



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

www.ct.gov/csc

VIA ELECTRONIC MAIL

November 20, 2019

Kristina Cottone
Smartlink, LLC
85 Rangeway Road, Building 3, Suite 102
North Billerica, MA 01862

RE: **EM-AT&T-005-191108** – AT&T Mobility, LLC notice of intent to modify an existing telecommunications facility located at 44 Gavitt Road, Barkhamsted, Connecticut.

Dear Ms. Cottone:

The Connecticut Siting Council (Council) is in receipt of your correspondence of November 15, 2019 submitted in response to the Council's November 13, 2019 notification of an incomplete request for exempt modification with regard to the above-referenced matter.

The submission renders the request for exempt modification complete and the Council will process the request in accordance with the Federal Communications Commission 60-day timeframe.

Thank you for your attention and cooperation.

Sincerely,

Melanie A. Bachman
Executive Director

MAB/IN/emr



Robidoux, Evan

From: Kristina Cottone <kristina.cottone@smartlinkllc.com>
Sent: Friday, November 15, 2019 11:27 AM
To: Robidoux, Evan
Cc: CSC-DL Siting Council
Subject: RE: Council Incomplete Letter for EM-AT&T-005-191108 (44 Gavitt Road, Barkhamsted)
Attachments: 10133911_DE125_191015_CTL01280.pdf; 10133911_MOD DESIGN_191015_CTL01280.pdf

Hi Evan,

See attached Mount analysis needed for the CSC submission.

When did the CSC start requiring these submissions to have the mount analysis?

Thank you,



Kristina Cottone | Real Estate Specialist
Smartlink

85 Rangeway Road – Building 3 Suite 102
North Billerica MA, 01862
(m) 978.551.8627
Kristina.cottone@Smartlinkllc.com
smartlinkllc.com

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From: Robidoux, Evan <Evan.Robidoux@ct.gov>
Sent: Friday, November 15, 2019 8:55 AM
To: Kristina Cottone <kristina.cottone@smartlinkllc.com>
Cc: CSC-DL Siting Council <Siting.Council@ct.gov>
Subject: Council Incomplete Letter for EM-AT&T-005-191108 (44 Gavitt Road, Barkhamsted)

Warning: This message was sent from outside the company and could contain attachments. Please do not open unless you recognize the source of this email and know the content is safe.

Please see the attached correspondence.

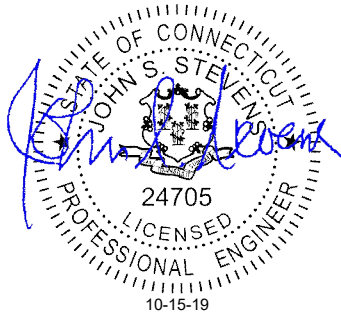
Evan Robidoux
Clerk Typist
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Post Modification Mount Analysis Report

October 15, 2019

Site Name	Barkhamsted Gavitt Rd
Site Number	CTL01280
FA Number	10133911
PACE Number	MRCTB041411 / MRCTB041603 / MRCTB041584 MRCTB041555 / MRCTB041750
PTN Number	2051A0Q8T0 / 2051A0QAG8 / 2051A0Q7Y8 2051A0QA9L / 2051A0Q90W
Infinigy Job Number	1106-A0001-B
Client	Smartlink
Carrier	AT&T Mobility
Site Location	44 Gavitt Road Barkhamsted, CT 6063 Litchfield County 41.94611 N NAD83 72.91128 W NAD83
Mount Centerline EL.	167.0 ft
Mount Type	Platform
Structural Usage Ratio	54.3%
Overall Result	Pass
Notes	See appended documents for mount modifications.

Upon reviewing the results of this analysis, it is our opinion that the post modification mount meets the specified TIA and ASCE code requirements. The mounts and connections for the proposed carrier are therefore deemed adequate to support the final loading configuration as listed in this report.



Thomas Marr
Project Engineer I

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Introduction

Infinigy Engineering has been requested to perform a post modification mount analysis on the existing AT&T Mobility mounts. All referenced supporting documents have been obtained from the client and are assumed to be accurate and applicable to this site. The mount was analyzed using RISA-3D Version 17.0.4 analysis software.

Supporting Documentation

RFDS	AT&T RFDS ID: 3174704, dated September 8, 2019
CD	Infinigy Engineering Project #499-006, dated November 27, 2019
Site Photos	Smartlink Provided, dated July 10, 2019
Mount Spec Sheet	Commscope part #MT-196-14, dated March 13, 2008
Previous MA	Infinigy Engineering, PLLC. Job #1106-A0001-B, dated October 1, 2019

Analysis Code Requirements

Wind Speed	118 mph (3-Second Gust)
Wind Speed w/ Ice	40 mph (3 Second Gust) w/ 1.7" Ice
TIA Revision	ANSI/TIA-222-H
Adopted IBC	2015 IBC / 2018 Connecticut State Building Code
Structure Class	II
Exposure Category	B
Topographic Category	1
Spectral Response	$S_s = 0.177 g, S_1 = 0.065 g$
Site Class	D - Stiff Soil
HMSL	1132 ft.

Conclusion

Upon reviewing the results of this analysis, it is our opinion that the post modification mount meets the specified TIA and ASCE code requirements. The mount and connections for the proposed carrier are therefore deemed adequate to support the final loading configuration as listed in this report.

If you have any questions, require additional information, or actual conditions differ from those as detailed in this report please contact me via the information below:

Thomas Marr
 Project Engineer I | **INFINIGY**
 1033 Watervliet Shaker Road, Albany, NY 12205
 (O) (518) 690-0790
 Structural@infinigy.com | www.infinigy.com
 10133911_Barkhamsted Gavitt Rd

Final Configuration Loading

Mount CL (ft)	Vert. O/S (ft)	Rad. HT (ft)	Horiz. O/S (ft) ⁽¹⁾	Qty	Appurtenance ⁽²⁾	Carrier
167.0	0.0	167.0	1.0	3	POWERWAVE 7770.00	AT&T
			5.5	2	CCI HPA-65R-BU6AA	
			5.5	1	COMMSCOPE SBNHH-1D65A	
			11.5	2	CCI DMP65R-BU6DA	
			11.5	1	CCI DMP65R-BU4DA	
			5.5	3	KAELUS DBCT108F1V92-1	
			1.0	3	POWERWAVE TT08-19DB111-001	
			11.5	3	ERICSSON RADIO 4449 B5/B12	
			5.5	3	ERICSSON RADIO 8843 B2/B66A	
			--	2	RAYCAP DC6-48-60-18-8F	

(1) Horizontal Offset is defined as the distance from the left most edge of the mount face horizontal when viewed facing the tower

(2) Raycap assumed to be installed directly on tower

Structure Usages

Horizontals	18.4%	Pass
Standoffs	41.2%	Pass
Mount Pipes	54.3%	Pass
Handrails	21.6%	Pass
Bracing	43.7%	Pass
Bolts	27.0%	Pass
Max Usage	54.3%	Pass

Mount Connection Usages

Reaction Data	Design Capacity*	Analysis Reactions	Results
Max Tension (lbs.)	10170.0	2744.66	27.0%
Max Shear (lbs.)	6213.0	1364.31	22.0%
Unity Check	-	-	12.1%

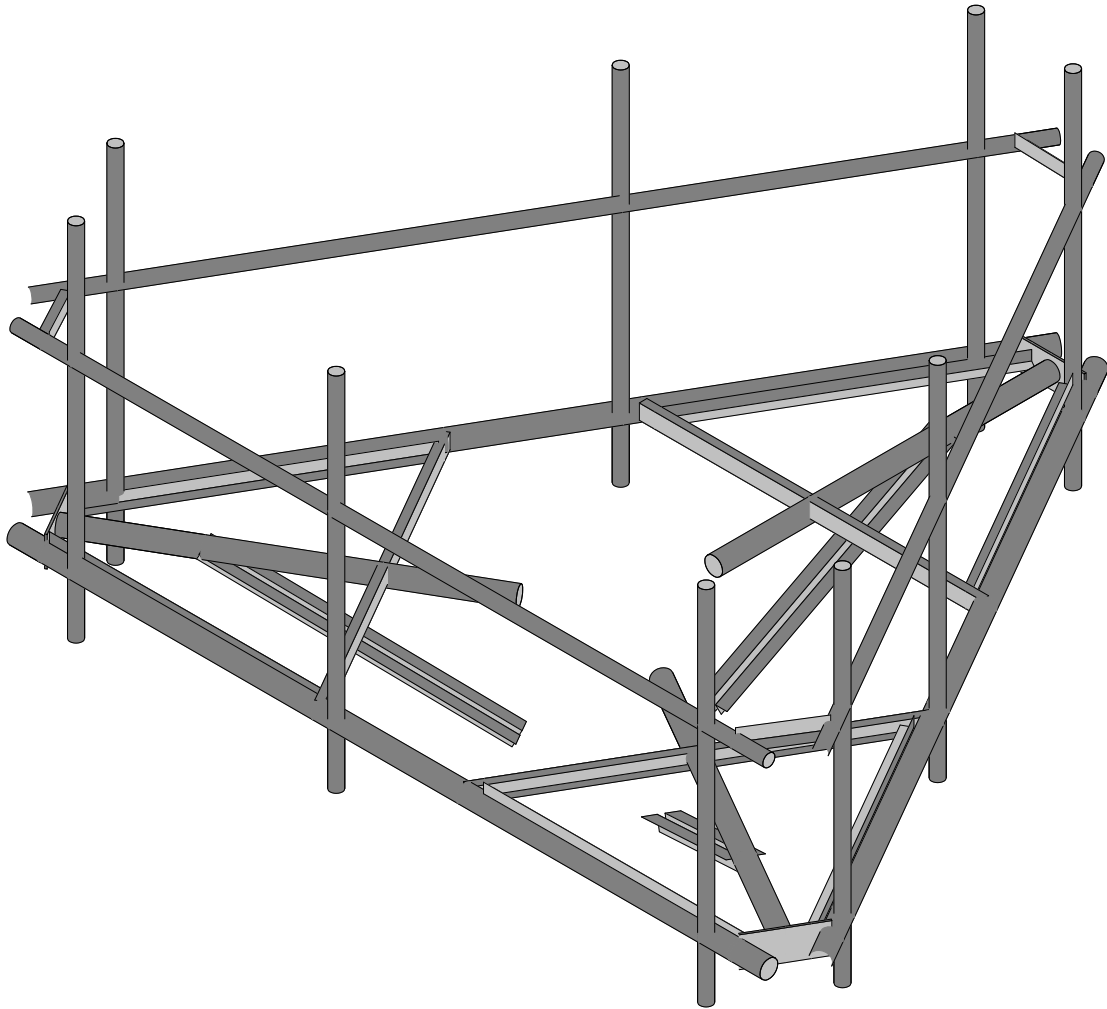
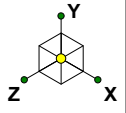
*Assumed (1) 5/8" A307 Bolts, total of (4) per Connection. Contractor to field verify prior to proposed installation.

Assumptions and Limitations

Our structural calculations are completed assuming all information provided to Infinigy Engineering is accurate and applicable to this site. For the purposes of calculations, we assume an overall structure condition of “like new” and all members and connections to be free of corrosion and/or structural defects. The structure owner and/or contractor shall verify the structure’s condition prior to installation of any proposed equipment. If actual conditions differ from those described in this report Infinigy Engineering should be notified immediately to complete a revised evaluation.

Our evaluation is completed using standard TIA, AISC, ACI, and ASCE methods and procedures. Our structural results are proprietary and should not be used by others as their own. Infinigy Engineering is not responsible for decisions made by others that are or are not based on our supplied assumptions and conclusions.

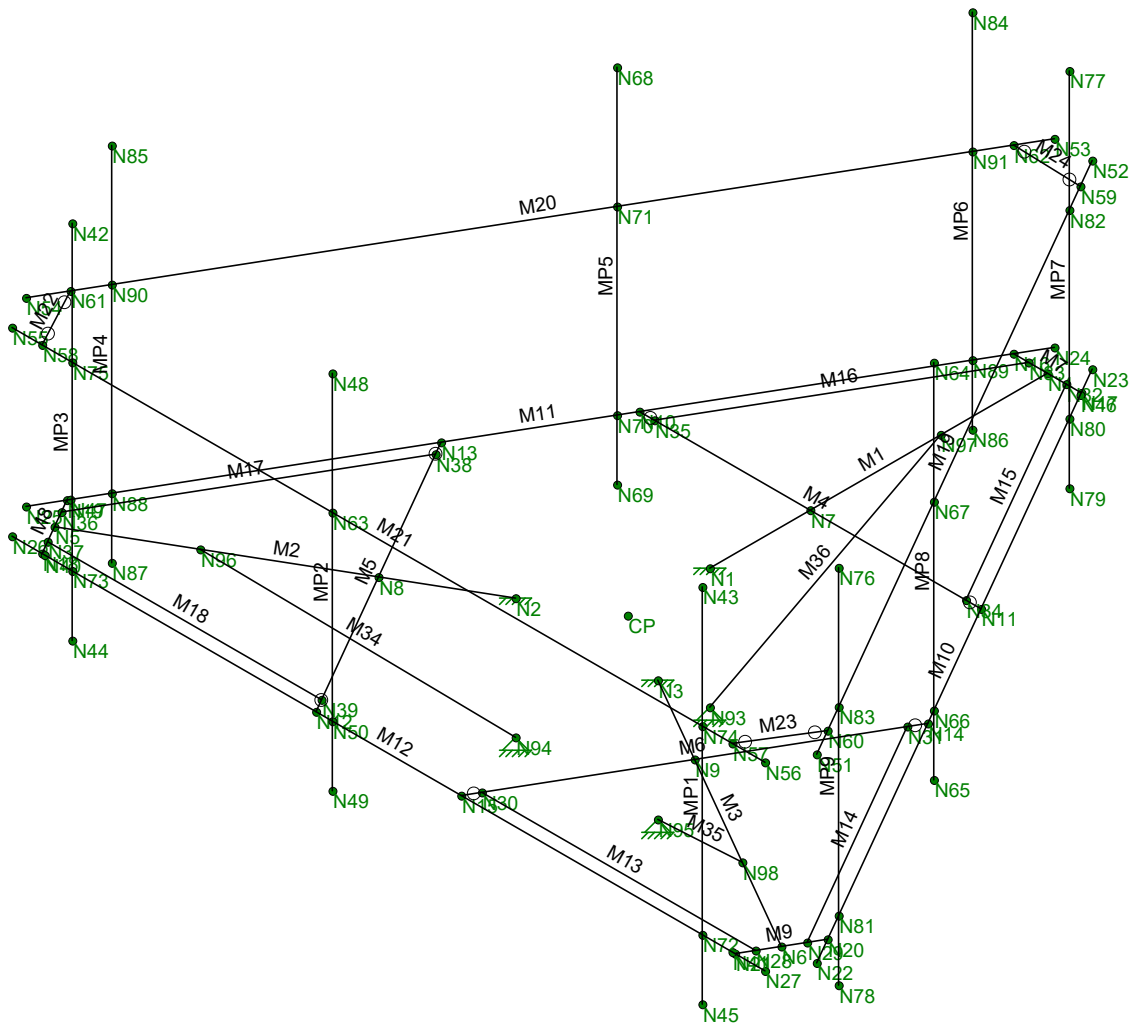
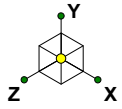
This report is an evaluation of the proposed carriers mount structure only and does not reflect adequacy of the existing tower, other mounts, or coax mounting attachments. These elements are assumed to be adequate for the purposes of this analysis and are assumed to have been installed per their manufacturer requirements.



Infinigy Engineering PLLC
TM
1106-A0001-B

CTL01280

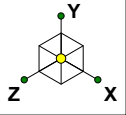
Final Configuration
Oct 10, 2019 at 9:38 AM
CTL01280_MOD_loaded.r3d



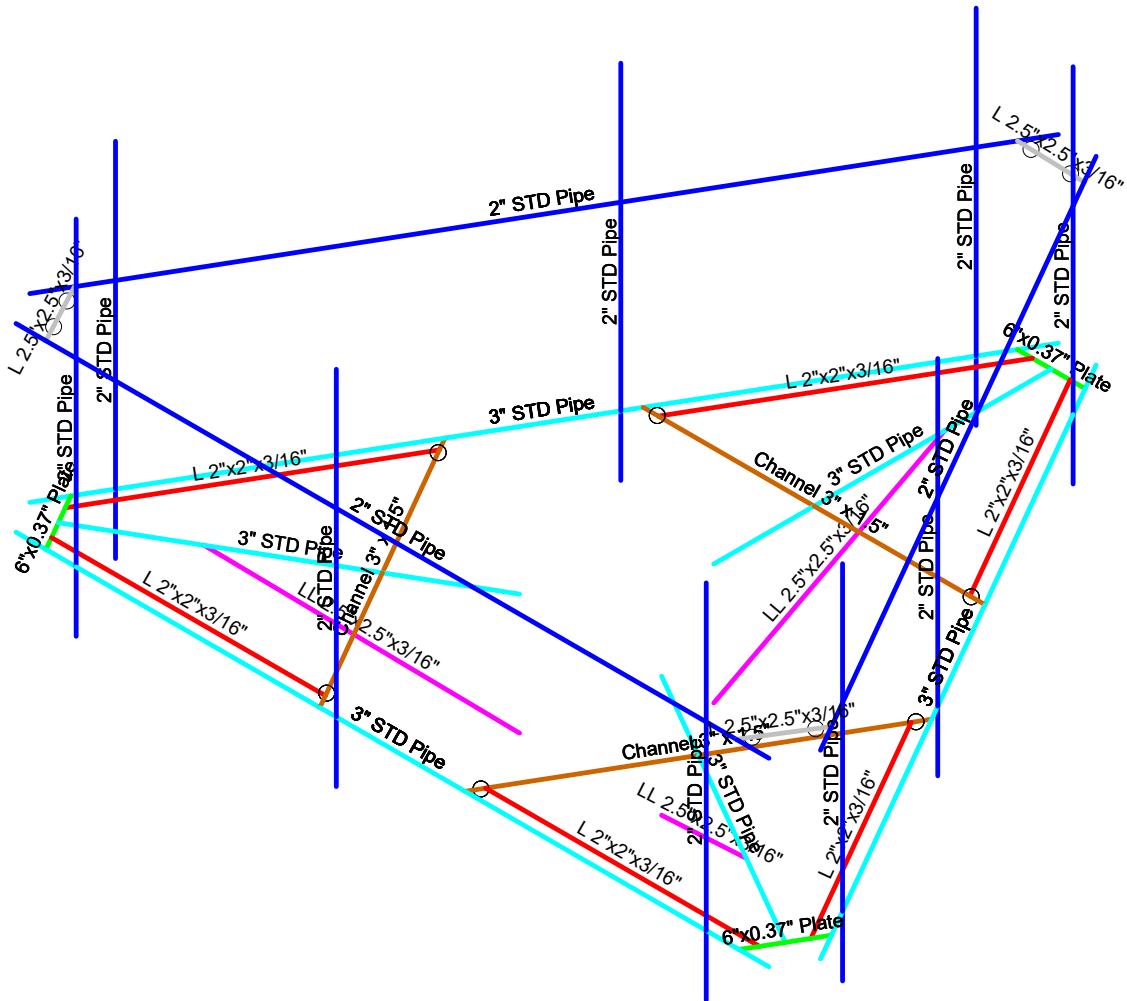
Infinigy Engineering PLLC
TM
1106-A0001-B

CTL01280

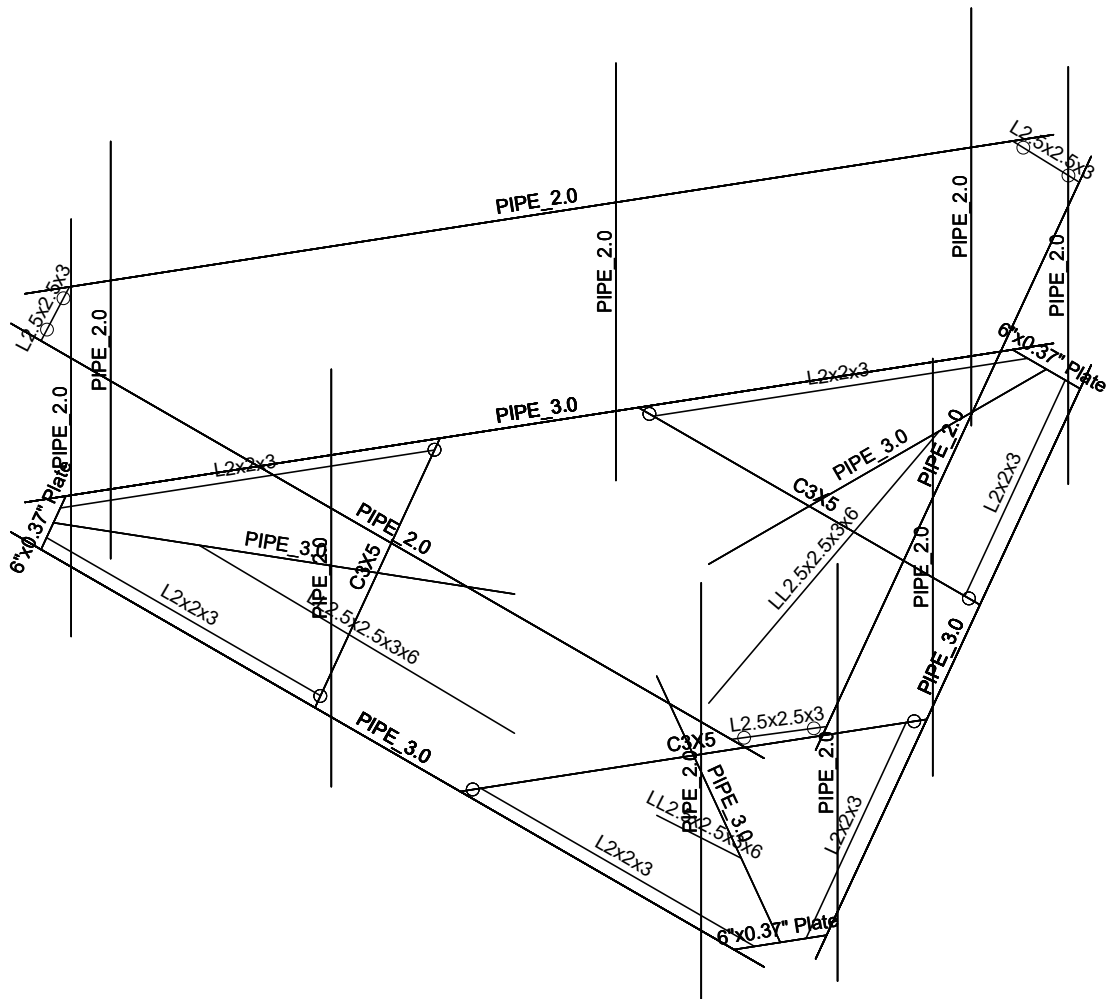
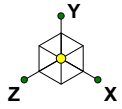
Wire Frame
Oct 10, 2019 at 9:38 AM
CTL01280_MOD_loaded.r3d



Section Sets	
█	2" STD Pipe
█	6"x0.37" Plate
█	L 2"x2"x3/16"
█	L 2.5"x2.5"x3/16"
█	LL 2.5"x2.5"x3/16"
█	3" STD Pipe
█	Channel 3" x 1.5"



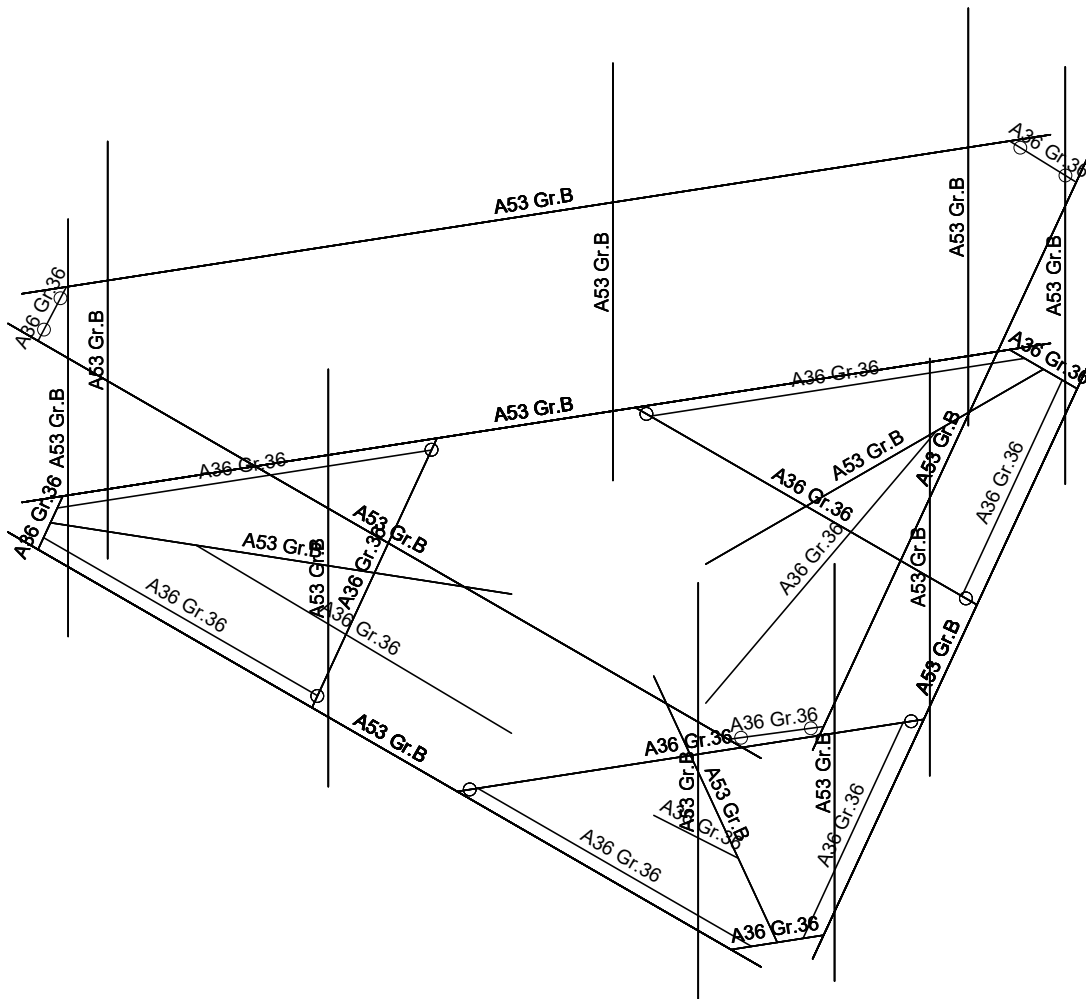
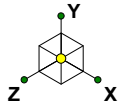
Infinigy Engineering PLLC	CTL01280	Section Sets
TM		Oct 10, 2019 at 9:39 AM
1106-A0001-B		CTL01280_MOD_loaded.r3d



Infinigy Engineering PLLC
 TM
 1106-A0001-B

CTL01280

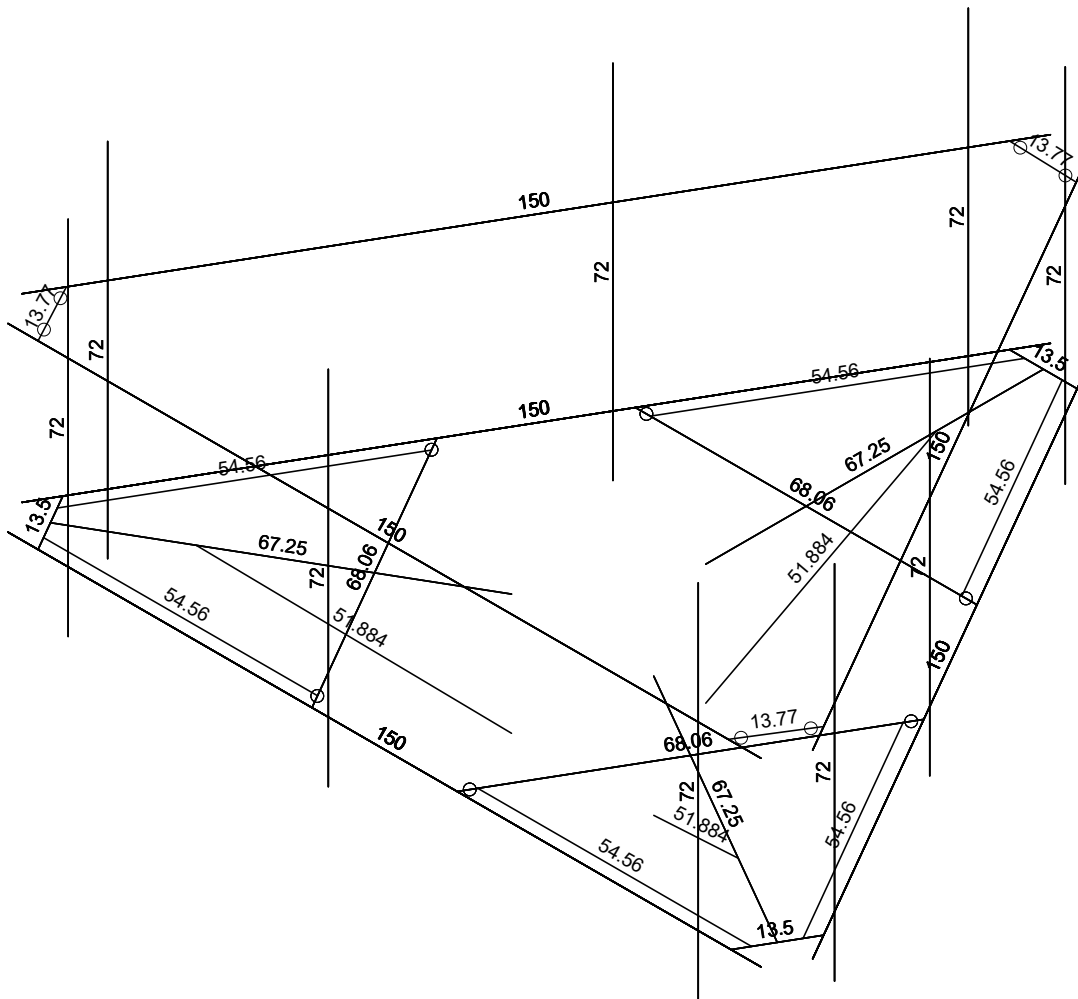
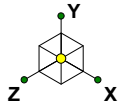
Member Shape
 Oct 10, 2019 at 9:39 AM
 CTL01280_MOD_loaded.r3d



