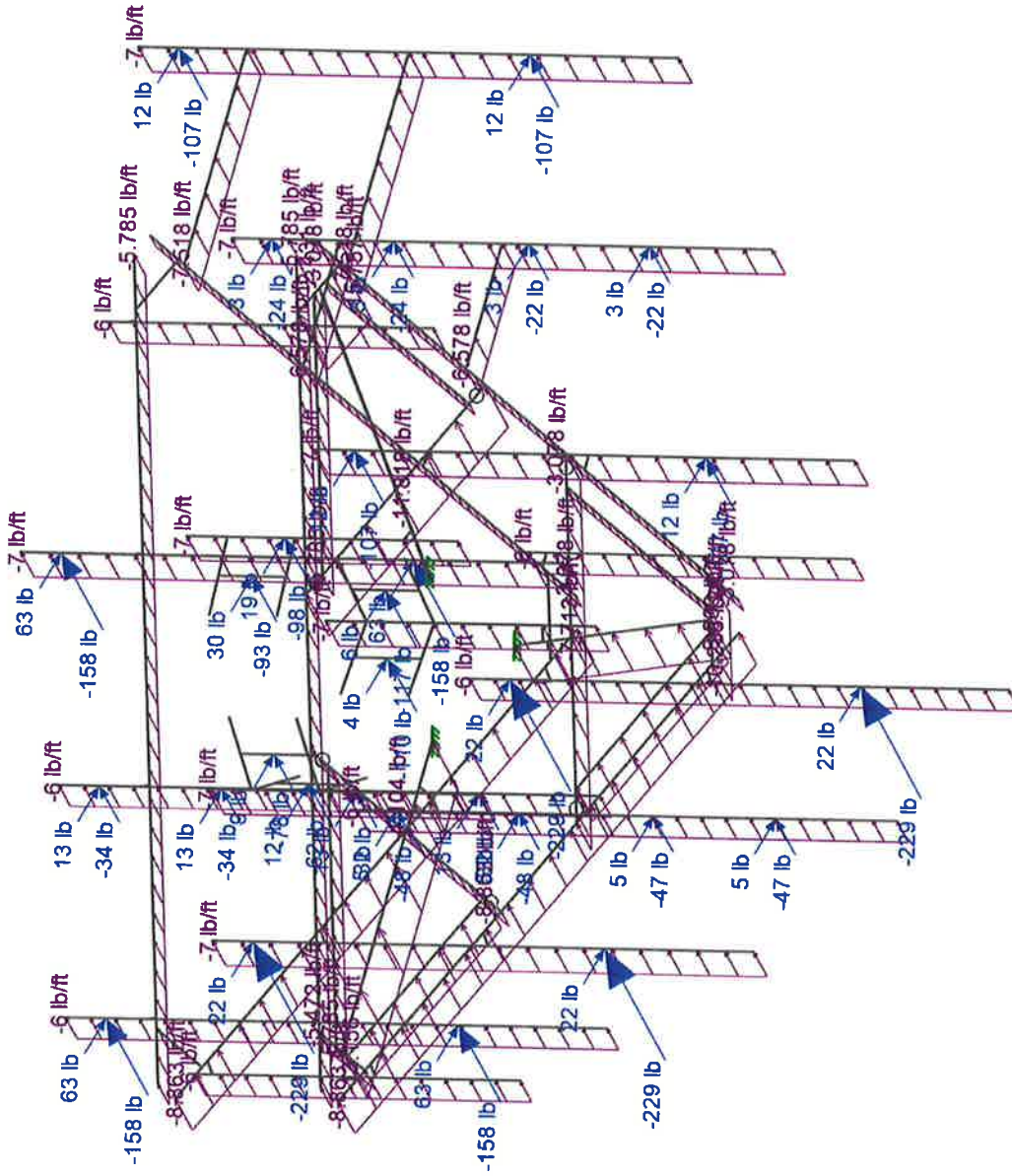
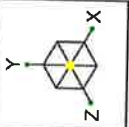
SML-073R2 / 2401983

Site#: 50699-A / HIGHWAY 50 & HIGHWAY 120

SK-7

May 07, 2024 at 09:58 PM

12.5 ft Platform.r3d



Loads: BLC 2, Wind 0 No Ice



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VG

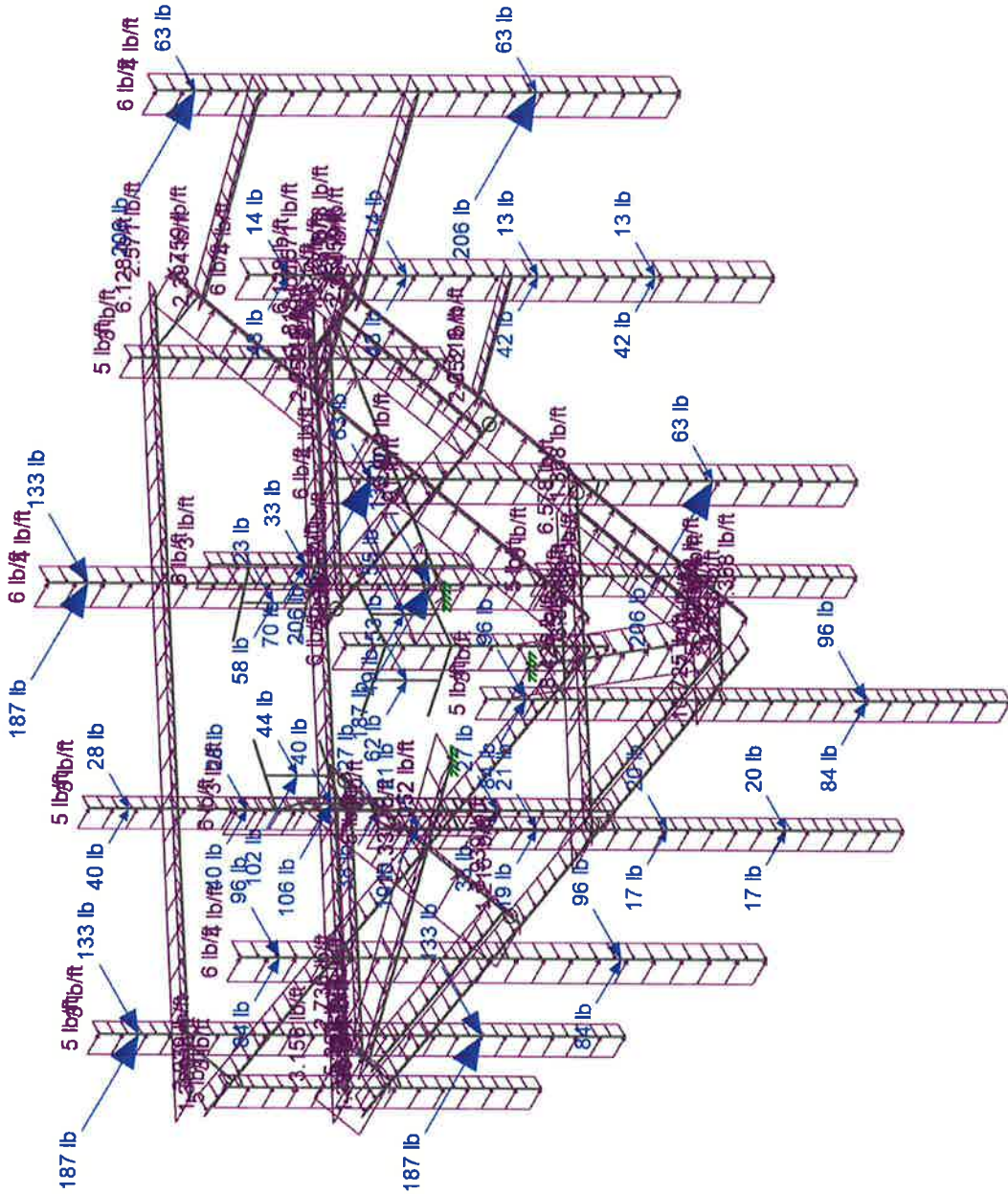
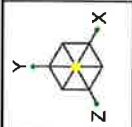
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Site#: 50699-A / HIGHWAY 50 & HIGHWAY 120

SK-8

May 07, 2024 at 09:58 PM

12.5 ft Platform.r3d



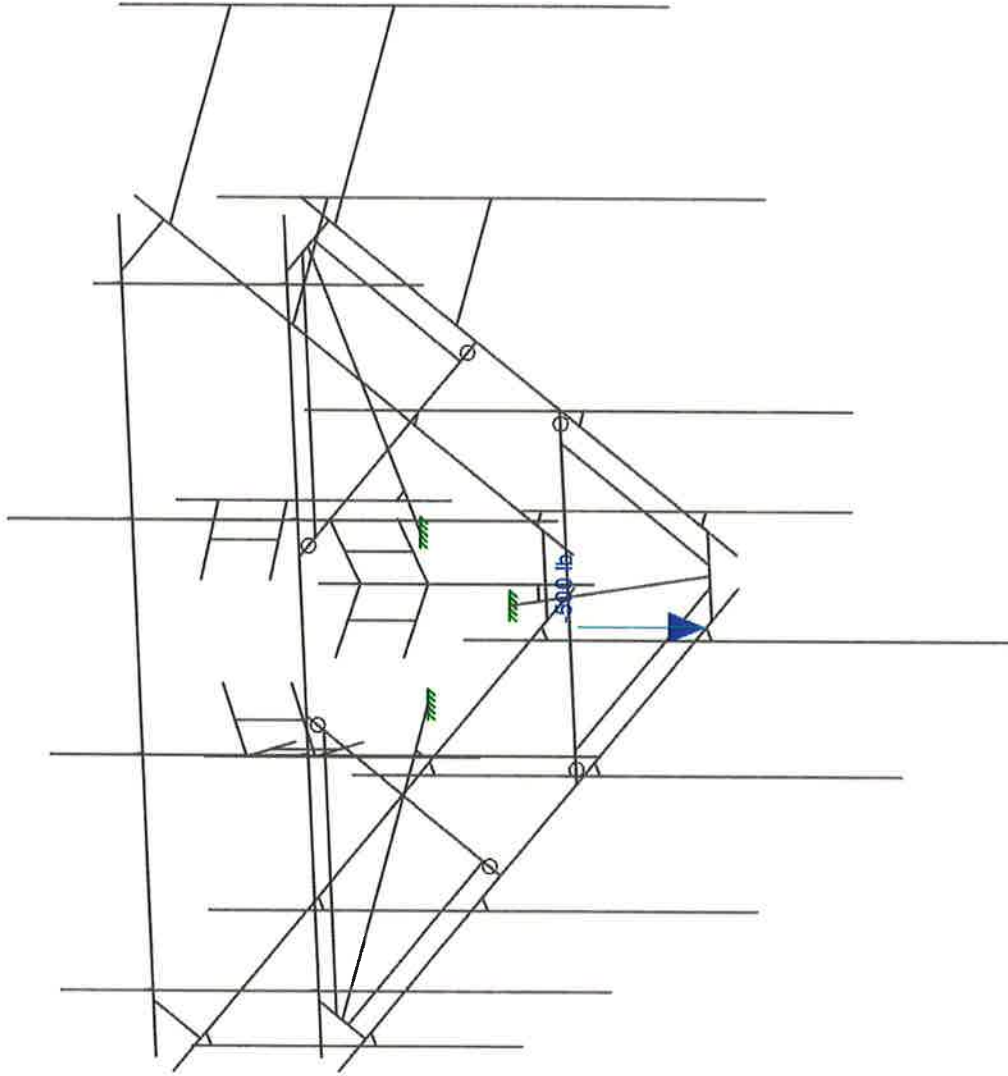
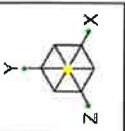
Loads: BLC 6, Wind 120 No Ice

IRISA
A NEULETSCH-ERK COMPANY

Morrison Hershfield
 VG
 SML-073R2 / 2401983

Site#: 50699-A / HIGHWAY 50 & HIGHWAY 120

SK-9
 May 07, 2024 at 09:58 PM
 12.5 ft Platform.r3d



Loads: BLC 27, LLM1



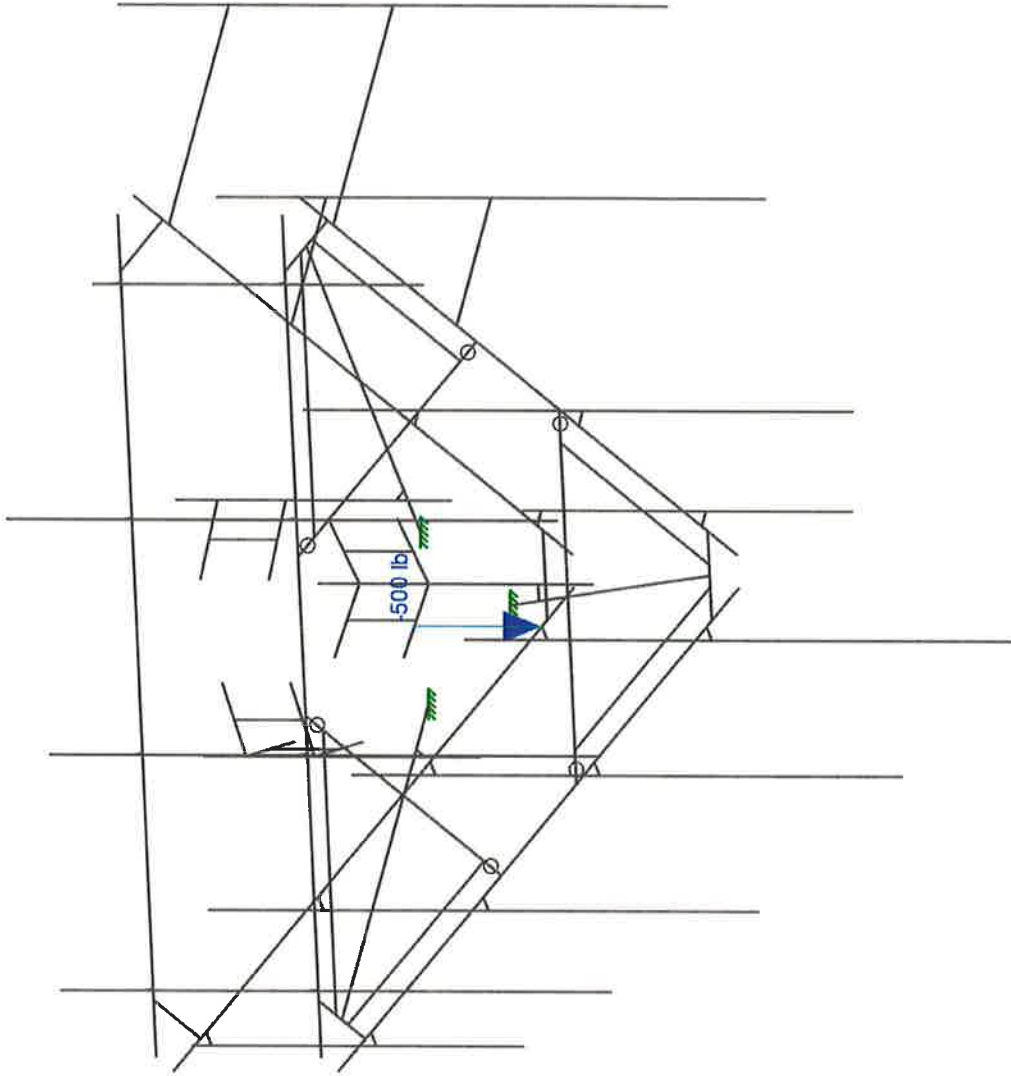
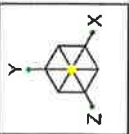
Morrison Hershfield
VG
SML-073R2 / 2401983

Site#: 50699-A / HIGHWAY 50 & HIGHWAY 120

SK-11

May 07, 2024 at 09:58 PM

12.5 ft Platform.r3d



Loads: BLC 28, LLM2

Morrison Hershfield
VG

Site#: 50699-A / HIGHWAY 50 & HIGHWAY 120

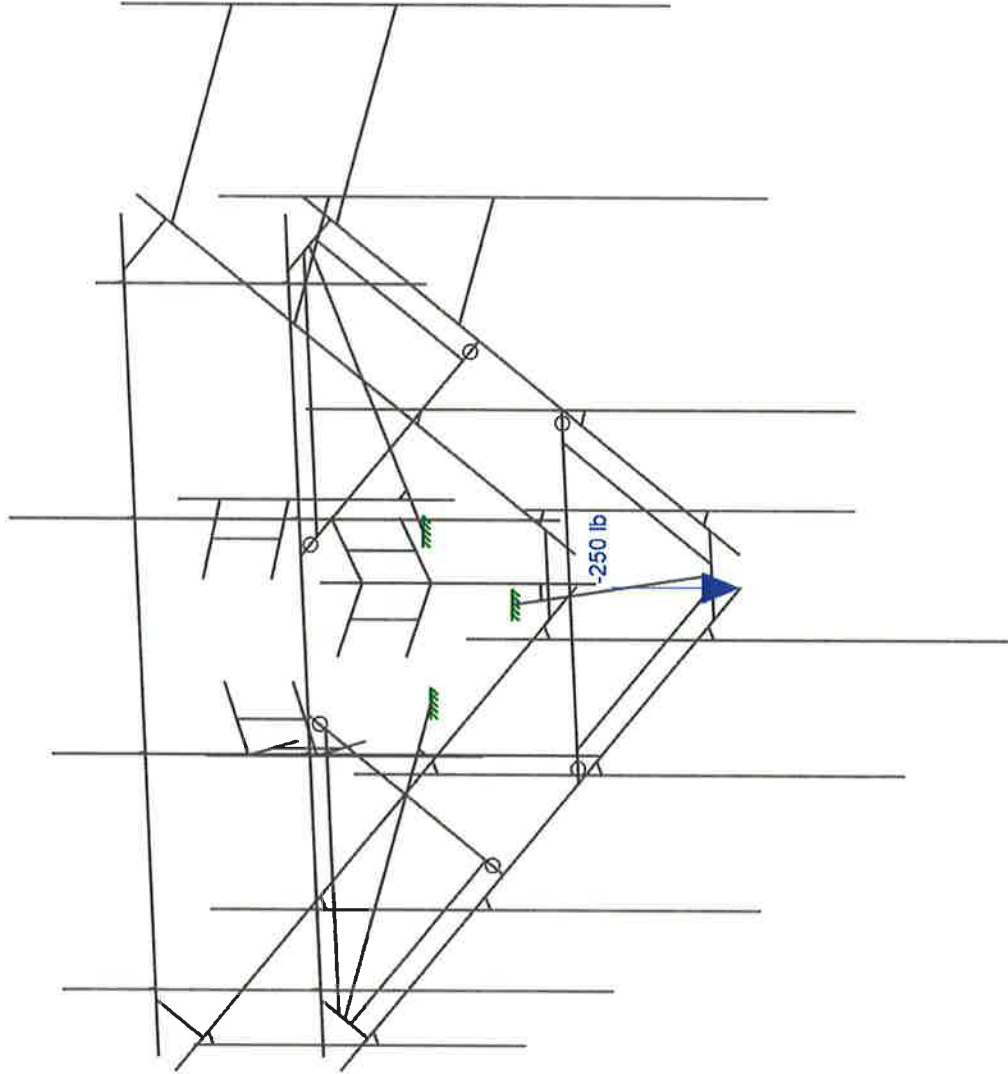
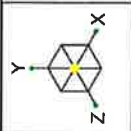
SK-12

May 07, 2024 at 09:59 PM

SML-073R2 / 2401983

12.5 ft Platform.r3d





Loads: BLC 33, LL1



Morrison Hershfield
VG

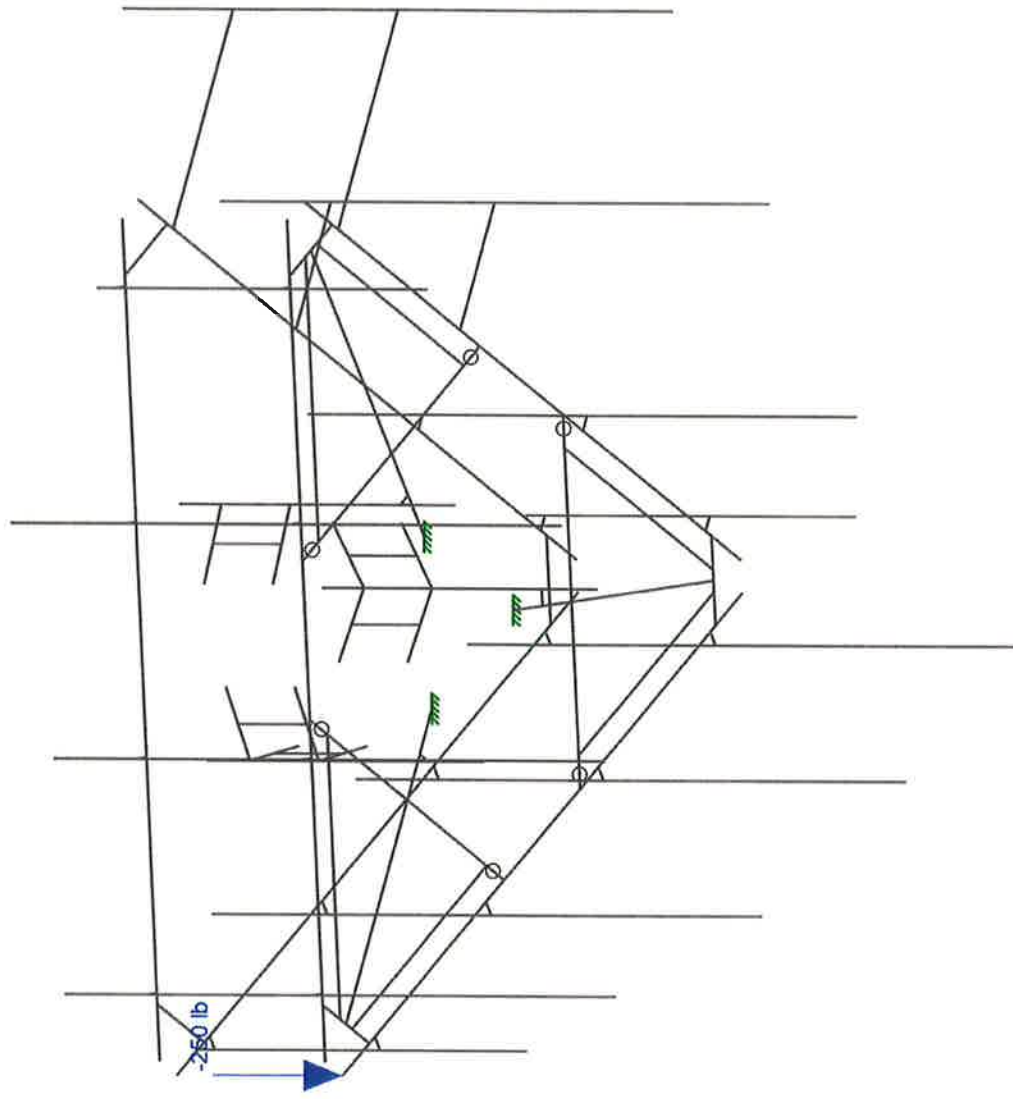
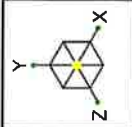
SML-073R2 / 2401983

Site#: 50699-A / HIGHWAY 50 & HIGHWAY 120

SK-13

May 07, 2024 at 09:59 PM

12.5 ft Platform.r3d



Loads: BLC 34, LL2



Morrison Hershfield
VG

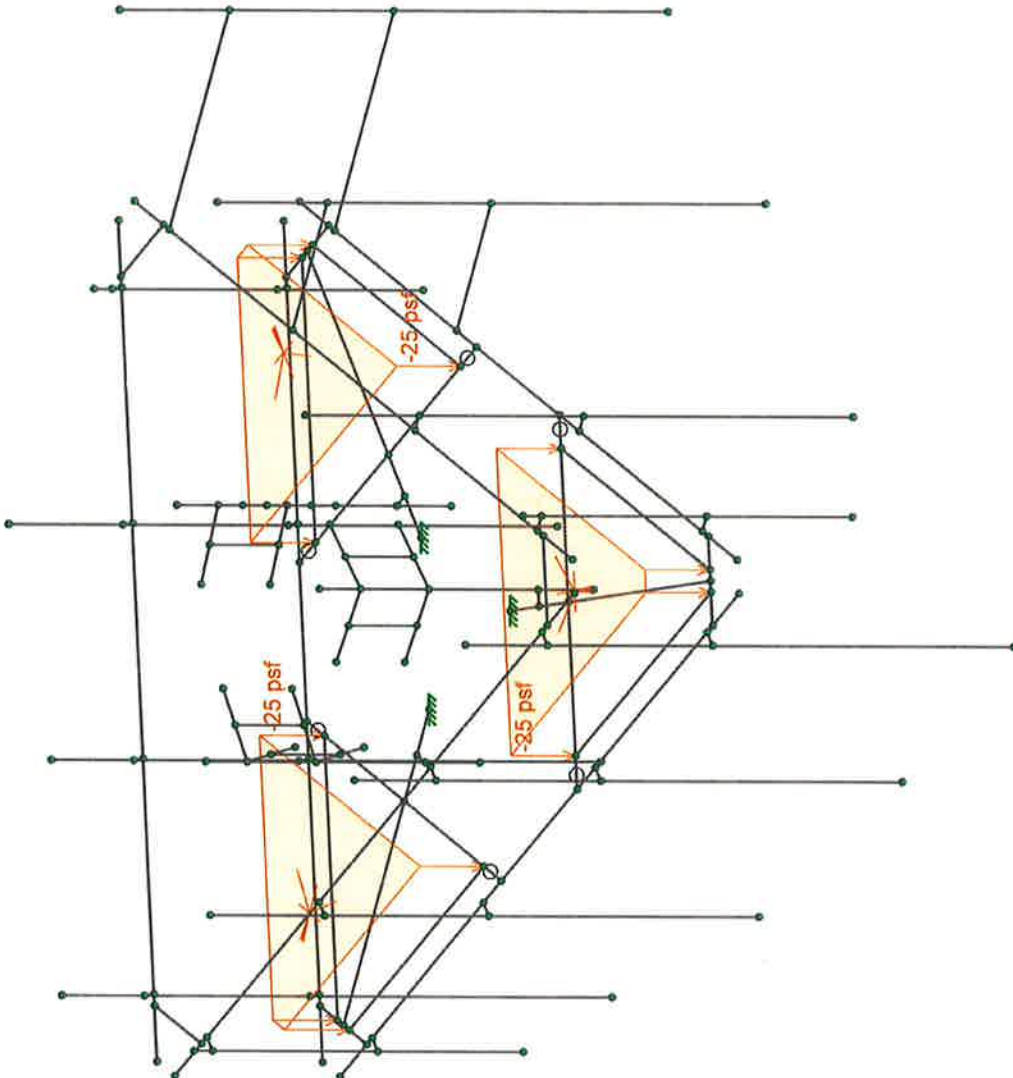
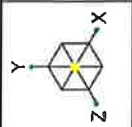
SML-073R2 / 2401983

Site#: 50699-A / HIGHWAY 50 & HIGHWAY 120

SK-14

May 07, 2024 at 09:59 PM

12.5 ft Platform.r3d



Loads: BLC 39, LL Grating

IRISA
A NEMETSCHEK COMPANY

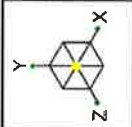
Morrison Hershfield
VG
SML-073R2 / 2401983

Site#: 50699-A / HIGHWAY 50 & HIGHWAY 120

SK-15

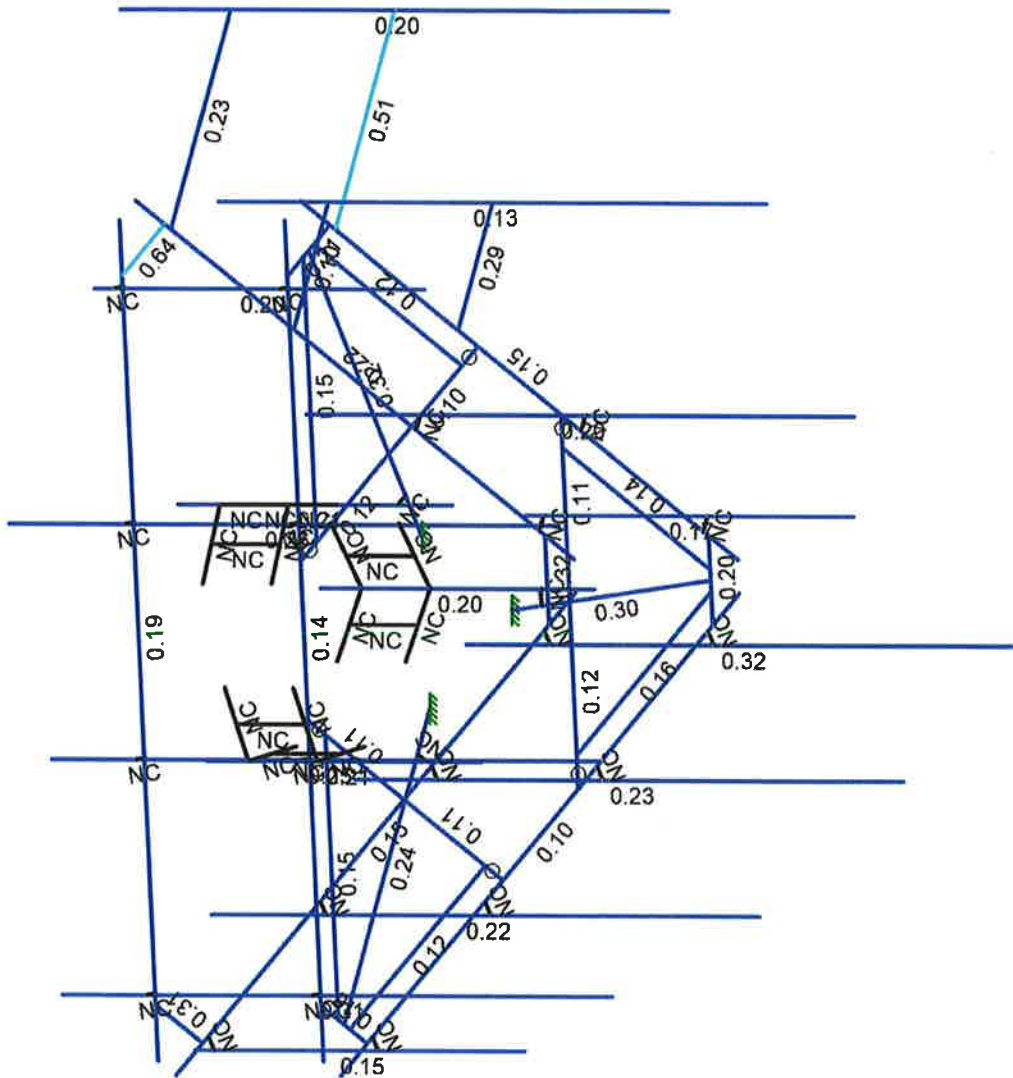
May 07, 2024 at 09:59 PM

12.5 ft Platform.r3d



Code Check (Env)

No Calc
> 1.0
.90-1.0
.75-.90
.50-.75
0--.50



Member Code Checks Displayed (Enveloped)
Envelope Only Solution

IRISA
A WILKINS GROUP COMPANY

Morrison Hershfield
VG
SML-073R2 / 2401983

Site#: 50699-A / HIGHWAY 50 & HIGHWAY 120

SK-16
May 07, 2024 at 10:00 PM
12.5 ft Platform.r3d

SOFTWARE ANALYSIS OUTPUT

Model Settings

Number of Reported Sections	5
Number of Internal Sections	100
Member Area Load Mesh Size (in ²)	144
Consider Shear Deformation	Yes
Consider Torsional Warping	Yes
Approximate Mesh Size (in)	12
Transfer Forces Between Intersecting Wood Walls	Yes
Increase Wood Wall Nailing Capacity for Wind Loads	Yes
Include P-Delta for Walls	Yes
Optimize Masonry and Wood Walls	Yes
Maximum Number of Iterations	3
Single	No
Multiple (Optimum)	Yes
Maximum	No

Global Axis corresponding to vertical direction	Y
Convert Existing Data	Yes
Default Global Plane for z-axis	XZ
Plate Local Axis Orientation	Nodal

Hot Rolled Steel	AISC 15th (360-16): LRFD
Stiffness Adjustment	Yes (Iterative)
Notional Annex	None
Connections	None
Cold Formed Steel	None
Stiffness Adjustment	Yes (Iterative)
Wood	None
Temperature	< 100F
Concrete	None
Masonry	None
Aluminum	None
Structure Type	Building
Stiffness Adjustment	Yes (Iterative)
Stainless	None
Stiffness Adjustment	Yes (Iterative)

Compression Stress Block	Rectangular Stress Block
Analyze using Cracked Sections	Yes
Leave room for horizontal rebar splices (2*d bar spacing)	Yes
List forces which were ignored for design in the Detail Report	Yes

Column Min Steel	1
Column Max Steel	8
Rebar Material Spec	ASTM A615
Warn if beam-column framing arrangement is not understood	No
Number of Shear Regions	4
Region 2 & 3 Spacing Increase Increment (in)	4

Code	ASCE 7-16
Risk Category	I or II
Drift Cat	Other



Company : Morrison Hershfield
 Designer : VG
 Job Number : SML-073R2 / 2401983
 Model Name : Site#: 50699-A / HIGHWAY 50 & ...

