April 7, 2022

Melanie A. Bachman
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: Notice of Exempt Modification – AT&T Mobility Site 13683394, Site # CT1009
AT&T Wireless Telecommunications Facility @ 699 West Street, Rocky Hill, CT 06067

Dear Ms. Bachman,

AT&T Mobility ("AT&T") is proposing to modify a wireless telecommunications facility on an existing one hundred (100) foot tall monopole tower at 699 West Street, in Rocky Hill, CT 06067 (Latitude: 41.65176772 Longitude: -72.66847905). The monopole tower is owned and operated by American Tower Corporation. The subject property is owned by Eversource (F/K/A Connecticut Power & Light).

AT&T proposes to remove three (3) existing antennas, six (6) RRH units, six (6) coax cables, two (2) DC cables, a fiber trunk and conduit, and replace them with twelve (12) new panel antennas at the existing centerline of one hundred three (103) feet on the existing one hundred (100) foot tall monopole, with nine (9) new RRH units, one (1) DC 9 squid, three (3) new cables and a fiber trunk, as more particularly detailed and described on the enclosed Construction Drawings prepared by Dewberry Engineering., dated 3/17/2022. The proposal involves minimal groundwork: removing the BB Units, and installing a DC12, three (3) 6673 gateways, an MXU and a 6630 IDLe.

Most recently, on 04/23/2018, the Siting Council approved EM-AT&T-119-180405 - AT&T Mobility notice of intent to modify the existing telecommunications facility at the same 103 foot centerline.

Please accept this application as notification in accordance with R.C.S.A. § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72 (b)(2). In accordance with R.C.S.A §16-50j-73, a copy of this letter is being sent to the following individuals: American Tower Corporation as Tower Operator/Owner; Eversource (F/K/A Conn Power & Light) as Property Owner; the Honorable John Mehr, the Town Manager of Rocky Hill, and Kimberley A. Ricci, the Town Planner/Zoning Enforcement Officer for Rocky Hill.

Jack Andrews. 10130 Donleigh Dr., Columbia, MD 21046 443-677-0144 jmandrews@clinellc.com
Centerline Communications • 750 W Center Street, Suite 301, W Bridgewater, MA 02379

The applicant's proposal falls squarely within those activities explicitly provided for in R.C.S.A. § § 16-50j-72(b)(2):

1. The proposed modifications will NOT result in an increase in the height of the existing structure. AT&T's antennas and associated lines will be installed at the existing mount height of 103' on the tower.
2. The proposed modifications will NOT require an extension of the site boundary.
3. The proposed modifications will NOT increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.
4. The operation of the modified facility will NOT increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission (FCC) safety standard. Please see the RF emissions calculation for AT&T's modified facility enclosed herewith.
5. The proposed modifications will NOT cause an ineligible change or alteration in the physical or environmental characteristics of the site.
6. The existing structure and its foundation can support the proposed loading. Please see the structural analysis dated November 2, 2021, prepared by American Tower Corporation and enclosed herewith.

For the foregoing reasons, AT&T respectfully requests that the Council approve this request for the exempt modifications under R.C.S.A. § 16-50j-72(b)(2), for this tower located at 699 West Street, Rocky Hill, CT 06067.

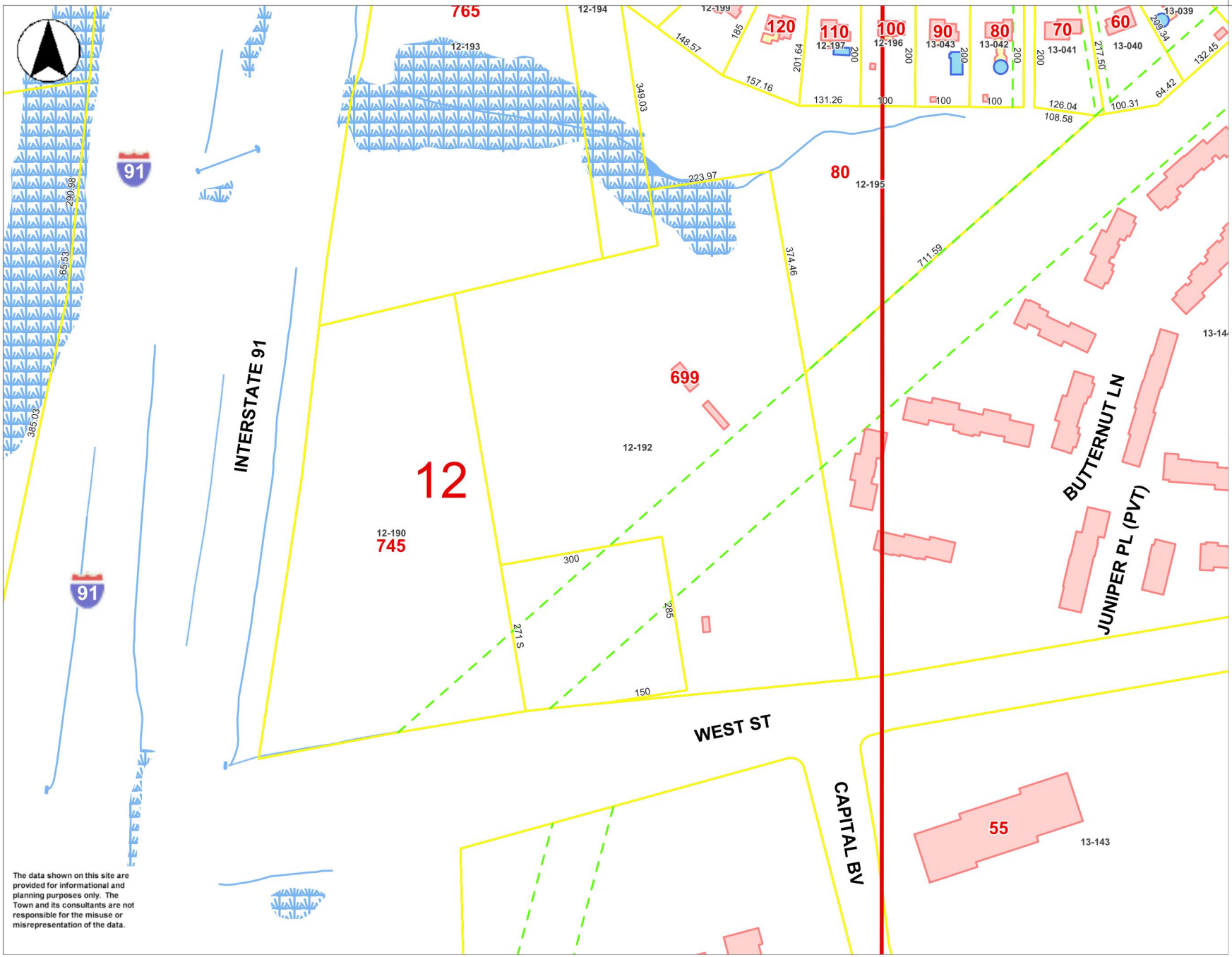
If you have any questions, please feel free to contact me.

Sincerely,

Jack Andrews
Zoning Manager, Centerline Communications
10130 Donleigh Drive
Columbia, MD 21046
443-677-0144

Enclosures:
Exhibit 1 – Property Card and GIS
Exhibit 2 – Construction Drawings
Exhibit 3 – Structural Analysis Report
Exhibit 4 – Antenna Mount Analysis Report
Exhibit 5 – EME Study Report
Exhibit 6 – (4) Notice Confirmations

cc: American Tower Corporation - Tower Operator/Owner
Eversource (F/K/A Conn Power & Light) - Property Owner
John Mehr - the Town Manager of Rocky Hill
Kimberley A. Ricci - Town Planner/Zoning Enforcement Officer for Rocky Hill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126.04
100.31
64.42
132.45
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209.34
91
290.98
165.53
385.03
INTERSTATE 91
699
12-192
12
12-190
745
300
285
271 S
150
WEST ST
BUTTERNUT LN
JUNIPER PL (PVT)
CAPITAL BV
55
13-143
13-14
Parcels for Identify
GIS Grid
Buildings
Building
Deck
Greenhouse
Pool
Easements
Parcels w/Aerials
Parcels
CT Highways
Interstate
US Highway
State Highway
CT Communities
CT Communities Opaque
Town Boundary
Recreation
Streets
Streams
Culvert
Dam
Drainage Ditch
Perenial Stream
Water Bodies
The data shown on this site are provided for informational and planning purposes only. The Town and its consultants are not responsible for the misuse or misrepresentation of the data.
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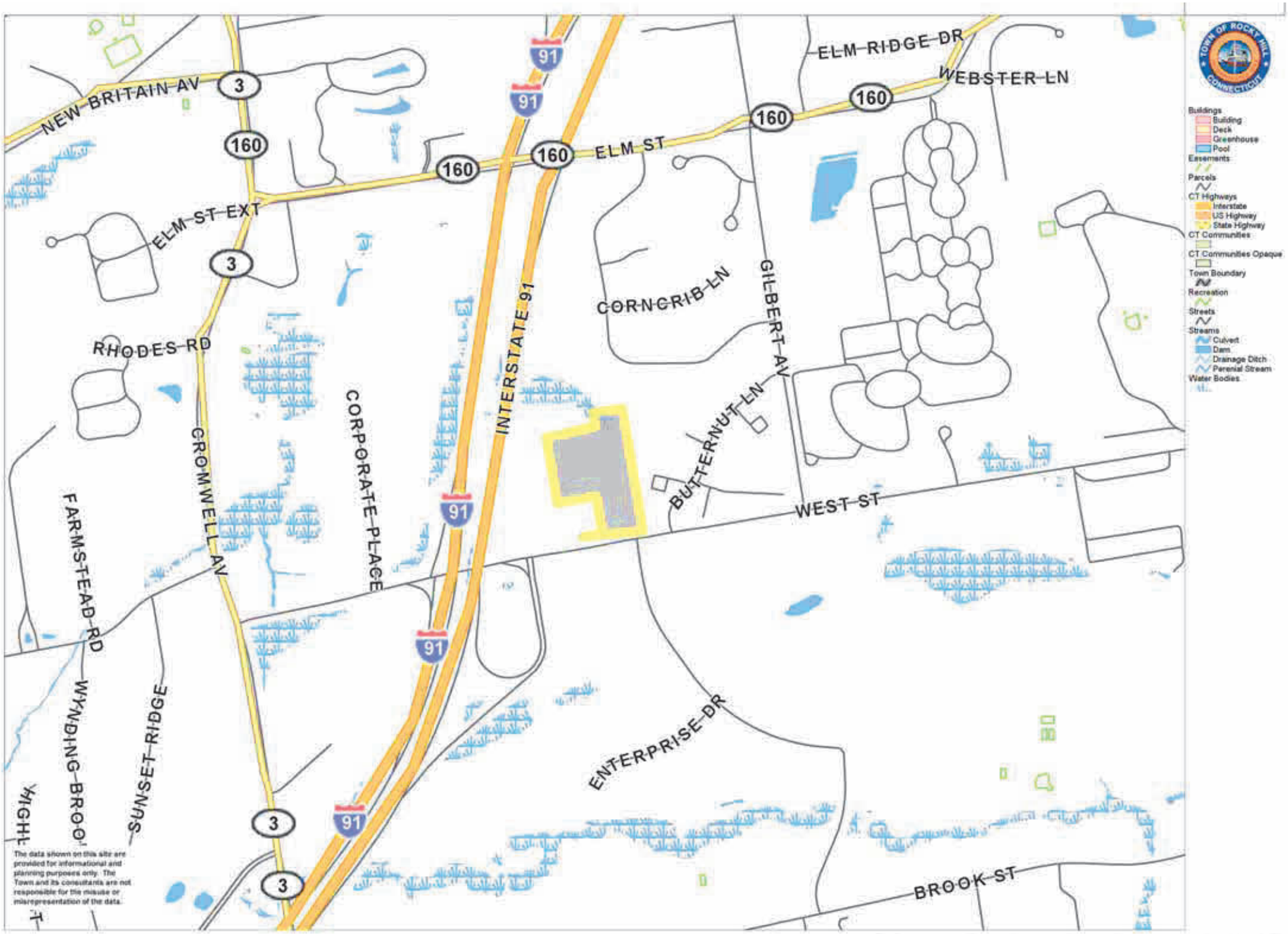
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ELM RIDGE DR
WEBSTER LN
ELM ST
RHODES RD
CROMWELL AV
CORPORATE PLACE
INTERSTATE 91
CORNCRIB LN
GILBERT AV
BUTTERNUT LN
WEST ST
FARMSTEAD RD
WYNDING BROOK
SUNSET RIDGE
HIGHT
ENTERPRISE DR
BROOK ST
91
Buildings
Building
Deck
Greenhouse
Pool
Easements
Parcels
CT Highways
Interstate
US Highway
State Highway
CT Communities
CT Communities Opaque
Town Boundary
Recreation
Streets
Streams
Culvert
Dam
Drainage Ditch
Perenial Stream
Water Bodies
The data shown on this site are provided for informational and planning purposes only. The Town and its consultants are not responsible for the misuse or misrepresentation of the data.
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1200
2400 ft
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Town of Rocky Hill Property Summary Report

699 WEST STREET

PARCEL ID:	12-192	**ACCOUNT NUMBER:**	001195
LOCATION:	699 WEST STREET		
OWNER NAME:	CONNECTICUT LIGHT + POWER CO THE		

12-192-001 11/05/2012

OWNER OF RECORD
CONNECTICUT LIGHT + POWER CO THE PO BOX 270 HARTFORD, CT 06141-0270

LIVING AREA:	null	**ZONING:**	R-20	**ACREAGE:**	9.98

SALES HISTORY

OWNER	BOOK / PAGE	SALE DATE	SALE PRICE
CONNECTICUT LIGHT + POWER CO THE	139/ 448	01-Jul-1982	$0.00

CURRENT PARCEL VALUE

TOTAL:	$1,229,340.00	**IMPROVEMENTS:**	$151,620.00	**LAND:**	$1,077,720.00

ASSESSING HISTORY

FISCAL YEAR	TOTAL VALUE	IMPROVEMENT VALUE	LAND VALUE
2017	$1,229,340.00	$151,620.00	$1,077,720.00
2007	$73,080.00	$0.00	$73,080.00
2006	$73,080.00	$0.00	$73,080.00
2016	$1,229,340.00	$151,620.00	$1,077,720.00
2014	$1,229,340.00	$151,620.00	$1,077,720.00
2013	$1,229,340.00	$151,620.00	$1,077,720.00
2012	$545,650.00	$0.00	$545,650.00
2011	$545,650.00	$0.00	$545,650.00
2010	$545,650.00	$0.00	$545,650.00
2009	$545,650.00	$0.00	$545,650.00
2008	$545,650.00	$0.00	$545,650.00

Radio Frequency Emissions Analysis Report

February 24, 2022

Centerline Communications on behalf of AT&T

Site Name: ROCKY HILL-WEST ST
Site Address: 2 WEST STREET, ROCKY HILL, CT 06067
FA#: 10035027
USID: 59333

Site Compliance Summary

Compliance Status:	Compliant
Carrier MPE% of FCC General Population Allowable Limit:	6.96221200%
Composite MPE% of FCC General Population Allowable Limit:	6.96335200%

February 24, 2022

AT&T New England
Attn: John Benedetto, RF Manager
5050 Cochituate Road Suite 550 - 13&14
Framingham, MA 01701

Emissions Analysis for Site: **ROCKY HILL-WEST ST**

Centerline Communications, LLC ("Centerline") was directed to analyze the proposed AT&T facility to be located a monopole near **2 WEST STREET, ROCKY HILL CT 06067** for the purpose of determining whether the emissions from the proposed facility are within specified federal limits.

All information used in this report was analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01 and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter (µW/cm2). The number of µW/cm^2 calculated at each sample point is called the power density. The exposure limit for power density varies depending upon the frequencies being utilized. Wireless Carriers and Paging Services use different frequency bands each with different exposure limits, therefore it is necessary to report results and limits in terms of percent MPE rather than power density.

All results were compared to the FCC (Federal Communications Commission) radio frequency exposure rules, 47 CFR 1.1307(b)(1) – (b)(3), to determine compliance with the Maximum Permissible Exposure (MPE) limits for General Population/Uncontrolled environments as defined below.

General population/uncontrolled exposure limits apply to situations in which the general population may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general population would always be considered under this category when exposure is not employment related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

Population exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter (µW/cm^2). The general population exposure limits for the 700 MHz (LTE) band is 467 µW/cm^2, 850 (5G) band is 567 µW/cm^2, 1900 MHz (PCS), 2100 (AWS), 2300 (WCS) and 5 GHz (B46) bands is 1000 µW/cm^2.

Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits, as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means. Additional details can be found in FCC OET 65.

Calculations

Calculations were performed for the proposed facility using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since AT&T is proposing focused omnidirectional antennas, which project most of the emitted energy out toward the horizon, all calculations were performed assuming a lobe representing the maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was focused at the base of the tower. This is a very conservative estimate since the gain reduction in actual applications is typically greater than 10 dB in the direction of ground immediately surrounding the facility. Real world emissions values from this facility are expected to be lower than values listed in this report at ground level. For this report the sample point is the top of a 6-foot person standing at the base of the tower.

Per FCC OET Bulletin No. 65 - Edition 97-01 recommendations to achieve the maximum anticipated value at each sample point, all power levels emitting from the proposed antenna installation are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. All power values expressed and analyzed are maximum power levels expected to be used on all radios.

For each sector the following channel counts, frequency bands and power levels were utilized as shown in *Table 1*:

RRH #	Frequency Band	Technology	Channel Count	Transmit Power per Channel (W)
1	700	LTE	4	40
2	1900	PCS	4	40
3	2100	AWS	4	40
4	3700	C-Band	1	108.4
5	3450	DoD	1	54.2
5	3450	DoD	1	54
6	700	LTE	4	40
6	850	5G	4	40
7	2300	WCS	4	25

Table 1: Channel Data Table

The following antennas listed in Table 2 were used in the modeling for transmission in the 700 MHz (LTE), 850 MHz (5G), 1900 MHz (PCS), 2100 MHz (AWS), 2300 MHz (WCS) and 5 GHz (Band 46) frequency bands. This is based on information from the carrier with regard to anticipated antenna selection.

Sector	Antenna Number	Make / Model	Centerline (ft)
A	1	CCI TPA65R-BU6D	103
A	1	CCI TPA65R-BU6D	103
A	1	CCI TPA65R-BU6D	103
A	2	ERICSSON AIR6449	101
A	3	ERICSSON AIR6419	105
A	3	ERICSSON AIR6419	105
A	4	CCI DMP65R-BU6D	103
A	4	CCI DMP65R-BU6D	103
A	4	CCI DMP65R-BU6D	103
B	5	CCI TPA65R-BU6D	103
B	5	CCI TPA65R-BU6D	103
B	5	CCI TPA65R-BU6D	103
B	6	ERICSSON AIR6449	101
B	7	ERICSSON AIR6419	105
B	7	ERICSSON AIR6419	105
B	8	CCI DMP65R-BU6D	103
B	8	CCI DMP65R-BU6D	103
B	8	CCI DMP65R-BU6D	103
G	9	CCI TPA65R-BU6D	103
G	9	CCI TPA65R-BU6D	103
G	9	CCI TPA65R-BU6D	103
G	10	ERICSSON AIR6449	101
G	11	ERICSSON AIR6419	105
G	11	ERICSSON AIR6419	105
G	12	CCI DMP65R-BU6D	103
G	12	CCI DMP65R-BU6D	103
G	12	CCI DMP65R-BU6D	103

Table 2: Antenna Data

All calculations were done with respect to uncontrolled / general population threshold limits.

Results

Per the calculations completed for the proposed AT&T configurations *Table 3* shows resulting emissions power levels and percentages of the FCC's allowable general population limit.

ID	Make / Model	Frequency Band	Gain (dBd)	Centerline (ft)	Channel Count	TX Power (W)	ERP (W)	MPE %
AT&T A 1	CCI TPA65R-BU6D	700	11.75	103.0	4	40	2393.9770	0.000152000
AT&T A 1	CCI TPA65R-BU6D	1900	15.05	103.0	4	40	5118.2322	0.000089000
AT&T A 1	CCI TPA65R-BU6D	2100	15.95	103.0	4	40	6296.8012	0.000090000
AT&T A 2	ERICSSON AIR6449	3700	23.55	101.0	1	108.4	24548.7443	0.000350000
AT&T A 3	ERICSSON AIR6419	3450	15.45	105.0	1	54.2	1901.0752	1.159789000
AT&T A 3	ERICSSON AIR6419	3450	15.75	105.0	1	54	2029.5220	1.159789000
AT&T A 4	CCI DMP65R-BU6D	700	11.75	103.0	4	40	2393.9770	0.000104000
AT&T A 4	CCI DMP65R-BU6D	850	11.45	103.0	4	40	2234.1894	0.000079000
AT&T A 4	CCI DMP65R-BU6D	2300	14.95	103.0	4	25	3126.0794	0.000039000
AT&T B 5	CCI TPA65R-BU6D	700	11.75	103.0	4	40	2393.9770	0.000116000
AT&T B 5	CCI TPA65R-BU6D	1900	15.45	103.0	4	40	5612.0300	0.000076000
AT&T B 5	CCI TPA65R-BU6D	2100	15.95	103.0	4	40	6296.8012	0.000077000
AT&T B 6	ERICSSON AIR6449	3700	23.55	101.0	1	108.4	24548.7443	0.000350000
AT&T B 7	ERICSSON AIR6419	3450	15.45	105.0	1	54.2	1901.0752	1.159789000
AT&T B 7	ERICSSON AIR6419	3450	15.75	105.0	1	54	2029.5220	1.159789000
AT&T B 8	CCI DMP65R-BU6D	700	11.75	103.0	4	40	2393.9770	0.000119000
AT&T B 8	CCI DMP65R-BU6D	850	11.45	103.0	4	40	2234.1894	0.000091000
AT&T B 8	CCI DMP65R-BU6D	2300	15.25	103.0	4	25	3349.6544	0.000045000
AT&T G 9	CCI TPA65R-BU6D	700	11.35	103.0	4	40	2183.3330	0.000401000
AT&T G 9	CCI TPA65R-BU6D	1900	15.55	103.0	4	40	5742.7510	0.000088000
AT&T G 9	CCI TPA65R-BU6D	2100	16.05	103.0	4	40	6443.4725	0.000090000
AT&T G 10	ERICSSON AIR6449	3700	23.55	101.0	1	108.4	24548.7443	0.000350000
AT&T G 11	ERICSSON AIR6419	3450	15.45	105.0	1	54.2	1901.0752	1.159791000
AT&T G 11	ERICSSON AIR6419	3450	15.75	105.0	1	54	2029.5220	1.159791000
AT&T G 12	CCI DMP65R-BU6D	700	11.25	103.0	4	40	2133.6343	0.000398000
AT&T G 12	CCI DMP65R-BU6D	850	11.35	103.0	4	40	2183.3330	0.000307000
AT&T G 12	CCI DMP65R-BU6D	2300	15.55	103.0	4	25	3589.2193	0.000063000
							AT&T MPE%	**6.96221200 %**

Table 3: AT&T Antenna Inventory & Power Level

FCC OET 65 specifies that for carriers utilizing directional antennas that the highest recorded sector value be used for composite site MPE values due to their greatly reduced emissions contributions in the directions of the adjacent sectors. *Table 4* below details a breakdown by frequency band and technology for the MPE power values for the maximum calculated AT&T sector(s).

Frequency Band	Technology	Centerline (ft.)	# of Channels	ERP W (Per Channel)	Total Power Density ($\mu W/cm^2$)	Allowable MPE ($\mu W/cm^2$)	MPE %
700	LTE	103.0	4	598.4942624	0.0007080	467	0.00015200
1900	PCS	103.0	4	1279.558044	0.0008920	1000	0.00008900
2100	AWS	103.0	4	1574.200302	0.0008980	1000	0.00009000
3700	C-Band	101.0	1	24548.74429	0.0034960	1000	0.00035000
3450	DoD	105.0	1	1901.075157	11.5978950	1000	1.15978900
3450	DoD	105.0	1	2029.521983	11.5978950	1000	1.15978900
700	LTE	103.0	4	598.4942624	0.0004850	467	0.00010400
850	5G	103.0	4	558.5473444	0.0004480	567	0.00007900
2300	WCS	103.0	4	781.5198418	0.0003910	1000	0.00003900
						Alpha MPE%	**2.32048100**
700	LTE	103.0	4	598.4942624	0.0005420	467	0.00011600
1900	PCS	103.0	4	1403.007496	0.0007640	1000	0.00007600
2100	AWS	103.0	4	1574.200302	0.0007730	1000	0.00007700
3700	C-Band	101.0	1	24548.74429	0.0034960	1000	0.00035000
3450	DoD	105.0	1	1901.075157	11.5978880	1000	1.15978900
3450	DoD	105.0	1	2029.521983	11.5978880	1000	1.15978900
700	LTE	103.0	4	598.4942624	0.0005570	467	0.00011900
850	5G	103.0	4	558.5473444	0.0005150	567	0.00009100
2300	WCS	103.0	4	837.4135979	0.0004520	1000	0.00004500
						Beta MPE%	**2.32045200**
700	LTE	103.0	4	545.8332546	0.0018700	467	0.00040100
1900	PCS	103.0	4	1435.687739	0.0008760	1000	0.00008800
2100	AWS	103.0	4	1610.868137	0.0008990	1000	0.00009000
3700	C-Band	101.0	1	24548.74429	0.0034960	1000	0.00035000
3450	DoD	105.0	1	1901.075157	11.5979090	1000	1.15979100
3450	DoD	105.0	1	2029.521983	11.5979090	1000	1.15979100
700	LTE	103.0	4	533.4085729	0.0018570	467	0.00039800
850	5G	103.0	4	545.8332546	0.0017420	567	0.00030700
2300	WCS	103.0	4	897.3048366	0.0006280	1000	0.00006300
						Gamma MPE%	**2.32127900**
						AT&T MPE%	**6.96221200 %**

Table 4: AT&T Maximum Sector MPE Power Values

Summary

All calculations performed for this analysis yielded results that were **within** the allowable limits for general population exposure to RF Emissions.

The anticipated maximum composite contributions from the AT&T facility as well as the site composite emissions value with regards to compliance with FCC's allowable limits for general population exposure to RF Emissions are shown here:

Carrier	Predicted MPE %
AT&T	6.96221200%
Verizon	0.00061400%
Unknown	0.00021900%
Composite	**6.96335200%**

Table 5: Total Predicted MPE(%) by Carrier

Compliance Status:

The anticipated composite MPE value for this site assuming all carriers present is **6.96335200%** of the allowable FCC established general population limit sampled at the ground level.

FCC guidelines state that if a site is found to be out of compliance (over allowable thresholds), that carriers over a 5% contribution to the composite value will require measures to bring the site into compliance. For this facility, the composite values calculated were well within the allowable 100% threshold standard per the federal government.

Katrina Styx
RF Compliance Consultant
Centerline Communications, LLC
750 West Center St. Suite 301
West Bridgewater, MA 02379

AMERICAN TOWER®
CORPORATION

This report was prepared for American Tower Corporation by

TOWER ENGINEERING PROFESSIONALS

Structural Analysis Report

Structure	:	**100 ft Monopole**
ATC Site Name	:	**Rkhl - Rocky Hill,CT**
ATC Site Number	:	**302479**
Engineering Number	:	**13683394_C3_03**
Proposed Carrier	:	**AT&T MOBILITY**
Carrier Site Name	:	**MRCTB051039**
Carrier Site Number	:	**N/A**
Site Location	:	**699 West Street** **Rocky Hill, CT 06067-1924** **41.6518, -72.6685**
County	:	**Hartford**
Date	:	**November 2, 2021**
Max Usage	:	**92%**
Result	:	**Pass**

Prepared By:

Ayoub Sabor
TEP

Ayoub Sabor

Reviewed By:

STATE OF CONNECTICUT
AARON THOMAS RUCKER
32608
LICENSED PROFESSIONAL ENGINEER

11/02/2021

COA : PEC.0001553

Table of Contents

Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 100 ft Monopole to reflect the change in loading by AT&T MOBILITY.

