



QC Development

PO Box 916

Storrs, CT 06268

860-670-9068

QCDevelopment9068@gmail.com

April 28, 2016

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

Notice of Exempt Modification – New Cingular Wireless PCS, LLC (AT&T)
1330 Chopsey Hill Road, Bridgeport, CT 06606 – CT5093
N 41-13-10
W 73-12-08

Dear Ms. Bachman:

AT&T currently maintains nine (9) antennas at the 165-foot level of the existing 240-foot Self Support Tower at 1330 Chopsey Hill Road, Bridgeport, CT. The tower is owned by American Tower. The property is owned by Cell Tower Lease Acquisition LLC. AT&T now intends to replace three (3) of its existing antennas with three (3) new Quintel antennas. These antennas would be installed at the 165-foot level of the tower. AT&T also intends to replace three (3) Ericsson RRUS-11 remote radio units with three (3) new Ericsson RRUS-32 B2 units.

This facility was approved by the Planning and Zoning Commission of the City of Bridgeport on August 11, 1986. This approval included no condition(s) that could feasibly be violated by this modification, including total facility height or mounting restrictions. This modification therefore complies with the aforementioned approval.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies § 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 Mayor Joseph Ganim for the City of Bridgeport, as well as the property owner and the tower owner.

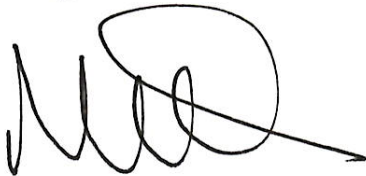
The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

1. The proposed modifications will not result in an increase in the height of the existing structure.
2. The proposed modifications will not require the 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 replacement antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission safety standard.
5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.
6. The existing structure and its foundation can support the proposed loading.

For the foregoing reasons, AT&T respectfully submits that the proposed modifications to the above-referenced telecommunications facility constitute an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Please feel free to call me at (860) 670-9068 with any questions regarding this matter. Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read 'MR', with a large, stylized flourish extending to the right.

Mark Roberts
QC Development
Consultant for AT&T

Attachments

cc: Mayor Joseph Ganim - as elected official (via e-mail)
American Tower - as tower owner (via e-mail)
Cell Tower Lease Acquisition LLC - as property owner (via e-mail)

Power Density

Existing Loading on Tower

Carrier	# of Channels	ERP/Ch (W)	Antenna Centerline Height (ft)	Power Density (mW/cm ²)	Freq. Band (MHz ^{**})	Limit S (mW/cm ²)	%MPE
Other Carriers*							7.26%
AT&T LTE	2	1791	165	0.0510	2300	1.0000	0.51%
AT&T LTE	2	1104	165	0.0314	734	0.4893	0.64%
AT&T LTE	2	2203	165	0.0627	1900	1.0000	0.63%
AT&T GSM	2	492	165	0.0140	880	0.5867	0.24%
AT&T UMTS	2	419	165	0.0119	880	0.5867	0.20%
AT&T UMTS	2	817	165	0.0232	1900	1.0000	0.23%
Site Total							9.71%

*Per CSC Records (available upon request, includes calculation formulas)

** If a range of frequencies are used, such as 880-894, enter the lowest value, i.e. 880

Proposed Loading on Tower

Carrier	# of Channels	ERP/Ch (W)	Antenna Centerline Height (ft)	Power Density (mW/cm ²)	Freq. Band (MHz ^{**})	Limit S (mW/cm ²)	%MPE
Other Carriers*							7.26%
AT&T LTE	2	1791	165	0.0510	2300	1.0000	0.51%
AT&T LTE	2	1104	165	0.0314	734	0.4893	0.64%
AT&T LTE	2	3664	165	0.0627	1900	1.0000	1.04%
AT&T GSM	2	492	165	0.0140	880	0.5867	0.24%
AT&T UMTS	2	419	165	0.0119	880	0.5867	0.20%
AT&T UMTS	2	817	165	0.0232	1900	1.0000	0.23%
Site Total							10.13%

*Per CSC Records (available upon request, includes calculation formulas)

** If a range of frequencies are used, such as 880-894, enter the lowest value, i.e. 880

Note: Proposed Loading may also include corrections to certain Existing Loading values



WIRELESS COMMUNICATIONS FACILITY

CT5093 - LTE BWE

BEARDSLEY

1330 CHOPSEY HILL ROAD

BRIDGEPORT, CT 06606

GENERAL NOTES

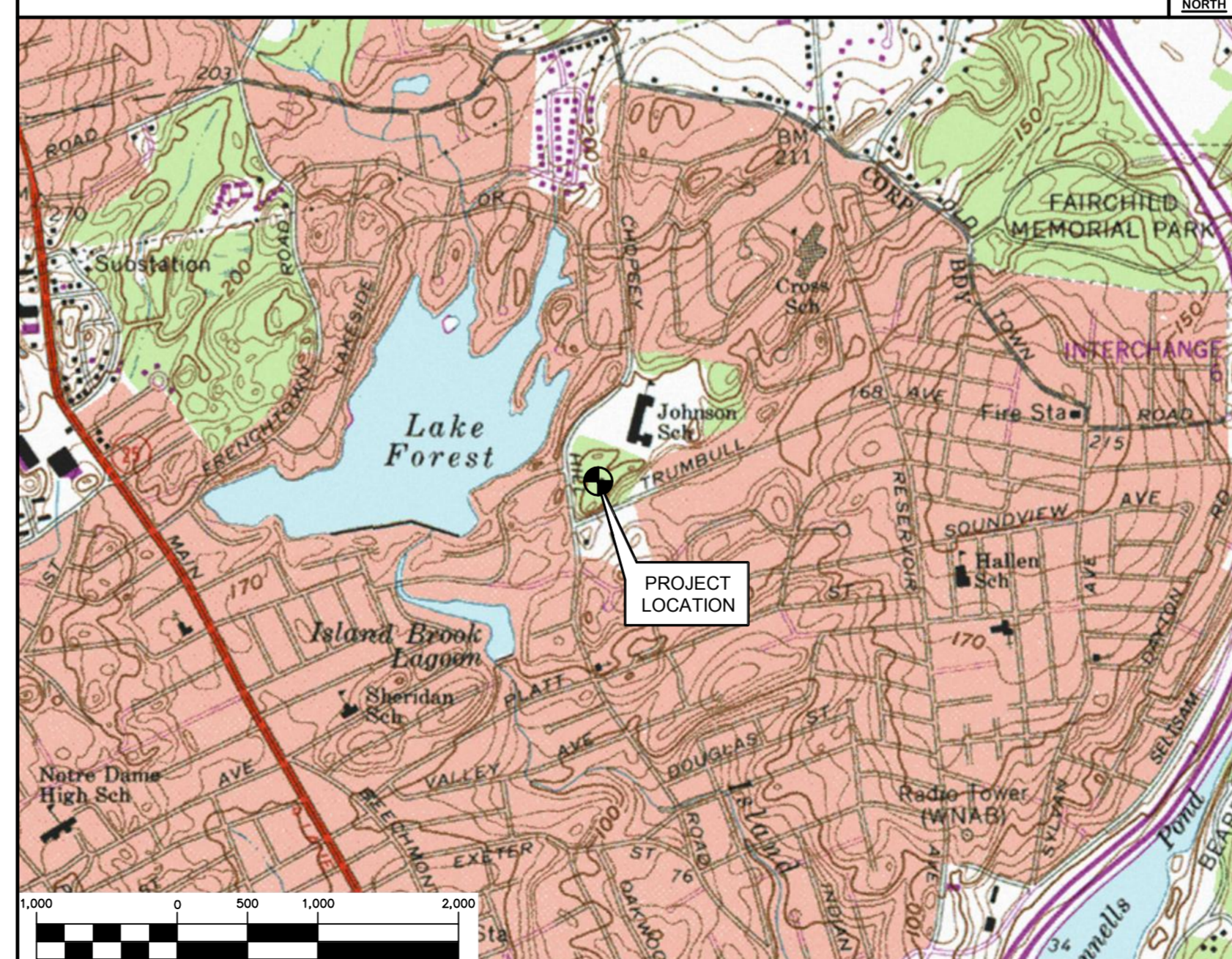
1. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2003 INTERNATIONAL BUILDING CODE AS MODIFIED BY THE 2005 CONNECTICUT SUPPLEMENT AND 2009 AMENDMENTS, INCLUDING THE TM/EIA-222 REVISION "F" "STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND SUPPORTING STRUCTURES," 2005 CONNECTICUT FIRE SAFETY CODE AND 2009 AMENDMENTS, NATIONAL ELECTRICAL CODE AND LOCAL CODES.
2. THE COMPOUND, TOWER, PRIMARY GROUND RING, ELECTRICAL SERVICE TO THE METER BANK AND TELEPHONE SERVICE TO THE DEMARCATION POINT ARE PROVIDED BY SITE OWNER. AS BUILT FIELD CONDITIONS REGARDING THESE ITEMS SHALL BE CONFIRMED BY THE CONTRACTOR. SHOULD ANY FIELD CONDITIONS PRECLUDE COMPLIANCE WITH THE DRAWINGS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AND SHALL NOT PROCEED WITH ANY AFFECTED WORK.
3. CONTRACTOR SHALL REVIEW ALL DRAWINGS AND SPECIFICATIONS IN THE CONTRACT DOCUMENT SET. CONTRACTOR SHALL COORDINATE ALL WORK SHOWN IN THE SET OF DRAWINGS. THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF DRAWINGS TO ALL SUBCONTRACTORS AND ALL RELATED PARTIES. THE SUBCONTRACTORS SHALL EXAMINE ALL THE DRAWINGS AND SPECIFICATIONS FOR THE INFORMATION THAT AFFECTS THEIR WORK.
4. CONTRACTOR SHALL PROVIDE A COMPLETE BUILD-OUT WITH ALL FINISHES, STRUCTURAL, MECHANICAL, AND ELECTRICAL COMPONENTS AND PROVIDE ALL ITEMS AS SHOWN OR INDICATED ON THE DRAWINGS OR IN THE WRITTEN SPECIFICATIONS.
5. CONTRACTOR SHALL FURNISH ALL MATERIAL, LABOR AND EQUIPMENT TO COMPLETE THE WORK AND FURNISH A COMPLETED JOB ALL IN ACCORDANCE WITH LOCAL AND STATE GOVERNING AUTHORITIES AND OTHER AUTHORITIES HAVING LAWFUL JURISDICTION OVER THE WORK.
6. CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND ALL INSPECTIONS REQUIRED AND SHALL ALSO PAY FEES REQUIRED FOR THE GENERAL CONSTRUCTION, PLUMBING, ELECTRICAL AND HVAC. PERMITS SHALL BE PAID FOR BY THE RESPECTIVE SUBCONTRACTORS.
7. CONTRACTOR SHALL MAINTAIN A CURRENT SET OF DRAWINGS AND SPECIFICATIONS ON SITE AT ALL TIMES AND INSURE DISTRIBUTION OF NEW DRAWINGS TO SUBCONTRACTORS AND OTHER RELEVANT PARTIES AS SOON AS THEY ARE MADE AVAILABLE. ALL OLD DRAWINGS SHALL BE MARKED VOID AND REMOVED FROM THE CONTRACT AREA. THE CONTRACTOR SHALL FURNISH AN 'AS-BUILT' SET OF DRAWINGS TO OWNER UPON COMPLETION OF PROJECT.
8. LOCATION OF EQUIPMENT, AND WORK SUPPLIED BY OTHERS THAT IS DIAGRAMMATICALLY INDICATED ON THE DRAWINGS SHALL BE DETERMINED BY THE CONTRACTOR. THE CONTRACTOR SHALL DETERMINE LOCATIONS AND DIMENSIONS SUBJECT TO STRUCTURAL CONDITIONS AND WORK OF THE SUBCONTRACTORS.
9. THE CONTRACTOR IS SOLELY RESPONSIBLE TO DETERMINE CONSTRUCTION PROCEDURE AND SEQUENCE, AND TO ENSURE THE SAFETY OF THE EXISTING STRUCTURES AND ITS COMPONENT PARTS DURING CONSTRUCTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, BRACING, UNDERPINNING, ETC. THAT MAY BE NECESSARY. MAINTAIN EXISTING BUILDING'S/PROPERTY'S OPERATIONS, COORDINATE WORK WITH BUILDING/PROPERTY OWNER.
10. DRAWINGS INDICATE THE MINIMUM STANDARDS, BUT IF ANY WORK SHOULD BE INDICATED TO BE SUBSTANDARD TO ANY ORDINANCES, LAWS, CODES, RULES, OR REGULATIONS BEARING ON THE WORK, THE CONTRACTOR SHALL INCLUDE IN HIS WORK AND SHALL EXECUTE THE WORK CORRECTLY IN ACCORDANCE WITH SUCH ORDINANCES, LAWS, CODES, RULES OR REGULATIONS WITH NO INCREASE IN COSTS.
11. ALL UTILITY WORK SHALL BE IN ACCORDANCE WITH LOCAL UTILITY COMPANY REQUIREMENTS AND SPECIFICATIONS.
12. ALL EQUIPMENT AND PRODUCTS PURCHASED ARE TO BE REVIEWED BY CONTRACTOR AND ALL APPLICABLE SUBCONTRACTORS FOR ANY CONDITION PER MFR.'S RECOMMENDATIONS. CONTRACTOR TO SUPPLY THESE ITEMS AT NO COST TO OWNER OR CONSTRUCTION MANAGER.
13. ANY AND ALL ERRORS, DISCREPANCIES, AND 'MISSED' ITEMS ARE TO BE BROUGHT TO THE ATTENTION OF THE AT&T CONSTRUCTION MANAGER DURING THE BIDDING PROCESS BY THE CONTRACTOR. ALL THESE ITEMS ARE TO BE INCLUDED IN THE BID. NO 'EXTRA' WILL BE ALLOWED FOR MISSED ITEMS.
14. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ON-SITE SAFETY FROM THE TIME THE JOB IS AWARDED UNTIL ALL WORK IS COMPLETE AND ACCEPTED BY THE OWNER.
15. CONTRACTOR TO REVIEW ALL SHOP DRAWINGS AND SUBMIT COPY TO ENGINEER FOR APPROVAL. DRAWINGS MUST BEAR THE CHECKER'S INITIALS BEFORE SUBMITTING TO THE CONSTRUCTION MANAGER FOR REVIEW.
16. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, ELEVATIONS, ANGLES, AND EXISTING CONDITIONS AT THE SITE, PRIOR TO FABRICATION AND/OR INSTALLATION OF ANY WORK IN THE CONTRACT AREA.
17. COORDINATION, LAYOUT, FURNISHING AND INSTALLATION OF CONDUIT AND ALL APPURTENANCES REQUIRED FOR PROPER INSTALLATION OF ELECTRICAL AND TELECOMMUNICATION SERVICE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
18. ALL EQUIPMENT AND PRODUCTS PURCHASED ARE TO BE REVIEWED BY CONTRACTOR AND ALL APPLICABLE SUB-CONTRACTORS FOR ANY CONDITION PER THE MANUFACTURER'S RECOMMENDATIONS. CONTRACTOR TO SUPPLY THESE ITEMS AT NO COST TO OWNER OR CONSTRUCTION MANAGER.
19. ALL DAMAGE CAUSED TO ANY EXISTING STRUCTURE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL BE HELD LIABLE FOR ALL REPAIRS REQUIRED FOR EXISTING STRUCTURES IF DAMAGED DURING CONSTRUCTION ACTIVITIES.
20. THE CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" AT LEAST 48 HOURS PRIOR TO ANY EXCAVATIONS AT 1-800-922-4455. ALL UTILITIES SHALL BE IDENTIFIED AND CLEARLY MARKED PRIOR TO ANY EXCAVATION WORK. CONTRACTOR SHALL MAINTAIN AND PROTECT MARKED UTILITIES THROUGHOUT PROJECT COMPLETION.
21. CONTRACTOR SHALL COMPLY WITH OWNERS ENVIRONMENTAL ENGINEER ON ALL METHODS AND PROVISIONS FOR ALL EXCAVATION ACTIVITIES INCLUDING SOIL DISPOSAL. ALL BACKFILL MATERIALS TO BE PROVIDED BY THE CONTRACTOR.

