

Tyler Ramsden, Site Acquisition
c/o New Cingular Wireless, PCS LLC (AT&T)
Centerline Communications, LLC
95 Ryan Drive, Suite 1
Raynham, MA 02767
Mobile: (781) 708-3952
tramsden@clinellc.com

March 21, 2018

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

RE: Notice of Exempt Modification // Site Number: CT5093 (Name: Bridgeport Beardsley)
1000 Trumbull Ave, Bridgeport, CT 06606
N 41.219391 // W 73.202198

Dear Ms. Bachman:

New Cingular Wireless, PCS, LLC (“AT&T”) currently maintains (9) total antennas at 165-foot radiation centerline of the existing 240-foot lattice tower at 1000 Trumbull Ave, Bridgeport, CT. The tower and parcel are owned by American Tower Corporation, LLC. Copies of CSC submission have been mailed to ATC as well as Joseph Ganim, Mayor of City of Bridgeport, and Dennis Buckley, Zoning Administrator, City of Bridgeport. AT&T now intends to install 3 new remote radios onto the existing pipe mounts at the 165-foot radiation centerline.

The current proposal involves radio add only; no antennas will be added.

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 Neil O’Leary, Mayor for the City of Waterbury, as well as the tower owner and the ground owner, Waterbury Center Medical Condominium Association, Inc.

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

Attached to accommodate this filing are construction drawings dated October 17, 2017 by Hudson Design Group, a structural analysis dated August 17, 2017 by American Tower

Corporation, and an Emissions Analysis Report dated November 17, 2017 by Centerline Communications.

1. The proposed modifications will not result in an increase in the height of the existing structure.
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 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 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, as shown in the attached structural analysis dated August 17, 2017 by American Tower Corporation.

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).

Sincerely,

Tyler Ramsden, Site Acquisition
c/o New Cingular Wireless, PCS LLC (AT&T)
Centerline Communications, LLC
95 Ryan Drive, Suite 1
Raynham, MA 02767
Mobile: (781) 708-3952
tramsden@clinellc.com

cc: Joseph Ganim, Mayor, City of Waterbury
Dennis Buckley, Zoning Administrator, City of Bridgeport
Shawn Dunn, Project Manager, American Tower Corporation, Tower and Parcel Owner

1000 TRUMBULL AV

Location 1000 TRUMBULL AV

Mblu 82/ 2778/ 61/B /

Acct# RT-0049550

Owner GLOBAL TOWER ASSETS LLC

Assessment \$310,420

Appraisal \$443,440

PID 32253

Building Count 1

Current Value

Appraisal			
Valuation Year	Improvements	Land	Total
2017	\$75,820	\$367,620	\$443,440

Assessment			
Valuation Year	Improvements	Land	Total
2017	\$53,090	\$257,330	\$310,420

Owner of Record

Owner GLOBAL TOWER ASSETS LLC
Co-Owner
Address 10 PRESIDENTIAL WAY
WOBURN, MA 01801

Sale Price \$0
Certificate
Book & Page 9695/ 74
Sale Date 09/13/2017
Instrument 04

Ownership History

Ownership History					
Owner	Sale Price	Certificate	Book & Page	Instrument	Sale Date
GLOBAL TOWER ASSETS LLC	\$0		9695/ 74	04	09/13/2017
GLOBAL TOWER ASSETS LLC	\$0		9500/ 294	03	09/14/2016
CELL TOWER LEASE ACQUISITION LLC	\$0		7342/ 302	03	01/23/2007
UNISON SITE MANAGEMENT LLC	\$1,925,000		7342/ 299	03	01/23/2007
TARTAGLIA REMO	\$700,000		3018/ 317		07/06/1992

Building Information

Building 1 : Section 1

Year Built:
Living Area: 0
Replacement Cost: \$0


Building Percent**Good:****Replacement Cost****Less Depreciation:** \$0

Building Attributes	
Field	Description
Style	Telephone Bldg
Model	
Grade:	
Stories:	
Occupancy:	
Exterior Wall 1:	
Exterior Wall 2:	
Roof Structure:	
Roof Cover:	
Interior Wall 1:	
Interior Wall 2:	
Interior Flr 1:	
Interior Flr 2:	
Heat Fuel:	
Heat Type:	
AC Type:	
Total Bedrooms	
Total Full Baths	
Total Half Baths	
Total Xtra Fixtrs:	
Total Rooms	
Bath Style:	
Kitchen Style:	
Fireplaces	
Fin Bsmt Area	
Fin Bsmt Quality	
Bsmt Garages	
.	