Supporting Documents

Tower Drawings	ITT Meyer Type D, AT&T Technologies #AT-8935, dated April 13, 1984 Mapping by Hightower Solutions, Project #1981, dated August 9, 2007
Foundation Drawing	SNET Site: Rocky Hill, Conn, dated November 12, 1991
Geotechnical Report	S&ME Job #1261-08-049Q, dated April 24, 2008
Modifications	ATC Engineering #40737338, dated May 5, 2008
Mount Analysis	ATC Engineering #13683394_C8_01, dated November 1, 2021

Analysis

The tower was analyzed using American Tower Corporation's tower analysis software. This program considers an elastic three-dimensional model and second-order effects per ANSI/TIA-222.

Basic Wind Speed:	118 mph (3-second gust)
Basic Wind Speed w/ Ice:	50 mph (3-second gust) w/ 1.50" radial ice concurrent
Code:	ANSI/TIA-222-H / 2015 IBC / 2018 Connecticut State Building Code
Exposure Category:	B
Risk Category:	II
Topographic Factor Procedure:	Method 1
Topographic Category:	1
Spectral Response:	Ss = 0.20, S_1 = 0.06
Site Class:	D - Stiff Soil - Default

Conclusion

Based on the analysis results, the structure meets the requirements per the applicable codes listed above. The tower and foundation can support the equipment as described in this report.

If you have any questions or require additional information, please contact American Tower via email at Engineering@americantower.com. Please include the American Tower site name, site number, and engineering number in the subject line for any questions.

Existing and Reserved Equipment

Elev.[1] (ft)	Qty	Equipment	Mount Type	Lines	Carrier
105.0	3	CCI HPA-65R-BUU-H6	Platform with Handrails	-	AT&T MOBILITY
103.0	2	Quintel QS66512-2			
100.0	3	Raycap DC6-48-60-18-8F (23.5" Height)			
90.2	1	Generic 48" x 16" Panel	Low Profile Platform	(6) 1 5/8" Coax (2) 1 5/8" Hybriflex	VERIZON WIRELESS
90.0	3	Samsung RT4401-48A			
	3	Samsung Outdoor CBRS 20W RRH –Clip-on Antenna			
	3	Samsung B5/B13 RRH-BR04C			
	3	Andrew LNX-6514DS-VTM			
	3	Samsung B2/B66A RRH-BR049			
	2	Raycap RCMDC-6627-PF-48			
	3	Samsung MT6407-77A			
	6	Andrew SBNHH-1D65B			
80.0	3	RFS APXV18-206517S-C	Flush	(6) 1 5/8" Coax	METRO PCS INC

Equipment to be Removed

Elev.[1] (ft)	Qty	Equipment	Mount Type	Lines	Carrier
105.0	12	Powerwave Allgon 7020.00 Dual Band RET	-	(2) 3" conduit (12) 1 1/4" Coax (2) 0.39" (10mm) Fiber Trunk (4) 0.78" (19.7mm) 8 AWG 6	AT&T MOBILITY
103.0	3	Powerwave Allgon 7770.00			
100.0	3	Ericsson RRUS 32 (55.1 lbs)			
	3	Ericsson RRUS 32 B2			
	3	Ericsson RRUS 11 (Band 12)			
	3	Ericsson RRUS 32 B66			
	6	Kaelus DBC0061F1V51-2			
	6	Powerwave Allgon LGP21401			

Proposed Equipment

Elev.[1] (ft)	Qty	Equipment	Mount Type	Lines	Carrier
105.0	3	Ericsson AIR 6419 N77G	Platform with Handrails	(3) 0.92" (23.4mm) Cable (6) 1 5/8" Coax (4) 2" conduit (3) 0.40" (10.3mm) Fiber (4) 0.82" (20.8mm) 8 AWG 6	AT&T MOBILITY
103.0	1	Raycap DC9-48-60-24-8C-EV			
	3	CCI DMP65R-BU6DA			
	3	CCI TPA-65R-BU6DA-K			
101.0	3	Ericsson AIR 6449 n77D			
100.0	3	Ericsson RRUS 4415 B25			
	3	Ericsson RRUS 4449 B5, B12			
	3	Ericsson RRUS 4478 B14			
	3	Ericsson RRUS 32 B66A			
	3	Ericsson RRUS 32 B30			

[1] Contracted elevations are shown for appurtenances within contracted installation tolerances. Appurtenances outside of contract limits are shown at installed elevations.

Install proposed lines inside the pole shaft.

Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Anchor Bolts	28%	Pass
Shaft	92%	Pass
Base Plate	52%	Pass
Reinforcement	92%	Pass

Foundations

Reaction Component	Analysis Reactions	% of Usage
Moment (Kips-Ft)	1120.5	42%
Axial (Kips)	28.3	14%
Shear (Kips)	14.3	23%

The structure base reactions resulting from this analysis were found to be acceptable through analysis based on geotechnical and foundation information, therefore no modification or reinforcement of the foundation will be required.

Deflection, Twist and Sway*

Antenna Elevation (ft)	Antenna	Carrier	Deflection (ft)	Sway (Rotation) (°)
105.0	Ericsson AIR 6419 N77G	AT&T MOBILITY	0.970	1.140
103.0	Raycap DC9-48-60-24-8C-EV			
	CCI DMP65R-BU6DA			
	CCI TPA-65R-BU6DA-K			
101.0	Ericsson AIR 6449 n77D			
100.0	Ericsson RRUS 4415 B25			
	Ericsson RRUS 4449 B5, B12			
	Ericsson RRUS 4478 B14			
	Ericsson RRUS 32 B66A			
	Ericsson RRUS 32 B30			

***Deflection, Twist and Sway was evaluated considering a design wind speed of 60 mph (3-Second Gust) per ANSI/TIA-222-H**

Standard Conditions

All engineering services performed by A.T. Engineering Service, PLLC are prepared on the basis that the information used is current and correct. This information may consist of, but is not limited to the following:

- Information supplied by the client regarding antenna, mounts and feed line loading
- Information from drawings, design and analysis documents, and field notes in the possession of A.T. Engineering Service, PLLC

It is the responsibility of the client to ensure that the information provided to A.T. Engineering Service, PLLC and used in the performance of our engineering services is correct and complete.

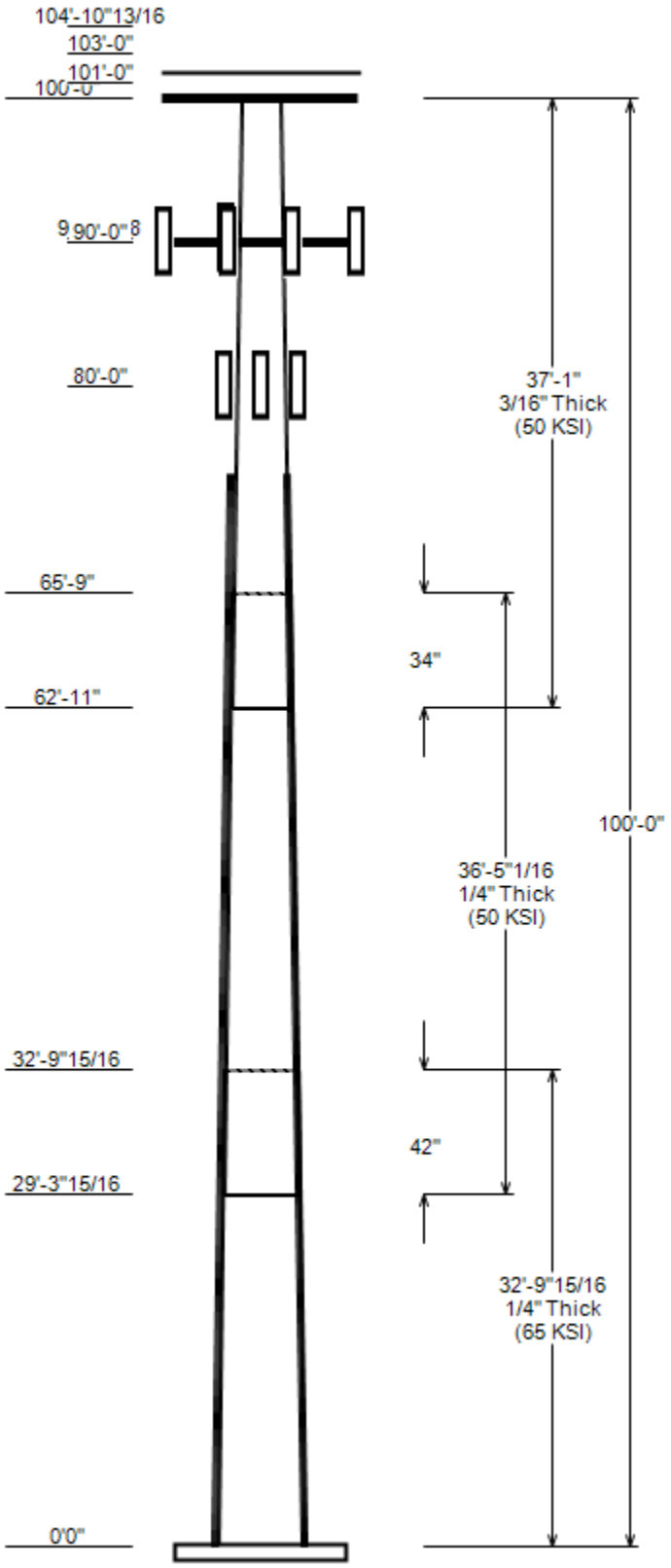
All assets of American Tower Corporation, its affiliates, and subsidiaries (collectively "American Tower") are inspected at regular intervals. Based upon these inspections and in the absence of information to the contrary, American Tower assumes that all structures were constructed in accordance with the drawings and specifications.

Unless explicitly agreed by both the client and A.T. Engineering Service, PLLC, all services will be performed in accordance with the current revision of ANSI/TIA-222.

All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. A.T. Engineering Service, PLLC is not responsible for the conclusions, opinions and recommendations made by others based on the information supplied herein.

JOB INFORMATION

Asset :	302479, Rkhl - Rocky Hill	Height :	100 ft
Client :	AT&T MOBILITY	Base Width :	30
Code :	ANSI/TIA-222-H	Shape :	12 Sides



SITE PARAMETERS

Base Elev (ft):	0.00	Structure Class:	II
Taper :	0.16400 (In/ft)	Exposure :	B
Topographic Category :	1	Topographic Feature:	
Topo Method :	Method 1		

SECTION PROPERTIES

Shaft Section	Length (ft)	Diameter (in) Across Flats Top	Diameter (in) Across Flats Bottom	Thick (in)	Joint Type	Overlap Length (in)	Shape	Steel Grade (ksi)
1	32.830	24.62	30.00	0.250		0.000	12 Sides	65
2	36.420	19.73	25.70	0.250	Slip Joint	42.000	12 Sides	50
3	37.083	14.50	20.57	0.188	Slip Joint	34.000	12 Sides	50

DISCRETE APPURTENANCE

Attach Elev (ft)	Force Elev (ft)	Qty	Description
105.0	105.0	3	Ericsson AIR 6419 N77G
105.0	105.0	3	CCI HPA-65R-BUU-H6
104.9	104.9	2	Raycap DC6-48-60-18-8F (23.5"
103.0	103.0	1	Raycap DC9-48-60-24-8C-EV
103.0	106.0	3	Quintel QS66512-2
103.0	103.0	3	CCI DMP65R-BU6DA
103.0	103.0	3	CCI TPA-65R-BU6DA-K
101.0	101.0	3	Ericsson AIR 6449 n77D
100.0	100.0	3	Ericsson RRUS 4415 B25
100.0	100.0	3	Ericsson RRUS 4449 B5, B12
100.0	100.0	3	Ericsson RRUS 4478 B14
100.0	100.0	3	Ericsson RRUS 32 B66A
100.0	100.0	3	Ericsson RRUS 32 B30
100.0	100.0	1	Generic Round Platform with Ha
90.2	90.2	1	Generic 48" x 16" Panel
90.0	90.0	3	Samsung Outdoor CBRS 20W RRH –
90.0	90.0	3	Samsung RT4401-48A
90.0	90.0	3	Samsung B5/B13 RRH-BR04C
90.0	90.0	3	Samsung B2/B66A RRH-BR049
90.0	90.0	2	Raycap RCMDC-6627-PF-48
90.0	90.0	3	Samsung MT6407-77A
90.0	90.0	3	Andrew LNX-6514DS-VTM
90.0	90.0	6	Andrew SBNHH-1D65B
90.0	90.0	1	Round Low Profile Platform
80.0	80.0	3	RFS APXV18-206517S-C

LINEAR APPURTENANCE

Elev From (ft)	Elev To (ft)	Description	Exp To Wind
0.0	103.0	2" conduit	No
0.0	103.0	1 5/8" Coax	No
0.0	103.0	0.92" (23.4mm) Cable	No
0.0	100.0	2" conduit	No
0.0	100.0	0.92" (23.4mm) Cable	No
0.0	100.0	0.82" (20.8mm) 8 AWG 6	No
0.0	100.0	0.40" (10.3mm) Fiber	No
5.0	90.0	1 5/8" Hybriflex	Yes
5.0	90.0	1 5/8" Coax	Yes
5.0	80.0	1 5/8" Coax	Yes
0.0	78.4	#20 w/ Angle Brackets	Yes
0.0	78.4	#20 w/ Angle Brackets	Yes
0.0	78.4	#20 w/ Angle Brackets	Yes
0.0	78.4	#20 w/ Angle Brackets	Yes

JOB INFORMATION			
Asset :	302479, Rkhl - Rocky Hill	Height :	100 ft
Client :	AT&T MOBILITY	Base Width :	30
Code :	ANSI/TIA-222-H	Shape :	12 Sides

LOAD CASES	
1.2D + 1.0W Normal	118 mph wind with no ice
0.9D + 1.0W Normal	118 mph wind with no ice
1.2D + 1.0Di + 1.0Wi Nor	50 mph wind with 1.5" radial ice
1.2D + 1.0Ev + 1.0Eh Nor	Seismic
0.9D - 1.0Ev + 1.0Eh Nor	Seismic (Reduced DL)
1.0D + 1.0W Service Norm	60 mph Wind with No Ice

REACTIONS

Load Case	Moment (kip-ft)	Shear (Kip)	Axial (Kip)
1.2D + 1.0W Normal	1120.48	14.28	28.29
0.9D + 1.0W Normal	1105.64	14.26	21.21
1.2D + 1.0Di + 1.0Wi Normal	423.21	5.68	48.29
1.2D + 1.0Ev + 1.0Eh Normal	62.59	0.71	28.15
0.9D - 1.0Ev + 1.0Eh Normal	61.58	0.71	19.41
1.0D + 1.0W Service Normal	257.12	3.30	23.60

DISH DEFLECTIONS

Load Case	Attach Elev (ft)	Deflection (in)	Rotation (deg)

ANALYSIS PARAMETERS

Location:	Hartford County,CT	Height:	100 ft
Type and Shape:	Taper, 12 Sides	Base Diameter:	30.00 in
Manufacturer:	ITT Meyer	Top Diameter:	14.50 in
K_d (non-service):	0.95	Taper:	0.1640 in/ft
K_e:	0.99	Rotation:	0.000°

ICE & WIND PARAMETERS

Exposure Category:	B	Design Wind Speed w/o Ice:	118 mph
Risk Category:	II	Design Wind Speed w/Ice:	50 mph
Topo Factor Procedure:	Method 1	Operational Wind Speed:	60 mph
Topographic Category:	1	Design Ice Thickness:	1.50 in
Crest Height:	0 ft	HMSL:	200.00 ft

SEISMIC PARAMETERS

Analysis Method:	Equivalent Lateral Force Method				
Site Class:	D - Stiff Soil			Period Based on Rayleigh Method (sec):	2.10
T_L (sec):	6	P:	1	$C_{s:}$	0.030
$S_{s:}$	0.201	$S_{1:}$	0.055	C_s Max:	0.030
$F_{a:}$	1.600	$F_{v:}$	2.400	C_s Min:	0.030
$S_{ds:}$	0.214	$S_{d1:}$	0.088		

LOAD CASES

1.2D + 1.0W Normal	118 mph wind with no ice
0.9D + 1.0W Normal	118 mph wind with no ice
1.2D + 1.0Di + 1.0Wi Normal	50 mph wind with 1.5" radial ice
1.2D + 1.0Ev + 1.0Eh Normal	Seismic
0.9D - 1.0Ev + 1.0Eh Normal	Seismic (Reduced DL)
1.0D + 1.0W Service Normal	60 mph Wind with No Ice

SHAFT SECTION PROPERTIES

Sect Info	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Slip Joint len (in)	Weight (lb)	Bottom Dia (in)	Bottom Elev (ft)	Bottom Area (in²)	Bottom Ix (in⁴)	Bottom W/t Ratio	Bottom D/t Ratio	Top Dia (in)	Top Elev (in)	Top Area (in²)	Top Ix (in⁴)	Top W/t Ratio	Top D/t Ratio	Taper (in/ft)
1-12	32.83	0.2500	65		0.00	2,434	30.00	0.000	23.95	2,705.5	29.47	120.00	24.62	32.83	19.62	1,487.8	23.71	98.50	0.1638
2-12	36.42	0.2500	50	Slip	42.00	2,241	25.70	29.330	20.48	1,693.1	24.86	102.79	19.73	65.75	15.68	759.9	18.47	78.93	0.1638
3-12	37.08	0.1880	50	Slip	34.00	1,325	20.57	62.917	12.34	654.5	26.64	109.43	14.50	100.00	8.66	226.5	17.99	77.13	0.1638
				Shaft Weight		6,000													

DISCRETE APPURTENANCE PROPERTIES

Attach Elev (ft)	Description	Qty	Ka	Vert Ecc (ft)	No Ice Weight (lb)	No Ice EPAa (sf)	No Ice Orientation Factor	Ice Weight (lb)	Ice EPAa (sf)	Ice Orientation Factor
105.00	CCI HPA-65R-BUU-H6	3	0.75	0.000	51.00	9.658	0.69	261.58	12.319	0.69
105.00	Ericsson AIR 6419 N77G	3	0.75	0.000	70.00	3.925	0.57	160.01	5.227	0.57
104.90	Raycap DC6-48-60-18-8F (23.5"	2	0.75	0.000	20.00	1.260	1.00	70.54	1.892	1.00
103.00	Raycap DC9-48-60-24-8C-EV	1	0.75	0.000	16.00	4.788	1.00	139.91	6.200	1.00
103.00	Quintel QS66512-2	3	0.75	3.000	111.00	8.133	0.74	302.27	10.809	0.74
103.00	CCI DMP65R-BU6DA	3	0.75	0.000	79.40	12.709	0.63	326.64	15.386	0.63
103.00	CCI TPA-65R-BU6DA-K	3	0.75	0.000	79.60	15.270	0.60	366.96	18.017	0.60
101.00	Ericsson AIR 6449 n77D	3	0.75	0.000	81.60	4.028	0.65	180.63	5.345	0.65
100.00	Generic Round Platform with Ha	1	1.00	0.000	2500.00	27.200	1.00	4054.62	50.662	1.00
100.00	Ericsson RRUS 32 B66A	3	0.75	0.000	50.70	2.720	0.67	121.04	3.837	0.67
100.00	Ericsson RRUS 32 B30	3	0.75	0.000	60.00	2.743	0.67	130.61	3.865	0.67
100.00	Ericsson RRUS 4478 B14	3	0.75	0.000	59.40	2.021	0.67	118.30	2.926	0.67
100.00	Ericsson RRUS 4449 B5, B12	3	0.75	0.000	71.00	1.969	0.50	132.86	2.864	0.50
100.00	Ericsson RRUS 4415 B25	3	0.75	0.000	46.00	1.842	0.50	93.06	2.703	0.50
90.20	Generic 48" x 16" Panel	1	0.80	0.000	30.00	6.519	1.00	175.44	8.348	1.00
90.00	Samsung MT6407-77A	3	0.80	0.000	81.60	4.709	0.61	178.38	6.151	0.61
90.00	Andrew LNX-6514DS-VTM	3	0.80	0.000	33.10	8.079	0.69	198.64	10.724	0.69
90.00	Andrew SBNHH-1D65B	6	0.80	0.000	50.70	8.173	0.69	217.31	10.860	0.69
90.00	Round Low Profile Platform	1	1.00	0.000	1500.00	21.700	1.00	2115.15	39.929	1.00
90.00	Samsung Outdoor CBRS 20W RRH –	3	0.80	0.000	4.40	0.892	0.50	21.49	1.499	0.50
90.00	Samsung B2/B66A RRH-BR049	3	0.80	0.000	84.40	1.875	0.50	144.97	2.732	0.50
90.00	Samsung B5/B13 RRH-BR04C	3	0.80	0.000	70.30	1.875	0.50	124.61	2.732	0.50
90.00	Samsung RT4401-48A	3	0.80	0.000	18.60	0.996	0.50	44.24	1.646	0.50
90.00	Raycap RCMDC-6627-PF-48	2	0.80	0.000	32.00	4.056	0.79	152.67	5.352	0.79
80.00	RFS APXV18-206517S-C	3	1.00	0.000	26.40	5.160	0.68	113.31	7.379	0.68
Totals	Num Loadings: 25	68			7,689.70			17,294.20		

LINEAR APPURTENANCE PROPERTIES

Load Case Azimuth (deg) : _

Elev From (ft)	Elev To (ft)	Qty	Description	Coax Dia (in)	Coax Wt (lb/ft)	Flat	Max Coax/ Row	Dist Between Rows(in)	Dist Between Cols(in)	Azimuth (deg)	Dist From Face (in)	Exposed To Wind	Carrier
0.00	103.00	6	1 5/8" Coax	1.98	0.82	N	0	0	0	0	0	N	AT&T MOBILITY
0.00	103.00	2	0.92" (23.4mm) Cable	0.92	0.89	N	0	0	0	0	0	N	AT&T MOBILITY
0.00	103.00	1	2" conduit	2.38	3.65	N	0	0	0	0	0	N	AT&T MOBILITY
0.00	100.00	4	0.82" (20.8mm) 8 AWG	0.82	0.62	N	0	0	0	0	0	N	AT&T MOBILITY
0.00	100.00	3	0.40" (10.3mm) Fiber	0.4	0.09	N	0	0	0	0	0	N	AT&T MOBILITY
0.00	100.00	3	2" conduit	2.38	3.65	N	0	0	0	0	0	N	AT&T MOBILITY
0.00	100.00	1	0.92" (23.4mm) Cable	0.92	0.89	N	0	0	0	0	0	N	AT&T MOBILITY
5.00	90.00	6	1 5/8" Coax	1.98	0.82	N	6	1	1	160	1	Y	VERIZON WIREL
5.00	90.00	2	1 5/8" Hybriflex	1.98	1.3	N	1	1	1	160	1	Y	VERIZON WIREL
5.00	80.00	6	1 5/8" Coax	1.98	0.82	N	3	1	1	200	1	Y	METRO PCS INC
0.00	78.40	1	#20 w/ Angle Brackets	4	4.68	N	1	0	0	180	3.6	Y	
0.00	78.40	1	#20 w/ Angle Brackets	4	4.68	N	1	0	0	0	3.6	Y	
0.00	78.40	1	#20 w/ Angle Brackets	4	4.68	N	1	0	0	90	3.6	Y	
0.00	78.40	1	#20 w/ Angle Brackets	4	4.68	N	1	0	0	270	3.6	Y	

ADDITIONAL STEEL

Elev From (ft)	Elev To (ft)	Qty	Description	Fy (ksi)	Offset (in)	Intermediate Connectors Description	Spacing (in)	Len (in)	Connectors	Continuation?
0.00	74.00	4	SOL #20 All Thread Bar	80	2.20	6" Angle Bracket	30.00	3.31	5/8" A36 U-Bolt	N

SEGMENT PROPERTIES

(Max Len: 5.ft)

Seg Top Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	F'y (ksi)	S (in^3)	Z (in^3)	Weight (lb)	Additional Reinforcing Area (in^2)	Additional Reinforcing Ix (in^4)	Additional Reinforcing Weight (lb)
0.00		0.2500	30.000	23.949	2,705.50	29.47	120.00	72.6	174.2	0.0	0.0	19.640	3,350.40	0.0
5.00		0.2500	29.181	23.290	2,488.20	28.60	116.72	73.5	164.7	0.0	401.9	19.640	3,203.70	334.0
10.00		0.2500	28.362	22.630	2,282.80	27.72	113.45	74.5	155.5	0.0	390.6	19.640	3,060.30	334.0
15.00		0.2500	27.544	21.971	2,089.10	26.84	110.17	75.4	146.5	0.0	379.4	19.640	2,920.20	334.0
20.00		0.2500	26.725	21.312	1,906.70	25.96	106.90	76.4	137.8	0.0	368.2	19.640	2,783.40	334.0
25.00		0.2500	25.906	20.653	1,735.20	25.09	103.62	77.4	129.4	0.0	357.0	19.640	2,649.80	334.0
29.33	Bot - Section 2	0.2500	25.197	20.082	1,595.30	24.33	100.79	78.2	122.3	0.0	300.1	19.640	2,536.80	289.2
30.00		0.2500	25.087	19.994	1,574.30	24.21	100.35	78.3	121.2	0.0	92.3	19.640	2,598.70	44.8
32.83	Top - Section 1	0.2500	25.124	20.023	1,581.30	24.25	100.50	62.7	121.6	0.0	385.3	19.640	2,525.30	189.0
35.00		0.2500	24.768	19.737	1,514.50	23.87	99.07	63	118.1	0.0	146.8	19.640	2,469.80	145.0
40.00		0.2500	23.950	19.078	1,367.70	22.99	95.80	63	110.3	0.0	330.2	19.640	2,344.10	334.0
45.00		0.2500	23.131	18.419	1,230.80	22.11	92.52	63	102.8	0.0	319.0	19.640	2,221.70	334.0
50.00		0.2500	22.312	17.760	1,103.40	21.23	89.25	63	95.5	0.0	307.8	19.640	2,102.60	334.0
55.00		0.2500	21.493	17.101	985.00	20.36	85.97	63	88.5	0.0	296.6	19.640	1,986.80	334.0
60.00		0.2500	20.674	16.442	875.40	19.48	82.70	63	81.8	0.0	285.3	19.640	1,874.30	334.0
62.92	Bot - Section 3	0.2500	20.197	16.057	815.50	18.97	80.79	63	78.0	0.0	161.3	19.640	1,810.20	194.8
65.00		0.2500	19.856	15.783	774.30	18.60	79.42	63	75.3	0.0	199.6	19.640	1,814.90	139.2
65.75	Top - Section 2	0.1880	20.109	12.059	610.80	25.98	106.96	61.4	58.7	0.0	71.0	19.640	1,798.50	50.1
70.00		0.1880	19.413	11.638	549.00	24.99	103.26	62.2	54.6	0.0	171.4	19.640	1,707.40	283.9
74.00	Reinf. Top	0.1880	18.758	11.241	494.80	24.06	99.78	62.8	51.0	0.0	155.7	19.640	1,623.80	267.2
75.00		0.1880	18.594	11.142	481.80	23.82	98.90	63	50.1	0.0	38.1			
80.00		0.1880	17.775	10.647	420.30	22.65	94.55	63	45.7	0.0	185.4			
85.00		0.1880	16.956	10.151	364.30	21.49	90.19	63	41.5	0.0	176.9			
90.00		0.1880	16.138	9.655	313.50	20.32	85.84	63	37.5	0.0	168.5			
90.20		0.1880	16.105	9.635	311.60	20.27	85.66	63	37.4	0.0	6.6			
95.00		0.1880	15.319	9.160	267.70	19.15	81.48	63	33.8	0.0	153.5			
100.00		0.1880	14.500	8.664	226.50	17.99	77.13	63	30.2	0.0	151.6			
								Totals:			6,000.1			4,943.2

Load Case: 1.2D + 1.0W Normal 118 mph wind with no ice 22 Iterations
Gust Response Factor: 1.10
Dead load Factor: 1.20
Wind Load Factor: 1.00