SITE DIRECTIONS

FROM:	TO:
500 ENTERPRISE DRIVE ROCKY HILL, CONNECTICUT	1320 CHOPSEY HILL ROAD BRIDGEPORT, CT
1. TURN LEFT ONTO CAPITOL BLVD	0.3 mi
2. TURN LEFT ONTO WEST STREET	0.3 mi
3. TAKE RAMP LEFT FOR I-91 S	9.7 mi
4. AT EXIT 17, TAKE RAMP RIGHT FOR CT-15 SOUTH TOWARD NEW HAVEN	30.2 mi
5. AT EXIT 52, TAKE RAMP RIGHT FOR CT-8 SOUTH TOWARD BRIDGEPORT	1.9 mi
6. AT EXIT 7, TAKE RAMP FOR CT-127/WHITE PLAINS ROAD	0.3 mi
7. STAY STRAIGHT TO GO ONTO OLD TOWN ROAD	0.6 mi
8. OLD TOWN ROAD BECOMES TRUMBULL AVENUE	0.6 mi
9. TURN RIGHT ONTO CHOPSEY HILL ROAD	0.1 mi
10. END AT 1320 CHOPSEY HILL ROAD (ON RIGHT)	0.0 mi

VICINITY MAP

SCALE: 1" = 1000'



PROJECT SUMMARY

1. THE PROPOSED SCOPE OF WORK CONSISTS OF A MODIFICATION TO THE EXISTING UNMANNED TELECOMMUNICATIONS FACILITY INCLUDING THE FOLLOWING:
 - A. REMOVE AND REPLACE EXISTING POSITION 2 ANTENNA FOR PROPOSED (12) PORT ANTENNA, (1) PER SECTOR.
 - B. REMOVE & REPLACE (3) EXISTING RRUS-11 (1900MHz WITH (3) NEW RRUS-32 B2 MOUNTED BY ANTENNA ON EXISTING TOWER.

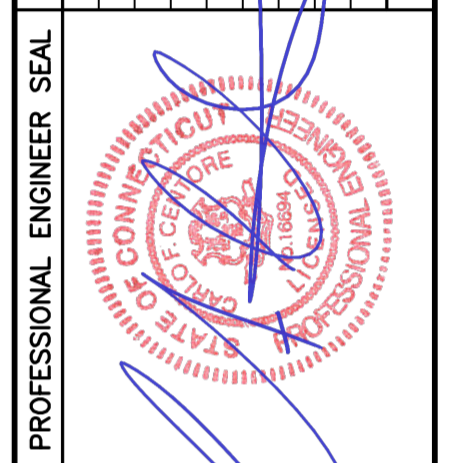
PROJECT INFORMATION

AT&T SITE NUMBER:	CT5093
AT&T SITE NAME:	BEARDSLEY
SITE ADDRESS:	1330 CHOPSEY HILL ROAD BRIDGEPORT, CT 06606
PROPERTY OWNER:	AMERICAN TOWER CORP. 116 HUNTINGTON AVE., 11TH FLOOR BOSTON, MA 02116
LESSEE/APPLICANT:	AT&T MOBILITY 500 ENTERPRISE DRIVE, SUITE 3A ROCKY HILL, CT 06607
CONTACT PERSON:	TIM BURKS SAI COMMUNICATIONS (860) 989-0001
ENGINEER:	CENTEK ENGINEERING, INC. 63-2 NORTH BRANFORD RD. BRANFORD, CT. 06405
PROJECT COORDINATES:	LATITUDE: 41°-13'-10" N LONGITUDE: 73°-12'-08" W GROUND ELEVATION: ±150' AMSL

SHEET INDEX

SHT. NO.	DESCRIPTION	REV.
T-1	TITLE SHEET	2
N-1	NOTES AND SPECIFICATIONS	1
C-1	PLANS, ELEVATION AND DETAILS	2
C-2	LTE BWE EQUIPMENT DETAILS AND ELEVATIONS	2
E-1	TYPICAL ELECTRICAL DETAILS AND NOTES	0

REV.	DATE	BY	CHK'D	DESCRIPTION
2	04/28/16	KAW		CONSTRUCTION DRAWINGS - REVISED DCE
1	04/05/16	DRB		CONSTRUCTION DRAWINGS - ISSUED FOR CLIENT REVIEW
0	03/21/16	BRB		CONSTRUCTION DRAWINGS - ISSUED FOR CLIENT REVIEW



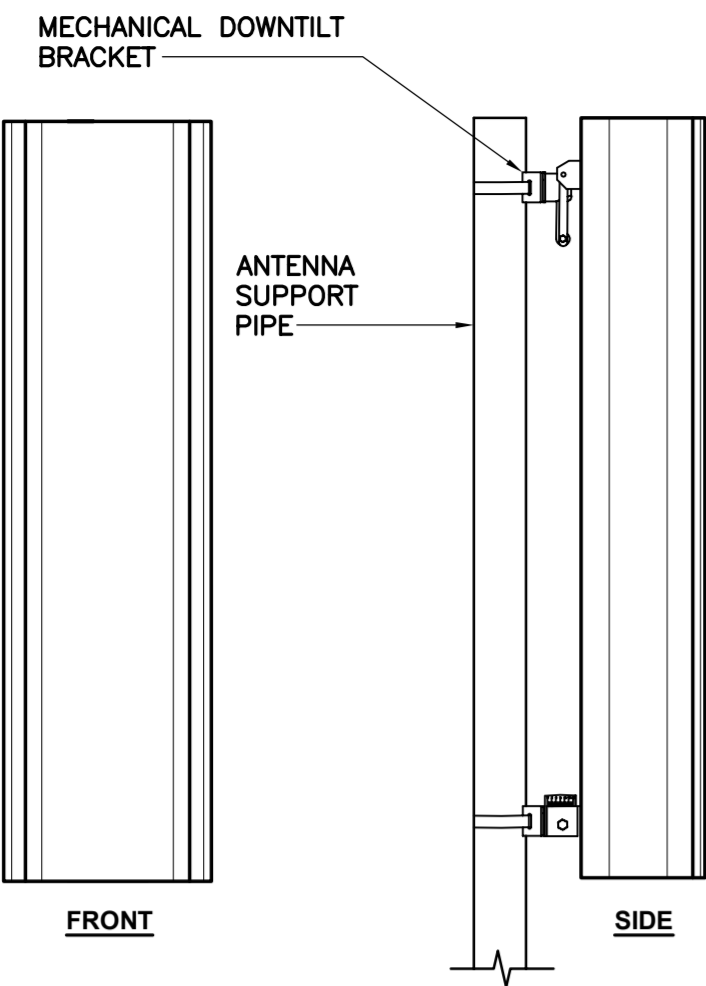
CENTEK engineering
 Centek on Solutions
 (203) 488-0380
 (203) 488-9387 Fax
 632 North Branford Road
 Branford, CT 06405
 www.CentekEng.com

AT&T MOBILITY
 WIRELESS COMMUNICATIONS FACILITY
BEARDSLEY
SITE NUMBER: CT5093 - LTE BWE
1330 CHOPSEY HILL ROAD
BRIDGEPORT, CT 06606

DATE:	03/01/16
SCALE:	AS NOTED
JOB NO.	16034.01

T-1

Sheet No. 1 of 5



ALPHA/BETA/GAMMA ANTENNA		
EQUIPMENT	DIMENSIONS	WEIGHT
MAKE: QUINTEL MODEL: QS66512-3	72.0"H x 12.0"W x 9.6"D	112.0-LBS

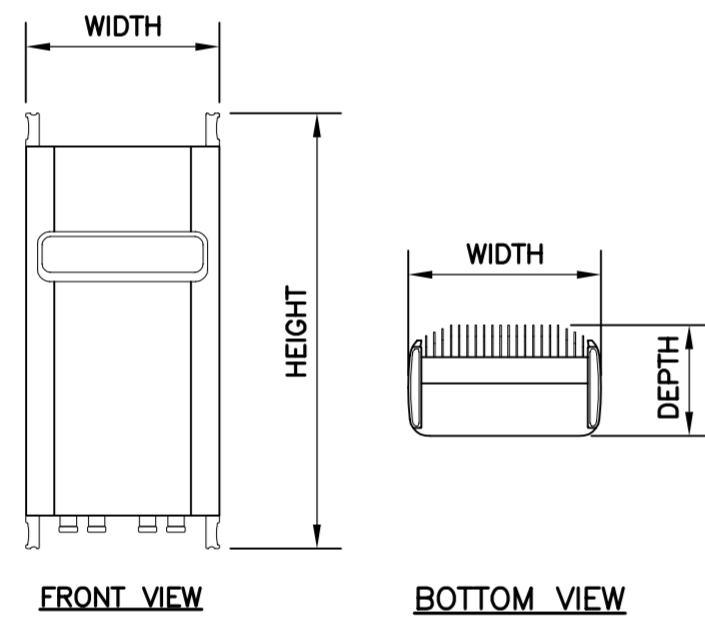
BOTTOM

5 PROPOSED ANTENNA DETAIL

C-2 SCALE: NTS

NOTES:

- INSTALL ANTENNA TO EXISTING PIPE MUST USING MANUFACTURERS SUPPLIED BRACKETS AND MOUNTING HARDWARE
- SET MECHANICAL DOWNTILT TO VALUE SPECIFIED IN LATEST RFDS



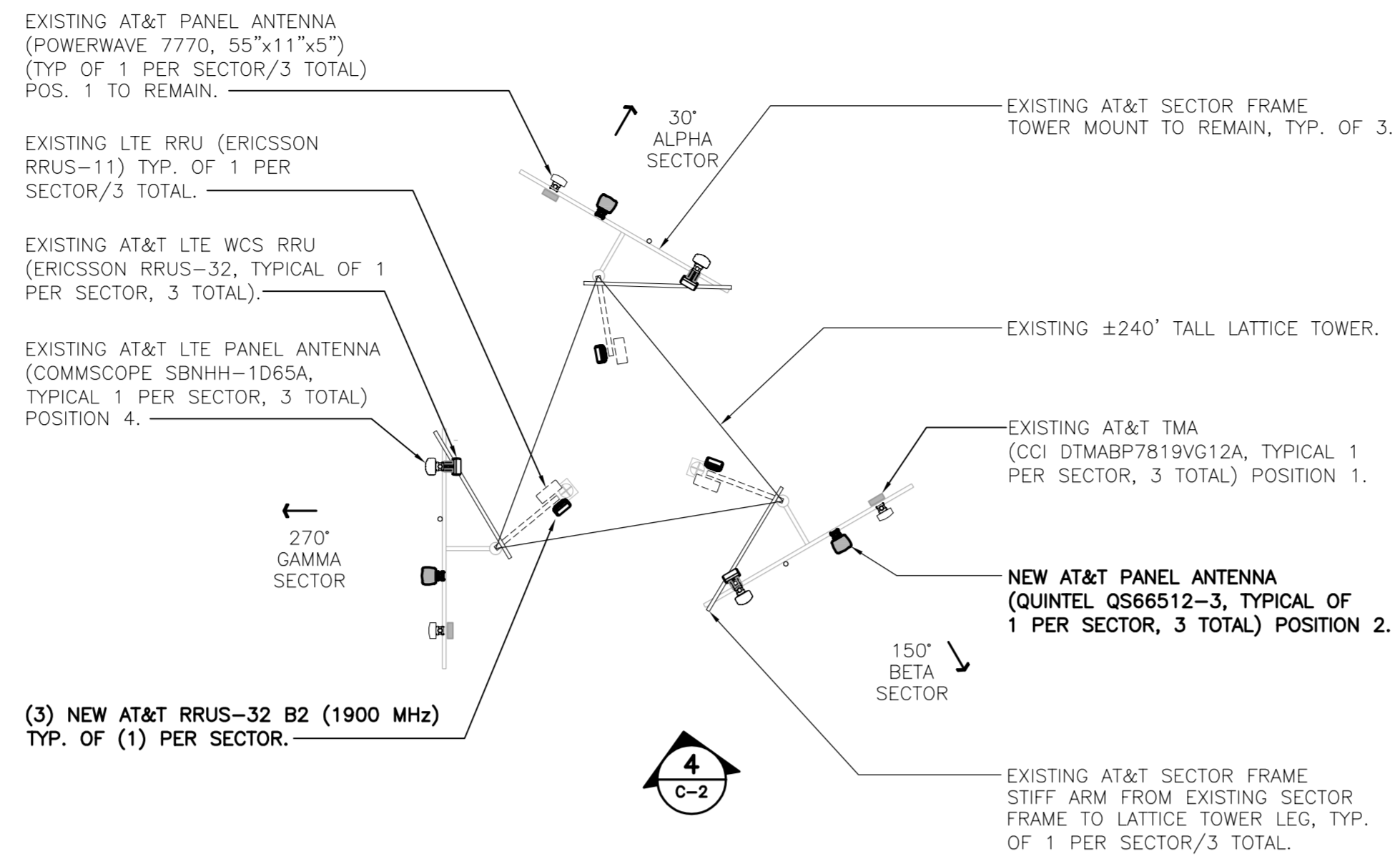
RRU (REMOTE RADIO UNIT)			
EQUIPMENT	DIMENSIONS	WEIGHT	CLEARANCES
MAKE: ERICSSON MODEL: RRUS 32	27.17"H x 12.05"W x 7.01"D	52.91 LBS.	ABOVE: 16" MIN. BELOW: 12" MIN. FRONT: 36" MIN.

7 ERICSSON RRUS 32 DETAIL

C-2 SCALE: 1" = 1'-0"

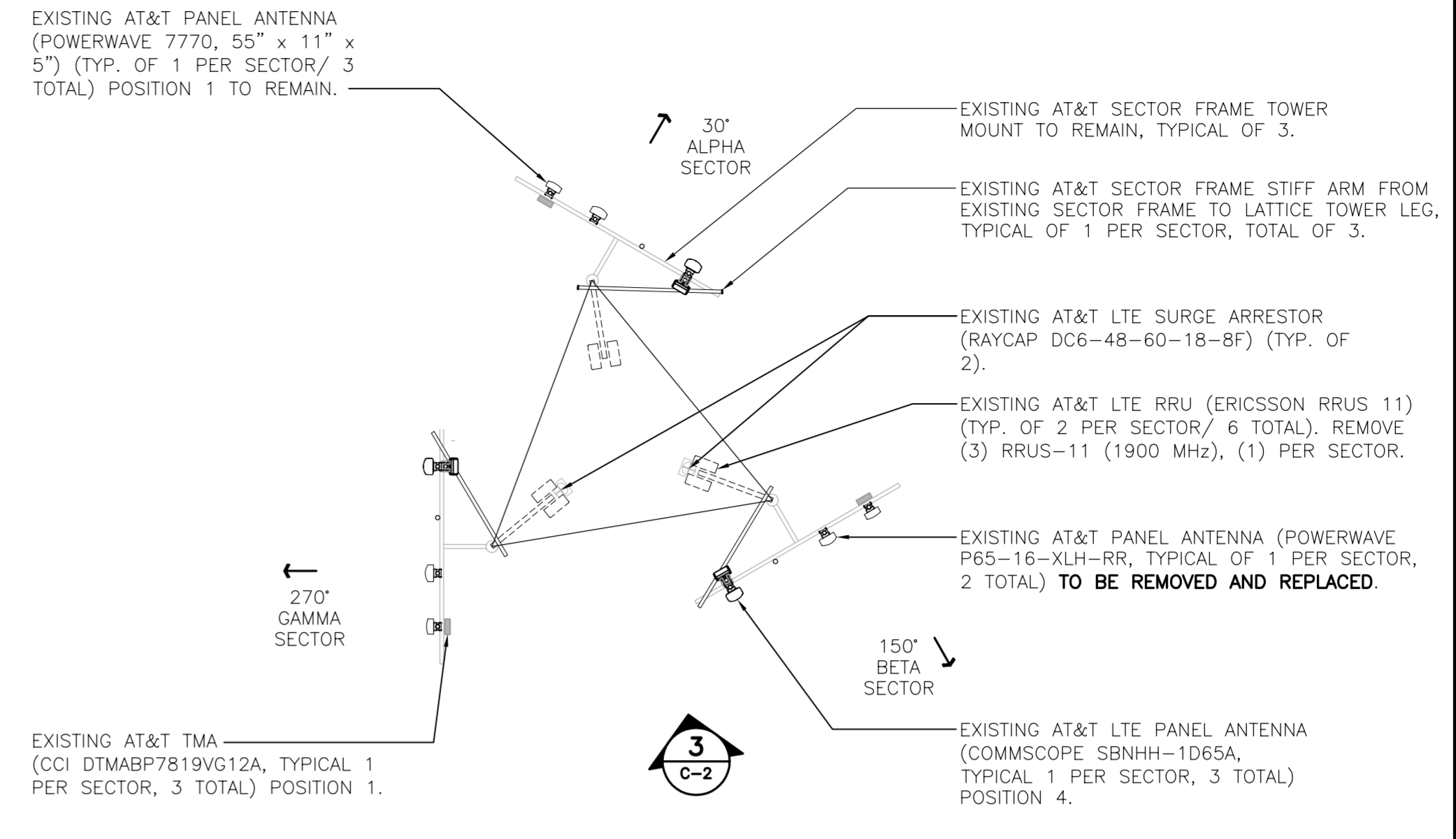
NOTES:

- CONTRACTOR TO COORDINATE FINAL EQUIPMENT MODEL SELECTION WITH AT&T CONSTRUCTION MANAGER PRIOR TO ORDERING.