05/07/2024
 10:00:54 PM
 Checked By : GLC

Model Settings (Continued)

Base Elevation (ft)	
Include the weight of the structure in base shear calcs	Yes
S _v (g)	0.04
SD _v (g)	0.065
SD _s (g)	0.074
T _v (sec)	12
T Z (sec)	
T X (sec)	
C _v Z	0.02
C _v X	0.02
C _v Exp. Z	0.75
C _v Exp. X	0.75
R Z	3
R X	3
Ω _v Z	1
Ω _v X	1
C _v Z	4
C _v X	4
ρ Z	1
ρ X	1

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm. Coeff. [1e ⁵ F ⁻¹]	Density [k/ft ³]	Yield [ksi]	Ry	Fu [ksi]	Rt
1	A36 Gr.36	29000	11154	0.3	0.65	0.49	36	1.5	58	1.2
2	A500 Gr.B Rect	29000	11154	0.3	0.65	0.527	46	1.4	58	1.3
3	A53 Gr.B	29000	11154	0.3	0.65	0.49	35	1.6	60	1.2
4	A992	29000	11154	0.3	0.65	0.49	50	1.1	65	1.1
5	A572 Gr.50	29000	11154	0.3	0.65	0.49	50	1.1	65	1.1
6	A500 Gr.B RND	29000	11154	0.3	0.65	0.527	42	1.4	58	1.3
7	A500 Gr.C RND	29000	11154	0.3	0.65	0.527	46	1.4	62	1.3
8	A500 Gr.C RECT	29000	11154	0.3	0.65	0.527	50	1.4	62	1.3
9	A1085	29000	11154	0.3	0.65	0.49	50	1.4	65	1.3
10	A913 Gr.65	29000	11154	0.3	0.65	0.49	65	1.1	80	1.1

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rule	Area [in ²]	Iyy [in ⁴]	Izz [in ⁴]	J [in ⁴]
1	Main Horizontal	HSS3.500X0.188	Beam	HSS Pipe	A53 Gr.B	Typical	1.82	2.52	2.52	5.04
2	Horizontal Support	HSS4X4X4	Beam	SquareTube	A500 Gr.B Rect	Typical	3.37	7.8	7.8	12.8
3	Outrigger Arm	HSS4X4X4	Beam	SquareTube	A500 Gr.B Rect	Typical	3.37	7.8	7.8	12.8
4	Main Horizontal Support	PL6X1/2	Beam	RECT	A36 Gr.36	Typical	3	0.062	9	0.237
5	Grating Support	L2X2X3	Beam	Single Angle	A36 Gr.36	Typical	0.722	0.271	0.271	0.009
6	Mast Pipe (E)	HSS2.375X0.188	Column	HSS Pipe	A53 Gr.B	Typical	1.2	0.733	0.733	1.47
7	Mast Pipe (P)	PIPE 2.5	Column	Pipe	A53 Gr.B	Typical	1.61	1.45	1.45	2.89
8	RRH Pipe (P)	PIPE 2.5	Column	Pipe	A53 Gr.B	Typical	1.61	1.45	1.45	2.89
9	Standoff (P)	HSS2X2X2	Beam	Tube	A500 Gr.C RECT	Typical	0.84	0.486	0.486	0.796
10	Top Rail (P)	PIPE 2.0	Beam	Pipe	A53 Gr.B	Typical	1.02	0.627	0.627	1.25
11	TopRail Support (P)	L2X2X4	Beam	Single Angle	A36 Gr.36	Typical	0.944	0.346	0.346	0.021

Node Boundary Conditions

	Node Label	X [k/in]	Y [k/in]	Z [k/in]	X Rot [k-ft/rad]	Y Rot [k-ft/rad]	Z Rot [k-ft/rad]
1	N13	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
2	N18	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
3	N19	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction

Hot Rolled Steel Design Parameters

	Label	Shape	Length [in]	Lb y-y [in]	Lb z-z [in]	Lcomp top [in]	K y-y	K z-z	Channel Conn.	a [in]	Function
1	M1	Main Horizontal	150	Segment	Segment	Lbyy			N/A	N/A	Lateral
2	M2	Main Horizontal	150	Segment	Segment	Lbyy			N/A	N/A	Lateral
3	M3	Main Horizontal	150	Segment	Segment	Lbyy			N/A	N/A	Lateral
4	M4	Horizontal Support	33.403			Lbyy	0.8	0.8	N/A	N/A	Lateral
5	M5	Horizontal Support	33.403			Lbyy	0.8	0.8	N/A	N/A	Lateral
6	M6	Horizontal Support	33.403			Lbyy	0.8	0.8	N/A	N/A	Lateral
7	M7	Horizontal Support	33.403			Lbyy	0.8	0.8	N/A	N/A	Lateral
8	M8	Horizontal Support	33.403			Lbyy	0.8	0.8	N/A	N/A	Lateral
9	M9	Horizontal Support	33.403			Lbyy	0.8	0.8	N/A	N/A	Lateral
10	M10	Outrigger Arm	62	50	50	Lbyy			N/A	N/A	Lateral
11	M11	Outrigger Arm	62	50	50	Lbyy			N/A	N/A	Lateral
12	M12	Outrigger Arm	62	50	50	Lbyy			N/A	N/A	Lateral
13	M13	Main Horizontal Support	16			Lbyy	0.7	0.7	N/A	N/A	Lateral
14	M14	Main Horizontal Support	16			Lbyy	0.7	0.7	N/A	N/A	Lateral
15	M15	Main Horizontal Support	16			Lbyy	0.7	0.7	N/A	N/A	Lateral
16	M16	Grating Support	50.807			Lbyy	0.7	0.7	N/A	N/A	Lateral
17	M17	Grating Support	50.807			Lbyy	0.7	0.7	N/A	N/A	Lateral
18	M18	Grating Support	50.807			Lbyy	0.7	0.7	N/A	N/A	Lateral

Hot Rolled Steel Design Parameters (Continued)

Label	Shape	Length [in]	Lb y-y [in]	Lb z-z [in]	Lcomp top [in]	K y-y	K z-z	Channel Conn.	a [in]	Function	
19	M19	Grating Support	50.807			Lbyy	0.7	0.7	N/A	N/A	Lateral
20	M20	Grating Support	50.807			Lbyy	0.7	0.7	N/A	N/A	Lateral
21	M21	Grating Support	50.807			Lbyy	0.7	0.7	N/A	N/A	Lateral
22	M22	Mast Pipe (E)	120	Segment	Segment	Lbyy			N/A	N/A	Lateral
23	M23	Mast Pipe (E)	120	Segment	Segment	Lbyy			N/A	N/A	Lateral
24	M24	Mast Pipe (E)	72	Segment	Segment	Lbyy			N/A	N/A	Lateral
25	M25	Mast Pipe (E)	72	Segment	Segment	Lbyy			N/A	N/A	Lateral
26	M26	Mast Pipe (E)	72	Segment	Segment	Lbyy			N/A	N/A	Lateral
27	M27	Mast Pipe (E)	120	Segment	Segment	Lbyy			N/A	N/A	Lateral
28	M28	Mast Pipe (E)	120	Segment	Segment	Lbyy			N/A	N/A	Lateral
29	M29	Mast Pipe (P)	120	Segment	Segment	Lbyy			N/A	N/A	Lateral
30	M30	Mast Pipe (P)	120	Segment	Segment	Lbyy			N/A	N/A	Lateral
31	M31	Mast Pipe (P)	120	Segment	Segment	Lbyy			N/A	N/A	Lateral
32	M32	Mast Pipe (P)	120	Segment	Segment	Lbyy			N/A	N/A	Lateral
33	M33	Mast Pipe (P)	120	Segment	Segment	Lbyy			N/A	N/A	Lateral
34	M34	RRH Pipe (P)	60			Lbyy			N/A	N/A	Lateral
35	M35	RRH Pipe (P)	60			Lbyy			N/A	N/A	Lateral
36	M36	RRH Pipe (P)	60			Lbyy			N/A	N/A	Lateral
37	M37	Standoff (P)	25			Lbyy			N/A	N/A	Lateral
38	M38	Standoff (P)	43			Lbyy			N/A	N/A	Lateral
39	M39	Standoff (P)	25			Lbyy			N/A	N/A	Lateral
40	M40	Standoff (P)	43			Lbyy			N/A	N/A	Lateral
41	M41	Top Rail (P)	150	Segment	Segment	Lbyy			N/A	N/A	Lateral
42	M42	Top Rail (P)	150	Segment	Segment	Lbyy			N/A	N/A	Lateral
43	M43	Top Rail (P)	150	Segment	Segment	Lbyy			N/A	N/A	Lateral
44	M44	TopRail Support (P)	16			Lbyy	0.7	0.7	N/A	N/A	Lateral
45	M45	TopRail Support (P)	16			Lbyy	0.7	0.7	N/A	N/A	Lateral
46	M46	TopRail Support (P)	16			Lbyy	0.7	0.7	N/A	N/A	Lateral

Member Point Loads (BLC 1 : DL)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
1	M22	Y	-41	9
2	M22	Y	-41	87
3	M28	Y	-33	9
4	M28	Y	-33	36
5	M28	Y	-33	66
6	M28	Y	-33	93
7	M32	Y	-41	9
8	M32	Y	-41	87
9	M27	Y	-41	9
10	M27	Y	-41	87
11	M23	Y	-33	9
12	M23	Y	-33	36
13	M23	Y	-33	66
14	M23	Y	-33	93
15	M31	Y	-41	9
16	M31	Y	-41	87
17	M30	Y	-41	9
18	M30	Y	-41	87
19	M29	Y	-33	9
20	M29	Y	-33	36
21	M29	Y	-33	66
22	M29	Y	-33	93
23	M33	Y	-41	9
24	M33	Y	-41	87

Member Point Loads (BLC 1 : DL) (Continued)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
25	M66	Y	-33	7.5
26	M66	Y	-33	7.5
27	M66	Y	-30	7.5
28	M66	Y	-30	7.5
29	M69	Y	-34	7.5
30	M69	Y	-34	7.5
31	M62	Y	-33	7.5
32	M62	Y	-33	7.5
33	M62	Y	-60	7.5
34	M65	Y	-67	7.5
35	M72	Y	-65	7.5
36	M72	Y	-60	7.5
37	M75	Y	-67	7.5
38	M69	Y	-33	7.5
39	M65	Y	-33	7.5
40	M75	Y	-26	7.5

Member Point Loads (BLC 2 : Wind 0 No Ice)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
1	M22	Z	-229	9
2	M22	Z	-229	87
3	M28	Z	-48	9
4	M28	Z	-48	36
5	M28	Z	-47	66
6	M28	Z	-47	93
7	M32	Z	-229	9
8	M32	Z	-229	87
9	M27	Z	-158	9
10	M27	Z	-158	87
11	M23	Z	-34	9
12	M23	Z	-34	36
13	M23	Z	-32	66
14	M23	Z	-32	93
15	M31	Z	-158	9
16	M31	Z	-158	87
17	M30	Z	-107	9
18	M30	Z	-107	87
19	M29	Z	-24	9
20	M29	Z	-24	36
21	M29	Z	-22	66
22	M29	Z	-22	93
23	M33	Z	-107	9
24	M33	Z	-107	87
25	M66	Z	-17	7.5
26	M66	Z	-17	7.5
27	M66	Z	-14	7.5
28	M66	Z	-14	7.5
29	M69	Z	-17	7.5
30	M69	Z	-17	7.5
31	M62	Z	-27	7.5
32	M62	Z	-27	7.5
33	M62	Z	-39	7.5
34	M65	Z	-54	7.5
35	M72	Z	-69	7.5
36	M72	Z	-48	7.5

Member Point Loads (BLC 2 : Wind 0 No Ice) (Continued)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
37	M75	Z	-69	7.5
38	M69	Z	-44	7.5
39	M65	Z	-44	7.5
40	M75	Z	-41	7.5
41	M22	X	22	9
42	M22	X	22	87
43	M28	X	5	9
44	M28	X	5	36
45	M28	X	5	66
46	M28	X	5	93
47	M32	X	22	9
48	M32	X	22	87
49	M27	X	63	9
50	M27	X	63	87
51	M23	X	13	9
52	M23	X	13	36
53	M23	X	13	66
54	M23	X	13	93
55	M31	X	63	9
56	M31	X	63	87
57	M30	X	12	9
58	M30	X	12	87
59	M29	X	3	9
60	M29	X	3	36
61	M29	X	3	66
62	M29	X	3	93
63	M33	X	12	9
64	M33	X	12	87
65	M66	X	4	7.5
66	M66	X	4	7.5
67	M66	X	2	7.5
68	M66	X	2	7.5
69	M69	X	4	7.5
70	M69	X	4	7.5
71	M62	X	10	7.5
72	M62	X	10	7.5
73	M62	X	10	7.5
74	M65	X	19	7.5
75	M72	X	4	7.5
76	M72	X	2	7.5
77	M75	X	4	7.5
78	M69	X	1	7.5
79	M65	X	0	7.5
80	M75	X	0	7.5

Member Point Loads (BLC 3 : Wind 30 No Ice)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
1	M22	Z	-209	9
2	M22	Z	-209	87
3	M28	Z	-44	9
4	M28	Z	-44	36
5	M28	Z	-43	66
6	M28	Z	-43	93
7	M32	Z	-209	9
8	M32	Z	-209	87

Member Point Loads (BLC 3 : Wind 30 No Ice) (Continued)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
9	M27	Z	-106	9
10	M27	Z	-106	87
11	M23	Z	-23	9
12	M23	Z	-23	36
13	M23	Z	-22	66
14	M23	Z	-22	93
15	M31	Z	-106	9
16	M31	Z	-106	87
17	M30	Z	-87	9
18	M30	Z	-87	87
19	M29	Z	-20	9
20	M29	Z	-20	36
21	M29	Z	-18	66
22	M29	Z	-18	93
23	M33	Z	-87	9
24	M33	Z	-87	87
25	M66	Z	-13	7.5
26	M66	Z	-13	7.5
27	M66	Z	-12	7.5
28	M66	Z	-12	7.5
29	M69	Z	-13	7.5
30	M69	Z	-13	7.5
31	M62	Z	-28	7.5
32	M62	Z	-28	7.5
33	M62	Z	-39	7.5
34	M65	Z	-56	7.5
35	M72	Z	-61	7.5
36	M72	Z	-42	7.5
37	M75	Z	-62	7.5
38	M69	Z	-38	7.5
39	M65	Z	-38	7.5
40	M75	Z	-36	7.5
41	M22	X	74	9
42	M22	X	74	87
43	M28	X	16	9
44	M28	X	16	36
45	M28	X	15	66
46	M28	X	15	93
47	M32	X	74	9
48	M32	X	74	87
49	M27	X	36	9
50	M27	X	36	87
51	M23	X	9	9
52	M23	X	9	36
53	M23	X	8	66
54	M23	X	8	93
55	M31	X	36	9
56	M31	X	36	87
57	M30	X	106	9
58	M30	X	106	87
59	M29	X	23	9
60	M29	X	23	36
61	M29	X	22	66
62	M29	X	22	93
63	M33	X	106	9

Member Point Loads (BLC 3 : Wind 30 No Ice) (Continued)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
64	M33	X	106	87
65	M66	X	15	7.5
66	M66	X	15	7.5
67	M66	X	11	7.5
68	M66	X	11	7.5
69	M69	X	15	7.5
70	M69	X	15	7.5
71	M62	X	20	7.5
72	M62	X	20	7.5
73	M62	X	27	7.5
74	M65	X	40	7.5
75	M72	X	19	7.5
76	M72	X	16	7.5
77	M75	X	19	7.5
78	M69	X	22	7.5
79	M65	X	22	7.5
80	M75	X	21	7.5

Member Point Loads (BLC 4 : Wind 60 No Ice)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
1	M22	Z	-133	9
2	M22	Z	-133	87
3	M28	Z	-28	9
4	M28	Z	-28	36
5	M28	Z	-27	66
6	M28	Z	-27	93
7	M32	Z	-133	9
8	M32	Z	-133	87
9	M27	Z	-25	9
10	M27	Z	-25	87
11	M23	Z	-6	9
12	M23	Z	-6	36
13	M23	Z	-5	66
14	M23	Z	-5	93
15	M31	Z	-25	9
16	M31	Z	-25	87
17	M30	Z	-44	9
18	M30	Z	-44	87
19	M29	Z	-10	9
20	M29	Z	-10	36
21	M29	Z	-9	66
22	M29	Z	-9	93
23	M33	Z	-44	9
24	M33	Z	-44	87
25	M66	Z	-6	7.5
26	M66	Z	-6	7.5
27	M66	Z	-6	7.5
28	M66	Z	-6	7.5
29	M69	Z	-6	7.5
30	M69	Z	-6	7.5
31	M62	Z	-22	7.5
32	M62	Z	-22	7.5
33	M62	Z	-29	7.5
34	M65	Z	-43	7.5
35	M72	Z	-37	7.5



Member Point Loads (BLC 4 : Wind 60 No Ice) (Continued)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
36	M72	Z	-26	7.5
37	M75	Z	-38	7.5
38	M69	Z	-22	7.5
39	M65	Z	-22	7.5
40	M75	Z	-21	7.5
41	M22	X	106	9
42	M22	X	106	87
43	M28	X	23	9
44	M28	X	23	36
45	M28	X	22	66
46	M28	X	22	93
47	M32	X	106	9
48	M32	X	106	87
49	M27	X	125	9
50	M27	X	125	87
51	M23	X	27	9
52	M23	X	27	36
53	M23	X	26	66
54	M23	X	26	93
55	M31	X	125	9
56	M31	X	125	87
57	M30	X	195	9
58	M30	X	195	87
59	M29	X	41	9
60	M29	X	41	36
61	M29	X	40	66
62	M29	X	40	93
63	M33	X	195	9
64	M33	X	195	87
65	M66	X	28	7.5
66	M66	X	28	7.5
67	M66	X	20	7.5
68	M66	X	20	7.5
69	M69	X	28	7.5
70	M69	X	28	7.5
71	M62	X	25	7.5
72	M62	X	25	7.5
73	M62	X	36	7.5
74	M65	X	50	7.5
75	M72	X	29	7.5
76	M72	X	25	7.5
77	M75	X	30	7.5
78	M69	X	38	7.5
79	M65	X	38	7.5
80	M75	X	36	7.5

Member Point Loads (BLC 5 : Wind 90 No Ice)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
1	M22	Z	-22	9
2	M22	Z	-22	87
3	M28	Z	-5	9
4	M28	Z	-5	36
5	M28	Z	-5	66
6	M28	Z	-5	93
7	M32	Z	-22	9

Member Point Loads (BLC 5 : Wind 90 No Ice) (Continued)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
8	M32	Z	-22	87
9	M27	Z	-63	9
10	M27	Z	-63	87
11	M23	Z	-13	9
12	M23	Z	-13	36
13	M23	Z	-13	66
14	M23	Z	-13	93
15	M31	Z	-63	9
16	M31	Z	-63	87
17	M30	Z	-12	9
18	M30	Z	-12	87
19	M29	Z	-3	9
20	M29	Z	-3	36
21	M29	Z	-3	66
22	M29	Z	-3	93
23	M33	Z	-12	9
24	M33	Z	-12	87
25	M66	Z	-4	7.5
26	M66	Z	-4	7.5
27	M66	Z	-2	7.5
28	M66	Z	-2	7.5
29	M69	Z	-4	7.5
30	M69	Z	-4	7.5
31	M62	Z	-10	7.5
32	M62	Z	-10	7.5
33	M62	Z	-10	7.5
34	M65	Z	-19	7.5
35	M72	Z	-4	7.5
36	M72	Z	-2	7.5
37	M75	Z	-4	7.5
38	M69	Z	-1	7.5
39	M65	Z	0	7.5
40	M75	Z	-1	7.5
41	M22	X	109	9
42	M22	X	109	87
43	M28	X	24	9
44	M28	X	24	36
45	M28	X	22	66
46	M28	X	22	93
47	M32	X	109	9
48	M32	X	109	87
49	M27	X	180	9
50	M27	X	180	87
51	M23	X	39	9
52	M23	X	39	36
53	M23	X	37	66
54	M23	X	37	93
55	M31	X	180	9
56	M31	X	180	87
57	M30	X	231	9
58	M30	X	231	87
59	M29	X	49	9
60	M29	X	49	36
61	M29	X	47	66
62	M29	X	47	93



Company : Morrison Hershfield
 Designer : VG
 Job Number : SML-073R2 / 2401983
 Model Name : Site#: 50699-A / HIGHWAY 50 & ...

05/07/2024
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 Checked By : GLC

Member Point Loads (BLC 5 : Wind 90 No Ice) (Continued)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
63	M33	X	231	9
64	M33	X	231	87
65	M66	X	34	7.5
66	M66	X	34	7.5
67	M66	X	24	7.5
68	M66	X	24	7.5
69	M69	X	34	7.5
70	M69	X	34	7.5
71	M62	X	24	7.5
72	M62	X	24	7.5
73	M62	X	36	7.5
74	M65	X	47	7.5
75	M72	X	32	7.5
76	M72	X	28	7.5
77	M75	X	32	7.5
78	M69	X	44	7.5
79	M65	X	44	7.5
80	M75	X	41	7.5

Member Point Loads (BLC 6 : Wind 120 No Ice)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
1	M22	Z	96	9
2	M22	Z	96	87
3	M28	Z	21	9
4	M28	Z	21	36
5	M28	Z	20	66
6	M28	Z	20	93
7	M32	Z	96	9
8	M32	Z	96	87
9	M27	Z	133	9
10	M27	Z	133	87
11	M23	Z	28	9
12	M23	Z	28	36
13	M23	Z	27	66
14	M23	Z	27	93
15	M31	Z	133	9
16	M31	Z	133	87
17	M30	Z	63	9
18	M30	Z	63	87
19	M29	Z	14	9
20	M29	Z	14	36
21	M29	Z	13	66
22	M29	Z	13	93
23	M33	Z	63	9
24	M33	Z	63	87
25	M66	Z	11	7.5
26	M66	Z	11	7.5
27	M66	Z	9	7.5
28	M66	Z	9	7.5
29	M69	Z	11	7.5
30	M69	Z	11	7.5
31	M62	Z	6	7.5
32	M62	Z	6	7.5
33	M62	Z	11	7.5
34	M65	Z	11	7.5

Member Point Loads (BLC 6 : Wind 120 No Ice) (Continued)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
35	M72	Z	32	7.5
36	M72	Z	23	7.5
37	M75	Z	32	7.5
38	M69	Z	22	7.5
39	M65	Z	22	7.5
40	M75	Z	21	7.5
41	M22	X	84	9
42	M22	X	84	87
43	M28	X	19	9
44	M28	X	19	36
45	M28	X	17	66
46	M28	X	17	93
47	M32	X	84	9
48	M32	X	84	87
49	M27	X	187	9
50	M27	X	187	87
51	M23	X	40	9
52	M23	X	40	36
53	M23	X	38	66
54	M23	X	38	93
55	M31	X	187	9
56	M31	X	187	87
57	M30	X	206	9
58	M30	X	206	87
59	M29	X	43	9
60	M29	X	43	36
61	M29	X	42	66
62	M29	X	42	93
63	M33	X	206	9
64	M33	X	206	87
65	M66	X	31	7.5
66	M66	X	31	7.5
67	M66	X	22	7.5
68	M66	X	22	7.5
69	M69	X	32	7.5
70	M69	X	32	7.5
71	M62	X	16	7.5
72	M62	X	16	7.5
73	M62	X	26	7.5
74	M65	X	32	7.5
75	M72	X	26	7.5
76	M72	X	23	7.5
77	M75	X	26	7.5
78	M69	X	38	7.5
79	M65	X	38	7.5
80	M75	X	36	7.5

Member Point Loads (BLC 7 : Wind 150 No Ice)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
1	M22	Z	187	9
2	M22	Z	187	87
3	M28	Z	40	9
4	M28	Z	40	36
5	M28	Z	38	66
6	M28	Z	38	93

Member Point Loads (BLC 7 : Wind 150 No Ice) (Continued)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
7	M32	Z	187	9
8	M32	Z	187	87
9	M27	Z	168	9
10	M27	Z	168	87
11	M23	Z	36	9
12	M23	Z	36	36
13	M23	Z	34	66
14	M23	Z	34	93
15	M31	Z	168	9
16	M31	Z	168	87
17	M30	Z	98	9
18	M30	Z	98	87
19	M29	Z	22	9
20	M29	Z	22	36
21	M29	Z	20	66
22	M29	Z	20	93
23	M33	Z	98	9
24	M33	Z	98	87
25	M66	Z	16	7.5
26	M66	Z	16	7.5
27	M66	Z	13	7.5
28	M66	Z	13	7.5
29	M69	Z	16	7.5
30	M69	Z	16	7.5
31	M62	Z	19	7.5
32	M62	Z	19	7.5
33	M62	Z	29	7.5
34	M65	Z	38	7.5
35	M72	Z	58	7.5
36	M72	Z	40	7.5
37	M75	Z	58	7.5
38	M69	Z	38	7.5
39	M65	Z	38	7.5
40	M75	Z	36	7.5
41	M22	X	36	9
42	M22	X	36	87
43	M28	X	9	9
44	M28	X	9	36
45	M28	X	8	66
46	M28	X	8	93
47	M32	X	36	9
48	M32	X	36	87
49	M27	X	144	9
50	M27	X	144	87
51	M23	X	30	9
52	M23	X	30	36
53	M23	X	30	66
54	M23	X	30	93
55	M31	X	144	9
56	M31	X	144	87
57	M30	X	125	9
58	M30	X	125	87
59	M29	X	27	9
60	M29	X	27	36
61	M29	X	26	66

Member Point Loads (BLC 7 : Wind 150 No Ice) (Continued)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
62	M29	X	26	93
63	M33	X	125	9
64	M33	X	125	87
65	M66	X	20	7.5
66	M66	X	20	7.5
67	M66	X	14	7.5
68	M66	X	14	7.5
69	M69	X	20	7.5
70	M69	X	20	7.5
71	M62	X	4	7.5
72	M62	X	4	7.5
73	M62	X	10	7.5
74	M65	X	8	7.5
75	M72	X	13	7.5
76	M72	X	13	7.5
77	M75	X	13	7.5
78	M69	X	22	7.5
79	M65	X	22	7.5
80	M75	X	21	7.5