CALCULATED FORCES

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (ft-kips)	Phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-28.29	-14.28	0.00	-1,120.5	0.00	1,120.48	1,564.13	420.30	1,179.53	948.21	0	0	0.539
5.00	-27.09	-13.95	0.00	-1,049.1	0.00	1,049.10	1,541.14	408.73	1,115.51	908.35	0.14	-0.25	0.516
10.00	-25.82	-13.63	0.00	-979.4	0.00	979.36	1,517.02	397.16	1,053.28	868.61	0.54	-0.51	0.492
15.00	-24.58	-13.33	0.00	-911.2	0.00	911.19	1,491.76	385.60	992.84	829.05	1.21	-0.76	0.468
20.00	-23.35	-13.04	0.00	-844.6	0.00	844.55	1,465.37	374.03	934.18	789.73	2.14	-1.01	0.444
25.00	-22.14	-12.77	0.00	-779.4	0.00	779.37	1,437.84	362.46	877.31	750.70	3.33	-1.26	0.420
29.33	-21.12	-12.62	0.00	-724.1	0.00	724.07	1,413.08	352.44	829.50	717.19	4.57	-1.47	0.399
30.00	-20.89	-12.53	0.00	-715.6	0.00	715.61	1,409.18	350.89	822.22	712.03	4.78	-1.5	0.388
32.83	-19.99	-12.38	0.00	-680.2	0.00	680.15	1,130.06	270.32	634.34	571.84	5.71	-1.63	0.469
35.00	-19.47	-12.20	0.00	-653.3	0.00	653.28	1,119.11	266.45	616.35	558.13	6.47	-1.74	0.456
40.00	-18.30	-11.91	0.00	-592.3	0.00	592.30	1,081.73	257.56	575.89	521.29	8.41	-1.96	0.429
45.00	-17.15	-11.63	0.00	-532.7	0.00	532.74	1,044.36	248.66	536.79	485.71	10.58	-2.18	0.401
50.00	-16.01	-11.34	0.00	-474.6	0.00	474.58	1,006.99	239.76	499.08	451.39	12.97	-2.38	0.372
55.00	-14.90	-11.05	0.00	-417.9	0.00	417.86	969.61	230.86	462.73	418.33	15.58	-2.58	0.341
60.00	-13.80	-10.79	0.00	-362.6	0.00	362.63	932.24	221.96	427.76	386.52	18.38	-2.77	0.308
62.92	-13.17	-10.63	0.00	-331.2	0.00	331.16	910.44	216.77	408.00	368.55	20.1	-2.87	0.288
65.00	-12.62	-10.52	0.00	-309.0	0.00	309.01	894.87	213.06	394.17	355.97	21.37	-2.94	0.268
65.75	-12.42	-10.39	0.00	-301.1	0.00	301.12	666.75	162.80	305.95	270.38	21.84	-2.97	0.294
70.00	-11.58	-10.13	0.00	-257.0	0.00	256.95	651.10	157.11	284.95	254.72	24.54	-3.1	0.256
74.00	-10.80	-9.95	0.00	-216.4	0.00	216.43	635.86	151.76	265.87	240.20	27.19	-3.22	0.221
74.00	-10.80	-9.95	0.00	-216.4	0.00	216.43	635.86	151.76	265.87	240.20	27.19	-3.22	0.922
75.00	-10.64	-9.84	0.00	-206.5	0.00	206.48	631.77	150.42	261.20	236.53	27.87	-3.25	0.894
80.00	-9.98	-9.25	0.00	-157.3	0.00	157.30	603.66	143.73	238.49	215.85	31.57	-3.79	0.749
85.00	-9.53	-9.04	0.00	-111.1	0.00	111.06	575.56	137.04	216.81	196.12	35.78	-4.24	0.587
90.00	-6.07	-5.79	0.00	-65.8	0.00	65.84	547.45	130.35	196.16	177.33	40.42	-4.59	0.384
90.20	-6.03	-5.50	0.00	-64.7	0.00	64.69	546.33	130.08	195.35	176.60	40.61	-4.6	0.379
95.00	-5.70	-5.27	0.00	-38.3	0.00	38.30	519.35	123.65	176.54	159.49	45.35	-4.82	0.253
100.00	0.00	-4.76	0.00	-12.0	0.00	11.96	491.24	116.96	157.96	142.60	50.48	-4.96	0.086

Load Case: 0.9D + 1.0W Normal 118 mph wind with no ice 21 Iterations
Gust Response Factor: 1.10
Dead load Factor: 0.90
Wind Load Factor: 1.00

CALCULATED FORCES

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (ft-kips)	Phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-21.21	-14.26	0.00	-1,105.6	0.00	1,105.64	1,564.13	420.30	1,179.53	948.21	0	0	0.530
5.00	-20.29	-13.90	0.00	-1,034.4	0.00	1,034.35	1,541.14	408.73	1,115.51	908.35	0.14	-0.25	0.506
10.00	-19.33	-13.56	0.00	-964.8	0.00	964.85	1,517.02	397.16	1,053.28	868.61	0.53	-0.5	0.483
15.00	-18.38	-13.23	0.00	-897.1	0.00	897.06	1,491.76	385.60	992.84	829.05	1.19	-0.75	0.459
20.00	-17.45	-12.91	0.00	-830.9	0.00	830.93	1,465.37	374.03	934.18	789.73	2.11	-0.99	0.435
25.00	-16.53	-12.63	0.00	-766.4	0.00	766.36	1,437.84	362.46	877.31	750.70	3.28	-1.24	0.411
29.33	-15.76	-12.47	0.00	-711.7	0.00	711.66	1,413.08	352.44	829.50	717.19	4.5	-1.44	0.390
30.00	-15.59	-12.38	0.00	-703.3	0.00	703.30	1,409.18	350.89	822.22	712.03	4.71	-1.48	0.379
32.83	-14.91	-12.22	0.00	-668.3	0.00	668.27	1,130.06	270.32	634.34	571.84	5.62	-1.61	0.459
35.00	-14.51	-12.03	0.00	-641.7	0.00	641.74	1,119.11	266.45	616.35	558.13	6.38	-1.71	0.446
40.00	-13.63	-11.74	0.00	-581.6	0.00	581.61	1,081.73	257.56	575.89	521.29	8.29	-1.93	0.419
45.00	-12.76	-11.45	0.00	-522.9	0.00	522.93	1,044.36	248.66	536.79	485.71	10.42	-2.14	0.392
50.00	-11.90	-11.16	0.00	-465.7	0.00	465.69	1,006.99	239.76	499.08	451.39	12.77	-2.34	0.363
55.00	-11.06	-10.86	0.00	-409.9	0.00	409.91	969.61	230.86	462.73	418.33	15.33	-2.54	0.332
60.00	-10.24	-10.60	0.00	-355.6	0.00	355.62	932.24	221.96	427.76	386.52	18.09	-2.72	0.300
62.92	-9.76	-10.45	0.00	-324.7	0.00	324.69	910.44	216.77	408.00	368.55	19.78	-2.82	0.281
65.00	-9.35	-10.34	0.00	-302.9	0.00	302.93	894.87	213.06	394.17	355.97	21.03	-2.89	0.262
65.75	-9.19	-10.21	0.00	-295.2	0.00	295.17	666.75	162.80	305.95	270.38	21.49	-2.92	0.286
70.00	-8.56	-9.96	0.00	-251.8	0.00	251.77	651.10	157.11	284.95	254.72	24.15	-3.05	0.249
74.00	-7.98	-9.78	0.00	-212.0	0.00	211.95	635.86	151.76	265.87	240.20	26.75	-3.17	0.215
74.00	-7.98	-9.78	0.00	-212.0	0.00	211.95	635.86	151.76	265.87	240.20	26.75	-3.17	0.899
75.00	-7.85	-9.65	0.00	-202.2	0.00	202.17	631.77	150.42	261.20	236.53	27.42	-3.19	0.871
80.00	-7.35	-9.05	0.00	-153.9	0.00	153.90	603.66	143.73	238.49	215.85	31.05	-3.72	0.729
85.00	-7.00	-8.84	0.00	-108.6	0.00	108.63	575.56	137.04	216.81	196.12	35.19	-4.16	0.570
90.00	-4.45	-5.65	0.00	-64.5	0.00	64.46	547.45	130.35	196.16	177.33	39.74	-4.5	0.373
90.20	-4.43	-5.36	0.00	-63.3	0.00	63.33	546.33	130.08	195.35	176.60	39.93	-4.51	0.368
95.00	-4.18	-5.13	0.00	-37.6	0.00	37.61	519.35	123.65	176.54	159.49	44.59	-4.73	0.246
100.00	0.00	-4.76	0.00	-12.0	0.00	11.96	491.24	116.96	157.96	142.60	49.62	-4.87	0.086

Load Case: 1.2D + 1.0Di + 1.0Wi Normal		50 mph wind with 1.5" radial ice			21 Iterations
Gust Response Factor:	1.10	Ice Dead Load Factor	1.00		
Dead load Factor:	1.20			Ice Importance Factor	1.00
Wind Load Factor:	1.00				

CALCULATED FORCES

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (ft-kips)	Phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-48.29	-5.68	0.00	-423.2	0.00	423.21	1,564.13	420.30	1,179.53	948.21	0	0	0.217
5.00	-46.77	-5.64	0.00	-394.8	0.00	394.78	1,541.14	408.73	1,115.51	908.35	0.05	-0.1	0.207
10.00	-44.91	-5.55	0.00	-366.6	0.00	366.57	1,517.02	397.16	1,053.28	868.61	0.2	-0.19	0.196
15.00	-43.05	-5.45	0.00	-338.8	0.00	338.81	1,491.76	385.60	992.84	829.05	0.45	-0.29	0.186
20.00	-41.18	-5.35	0.00	-311.5	0.00	311.53	1,465.37	374.03	934.18	789.73	0.8	-0.38	0.175
25.00	-39.32	-5.24	0.00	-284.8	0.00	284.79	1,437.84	362.46	877.31	750.70	1.25	-0.47	0.164
29.33	-37.71	-5.14	0.00	-262.1	0.00	262.12	1,413.08	352.44	829.50	717.19	1.71	-0.54	0.155
30.00	-37.40	-5.12	0.00	-258.7	0.00	258.68	1,409.18	350.89	822.22	712.03	1.79	-0.56	0.151
32.83	-36.12	-5.04	0.00	-244.2	0.00	244.20	1,130.06	270.32	634.34	571.84	2.13	-0.61	0.181
35.00	-35.31	-4.98	0.00	-233.3	0.00	233.26	1,119.11	266.45	616.35	558.13	2.41	-0.64	0.175
40.00	-33.47	-4.83	0.00	-208.4	0.00	208.39	1,081.73	257.56	575.89	521.29	3.13	-0.72	0.163
45.00	-31.63	-4.66	0.00	-184.3	0.00	184.26	1,044.36	248.66	536.79	485.71	3.93	-0.8	0.150
50.00	-29.81	-4.49	0.00	-160.9	0.00	160.94	1,006.99	239.76	499.08	451.39	4.8	-0.87	0.137
55.00	-28.01	-4.25	0.00	-138.5	0.00	138.49	969.61	230.86	462.73	418.33	5.74	-0.93	0.124
60.00	-26.23	-4.00	0.00	-117.3	0.00	117.26	932.24	221.96	427.76	386.52	6.76	-0.99	0.110
62.92	-25.19	-3.85	0.00	-105.6	0.00	105.60	910.44	216.77	408.00	368.55	7.37	-1.03	0.102
65.00	-24.35	-3.74	0.00	-97.6	0.00	97.59	894.87	213.06	394.17	355.97	7.83	-1.05	0.094
65.75	-24.05	-3.68	0.00	-94.8	0.00	94.79	666.75	162.80	305.95	270.38	7.99	-1.06	0.103
70.00	-22.62	-3.44	0.00	-79.2	0.00	79.15	651.10	157.11	284.95	254.72	8.96	-1.1	0.089
74.00	-21.28	-3.23	0.00	-65.4	0.00	65.38	635.86	151.76	265.87	240.20	9.89	-1.14	0.076
74.00	-21.28	-3.23	0.00	-65.4	0.00	65.38	635.86	151.76	265.87	240.20	9.89	-1.14	0.306
75.00	-21.02	-3.18	0.00	-62.2	0.00	62.15	631.77	150.42	261.20	236.53	10.13	-1.15	0.296
80.00	-19.56	-2.85	0.00	-46.3	0.00	46.26	603.66	143.73	238.49	215.85	11.42	-1.31	0.247
85.00	-18.79	-2.72	0.00	-32.0	0.00	31.99	575.56	137.04	216.81	196.12	12.86	-1.44	0.196
90.00	-12.12	-1.67	0.00	-18.4	0.00	18.39	547.45	130.35	196.16	177.33	14.43	-1.54	0.126
90.20	-11.94	-1.60	0.00	-18.1	0.00	18.06	546.33	130.08	195.35	176.60	14.49	-1.54	0.124
95.00	-11.44	-1.53	0.00	-10.4	0.00	10.39	519.35	123.65	176.54	159.49	16.07	-1.6	0.087
100.00	0.00	-1.21	0.00	-2.7	0.00	2.73	491.24	116.96	157.96	142.60	17.77	-1.64	0.019

Load Case: 1.0D + 1.0W Service Normal 60 mph Wind with No Ice 20 Iterations
Gust Response Factor: 1.10
Dead load Factor: 1.00
Wind Load Factor: 1.00

CALCULATED FORCES

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (ft-kips)	Phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-23.60	-3.30	0.00	-257.1	0.00	257.12	1,564.13	420.30	1,179.53	948.21	0	0	0.129
5.00	-22.64	-3.22	0.00	-240.6	0.00	240.62	1,541.14	408.73	1,115.51	908.35	0.03	-0.06	0.124
10.00	-21.64	-3.14	0.00	-224.5	0.00	224.52	1,517.02	397.16	1,053.28	868.61	0.12	-0.12	0.118
15.00	-20.64	-3.07	0.00	-208.8	0.00	208.81	1,491.76	385.60	992.84	829.05	0.28	-0.17	0.112
20.00	-19.65	-3.00	0.00	-193.5	0.00	193.48	1,465.37	374.03	934.18	789.73	0.49	-0.23	0.107
25.00	-18.68	-2.93	0.00	-178.5	0.00	178.49	1,437.84	362.46	877.31	750.70	0.76	-0.29	0.101
29.33	-17.85	-2.90	0.00	-165.8	0.00	165.79	1,413.08	352.44	829.50	717.19	1.05	-0.34	0.096
30.00	-17.67	-2.88	0.00	-163.8	0.00	163.85	1,409.18	350.89	822.22	712.03	1.09	-0.34	0.093
32.83	-16.94	-2.84	0.00	-155.7	0.00	155.71	1,130.06	270.32	634.34	571.84	1.31	-0.37	0.113
35.00	-16.52	-2.80	0.00	-149.5	0.00	149.54	1,119.11	266.45	616.35	558.13	1.48	-0.4	0.109
40.00	-15.57	-2.73	0.00	-135.6	0.00	135.56	1,081.73	257.56	575.89	521.29	1.93	-0.45	0.103
45.00	-14.64	-2.66	0.00	-121.9	0.00	121.91	1,044.36	248.66	536.79	485.71	2.43	-0.5	0.096
50.00	-13.72	-2.60	0.00	-108.6	0.00	108.59	1,006.99	239.76	499.08	451.39	2.97	-0.55	0.089
55.00	-12.80	-2.53	0.00	-95.6	0.00	95.61	969.61	230.86	462.73	418.33	3.57	-0.59	0.082
60.00	-11.90	-2.47	0.00	-83.0	0.00	82.96	932.24	221.96	427.76	386.52	4.21	-0.63	0.074
62.92	-11.38	-2.43	0.00	-75.8	0.00	75.76	910.44	216.77	408.00	368.55	4.61	-0.66	0.070
65.00	-10.93	-2.41	0.00	-70.7	0.00	70.69	894.87	213.06	394.17	355.97	4.9	-0.67	0.065
65.75	-10.76	-2.38	0.00	-68.9	0.00	68.88	666.75	162.80	305.95	270.38	5	-0.68	0.071
70.00	-10.07	-2.32	0.00	-58.8	0.00	58.77	651.10	157.11	284.95	254.72	5.62	-0.71	0.062
74.00	-9.42	-2.28	0.00	-49.5	0.00	49.49	635.86	151.76	265.87	240.20	6.23	-0.74	0.054
74.00	-9.42	-2.28	0.00	-49.5	0.00	49.49	635.86	151.76	265.87	240.20	6.23	-0.74	0.221
75.00	-9.33	-2.25	0.00	-47.2	0.00	47.21	631.77	150.42	261.20	236.53	6.39	-0.74	0.215
80.00	-8.81	-2.11	0.00	-36.0	0.00	35.96	603.66	143.73	238.49	215.85	7.23	-0.87	0.181
85.00	-8.47	-2.07	0.00	-25.4	0.00	25.39	575.56	137.04	216.81	196.12	8.2	-0.97	0.144
90.00	-5.40	-1.32	0.00	-15.1	0.00	15.06	547.45	130.35	196.16	177.33	9.26	-1.05	0.095
90.20	-5.36	-1.25	0.00	-14.8	0.00	14.79	546.33	130.08	195.35	176.60	9.31	-1.05	0.094
95.00	-5.09	-1.20	0.00	-8.8	0.00	8.77	519.35	123.65	176.54	159.49	10.39	-1.1	0.065
100.00	0.00	-1.10	0.00	-2.8	0.00	2.77	491.24	116.96	157.96	142.60	11.57	-1.13	0.019

EQUIVALENT LATERAL FORCES METHOD ANALYSIS

(Based on ASCE7-16 Chapters 11, 12 and 15)

Spectral Response Acceleration for Short Period (S_S):	0.201
Spectral Response Acceleration at 1.0 Second Period (S_1):	0.055
Long-Period Transition Period (T_L – Seconds):	6
Importance Factor (I_e):	1.000
Site Coefficient F_a:	1.600
Site Coefficient F_v:	2.400
Response Modification Coefficient (R):	1.500
Design Spectral Response Acceleration at Short Period (S_{ds}):	0.214
Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.088
Seismic Response Coefficient (C_s):	0.030
Upper Limit C_S:	0.030
Lower Limit C_S:	0.030
Period based on Rayleigh Method (sec):	2.100
Redundancy Factor (p):	1.000
Seismic Force Distribution Exponent (k):	1.800
Total Unfactored Dead Load:	23.600 k
Seismic Base Shear (E):	0.710 k

1.2D + 1.0Ev + 1.0Eh Normal **Seismic**

Segment	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
26	97.5	276	1,048	0.023	16	343
25	92.6	273	945	0.021	15	340
24	90.1	12	38	0.001	1	14
23	87.5	331	1,033	0.023	16	411
22	82.5	339	953	0.021	15	422
21	77.5	436	1,094	0.024	17	542
20	74.5	94	220	0.005	3	117
19	72	647	1,423	0.032	22	805
18	67.875	694	1,372	0.030	22	862
17	65.375	163	302	0.007	5	203
16	63.9583	456	810	0.018	13	566
15	61.4583	520	859	0.019	14	646
14	57.5	900	1,320	0.029	21	1,118
13	52.5	911	1,135	0.025	18	1,132
12	47.5	922	959	0.021	15	1,146
11	42.5	933	795	0.018	12	1,160
10	37.5	945	642	0.014	10	1,174
9	33.915	414	235	0.005	4	514
8	31.415	733	362	0.008	6	911
7	29.665	175	78	0.002	1	217
6	27.165	832	317	0.007	5	1,034
5	22.5	971	263	0.006	4	1,207
4	17.5	983	170	0.004	3	1,221
3	12.5	994	94	0.002	1	1,235
2	7.5	1,005	38	0.001	1	1,249
1	2.5	954	5	0.000	0	1,186
Ericsson AIR 6419 N77G	100	210	834	0.018	13	261
CCI HPA-65R-BUU-H6	100	153	608	0.014	10	190
Raycap DC6-48-60-18-8F (23.5" Height)	100	40	159	0.004	2	50
Raycap DC9-48-60-24-8C-EV	100	16	64	0.001	1	20
Quintel QS66512-2	100	333	1,322	0.029	21	414
CCI DMP65R-BU6DA	100	238	946	0.021	15	296
CCI TPA-65R-BU6DA-K	100	239	948	0.021	15	297
Ericsson AIR 6449 n77D	100	245	972	0.022	15	304

Segment	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
Ericsson RRUS 4415 B25	100	138	548	0.012	9	172
Ericsson RRUS 4449 B5, B12	100	213	846	0.019	13	265
Ericsson RRUS 4478 B14	100	178	708	0.016	11	221
Ericsson RRUS 32 B66A	100	152	604	0.013	9	189
Ericsson RRUS 32 B30	100	180	715	0.016	11	224
Generic Round Platform with Handrails	100	2,500	9,927	0.220	156	3,107
Generic 48" x 16" Panel	90.2	30	99	0.002	2	37
Samsung Outdoor CBRS 20W RRH –Clip-on Antenna	90	13	43	0.001	1	16
Samsung RT4401-48A	90	56	183	0.004	3	69
Samsung B5/B13 RRH-BR04C	90	211	693	0.015	11	262
Samsung B2/B66A RRH-BR049	90	253	832	0.018	13	315
Raycap RCMDC-6627-PF-48	90	64	210	0.005	3	80
Samsung MT6407-77A	90	245	804	0.018	13	304
Andrew LNX-6514DS-VTM	90	99	326	0.007	5	123
Andrew SBNHH-1D65B	90	304	999	0.022	16	378
Round Low Profile Platform	90	1,500	4,927	0.109	77	1,864
RFS APXV18-206517S-C	80	79	210	0.005	3	98
		23,603	45,034	1.000	708	29,335

0.9D - 1.0Ev + 1.0Eh Normal **Seismic (Reduced DL)**

Segment	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
26	97.5	276	1,048	0.023	16	237
25	92.6	273	945	0.021	15	234
24	90.1	12	38	0.001	1	10
23	87.5	331	1,033	0.023	16	284
22	82.5	339	953	0.021	15	291
21	77.5	436	1,094	0.024	17	374
20	74.5	94	220	0.005	3	81
19	72	647	1,423	0.032	22	555
18	67.875	694	1,372	0.030	22	595
17	65.375	163	302	0.007	5	140
16	63.9583	456	810	0.018	13	391
15	61.4583	520	859	0.019	14	445
14	57.5	900	1,320	0.029	21	771
13	52.5	911	1,135	0.025	18	781
12	47.5	922	959	0.021	15	790
11	42.5	933	795	0.018	12	800
10	37.5	945	642	0.014	10	810
9	33.915	414	235	0.005	4	354
8	31.415	733	362	0.008	6	628
7	29.665	175	78	0.002	1	150
6	27.165	832	317	0.007	5	713
5	22.5	971	263	0.006	4	833
4	17.5	983	170	0.004	3	842
3	12.5	994	94	0.002	1	852
2	7.5	1,005	38	0.001	1	862
1	2.5	954	5	0.000	0	818
Ericsson AIR 6419 N77G	100	210	834	0.018	13	180
CCI HPA-65R-BUU-H6	100	153	608	0.014	10	131
Raycap DC6-48-60-18-8F (23.5" Height)	100	40	159	0.004	2	34
Raycap DC9-48-60-24-8C-EV	100	16	64	0.001	1	14
Quintel QS66512-2	100	333	1,322	0.029	21	285
CCI DMP65R-BU6DA	100	238	946	0.021	15	204
CCI TPA-65R-BU6DA-K	100	239	948	0.021	15	205
Ericsson AIR 6449 n77D	100	245	972	0.022	15	210
Ericsson RRUS 4415 B25	100	138	548	0.012	9	118
Ericsson RRUS 4449 B5, B12	100	213	846	0.019	13	183
Ericsson RRUS 4478 B14	100	178	708	0.016	11	153
Ericsson RRUS 32 B66A	100	152	604	0.013	9	130
Ericsson RRUS 32 B30	100	180	715	0.016	11	154

Segment	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
Generic Round Platform with Handrails	100	2,500	9,927	0.220	156	2,143
Generic 48" x 16" Panel	90.2	30	99	0.002	2	26
Samsung Outdoor CBRS 20W RRH –Clip-on Antenna	90	13	43	0.001	1	11
Samsung RT4401-48A	90	56	183	0.004	3	48
Samsung B5/B13 RRH-BR04C	90	211	693	0.015	11	181
Samsung B2/B66A RRH-BR049	90	253	832	0.018	13	217
Raycap RCMDC-6627-PF-48	90	64	210	0.005	3	55
Samsung MT6407-77A	90	245	804	0.018	13	210
Andrew LNX-6514DS-VTM	90	99	326	0.007	5	85
Andrew SBNHH-1D65B	90	304	999	0.022	16	261
Round Low Profile Platform	90	1,500	4,927	0.109	77	1,286
RFS APXV18-206517S-C	80	79	210	0.005	3	68
		23,603	45,034	1.000	708	20,230

1.2D + 1.0Ev + 1.0Eh Normal **Seismic**

CALCULATED FORCES

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (fr-kips)	Mu Mx (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (kips)	Phi Mn (kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-28.15	-0.71	0.00	-62.59	0.00	62.59	1,564.13	420.30	1,180	948.21	0.00	0.00	0.04
5.00	-26.90	-0.72	0.00	-59.04	0.00	59.04	1,541.14	408.73	1,116	908.35	0.01	-0.01	0.04
10.00	-25.66	-0.72	0.00	-55.45	0.00	55.45	1,517.02	397.16	1,053	868.61	0.03	-0.03	0.04
15.00	-24.44	-0.72	0.00	-51.85	0.00	51.85	1,491.76	385.60	993	829.05	0.07	-0.04	0.04
20.00	-23.24	-0.72	0.00	-48.23	0.00	48.23	1,465.37	374.03	934	789.73	0.12	-0.06	0.03
25.00	-22.20	-0.72	0.00	-44.60	0.00	44.60	1,437.84	362.46	877	750.70	0.19	-0.07	0.03
29.33	-21.98	-0.72	0.00	-41.47	0.00	41.47	1,413.08	352.44	830	717.19	0.26	-0.08	0.03
30.00	-21.07	-0.72	0.00	-40.98	0.00	40.98	1,409.18	350.89	822	712.03	0.27	-0.09	0.03
32.83	-20.56	-0.72	0.00	-38.95	0.00	38.95	1,130.06	270.32	634	571.84	0.32	-0.09	0.04
35.00	-19.38	-0.71	0.00	-37.39	0.00	37.39	1,119.11	266.45	616	558.13	0.37	-0.10	0.03
40.00	-18.22	-0.70	0.00	-33.85	0.00	33.85	1,081.73	257.56	576	521.29	0.48	-0.11	0.03
45.00	-17.08	-0.68	0.00	-30.36	0.00	30.36	1,044.36	248.66	537	485.71	0.60	-0.12	0.03
50.00	-15.94	-0.67	0.00	-26.94	0.00	26.94	1,006.99	239.76	499	451.39	0.74	-0.14	0.03
55.00	-14.83	-0.65	0.00	-23.61	0.00	23.61	969.61	230.86	463	418.33	0.88	-0.15	0.03
60.00	-14.18	-0.63	0.00	-20.38	0.00	20.38	932.24	221.96	428	386.52	1.04	-0.16	0.02
62.92	-13.61	-0.62	0.00	-18.53	0.00	18.53	910.44	216.77	408	368.55	1.14	-0.16	0.02
65.00	-13.41	-0.62	0.00	-17.24	0.00	17.24	894.87	213.06	394	355.97	1.21	-0.17	0.02
65.75	-12.55	-0.59	0.00	-16.78	0.00	16.78	666.75	162.80	306	270.38	1.24	-0.17	0.02
70.00	-11.74	-0.57	0.00	-14.26	0.00	14.26	651.10	157.11	285	254.72	1.39	-0.18	0.02
74.00	-11.63	-0.57	0.00	-11.99	0.00	11.99	635.86	151.76	266	240.20	1.54	-0.18	0.07
74.00	-11.63	-0.57	0.00	-11.99	0.00	11.99	635.86	151.76	266	240.20	1.54	-0.18	0.02
75.00	-11.09	-0.55	0.00	-11.42	0.00	11.42	631.77	150.42	261	236.53	1.58	-0.18	0.07
80.00	-10.57	-0.54	0.00	-8.67	0.00	8.67	603.66	143.73	238	215.85	1.79	-0.21	0.06
85.00	-10.15	-0.52	0.00	-6.00	0.00	6.00	575.56	137.04	217	196.12	2.03	-0.24	0.05
90.00	-6.73	-0.36	0.00	-3.39	0.00	3.39	547.45	130.35	196	177.33	2.29	-0.26	0.03
90.20	-6.35	-0.35	0.00	-3.32	0.00	3.32	546.33	130.08	195	176.60	2.30	-0.26	0.03
95.00	-6.01	-0.33	0.00	-1.65	0.00	1.65	519.35	123.65	177	159.49	2.57	-0.27	0.02
100.00	0.00	-0.30	0.00	0.00	0.00	0.00	491.24	116.96	158	142.60	2.85	-0.27	0.00