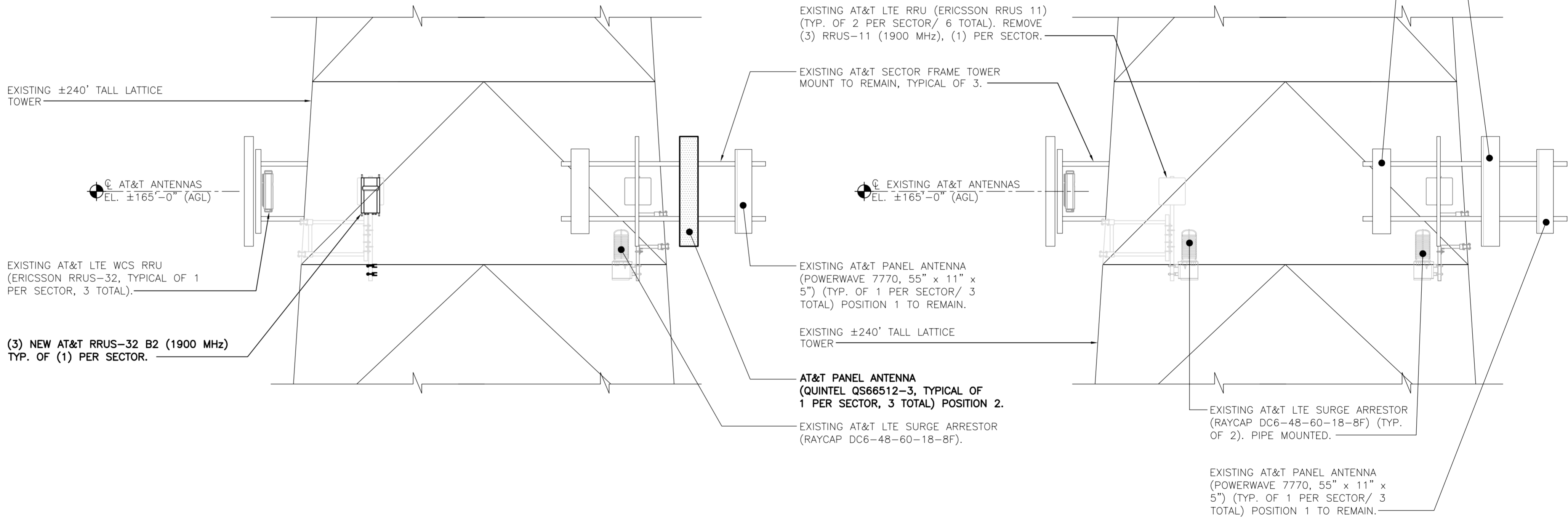
2 PROPOSED ANTENNA PLAN

C-2 SCALE: 1/8" = 1'-0"



1 EXISTING ANTENNA PLAN

C-2 SCALE: 1/8" = 1'-0"



4 PROPOSED ANTENNA PLAN

C-2 SCALE: 1/2" = 1'-0"

- NOTE:
- TOWER MOUNTED AMPLIFIERS (TMA), NOT SHOWN FOR CLARITY.

3 EXISTING ANTENNA PLAN

C-2 SCALE: 1/4" = 1'-0"

- NOTE:
- TOWER MOUNTED AMPLIFIERS (TMA), NOT SHOWN FOR CLARITY.

NOTES:

- PROVIDE MOUNTING PIPES, CROSSOVERS & ASSOCIATED HARDWARE TO COMPLETE THE PROPOSED UPGRADE.
- REFER TO AMERICAN TOWER CORP. STRUCTURAL REPORT AND FINAL AT&T RF DATA SHEET PRIOR TO INSTALLATION OF TOWER MOUNTED LTE RELATED ANTENNAS, CABLES AND RELATED EQUIPMENT
- COORDINATE ANTENNA CENTERLINE ELEVATION, RRU/SURGE ARRESTOR MOUNTING ELEVATION, ATTACHMENT HARDWARE WITH AMERICAN TOWER, CO.



CENTEK engineering
 Centered on Solutions
 (203) 489-0380
 (203) 489-3587 Fax
 652 North Branford Road
 Branford, CT 06405
 www.CentekEng.com

AT&T MOBILITY
 WIRELESS COMMUNICATIONS FACILITY
BEARDSLEY
 SITE NUMBER: CT5093 - LTE BWE
 1330 CHOPSEY HILL ROAD
 BRIDGEPORT, CT 06606

DATE: 03/01/16
 SCALE: AS NOTED
 JOB NO. 16034.01

LTE BWE
 EQUIPMENT
 DETAILS AND
 ELEVATIONS

C-2



AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure : 240 ft Self Supported Tower
GTP Site Name : Tartaglia, CT
GTP Site Number : CT-5035
Engineering Number : 65511321
Proposed Carrier : AT&T Mobility
Carrier Site Name : Beardsley
Carrier Site Number : CT5093
Site Location : 1000 Trumbull Avenue
Bridgeport, CT 06606-0000
41.21884900,-73.20170100
County : Fairfield
Date : February 26, 2016
Max Usage : 97%
Result : Pass

Prepared By:
Robert D. Barrett, E.I.
Structural Engineer I

Robert D. Barrett

Reviewed by:
Scott Wirgau, PE
Structural Team Leader



Feb 26 2016 4:50 PM

COA: PEC.0001553



Table of Contents

Introduction	1
Supporting Documents	1
Analysis	1
Conclusion.....	1
Existing and Reserved Equipment.....	2-3
Equipment to be Removed.....	3
Proposed Equipment	3
Structure Usages	4
Foundations	4
Deflection, Twist, and Sway.....	4
Standard Conditions	5
Calculations	Attached



Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 240 ft self supported tower to reflect the change in loading by AT&T Mobility.

Supporting Documents

Tower Drawings	Rohn Drawing #C880400RI, dated March 3, 1988
Foundation Drawing	Mapping by FDH Project #10-12269E N1, dated January 17, 2011
Geotechnical Report	Soiltesting Job #G96-1987-87, dated January 6, 1988
Modifications	Centek Job #10001.CO78, dated December 6, 2010 GlenMartin Drawing #GM-07602, dated February 21, 2013

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:	110 mph (3-Second Gust)
Basic Wind Speed w/ Ice:	50 mph (3-Second Gust) w/ 3/4" radial ice concurrent
Code:	ANSI/TIA-222-G / 2003 IBC w/ 2005 CT Supplement & 2009 CT Amendment
Structure Class:	II
Exposure Category:	C
Topographic Category:	1
Spectral Response:	$S_s = 0.21$, $S_1 = 0.06$
Site Class:	D - Stiff Soil

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

Elevation ¹ (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
240.0	240.0	1	10' Omni	Empty Side Arm	(1) 1" Conduit (1) 1 1/4" Coax	--
		1	Beacon			
		1	Lightning Rod			
230.0	230.0	2	8' Omni	Side Arms	(2) 7/8" Coax	--
223.0	223.0	1	12' Omni	Side Arm	(1) 1 1/4" Coax	
202.0	202.0	3	Ericsson RRUS-11	Sector Frames	(7) 1 5/8" Coax	T-Mobile
		3	Commscope LNX-6515DS-VTM			
		3	Ericsson KRY 112 144-1			
		3	Ericsson AIR21 B4A/B2P			
		3	Ericsson AIR21 B2A/B4P			
196.0	196.0	1	3' Yagi	Leg	(1) 7/8" Coax	--
187.0	187.0	2	2' HP Dish	Leg	(4) 1/2" Coax	Clearwire
		1	Andrew VHLP800-11-DW1			
180.6	180.6	3	DragonWave A-ANT-11G-2C	Sector Frames	(6) 5/16" Coax (3) 1 1/4" Hybriflex (3) 1/2" Ethernet (2) 2" Conduit (1) 1.625" Hybrid	Sprint Nextel
		3	RFS APXVTM14-C-I20			
		3	Alcatel-Lucent TD-RRH8x20-25			
		1	PCTEL GPS-TMG-HR-26NCM			
		3	Samsung DAP Heads			
		3	Argus LLPX310R			
		3	Alcatel-Lucent 800MHz 2/50W			
		6	Alcatel-Lucent 1900MHz 2x40W			
		1	RFS APXV9ERR18-C-A20			
		2	RFS APXVSP18-C-A20			
174.0	174.0	2	Andrew 950F65T4E-M	Leg	(6) 1 5/8" Coax	--
		4	5' x 5" x 2" Panel			
165.0	165.0	1	20' Omni	Sector Frames	(2) 0.39" Fiber Trunk (4) 0.78" 8 AWG 6 (12) 1 5/8" Coax	AT&T Mobility
		3	Ericsson RRUS-11			
		9	Powerwave LGP21401			
		3	CCI DTMABP7819VG12A			
		12	Powerwave LGP21901			
		3	Commscope SBNHH-1D65A			
		2	Raycap DC6-48-60-18-8F			
		3	Powerwave 7770			
		3	Ericsson RRUS-32			
		6	Powerwave 7020			
152.0	155.0	6	Andrew CBC78-DF	Sector Frames	(12) 1 5/8" Coax (2) 1 5/8" Hybrid	Verizon
		2	RFS DB-T1-6Z-8AB-0Z			
		3	ALU RH_2x60-PCS			
		3	ALU RH_2x60-700			
		3	ALU RH_2x60-AWS			
		3	Kathrein 800 10734V01			
		6	Commscope HBXX-6516DS-A2M			
		3	Antel BXA-80063/6BF			



Existing and Reserved Equipment (Continued)

Elevation ¹ (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
140.0	140.0	3	Small Side Lights	Leg	-	--
118.0	118.0	1	10' Omni	Side Arm	(1) 7/8" Coax	
108.0	108.0	1	10' Omni	Side Arm	(1) 1 1/4" Coax	
80.0	80.0	-	-	Empty Side Arm	-	
22.0	22.0	1	3' Dish	Leg	(1) 0.24" Cat 5	
20.0	20.0	1	GPS	Leg	(1) 1/2" Coax	Verizon
8.0	8.0	1	GPS	Side Arm	(1) 1/2" Coax	T-Mobile

Equipment to be Removed

Elevation ¹ (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
165.0	165.0	3	Powerwave P65-16-XLH-RR	-	-	AT&T Mobility
		3	Ericsson RRUS-11			

Proposed Equipment

Elevation ¹ (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
165.0	165.0	3	Ericsson RRUS-32 B2	Sector Frames	-	AT&T Mobility
		3	Quintel QS66512-3			

¹Mount elevation is defined as height above bottom of steel structure to the bottom of mount, RAD elevation is defined as center of antenna above ground level (AGL).

Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Legs	49%	Pass
Diagonals	97%	Pass
Horizontals	91%	Pass
Anchor Bolts*	45%	Pass
Leg Bolts	42%	Pass

*Includes a factor of safety of 2 or greater

Foundations*

Reaction Component	Analysis Reactions	% of Usage
Uplift (Kips)	321.2	71%
Axial (Kips)	382.6	66%

*Includes a factor of safety of 2 or greater

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)	Twist (°)	Sway (Rotation) (°)
187.0	2' HP Dish	Clearwire	0.109	0.011	0.044
	2' HP Dish				
	Andrew VHLP800-11-DW1				
180.6	DragonWave A-ANT-11G-2C	Sprint Nextel	0.102		
	DragonWave A-ANT-11G-2C				
	DragonWave A-ANT-11G-2C				
165.0	Ericsson RRUS-32 B2	AT&T Mobility	0.087		
	Quintel QS66512-3				
22.0	3' Dish	--	0.008	0.002	0.023

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



Standard Conditions

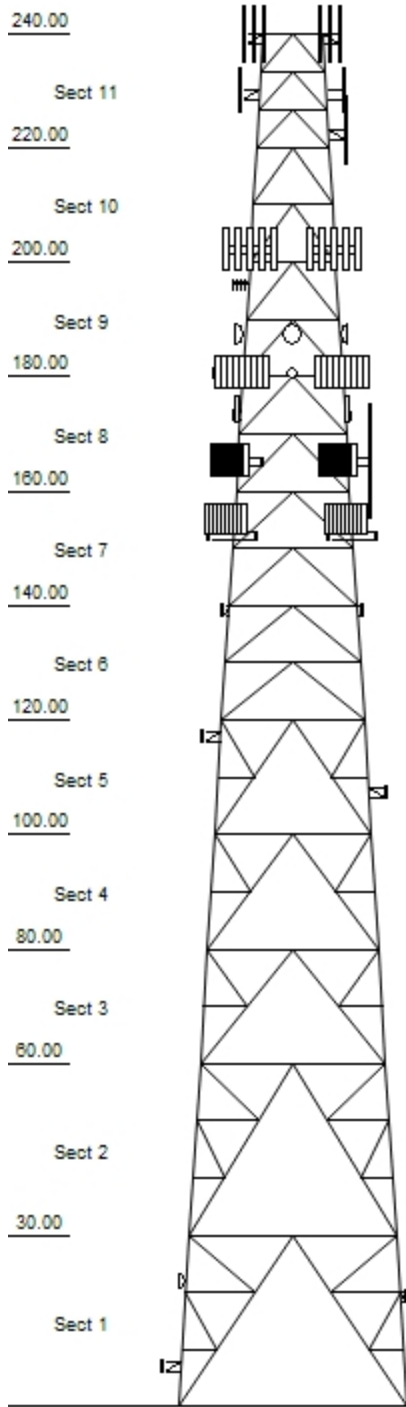
All engineering services are performed on the basis that the information used is current and correct. This information may consist of, but is not necessary limited, to:

- Information supplied by the client regarding the structure itself, antenna, mounts and feed line loading on the structure and its components, or other relevant information.
- Information from drawings in the possession of American Tower Corporation, or generated by field inspections or measurements of the structure.

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. In the absence of information to the contrary, we assume that all structures were constructed in accordance with the drawings and specifications and that their capacity has not significantly changed from the "as new" condition.

Unless explicitly agreed by both the client and American Tower Corporation, all services will be performed in accordance with the current revision of ANSI/TIA -222. The design basic wind speed will be determined based on the minimum basic wind speed as prescribed in ANSI/TIA-222. Although every effort is taken to ensure that the loading considered is adequate to meet the requirements of all applicable regulatory entities, we can provide no assurance to meet any other local and state codes or requirements. If wind and ice loads or other relevant parameters are to be different from the minimum values recommended by the codes, the client shall specify the exact requirement.

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 we supply.



© 2007 - 2016 by ATC IP LLC. All rights reserved.