Infinigy Engineering PLLC
 TM
 1106-A0001-B

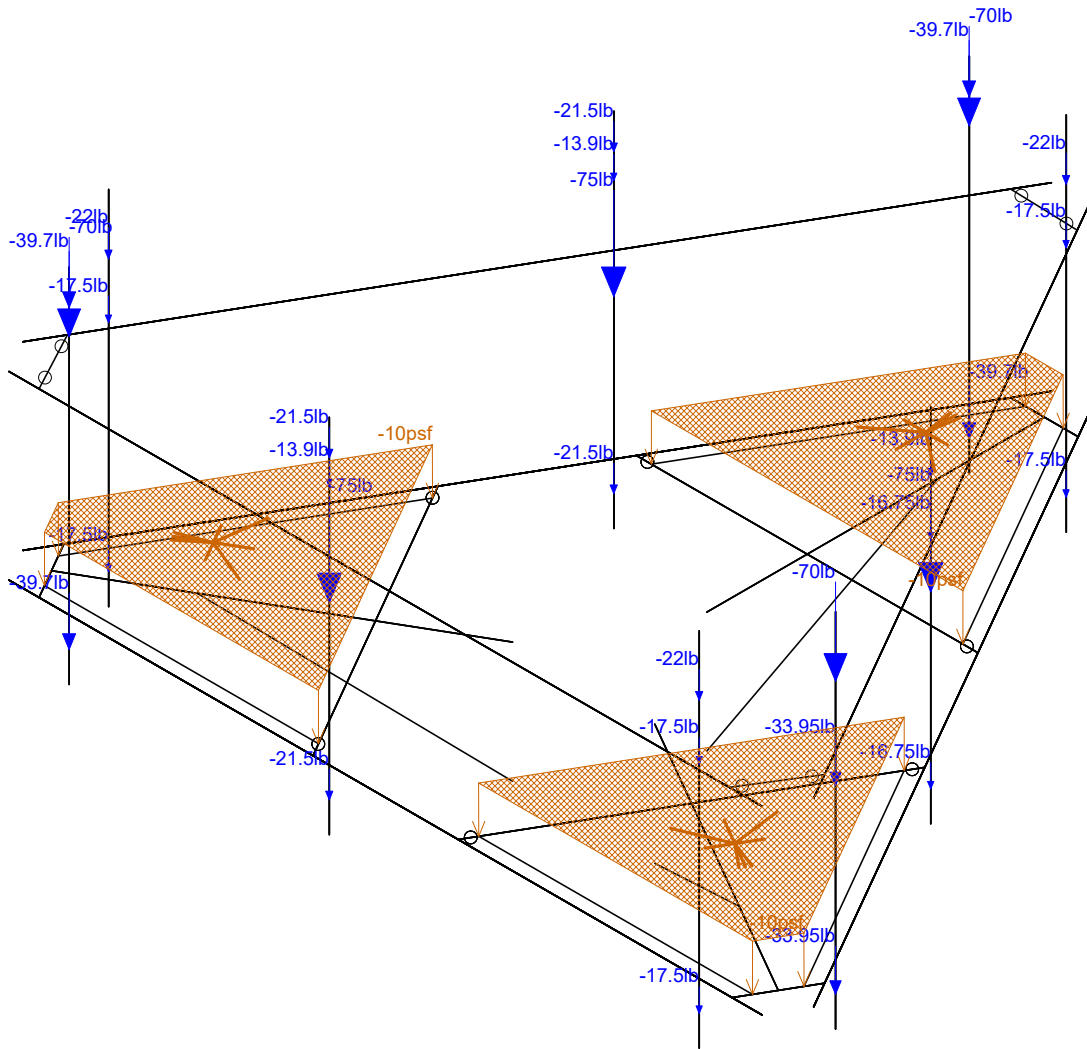
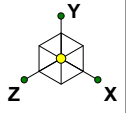
CTL01280

Material Sets
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 CTL01280_MOD_loaded.r3d



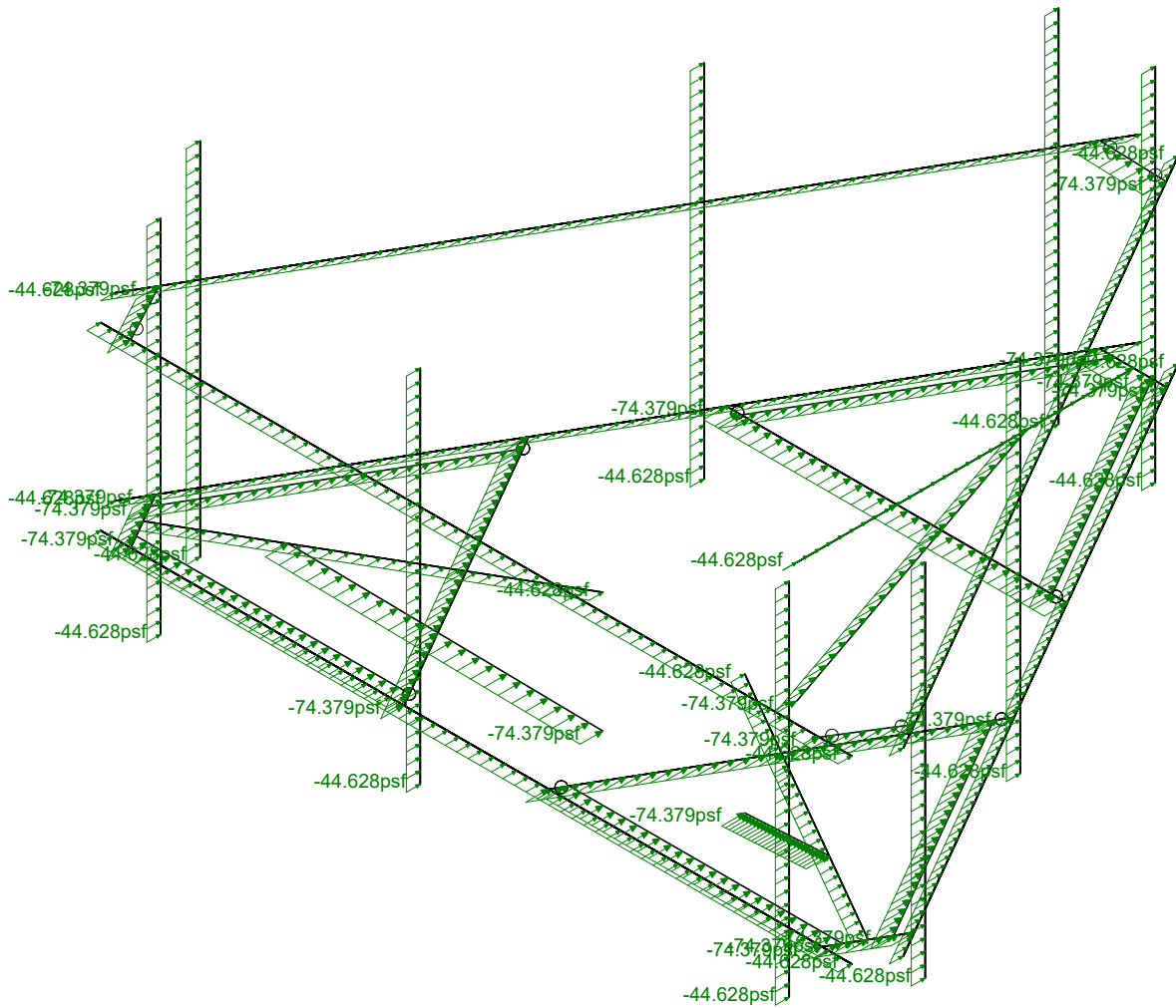
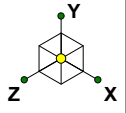
Member Length (in) Displayed

Infinigy Engineering PLLC	CTL01280	Member Length
TM		Oct 10, 2019 at 9:39 AM
1106-A0001-B		CTL01280_MOD_loaded.r3d



Loads: BLC 1, Self Weight

Infinigy Engineering PLLC	CTL01280	Self Weight
TM		Oct 10, 2019 at 9:40 AM
1106-A0001-B		CTL01280_MOD_loaded.r3d



Loads: BLC 14, Distr. Wind Load Z

Infinigy Engineering PLLC

TM

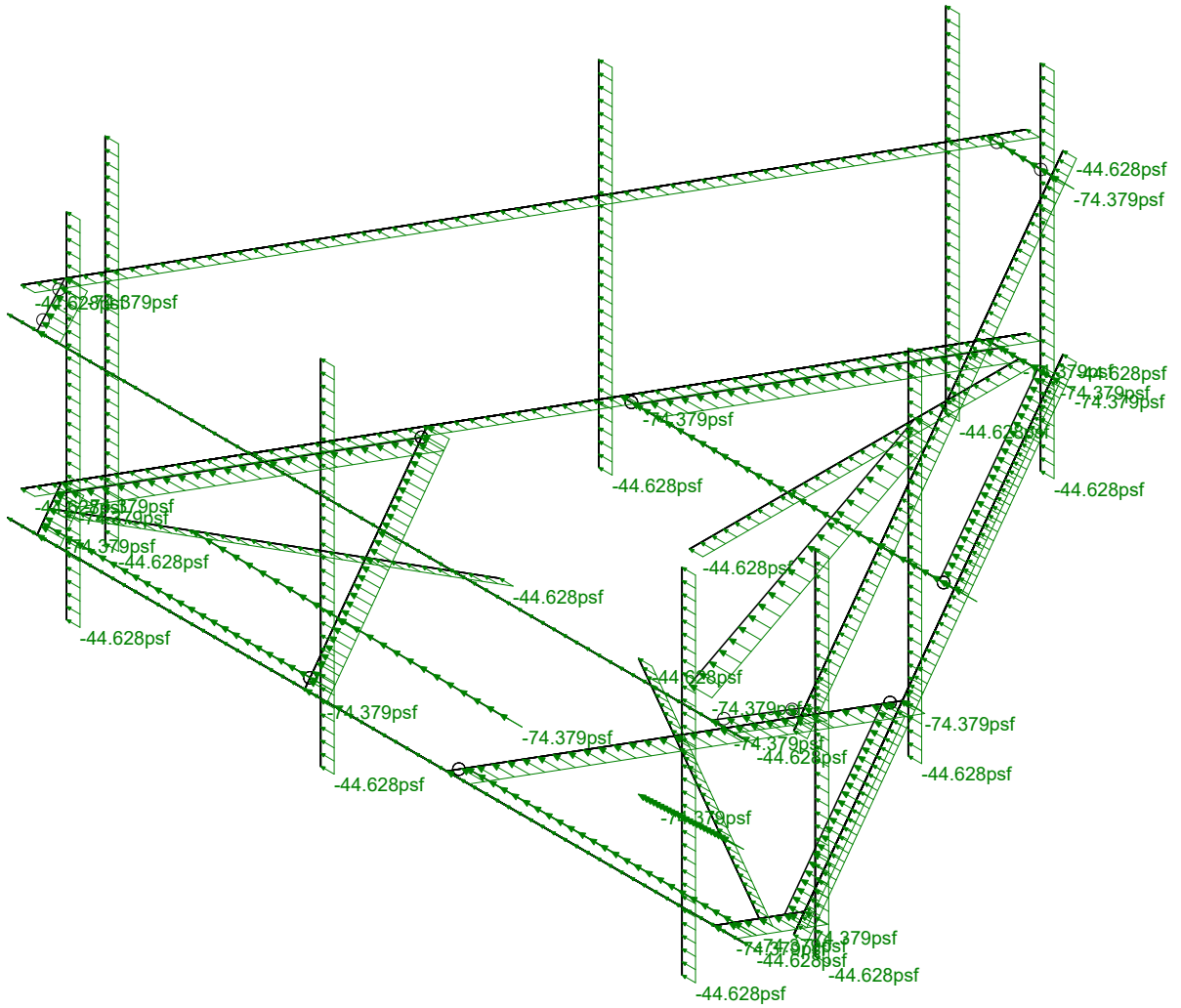
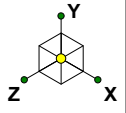
1106-A0001-B

CTL01280

Wind Load AZI 000

Oct 10, 2019 at 9:40 AM

CTL01280_MOD_loaded.r3d



Loads: BLC 15, Distr. Wind Load X

Infinigy Engineering PLLC

TM

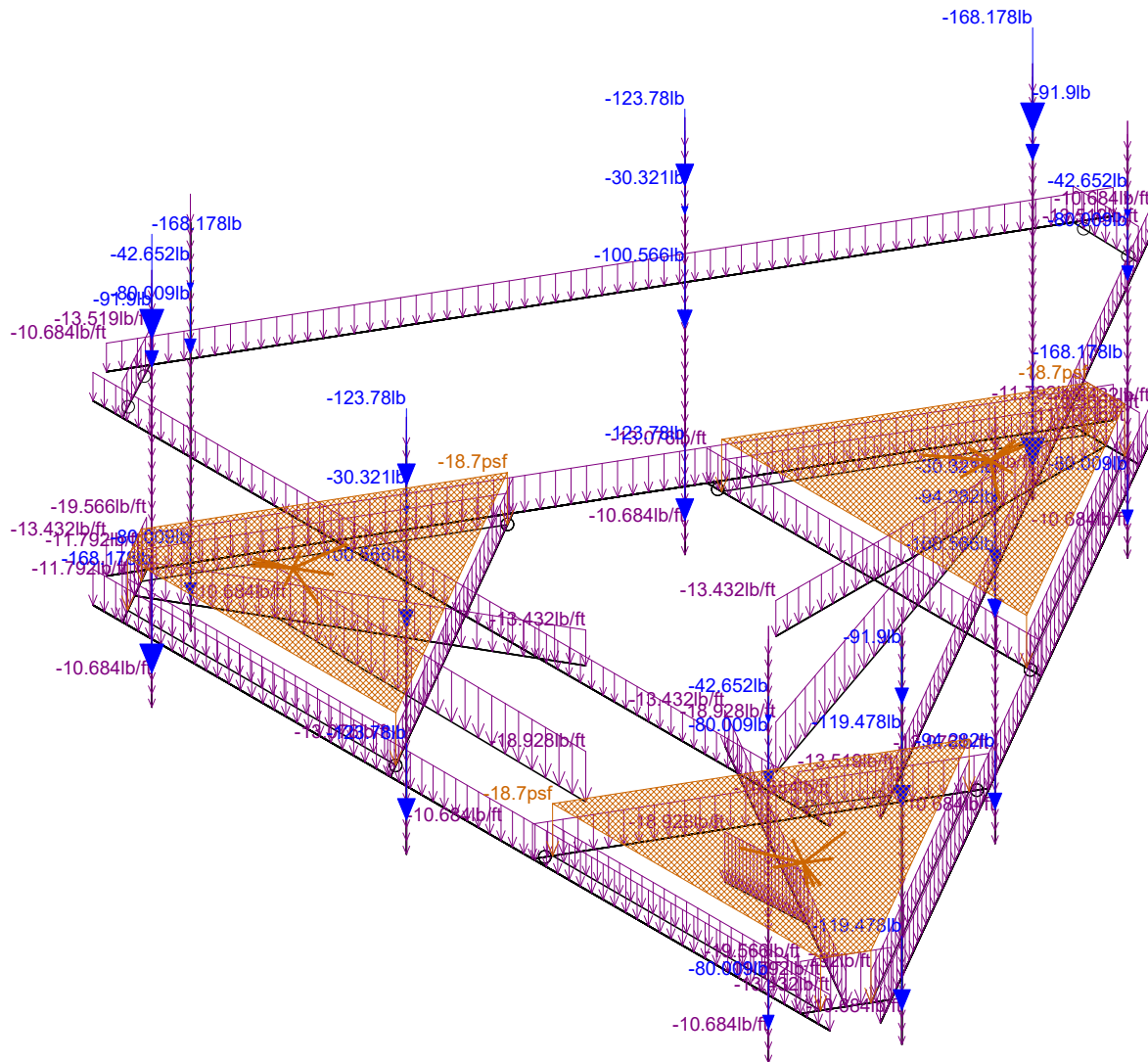
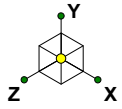
1106-A0001-B

CTL01280

Wind Load AZI 090

Oct 10, 2019 at 9:40 AM

CTL01280_MOD_loaded.r3d

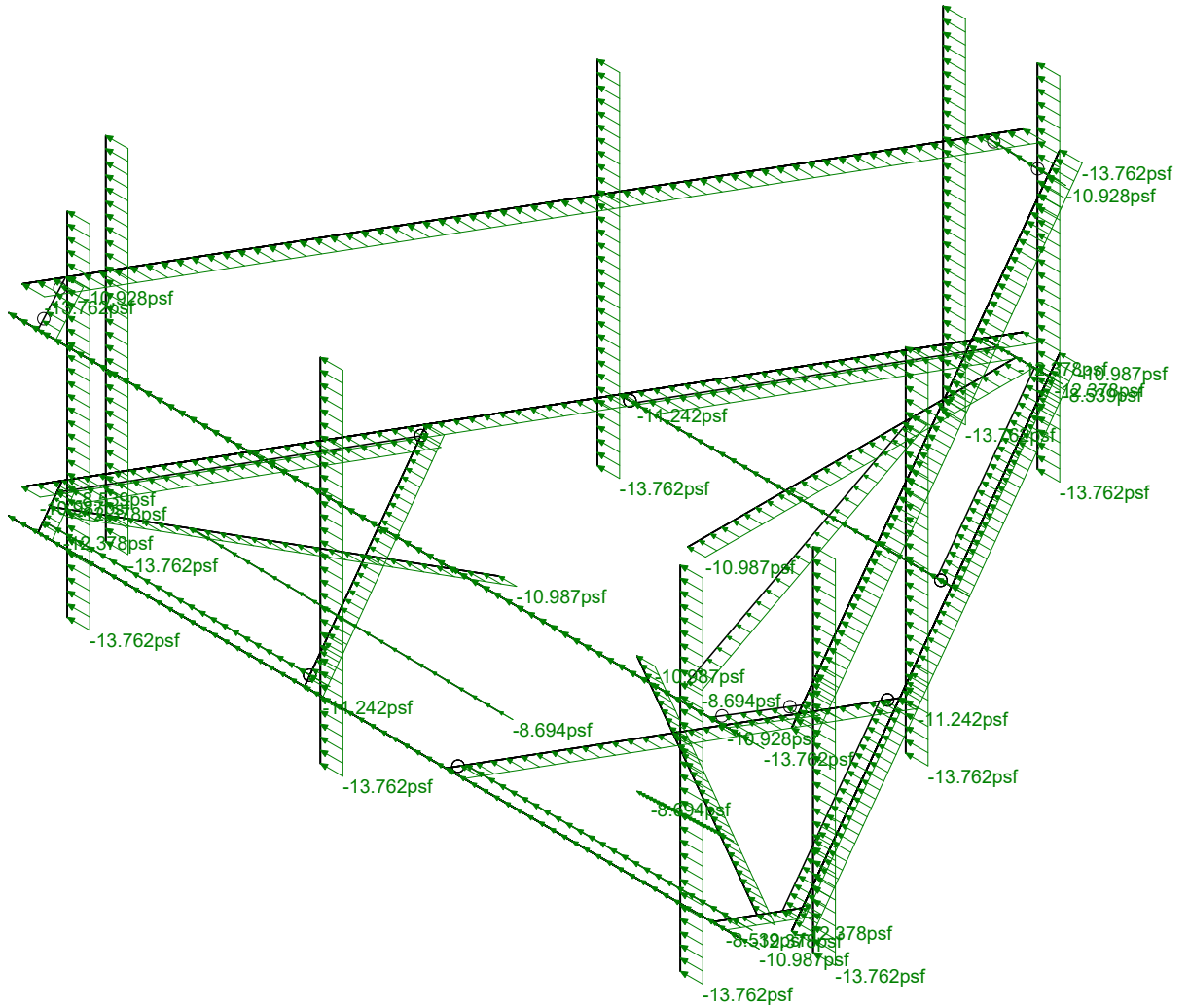
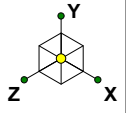


Loads: BLC 16, Ice Weight

Infinigy Engineering PLLC
TM
1106-A0001-B

CTL01280

Ice Weight
Oct 10, 2019 at 9:40 AM
CTL01280_MOD_loaded.r3d



Loads: BLC 30, Distr. Ice Wind Load X

Infinigy Engineering PLLC

TM

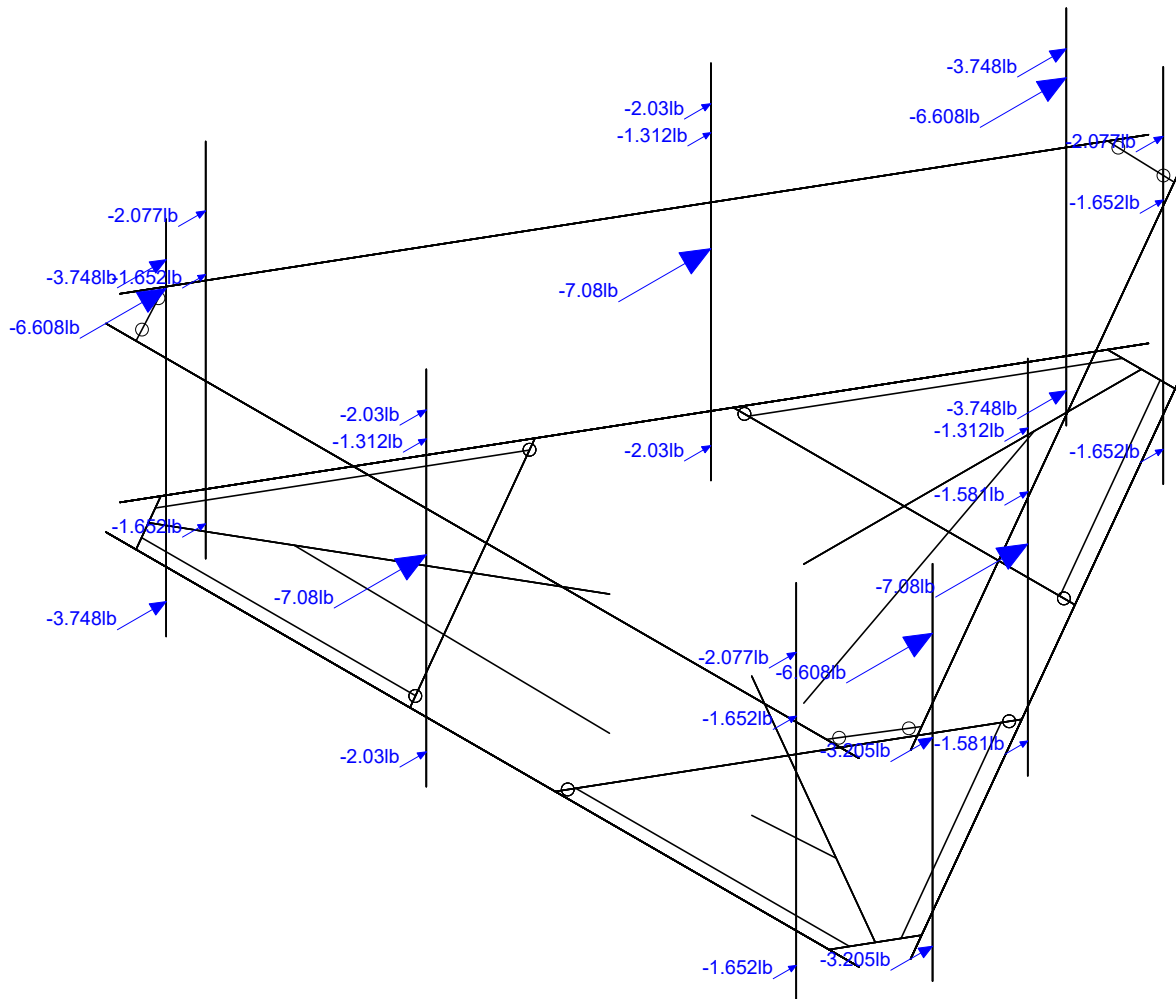
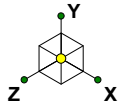
1106-A0001-B

CTL01280

Wind + Ice Load AZI 090

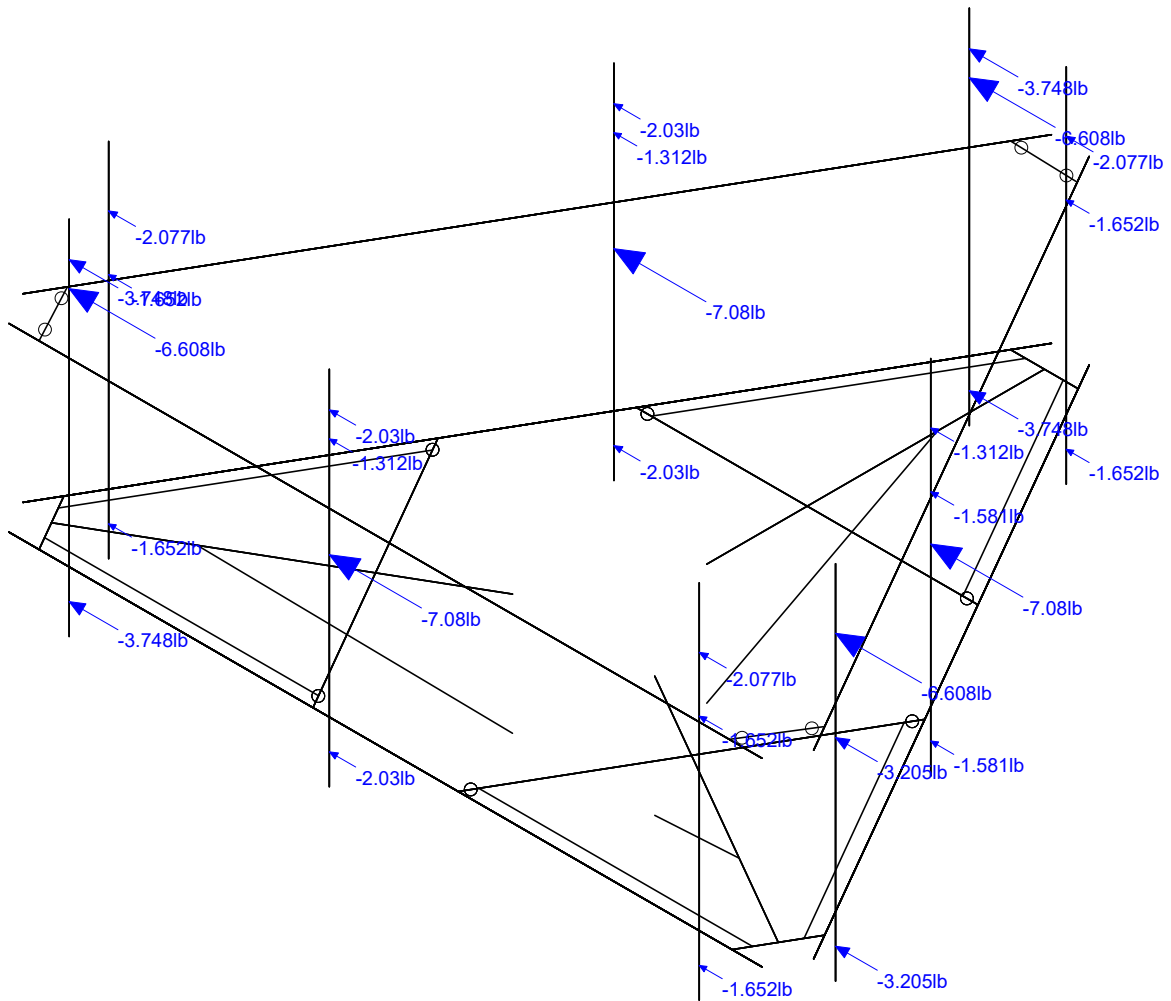
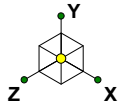
Oct 10, 2019 at 9:41 AM