0.9D - 1.0Ev + 1.0Eh Normal **Seismic (Reduced DL)**

CALCULATED FORCES

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (fr-kips)	Mu Mx (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (kips)	Phi Mn (kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-19.41	-0.71	0.00	-61.58	0.00	61.58	1,564.13	420.30	1,180	948.21	0.00	0.00	0.04
5.00	-18.55	-0.71	0.00	-58.03	0.00	58.03	1,541.14	408.73	1,116	908.35	0.01	-0.01	0.03
10.00	-17.70	-0.72	0.00	-54.46	0.00	54.46	1,517.02	397.16	1,053	868.61	0.03	-0.03	0.03
15.00	-16.86	-0.72	0.00	-50.88	0.00	50.88	1,491.76	385.60	993	829.05	0.07	-0.04	0.03
20.00	-16.02	-0.72	0.00	-47.29	0.00	47.29	1,465.37	374.03	934	789.73	0.12	-0.06	0.03
25.00	-15.31	-0.71	0.00	-43.71	0.00	43.71	1,437.84	362.46	877	750.70	0.18	-0.07	0.03

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (fr-kips)	Mu Mx (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (kips)	Phi Mn (kips)	Total Deflect (in)	Rotation (deg)	Ratio
29.33	-15.16	-0.71	0.00	-40.62	0.00	40.62	1,413.08	352.44	830	717.19	0.25	-0.08	0.03
30.00	-14.53	-0.71	0.00	-40.14	0.00	40.14	1,409.18	350.89	822	712.03	0.27	-0.08	0.03
32.83	-14.18	-0.71	0.00	-38.14	0.00	38.14	1,130.06	270.32	634	571.84	0.32	-0.09	0.03
35.00	-13.37	-0.70	0.00	-36.60	0.00	36.60	1,119.11	266.45	616	558.13	0.36	-0.10	0.03
40.00	-12.57	-0.69	0.00	-33.12	0.00	33.12	1,081.73	257.56	576	521.29	0.47	-0.11	0.03
45.00	-11.78	-0.67	0.00	-29.69	0.00	29.69	1,044.36	248.66	537	485.71	0.59	-0.12	0.03
50.00	-11.00	-0.65	0.00	-26.33	0.00	26.33	1,006.99	239.76	499	451.39	0.72	-0.13	0.03
55.00	-10.22	-0.63	0.00	-23.06	0.00	23.06	969.61	230.86	463	418.33	0.87	-0.14	0.02
60.00	-9.78	-0.62	0.00	-19.90	0.00	19.90	932.24	221.96	428	386.52	1.02	-0.15	0.02
62.92	-9.39	-0.61	0.00	-18.09	0.00	18.09	910.44	216.77	408	368.55	1.12	-0.16	0.02
65.00	-9.25	-0.60	0.00	-16.82	0.00	16.82	894.87	213.06	394	355.97	1.19	-0.16	0.02
65.75	-8.65	-0.58	0.00	-16.37	0.00	16.37	666.75	162.80	306	270.38	1.22	-0.17	0.02
70.00	-8.10	-0.56	0.00	-13.91	0.00	13.91	651.10	157.11	285	254.72	1.37	-0.17	0.02
74.00	-8.02	-0.55	0.00	-11.68	0.00	11.68	635.86	151.76	266	240.20	1.51	-0.18	0.06
74.00	-8.02	-0.55	0.00	-11.68	0.00	11.68	635.86	151.76	266	240.20	1.51	-0.18	0.02
75.00	-7.64	-0.54	0.00	-11.13	0.00	11.13	631.77	150.42	261	236.53	1.55	-0.18	0.06
80.00	-7.29	-0.52	0.00	-8.44	0.00	8.44	603.66	143.73	238	215.85	1.76	-0.21	0.05
85.00	-7.00	-0.51	0.00	-5.83	0.00	5.83	575.56	137.04	217	196.12	1.99	-0.23	0.04
90.00	-4.64	-0.35	0.00	-3.30	0.00	3.30	547.45	130.35	196	177.33	2.24	-0.25	0.03
90.20	-4.38	-0.34	0.00	-3.23	0.00	3.23	546.33	130.08	195	176.60	2.25	-0.25	0.03
95.00	-4.14	-0.32	0.00	-1.60	0.00	1.60	519.35	123.65	177	159.49	2.51	-0.26	0.02
100.00	0.00	-0.30	0.00	0.00	0.00	0.00	491.24	116.96	158	142.60	2.79	-0.27	0.00

ANALYSIS SUMMARY

	Reactions						Max Usage	
Load Case	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)	Elev (ft)	Interaction Ratio
1.2D + 1.0W Normal	14.28	0.00	28.29	0.00	0.00	1120.48	74.00	0.92
0.9D + 1.0W Normal	14.26	0.00	21.21	0.00	0.00	1105.64	74.00	0.9
1.2D + 1.0Di + 1.0Wi Normal	5.68	0.00	48.29	0.00	0.00	423.21	74.00	0.31
1.2D + 1.0Ev + 1.0Eh Normal	0.72	0.00	28.15	0.00	0.00	62.59	74.00	0.07
0.9D - 1.0Ev + 1.0Eh Normal	0.72	0.00	19.41	0.00	0.00	61.58	74.00	0.06
1.0D + 1.0W Service Normal	3.30	0.00	23.60	0.00	0.00	257.12	74.00	0.22

ADDITIONAL STEEL SUMMARY

			Intermediate Connectors				Max member		
Elev From (ft)	Elev To (ft)	Member	VQ/I	Shear Applied (kips)	Shear (phiVn) (kips)	Ratio	Pu (kip)	PhiPn (kip)	Ratio
0.00	74.00	SOL #20 All Thread Bar	295.7	8.9	16.8	0.5278	204.3	330.5	0.6182

			Upper Termination Connectors					Lower Termination Connectors				
Elev From (ft)	Elev To (ft)	Member	MQ/I	phiVn (kips)	Num Reqd	Num Actual	Ratio	MQ/I (kips)	phiVn (kip)	Num Reqd	Num Actual	Ratio
0.00	74.00	SOL #20 All Thread Bar	77.2166	12	7	7	0.9192	0	12	0	0	0.0000

Base Plate & Anchor Rod Analysis

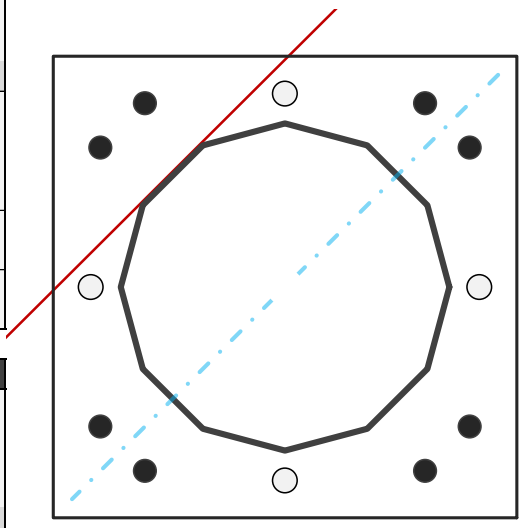
Pole Dimensions		
Number of Sides	12	-
Diameter	30	in
Thickness	1/4	in
Orientation Offset		°

Base Reactions		
Moment, Mu	1,120.5	k-ft
Axial, Pu	28.3	k
Shear, Vu	14.3	k
Neutral Axis	45	°

Report Capacities		
Component	Capacity	Result
Base Plate	52%	Pass
Anchor Rods	28%	Pass
Dwyidag	41%	Pass

Base Plate		
Shape	Square	-
Width	44	in
Thickness	2	in
Grade	A572-60	
Yield Strength, Fy	60	ksi
Tensile Strength, Fu	75	ksi
Clip	0	in
Orientation Offset	0	°
Anchor Rod Detail	c	η=0.55
Clear Distance	N/A	in
Applied Moment, Mu	902.5	k
Bending Stress, ϕMn	1733.4	k

Original Anchor Rods		
Arrangement	Cluster	-
Quantity	8	-
Diameter, ø	2 1/4	in
Bolt Circle	44	in
Grade	A615-75	
Yield Strength, Fy	75	ksi
Tensile Strength, Fu	100	ksi
Spacing	6.0	in
Orientation Offset	0	°
Applied Force, Pu	67.0	k
Anchor Rods, ϕPn	243.6	k



Dywidag Reinforcement		
Quantity	4	-
Bar Size	#20	in
Diameter, ø	2.5	in
Bracket Type	Angle	-
Circle	36.88	in
Orientation Offset	0	°
Applied Force, Pu	149.8	k
Dywidag Bar, ϕPn	368.2	k

Calculations for Monopole Base Plate & Anchor Rod Analysis

Reaction Distribution

Reaction	Shear Vu	Moment Mu	Factor
-	k	k-ft	-
Base Forces	14.3	485.3	0.43
Anchor Rod Forces	14.3	485.3	0.43
Additional Bolt (Grp1) Forces	0.0	0.0	0.00
Additional Bolt (Grp2) Forces	0.0	0.0	0.00
Dywidag Forces	0.0	635.2	0.57
Stiffener Forces	0.0	0.0	0.00

Geometric Properties

Section	Gross Area	Net Area	Individual Inertia	Threads per Inch	Moment of Inertia
-	in^2	in^2	in^4	#	in^4
Pole	23.0996	1.9250	0.0403		2556.06
Bolt	3.9761	3.2477	0.8393	4.5	6294.24
Bolt1	0.0000	0.0000	0.0000	0	0.00
Bolt2	0.0000	0.0000	0.0000	0	0.00
Dywidag	4.9087	4.9087	1.9175		3345.94
Stiffener	0.0000	0.0000	0.0000		0.00

Base Plate		
Shape	Square	-
Width, W	44	in
Thickness, t	2	in
Yield Strength, Fy	60	ksi
Tensile Strength, Fu	75	ksi
Base Plate Chord	32.187	in
Detail Type	c	-
Detail Factor	0.55	-
Clear Distance	N/A	-

Anchor Rods		
Anchor Rod Quantity, N	8	-
Rod Diameter, d	2.25	in
Bolt Circle, BC	44	in
Yield Strength, Fy	75	ksi
Tensile Strength, Fu	100	ksi
Applied Axial, Pu	67.0	k
Applied Shear, Vu	0.4	k
Compressive Capacity, ϕPn	243.6	k
Tensile Capacity, ϕRnt	0.275	OK
Interaction Capacity	0.278	OK

External Base Plate		
Chord Length AA	32.100	in
Additional AA	0.000	in
Section Modulus, Z	32.100	in^3
Applied Moment, Mu	902.5	k-ft
Bending Capacity, ϕMn	1733.4	k-ft
Capacity, Mu/ϕMn	0.521	OK
Chord Length AB	31.038	in
Additional AB	0.000	in
Section Modulus, Z	31.038	in^3
Applied Moment, Mu	831.3	k-ft
Bending Capacity, ϕMn	1676.0	k-ft
Capacity, Mu/ϕMn	0.496	OK
Bend Line Length	0.000	in
Additional Bend Line	0.000	in
Section Modulus, Z	0.000	in^3
Applied Moment, Mu	0.0	k-ft
Bending Capacity, ϕMn	0.0	k-ft
Capacity, Mu/ϕMn		

Internal Base Plate		
Arc Length	0.000	in
Section Modulus, Z	0.000	in^3
Moment Arm	0.000	in
Applied Moment, Mu	0.0	k-ft
Bending Capacity, ϕMn	0.0	k-ft
Capacity, Mu/ϕMn		

Dywidag Reinforcement		
Dywidag Quantity, N	4	-
Dywidag Diameter, d	2.5	in
Bolt Circle, BC	36.88	in
Yield Strength, Fy	80	ksi
Tensile Strength, Fu	100	ksi
Applied Axial, Pu	149.8	k
Compressive Capacity, ϕPn	368.2	k
Capacity, Pu/ϕPn	0.407	OK

Site Name: Rkhl-Rocky Hill, CT
Site Number: 302479
Tower Type: MP
Design Loads (Factored) - Analysis per TIA-222-H Standards

Monolithic Mat & Pier Foundation Analysis

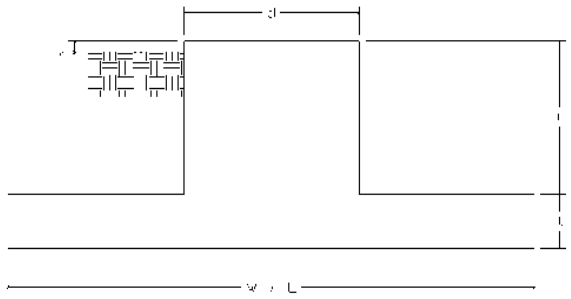
Foundation Analysis Parameters		
Design / Analysis / Mapping:	Analysis	-
Compression/Leg:	28.3	k
Uplift/Leg:	0.0	k
Total Shear:	14.3	k
Moment:	1,120.5	k-ft
Tower + Appurtenance Weight:	28.3	k
Depth to Base of Foundation (l + t - h):	8	ft
Diameter of Pier (d):	6	ft
Length of Pier (l):	5.5	ft
Height of Pier above Ground (h):	0.5	ft
Width of Pad (W):	18	ft
Length of Pad (L):	18	ft
Thickness of Pad (t):	3	ft
Tower Leg Center to Center:	0	ft
Number of Tower Legs:	1	-
Tower Center from Mat Center:	0	ft
Depth Below Ground Surface to Water Table:	99	ft
Unit Weight of Concrete:	150	pcf
Unit Weight of Soil Above Water Table:	100	pcf
Unit Weight of Water:	62.4	pcf
Unit Weight of Soil Below Water Table:	37.6	pcf
Friction Angle of Uplift:	15	°
Coefficient of Shear Friction:	0.5	-
Ultimate Compressive Bearing Pressure:	30,000	psf
Ultimate Passive Pressure on Pad Face:	0	psf
$f_{Soil\ and\ Concrete\ Weight}$:	0.9	-
f_{Soil}:	0.75	-

Overturning Moment Usage		
Design OTM:	1241.9	k-ft
OTM Resistance:	2956.1	k-ft
Design OTM / OTM Resistance:	42%	Pass

Soil Bearing Pressure Usage		
Net Bearing Pressure:	3066	psf
Factored Nominal Bearing Pressure:	22500	psf
Factored Nominal (Net) Bearing Pressure:	14%	Pass
Load Direction Controling Design Bearing Pressure:	*Diagonal to Pad Edge*	

Sliding Factor of Safety		
Ultimate Friction Resistance:	170.3	k
Ultimate Passive Pressure Resistance:	0.0	k
Total Factored Sliding Resistance:	127.7	k
Sliding Design / Sliding Resistance:	11%	Pass

Foundation Steel Parameters		
Shear/Leg (Compression):	9.5	k
Shear/Leg (Uplift):	7.9	k
Concrete Strength (f'_c):	3,000	psi
Pad Tension Steel Depth:	32.38	in
Dead Load Factor:	0.9	-
f_{Shear}:	0.75	-
$f_{Flexure\ /\ Tension}$:	0.9	-
$f_{Compression:}$	0.65	-
b:	0.85	-
Bottom Pad Rebar Size #:	10	-
# of Bottom Pad Rebar:	35	-
Pad Bottom Steel Area:	44.45	in^2
Pad Steel F_y:	60,000	psi
Top Pad Rebar Size #:	5	-
# of Top Pad Rebar:	35	-
Pad Top Steel Area:	10.85	in^2
Pier Rebar Size #:	11	-
Pier Steel Area (Single Bar):	1.56	in^2
# of Pier Rebar:	52	-
Pier Steel F_y:	60,000	psi
Pier Cage Diameter:	63.6	in
Rebar Strain Limit:	0.008	-
Steel Elastic Modulus:	29,000	ksi
Tie Rebar Size #:	4	-
Tie Steel Area (Single Bar):	0.20	in^2
Tie Spacing:	12	in
Tie Steel F_y:	40,000	psi
Clear Cover:	3	in



Pad Strength Capacity			
Factored One Way Shear (V_u):	102.8	k	
One Way Shear Capacity (fV_c):	448.8	k	*ACI 318-14 25.5.5.1*
V_u / fV_c:	23%	Pass	
Load Direction Controling Shear Capacity:	*Diagonal to Pad Edge*		
Lower Steel Pad Factored Moment (M_u):	598.0	k-ft	
Lower Steel Pad Moment Capacity (fM_n):	6064.2	k-ft	*ACI 318-14 22.3.1.1*
M_u / fM_n:	10%	Pass	
Load Direction Controling Flexural Capacity:	*Parallel to Pad Edge*		
Upper Steel Pad Factored Moment (M_u):	293.5	k-ft	
Upper Steel Pad Moment Capacity (fM_n):	1556.2	k-ft	
M_u / fM_n:	19%	Pass	
Lower Pad Flexural Reinforcement Ratio:	0.0064		*OK - ACI 318-14 7.6.1.1 & 8.6.1.1*
Upper Pad Flexural Reinforcement Ratio:	0.0016		*OK - ACI 318-14 7.6.1.1 & 8.6.1.1*
Pad Shrinkage Reinforcement Ratio:	0.0079		*OK - ACI 318-14 24.4.3.2*
Lower Pad Reinforcement Spacing:	6.2	in	*OK - ACI 318-14 7.7.2.3, 8.7.2.2, & 24.4.3.3*
Upper Pad Reinforcement Spacing:	6.2	in	*OK - ACI 318-14 7.7.2.3, 8.7.2.2, & 24.4.3.3*
Ultimate Punching Shear Stress, v_u:	14.46	psi	*ACI 318-14 R8.4.4.2.3*
Nominal Punching Shear Capacity (f_cv_c):	164.3	psi	*ACI 318-14 22.6.5.2*
v_u / f_cv_c:	9%	Pass	
Pier Moment Pad Flexure Transfer Ratio, γ_f:	0.60		*TIA-222-H 9.4.2*
Moment Transfer Effective Flexural Width, B_{eff}:	15.00	ft	*TIA-222-H 9.4.2*
Moment Transfer Through Pad Flexure:	8632.94	k-in	*TIA-222-H 9.4.2*
Moment Transfer Flexural Capacity ($fM_{sc,f}$):	62696.84	k-in	
g_fM_{sc} / $fM_{sc,f}$:	0%	Pass	

Pier Strength Capacity			
Factored Moment in Pier (M_u):	1199.0	k-ft	
Pier Moment Capacity (fM_n):	11356.3	k-ft	
M_u / fM_n:	11%	Pass	
Factored Shear in Pier (V_u):	14.3	k	
Pier Shear Capacity (fV_n):	393.3	k	*ACI 318-14 22.5.1.1*
V_u / fV_c:	4%	Pass	
Pier Shear Reinforcement Ratio:	0.0005		*OK - No Ties Necessary for Shear - ACI11.5.6.1*
Factored Tension in Pier (T_u):	0.0	k	
Pier Tension Capacity (fT_n):	4380.5	k	
T_u / fT_n:	0%	Pass	
Factored Compression in Pier (P_u):	28.3	k	
Pier Compression Capacity (fP_n):	5339.9	k	*ACI 318-14 22.4.2.1*
P_u / fP_n:	1%	Pass	
Pier Compression Reinforcement Ratio:	0.020		*OK - TIA-222-H 9.4.1*
Minimum Depth to Develop Vertical Rebar:	63	in	*ACI 318-14 25.4.2.3*
Minimum Hook Development Length:	31	in	*ACI 318-14 25.4.3.1*
Minimum Mat Thickness / Edge Distance from Pier:	34.0	in	
Minimum Foundation Depth:	8.35	ft	
$M_u/f_BM_n + T_u/f_TT_n$:	11%	Pass	

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Mount Analysis Report

ATC Site Name	:	**Rkhl - Rocky Hill, CT**
ATC Site Number	:	**302479**
Engineering Number	:	**13683394_C8_04**
Mount Elevation	:	**104 ft**
Carrier	:	**AT&T Mobility**
Carrier Site Name	:	**MRCTB051039**
Carrier Site Number	:	**N/A**
Site Location	:	**699 West Street** **Rocky Hill, CT 06067-1924** **41.65176772 , -72.66847905**
County	:	**Hartford**
Date	:	**March 4, 2022**
Max Usage	:	**84%**
Result	:	**Contingent Pass**

Prepared By:
Michael Ellis
Structural Engineer I

Reviewed By:

COA: PEC.0001553

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Table of Contents

Introduction

The purpose of this report is to summarize results of the mount analysis performed for AT&T Mobility at 104 ft.

Supporting Documents

Specifications Sheet	Site Pro 1 F3P-12W, dated August 30, 2017
Radio Frequency Data Sheet	RFDS ID #10035027, dated October 6, 2021
Reference Photos	Site photos from 2019

Analysis

This mount was analyzed using American Tower Corporation's Mount Analysis Program and RISA-3D

Basic Wind Speed:	118 mph (3-Second Gust)
Basic Wind Speed w/ Ice:	50 mph (3-Second Gust) w/ 1.50'' radial ice concurrent
Codes:	ANSI/TIA-222-H
Exposure Category:	B
Risk Category:	II
Topographic Factor Procedure:	Method 2
Feature:	Flat
Crest Height (H):	0 ft
Crest Length (L):	0 ft
Spectral Response:	Ss = 0.201, S1 = 0.055
Site Class:	D - Stiff Soil
Live Loads:	Lm = 500 lbs

*** Based on experience, it has been determined that the Lv load cases will not control over Lm load cases in platform mount analyses. Therefore, these load cases have been excluded from this analysis.**

Conclusion

Based on the analysis results, the antenna mount meets the requirements per the applicable codes listed above provided the modifications listed below are completed:

- Install P2.5 (2.875" x 96") antenna mounting pipe (Mount Pipe N, M and P) with Site Pro 1 BBPM-K2 (or approved equivalent) U-bolts.
- No structural failures were addressed with the noted contingencies. Contingencies address Carrier's antenna spacing requirements.

If you have any questions or require additional information, please contact American Tower via email at Engineering@americantower.com. Please include the American Tower site name, site number, and engineering number in the subject line for any questions.

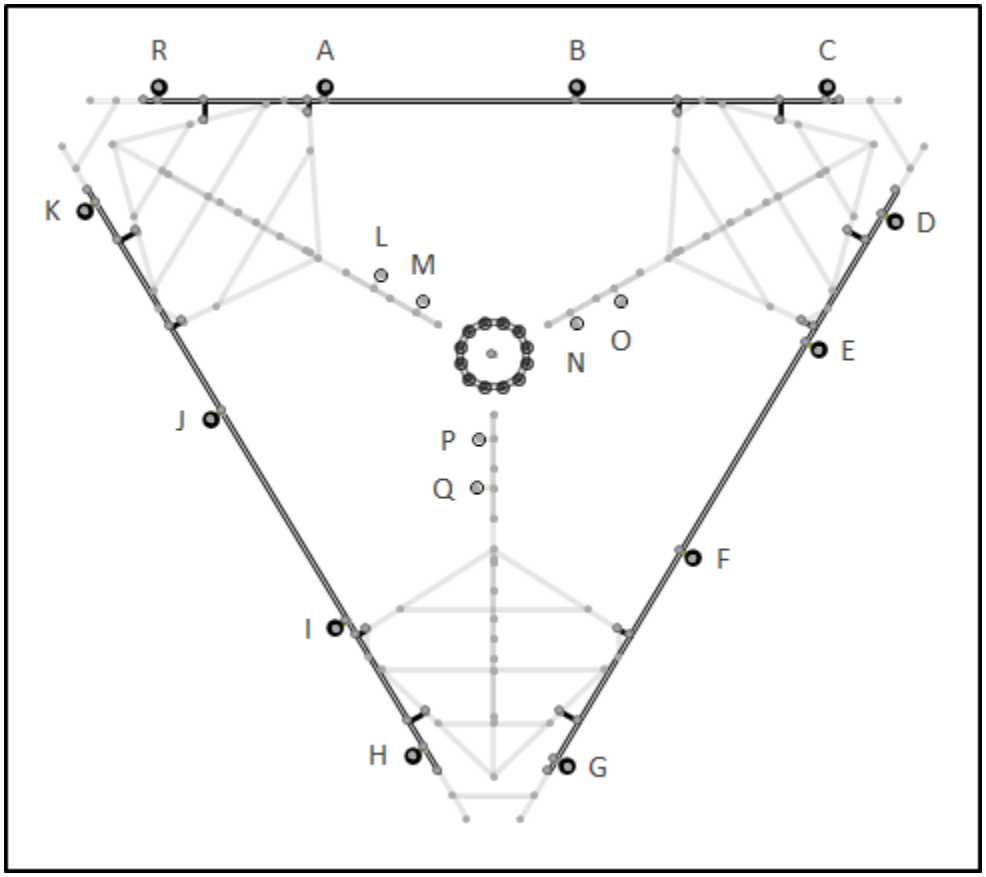
Application Loading

Mount Centerline (ft)	Equipment Centerline (ft)	Qty	Equipment Manufacturer & Model
104.0	105.0	3	Ericsson AIR 6419 N77G
		3	CCI HPA-65R-BUU-H6
	103.0	3	CCI TPA-65R-BU6DA-K
		3	CCI DMP65R-BU6DA
		3	Quintel QS66512-2
		1	Raycap DC9-48-60-24-8C-EV
	101.0	3	Ericsson AIR 6449 n77D
	100.0	1	Raycap DC6-48-60-18-8F (23.5" Height)
		1	Raycap DC6-48-60-18-8F (23.5" Height)
		3	Ericsson RRUS 4415 B25
		3	Ericsson RRUS 4478 B14
		3	Ericsson RRUS 32 B30
		3	Ericsson RRUS 4449 B5, B12
		3	Ericsson RRUS 32 B66A

Structure Usages

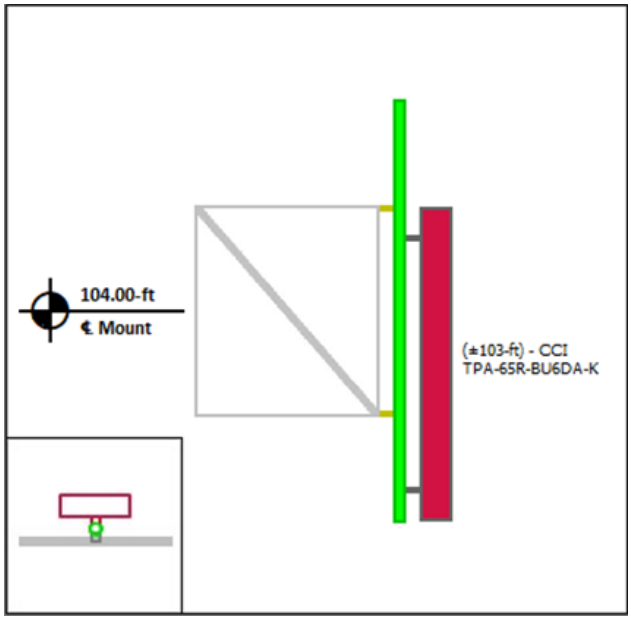
Structural Component	Controlling Usage	Pass/Fail
Horizontals	84%	Pass
Verticals	42%	Pass
Diagonals	38%	Pass
Mount Pipes	76%	Pass