Member Point Loads (BLC 8 : Wind 180 No Ice)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
1	M22	Z	229	9
2	M22	Z	229	87
3	M28	Z	48	9
4	M28	Z	48	36
5	M28	Z	47	66
6	M28	Z	47	93
7	M32	Z	229	9
8	M32	Z	229	87
9	M27	Z	158	9
10	M27	Z	158	87
11	M23	Z	34	9
12	M23	Z	34	36
13	M23	Z	32	66
14	M23	Z	32	93
15	M31	Z	158	9
16	M31	Z	158	87
17	M30	Z	107	9
18	M30	Z	107	87
19	M29	Z	24	9
20	M29	Z	24	36
21	M29	Z	22	66
22	M29	Z	22	93
23	M33	Z	107	9
24	M33	Z	107	87
25	M66	Z	17	7.5
26	M66	Z	17	7.5
27	M66	Z	14	7.5
28	M66	Z	14	7.5
29	M69	Z	17	7.5
30	M69	Z	17	7.5
31	M62	Z	27	7.5
32	M62	Z	27	7.5
33	M62	Z	39	7.5

Member Point Loads (BLC 8 : Wind 180 No Ice) (Continued)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
34	M65	Z	54	7.5
35	M72	Z	69	7.5
36	M72	Z	48	7.5
37	M75	Z	69	7.5
38	M69	Z	44	7.5
39	M65	Z	44	7.5
40	M75	Z	41	7.5
41	M22	X	-22	9
42	M22	X	-22	87
43	M28	X	-5	9
44	M28	X	-5	36
45	M28	X	-5	66
46	M28	X	-5	93
47	M32	X	-22	9
48	M32	X	-22	87
49	M27	X	-63	9
50	M27	X	-63	87
51	M23	X	-13	9
52	M23	X	-13	36
53	M23	X	-13	66
54	M23	X	-13	93
55	M31	X	-63	9
56	M31	X	-63	87
57	M30	X	-12	9
58	M30	X	-12	87
59	M29	X	-3	9
60	M29	X	-3	36
61	M29	X	-3	66
62	M29	X	-3	93
63	M33	X	-12	9
64	M33	X	-12	87
65	M66	X	-4	7.5
66	M66	X	-4	7.5
67	M66	X	-2	7.5
68	M66	X	-2	7.5
69	M69	X	-4	7.5
70	M69	X	-4	7.5
71	M62	X	-10	7.5
72	M62	X	-10	7.5
73	M62	X	-10	7.5
74	M65	X	-19	7.5
75	M72	X	-4	7.5
76	M72	X	-2	7.5
77	M75	X	-4	7.5
78	M69	X	-1	7.5
79	M65	X	0	7.5
80	M75	X	-1	7.5

Member Point Loads (BLC 9 : Wind 210 No Ice)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
1	M22	Z	209	9
2	M22	Z	209	87
3	M28	Z	44	9
4	M28	Z	44	36
5	M28	Z	43	66

Member Point Loads (BLC 9 : Wind 210 No ice) (Continued)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
6	M28	Z	43	93
7	M32	Z	209	9
8	M32	Z	209	87
9	M27	Z	106	9
10	M27	Z	106	87
11	M23	Z	23	9
12	M23	Z	23	36
13	M23	Z	22	66
14	M23	Z	22	93
15	M31	Z	106	9
16	M31	Z	106	87
17	M30	Z	87	9
18	M30	Z	87	87
19	M29	Z	20	9
20	M29	Z	20	36
21	M29	Z	18	66
22	M29	Z	18	93
23	M33	Z	87	9
24	M33	Z	87	87
25	M66	Z	13	7.5
26	M66	Z	13	7.5
27	M66	Z	12	7.5
28	M66	Z	12	7.5
29	M69	Z	13	7.5
30	M69	Z	13	7.5
31	M62	Z	28	7.5
32	M62	Z	28	7.5
33	M62	Z	39	7.5
34	M65	Z	56	7.5
35	M72	Z	61	7.5
36	M72	Z	42	7.5
37	M75	Z	62	7.5
38	M69	Z	38	7.5
39	M65	Z	38	7.5
40	M75	Z	36	7.5
41	M22	X	-74	9
42	M22	X	-74	87
43	M28	X	-16	9
44	M28	X	-16	36
45	M28	X	-15	66
46	M28	X	-15	93
47	M32	X	-74	9
48	M32	X	-74	87
49	M27	X	-36	9
50	M27	X	-36	87
51	M23	X	-9	9
52	M23	X	-9	36
53	M23	X	-8	66
54	M23	X	-8	93
55	M31	X	-36	9
56	M31	X	-36	87
57	M30	X	-106	9
58	M30	X	-106	87
59	M29	X	-23	9
60	M29	X	-23	36

Member Point Loads (BLC 9 : Wind 210 No ice) (Continued)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
61	M29	X	-22	66
62	M29	X	-22	93
63	M33	X	-106	9
64	M33	X	-106	87
65	M66	X	-15	7.5
66	M66	X	-15	7.5
67	M66	X	-11	7.5
68	M66	X	-11	7.5
69	M69	X	-15	7.5
70	M69	X	-15	7.5
71	M62	X	-20	7.5
72	M62	X	-20	7.5
73	M62	X	-27	7.5
74	M65	X	-40	7.5
75	M72	X	-19	7.5
76	M72	X	-16	7.5
77	M75	X	-19	7.5
78	M69	X	-22	7.5
79	M65	X	-22	7.5
80	M75	X	-21	7.5

Member Point Loads (BLC 10 : Wind 240 No ice)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
1	M22	Z	133	9
2	M22	Z	133	87
3	M28	Z	28	9
4	M28	Z	28	36
5	M28	Z	27	66
6	M28	Z	27	93
7	M32	Z	133	9
8	M32	Z	133	87
9	M27	Z	25	9
10	M27	Z	25	87
11	M23	Z	6	9
12	M23	Z	6	36
13	M23	Z	5	66
14	M23	Z	5	93
15	M31	Z	25	9
16	M31	Z	25	87
17	M30	Z	44	9
18	M30	Z	44	87
19	M29	Z	10	9
20	M29	Z	10	36
21	M29	Z	9	66
22	M29	Z	9	93
23	M33	Z	44	9
24	M33	Z	44	87
25	M66	Z	6	7.5
26	M66	Z	6	7.5
27	M66	Z	6	7.5
28	M66	Z	6	7.5
29	M69	Z	6	7.5
30	M69	Z	6	7.5
31	M62	Z	22	7.5
32	M62	Z	22	7.5

Member Point Loads (BLC 10 : Wind 240 No ice) (Continued)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
33	M62	Z	29	7.5
34	M65	Z	43	7.5
35	M72	Z	37	7.5
36	M72	Z	26	7.5
37	M75	Z	38	7.5
38	M69	Z	22	7.5
39	M65	Z	22	7.5
40	M75	Z	21	7.5
41	M22	X	-106	9
42	M22	X	-106	87
43	M28	X	-23	9
44	M28	X	-23	36
45	M28	X	-22	66
46	M28	X	-22	93
47	M32	X	-106	9
48	M32	X	-106	87
49	M27	X	-125	9
50	M27	X	-125	87
51	M23	X	-27	9
52	M23	X	-27	36
53	M23	X	-26	66
54	M23	X	-26	93
55	M31	X	-125	9
56	M31	X	-125	87
57	M30	X	-195	9
58	M30	X	-195	87
59	M29	X	-41	9
60	M29	X	-41	36
61	M29	X	-40	66
62	M29	X	-40	93
63	M33	X	-195	9
64	M33	X	-195	87
65	M66	X	-28	7.5
66	M66	X	-28	7.5
67	M66	X	-20	7.5
68	M66	X	-20	7.5
69	M69	X	-28	7.5
70	M69	X	-28	7.5
71	M62	X	-25	7.5
72	M62	X	-25	7.5
73	M62	X	-36	7.5
74	M65	X	-50	7.5
75	M72	X	-29	7.5
76	M72	X	-25	7.5
77	M75	X	-30	7.5
78	M69	X	-38	7.5
79	M65	X	-38	7.5
80	M75	X	-36	7.5

Member Point Loads (BLC 11 : Wind 270 No ice)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
1	M22	Z	22	9
2	M22	Z	22	87
3	M28	Z	5	9
4	M28	Z	5	36

Member Point Loads (BLC 11 : Wind 270 No Ice) (Continued)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
5	M28	Z	5	66
6	M28	Z	5	93
7	M32	Z	22	9
8	M32	Z	22	87
9	M27	Z	63	9
10	M27	Z	63	87
11	M23	Z	13	9
12	M23	Z	13	36
13	M23	Z	13	66
14	M23	Z	13	93
15	M31	Z	63	9
16	M31	Z	63	87
17	M30	Z	12	9
18	M30	Z	12	87
19	M29	Z	3	9
20	M29	Z	3	36
21	M29	Z	3	66
22	M29	Z	3	93
23	M33	Z	12	9
24	M33	Z	12	87
25	M66	Z	4	7.5
26	M66	Z	4	7.5
27	M66	Z	2	7.5
28	M66	Z	2	7.5
29	M69	Z	4	7.5
30	M69	Z	4	7.5
31	M62	Z	10	7.5
32	M62	Z	10	7.5
33	M62	Z	10	7.5
34	M65	Z	19	7.5
35	M72	Z	4	7.5
36	M72	Z	2	7.5
37	M75	Z	4	7.5
38	M69	Z	1	7.5
39	M65	Z	1	7.5
40	M75	Z	1	7.5
41	M22	X	-109	9
42	M22	X	-109	87
43	M28	X	-24	9
44	M28	X	-24	36
45	M28	X	-22	66
46	M28	X	-22	93
47	M32	X	-109	9
48	M32	X	-109	87
49	M27	X	-180	9
50	M27	X	-180	87
51	M23	X	-39	9
52	M23	X	-39	36
53	M23	X	-37	66
54	M23	X	-37	93
55	M31	X	-180	9
56	M31	X	-180	87
57	M30	X	-231	9
58	M30	X	-231	87
59	M29	X	-49	9

Member Point Loads (BLC 11 : Wind 270 No Ice) (Continued)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
60	M29	X	-49	36
61	M29	X	-47	66
62	M29	X	-47	93
63	M33	X	-231	9
64	M33	X	-231	87
65	M66	X	-34	7.5
66	M66	X	-34	7.5
67	M66	X	-24	7.5
68	M66	X	-24	7.5
69	M69	X	-34	7.5
70	M69	X	-34	7.5
71	M62	X	-24	7.5
72	M62	X	-24	7.5
73	M62	X	-36	7.5
74	M65	X	-47	7.5
75	M72	X	-32	7.5
76	M72	X	-28	7.5
77	M75	X	-32	7.5
78	M69	X	-44	7.5
79	M65	X	-44	7.5
80	M75	X	-41	7.5

Member Point Loads (BLC 12 : Wind 300 No Ice)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
1	M22	Z	-96	9
2	M22	Z	-96	87
3	M28	Z	-21	9
4	M28	Z	-21	36
5	M28	Z	-20	66
6	M28	Z	-20	93
7	M32	Z	-96	9
8	M32	Z	-96	87
9	M27	Z	-133	9
10	M27	Z	-133	87
11	M23	Z	-28	9
12	M23	Z	-28	36
13	M23	Z	-27	66
14	M23	Z	-27	93
15	M31	Z	-133	9
16	M31	Z	-133	87
17	M30	Z	-63	9
18	M30	Z	-63	87
19	M29	Z	-14	9
20	M29	Z	-14	36
21	M29	Z	-13	66
22	M29	Z	-13	93
23	M33	Z	-63	9
24	M33	Z	-63	87
25	M66	Z	-11	7.5
26	M66	Z	-11	7.5
27	M66	Z	-9	7.5
28	M66	Z	-9	7.5
29	M69	Z	-11	7.5
30	M69	Z	-11	7.5
31	M62	Z	-6	7.5



Member Point Loads (BLC 12 : Wind 300 No Ice) (Continued)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
32	M62	Z	-6	7.5
33	M62	Z	-11	7.5
34	M65	Z	-11	7.5
35	M72	Z	-32	7.5
36	M72	Z	-23	7.5
37	M75	Z	-32	7.5
38	M69	Z	-22	7.5
39	M65	Z	-22	7.5
40	M75	Z	-21	7.5
41	M22	X	-84	9
42	M22	X	-84	87
43	M28	X	-19	9
44	M28	X	-19	36
45	M28	X	-17	66
46	M28	X	-17	93
47	M32	X	-84	9
48	M32	X	-84	87
49	M27	X	-187	9
50	M27	X	-187	87
51	M23	X	-40	9
52	M23	X	-40	36
53	M23	X	-38	66
54	M23	X	-38	93
55	M31	X	-187	9
56	M31	X	-187	87
57	M30	X	-206	9
58	M30	X	-206	87
59	M29	X	-43	9
60	M29	X	-43	36
61	M29	X	-42	66
62	M29	X	-42	93
63	M33	X	-206	9
64	M33	X	-206	87
65	M66	X	-31	7.5
66	M66	X	-31	7.5
67	M66	X	-22	7.5
68	M66	X	-22	7.5
69	M69	X	-32	7.5
70	M69	X	-32	7.5
71	M62	X	-16	7.5
72	M62	X	-16	7.5
73	M62	X	-26	7.5
74	M65	X	-32	7.5
75	M72	X	-26	7.5
76	M72	X	-23	7.5
77	M75	X	-26	7.5
78	M69	X	-38	7.5
79	M65	X	-38	7.5
80	M75	X	-36	7.5

Member Point Loads (BLC 13 : Wind 330 No Ice)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
1	M22	Z	-187	9
2	M22	Z	-187	87
3	M28	Z	-40	9

Member Point Loads (BLC 13 : Wind 330 No Ice) (Continued)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
4	M28	Z	-40	36
5	M28	Z	-38	66
6	M28	Z	-38	93
7	M32	Z	-187	9
8	M32	Z	-187	87
9	M27	Z	-168	9
10	M27	Z	-168	87
11	M23	Z	-36	9
12	M23	Z	-36	36
13	M23	Z	-34	66
14	M23	Z	-34	93
15	M31	Z	-168	9
16	M31	Z	-168	87
17	M30	Z	-98	9
18	M30	Z	-98	87
19	M29	Z	-22	9
20	M29	Z	-22	36
21	M29	Z	-20	66
22	M29	Z	-20	93
23	M33	Z	-98	9
24	M33	Z	-98	87
25	M66	Z	-16	7.5
26	M66	Z	-16	7.5
27	M66	Z	-13	7.5
28	M66	Z	-13	7.5
29	M69	Z	-16	7.5
30	M69	Z	-16	7.5
31	M62	Z	-19	7.5
32	M62	Z	-19	7.5
33	M62	Z	-29	7.5
34	M65	Z	-38	7.5
35	M72	Z	-58	7.5
36	M72	Z	-40	7.5
37	M75	Z	-58	7.5
38	M69	Z	-38	7.5
39	M65	Z	-38	7.5
40	M75	Z	-36	7.5
41	M22	X	-36	9
42	M22	X	-36	87
43	M28	X	-9	9
44	M28	X	-9	36
45	M28	X	-8	66
46	M28	X	-8	93
47	M32	X	-36	9
48	M32	X	-36	87
49	M27	X	-144	9
50	M27	X	-144	87
51	M23	X	-30	9
52	M23	X	-30	36
53	M23	X	-30	66
54	M23	X	-30	93
55	M31	X	-144	9
56	M31	X	-144	87
57	M30	X	-125	9
58	M30	X	-125	87

Member Point Loads (BLC 13 : Wind 330 No Ice) (Continued)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
59	M29	X	-27	9
60	M29	X	-27	36
61	M29	X	-26	66
62	M29	X	-26	93
63	M33	X	-125	9
64	M33	X	-125	87
65	M66	X	-20	7.5
66	M66	X	-20	7.5
67	M66	X	-14	7.5
68	M66	X	-14	7.5
69	M69	X	-20	7.5
70	M69	X	-20	7.5
71	M62	X	-4	7.5
72	M62	X	-4	7.5
73	M62	X	-10	7.5
74	M65	X	-8	7.5
75	M72	X	-13	7.5
76	M72	X	-13	7.5
77	M75	X	-13	7.5
78	M69	X	-22	7.5
79	M65	X	-22	7.5
80	M75	X	-21	7.5

Member Point Loads (BLC 27 : LLM1)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
1	M1	Y	-500	138

Member Point Loads (BLC 28 : LLM2)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
1	M41	Y	-500	138

Member Point Loads (BLC 29 : LLM3)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
1	M3	Y	-500	138

Member Point Loads (BLC 30 : LLM4)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
1	M43	Y	-500	138

Member Point Loads (BLC 31 : LLM5)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
1	M2	Y	-500	138

Member Point Loads (BLC 32 : LLM6)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
1	M42	Y	-500	138



Company : Morrison Hershfield
 Designer : VG
 Job Number : SML-073R2 / 2401983
 Model Name : Site#: 50699-A / HIGHWAY 50 & ...

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 Checked By : GLC

Member Point Loads (BLC 33 : LL1)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
1	M1	Y	-250	%100

Member Point Loads (BLC 34 : LL2)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
1	M1	Y	-250	0

Member Point Loads (BLC 35 : LL3)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
1	M3	Y	-250	%100

Member Point Loads (BLC 36 : LL4)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
1	M3	Y	-250	0

Member Point Loads (BLC 37 : LL5)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
1	M2	Y	-250	%100

Member Point Loads (BLC 38 : LL6)

	Member Label	Direction	Magnitude [lb, kip-in]	Location [(in, %)]
1	M2	Y	-250	0

Member Distributed Loads (BLC 2 : Wind 0 No Ice)

	Member Label	Direction	Start Magnitude [lb/ft, F, psf, kip-in/in]	End Magnitude [lb/ft, F, psf, kip-in/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M1	PZ	-9	-9	0	%100
2	M2	PZ	-9	-9	0	%100
3	M3	PZ	-9	-9	0	%100
4	M4	PZ	-12	-12	0	%100
5	M5	PZ	-12	-12	0	%100
6	M6	PZ	-12	-12	0	%100
7	M7	PZ	-12	-12	0	%100
8	M8	PZ	-12	-12	0	%100
9	M9	PZ	-12	-12	0	%100
10	M10	PZ	-14	-14	0	%100
11	M11	PZ	-14	-14	0	%100
12	M12	PZ	-14	-14	0	%100
13	M13	PZ	-16	-16	0	%100
14	M14	PZ	-16	-16	0	%100
15	M15	PZ	-16	-16	0	%100
16	M16	PZ	-9	-9	0	%100
17	M17	PZ	-9	-9	0	%100
18	M18	PZ	-9	-9	0	%100
19	M19	PZ	-9	-9	0	%100
20	M20	PZ	-9	-9	0	%100
21	M21	PZ	-9	-9	0	%100
22	M22	PZ	-6	-6	0	%100



Company : Morrison Hershfield
 Designer : VG
 Job Number : SML-073R2 / 2401983
 Model Name : Site#: 50699-A / HIGHWAY 50 & ...

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Member Distributed Loads (BLC 2 : Wind 0 No Ice) (Continued)

Member	Label	Direction	Start Magnitude [lb/ft, F, psf, kip-in/in]	End Magnitude [lb/ft, F, psf, kip-in/in]	Start Location [(in, %)]	End Location [(in, %)]
23	M23	PZ	-6	-6	0	%100
24	M24	PZ	-6	-6	0	%100
25	M25	PZ	-6	-6	0	%100
26	M26	PZ	-6	-6	0	%100
27	M27	PZ	-6	-6	0	%100
28	M28	PZ	-6	-6	0	%100
29	M29	PZ	-7	-7	0	%100
30	M30	PZ	-7	-7	0	%100
31	M31	PZ	-7	-7	0	%100
32	M32	PZ	-7	-7	0	%100
33	M33	PZ	-7	-7	0	%100
34	M34	PZ	-7	-7	0	%100
35	M35	PZ	-7	-7	0	%100
36	M36	PZ	-7	-7	0	%100
37	M37	PZ	-7	-7	0	%100
38	M38	PZ	-8	-8	0	%100
39	M1	PX	0	0	0	%100
40	M2	PX	0	0	0	%100
41	M3	PX	0	0	0	%100
42	M4	PX	0	0	0	%100
43	M5	PX	0	0	0	%100
44	M6	PX	0	0	0	%100
45	M7	PX	0	0	0	%100
46	M8	PX	0	0	0	%100
47	M9	PX	0	0	0	%100
48	M10	PX	0	0	0	%100
49	M11	PX	0	0	0	%100
50	M12	PX	0	0	0	%100
51	M13	PX	0	0	0	%100
52	M14	PX	0	0	0	%100
53	M15	PX	0	0	0	%100
54	M16	PX	0	0	0	%100
55	M17	PX	0	0	0	%100
56	M18	PX	0	0	0	%100
57	M19	PX	0	0	0	%100
58	M20	PX	0	0	0	%100
59	M21	PX	0	0	0	%100
60	M22	PX	0	0	0	%100
61	M23	PX	0	0	0	%100
62	M24	PX	0	0	0	%100
63	M25	PX	0	0	0	%100
64	M26	PX	0	0	0	%100
65	M27	PX	0	0	0	%100
66	M28	PX	0	0	0	%100
67	M29	PX	0	0	0	%100
68	M30	PX	0	0	0	%100
69	M31	PX	0	0	0	%100
70	M32	PX	0	0	0	%100
71	M33	PX	0	0	0	%100
72	M34	PX	0	0	0	%100
73	M35	PX	0	0	0	%100
74	M36	PX	0	0	0	%100
75	M37	PX	0	0	0	%100
76	M38	PX	0	0	0	%100
77	M41	PX	0	0	0	%100



Member Distributed Loads (BLC 2 : Wind 0 No Ice) (Continued)

Member Label	Direction	Start Magnitude [lb/ft, F, psf, kip-in/in]	End Magnitude [lb/ft, F, psf, kip-in/in]	Start Location [(in, %)]	End Location [(in, %)]
78	M41	PZ	-9	-9	0 %100
79	M42	PZ	-9	-9	0 %100
80	M42	PX	0	0	0 %100
81	M43	PX	0	0	0 %100
82	M43	PZ	-9	-9	0 %100
83	M39	PX	0	0	0 %100
84	M39	PZ	-7	-7	0 %100
85	M40	PX	0	0	0 %100
86	M40	PZ	-8	-8	0 %100

Member Distributed Loads (BLC 3 : Wind 30 No Ice)

Member Label	Direction	Start Magnitude [lb/ft, F, psf, kip-in/in]	End Magnitude [lb/ft, F, psf, kip-in/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M1	PZ	-8	-8	0 %100
2	M2	PZ	-8	-8	0 %100
3	M3	PZ	-8	-8	0 %100
4	M4	PZ	-11	-11	0 %100
5	M5	PZ	-11	-11	0 %100
6	M6	PZ	-11	-11	0 %100
7	M7	PZ	-11	-11	0 %100
8	M8	PZ	-11	-11	0 %100
9	M9	PZ	-11	-11	0 %100
10	M10	PZ	-12	-12	0 %100
11	M11	PZ	-12	-12	0 %100
12	M12	PZ	-12	-12	0 %100
13	M13	PZ	-14	-14	0 %100
14	M14	PZ	-14	-14	0 %100
15	M15	PZ	-14	-14	0 %100
16	M16	PZ	-7	-7	0 %100
17	M17	PZ	-7	-7	0 %100
18	M18	PZ	-7	-7	0 %100
19	M19	PZ	-7	-7	0 %100
20	M20	PZ	-7	-7	0 %100
21	M21	PZ	-7	-7	0 %100
22	M22	PZ	-5	-5	0 %100
23	M23	PZ	-5	-5	0 %100
24	M24	PZ	-5	-5	0 %100
25	M25	PZ	-5	-5	0 %100
26	M26	PZ	-5	-5	0 %100
27	M27	PZ	-5	-5	0 %100
28	M28	PZ	-5	-5	0 %100
29	M29	PZ	-6	-6	0 %100
30	M30	PZ	-6	-6	0 %100
31	M31	PZ	-6	-6	0 %100
32	M32	PZ	-6	-6	0 %100
33	M33	PZ	-6	-6	0 %100
34	M34	PZ	-6	-6	0 %100
35	M35	PZ	-6	-6	0 %100
36	M36	PZ	-6	-6	0 %100
37	M37	PZ	-6	-6	0 %100
38	M38	PZ	-7	-7	0 %100
39	M1	PX	4	4	0 %100
40	M2	PX	4	4	0 %100
41	M3	PX	4	4	0 %100
42	M4	PX	6	6	0 %100
43	M5	PX	6	6	0 %100



Company : Morrison Hershfield
 Designer : VG
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Member Distributed Loads (BLC 3 : Wind 30 No Ice) (Continued)

Member Label	Direction	Start Magnitude [lb/ft, F, psf, kip-in/in]	End Magnitude [lb/ft, F, psf, kip-in/in]	Start Location [(in, %)]	End Location [(in, %)]
44	M6	PX	6	6	0 %100
45	M7	PX	6	6	0 %100
46	M8	PX	6	6	0 %100
47	M9	PX	6	6	0 %100
48	M10	PX	7	7	0 %100
49	M11	PX	7	7	0 %100
50	M12	PX	7	7	0 %100
51	M13	PX	8	8	0 %100
52	M14	PX	8	8	0 %100
53	M15	PX	8	8	0 %100
54	M16	PX	4	4	0 %100
55	M17	PX	4	4	0 %100
56	M18	PX	4	4	0 %100
57	M19	PX	4	4	0 %100
58	M20	PX	4	4	0 %100
59	M21	PX	4	4	0 %100
60	M22	PX	3	3	0 %100
61	M23	PX	3	3	0 %100
62	M24	PX	3	3	0 %100
63	M25	PX	3	3	0 %100
64	M26	PX	3	3	0 %100
65	M27	PX	3	3	0 %100
66	M28	PX	3	3	0 %100
67	M29	PX	4	4	0 %100
68	M30	PX	4	4	0 %100
69	M31	PX	4	4	0 %100
70	M32	PX	4	4	0 %100
71	M33	PX	4	4	0 %100
72	M34	PX	3	3	0 %100
73	M35	PX	3	3	0 %100
74	M36	PX	3	3	0 %100
75	M37	PX	3	3	0 %100
76	M38	PX	4	4	0 %100
77	M41	PX	4	4	0 %100
78	M41	PZ	-8	-8	0 %100
79	M42	PZ	-8	-8	0 %100
80	M42	PX	4	4	0 %100
81	M43	PZ	-8	-8	0 %100
82	M43	PX	4	4	0 %100
83	M39	PZ	-6	-6	0 %100
84	M39	PX	3	3	0 %100
85	M40	PX	4	4	0 %100
86	M40	PZ	-7	-7	0 %100

Member Distributed Loads (BLC 4 : Wind 60 No Ice)

Member Label	Direction	Start Magnitude [lb/ft, F, psf, kip-in/in]	End Magnitude [lb/ft, F, psf, kip-in/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M1	PZ	-4	-4	0 %100
2	M2	PZ	-4	-4	0 %100
3	M3	PZ	-4	-4	0 %100
4	M4	PZ	-6	-6	0 %100
5	M5	PZ	-6	-6	0 %100
6	M6	PZ	-6	-6	0 %100
7	M7	PZ	-6	-6	0 %100
8	M8	PZ	-6	-6	0 %100
9	M9	PZ	-6	-6	0 %100

Member Distributed Loads (BLC 4 : Wind 60 No Ice) (Continued)

Member Label	Direction	Start Magnitude [lb/ft, F, psf, kip-in/in]	End Magnitude [lb/ft, F, psf, kip-in/in]	Start Location [(in, %)]	End Location [(in, %)]
10	M10	PZ	-7	-7	0 %100
11	M11	PZ	-7	-7	0 %100
12	M12	PZ	-7	-7	0 %100
13	M13	PZ	-8	-8	0 %100
14	M14	PZ	-8	-8	0 %100
15	M15	PZ	-8	-8	0 %100
16	M16	PZ	-4	-4	0 %100
17	M17	PZ	-4	-4	0 %100
18	M18	PZ	-4	-4	0 %100
19	M19	PZ	-4	-4	0 %100
20	M20	PZ	-4	-4	0 %100
21	M21	PZ	-4	-4	0 %100
22	M22	PZ	-3	-3	0 %100
23	M23	PZ	-3	-3	0 %100
24	M24	PZ	-3	-3	0 %100
25	M25	PZ	-3	-3	0 %100
26	M26	PZ	-3	-3	0 %100
27	M27	PZ	-3	-3	0 %100
28	M28	PZ	-3	-3	0 %100
29	M29	PZ	-4	-4	0 %100
30	M30	PZ	-4	-4	0 %100
31	M31	PZ	-4	-4	0 %100
32	M32	PZ	-4	-4	0 %100
33	M33	PZ	-4	-4	0 %100
34	M34	PZ	-3	-3	0 %100
35	M35	PZ	-3	-3	0 %100
36	M36	PZ	-3	-3	0 %100
37	M37	PZ	-3	-3	0 %100
38	M38	PZ	-4	-4	0 %100
39	M1	PX	8	8	0 %100
40	M2	PX	8	8	0 %100
41	M3	PX	8	8	0 %100
42	M4	PX	11	11	0 %100
43	M5	PX	11	11	0 %100
44	M6	PX	11	11	0 %100
45	M7	PX	11	11	0 %100
46	M8	PX	11	11	0 %100
47	M9	PX	11	11	0 %100
48	M10	PX	12	12	0 %100
49	M11	PX	12	12	0 %100
50	M12	PX	12	12	0 %100
51	M13	PX	14	14	0 %100
52	M14	PX	14	14	0 %100
53	M15	PX	14	14	0 %100
54	M16	PX	7	7	0 %100
55	M17	PX	7	7	0 %100
56	M18	PX	7	7	0 %100
57	M19	PX	7	7	0 %100
58	M20	PX	7	7	0 %100
59	M21	PX	7	7	0 %100
60	M22	PX	5	5	0 %100
61	M23	PX	5	5	0 %100
62	M24	PX	5	5	0 %100
63	M25	PX	5	5	0 %100
64	M26	PX	5	5	0 %100



Company : Morrison Hershfield
 Designer : VG
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Member Distributed Loads (BLC 4 : Wind 60 No Ice) (Continued)