CTL01280_MOD_loaded.r3d



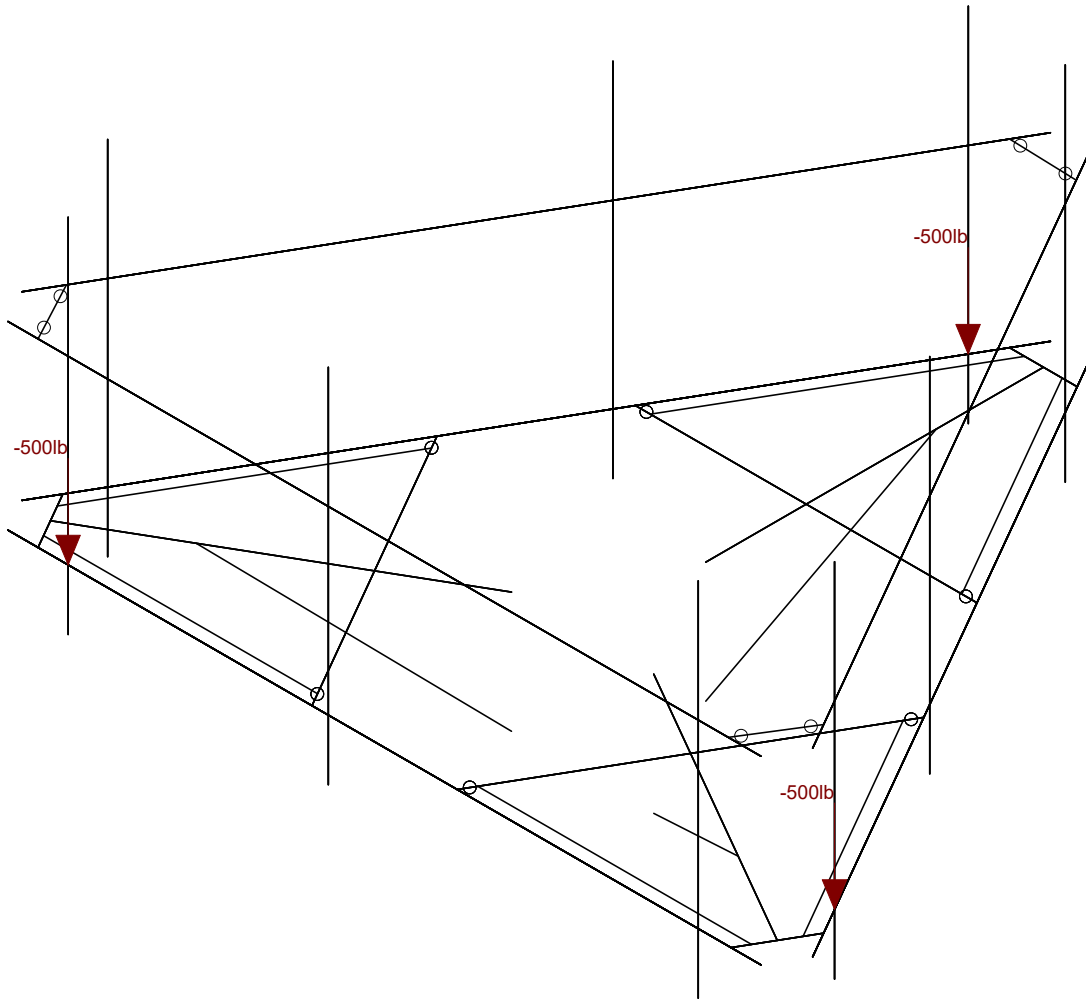
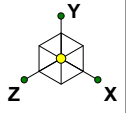
Loads: BLC 31, Seismic Load Z

Infinigy Engineering PLLC	CTL01280	Seismic Load AZI 000
TM		Oct 10, 2019 at 9:41 AM
1106-A0001-B		CTL01280_MOD_loaded.r3d



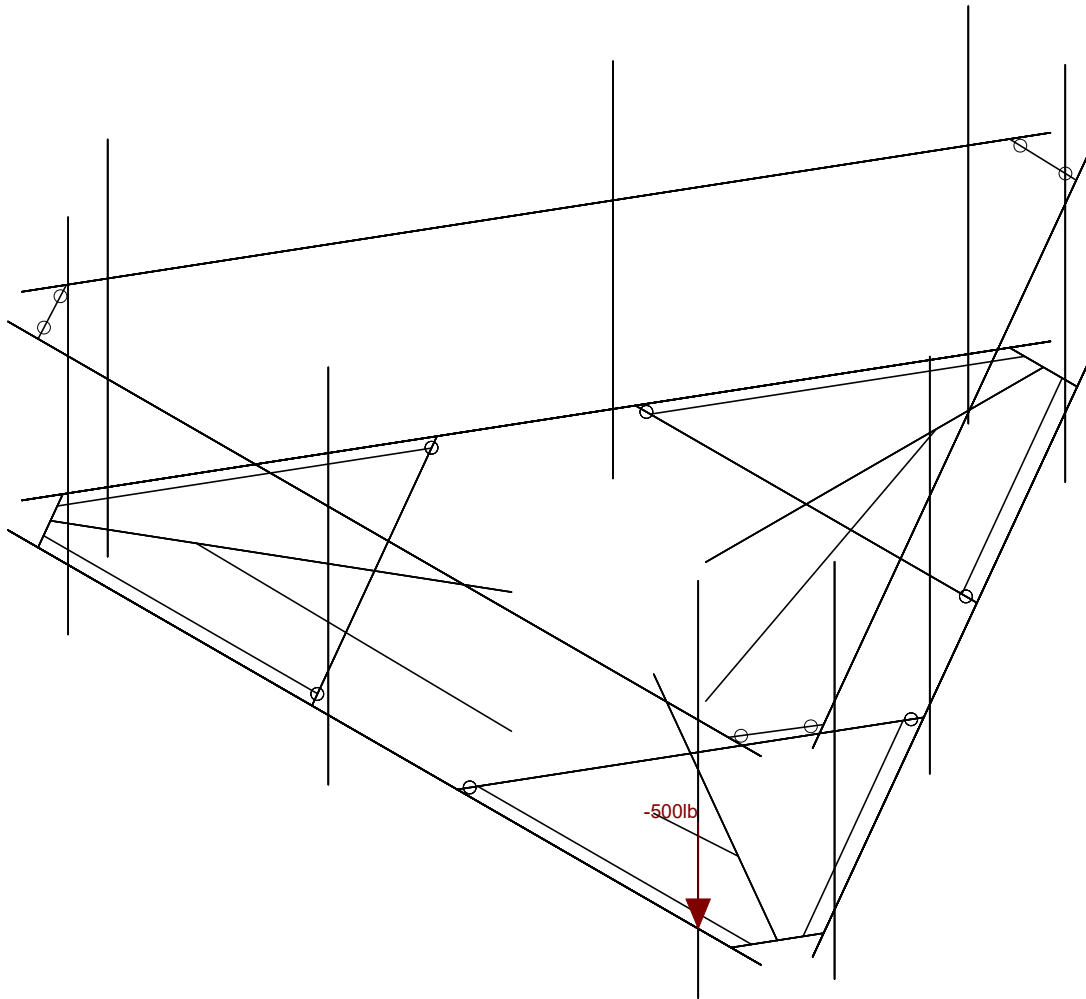
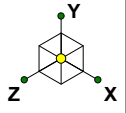
Loads: BLC 32, Seismic Load X

Infinigy Engineering PLLC	CTL01280	Seismic Load AZI 090
TM		Oct 10, 2019 at 9:41 AM
1106-A0001-B		CTL01280_MOD_loaded.r3d



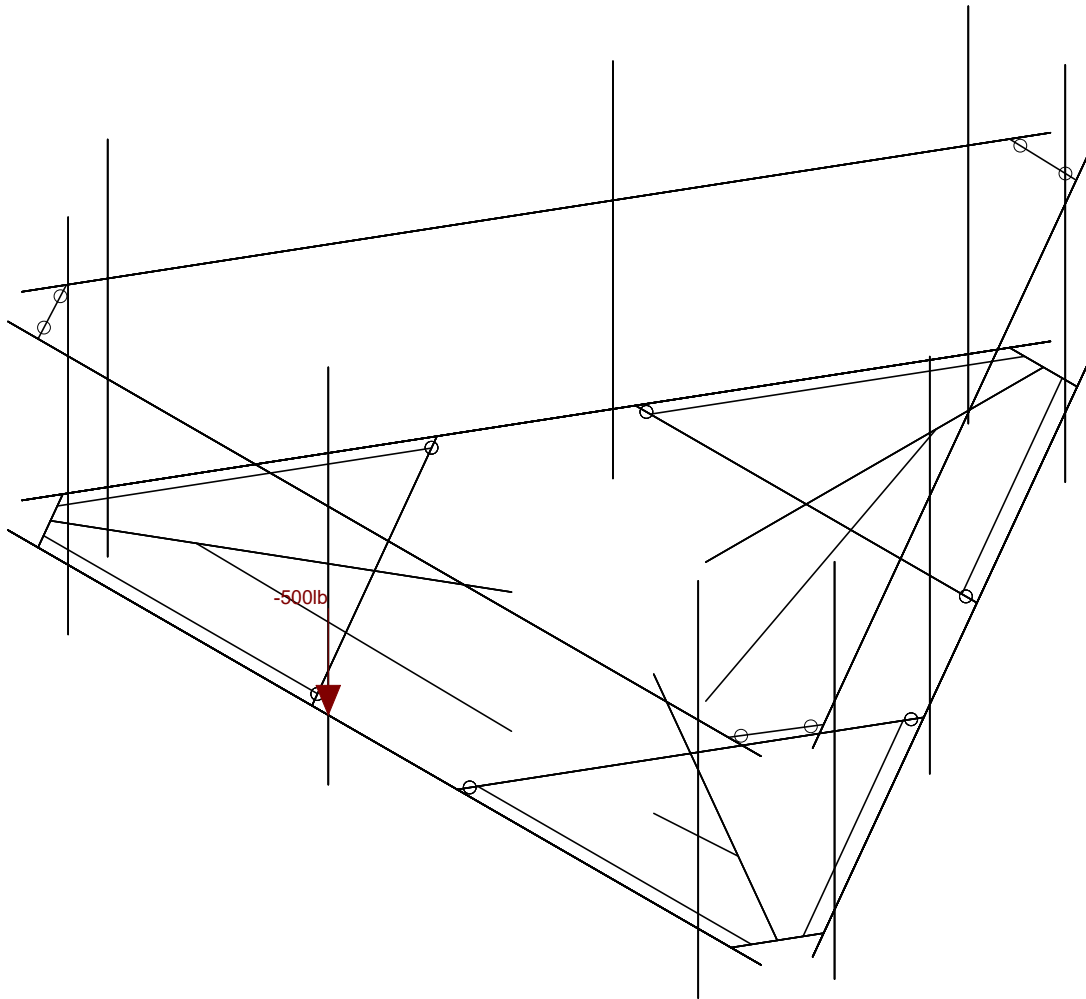
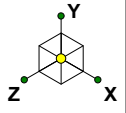
Loads: BLC 33, Service Live Loads

Infinigy Engineering PLLC	CTL01280	Service Load
TM		Oct 10, 2019 at 9:41 AM
1106-A0001-B		CTL01280_MOD_loaded.r3d



Loads: BLC 34, Maintenance Load 1

Infinigy Engineering PLLC	CTL01280	Maintenance Load 1
TM		Oct 10, 2019 at 9:42 AM
1106-A0001-B		CTL01280_MOD_loaded.r3d



Loads: BLC 35, Maintenance Load 2

Infinigy Engineering PLLC

TM

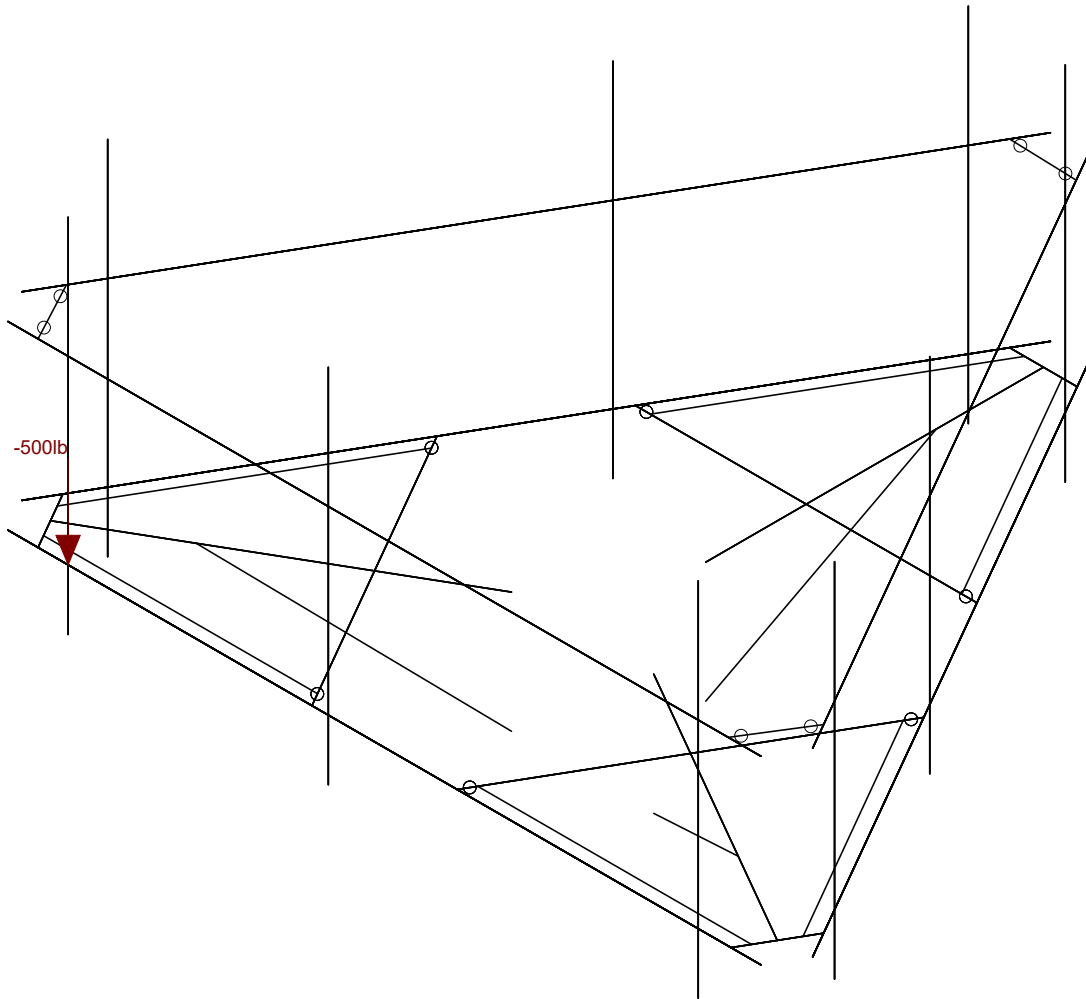
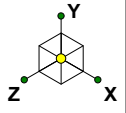
1106-A0001-B

CTL01280

Maintenance Load 2

Oct 10, 2019 at 9:42 AM

CTL01280_MOD_loaded.r3d



Loads: BLC 36, Maintenance Load 3

Infinigy Engineering PLLC

TM

1106-A0001-B

CTL01280

Maintenance Load 3

Oct 10, 2019 at 9:42 AM

CTL01280_MOD_loaded.r3d

Program Inputs



Project Information	
Client:	Smartlink
Carrier:	AT&T Mobility
Engineer:	TM

Code Standards	
Building Code:	2015 IBC
TIA Standard:	TIA-222-H
ASCE Standard:	ASCE 7-10

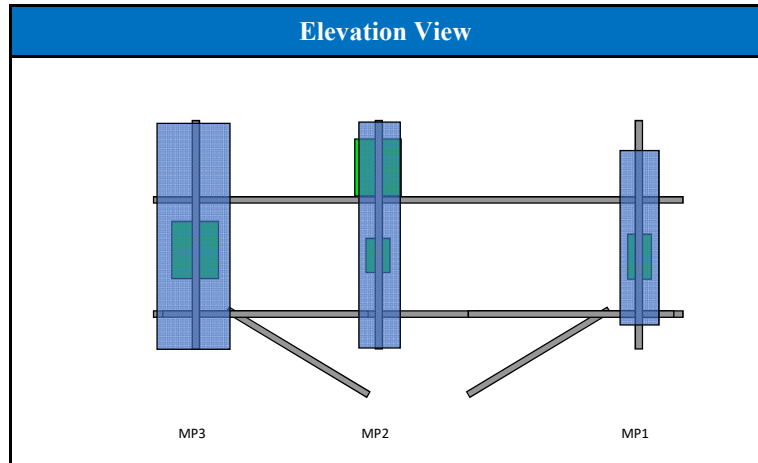
Mount Information	
Mount Type:	Platform
Num Sectors:	3
Centerline AGL:	167.0 ft
Roof Height AGL:	0.0 ft

Site Information	
Risk Category:	II
Exposure Category:	B
Topo Category:	1
Site Class:	D - Stiff Soil
Ground Elevation:	1132 ft

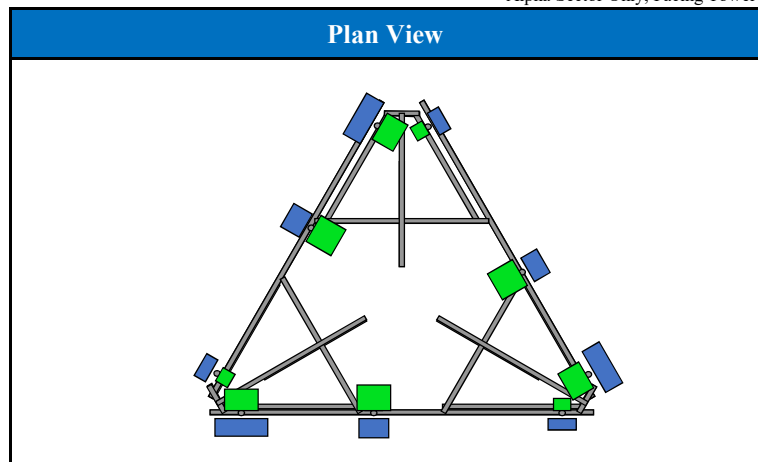
Wind and Ice Data	
Ultimate Wind:	118 mph
Basic Wind:	N/A mph
Ice Wind:	40 mph
Ice Thickness:	1.7 in

Topographic Data	
Topo Feature:	N/A
Crest Height:	N/A ft
Slope Distance:	N/A ft
Crest Distance:	N/A ft

Seismic Data	
S_s :	0.18 g
S_1 :	0.07 g
a_p :	1.0
R_p :	2.50
Ω_p :	1.0
S_{ps} :	0.19
S_{D1} :	0.10
F_g :	1.60
F_v :	2.40



*Alpha Sector Only, Facing Tower



*Alpha Sector at Bottom

Appurtenance Information**										
Appurtenance Name	Elevation	Qty.	q_z (psf)	EPA_N (ft ²)	EPA_T (ft ²)	Wind F_z (lbs)	Wind F_x (lbs)	Weight (lbs)	Seismic F (lbs)	Member (α sector)
POWERWAVE 7770.00	167.0	3	37.19	5.51	2.93	184.37	98.01	35.00	3.30	MP1
CCI HPA-65R-BU6AA	167.0	2	37.19	7.86	6.02	263.21	201.46	43.00	4.06	MP2
COMMSCOPE SBNHH-1D65A	167.0	1	37.19	5.96	3.91	199.39	131.00	33.50	3.16	Leg/Flush
CCI DMP65R-BU6DA	167.0	2	37.19	12.71	5.62	425.39	187.95	79.40	7.50	MP3
CCI DMP65R-BU4DA	167.0	1	37.19	8.28	3.51	277.14	117.35	67.90	6.41	Leg/Flush
KAELUS DBCT108F1V92-1	167.0	3	37.19	0.60	0.32	20.22	10.73	13.90	1.31	MP2
POWERWAVE TT08-19DB111-001	167.0	3	37.19	0.79	0.64	26.54	21.49	22.00	2.08	MP1
ERICSSON RADIO 4449 B5/B12	167.0	3	37.19	1.98	1.41	66.27	47.19	70.00	6.61	MP3
ERICSSON RADIO 8843 B2/B66A	167.0	3	37.19	1.98	1.70	66.27	56.73	75.00	7.08	MP2
RAYCAP DC6-48-60-18-8F	167.0	2	37.19	2.90	2.90	97.09	97.09	32.80	3.10	Leg/Flush

**Dish calculations differ from those in display

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design Rul...
1	M1	N1	N4			3" STD Pipe	None	None	A53 Gr.B	Typical
2	M2	N2	N5			3" STD Pipe	None	None	A53 Gr.B	Typical
3	M3	N3	N6			3" STD Pipe	None	None	A53 Gr.B	Typical
4	M4	N10	N11		180	Channel 3" x 1.5"	None	None	A36 Gr.36	Typical
5	M5	N12	N13		180	Channel 3" x 1.5"	None	None	A36 Gr.36	Typical
6	M6	N14	N15		180	Channel 3" x 1.5"	None	None	A36 Gr.36	Typical
7	M7	N17	N16			6"x0.37" Plate	None	None	A36 Gr.36	Typical
8	M8	N19	N18			6"x0.37" Plate	None	None	A36 Gr.36	Typical
9	M9	N21	N20			6"x0.37" Plate	None	None	A36 Gr.36	Typical
10	M10	N23	N22			3" STD Pipe	None	None	A53 Gr.B	Typical
11	M11	N25	N24			3" STD Pipe	None	None	A53 Gr.B	Typical
12	M12	N27	N26			3" STD Pipe	None	None	A53 Gr.B	Typical
13	M13	N28	N30			L 2"x2"x3/16"	None	None	A36 Gr.36	Typical
14	M14	N29	N31		270	L 2"x2"x3/16"	None	None	A36 Gr.36	Typical
15	M15	N32	N34			L 2"x2"x3/16"	None	None	A36 Gr.36	Typical
16	M16	N33	N35		270	L 2"x2"x3/16"	None	None	A36 Gr.36	Typical
17	M17	N36	N38			L 2"x2"x3/16"	None	None	A36 Gr.36	Typical
18	M18	N37	N39		270	L 2"x2"x3/16"	None	None	A36 Gr.36	Typical
19	M19	N52	N51			2" STD Pipe	None	None	A53 Gr.B	Typical
20	M20	N54	N53			2" STD Pipe	None	None	A53 Gr.B	Typical
21	M21	N56	N55			2" STD Pipe	None	None	A53 Gr.B	Typical
22	M22	N61	N58			L 2.5"x2.5"x3/16"	None	None	A36 Gr.36	Typical
23	M23	N57	N60			L 2.5"x2.5"x3/16"	None	None	A36 Gr.36	Typical
24	M24	N59	N62			L 2.5"x2.5"x3/16"	None	None	A36 Gr.36	Typical
25	MP1	N45	N43			2" STD Pipe	None	None	A53 Gr.B	Typical
26	MP2	N49	N48			2" STD Pipe	None	None	A53 Gr.B	Typical
27	MP3	N44	N42			2" STD Pipe	None	None	A53 Gr.B	Typical
28	MP4	N87	N85			2" STD Pipe	None	None	A53 Gr.B	Typical
29	MP5	N69	N68			2" STD Pipe	None	None	A53 Gr.B	Typical
30	MP6	N86	N84			2" STD Pipe	None	None	A53 Gr.B	Typical
31	MP7	N79	N77			2" STD Pipe	None	None	A53 Gr.B	Typical
32	MP8	N65	N64			2" STD Pipe	None	None	A53 Gr.B	Typical
33	MP9	N78	N76			2" STD Pipe	None	None	A53 Gr.B	Typical
34	M34	N94	N96			LL 2.5"x2.5"x3/16"	None	None	A36 Gr.36	Typical
35	M35	N95	N98			LL 2.5"x2.5"x3/16"	None	None	A36 Gr.36	Typical
36	M36	N93	N97			LL 2.5"x2.5"x3/16"	None	None	A36 Gr.36	Typical

Material Takeoff

	Material	Size	Pieces	Length[in]	Weight[K]
1	Hot Rolled Steel				
2	A36 Gr.36	6"x0.37" Plate	3	40.5	.025
3	A36 Gr.36	L2.5x2.5x3	3	41.3	.011
4	A36 Gr.36	L2x2x3	6	327.4	.067
5	A36 Gr.36	LL2.5x2.5x3x6	3	155.7	.079
6	A36 Gr.36	C3X5	3	204.2	.085
7	A53 Gr.B	PIPE 2.0	12	1098	.318
8	A53 Gr.B	PIPE 3.0	6	651.8	.383
9	Total HR Steel		36	2518.8	.968

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distrib...	Area(Me...	Surface(...
1	Self Weight	DL		-1			30		3	
2	Wind Load AZI 0	WLZ					60			
3	Wind Load AZI 30	None					60			
4	Wind Load AZI 60	None					60			
5	Wind Load AZI 90	WLX					60			
6	Wind Load AZI 120	None					60			
7	Wind Load AZI 150	None					60			
8	Wind Load AZI 180	None					60			
9	Wind Load AZI 210	None					60			
10	Wind Load AZI 240	None					60			
11	Wind Load AZI 270	None					60			
12	Wind Load AZI 300	None					60			
13	Wind Load AZI 330	None					60			
14	Distr. Wind Load Z	WLZ						36		
15	Distr. Wind Load X	WLX						36		
16	Ice Weight	OL1					30	36	3	
17	Ice Wind Load AZI 0	OL2					60			
18	Ice Wind Load AZI 30	None					60			
19	Ice Wind Load AZI 60	None					60			
20	Ice Wind Load AZI 90	OL3					60			
21	Ice Wind Load AZI 120	None					60			
22	Ice Wind Load AZI 150	None					60			
23	Ice Wind Load AZI 180	None					60			
24	Ice Wind Load AZI 210	None					60			
25	Ice Wind Load AZI 240	None					60			
26	Ice Wind Load AZI 270	None					60			
27	Ice Wind Load AZI 300	None					60			
28	Ice Wind Load AZI 330	None					60			
29	Distr. Ice Wind Load Z	OL2						36		
30	Distr. Ice Wind Load X	OL3						36		
31	Seismic Load Z	ELZ			-.094		30			
32	Seismic Load X	ELX	-.094				30			
33	Service Live Loads	LL				3				
34	Maintenance Load 1	LL				1				
35	Maintenance Load 2	LL				1				
36	Maintenance Load 3	LL				1				
37	Maintenance Load 4	LL				1				
38	Maintenance Load 5	LL				1				
39	Maintenance Load 6	LL				1				
40	Maintenance Load 7	LL				1				
41	Maintenance Load 8	LL				1				
42	Maintenance Load 9	LL				1				
43	BLC 1 Transient Area Loads	None						42		
44	BLC 16 Transient Area Loads	None						42		

Load Combinations

	Description	So...	P...	S...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...
1	1.4DL	Yes	Y		1	1.4									
2	1.2DL + 1WL AZI 0	Yes	Y		1	1.2	2	1	14	1	15				
3	1.2DL + 1WL AZI ...	Yes	Y		1	1.2	3	1	14	.866	15	.5			
4	1.2DL + 1WL AZI ...	Yes	Y		1	1.2	4	1	14	.5	15	.866			
5	1.2DL + 1WL AZI ...	Yes	Y		1	1.2	5	1	14		15	1			
6	1.2DL + 1WL AZI ...	Yes	Y		1	1.2	6	1	14	-.5	15	.866			
7	1.2DL + 1WL AZI ...	Yes	Y		1	1.2	7	1	14	-.866	15	.5			
8	1.2DL + 1WL AZI ...	Yes	Y		1	1.2	8	1	14	-1	15				

Load Combinations (Continued)

	Description	So...	P...	S...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...
9	1.2DL + 1WL AZI ...	Yes	Y		1	1.2	9	1	14	-.866	15	-.5		
10	1.2DL + 1WL AZI ...	Yes	Y		1	1.2	10	1	14	-.5	15	-.866		
11	1.2DL + 1WL AZI ...	Yes	Y		1	1.2	11	1	14		15	-.1		
12	1.2DL + 1WL AZI ...	Yes	Y		1	1.2	12	1	14	.5	15	-.866		
13	1.2DL + 1WL AZI ...	Yes	Y		1	1.2	13	1	14	.866	15	-.5		
14	0.9DL + 1WL AZI 0	Yes	Y		1	.9	2	1	14	1	15			
15	0.9DL + 1WL AZI ...	Yes	Y		1	.9	3	1	14	.866	15	.5		
16	0.9DL + 1WL AZI ...	Yes	Y		1	.9	4	1	14	.5	15	.866		
17	0.9DL + 1WL AZI ...	Yes	Y		1	.9	5	1	14		15	1		
18	0.9DL + 1WL AZI ...	Yes	Y		1	.9	6	1	14	-.5	15	.866		
19	0.9DL + 1WL AZI ...	Yes	Y		1	.9	7	1	14	-.866	15	.5		
20	0.9DL + 1WL AZI ...	Yes	Y		1	.9	8	1	14	-.1	15			
21	0.9DL + 1WL AZI ...	Yes	Y		1	.9	9	1	14	-.866	15	-.5		
22	0.9DL + 1WL AZI ...	Yes	Y		1	.9	10	1	14	-.5	15	-.866		
23	0.9DL + 1WL AZI ...	Yes	Y		1	.9	11	1	14		15	-.1		
24	0.9DL + 1WL AZI ...	Yes	Y		1	.9	12	1	14	.5	15	-.866		
25	0.9DL + 1WL AZI ...	Yes	Y		1	.9	13	1	14	.866	15	-.5		
26	1.2D + 1.0Di	Yes	Y		1	1.2	16	1						
27	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	16	1	17	1	29	1	30	
28	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	16	1	18	1	29	.866	30	.5
29	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	16	1	19	1	29	.5	30	.866
30	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	16	1	20	1	29		30	1
31	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	16	1	21	1	29	-.5	30	.866
32	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	16	1	22	1	29	-.866	30	.5
33	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	16	1	23	1	29	-.1	30	
34	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	16	1	24	1	29	-.866	30	-.5
35	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	16	1	25	1	29	-.5	30	-.866
36	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	16	1	26	1	29		30	-.1
37	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	16	1	27	1	29	.5	30	-.866
38	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	16	1	28	1	29	.866	30	-.5
39	(1.2 + 0.2Sds)DL ...	Yes	Y		1	1.238	31	1	32					
40	(1.2 + 0.2Sds)DL ...	Yes	Y		1	1.238	31	.866	32	.5				
41	(1.2 + 0.2Sds)DL ...	Yes	Y		1	1.238	31	.5	32	.866				
42	(1.2 + 0.2Sds)DL ...	Yes	Y		1	1.238	31		32	1				
43	(1.2 + 0.2Sds)DL ...	Yes	Y		1	1.238	31	-.5	32	.866				
44	(1.2 + 0.2Sds)DL ...	Yes	Y		1	1.238	31	-.866	32	.5				
45	(1.2 + 0.2Sds)DL ...	Yes	Y		1	1.238	31	-.1	32					
46	(1.2 + 0.2Sds)DL ...	Yes	Y		1	1.238	31	-.866	32	-.5				
47	(1.2 + 0.2Sds)DL ...	Yes	Y		1	1.238	31	-.5	32	-.866				
48	(1.2 + 0.2Sds)DL ...	Yes	Y		1	1.238	31		32	-.1				
49	(1.2 + 0.2Sds)DL ...	Yes	Y		1	1.238	31	.5	32	-.866				
50	(1.2 + 0.2Sds)DL ...	Yes	Y		1	1.238	31	.866	32	-.5				
51	(0.9 - 0.2Sds)DL ...	Yes	Y		1	.862	31	1	32					
52	(0.9 - 0.2Sds)DL ...	Yes	Y		1	.862	31	.866	32	.5				
53	(0.9 - 0.2Sds)DL ...	Yes	Y		1	.862	31	.5	32	.866				
54	(0.9 - 0.2Sds)DL ...	Yes	Y		1	.862	31		32	1				
55	(0.9 - 0.2Sds)DL ...	Yes	Y		1	.862	31	-.5	32	.866				
56	(0.9 - 0.2Sds)DL ...	Yes	Y		1	.862	31	-.866	32	.5				
57	(0.9 - 0.2Sds)DL ...	Yes	Y		1	.862	31	-.1	32					
58	(0.9 - 0.2Sds)DL ...	Yes	Y		1	.862	31	-.866	32	-.5				
59	(0.9 - 0.2Sds)DL ...	Yes	Y		1	.862	31	-.5	32	-.866				
60	(0.9 - 0.2Sds)DL ...	Yes	Y		1	.862	31		32	-.1				
61	(0.9 - 0.2Sds)DL ...	Yes	Y		1	.862	31	.5	32	-.866				
62	(0.9 - 0.2Sds)DL ...	Yes	Y		1	.862	31	.866	32	-.5				
63	1.0DL + 1.5LL + 1...	Yes	Y		1	1	2	.259	14	.259	15		33	1.5
64	1.0DL + 1.5LL + 1...	Yes	Y		1	1	3	.259	14	.224	15	.129	33	1.5
65	1.0DL + 1.5LL + 1...	Yes	Y		1	1	4	.259	14	.129	15	.224	33	1.5