Loads: 110 mph no ice
 50 mph w / 3/4" radial ice
 Site Class: D Ss: 0.21 S1: 0.06
 60 mph Serviceability

Uplift 321.23 k Moment 12,154.51 Moment Ice 3,157.80 k-ft
 Vert 382.64 k Tot Down 103.99 k Tot Down Ice 249.81 k
 Horiz 55.09 k Tot Shear 93.08 k Tot Shear Ice 24.52 k

Job Information

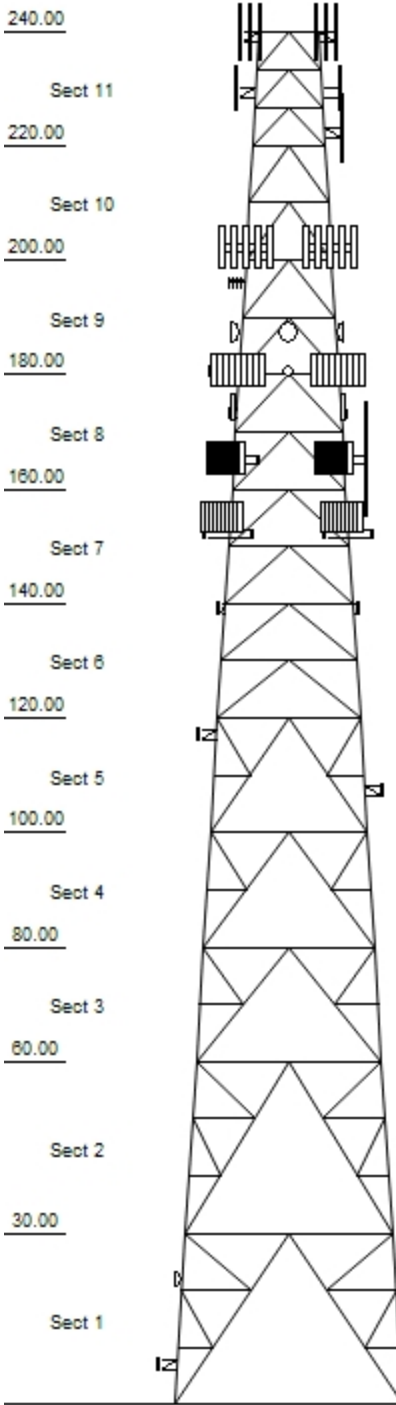
Tower : CT-5035 Location : Tartaglia, CT
 Code : ANSI/TIA-222-G Shape : Triangle Base Width : 40.33 ft
 Client : AT&T Mobility Top Width : 10.93 ft

Sections Properties

Section	Leg Members	Diagonal Members	Horizontal Members
1	PX 50 ksi 10" DIA PIPE	PST 50 ksi 3" DIA PIPE	PST 50 ksi 3-1/2" DIA PIPE
2 - 3	PX 50 ksi 10" DIA PIPE	PST 50 ksi 3" DIA PIPE	PST 50 ksi 3" DIA PIPE
4	PX 50 ksi 8" DIA PIPE	PST 50 ksi 3" DIA PIPE	PST 50 ksi 3" DIA PIPE
5	PX 50 ksi 8" DIA PIPE	PST 50 ksi 2-1/2" DIA PIPE	PST 50 ksi 2-1/2" DIA PIPE
6	PX 50 ksi 8" DIA PIPE	PST 50 ksi 3" DIA PIPE	PST 50 ksi 2-1/2" DIA PIPE
7 - 8	PX 50 ksi 8" DIA PIPE	PST 50 ksi 2-1/2" DIA PIPE	PST 50 ksi 2-1/2" DIA PIPE
9 - 10	PX 50 ksi 8" DIA PIPE	PST 50 ksi 2-1/2" DIA PIPE	PST 50 ksi 2" DIA PIPE
11	PX 50 ksi 8" DIA PIPE	PST 50 ksi 2" DIA PIPE	PST 50 ksi 2" DIA PIPE

Discrete Appurtenance

Elev (ft)	Type	Qty	Description
240.00	Straight Arm	1	Empty Round Side Arm
240.00	Whip	1	10' Omni
240.00	Whip	1	Beacon
240.00	Whip	1	Lightning Rod
230.00	Whip	1	8' Omni
230.00	Whip	1	8' Omni
230.00	Straight Arm	3	Round Side Arm
223.00	Straight Arm	1	Round Side Arm
223.00	Whip	1	12' Omni
202.00	Panel	3	Ericsson RRUS-11
202.00	Panel	3	Commscope LNX-6515DS-VTM
202.00	Panel	3	Ericsson KRY 112 144-1
202.00	Panel	3	Ericsson AR21 B4/B2P
202.00	Panel	3	Ericsson AR21 B2/B4P
202.00	Mounting Frame	3	Round Sector Frame
196.00	Yagi	1	3' Yagi
187.00	Dish	1	2' HP Dish
187.00	Dish	1	2' HP Dish
187.00	Dish	1	Andrew VHLP800-11-DW1
180.60	Dish	1	DragonWave A-ANT-11G-2C
180.60	Dish	1	DragonWave A-ANT-11G-2C
180.60	Panel	3	RFS APXVTM14-C-I20
180.60	Panel	3	Alcatel-Lucent TD-RRH8x20-25
180.60	Panel	1	PCTEL GPS-TMG-HR-26NCM
180.60	Dish	1	DragonWave A-ANT-11G-2C
180.60	Panel	3	Samsung DAP Heads
180.60	Panel	3	Argus LLPX310R
180.60	Panel	3	Alcatel-Lucent 800 MHz 2/50W
180.60	Panel	6	Alcatel-Lucent 1900 MHz 2x40W
180.60	Panel	1	RFS APXV9ERR18-C-A20
180.60	Panel	2	RFS APXVSP18-C-A20
180.60	Mounting Frame	3	Flat Light Sector Frame
174.00	Panel	2	Andrew 950F65T4E-M
174.00	Panel	4	5' x 5" x 2" Panel
165.00	Panel	3	Ericsson RRUS-32 B2
165.00	Panel	3	Quintel QS66512-3
165.00	Panel	3	Ericsson RRUS-11
165.00	Panel	9	Powerwave LGP21401
165.00	Panel	3	CCI DTMAPB7819VG12A
165.00	Panel	12	Powerwave LGP21901
165.00	Panel	3	Commscope SBNHH-1D65A
165.00	Panel	1	Raycap DC6-48-60-18-8F
165.00	Mounting Frame	3	Round Sector Frame
165.00	Whip	1	20' Omni
165.00	Panel	3	Powerwave 7770
165.00	Panel	3	Ericsson RRUS-32
165.00	Panel	1	Raycap DC6-48-60-18-8F
165.00	Panel	6	Powerwave 7020
152.00	Panel	6	Andrew CBC78-DF
152.00	Panel	2	RFS DB-T1-6Z-8AB-0Z



© 2007 - 2016 by ATC IP LLC. All rights reserved.

Job Information		
Tower : CT-5035	Location : Tartaglia, CT	
Code : ANSI/TIA-222-G	Shape : Triangle	Base Width : 40.33 ft
Client : AT&T Mobility		Top Width : 10.93 ft

152.00	Panel	3	ALU RH 2x60-PCS
152.00	Panel	3	ALU RH 2x60-700
152.00	Panel	3	ALU RH 2x60-AWS
152.00	Panel	3	Kathrein 800 10734V01
152.00	Panel	6	Commscope HBXX-6516DS-A2M
152.00	Mounting Frame	3	Flat Light Sector Frame
152.00	Panel	3	Antel BXA-80063/6BF
140.00	Whip	3	Small Side Lights
118.00	Straight Arm	1	Round Side Arm
118.00	Whip	1	10' Omni
108.00	Straight Arm	1	Round Side Arm
108.00	Whip	1	10' Omni
80.00	Straight Arm	1	Empty Round Side Arm
22.00	Dish	1	3' Dish
20.00	Whip	1	GPS
8.00	Straight Arm	1	Round Side Arm
8.00	Whip	1	GPS

Linear Appurtenance

Elev (ft)			
From	To	Qty	Description
0.000	240.00	1	1" Conduit
0.000	240.00	1	1 1/4" Coax
0.000	230.00	2	7/8" Coax
0.000	223.00	1	1 1/4" Coax
0.000	202.00	1	Waveguide
0.000	202.00	7	1 5/8" Coax
0.000	196.00	1	7/8" Coax
0.000	187.00	4	1/2" Coax
0.000	180.60	1	Waveguide
0.000	180.60	6	5/16" Coax
0.000	180.60	2	2" Conduit
0.000	180.60	3	1/2" Ethernet
0.000	180.60	1	1.625" Hybrid
0.000	180.60	3	1 1/4" Hybriflex
0.000	174.00	1	Waveguide
0.000	174.00	6	1 5/8" Coax
0.000	165.00	1	Waveguide
0.000	165.00	12	1 5/8" Coax
0.000	165.00	1	1 1/4" Coax
0.000	165.00	2	0.78" 8 AWG 6
0.000	165.00	2	0.78" 8 AWG 6
0.000	165.00	1	0.39" Fiber Trunk
0.000	165.00	1	0.39" Fiber Trunk
0.000	152.00	1	Waveguide
0.000	152.00	1	1 5/8" Hybrid
0.000	152.00	1	1 5/8" Hybrid
0.000	152.00	12	1 5/8" Coax
0.000	118.00	1	7/8" Coax
0.000	108.00	1	1 1/4" Coax
0.000	22.000	1	0.24" Cat 5
0.000	20.000	1	1/2" Coax
0.000	8.000	1	1/2" Coax

Uplift 321.23 k Moment 12,154.51 Moment Ioe 3,157.80 k-ft
 Vert 382.64 k Tot Down 103.99 k Tot Down Ioe 249.81 k
 Horiz 55.09 k Tot Shear 93.06 k Tot Shear Ioe 24.52 k

Site Number: CT-5035
 Site Name: Tartaglia, CT
 Customer: AT&T Mobility

Code: ANSI/TIA-222-G
 Engineering Number: 65511321

© 2007 - 2016 by ATC IP LLC. All rights reserved.
 2/26/2016 4:37:06 PM

Analysis Parameters

Location:	Fairfield County, CT		
Code:	ANSI/TIA-222-G	Height (ft):	240
Shape:	Triangle	Base Elevation (ft):	0.00
Tower Manufacturer:	Rohn	Bottom Face Width (ft):	40.33
Tower Type:	Self Support	Top Face Width (ft):	10.93

Ice & Wind Parameters

Structure Class:	II	Design Windspeed Without Ice:	110 mph
Exposure Category:	C	Design Windspeed With Ice:	50 mph
Topographic Category:	1	Operational Windspeed:	60 mph
Crest Height:	0.0 ft	Design Ice Thickness:	0.75 in

Seismic Parameters

Analysis Method:	Equivalent Modal Analysis & Equivalent Lateral Force Methods		
Site Class:	D - Stiff Soil		
Period Based on Rayleigh Method (sec):	0.68		
T_L (sec):	6	p:	1.3
S_s :	0.207	S_1 :	0.065
F_a :	1.600	F_v :	2.400
S_{ds} :	0.221	S_{d1} :	0.104
		C_s :	0.051
		$C_{s, Max}$:	0.051
		$C_{s, Min}$:	0.030

Load Cases

1.2D + 1.6W Normal	110 mph Normal to Face with No Ice
1.2D + 1.6W 60 deg	110 mph 60 degree with No Ice
1.2D + 1.6W 90 deg	110 mph 90 degree with No Ice
0.9D + 1.6W Normal	110 mph Normal to Face with No Ice (Reduced DL)
0.9D + 1.6W 60 deg	110 mph 60 deg with No Ice (Reduced DL)
0.9D + 1.6W 90 deg	110 mph 90 deg with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi Normal	50 mph Normal with 0.75 in Radial Ice
1.2D + 1.0Di + 1.0Wi 60 deg	50 mph 60 degree with 0.75 in Radial Ice
1.2D + 1.0Di + 1.0Wi 90 deg	50 mph 90 degree with 0.75 in Radial Ice
(1.2 + 0.2Sds) * DL + E Normal	Seismic Normal
(1.2 + 0.2Sds) * DL + E 60 deg	Seismic 60 degree
(1.2 + 0.2Sds) * DL + E 90 deg	Seismic 90 degree
(0.9 - 0.2Sds) * DL + E Normal	Seismic (Reduced DL) Normal
(0.9 - 0.2Sds) * DL + E 60 deg	Seismic (Reduced DL) 60 degree
(0.9 - 0.2Sds) * DL + E 90 deg	Seismic (Reduced DL) 90 degree
1.0D + 1.0W Service Normal	Serviceability - 60 mph Wind Normal
1.0D + 1.0W Service 60 deg	Serviceability - 60 mph Wind 60 degree
1.0D + 1.0W Service 90 deg	Serviceability - 60 mph Wind 90 degree

Site Number: CT-5035

Code: ANSI/TIA-222-G

© 2007 - 2016 by ATC IP LLC. All rights reserved.

Site Name: Tartaglia, CT

Engineering Number: 65511321

2/26/2016 4:37:06 PM

Customer: AT&T Mobility

Tower Loading

Discrete Appurtenance Properties 1.2D + 1.6W

Elevation (ft)	Description	Qty	Wt. (lb)	EPA (sf)	Length (ft)	Width (in)	Depth (in)	K _a	Orient. Factor	Vert. Ecc.(ft)	M _u (lb-ft)	Q _z (psf)	F _a (WL) (lb)	P _a (DL) (lb)
240.0	10' Omni	1	25	3.0	10.0	3.0	3.0	1.00	1.00	0.0	0.0	40.07	163	36
240.0	Beacon	1	70	4.5	3.0	18.0	18.0	1.00	1.00	0.0	0.0	40.07	245	101
240.0	Empty Round Side	1	150	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	40.07	283	216
240.0	Lightning Rod	1	10	1.0	4.0	3.0	3.0	1.00	1.00	0.0	0.0	40.07	54	14
230.0	8' Omni	1	40	2.4	8.0	4.0	4.0	1.00	1.00	0.0	0.0	39.71	130	58
230.0	8' Omni	1	40	2.4	8.0	3.0	3.0	1.00	1.00	0.0	0.0	39.71	130	58
230.0	Round Side Arm	3	150	5.2	0.0	0.0	0.0	1.00	0.67	0.0	0.0	39.71	564	648
223.0	12' Omni	1	40	3.6	12.0	4.0	4.0	1.00	1.00	0.0	0.0	39.45	193	58
223.0	Round Side Arm	1	150	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	39.45	279	216
202.0	Commscope LNX-	3	50	11.4	8.0	11.9	7.1	0.80	0.70	0.0	0.0	38.64	1011	217
202.0	Ericsson AIR21	3	90	6.1	4.7	12.0	8.0	0.80	0.71	0.0	0.0	38.64	542	389
202.0	Ericsson AIR21	3	90	6.1	4.7	12.1	7.9	0.80	0.70	0.0	0.0	38.64	538	389
202.0	Ericsson KRY 112	3	11	0.4	0.6	6.1	2.7	0.80	0.50	0.0	0.0	38.64	26	48
202.0	Ericsson RRUS-11	3	51	2.8	1.6	17.0	7.2	0.80	0.50	0.0	0.0	38.64	176	219
202.0	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.67	0.0	0.0	38.64	1141	1296
196.0	3' Yagi	1	10	3.0	3.0	36.0	3.0	1.00	1.00	0.0	0.0	38.40	156	14
187.0	2' HP Dish	1	90	4.0	2.0	0.0	0.0	1.00	0.79	0.0	0.0	38.02	162	130
187.0	2' HP Dish	1	90	4.0	2.0	0.0	0.0	1.00	0.97	0.0	0.0	38.02	199	130
187.0	Andrew VHLP800-11-	1	121	16.7	4.1	0.0	0.0	1.00	1.00	0.0	0.0	38.02	864	174
180.6	Alcatel-Lucent 1900	6	44	3.8	1.9	17.3	13.0	0.80	0.50	0.0	0.0	37.74	472	380
180.6	Alcatel-Lucent 800	3	64	2.4	1.6	13.0	12.2	0.80	0.50	0.0	0.0	37.74	148	276
180.6	Alcatel-Lucent TD-	3	70	4.7	2.2	18.6	6.7	0.80	0.67	0.0	0.0	37.74	390	302
180.6	Argus LLPX310R	3	29	4.3	3.5	11.8	4.5	0.80	0.63	0.0	0.0	37.74	333	124
180.6	DragonWave A-ANT-	1	27	4.7	2.2	0.0	0.0	0.80	0.55	0.0	0.0	37.74	106	39
180.6	DragonWave A-ANT-	1	27	4.7	2.2	0.0	0.0	0.80	0.61	0.0	0.0	37.74	117	39
180.6	DragonWave A-ANT-	1	27	4.7	2.2	0.0	0.0	0.80	1.00	0.0	0.0	37.74	193	39
180.6	Flat Light Sector	3	400	17.9	0.0	0.0	0.0	0.75	0.67	0.0	0.0	37.74	1385	1728
180.6	PCTEL GPS-TMG-HR-	1	1	0.1	0.4	3.2	3.2	0.80	1.00	0.0	0.0	37.74	4	1
180.6	RFS APXV9ERR18-C-	1	62	8.0	6.0	11.8	7.9	0.80	0.71	0.0	0.0	37.74	234	89
180.6	RFS APXVSPP18-C-	2	57	8.0	6.0	11.8	7.0	0.80	0.71	0.0	0.0	37.74	468	164
180.6	RFS APXVTM14-C-I20	3	56	6.3	4.7	12.6	6.3	0.80	0.66	0.0	0.0	37.74	515	242
180.6	Samsung DAP Heads	3	33	1.8	1.4	11.6	5.3	0.80	0.50	0.0	0.0	37.74	112	143
174.0	5' x 5" x 2" Panel	4	30	3.3	5.0	5.0	2.0	1.00	0.74	0.0	0.0	37.44	491	173
174.0	Andrew 950F65T4E-	2	16	4.8	5.0	11.0	7.0	1.00	0.90	0.0	0.0	37.44	435	45
165.0	20' Omni	1	55	6.0	20.0	4.0	4.0	0.80	1.00	0.0	0.0	37.03	242	79
165.0	CCI	3	19	1.0	0.9	10.6	3.8	0.80	0.50	0.0	0.0	37.03	59	83
165.0	Commscope SBNHH-	3	41	5.9	4.6	11.9	7.1	0.80	0.69	0.0	0.0	37.03	490	177
165.0	Ericsson RRUS-11	3	51	2.8	1.6	17.0	7.2	0.80	0.50	0.0	0.0	37.03	169	219
165.0	Ericsson RRUS-32	3	51	2.7	2.2	12.1	6.8	0.80	0.50	0.0	0.0	37.03	163	219
165.0	Ericsson RRUS-32 B2	3	51	2.7	2.2	12.1	6.8	0.80	0.50	0.0	0.0	37.03	163	219
165.0	Powerwave 7020	6	2	0.4	0.4	8.3	2.4	0.80	0.50	0.0	0.0	37.03	48	19
165.0	Powerwave 7770	3	35	5.5	4.6	11.0	5.0	0.80	0.65	0.0	0.0	37.03	432	151
165.0	Powerwave	9	14	1.1	1.2	9.2	2.6	0.80	0.50	0.0	0.0	37.03	199	183
165.0	Powerwave	12	6	0.2	0.5	4.0	3.0	0.80	0.50	0.0	0.0	37.03	48	95
165.0	Quintel QS66512-3	3	112	8.1	6.0	12.0	9.6	0.80	0.74	0.0	0.0	37.03	727	484
165.0	Raycap DC6-48-60-	1	20	1.1	2.0	9.7	9.7	0.80	1.00	0.0	0.0	37.03	45	29
165.0	Raycap DC6-48-60-	1	20	1.1	2.0	9.7	9.7	0.80	1.00	0.0	0.0	37.03	45	29
165.0	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.67	0.0	0.0	37.03	1093	1296
152.0	ALU RH_2x60-700	3	57	2.2	1.8	12.0	9.0	0.80	0.50	3.0	386.5	36.54	129	247
152.0	ALU RH_2x60-AWS	3	44	1.9	1.7	11.2	7.3	0.80	0.50	3.0	336.4	36.54	112	190
152.0	ALU RH_2x60-PCS	3	46	1.8	1.6	11.2	8.2	0.80	0.50	3.0	329.2	36.54	110	199
152.0	Andrew CBC78-DF	6	7	0.4	0.7	5.9	2.6	0.80	0.50	3.0	161.0	36.54	54	57
152.0	Antel BX A-80063/6BF	3	19	7.3	5.7	11.2	5.3	0.80	0.66	3.0	1717.0	36.54	572	83
152.0	Commscope HBXX-	6	31	5.4	4.2	12.0	6.5	0.80	0.67	3.0	2598.9	36.54	866	264