Member	Label	Direction	Start Magnitude [lb/ft, F, psf, kip-in/in]	End Magnitude [lb/ft, F, psf, kip-in/in]	Start Location [(in, %)]	End Location [(in, %)]
65	M27	PX	5	5	0	%100
66	M28	PX	5	5	0	%100
67	M29	PX	6	6	0	%100
68	M30	PX	6	6	0	%100
69	M31	PX	6	6	0	%100
70	M32	PX	6	6	0	%100
71	M33	PX	6	6	0	%100
72	M34	PX	6	6	0	%100
73	M35	PX	6	6	0	%100
74	M36	PX	6	6	0	%100
75	M37	PX	6	6	0	%100
76	M38	PX	7	7	0	%100
77	M41	PZ	-4	-4	0	%100
78	M41	PX	8	8	0	%100
79	M42	PZ	-4	-4	0	%100
80	M42	PX	8	8	0	%100
81	M43	PZ	-4	-4	0	%100
82	M43	PX	8	8	0	%100
83	M39	PX	6	6	0	%100
84	M39	PZ	-3	-3	0	%100
85	M40	PZ	-4	-4	0	%100
86	M40	PX	7	7	0	%100

Member Distributed Loads (BLC 5 : Wind 90 No Ice)

Member	Label	Direction	Start Magnitude [lb/ft, F, psf, kip-in/in]	End Magnitude [lb/ft, F, psf, kip-in/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M1	PZ	0	0	0	%100
2	M2	PZ	0	0	0	%100
3	M3	PZ	0	0	0	%100
4	M4	PZ	0	0	0	%100
5	M5	PZ	0	0	0	%100
6	M6	PZ	0	0	0	%100
7	M7	PZ	0	0	0	%100
8	M8	PZ	0	0	0	%100
9	M9	PZ	0	0	0	%100
10	M10	PZ	0	0	0	%100
11	M11	PZ	0	0	0	%100
12	M12	PZ	0	0	0	%100
13	M13	PZ	0	0	0	%100
14	M14	PZ	0	0	0	%100
15	M15	PZ	0	0	0	%100
16	M16	PZ	0	0	0	%100
17	M17	PZ	0	0	0	%100
18	M18	PZ	0	0	0	%100
19	M19	PZ	0	0	0	%100
20	M20	PZ	0	0	0	%100
21	M21	PZ	0	0	0	%100
22	M22	PZ	0	0	0	%100
23	M23	PZ	0	0	0	%100
24	M24	PZ	0	0	0	%100
25	M25	PZ	0	0	0	%100
26	M26	PZ	0	0	0	%100
27	M27	PZ	0	0	0	%100
28	M28	PZ	0	0	0	%100
29	M29	PZ	0	0	0	%100
30	M30	PZ	0	0	0	%100



Company : Morrison Hershfield
 Designer : VG
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Member Distributed Loads (BLC 5 : Wind 90 No Ice) (Continued)

Member	Label	Direction	Start Magnitude [lb/ft, F, psf, kip-in/in]	End Magnitude [lb/ft, F, psf, kip-in/in]	Start Location [(in, %)]	End Location [(in, %)]
31	M31	PZ	0	0	0	%100
32	M32	PZ	0	0	0	%100
33	M33	PZ	0	0	0	%100
34	M34	PZ	0	0	0	%100
35	M35	PZ	0	0	0	%100
36	M36	PZ	0	0	0	%100
37	M37	PZ	0	0	0	%100
38	M38	PZ	0	0	0	%100
39	M1	PX	9	9	0	%100
40	M2	PX	9	9	0	%100
41	M3	PX	9	9	0	%100
42	M4	PX	12	12	0	%100
43	M5	PX	12	12	0	%100
44	M6	PX	12	12	0	%100
45	M7	PX	12	12	0	%100
46	M8	PX	12	12	0	%100
47	M9	PX	12	12	0	%100
48	M10	PX	14	14	0	%100
49	M11	PX	14	14	0	%100
50	M12	PX	14	14	0	%100
51	M13	PX	16	16	0	%100
52	M14	PX	16	16	0	%100
53	M15	PX	16	16	0	%100
54	M16	PX	9	9	0	%100
55	M17	PX	9	9	0	%100
56	M18	PX	9	9	0	%100
57	M19	PX	9	9	0	%100
58	M20	PX	9	9	0	%100
59	M21	PX	9	9	0	%100
60	M22	PX	6	6	0	%100
61	M23	PX	6	6	0	%100
62	M24	PX	6	6	0	%100
63	M25	PX	6	6	0	%100
64	M26	PX	6	6	0	%100
65	M27	PX	6	6	0	%100
66	M28	PX	6	6	0	%100
67	M29	PX	7	7	0	%100
68	M30	PX	7	7	0	%100
69	M31	PX	7	7	0	%100
70	M32	PX	7	7	0	%100
71	M33	PX	7	7	0	%100
72	M34	PX	7	7	0	%100
73	M35	PX	7	7	0	%100
74	M36	PX	7	7	0	%100
75	M37	PX	7	7	0	%100
76	M38	PX	8	8	0	%100
77	M41	PX	9	9	0	%100
78	M41	PZ	0	0	0	%100
79	M42	PX	9	9	0	%100
80	M42	PZ	0	0	0	%100
81	M43	PX	9	9	0	%100
82	M43	PZ	0	0	0	%100
83	M39	PZ	0	0	0	%100
84	M39	PX	7	7	0	%100
85	M40	PX	8	8	0	%100



Company : Morrison Hershfield
 Designer : VG
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Member Distributed Loads (BLC 5 : Wind 90 No Ice) (Continued)

Member Label	Direction	Start Magnitude [lb/ft, F, psf, kip-in/in]	End Magnitude [lb/ft, F, psf, kip-in/in]	Start Location [(in, %)]	End Location [(in, %)]
86	M40	PZ	0	0	%100

Member Distributed Loads (BLC 6 : Wind 120 No Ice)

Member Label	Direction	Start Magnitude [lb/ft, F, psf, kip-in/in]	End Magnitude [lb/ft, F, psf, kip-in/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M1	PZ	4	0	%100
2	M2	PZ	4	0	%100
3	M3	PZ	4	0	%100
4	M4	PZ	6	0	%100
5	M5	PZ	6	0	%100
6	M6	PZ	6	0	%100
7	M7	PZ	6	0	%100
8	M8	PZ	6	0	%100
9	M9	PZ	6	0	%100
10	M10	PZ	7	0	%100
11	M11	PZ	7	0	%100
12	M12	PZ	7	0	%100
13	M13	PZ	8	0	%100
14	M14	PZ	8	0	%100
15	M15	PZ	8	0	%100
16	M16	PZ	4	0	%100
17	M17	PZ	4	0	%100
18	M18	PZ	4	0	%100
19	M19	PZ	4	0	%100
20	M20	PZ	4	0	%100
21	M21	PZ	4	0	%100
22	M22	PZ	3	0	%100
23	M23	PZ	3	0	%100
24	M24	PZ	3	0	%100
25	M25	PZ	3	0	%100
26	M26	PZ	3	0	%100
27	M27	PZ	3	0	%100
28	M28	PZ	3	0	%100
29	M29	PZ	4	0	%100
30	M30	PZ	4	0	%100
31	M31	PZ	4	0	%100
32	M32	PZ	4	0	%100
33	M33	PZ	4	0	%100
34	M34	PZ	3	0	%100
35	M35	PZ	3	0	%100
36	M36	PZ	3	0	%100
37	M37	PZ	3	0	%100
38	M38	PZ	4	0	%100
39	M1	PX	8	0	%100
40	M2	PX	8	0	%100
41	M3	PX	8	0	%100
42	M4	PX	11	0	%100
43	M5	PX	11	0	%100
44	M6	PX	11	0	%100
45	M7	PX	11	0	%100
46	M8	PX	11	0	%100
47	M9	PX	11	0	%100
48	M10	PX	12	0	%100
49	M11	PX	12	0	%100
50	M12	PX	12	0	%100
51	M13	PX	14	0	%100

Member Distributed Loads (BLC 6 : Wind 120 No Ice) (Continued)

Member	Label	Direction	Start Magnitude [lb/ft, F, psf, kip-in/in]	End Magnitude [lb/ft, F, psf, kip-in/in]	Start Location [(in, %)]	End Location [(in, %)]
52	M14	PX	14	14	0	%100
53	M15	PX	14	14	0	%100
54	M16	PX	7	7	0	%100
55	M17	PX	7	7	0	%100
56	M18	PX	7	7	0	%100
57	M19	PX	7	7	0	%100
58	M20	PX	7	7	0	%100
59	M21	PX	7	7	0	%100
60	M22	PX	5	5	0	%100
61	M23	PX	5	5	0	%100
62	M24	PX	5	5	0	%100
63	M25	PX	5	5	0	%100
64	M26	PX	5	5	0	%100
65	M27	PX	5	5	0	%100
66	M28	PX	5	5	0	%100
67	M29	PX	6	6	0	%100
68	M30	PX	6	6	0	%100
69	M31	PX	6	6	0	%100
70	M32	PX	6	6	0	%100
71	M33	PX	6	6	0	%100
72	M34	PX	6	6	0	%100
73	M35	PX	6	6	0	%100
74	M36	PX	6	6	0	%100
75	M37	PX	6	6	0	%100
76	M38	PX	7	7	0	%100
77	M41	PX	8	8	0	%100
78	M41	PZ	4	4	0	%100
79	M42	PZ	4	4	0	%100
80	M42	PX	8	8	0	%100
81	M43	PZ	4	4	0	%100
82	M43	PX	8	8	0	%100
83	M39	PZ	3	3	0	%100
84	M39	PX	6	6	0	%100
85	M40	PX	7	7	0	%100
86	M40	PZ	4	4	0	%100

Member Distributed Loads (BLC 7 : Wind 150 No Ice)

Member	Label	Direction	Start Magnitude [lb/ft, F, psf, kip-in/in]	End Magnitude [lb/ft, F, psf, kip-in/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M1	PZ	8	8	0	%100
2	M2	PZ	8	8	0	%100
3	M3	PZ	8	8	0	%100
4	M4	PZ	11	11	0	%100
5	M5	PZ	11	11	0	%100
6	M6	PZ	11	11	0	%100
7	M7	PZ	11	11	0	%100
8	M8	PZ	11	11	0	%100
9	M9	PZ	11	11	0	%100
10	M10	PZ	12	12	0	%100
11	M11	PZ	12	12	0	%100
12	M12	PZ	12	12	0	%100
13	M13	PZ	14	14	0	%100
14	M14	PZ	14	14	0	%100
15	M15	PZ	14	14	0	%100
16	M16	PZ	7	7	0	%100
17	M17	PZ	7	7	0	%100

Member Distributed Loads (BLC 7 : Wind 150 No Ice) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, psf, kip-in/in]	End Magnitude [lb/ft, F, psf, kip-in/in]	Start Location [(in, %)]	End Location [(in, %)]
18	M18	PZ	7	7	0	%100
19	M19	PZ	7	7	0	%100
20	M20	PZ	7	7	0	%100
21	M21	PZ	7	7	0	%100
22	M22	PZ	5	5	0	%100
23	M23	PZ	5	5	0	%100
24	M24	PZ	5	5	0	%100
25	M25	PZ	5	5	0	%100
26	M26	PZ	5	5	0	%100
27	M27	PZ	5	5	0	%100
28	M28	PZ	5	5	0	%100
29	M29	PZ	6	6	0	%100
30	M30	PZ	6	6	0	%100
31	M31	PZ	6	6	0	%100
32	M32	PZ	6	6	0	%100
33	M33	PZ	6	6	0	%100
34	M34	PZ	6	6	0	%100
35	M35	PZ	6	6	0	%100
36	M36	PZ	6	6	0	%100
37	M37	PZ	6	6	0	%100
38	M38	PZ	7	7	0	%100
39	M1	PX	4	4	0	%100
40	M2	PX	4	4	0	%100
41	M3	PX	4	4	0	%100
42	M4	PX	6	6	0	%100
43	M5	PX	6	6	0	%100
44	M6	PX	6	6	0	%100
45	M7	PX	6	6	0	%100
46	M8	PX	6	6	0	%100
47	M9	PX	6	6	0	%100
48	M10	PX	7	7	0	%100
49	M11	PX	7	7	0	%100
50	M12	PX	7	7	0	%100
51	M13	PX	8	8	0	%100
52	M14	PX	8	8	0	%100
53	M15	PX	8	8	0	%100
54	M16	PX	4	4	0	%100
55	M17	PX	4	4	0	%100
56	M18	PX	4	4	0	%100
57	M19	PX	4	4	0	%100
58	M20	PX	4	4	0	%100
59	M21	PX	4	4	0	%100
60	M22	PX	3	3	0	%100
61	M23	PX	3	3	0	%100
62	M24	PX	3	3	0	%100
63	M25	PX	3	3	0	%100
64	M26	PX	3	3	0	%100
65	M27	PX	3	3	0	%100
66	M28	PX	3	3	0	%100
67	M29	PX	4	4	0	%100
68	M30	PX	4	4	0	%100
69	M31	PX	4	4	0	%100
70	M32	PX	4	4	0	%100
71	M33	PX	4	4	0	%100
72	M34	PX	3	3	0	%100

Member Distributed Loads (BLC 7 : Wind 150 No Ice) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, psf, kip-in/in]	End Magnitude [lb/ft, F, psf, kip-in/in]	Start Location [(in, %)]	End Location [(in, %)]
73	M35	PX	3	3	0	%100
74	M36	PX	3	3	0	%100
75	M37	PX	3	3	0	%100
76	M38	PX	4	4	0	%100
77	M41	PZ	8	8	0	%100
78	M41	PX	4	4	0	%100
79	M42	PZ	8	8	0	%100
80	M42	PX	4	4	0	%100
81	M43	PX	4	4	0	%100
82	M43	PZ	8	8	0	%100
83	M39	PZ	6	6	0	%100
84	M39	PX	3	3	0	%100
85	M40	PX	4	4	0	%100
86	M40	PZ	7	7	0	%100

Member Distributed Loads (BLC 8 : Wind 180 No Ice)

	Member Label	Direction	Start Magnitude [lb/ft, F, psf, kip-in/in]	End Magnitude [lb/ft, F, psf, kip-in/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M1	PZ	9	9	0	%100
2	M2	PZ	9	9	0	%100
3	M3	PZ	9	9	0	%100
4	M4	PZ	12	12	0	%100
5	M5	PZ	12	12	0	%100
6	M6	PZ	12	12	0	%100
7	M7	PZ	12	12	0	%100
8	M8	PZ	12	12	0	%100
9	M9	PZ	12	12	0	%100
10	M10	PZ	14	14	0	%100
11	M11	PZ	14	14	0	%100
12	M12	PZ	14	14	0	%100
13	M13	PZ	16	16	0	%100
14	M14	PZ	16	16	0	%100
15	M15	PZ	16	16	0	%100
16	M16	PZ	9	9	0	%100
17	M17	PZ	9	9	0	%100
18	M18	PZ	9	9	0	%100
19	M19	PZ	9	9	0	%100
20	M20	PZ	9	9	0	%100
21	M21	PZ	9	9	0	%100
22	M22	PZ	6	6	0	%100
23	M23	PZ	6	6	0	%100
24	M24	PZ	6	6	0	%100
25	M25	PZ	6	6	0	%100
26	M26	PZ	6	6	0	%100
27	M27	PZ	6	6	0	%100
28	M28	PZ	6	6	0	%100
29	M29	PZ	7	7	0	%100
30	M30	PZ	7	7	0	%100
31	M31	PZ	7	7	0	%100
32	M32	PZ	7	7	0	%100
33	M33	PZ	7	7	0	%100
34	M34	PZ	7	7	0	%100
35	M35	PZ	7	7	0	%100
36	M36	PZ	7	7	0	%100
37	M37	PZ	7	7	0	%100
38	M38	PZ	8	8	0	%100

Member Distributed Loads (BLC 8 : Wind 180 No Ice) (Continued)

Member Label	Direction	Start Magnitude [lb/ft, F, psf, kip-in/in]	End Magnitude [lb/ft, F, psf, kip-in/in]	Start Location [(in, %)]	End Location [(in, %)]
39	M1	PX	0	0	%100
40	M2	PX	0	0	%100
41	M3	PX	0	0	%100
42	M4	PX	0	0	%100
43	M5	PX	0	0	%100
44	M6	PX	0	0	%100
45	M7	PX	0	0	%100
46	M8	PX	0	0	%100
47	M9	PX	0	0	%100
48	M10	PX	0	0	%100
49	M11	PX	0	0	%100
50	M12	PX	0	0	%100
51	M13	PX	0	0	%100
52	M14	PX	0	0	%100
53	M15	PX	0	0	%100
54	M16	PX	0	0	%100
55	M17	PX	0	0	%100
56	M18	PX	0	0	%100
57	M19	PX	0	0	%100
58	M20	PX	0	0	%100
59	M21	PX	0	0	%100
60	M22	PX	0	0	%100
61	M23	PX	0	0	%100
62	M24	PX	0	0	%100
63	M25	PX	0	0	%100
64	M26	PX	0	0	%100
65	M27	PX	0	0	%100
66	M28	PX	0	0	%100
67	M29	PX	0	0	%100
68	M30	PX	0	0	%100
69	M31	PX	0	0	%100
70	M32	PX	0	0	%100
71	M33	PX	0	0	%100
72	M34	PX	0	0	%100
73	M35	PX	0	0	%100
74	M36	PX	0	0	%100
75	M37	PX	0	0	%100
76	M38	PX	0	0	%100
77	M41	PZ	9	0	%100
78	M41	PX	0	0	%100
79	M42	PZ	9	0	%100
80	M42	PX	0	0	%100
81	M43	PX	0	0	%100
82	M43	PZ	9	0	%100
83	M39	PX	0	0	%100
84	M39	PZ	7	0	%100
85	M40	PX	0	0	%100
86	M40	PZ	8	0	%100

Member Distributed Loads (BLC 9 : Wind 210 No ice)

Member Label	Direction	Start Magnitude [lb/ft, F, psf, kip-in/in]	End Magnitude [lb/ft, F, psf, kip-in/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M1	PZ	8	0	%100
2	M2	PZ	8	0	%100
3	M3	PZ	8	0	%100
4	M4	PZ	11	0	%100



Company : Morrison Hershfield
 Designer : VG
 Job Number : SML-073R2 / 2401983
 Model Name : Site#: 50699-A / HIGHWAY 50 & ...

05/07/2024
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Member Distributed Loads (BLC 9 : Wind 210 No ice) (Continued)

Member Label	Direction	Start Magnitude [lb/ft, F, psf, kip-in/in]	End Magnitude [lb/ft, F, psf, kip-in/in]	Start Location [(in, %)]	End Location [(in, %)]
5	M5	PZ	11	11	0 %100
6	M6	PZ	11	11	0 %100
7	M7	PZ	11	11	0 %100
8	M8	PZ	11	11	0 %100
9	M9	PZ	11	11	0 %100
10	M10	PZ	12	12	0 %100
11	M11	PZ	12	12	0 %100
12	M12	PZ	12	12	0 %100
13	M13	PZ	14	14	0 %100
14	M14	PZ	14	14	0 %100
15	M15	PZ	14	14	0 %100
16	M16	PZ	7	7	0 %100
17	M17	PZ	7	7	0 %100
18	M18	PZ	7	7	0 %100
19	M19	PZ	7	7	0 %100
20	M20	PZ	7	7	0 %100
21	M21	PZ	7	7	0 %100
22	M22	PZ	5	5	0 %100
23	M23	PZ	5	5	0 %100
24	M24	PZ	5	5	0 %100
25	M25	PZ	5	5	0 %100
26	M26	PZ	5	5	0 %100
27	M27	PZ	5	5	0 %100
28	M28	PZ	5	5	0 %100
29	M29	PZ	6	6	0 %100
30	M30	PZ	6	6	0 %100
31	M31	PZ	6	6	0 %100
32	M32	PZ	6	6	0 %100
33	M33	PZ	6	6	0 %100
34	M34	PZ	6	6	0 %100
35	M35	PZ	6	6	0 %100
36	M36	PZ	6	6	0 %100
37	M37	PZ	6	6	0 %100
38	M38	PZ	7	7	0 %100
39	M1	PX	-4	-4	0 %100
40	M2	PX	-4	-4	0 %100
41	M3	PX	-4	-4	0 %100
42	M4	PX	-6	-6	0 %100
43	M5	PX	-6	-6	0 %100
44	M6	PX	-6	-6	0 %100
45	M7	PX	-6	-6	0 %100
46	M8	PX	-6	-6	0 %100
47	M9	PX	-6	-6	0 %100
48	M10	PX	-7	-7	0 %100
49	M11	PX	-7	-7	0 %100
50	M12	PX	-7	-7	0 %100
51	M13	PX	-8	-8	0 %100
52	M14	PX	-8	-8	0 %100
53	M15	PX	-8	-8	0 %100
54	M16	PX	-4	-4	0 %100
55	M17	PX	-4	-4	0 %100
56	M18	PX	-4	-4	0 %100
57	M19	PX	-4	-4	0 %100
58	M20	PX	-4	-4	0 %100
59	M21	PX	-4	-4	0 %100

Member Distributed Loads (BLC 9 : Wind 210 No ice) (Continued)

Member Label	Direction	Start Magnitude [lb/ft, F, psf, kip-in/in]	End Magnitude [lb/ft, F, psf, kip-in/in]	Start Location [(in, %)]	End Location [(in, %)]
60	M22	PX	-3	-3	0 %100
61	M23	PX	-3	-3	0 %100
62	M24	PX	-3	-3	0 %100
63	M25	PX	-3	-3	0 %100
64	M26	PX	-3	-3	0 %100
65	M27	PX	-3	-3	0 %100
66	M28	PX	-3	-3	0 %100
67	M29	PX	-4	-4	0 %100
68	M30	PX	-4	-4	0 %100
69	M31	PX	-4	-4	0 %100
70	M32	PX	-4	-4	0 %100
71	M33	PX	-4	-4	0 %100
72	M34	PX	-3	-3	0 %100
73	M35	PX	-3	-3	0 %100
74	M36	PX	-3	-3	0 %100
75	M37	PX	-3	-3	0 %100
76	M38	PX	-4	-4	0 %100
77	M41	PZ	8	8	0 %100
78	M41	PX	-4	-4	0 %100
79	M42	PX	-4	-4	0 %100
80	M42	PZ	8	8	0 %100
81	M43	PX	-4	-4	0 %100
82	M43	PZ	8	8	0 %100
83	M39	PZ	6	6	0 %100
84	M39	PX	-3	-3	0 %100
85	M40	PZ	7	7	0 %100
86	M40	PX	-4	-4	0 %100

Member Distributed Loads (BLC 10 : Wind 240 No ice)

Member Label	Direction	Start Magnitude [lb/ft, F, psf, kip-in/in]	End Magnitude [lb/ft, F, psf, kip-in/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M1	PZ	4	4	0 %100
2	M2	PZ	4	4	0 %100
3	M3	PZ	4	4	0 %100
4	M4	PZ	6	6	0 %100
5	M5	PZ	6	6	0 %100
6	M6	PZ	6	6	0 %100
7	M7	PZ	6	6	0 %100
8	M8	PZ	6	6	0 %100
9	M9	PZ	6	6	0 %100
10	M10	PZ	7	7	0 %100
11	M11	PZ	7	7	0 %100
12	M12	PZ	7	7	0 %100
13	M13	PZ	8	8	0 %100
14	M14	PZ	8	8	0 %100
15	M15	PZ	8	8	0 %100
16	M16	PZ	4	4	0 %100
17	M17	PZ	4	4	0 %100
18	M18	PZ	4	4	0 %100
19	M19	PZ	4	4	0 %100
20	M20	PZ	4	4	0 %100
21	M21	PZ	4	4	0 %100
22	M22	PZ	3	3	0 %100
23	M23	PZ	3	3	0 %100
24	M24	PZ	3	3	0 %100
25	M25	PZ	3	3	0 %100



Member Distributed Loads (BLC 10 : Wind 240 No Ice) (Continued)

Member Label	Direction	Start Magnitude [lb/ft, F, psf, kip-in/in]	End Magnitude [lb/ft, F, psf, kip-in/in]	Start Location [(in, %)]	End Location [(in, %)]
26	M26	PZ	3	3	0 %100
27	M27	PZ	3	3	0 %100
28	M28	PZ	3	3	0 %100
29	M29	PZ	4	4	0 %100
30	M30	PZ	4	4	0 %100
31	M31	PZ	4	4	0 %100
32	M32	PZ	4	4	0 %100
33	M33	PZ	4	4	0 %100
34	M34	PZ	3	3	0 %100
35	M35	PZ	3	3	0 %100
36	M36	PZ	3	3	0 %100
37	M37	PZ	3	3	0 %100
38	M38	PZ	4	4	0 %100
39	M1	PX	-8	-8	0 %100
40	M2	PX	-8	-8	0 %100
41	M3	PX	-8	-8	0 %100
42	M4	PX	-11	-11	0 %100
43	M5	PX	-11	-11	0 %100
44	M6	PX	-11	-11	0 %100
45	M7	PX	-11	-11	0 %100
46	M8	PX	-11	-11	0 %100
47	M9	PX	-11	-11	0 %100
48	M10	PX	-12	-12	0 %100
49	M11	PX	-12	-12	0 %100
50	M12	PX	-12	-12	0 %100
51	M13	PX	-14	-14	0 %100
52	M14	PX	-14	-14	0 %100
53	M15	PX	-14	-14	0 %100
54	M16	PX	-7	-7	0 %100
55	M17	PX	-7	-7	0 %100
56	M18	PX	-7	-7	0 %100
57	M19	PX	-7	-7	0 %100
58	M20	PX	-7	-7	0 %100
59	M21	PX	-7	-7	0 %100
60	M22	PX	-5	-5	0 %100
61	M23	PX	-5	-5	0 %100
62	M24	PX	-5	-5	0 %100
63	M25	PX	-5	-5	0 %100
64	M26	PX	-5	-5	0 %100
65	M27	PX	-5	-5	0 %100
66	M28	PX	-5	-5	0 %100
67	M29	PX	-6	-6	0 %100
68	M30	PX	-6	-6	0 %100
69	M31	PX	-6	-6	0 %100
70	M32	PX	-6	-6	0 %100
71	M33	PX	-6	-6	0 %100
72	M34	PX	-6	-6	0 %100
73	M35	PX	-6	-6	0 %100
74	M36	PX	-6	-6	0 %100
75	M37	PX	-6	-6	0 %100
76	M38	PX	-7	-7	0 %100
77	M41	PZ	4	4	0 %100
78	M41	PX	-8	-8	0 %100
79	M42	PZ	4	4	0 %100
80	M42	PX	-8	-8	0 %100



Company : Morrison Hershfield
 Designer : VG
 Job Number : SML-073R2 / 2401983
 Model Name : Site#: 50699-A / HIGHWAY 50 & ...

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 10:00:54 PM
 Checked By : GLC

Member Distributed Loads (BLC 10 : Wind 240 No Ice) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, psf, kip-in/in]	End Magnitude [lb/ft, F, psf, kip-in/in]	Start Location [(in, %)]	End Location [(in, %)]
81	M43	PX	-8	-8	0	%100
82	M43	PZ	4	4	0	%100
83	M39	PX	-6	-6	0	%100
84	M39	PZ	3	3	0	%100
85	M40	PZ	4	4	0	%100
86	M40	PX	-7	-7	0	%100

Member Distributed Loads (BLC 11 : Wind 270 No Ice)

	Member Label	Direction	Start Magnitude [lb/ft, F, psf, kip-in/in]	End Magnitude [lb/ft, F, psf, kip-in/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M1	PZ	0	0	0	%100
2	M2	PZ	0	0	0	%100
3	M3	PZ	0	0	0	%100
4	M4	PZ	0	0	0	%100
5	M5	PZ	0	0	0	%100
6	M6	PZ	0	0	0	%100
7	M7	PZ	0	0	0	%100
8	M8	PZ	0	0	0	%100
9	M9	PZ	0	0	0	%100
10	M10	PZ	0	0	0	%100
11	M11	PZ	0	0	0	%100
12	M12	PZ	0	0	0	%100
13	M13	PZ	0	0	0	%100
14	M14	PZ	0	0	0	%100
15	M15	PZ	0	0	0	%100
16	M16	PZ	0	0	0	%100
17	M17	PZ	0	0	0	%100
18	M18	PZ	0	0	0	%100
19	M19	PZ	0	0	0	%100
20	M20	PZ	0	0	0	%100
21	M21	PZ	0	0	0	%100
22	M22	PZ	0	0	0	%100
23	M23	PZ	0	0	0	%100
24	M24	PZ	0	0	0	%100
25	M25	PZ	0	0	0	%100
26	M26	PZ	0	0	0	%100
27	M27	PZ	0	0	0	%100
28	M28	PZ	0	0	0	%100
29	M29	PZ	0	0	0	%100
30	M30	PZ	0	0	0	%100
31	M31	PZ	0	0	0	%100
32	M32	PZ	0	0	0	%100
33	M33	PZ	0	0	0	%100
34	M34	PZ	0	0	0	%100
35	M35	PZ	0	0	0	%100
36	M36	PZ	0	0	0	%100
37	M37	PZ	0	0	0	%100
38	M38	PZ	0	0	0	%100
39	M1	PX	-9	-9	0	%100
40	M2	PX	-9	-9	0	%100
41	M3	PX	-9	-9	0	%100
42	M4	PX	-12	-12	0	%100
43	M5	PX	-12	-12	0	%100
44	M6	PX	-12	-12	0	%100
45	M7	PX	-12	-12	0	%100
46	M8	PX	-12	-12	0	%100



Company : Morrison Hershfield
 Designer : VG
 Job Number : SML-073R2 / 2401983
 Model Name : Site#: 50699-A / HIGHWAY 50 & ...