Load Combinations (Continued)

	Description	So...	P...	S...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...
66	1.0DL + 1.5LL + 1...	Yes	Y		1	1	5	.259	14		15	.259	33	1.5
67	1.0DL + 1.5LL + 1...	Yes	Y		1	1	6	.259	14	-.129	15	.224	33	1.5
68	1.0DL + 1.5LL + 1...	Yes	Y		1	1	7	.259	14	-.224	15	.129	33	1.5
69	1.0DL + 1.5LL + 1...	Yes	Y		1	1	8	.259	14	-.259	15		33	1.5
70	1.0DL + 1.5LL + 1...	Yes	Y		1	1	9	.259	14	-.224	15	-.129	33	1.5
71	1.0DL + 1.5LL + 1...	Yes	Y		1	1	10	.259	14	-.129	15	-.224	33	1.5
72	1.0DL + 1.5LL + 1...	Yes	Y		1	1	11	.259	14		15	-.259	33	1.5
73	1.0DL + 1.5LL + 1...	Yes	Y		1	1	12	.259	14	.129	15	-.224	33	1.5
74	1.0DL + 1.5LL + 1...	Yes	Y		1	1	13	.259	14	.224	15	-.129	33	1.5
75	1.2DL + 1.5LL	Yes	Y		1	1.2	33	1.5						
76	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	34	1.5	2	.065	14	.065	15	
77	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	34	1.5	3	.065	14	.056	15	.032
78	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	34	1.5	4	.065	14	.032	15	.056
79	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	34	1.5	5	.065	14		15	.065
80	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	34	1.5	6	.065	14	-.032	15	.056
81	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	34	1.5	7	.065	14	-.056	15	.032
82	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	34	1.5	8	.065	14	-.065	15	
83	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	34	1.5	9	.065	14	-.056	15	-.032
84	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	34	1.5	10	.065	14	-.032	15	-.056
85	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	34	1.5	11	.065	14		15	-.065
86	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	34	1.5	12	.065	14	.032	15	-.056
87	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	34	1.5	13	.065	14	.056	15	-.032
88	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	35	1.5	2	.065	14	.065	15	
89	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	35	1.5	3	.065	14	.056	15	.032
90	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	35	1.5	4	.065	14	.032	15	.056
91	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	35	1.5	5	.065	14		15	.065
92	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	35	1.5	6	.065	14	-.032	15	.056
93	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	35	1.5	7	.065	14	-.056	15	.032
94	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	35	1.5	8	.065	14	-.065	15	
95	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	35	1.5	9	.065	14	-.056	15	-.032
96	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	35	1.5	10	.065	14	-.032	15	-.056
97	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	35	1.5	11	.065	14		15	-.065
98	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	35	1.5	12	.065	14	.032	15	-.056
99	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	35	1.5	13	.065	14	.056	15	-.032
100	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	36	1.5	2	.065	14	.065	15	
101	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	36	1.5	3	.065	14	.056	15	.032
102	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	36	1.5	4	.065	14	.032	15	.056
103	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	36	1.5	5	.065	14		15	.065
104	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	36	1.5	6	.065	14	-.032	15	.056
105	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	36	1.5	7	.065	14	-.056	15	.032
106	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	36	1.5	8	.065	14	-.065	15	
107	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	36	1.5	9	.065	14	-.056	15	-.032
108	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	36	1.5	10	.065	14	-.032	15	-.056
109	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	36	1.5	11	.065	14		15	-.065
110	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	36	1.5	12	.065	14	.032	15	-.056
111	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	36	1.5	13	.065	14	.056	15	-.032
112	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	37	1.5	2	.065	14	.065	15	
113	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	37	1.5	3	.065	14	.056	15	.032
114	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	37	1.5	4	.065	14	.032	15	.056
115	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	37	1.5	5	.065	14		15	.065
116	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	37	1.5	6	.065	14	-.032	15	.056
117	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	37	1.5	7	.065	14	-.056	15	.032
118	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	37	1.5	8	.065	14	-.065	15	
119	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	37	1.5	9	.065	14	-.056	15	-.032
120	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	37	1.5	10	.065	14	-.032	15	-.056
121	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	37	1.5	11	.065	14		15	-.065
122	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	37	1.5	12	.065	14	.032	15	-.056

Load Combinations (Continued)

	Description	So...	P...	S...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...
123	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	37	1.5	13	.065	14	.056	15	-.032
124	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	38	1.5	2	.065	14	.065	15	
125	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	38	1.5	3	.065	14	.056	15	.032
126	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	38	1.5	4	.065	14	.032	15	.056
127	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	38	1.5	5	.065	14		15	.065
128	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	38	1.5	6	.065	14	-.032	15	.056
129	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	38	1.5	7	.065	14	-.056	15	.032
130	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	38	1.5	8	.065	14	-.065	15	
131	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	38	1.5	9	.065	14	-.056	15	-.032
132	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	38	1.5	10	.065	14	-.032	15	-.056
133	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	38	1.5	11	.065	14		15	-.065
134	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	38	1.5	12	.065	14	.032	15	-.056
135	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	38	1.5	13	.065	14	.056	15	-.032
136	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	39	1.5	2	.065	14	.065	15	
137	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	39	1.5	3	.065	14	.056	15	.032
138	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	39	1.5	4	.065	14	.032	15	.056
139	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	39	1.5	5	.065	14		15	.065
140	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	39	1.5	6	.065	14	-.032	15	.056
141	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	39	1.5	7	.065	14	-.056	15	.032
142	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	39	1.5	8	.065	14	-.065	15	
143	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	39	1.5	9	.065	14	-.056	15	-.032
144	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	39	1.5	10	.065	14	-.032	15	-.056
145	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	39	1.5	11	.065	14		15	-.065
146	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	39	1.5	12	.065	14	.032	15	-.056
147	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	39	1.5	13	.065	14	.056	15	-.032
148	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	40	1.5	2	.065	14	.065	15	
149	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	40	1.5	3	.065	14	.056	15	.032
150	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	40	1.5	4	.065	14	.032	15	.056
151	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	40	1.5	5	.065	14		15	.065
152	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	40	1.5	6	.065	14	-.032	15	.056
153	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	40	1.5	7	.065	14	-.056	15	.032
154	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	40	1.5	8	.065	14	-.065	15	
155	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	40	1.5	9	.065	14	-.056	15	-.032
156	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	40	1.5	10	.065	14	-.032	15	-.056
157	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	40	1.5	11	.065	14		15	-.065
158	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	40	1.5	12	.065	14	.032	15	-.056
159	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	40	1.5	13	.065	14	.056	15	-.032
160	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	41	1.5	2	.065	14	.065	15	
161	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	41	1.5	3	.065	14	.056	15	.032
162	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	41	1.5	4	.065	14	.032	15	.056
163	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	41	1.5	5	.065	14		15	.065
164	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	41	1.5	6	.065	14	-.032	15	.056
165	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	41	1.5	7	.065	14	-.056	15	.032
166	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	41	1.5	8	.065	14	-.065	15	
167	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	41	1.5	9	.065	14	-.056	15	-.032
168	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	41	1.5	10	.065	14	-.032	15	-.056
169	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	41	1.5	11	.065	14		15	-.065
170	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	41	1.5	12	.065	14	.032	15	-.056
171	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	41	1.5	13	.065	14	.056	15	-.032
172	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	42	1.5	2	.065	14	.065	15	
173	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	42	1.5	3	.065	14	.056	15	.032
174	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	42	1.5	4	.065	14	.032	15	.056
175	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	42	1.5	5	.065	14		15	.065
176	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	42	1.5	6	.065	14	-.032	15	.056
177	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	42	1.5	7	.065	14	-.056	15	.032
178	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	42	1.5	8	.065	14	-.065	15	
179	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	42	1.5	9	.065	14	-.056	15	-.032

Load Combinations (Continued)

	Description	So...	P...	S...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...	BLC Fac...
180	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	42	1.5	10	.065	14	-.032	15	-.056
181	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	42	1.5	11	.065	14		15	-.065
182	1.2DL + 1.5LM-M...	Yes	Y		1	1.2	42	1.5	12	.065	14	.032	15	-.056

Envelope Joint Reactions

Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC	
1	N3	max	1809.525	16	376.627	28	1076.144	16	408.135	25	1263.248	19	419.124	160
2		min	-4321.088	35	-22.229	179	-2531.761	34	-462.2	7	-1276.4...	13	-209.243	20
3	N2	max	4634.61	31	372.331	36	1456.059	25	501.262	15	1637.188	15	227.643	20
4		min	-1692.808	24	-22.916	104	-2764.564	32	-624.209	9	-1647.5...	9	-361.928	2
5	N1	max	1267.005	5	351.405	32	5324.59	27	268.733	32	1697.289	23	546.982	23
6		min	-1264.183	11	-26.707	147	-2180.538	20	-82.237	147	-1703.9...	5	-596.87	5
7	N93	max	121.195	22	2745.308	27	158.615	20	0	182	0	182	0	182
8		min	-128.402	4	-69.907	20	-5376.599	27	0	1	0	1	0	1
9	N94	max	78.743	24	2776.163	31	2732.977	31	0	182	0	182	0	182
10		min	-4698.344	31	-42.104	24	-49.034	24	0	1	0	1	0	1
11	N95	max	4380.809	35	2586.784	35	2520.378	35	0	182	0	182	0	182
12		min	-104.981	16	-56.437	16	-58.95	16	0	1	0	1	0	1
13	Totals:	max	4138.458	17	8886.211	38	4300.076	14						
14		min	-4138.458	11	1986.634	51	-4300.076	8						

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

Member	Shape	Code Ch...	Loc[in]	LC	Shear C...	Loc.....	LC	phi*Pn...	phi*Pn...	phi*M...	phi*M.....	Eqn		
1	MP4	PIPE 2.0	.543	12	8	.137	12	25	3161....	32130	1871....	1871....	1 H1-1b	
2	M7	6"x0.37" Plate	.535	6.75	9	.382	6.75	y	4	31020...	71928	554.445	8991	... H1-1b
3	MP7	PIPE 2.0	.520	12	4	.144	12	9	3161....	32130	1871....	1871....	1 H1-1b	
4	M8	6"x0.37" Plate	.512	6.75	13	.393	6.6...	y	8	31020...	71928	554.445	8991	... H1-1b
5	M9	6"x0.37" Plate	.488	6.75	5	.360	6.75	y	33	31020...	71928	554.445	8991	... H1-1b
6	MP3	PIPE 2.0	.479	12	3	.104	12	11	3161....	32130	1871....	1871....	1 H1-1b	
7	MP2	PIPE 2.0	.460	12	8	.104	12	11	3161....	32130	1871....	1871....	1 H1-1b	
8	MP5	PIPE 2.0	.452	12	9	.116	12	7	3161....	32130	1871....	1871....	1 H1-1b	
9	MP6	PIPE 2.0	.445	12	11	.110	48	3	3161....	32130	1871....	1871....	1 H1-1b	
10	M5	C3X5	.432	34.03	33	.436	2.8...	z	2	34961...	47628	981.263	3987....	1 H1-1b
11	M4	C3X5	.419	34.03	28	.437	2.8...	z	10	34961...	47628	981.263	3987....	1 H1-1b
12	MP9	PIPE 2.0	.413	12	7	.124	12	3	3161....	32130	1871....	1871....	1 H1-1b	
13	M2	PIPE 3.0	.412	46.234	31	.291	46....	9	60011...	65205	5748.75	5748.75	1 H1-1b	
14	M1	PIPE 3.0	.408	46.234	27	.279	46....	4	60011...	65205	5748.75	5748.75	1 H1-1b	
15	M6	C3X5	.407	34.03	37	.383	65....	z	2	34961...	47628	981.263	3987....	1 H1-1b
16	MP1	PIPE 2.0	.404	12	13	.124	12	10	3161....	32130	1871....	1871....	1 H1-1b	
17	M3	PIPE 3.0	.380	46.234	35	.243	46....	13	60011...	65205	5748.75	5748.75	1 H1-1b	
18	MP8	PIPE 2.0	.374	12	4	.126	12	3	3161....	32130	1871....	1871....	1 H1-1b	
19	M18	L2x2x3	.344	54.56	20	.034	54....	y	2	8291....	23392.8	557.717	1217....	... H2-1
20	M16	L2x2x3	.330	54.56	15	.032	54....	y	10	8291....	23392.8	557.717	1203....	... H2-1
21	M14	L2x2x3	.312	54.56	23	.028	54....	y	6	8291....	23392.8	557.717	1197.1	... H2-1
22	M36	LL2.5x2.5x3x6	.301	51.884	29	.010	51....	z	5	43301...	58320	4643....	2195....	... H1-1b
23	M34	LL2.5x2.5x3x6	.301	51.884	33	.012	51....	z	9	43301...	58320	4643....	2195....	... H1-1b
24	M13	L2x2x3	.282	54.56	21	.027	54....	z	2	8291....	23392.8	557.717	1191....	... H2-1
25	M17	L2x2x3	.275	54.56	17	.030	54....	z	9	8291....	23392.8	557.717	1194....	... H2-1
26	M35	LL2.5x2.5x3x6	.269	51.884	37	.011	51....	z	13	43301...	58320	4643....	2195....	... H1-1b
27	M15	L2x2x3	.256	54.56	25	.029	54....	z	5	8291....	23392.8	557.717	1197....	... H2-1
28	M20	PIPE 2.0	.216	137.5	12	.133	12.5	13	25067...	32130	1871....	1871....	1 H1-1b	
29	M21	PIPE 2.0	.210	137.5	4	.131	12.5	9	25067...	32130	1871....	1871....	1 H1-1b	
30	M19	PIPE 2.0	.191	12.5	4	.145	12.5	9	25067...	32130	1871....	1871....	1 H1-1b	
31	M11	PIPE 3.0	.128	85.938	130	.184	143...	10	58364...	65205	5748.75	5748.75	1 H1-1b	

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

Member	Shape	Code Ch...	Loc[in]	LC	Shear C...	Loc.....	LC	phi*Pn...	phi*Pn...	phi*M...	phi*M.....	Egn	
32	M12	PIPE 3.0	.127	85.938	97	.181	143...	2	58364...	65205	5748.75	5748.75 1	H1-1b
33	M10	PIPE 3.0	.126	85.938	161	.162	143...	11	58364...	65205	5748.75	5748.75 1	H1-1b
34	M24	L2.5x2.5x3	.015	6.885	9	.165	0 z	10	27536...	29192.48	872.574	1971.83...	H2-1
35	M22	L2.5x2.5x3	.014	6.741	13	.166	13... z	2	27536...	29192.48	872.574	1971.83...	H2-1
36	M23	L2.5x2.5x3	.012	6.741	4	.126	13... y	13	27536...	29192.48	872.574	1971.83...	H2-1

Hot Rolled Steel Section Sets

Label	Shape	Type	Design List	Material	Design R...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	2" STD Pipe	PIPE 2.0	None	A53 Gr.B	Typical	1.02	.627	.627	1.25
2	6"x0.37" Plate	6"x0.37" Plate	None	A36 Gr.36	Typical	2.22	.025	6.66	.097
3	L 2"x2"x3/16"	L2x2x3	None	A36 Gr.36	Typical	.722	.271	.271	.009
4	L 2.5"x2.5"x3/...	L2.5x2.5x3	None	A36 Gr.36	Typical	.901	.535	.535	.011
5	LL 2.5"x2.5"x...	LL2.5x2.5x3x6	None	A36 Gr.36	Typical	1.8	3.09	1.07	.023
6	3" STD Pipe	PIPE 3.0	None	A53 Gr.B	Typical	2.07	2.85	2.85	5.69
7	Channel 3" x ...	C3X5	None	A36 Gr.36	Typical	1.47	.241	1.85	.043

Member Advanced Data

Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	M1					Yes	** NA **			None
2	M2					Yes	** NA **			None
3	M3					Yes	** NA **			None
4	M4	BenPIN	BenPIN			Yes	** NA **			None
5	M5	BenPIN	BenPIN			Yes	** NA **			None
6	M6	BenPIN	BenPIN			Yes	** NA **			None
7	M7					Yes	** NA **			None
8	M8					Yes	** NA **			None
9	M9					Yes	** NA **			None
10	M10					Yes	** NA **			None
11	M11					Yes	** NA **			None
12	M12					Yes	** NA **			None
13	M13					Yes	** NA **			None
14	M14					Yes	** NA **			None
15	M15					Yes	** NA **			None
16	M16					Yes	** NA **			None
17	M17					Yes	** NA **			None
18	M18					Yes	** NA **			None
19	M19					Yes	** NA **			None
20	M20					Yes	** NA **			None
21	M21					Yes	** NA **			None
22	M22	BenPIN	BenPIN			Yes	** NA **			None
23	M23	BenPIN	BenPIN			Yes	** NA **			None
24	M24	BenPIN	BenPIN			Yes	** NA **			None
25	MP1					Yes	** NA **			None
26	MP2					Yes	** NA **			None
27	MP3					Yes	** NA **			None
28	MP4					Yes	** NA **			None
29	MP5					Yes	** NA **			None
30	MP6					Yes	** NA **			None
31	MP7					Yes	** NA **			None
32	MP8					Yes	** NA **			None
33	MP9					Yes	** NA **			None
34	M34					Yes	** NA **			None
35	M35					Yes	** NA **			None
36	M36					Yes	** NA **			None

Hot Rolled Steel Design Parameters

Label	Shape	Length[in]	Lbyy[in]	Lbzz[in]	Lcomp top[in]	Lcomp bot[in]	L-torque[in]	Kyy	Kzz	Cb	Funci...
1	M1	3" STD Pipe	67.25	47.25	47.25	47.25	47.25	47.25			Lateral
2	M2	3" STD Pipe	67.25	47.25	47.25	47.25	47.25	47.25			Lateral
3	M3	3" STD Pipe	67.25	47.25	47.25	47.25	47.25	47.25			Lateral
4	M4	Channel 3" x 1.5"	68.06	31.03	31.03	31.03	31.03	31.03			Lateral
5	M5	Channel 3" x 1.5"	68.06	31.03	31.03	31.03	31.03	31.03			Lateral
6	M6	Channel 3" x 1.5"	68.06	31.03	31.03	31.03	31.03	31.03			Lateral
7	M7	6"x0.37" Plate	13.5			Lbyy					Lateral
8	M8	6"x0.37" Plate	13.5			Lbyy					Lateral
9	M9	6"x0.37" Plate	13.5			Lbyy					Lateral
10	M10	3" STD Pipe	150	54.6	54.6	54.6	54.6	54.6			Lateral
11	M11	3" STD Pipe	150	54.6	54.6	54.6	54.6	54.6			Lateral
12	M12	3" STD Pipe	150	54.6	54.6	54.6	54.6	54.6			Lateral
13	M13	L 2"x2"x3/16"	54.56			Lbyy					Lateral
14	M14	L 2"x2"x3/16"	54.56			Lbyy					Lateral
15	M15	L 2"x2"x3/16"	54.56			Lbyy					Lateral
16	M16	L 2"x2"x3/16"	54.56			Lbyy					Lateral
17	M17	L 2"x2"x3/16"	54.56			Lbyy					Lateral
18	M18	L 2"x2"x3/16"	54.56			Lbyy					Lateral
19	M19	2" STD Pipe	150	54.6	54.6	54.6	54.6	54.6			Lateral
20	M20	2" STD Pipe	150	54.6	54.6	54.6	54.6	54.6			Lateral
21	M21	2" STD Pipe	150	54.6	54.6	54.6	54.6	54.6			Lateral
22	M22	L 2.5"x2.5"x3/16"	13.77								Lateral
23	M23	L 2.5"x2.5"x3/16"	13.77								Lateral
24	M24	L 2.5"x2.5"x3/16"	13.77								Lateral
25	MP1	2" STD Pipe	72	100.8	100.8	100.8	100.8	100.8	2.1	2.1	Lateral
26	MP2	2" STD Pipe	72	100.8	100.8	100.8	100.8	100.8	2.1	2.1	Lateral
27	MP3	2" STD Pipe	72	100.8	100.8	100.8	100.8	100.8	2.1	2.1	Lateral
28	MP4	2" STD Pipe	72	100.8	100.8	100.8	100.8	100.8	2.1	2.1	Lateral
29	MP5	2" STD Pipe	72	100.8	100.8	100.8	100.8	100.8	2.1	2.1	Lateral
30	MP6	2" STD Pipe	72	100.8	100.8	100.8	100.8	100.8	2.1	2.1	Lateral
31	MP7	2" STD Pipe	72	100.8	100.8	100.8	100.8	100.8	2.1	2.1	Lateral
32	MP8	2" STD Pipe	72	100.8	100.8	100.8	100.8	100.8	2.1	2.1	Lateral
33	MP9	2" STD Pipe	72	100.8	100.8	100.8	100.8	100.8	2.1	2.1	Lateral
34	M34	LL 2.5"x2.5"x3/16"	51.884								Lateral
35	M35	LL 2.5"x2.5"x3/16"	51.884								Lateral
36	M36	LL 2.5"x2.5"x3/16"	51.884								Lateral

Joint Loads and Enforced Displacements (BLC 33 : Service Live Loads)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^...
1	N73	L	Y	-500
2	N89	L	Y	-500
3	N81	L	Y	-500

Joint Loads and Enforced Displacements (BLC 34 : Maintenance Load 1)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^...
1	N72	L	Y	-500

Joint Loads and Enforced Displacements (BLC 35 : Maintenance Load 2)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^...
1	N50	L	Y	-500

Joint Loads and Enforced Displacements (BLC 36 : Maintenance Load 3)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^...
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Joint Loads and Enforced Displacements (BLC 36 : Maintenance Load 3) (Continued)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^...
1	N73	L	Y	-500

Joint Loads and Enforced Displacements (BLC 37 : Maintenance Load 4)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^...
1	N88	L	Y	-500

Joint Loads and Enforced Displacements (BLC 38 : Maintenance Load 5)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^...
1	N70	L	Y	-500

Joint Loads and Enforced Displacements (BLC 39 : Maintenance Load 6)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^...
1	N89	L	Y	-500

Joint Loads and Enforced Displacements (BLC 40 : Maintenance Load 7)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^...
1	N80	L	Y	-500

Joint Loads and Enforced Displacements (BLC 41 : Maintenance Load 8)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^...
1	N66	L	Y	-500

Joint Loads and Enforced Displacements (BLC 42 : Maintenance Load 9)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^...
1	N81	L	Y	-500

Member Point Loads (BLC 1 : Self Weight)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	Y	-17.5	6
2	MP1	Y	-17.5	49
3	MP2	Y	-21.5	6
4	MP2	Y	-21.5	65
5	MP3	Y	-39.7	6
6	MP3	Y	-39.7	65
7	MP2	Y	-13.9	60
8	MP1	Y	-22	60
9	MP3	Y	-70	60
10	MP2	Y	-75	40
11	MP4	Y	-17.5	6
12	MP4	Y	-17.5	49
13	MP5	Y	-21.5	6
14	MP5	Y	-21.5	65
15	MP6	Y	-39.7	6
16	MP6	Y	-39.7	65
17	MP5	Y	-13.9	60
18	MP4	Y	-22	60
19	MP6	Y	-70	60
20	MP5	Y	-75	40
21	MP7	Y	-17.5	6
22	MP7	Y	-17.5	49
23	MP8	Y	-16.75	6
24	MP8	Y	-16.75	49

Member Point Loads (BLC 1 : Self Weight) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
25	MP9	Y	-33.95	6
26	MP9	Y	-33.95	42
27	MP8	Y	-13.9	60
28	MP7	Y	-22	60
29	MP9	Y	-70	60
30	MP8	Y	-75	40

Member Point Loads (BLC 2 : Wind Load AZI 0)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	0	6
2	MP1	Z	-92.19	6
3	MP1	X	0	49
4	MP1	Z	-92.19	49
5	MP2	X	0	6
6	MP2	Z	-131.6	6
7	MP2	X	0	65
8	MP2	Z	-131.6	65
9	MP3	X	0	6
10	MP3	Z	-212.7	6
11	MP3	X	0	65
12	MP3	Z	-212.7	65
13	MP2	X	0	60
14	MP2	Z	-20.22	60
15	MP1	X	0	60
16	MP1	Z	-26.54	60
17	MP3	X	0	60
18	MP3	Z	-66.27	60
19	MP2	X	0	40
20	MP2	Z	-66.27	40
21	MP4	X	0	6
22	MP4	Z	-59.8	6
23	MP4	X	0	49
24	MP4	Z	-59.8	49
25	MP5	X	0	6
26	MP5	Z	-108.45	6
27	MP5	X	0	65
28	MP5	Z	-108.45	65
29	MP6	X	0	6
30	MP6	Z	-123.65	6
31	MP6	X	0	65
32	MP6	Z	-123.65	65
33	MP5	X	0	60
34	MP5	Z	-13.1	60
35	MP4	X	0	60
36	MP4	Z	-22.75	60
37	MP6	X	0	60
38	MP6	Z	-51.96	60
39	MP5	X	0	40
40	MP5	Z	-59.12	40
41	MP7	X	0	6
42	MP7	Z	-59.8	6
43	MP7	X	0	49
44	MP7	Z	-59.8	49
45	MP8	X	0	6
46	MP8	Z	-74.05	6
47	MP8	X	0	49

Member Point Loads (BLC 2 : Wind Load AZI 0) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
48	MP8	Z	-74.05	49
49	MP9	X	0	6
50	MP9	Z	-78.65	6
51	MP9	X	0	42
52	MP9	Z	-78.65	42
53	MP8	X	0	60
54	MP8	Z	-13.1	60
55	MP7	X	0	60
56	MP7	Z	-22.75	60
57	MP9	X	0	60
58	MP9	Z	-51.96	60
59	MP8	X	0	40
60	MP8	Z	-59.12	40

Member Point Loads (BLC 3 : Wind Load AZI 30)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	-40.7	6
2	MP1	Z	-70.49	6
3	MP1	X	-40.7	49
4	MP1	Z	-70.49	49
5	MP2	X	-61.94	6
6	MP2	Z	-107.29	6
7	MP2	X	-61.94	65
8	MP2	Z	-107.29	65
9	MP3	X	-91.51	6
10	MP3	Z	-158.5	6
11	MP3	X	-91.51	65
12	MP3	Z	-158.5	65
13	MP2	X	-8.92	60
14	MP2	Z	-15.46	60
15	MP1	X	-12.64	60
16	MP1	Z	-21.89	60
17	MP3	X	-30.75	60
18	MP3	Z	-53.26	60
19	MP2	X	-31.94	40
20	MP2	Z	-55.33	40
21	MP4	X	-40.7	6
22	MP4	Z	-70.49	6
23	MP4	X	-40.7	49
24	MP4	Z	-70.49	49
25	MP5	X	-61.94	6
26	MP5	Z	-107.29	6
27	MP5	X	-61.94	65
28	MP5	Z	-107.29	65
29	MP6	X	-91.51	6
30	MP6	Z	-158.5	6
31	MP6	X	-91.51	65
32	MP6	Z	-158.5	65
33	MP5	X	-8.92	60
34	MP5	Z	-15.46	60
35	MP4	X	-12.64	60
36	MP4	Z	-21.89	60
37	MP6	X	-30.75	60
38	MP6	Z	-53.26	60
39	MP5	X	-31.94	40
40	MP5	Z	-55.33	40

Member Point Loads (BLC 3 : Wind Load AZI 30) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
41	MP7	X	-24.5	6
42	MP7	Z	-42.44	6
43	MP7	X	-24.5	49
44	MP7	Z	-42.44	49
45	MP8	X	-32.75	6
46	MP8	Z	-56.72	6
47	MP8	X	-32.75	49
48	MP8	Z	-56.72	49
49	MP9	X	-29.34	6
50	MP9	Z	-50.81	6
51	MP9	X	-29.34	42
52	MP9	Z	-50.81	42
53	MP8	X	-5.36	60
54	MP8	Z	-9.29	60
55	MP7	X	-10.75	60
56	MP7	Z	-18.61	60
57	MP9	X	-23.6	60
58	MP9	Z	-40.87	60
59	MP8	X	-28.37	40
60	MP8	Z	-49.13	40