Building Photo

(<http://images.vgsi.com/photos2/BridgeportCTPhotos//\00\09\9C>)

Building Layout

 Building Layout

(<http://images.vgsi.com/photos2/BridgeportCTPhotos//Sketches/>)

Building Sub-Areas (sq ft)	Legend
No Data for Building Sub-Areas	

Extra Features

Extra Features	Legend
No Data for Extra Features	

Land

Land Use

Use Code 200V
Description Commercial Lnd
Zone RA
Neighborhood 2140
Alt Land Appr Category No

Land Line Valuation

Size (Acres) 3.05
Frontage 0
Depth 0
Assessed Value \$257,330
Appraised Value \$367,620

Outbuildings

Outbuildings						Legend
Code	Description	Sub Code	Sub Description	Size	Value	Bldg #
FN5	Fence 10'			616 LF	\$6,160	1
PAV2	Paving Conc			40 SF	\$110	1
TWR	Tower			240 LF	\$48,000	1
SHD1	Shed	MS	Masonry	1200 SF	\$12,240	1
SHD1	Shed	MS	Masonry	432 SF	\$4,410	1
SHD1	Shed	MS	Masonry	240 SF	\$2,450	1
SHD1	Shed	MS	Masonry	240 SF	\$2,450	1

Valuation History

Appraisal			
Valuation Year	Improvements	Land	Total
2017	\$75,820	\$367,620	\$443,440
2016	\$75,820	\$367,620	\$443,440
2015	\$75,820	\$367,620	\$443,440

Assessment			
Valuation Year	Improvements	Land	Total
2017	\$53,090	\$257,330	\$310,420
2016	\$53,090	\$257,330	\$310,420
2015	\$53,090	\$257,330	\$310,420

UPS Internet Shipping: View/Print Label

1. **Ensure there are no other shipping or tracking labels attached to your package.** Select the Print button on the print dialog box that appears. Note: If your browser does not support this function select Print from the File menu to print the label.

2. **Fold the printed label at the solid line below.** Place the label in a UPS Shipping Pouch. If you do not have a pouch, affix the folded label using clear plastic shipping tape over the entire label.

3. GETTING YOUR SHIPMENT TO UPS

Customers with a Daily Pickup

Your driver will pickup your shipment(s) as usual.

Customers without a Daily Pickup

Take your package to any location of The UPS Store®, UPS Access Point(TM) location, UPS Drop Box, UPS Customer Center, Staples® or Authorized Shipping Outlet near you. Items sent via UPS Return Services(SM) (including via Ground) are also accepted at Drop Boxes. To find the location nearest you, please visit the 'Find Locations' Quick link at ups.com.

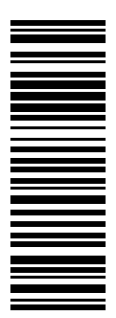
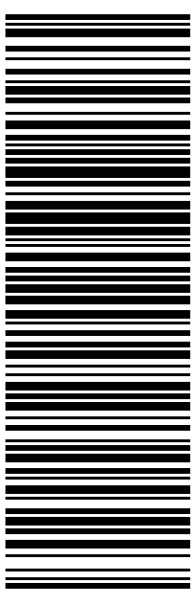

Schedule a same day or future day Pickup to have a UPS driver pickup all of your Internet Shipping packages. Hand the package to any UPS driver in your area.