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Member Distributed Loads (BLC 11 : Wind 270 No Ice) (Continued)

Member Label	Direction	Start Magnitude [lb/ft, F, psf, kip-in/in]	End Magnitude [lb/ft, F, psf, kip-in/in]	Start Location [(in, %)]	End Location [(in, %)]
47	M9	PX	-12	-12	0 %100
48	M10	PX	-14	-14	0 %100
49	M11	PX	-14	-14	0 %100
50	M12	PX	-14	-14	0 %100
51	M13	PX	-16	-16	0 %100
52	M14	PX	-16	-16	0 %100
53	M15	PX	-16	-16	0 %100
54	M16	PX	-9	-9	0 %100
55	M17	PX	-9	-9	0 %100
56	M18	PX	-9	-9	0 %100
57	M19	PX	-9	-9	0 %100
58	M20	PX	-9	-9	0 %100
59	M21	PX	-9	-9	0 %100
60	M22	PX	-6	-6	0 %100
61	M23	PX	-6	-6	0 %100
62	M24	PX	-6	-6	0 %100
63	M25	PX	-6	-6	0 %100
64	M26	PX	-6	-6	0 %100
65	M27	PX	-6	-6	0 %100
66	M28	PX	-6	-6	0 %100
67	M29	PX	-7	-7	0 %100
68	M30	PX	-7	-7	0 %100
69	M31	PX	-7	-7	0 %100
70	M32	PX	-7	-7	0 %100
71	M33	PX	-7	-7	0 %100
72	M34	PX	-7	-7	0 %100
73	M35	PX	-7	-7	0 %100
74	M36	PX	-7	-7	0 %100
75	M37	PX	-7	-7	0 %100
76	M38	PX	-8	-8	0 %100
77	M41	PX	-9	-9	0 %100
78	M41	PZ	0	0	0 %100
79	M42	PZ	0	0	0 %100
80	M42	PX	-9	-9	0 %100
81	M43	PX	-9	-9	0 %100
82	M43	PZ	0	0	0 %100
83	M39	PZ	0	0	0 %100
84	M39	PX	-7	-7	0 %100
85	M40	PX	-8	-8	0 %100
86	M40	PZ	0	0	0 %100

Member Distributed Loads (BLC 12 : Wind 300 No Ice)

Member Label	Direction	Start Magnitude [lb/ft, F, psf, kip-in/in]	End Magnitude [lb/ft, F, psf, kip-in/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M1	PZ	-4	-4	0 %100
2	M2	PZ	-4	-4	0 %100
3	M3	PZ	-4	-4	0 %100
4	M4	PZ	-6	-6	0 %100
5	M5	PZ	-6	-6	0 %100
6	M6	PZ	-6	-6	0 %100
7	M7	PZ	-6	-6	0 %100
8	M8	PZ	-6	-6	0 %100
9	M9	PZ	-6	-6	0 %100
10	M10	PZ	-7	-7	0 %100
11	M11	PZ	-7	-7	0 %100
12	M12	PZ	-7	-7	0 %100

Member Distributed Loads (BLC 12 : Wind 300 No Ice) (Continued)

Member Label	Direction	Start Magnitude [lb/ft, F, psf, kip-in/in]	End Magnitude [lb/ft, F, psf, kip-in/in]	Start Location [(in, %)]	End Location [(in, %)]
13	M13	PZ	-8	-8	0 %100
14	M14	PZ	-8	-8	0 %100
15	M15	PZ	-8	-8	0 %100
16	M16	PZ	-4	-4	0 %100
17	M17	PZ	-4	-4	0 %100
18	M18	PZ	-4	-4	0 %100
19	M19	PZ	-4	-4	0 %100
20	M20	PZ	-4	-4	0 %100
21	M21	PZ	-4	-4	0 %100
22	M22	PZ	-3	-3	0 %100
23	M23	PZ	-3	-3	0 %100
24	M24	PZ	-3	-3	0 %100
25	M25	PZ	-3	-3	0 %100
26	M26	PZ	-3	-3	0 %100
27	M27	PZ	-3	-3	0 %100
28	M28	PZ	-3	-3	0 %100
29	M29	PZ	-4	-4	0 %100
30	M30	PZ	-4	-4	0 %100
31	M31	PZ	-4	-4	0 %100
32	M32	PZ	-4	-4	0 %100
33	M33	PZ	-4	-4	0 %100
34	M34	PZ	-3	-3	0 %100
35	M35	PZ	-3	-3	0 %100
36	M36	PZ	-3	-3	0 %100
37	M37	PZ	-3	-3	0 %100
38	M38	PZ	-4	-4	0 %100
39	M1	PX	-8	-8	0 %100
40	M2	PX	-8	-8	0 %100
41	M3	PX	-8	-8	0 %100
42	M4	PX	-11	-11	0 %100
43	M5	PX	-11	-11	0 %100
44	M6	PX	-11	-11	0 %100
45	M7	PX	-11	-11	0 %100
46	M8	PX	-11	-11	0 %100
47	M9	PX	-11	-11	0 %100
48	M10	PX	-12	-12	0 %100
49	M11	PX	-12	-12	0 %100
50	M12	PX	-12	-12	0 %100
51	M13	PX	-14	-14	0 %100
52	M14	PX	-14	-14	0 %100
53	M15	PX	-14	-14	0 %100
54	M16	PX	-7	-7	0 %100
55	M17	PX	-7	-7	0 %100
56	M18	PX	-7	-7	0 %100
57	M19	PX	-7	-7	0 %100
58	M20	PX	-7	-7	0 %100
59	M21	PX	-7	-7	0 %100
60	M22	PX	-5	-5	0 %100
61	M23	PX	-5	-5	0 %100
62	M24	PX	-5	-5	0 %100
63	M25	PX	-5	-5	0 %100
64	M26	PX	-5	-5	0 %100
65	M27	PX	-5	-5	0 %100
66	M28	PX	-5	-5	0 %100
67	M29	PX	-6	-6	0 %100



Company : Morrison Hershfield
 Designer : VG
 Job Number : SML-073R2 / 2401983
 Model Name : Site#: 50699-A / HIGHWAY 50 & ...

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Member Distributed Loads (BLC 12 : Wind 300 No Ice) (Continued)

Member Label	Direction	Start Magnitude [lb/ft, F, psf, kip-in/in]	End Magnitude [lb/ft, F, psf, kip-in/in]	Start Location [(in, %)]	End Location [(in, %)]
68	M30	PX	-6	-6	0 %100
69	M31	PX	-6	-6	0 %100
70	M32	PX	-6	-6	0 %100
71	M33	PX	-6	-6	0 %100
72	M34	PX	-6	-6	0 %100
73	M35	PX	-6	-6	0 %100
74	M36	PX	-6	-6	0 %100
75	M37	PX	-6	-6	0 %100
76	M38	PX	-7	-7	0 %100
77	M41	PZ	-4	-4	0 %100
78	M41	PX	-8	-8	0 %100
79	M42	PX	-8	-8	0 %100
80	M42	PZ	-4	-4	0 %100
81	M43	PX	-8	-8	0 %100
82	M43	PZ	-4	-4	0 %100
83	M39	PX	-6	-6	0 %100
84	M39	PZ	-3	-3	0 %100
85	M40	PZ	-4	-4	0 %100
86	M40	PX	-7	-7	0 %100

Member Distributed Loads (BLC 13 : Wind 330 No Ice)

Member Label	Direction	Start Magnitude [lb/ft, F, psf, kip-in/in]	End Magnitude [lb/ft, F, psf, kip-in/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M1	PZ	-8	-8	0 %100
2	M2	PZ	-8	-8	0 %100
3	M3	PZ	-8	-8	0 %100
4	M4	PZ	-11	-11	0 %100
5	M5	PZ	-11	-11	0 %100
6	M6	PZ	-11	-11	0 %100
7	M7	PZ	-11	-11	0 %100
8	M8	PZ	-11	-11	0 %100
9	M9	PZ	-11	-11	0 %100
10	M10	PZ	-12	-12	0 %100
11	M11	PZ	-12	-12	0 %100
12	M12	PZ	-12	-12	0 %100
13	M13	PZ	-14	-14	0 %100
14	M14	PZ	-14	-14	0 %100
15	M15	PZ	-14	-14	0 %100
16	M16	PZ	-7	-7	0 %100
17	M17	PZ	-7	-7	0 %100
18	M18	PZ	-7	-7	0 %100
19	M19	PZ	-7	-7	0 %100
20	M20	PZ	-7	-7	0 %100
21	M21	PZ	-7	-7	0 %100
22	M22	PZ	-5	-5	0 %100
23	M23	PZ	-5	-5	0 %100
24	M24	PZ	-5	-5	0 %100
25	M25	PZ	-5	-5	0 %100
26	M26	PZ	-5	-5	0 %100
27	M27	PZ	-5	-5	0 %100
28	M28	PZ	-5	-5	0 %100
29	M29	PZ	-6	-6	0 %100
30	M30	PZ	-6	-6	0 %100
31	M31	PZ	-6	-6	0 %100
32	M32	PZ	-6	-6	0 %100
33	M33	PZ	-6	-6	0 %100

Member Distributed Loads (BLC 13 : Wind 330 No Ice) (Continued)

Member Label	Direction	Start Magnitude [lb/ft, F, psf, kip-in/in]	End Magnitude [lb/ft, F, psf, kip-in/in]	Start Location [(in, %)]	End Location [(in, %)]
34	M34	PZ	-6	-6	0 %100
35	M35	PZ	-6	-6	0 %100
36	M36	PZ	-6	-6	0 %100
37	M37	PZ	-6	-6	0 %100
38	M38	PZ	-7	-7	0 %100
39	M1	PX	-4	-4	0 %100
40	M2	PX	-4	-4	0 %100
41	M3	PX	-4	-4	0 %100
42	M4	PX	-6	-6	0 %100
43	M5	PX	-6	-6	0 %100
44	M6	PX	-6	-6	0 %100
45	M7	PX	-6	-6	0 %100
46	M8	PX	-6	-6	0 %100
47	M9	PX	-6	-6	0 %100
48	M10	PX	-7	-7	0 %100
49	M11	PX	-7	-7	0 %100
50	M12	PX	-7	-7	0 %100
51	M13	PX	-8	-8	0 %100
52	M14	PX	-8	-8	0 %100
53	M15	PX	-8	-8	0 %100
54	M16	PX	-4	-4	0 %100
55	M17	PX	-4	-4	0 %100
56	M18	PX	-4	-4	0 %100
57	M19	PX	-4	-4	0 %100
58	M20	PX	-4	-4	0 %100
59	M21	PX	-4	-4	0 %100
60	M22	PX	-3	-3	0 %100
61	M23	PX	-3	-3	0 %100
62	M24	PX	-3	-3	0 %100
63	M25	PX	-3	-3	0 %100
64	M26	PX	-3	-3	0 %100
65	M27	PX	-3	-3	0 %100
66	M28	PX	-3	-3	0 %100
67	M29	PX	-4	-4	0 %100
68	M30	PX	-4	-4	0 %100
69	M31	PX	-4	-4	0 %100
70	M32	PX	-4	-4	0 %100
71	M33	PX	-4	-4	0 %100
72	M34	PX	-3	-3	0 %100
73	M35	PX	-3	-3	0 %100
74	M36	PX	-3	-3	0 %100
75	M37	PX	-3	-3	0 %100
76	M38	PX	-4	-4	0 %100
77	M41	PZ	-8	-8	0 %100
78	M41	PX	-4	-4	0 %100
79	M42	PX	-4	-4	0 %100
80	M42	PZ	-8	-8	0 %100
81	M43	PX	-4	-4	0 %100
82	M43	PZ	-8	-8	0 %100
83	M39	PX	-3	-3	0 %100
84	M39	PZ	-6	-6	0 %100
85	M40	PX	-4	-4	0 %100
86	M40	PZ	-7	-7	0 %100



Company : Morrison Hershfield
 Designer : VG
 Job Number : SML-073R2 / 2401983
 Model Name : Site#: 50699-A / HIGHWAY 50 & ...

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Member Distributed Loads (BLC 40 : BLC 39 Transient Area Loads)

Member	Label	Direction	Start Magnitude [lb/ft, F, psf, kip-in/in]	End Magnitude [lb/ft, F, psf, kip-in/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M8	Y	-15.527	-15.527	0	25.171
2	M9	Y	-15.528	-15.528	0	25.171
3	M10	Y	-1.927	-13.518	0	8.68
4	M10	Y	-13.518	-26.198	8.68	17.36
5	M10	Y	-26.198	-45.659	17.36	26.04
6	M10	Y	-45.659	-29.407	26.04	34.72
7	M10	Y	-29.407	-0.58	34.72	43.4
8	M15	Y	-2.076	-2.307	5.734	6.867
9	M15	Y	-2.307	-2.422	6.867	8
10	M15	Y	-2.422	-2.306	8	9.133
11	M15	Y	-2.306	-2.075	9.133	10.266
12	M16	Y	-0.343	-10.564	5.081	14.226
13	M16	Y	-10.564	-16.385	14.226	23.371
14	M16	Y	-16.385	-12.104	23.371	32.516
15	M16	Y	-12.104	-8.795	32.516	41.662
16	M16	Y	-8.795	-1.941	41.662	50.807
17	M21	Y	-1.941	-8.796	0	9.145
18	M21	Y	-8.796	-12.105	9.145	18.29
19	M21	Y	-12.105	-16.386	18.29	27.436
20	M21	Y	-16.386	-10.563	27.436	36.581
21	M21	Y	-10.563	-0.343	36.581	45.726
22	M4	Y	-15.527	-15.527	0	25.172
23	M5	Y	-15.527	-15.527	0	25.171
24	M11	Y	-1.927	-13.519	0	8.68
25	M11	Y	-13.519	-26.202	8.68	17.36
26	M11	Y	-26.202	-45.676	17.36	26.04
27	M11	Y	-45.676	-29.421	26.04	34.72
28	M11	Y	-29.421	-0.58	34.72	43.4
29	M13	Y	-2.075	-2.307	5.734	6.867
30	M13	Y	-2.307	-2.423	6.867	8
31	M13	Y	-2.423	-2.307	8	9.133
32	M13	Y	-2.307	-2.075	9.133	10.266
33	M17	Y	-1.942	-8.796	0	9.145
34	M17	Y	-8.796	-12.1	9.145	18.29
35	M17	Y	-12.1	-16.378	18.29	27.436
36	M17	Y	-16.378	-10.56	27.436	36.581
37	M17	Y	-10.56	-0.343	36.581	45.726
38	M18	Y	-0.343	-10.56	5.081	14.226
39	M18	Y	-10.56	-16.378	14.226	23.371
40	M18	Y	-16.378	-12.101	23.371	32.516
41	M18	Y	-12.101	-8.796	32.516	41.661
42	M18	Y	-8.796	-1.941	41.661	50.807
43	M6	Y	-15.527	-15.527	0	25.171
44	M7	Y	-15.527	-15.527	0	25.171
45	M12	Y	-1.927	-13.519	0	8.68
46	M12	Y	-13.519	-26.199	8.68	17.36
47	M12	Y	-26.199	-45.658	17.36	26.04
48	M12	Y	-45.658	-29.406	26.04	34.72
49	M12	Y	-29.406	-0.58	34.72	43.4
50	M14	Y	-2.075	-2.307	5.734	6.867
51	M14	Y	-2.307	-2.423	6.867	8
52	M14	Y	-2.423	-2.307	8	9.133
53	M14	Y	-2.307	-2.075	9.133	10.266
54	M19	Y	-1.941	-8.796	0	9.145
55	M19	Y	-8.796	-12.106	9.145	18.29



Company : Morrison Hershfield
 Designer : VG
 Job Number : SML-073R2 / 2401983
 Model Name : Site#: 50699-A / HIGHWAY 50 & ...

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Member Distributed Loads (BLC 40 : BLC 39 Transient Area Loads) (Continued)

Member Label	Direction	Start Magnitude [lb/ft, F, psf, kip-in/in]	End Magnitude [lb/ft, F, psf, kip-in/in]	Start Location [(in, %)]	End Location [(in, %)]
56	M19	Y	-12.106	-16.386	18.29 27.436
57	M19	Y	-16.386	-10.563	27.436 36.581
58	M19	Y	-10.563	-0.343	36.581 45.726
59	M20	Y	-0.343	-10.563	5.081 14.226
60	M20	Y	-10.563	-16.386	14.226 23.371
61	M20	Y	-16.386	-12.106	23.371 32.516
62	M20	Y	-12.106	-8.796	32.516 41.661
63	M20	Y	-8.796	-1.941	41.661 50.807

Member Area Loads (BLC 39 : LL Grating)

Node A	Node B	Node C	Node D	Direction	Load Direction	A Magnitude [psf]	B Magnitude [psf]	C Magnitude [psf]	D Magnitude [psf]	Exclude Braces	
1	N16	N24	N28	N29	Y	Two Way	-25	-25	-25	-25	Yes
2	N32	N33	N25	N17	Y	Two Way	-25	-25	-25	-25	Yes
3	N11	N6	N4	N9	Y	Two Way	-25	-25	-25	-25	Yes

Basic Load Cases

	BLC Description	Category	Y Gravity	Point	Distributed	Area(Member)
1	DL	DL	-1	40		
2	Wind 0 No Ice	WL		80	86	
3	Wind 30 No Ice	WL		80	86	
4	Wind 60 No Ice	WL		80	86	
5	Wind 90 No Ice	WL		80	86	
6	Wind 120 No Ice	WL		80	86	
7	Wind 150 No Ice	WL		80	86	
8	Wind 180 No Ice	WL		80	86	
9	Wind 210 No ice	WL		80	86	
10	Wind 240 No ice	WL		80	86	
11	Wind 270 No Ice	WL		80	86	
12	Wind 300 No Ice	WL		80	86	
13	Wind 330 No Ice	WL		80	86	
14	Ice DL	SL	-0.11			
15	Wind 0 With Ice	WL				
16	Wind 30 With Ice	WL				
17	Wind 60 With Ice	WL				
18	Wind 90 With Ice	WL				
19	Wind 120 With Ice	WL				
20	Wind 150 With Ice	WL				
21	Wind 180 With Ice	WL				
22	Wind 210 With Ice	WL				
23	Wind 240 With Ice	WL				
24	Wind 270 With Ice	WL				
25	Wind 300 With Ice	WL				
26	Wind 330 With Ice	WL				
27	LLM1	OL1		1		
28	LLM2	OL2		1		
29	LLM3	OL3		1		
30	LLM4	OL4		1		
31	LLM5	OL5		1		
32	LLM6	OL6		1		
33	LL1	LL		1		
34	LL2	LL		1		
35	LL3	LL		1		
36	LL4	LL		1		

Basic Load Cases (Continued)

	BLC Description	Category	Y Gravity	Point	Distributed	Area(Member)
37	LL5	LL		1		
38	LL6	LL		1		
39	LL Grating	LL				3
40	BLC 39 Transient Area Loads	None			63	

Moving Loads

	Tag	Pattern	Increment [in]	Both Ways	1st Node	2nd Node	3rd Node	4th Node
1	M1	MAINTENANCE-LOAD	12	Yes	N39	N49	N53	N36
2	M2	MAINTENANCE-LOAD	12	Yes	N150	N156	N154	N152
3	M3	MAINTENANCE-LOAD	12	Yes	N88	N97	N95	N92
4	M4	MAINTENANCE-LOAD	12	Yes	N166	N158	N168	N160
5	M5	MAINTENANCE-LOAD	12	Yes	N72	N81	N79	N76
6	M6	MAINTENANCE-LOAD	12	Yes	N148	N146	N164	N162

Load Combinations

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor
1	1.4 DL	Yes	Y	1	1.4				
2	1.2 DL + 1.0 W0	Yes	Y	1	1.2	2	1		
3	1.2 DL + 1.0 W30	Yes	Y	1	1.2	3	1		
4	1.2 DL + 1.0 W60	Yes	Y	1	1.2	4	1		
5	1.2 DL + 1.0 W90	Yes	Y	1	1.2	5	1		
6	1.2 DL + 1.0 W120	Yes	Y	1	1.2	6	1		
7	1.2 DL + 1.0 W150	Yes	Y	1	1.2	7	1		
8	1.2 DL + 1.0 W180	Yes	Y	1	1.2	8	1		
9	1.2 DL + 1.0 W210	Yes	Y	1	1.2	9	1		
10	1.2 DL + 1.0 W240	Yes	Y	1	1.2	10	1		
11	1.2 DL + 1.0 W270	Yes	Y	1	1.2	11	1		
12	1.2 DL + 1.0 W300	Yes	Y	1	1.2	12	1		
13	1.2 DL + 1.0 W330	Yes	Y	1	1.2	13	1		
14	0.9 DL + 1.0 W0	Yes	Y	1	0.9	2	1		
15	0.9 DL + 1.0 W30	Yes	Y	1	0.9	3	1		
16	0.9 DL + 1.0 W60	Yes	Y	1	0.9	4	1		
17	0.9 DL + 1.0 W90	Yes	Y	1	0.9	5	1		
18	0.9 DL + 1.0 W120	Yes	Y	1	0.9	6	1		
19	0.9 DL + 1.0 W150	Yes	Y	1	0.9	7	1		
20	0.9 DL + 1.0 W180	Yes	Y	1	0.9	8	1		
21	0.9 DL + 1.0 W210	Yes	Y	1	0.9	9	1		
22	0.9 DL + 1.0 W240	Yes	Y	1	0.9	10	1		
23	0.9 DL + 1.0 W270	Yes	Y	1	0.9	11	1		
24	0.9 DL + 1.0 W300	Yes	Y	1	0.9	12	1		
25	0.9 DL + 1.0 W330	Yes	Y	1	0.9	13	1		
26	1.2 DL + 1.0 DLi + 1.0 W0 ICE	Yes	Y	1	1.2	14	1	15	1
27	1.2 DL + 1.0 DLi + 1.0 W30 ICE	Yes	Y	1	1.2	14	1	16	1
28	1.2 DL + 1.0 DLi + 1.0 W60 ICE	Yes	Y	1	1.2	14	1	17	1
29	1.2 DL + 1.0 DLi + 1.0 W90 ICE	Yes	Y	1	1.2	14	1	18	1
30	1.2 DL + 1.0 DLi + 1.0 W120 ICE	Yes	Y	1	1.2	14	1	19	1
31	1.2 DL + 1.0 DLi + 1.0 W150 ICE	Yes	Y	1	1.2	14	1	20	1
32	1.2 DL + 1.0 DLi + 1.0 W180 ICE	Yes	Y	1	1.2	14	1	21	1
33	1.2 DL + 1.0 DLi + 1.0 W210 ICE	Yes	Y	1	1.2	14	1	22	1
34	1.2 DL + 1.0 DLi + 1.0 W240 ICE	Yes	Y	1	1.2	14	1	23	1
35	1.2 DL + 1.0 DLi + 1.0 W270 ICE	Yes	Y	1	1.2	14	1	24	1
36	1.2 DL + 1.0 DLi + 1.0 W300 ICE	Yes	Y	1	1.2	14	1	25	1
37	1.2 DL + 1.0 DLi + 1.0 W330 ICE	Yes	Y	1	1.2	14	1	26	1

Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor
38	0.9 DL + 1.0 DLi + 1.0 W0 ICE	Yes	Y	1	0.9	14	1	15	1
39	0.9 DL + 1.0 DLi + 1.0 W30 ICE	Yes	Y	1	0.9	14	1	16	1
40	0.9 DL + 1.0 DLi + 1.0 W60 ICE	Yes	Y	1	0.9	14	1	17	1
41	0.9 DL + 1.0 DLi + 1.0 W90 ICE	Yes	Y	1	0.9	14	1	18	1
42	0.9 DL + 1.0 DLi + 1.0 W120 ICE	Yes	Y	1	0.9	14	1	19	1
43	0.9 DL + 1.0 DLi + 1.0 W150 ICE	Yes	Y	1	0.9	14	1	20	1
44	0.9 DL + 1.0 DLi + 1.0 W180 ICE	Yes	Y	1	0.9	14	1	21	1
45	0.9 DL + 1.0 DLi + 1.0 W210 ICE	Yes	Y	1	0.9	14	1	22	1
46	0.9 DL + 1.0 DLi + 1.0 W240 ICE	Yes	Y	1	0.9	14	1	23	1
47	0.9 DL + 1.0 DLi + 1.0 W270 ICE	Yes	Y	1	0.9	14	1	24	1
48	0.9 DL + 1.0 DLi + 1.0 W300 ICE	Yes	Y	1	0.9	14	1	25	1
49	0.9 DL + 1.0 DLi + 1.0 W330 ICE	Yes	Y	1	0.9	14	1	26	1
50	1.2 DL + 1.5 LLM1 + 1.0 W0m	Yes	Y	1	1.2	27	1.5	2	0.04
51	1.2 DL + 1.5 LLM1 + 1.0 W30m	Yes	Y	1	1.2	27	1.5	3	0.04
52	1.2 DL + 1.5 LLM1 + 1.0 W60m	Yes	Y	1	1.2	27	1.5	4	0.04
53	1.2 DL + 1.5 LLM1 + 1.0 W90m	Yes	Y	1	1.2	27	1.5	5	0.04
54	1.2 DL + 1.5 LLM1 + 1.0 W120m	Yes	Y	1	1.2	27	1.5	6	0.04
55	1.2 DL + 1.5 LLM1 + 1.0 W150m	Yes	Y	1	1.2	27	1.5	7	0.04
56	1.2 DL + 1.5 LLM1 + 1.0 W180m	Yes	Y	1	1.2	27	1.5	8	0.04
57	1.2 DL + 1.5 LLM1 + 1.0 W210m	Yes	Y	1	1.2	27	1.5	9	0.04
58	1.2 DL + 1.5 LLM1 + 1.0 W240m	Yes	Y	1	1.2	27	1.5	10	0.04
59	1.2 DL + 1.5 LLM1 + 1.0 W270m	Yes	Y	1	1.2	27	1.5	11	0.04
60	1.2 DL + 1.5 LLM1 + 1.0 W300m	Yes	Y	1	1.2	27	1.5	12	0.04
61	1.2 DL + 1.5 LLM1 + 1.0 W330m	Yes	Y	1	1.2	27	1.5	13	0.04
62	1.2 DL + 1.5 LLM2 + 1.0 W0m	Yes	Y	1	1.2	28	1.5	2	0.04
63	1.2 DL + 1.5 LLM2 + 1.0 W30m	Yes	Y	1	1.2	28	1.5	3	0.04
64	1.2 DL + 1.5 LLM2 + 1.0 W60m	Yes	Y	1	1.2	28	1.5	4	0.04
65	1.2 DL + 1.5 LLM2 + 1.0 W90m	Yes	Y	1	1.2	28	1.5	5	0.04
66	1.2 DL + 1.5 LLM2 + 1.0 W120m	Yes	Y	1	1.2	28	1.5	6	0.04
67	1.2 DL + 1.5 LLM2 + 1.0 W150m	Yes	Y	1	1.2	28	1.5	7	0.04
68	1.2 DL + 1.5 LLM2 + 1.0 W180m	Yes	Y	1	1.2	28	1.5	8	0.04
69	1.2 DL + 1.5 LLM2 + 1.0 W210m	Yes	Y	1	1.2	28	1.5	9	0.04
70	1.2 DL + 1.5 LLM2 + 1.0 W240m	Yes	Y	1	1.2	28	1.5	10	0.04
71	1.2 DL + 1.5 LLM2 + 1.0 W270m	Yes	Y	1	1.2	28	1.5	11	0.04
72	1.2 DL + 1.5 LLM2 + 1.0 W300m	Yes	Y	1	1.2	28	1.5	12	0.04
73	1.2 DL + 1.5 LLM2 + 1.0 W330m	Yes	Y	1	1.2	28	1.5	13	0.04
74	1.2 DL + 1.5 LLM3 + 1.0 W0m	Yes	Y	1	1.2	29	1.5	2	0.04
75	1.2 DL + 1.5 LLM3 + 1.0 W30m	Yes	Y	1	1.2	29	1.5	3	0.04
76	1.2 DL + 1.5 LLM3 + 1.0 W60m	Yes	Y	1	1.2	29	1.5	4	0.04
77	1.2 DL + 1.5 LLM3 + 1.0 W90m	Yes	Y	1	1.2	29	1.5	5	0.04
78	1.2 DL + 1.5 LLM3 + 1.0 W120m	Yes	Y	1	1.2	29	1.5	6	0.04
79	1.2 DL + 1.5 LLM3 + 1.0 W150m	Yes	Y	1	1.2	29	1.5	7	0.04
80	1.2 DL + 1.5 LLM3 + 1.0 W180m	Yes	Y	1	1.2	29	1.5	8	0.04
81	1.2 DL + 1.5 LLM3 + 1.0 W210m	Yes	Y	1	1.2	29	1.5	9	0.04
82	1.2 DL + 1.5 LLM3 + 1.0 W240m	Yes	Y	1	1.2	29	1.5	10	0.04
83	1.2 DL + 1.5 LLM3 + 1.0 W270m	Yes	Y	1	1.2	29	1.5	11	0.04
84	1.2 DL + 1.5 LLM3 + 1.0 W300m	Yes	Y	1	1.2	29	1.5	12	0.04
85	1.2 DL + 1.5 LLM3 + 1.0 W330m	Yes	Y	1	1.2	29	1.5	13	0.04
86	1.2 DL + 1.5 LLM4 + 1.0 W0m	Yes	Y	1	1.2	30	1.5	2	0.04
87	1.2 DL + 1.5 LLM4 + 1.0 W30m	Yes	Y	1	1.2	30	1.5	3	0.04
88	1.2 DL + 1.5 LLM4 + 1.0 W60m	Yes	Y	1	1.2	30	1.5	4	0.04
89	1.2 DL + 1.5 LLM4 + 1.0 W90m	Yes	Y	1	1.2	30	1.5	5	0.04
90	1.2 DL + 1.5 LLM4 + 1.0 W120m	Yes	Y	1	1.2	30	1.5	6	0.04
91	1.2 DL + 1.5 LLM4 + 1.0 W150m	Yes	Y	1	1.2	30	1.5	7	0.04
92	1.2 DL + 1.5 LLM4 + 1.0 W180m	Yes	Y	1	1.2	30	1.5	8	0.04

Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor
93	1.2 DL + 1.5 LLM4 + 1.0 W210m	Yes	Y	1	1.2	30	1.5	9	0.04
94	1.2 DL + 1.5 LLM4 + 1.0 W240m	Yes	Y	1	1.2	30	1.5	10	0.04
95	1.2 DL + 1.5 LLM4 + 1.0 W270m	Yes	Y	1	1.2	30	1.5	11	0.04
96	1.2 DL + 1.5 LLM4 + 1.0 W300m	Yes	Y	1	1.2	30	1.5	12	0.04
97	1.2 DL + 1.5 LLM4 + 1.0 W330m	Yes	Y	1	1.2	30	1.5	13	0.04
98	1.2 DL + 1.5 LLM5 + 1.0 W0m	Yes	Y	1	1.2	31	1.5	2	0.04
99	1.2 DL + 1.5 LLM5 + 1.0 W30m	Yes	Y	1	1.2	31	1.5	3	0.04
100	1.2 DL + 1.5 LLM5 + 1.0 W60m	Yes	Y	1	1.2	31	1.5	4	0.04
101	1.2 DL + 1.5 LLM5 + 1.0 W90m	Yes	Y	1	1.2	31	1.5	5	0.04
102	1.2 DL + 1.5 LLM5 + 1.0 W120m	Yes	Y	1	1.2	31	1.5	6	0.04
103	1.2 DL + 1.5 LLM5 + 1.0 W150m	Yes	Y	1	1.2	31	1.5	7	0.04
104	1.2 DL + 1.5 LLM5 + 1.0 W180m	Yes	Y	1	1.2	31	1.5	8	0.04
105	1.2 DL + 1.5 LLM5 + 1.0 W210m	Yes	Y	1	1.2	31	1.5	9	0.04
106	1.2 DL + 1.5 LLM5 + 1.0 W240m	Yes	Y	1	1.2	31	1.5	10	0.04
107	1.2 DL + 1.5 LLM5 + 1.0 W270m	Yes	Y	1	1.2	31	1.5	11	0.04
108	1.2 DL + 1.5 LLM5 + 1.0 W300m	Yes	Y	1	1.2	31	1.5	12	0.04
109	1.2 DL + 1.5 LLM5 + 1.0 W330m	Yes	Y	1	1.2	31	1.5	13	0.04
110	1.2 DL + 1.5 LLM6 + 1.0 W0m	Yes	Y	1	1.2	32	1.5	2	0.04
111	1.2 DL + 1.5 LLM6 + 1.0 W30m	Yes	Y	1	1.2	32	1.5	3	0.04
112	1.2 DL + 1.5 LLM6 + 1.0 W60m	Yes	Y	1	1.2	32	1.5	4	0.04
113	1.2 DL + 1.5 LLM6 + 1.0 W90m	Yes	Y	1	1.2	32	1.5	5	0.04
114	1.2 DL + 1.5 LLM6 + 1.0 W120m	Yes	Y	1	1.2	32	1.5	6	0.04
115	1.2 DL + 1.5 LLM6 + 1.0 W150m	Yes	Y	1	1.2	32	1.5	7	0.04
116	1.2 DL + 1.5 LLM6 + 1.0 W180m	Yes	Y	1	1.2	32	1.5	8	0.04
117	1.2 DL + 1.5 LLM6 + 1.0 W210m	Yes	Y	1	1.2	32	1.5	9	0.04
118	1.2 DL + 1.5 LLM6 + 1.0 W240m	Yes	Y	1	1.2	32	1.5	10	0.04
119	1.2 DL + 1.5 LLM6 + 1.0 W270m	Yes	Y	1	1.2	32	1.5	11	0.04
120	1.2 DL + 1.5 LLM6 + 1.0 W300m	Yes	Y	1	1.2	32	1.5	12	0.04
121	1.2 DL + 1.5 LLM6 + 1.0 W330m	Yes	Y	1	1.2	32	1.5	13	0.04
122	1.2 DL + 1.5 LL1	Yes	Y	1	1.2	33	1.5		
123	1.2 DL + 1.5 LL2	Yes	Y	1	1.2	34	1.5		
124	1.2 DL + 1.5 LL3	Yes	Y	1	1.2	35	1.5		
125	1.2 DL + 1.5 LL4	Yes	Y	1	1.2	36	1.5		
126	1.2 DL + 1.5 LL5	Yes	Y	1	1.2	37	1.5		
127	1.2 DL + 1.5 LL6	Yes	Y	1	1.2	38	1.5		
128	1.2 DL + 1.5 LL Grating	Yes	Y	1	1.2	39	1.5		

Envelope Node Reactions

Node Label		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-in]	LC	MY [k-in]	LC	MZ [k-in]	LC	
1	N13	max	1644.122	11	2270.574	98	1918.489	14	59.777	110	21.964	17	14.716	4
2		min	-1585.058	17	590.246	20	-1984.731	8	3.854	20	-22.327	11	-5.349	22
3	N18	max	1799.35	23	2046.457	83	1199.382	3	4.093	14	9.125	2	8.401	17
4		min	-1816.528	5	425.515	17	-1138.197	21	-14.615	80	-8.264	20	-44.632	95
5	N19	max	1552.473	24	2222.726	54	1929.399	13	6.27	25	13.62	9	42.515	66
6		min	-1594.006	6	543.469	24	-1916.964	19	-38.363	67	-13.471	15	0.568	24
7	Totals:	max	4758.782	23	4685.628	128	4735.106	14						
8		min	-4758.787	5	2756.169	19	-4735.112	8						

Envelope AISC 15TH (360-16): LRFD Member Steel Code Checks

Member	Shape	Code Check	Loc[in]	LC	Shear	Check	Loc[in]	Dir	LC	phi*Pnc [lb]	phi*Pnt [lb]	phi*Mn y-y [k-in]	phi*Mn z-z [k-in]	Cb	Eqn.
1	M1	HSS3.500X0.188	0.099	60.937	95	0.091	139.062	3	55647.566	57330	60.795	60.795	1	H1-1b	
2	M2	HSS3.500X0.188	0.145	137.5	7	0.115	139.062	110	53711.013	57330	60.795	60.795	1	H1-1b	
3	M3	HSS3.500X0.188	0.136	60.937	112	0.116	59.375	6	55647.566	57330	60.795	60.795	1	H1-1b	

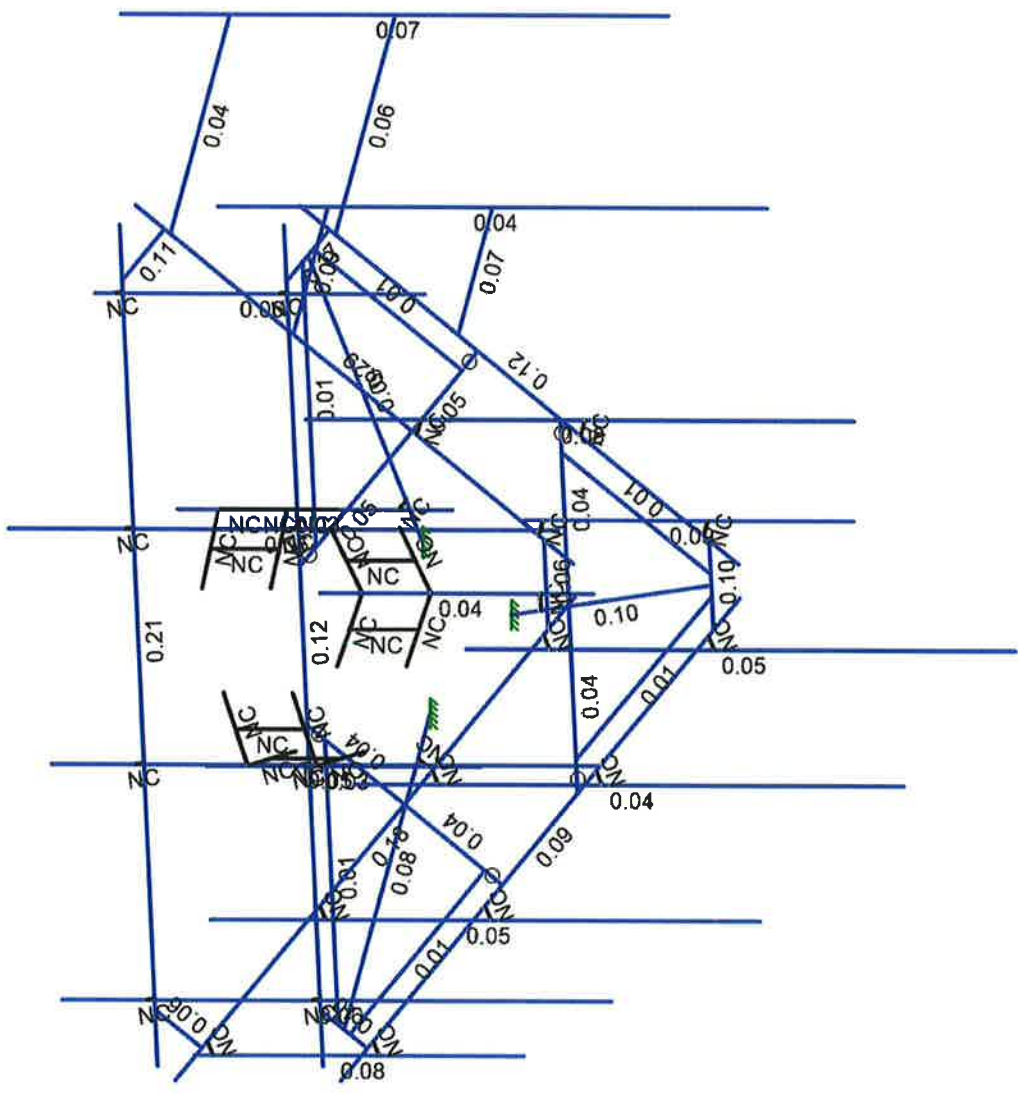
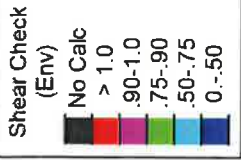
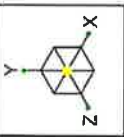


Company : Morrison Hershfield
 Designer : VG
 Job Number : SML-073R2 / 2401983
 Model Name : Site#: 50699-A / HIGHWAY 50 & ...

05/07/2024
 10:00:54 PM
 Checked By : GLC

Envelope AISC 15TH (360-16): LRFD Member Steel Code Checks (Continued)

Member	Shape	Code Check	Loc[in]	LC Shear Check	Loc[in]	Dir	LC phi*Pnc [lb]	phi*Pnt [lb]	phi*Mn y-y [k-in]	phi*Mn z-z [k-in]	Cb	Egn.		
4	M4	HSS4X4X4	0.119	0	52	0.041	27.488	z 2	136652.265	139518	194.166	194.166	1.706	H1-1b
5	M5	HSS4X4X4	0.111	0	65	0.04	27.488	z 4	136652.265	139518	194.166	194.166	1.701	H1-1b
6	M6	HSS4X4X4	0.102	0	120	0.047	27.488	z 4	136652.265	139518	194.166	194.166	1.708	H1-1b
7	M7	HSS4X4X4	0.122	0	100	0.054	27.488	z 6	136652.265	139518	194.166	194.166	1.707	H1-1b
8	M8	HSS4X4X4	0.107	0	80	0.045	27.488	z 6	136652.265	139518	194.166	194.166	1.709	H1-1b
9	M9	HSS4X4X4	0.106	0	96	0.036	27.488	z 2	136652.265	139518	194.166	194.166	1.707	H1-1b
10	M10	HSS4X4X4	0.243	62	96	0.081	62	y 7	129740.42	139518	194.166	194.166	2.555	H1-1b
11	M11	HSS4X4X4	0.297	62	67	0.097	62	z 3	129740.42	139518	194.166	194.166	2.436	H1-1b
12	M12	HSS4X4X4	0.316	62	121	0.091	62	z 5	129740.42	139518	194.166	194.166	2.329	H1-1b
13	M13	PL6X1/2	0.199	8	13	0.105	8	y 6	70795.274	97200	12.15	143.421	1.062	H1-1b
14	M14	PL6X1/2	0.209	8	13	0.172	8	y 10	70795.274	97200	12.15	145.8	1.112	H1-1b
15	M15	PL6X1/2	0.183	8	12	0.097	8	y 11	70795.274	97200	12.15	145.8	1.183	H1-1b
16	M16	L2X2X3	0.119	0	21	0.007	0	z 2	15065.193	23392.8	6.693	13.637	1.5	H2-1
17	M17	L2X2X3	0.161	50.807	19	0.008	50.807	z 2	15065.193	23392.8	6.693	13.637	1.5	H2-1
18	M18	L2X2X3	0.145	0	17	0.008	0	z 11	15065.247	23392.8	6.693	13.637	1.5	H2-1
19	M19	L2X2X3	0.124	50.807	10	0.008	50.807	z 5	15065.247	23392.8	6.693	13.637	1.5	H2-1
20	M20	L2X2X3	0.15	50.807	13	0.009	0	z 6	15065.247	23392.8	6.693	13.637	1.5	H2-1
21	M21	L2X2X3	0.154	50.807	23	0.007	50.807	y 12	15065.247	23392.8	6.693	13.637	1.5	H2-1
22	M22	HSS2.375X0.188	0.317	55	8	0.054	53.75	3	26240.848	37800	26.618	26.618	1	H1-1b
23	M23	HSS2.375X0.188	0.251	53.75	5	0.053	53.75	6	33910.222	37800	26.618	26.618	1	H1-1b
24	M24	HSS2.375X0.188	0.173	39.75	2	0.086	39.75	3	33910.222	37800	26.618	26.618	1	H1-1b
25	M25	HSS2.375X0.188	0.146	39.75	7	0.077	39.75	7	33910.222	37800	26.618	26.618	1	H1-1b
26	M26	HSS2.375X0.188	0.199	4.5	119	0.061	39.75	12	33910.222	37800	26.618	26.618	1	H1-1b
27	M27	HSS2.375X0.188	0.315	55	12	0.055	53.75	13	26240.848	37800	26.618	26.618	1	H1-1b
28	M28	HSS2.375X0.188	0.226	53.75	2	0.045	53.75	9	33910.222	37800	26.618	26.618	1	H1-1b
29	M29	PIPE 2.5	0.134	60	11	0.045	60	7	47114.007	50715	43.155	43.155	1	H1-1b
30	M30	PIPE 2.5	0.196	60	11	0.065	60	6	47114.007	50715	43.155	43.155	1	H1-1b
31	M31	PIPE 2.5	0.26	60	6	0.051	25	13	47114.007	50715	43.155	43.155	1	H1-1b
32	M32	PIPE 2.5	0.217	60	2	0.053	25	8	47114.007	50715	43.155	43.155	1	H1-1b
33	M33	PIPE 2.5	0.204	60	5	0.077	60	5	47114.007	50715	43.155	43.155	1	H1-1b
34	M34	PIPE 2.5	0.203	47.5	2	0.038	47.5	9	41331.898	50715	43.155	43.155	1	H1-1b
35	M35	PIPE 2.5	0.211	47.5	5	0.033	47.5	12	41331.898	50715	43.155	43.155	1	H1-1b
36	M36	PIPE 2.5	0.21	47.5	9	0.032	47.5	4	41331.898	50715	43.155	43.155	1	H1-1b
37	M37	HSS2X2X2	0.29	0	6	0.075	0	y 11	34929.243	37800	26.28	26.28	2.184	H1-1b
38	M38	HSS2X2X2	0.512	0	7	0.057	0	y 12	29923.562	37800	26.28	26.28	2.226	H1-1b
39	M39	HSS2X2X2	0.096	0	121	0.09	25	y 11	34929.243	37800	26.28	26.28	2.237	H1-1b
40	M40	HSS2X2X2	0.227	0	12	0.04	0	z 7	29923.562	37800	26.28	26.28	1.892	H1-1b
41	M41	PIPE 2.0	0.153	53.125	7	0.176	139.062	3	27741.09	32130	22.459	22.459	1	H1-1b
42	M42	PIPE 2.0	0.221	139.062	121	0.287	139.062	120	32119.301	32130	22.459	22.459	1	H3-6
43	M43	PIPE 2.0	0.186	137.5	5	0.213	10.937	119	27741.09	32130	22.459	22.459	1	H1-1b
44	M44	L2X2X4	0.317	0	2	0.061	16	z 3	29266.298	30585.6	8.291	18.922	1.5	H2-1
45	M45	L2X2X4	0.644	0	115	0.108	16	z 11	29266.298	30585.6	8.291	18.922	1.5	H2-1
46	M46	L2X2X4	0.308	0	7	0.058	16	z 7	29266.298	30585.6	8.291	18.922	1.5	H2-1

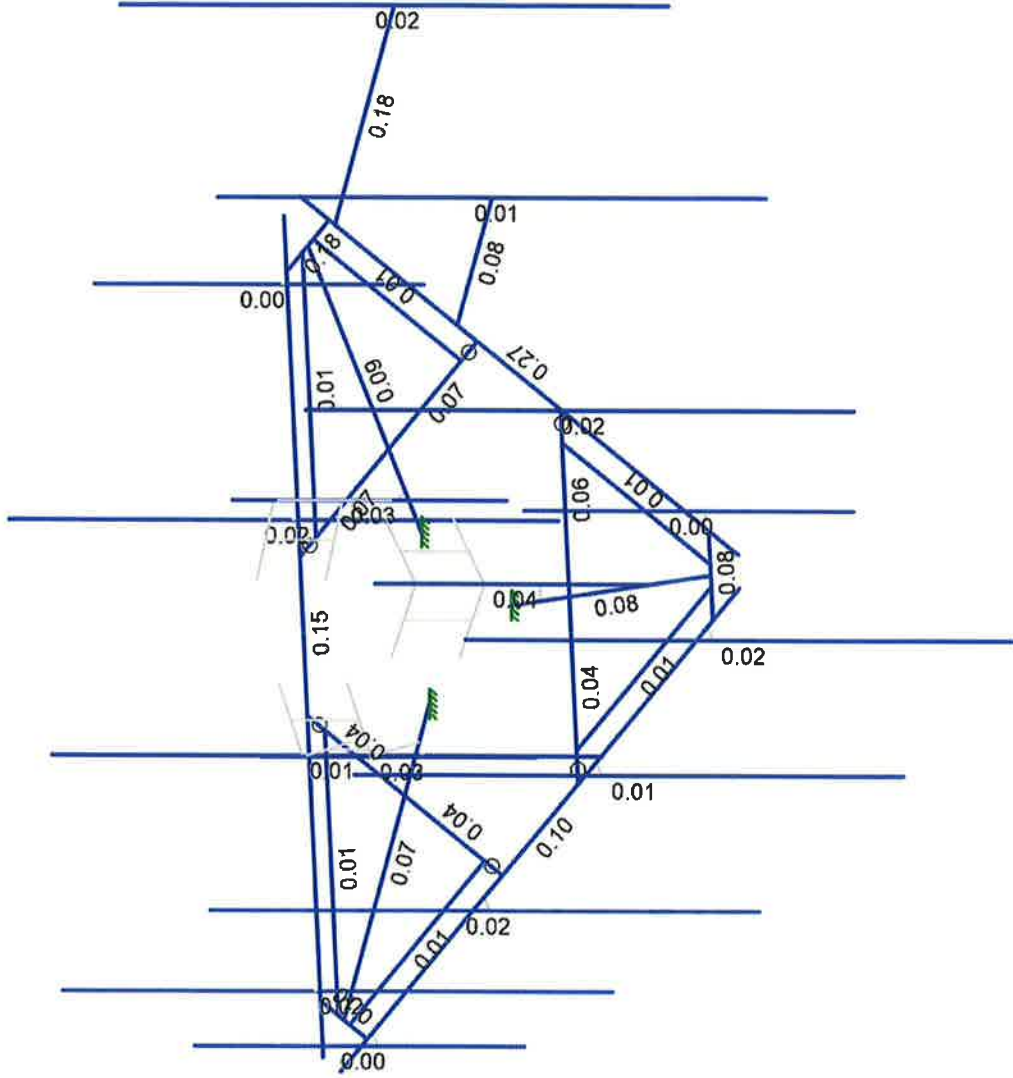
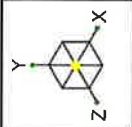


Member Shear Checks Displayed (Enveloped)
Envelope Only Solution

Morrison Hershfield
VG
SML-073R2 / 2401983

Site#: 50699-A / HIGHWAY 50 & HIGHWAY 120

SK-17
May 07, 2024 at 10:00 PM
12.5 ft Platform.r3d



Member Shear Checks Displayed (Enveloped)
Envelope Only Solution



Morrison Hershfield
VG
SML-073R2 / 2401983

Site#: 50699-A / HIGHWAY 50 & HIGHWAY 120

SK-18

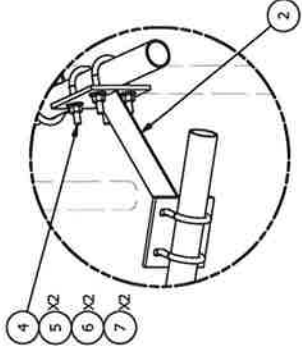
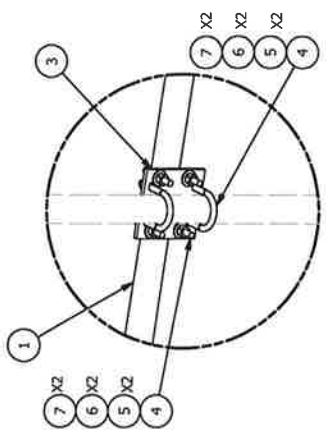
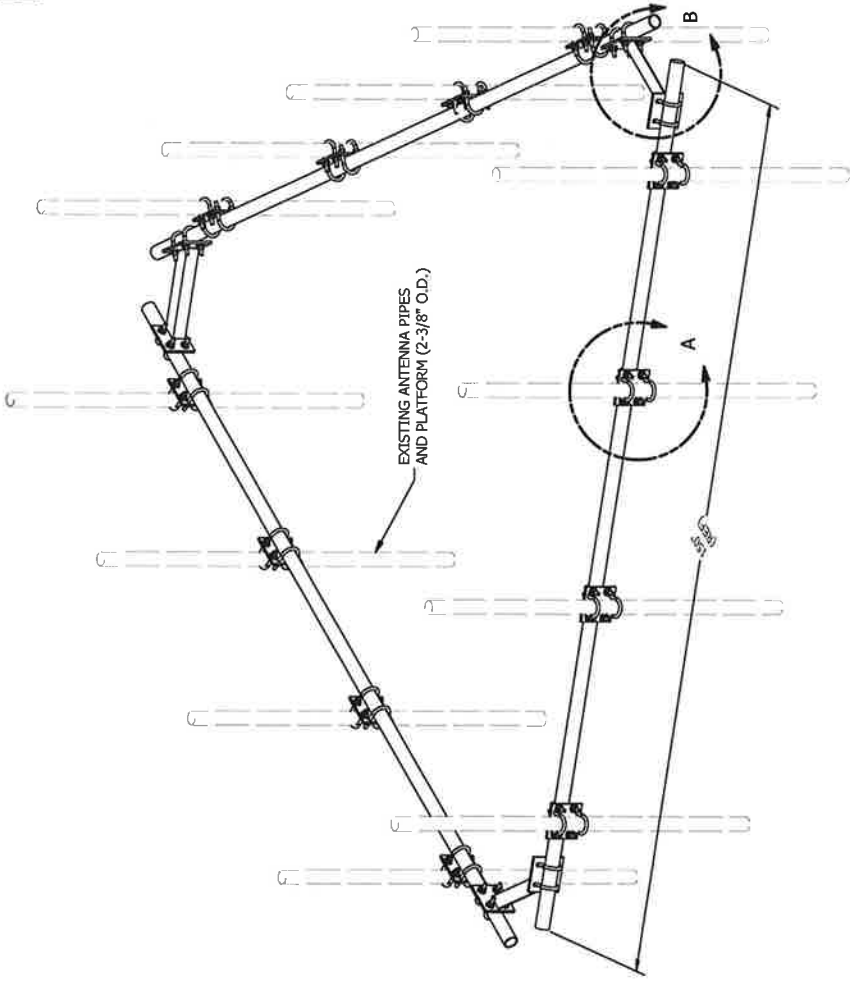
May 05, 2024 at 02:19 PM

12.5 ft Platform.r3d

MOUNT ASSEMBLY DRAWINGS

PARTS LIST

ITEM	QTY	PART NO.	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1	3	P2150	2-3/8" O.D. X 150" SCH 40 GALVANIZED PIPE	150 in	45.77	137.31
2	3	X-AHCP	ANGLE HANDRAIL CORNER PLATE		12.92	38.76
3	12	SCX1	CROSSOVER PLATE 2-3/8" X 2-3/8"	6 in	3.71	44.50
4	60	X-UB1212	1/2" X 2-1/2" X 4-1/2" X 2" U-BOLT (HDG.)		0.63	37.51
5	120	G12FW	1/2" HDG USS FLATWASHER	3/32 in	0.03	4.09
6	120	G12LW	1/2" HDG LOCKWASHER	1/8 in	0.01	1.67
7	120	G12NUT	1/2" HDG HEAVY 2H HEX NUT		0.07	8.60
					TOTAL WT. #	272.43



TOLERANCE NOTES
 TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:
 SLAMMED, SHEARED AND CHAMFERED EDGES (± 0.0007)
 DRILLED, MANDRELS AND HOLES (± 0.0007) - NO CONING OF HOLES
 UNLESS CUT EDGES AND HOLES (± 0.0007) - NO CONING OF HOLES
 BEHIND ARE ± 0.0007
 ALL OTHER ASSEMBLY (± 0.0007)
 ALL OTHER ASSEMBLY (± 0.0007)

PROPERTY NOTE:
 DIMENSIONS CONTAINED IN THIS DRAWING ARE THE PROPERTY OF VALMONT INDUSTRIES AND CONSIDERED A TRADE SECRET. ANY USE OR REPRODUCTION WITHOUT THE CONSENT OF VALMONT INDUSTRIES IS STRICTLY PROHIBITED.

DESCRIPTION
HANDRAIL KIT FOR 12'-6" FACE

CPD NO. DRAWN BY
 K08 5/30/2012

ENG. APPROVAL
 CHECKED BY
 BMC 7/13/2014

CLASS SUB
 81 01

CUSTOMER

SITE PRO
 A valmont COMPANY

Locations:
 New York, NY
 Los Angeles, CA
 Plymouth, IN
 Salem, OR
 Dallas, TX

Engineering Support Team:
 1-888-753-7446

PART NO. **HRK12**

DWG. NO. **HRK12**

REV	DESCRIPTION OF REVISIONS	CPD	BY	DATE
A	REPLACED HCP WITH X-AHCP		CEK	7/10/2014
REVISION HISTORY				



FREMONT COUNTY COLLOCATION OF ANTENNA ON AN EXISTING TOWER APPLICATION

1. Name and Number of Existing SRU Permit Not known

2. Name: AT&T New Cingular Wireless Address: 7670 S. Chester St.
City: Englewood State: CO Zip Code: 80112
Telephone #: 720-331-0822 Facsimile #: N/A
Name of Contact: Elizabeth Pope Email Address: ew1044@att.com

3. The Applicant Applying for Collocation is:
Name: Smartlink Group Address: 10 Church Circle
City: Annapolis State: MD Zip Code: 21401
Telephone #: 720-331-0822 Facsimile #: N/A
Name of Contact: Audra Kirk Email Address: audra.kirk@smartlinkgroup.com

4. Property Owner: Landmark Dividend Address: P.O. Box 3429
City: El Segundo State: CA Zip Code: 90245
Telephone #: 310.361.5716 Facsimile #: N/A
Name of Contact: Ellen Bacho Email Address: ebacho@landmarkdividend.com

5. Consultant: N/A Address: _____
City: _____ State: _____ Zip Code: _____
Telephone #: _____ Facsimile #: _____
Name of Contact: _____ Email Address: _____

Please read prior to completion of this application

An application for Special Review Use Permit, instead of a Collocation Application, will be required for the following:

1. An increase in the height of the existing tower;
2. The relocation of an existing tower;
3. The placement of an additional tower on the existing tower site;
4. An attachment of an antenna on an existing non-commercial tower, which is less than one-hundred (100) feet in height.

Any application which is not complete or does not include all minimum submittal requirements will not be accepted by the Fremont County Department of Planning and Zoning (Department).

The applicant shall provide one (1) original document of the application and all of its attachments (*copies of deeds, contracts, leases etcetera are acceptable*) at the time of application submittal. After submittal, the Department will review the application and all attachments and prepare a Department Submittal Deficiency and Comment Letter (D & C Letter), which will list the deficiencies, comments and questions

about the application, which must be addressed by the applicant. The applicant shall provide one (1) original document of all requirements of the D & C letter to the Department.

Attachments can be made to this application to provide expanded narrative for any application item including supportive documentation or evidence for provided application item answers. Please indicate at the application item that there is an attachment and label it as an exhibit with the application item number, a period and the number of the attachment for that item (*as an example, the first attached document providing evidence in support of the answer given at application item number 22 would be marked - Exhibit 22.1, the fifth attached document supporting the narrative provided for application item 22 would be marked - Exhibit 22.5*). **Please label all exhibits in the lower right-hand corner of the page.**

An additional review fee of two-hundred fifty dollars (\$250.00) will be charged to the applicant, if all deficiencies as per the initial D & C Letter are not adequately addressed or provided. Each subsequent D & C Letter, based on resubmitted items, will result in another two-hundred fifty dollar (\$250.00) review fee. All such fees shall be paid along with the deficiency submittal, prior to any further review of the application.

If the application is approved by the Department, with contingencies and the contingencies are not submitted or addressed within six (6) months after approval, an additional fee of one-hundred fifty dollars (\$150.00) will be charged to the applicant for a request for an extension of time to submit the contingencies. All such fees shall be paid along with a written request, explaining the need for extension.

The Department may require additional information at any time during the application process as may be deemed necessary in determining if the application is in compliance with all applicable regulations and to make an informed decision with regard to recommendations, approval or disapproval of the application.