Site Number: CT-5035

Code: ANSI/TIA-222-G

© 2007 - 2016 by ATC IP LLC. All rights reserved.

Site Name: Tartaglia, CT

Engineering Number: 65511321

2/26/2016 4:37:06 PM

Customer: AT&T Mobility

Tower Loading

152.0 Flat Light Sector	3	400	17.9	0.0	0.0	0.0	0.75	0.67	0.0	0.0	36.39	1336	1728
152.0 Kathrein 800	3	24	5.7	4.4	11.9	3.9	0.80	0.62	3.0	1257.9	36.54	419	105
152.0 RFS DB-T1-6Z-8AB-	2	7	4.8	2.0	24.0	10.0	0.80	0.50	3.0	572.5	36.54	191	19
140.0 Small Side Lights	3	45	2.0	1.0	8.0	8.0	1.00	1.00	0.0	0.0	35.77	292	194
118.0 10' Omni	1	8	0.1	1.0	2.0	2.0	1.00	1.00	0.0	0.0	34.50	6	12
118.0 Round Side Arm	1	150	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	34.50	244	216
108.0 10' Omni	1	8	0.1	1.0	2.0	2.0	1.00	1.00	0.0	0.0	33.87	6	12
108.0 Round Side Arm	1	150	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	33.87	240	216
80.00 Empty Round Side	1	150	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	31.79	225	216
22.00 3' Dish	1	100	6.1	3.0	0.0	0.0	1.00	0.64	0.0	0.0	24.23	129	144
20.00 GPS	1	10	1.0	1.0	9.0	6.0	1.00	1.00	0.0	0.0	23.75	32	14
8.00 GPS	1	10	1.0	1.0	9.0	6.0	1.00	1.00	0.0	0.0	22.38	30	14
8.00 Round Side Arm	1	150	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	22.38	158	216
Totals	168	10849	732.4										

Discrete Appurtenance Properties 0.9D + 1.6W

Elevation (ft)	Description	Qty	Wt. (lb)	EPA (sf)	Length (ft)	Width (in)	Depth (in)	K _a	Orient. Factor	Vert. Ecc.(ft)	M _u (lb-ft)	Q _z (psf)	F _a (WL) (lb)	P _a (DL) (lb)
240.0	10' Omni	1	25	3.0	10.0	3.0	3.0	1.00	1.00	0.0	0.0	40.07	163	20
240.0	Beacon	1	70	4.5	3.0	18.0	18.0	1.00	1.00	0.0	0.0	40.07	245	57
240.0	Empty Round Side	1	150	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	40.07	283	122
240.0	Lightning Rod	1	10	1.0	4.0	3.0	3.0	1.00	1.00	0.0	0.0	40.07	54	8
230.0	8' Omni	1	40	2.4	8.0	4.0	4.0	1.00	1.00	0.0	0.0	39.71	130	32
230.0	8' Omni	1	40	2.4	8.0	3.0	3.0	1.00	1.00	0.0	0.0	39.71	130	32
230.0	Round Side Arm	3	150	5.2	0.0	0.0	0.0	1.00	0.67	0.0	0.0	39.71	564	365
223.0	12' Omni	1	40	3.6	12.0	4.0	4.0	1.00	1.00	0.0	0.0	39.45	193	32
223.0	Round Side Arm	1	150	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	39.45	279	122
202.0	Commscope LNX-	3	50	11.4	8.0	11.9	7.1	0.80	0.70	0.0	0.0	38.64	1011	122
202.0	Ericsson AIR21	3	90	6.1	4.7	12.0	8.0	0.80	0.71	0.0	0.0	38.64	542	219
202.0	Ericsson AIR21	3	90	6.1	4.7	12.1	7.9	0.80	0.70	0.0	0.0	38.64	538	219
202.0	Ericsson KRY 112	3	11	0.4	0.6	6.1	2.7	0.80	0.50	0.0	0.0	38.64	26	27
202.0	Ericsson RRUS-11	3	51	2.8	1.6	17.0	7.2	0.80	0.50	0.0	0.0	38.64	176	123
202.0	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.67	0.0	0.0	38.64	1141	729
196.0	3' Yagi	1	10	3.0	3.0	36.0	3.0	1.00	1.00	0.0	0.0	38.40	156	8
187.0	2' HP Dish	1	90	4.0	2.0	0.0	0.0	1.00	0.79	0.0	0.0	38.02	162	73
187.0	2' HP Dish	1	90	4.0	2.0	0.0	0.0	1.00	0.97	0.0	0.0	38.02	199	73
187.0	Andrew VHLP800-11-	1	121	16.7	4.1	0.0	0.0	1.00	1.00	0.0	0.0	38.02	864	98
180.6	Alcatel-Lucent 1900	6	44	3.8	1.9	17.3	13.0	0.80	0.50	0.0	0.0	37.74	472	214
180.6	Alcatel-Lucent 800	3	64	2.4	1.6	13.0	12.2	0.80	0.50	0.0	0.0	37.74	148	156
180.6	Alcatel-Lucent TD-	3	70	4.7	2.2	18.6	6.7	0.80	0.67	0.0	0.0	37.74	390	170
180.6	Argus LLPX310R	3	29	4.3	3.5	11.8	4.5	0.80	0.63	0.0	0.0	37.74	333	69
180.6	DragonWave A-ANT-	1	27	4.7	2.2	0.0	0.0	0.80	0.55	0.0	0.0	37.74	106	22
180.6	DragonWave A-ANT-	1	27	4.7	2.2	0.0	0.0	0.80	0.61	0.0	0.0	37.74	117	22
180.6	DragonWave A-ANT-	1	27	4.7	2.2	0.0	0.0	0.80	1.00	0.0	0.0	37.74	193	22
180.6	Flat Light Sector	3	400	17.9	0.0	0.0	0.0	0.75	0.67	0.0	0.0	37.74	1385	972
180.6	PCTEL GPS-TMG-HR-	1	1	0.1	0.4	3.2	3.2	0.80	1.00	0.0	0.0	37.74	4	0
180.6	RFS APXV9ERR18-C-	1	62	8.0	6.0	11.8	7.9	0.80	0.71	0.0	0.0	37.74	234	50
180.6	RFS APXVSP18-C-	2	57	8.0	6.0	11.8	7.0	0.80	0.71	0.0	0.0	37.74	468	92
180.6	RFS APXVTM14-C-I20	3	56	6.3	4.7	12.6	6.3	0.80	0.66	0.0	0.0	37.74	515	136
180.6	Samsung DAP Heads	3	33	1.8	1.4	11.6	5.3	0.80	0.50	0.0	0.0	37.74	112	80
174.0	5' x 5" x 2" Panel	4	30	3.3	5.0	5.0	2.0	1.00	0.74	0.0	0.0	37.44	491	97
174.0	Andrew 950F65T4E-	2	16	4.8	5.0	11.0	7.0	1.00	0.90	0.0	0.0	37.44	435	25
165.0	20' Omni	1	55	6.0	20.0	4.0	4.0	0.80	1.00	0.0	0.0	37.03	242	45
165.0	CCI	3	19	1.0	0.9	10.6	3.8	0.80	0.50	0.0	0.0	37.03	59	47
165.0	Commscope SBNHH-	3	41	5.9	4.6	11.9	7.1	0.80	0.69	0.0	0.0	37.03	490	99

Site Number: CT-5035

Code: ANSI/TIA-222-G

© 2007 - 2016 by ATC IP LLC. All rights reserved.

Site Name: Tartaglia, CT

Engineering Number: 65511321

2/26/2016 4:37:06 PM

Customer: AT&T Mobility

Tower Loading

165.0	Ericsson RRUS-11	3	51	2.8	1.6	17.0	7.2	0.80	0.50	0.0	0.0	37.03	169	123
165.0	Ericsson RRUS-32	3	51	2.7	2.2	12.1	6.8	0.80	0.50	0.0	0.0	37.03	163	123
165.0	Ericsson RRUS-32 B2	3	51	2.7	2.2	12.1	6.8	0.80	0.50	0.0	0.0	37.03	163	123
165.0	Powerwave 7020	6	2	0.4	0.4	8.3	2.4	0.80	0.50	0.0	0.0	37.03	48	11
165.0	Powerwave 7770	3	35	5.5	4.6	11.0	5.0	0.80	0.65	0.0	0.0	37.03	432	85
165.0	Powerwave	9	14	1.1	1.2	9.2	2.6	0.80	0.50	0.0	0.0	37.03	199	103
165.0	Powerwave	12	6	0.2	0.5	4.0	3.0	0.80	0.50	0.0	0.0	37.03	48	53
165.0	Quintel QS66512-3	3	112	8.1	6.0	12.0	9.6	0.80	0.74	0.0	0.0	37.03	727	272
165.0	Raycap DC6-48-60-	1	20	1.1	2.0	9.7	9.7	0.80	1.00	0.0	0.0	37.03	45	16
165.0	Raycap DC6-48-60-	1	20	1.1	2.0	9.7	9.7	0.80	1.00	0.0	0.0	37.03	45	16
165.0	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.67	0.0	0.0	37.03	1093	729
152.0	ALU RH_2x60-700	3	57	2.2	1.8	12.0	9.0	0.80	0.50	3.0	386.5	36.54	129	139
152.0	ALU RH_2x60-AWS	3	44	1.9	1.7	11.2	7.3	0.80	0.50	3.0	336.4	36.54	112	107
152.0	ALU RH_2x60-PCS	3	46	1.8	1.6	11.2	8.2	0.80	0.50	3.0	329.2	36.54	110	112
152.0	Andrew CBC78-DF	6	7	0.4	0.7	5.9	2.6	0.80	0.50	3.0	161.0	36.54	54	32
152.0	Antel BX-80063/6BF	3	19	7.3	5.7	11.2	5.3	0.80	0.66	3.0	1717.0	36.54	572	47
152.0	Commscope HBXX-	6	31	5.4	4.2	12.0	6.5	0.80	0.67	3.0	2598.9	36.54	866	149
152.0	Flat Light Sector	3	400	17.9	0.0	0.0	0.0	0.75	0.67	0.0	0.0	36.39	1336	972
152.0	Kathrein 800	3	24	5.7	4.4	11.9	3.9	0.80	0.62	3.0	1257.9	36.54	419	59
152.0	RFS DB-T1-6Z-8AB-	2	7	4.8	2.0	24.0	10.0	0.80	0.50	3.0	572.5	36.54	191	11
140.0	Small Side Lights	3	45	2.0	1.0	8.0	8.0	1.00	1.00	0.0	0.0	35.77	292	109
118.0	10' Omni	1	8	0.1	1.0	2.0	2.0	1.00	1.00	0.0	0.0	34.50	6	6
118.0	Round Side Arm	1	150	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	34.50	244	122
108.0	10' Omni	1	8	0.1	1.0	2.0	2.0	1.00	1.00	0.0	0.0	33.87	6	6
108.0	Round Side Arm	1	150	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	33.87	240	122
80.00	Empty Round Side	1	150	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	31.79	225	122
22.00	3' Dish	1	100	6.1	3.0	0.0	0.0	1.00	0.64	0.0	0.0	24.23	129	81
20.00	GPS	1	10	1.0	1.0	9.0	6.0	1.00	1.00	0.0	0.0	23.75	32	8
8.00	GPS	1	10	1.0	1.0	9.0	6.0	1.00	1.00	0.0	0.0	22.38	30	8
8.00	Round Side Arm	1	150	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	22.38	158	122
Totals		168	10849	732.4										

Discrete Appurtenance Properties 1.2D + 1.0Di + 1.0Wi

Elevation (ft)	Description	Qty	Ice Wt (lb)	Ice EPA (sf)	Length (ft)	Width (in)	Depth (in)	K _a	Orient. Factor	Vert. Ecc.(ft)	M _u (lb-ft)	Q _z (psf)	F _a (WL) (lb)	P _a (DL) (lb)
240.0	10' Omni	1	167	6.0	10.0	3.0	3.0	1.00	1.00	0.0	0.0	8.28	42	206
240.0	Beacon	1	294	4.2	3.0	18.0	18.0	1.00	1.00	0.0	0.0	8.28	29	369
240.0	Empty Round Side	1	227	8.0	0.0	0.0	0.0	1.00	1.00	0.0	0.0	8.28	57	308
240.0	Lightning Rod	1	70	1.9	4.0	3.0	3.0	1.00	1.00	0.0	0.0	8.28	14	86
230.0	8' Omni	1	179	4.9	8.0	4.0	4.0	1.00	1.00	0.0	0.0	8.20	34	224
230.0	8' Omni	1	154	4.5	8.0	3.0	3.0	1.00	1.00	0.0	0.0	8.20	31	195
230.0	Round Side Arm	3	227	8.0	0.0	0.0	0.0	1.00	0.67	0.0	0.0	8.20	113	923
223.0	12' Omni	1	242	8.4	12.0	4.0	4.0	1.00	1.00	0.0	0.0	8.15	58	300
223.0	Round Side Arm	1	226	8.0	0.0	0.0	0.0	1.00	1.00	0.0	0.0	8.15	56	307
202.0	Commscope LNX-	3	321	13.1	8.0	11.9	7.1	0.80	0.70	0.0	0.0	7.98	150	1193
202.0	Ericsson AIR21	3	264	7.2	4.7	12.0	8.0	0.80	0.71	0.0	0.0	7.98	83	1015
202.0	Ericsson AIR21	3	264	7.2	4.7	12.1	7.9	0.80	0.70	0.0	0.0	7.98	82	1015
202.0	Ericsson KRY 112	3	28	0.6	0.6	6.1	2.7	0.80	0.50	0.0	0.0	7.98	5	109
202.0	Ericsson RRUS-11	3	140	3.5	1.6	17.0	7.2	0.80	0.50	0.0	0.0	7.98	28	539
202.0	Round Sector Frame	3	677	31.4	0.0	0.0	0.0	0.75	0.67	0.0	0.0	7.98	321	2655
196.0	3' Yagi	1	102	9.4	3.0	36.0	3.0	1.00	1.00	0.0	0.0	7.93	63	125
187.0	2' HP Dish	1	225	5.1	2.0	0.0	0.0	1.00	0.79	0.0	0.0	7.85	27	292
187.0	2' HP Dish	1	225	5.1	2.0	0.0	0.0	1.00	0.97	0.0	0.0	7.85	33	292
187.0	Andrew VHLP800-11-	1	466	19.2	4.1	0.0	0.0	1.00	1.00	0.0	0.0	7.85	128	589
180.6	Alcatel-Lucent 1900	6	172	4.0	1.9	17.3	13.0	0.80	0.50	0.0	0.0	7.80	64	1300

Site Number: CT-5035
 Site Name: Tartaglia, CT
 Customer: AT&T Mobility

Code: ANSI/TIA-222-G
 Engineering Number: 65511321

© 2007 - 2016 by ATC IP LLC. All rights reserved.