Mount Layout

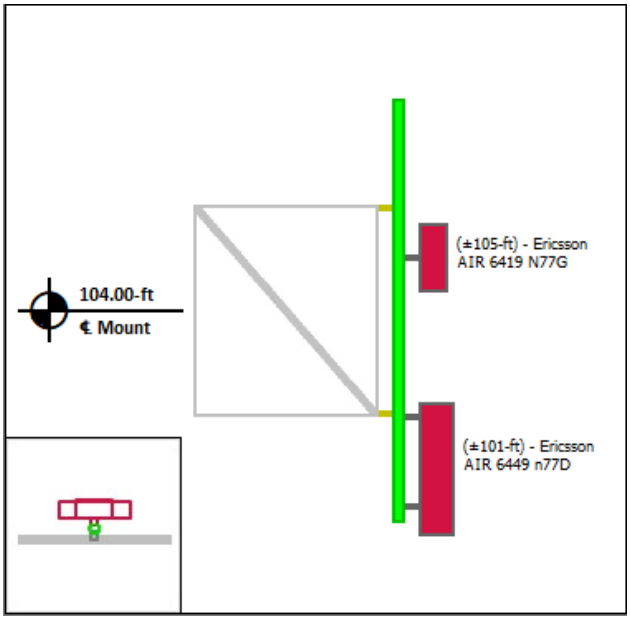


Equipment Layout

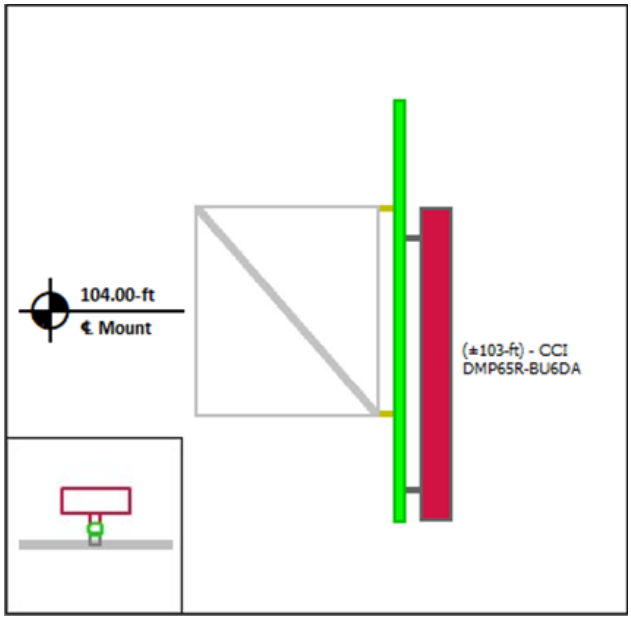
Mount Pipe A



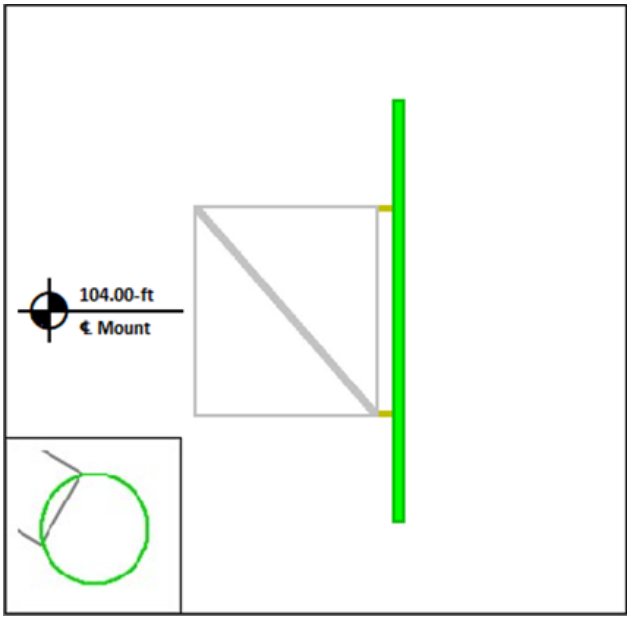
Mount Pipe B



Mount Pipe C

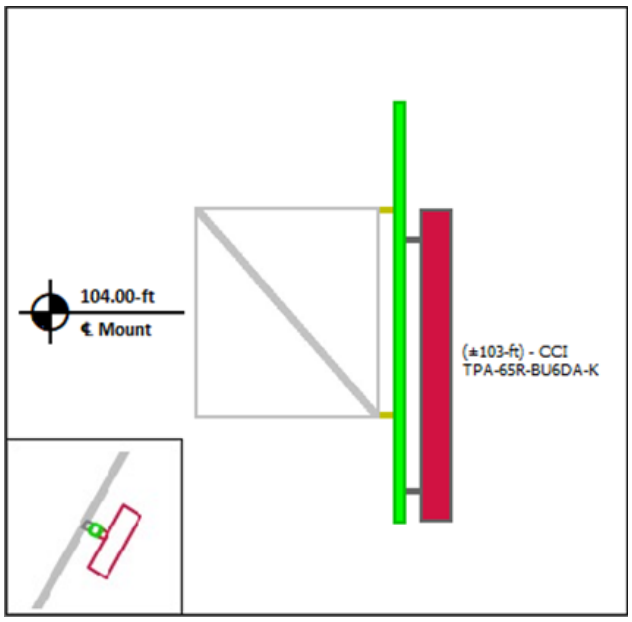


Mount Pipe D

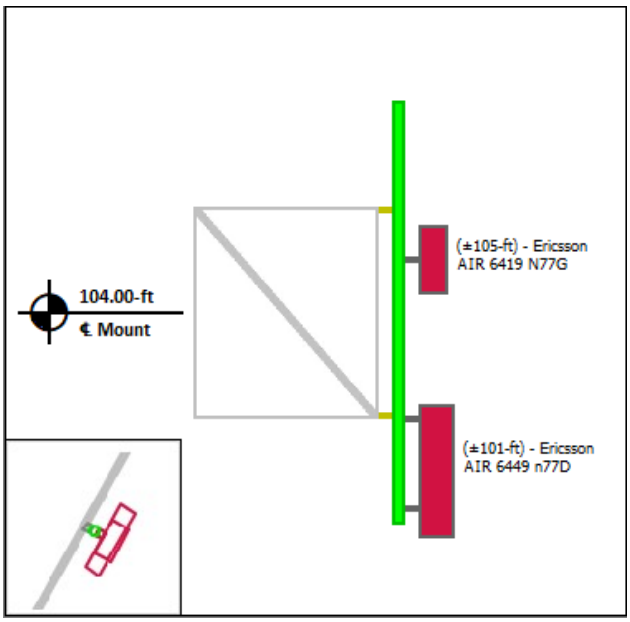


Equipment Layout Cont'd.

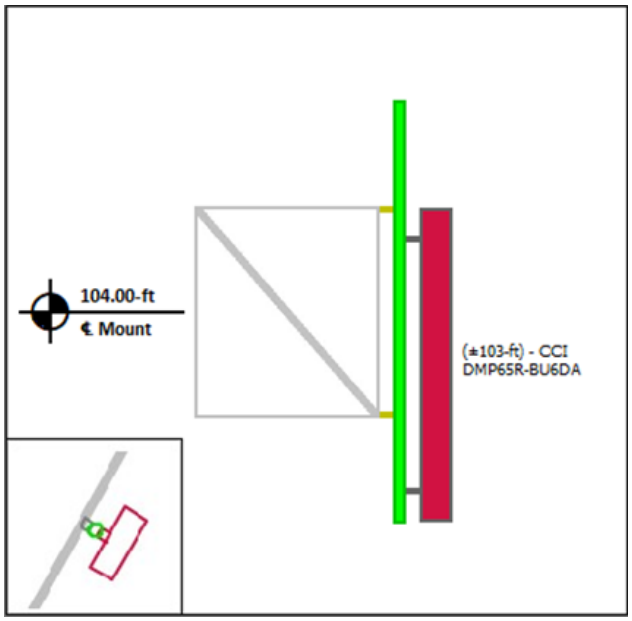
Mount Pipe E



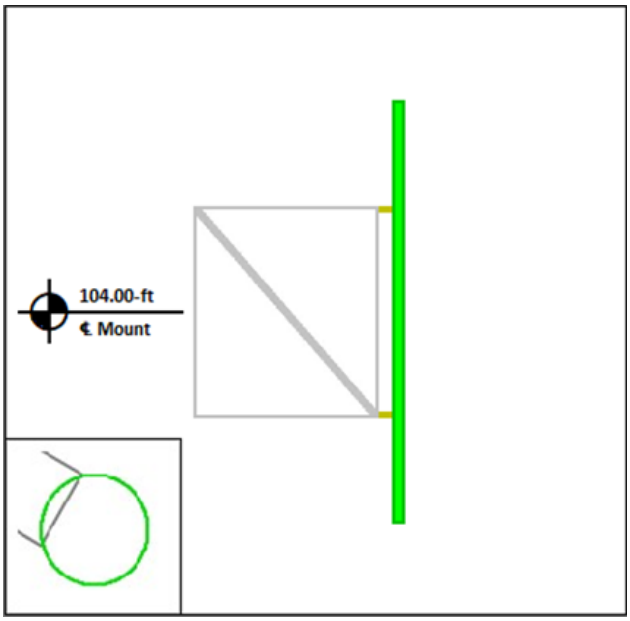
Mount Pipe F



Mount Pipe G

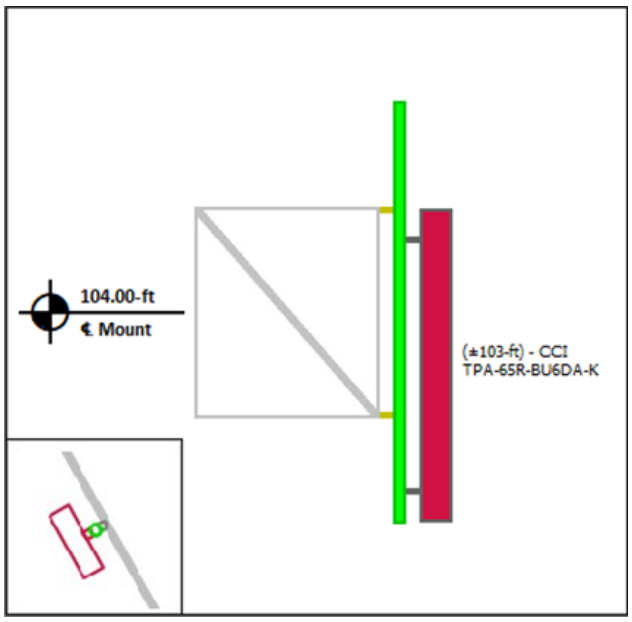


Mount Pipe H

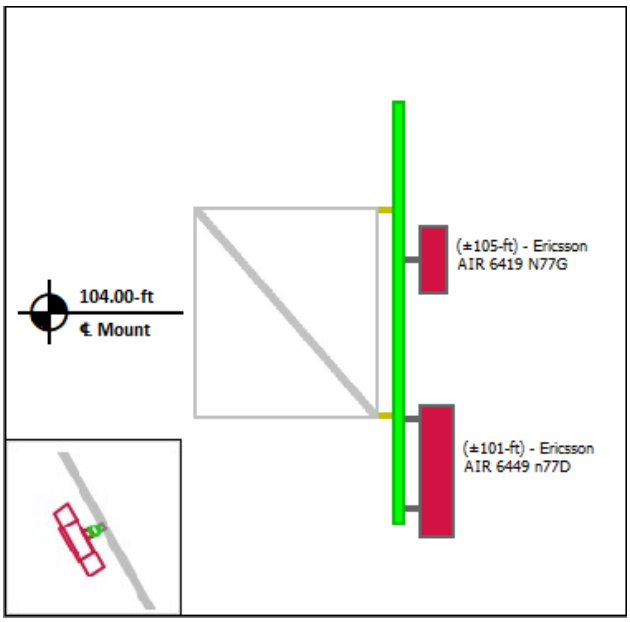


Equipment Layout Cont'd.

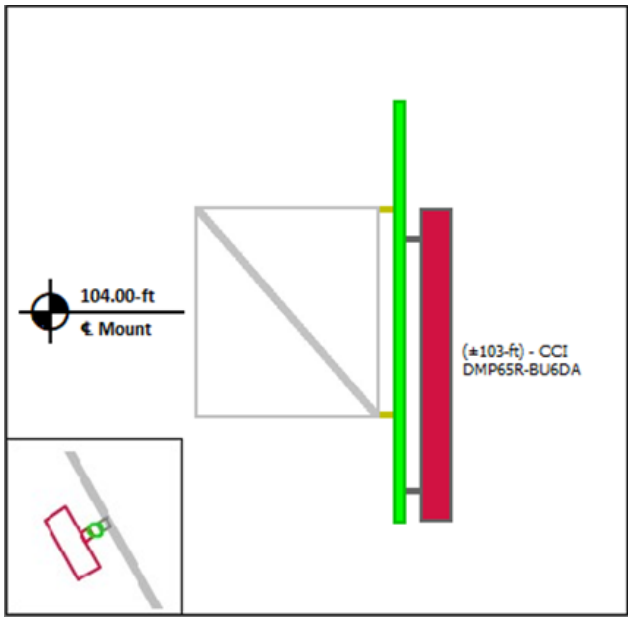
Mount Pipe I



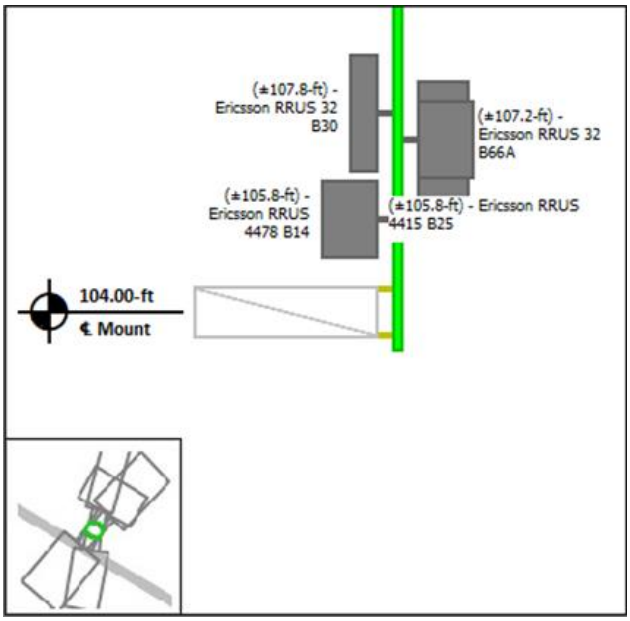
Mount Pipe J



Mount Pipe K

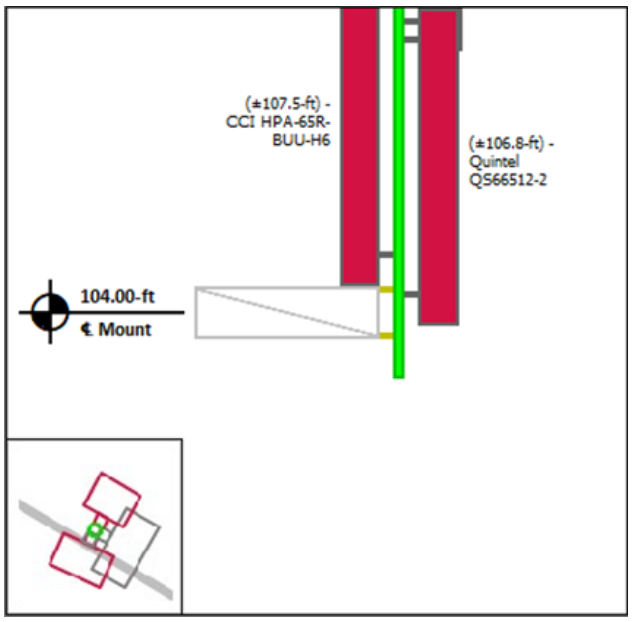


Mount Pipe L

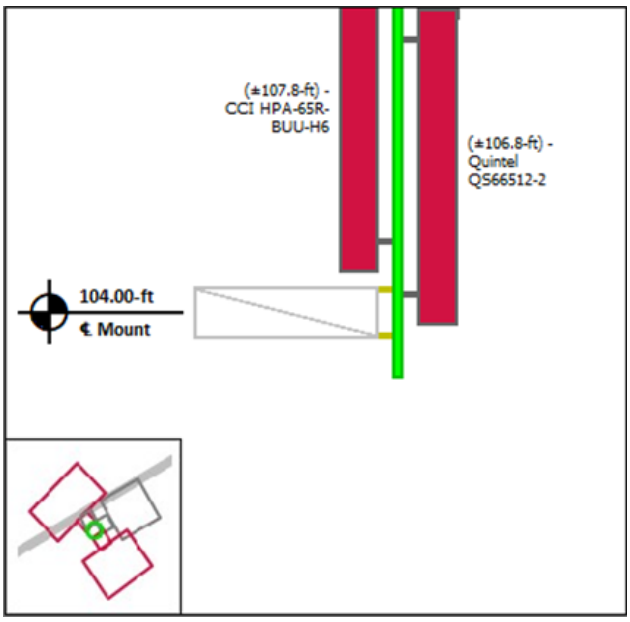


Equipment Layout Cont'd.

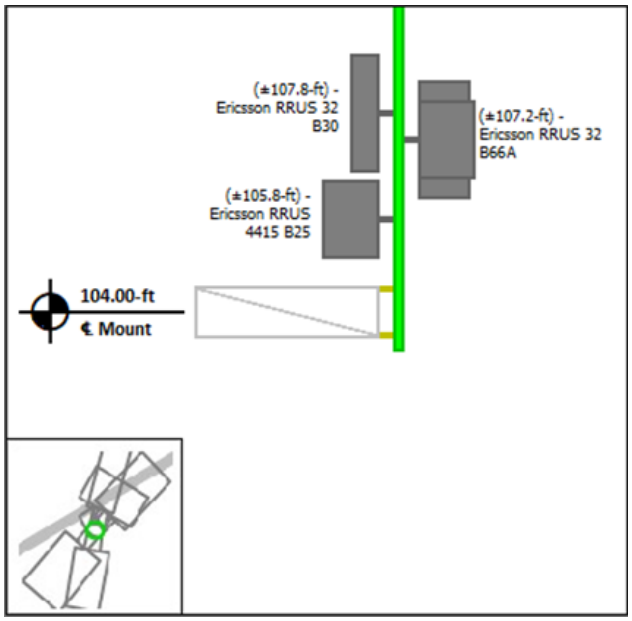
Mount Pipe M



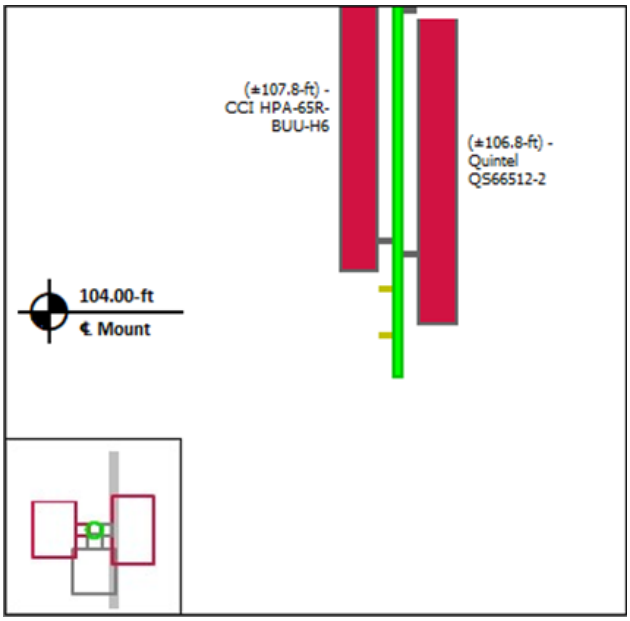
Mount Pipe N



Mount Pipe O

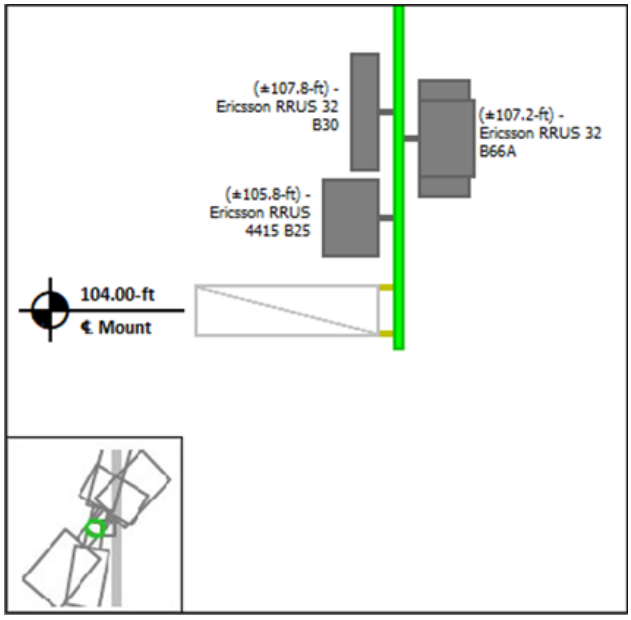


Mount Pipe P

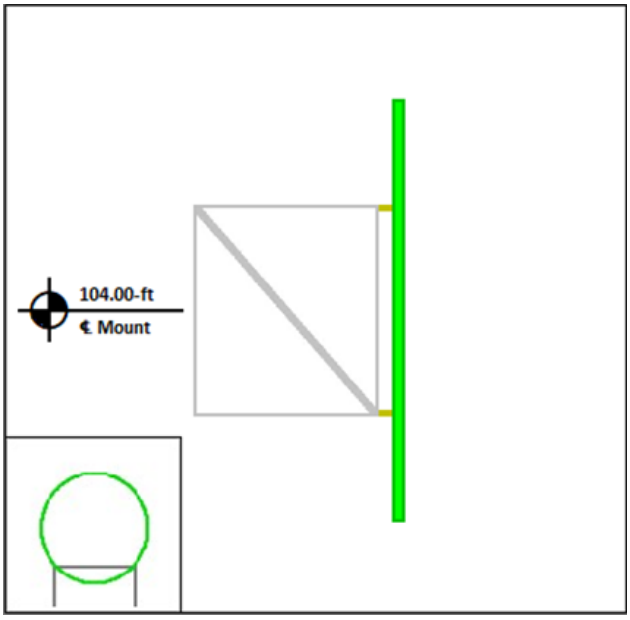


Equipment Layout Cont'd.

Mount Pipe Q



Mount Pipe R



Standard Conditions

All engineering services performed by A.T. Engineering Service, PLLC are prepared on the basis that the information used is current and correct. This information may consist of, but is not limited to the following:

- Information supplied by the client regarding equipment, mounts and feed line loading
- Information from drawings, design and analysis documents, and field notes in the possession of A.T. Engineering Service, PLLC

It is the responsibility of the client to ensure that the information provided to A.T. Engineering Service, PLLC and used in the performance of our engineering services is correct and complete.

American Tower assumes that all structures were constructed in accordance with the drawings and specifications.

All connections are to be verified for condition and tightness by the installation contractor preceding any changes to the appurtenance mounting system and/or equipment attached to it.

Unless explicitly agreed by both the client and A.T. Engineering Service, PLLC, all services will be performed in accordance with the current revision of ANSI/TIA-222.

Installation of all equipment and steel should be confirmed not to cause tower conflicts nor impede the tower climbing pegs.

All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. A.T. Engineering Service, PLLC is not responsible for the conclusions, opinions and recommendations made by others based on the information supplied herein.

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Site Number:	*302479*
Project Number:	*13683394_C8_04*
Carrier:	*AT&T Mobility*
Mount Elevation:	*104 ft*
Date:	3/4/2022

Mount Analysis Force Calculations

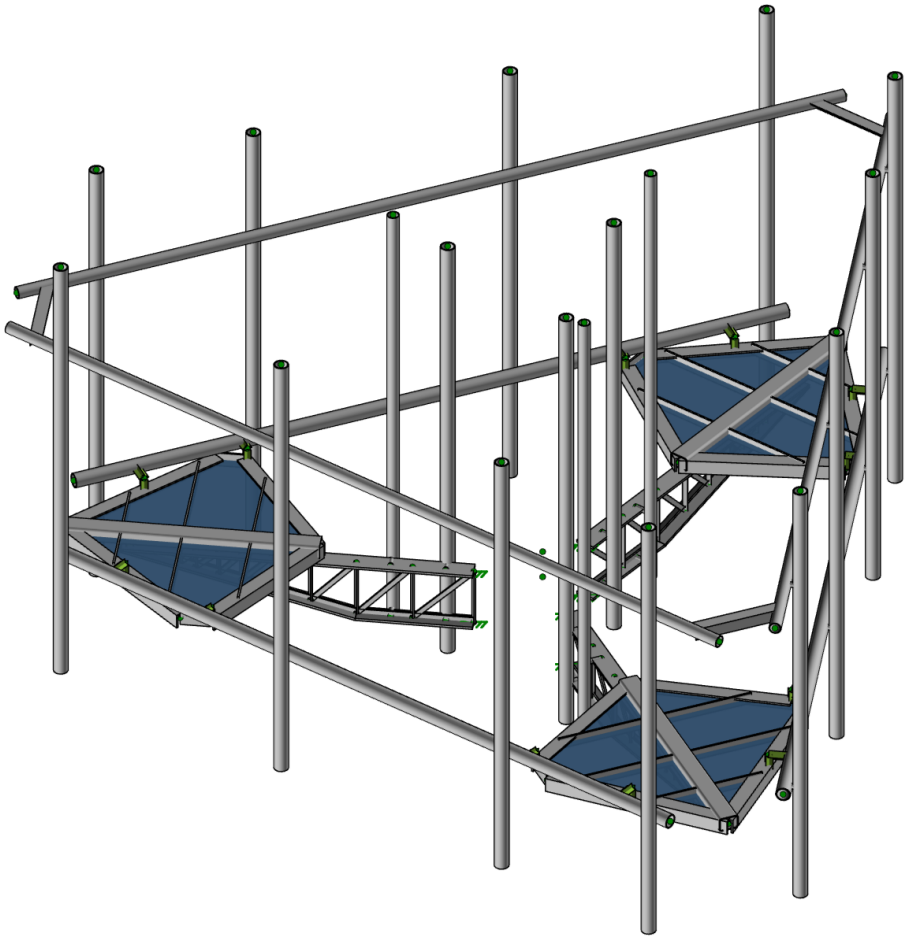
Wind & Ice Load Calculations			
Velocity Pressure Coefficient	K_z	1.00	
Topographic Factor	K_{zt}	1.00	
Rooftop Wind Speed-up Factor	K_s	1.00	
Shielding Factor	K_a	0.90	
Ground Elevation Factor	K_e	0.99	
Wind Direction Probability Factor	K_d	0.95	
Basic Wind Speed	V	118	mph
Velocity Pressure	q_z	33.6	psf
Height Escalation Factor	K_{iz}	1.12	
Thickness of Radial Glaze Ice	T_{iz}	1.68	in

Seismic Load Calculations			
Short Period DSRAP	S_{DS}	0.214	
1 Second DSRAP	S_{D1}	0.088	
Importance Factor	I	1.0	
Response Modification Coefficient	R	2.0	
Seismic Response Coefficient	C_S	0.107	
Amplification Factor	A	1.0	
Total Weight	W	4326.5	lbs
Total Shear Force	V_S	463.8	lbs
Horizontal Seismic Load	Eh	463.8	lbs
Vertical Seismic Load	Ev	185.5	lbs

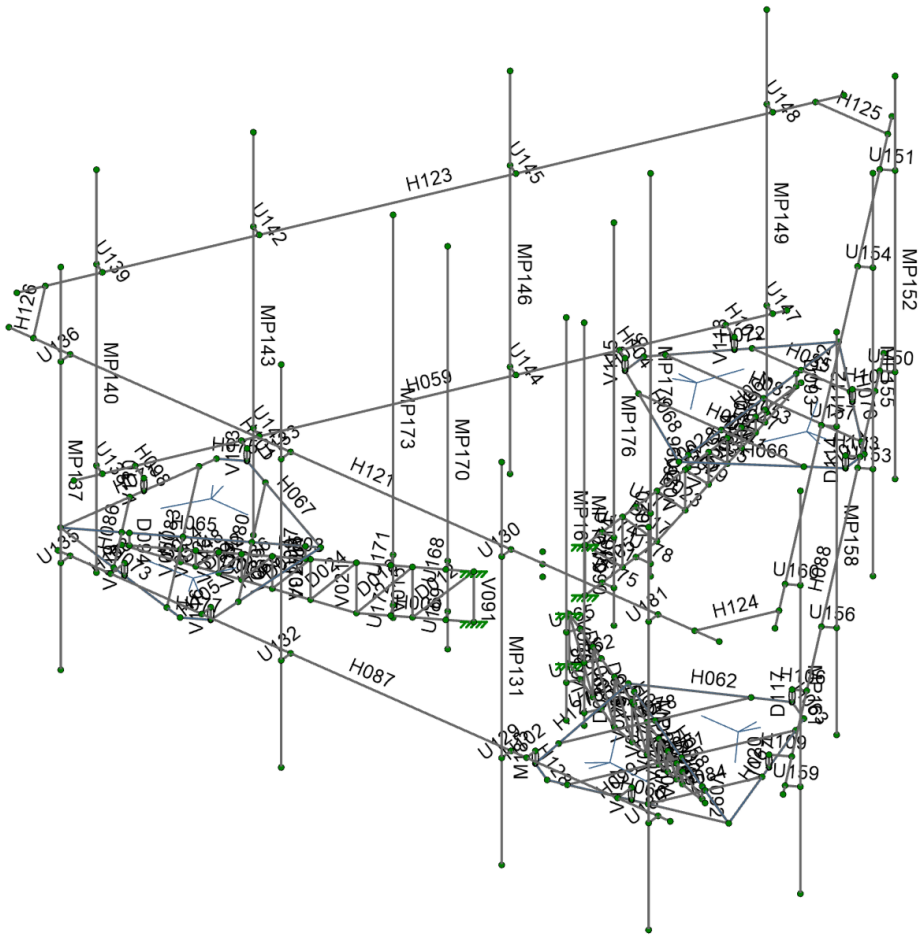
Antenna Calculations (Elevations per Application/RFDS)*