6. The legal description and/or address of the existing site is: _____
1380 E. Highway 50, Penrose, CO 81240
APN# 3937100014004

7. The type of construction of the existing tower is: unmanned telecommunication facility

8. The total height of the existing tower (*with antenna*) is 102' feet.

9. What will be the total height of the tower (*with antenna(s)*) after collocation? 102' feet.

10. The existing tower currently has 9 antennas.

11. After the proposed collocation the tower would house 12 (with 3 stacked) antennas.

12. Please provide documentation from a Licensed Professional Engineer demonstrating that the tower is capable of accommodating the proposed number of antennas. (*Mark as EXHIBIT 13.1*)

13. The existing site contains 1 accessory structures.

14. Will the proposed collocation require additional accessory structures? Yes --- No If yes, please provide how many, the sizes, the heights, the location and the reason such additional structures are necessary (*a new site plan may be required*): _____

15. If a design plan addressing materials, colors, textures, screening and landscaping in the design of the tower or antenna was required with the issuance of the original permit, will it be adequate for the proposed collocation? Yes --- No If no, it may be required to comply with the original design plan.
16. The existing site contains 1 off-street parking spaces.
17. Will the proposed collocation require additional off-street parking spaces? Yes --- No If yes, please provide how many additional spaces will be necessary: _____ off-street parking spaces.
18. Was surfacing, lighting and or landscaping of driveways and parking areas required with issuance of the original permit? Yes --- No If no, was it waived by the Board? Yes --- No
19. Will the surfacing, lighting and or landscaping of driveways and parking areas required with issuance of the original permit be adequate for the proposed collocation? Yes --- No Please explain: _____

20. Will the existing access to the site be adequate for the proposed collocation? Yes --- No If No, what is the proposed access for the proposed collocation? _____

21. Was a stormwater drainage plan required and approved with the issuance of the original permit? Yes --- No If yes, will the stormwater drainage plan required and approved with the issuance of the original permit be adequate with the addition of the accessory structures (if any)? Yes --- No Please explain: _____

22. Please explain how the existing tower and additional uses meet the minimum requirements of the Federal Aviation Administration. The existing tower and the new equipment will meet all FAA requirement. This tower is not tall enough to be registered with the FAA, all other requirements are met. _____

23. If the existing permit holder is not the site property owner, does the agreement, lease, or the like between the site property owner and the existing permit holder allow the collocation? Yes --- No Please show (highlight) in the agreement, lease or the like that grants the permission to collocate.
24. Please attach a copy of a lease or agreement between the permit holder and the collocation applicant as to right to use of the tower by the collocation applicant, marked as Exhibit 25.1.
25. A submittal fee of \$250.00 must accompany this application (Check # _____ cash)
 Can I pay with CC over the phone?

Collocation Applicant's Endorsement:

By signing this Application, the Applicant, or the agent/representative acting with due authorization on behalf of the Applicant, hereby certifies that all information contained in the application and any attachments to the Application, is true and correct to the best of Applicant's knowledge and belief.

Fremont County hereby advises Applicant that if any material information contained herein is determined to be misleading, inaccurate or false, the Board of Commissioners may take any and all reasonable and appropriate steps to declare actions of the Board regarding the Application to be null and void.

Further the applicant understands that if collocation is approved the applicant must comply with the conditions of the original permit, as issued or as may be amended, and applicable regulations of the Fremont County Zoning Resolution.

Signing this Application is a declaration by the Applicant to conform to all plans, drawings, and commitments submitted with or contained within this Application, provided that the same is in conformance with the Fremont County Zoning Resolution.

AUDRA KIRK
Applicant Printed Name

Applicant Signature

REAL ESTATE SPECIALIST III
Applicant Title & Company Name SmartLink Group
5.8.24
Date

Existing Permit Holder's Endorsement:

By signing this Application, the Permit Holder, or the agent/representative acting with due authorization on behalf of the Permit Holder, hereby certifies that all information contained in the application and any attachments to the Application, is true and correct to the best of Permit Holder's knowledge and belief.

Fremont County hereby advises Permit Holder that if any material information contained herein is determined to be misleading, inaccurate or false, the Board of Commissioners may take any and all reasonable and appropriate steps to declare actions of the Board regarding the Application to be null and void.

Further the existing permit holder understands that if collocation is approved the applicant and existing permit holder must comply with the conditions of the original permit, as issued or as may be amended, and applicable regulations of the Fremont County Zoning Resolution.

Signing this Application is a declaration by the Permit Holder to conform to all plans, drawings, and commitments submitted with or contained within this Application, provided that the same is in conformance with the Fremont County Zoning Resolution.

THIS SIGNATURE ALSO SERVES AS THE EXISTING PERMIT HOLDERS APPROVAL FOR COLLOCATION.

Permit Holder Printed Name

Permit Holder Signature

Permit Holder Title & Company Name

Date

Cell Site No: DNVRCO 6039
Cell Site Name : Hwy 50 & Hwy 120
Fixed Asset #10099191
Site Address: 1380 E. Highway 50, Penrose, CO 81240

FIRST AMENDMENT TO OPTION AND LEASE AGREEMENT

THIS FIRST AMENDMENT TO OPTION AND LEASE ("Amendment") dated as of the date below ("Effective Date"), by and between LD Acquisition Company 5, LLC, a Delaware limited liability company, having a mailing address at 1700 E. Walnut Avenue, Suite 400, El Segundo, CA 90245 (hereinafter referred to as "Landlord") and New Cingular Wireless PCS, LLC, having a mailing address at 12555 Cingular Way, Alpharetta, GA 30004 (hereinafter referred to as "Tenant").

BACKGROUND

WHEREAS, Eicher Inc., a Colorado corporation, ("Owner") and Tenant entered into a Option and Lease Agreement dated December 22, 2008, whereby Owner leased to Tenant certain Premises, therein described, that are a portion of the Property located at 1380 E. Highway 50, Penrose, CO 81240 (the "Agreement"); and

WHEREAS, Owner has assigned all of its right, title and interest in and to the Agreement to LD Holdings LLC pursuant to that certain Easement And Assignment Of Lease Agreement dated March 5, 2012 (the "Easement Agreement"), attached hereto and incorporated herein as Attachment 1;

WHEREAS, LD Holdings LLC assigned its interest in the Easement Agreement to Landlord pursuant to that certain Assignment Of Easement And Assignment Of Lease Agreement dated April 18, 2012, attached hereto ; and

WHEREAS, Landlord and Tenant desire to amend the Term and modify the Rent payable under the Agreement; and

WHEREAS, Landlord and Tenant, in their mutual interest, wish to amend the Agreement as set forth below accordingly.

NOW THEREFORE, in consideration of the foregoing and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Landlord and Tenant hereby agree as follows:

1. **Term.** The Term of the Agreement shall be amended to provide that the Agreement has a new initial term of 5 years ("New Initial Term"), commencing and effective on March 29, 2012. The Term will be automatically renewed for up to 5 additional 5 year terms (each an "Extension Term") upon the same terms and conditions of the Agreement, as amended herein, unless Tenant notifies Landlord in writing of Tenant's intention not to renew the

Agreement at least ninety (90) days prior to the expiration of the then current Extension Term. Hereafter, the defined term "Term" shall include the New Initial Term and any applicable Extension Term. Landlord agrees and acknowledges that except that as such permitted use or other rights may be amended herein, Tenant may continue to use and exercise its rights under the Agreement as permitted prior to the New Initial Term.

2. **Termination.** Notwithstanding anything to the contrary in the Agreement, and in addition to any rights that may already exist in the Agreement, Tenant may terminate the Agreement at any time with ninety (90) prior written notice to Landlord for any or no reason and without the payment of any monies.

3. **Modification of Rent.** Commencing and effective on March 29, 2012, the Rent payable under the Agreement shall be FIVE HUNDRED DOLLARS (\$500.00) per month, and shall continue during the Term, subject to adjustment as provided below. Notwithstanding any terms in the Agreement to the contrary, no revenue sharing from SubTenants (as that term is hereinafter defined) shall be due to Landlord.

4. **Future Rent Increase.** The Agreement is amended to provide that commencing on March 29, 2013, and on an annual basis thereafter, Rent shall increase by three percent (3%) over the Rent paid during the previous year.

5. **Expansion of Permitted Use.** Notwithstanding any terms in the Agreement to the contrary, Tenant, its personnel, invitees, contractors, agents, subtenants and assigns may without the consent of Landlord or Owner and without any increased rental payment or rental cost use the Premises for the transmission and reception of any and all communications signals and to modify, supplement, replace, upgrade, expand, including the number and type(s) of antennas, or refurbish the equipment and/or improvements thereon, or relocate the same within the Premises at any time during the term of this Agreement. Landlord shall reasonably cooperate in obtaining governmental and other use permits or approvals necessary or desirable for the foregoing permitted use. If Landlord does not comply with the terms of this section, in addition to any other rights it may have at law and equity, including the right to cure Landlord's default and to deduct the costs of such cure from any monies due to Landlord from Tenant, Tenant may terminate this Agreement and shall have no further liability to Landlord.

6. **Sale of Property.** If Landlord, at any time during the Term of the Agreement, decides to sell, subdivide or rezone any of the Property or any part of the surrounding property, to a purchaser other than Tenant, Landlord acknowledges and agrees that such sale, subdivision or rezoning shall be made subject to this Agreement and Tenant's rights hereunder. Landlord agrees that it shall promptly notify Tenant in writing of such sale, subdivision or rezoning. If at any time after the date of this Amendment, Landlord receives or negotiates a bona fide written offer from a third party seeking to purchase the Property, or, all or any part of the surrounding property ("Purchase Offer"), Landlord shall immediately furnish Tenant with a copy of the Purchase Offer. Tenant shall have the right within twenty (20) days after it receives such copy and representation to match the Purchase Offer and agree in writing to match the terms of the Purchase Offer. Such writing shall be in the form of a contract substantially similar to the Rental Purchase Offer. If Tenant chooses not to exercise this right or fails to provide written notice to

Landlord within the twenty (20) day period, Landlord may sell the Property or surrounding property, as applicable, pursuant to the Purchase Offer, subject to the terms of this Amendment. Notwithstanding the foregoing, in the event the sale or transfer of the Property is related to Landlord's financing or securitization, whereby Landlord shall continue to manage the Property, then Landlord shall have the right to sell or transfer the Property to such third party subject to the Tenant's right hereunder and further provided that the assignee of such financing or securitization shall execute a mutually agreeable subordination and non-disturbance agreement.

7. Sublease Rights. The parties agree or confirm that Tenant may sublease all or any portion of the Premises to any person or entity licensed by the FCC to operate wireless communications services (hereinafter, a "SubTenant") upon such terms and conditions as Tenant and SubTenant shall agree (each such agreement a "Sublease"), upon notice to Landlord. Notwithstanding any terms in the Agreement to the contrary, no revenue sharing from SubTenant's shall be due to Landlord, provided that any such SubTenant facilities are located within the Premises nor shall Landlord be responsible to review plans from Tenant or its SubTenants.

8. Additional Rights. In the event that Landlord secures additional rights from Owner from time to time, including but not limited to additional Term, notice of such rights shall be provided to Tenant within sixty (60) days of any amendment or other document stating such rights and Tenant shall be entitled to adopt such rights into the Agreement by incorporating them into an amendment to the Agreement, all at the sole discretion of Tenant. As an example of such a right, but not intended to limit such rights to those related to Term, if Landlord receives additional Term from Owner, Tenant shall be permitted to extend its Agreement, in five year increments, until such date of expiration.

9. Memorandum of Lease. Contemporaneous with this Amendment, each Party will sign the Memorandum of Lease attached hereto as Exhibit 1. Landlord will, at its sole cost and expense, within thirty (30) days of the full execution of this Amendment, submit the Memorandum of Lease, in its proper form, to the appropriate local governmental agency for recording in the land use records and will provide proof of such filing and recording within six (6) months of such submission to Tenant.

10. Future Negotiations. Landlord hereby agrees not to interfere with any future negotiations Tenant may have with Owner with respect to the Premises; however, Tenant agrees that it shall not enter into any negotiations that would adversely affect Landlord's interest under the Agreement or under the Lease Purchase and Easement Agreement without the prior written approval of Landlord, which shall not be unreasonably withheld, delayed or conditioned. Landlord further agrees that it will not enter into any future agreement with Owner that may affect the Premises or Tenant's lease of the Premises without the prior written approval of Tenant, which shall not be unreasonably withheld, delayed or conditioned.

11. Acknowledgement. Landlord acknowledges that: 1) this Amendment is entered into of the Landlord's free will and volition; and 2) Landlord has read and understands this Amendment and the underlying Agreement and, prior to execution of the Amendment, was free

14. **Other Terms and Conditions Remain.** Except as expressly set forth in this Amendment, the Agreement otherwise is unmodified and remains in full force and effect. Each reference in the Agreement to itself shall be deemed also to refer to this Amendment.

15. **Capitalized Terms.** All capitalized terms used but not defined herein shall have the same meanings as defined in the Agreement.

IN WITNESS WHEREOF, the parties have caused their properly authorized representatives to execute and seal this Amendment on the date and year below.

LANDLORD: LD ACQUISITION COMPANY 5 LLC a Delaware limited liability company	TENANT: New Cingular Wireless PCS, LLC a Delaware limited liability company
BY: LANDMARK DIVIDEND GROWTH FUND - A LLC, its sole member	By: AT&T Mobility Corporation Its: Manager
BY: Landmark Dividend Management LLC, its managing member	
By: <i>Keith Drucker</i>	By: <i>Gregory D. Ohmer</i>
Name: Keith Drucker Chief Operating Officer	Name: Gregory D. Ohmer
Title:	Title: Area Manager
Date: <i>7/10/2012</i>	Date: <i>7/5/12</i>

LANDLORD ACKNOWLEDGEMENT

STATE OF CALIFORNIA

ss.

COUNTY OF LOS ANGELES

On July 10, 2012 before me, Catherine Victoria Humenuk, Notary Public, personally appeared Keith Drucker, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or entity upon behalf of which the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.



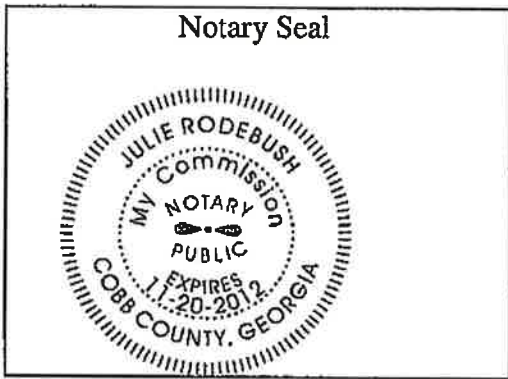
Catherine Victoria Humenuk
Notary Public in and for the State of California
Expiration: Nov 5, 2015

TENANT ACKNOWLEDGEMENT

STATE OF Georgia)
COUNTY OF Fulton) SS.

I certify that I know or have satisfactory evidence that Gregory Ohmer is the person who appeared before me, and said person acknowledged that he signed this instrument, on oath stated that he was authorized to execute the instrument and acknowledged it as the ~~Executive Director~~ of New Cingular Wireless PCS, LLC, to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

DATED: 7/5/12 Area Manager



Julie Rodebush
(Signature of Notary)
Julie Rodebush
(Legibly Print or Stamp Name of Notary)
Notary Public in and for the State of
Georgia
My appointment expires: 11/20/12

Exhibit 25.1
Landlord lease
agreement



Mr. Alexander Hinton
 Smartlink Group, LLC
 10 Church Circle
 Annapolis, MD 21401
 (425) 246-4742

Morrison Hershfield
 1455 Lincoln Parkway, Suite 500
 Atlanta, GA 30346
 (770) 379-8500

Date: May 14, 2024

Subject: Rigorous Structural Analysis Report

AT&T Designation:

Site USID: 50699-A
Site FA: 10099191
Site ID: COU6039
Site Name: HIGHWAY 50 & HIGHWAY 120

Site Address: 1380 East Highway 50, Penrose, Fremont County, CO 81240
Site Coordinates: Latitude 38° 24' 18.36" N, Longitude 104° 59' 20.04" W
Tower Description: 100 ft – Monopole Tower [Wireless Structures]

Morrison Hershfield Project Number: SML-073R1 / 2401983

Dear Mr. Hinton,

Morrison Hershfield is pleased to submit this **“Rigorous Structural Analysis Report”** to determine the structural integrity of the above-mentioned tower structure for the existing and proposed antenna and equipment noted.

This rigorous analysis has been performed in accordance with the 2021 International Building Code based upon an ultimate 3-second gust wind speed of 106 mph. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Our analysis demonstrates that the existing tower and foundation **ARE in conformance** with the requirements of the above noted standards under the effects of loading described.

Summary of Results		
Tower Structure	71.7%	Sufficient
Base Foundation	33%	Sufficient

We at *Morrison Hershfield* appreciate the opportunity of providing our continuing professional services to you and Smartlink Group, LLC. If you have any questions or need further assistance on this or any other projects, please give us a call.

Respectfully submitted by:
 Morrison Hershfield

G. Lance Cooke, P.E. (CO License No. 44803)
 Senior Engineer



EXP 10/31/25

1.0 INTRODUCTION

This tower is a 100 ft monopole tower designed by Wireless Structures Consulting, PC, in January of 2010. The tower was originally designed for a basic wind speed of 90 mph and no radial ice thickness per ANSI/TIA-222-G Standard.

2.0 ANALYSIS CRITERIA

The following design parameters have been used in our analysis:

Design Standard:	2021 International Building Code ANSI/TIA-222-H, Structural Standard for Antenna Supporting Structures and Antennas and Small Wind Turbine Support Structures ASCE 7-16, Minimum Design Loads and Associated Criteria for Buildings and Other Structures AISC 325-15, Manual of Steel Construction ACI 318-19, Building Code Requirements for Structural Concrete ANSI/AWS D1.1-11, Structural Welding Code - Steel
Design Wind Speed:	106 mph (Ultimate 3-sec gust) with no radial ice
Risk Category:	II
Exposure Category:	C
Topographic Factor, K_{zt} :	1.0
Design Ice Thickness:	0.25 in [Neglected]
Wind Speed with Ice:	50 mph (Nominal 3-sec gust) [Neglected]
Seismic S_s :	0.227 [Neglected]
Seismic S_1 :	0.065 [Neglected]
Service Wind Speed:	60 mph (Nominal 3-sec gust)

The structural analysis was based on the following documentation:

Table 1 – Documentation

Document	Description	Source
Geotechnical Report	Terracon Consultants, Inc., Project No. B8095016, dated 09/11/2009	AT&T FileNet
Tower & Foundation Drawings	Wireless Structures Consulting, PC, Project No. 10-0004, dated 01/14/2010	AT&T FileNet
Structural Analysis Report	Morrison Hershfield, Project No. MD7-218 / 2000154, dated 01/17/2020	MH
Preliminary Construction Drawings	Morrison Hershfield, Site ID: COU6039, dated 04/22/2024	MH
DE130 Scoping Checklist Form	Smartlink Group, LLC, Site ID: COU6039, dated 03/28/2024	Client

3.0 ANALYSIS LOADING

The existing and proposed antennas, transmission cables, antenna mounts and other equipment considered in this analysis were provided by the client and are noted in the attachments.

4.0 ANALYSIS PROCEDURE

tnxTower (Version 8.2.4.3), a commercially available analysis software package, was used to create a three-dimensional model of the tower and calculate member stresses for various loading cases. Selected output from the analysis is attached at the end of this report.

5.0 ASSUMPTIONS

The analysis provided by Morrison Hershfield is based on the theoretical capacity of the structure and is not a condition assessment of the tower. Morrison Hershfield has not performed an engineering inspection of the tower and the analysis was completed based on information supplied by the client. Morrison Hershfield has not made any independent determination of the accuracy of the information provided.

- 1) Tower and structures were built in accordance with the manufacturer's specifications and the applicable ANSI/TIA/EIA standard.
- 2) The tower and structures have been maintained in accordance with the manufacturer's specification.
- 3) The tower is assumed to be in good condition and capable of supporting its full design capacity.
- 4) The foundation was properly designed and constructed for the original design loads.
- 5) The configuration of antennas, transmission cables, antenna mounts and other appurtenances are as specified in the attached Tower Analysis Summary Form and the referenced documents.
- 6) All existing/proposed antennas and antenna mounts are assumed to be adequate for the existing/proposed loads. Analysis of these antennas and antenna mounts is considered to be outside of the scope of this analysis. Morrison Hershfield has not performed an analysis of the existing/proposed antennas or antenna mounts.
- 7) The existing and proposed loading for AT&T Mobility are taken from the DE130 Scoping Checklist Form provided by Smartlink Group, LLC, Site ID: COU6039, dated 03/28/2024, and from the Preliminary Construction Drawings completed by Morrison Hershfield, Site ID: COU6039, dated 04/22/2024, and are considered to be correct.

If any assumptions are not valid or have been made in error, this analysis is invalid. Morrison Hershfield should be notified to determine the effect on the structural integrity of the tower.

6.0 SUMMARY OF RESULTS

The following tables summarize the location and utilized percentage of available capacity for each component of the tower. With consideration to the appropriate safety factors, 100% represents the full capacity of the component. Percentages below 100% indicate available capacity and conformance of the component. Percentages above 100% indicate an overstressed situation requiring structural modification to ensure conformance with the applicable codes and standards.

Based on our analysis results, the **tower and foundation ARE within capacity** to support the loads under the current loading scenario.

Table 2 – Tower Section Capacity

Section No.	Elevation ft	Component Type	Size	% Capacity	Pass Fail
L1	100 - 51.75	Pole	TP26.39x19.15x0.1875	46.1	Pass
L2	51.75 - 0	Pole	TP34x26.39x0.25	51.1	Pass
				Summary	
				Pole (L2)	Pass
				RATING =	51.1 Pass

Table 3 – Capacity of Additional Components

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1	Flange Bolts	51.75	71.7	Pass
1	Flange Plate		48.3	Pass
1	Anchor Rods	0	58.3	Pass
1	Base Plate		30.1	Pass
1	Foundation Soil Interaction	0	11.2	Pass
1	Foundation Structural		33.0	Pass

Structure Rating (max from all components) =	71.7%
---	--------------

Notes:

- 1) See additional documentation in "Additional Calculations" for calculations supporting the % capacity consumed.
- 2) Rating per TIA-222-H, Section 15.5.

7.0 RECOMMENDATIONS

- 1) All assumptions made in this analysis should be carefully reviewed. Morrison Hershfield should be contacted for any discrepancies so that a full assessment may be made to validate the results of this analysis.

ATTACHMENTS: Tower Loading, Tower Profile, Program Output, Coax Sketch and Additional Calculations

TOWER LOADING

Tower Analysis Summary Form

The information contained in this summary report is not to be used independently from the PE stamped tower analysis.

Site Name	HIGHWAY 50 & HIGHWAY 120
Site Number	50699-A
FA Number	10099181
Date of Analysis	05/14/2024
Company Performing Analysis	Morrison Hershfield

Tower Info	Description	Date
Tower Type (G, SST, MP)	MP	
Tower Height (top of steel AGL)	100 ft	
Tower Manufacturer	Wireless Structures Consulting, PC	
Tower Model	N/A	
Tower Drawings	Wireless Structures Consulting, PC, Project No. 10-0004	01/14/2010
Foundation Drawings	Wireless Structures Consulting, PC, Project No. 10-0004	01/14/2010
Geotechnical Report	Terracon Consultants, Inc., Project No. B0995016	09/11/2009
Tower Mapping	N/A	
Structural Analysis Report	Morrison Hershfield, Project No. M07-318 / 2000154	01/17/2020
Foundation Mapping	N/A	

Steel Yield Strength (ksi)	65
Flange Plate / Bolts	36 / A325X
Base Plate	50
Anchor Rods	55

Design Code Used	ANSI/TIA-222-H
Location of Tower (County, State)	2021 IBC / ASCE 7-16 Fremont, CO
Basic Wind Speed (mph)	100 mph (Ultimate 3-sec)
Ice Thickness (in)	0.25
Soil Type	II
Exposure Category (B, C, D)	C
Topographic Category (1 to 9)	1

Analysis Results (% Maximum Usage)	
Tower (%)	51.1%
Anchor Rods (%) / Base Plate (%)	58.3% / 30.1%
Foundation (%)	33.0%
Foundation Adequate?	YES

1) The existing and proposed loading for AT&T Mobility are taken from the DE130 Scoping sheet Form provided by Smartlink Group, LLC, Site ID: COU603, dated 03/29/2024, and the Preliminary Construction Drawings completed by Morrison Hershfield, Site ID: COU603, dated 04/22/2024, and are considered to be correct.

Existing / Reserved Loading		Antenna		Mount		Transmission Line	
Antenna Owner	Mount Height (ft)	Antenna CL (ft)	Quantity	Type	Manufacturer	Quantity	Model
AT&T Mobility	97	96	6	Panel	CCI	10/130/275	Unknown
AT&T Mobility	97	96	3	Panel	Powerwave	10/130/275	12.5 ft Low Profile Platform
AT&T Mobility	97	96	3	RRH	Nokia		Unknown
AT&T Mobility	97	96	3	RRH	Nokia		Unknown
AT&T Mobility	97	96	3	RRH	Nokia		Unknown
AT&T Mobility	97	96	2	Squid	Raycap		Unknown

Note: The existing (3) Powerwave P65-15-XLH-RR Panels, (3) Nokia Dual RRH 4T4R B1274 320W AHLBA RRHs, (3) Nokia Dual RRH 4T4R B2566 320W AHLFB RRHs, (3) Nokia RRH 4T4R B5 160W and (13) 1-5/8" coax at 97 ft elevation are to be removed prior to the installation of proposed loading. The remaining existing loading shall be re-used.

Proposed Loading		Antenna		Mount		Transmission Line	
Antenna Owner	Mount Height (ft)	Antenna CL (ft)	Quantity	Type	Manufacturer	Quantity	Model
AT&T Mobility	97	96	3	Panel	Ericsson	10/130/275	Same as Existing
AT&T Mobility	97	96	3	Panel	Ericsson	10/130/275	12.5 ft Long Top Rail (RRH12)
AT&T Mobility	97	96	3	RRH	Nokia		RRU Mount (8 D21RRUDSM)
AT&T Mobility	97	96	3	RRH	Nokia		10 ft Long Pipe Mount (RP2.5 STD)
AT&T Mobility	97	96	3	RRH	Nokia		6 ft Long Pipe Mount (RP2.5 STD)

Note: Proposed loading is in addition to the remaining existing loading at 97 ft elevation.

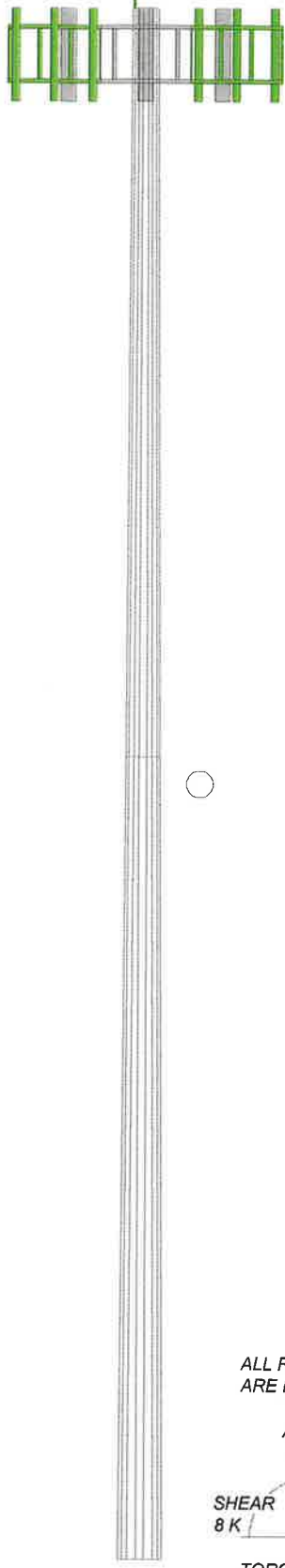
TOWER PROFILE

Section	1	2
Length (ft)	48.25	51.75
Number of Sides	18	18
Thickness (in)	0.1875	0.2500
Top Dia (in)	19.1500	26.3900
Bot Dia (in)	26.3900	34.0000
Grade		A572-65
Weight (K)	2.2	4.2

100.0 ft

51.8 ft

0.0 ft



DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
Lightning Rod	102	DC9-48-60-24-8C-EV (P)	98
(2) TPA65R-BU8D_TIA (E)	98	(2) 10' x 2" Mount Pipe (E)	97
(2) TPA65R-BU8D_TIA (E)	98	12.5 ft Low Profile Platform Mount (E)	97
TPA65R-BU8D_TIA (E)	98	6' x 2" Mount Pipe (E)	97
TPA65R-BU8D_TIA (E)	98	6' x 2" Mount Pipe (E)	97
DC6-48-60-18-8F (E)	98	6' x 2" Mount Pipe (E)	97
DC6-48-60-18-8F (E)	98	(2) 10' x 2" Mount Pipe (E)	97
AIR6419 B77D_TIA (P)	98	10 ft Long Pipe Mount [#P2.5 STD] (P)	97
AIR6419 B77D_TIA (P)	98	10 ft Long Pipe Mount [#P2.5 STD] (P)	97
AIR6419 B77D_TIA (P)	98	(3) 10 ft Long Pipe Mount [#P2.5 STD] (P)	97
AIR6419 B77G_TIA (P)	98	(2) RRU Mount [#D218RRUDSM] (P)	97
AIR6419 B77G_TIA (P)	98	(2) RRU Mount [#D218RRUDSM] (P)	97
4490 B5/B12A (P)	98	(2) RRU Mount [#D218RRUDSM] (P)	97
4490 B5/B12A (P)	98	6 ft Long Pipe Mount [#P2.5 STD] (P)	97
4490 B5/B12A (P)	98	6 ft Long Pipe Mount [#P2.5 STD] (P)	97
4478 B14 (P)	98	6 ft Long Pipe Mount [#P2.5 STD] (P)	97
4478 B14 (P)	98	12.5 ft Top Rail Reinforcement Kit [#HRK12] (P)	97
4478 B14 (P)	98	(2) Extended Crossover Kit [#P2] (P)	97
4890 B25/B66 (P)	98	(2) Extended Crossover Kit [#P4] (P)	97
4890 B25/B66 (P)	98		
4890 B25/B66 (P)	98		

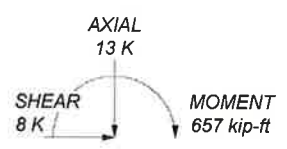
MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	80 ksi			

TOWER DESIGN NOTES

1. Tower is located in Fremont County, Colorado.
2. Tower designed for Exposure C to the TIA-222-H Standard.
3. Tower designed for a 106 mph basic wind in accordance with the TIA-222-H Standard.
4. Deflections are based upon a 60 mph wind.
5. Tower Risk Category II.
6. Topographic Category 1 with Crest Height of 0.00 ft
7. TOWER RATING: 51.1%

ALL REACTIONS ARE FACTORED



TORQUE 1 kip-ft
REACTIONS - 106 mph WIND

<p>MORRISON HERSHFIELD Stantec Consulting Engineers</p>	<p>Morrison Hershfield 1455 Lincoln Parkway, Suite 500 Atlanta, GA 30346 Phone: (770) 379-8500 FAX: (770) 379-8501</p>		<p>Job: SML-073R1 / 2401983</p>
	<p>Project: 50699-A / Highway 50 & Highway 120</p>		<p>Client: Smartlink Group, LLC Date: 05/14/24</p>
	<p>Code: TIA-222-H</p>		<p>App'd: [Signature] Scale: N</p>
	<p>Path:</p>		<p>Dwg No.</p>
	<p>Drawn by: DB</p>		

PROGRAM OUTPUT

tnxTower Morrison Hershfield 1455 Lincoln Parkway, Suite 500 Atlanta, GA 30346 Phone: (770) 379-8500 FAX: (770) 379-8501	Job SML-073R1 / 2401983	Page 1 of 5
	Project 50699-A / Highway 50 & Highway 120	Date 21:19:20 05/14/24
	Client Smartlink Group, LLC	Designed by DB

Tower Input Data

The tower is a monopole.