2/26/2016 4:37:06 PM

Tower Loading

180.6	Alcatel-Lucent 800	3	156	2.7	1.6	13.0	12.2	0.80	0.50	0.0	0.0	7.80	21	608
180.6	Alcatel-Lucent TD-	3	164	6.7	2.2	18.6	6.7	0.80	0.67	0.0	0.0	7.80	72	640
180.6	Argus LLPX310R	3	138	5.2	3.5	11.8	4.5	0.80	0.63	0.0	0.0	7.80	52	518
180.6	DragonWave A-ANT-	1	126	6.0	2.2	0.0	0.0	0.80	0.55	0.0	0.0	7.80	17	158
180.6	DragonWave A-ANT-	1	126	6.0	2.2	0.0	0.0	0.80	0.61	0.0	0.0	7.80	19	158
180.6	DragonWave A-ANT-	1	126	6.0	2.2	0.0	0.0	0.80	1.00	0.0	0.0	7.80	32	158
180.6	Flat Light Sector	3	705	33.2	0.0	0.0	0.0	0.75	0.67	0.0	0.0	7.80	332	2827
180.6	PCTEL GPS-TMG-HR-	1	11	0.3	0.4	3.2	3.2	0.80	1.00	0.0	0.0	7.80	2	14
180.6	RFS APXV9ERR18-C-	1	274	9.3	6.0	11.8	7.9	0.80	0.71	0.0	0.0	7.80	35	343
180.6	RFS APXVSP18-C-	2	260	9.3	6.0	11.8	7.0	0.80	0.71	0.0	0.0	7.80	70	651
180.6	RFS APXVTM14-C-I20	3	204	8.5	4.7	12.6	6.3	0.80	0.66	0.0	0.0	7.80	90	774
180.6	Samsung DAP Heads	3	86	2.1	1.4	11.6	5.3	0.80	0.50	0.0	0.0	7.80	17	334
174.0	5' x 5" x 2" Panel	4	108	4.3	5.0	5.0	2.0	1.00	0.74	0.0	0.0	7.74	84	546
174.0	Andrew 950F65T4E-	2	181	7.2	5.0	11.0	7.0	1.00	0.90	0.0	0.0	7.74	86	442
165.0	20' Omni	1	373	15.2	20.0	4.0	4.0	0.80	1.00	0.0	0.0	7.65	79	461
165.0	CCI	3	53	1.4	0.9	10.6	3.8	0.80	0.50	0.0	0.0	7.65	11	205
165.0	Commscope SBNHH-	3	199	7.0	4.6	11.9	7.1	0.80	0.69	0.0	0.0	7.65	75	746
165.0	Ericsson RRUS-11	3	137	3.5	1.6	17.0	7.2	0.80	0.50	0.0	0.0	7.65	27	530
165.0	Ericsson RRUS-32	3	115	3.7	2.2	12.1	6.8	0.80	0.50	0.0	0.0	7.65	29	451
165.0	Ericsson RRUS-32 B2	3	137	3.4	2.2	12.1	6.8	0.80	0.50	0.0	0.0	7.65	27	529
165.0	Powerwave 7020	6	18	0.6	0.4	8.3	2.4	0.80	0.50	0.0	0.0	7.65	10	132
165.0	Powerwave 7770	3	170	6.6	4.6	11.0	5.0	0.80	0.65	0.0	0.0	7.65	67	638
165.0	Powerwave	9	48	1.6	1.2	9.2	2.6	0.80	0.50	0.0	0.0	7.65	37	546
165.0	Powerwave	12	18	0.4	0.5	4.0	3.0	0.80	0.50	0.0	0.0	7.65	13	277
165.0	Quintel QS66512-3	3	339	9.4	6.0	12.0	9.6	0.80	0.74	0.0	0.0	7.65	109	1302
165.0	Raycap DC6-48-60-	1	101	2.5	2.0	9.7	9.7	0.80	1.00	0.0	0.0	7.65	13	125
165.0	Raycap DC6-48-60-	1	101	2.5	2.0	9.7	9.7	0.80	1.00	0.0	0.0	7.65	13	125
165.0	Round Sector Frame	3	669	31.0	0.0	0.0	0.0	0.75	0.67	0.0	0.0	7.65	304	2623
152.0	ALU RH_2x60-700	3	139	2.8	1.8	12.0	9.0	0.80	0.50	3.0	64.4	7.55	21	541
152.0	ALU RH_2x60-AWS	3	112	2.5	1.7	11.2	7.3	0.80	0.50	3.0	56.8	7.55	19	434
152.0	ALU RH_2x60-PCS	3	100	2.7	1.6	11.2	8.2	0.80	0.50	3.0	63.2	7.55	21	393
152.0	Andrew CBC78-DF	6	24	0.7	0.7	5.9	2.6	0.80	0.50	3.0	31.5	7.55	11	181
152.0	Antel BX-80063/6BF	3	189	8.5	5.7	11.2	5.3	0.80	0.66	3.0	259.2	7.55	86	694
152.0	Commscope HBXX-	6	244	7.9	4.2	12.0	6.5	0.80	0.67	3.0	491.9	7.55	164	1803
152.0	Flat Light Sector	3	702	33.0	0.0	0.0	0.0	0.75	0.67	0.0	0.0	7.52	318	2814
152.0	Kathrein 800	3	153	6.7	4.4	11.9	3.9	0.80	0.62	3.0	192.7	7.55	64	570
152.0	RFS DB-T1-6Z-8AB-	2	150	5.7	2.0	24.0	10.0	0.80	0.50	3.0	87.4	7.55	29	364
140.0	Small Side Lights	3	86	0.9	1.0	8.0	8.0	1.00	1.00	0.0	0.0	7.39	16	341
118.0	10' Omni	1	21	0.4	1.0	2.0	2.0	1.00	1.00	0.0	0.0	7.13	2	27
118.0	Round Side Arm	1	221	7.8	0.0	0.0	0.0	1.00	1.00	0.0	0.0	7.13	48	301
108.0	10' Omni	1	20	0.4	1.0	2.0	2.0	1.00	1.00	0.0	0.0	7.00	2	26
108.0	Round Side Arm	1	220	7.8	0.0	0.0	0.0	1.00	1.00	0.0	0.0	7.00	46	300
80.00	Empty Round Side	1	218	7.7	0.0	0.0	0.0	1.00	1.00	0.0	0.0	6.57	43	298
22.00	3' Dish	1	245	7.1	3.0	0.0	0.0	1.00	0.64	0.0	0.0	5.01	19	318
20.00	GPS	1	38	0.8	1.0	9.0	6.0	1.00	1.00	0.0	0.0	4.91	4	49
8.00	GPS	1	38	0.8	1.0	9.0	6.0	1.00	1.00	0.0	0.0	4.62	3	49
8.00	Round Side Arm	1	208	7.4	0.0	0.0	0.0	1.00	1.00	0.0	0.0	4.62	29	286
Totals		168	30073	1091.5										

Discrete Appurtenance Properties 1.0D + 1.0W Service

Elevation (ft)	Description	Qty	Wt. (lb)	EPA (sf)	Length (ft)	Width (in)	Depth (in)	K _a	Orient. Factor	Vert. Ecc.(ft)	M _u (lb-ft)	Q _z (psf)	F _a (WL) (lb)	P _a (DL) (lb)
240.0	10' Omni	1	25	3.0	10.0	3.0	3.0	1.00	1.00	0.0	0.0	11.92	30	25
240.0	Beacon	1	70	4.5	3.0	18.0	18.0	1.00	1.00	0.0	0.0	11.92	46	70
240.0	Empty Round Side	1	150	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	11.92	53	150

Tower Loading

240.0	Lightning Rod	1	10	1.0	4.0	3.0	3.0	1.00	1.00	0.0	0.0	11.92	10	10
230.0	8' Omni	1	40	2.4	8.0	4.0	4.0	1.00	1.00	0.0	0.0	11.81	24	40
230.0	8' Omni	1	40	2.4	8.0	3.0	3.0	1.00	1.00	0.0	0.0	11.81	24	40
230.0	Round Side Arm	3	150	5.2	0.0	0.0	0.0	1.00	0.67	0.0	0.0	11.81	105	450
223.0	12' Omni	1	40	3.6	12.0	4.0	4.0	1.00	1.00	0.0	0.0	11.74	36	40
223.0	Round Side Arm	1	150	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	11.74	52	150
202.0	Commscope LNX-	3	50	11.4	8.0	11.9	7.1	0.80	0.70	0.0	0.0	11.50	188	151
202.0	Ericsson AIR21	3	90	6.1	4.7	12.0	8.0	0.80	0.71	0.0	0.0	11.50	101	270
202.0	Ericsson AIR21	3	90	6.1	4.7	12.1	7.9	0.80	0.70	0.0	0.0	11.50	100	270
202.0	Ericsson KRY 112	3	11	0.4	0.6	6.1	2.7	0.80	0.50	0.0	0.0	11.50	5	33
202.0	Ericsson RRUS-11	3	51	2.8	1.6	17.0	7.2	0.80	0.50	0.0	0.0	11.50	33	152
202.0	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.67	0.0	0.0	11.50	212	900
196.0	3' Yagi	1	10	3.0	3.0	36.0	3.0	1.00	1.00	0.0	0.0	11.42	29	10
187.0	2' HP Dish	1	90	4.0	2.0	0.0	0.0	1.00	0.79	0.0	0.0	11.31	30	90
187.0	2' HP Dish	1	90	4.0	2.0	0.0	0.0	1.00	0.97	0.0	0.0	11.31	37	90
187.0	Andrew VHLP800-11-	1	121	16.7	4.1	0.0	0.0	1.00	1.00	0.0	0.0	11.31	161	121
180.6	Alcatel-Lucent 1900	6	44	3.8	1.9	17.3	13.0	0.80	0.50	0.0	0.0	11.23	88	264
180.6	Alcatel-Lucent 800	3	64	2.4	1.6	13.0	12.2	0.80	0.50	0.0	0.0	11.23	27	192
180.6	Alcatel-Lucent TD-	3	70	4.7	2.2	18.6	6.7	0.80	0.67	0.0	0.0	11.23	72	210
180.6	Argus LLPX310R	3	29	4.3	3.5	11.8	4.5	0.80	0.63	0.0	0.0	11.23	62	86
180.6	DragonWave A-ANT-	1	27	4.7	2.2	0.0	0.0	0.80	0.55	0.0	0.0	11.23	20	27
180.6	DragonWave A-ANT-	1	27	4.7	2.2	0.0	0.0	0.80	0.61	0.0	0.0	11.23	22	27
180.6	DragonWave A-ANT-	1	27	4.7	2.2	0.0	0.0	0.80	1.00	0.0	0.0	11.23	36	27
180.6	Flat Light Sector	3	400	17.9	0.0	0.0	0.0	0.75	0.67	0.0	0.0	11.23	258	1200
180.6	PCTEL GPS-TMG-HR-	1	1	0.1	0.4	3.2	3.2	0.80	1.00	0.0	0.0	11.23	1	1
180.6	RFS APXV9ERR18-C-	1	62	8.0	6.0	11.8	7.9	0.80	0.71	0.0	0.0	11.23	43	62
180.6	RFS APXVSPP18-C-	2	57	8.0	6.0	11.8	7.0	0.80	0.71	0.0	0.0	11.23	87	114
180.6	RFS APXVTM14-C-I20	3	56	6.3	4.7	12.6	6.3	0.80	0.66	0.0	0.0	11.23	96	168
180.6	Samsung DAP Heads	3	33	1.8	1.4	11.6	5.3	0.80	0.50	0.0	0.0	11.23	21	99
174.0	5' x 5" x 2" Panel	4	30	3.3	5.0	5.0	2.0	1.00	0.74	0.0	0.0	11.14	91	120
174.0	Andrew 950F65T4E-	2	16	4.8	5.0	11.0	7.0	1.00	0.90	0.0	0.0	11.14	81	31
165.0	20' Omni	1	55	6.0	20.0	4.0	4.0	0.80	1.00	0.0	0.0	11.02	45	55
165.0	CCI	3	19	1.0	0.9	10.6	3.8	0.80	0.50	0.0	0.0	11.02	11	58
165.0	Commscope SBNHH-	3	41	5.9	4.6	11.9	7.1	0.80	0.69	0.0	0.0	11.02	91	123
165.0	Ericsson RRUS-11	3	51	2.8	1.6	17.0	7.2	0.80	0.50	0.0	0.0	11.02	31	152
165.0	Ericsson RRUS-32	3	51	2.7	2.2	12.1	6.8	0.80	0.50	0.0	0.0	11.02	30	152
165.0	Ericsson RRUS-32 B2	3	51	2.7	2.2	12.1	6.8	0.80	0.50	0.0	0.0	11.02	30	152
165.0	Powerwave 7020	6	2	0.4	0.4	8.3	2.4	0.80	0.50	0.0	0.0	11.02	9	13
165.0	Powerwave 7770	3	35	5.5	4.6	11.0	5.0	0.80	0.65	0.0	0.0	11.02	80	105
165.0	Powerwave	9	14	1.1	1.2	9.2	2.6	0.80	0.50	0.0	0.0	11.02	37	127
165.0	Powerwave	12	6	0.2	0.5	4.0	3.0	0.80	0.50	0.0	0.0	11.02	9	66
165.0	Quintel QS66512-3	3	112	8.1	6.0	12.0	9.6	0.80	0.74	0.0	0.0	11.02	135	336
165.0	Raycap DC6-48-60-	1	20	1.1	2.0	9.7	9.7	0.80	1.00	0.0	0.0	11.02	8	20
165.0	Raycap DC6-48-60-	1	20	1.1	2.0	9.7	9.7	0.80	1.00	0.0	0.0	11.02	8	20
165.0	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.67	0.0	0.0	11.02	203	900
152.0	ALU RH_2x60-700	3	57	2.2	1.8	12.0	9.0	0.80	0.50	3.0	71.9	10.87	24	172
152.0	ALU RH_2x60-AWS	3	44	1.9	1.7	11.2	7.3	0.80	0.50	3.0	62.5	10.87	21	132
152.0	ALU RH_2x60-PCS	3	46	1.8	1.6	11.2	8.2	0.80	0.50	3.0	61.2	10.87	20	138
152.0	Andrew CBC78-DF	6	7	0.4	0.7	5.9	2.6	0.80	0.50	3.0	29.9	10.87	10	40
152.0	Antel BXA-80063/6BF	3	19	7.3	5.7	11.2	5.3	0.80	0.66	3.0	319.3	10.87	106	58
152.0	Commscope HBXX-	6	31	5.4	4.2	12.0	6.5	0.80	0.67	3.0	483.3	10.87	161	184
152.0	Flat Light Sector	3	400	17.9	0.0	0.0	0.0	0.75	0.67	0.0	0.0	10.83	248	1200
152.0	Kathrein 800	3	24	5.7	4.4	11.9	3.9	0.80	0.62	3.0	233.9	10.87	78	73
152.0	RFS DB-T1-6Z-8AB-	2	7	4.8	2.0	24.0	10.0	0.80	0.50	3.0	106.5	10.87	35	13
140.0	Small Side Lights	3	45	2.0	1.0	8.0	8.0	1.00	1.00	0.0	0.0	10.64	54	135
118.0	10' Omni	1	8	0.1	1.0	2.0	2.0	1.00	1.00	0.0	0.0	10.27	1	8
118.0	Round Side Arm	1	150	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	10.27	45	150
108.0	10' Omni	1	8	0.1	1.0	2.0	2.0	1.00	1.00	0.0	0.0	10.08	1	8
108.0	Round Side Arm	1	150	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	10.08	45	150

Site Number: CT-5035

Code: ANSI/TIA-222-G

© 2007 - 2016 by ATC IP LLC. All rights reserved.