UPS Access Point™
138 EXPRESS 286
286 BROADWAY
TAUNTON ,MA 02780

UPS Access Point™
MARYN-LOCKR-STOP & SHOP
36 NEW STATE HWY
RAYNHAM ,MA 02767

UPS Access Point™
TAILORS R US
566 WASHINGTON ST
SOUTH EASTON ,MA 02375

FOLD HERE

<p>NANCY GAGNON 508-286-0863 CENTERLINE COMMUNICATIONS 95 RYAN DR RAYNHAM MA 02767</p> <p>SHIP TO: SHAWN DUNN AMERICAN TOWER CORPORATION 10 PRESIDENTIAL WAY WOBURN MA 01801-1053</p>	<p>1 LBS</p> <p style="text-align: right;">1 OF 1</p>	<p>MA 018 9-04</p> 	<p>UPS GROUND</p> <p>TRACKING #: 1Z 9Y4 503 P2 2691 1244</p> 	<p>BILLING: P/P ATTENTION UPS DRIVER: SHIPPER RELEASE</p>  <p style="font-size: small;">UPS 20.0.32. WINTNVS0 97.0A.01.2018</p>
---	---	---	--	--

UPS Internet Shipping: View/Print Label

1. **Ensure there are no other shipping or tracking labels attached to your package.** Select the Print button on the print dialog box that appears. Note: If your browser does not support this function select Print from the File menu to print the label.

2. **Fold the printed label at the solid line below.** Place the label in a UPS Shipping Pouch. If you do not have a pouch, affix the folded label using clear plastic shipping tape over the entire label.

3. GETTING YOUR SHIPMENT TO UPS

Customers with a Daily Pickup

Your driver will pickup your shipment(s) as usual.

Customers without a Daily Pickup

Take your package to any location of The UPS Store®, UPS Access Point(TM) location, UPS Drop Box, UPS Customer Center, Staples® or Authorized Shipping Outlet near you. Items sent via UPS Return Services(SM) (including via Ground) are also accepted at Drop Boxes. To find the location nearest you, please visit the 'Find Locations' Quick link at ups.com.


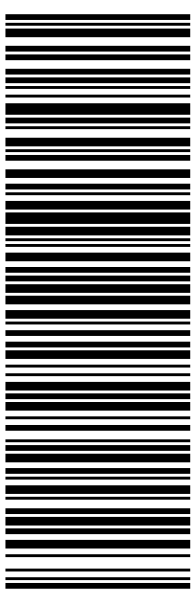

Schedule a same day or future day Pickup to have a UPS driver pickup all of your Internet Shipping packages. Hand the package to any UPS driver in your area.

UPS Access Point™
138 EXPRESS 286
286 BROADWAY
TAUNTON ,MA 02780

UPS Access Point™
MARYN-LOCKR-STOP & SHOP
36 NEW STATE HWY
RAYNHAM ,MA 02767

UPS Access Point™
TAILORS R US
566 WASHINGTON ST
SOUTH EASTON ,MA 02375

FOLD HERE

<p>1 LBS 1 OF 1</p> <p>NANCY GAGNON 508-386-0863 CENTERLINE COMMUNICATIONS 95 RYAN DR RAYNHAM MA 02767</p> <p>SHIP TO: JOSEPH GANIM CITY OF BRIDGEPORT MAYOR'S OFFICE 999 BROAD ST BRIDGEPORT CT 06604-4320</p>	<p>CT 066 9-04</p> 	<p>UPS GROUND</p> <p>TRACKING #: 1Z 9Y4 503 P2 2559 5688</p> 	<p>BILLING: P/P ATTENTION UPS DRIVER: SHIPPER RELEASE</p>  <p style="font-size: small;">UPS 20.0.32. WINTNVS0 97.0A.01.2018</p>
--	---	--	--

UPS Internet Shipping: View/Print Label

1. **Ensure there are no other shipping or tracking labels attached to your package.** Select the Print button on the print dialog box that appears. Note: If your browser does not support this function select Print from the File menu to print the label.

2. **Fold the printed label at the solid line below.** Place the label in a UPS Shipping Pouch. If you do not have a pouch, affix the folded label using clear plastic shipping tape over the entire label.