Equipment	Height	Width	Depth	Weight	EPA_N	EPA_T	EPA_{Ni}	EPA_{Ti}
Model #	in	in	in	lbs	sqft	sqft	sqft	sqft
Ericsson AIR 6419 N77G	15.7	30.0	6.7	70.0	3.93	0.40	5.30	0.72
CCI HPA-65R-BUU-H6	72.0	14.8	9.0	51.0	9.66	2.70	12.41	3.88
CCI TPA-65R-BU6DA-K	71.1	25.5	7.6	79.6	15.27	2.31	18.10	3.48
CCI DMP65R-BU6DA	71.2	20.7	7.7	79.4	12.71	2.32	15.47	3.50
Quintel QS66512-2	72.0	12.0	9.6	111.0	8.13	2.88	10.90	4.07
Raycap DC9-48-60-24-8C-EV	31.4	18.3	10.2	16.0	4.79	2.73	6.28	4.01
Ericsson AIR 6449 n77D	30.4	15.9	8.1	81.6	4.03	1.34	5.42	2.11
Raycap DC6-48-60-18-8F (23.5" Height)	23.5	9.7	9.7	20.0	1.90	1.90	2.92	2.92
Raycap DC6-48-60-18-8F (23.5" Height)	23.5	9.7	9.7	20.0	1.90	1.90	2.92	2.92
Ericsson RRUS 4415 B25	16.5	13.4	5.9	46.0	1.84	0.82	2.78	1.55
Ericsson RRUS 4478 B14	18.1	13.4	8.3	59.4	2.02	1.25	3.00	2.09
Ericsson RRUS 32 B30	27.2	12.1	7.0	60.0	2.74	1.67	3.94	2.78
Ericsson RRUS 4449 B5, B12	17.9	13.2	9.4	71.0	1.97	1.40	2.94	2.26
Ericsson RRUS 32 B66A	27.2	12.0	7.0	50.7	2.72	1.67	3.91	2.78

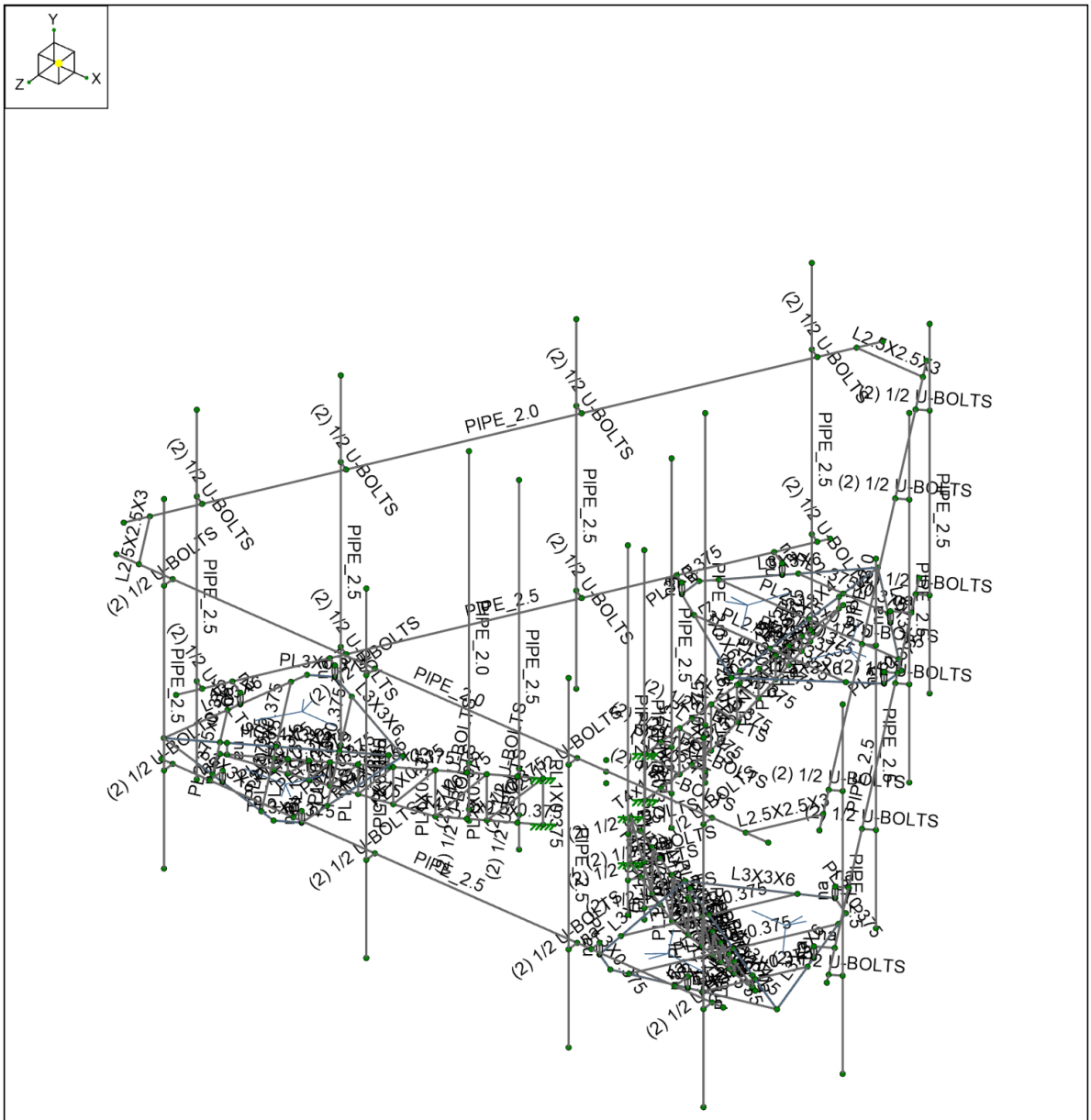
**** Equipment with EPA values N/A were not considered in the mount analysis***



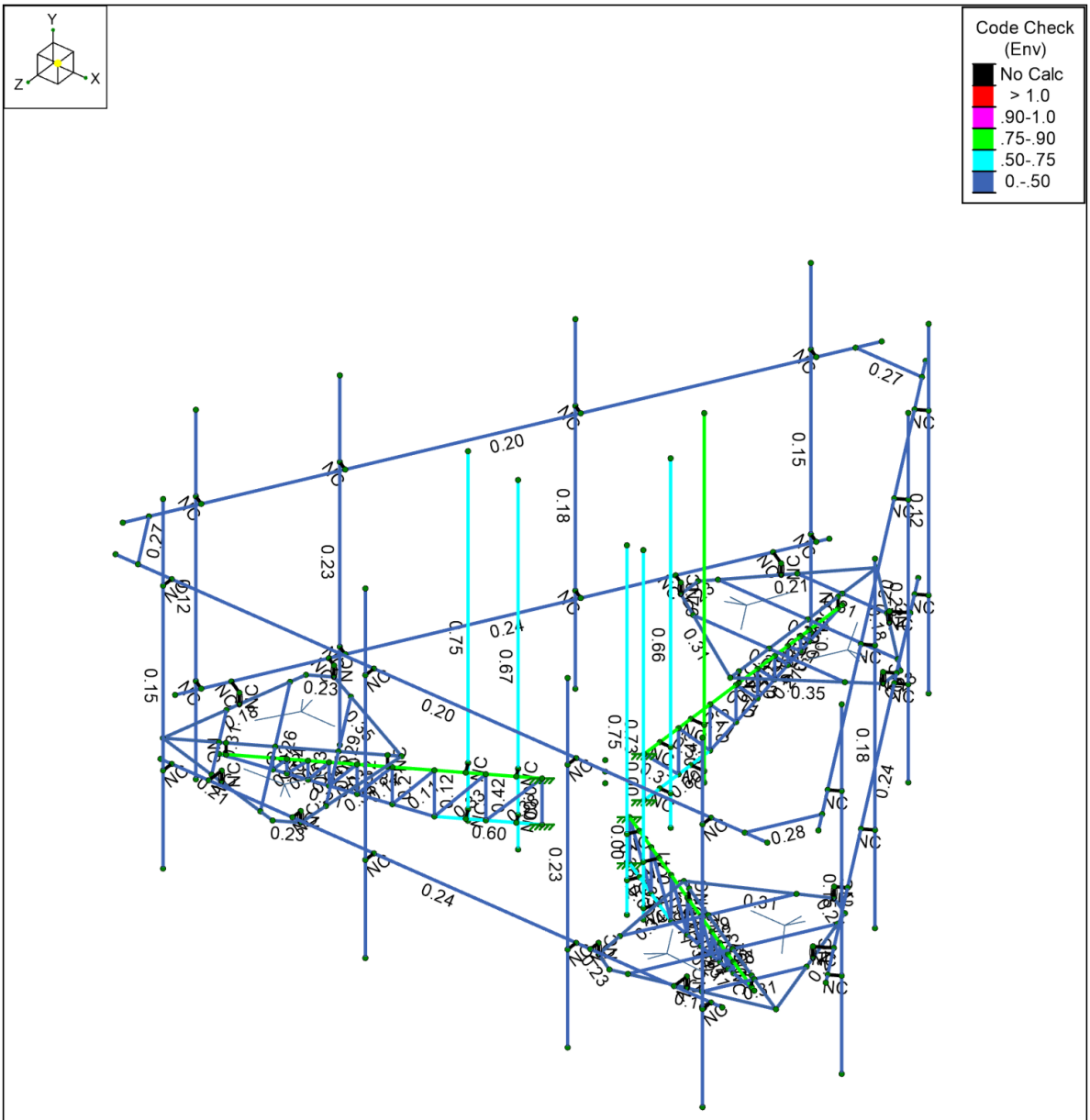
American Tower Corp.	302479, Rkhl - Rocky Hill	SK-1
Michael.Ellis		Mar 04, 2022
13683394_C8_04		R3D. AT&T MOBILITY @ 302479, …



American Tower Corp.	302479, Rkhl - Rocky Hill	SK-2
Michael.Ellis		Mar 04, 2022
13683394_C8_04		R3D. AT&T MOBILITY @ 302479, …

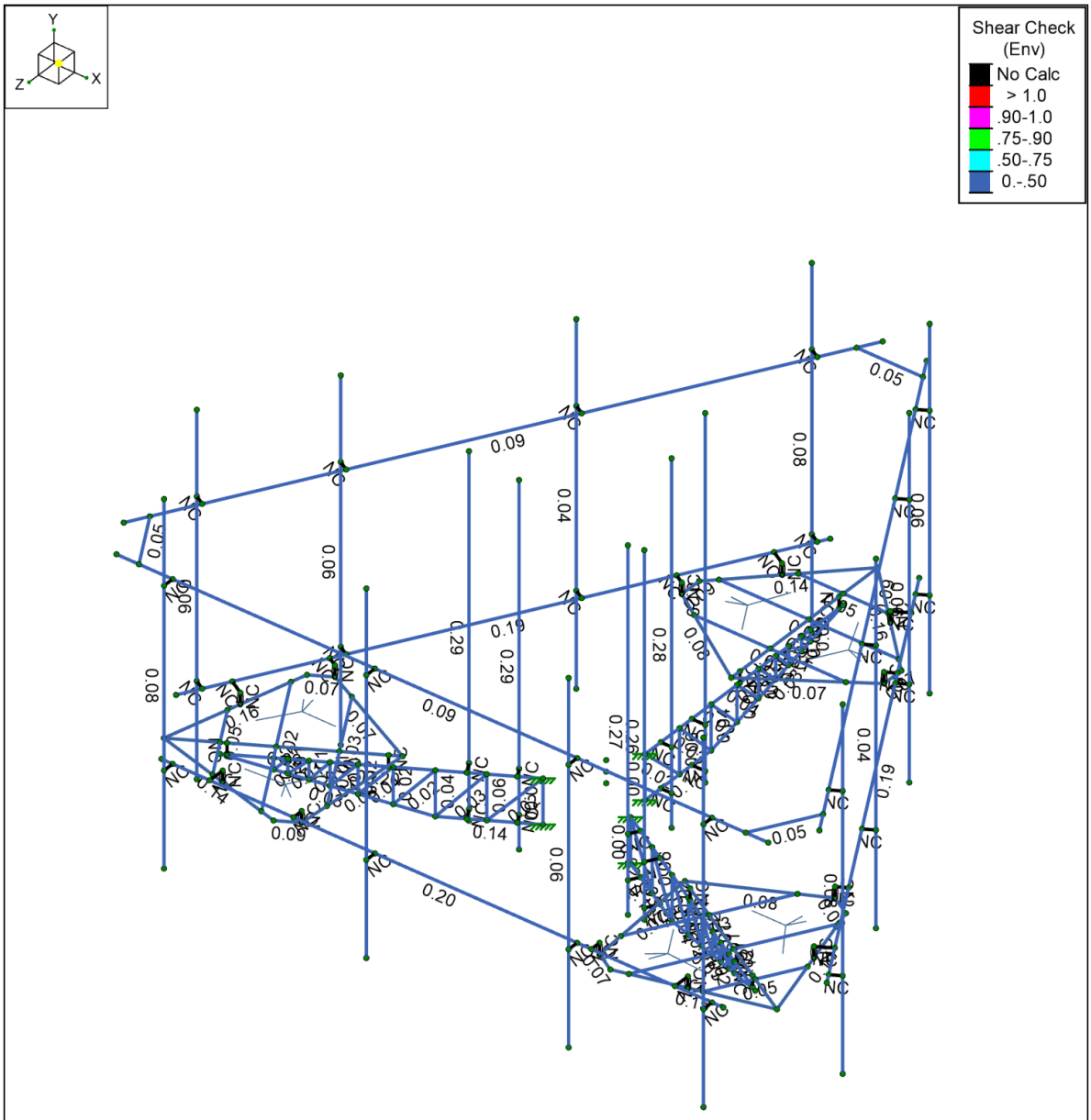


American Tower Corp.	302479, Rkhl - Rocky Hill	SK-3
Michael.Ellis		Mar 04, 2022
13683394_C8_04		R3D. AT&T MOBILITY @ 302479, …



Member Code Checks Displayed (Enveloped)

American Tower Corp.	302479, Rkhl - Rocky Hill	SK-4
Michael.Ellis		Mar 04, 2022
13683394_C8_04		R3D. AT&T MOBILITY @ 302479, …



Member Shear Checks Displayed (Enveloped)

American Tower Corp.	302479, Rkhl - Rocky Hill	SK-5
Michael.Ellis		Mar 04, 2022
13683394_C8_04		R3D. AT&T MOBILITY @ 302479, …

Basic Load Cases

	BLC Description	Category	Y Gravity	Nodal	Point	Distributed	Surface(Plate/Wall)
1	D	DL	-1		51		
2	Di	IL			51	117	6
3	W 0	WL			52	153	
4	W 30	WL			103	306	
5	W 60	WL			103	306	
6	W 90	WL			51	156	
7	W 120	WL			103	306	
8	W 150	WL			103	306	
9	W 180	WL			52	153	
10	W 210	WL			103	306	
11	W 240	WL			103	306	
12	W 270	WL			51	156	
13	W 300	WL			103	306	
14	W 330	WL			103	306	
15	Wi 0	WL			51	153	
16	Wi 30	WL			102	306	
17	Wi 60	WL			102	306	
18	Wi 90	WL			51	156	
19	Wi 120	WL			102	306	
20	Wi 150	WL			102	306	
21	Wi 180	WL			51	153	
22	Wi 210	WL			102	306	
23	Wi 240	WL			102	306	
24	Wi 270	WL			51	156	
25	Wi 300	WL			102	306	
26	Wi 330	WL			102	306	
27	Ws 0	WL			52	153	
28	Ws 30	WL			103	306	
29	Ws 60	WL			103	306	
30	Ws 90	WL			51	156	
31	Ws 120	WL			103	306	
32	Ws 150	WL			103	306	
33	Ws 180	WL			52	153	
34	Ws 210	WL			103	306	
35	Ws 240	WL			103	306	
36	Ws 270	WL			51	156	
37	Ws 300	WL			103	306	
38	Ws 330	WL			103	306	
39	Ev -Y	ELY				117	
40	Eh -Z	ELZ				117	
41	Eh -X	ELX				117	
42	Lm (1)	LL		1			
43	Lm (2)	LL		1			
44	Lm (3)	LL		1			
45	Lm (4)	LL		1			
46	Lm (5)	LL		1			
47	Lm (6)	LL		1			
48	Lm (7)	LL		1			
49	Lm (8)	LL		1			
50	Lm (9)	LL		1			
51	Lm (10)	LL		1			
52	Lm (11)	LL		1			
53	Lm (12)	LL		1			
54	Lm (13)	LL		1			
55	Lm (14)	LL		1			

Basic Load Cases (Continued)

	BLC Description	Category	Y Gravity	Nodal	Point	Distributed	Surface(Plate/Wall)
56	Lm (15)	LL		1			
57	Lm (16)	LL		1			
58	Lm (17)	LL		1			
59	Lm (18)	LL		1			

Node Boundary Conditions

	Node Label	X [lb/in]	Y [lb/in]	Z [lb/in]	X Rot [k-in/rad]	Y Rot [k-in/rad]	Z Rot [k-in/rad]
1	N002	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
2	N003	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
3	N004	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
4	N008	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
5	N009	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
6	N010	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction

Member Primary Data

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
1	H001	N002	N005		T4x1.5x0.5x0.375	Beam	None	A992	Typical
2	H002	N003	N006		T4x1.5x0.5x0.375	Beam	None	A992	Typical
3	H003	N004	N007		T4x1.5x0.5x0.375	Beam	None	A992	Typical
4	H004	N008	N011	180	T4x1.5x0.5x0.375	Beam	None	A992	Typical
5	H005	N009	N012	180	T4x1.5x0.5x0.375	Beam	None	A992	Typical
6	H006	N010	N013	180	T4x1.5x0.5x0.375	Beam	None	A992	Typical
7	D007	N011	N005	180	T4x1.5x0.5x0.375	Column	None	A992	Typical
8	D008	N012	N006	180	T4x1.5x0.5x0.375	Column	None	A992	Typical
9	D009	N013	N007	180	T4x1.5x0.5x0.375	Column	None	A992	Typical
10	D010	N002	N022		PL1X0.375	Column	None	A992	Typical
11	D011	N003	N045		PL1X0.375	Column	None	A992	Typical
12	D012	N004	N046		PL1X0.375	Column	None	A992	Typical
13	V013	N022	N014	90	PL1X0.375	Column	None	A992	Typical
14	V014	N045	N029	30	PL1X0.375	Column	None	A992	Typical
15	V015	N046	N030	330	PL1X0.375	Column	None	A992	Typical
16	D016	N014	N011		PL1X0.375	Column	None	A992	Typical
17	D017	N029	N012		PL1X0.375	Column	None	A992	Typical
18	D018	N030	N013		PL1X0.375	Column	None	A992	Typical
19	D019	N011	N015	90	PL1X0.375	Column	None	A992	Typical
20	D020	N012	N031	30	PL1X0.375	Column	None	A992	Typical
21	V021	N013	N032	330	PL1X0.375	Column	None	A992	Typical
22	D022	N015	N023		PL1X0.375	Column	None	A992	Typical
23	D023	N031	N047		PL1X0.375	Column	None	A992	Typical
24	D024	N032	N048		PL1X0.375	Column	None	A992	Typical
25	V025	N023	N016	90	PL1X0.375	Column	None	A992	Typical
26	V026	N047	N033	30	PL1X0.375	Column	None	A992	Typical
27	V027	N048	N034	330	PL1X0.375	Column	None	A992	Typical
28	D028	N016	N024		PL1X0.375	Column	None	A992	Typical
29	D029	N033	N049		PL1X0.375	Column	None	A992	Typical
30	D030	N034	N050		PL1X0.375	Column	None	A992	Typical
31	V031	N024	N017	90	PL1X0.375	Column	None	A992	Typical
32	V032	N049	N035	30	PL1X0.375	Column	None	A992	Typical
33	V033	N050	N036	330	PL1X0.375	Column	None	A992	Typical
34	D034	N017	N025		PL1X0.375	Column	None	A992	Typical
35	D035	N035	N057		PL1X0.375	Column	None	A992	Typical
36	D036	N036	N058		PL1X0.375	Column	None	A992	Typical
37	V037	N025	N018	90	PL1X0.375	Column	None	A992	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
38	V038	N057	N037	30	PL1X0.375	Column	None	A992	Typical
39	V039	N058	N038	330	PL1X0.375	Column	None	A992	Typical
40	D040	N018	N026		PL1X0.375	Column	None	A992	Typical
41	D041	N037	N051		PL1X0.375	Column	None	A992	Typical
42	D042	N038	N052		PL1X0.375	Column	None	A992	Typical
43	V043	N026	N019	90	PL1X0.375	Column	None	A992	Typical
44	V044	N051	N039	30	PL1X0.375	Column	None	A992	Typical
45	V045	N052	N040	330	PL1X0.375	Column	None	A992	Typical
46	D046	N019	N027		PL1X0.375	Column	None	A992	Typical
47	D047	N039	N053		PL1X0.375	Column	None	A992	Typical
48	D048	N040	N054		PL1X0.375	Column	None	A992	Typical
49	V049	N027	N020	90	PL1X0.375	Column	None	A992	Typical
50	V050	N053	N041	30	PL1X0.375	Column	None	A992	Typical
51	V051	N054	N042	330	PL1X0.375	Column	None	A992	Typical
52	D052	N020	N028		PL1X0.375	Column	None	A992	Typical
53	D053	N041	N055		PL1X0.375	Column	None	A992	Typical
54	D054	N042	N056		PL1X0.375	Column	None	A992	Typical
55	V055	N028	N021	90	PL1X0.375	Column	None	A992	Typical
56	V056	N055	N043	30	PL1X0.375	Column	None	A992	Typical
57	V057	N056	N044	330	PL1X0.375	Column	None	A992	Typical
58	H058	N059	N060	90	HSS4X3X4	Beam	None	A36	Typical
59	H059	N061	N062		PIPE_2.5	Beam	None	A36	Typical
60	H060	N060	N065	90	L3X3X6	Beam	None	A36	Typical
61	H061	N060	N066	180	L3X3X6	Beam	None	A36	Typical
62	H062	N059	N067	90	L3X3X6	Beam	None	A36	Typical
63	H063	N067	N066		PL3X0.375	Beam	None	A36	Typical
64	H064	N071	N073	90	HSS4X3X4	Beam	None	A36	Typical
65	H065	N072	N074	90	HSS4X3X4	Beam	None	A36	Typical
66	H066	N071	N075	180	L3X3X6	Beam	None	A36	Typical
67	H067	N072	N076	180	L3X3X6	Beam	None	A36	Typical
68	H068	N071	N077	90	L3X3X6	Beam	None	A36	Typical
69	H069	N072	N078	90	L3X3X6	Beam	None	A36	Typical
70	H070	N073	N079	90	L3X3X6	Beam	None	A36	Typical
71	H071	N074	N080	90	L3X3X6	Beam	None	A36	Typical
72	H072	N073	N081	180	L3X3X6	Beam	None	A36	Typical
73	H073	N074	N082	180	L3X3X6	Beam	None	A36	Typical
74	H074	N079	N075		PL3X0.375	Beam	None	A36	Typical
75	H075	N080	N076		PL3X0.375	Beam	None	A36	Typical
76	H076	N081	N077		PL3X0.375	Beam	None	A36	Typical
77	H077	N082	N078		PL3X0.375	Beam	None	A36	Typical
78	H078	N068	N097		PL2.375x0.375	Beam	None	A36	Typical
79	H079	N083	N100		PL2.375x0.375	Beam	None	A36	Typical
80	H080	N084	N101		PL2.375x0.375	Beam	None	A36	Typical
81	H081	N070	N098		PL2.375x0.375	Beam	None	A36	Typical
82	H082	N085	N102		PL2.375x0.375	Beam	None	A36	Typical
83	H083	N086	N103		PL2.375x0.375	Beam	None	A36	Typical
84	H084	N069	N099		PL2.375x0.375	Beam	None	A36	Typical
85	H085	N087	N104		PL2.375x0.375	Beam	None	A36	Typical
86	H086	N088	N105		PL2.375x0.375	Beam	None	A36	Typical
87	H087	N106	N108		PIPE_2.5	Beam	None	A36	Typical
88	H088	N107	N109		PIPE_2.5	Beam	None	A36	Typical
89	V089	N002	N008	90	PL1X0.375	Column	None	A992	Typical
90	V090	N003	N009	330	PL1X0.375	Column	None	A992	Typical
91	V091	N004	N010	30	PL1X0.375	Column	None	A992	Typical
92	V092	N090	N089		RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
93	D093	N126	N095		RIGID	None	None	RIGID	Typical
94	D094	N127	N096		RIGID	None	None	RIGID	Typical
95	V095	N092	N091		RIGID	None	None	RIGID	Typical
96	D096	N093	N128		RIGID	None	None	RIGID	Typical
97	D097	N094	N129		RIGID	None	None	RIGID	Typical
98	H098	N132	N063		RIGID	None	None	RIGID	Typical
99	H099	N134	N118		RIGID	None	None	RIGID	Typical
100	H100	N135	N119		RIGID	None	None	RIGID	Typical
101	H101	N130	N110		RIGID	None	None	RIGID	Typical
102	H102	N136	N122		RIGID	None	None	RIGID	Typical
103	H103	N137	N123		RIGID	None	None	RIGID	Typical
104	H104	N131	N111		RIGID	None	None	RIGID	Typical
105	H105	N138	N124		RIGID	None	None	RIGID	Typical
106	H106	N139	N125		RIGID	None	None	RIGID	Typical
107	H107	N133	N064		RIGID	None	None	RIGID	Typical
108	H108	N140	N120		RIGID	None	None	RIGID	Typical
109	H109	N141	N121		RIGID	None	None	RIGID	Typical
110	V110	N112	N132		RIGID	None	None	RIGID	Typical
111	V111	N114	N134		RIGID	None	None	RIGID	Typical
112	V112	N115	N135		RIGID	None	None	RIGID	Typical
113	V113	N076	N130		RIGID	None	None	RIGID	Typical
114	D114	N075	N137		RIGID	None	None	RIGID	Typical
115	V115	N077	N131		RIGID	None	None	RIGID	Typical
116	V116	N078	N138		RIGID	None	None	RIGID	Typical
117	D117	N067	N139		RIGID	None	None	RIGID	Typical
118	V118	N113	N133		RIGID	None	None	RIGID	Typical
119	V119	N116	N140		RIGID	None	None	RIGID	Typical
120	V120	N117	N141		RIGID	None	None	RIGID	Typical
121	H121	N143	N144		PIPE_2.0	Beam	None	A53 Gr. B	Typical
122	H122	N145	N147		PIPE_2.0	Beam	None	A53 Gr. B	Typical
123	H123	N146	N148		PIPE_2.0	Beam	None	A53 Gr. B	Typical
124	H124	N153	N149	90	L2.5X2.5X3	Beam	None	A36	Typical
125	H125	N154	N150	90	L2.5X2.5X3	Beam	None	A36	Typical
126	H126	N152	N151	90	L2.5X2.5X3	Beam	None	A36	Typical
127	H127	N059	N163	180	L3X3X6	Beam	None	A36	Typical
128	H128	N065	N163		PL3X0.375	Beam	None	A36	Typical
129	U129	N164	N167		(2) 1/2 U-BOLTS	Beam	None	A36	Typical
130	U130	N168	N169		(2) 1/2 U-BOLTS	Beam	None	A36	Typical
131	MP131	N170	N171		PIPE_2.5	Column	None	A53 Gr. B	Typical
132	U132	N157	N172		(2) 1/2 U-BOLTS	Beam	None	A36	Typical
133	U133	N173	N174		(2) 1/2 U-BOLTS	Beam	None	A36	Typical
134	MP134	N175	N176		PIPE_2.5	Column	None	A53 Gr. B	Typical
135	U135	N160	N177		(2) 1/2 U-BOLTS	Beam	None	A36	Typical
136	U136	N178	N179		(2) 1/2 U-BOLTS	Beam	None	A36	Typical
137	MP137	N180	N181		PIPE_2.5	Column	None	A53 Gr. B	Typical
138	U138	N156	N182		(2) 1/2 U-BOLTS	Beam	None	A36	Typical
139	U139	N183	N184		(2) 1/2 U-BOLTS	Beam	None	A36	Typical
140	MP140	N185	N186		PIPE_2.5	Column	None	A53 Gr. B	Typical
141	U141	N166	N187		(2) 1/2 U-BOLTS	Beam	None	A36	Typical
142	U142	N188	N189		(2) 1/2 U-BOLTS	Beam	None	A36	Typical
143	MP143	N190	N191		PIPE_2.5	Column	None	A53 Gr. B	Typical
144	U144	N159	N192		(2) 1/2 U-BOLTS	Beam	None	A36	Typical
145	U145	N193	N194		(2) 1/2 U-BOLTS	Beam	None	A36	Typical
146	MP146	N195	N196		PIPE_2.5	Column	None	A53 Gr. B	Typical
147	U147	N162	N197		(2) 1/2 U-BOLTS	Beam	None	A36	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
148	U148	N198	N199		(2) 1/2 U-BOLTS	Beam	None	A36	Typical
149	MP149	N200	N201		PIPE_2.5	Column	None	A53 Gr. B	Typical
150	U150	N155	N202		(2) 1/2 U-BOLTS	Beam	None	A36	Typical
151	U151	N203	N204		(2) 1/2 U-BOLTS	Beam	None	A36	Typical
152	MP152	N205	N206		PIPE_2.5	Column	None	A53 Gr. B	Typical
153	U153	N165	N207		(2) 1/2 U-BOLTS	Beam	None	A36	Typical
154	U154	N208	N209		(2) 1/2 U-BOLTS	Beam	None	A36	Typical
155	MP155	N210	N211		PIPE_2.5	Column	None	A53 Gr. B	Typical
156	U156	N158	N212		(2) 1/2 U-BOLTS	Beam	None	A36	Typical
157	U157	N213	N214		(2) 1/2 U-BOLTS	Beam	None	A36	Typical
158	MP158	N215	N216		PIPE_2.5	Column	None	A53 Gr. B	Typical
159	U159	N161	N217		(2) 1/2 U-BOLTS	Beam	None	A36	Typical
160	U160	N218	N219		(2) 1/2 U-BOLTS	Beam	None	A36	Typical
161	MP161	N220	N221		PIPE_2.5	Column	None	A53 Gr. B	Typical
162	U162	N223	N228		(2) 1/2 U-BOLTS	Beam	None	A36	Typical
163	U163	N229	N230		(2) 1/2 U-BOLTS	Beam	None	A36	Typical
164	MP164	N231	N232		PIPE_2.0	Column	None	A53 Gr. B	Typical
165	U165	N222	N233		(2) 1/2 U-BOLTS	Beam	None	A36	Typical
166	U166	N234	N235		(2) 1/2 U-BOLTS	Beam	None	A36	Typical
167	MP167	N236	N237		PIPE_2.5	Column	None	A53 Gr. B	Typical
168	U168	N225	N238		(2) 1/2 U-BOLTS	Beam	None	A36	Typical
169	U169	N239	N240		(2) 1/2 U-BOLTS	Beam	None	A36	Typical
170	MP170	N241	N242		PIPE_2.5	Column	None	A53 Gr. B	Typical
171	U171	N227	N243		(2) 1/2 U-BOLTS	Beam	None	A36	Typical
172	U172	N244	N245		(2) 1/2 U-BOLTS	Beam	None	A36	Typical
173	MP173	N246	N247		PIPE_2.0	Column	None	A53 Gr. B	Typical
174	U174	N224	N248		(2) 1/2 U-BOLTS	Beam	None	A36	Typical
175	U175	N249	N250		(2) 1/2 U-BOLTS	Beam	None	A36	Typical
176	MP176	N251	N252		PIPE_2.5	Column	None	A53 Gr. B	Typical
177	U177	N226	N253		(2) 1/2 U-BOLTS	Beam	None	A36	Typical
178	U178	N254	N255		(2) 1/2 U-BOLTS	Beam	None	A36	Typical
179	MP179	N256	N257		PIPE_2.0	Column	None	A53 Gr. B	Typical
180	U180	N258	N259		(2) 1/2 U-BOLTS	Beam	None	A36	Typical
181	U181	N260	N261		(2) 1/2 U-BOLTS	Beam	None	A36	Typical
182	MP182	N262	N263		PIPE_2.5	Column	None	A53 Gr. B	Typical
183	M183	N163	N136		RIGID	None	None	RIGID	Typical