Site Name: Tartaglia, CT

Engineering Number: 65511321

2/26/2016 4:37:06 PM

Customer: AT&T Mobility

Tower Loading

80.00 Empty Round Side	1	150	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	9.46	42	150
22.00 3' Dish	1	100	6.1	3.0	0.0	0.0	1.00	0.64	0.0	0.0	7.21	24	100
20.00 GPS	1	10	1.0	1.0	9.0	6.0	1.00	1.00	0.0	0.0	7.07	6	10
8.00 GPS	1	10	1.0	1.0	9.0	6.0	1.00	1.00	0.0	0.0	6.66	6	10
8.00 Round Side Arm	1	150	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	6.66	29	150
Totals	168	10849	732.4										

Site Number: CT-5035

Code: ANSI/TIA-222-G

© 2007 - 2016 by ATC IP LLC. All rights reserved.

Site Name: Tartaglia, CT

Engineering Number: 65511321

2/26/2016 4:37:06 PM

Customer: AT&T Mobility

Tower Loading

Linear Appurtenance Properties

Elev From (ft)	Elev To (ft)	Description	Qty	Width (in)	Weight (lb/ft)	Pct In Block	Spread On Faces	Bundling Arrangement	Cluster Dia (in)	Out Of Zone	Spacing (in)	Orientation Factor	Ka Override
0.00	240.0	1 1/4" Coax	1	1.55	0.63	0	2	Individual	0.00	N	1.00	1.00	0.01
0.00	240.0	1" Conduit	1	1.30	1.68	0	2	Individual	0.00	N	1.00	1.00	0.01
0.00	230.0	7/8" Coax	2	1.09	0.33	0	3	Individual	0.00	N	1.00	1.00	0.01
0.00	223.0	1 1/4" Coax	1	1.55	0.63	0	2	Individual	0.00	N	1.00	1.00	0.01
0.00	202.0	1 5/8" Coax	7	1.98	0.82	0	3	Individual	0.00	N	1.00	1.00	0.00
0.00	202.0	Waveguide	1	1.50	6.00	0	3	Individual	0.00	N	1.00	1.00	0.00
0.00	196.0	7/8" Coax	1	1.09	0.33	0	3	Individual	0.00	N	1.00	1.00	0.01
0.00	187.0	1/2" Coax	4	0.63	0.15	0	1	Individual	0.00	N	1.00	1.00	0.01
0.00	180.6	1 1/4" Hybriflex	3	1.54	1.00	67	2	Block	0.00	N	0.25	1.00	0.55
0.00	180.6	1.625" Hybrid	1	1.63	1.61	0	2	Individual	0.00	N	1.00	1.00	0.01
0.00	180.6	1/2" Ethernet	3	0.50	0.14	0	2	Individual	0.00	N	1.00	1.00	0.01
0.00	180.6	2" Conduit	2	2.38	3.65	0	1	Individual	0.00	N	1.00	1.00	0.00
0.00	180.6	5/16" Coax	6	0.32	0.04	0	2	Individual	0.00	N	1.00	1.00	0.28
0.00	180.6	Waveguide	1	1.50	6.00	0	2	Individual	0.00	N	1.00	1.00	0.00
0.00	174.0	1 5/8" Coax	6	1.98	0.82	0	1	Individual	0.00	N	1.00	1.00	0.28
0.00	174.0	Waveguide	1	1.50	6.00	0	1	Individual	0.00	N	1.00	1.00	0.00
0.00	165.0	0.39" Fiber Trunk	1	0.39	0.06	0	3	Individual	0.00	N	1.00	1.00	0.01
0.00	165.0	0.39" Fiber Trunk	1	0.39	0.06	0	3	Individual	0.00	N	1.00	1.00	0.01
0.00	165.0	0.78" 8 AWG 6	2	0.78	0.59	0	Lin App	Individual	0.00	N	1.00	1.00	0.01
0.00	165.0	0.78" 8 AWG 6	2	0.78	0.59	0	Lin App	Individual	0.00	N	1.00	1.00	0.01
0.00	165.0	1 1/4" Coax	1	1.55	0.63	0	2	Individual	0.00	N	1.00	1.00	0.01
0.00	165.0	1 5/8" Coax	12	1.98	0.82	50	3	Block	0.00	N	0.25	1.00	0.54
0.00	165.0	Waveguide	1	1.50	6.00	0	3	Individual	0.00	N	1.00	1.00	0.00
0.00	152.0	1 5/8" Coax	12	1.98	0.82	50	3	Block	0.00	N	0.25	1.00	0.54
0.00	152.0	1 5/8" Hybrid	1	1.98	1.30	0	3	Individual	0.00	N	1.00	1.00	0.00
0.00	152.0	1 5/8" Hybrid	1	1.98	1.30	0	3	Individual	0.00	N	1.00	1.00	0.01
0.00	152.0	Waveguide	1	1.50	6.00	0	3	Individual	0.00	N	1.00	1.00	0.00
0.00	118.0	7/8" Coax	1	1.09	0.33	0	2	Individual	0.00	N	1.00	1.00	0.01
0.00	108.0	1 1/4" Coax	1	1.55	0.63	0	2	Individual	0.00	N	1.00	1.00	0.01
0.00	22.00	0.24" Cat 5	1	0.24	0.04	0	Lin App	Individual	0.00	N	1.00	1.00	0.01
0.00	20.00	1/2" Coax	1	0.63	0.15	0	3	Individual	0.00	N	1.00	1.00	0.01
0.00	8.00	1/2" Coax	1	0.63	0.15	0	3	Individual	0.00	N	1.00	1.00	0.00

Site Number: CT-5035
 Site Name: Tartaglia, CT
 Customer: AT&T Mobility

Code: ANSI/TIA-222-G
 Engineering Number: 65511321

© 2007 - 2016 by ATC IP LLC. All rights reserved.
 2/26/2016 4:37:06 PM

Force/Stress Summary

Section: 1		1		Bot Elev (ft): 0.00				Height (ft): 30.000								
		Pu	Len	Bracing %			Fy	Phic	Pn	Num	Shear	Bear	Use			
Max Compression Member		(kip)	Load Case	(ft)	X	Y	Z	KL/R	(ksi)	(kip)	Bolts	Holes	(kip)	(kip)	%	Controls
LEG	PX - 10" DIA PIPE	-330.72	1.2D + 1.6W	30.08	33	33	33	32.8	50.0	669.65	0	0	0.00	0.00	49	Member X
HORIZ	PST - 3-1/2" DIA PIP	-18.06	0.9D + 1.6W 90	18.29	100	100	100	163.8	50.0	22.56	2	0	0.00	42.31	80	Member X
DIAG	PST - 3" DIA PIPE	-35.37	1.2D + 1.6W 90	36.16	32	32	32	0.0	0.0	41.40	3	0	0.00	60.65	85	User Input

Max Tension Member		Pu	Load Case	Fy	Fu	Phit	Pn	Num	Num	Shear	Bear	Use	
		(kip)		(ksi)	(ksi)	(kip)	Bolts	Holes	(kip)	(kip)	(kip)	%	Controls
LEG	PX - 10" DIA PIPE	275.23	0.9D + 1.6W 60	50	65	724.50	0	0	0.00	0.00	37		Member
HORIZ	PST - 3-1/2" DIA PIP	18.52	1.2D + 1.6W 90	50	65	120.60	2	0	0.00	33.93	54		Bolt Bear
DIAG	PST - 3" DIA PIPE	33.34	1.2D + 1.6W 90	50	65	100.35	3	0	0.00	52.65	63		Bolt Bear

Max Splice Forces		Pu	Load Case	phiRnt	Use	Num	Bolt Type	
		(kip)		(kip)	%	Bolts		
Top Tension		273.32	0.9D + 1.6W 60	0.00	0	0		
Top Compression		328.73	1.2D + 1.6W	0.00	0			
Bot Tension		325.26	0.9D + 1.6W 60	726.84	45	12	1" A193-B7	
Bot Compression		383.78	1.2D + 1.6W	0.00	0			

Section: 2		2		Bot Elev (ft): 30.00				Height (ft): 30.000								
		Pu	Len	Bracing %			Fy	Phic	Pn	Num	Shear	Bear	Use			
Max Compression Member		(kip)	Load Case	(ft)	X	Y	Z	KL/R	(ksi)	(kip)	Bolts	Holes	(kip)	(kip)	%	Controls
LEG	PX - 10" DIA PIPE	-271.56	1.2D + 1.6W	30.08	33	33	33	32.8	50.0	669.65	0	0	0.00	0.00	40	Member X
HORIZ	PST - 3" DIA PIPE	-17.32	1.2D + 1.6W 90	16.41	96	96	96	163.0	50.0	18.95	2	0	0.00	40.44	91	Member X
DIAG	PST - 3" DIA PIPE	-38.56	1.2D + 1.6W 90	35.15	31	31	31	112.7	50.0	39.62	3	0	0.00	60.65	97	Member X

Max Tension Member		Pu	Load Case	Fy	Fu	Phit	Pn	Num	Num	Shear	Bear	Use	
		(kip)		(ksi)	(ksi)	(kip)	Bolts	Holes	(kip)	(kip)	(kip)	%	Controls
LEG	PX - 10" DIA PIPE	222.99	0.9D + 1.6W 60	50	65	724.50	0	0	0.00	0.00	30		Member
HORIZ	PST - 3" DIA PIPE	18.19	1.2D + 1.6W 90	50	65	100.35	2	0	0.00	32.43	56		Bolt Bear
DIAG	PST - 3" DIA PIPE	36.00	1.2D + 1.6W 90	50	65	100.35	3	0	0.00	52.65	68		Bolt Bear

Max Splice Forces		Pu	Load Case	phiRnt	Use	Num	Bolt Type	
		(kip)		(kip)	%	Bolts		
Top Tension		221.18	0.9D + 1.6W 60	0.00	0	0		
Top Compression		269.65	1.2D + 1.6W	0.00	0			
Bot Tension		273.32	0.9D + 1.6W 60	654.24	42	12	1 A325	
Bot Compression		328.73	1.2D + 1.6W	0.00	0			

Site Number: CT-5035
 Site Name: Tartaglia, CT
 Customer: AT&T Mobility

Code: ANSI/TIA-222-G
 Engineering Number: 65511321

© 2007 - 2016 by ATC IP LLC. All rights reserved.
 2/26/2016 4:37:06 PM

Force/Stress Summary

Section: 3		3		Bot Elev (ft): 60.00				Height (ft): 20.000							
Max Compression Member		Pu (kip)	Load Case	Len (ft)	Bracing %			Fy (ksi)	PhiC	Pn Num	Num	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG	PX - 10" DIA PIPE	-230.98	1.2D + 1.6W	20.05	50	50	50	33.1	50.0	668.58	0	0	0.00	0.00	34 Member X
HORIZ	PST - 3" DIA PIPE	-15.84	1.2D + 1.6W 90	15.16	100	100	100	156.9	50.0	20.47	2	0	0.00	40.44	77 Member X
DIAG	PST - 3" DIA PIPE	-28.47	1.2D + 1.6W 90	25.88	48	48	48	128.5	50.0	30.49	3	0	0.00	50.54	93 Member X
Max Tension Member		Pu (kip)	Load Case		Fy (ksi)	Fu (ksi)	PhiT	Pn Num	Num	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls		
LEG	PX - 10" DIA PIPE	188.94	0.9D + 1.6W 60		50	65	724.50	0	0	0.00	0.00	26	Member		
HORIZ	PST - 3" DIA PIPE	16.63	1.2D + 1.6W 90		50	65	100.35	2	0	0.00	32.43	51	Bolt Bear		
DIAG	PST - 3" DIA PIPE	26.75	0.9D + 1.6W 90		50	65	100.35	3	0	0.00	43.80	61	Bolt Bear		
Max Splice Forces		Pu (kip)	Load Case		phiRnt (kip)	Use %	Num Bolts	Bolt Type							
Top Tension		187.25	0.9D + 1.6W 60		0.00	0	0								
Top Compression		229.20	1.2D + 1.6W		0.00	0									
Bot Tension		221.18	0.9D + 1.6W 60		654.24	34	12	1 A325							
Bot Compression		269.65	1.2D + 1.6W		0.00	0									

Section: 4		4		Bot Elev (ft): 80.00				Height (ft): 20.000							
Max Compression Member		Pu (kip)	Load Case	Len (ft)	Bracing %			Fy (ksi)	PhiC	Pn Num	Num	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG	PX - 8" DIA PIPE	-191.59	1.2D + 1.6W	20.06	50	50	50	41.8	50.0	506.95	0	0	0.00	0.00	37 Member X
HORIZ	PST - 3" DIA PIPE	-14.59	1.2D + 1.6W 90	13.83	100	100	100	143.2	50.0	24.58	2	0	0.00	40.44	59 Member X
DIAG	PST - 3" DIA PIPE	-27.28	1.2D + 1.6W 90	25.11	48	48	48	124.7	50.0	32.40	3	0	0.00	50.54	84 Member X
Max Tension Member		Pu (kip)	Load Case		Fy (ksi)	Fu (ksi)	PhiT	Pn Num	Num	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls		
LEG	PX - 8" DIA PIPE	154.67	0.9D + 1.6W 60		50	65	576.00	0	0	0.00	0.00	26	Member		
HORIZ	PST - 3" DIA PIPE	14.96	1.2D + 1.6W 90		50	65	100.35	2	0	0.00	32.43	46	Bolt Bear		
DIAG	PST - 3" DIA PIPE	25.59	1.2D + 1.6W 90		50	65	100.35	3	0	0.00	43.80	58	Bolt Bear		
Max Splice Forces		Pu (kip)	Load Case		phiRnt (kip)	Use %	Num Bolts	Bolt Type							
Top Tension		153.07	0.9D + 1.6W 60		0.00	0	0								
Top Compression		189.94	1.2D + 1.6W		0.00	0									
Bot Tension		187.25	0.9D + 1.6W 60		654.24	29	12	1 A325							
Bot Compression		229.20	1.2D + 1.6W		0.00	0									

Site Number: CT-5035
 Site Name: Tartaglia, CT
 Customer: AT&T Mobility

Code: ANSI/TIA-222-G
 Engineering Number: 65511321

© 2007 - 2016 by ATC IP LLC. All rights reserved.
 2/26/2016 4:37:06 PM

Force/Stress Summary

Section: 5		5		Bot Elev (ft): 100.0				Height (ft): 20.000							
Max Compression Member		Pu (kip)	Load Case	Len (ft)	Bracing % X Y Z			Fy (ksi)	Phic (kip)	Pn Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG	PX - 8" DIA PIPE	-150.99	1.2D + 1.6W	20.05	50	50	50	41.8	50.0	507.00	0	0	0.00	0.00	29 Member X
HORIZ	PST - 2-1/2" DIA PIP	-13.56	0.9D + 1.6W 90	12.58	98	98	98	156.3	50.0	15.75	2	0	0.00	38.00	86 Member X
DIAG	PST - 2-1/2" DIA PIP	-27.32	1.2D + 1.6W 90	24.33	48	48	48	0.0	0.0	28.20	3	0	0.00	47.50	96 User Input

Max Tension Member		Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit (kip)	Pn Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG	PX - 8" DIA PIPE	118.86	0.9D + 1.6W 60	50	65	576.00	0	0	0.00	0.00	20	Member
HORIZ	PST - 2-1/2" DIA PIP	14.23	1.2D + 1.6W 90	50	65	76.68	2	0	0.00	30.48	46	Bolt Bear
DIAG	PST - 2-1/2" DIA PIP	25.76	1.2D + 1.6W 90	50	65	76.68	3	0	0.00	41.17	62	Bolt Bear

Max Splice Forces		Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type
Top Tension		117.45	0.9D + 1.6W 60	0.00	0	0	
Top Compression		149.49	1.2D + 1.6W	0.00	0		
Bot Tension		153.07	0.9D + 1.6W 60	654.24	23	12	1 A325
Bot Compression		189.94	1.2D + 1.6W	0.00	0		

Section: 6		6		Bot Elev (ft): 120.0				Height (ft): 20.000							
Max Compression Member		Pu (kip)	Load Case	Len (ft)	Bracing % X Y Z			Fy (ksi)	Phic (kip)	Pn Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG	PX - 8" DIA PIPE	-130.44	1.2D + 1.6W	10.03	100	100	100	41.8	50.0	507.00	0	0	0.00	0.00	25 Member X
HORIZ	PST - 2-1/2" DIA PIP	-12.40	1.2D + 1.6W 90	11.96	100	100	100	151.6	50.0	16.75	2	0	0.00	31.67	74 Member X
DIAG	PST - 3" DIA PIPE	-17.69	1.2D + 1.6W 90	16.08	96	96	96	159.7	50.0	19.75	3	0	0.00	50.54	89 Member X