This tower is designed using the TIA-222-H standard.

The following design criteria apply:

Tower is located in Fremont County, Colorado.

Tower base elevation above sea level: 5242.00 ft.

Basic wind speed of 106 mph.

Risk Category II.

Exposure Category C.

Simplified Topographic Factor Procedure for wind speed-up calculations is used.

Topographic Category: 1.

Crest Height: 0.00 ft.

Deflections calculated using a wind speed of 60 mph.

A non-linear (P-delta) analysis was used.

Pressures are calculated at each section.

Stress ratio used in pole design is 1.

Tower analysis based on target reliabilities in accordance with Annex S.

Load Modification Factors used: $K_{es}(F_w) = 0.95$.

Maximum demand-capacity ratio is: 1.05.

Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

- | | | |
|---|---|---|
| <ul style="list-style-type: none"> Consider Moments - Legs Consider Moments - Horizontals Consider Moments - Diagonals Use Moment Magnification √ Use Code Stress Ratios √ Use Code Safety Factors - Guys Escalate Ice Always Use Max Kz Use Special Wind Profile Include Bolts In Member Capacity Leg Bolts Are At Top Of Section Secondary Horizontal Braces Leg Use Diamond Inner Bracing (4 Sided) SR Members Have Cut Ends SR Members Are Concentric Distribute Leg Loads As Uniform | <ul style="list-style-type: none"> Assume Legs Pinned √ Assume Rigid Index Plate √ Use Clear Spans For Wind Area Use Clear Spans For KL/r Retension Guys To Initial Tension √ Bypass Mast Stability Checks √ Use Azimuth Dish Coefficients √ Project Wind Area of Appurtenances √ Alternative Appurt. EPA Calculation Autocalc Torque Arm Areas Add IBC .6D+W Combination Sort Capacity Reports By Component Triangulate Diamond Inner Bracing Treat Feed Line Bundles As Cylinder Ignore KL/ry For 60 Deg. Angle Legs Use ASCE 10 X-Brace Ly Rules | <ul style="list-style-type: none"> Calculate Redundant Bracing Forces Ignore Redundant Members in FEA SR Leg Bolts Resist Compression All Leg Panels Have Same Allowable Offset Girt At Foundation √ Consider Feed Line Torque Include Angle Block Shear Check Use TIA-222-H Bracing Resist. Exemption Use TIA-222-H Tension Splice Exemption <li style="text-align: center;">Poles √ Include Shear-Torsion Interaction Always Use Sub-Critical Flow Use Top Mounted Sockets Pole Without Linear Attachments Pole With Shroud Or No Appurtenances Outside and Inside Corner Radii Are Known |
|---|---|---|

Tapered Pole Section Geometry

Section	Elevation ft	Section Length ft	Splice Length ft	Number of Sides	Top Diameter in	Bottom Diameter in	Wall Thickness in	Bend Radius in	Pole Grade
L1	100.00-51.75	48.25	0.00	18	19.1500	26.3900	0.1875	0.7500	A572-65 (65 ksi)
L2	51.75-0.00	51.75		18	26.3900	34.0000	0.2500	1.0000	A572-65 (65 ksi)

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	Client	Smartlink Group, LLC	Designed by	DB

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Sector	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	Number Per Row	Start/End Position	Width or Diameter in	Perimeter in	Weight plf

Safety Line 3/8" (Tower Hardware)	C	No	Surface Ar (CaAa)	100.00 - 0.00	1	1	0.000 0.000	0.3750		0.22
Climbing Pegs (Tower Hardware)	C	No	Surface Ar (CaAa)	100.00 - 0.00	1	1	-0.050 0.050	0.7050		1.80

Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number		C _A A _A ft ² /ft	Weight plf

AT&T									
DC Power (3/4") (E)	C	No	No	Inside Pole	97.00 - 8.00	4	No Ice	0.00	0.88
Fiber (3/8") (E)	C	No	No	Inside Pole	97.00 - 8.00	2	No Ice	0.00	0.08

DC Power (3/4") (P)	C	No	No	Inside Pole	97.00 - 8.00	1	No Ice	0.00	0.88
Fiber (3/8") (P)	C	No	No	Inside Pole	97.00 - 8.00	1	No Ice	0.00	0.08

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C _A A _A Front ft ²	C _A A _A Side ft ²	Weight K
Tower Hardware									
Lightning Rod	C	From Leg	0.00 0.00 0.00	0.0000	102.00	No Ice	0.15	0.15	0.00
AT&T									
(2) TPA65R-BU8D_TIA (E)	A	From Leg	4.00 0.00 0.00	0.0000	98.00	No Ice	18.09	8.20	0.09
(2) TPA65R-BU8D_TIA (E)	B	From Leg	4.00 0.00 0.00	0.0000	98.00	No Ice	18.09	8.20	0.09
TPA65R-BU8D_TIA (E)	C	From Leg	4.00 0.00 0.00	0.0000	98.00	No Ice	18.09	8.20	0.09
TPA65R-BU8D_TIA	C	From Leg	8.00	0.0000	98.00	No Ice	18.09	8.20	0.09

tnxTower Morrison Hershfield 1455 Lincoln Parkway, Suite 500 Atlanta, GA 30346 Phone: (770) 379-8500 FAX: (770) 379-8501	Job SML-073R1 / 2401983	Page 3 of 5
	Project 50699-A / Highway 50 & Highway 120	Date 21:19:20 05/14/24
	Client Smartlink Group, LLC	Designed by DB

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft	C _{AAA} Front ft ²	C _{AAA} Side ft ²	Weight K
(E)			0.00					
DC6-48-60-18-8F (E)	B	From Leg	2.00	0.0000	98.00	No Ice 0.92	0.92	0.02
DC6-48-60-18-8F (E)	C	From Leg	2.00	0.0000	98.00	No Ice 0.92	0.92	0.02
6' x 2" Mount Pipe (E)	A	From Leg	4.00	0.0000	97.00	No Ice 1.43	1.43	0.02
6' x 2" Mount Pipe (E)	B	From Leg	4.00	0.0000	97.00	No Ice 1.43	1.43	0.02
6' x 2" Mount Pipe (E)	C	From Leg	4.00	0.0000	97.00	No Ice 1.43	1.43	0.02
(2) 10' x 2" Mount Pipe (E)	A	From Leg	4.00	0.0000	97.00	No Ice 2.38	2.38	0.04
(2) 10' x 2" Mount Pipe (E)	B	From Leg	4.00	0.0000	97.00	No Ice 2.38	2.38	0.04
12.5 ft Low Profile Platform Mount (E) ***	C	None		0.0000	97.00	No Ice 14.69	14.69	1.25
AIR6419 B77D_TIA (P)	A	From Leg	4.00	0.0000	98.00	No Ice 3.78	1.80	0.07
AIR6419 B77D_TIA (P)	B	From Leg	4.00	0.0000	98.00	No Ice 3.78	1.80	0.07
AIR6419 B77D_TIA (P)	C	From Leg	6.00	0.0000	98.00	No Ice 3.78	1.80	0.07
AIR6419 B77G_TIA (P)	A	From Leg	4.00	0.0000	98.00	No Ice 3.67	1.65	0.07
AIR6419 B77G_TIA (P)	B	From Leg	4.00	0.0000	98.00	No Ice 3.67	1.65	0.07
AIR6419 B77G_TIA (P)	C	From Leg	6.00	0.0000	98.00	No Ice 3.67	1.65	0.07
4490 B5/B12A (P)	A	From Leg	2.00	0.0000	98.00	No Ice 2.68	1.22	0.07
4490 B5/B12A (P)	B	From Leg	2.00	0.0000	98.00	No Ice 2.68	1.22	0.07
4490 B5/B12A (P)	C	From Leg	2.00	0.0000	98.00	No Ice 2.68	1.22	0.07
4478 B14 (P)	A	From Leg	2.00	0.0000	98.00	No Ice 2.02	1.25	0.06

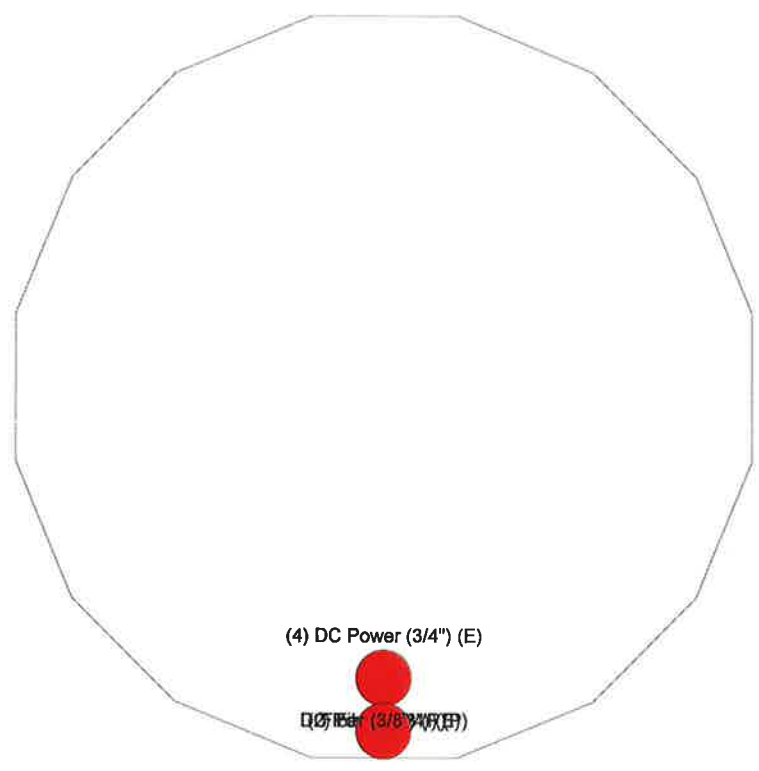
tnxTower Morrison Hershfield 1455 Lincoln Parkway, Suite 500 Atlanta, GA 30346 Phone: (770) 379-8500 FAX: (770) 379-8501	Job SML-073R1 / 2401983	Page 5 of 5
	Project 50699-A / Highway 50 & Highway 120	Date 21:19:20 05/14/24
	Client Smartlink Group, LLC	Designed by DB

Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
L1	100 - 51.75	Pole	TP26.39x19.15x0.1875	1	-7.35	957.85	46.1	Pass
L2	51.75 - 0	Pole	TP34x26.39x0.25	2	-13.01	1645.00	51.1	Pass
Summary								
Pole (L2)							51.1	Pass
RATING =							51.1	Pass



COAX SKETCH

Section @ 51'9"



(4) DC Power (3/4") (E)

(4) DC Power (3/4") (E)

 MORRISON HERSHFIELD  Stantec Consulting Engineers	Morrison Hershfield 1455 Lincoln Parkway, Suite 500 Atlanta, GA 30346 Phone: (770) 379-8500 FAX: (770) 379-8501		Job: SML-073R1 / 2401983 Project: 50699-A / Highway 50 & Highway 120	
	Client: Smartlink Group, LLC Code: TIA-222-H Path:	Drawn by: DB Date: 05/14/24	App'd: Scale: N Dwg No.	

ADDITIONAL CALCULATIONS

Monopole Flange Plate Connection

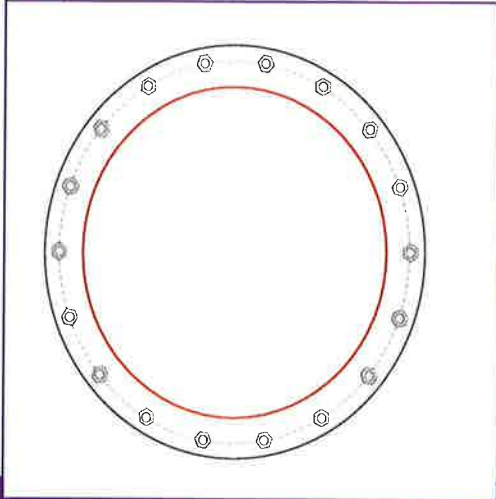
Elevation = 51.75 ft.

Site ID	50699-A
Site Name	Highway 50 & Highway 1
Project No.	SML-073R1 / 2401983
TIA-222 Revision	H

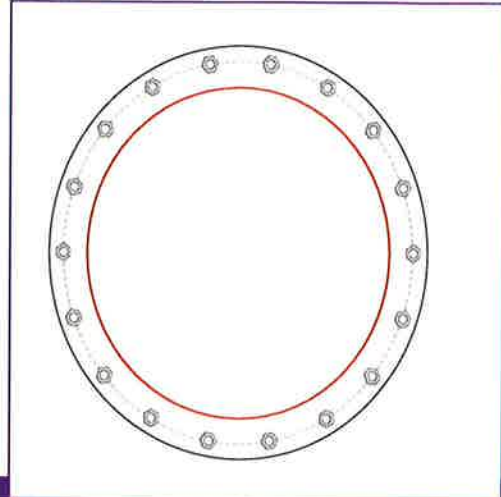
Applied Loads	
Moment (kip-ft)	263.44
Axial Force (kips)	7.35
Shear Force (kips)	6.65

*TIA-222-H Section 15.5 Applied

Top Plate - External



Bottom Plate - External



Connection Properties

Bolt Data

(18) 3/4" ϕ bolts (A325 X; Fy=92 ksi, Fu=120 ksi) on 30.5" BC

Top Plate Data

33" OD x 1.25" Plate (A36; Fy=36 ksi, Fu=58 ksi)

Top Stiffener Data

N/A

Top Pole Data

26.39" x 0.1875" 18-sided pole (A572-65; Fy=65 ksi, Fu=80 ksi)

Bottom Plate Data

33" OD x 1.25" Plate (A36; Fy=36 ksi, Fu=58 ksi)

Bottom Stiffener Data

N/A

Bottom Pole Data

26.39" x 0.25" 18-sided pole (A572-65; Fy=65 ksi, Fu=80 ksi)

Analysis Results

Bolt Capacity

Max Load (kips)	22.62
Allowable (kips)	30.06
Stress Rating:	71.7% Pass

Top Plate Capacity

Max Stress (ksi):	16.44	(Flexural)
Allowable Stress (ksi):	32.40	
Stress Rating:	48.3%	Pass
Tension Side Stress Rating:	26.3%	Pass

Bottom Plate Capacity

Max Stress (ksi):	16.44	(Flexural)
Allowable Stress (ksi):	32.40	
Stress Rating:	48.3%	Pass
Tension Side Stress Rating:	26.3%	Pass

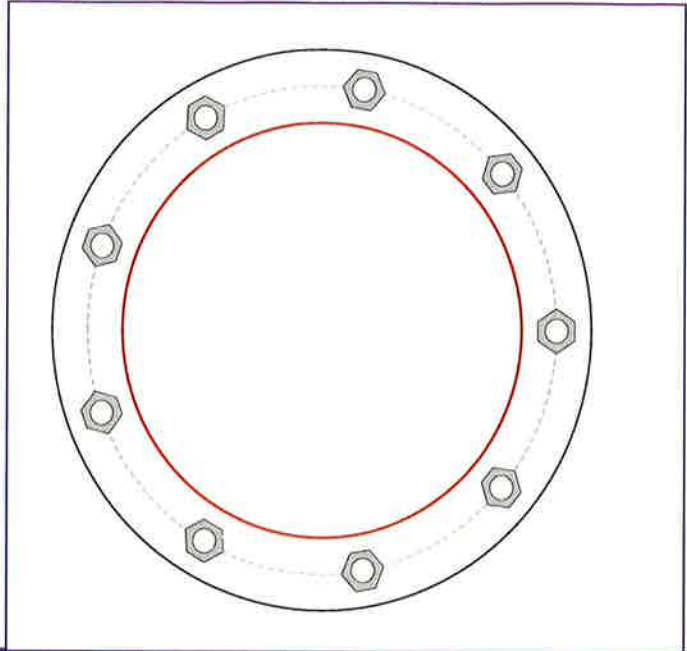
Monopole Base Plate Connection

Site Info	
Site ID:	50699-A
Site Name:	Highway 50 & Highway 1
Project No.:	SML-073R1 / 2401983

Analysis Considerations	
TIA-222 Revision:	H
Grout Considered:	No
l_{ar} (in):	0

Applied Loads	
Moment (kip-ft):	656.77
Axial Force (kips):	13.01
Shear Force (kips):	8.47

*TIA-222-H Section 15.5 Applied



Connection Properties	Analysis Results
-----------------------	------------------

Anchor Rod Data
(9) 2" ϕ bolts (F1554-55 N; $F_y=55$ ksi, $F_u=75$ ksi) on 40" BC
Base Plate Data
46" OD x 2" Plate (A572-50; $F_y=50$ ksi, $F_u=65$ ksi)
Stiffener Data
N/A
Pole Data
34" x 0.25" 18-sided pole (A572-65; $F_y=65$ ksi, $F_u=80$ ksi)

Anchor Rod Summary	<i>(units of kips, kip-in)</i>	
$P_{u,t} = 86.04$	$\phi P_{n,t} = 140.63$	Stress Rating
$V_u = 0.94$	$\phi V_n = 88.36$	58.3%
$M_u = n/a$	$\phi M_n = n/a$	Pass
Base Plate Summary		
Max Stress (ksi):	14.24	(Flexural)
Allowable Stress (ksi):	45	
Stress Rating:	30.1%	Pass

Drilled Pier Foundation

Site Info	
Site ID:	506895-A
Site Name	Highway 50 & Highway 2
Project No.	SMI-073R1 / 2401983

TIA-222 Revison: H
Tower Type: Monopole

Report File: X:\References\Telcom\US Tower Projects\Smartlink\SMI-073 - 10099191 - Highway 50 & Highway 120(SH)

Applied Loads		
	Comp.	Uplift
Moment (kip-ft)	656.77	
Axial Force (kips)	13.02	
Shear Force (kips)	8.46	

Material Properties	
Concrete Strength, f _c :	4 ksi
Rebar Strength, F _y :	60 ksi
Tie Yield Strength, F _y :	60 ksi

Pier Design Data	
Depth	27 ft
Ext. Above Grade	0.5 ft
Pier Section 1	
From 0.5 above grade to 27' below grade	
Pier Diameter	5 ft
Rebar Quantity	18
Rebar Size	9
Clear Cover to Ties	4 in
Tie Size	4
Tie Spacing	in

Rebar & Pier Options
Embedded Tie Inputs

Belled Pier Inputs

Analysis Results		
Soil Lateral Check	Compression	Uplift
D ₅₀ (ft from TOC)	7.49	-
Soil Safety Factor	11.32	-
Max Moment (kip-ft)	705.14	-
Rating*	11.2%	-
Soil Vertical Check	Compression	Uplift
Skin Friction (kips)	989.60	-
End Bearing (kips)	883.57	-
Weight of Concrete (kips)	78.07	-
Total Capacity (kips)	1873.17	-
Axial (kips)	91.09	-
Rating*	4.6%	-
Reinforced Concrete Flexure	Compression	Uplift
Critical Depth (ft from TOC)	6.86	-
Critical Moment (kip-ft)	704.68	-
Critical Moment Capacity	2034.94	-
Rating*	33.0%	-
Reinforced Concrete Shear	Compression	Uplift
Critical Depth (ft from TOC)	19.32	-
Critical Shear (kip)	76.24	-
Critical Shear Capacity	308.62	-
Rating*	23.5%	-

Structural Foundation Rating*	33.0%
Soil Interaction Rating*	11.2%

*Rating per TIA-222-H Section 15.5

Soil Profile

of Layers: 5

Layer	Top (ft)	Bottom (ft)	Thickness (ft)	γ _{soil} (pcf)	γ _{concrete} (pcf)	Cohesion (ksf)	Angle of Friction (degrees)	Calculated Ultimate Skin Friction Comp (ksf)	Calculated Ultimate Skin Friction Uplift (ksf)	Ultimate Skin Friction Comp Override (ksf)	Ultimate Skin Friction Uplift Override (ksf)	Ult. Gross Bearing Capacity (ksf)	SPT Blow Count	Soil Type
1	0	3.33	3.33	120	150	0	0	0.000	0.000	0.00	0.00			Cohesionless
2	3.33	8	4.67	120	150	0.66	0	0.363	0.363	0.00	0.00			Cohesive
3	8	14	6	131	150	0	32	0.000	0.000	3.00	3.00			Cohesionless
4	14	18	4	69	87.6	0	32	0.000	0.000	3.00	3.00			Cohesionless
5	18	27	9	33	87.6	0	32	0.000	0.000	6.00	6.00	60		Cohesionless

Check Limitation	
Apply TIA-222-H Section 15.5:	<input checked="" type="checkbox"/>
N/A	<input type="checkbox"/>
Design Options	
Input Effective Depths (else Actual):	<input type="checkbox"/>
Consider non-tapered moment capacity:	<input type="checkbox"/>
Check Shear along Depth of Pier:	<input checked="" type="checkbox"/>
Utilize Shear-Friction Methodology:	<input type="checkbox"/>
Override Critical Depth:	<input type="checkbox"/>

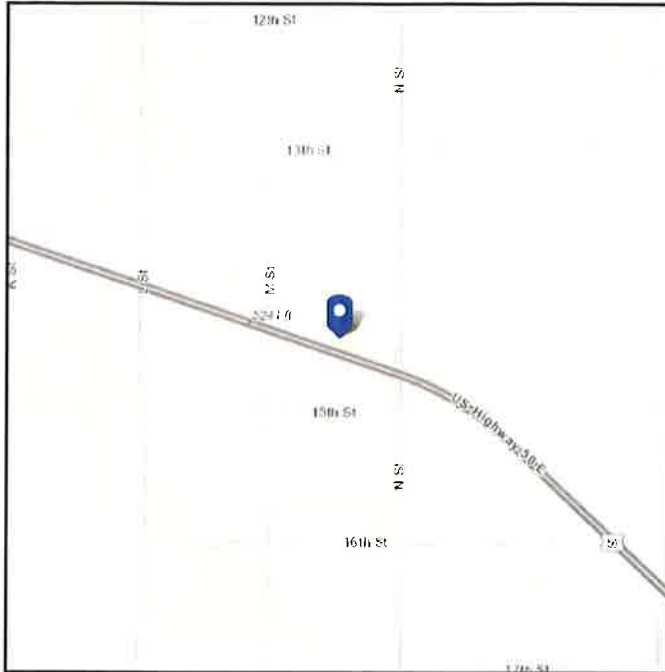
[Go to Soil Calculations](#)

ASCE Hazards Report

Address:
No Address at This Location

Standard: ASCE/SEI 7-16
Risk Category: II
Soil Class: D - Default (see Section 11.4.3)

Latitude: 38.4051
Longitude: -104.9889
Elevation: 5241.863989173369 ft (NAVD 88)



Wind

Results:

Wind Speed	106 Vmph
10-year MRI	77 Vmph
25-year MRI	83 Vmph
50-year MRI	88 Vmph
100-year MRI	93 Vmph

Data Source: ASCE/SEI 7-16, Fig. 26.5-1B and Figs. CC.2-1–CC.2-4, and Section 26.5.2
Date Accessed: Thu May 09 2024

Value provided is 3-second gust wind speeds at 33 ft above ground for Exposure C Category, based on linear interpolation between contours. Wind speeds are interpolated in accordance with the 7-16 Standard. Wind speeds correspond to approximately a 7% probability of exceedance in 50 years (annual exceedance probability = 0.00143, MRI = 700 years).

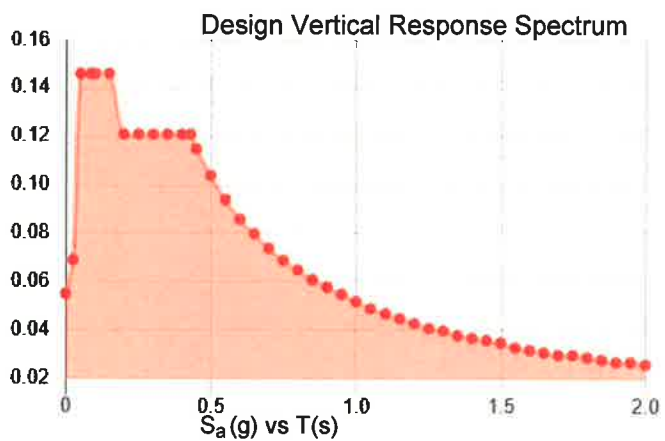
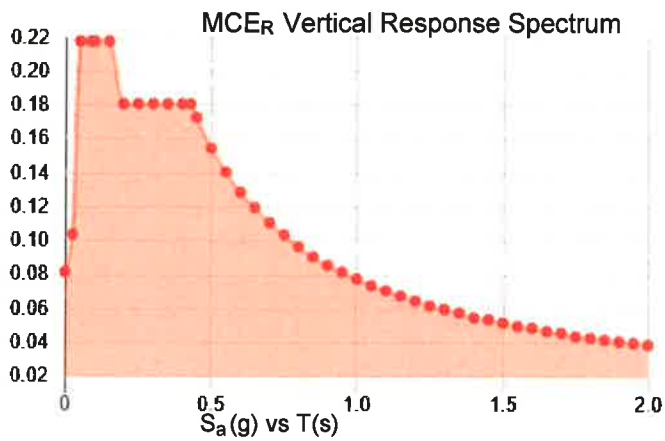
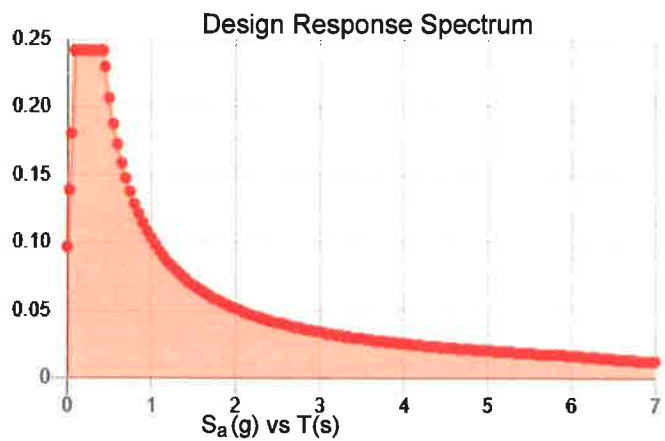
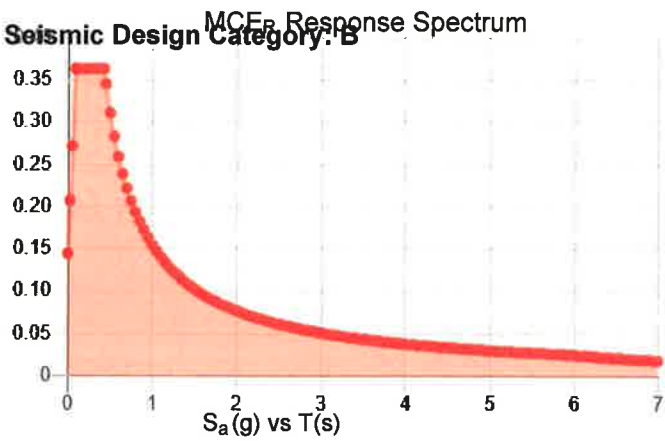
Site is not in a hurricane-prone region as defined in ASCE/SEI 7-16 Section 26.2.

Seismic

Site Soil Class: D - Default (see Section 11.4.3)

Results:

S_s :	0.227	S_{D1} :	0.104
S_1 :	0.065	T_L :	6
F_a :	1.6	PGA :	0.124
F_v :	2.4	PGA _M :	0.193
S_{MS} :	0.363	F_{PGA} :	1.552
S_{M1} :	0.155	I_e :	1
S_{DS} :	0.242	C_v :	0.753



Data Accessed: Thu May 09 2024

Date Source:

USGS Seismic Design Maps based on ASCE/SEI 7-16 and ASCE/SEI 7-16 Table 1.5-2. Additional data for site-specific ground motion procedures in accordance with ASCE/SEI 7-16 Ch. 21 are available from USGS.

Results:

Ice Thickness: 0.25 in.
Concurrent Temperature: 5 F
Gust Speed 50 mph

Data Source: Standard ASCE/SEI 7-16, Figs. 10-2 through 10-8

Date Accessed: Thu May 09 2024

Ice thicknesses on structures in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

In the mountain west, ice thicknesses may exceed the mapped values in the foothills and passes. However, at elevations above 5,000 ft, freezing rain is unlikely.

Values provided are equivalent radial ice thicknesses due to freezing rain with concurrent 3-second gust speeds, for a 500-year mean recurrence interval, and temperatures concurrent with ice thicknesses due to freezing rain. Thicknesses for ice accretions caused by other sources shall be obtained from local meteorological studies. Ice thicknesses in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

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