Member Advanced Data

	Label	I Release	Physical	Deflection Ratio Options	Activation	Seismic DR
1	H001		Yes	Default		None
2	H002		Yes	Default		None
3	H003		Yes	Default		None
4	H004		Yes	Default		None
5	H005		Yes	Default		None
6	H006		Yes	Default		None
7	D007		Yes	** NA **		None
8	D008		Yes	** NA **		None
9	D009		Yes	** NA **		None
10	D010		Yes	** NA **		None
11	D011		Yes	** NA **		None
12	D012		Yes	** NA **		None
13	V013		Yes	** NA **		None
14	V014		Yes	** NA **		None
15	V015		Yes	** NA **		None
16	D016		Yes	** NA **		None

Member Advanced Data (Continued)

	Label	I Release	Physical	Deflection Ratio Options	Activation	Seismic DR
17	D017		Yes	** NA **		None
18	D018		Yes	** NA **		None
19	D019		Yes	** NA **		None
20	D020		Yes	** NA **		None
21	V021		Yes	** NA **		None
22	D022		Yes	** NA **		None
23	D023		Yes	** NA **		None
24	D024		Yes	** NA **		None
25	V025		Yes	** NA **		None
26	V026		Yes	** NA **		None
27	V027		Yes	** NA **		None
28	D028		Yes	** NA **		None
29	D029		Yes	** NA **		None
30	D030		Yes	** NA **		None
31	V031		Yes	** NA **		None
32	V032		Yes	** NA **		None
33	V033		Yes	** NA **		None
34	D034		Yes	** NA **		None
35	D035		Yes	** NA **		None
36	D036		Yes	** NA **		None
37	V037		Yes	** NA **		None
38	V038		Yes	** NA **		None
39	V039		Yes	** NA **		None
40	D040		Yes	** NA **		None
41	D041		Yes	** NA **		None
42	D042		Yes	** NA **		None
43	V043		Yes	** NA **		None
44	V044		Yes	** NA **		None
45	V045		Yes	** NA **		None
46	D046		Yes	** NA **		None
47	D047		Yes	** NA **		None
48	D048		Yes	** NA **		None
49	V049		Yes	** NA **		None
50	V050		Yes	** NA **		None
51	V051		Yes	** NA **		None
52	D052		Yes	** NA **		None
53	D053		Yes	** NA **		None
54	D054		Yes	** NA **		None
55	V055		Yes	** NA **		None
56	V056		Yes	** NA **		None
57	V057		Yes	** NA **		None
58	H058		Yes	N/A		None
59	H059		Yes	N/A		None
60	H060		Yes	N/A		None
61	H061		Yes	N/A		None
62	H062		Yes	N/A		None
63	H063		Yes	N/A		None
64	H064		Yes	N/A		None
65	H065		Yes	N/A		None
66	H066		Yes	N/A		None
67	H067		Yes	N/A		None
68	H068		Yes	N/A		None
69	H069		Yes	N/A		None
70	H070		Yes	N/A		None
71	H071		Yes	N/A		None

Member Advanced Data (Continued)

	Label	I Release	Physical	Deflection Ratio Options	Activation	Seismic DR
72	H072		Yes	N/A		None
73	H073		Yes	N/A		None
74	H074		Yes	N/A		None
75	H075		Yes	N/A		None
76	H076		Yes	N/A		None
77	H077		Yes	N/A		None
78	H078		Yes	Default		None
79	H079		Yes	Default		None
80	H080		Yes	Default		None
81	H081		Yes	Default		None
82	H082		Yes	Default		None
83	H083		Yes	Default		None
84	H084		Yes	Default		None
85	H085		Yes	Default		None
86	H086		Yes	Default		None
87	H087		Yes	N/A		None
88	H088		Yes	N/A		None
89	V089		Yes	** NA **		None
90	V090		Yes	** NA **		None
91	V091		Yes	** NA **		None
92	V092		Yes	** NA **		None
93	D093		Yes	** NA **		None
94	D094		Yes	** NA **		None
95	V095		Yes	** NA **		None
96	D096		Yes	** NA **		None
97	D097		Yes	** NA **		None
98	H098		Yes	** NA **		None
99	H099		Yes	** NA **		None
100	H100		Yes	** NA **		None
101	H101		Yes	** NA **		None
102	H102		Yes	** NA **		None
103	H103		Yes	** NA **		None
104	H104		Yes	** NA **		None
105	H105		Yes	** NA **		None
106	H106		Yes	** NA **		None
107	H107		Yes	** NA **		None
108	H108		Yes	** NA **		None
109	H109		Yes	** NA **		None
110	V110	OOOXOO	Yes	** NA **		None
111	V111	OOOXOO	Yes	** NA **		None
112	V112	OOOXOO	Yes	** NA **		None
113	V113	OOOXOO	Yes	** NA **		None
114	D114	OOOXOO	Yes	** NA **		None
115	V115	OOOXOO	Yes	** NA **		None
116	V116	OOOXOO	Yes	** NA **		None
117	D117	OOOXOO	Yes	** NA **		None
118	V118	OOOXOO	Yes	** NA **		None
119	V119	OOOXOO	Yes	** NA **		None
120	V120	OOOXOO	Yes	** NA **		None
121	H121		Yes	N/A		None
122	H122		Yes	N/A		None
123	H123		Yes	N/A		None
124	H124		Yes	N/A		None
125	H125		Yes	N/A		None
126	H126		Yes	N/A		None

Member Advanced Data (Continued)

	Label	I Release	Physical	Deflection Ratio Options	Activation	Seismic DR
127	H127		Yes	N/A		None
128	H128		Yes	N/A		None
129	U129		Yes	N/A	Exclude	None
130	U130		Yes	N/A	Exclude	None
131	MP131		Yes	** NA **		None
132	U132		Yes	N/A	Exclude	None
133	U133		Yes	N/A	Exclude	None
134	MP134		Yes	** NA **		None
135	U135		Yes	N/A	Exclude	None
136	U136		Yes	N/A	Exclude	None
137	MP137		Yes	** NA **		None
138	U138		Yes	N/A	Exclude	None
139	U139		Yes	N/A	Exclude	None
140	MP140		Yes	** NA **		None
141	U141		Yes	N/A	Exclude	None
142	U142		Yes	N/A	Exclude	None
143	MP143		Yes	** NA **		None
144	U144		Yes	N/A	Exclude	None
145	U145		Yes	N/A	Exclude	None
146	MP146		Yes	** NA **		None
147	U147		Yes	N/A	Exclude	None
148	U148		Yes	N/A	Exclude	None
149	MP149		Yes	** NA **		None
150	U150		Yes	N/A	Exclude	None
151	U151		Yes	N/A	Exclude	None
152	MP152		Yes	** NA **		None
153	U153		Yes	N/A	Exclude	None
154	U154		Yes	N/A	Exclude	None
155	MP155		Yes	** NA **		None
156	U156		Yes	N/A	Exclude	None
157	U157		Yes	N/A	Exclude	None
158	MP158		Yes	** NA **		None
159	U159		Yes	N/A	Exclude	None
160	U160		Yes	N/A	Exclude	None
161	MP161		Yes	** NA **		None
162	U162		Yes	N/A	Exclude	None
163	U163		Yes	N/A	Exclude	None
164	MP164		Yes	** NA **		None
165	U165		Yes	N/A	Exclude	None
166	U166		Yes	N/A	Exclude	None
167	MP167		Yes	** NA **		None
168	U168		Yes	N/A	Exclude	None
169	U169		Yes	N/A	Exclude	None
170	MP170		Yes	** NA **		None
171	U171		Yes	N/A	Exclude	None
172	U172		Yes	N/A	Exclude	None
173	MP173		Yes	** NA **		None
174	U174		Yes	N/A	Exclude	None
175	U175		Yes	N/A	Exclude	None
176	MP176		Yes	** NA **		None
177	U177		Yes	N/A	Exclude	None
178	U178		Yes	N/A	Exclude	None
179	MP179		Yes	** NA **		None
180	U180		Yes	N/A	Exclude	None
181	U181		Yes	N/A	Exclude	None

Member Advanced Data (Continued)

	Label	I Release	Physical	Deflection Ratio Options	Activation	Seismic DR
182	MP182		Yes	** NA **		None
183	M183	OOOXOO	Yes	** NA **		None

Hot Rolled Steel Design Parameters

	Label	Shape	Length [in]	Lb y-y [in]	Lb z-z [in]	Lcomp top [in]	L-Torque [in]	K y-y	K z-z	Function
1	H001	T4x1.5x0.5x0.375	69			Lbyy		1	1	Lateral
2	H002	T4x1.5x0.5x0.375	69			Lbyy		1	1	Lateral
3	H003	T4x1.5x0.5x0.375	69			Lbyy		1	1	Lateral
4	H004	T4x1.5x0.5x0.375	23			Lbyy		1	1	Lateral
5	H005	T4x1.5x0.5x0.375	23			Lbyy		1	1	Lateral
6	H006	T4x1.5x0.5x0.375	23			Lbyy		1	1	Lateral
7	D007	T4x1.5x0.5x0.375	47.539			Lbyy		0.65	0.65	Lateral
8	D008	T4x1.5x0.5x0.375	47.539			Lbyy		0.65	0.65	Lateral
9	D009	T4x1.5x0.5x0.375	47.539			Lbyy		0.65	0.65	Lateral
10	D010	PL1X0.375	16.971			Lbyy		0.65	0.65	Lateral
11	D011	PL1X0.375	16.971			Lbyy		0.65	0.65	Lateral
12	D012	PL1X0.375	16.971			Lbyy		0.65	0.65	Lateral
13	V013	PL1X0.375	12			Lbyy		0.65	0.65	Lateral
14	V014	PL1X0.375	12			Lbyy		0.65	0.65	Lateral
15	V015	PL1X0.375	12			Lbyy		0.65	0.65	Lateral
16	D016	PL1X0.375	16.279			Lbyy		0.65	0.65	Lateral
17	D017	PL1X0.375	16.279			Lbyy		0.65	0.65	Lateral
18	D018	PL1X0.375	16.279			Lbyy		0.65	0.65	Lateral
19	D019	PL1X0.375	12			Lbyy		0.65	0.65	Lateral
20	D020	PL1X0.375	12			Lbyy		0.65	0.65	Lateral
21	V021	PL1X0.375	12			Lbyy		0.65	0.65	Lateral
22	D022	PL1X0.375	13.197			Lbyy		0.65	0.65	Lateral
23	D023	PL1X0.375	13.197			Lbyy		0.65	0.65	Lateral
24	D024	PL1X0.375	13.197			Lbyy		0.65	0.65	Lateral
25	V025	PL1X0.375	9.652			Lbyy		0.65	0.65	Lateral
26	V026	PL1X0.375	9.652			Lbyy		0.65	0.65	Lateral
27	V027	PL1X0.375	9.652			Lbyy		0.65	0.65	Lateral
28	D028	PL1X0.375	10.746			Lbyy		0.65	0.65	Lateral
29	D029	PL1X0.375	10.746			Lbyy		0.65	0.65	Lateral
30	D030	PL1X0.375	10.746			Lbyy		0.65	0.65	Lateral
31	V031	PL1X0.375	7.696			Lbyy		0.65	0.65	Lateral
32	V032	PL1X0.375	7.696			Lbyy		0.65	0.65	Lateral
33	V033	PL1X0.375	7.696			Lbyy		0.65	0.65	Lateral
34	D034	PL1X0.375	8.578			Lbyy		0.65	0.65	Lateral
35	D035	PL1X0.375	8.578			Lbyy		0.65	0.65	Lateral
36	D036	PL1X0.375	8.578			Lbyy		0.65	0.65	Lateral
37	V037	PL1X0.375	6.13			Lbyy		0.65	0.65	Lateral
38	V038	PL1X0.375	6.13			Lbyy		0.65	0.65	Lateral
39	V039	PL1X0.375	6.13			Lbyy		0.65	0.65	Lateral
40	D040	PL1X0.375	6.695			Lbyy		0.65	0.65	Lateral
41	D041	PL1X0.375	6.695			Lbyy		0.65	0.65	Lateral
42	D042	PL1X0.375	6.695			Lbyy		0.65	0.65	Lateral
43	V043	PL1X0.375	4.957			Lbyy		0.65	0.65	Lateral
44	V044	PL1X0.375	4.957			Lbyy		0.65	0.65	Lateral
45	V045	PL1X0.375	4.957			Lbyy		0.65	0.65	Lateral
46	D046	PL1X0.375	5.879			Lbyy		0.65	0.65	Lateral
47	D047	PL1X0.375	5.879			Lbyy		0.65	0.65	Lateral
48	D048	PL1X0.375	5.879			Lbyy		0.65	0.65	Lateral
49	V049	PL1X0.375	3.783			Lbyy		0.65	0.65	Lateral
50	V050	PL1X0.375	3.783			Lbyy		0.65	0.65	Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length [in]	Lb y-y [in]	Lb z-z [in]	Lcomp top [in]	L-Torque [in]	K y-y	K z-z	Function
51	V051	PL1X0.375	3.783			Lbyy		0.65	0.65	Lateral
52	D052	PL1X0.375	4.243			Lbyy		0.65	0.65	Lateral
53	D053	PL1X0.375	4.243			Lbyy		0.65	0.65	Lateral
54	D054	PL1X0.375	4.243			Lbyy		0.65	0.65	Lateral
55	V055	PL1X0.375	3			Lbyy		0.65	0.65	Lateral
56	V056	PL1X0.375	3			Lbyy		0.65	0.65	Lateral
57	V057	PL1X0.375	3			Lbyy		0.65	0.65	Lateral
58	H058	HSS4X3X4	51			Lbyy		0.65	0.65	Lateral
59	H059	PIPE_2.5	150			Lbyy		1	1	Lateral
60	H060	L3X3X6	38.184			Lbyy		0.65	0.65	Lateral
61	H061	L3X3X6	38.184			Lbyy		0.65	0.65	Lateral
62	H062	L3X3X6	32.45			Lbyy		0.65	0.65	Lateral
63	H063	PL3X0.375	6			Lbyy		0.65	0.65	Lateral
64	H064	HSS4X3X4	51			Lbyy		0.65	0.65	Lateral
65	H065	HSS4X3X4	51			Lbyy		0.65	0.65	Lateral
66	H066	L3X3X6	32.45			Lbyy		0.65	0.65	Lateral
67	H067	L3X3X6	32.45			Lbyy		0.65	0.65	Lateral
68	H068	L3X3X6	32.45			Lbyy		0.65	0.65	Lateral
69	H069	L3X3X6	32.45			Lbyy		0.65	0.65	Lateral
70	H070	L3X3X6	38.184			Lbyy		0.65	0.65	Lateral
71	H071	L3X3X6	38.184			Lbyy		0.65	0.65	Lateral
72	H072	L3X3X6	38.184			Lbyy		0.65	0.65	Lateral
73	H073	L3X3X6	38.184			Lbyy		0.65	0.65	Lateral
74	H074	PL3X0.375	6			Lbyy		0.65	0.65	Lateral
75	H075	PL3X0.375	6			Lbyy		0.65	0.65	Lateral
76	H076	PL3X0.375	6			Lbyy		0.65	0.65	Lateral
77	H077	PL3X0.375	6			Lbyy		0.65	0.65	Lateral
78	H078	PL2.375x0.375	40.5			Lbyy		0.65	0.65	Lateral
79	H079	PL2.375x0.375	40.5			Lbyy		0.65	0.65	Lateral
80	H080	PL2.375x0.375	40.5			Lbyy		0.65	0.65	Lateral
81	H081	PL2.375x0.375	48			Lbyy		0.65	0.65	Lateral
82	H082	PL2.375x0.375	48			Lbyy		0.65	0.65	Lateral
83	H083	PL2.375x0.375	48			Lbyy		0.65	0.65	Lateral
84	H084	PL2.375x0.375	24			Lbyy		0.65	0.65	Lateral
85	H085	PL2.375x0.375	24			Lbyy		0.65	0.65	Lateral
86	H086	PL2.375x0.375	24			Lbyy		0.65	0.65	Lateral
87	H087	PIPE_2.5	150			Lbyy		1	1	Lateral
88	H088	PIPE_2.5	150			Lbyy		1	1	Lateral
89	V089	PL1X0.375	12			Lbyy		0.65	0.65	Lateral
90	V090	PL1X0.375	12			Lbyy		0.65	0.65	Lateral
91	V091	PL1X0.375	12			Lbyy		0.65	0.65	Lateral
92	H121	PIPE_2.0	174			Lbyy		1	1	Lateral
93	H122	PIPE_2.0	174			Lbyy		1	1	Lateral
94	H123	PIPE_2.0	174			Lbyy		1	1	Lateral
95	H124	L2.5X2.5X3	17.727			Lbyy		0.65	0.65	Lateral
96	H125	L2.5X2.5X3	17.727			Lbyy		0.65	0.65	Lateral
97	H126	L2.5X2.5X3	17.727			Lbyy		0.65	0.65	Lateral
98	H127	L3X3X6	32.45			Lbyy		0.65	0.65	Lateral
99	H128	PL3X0.375	6			Lbyy		0.65	0.65	Lateral
100	U129	(2) 1/2 U-BOLTS	3			Lbyy		0.5	0.5	Lateral
101	U130	(2) 1/2 U-BOLTS	3			Lbyy		0.5	0.5	Lateral
102	MP131	PIPE_2.5	96	Segment	Segment	Lbyy	Segment	2.1	2.1	Lateral
103	U132	(2) 1/2 U-BOLTS	3			Lbyy		0.5	0.5	Lateral
104	U133	(2) 1/2 U-BOLTS	3			Lbyy		0.5	0.5	Lateral
105	MP134	PIPE_2.5	96	Segment	Segment	Lbyy	Segment	2.1	2.1	Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length [in]	Lb y-y [in]	Lb z-z [in]	Lcomp top [in]	L-Torque [in]	K y-y	K z-z	Function
106	U135	(2) 1/2 U-BOLTS	3			Lbyy		0.5	0.5	Lateral
107	U136	(2) 1/2 U-BOLTS	3			Lbyy		0.5	0.5	Lateral
108	MP137	PIPE_2.5	96	Segment	Segment	Lbyy	Segment	2.1	2.1	Lateral
109	U138	(2) 1/2 U-BOLTS	3			Lbyy		0.5	0.5	Lateral
110	U139	(2) 1/2 U-BOLTS	3			Lbyy		0.5	0.5	Lateral
111	MP140	PIPE_2.5	96	Segment	Segment	Lbyy	Segment	2.1	2.1	Lateral
112	U141	(2) 1/2 U-BOLTS	3			Lbyy		0.5	0.5	Lateral
113	U142	(2) 1/2 U-BOLTS	3			Lbyy		0.5	0.5	Lateral
114	MP143	PIPE_2.5	96	Segment	Segment	Lbyy	Segment	2.1	2.1	Lateral
115	U144	(2) 1/2 U-BOLTS	3			Lbyy		0.5	0.5	Lateral
116	U145	(2) 1/2 U-BOLTS	3			Lbyy		0.5	0.5	Lateral
117	MP146	PIPE_2.5	96	Segment	Segment	Lbyy	Segment	2.1	2.1	Lateral
118	U147	(2) 1/2 U-BOLTS	3			Lbyy		0.5	0.5	Lateral
119	U148	(2) 1/2 U-BOLTS	3			Lbyy		0.5	0.5	Lateral
120	MP149	PIPE_2.5	96	Segment	Segment	Lbyy	Segment	2.1	2.1	Lateral
121	U150	(2) 1/2 U-BOLTS	3			Lbyy		0.5	0.5	Lateral
122	U151	(2) 1/2 U-BOLTS	3			Lbyy		0.5	0.5	Lateral
123	MP152	PIPE_2.5	96	Segment	Segment	Lbyy	Segment	2.1	2.1	Lateral
124	U153	(2) 1/2 U-BOLTS	3			Lbyy		0.5	0.5	Lateral
125	U154	(2) 1/2 U-BOLTS	3			Lbyy		0.5	0.5	Lateral
126	MP155	PIPE_2.5	96	Segment	Segment	Lbyy	Segment	2.1	2.1	Lateral
127	U156	(2) 1/2 U-BOLTS	3			Lbyy		0.5	0.5	Lateral
128	U157	(2) 1/2 U-BOLTS	3			Lbyy		0.5	0.5	Lateral
129	MP158	PIPE_2.5	96	Segment	Segment	Lbyy	Segment	2.1	2.1	Lateral
130	U159	(2) 1/2 U-BOLTS	3			Lbyy		0.5	0.5	Lateral
131	U160	(2) 1/2 U-BOLTS	3			Lbyy		0.5	0.5	Lateral
132	MP161	PIPE_2.5	96	Segment	Segment	Lbyy	Segment	2.1	2.1	Lateral
133	U162	(2) 1/2 U-BOLTS	3.588			Lbyy		0.5	0.5	Lateral
134	U163	(2) 1/2 U-BOLTS	3.588			Lbyy		0.5	0.5	Lateral
135	MP164	PIPE_2.0	96	Segment	Segment	Lbyy	Segment	2.1	2.1	Lateral
136	U165	(2) 1/2 U-BOLTS	2.892			Lbyy		0.5	0.5	Lateral
137	U166	(2) 1/2 U-BOLTS	2.892			Lbyy		0.5	0.5	Lateral
138	MP167	PIPE_2.5	96	Segment	Segment	Lbyy	Segment	2.1	2.1	Lateral
139	U168	(2) 1/2 U-BOLTS	2.892			Lbyy		0.5	0.5	Lateral
140	U169	(2) 1/2 U-BOLTS	2.892			Lbyy		0.5	0.5	Lateral
141	MP170	PIPE_2.5	96	Segment	Segment	Lbyy	Segment	2.1	2.1	Lateral
142	U171	(2) 1/2 U-BOLTS	3.588			Lbyy		0.5	0.5	Lateral
143	U172	(2) 1/2 U-BOLTS	3.588			Lbyy		0.5	0.5	Lateral
144	MP173	PIPE_2.0	96	Segment	Segment	Lbyy	Segment	2.1	2.1	Lateral
145	U174	(2) 1/2 U-BOLTS	2.892			Lbyy		0.5	0.5	Lateral
146	U175	(2) 1/2 U-BOLTS	2.892			Lbyy		0.5	0.5	Lateral
147	MP176	PIPE_2.5	96	Segment	Segment	Lbyy	Segment	2.1	2.1	Lateral
148	U177	(2) 1/2 U-BOLTS	3.588			Lbyy		0.5	0.5	Lateral
149	U178	(2) 1/2 U-BOLTS	3.588			Lbyy		0.5	0.5	Lateral
150	MP179	PIPE_2.0	96	Segment	Segment	Lbyy	Segment	2.1	2.1	Lateral
151	U180	(2) 1/2 U-BOLTS	3			Lbyy		0.5	0.5	Lateral
152	U181	(2) 1/2 U-BOLTS	3			Lbyy		0.5	0.5	Lateral
153	MP182	PIPE_2.5	96	Segment	Segment	Lbyy	Segment	2.1	2.1	Lateral

Hot Rolled Steel Properties

	Label	E [psi]	G [psi]	Nu	Therm. Coeff. [1e⁵°F⁻¹]	Density [lb/ft³]	Yield [psi]	Ry	Fu [psi]	Rt
1	A992	2.9e+07	1.115e+07	0.3	0.65	490	50000	1.1	65000	1.1
2	A36	2.9e+07	1.115e+07	0.3	0.65	490	36000	1.5	58000	1.2
3	A53 Gr. B	2.9e+07	1.115e+07	0.3	0.65	490	35000	1.6	60000	1.2