Member Point Loads (BLC 4 : Wind Load AZI 60)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	-51.79	6
2	MP1	Z	-29.9	6
3	MP1	X	-51.79	49
4	MP1	Z	-29.9	49
5	MP2	X	-93.92	6
6	MP2	Z	-54.22	6
7	MP2	X	-93.92	65
8	MP2	Z	-54.22	65
9	MP3	X	-107.09	6
10	MP3	Z	-61.83	6
11	MP3	X	-107.09	65
12	MP3	Z	-61.83	65
13	MP2	X	-11.35	60
14	MP2	Z	-6.55	60
15	MP1	X	-19.7	60
16	MP1	Z	-11.38	60
17	MP3	X	-45	60
18	MP3	Z	-25.98	60
19	MP2	X	-51.2	40
20	MP2	Z	-29.56	40
21	MP4	X	-79.84	6
22	MP4	Z	-46.09	6
23	MP4	X	-79.84	49
24	MP4	Z	-46.09	49
25	MP5	X	-113.97	6
26	MP5	Z	-65.8	6
27	MP5	X	-113.97	65
28	MP5	Z	-65.8	65
29	MP6	X	-184.2	6
30	MP6	Z	-106.35	6
31	MP6	X	-184.2	65
32	MP6	Z	-106.35	65
33	MP5	X	-17.51	60

Member Point Loads (BLC 4 : Wind Load AZI 60) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
34	MP5	Z	-10.11	60
35	MP4	X	-22.98	60
36	MP4	Z	-13.27	60
37	MP6	X	-57.39	60
38	MP6	Z	-33.14	60
39	MP5	X	-57.39	40
40	MP5	Z	-33.14	40
41	MP7	X	-51.79	6
42	MP7	Z	-29.9	6
43	MP7	X	-51.79	49
44	MP7	Z	-29.9	49
45	MP8	X	-64.13	6
46	MP8	Z	-37.02	6
47	MP8	X	-64.13	49
48	MP8	Z	-37.02	49
49	MP9	X	-68.11	6
50	MP9	Z	-39.32	6
51	MP9	X	-68.11	42
52	MP9	Z	-39.32	42
53	MP8	X	-11.35	60
54	MP8	Z	-6.55	60
55	MP7	X	-19.7	60
56	MP7	Z	-11.38	60
57	MP9	X	-45	60
58	MP9	Z	-25.98	60
59	MP8	X	-51.2	40
60	MP8	Z	-29.56	40

Member Point Loads (BLC 5 : Wind Load AZI 90)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-49.01	6
2	MP1	Z	0	6
3	MP1	X	-49.01	49
4	MP1	Z	0	49
5	MP2	X	-100.73	6
6	MP2	Z	0	6
7	MP2	X	-100.73	65
8	MP2	Z	0	65
9	MP3	X	-93.97	6
10	MP3	Z	0	6
11	MP3	X	-93.97	65
12	MP3	Z	0	65
13	MP2	X	-10.73	60
14	MP2	Z	0	60
15	MP1	X	-21.49	60
16	MP1	Z	0	60
17	MP3	X	-47.19	60
18	MP3	Z	0	60
19	MP2	X	-56.73	40
20	MP2	Z	0	40
21	MP4	X	-81.39	6
22	MP4	Z	0	6
23	MP4	X	-81.39	49
24	MP4	Z	0	49
25	MP5	X	-123.89	6
26	MP5	Z	0	6

Member Point Loads (BLC 5 : Wind Load AZI 90) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
27	MP5	X	-123.89	65
28	MP5	Z	0	65
29	MP6	X	-183.02	6
30	MP6	Z	0	6
31	MP6	X	-183.02	65
32	MP6	Z	0	65
33	MP5	X	-17.85	60
34	MP5	Z	0	60
35	MP4	X	-25.28	60
36	MP4	Z	0	60
37	MP6	X	-61.5	60
38	MP6	Z	0	60
39	MP5	X	-63.89	40
40	MP5	Z	0	40
41	MP7	X	-81.39	6
42	MP7	Z	0	6
43	MP7	X	-81.39	49
44	MP7	Z	0	49
45	MP8	X	-91.15	6
46	MP8	Z	0	6
47	MP8	X	-91.15	49
48	MP8	Z	0	49
49	MP9	X	-118.59	6
50	MP9	Z	0	6
51	MP9	X	-118.59	42
52	MP9	Z	0	42
53	MP8	X	-17.85	60
54	MP8	Z	0	60
55	MP7	X	-25.28	60
56	MP7	Z	0	60
57	MP9	X	-61.5	60
58	MP9	Z	0	60
59	MP8	X	-63.89	40
60	MP8	Z	0	40

Member Point Loads (BLC 6 : Wind Load AZI 120)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	-51.79	6
2	MP1	Z	29.9	6
3	MP1	X	-51.79	49
4	MP1	Z	29.9	49
5	MP2	X	-93.92	6
6	MP2	Z	54.22	6
7	MP2	X	-93.92	65
8	MP2	Z	54.22	65
9	MP3	X	-107.09	6
10	MP3	Z	61.83	6
11	MP3	X	-107.09	65
12	MP3	Z	61.83	65
13	MP2	X	-11.35	60
14	MP2	Z	6.55	60
15	MP1	X	-19.7	60
16	MP1	Z	11.38	60
17	MP3	X	-45	60
18	MP3	Z	25.98	60
19	MP2	X	-51.2	40

Member Point Loads (BLC 6 : Wind Load AZI 120) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
20	MP2	Z	29.56	40
21	MP4	X	-51.79	6
22	MP4	Z	29.9	6
23	MP4	X	-51.79	49
24	MP4	Z	29.9	49
25	MP5	X	-93.92	6
26	MP5	Z	54.22	6
27	MP5	X	-93.92	65
28	MP5	Z	54.22	65
29	MP6	X	-107.09	6
30	MP6	Z	61.83	6
31	MP6	X	-107.09	65
32	MP6	Z	61.83	65
33	MP5	X	-11.35	60
34	MP5	Z	6.55	60
35	MP4	X	-19.7	60
36	MP4	Z	11.38	60
37	MP6	X	-45	60
38	MP6	Z	25.98	60
39	MP5	X	-51.2	40
40	MP5	Z	29.56	40
41	MP7	X	-79.84	6
42	MP7	Z	46.09	6
43	MP7	X	-79.84	49
44	MP7	Z	46.09	49
45	MP8	X	-86.34	6
46	MP8	Z	49.85	6
47	MP8	X	-86.34	49
48	MP8	Z	49.85	49
49	MP9	X	-120	6
50	MP9	Z	69.28	6
51	MP9	X	-120	42
52	MP9	Z	69.28	42
53	MP8	X	-17.51	60
54	MP8	Z	10.11	60
55	MP7	X	-22.98	60
56	MP7	Z	13.27	60
57	MP9	X	-57.39	60
58	MP9	Z	33.14	60
59	MP8	X	-57.39	40
60	MP8	Z	33.14	40

Member Point Loads (BLC 7 : Wind Load AZI 150)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	-40.7	6
2	MP1	Z	70.49	6
3	MP1	X	-40.7	49
4	MP1	Z	70.49	49
5	MP2	X	-61.94	6
6	MP2	Z	107.29	6
7	MP2	X	-61.94	65
8	MP2	Z	107.29	65
9	MP3	X	-91.51	6
10	MP3	Z	158.5	6
11	MP3	X	-91.51	65
12	MP3	Z	158.5	65

Member Point Loads (BLC 7 : Wind Load AZI 150) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
13	MP2	X	-8.92	60
14	MP2	Z	15.46	60
15	MP1	X	-12.64	60
16	MP1	Z	21.89	60
17	MP3	X	-30.75	60
18	MP3	Z	53.26	60
19	MP2	X	-31.94	40
20	MP2	Z	55.33	40
21	MP4	X	-24.5	6
22	MP4	Z	42.44	6
23	MP4	X	-24.5	49
24	MP4	Z	42.44	49
25	MP5	X	-50.37	6
26	MP5	Z	87.24	6
27	MP5	X	-50.37	65
28	MP5	Z	87.24	65
29	MP6	X	-46.99	6
30	MP6	Z	81.38	6
31	MP6	X	-46.99	65
32	MP6	Z	81.38	65
33	MP5	X	-5.36	60
34	MP5	Z	9.29	60
35	MP4	X	-10.75	60
36	MP4	Z	18.61	60
37	MP6	X	-23.6	60
38	MP6	Z	40.87	60
39	MP5	X	-28.37	40
40	MP5	Z	49.13	40
41	MP7	X	-40.7	6
42	MP7	Z	70.49	6
43	MP7	X	-40.7	49
44	MP7	Z	70.49	49
45	MP8	X	-45.57	6
46	MP8	Z	78.94	6
47	MP8	X	-45.57	49
48	MP8	Z	78.94	49
49	MP9	X	-59.3	6
50	MP9	Z	102.71	6
51	MP9	X	-59.3	42
52	MP9	Z	102.71	42
53	MP8	X	-8.92	60
54	MP8	Z	15.46	60
55	MP7	X	-12.64	60
56	MP7	Z	21.89	60
57	MP9	X	-30.75	60
58	MP9	Z	53.26	60
59	MP8	X	-31.94	40
60	MP8	Z	55.33	40

Member Point Loads (BLC 8 : Wind Load AZI 180)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	0	6
2	MP1	Z	92.19	6
3	MP1	X	0	49
4	MP1	Z	92.19	49
5	MP2	X	0	6

Member Point Loads (BLC 8 : Wind Load AZI 180) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
6	MP2	Z	131.6	6
7	MP2	X	0	65
8	MP2	Z	131.6	65
9	MP3	X	0	6
10	MP3	Z	212.7	6
11	MP3	X	0	65
12	MP3	Z	212.7	65
13	MP2	X	0	60
14	MP2	Z	20.22	60
15	MP1	X	0	60
16	MP1	Z	26.54	60
17	MP3	X	0	60
18	MP3	Z	66.27	60
19	MP2	X	0	40
20	MP2	Z	66.27	40
21	MP4	X	0	6
22	MP4	Z	59.8	6
23	MP4	X	0	49
24	MP4	Z	59.8	49
25	MP5	X	0	6
26	MP5	Z	108.45	6
27	MP5	X	0	65
28	MP5	Z	108.45	65
29	MP6	X	0	6
30	MP6	Z	123.65	6
31	MP6	X	0	65
32	MP6	Z	123.65	65
33	MP5	X	0	60
34	MP5	Z	13.1	60
35	MP4	X	0	60
36	MP4	Z	22.75	60
37	MP6	X	0	60
38	MP6	Z	51.96	60
39	MP5	X	0	40
40	MP5	Z	59.12	40
41	MP7	X	0	6
42	MP7	Z	59.8	6
43	MP7	X	0	49
44	MP7	Z	59.8	49
45	MP8	X	0	6
46	MP8	Z	74.05	6
47	MP8	X	0	49
48	MP8	Z	74.05	49
49	MP9	X	0	6
50	MP9	Z	78.65	6
51	MP9	X	0	42
52	MP9	Z	78.65	42
53	MP8	X	0	60
54	MP8	Z	13.1	60
55	MP7	X	0	60
56	MP7	Z	22.75	60
57	MP9	X	0	60
58	MP9	Z	51.96	60
59	MP8	X	0	40
60	MP8	Z	59.12	40

Member Point Loads (BLC 9 : Wind Load AZI 210)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	40.7	6
2	MP1	Z	70.49	6
3	MP1	X	40.7	49
4	MP1	Z	70.49	49
5	MP2	X	61.94	6
6	MP2	Z	107.29	6
7	MP2	X	61.94	65
8	MP2	Z	107.29	65
9	MP3	X	91.51	6
10	MP3	Z	158.5	6
11	MP3	X	91.51	65
12	MP3	Z	158.5	65
13	MP2	X	8.92	60
14	MP2	Z	15.46	60
15	MP1	X	12.64	60
16	MP1	Z	21.89	60
17	MP3	X	30.75	60
18	MP3	Z	53.26	60
19	MP2	X	31.94	40
20	MP2	Z	55.33	40
21	MP4	X	40.7	6
22	MP4	Z	70.49	6
23	MP4	X	40.7	49
24	MP4	Z	70.49	49
25	MP5	X	61.94	6
26	MP5	Z	107.29	6
27	MP5	X	61.94	65
28	MP5	Z	107.29	65
29	MP6	X	91.51	6
30	MP6	Z	158.5	6
31	MP6	X	91.51	65
32	MP6	Z	158.5	65
33	MP5	X	8.92	60
34	MP5	Z	15.46	60
35	MP4	X	12.64	60
36	MP4	Z	21.89	60
37	MP6	X	30.75	60
38	MP6	Z	53.26	60
39	MP5	X	31.94	40
40	MP5	Z	55.33	40
41	MP7	X	24.5	6
42	MP7	Z	42.44	6
43	MP7	X	24.5	49
44	MP7	Z	42.44	49
45	MP8	X	32.75	6
46	MP8	Z	56.72	6
47	MP8	X	32.75	49
48	MP8	Z	56.72	49
49	MP9	X	29.34	6
50	MP9	Z	50.81	6
51	MP9	X	29.34	42
52	MP9	Z	50.81	42
53	MP8	X	5.36	60
54	MP8	Z	9.29	60
55	MP7	X	10.75	60
56	MP7	Z	18.61	60
57	MP9	X	23.6	60

Member Point Loads (BLC 9 : Wind Load AZI 210) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
58	MP9	Z	40.87	60
59	MP8	X	28.37	40
60	MP8	Z	49.13	40

Member Point Loads (BLC 10 : Wind Load AZI 240)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	51.79	6
2	MP1	Z	29.9	6
3	MP1	X	51.79	49
4	MP1	Z	29.9	49
5	MP2	X	93.92	6
6	MP2	Z	54.22	6
7	MP2	X	93.92	65
8	MP2	Z	54.22	65
9	MP3	X	107.09	6
10	MP3	Z	61.83	6
11	MP3	X	107.09	65
12	MP3	Z	61.83	65
13	MP2	X	11.35	60
14	MP2	Z	6.55	60
15	MP1	X	19.7	60
16	MP1	Z	11.38	60
17	MP3	X	45	60
18	MP3	Z	25.98	60
19	MP2	X	51.2	40
20	MP2	Z	29.56	40
21	MP4	X	79.84	6
22	MP4	Z	46.09	6
23	MP4	X	79.84	49
24	MP4	Z	46.09	49
25	MP5	X	113.97	6
26	MP5	Z	65.8	6
27	MP5	X	113.97	65
28	MP5	Z	65.8	65
29	MP6	X	184.2	6
30	MP6	Z	106.35	6
31	MP6	X	184.2	65
32	MP6	Z	106.35	65
33	MP5	X	17.51	60
34	MP5	Z	10.11	60
35	MP4	X	22.98	60
36	MP4	Z	13.27	60
37	MP6	X	57.39	60
38	MP6	Z	33.14	60
39	MP5	X	57.39	40
40	MP5	Z	33.14	40
41	MP7	X	51.79	6
42	MP7	Z	29.9	6
43	MP7	X	51.79	49
44	MP7	Z	29.9	49
45	MP8	X	64.13	6
46	MP8	Z	37.02	6
47	MP8	X	64.13	49
48	MP8	Z	37.02	49
49	MP9	X	68.11	6
50	MP9	Z	39.32	6

Member Point Loads (BLC 10 : Wind Load AZI 240) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
51	MP9	X	68.11	42
52	MP9	Z	39.32	42
53	MP8	X	11.35	60
54	MP8	Z	6.55	60
55	MP7	X	19.7	60
56	MP7	Z	11.38	60
57	MP9	X	45	60
58	MP9	Z	25.98	60
59	MP8	X	51.2	40
60	MP8	Z	29.56	40

Member Point Loads (BLC 11 : Wind Load AZI 270)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	49.01	6
2	MP1	Z	0	6
3	MP1	X	49.01	49
4	MP1	Z	0	49
5	MP2	X	100.73	6
6	MP2	Z	0	6
7	MP2	X	100.73	65
8	MP2	Z	0	65
9	MP3	X	93.97	6
10	MP3	Z	0	6
11	MP3	X	93.97	65
12	MP3	Z	0	65
13	MP2	X	10.73	60
14	MP2	Z	0	60
15	MP1	X	21.49	60
16	MP1	Z	0	60
17	MP3	X	47.19	60
18	MP3	Z	0	60
19	MP2	X	56.73	40
20	MP2	Z	0	40
21	MP4	X	81.39	6
22	MP4	Z	0	6
23	MP4	X	81.39	49
24	MP4	Z	0	49
25	MP5	X	123.89	6
26	MP5	Z	0	6
27	MP5	X	123.89	65
28	MP5	Z	0	65
29	MP6	X	183.02	6
30	MP6	Z	0	6
31	MP6	X	183.02	65
32	MP6	Z	0	65
33	MP5	X	17.85	60
34	MP5	Z	0	60
35	MP4	X	25.28	60
36	MP4	Z	0	60
37	MP6	X	61.5	60
38	MP6	Z	0	60
39	MP5	X	63.89	40
40	MP5	Z	0	40
41	MP7	X	81.39	6
42	MP7	Z	0	6
43	MP7	X	81.39	49

Member Point Loads (BLC 11 : Wind Load AZI 270) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
44	MP7	Z	0	49
45	MP8	X	91.15	6
46	MP8	Z	0	6
47	MP8	X	91.15	49
48	MP8	Z	0	49
49	MP9	X	118.59	6
50	MP9	Z	0	6
51	MP9	X	118.59	42
52	MP9	Z	0	42
53	MP8	X	17.85	60
54	MP8	Z	0	60
55	MP7	X	25.28	60
56	MP7	Z	0	60
57	MP9	X	61.5	60
58	MP9	Z	0	60
59	MP8	X	63.89	40
60	MP8	Z	0	40

Member Point Loads (BLC 12 : Wind Load AZI 300)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	51.79	6
2	MP1	Z	-29.9	6
3	MP1	X	51.79	49
4	MP1	Z	-29.9	49
5	MP2	X	93.92	6
6	MP2	Z	-54.22	6
7	MP2	X	93.92	65
8	MP2	Z	-54.22	65
9	MP3	X	107.09	6
10	MP3	Z	-61.83	6
11	MP3	X	107.09	65
12	MP3	Z	-61.83	65
13	MP2	X	11.35	60
14	MP2	Z	-6.55	60
15	MP1	X	19.7	60
16	MP1	Z	-11.38	60
17	MP3	X	45	60
18	MP3	Z	-25.98	60
19	MP2	X	51.2	40
20	MP2	Z	-29.56	40
21	MP4	X	51.79	6
22	MP4	Z	-29.9	6
23	MP4	X	51.79	49
24	MP4	Z	-29.9	49
25	MP5	X	93.92	6
26	MP5	Z	-54.22	6
27	MP5	X	93.92	65
28	MP5	Z	-54.22	65
29	MP6	X	107.09	6
30	MP6	Z	-61.83	6
31	MP6	X	107.09	65
32	MP6	Z	-61.83	65
33	MP5	X	11.35	60
34	MP5	Z	-6.55	60
35	MP4	X	19.7	60
36	MP4	Z	-11.38	60

Member Point Loads (BLC 12 : Wind Load AZI 300) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
37	MP6	X	45	60
38	MP6	Z	-25.98	60
39	MP5	X	51.2	40
40	MP5	Z	-29.56	40
41	MP7	X	79.84	6
42	MP7	Z	-46.09	6
43	MP7	X	79.84	49
44	MP7	Z	-46.09	49
45	MP8	X	86.34	6
46	MP8	Z	-49.85	6
47	MP8	X	86.34	49
48	MP8	Z	-49.85	49
49	MP9	X	120	6
50	MP9	Z	-69.28	6
51	MP9	X	120	42
52	MP9	Z	-69.28	42
53	MP8	X	17.51	60
54	MP8	Z	-10.11	60
55	MP7	X	22.98	60
56	MP7	Z	-13.27	60
57	MP9	X	57.39	60
58	MP9	Z	-33.14	60
59	MP8	X	57.39	40
60	MP8	Z	-33.14	40

Member Point Loads (BLC 13 : Wind Load AZI 330)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	40.7	6
2	MP1	Z	-70.49	6
3	MP1	X	40.7	49
4	MP1	Z	-70.49	49
5	MP2	X	61.94	6
6	MP2	Z	-107.29	6
7	MP2	X	61.94	65
8	MP2	Z	-107.29	65
9	MP3	X	91.51	6
10	MP3	Z	-158.5	6
11	MP3	X	91.51	65
12	MP3	Z	-158.5	65
13	MP2	X	8.92	60
14	MP2	Z	-15.46	60
15	MP1	X	12.64	60
16	MP1	Z	-21.89	60
17	MP3	X	30.75	60
18	MP3	Z	-53.26	60
19	MP2	X	31.94	40
20	MP2	Z	-55.33	40
21	MP4	X	24.5	6
22	MP4	Z	-42.44	6
23	MP4	X	24.5	49
24	MP4	Z	-42.44	49
25	MP5	X	50.37	6
26	MP5	Z	-87.24	6
27	MP5	X	50.37	65
28	MP5	Z	-87.24	65
29	MP6	X	46.99	6

Member Point Loads (BLC 13 : Wind Load AZI 330) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
30	MP6	Z	-81.38	6
31	MP6	X	46.99	65
32	MP6	Z	-81.38	65
33	MP5	X	5.36	60
34	MP5	Z	-9.29	60
35	MP4	X	10.75	60
36	MP4	Z	-18.61	60
37	MP6	X	23.6	60
38	MP6	Z	-40.87	60
39	MP5	X	28.37	40
40	MP5	Z	-49.13	40
41	MP7	X	40.7	6
42	MP7	Z	-70.49	6
43	MP7	X	40.7	49
44	MP7	Z	-70.49	49
45	MP8	X	45.57	6
46	MP8	Z	-78.94	6
47	MP8	X	45.57	49
48	MP8	Z	-78.94	49
49	MP9	X	59.3	6
50	MP9	Z	-102.71	6
51	MP9	X	59.3	42
52	MP9	Z	-102.71	42
53	MP8	X	8.92	60
54	MP8	Z	-15.46	60
55	MP7	X	12.64	60
56	MP7	Z	-21.89	60
57	MP9	X	30.75	60
58	MP9	Z	-53.26	60
59	MP8	X	31.94	40
60	MP8	Z	-55.33	40

Member Point Loads (BLC 16 : Ice Weight)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	Y	-80.009	6
2	MP1	Y	-80.009	49
3	MP2	Y	-123.78	6
4	MP2	Y	-123.78	65
5	MP3	Y	-168.178	6
6	MP3	Y	-168.178	65
7	MP2	Y	-30.321	60
8	MP1	Y	-42.652	60
9	MP3	Y	-91.9	60
10	MP2	Y	-100.566	40
11	MP4	Y	-80.009	6
12	MP4	Y	-80.009	49
13	MP5	Y	-123.78	6
14	MP5	Y	-123.78	65
15	MP6	Y	-168.178	6
16	MP6	Y	-168.178	65
17	MP5	Y	-30.321	60
18	MP4	Y	-42.652	60
19	MP6	Y	-91.9	60
20	MP5	Y	-100.566	40
21	MP7	Y	-80.009	6
22	MP7	Y	-80.009	49

Member Point Loads (BLC 16 : Ice Weight) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
23	MP8	Y	-94.282	6
24	MP8	Y	-94.282	49
25	MP9	Y	-119.478	6
26	MP9	Y	-119.478	42
27	MP8	Y	-30.321	60
28	MP7	Y	-42.652	60
29	MP9	Y	-91.9	60
30	MP8	Y	-100.566	40

Member Point Loads (BLC 17 : Ice Wind Load AZI 0)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	0	6
2	MP1	Z	-7.55	6
3	MP1	X	0	49
4	MP1	Z	-7.55	49
5	MP2	X	0	6
6	MP2	Z	-10.17	6
7	MP2	X	0	65
8	MP2	Z	-10.17	65
9	MP3	X	0	6
10	MP3	Z	-12.7	6
11	MP3	X	0	65
12	MP3	Z	-12.7	65
13	MP2	X	0	60
14	MP2	Z	-2.96	60
15	MP1	X	0	60
16	MP1	Z	-3.64	60
17	MP3	X	0	60
18	MP3	Z	-5.74	60
19	MP2	X	0	40
20	MP2	Z	-5.74	40
21	MP4	X	0	6
22	MP4	Z	-6.09	6
23	MP4	X	0	49
24	MP4	Z	-6.09	49
25	MP5	X	0	6
26	MP5	Z	-9.5	6
27	MP5	X	0	65
28	MP5	Z	-9.5	65
29	MP6	X	0	6
30	MP6	Z	-9.98	6
31	MP6	X	0	65
32	MP6	Z	-9.98	65
33	MP5	X	0	60
34	MP5	Z	-2.29	60
35	MP4	X	0	60
36	MP4	Z	-3.31	60
37	MP6	X	0	60
38	MP6	Z	-5.22	60
39	MP5	X	0	40
40	MP5	Z	-5.49	40
41	MP7	X	0	6
42	MP7	Z	-6.09	6
43	MP7	X	0	49
44	MP7	Z	-6.09	49
45	MP8	X	0	6

Member Point Loads (BLC 17 : Ice Wind Load AZI 0) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
46	MP8	Z	-7.02	6
47	MP8	X	0	49
48	MP8	Z	-7.02	49
49	MP9	X	0	6
50	MP9	Z	-6.58	6
51	MP9	X	0	42
52	MP9	Z	-6.58	42
53	MP8	X	0	60
54	MP8	Z	-2.29	60
55	MP7	X	0	60
56	MP7	Z	-3.31	60
57	MP9	X	0	60
58	MP9	Z	-5.22	60
59	MP8	X	0	40
60	MP8	Z	-5.49	40

Member Point Loads (BLC 18 : Ice Wind Load AZI 30)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	-3.53	6
2	MP1	Z	-6.12	6
3	MP1	X	-3.53	49
4	MP1	Z	-6.12	49
5	MP2	X	-4.97	6
6	MP2	Z	-8.61	6
7	MP2	X	-4.97	65
8	MP2	Z	-8.61	65
9	MP3	X	-5.9	6
10	MP3	Z	-10.21	6
11	MP3	X	-5.9	65
12	MP3	Z	-10.21	65
13	MP2	X	-1.37	60
14	MP2	Z	-2.37	60
15	MP1	X	-1.76	60
16	MP1	Z	-3.06	60
17	MP3	X	-2.78	60
18	MP3	Z	-4.82	60
19	MP2	X	-2.83	40
20	MP2	Z	-4.9	40
21	MP4	X	-3.53	6
22	MP4	Z	-6.12	6
23	MP4	X	-3.53	49
24	MP4	Z	-6.12	49
25	MP5	X	-4.97	6
26	MP5	Z	-8.61	6
27	MP5	X	-4.97	65
28	MP5	Z	-8.61	65
29	MP6	X	-5.9	6
30	MP6	Z	-10.21	6
31	MP6	X	-5.9	65
32	MP6	Z	-10.21	65
33	MP5	X	-1.37	60
34	MP5	Z	-2.37	60
35	MP4	X	-1.76	60
36	MP4	Z	-3.06	60
37	MP6	X	-2.78	60
38	MP6	Z	-4.82	60

Member Point Loads (BLC 18 : Ice Wind Load AZI 30) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
39	MP5	X	-2.83	40
40	MP5	Z	-4.9	40
41	MP7	X	-2.8	6
42	MP7	Z	-4.85	6
43	MP7	X	-2.8	49
44	MP7	Z	-4.85	49
45	MP8	X	-3.37	6
46	MP8	Z	-5.84	6
47	MP8	X	-3.37	49
48	MP8	Z	-5.84	49
49	MP9	X	-2.96	6
50	MP9	Z	-5.12	6
51	MP9	X	-2.96	42
52	MP9	Z	-5.12	42
53	MP8	X	-1.03	60
54	MP8	Z	-1.79	60
55	MP7	X	-1.6	60
56	MP7	Z	-2.77	60
57	MP9	X	-2.52	60
58	MP9	Z	-4.37	60
59	MP8	X	-2.7	40
60	MP8	Z	-4.68	40

Member Point Loads (BLC 19 : Ice Wind Load AZI 60)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	-5.27	6
2	MP1	Z	-3.04	6
3	MP1	X	-5.27	49
4	MP1	Z	-3.04	49
5	MP2	X	-8.23	6
6	MP2	Z	-4.75	6
7	MP2	X	-8.23	65
8	MP2	Z	-4.75	65
9	MP3	X	-8.64	6
10	MP3	Z	-4.99	6
11	MP3	X	-8.64	65
12	MP3	Z	-4.99	65
13	MP2	X	-1.98	60
14	MP2	Z	-1.15	60
15	MP1	X	-2.87	60
16	MP1	Z	-1.65	60
17	MP3	X	-4.52	60
18	MP3	Z	-2.61	60
19	MP2	X	-4.75	40
20	MP2	Z	-2.74	40
21	MP4	X	-6.54	6
22	MP4	Z	-3.78	6
23	MP4	X	-6.54	49
24	MP4	Z	-3.78	49
25	MP5	X	-8.81	6
26	MP5	Z	-5.08	6
27	MP5	X	-8.81	65
28	MP5	Z	-5.08	65
29	MP6	X	-11	6
30	MP6	Z	-6.35	6
31	MP6	X	-11	65