Max Tension Member		Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit (kip)	Pn Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG	PX - 8" DIA PIPE	98.04	1.2D + 1.6W 60	50	65	576.00	0	0	0.00	0.00	17	Member
HORIZ	PST - 2-1/2" DIA PIP	13.12	1.2D + 1.6W 90	50	65	76.68	2	0	0.00	25.33	51	Bolt Bear
DIAG	PST - 3" DIA PIPE	16.70	0.9D + 1.6W 90	50	65	100.35	3	0	0.00	43.80	38	Bolt Bear

Max Splice Forces		Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type
Top Tension		83.31	0.9D + 1.6W 60	0.00	0	0	
Top Compression		109.41	1.2D + 1.6W	0.00	0		
Bot Tension		117.45	0.9D + 1.6W 60	436.16	27	8	1 A325
Bot Compression		149.49	1.2D + 1.6W	0.00	0		

Site Number: CT-5035
 Site Name: Tartaglia, CT
 Customer: AT&T Mobility

Code: ANSI/TIA-222-G
 Engineering Number: 65511321

© 2007 - 2016 by ATC IP LLC. All rights reserved.
 2/26/2016 4:37:07 PM

Force/Stress Summary

Section: 7		7		Bot Elev (ft): 140.0				Height (ft): 20.000								
		Pu		Len	Bracing %			Fy	PhiC	Pn Num	Num	Shear	Bear	Use		
Max Compression Member		(kip)	Load Case	(ft)	X	Y	Z	KL/R	(ksi)	(kip)	Bolts	Holes	(kip)	(kip)	%	Controls
LEG	PX - 8" DIA PIPE	-91.00	1.2D + 1.6W	10.03	100	100	100	41.8	50.0	507.00	0	0	0.00	0.00	17	Member X
HORIZ	PST - 2-1/2" DIA PIP	-10.76	1.2D + 1.6W 90	10.71	100	100	100	135.8	50.0	20.89	2	0	0.00	31.67	51	Member X
DIAG	PST - 2-1/2" DIA PIP	-16.06	1.2D + 1.6W 90	15.12	100	100	100	0.0	0.0	23.40	3	0	0.00	47.50	68	User Input

		Pu		Fy	Fu	PhiT	Pn Num	Num	Shear	Bear	Use	
Max Tension Member		(kip)	Load Case	(ksi)	(ksi)	(kip)	Bolts	Holes	phiRnv	phiRn	%	Controls
									(kip)	(kip)		
LEG	PX - 8" DIA PIPE	64.48	1.2D + 1.6W 60	50	65	576.00	0	0	0.00	0.00	11	Member
HORIZ	PST - 2-1/2" DIA PIP	11.32	1.2D + 1.6W 90	50	65	76.68	2	0	0.00	25.33	44	Bolt Bear
DIAG	PST - 2-1/2" DIA PIP	15.05	1.2D + 1.6W 90	50	65	76.68	3	0	0.00	41.17	36	Bolt Bear

Max Splice Forces		Pu		phiRnt	Use	Num	
		(kip)	Load Case	(kip)	%	Bolts	Bolt Type
Top Tension		52.35	0.9D + 1.6W 60	0.00	0	0	
Top Compression		71.46	1.2D + 1.6W	0.00	0		
Bot Tension		83.31	0.9D + 1.6W 60	436.16	19	8	1 A325
Bot Compression		109.41	1.2D + 1.6W	0.00	0		

Section: 8		8		Bot Elev (ft): 160.0				Height (ft): 20.000								
		Pu		Len	Bracing %			Fy	PhiC	Pn Num	Num	Shear	Bear	Use		
Max Compression Member		(kip)	Load Case	(ft)	X	Y	Z	KL/R	(ksi)	(kip)	Bolts	Holes	(kip)	(kip)	%	Controls
LEG	PX - 8" DIA PIPE	-56.71	1.2D + 1.6W	10.03	100	100	100	41.8	50.0	507.00	0	0	0.00	0.00	11	Member X
HORIZ	PST - 2-1/2" DIA PIP	-7.27	1.2D + 1.6W 90	9.464	100	100	100	119.9	50.0	26.77	2	0	0.00	31.67	27	Member X
DIAG	PST - 2-1/2" DIA PIP	-11.61	1.2D + 1.6W 90	14.20	96	96	96	172.9	50.0	12.88	3	0	0.00	47.50	90	Member X

		Pu		Fy	Fu	PhiT	Pn Num	Num	Shear	Bear	Use	
Max Tension Member		(kip)	Load Case	(ksi)	(ksi)	(kip)	Bolts	Holes	phiRnv	phiRn	%	Controls
									(kip)	(kip)		
LEG	PX - 8" DIA PIPE	41.19	0.9D + 1.6W 60	50	65	576.00	0	0	0.00	0.00	7	Member
HORIZ	PST - 2-1/2" DIA PIP	7.69	1.2D + 1.6W 90	50	65	76.68	2	0	0.00	25.33	30	Bolt Bear
DIAG	PST - 2-1/2" DIA PIP	10.84	1.2D + 1.6W 90	50	65	76.68	3	0	0.00	41.17	26	Bolt Bear

Max Splice Forces		Pu		phiRnt	Use	Num	
		(kip)	Load Case	(kip)	%	Bolts	Bolt Type
Top Tension		28.56	0.9D + 1.6W 60	0.00	0	0	
Top Compression		41.99	1.2D + 1.6W	0.00	0		
Bot Tension		52.35	0.9D + 1.6W 60	436.16	12	8	1 A325
Bot Compression		71.46	1.2D + 1.6W	0.00	0		

Site Number: CT-5035
 Site Name: Tartaglia, CT
 Customer: AT&T Mobility

Code: ANSI/TIA-222-G
 Engineering Number: 65511321

© 2007 - 2016 by ATC IP LLC. All rights reserved.
 2/26/2016 4:37:07 PM

Force/Stress Summary

Section: 9		9		Bot Elev (ft): 180.0				Height (ft): 20.000								
		Pu		Len	Bracing %			Fy	Phic	Pn	Num	Shear		Bear	Use	
Max Compression Member		(kip)	Load Case	(ft)	X	Y	Z	KL/R	(ksi)	(kip)	Bolts	Holes	(kip)	(kip)	%	Controls
LEG	PX - 8" DIA PIPE	-30.88	1.2D + 1.6W	10.03	100	100	100	41.8	50.0	507.00	0	0	0.00	0.00	6	Member X
HORIZ	PST - 2" DIA PIPE	-4.48	1.2D + 1.6W 90	8.214	100	100	100	125.2	50.0	15.41	2	0	0.00	24.02	29	Member X
DIAG	PST - 2-1/2" DIA PIP	-7.82	1.2D + 1.6W 90	13.35	100	100	100	169.2	50.0	13.45	3	0	0.00	47.50	58	Member X

		Pu		Fy	Fu	Phit	Pn	Num	Num	Shear	Bear	Use	Controls
Max Tension Member		(kip)	Load Case	(ksi)	(ksi)	(kip)	Bolts	Holes		(kip)	(kip)	%	
LEG	PX - 8" DIA PIPE	19.49	1.2D + 1.6W 60	50	65	576.00	0	0	0.00	0.00	3		Member
HORIZ	PST - 2" DIA PIPE	4.76	1.2D + 1.6W 90	50	65	48.15	2	0	0.00	19.22	24		Bolt Bear
DIAG	PST - 2-1/2" DIA PIP	7.24	1.2D + 1.6W 90	50	65	76.68	3	0	0.00	41.17	17		Bolt Bear

Max Splice Forces		Pu		phiRnt	Use	Num	Bolt Type
		(kip)	Load Case	(kip)	%	Bolts	
Top Tension		12.70	0.9D + 1.6W 60	0.00	0	0	
Top Compression		20.92	1.2D + 1.6W	0.00	0		
Bot Tension		28.56	0.9D + 1.6W 60	436.16	7	8	1 A325
Bot Compression		41.99	1.2D + 1.6W	0.00	0		

Section: 10		10		Bot Elev (ft): 200.0				Height (ft): 20.000								
		Pu		Len	Bracing %			Fy	Phic	Pn	Num	Shear		Bear	Use	
Max Compression Member		(kip)	Load Case	(ft)	X	Y	Z	KL/R	(ksi)	(kip)	Bolts	Holes	(kip)	(kip)	%	Controls
LEG	PX - 8" DIA PIPE	-14.01	1.2D + 1.6W	10.02	100	100	100	41.8	50.0	507.06	0	0	0.00	0.00	2	Member X
HORIZ	PST - 2" DIA PIPE	-2.13	1.2D + 1.6W 90	7.026	100	100	100	107.1	50.0	20.80	2	0	0.00	24.02	10	Member X
DIAG	PST - 2-1/2" DIA PIP	-4.38	1.2D + 1.6W 90	12.55	100	100	100	159.1	50.0	15.20	3	0	0.00	47.50	28	Member X

		Pu		Fy	Fu	Phit	Pn	Num	Num	Shear	Bear	Use	Controls
Max Tension Member		(kip)	Load Case	(ksi)	(ksi)	(kip)	Bolts	Holes		(kip)	(kip)	%	
LEG	PX - 8" DIA PIPE	7.74	1.2D + 1.6W 60	50	65	576.00	0	0	0.00	0.00	1		Member
HORIZ	PST - 2" DIA PIPE	2.35	1.2D + 1.6W 90	50	65	48.15	2	0	0.00	19.22	12		Bolt Bear
DIAG	PST - 2-1/2" DIA PIP	3.87	1.2D + 1.6W 90	50	65	76.68	3	0	0.00	41.17	9		Bolt Bear

Max Splice Forces		Pu		phiRnt	Use	Num	Bolt Type
		(kip)	Load Case	(kip)	%	Bolts	
Top Tension		3.82	0.9D + 1.6W 60	0.00	0	0	
Top Compression		7.89	1.2D + 1.6W	0.00	0		
Bot Tension		12.70	0.9D + 1.6W 60	436.16	3	8	1 A325
Bot Compression		20.92	1.2D + 1.6W	0.00	0		

Site Number: CT-5035
 Site Name: Tartaglia, CT
 Customer: AT&T Mobility

Code: ANSI/TIA-222-G
 Engineering Number: 65511321

© 2007 - 2016 by ATC IP LLC. All rights reserved.
 2/26/2016 4:37:07 PM

Force/Stress Summary

Section: 11		11		Bot Elev (ft): 220.0				Height (ft): 20.000							
		Pu		Len	Bracing %			Fy	Phic	Pn	Num	Shear	Bear		
Max Compression Member		(kip)	Load Case	(ft)	X	Y	Z	(ksi)	(kip)	Bolts	Holes	phiRnv	phiRn	Use	Controls
LEG	PX - 8" DIA PIPE	-4.66	1.2D + 1.6W	6.68	100	100	100	27.8	50.0	544.30	0	0	0.00	0.00	0 Member X
HORIZ	PST - 2" DIA PIPE	-1.15	1.2D + 1.6W	6.130	100	100	100	93.5	50.0	25.42	2	0	0.00	24.02	4 Member X
DIAG	PST - 2" DIA PIPE	-2.31	1.2D + 1.6W 90	9.288	100	100	100	141.6	50.0	12.05	3	0	0.00	36.04	19 Member X

Max Tension Member		Pu		Fy	Fu	Phit	Pn	Num	Num	Shear	Bear		
		(kip)	Load Case	(ksi)	(ksi)	(kip)	Bolts	Holes		phiRnv	phiRn	Use	Controls
										(kip)	(kip)	%	
LEG	PX - 8" DIA PIPE	1.48	1.2D + 1.6W 60	50	65	576.00	0	0		0.00	0.00	0	Member
HORIZ	PST - 2" DIA PIPE	1.40	1.2D + 1.6W 90	50	65	48.15	2	0		0.00	19.22	7	Bolt Bear
DIAG	PST - 2" DIA PIPE	1.96	1.2D + 1.6W 90	50	65	48.15	3	0		0.00	31.23	6	Bolt Bear

Max Splice Forces		Pu		phiRnt	Use	Num		
		(kip)	Load Case	(kip)	%	Bolts	Bolt Type	
Top Tension		0.00		0.00	0	0		
Top Compression		0.80	1.2D + 1.0Di +	0.00	0			
Bot Tension		3.82	0.9D + 1.6W 60	436.16	1	8	1 A325	
Bot Compression		7.89	1.2D + 1.6W	0.00	0			

Site Name: Tartaglia, CT
 Site Number: CT-5035
 Engineering Number: 65511321
 Engineer: R. Barrett
 Date: 2/26/2016

Program Last Updated: 5/13/2014
 American Tower Corporation

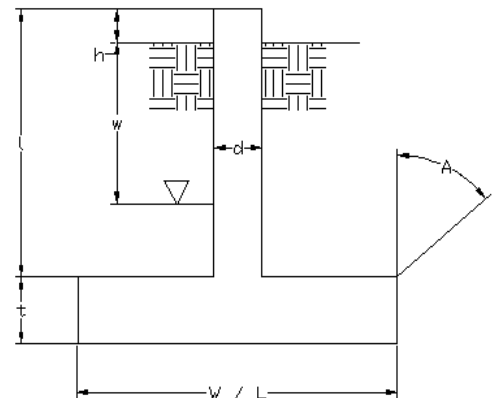
Design Base Loads (Factored) per TIA-222-G

Foundation Mapped:	Y
Moment (M_u):	0.0 k-ft
Shear/Leg (V_u):	55.1 k
Compression/Leg (P_u):	382.6 k
Uplift/Leg (T_u):	321.2 k
Tower Type (GT / SST):	SST
Diameter of Prismatic Portion of Pier (d):	0.0 ft
Depth to Base of Foundation (l + t - h):	6.1 ft
Pier Height Above Ground (h):	0.00 ft
Length / Width of Pad (w):	22.0 ft
Thickness of Pad (t):	6.10 ft
Depth Below Ground Surface to Water Table (w):	99.0 ft
Unit Weight of Concrete:	150.0 pcf
Unit Weight of Water:	62.4 pcf
Unit Weight of Soil Above Water Table:	110.0 pcf
Unit Weight of Soil Below Water Table:	55.0 pcf
Friction Angle of Uplift from Top of Pad:	30 Degrees
Friction Angle of Uplift from Base of Pad:	30 Degrees
Uplift Angle Started at Top or Base of Pad (T/B):	T
Ultimate Skin Friction:	0 psf
Ultimate Compressive Bearing Pressure:	3000 psf
Capacity Increase (Due to Transient Loads):	1.00
Bearing Strength Reduction Factor (ϕ_s):	0.75
Uplift Strength Reduction Factor (ϕ_s):	0.75

Axial Capacities and Design Moment

Considering Uplift Starting at Top of Pad

Volume of Concrete:	4044.4 ft ³
Depth to Uplift Starting Point:	0.0 ft
Soil Volume Above Mat:	0.0 ft ³
Soil Volume Around Mat Edges:	0.0 ft ³
Soil Volume Around Mat Corners:	0.0 ft ³
Volume of Soil:	0.0 ft ³
Weight of Concrete (Bouyancy Considered):	606.7 k
Nominal Uplift Capacity per Leg ($\phi_s T_n$):	455.0 k
Nominal Compressive Capacity per Leg ($\phi_s P_n$):	1089.0 k
P_u :	720.9 k
$T_u / \phi_s T_n$:	0.71 Result: OK
$P_u / \phi_s P_n$:	0.66 Result: OK





City of Bridgeport
Zoning Department
PLANNING AND ECONOMIC DEVELOPMENT

45 Lyon Terrace • Bridgeport, Connecticut 06604
Telephone (203) 576-7217
Fax (203) 576-7213

1330 Chopsy Hill Rd. & E&F Development Co.,
800 Trumbull Ave. owner
N/E corner
Lot: 481.56' x 459.47' x
711.29' x 419.50'

Waive reg. pro. the business use of prop. in an
A-RES. ZONE & waive reg. pro. a structure exceed.
35' in height to permit the erection of a 300'
high radio station tower, accessory transmission
equip. bldg.

PUBLIC HEARING, Monday, August 11, 1986 GRANTED
CONDITIONALLY, subject to the following:

1. The develop. of the subj. prop. shall be substantially in accord with the plans submitted & held on file in the Zoning Department.
2. The petitioner shall file plans & applications for the issuance of a Cert. of Zoning Compl. & a Bldg. Permit.
3. All construction shall conform with the req'ts. of the Basic Bldg. Code of the State of CT.

~~Notice of Variance~~

~~Signed 8/21/86~~

Notice of Variance signed 11/19/86