Envelope Node Reactions

	Node Label		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC
1	N002	max	4865.447	17	4744.574	36	5208.188	14	-31.105	16	3750.831	7	304.264	37
2		min	-12976.635	34	316.73	18	-9258.318	8	-161.288	34	-3609.545	25	-130.483	20
3	N003	max	5066.289	17	4742.439	28	15346.299	26	344.991	28	3968.886	11	100.162	11
4		min	-5351.674	11	285.05	22	-6045.902	20	-97.584	22	-3825.81	17	-97.789	17
5	N004	max	13621.577	29	4732.843	32	4735.118	14	138.702	15	3965.825	3	36.956	15
6		min	-5998.496	23	315.844	14	-8306.436	8	-224.443	9	-3824	21	-288.157	32
7	N008	max	13970.837	34	1023.152	8	8802.091	33	74.93	14	1084.041	23	260.158	32
8		min	-1902.833	17	-664.653	14	-2644.972	15	-168.588	32	-1240.157	5	-106.21	14
9	N009	max	2957.383	11	926.88	12	2519.206	20	312.215	36	1263.279	15	27.05	11
10		min	-2672.426	17	-565.059	18	-16475.954	26	-105.654	18	-1420.736	9	-20.373	17
11	N010	max	2760.498	23	939.367	4	8019.132	32	44.349	22	1152.128	19	100.517	22
12		min	-14570.544	29	-577.772	22	-2171.22	14	-143.137	28	-1310.211	13	-278.428	28
13	Totals:	max	7809.247	17	15546.019	31	7930.789	2						
14		min	-7809.247	11	3923.663	25	-7930.787	20						

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

	Member	Shape	Code Check	Loc[in]	LC	Shear Check	Loc[in]	Dir	LC	phi*Pnc [lb]	phi*Pnt [lb]	phi*Mn y-y [lb-ft]	phi*Mn z-z [lb-ft]	Cb	Eqn
1	H001	T4x1.5x0.5x0.375	0.824	0	14	0.193	0	z	7	11888.663	106875	7631.836	830.305	3	H1-1a
2	H002	T4x1.5x0.5x0.375	0.839	0	5	0.202	0	z	11	11888.663	106875	7631.836	830.305	3	H1-1b
3	H003	T4x1.5x0.5x0.375	0.844	0	9	0.205	0	z	3	11888.663	106875	7631.836	830.305	3	H1-1b
4	H004	T4x1.5x0.5x0.375	0.598	0	32	0.132	12.219	y	7	74070.188	106875	7631.836	830.305	2.931	H1-1a
5	H005	T4x1.5x0.5x0.375	0.605	0	36	0.143	12.219	y	11	74070.188	106875	7631.836	830.305	2.965	H1-1a
6	H006	T4x1.5x0.5x0.375	0.603	0	28	0.143	12.219	y	3	74070.188	106875	7631.836	830.305	3	H1-1a
7	D007	T4x1.5x0.5x0.375	0.208	47.539	34	0.031	8.914	y	11	55139.096	106875	7631.836	830.305	2.261	H1-1b
8	D008	T4x1.5x0.5x0.375	0.208	47.539	26	0.031	8.914	y	3	55139.096	106875	7631.836	830.305	2.37	H1-1b
9	D009	T4x1.5x0.5x0.375	0.207	47.539	30	0.031	8.914	z	11	55139.096	106875	7631.836	830.305	2.458	H1-1b
10	D010	PL1X0.375	0.376	16.971	33	0.021	16.971	y	7	7898.164	16875	131.836	351.562	1.497	H1-1a
11	D011	PL1X0.375	0.375	16.971	26	0.022	16.971	y	11	7898.164	16875	131.836	351.562	1.489	H1-1a
12	D012	PL1X0.375	0.376	16.971	30	0.022	16.971	y	3	7898.164	16875	131.836	351.562	1.481	H1-1a
13	V013	PL1X0.375	0.415	0	36	0.058	12	y	7	11544.761	16875	131.836	351.562	2.225	H1-1a
14	V014	PL1X0.375	0.417	0	28	0.063	12	y	11	11544.761	16875	131.836	351.562	2.222	H1-1a
15	V015	PL1X0.375	0.416	0	32	0.063	12	y	3	11544.761	16875	131.836	351.562	2.223	H1-1a
16	D016	PL1X0.375	0.329	0	34	0.027	16.279	y	3	8391.851	16875	131.836	351.562	2.165	H1-1a
17	D017	PL1X0.375	0.33	0	26	0.026	16.279	y	7	8391.851	16875	131.836	351.562	2.158	H1-1a
18	D018	PL1X0.375	0.33	0	30	0.027	16.279	y	11	8391.851	16875	131.836	351.562	2.165	H1-1a
19	D019	PL1X0.375	0.123	0	27	0.041	12	y	7	11544.761	16875	131.836	351.562	2.152	H1-1b
20	D020	PL1X0.375	0.125	0	7	0.043	12	y	11	11544.761	16875	131.836	351.562	1.853	H1-1b
21	V021	PL1X0.375	0.124	0	11	0.042	12	y	3	11544.761	16875	131.836	351.562	1.838	H1-1b
22	D022	PL1X0.375	0.113	0	28	0.021	13.197	y	3	10662.295	16875	131.836	351.562	2.112	H1-1b*
23	D023	PL1X0.375	0.113	0	32	0.022	13.197	y	7	10662.295	16875	131.836	351.562	2.121	H1-1b*
24	D024	PL1X0.375	0.113	0	36	0.022	13.197	y	11	10662.295	16875	131.836	351.562	2.112	H1-1b*
25	V025	PL1X0.375	0.211	9.652	174	0.021	0	y	13	13200.316	16875	131.836	351.562	1.895	H1-1b
26	V026	PL1X0.375	0.212	9.652	131	0.022	0	y	5	13200.316	16875	131.836	351.562	1.882	H1-1b
27	V027	PL1X0.375	0.212	9.652	75	0.022	0	y	9	13200.316	16875	131.836	351.562	1.883	H1-1b
28	D028	PL1X0.375	0.11	0	34	0.037	10.746	y	175	12446.442	16875	131.836	351.562	2.184	H1-1b
29	D029	PL1X0.375	0.11	0	26	0.037	10.746	y	131	12446.442	16875	131.836	351.562	2.182	H1-1b
30	D030	PL1X0.375	0.11	0	30	0.037	10.746	y	75	12446.442	16875	131.836	351.562	2.184	H1-1b
31	V031	PL1X0.375	0.118	7.696	175	0.016	7.696	y	173	14435.833	16875	131.836	351.562	1.746	H1-1b
32	V032	PL1X0.375	0.119	7.696	131	0.017	7.696	y	129	14435.833	16875	131.836	351.562	1.746	H1-1b
33	V033	PL1X0.375	0.119	7.696	75	0.017	7.696	y	85	14435.833	16875	131.836	351.562	1.746	H1-1b
34	D034	PL1X0.375	0.028	0	175	0.02	8.578	y	175	13899.488	16875	131.836	351.562	1.093	H1-1b
35	D035	PL1X0.375	0.028	0	131	0.02	8.578	y	131	13899.488	16875	131.836	351.562	1.097	H1-1b
36	D036	PL1X0.375	0.028	0	75	0.02	8.578	y	75	13899.488	16875	131.836	351.562	1.098	H1-1b
37	V037	PL1X0.375	0.05	6.13	175	0.013	0	y	174	15283.362	16875	131.836	351.562	1.455	H1-1b

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

	Member	Shape	Code Check	Loc[in]	LC	Shear Check	Loc[in]	Dir	LC	phi*Pnc [lb]	phi*Pnt [lb]	phi*Mn y-y [lb-ft]	phi*Mn z-z [lb-ft]	Cb	Eqn
38	V038	PL1X0.375	0.051	6.13	131	0.013	0	y	131	15283.362	16875	131.836	351.562	1.455	H1-1b
39	V039	PL1X0.375	0.051	6.13	75	0.013	0	y	75	15283.362	16875	131.836	351.562	1.455	H1-1b
40	D040	PL1X0.375	0.036	6.694	34	0.013	6.694	y	175	14994.734	16875	131.836	351.562	2.225	H1-1b
41	D041	PL1X0.375	0.036	6.694	26	0.013	6.694	y	131	14994.734	16875	131.836	351.562	2.229	H1-1b
42	D042	PL1X0.375	0.035	6.694	30	0.013	6.694	y	75	14994.734	16875	131.836	351.562	2.225	H1-1b
43	V043	PL1X0.375	0.034	4.957	175	0.012	0	y	175	15816.772	16875	131.836	351.562	1.291	H1-1b
44	V044	PL1X0.375	0.034	4.957	131	0.012	0	y	131	15816.772	16875	131.836	351.562	1.29	H1-1b
45	V045	PL1X0.375	0.034	4.957	75	0.012	0	y	75	15816.772	16875	131.836	351.562	1.291	H1-1b
46	D046	PL1X0.375	0.05	5.879	34	0.007	5.879	y	179	15405.619	16875	131.836	351.562	2.192	H1-1b
47	D047	PL1X0.375	0.05	5.879	26	0.007	5.879	y	131	15405.619	16875	131.836	351.562	2.194	H1-1b
48	D048	PL1X0.375	0.05	5.879	30	0.007	5.879	y	75	15405.619	16875	131.836	351.562	2.192	H1-1b
49	V049	PL1X0.375	0.044	0	34	0.012	0	y	175	16250.363	16875	131.836	351.562	1.582	H1-1b
50	V050	PL1X0.375	0.044	0	26	0.012	0	y	131	16250.363	16875	131.836	351.562	1.643	H1-1b
51	V051	PL1X0.375	0.044	0	30	0.012	0	y	75	16250.363	16875	131.836	351.562	1.677	H1-1b
52	D052	PL1X0.375	0.105	4.243	34	0.016	4.243	y	35	16092.978	16875	131.836	351.562	2.202	H1-1b
53	D053	PL1X0.375	0.105	4.243	26	0.016	4.243	y	27	16092.978	16875	131.836	351.562	2.203	H1-1b
54	D054	PL1X0.375	0.105	4.243	30	0.016	4.243	y	31	16092.978	16875	131.836	351.562	2.202	H1-1b
55	V055	PL1X0.375	0.124	3	34	0.018	3	y	69	16479.351	16875	131.836	351.562	2.258	H1-1b
56	V056	PL1X0.375	0.124	3	26	0.018	3	y	169	16479.351	16875	131.836	351.562	2.256	H1-1b
57	V057	PL1X0.375	0.124	3	30	0.018	3	y	113	16479.351	16875	131.836	351.562	2.254	H1-1b
58	H058	HSS4X3X4	0.119	0	31	0.088	2.656	y	13	90310.641	94284	8424	10287	1.385	H1-1b
59	H059	PIPE_2.5	0.238	93.75	123	0.193	35.938		10	14558.792	52164	3699	3699	2.41	H1-1b
60	H060	L3X3X6	0.181	0	33	0.155	17.103	z	8	62101.933	68364	2307.398	5322.329	1.5	H2-1
61	H061	L3X3X6	0.207	20.285	193	0.144	17.103	y	12	62101.933	68364	2307.398	5322.329	1.5	H2-1
62	H062	L3X3X6	0.314	0	31	0.076	24.337	z	34	63781.49	68364	2307.398	5322.329	1.5	H2-1
63	H063	PL3X0.375	0.235	0	11	0.094	6	y	32	34042.617	36450	284.766	2278.125	1.575	H1-1b
64	H064	HSS4X3X4	0.119	0	35	0.09	2.656	y	5	90310.641	94284	8424	10287	1.388	H1-1b
65	H065	HSS4X3X4	0.119	0	27	0.09	2.656	y	9	90310.641	94284	8424	10287	1.386	H1-1b
66	H066	L3X3X6	0.345	32.45	6	0.066	24.337	y	37	63781.49	68364	2307.398	5322.329	1.5	H2-1
67	H067	L3X3X6	0.346	32.45	10	0.066	24.337	y	29	63781.49	68364	2307.398	5322.329	1.5	H2-1
68	H068	L3X3X6	0.314	0	35	0.076	24.337	z	26	63781.49	68364	2307.398	5322.329	1.5	H2-1
69	H069	L3X3X6	0.314	0	27	0.075	24.337	z	30	63781.49	68364	2307.398	5322.329	1.5	H2-1
70	H070	L3X3X6	0.18	0	37	0.16	17.103	z	12	62101.933	68364	2307.398	5322.329	1.5	H2-1
71	H071	L3X3X6	0.18	0	29	0.161	17.103	z	4	62101.933	68364	2307.398	5322.329	1.5	H2-1
72	H072	L3X3X6	0.212	20.285	137	0.142	17.103	y	4	62101.933	68364	2307.398	5322.329	1.5	H2-1
73	H073	L3X3X6	0.212	20.285	93	0.142	17.103	y	8	62101.933	68364	2307.398	5322.329	1.5	H2-1
74	H074	PL3X0.375	0.227	6	13	0.07	0	y	4	34042.617	36450	284.766	2278.125	1.522	H1-1b
75	H075	PL3X0.375	0.227	6	5	0.07	0	y	8	34042.617	36450	284.766	2278.125	1.521	H1-1b
76	H076	PL3X0.375	0.234	6	3	0.094	0	y	36	34042.617	36450	284.766	2278.125	1.573	H1-1b
77	H077	PL3X0.375	0.234	6	7	0.093	0	y	28	34042.617	36450	284.766	2278.125	1.573	H1-1b
78	H078	PL2.375x0.375	0.29	20.25	35	0.031	20.25	y	8	3402.352	28856.25	225.439	1427.783	1.308	H1-1b
79	H079	PL2.375x0.375	0.29	20.25	27	0.031	20.25	y	12	3402.352	28856.25	225.439	1427.783	1.309	H1-1b
80	H080	PL2.375x0.375	0.289	20.25	31	0.031	20.25	y	4	3402.352	28856.25	225.439	1427.783	1.308	H1-1b
81	H081	PL2.375x0.375	0.265	24	13	0.023	24	y	37	2422.182	28856.25	225.439	1427.783	1.406	H1-1a
82	H082	PL2.375x0.375	0.265	24	5	0.023	24	y	29	2422.182	28856.25	225.439	1427.783	1.417	H1-1a
83	H083	PL2.375x0.375	0.263	24	9	0.023	24	y	33	2422.182	28856.25	225.439	1427.783	1.417	H1-1a
84	H084	PL2.375x0.375	0.311	12	34	0.045	12	y	37	9688.729	28856.25	225.439	1427.783	1.29	H1-1b
85	H085	PL2.375x0.375	0.311	12	26	0.046	12	y	29	9688.729	28856.25	225.439	1427.783	1.29	H1-1b
86	H086	PL2.375x0.375	0.311	12	30	0.046	12	y	33	9688.729	28856.25	225.439	1427.783	1.29	H1-1b
87	H087	PIPE_2.5	0.237	93.75	79	0.195	35.937		2	14558.792	52164	3699	3699	2.41	H1-1b
88	H088	PIPE_2.5	0.238	93.75	179	0.193	35.938		6	14558.792	52164	3699	3699	2.407	H1-1b
89	V089	PL1X0.375	0.001	12	35	0	12	y	26	11544.761	16875	131.836	346.802	1	H1-1b
90	V090	PL1X0.375	0.004	12	2	0	12	y	12	11544.761	16875	131.836	351.562	2.381	H1-1b
91	V091	PL1X0.375	0.004	12	8	0	12	y	5	11544.761	16875	131.836	351.562	2.381	H1-1b
92	H121	PIPE_2.0	0.198	105.125	79	0.089	16.312		9	4678.524	32130	1871.625	1871.625	2.331	H1-1b

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

	Member	Shape	Code Check	Loc[in]	LC	Shear Check	Loc[in]	Dir	LC	phi*Pnc [lb]	phi*Pnt [lb]	phi*Mn y-y [lb-ft]	phi*Mn z-z [lb-ft]	Cb	Eqn
93	H122	PIPE_2.0	0.198	105.125	179	0.09	18.125		13	4678.524	32130	1871.625	1871.625	2.328	H1-1b
94	H123	PIPE_2.0	0.198	105.125	123	0.09	18.125		5	4678.524	32130	1871.625	1871.625	2.337	H1-1b
95	H124	L2.5X2.5X3	0.277	17.727	11	0.049	17.727	y	7	27743.846	29192.4	872.574	1971.83	1.395	H2-1
96	H125	L2.5X2.5X3	0.275	17.727	3	0.05	17.727	y	11	27743.846	29192.4	872.574	1971.83	1.404	H2-1
97	H126	L2.5X2.5X3	0.274	17.727	7	0.05	17.727	y	3	27743.846	29192.4	872.574	1971.83	1.402	H2-1
98	H127	L3X3X6	0.342	32.45	2	0.067	24.337	y	33	63781.49	68364	2307.398	5322.329	1.5	H2-1
99	H128	PL3X0.375	0.226	6	9	0.07	0	y	12	34042.617	36450	284.766	2278.125	1.529	H1-1b
100	MP131	PIPE_2.5	0.231	70	13	0.058	70		9	28468.406	50715	3596.25	3596.25	2.051	H1-1b
101	MP134	PIPE_2.5	0.177	70	3	0.041	70		7	28468.406	50715	3596.25	3596.25	2.456	H1-1b
102	MP137	PIPE_2.5	0.148	70	27	0.079	23		8	28468.406	50715	3596.25	3596.25	1.962	H1-1b
103	MP140	PIPE_2.5	0.125	70	105	0.063	70		4	28468.406	50715	3596.25	3596.25	2.67	H1-1b
104	MP143	PIPE_2.5	0.229	70	9	0.057	70		5	28468.406	50715	3596.25	3596.25	2.194	H1-1b
105	MP146	PIPE_2.5	0.177	70	11	0.041	70		3	28468.406	50715	3596.25	3596.25	2.801	H1-1b
106	MP149	PIPE_2.5	0.148	70	35	0.08	23		4	28468.406	50715	3596.25	3596.25	2.537	H1-1b
107	MP152	PIPE_2.5	0.125	70	149	0.063	70		12	28468.406	50715	3596.25	3596.25	2.119	H1-1b
108	MP155	PIPE_2.5	0.228	70	5	0.057	70		13	28468.406	50715	3596.25	3596.25	2.182	H1-1b
109	MP158	PIPE_2.5	0.177	70	7	0.041	70		11	28468.406	50715	3596.25	3596.25	1.741	H1-1b
110	MP161	PIPE_2.5	0.148	70	31	0.079	23		12	28468.406	50715	3596.25	3596.25	1.615	H1-1b
111	MP164	PIPE_2.0	0.726	81	6	0.263	81		7	4895.519	32130	1871.625	1871.625	3	H1-1a
112	MP167	PIPE_2.5	0.75	75	8	0.266	75		7	13205.253	50715	3596.25	3596.25	3	H1-1b
113	MP170	PIPE_2.5	0.67	75	4	0.287	75		3	13205.253	50715	3596.25	3596.25	1.973	H1-1b
114	MP173	PIPE_2.0	0.752	81	3	0.288	81		3	4895.519	32130	1871.625	1871.625	3	H1-1a
115	MP176	PIPE_2.5	0.659	75	12	0.28	75		10	13205.253	50715	3596.25	3596.25	1.562	H1-1b
116	MP179	PIPE_2.0	0.757	81	11	0.289	81		11	4895.519	32130	1871.625	1871.625	2.42	H1-1a
117	MP182	PIPE_2.5	0.121	70	277	0.06	23		8	28468.406	50715	3596.25	3596.25	1.53	H1-1b

CSC 13683394

13683394 Rocky Hill, CT

Notices Mailed 4/7/2022

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10400 SHAKER DR
SIMPSONVILLE, MD 21150-9998
(800)275-8777

04/07/2022 04:39 PM

Product	Qty	Unit Price	Price
Priority Mail® 2-Day 1 Flat Rate Env Woburn, MA 01801 Flat Rate Expected Delivery Date Mon 04/11/2022 Tracking #: 9505 5103 9196 2097 6190 38			$8.95
Insurance Up to $50.00 included			$0.00
Total			$8.95
Priority Mail® 2-Day 1 Flat Rate Env Berlin, CT 06037 Flat Rate Expected Delivery Date Mon 04/11/2022 Tracking #: 9505 5103 9196 2097 6190 45			$8.95
Insurance Up to $50.00 included			$0.00
Total			$8.95
Priority Mail® 2-Day 1 Flat Rate Env Rocky Hill, CT 06067 Flat Rate Expected Delivery Date Mon 04/11/2022 Tracking #: 9505 5103 9196 2097 6190 52			$8.95
Insurance Up to $50.00 included			$0.00
Total			$8.95
Priority Mail® 2-Day 1 Flat Rate Env Rocky Hill, CT 06067 Flat Rate Expected Delivery Date Mon 04/11/2022 Tracking #: 9505 5103 9196 2097 6190 69			$8.95
Insurance Up to $50.00 included			$0.00
Total			$8.95
Grand Total:			$35.80
Credit Card Remitted Card Name: VISA Account #: XXXXXXXXXXXX9132 Approval #: 007164			$35.80

American Tower Corp. - Tower Owner

Eversource - Property Owner

John Mehr - Town Manager

Kimberly A. Ricci - Zoning Enforcement Officer

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Rocky Hill, CT

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April 7, 2022

Jacqueline Hall
Project Manager, Site Development
American Tower Corporation
10 Presidential Way
Woburn, MA 01801

Re: Notice of Exempt Modification – AT&T Mobility Site 13683394, Site # CT1009
AT&T Wireless Telecommunications Facility @ 699 West Street, Rocky Hill, CT 06067

Dear Ms. Hall:

AT&T Mobility ("AT&T") is proposing to modify a wireless telecommunications facility on an existing one hundred (100) foot tall monopole tower at 699 West Street, in Rocky Hill, CT 06067 (Latitude: 41.65176772 Longitude: -72.66847905). The monopole tower is owned and operated by American Tower Corporation. The subject property is owned by Eversource (F/K/A Connecticut Power & Light).

AT&T proposes to remove three (3) existing antennas, six (6) RRH units, six (6) coax cables, two (2) DC cables, a fiber trunk and conduit, and replace them with twelve (12) new panel antennas at the existing centerline of one hundred three (103) feet on the existing one hundred (100) foot tall monopole, with nine (9) new RRH units, one (1) DC 9 squid, three (3) new cables and a fiber trunk. The proposal involves minimal groundwork: removing the BB Units, and installing a DC12, three (3) 6673 gateways, an MXU and a 6630 IDLe.

This letter is intended to serve as the required notice to the tower owner. As required by Regulations of Connecticut State Agencies ("RCSA") 16-50j-73 the Connecticut Siting Council ("CSC") has been notified of this proposal and will review this application. Please accept this letter as notification pursuant to RSCA 16-50j-73.

The enclosed letter and attachments to the CSC fully describe AT&T's proposal for the site. However, if you have any questions or require any additional information concerning our plans or the CSC procedures, please contact me at 443-677-0144 or contact Melanie Bachmann, Acting Executive Director of the CSC at 860-972-2935.

Respectfully Submitted,

Jack Andrews
Zoning Manager, Centerline Communications
10130 Donleigh Drive
Columbia, MD 21046

April 7, 2022

Kimberley A. Ricci
Town Planner/Zoning Enforcement Officer
761 Old Main Street
Rocky Hill, CT 06067

Re: Notice of Exempt Modification – AT&T Mobility Site 13683394, Site # CT1009
AT&T Wireless Telecommunications Facility @ 699 West Street, Rocky Hill, CT 06067

Dear Ms. Ricci:

AT&T Mobility ("AT&T") is proposing to modify a wireless telecommunications facility on an existing one hundred (100) foot tall monopole tower at 699 West Street, in Rocky Hill, CT 06067 (Latitude: 41.65176772 Longitude: -72.66847905). The monopole tower is owned and operated by American Tower Corporation. The subject property is owned by Eversource (F/K/A Connecticut Power & Light).

AT&T proposes to remove three (3) existing antennas, six (6) RRH units, six (6) coax cables, two (2) DC cables, a fiber trunk and conduit, and replace them with twelve (12) new panel antennas at the existing centerline of one hundred three (103) feet on the existing one hundred (100) foot tall monopole, with nine (9) new RRH units, one (1) DC 9 squid, three (3) new cables and a fiber trunk. The proposal involves minimal groundwork: removing the BB Units, and installing a DC12, three (3) 6673 gateways, an MXU and a 6630 IDLe.

This letter is intended to serve as the required notice to the municipal planning agency. As required by Regulations of Connecticut State Agencies ("RCSA") 16-50j-73 the Connecticut Siting Council ("CSC") has been notified of this proposal and will review this application. Please accept this letter as notification pursuant to RSCA 16-50j-73.

The enclosed letter and attachments to the CSC fully describe AT&T's proposal for the site. However, if you have any questions or require any additional information concerning our plans or the CSC procedures, please contact me at 443-677-0144 or contact Melanie Bachmann, Acting Executive Director of the CSC at 860-972-2935.

Respectfully Submitted,

Jack Andrews
Zoning Manager, Centerline Communications
10130 Donleigh Drive
Columbia, MD 21046

April 7, 2022

Eversource
107 Selden Street
Berlin, CT 06037

Re: Notice of Exempt Modification – AT&T Mobility Site 13683394, Site # CT1009
AT&T Wireless Telecommunications Facility @ 699 West Street, Rocky Hill, CT 06067

Dear Property Owner:

AT&T Mobility ("AT&T") is proposing to modify a wireless telecommunications facility on an existing one hundred (100) foot tall monopole tower at 699 West Street, in Rocky Hill, CT 06067 (Latitude: 41.65176772 Longitude: -72.66847905). The monopole tower is owned and operated by American Tower Corporation. The subject property is owned by Eversource (F/K/A Connecticut Power & Light).

AT&T proposes to remove three (3) existing antennas, six (6) RRH units, six (6) coax cables, two (2) DC cables, a fiber trunk and conduit, and replace them with twelve (12) new panel antennas at the existing centerline of one hundred three (103) feet on the existing one hundred (100) foot tall monopole, with nine (9) new RRH units, one (1) DC 9 squid, three (3) new cables and a fiber trunk. The proposal involves minimal groundwork: removing the BB Units, and installing a DC12, three (3) 6673 gateways, an MXU and a 6630 IDLe.

This letter is intended to serve as the required notice to the property owner. As required by Regulations of Connecticut State Agencies ("RCSA") 16-50j-73 the Connecticut Siting Council ("CSC") has been notified of this proposal and will review this application. Please accept this letter as notification pursuant to RSCA 16-50j-73.

The enclosed letter and attachments to the CSC fully describe AT&T's proposal for the site. However, if you have any questions or require any additional information concerning our plans or the CSC procedures, please contact me at 443-677-0144 or contact Melanie Bachmann, Acting Executive Director of the CSC at 860-972-2935.

Respectfully Submitted,

Jack Andrews
Zoning Manager, Centerline Communications
10130 Donleigh Drive
Columbia, MD 21046

April 7, 2022

John Mehr, Town Manager
761 Old Main Street
Rocky Hill, CT 06067

Re: Notice of Exempt Modification – AT&T Mobility Site 13683394, Site # CT1009
AT&T Wireless Telecommunications Facility @ 699 West Street, Rocky Hill, CT 06067

Dear Mr. Mehr:

AT&T Mobility ("AT&T") is proposing to modify a wireless telecommunications facility on an existing one hundred (100) foot tall monopole tower at 699 West Street, in Rocky Hill, CT 06067 (Latitude: 41.65176772 Longitude: -72.66847905). The monopole tower is owned and operated by American Tower Corporation. The subject property is owned by Eversource (F/K/A Connecticut Power & Light).

AT&T proposes to remove three (3) existing antennas, six (6) RRH units, six (6) coax cables, two (2) DC cables, a fiber trunk and conduit, and replace them with twelve (12) new panel antennas at the existing centerline of one hundred three (103) feet on the existing one hundred (100) foot tall monopole, with nine (9) new RRH units, one (1) DC 9 squid, three (3) new cables and a fiber trunk. The proposal involves minimal groundwork: removing the BB Units, and installing a DC12, three (3) 6673 gateways, an MXU and a 6630 IDLe.

This letter is intended to serve as the required notice to the chief elected official/municipal officer. As required by Regulations of Connecticut State Agencies ("RCSA") 16-50j-73 the Connecticut Siting Council ("CSC") has been notified of this proposal and will review this application. Please accept this letter as notification pursuant to RSCA 16-50j-73.

The enclosed letter and attachments to the CSC fully describe AT&T's proposal for the site. However, if you have any questions or require any additional information concerning our plans or the CSC procedures, please contact me at 443-677-0144 or contact Melanie Bachmann, Acting Executive Director of the CSC at 860-972-2935.

Respectfully Submitted,

Jack Andrews
Zoning Manager, Centerline Communications
10130 Donleigh Drive
Columbia, MD 21046