Member Point Loads (BLC 19 : Ice Wind Load AZI 60) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
32	MP6	Z	-6.35	65
33	MP5	X	-2.56	60
34	MP5	Z	-1.48	60
35	MP4	X	-3.15	60
36	MP4	Z	-1.82	60
37	MP6	X	-4.97	60
38	MP6	Z	-2.87	60
39	MP5	X	-4.97	40
40	MP5	Z	-2.87	40
41	MP7	X	-5.27	6
42	MP7	Z	-3.04	6
43	MP7	X	-5.27	49
44	MP7	Z	-3.04	49
45	MP8	X	-6.08	6
46	MP8	Z	-3.51	6
47	MP8	X	-6.08	49
48	MP8	Z	-3.51	49
49	MP9	X	-5.7	6
50	MP9	Z	-3.29	6
51	MP9	X	-5.7	42
52	MP9	Z	-3.29	42
53	MP8	X	-1.98	60
54	MP8	Z	-1.15	60
55	MP7	X	-2.87	60
56	MP7	Z	-1.65	60
57	MP9	X	-4.52	60
58	MP9	Z	-2.61	60
59	MP8	X	-4.75	40
60	MP8	Z	-2.74	40

Member Point Loads (BLC 20 : Ice Wind Load AZI 90)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	-5.6	6
2	MP1	Z	0	6
3	MP1	X	-5.6	49
4	MP1	Z	0	49
5	MP2	X	-9.28	6
6	MP2	Z	0	6
7	MP2	X	-9.28	65
8	MP2	Z	0	65
9	MP3	X	-9.07	6
10	MP3	Z	0	6
11	MP3	X	-9.07	65
12	MP3	Z	0	65
13	MP2	X	-2.07	60
14	MP2	Z	0	60
15	MP1	X	-3.2	60
16	MP1	Z	0	60
17	MP3	X	-5.05	60
18	MP3	Z	0	60
19	MP2	X	-5.4	40
20	MP2	Z	0	40
21	MP4	X	-7.06	6
22	MP4	Z	0	6
23	MP4	X	-7.06	49
24	MP4	Z	0	49

Member Point Loads (BLC 20 : Ice Wind Load AZI 90) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
25	MP5	X	-9.95	6
26	MP5	Z	0	6
27	MP5	X	-9.95	65
28	MP5	Z	0	65
29	MP6	X	-11.79	6
30	MP6	Z	0	6
31	MP6	X	-11.79	65
32	MP6	Z	0	65
33	MP5	X	-2.74	60
34	MP5	Z	0	60
35	MP4	X	-3.53	60
36	MP4	Z	0	60
37	MP6	X	-5.57	60
38	MP6	Z	0	60
39	MP5	X	-5.66	40
40	MP5	Z	0	40
41	MP7	X	-7.06	6
42	MP7	Z	0	6
43	MP7	X	-7.06	49
44	MP7	Z	0	49
45	MP8	X	-7.55	6
46	MP8	Z	0	6
47	MP8	X	-7.55	49
48	MP8	Z	0	49
49	MP9	X	-7.91	6
50	MP9	Z	0	6
51	MP9	X	-7.91	42
52	MP9	Z	0	42
53	MP8	X	-2.74	60
54	MP8	Z	0	60
55	MP7	X	-3.53	60
56	MP7	Z	0	60
57	MP9	X	-5.57	60
58	MP9	Z	0	60
59	MP8	X	-5.66	40
60	MP8	Z	0	40

Member Point Loads (BLC 21 : Ice Wind Load AZI 120)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	-5.27	6
2	MP1	Z	3.04	6
3	MP1	X	-5.27	49
4	MP1	Z	3.04	49
5	MP2	X	-8.23	6
6	MP2	Z	4.75	6
7	MP2	X	-8.23	65
8	MP2	Z	4.75	65
9	MP3	X	-8.64	6
10	MP3	Z	4.99	6
11	MP3	X	-8.64	65
12	MP3	Z	4.99	65
13	MP2	X	-1.98	60
14	MP2	Z	1.15	60
15	MP1	X	-2.87	60
16	MP1	Z	1.65	60
17	MP3	X	-4.52	60

Member Point Loads (BLC 21 : Ice Wind Load AZI 120) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
18	MP3	Z	2.61	60
19	MP2	X	-4.75	40
20	MP2	Z	2.74	40
21	MP4	X	-5.27	6
22	MP4	Z	3.04	6
23	MP4	X	-5.27	49
24	MP4	Z	3.04	49
25	MP5	X	-8.23	6
26	MP5	Z	4.75	6
27	MP5	X	-8.23	65
28	MP5	Z	4.75	65
29	MP6	X	-8.64	6
30	MP6	Z	4.99	6
31	MP6	X	-8.64	65
32	MP6	Z	4.99	65
33	MP5	X	-1.98	60
34	MP5	Z	1.15	60
35	MP4	X	-2.87	60
36	MP4	Z	1.65	60
37	MP6	X	-4.52	60
38	MP6	Z	2.61	60
39	MP5	X	-4.75	40
40	MP5	Z	2.74	40
41	MP7	X	-6.54	6
42	MP7	Z	3.78	6
43	MP7	X	-6.54	49
44	MP7	Z	3.78	49
45	MP8	X	-6.77	6
46	MP8	Z	3.91	6
47	MP8	X	-6.77	49
48	MP8	Z	3.91	49
49	MP9	X	-7.43	6
50	MP9	Z	4.29	6
51	MP9	X	-7.43	42
52	MP9	Z	4.29	42
53	MP8	X	-2.56	60
54	MP8	Z	1.48	60
55	MP7	X	-3.15	60
56	MP7	Z	1.82	60
57	MP9	X	-4.97	60
58	MP9	Z	2.87	60
59	MP8	X	-4.97	40
60	MP8	Z	2.87	40

Member Point Loads (BLC 22 : Ice Wind Load AZI 150)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	-3.53	6
2	MP1	Z	6.12	6
3	MP1	X	-3.53	49
4	MP1	Z	6.12	49
5	MP2	X	-4.97	6
6	MP2	Z	8.61	6
7	MP2	X	-4.97	65
8	MP2	Z	8.61	65
9	MP3	X	-5.9	6
10	MP3	Z	10.21	6

Member Point Loads (BLC 22 : Ice Wind Load AZI 150) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
11	MP3	X	-5.9	65
12	MP3	Z	10.21	65
13	MP2	X	-1.37	60
14	MP2	Z	2.37	60
15	MP1	X	-1.76	60
16	MP1	Z	3.06	60
17	MP3	X	-2.78	60
18	MP3	Z	4.82	60
19	MP2	X	-2.83	40
20	MP2	Z	4.9	40
21	MP4	X	-2.8	6
22	MP4	Z	4.85	6
23	MP4	X	-2.8	49
24	MP4	Z	4.85	49
25	MP5	X	-4.64	6
26	MP5	Z	8.04	6
27	MP5	X	-4.64	65
28	MP5	Z	8.04	65
29	MP6	X	-4.54	6
30	MP6	Z	7.86	6
31	MP6	X	-4.54	65
32	MP6	Z	7.86	65
33	MP5	X	-1.03	60
34	MP5	Z	1.79	60
35	MP4	X	-1.6	60
36	MP4	Z	2.77	60
37	MP6	X	-2.52	60
38	MP6	Z	4.37	60
39	MP5	X	-2.7	40
40	MP5	Z	4.68	40
41	MP7	X	-3.53	6
42	MP7	Z	6.12	6
43	MP7	X	-3.53	49
44	MP7	Z	6.12	49
45	MP8	X	-3.78	6
46	MP8	Z	6.54	6
47	MP8	X	-3.78	49
48	MP8	Z	6.54	49
49	MP9	X	-3.96	6
50	MP9	Z	6.85	6
51	MP9	X	-3.96	42
52	MP9	Z	6.85	42
53	MP8	X	-1.37	60
54	MP8	Z	2.37	60
55	MP7	X	-1.76	60
56	MP7	Z	3.06	60
57	MP9	X	-2.78	60
58	MP9	Z	4.82	60
59	MP8	X	-2.83	40
60	MP8	Z	4.9	40

Member Point Loads (BLC 23 : Ice Wind Load AZI 180)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	0	6
2	MP1	Z	7.55	6
3	MP1	X	0	49

Member Point Loads (BLC 23 : Ice Wind Load AZI 180) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
4	MP1	Z	7.55	49
5	MP2	X	0	6
6	MP2	Z	10.17	6
7	MP2	X	0	65
8	MP2	Z	10.17	65
9	MP3	X	0	6
10	MP3	Z	12.7	6
11	MP3	X	0	65
12	MP3	Z	12.7	65
13	MP2	X	0	60
14	MP2	Z	2.96	60
15	MP1	X	0	60
16	MP1	Z	3.64	60
17	MP3	X	0	60
18	MP3	Z	5.74	60
19	MP2	X	0	40
20	MP2	Z	5.74	40
21	MP4	X	0	6
22	MP4	Z	6.09	6
23	MP4	X	0	49
24	MP4	Z	6.09	49
25	MP5	X	0	6
26	MP5	Z	9.5	6
27	MP5	X	0	65
28	MP5	Z	9.5	65
29	MP6	X	0	6
30	MP6	Z	9.98	6
31	MP6	X	0	65
32	MP6	Z	9.98	65
33	MP5	X	0	60
34	MP5	Z	2.29	60
35	MP4	X	0	60
36	MP4	Z	3.31	60
37	MP6	X	0	60
38	MP6	Z	5.22	60
39	MP5	X	0	40
40	MP5	Z	5.49	40
41	MP7	X	0	6
42	MP7	Z	6.09	6
43	MP7	X	0	49
44	MP7	Z	6.09	49
45	MP8	X	0	6
46	MP8	Z	7.02	6
47	MP8	X	0	49
48	MP8	Z	7.02	49
49	MP9	X	0	6
50	MP9	Z	6.58	6
51	MP9	X	0	42
52	MP9	Z	6.58	42
53	MP8	X	0	60
54	MP8	Z	2.29	60
55	MP7	X	0	60
56	MP7	Z	3.31	60
57	MP9	X	0	60
58	MP9	Z	5.22	60
59	MP8	X	0	40
60	MP8	Z	5.49	40

Member Point Loads (BLC 24 : Ice Wind Load AZI 210)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	3.53	6
2	MP1	Z	6.12	6
3	MP1	X	3.53	49
4	MP1	Z	6.12	49
5	MP2	X	4.97	6
6	MP2	Z	8.61	6
7	MP2	X	4.97	65
8	MP2	Z	8.61	65
9	MP3	X	5.9	6
10	MP3	Z	10.21	6
11	MP3	X	5.9	65
12	MP3	Z	10.21	65
13	MP2	X	1.37	60
14	MP2	Z	2.37	60
15	MP1	X	1.76	60
16	MP1	Z	3.06	60
17	MP3	X	2.78	60
18	MP3	Z	4.82	60
19	MP2	X	2.83	40
20	MP2	Z	4.9	40
21	MP4	X	3.53	6
22	MP4	Z	6.12	6
23	MP4	X	3.53	49
24	MP4	Z	6.12	49
25	MP5	X	4.97	6
26	MP5	Z	8.61	6
27	MP5	X	4.97	65
28	MP5	Z	8.61	65
29	MP6	X	5.9	6
30	MP6	Z	10.21	6
31	MP6	X	5.9	65
32	MP6	Z	10.21	65
33	MP5	X	1.37	60
34	MP5	Z	2.37	60
35	MP4	X	1.76	60
36	MP4	Z	3.06	60
37	MP6	X	2.78	60
38	MP6	Z	4.82	60
39	MP5	X	2.83	40
40	MP5	Z	4.9	40
41	MP7	X	2.8	6
42	MP7	Z	4.85	6
43	MP7	X	2.8	49
44	MP7	Z	4.85	49
45	MP8	X	3.37	6
46	MP8	Z	5.84	6
47	MP8	X	3.37	49
48	MP8	Z	5.84	49
49	MP9	X	2.96	6
50	MP9	Z	5.12	6
51	MP9	X	2.96	42
52	MP9	Z	5.12	42
53	MP8	X	1.03	60
54	MP8	Z	1.79	60
55	MP7	X	1.6	60
56	MP7	Z	2.77	60
57	MP9	X	2.52	60

Member Point Loads (BLC 24 : Ice Wind Load AZI 210) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
58	MP9	Z	4.37	60
59	MP8	X	2.7	40
60	MP8	Z	4.68	40

Member Point Loads (BLC 25 : Ice Wind Load AZI 240)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	5.27	6
2	MP1	Z	3.04	6
3	MP1	X	5.27	49
4	MP1	Z	3.04	49
5	MP2	X	8.23	6
6	MP2	Z	4.75	6
7	MP2	X	8.23	65
8	MP2	Z	4.75	65
9	MP3	X	8.64	6
10	MP3	Z	4.99	6
11	MP3	X	8.64	65
12	MP3	Z	4.99	65
13	MP2	X	1.98	60
14	MP2	Z	1.15	60
15	MP1	X	2.87	60
16	MP1	Z	1.65	60
17	MP3	X	4.52	60
18	MP3	Z	2.61	60
19	MP2	X	4.75	40
20	MP2	Z	2.74	40
21	MP4	X	6.54	6
22	MP4	Z	3.78	6
23	MP4	X	6.54	49
24	MP4	Z	3.78	49
25	MP5	X	8.81	6
26	MP5	Z	5.08	6
27	MP5	X	8.81	65
28	MP5	Z	5.08	65
29	MP6	X	11	6
30	MP6	Z	6.35	6
31	MP6	X	11	65
32	MP6	Z	6.35	65
33	MP5	X	2.56	60
34	MP5	Z	1.48	60
35	MP4	X	3.15	60
36	MP4	Z	1.82	60
37	MP6	X	4.97	60
38	MP6	Z	2.87	60
39	MP5	X	4.97	40
40	MP5	Z	2.87	40
41	MP7	X	5.27	6
42	MP7	Z	3.04	6
43	MP7	X	5.27	49
44	MP7	Z	3.04	49
45	MP8	X	6.08	6
46	MP8	Z	3.51	6
47	MP8	X	6.08	49
48	MP8	Z	3.51	49
49	MP9	X	5.7	6
50	MP9	Z	3.29	6

Member Point Loads (BLC 25 : Ice Wind Load AZI 240) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
51	MP9	X	5.7	42
52	MP9	Z	3.29	42
53	MP8	X	1.98	60
54	MP8	Z	1.15	60
55	MP7	X	2.87	60
56	MP7	Z	1.65	60
57	MP9	X	4.52	60
58	MP9	Z	2.61	60
59	MP8	X	4.75	40
60	MP8	Z	2.74	40

Member Point Loads (BLC 26 : Ice Wind Load AZI 270)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	5.6	6
2	MP1	Z	0	6
3	MP1	X	5.6	49
4	MP1	Z	0	49
5	MP2	X	9.28	6
6	MP2	Z	0	6
7	MP2	X	9.28	65
8	MP2	Z	0	65
9	MP3	X	9.07	6
10	MP3	Z	0	6
11	MP3	X	9.07	65
12	MP3	Z	0	65
13	MP2	X	2.07	60
14	MP2	Z	0	60
15	MP1	X	3.2	60
16	MP1	Z	0	60
17	MP3	X	5.05	60
18	MP3	Z	0	60
19	MP2	X	5.4	40
20	MP2	Z	0	40
21	MP4	X	7.06	6
22	MP4	Z	0	6
23	MP4	X	7.06	49
24	MP4	Z	0	49
25	MP5	X	9.95	6
26	MP5	Z	0	6
27	MP5	X	9.95	65
28	MP5	Z	0	65
29	MP6	X	11.79	6
30	MP6	Z	0	6
31	MP6	X	11.79	65
32	MP6	Z	0	65
33	MP5	X	2.74	60
34	MP5	Z	0	60
35	MP4	X	3.53	60
36	MP4	Z	0	60
37	MP6	X	5.57	60
38	MP6	Z	0	60
39	MP5	X	5.66	40
40	MP5	Z	0	40
41	MP7	X	7.06	6
42	MP7	Z	0	6
43	MP7	X	7.06	49

Member Point Loads (BLC 26 : Ice Wind Load AZI 270) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
44	MP7	Z	0	49
45	MP8	X	7.55	6
46	MP8	Z	0	6
47	MP8	X	7.55	49
48	MP8	Z	0	49
49	MP9	X	7.91	6
50	MP9	Z	0	6
51	MP9	X	7.91	42
52	MP9	Z	0	42
53	MP8	X	2.74	60
54	MP8	Z	0	60
55	MP7	X	3.53	60
56	MP7	Z	0	60
57	MP9	X	5.57	60
58	MP9	Z	0	60
59	MP8	X	5.66	40
60	MP8	Z	0	40

Member Point Loads (BLC 27 : Ice Wind Load AZI 300)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP1	X	5.27	6
2	MP1	Z	-3.04	6
3	MP1	X	5.27	49
4	MP1	Z	-3.04	49
5	MP2	X	8.23	6
6	MP2	Z	-4.75	6
7	MP2	X	8.23	65
8	MP2	Z	-4.75	65
9	MP3	X	8.64	6
10	MP3	Z	-4.99	6
11	MP3	X	8.64	65
12	MP3	Z	-4.99	65
13	MP2	X	1.98	60
14	MP2	Z	-1.15	60
15	MP1	X	2.87	60
16	MP1	Z	-1.65	60
17	MP3	X	4.52	60
18	MP3	Z	-2.61	60
19	MP2	X	4.75	40
20	MP2	Z	-2.74	40
21	MP4	X	5.27	6
22	MP4	Z	-3.04	6
23	MP4	X	5.27	49
24	MP4	Z	-3.04	49
25	MP5	X	8.23	6
26	MP5	Z	-4.75	6
27	MP5	X	8.23	65
28	MP5	Z	-4.75	65
29	MP6	X	8.64	6
30	MP6	Z	-4.99	6
31	MP6	X	8.64	65
32	MP6	Z	-4.99	65
33	MP5	X	1.98	60
34	MP5	Z	-1.15	60
35	MP4	X	2.87	60
36	MP4	Z	-1.65	60

Member Point Loads (BLC 27 : Ice Wind Load AZI 300) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
37	MP6	X	4.52	60
38	MP6	Z	-2.61	60
39	MP5	X	4.75	40
40	MP5	Z	-2.74	40
41	MP7	X	6.54	6
42	MP7	Z	-3.78	6
43	MP7	X	6.54	49
44	MP7	Z	-3.78	49
45	MP8	X	6.77	6
46	MP8	Z	-3.91	6
47	MP8	X	6.77	49
48	MP8	Z	-3.91	49
49	MP9	X	7.43	6
50	MP9	Z	-4.29	6
51	MP9	X	7.43	42
52	MP9	Z	-4.29	42
53	MP8	X	2.56	60
54	MP8	Z	-1.48	60
55	MP7	X	3.15	60
56	MP7	Z	-1.82	60
57	MP9	X	4.97	60
58	MP9	Z	-2.87	60
59	MP8	X	4.97	40
60	MP8	Z	-2.87	40

Member Point Loads (BLC 28 : Ice Wind Load AZI 330)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	3.53	6
2	MP1	Z	-6.12	6
3	MP1	X	3.53	49
4	MP1	Z	-6.12	49
5	MP2	X	4.97	6
6	MP2	Z	-8.61	6
7	MP2	X	4.97	65
8	MP2	Z	-8.61	65
9	MP3	X	5.9	6
10	MP3	Z	-10.21	6
11	MP3	X	5.9	65
12	MP3	Z	-10.21	65
13	MP2	X	1.37	60
14	MP2	Z	-2.37	60
15	MP1	X	1.76	60
16	MP1	Z	-3.06	60
17	MP3	X	2.78	60
18	MP3	Z	-4.82	60
19	MP2	X	2.83	40
20	MP2	Z	-4.9	40
21	MP4	X	2.8	6
22	MP4	Z	-4.85	6
23	MP4	X	2.8	49
24	MP4	Z	-4.85	49
25	MP5	X	4.64	6
26	MP5	Z	-8.04	6
27	MP5	X	4.64	65
28	MP5	Z	-8.04	65
29	MP6	X	4.54	6

Member Point Loads (BLC 28 : Ice Wind Load AZI 330) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
30	MP6	Z	-7.86	6
31	MP6	X	4.54	65
32	MP6	Z	-7.86	65
33	MP5	X	1.03	60
34	MP5	Z	-1.79	60
35	MP4	X	1.6	60
36	MP4	Z	-2.77	60
37	MP6	X	2.52	60
38	MP6	Z	-4.37	60
39	MP5	X	2.7	40
40	MP5	Z	-4.68	40
41	MP7	X	3.53	6
42	MP7	Z	-6.12	6
43	MP7	X	3.53	49
44	MP7	Z	-6.12	49
45	MP8	X	3.78	6
46	MP8	Z	-6.54	6
47	MP8	X	3.78	49
48	MP8	Z	-6.54	49
49	MP9	X	3.96	6
50	MP9	Z	-6.85	6
51	MP9	X	3.96	42
52	MP9	Z	-6.85	42
53	MP8	X	1.37	60
54	MP8	Z	-2.37	60
55	MP7	X	1.76	60
56	MP7	Z	-3.06	60
57	MP9	X	2.78	60
58	MP9	Z	-4.82	60
59	MP8	X	2.83	40
60	MP8	Z	-4.9	40

Member Point Loads (BLC 31 : Seismic Load Z)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	Z	-1.652	6
2	MP1	Z	-1.652	49
3	MP2	Z	-2.03	6
4	MP2	Z	-2.03	65
5	MP3	Z	-3.748	6
6	MP3	Z	-3.748	65
7	MP2	Z	-1.312	60
8	MP1	Z	-2.077	60
9	MP3	Z	-6.608	60
10	MP2	Z	-7.08	40
11	MP4	Z	-1.652	6
12	MP4	Z	-1.652	49
13	MP5	Z	-2.03	6
14	MP5	Z	-2.03	65
15	MP6	Z	-3.748	6
16	MP6	Z	-3.748	65
17	MP5	Z	-1.312	60
18	MP4	Z	-2.077	60
19	MP6	Z	-6.608	60
20	MP5	Z	-7.08	40
21	MP7	Z	-1.652	6
22	MP7	Z	-1.652	49

Member Point Loads (BLC 31 : Seismic Load Z) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
23	MP8	Z	-1.581	6
24	MP8	Z	-1.581	49
25	MP9	Z	-3.205	6
26	MP9	Z	-3.205	42
27	MP8	Z	-1.312	60
28	MP7	Z	-2.077	60
29	MP9	Z	-6.608	60
30	MP8	Z	-7.08	40

Member Point Loads (BLC 32 : Seismic Load X)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in, %]
1	MP1	X	-1.652	6
2	MP1	X	-1.652	49
3	MP2	X	-2.03	6
4	MP2	X	-2.03	65
5	MP3	X	-3.748	6
6	MP3	X	-3.748	65
7	MP2	X	-1.312	60
8	MP1	X	-2.077	60
9	MP3	X	-6.608	60
10	MP2	X	-7.08	40
11	MP4	X	-1.652	6
12	MP4	X	-1.652	49
13	MP5	X	-2.03	6
14	MP5	X	-2.03	65
15	MP6	X	-3.748	6
16	MP6	X	-3.748	65
17	MP5	X	-1.312	60
18	MP4	X	-2.077	60
19	MP6	X	-6.608	60
20	MP5	X	-7.08	40
21	MP7	X	-1.652	6
22	MP7	X	-1.652	49
23	MP8	X	-1.581	6
24	MP8	X	-1.581	49
25	MP9	X	-3.205	6
26	MP9	X	-3.205	42
27	MP8	X	-1.312	60
28	MP7	X	-2.077	60
29	MP9	X	-6.608	60
30	MP8	X	-7.08	40

Member Distributed Loads (BLC 14 : Distr. Wind Load Z)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in, %]	End Location[in, %]
1	M1	SZ	-44.628	-44.628	0	%100
2	M2	SZ	-44.628	-44.628	0	%100
3	M3	SZ	-44.628	-44.628	0	%100
4	M4	SZ	-74.379	-74.379	0	%100
5	M5	SZ	-74.379	-74.379	0	%100
6	M6	SZ	-74.379	-74.379	0	%100
7	M7	SZ	-74.379	-74.379	0	%100
8	M8	SZ	-74.379	-74.379	0	%100
9	M9	SZ	-74.379	-74.379	0	%100
10	M10	SZ	-44.628	-44.628	0	%100
11	M11	SZ	-44.628	-44.628	0	%100

Member Distributed Loads (BLC 14 : Distr. Wind Load Z) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft....]	Start Location[in, %]	End Location[in, %]
12	M12	SZ	-44.628	-44.628	0	%100
13	M13	SZ	-74.379	-74.379	0	%100
14	M14	SZ	-74.379	-74.379	0	%100
15	M15	SZ	-74.379	-74.379	0	%100
16	M16	SZ	-74.379	-74.379	0	%100
17	M17	SZ	-74.379	-74.379	0	%100
18	M18	SZ	-74.379	-74.379	0	%100
19	M19	SZ	-44.628	-44.628	0	%100
20	M20	SZ	-44.628	-44.628	0	%100
21	M21	SZ	-44.628	-44.628	0	%100
22	M22	SZ	-74.379	-74.379	0	%100
23	M23	SZ	-74.379	-74.379	0	%100
24	M24	SZ	-74.379	-74.379	0	%100
25	MP1	SZ	-44.628	-44.628	0	%100
26	MP2	SZ	-44.628	-44.628	0	%100
27	MP3	SZ	-44.628	-44.628	0	%100
28	MP4	SZ	-44.628	-44.628	0	%100
29	MP5	SZ	-44.628	-44.628	0	%100
30	MP6	SZ	-44.628	-44.628	0	%100
31	MP7	SZ	-44.628	-44.628	0	%100
32	MP8	SZ	-44.628	-44.628	0	%100
33	MP9	SZ	-44.628	-44.628	0	%100
34	M34	SZ	-74.379	-74.379	0	%100
35	M35	SZ	-74.379	-74.379	0	%100
36	M36	SZ	-74.379	-74.379	0	%100

Member Distributed Loads (BLC 15 : Distr. Wind Load X)

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft....]	Start Location[in, %]	End Location[in, %]
1	M1	SX	-44.628	-44.628	0	%100
2	M2	SX	-44.628	-44.628	0	%100
3	M3	SX	-44.628	-44.628	0	%100
4	M4	SX	-74.379	-74.379	0	%100
5	M5	SX	-74.379	-74.379	0	%100
6	M6	SX	-74.379	-74.379	0	%100
7	M7	SX	-74.379	-74.379	0	%100
8	M8	SX	-74.379	-74.379	0	%100
9	M9	SX	-74.379	-74.379	0	%100
10	M10	SX	-44.628	-44.628	0	%100
11	M11	SX	-44.628	-44.628	0	%100
12	M12	SX	-44.628	-44.628	0	%100
13	M13	SX	-74.379	-74.379	0	%100
14	M14	SX	-74.379	-74.379	0	%100
15	M15	SX	-74.379	-74.379	0	%100
16	M16	SX	-74.379	-74.379	0	%100
17	M17	SX	-74.379	-74.379	0	%100
18	M18	SX	-74.379	-74.379	0	%100
19	M19	SX	-44.628	-44.628	0	%100
20	M20	SX	-44.628	-44.628	0	%100
21	M21	SX	-44.628	-44.628	0	%100
22	M22	SX	-74.379	-74.379	0	%100
23	M23	SX	-74.379	-74.379	0	%100
24	M24	SX	-74.379	-74.379	0	%100
25	MP1	SX	-44.628	-44.628	0	%100
26	MP2	SX	-44.628	-44.628	0	%100
27	MP3	SX	-44.628	-44.628	0	%100
28	MP4	SX	-44.628	-44.628	0	%100

Member Distributed Loads (BLC 15 : Distr. Wind Load X) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
29	MP5	SX	-44.628	-44.628	0	%100
30	MP6	SX	-44.628	-44.628	0	%100
31	MP7	SX	-44.628	-44.628	0	%100
32	MP8	SX	-44.628	-44.628	0	%100
33	MP9	SX	-44.628	-44.628	0	%100
34	M34	SX	-74.379	-74.379	0	%100
35	M35	SX	-74.379	-74.379	0	%100
36	M36	SX	-74.379	-74.379	0	%100

Member Distributed Loads (BLC 16 : Ice Weight)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
1	M1	Y	-13.432	-13.432	0	%100
2	M2	Y	-13.432	-13.432	0	%100
3	M3	Y	-13.432	-13.432	0	%100
4	M4	Y	-13.076	-13.076	0	%100
5	M5	Y	-13.076	-13.076	0	%100
6	M6	Y	-13.076	-13.076	0	%100
7	M7	Y	-19.566	-19.566	0	%100
8	M8	Y	-19.566	-19.566	0	%100
9	M9	Y	-19.566	-19.566	0	%100
10	M10	Y	-13.432	-13.432	0	%100
11	M11	Y	-13.432	-13.432	0	%100
12	M12	Y	-13.432	-13.432	0	%100
13	M13	Y	-11.792	-11.792	0	%100
14	M14	Y	-11.792	-11.792	0	%100
15	M15	Y	-11.792	-11.792	0	%100
16	M16	Y	-11.792	-11.792	0	%100
17	M17	Y	-11.792	-11.792	0	%100
18	M18	Y	-11.792	-11.792	0	%100
19	M19	Y	-10.684	-10.684	0	%100
20	M20	Y	-10.684	-10.684	0	%100
21	M21	Y	-10.684	-10.684	0	%100
22	M22	Y	-13.519	-13.519	0	%100
23	M23	Y	-13.519	-13.519	0	%100
24	M24	Y	-13.519	-13.519	0	%100
25	MP1	Y	-10.684	-10.684	0	%100
26	MP2	Y	-10.684	-10.684	0	%100
27	MP3	Y	-10.684	-10.684	0	%100
28	MP4	Y	-10.684	-10.684	0	%100
29	MP5	Y	-10.684	-10.684	0	%100
30	MP6	Y	-10.684	-10.684	0	%100
31	MP7	Y	-10.684	-10.684	0	%100
32	MP8	Y	-10.684	-10.684	0	%100
33	MP9	Y	-10.684	-10.684	0	%100
34	M34	Y	-18.928	-18.928	0	%100
35	M35	Y	-18.928	-18.928	0	%100
36	M36	Y	-18.928	-18.928	0	%100

Member Distributed Loads (BLC 29 : Distr. Ice Wind Load Z)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in, %]	End Location[in, %]
1	M1	SZ	-10.987	-10.987	0	%100
2	M2	SZ	-10.987	-10.987	0	%100
3	M3	SZ	-10.987	-10.987	0	%100
4	M4	SZ	-11.242	-11.242	0	%100
5	M5	SZ	-11.242	-11.242	0	%100
6	M6	SZ	-11.242	-11.242	0	%100

Member Distributed Loads (BLC 29 : Distr. Ice Wind Load Z) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in, %]	End Location[in, %]
7	M7	SZ	-8.539	-8.539	0 %100
8	M8	SZ	-8.539	-8.539	0 %100
9	M9	SZ	-8.539	-8.539	0 %100
10	M10	SZ	-10.987	-10.987	0 %100
11	M11	SZ	-10.987	-10.987	0 %100
12	M12	SZ	-10.987	-10.987	0 %100
13	M13	SZ	-12.378	-12.378	0 %100
14	M14	SZ	-12.378	-12.378	0 %100
15	M15	SZ	-12.378	-12.378	0 %100
16	M16	SZ	-12.378	-12.378	0 %100
17	M17	SZ	-12.378	-12.378	0 %100
18	M18	SZ	-12.378	-12.378	0 %100
19	M19	SZ	-13.762	-13.762	0 %100
20	M20	SZ	-13.762	-13.762	0 %100
21	M21	SZ	-13.762	-13.762	0 %100
22	M22	SZ	-10.928	-10.928	0 %100
23	M23	SZ	-10.928	-10.928	0 %100
24	M24	SZ	-10.928	-10.928	0 %100
25	MP1	SZ	-13.762	-13.762	0 %100
26	MP2	SZ	-13.762	-13.762	0 %100
27	MP3	SZ	-13.762	-13.762	0 %100
28	MP4	SZ	-13.762	-13.762	0 %100
29	MP5	SZ	-13.762	-13.762	0 %100
30	MP6	SZ	-13.762	-13.762	0 %100
31	MP7	SZ	-13.762	-13.762	0 %100
32	MP8	SZ	-13.762	-13.762	0 %100
33	MP9	SZ	-13.762	-13.762	0 %100
34	M34	SZ	-8.694	-8.694	0 %100
35	M35	SZ	-8.694	-8.694	0 %100
36	M36	SZ	-8.694	-8.694	0 %100

Member Distributed Loads (BLC 30 : Distr. Ice Wind Load X)

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[in, %]	End Location[in, %]
1	M1	SX	-10.987	-10.987	0 %100
2	M2	SX	-10.987	-10.987	0 %100
3	M3	SX	-10.987	-10.987	0 %100
4	M4	SX	-11.242	-11.242	0 %100
5	M5	SX	-11.242	-11.242	0 %100
6	M6	SX	-11.242	-11.242	0 %100
7	M7	SX	-8.539	-8.539	0 %100
8	M8	SX	-8.539	-8.539	0 %100
9	M9	SX	-8.539	-8.539	0 %100
10	M10	SX	-10.987	-10.987	0 %100
11	M11	SX	-10.987	-10.987	0 %100
12	M12	SX	-10.987	-10.987	0 %100
13	M13	SX	-12.378	-12.378	0 %100
14	M14	SX	-12.378	-12.378	0 %100
15	M15	SX	-12.378	-12.378	0 %100
16	M16	SX	-12.378	-12.378	0 %100
17	M17	SX	-12.378	-12.378	0 %100
18	M18	SX	-12.378	-12.378	0 %100
19	M19	SX	-13.762	-13.762	0 %100
20	M20	SX	-13.762	-13.762	0 %100
21	M21	SX	-13.762	-13.762	0 %100
22	M22	SX	-10.928	-10.928	0 %100
23	M23	SX	-10.928	-10.928	0 %100

Member Distributed Loads (BLC 30 : Distr. Ice Wind Load X) (Continued)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in,%]	End Location[in,%]
24	M24	SX	-10.928	-10.928	0 %100
25	MP1	SX	-13.762	-13.762	0 %100
26	MP2	SX	-13.762	-13.762	0 %100
27	MP3	SX	-13.762	-13.762	0 %100
28	MP4	SX	-13.762	-13.762	0 %100
29	MP5	SX	-13.762	-13.762	0 %100
30	MP6	SX	-13.762	-13.762	0 %100
31	MP7	SX	-13.762	-13.762	0 %100
32	MP8	SX	-13.762	-13.762	0 %100
33	MP9	SX	-13.762	-13.762	0 %100
34	M34	SX	-8.694	-8.694	0 %100
35	M35	SX	-8.694	-8.694	0 %100
36	M36	SX	-8.694	-8.694	0 %100

Member Distributed Loads (BLC 43 : BLC 1 Transient Area Loads)

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft....	Start Location[in,%]	End Location[in,%]
1	M1	Y	-.546	-11.39	20.175 31.944
2	M1	Y	-11.39	-18.177	31.944 43.712
3	M1	Y	-18.177	-9.519	43.712 55.481
4	M1	Y	-9.519	-.546	55.481 67.25
5	M4	Y	-7.386	-7.386	5.865 62.195
6	M7	Y	-1.715	-1.715	4.58 8.92
7	M15	Y	-2.179	-3.482	0 10.912
8	M15	Y	-3.482	-6.306	10.912 21.824
9	M15	Y	-6.306	-7.83	21.824 32.736
10	M15	Y	-7.83	-6.531	32.736 43.648
11	M16	Y	-2.179	-3.482	0 10.912
12	M16	Y	-3.482	-6.306	10.912 21.824
13	M16	Y	-6.306	-7.83	21.824 32.736
14	M16	Y	-7.83	-6.531	32.736 43.648
15	M2	Y	-.546	-11.39	20.175 31.944
16	M2	Y	-11.39	-18.177	31.944 43.712
17	M2	Y	-18.177	-9.519	43.712 55.481
18	M2	Y	-9.519	-.546	55.481 67.25
19	M5	Y	-7.386	-7.386	5.865 62.195
20	M8	Y	-1.715	-1.715	4.58 8.92
21	M17	Y	-2.179	-3.482	0 10.912
22	M17	Y	-3.482	-6.306	10.912 21.824
23	M17	Y	-6.306	-7.83	21.824 32.736
24	M17	Y	-7.83	-6.531	32.736 43.648
25	M18	Y	-2.179	-3.482	0 10.912
26	M18	Y	-3.482	-6.306	10.912 21.824
27	M18	Y	-6.306	-7.83	21.824 32.736
28	M18	Y	-7.83	-6.531	32.736 43.648
29	M3	Y	-.546	-11.39	20.175 31.944
30	M3	Y	-11.39	-18.177	31.944 43.712
31	M3	Y	-18.177	-9.519	43.712 55.481
32	M3	Y	-9.519	-.546	55.481 67.25
33	M6	Y	-7.386	-7.386	5.865 62.195
34	M9	Y	-1.715	-1.715	4.58 8.92
35	M13	Y	-2.179	-3.482	0 10.912
36	M13	Y	-3.482	-6.306	10.912 21.824
37	M13	Y	-6.306	-7.83	21.824 32.736
38	M13	Y	-7.83	-6.531	32.736 43.648
39	M14	Y	-2.179	-3.482	0 10.912
40	M14	Y	-3.482	-6.306	10.912 21.824

Member Distributed Loads (BLC 43 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft....]	Start Location[in,%]	End Location[in,%]
41	M14	Y	-6.306	-7.83	21.824	32.736
42	M14	Y	-7.83	-6.531	32.736	43.648

Member Distributed Loads (BLC 44 : BLC 16 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft....]	Start Location[in,%]	End Location[in,%]
1	M1	Y	-1.022	-21.3	20.175	31.944
2	M1	Y	-21.3	-33.991	31.944	43.712
3	M1	Y	-33.991	-17.8	43.712	55.481
4	M1	Y	-17.8	-1.022	55.481	67.25
5	M4	Y	-13.812	-13.812	5.865	62.195
6	M7	Y	-3.206	-3.206	4.58	8.92
7	M15	Y	-4.075	-6.511	0	10.912
8	M15	Y	-6.511	-11.793	10.912	21.824
9	M15	Y	-11.793	-14.642	21.824	32.736
10	M15	Y	-14.642	-12.213	32.736	43.648
11	M16	Y	-4.075	-6.511	0	10.912
12	M16	Y	-6.511	-11.793	10.912	21.824
13	M16	Y	-11.793	-14.642	21.824	32.736
14	M16	Y	-14.642	-12.213	32.736	43.648
15	M2	Y	-1.022	-21.3	20.175	31.944
16	M2	Y	-21.3	-33.992	31.944	43.712
17	M2	Y	-33.992	-17.8	43.712	55.481
18	M2	Y	-17.8	-1.022	55.481	67.25
19	M5	Y	-13.812	-13.812	5.865	62.195
20	M8	Y	-3.206	-3.206	4.58	8.92
21	M17	Y	-4.075	-6.511	0	10.912
22	M17	Y	-6.511	-11.793	10.912	21.824
23	M17	Y	-11.793	-14.642	21.824	32.736
24	M17	Y	-14.642	-12.213	32.736	43.648
25	M18	Y	-4.075	-6.511	0	10.912
26	M18	Y	-6.511	-11.793	10.912	21.824
27	M18	Y	-11.793	-14.642	21.824	32.736
28	M18	Y	-14.642	-12.213	32.736	43.648
29	M3	Y	-1.022	-21.3	20.175	31.944
30	M3	Y	-21.3	-33.992	31.944	43.712
31	M3	Y	-33.992	-17.8	43.712	55.481
32	M3	Y	-17.8	-1.022	55.481	67.25
33	M6	Y	-13.812	-13.812	5.865	62.195
34	M9	Y	-3.206	-3.206	4.58	8.92
35	M13	Y	-4.075	-6.511	0	10.912
36	M13	Y	-6.511	-11.793	10.912	21.824
37	M13	Y	-11.793	-14.642	21.824	32.736
38	M13	Y	-14.642	-12.213	32.736	43.648
39	M14	Y	-4.075	-6.511	0	10.912
40	M14	Y	-6.511	-11.793	10.912	21.824
41	M14	Y	-11.793	-14.642	21.824	32.736
42	M14	Y	-14.642	-12.213	32.736	43.648

Member Area Loads (BLC 1 : Self Weight)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[psf]
1	N34	N35	N33	N32	Y	Two Way	-10
2	N38	N39	N37	N36	Y	Two Way	-10
3	N29	N28	N30	N31	Y	Two Way	-10

Member Area Loads (BLC 16 : Ice Weight)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[psf]
1	N33	N32	N34	N35	Y	Two Way	-18.7
2	N38	N39	N37	N36	Y	Two Way	-18.7
3	N30	N28	N29	N31	Y	Two Way	-18.7

Site Name:	CTL01280
Client:	Smartlink
Carrier:	AT&T
Engineer:	TM
Date:	10/11/2019
Job #:	1106-A0001-B
	167.0' RAD

Code:	LRFD
Bolt Diameter	0.625
Bolt Grade:	A307
Threads Excluded?:	N
Axial (lbs):	2744.66
Shear (lbs):	1364.31

Bolt Info:	
Yield Strength (F_{yb})	36.0 ksi
Ultimate Strength (F_{ub})	60.0 ksi
Threads/in (n)	11
Gross Area (A_{gb})	0.307 in ²
Net Area (A_{nb})	0.226 in ²

Bolt Capacity (5/8" A307 Bolt), total of (4) per connection				
	Ult Load / Bolt	Factored Load ($\phi=0.75$)	# of Bolts	Factor Joint Capacity
Axial (lb)	13560.1	10170.1	1	10170
Shear(lb)	8283.5	6212.6	1	6213

Interaction Check	
$T / \phi T_n$	27.0%
$V / \phi V_n$	22.0%
≤ 1.0	12.1%
	OK

GENERAL NOTES:

1. THESE DOCUMENTS WERE DESIGNED IN ACCORDANCE WITH THE LATEST VERSION OF APPLICABLE LOCAL/STATE/COUNTY/CITY BUILDING CODES, AS WELL AS ANSI/TIA-222 STANDARD, AWWA-D100 STANDARD, NDS, NEC, MSJC, AND/OR THE LATEST VERSION OF THE INTERNATIONAL BUILDING CODE, UNLESS NOTED OTHERWISE IN THE CORRESPONDING STRUCTURAL REPORT.
2. ALL CONSTRUCTION METHODS SHOULD FOLLOW STANDARDS OF GOOD CONSTRUCTION PRACTICE.
3. ALL WORK INDICATED ON THESE DRAWINGS SHALL BE PERFORMED BY QUALIFIED CONTRACTORS EXPERIENCED IN SIMILAR CONSTRUCTION.
4. ALL NEW WORK SHALL ACCOMMODATE EXISTING CONDITIONS. IF OBSTRUCTIONS ARE FOUND, CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD PRIOR TO CONTINUING WORK.
5. ANY CHANGES OR ADDITIONS MUST CONFORM TO THE REQUIREMENTS OF THESE NOTES AND SPECIFICATIONS, AND SHOULD BE SIMILAR TO THOSE SHOWN. ALL CHANGES OR ADDITIONS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL PRIOR TO FABRICATION AND/OR CONSTRUCTION.
6. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND EXECUTION OF ALL MISCELLANEOUS SHORING, BRACING, TEMPORARY SUPPORTS, ETC. NECESSARY TO PROVIDE A COMPLETE AND STABLE STRUCTURE DURING CONSTRUCTION. TIA-1019-A-2011 IS AN APPROPRIATE REFERENCE FOR THOSE DESIGNS MEETING TIA STANDARDS. THE ENGINEER OF RECORD MAY PROVIDE FORMAL RIGGING PLANS AT THE REQUEST AND EXPENSE OF THE CONTRACTOR.

7. INSTALLATION SHALL NOT INTERFERE NOR DENY ADEQUATE ACCESS TO OR FROM ANY EXISTING OR PROPOSED OPERATIONAL AND SAFETY EQUIPMENT.
8. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO ANY FABRICATION. CONTACT INFINIGY ENGINEERING IF ANY DISCREPANCIES EXIST.

STEEL CONSTRUCTION NOTES:

1. STRUCTURAL STEEL SHALL CONFORM TO THE AISC MANUAL OF STEEL CONSTRUCTION 14TH EDITION, FOR THE DESIGN AND FABRICATION OF STEEL COMPONENTS.
2. ALL FIELD CUT SURFACES, FIELD DRILLED HOLES, AND GROUND SURFACES WHERE EXISTING PAINT OR GALVANIZATION REMOVAL WAS REQUIRED SHALL BE REPAIRED WITH (2) BRUSHED COATS OF ZRC GALVALITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURERS' RECOMMENDATIONS.
3. ALL FIELD DRILLED HOLES TO BE USED FOR FIELD BOLTING INSTALLATION SHALL BE STANDARD HOLES, AS DEFINED BY AISC, UNLESS NOTED OTHERWISE.
4. ALL EXTERIOR STEEL WORK SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A123.
5. ALL STEEL MEMBERS AND CONNECTIONS SHALL MEET THE FOLLOWING GRADES:
 - ANGLES, CHANNELS, PLATES AND BARS TO BE A36. Fy=36 KSI, U.N.O.
 - W SHAPES TO BE A992. Fy=50 KSI, U.N.O.
 - RECTANGULAR HSS TO BE A500, GRADE B. Fy=46 KSI, U.N.O.
 - ROUND HSS TO BE A500, GRADE B. Fy=42 KSI, U.N.O.
 - STEEL PIPE TO BE A53, GRADE B. Fy=35 KSI, U.N.O.
 - BOLTS TO BE A325-X. Fu=120 KSI, U.N.O.
 - U-BOLTS AND LAG SCREWS TO BE A307 GR A. Fu=60 KSI, U.N.O.
6. ALL WELDING SHALL BE DONE USING E70XX ELECTRODES, U.N.O.
7. ALL WELDING SHALL CONFORM TO AISC AND AWS D1.1 LATEST EDITION.
8. ALL HILTI ANCHORS TO BE CARBON STEEL, U.N.O.
 - MECHANICAL ANCHORS: KWIK BOLT-TZ, U.N.O.
 - CMU BLOCK ANCHORS: ADHESIVE - HY120, U.N.O.
 - CONCRETE ANCHORS: ADHESIVE - HY150, U.N.O.
 - CONCRETE REBAR: ADHESIVE - RES500, U.N.O.
9. ALL STUDS TO BE NELSON CAPACITOR DISCHARGE 1/4"-20 LOW CARBON STEEL COPPER-FLASH AT 55 KSI ULT/50 KSI YIELD, U.N.O.
10. BOLTS SHALL BE TIGHTENED TO A "SNUG TIGHT" CONDITION AS DEFINED BY AISC.
11. MINIMUM EDGE DISTANCES SHALL CONFORM TO AISC TABLE J3.4.
12. REMOVAL/REPLACEMENT OF STRUCTURAL MEMBERS SHALL BE DONE ONE MEMBER AT A TIME. CONTRACTOR IS RESPONSIBLE FOR ENSURING THE STRUCTURAL INTEGRITY OF THE STRUCTURE DURING ALL PHASES OF CONSTRUCTION.

CONCRETE CONSTRUCTION NOTES:

1. CONCRETE TO BE 4000 PSI @ 28 DAYS. REINFORCING BAR TO CONFORM TO ASTM A615 GRADE 60 SPECIFICATIONS. CONCRETE INSTALLATION TO CONFORM TO ACI-318 BUILDING REQUIREMENTS FOR REINFORCED CONCRETE. ALL CONCRETE TO BE PLACED AGAINST UNDISTURBED EARTH FREE OF WATER AND ALL FOREIGN OBJECTS AND MATERIALS. A MINIMUM OF THREE INCHES OF CONCRETE SHALL COVER ALL REINFORCEMENT. WELDING OF REBAR IS NOT PERMITTED.
2. EXISTING CONCRETE SURFACES THAT ARE TO BE IN CONTACT WITH NEW PROPOSED CONCRETE SHOULD BE WIRE BRUSHED CLEAN AND TREATED WITH APPROPRIATE MECHANICAL SCRATCH COAT AND REPAIR MATERIALS OR APPROPRIATE CHEMICAL METHODS SUCH AS THE APPLICATION OF A BONDING AGENT, EX. SAKRETE OR EQUIVALENT, TO ENSURE A QUALITY BOND BETWEEN EXISTING AND PROPOSED CONCRETE SURFACES.

FIBER REINFORCED POLYMER (FRP) NOTES:

1. FRP PLATES, SHAPES, BOLTS AND NUTS (STUD/NUT ASSEMBLIES) SHALL CONFORM TO ASTM D638, 695, 790. PLATES AND SHAPES TO BE FY = 5.35 KSI LW (SAFETY FACTOR OF 8), .945 KSI CW (SAFETY FACTOR OF 8) MIN.
2. IF FIELD FABRICATION IS REQUIRED, ALL CUT EDGES AND DRILLED HOLES TO BE SEALED USING VINYL ESTER SEALING KIT SUPPLIED BY THE MANUFACTURER.
3. ALL FASTENERS TO BE 1/2" DIA FRP THREADED ROD WITH FIBER REINFORCED THERMOPLASTIC NUT, SPACED AT 12 INCHES ON CENTER MAXIMUM, U.N.O., FOR PANELS AND AS DESIGNED FOR STRUCTURAL MEMBERS.
4. THE COLOR AND SURFACE PATTERN OF EXPOSED FRP PANELS SHALL MATCH THE EXTERIOR OF THE EXISTING BUILDING, U.N.O.
5. STUD/NUT ASSEMBLIES SHOULD BE LUBRICATED FOR INSTALLATION
6. ENSURE BEARING SURFACES OF THE NUTS ARE PARALLEL TO THE SURFACES BEING FASTENED.
7. TORQUE BOLTS ACCORDING TO THE FOLLOWING TABLE:

INSTALLATION TORQUE TABLE		
SIZE	ULTIMATE TORQUE STRENGTH	RECOMMENDED MAXIMUM INSTALLATION TORQUE
3/8-16 UNC	8 FT-LBS	4 FT-LBS
1/2-13 UNC	18 FT-LBS	8 FT-LBS
5/8-11 UNC	35 FT-LBS	16 FT-LBS
3/4-10 UNC	50 FT-LBS	24 FT-LBS
1-8 UNC	110 FT-LBS	50 FT-LBS

8. WHEN TIGHTENING FRP STUD/NUT ASSEMBLIES, WRENCHES MUST MAKE FULL CONTACT WITH ALL NUT EDGES. A STANDARD SIX POINT SOCKET IS RECOMMENDED.
9. STUD/NUT ASSEMBLIES SHOULD BE BONDED BY APPLYING BONDING AGENT TO ENTIRE NUT AND EXPOSED STUD.
10. ALL FRP MATERIALS TO BE PROVIDED BY FIBERGRATE COMPOSITE STRUCTURES, DALLAS TX, OR APPROVED EQUAL.
11. ALL FRP SHAPES TO BE DYNAFORM PULTRUDED STRUCTURAL SHAPES.
12. ALL FRP PLATES TO BE FIBERPLATE MOLDED FRP PLATE.
13. ALL FRP PANELS TO BE FIBERPLATE CLADDING PANEL.
14. EACH FRP PANEL TO BE IDENTIFIED WITH LARR#25536 AND FIBERGRATE COMPOSITE STRUCTURAL LABEL.
15. FRP MATERIAL TO BE CLASSIFIED AS CC1 OR BETTER, AND HAVE MAXIMUM FLAME SPREAD OF 50.
16. ALL DESIGN AND CONSTRUCTION TO BE COMPLETED IN ACCORDANCE WITH LOS ANGELES RESEARCH REPORT RR25536, DATED FEBRUARY 1, 2016.
17. SPECIAL INSPECTIONS MUST BE PROVIDED FOR ALL FRP INSTALLMENTS. SEE SPECIAL INSPECTION SECTION, THIS SHEET.

RATIO OF EDGE DISTANCE TO FRP FASTENER DIAMETER		
	RANGE	RECOMMENDED
EDGE DISTANCE - CL* BOLT TO END	2.0-4.0	3.0
EDGE DISTANCE - CL* BOLT TO SIDE	1.5-3.5	2.5
BOLT PITCH - CL* TO CL*	4.0-5.0	5.0

WOOD CONSTRUCTION NOTES:

1. ALL EXISTING WOOD SHAPES ARE ASSUMED TO BE DOUGLAS FIR-LARCH WITH A REFERENCE DESIGN BENDING VALUE OF 1000 PSI MIN.
2. ALL PROPOSED WOOD SHAPES ARE TO BE DOUGLAS FIR-LARCH WITH A REFERENCE DESIGN BENDING VALUE OF 1000 PSI MIN. U.N.O.
3. ALL EXISTING AND PROPOSED GLUED LAMINATED TIMBERS ARE TO BE 24F-1.8C DOUGLAS FIR BALANCED WITH A REFERENCE DESIGN BENDING VALUE OF 2400 PSI MIN. U.N.O.

MASONRY CONSTRUCTION NOTES:

1. ALL BRICK TO BE 1500 PSI MIN. REINFORCING BAR (IF APPLICABLE) TO CONFORM TO ASTM A615 GRADE 60 SPECIFICATIONS. ALL MORTAR TO BE 2000 PSI MIN.
 - FOR INTERIOR/ABOVE GRADE APPLICATIONS TYPE N MORTAR HAVING MINIMUM MODULUS OF RUPTURE OF 100 PSI SHALL BE USED. FOR EXTERIOR/BELOW GRADE APPLICATIONS TYPE M OR S MORTAR HAVING A MINIMUM MODULUS OF RUPTURE OF 133 PSI.
 - BRICK AND MORTAR INSTALLATION TO CONFORM TO MSJC BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES.
2. ALL CMU TO BE 1500 PSI MIN. REINFORCING BAR (IF APPLICABLE) TO CONFORM TO ASTM A615 GRADE 60 SPECIFICATIONS. ALL MORTAR TO BE 2000 PSI MIN.
 - FOR INTERIOR/ABOVE GRADE APPLICATIONS, TYPE N MORTAR HAVING MINIMUM MODULUS OF RUPTURE OF 64 PSI SHALL BE USED FOR UNGROUTED BLOCKS, AND 158 PSI FOR FULLY GROUTED BLOCKS.
 - FOR EXTERIOR/BELOW GRADE APPLICATIONS TYPE M OR S MORTAR HAVING A MINIMUM MODULUS OF RUPTURE OF 84 PSI SHALL BE USED FOR UNGROUTED BLOCKS, AND 163 PSI FOR FULLY GROUTED BLOCKS.
 - BRICK AND MORTAR INSTALLATION TO CONFORM TO MSJC BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES.

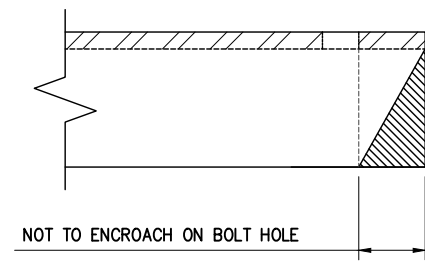
TOWER PLUMB & TENSION NOTES:

1. PLUMB AND TENSION TOWER UPON COMPLETION OF STRUCTURAL MODIFICATIONS DETAILED IN THESE DRAWINGS.
2. RETENSIONING OF EXISTING GUY WIRES SHALL BE PERFORMED AT A TIME WHEN THE WIND VELOCITY IS LESS THAN 10 MPH AT GROUND LEVEL AND WITH NO ICE ON THE STRUCTURE AND GUY WIRES.
3. PLUMB THE TOWER WHILE RETENSIONING THE EXISTING GUY WIRES. THE HORIZONTAL DISTANCE BETWEEN THE VERTICAL CENTERLINES AT ANY TWO ELEVATIONS SHALL NOT EXCEED 0.25% OF THE VERTICAL DISTANCE BETWEEN TWO ELEVATIONS FOR LATTICED STRUCTURES.
4. THE TWIST BETWEEN ANY TWO ELEVATIONS THROUGHOUT THE HEIGHT OF A LATTICE STRUCTURE SHALL NOT EXCEED 0.5 DEGREES IN 10 FEET. THE MAXIMUM TWIST OVER THE LATTICE STRUCTURE HEIGHT SHALL NOT EXCEED 5 DEGREES.

SPECIAL INSPECTIONS NOTES:

1. A QUALIFIED INDEPENDENT TESTING LABORATORY, EMPLOYED BY THE OWNER AND APPROVED BY THE JURISDICTION, SHALL PERFORM INSPECTION AND TESTING IN ACCORDANCE WITH THE THE GOVERNING BUILDING CODE, APPLICABLE SECTION(S) AS REQUIRED BY PROJECT SPECIFICATIONS FOR THE FOLLOWING CONSTRUCTION WORK:
 - a. STRUCTURAL WELDING (CONTINUOUS INSPECTION OF FIELD WELDS ONLY).
 - b. HIGH STRENGTH BOLTS (PERIODIC INSPECTION OF A325 AND/OR A490 BOLTS) TO BE TIGHTENED PER "TURN-OF-THE-NUT" METHOD.
 - c. MECHANICAL AND EPOXYED ANCHORAGES.
 - d. FIBER REINFORCED POLYMER.
 - THE SPECIAL INSPECTOR MUST VERIFY THAT THE FRP MATERIAL SPECIFIED ON THE APPROVED DESIGN DOCUMENTS IS BEING INSTALLED.
 - THE SPECIAL INSPECTOR MUST VERIFY THAT ALL CUT EDGES AND DRILLED HOLES ARE PROPERLY SEALED USING A VINYL ESTER SEALING KIT SUPPLIED BY THE MANUFACTURER.
 - THE SPECIAL INSPECTOR MUST VERIFY THAT THE STRUCTURE IS BUILT IN ACCORDANCE WITH THE APPROVED DESIGN DOCUMENTS.
2. THE INSPECTION AGENCY SHALL SUBMIT INSPECTION AND TEST REPORTS TO THE BUILDING DEPARTMENT, THE ENGINEER OF RECORD, AND THE OWNER UNLESS THE FABRICATOR IS APPROVED BY THE BUILDING OFFICIAL TO PERFORM WORK WITHOUT THE SPECIAL INSPECTIONS.

MAXIMUM ALLOWABLE ANGLE CLIP



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No.	ISSUED FOR REVIEW	TM	10/10/19
0	Submitted / Revision	App'd	Date

Drawn: LAM Date: 10/10/19
 Designed: TM Date: 10/10/19
 Checked: TM Date: 10/10/19

Project Number: 1106-A0001-B

Project Title:
 BARKHAMSTED GAVITT RD
 FA # 10133911
 CTL01280
 44 GAVITT ROAD
 BARKHAMSTED, CT 06063



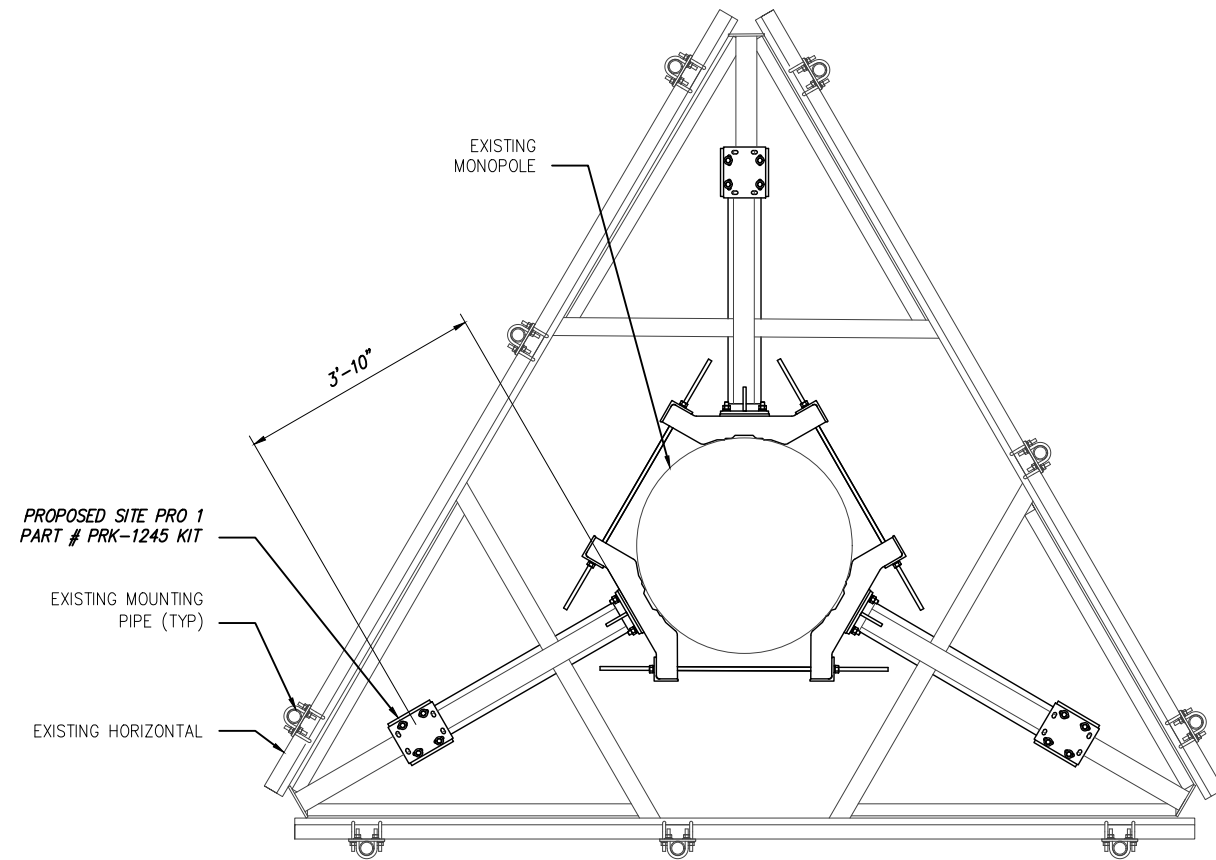
Drawing Scale: AS NOTED
 Date: 10/10/19

Drawing Title: **GENERAL NOTES**

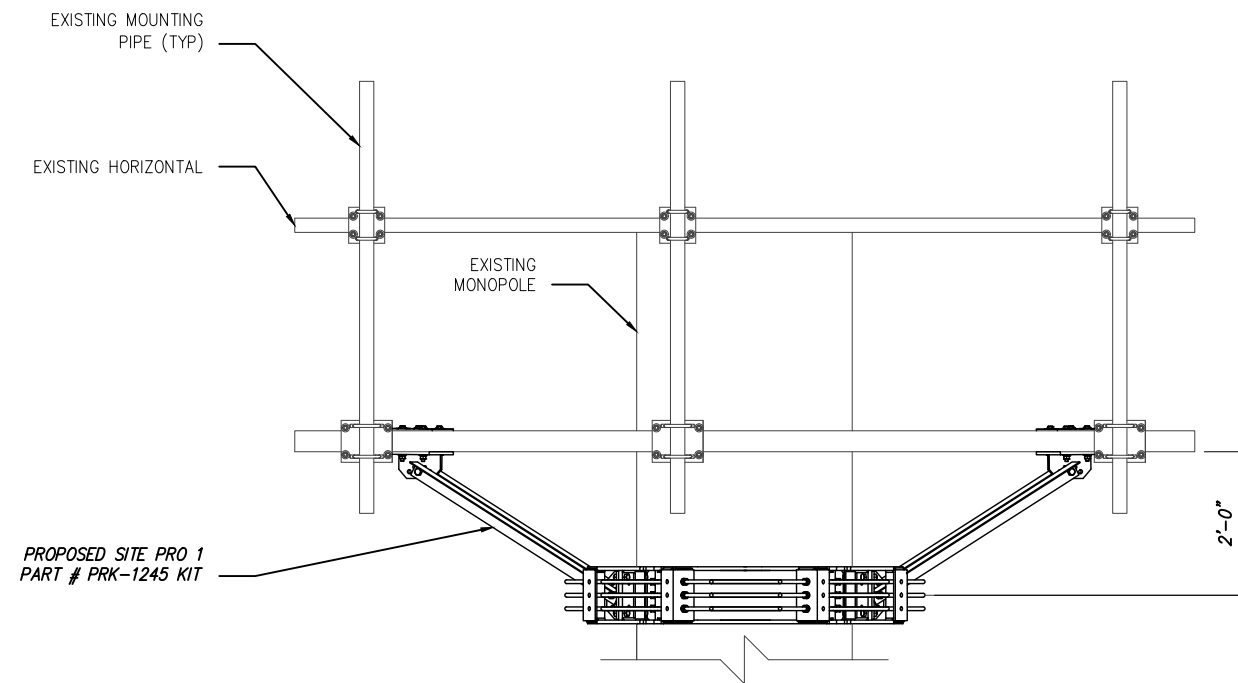
Drawing Number: **S-1**

NOTES:

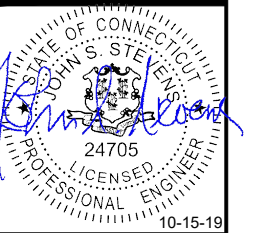
1. VARIOUS EXISTING CONDITIONS AND PROPOSED MODIFICATIONS ARE NOT SHOWN FOR CLARITY.
2. ALL SITE PRO 1 PARTS ARE TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.



1 PLAN VIEW
SCALE: NOT TO SCALE



2 ELEVATION VIEW
SCALE: NOT TO SCALE



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BARKHAMSTED, CT 06063



Drawing Scale: AS NOTED

Date: 10/10/19

0

Drawing Title
MOUNT MODIFICATION DETAILS

Drawing Number
S-2

GENERAL NOTES:

1. THESE DOCUMENTS WERE DESIGNED IN ACCORDANCE WITH THE LATEST VERSION OF APPLICABLE LOCAL/STATE/COUNTY/CITY BUILDING CODES, AS WELL AS ANSI/TIA-222 STANDARD, AWWA-D100 STANDARD, NDS, NEC, MSJC, AND/OR THE LATEST VERSION OF THE INTERNATIONAL BUILDING CODE, UNLESS NOTED OTHERWISE IN THE CORRESPONDING STRUCTURAL REPORT.
2. ALL CONSTRUCTION METHODS SHOULD FOLLOW STANDARDS OF GOOD CONSTRUCTION PRACTICE.
3. ALL WORK INDICATED ON THESE DRAWINGS SHALL BE PERFORMED BY QUALIFIED CONTRACTORS EXPERIENCED IN SIMILAR CONSTRUCTION.
4. ALL NEW WORK SHALL ACCOMMODATE EXISTING CONDITIONS. IF OBSTRUCTIONS ARE FOUND, CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD PRIOR TO CONTINUING WORK.
5. ANY CHANGES OR ADDITIONS MUST CONFORM TO THE REQUIREMENTS OF THESE NOTES AND SPECIFICATIONS, AND SHOULD BE SIMILAR TO THOSE SHOWN. ALL CHANGES OR ADDITIONS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL PRIOR TO FABRICATION AND/OR CONSTRUCTION.
6. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND EXECUTION OF ALL MISCELLANEOUS SHORING, BRACING, TEMPORARY SUPPORTS, ETC. NECESSARY TO PROVIDE A COMPLETE AND STABLE STRUCTURE DURING CONSTRUCTION. TIA-1019-A-2011 IS AN APPROPRIATE REFERENCE FOR THOSE DESIGNS MEETING TIA STANDARDS. THE ENGINEER OF RECORD MAY PROVIDE FORMAL RIGGING PLANS AT THE REQUEST AND EXPENSE OF THE CONTRACTOR.

7. INSTALLATION SHALL NOT INTERFERE NOR DENY ADEQUATE ACCESS TO OR FROM ANY EXISTING OR PROPOSED OPERATIONAL AND SAFETY EQUIPMENT.
8. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO ANY FABRICATION. CONTACT INFINIGY ENGINEERING IF ANY DISCREPANCIES EXIST.

STEEL CONSTRUCTION NOTES:

1. STRUCTURAL STEEL SHALL CONFORM TO THE AISC MANUAL OF STEEL CONSTRUCTION 14TH EDITION, FOR THE DESIGN AND FABRICATION OF STEEL COMPONENTS.
2. ALL FIELD CUT SURFACES, FIELD DRILLED HOLES, AND GROUND SURFACES WHERE EXISTING PAINT OR GALVANIZATION REMOVAL WAS REQUIRED SHALL BE REPAIRED WITH (2) BRUSHED COATS OF ZRC GALVALITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURERS' RECOMMENDATIONS.
3. ALL FIELD DRILLED HOLES TO BE USED FOR FIELD BOLTING INSTALLATION SHALL BE STANDARD HOLES, AS DEFINED BY AISC, UNLESS NOTED OTHERWISE.
4. ALL EXTERIOR STEEL WORK SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A123.
5. ALL STEEL MEMBERS AND CONNECTIONS SHALL MEET THE FOLLOWING GRADES:
 - ANGLES, CHANNELS, PLATES AND BARS TO BE A36. Fy=36 KSI, U.N.O.
 - W SHAPES TO BE A992. Fy=50 KSI, U.N.O.
 - RECTANGULAR HSS TO BE A500, GRADE B. Fy=46 KSI, U.N.O.
 - ROUND HSS TO BE A500, GRADE B. Fy=42 KSI, U.N.O.
 - STEEL PIPE TO BE A53, GRADE B. Fy=35 KSI, U.N.O.
 - BOLTS TO BE A325-X. Fu=120 KSI, U.N.O.
 - U-BOLTS AND LAG SCREWS TO BE A307 GR A. Fu=60 KSI, U.N.O.
6. ALL WELDING SHALL BE DONE USING E70XX ELECTRODES, U.N.O.
7. ALL WELDING SHALL CONFORM TO AISC AND AWS D1.1 LATEST EDITION.
8. ALL HILTI ANCHORS TO BE CARBON STEEL, U.N.O.
 - MECHANICAL ANCHORS: KWIK BOLT-TZ, U.N.O.
 - CMU BLOCK ANCHORS: ADHESIVE - HY120, U.N.O.
 - CONCRETE ANCHORS: ADHESIVE - HY150, U.N.O.
 - CONCRETE REBAR: ADHESIVE - RES500, U.N.O.
9. ALL STUDS TO BE NELSON CAPACITOR DISCHARGE 1/4"-20 LOW CARBON STEEL COPPER-FLASH AT 55 KSI ULT/50 KSI YIELD, U.N.O.
10. BOLTS SHALL BE TIGHTENED TO A "SNUG TIGHT" CONDITION AS DEFINED BY AISC.
11. MINIMUM EDGE DISTANCES SHALL CONFORM TO AISC TABLE J3.4.
12. REMOVAL/REPLACEMENT OF STRUCTURAL MEMBERS SHALL BE DONE ONE MEMBER AT A TIME. CONTRACTOR IS RESPONSIBLE FOR ENSURING THE STRUCTURAL INTEGRITY OF THE STRUCTURE DURING ALL PHASES OF CONSTRUCTION.

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1. CONCRETE TO BE 4000 PSI @ 28 DAYS. REINFORCING BAR TO CONFORM TO ASTM A615 GRADE 60 SPECIFICATIONS. CONCRETE INSTALLATION TO CONFORM TO ACI-318 BUILDING REQUIREMENTS FOR REINFORCED CONCRETE. ALL CONCRETE TO BE PLACED AGAINST UNDISTURBED EARTH FREE OF WATER AND ALL FOREIGN OBJECTS AND MATERIALS. A MINIMUM OF THREE INCHES OF CONCRETE SHALL COVER ALL REINFORCEMENT. WELDING OF REBAR IS NOT PERMITTED.
2. EXISTING CONCRETE SURFACES THAT ARE TO BE IN CONTACT WITH NEW PROPOSED CONCRETE SHOULD BE WIRE BRUSHED CLEAN AND TREATED WITH APPROPRIATE MECHANICAL SCRATCH COAT AND REPAIR MATERIALS OR APPROPRIATE CHEMICAL METHODS SUCH AS THE APPLICATION OF A BONDING AGENT, EX. SAKRETE OR EQUIVALENT, TO ENSURE A QUALITY BOND BETWEEN EXISTING AND PROPOSED CONCRETE SURFACES.

FIBER REINFORCED POLYMER (FRP) NOTES:

1. FRP PLATES, SHAPES, BOLTS AND NUTS (STUD/NUT ASSEMBLIES) SHALL CONFORM TO ASTM D638, 695, 790. PLATES AND SHAPES TO BE FY = 5.35 KSI LW (SAFETY FACTOR OF 8), .945 KSI CW (SAFETY FACTOR OF 8) MIN.
2. IF FIELD FABRICATION IS REQUIRED, ALL CUT EDGES AND DRILLED HOLES TO BE SEALED USING VINYL ESTER SEALING KIT SUPPLIED BY THE MANUFACTURER.
3. ALL FASTENERS TO BE 1/2" DIA FRP THREADED ROD WITH FIBER REINFORCED THERMOPLASTIC NUT, SPACED AT 12 INCHES ON CENTER MAXIMUM, U.N.O., FOR PANELS AND AS DESIGNED FOR STRUCTURAL MEMBERS.
4. THE COLOR AND SURFACE PATTERN OF EXPOSED FRP PANELS SHALL MATCH THE EXTERIOR OF THE EXISTING BUILDING, U.N.O.
5. STUD/NUT ASSEMBLIES SHOULD BE LUBRICATED FOR INSTALLATION
6. ENSURE BEARING SURFACES OF THE NUTS ARE PARALLEL TO THE SURFACES BEING FASTENED.
7. TORQUE BOLTS ACCORDING TO THE FOLLOWING TABLE:

INSTALLATION TORQUE TABLE		
SIZE	ULTIMATE TORQUE STRENGTH	RECOMMENDED MAXIMUM INSTALLATION TORQUE
3/8-16 UNC	8 FT-LBS	4 FT-LBS
1/2-13 UNC	18 FT-LBS	8 FT-LBS
5/8-11 UNC	35 FT-LBS	16 FT-LBS
3/4-10 UNC	50 FT-LBS	24 FT-LBS
1-8 UNC	110 FT-LBS	50 FT-LBS

8. WHEN TIGHTENING FRP STUD/NUT ASSEMBLIES, WRENCHES MUST MAKE FULL CONTACT WITH ALL NUT EDGES. A STANDARD SIX POINT SOCKET IS RECOMMENDED.
9. STUD/NUT ASSEMBLIES SHOULD BE BONDED BY APPLYING BONDING AGENT TO ENTIRE NUT AND EXPOSED STUD.
10. ALL FRP MATERIALS TO BE PROVIDED BY FIBERGRATE COMPOSITE STRUCTURES, DALLAS TX, OR APPROVED EQUAL.
11. ALL FRP SHAPES TO BE DYNAFORM PULTRUDED STRUCTURAL SHAPES.
12. ALL FRP PLATES TO BE FIBERPLATE MOLDED FRP PLATE.
13. ALL FRP PANELS TO BE FIBERPLATE CLADDING PANEL.
14. EACH FRP PANEL TO BE IDENTIFIED WITH LARR#25536 AND FIBERGRATE COMPOSITE STRUCTURAL LABEL.
15. FRP MATERIAL TO BE CLASSIFIED AS CC1 OR BETTER, AND HAVE MAXIMUM FLAME SPREAD OF 50.
16. ALL DESIGN AND CONSTRUCTION TO BE COMPLETED IN ACCORDANCE WITH LOS ANGELES RESEARCH REPORT RR25536, DATED FEBRUARY 1, 2016.
17. SPECIAL INSPECTIONS MUST BE PROVIDED FOR ALL FRP INSTALLMENTS. SEE SPECIAL INSPECTION SECTION, THIS SHEET.

RATIO OF EDGE DISTANCE TO FRP FASTENER DIAMETER		
	RANGE	RECOMMENDED
EDGE DISTANCE - CL* BOLT TO END	2.0-4.0	3.0
EDGE DISTANCE - CL* BOLT TO SIDE	1.5-3.5	2.5
BOLT PITCH - CL* TO CL*	4.0-5.0	5.0

WOOD CONSTRUCTION NOTES:

1. ALL EXISTING WOOD SHAPES ARE ASSUMED TO BE DOUGLAS FIR-LARCH WITH A REFERENCE DESIGN BENDING VALUE OF 1000 PSI MIN.
2. ALL PROPOSED WOOD SHAPES ARE TO BE DOUGLAS FIR-LARCH WITH A REFERENCE DESIGN BENDING VALUE OF 1000 PSI MIN. U.N.O.
3. ALL EXISTING AND PROPOSED GLUED LAMINATED TIMBERS ARE TO BE 24F-1.8C DOUGLAS FIR BALANCED WITH A REFERENCE DESIGN BENDING VALUE OF 2400 PSI MIN. U.N.O.

MASONRY CONSTRUCTION NOTES:

1. ALL BRICK TO BE 1500 PSI MIN. REINFORCING BAR (IF APPLICABLE) TO CONFORM TO ASTM A615 GRADE 60 SPECIFICATIONS. ALL MORTAR TO BE 2000 PSI MIN.
 - FOR INTERIOR/ABOVE GRADE APPLICATIONS TYPE N MORTAR HAVING MINIMUM MODULUS OF RUPTURE OF 100 PSI SHALL BE USED. FOR EXTERIOR/BELOW GRADE APPLICATIONS TYPE M OR S MORTAR HAVING A MINIMUM MODULUS OF RUPTURE OF 133 PSI.
 - BRICK AND MORTAR INSTALLATION TO CONFORM TO MSJC BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES.
2. ALL CMU TO BE 1500 PSI MIN. REINFORCING BAR (IF APPLICABLE) TO CONFORM TO ASTM A615 GRADE 60 SPECIFICATIONS. ALL MORTAR TO BE 2000 PSI MIN.
 - FOR INTERIOR/ABOVE GRADE APPLICATIONS, TYPE N MORTAR HAVING MINIMUM MODULUS OF RUPTURE OF 64 PSI SHALL BE USED FOR UNGROUTED BLOCKS, AND 158 PSI FOR FULLY GROUTED BLOCKS.
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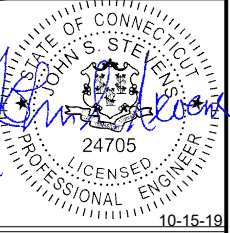
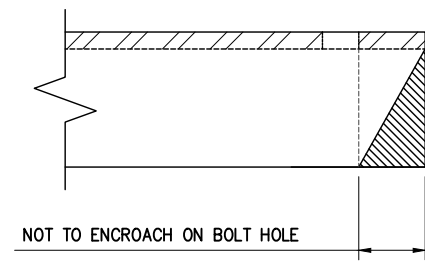
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1. PLUMB AND TENSION TOWER UPON COMPLETION OF STRUCTURAL MODIFICATIONS DETAILED IN THESE DRAWINGS.
2. RETENSIONING OF EXISTING GUY WIRES SHALL BE PERFORMED AT A TIME WHEN THE WIND VELOCITY IS LESS THAN 10 MPH AT GROUND LEVEL AND WITH NO ICE ON THE STRUCTURE AND GUY WIRES.
3. PLUMB THE TOWER WHILE RETENSIONING THE EXISTING GUY WIRES. THE HORIZONTAL DISTANCE BETWEEN THE VERTICAL CENTERLINES AT ANY TWO ELEVATIONS SHALL NOT EXCEED 0.25% OF THE VERTICAL DISTANCE BETWEEN TWO ELEVATIONS FOR LATTICED STRUCTURES.
4. THE TWIST BETWEEN ANY TWO ELEVATIONS THROUGHOUT THE HEIGHT OF A LATTICE STRUCTURE SHALL NOT EXCEED 0.5 DEGREES IN 10 FEET. THE MAXIMUM TWIST OVER THE LATTICE STRUCTURE HEIGHT SHALL NOT EXCEED 5 DEGREES.

SPECIAL INSPECTIONS NOTES:

1. A QUALIFIED INDEPENDENT TESTING LABORATORY, EMPLOYED BY THE OWNER AND APPROVED BY THE JURISDICTION, SHALL PERFORM INSPECTION AND TESTING IN ACCORDANCE WITH THE THE GOVERNING BUILDING CODE, APPLICABLE SECTION(S) AS REQUIRED BY PROJECT SPECIFICATIONS FOR THE FOLLOWING CONSTRUCTION WORK:
 - a. STRUCTURAL WELDING (CONTINUOUS INSPECTION OF FIELD WELDS ONLY).
 - b. HIGH STRENGTH BOLTS (PERIODIC INSPECTION OF A325 AND/OR A490 BOLTS) TO BE TIGHTENED PER "TURN-OF-THE-NUT" METHOD.
 - c. MECHANICAL AND EPOXYED ANCHORAGES.
 - d. FIBER REINFORCED POLYMER.
 - THE SPECIAL INSPECTOR MUST VERIFY THAT THE FRP MATERIAL SPECIFIED ON THE APPROVED DESIGN DOCUMENTS IS BEING INSTALLED.
 - THE SPECIAL INSPECTOR MUST VERIFY THAT ALL CUT EDGES AND DRILLED HOLES ARE PROPERLY SEALED USING A VINYL ESTER SEALING KIT SUPPLIED BY THE MANUFACTURER.
 - THE SPECIAL INSPECTOR MUST VERIFY THAT THE STRUCTURE IS BUILT IN ACCORDANCE WITH THE APPROVED DESIGN DOCUMENTS.
2. THE INSPECTION AGENCY SHALL SUBMIT INSPECTION AND TEST REPORTS TO THE BUILDING DEPARTMENT, THE ENGINEER OF RECORD, AND THE OWNER UNLESS THE FABRICATOR IS APPROVED BY THE BUILDING OFFICIAL TO PERFORM WORK WITHOUT THE SPECIAL INSPECTIONS.

MAXIMUM ALLOWABLE ANGLE CLIP



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No.	ISSUED FOR REVIEW	TM	10/10/19
0	Submitted / Revision	App'd	Date

Drawn: LAM Date: 10/10/19
 Designed: TM Date: 10/10/19
 Checked: TM Date: 10/10/19

Project Number: 1106-A0001-B

Project Title:
 BARKHAMSTED GAVITT RD
 FA # 10133911
 CTL01280
 44 GAVITT ROAD
 BARKHAMSTED, CT 06063

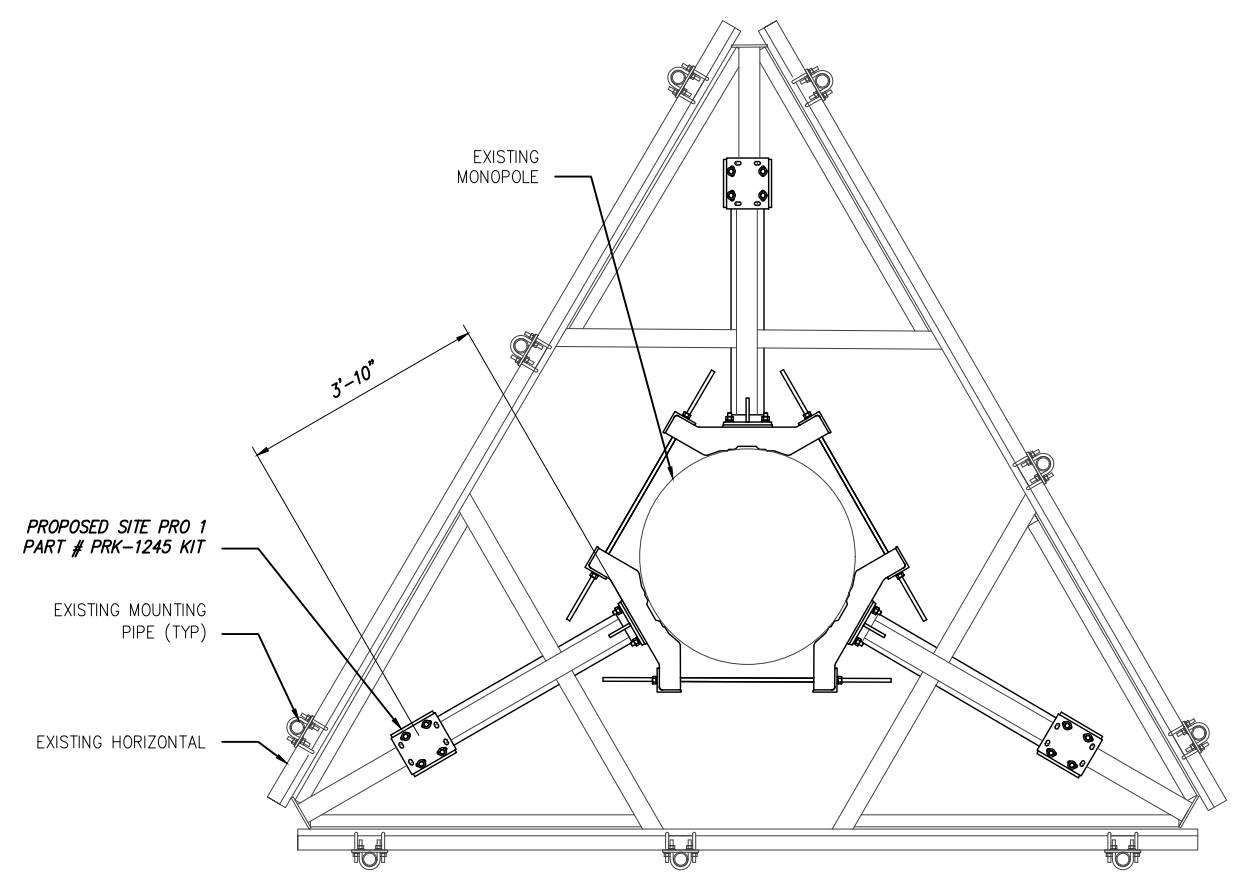


Drawing Scale: AS NOTED
 Date: 10/10/19

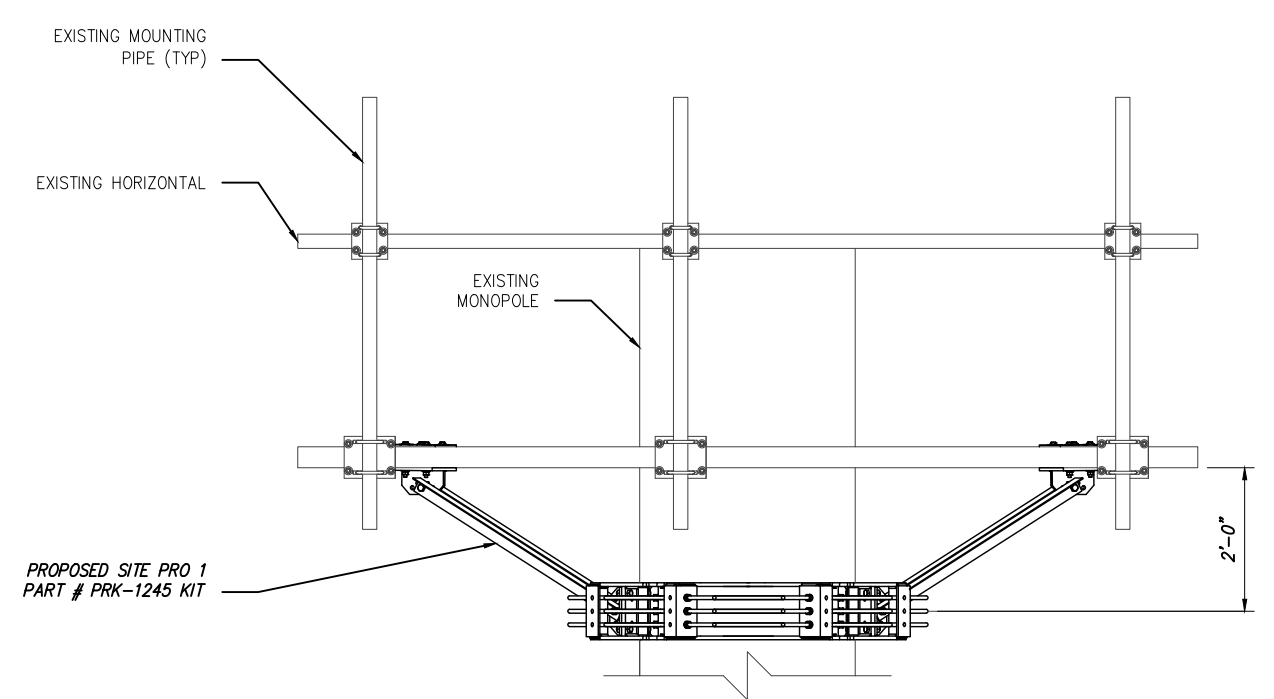
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Drawing Number: **S-1**

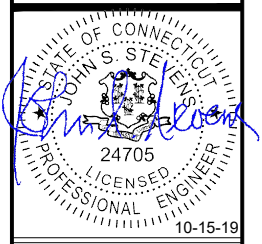
NOTES:
 1. VARIOUS EXISTING CONDITIONS AND PROPOSED MODIFICATIONS ARE NOT SHOWN FOR CLARITY.
 2. ALL SITE PRO 1 PARTS ARE TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.



1 PLAN VIEW
 SCALE: NOT TO SCALE



2 ELEVATION VIEW
 SCALE: NOT TO SCALE



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Drawing Scale: AS NOTED
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 0

Drawing Title
MOUNT MODIFICATION DETAILS

Drawing Number
S-2