3. GETTING YOUR SHIPMENT TO UPS

Customers with a Daily Pickup

Your driver will pickup your shipment(s) as usual.

Customers without a Daily Pickup

Take your package to any location of The UPS Store®, UPS Access Point(TM) location, UPS Drop Box, UPS Customer Center, Staples® or Authorized Shipping Outlet near you. Items sent via UPS Return Services(SM) (including via Ground) are also accepted at Drop Boxes. To find the location nearest you, please visit the 'Find Locations' Quick link at ups.com.

Schedule a same day or future day Pickup to have a UPS driver pickup all of your Internet Shipping packages. Hand the package to any UPS driver in your area.

UPS Access Point™
138 EXPRESS 286
286 BROADWAY
TAUNTON ,MA 02780

UPS Access Point™
MARYN-LOCKR-STOP & SHOP
36 NEW STATE HWY
RAYNHAM ,MA 02767

UPS Access Point™
TAILORS R US
566 WASHINGTON ST
SOUTH EASTON ,MA 02375

FOLD HERE

<p>1 LBS 1 OF 1</p> <p>NANCY GAGNON 508-386-0863 CENTERLINE COMMUNICATIONS 95 RYAN DR RAYNHAM MA 02767</p> <p>SHIP TO: DENNIS BUCKLEY CITY OF BRIDGEPORT ZONING DEPARTMENT ROOM 210 45 LYON TERRACE BRIDGEPORT CT 06604-4023</p>	<p>CT 066 9-04</p> 	<p>UPS GROUND</p> <p>TRACKING #: 1Z 9Y4 503 P2 3154 2857</p> 	 <p>UPS 20.0.32. WINTNVS0 97.0A.01.2018</p> <p>BILLING: P/P ATTENTION UPS DRIVER: SHIPPER RELEASE</p>
---	---	--	--



Radio Frequency Emissions Analysis Report

AT&T Existing Facility

Site ID: CT5093

Bridgeport Beardsley
1320 Chopsey Hill Road
Bridgeport, CT 06606

November 17, 2017

Centerline Communications Project Number: 950012-009

Site Compliance Summary	
Compliance Status:	COMPLIANT
Site total MPE% of FCC general population allowable limit:	10.99 %



November 17, 2017

AT&T Mobility – New England
Attn: John Benedetto, RF Manager
550 Cochituate Road
Suite 550 – 13&14
Framingham, MA 06040

Emissions Analysis for Site: **CT5093 – Bridgeport Beardsley**

Centerline Communications, LLC (“Centerline”) was directed to analyze the proposed AT&T facility located at **1320 Chopsey Hill Road, Bridgeport, CT**, for the purpose of determining whether the emissions from the Proposed AT&T Antenna Installation located on this property 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 ($\mu\text{W}/\text{cm}^2$). The number of $\mu\text{W}/\text{cm}^2$ 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 ($\mu\text{W}/\text{cm}^2$). The general population exposure limits for the 700 and 850 MHz Bands are approximately $467 \mu\text{W}/\text{cm}^2$ and $567 \mu\text{W}/\text{cm}^2$ respectively. The general population exposure limit for the 1900 MHz (PCS), 2100 MHz (AWS) and 2300 MHz (WCS) bands is $1000 \mu\text{W}/\text{cm}^2$. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.



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 (see below), 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 AT&T Wireless antenna facility located at **1320 Chopsey Hill Road, Bridgeport, CT**, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since AT&T is proposing highly focused directional panel 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. 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.

All emissions values for additional carriers were taken from the Connecticut Siting Council (CSC) active MPE database. Values in this database are provided by the individual carriers themselves

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

Technology	Frequency Band	Channel Count	Transmit Power per Channel (W)
UMTS	850 MHz	2	30
UMTS	1900 MHz (PCS)	2	30
LTE	700 MHz	4	60
LTE	850 MHz	2	60
LTE	1900 MHz (PCS)	2	60
LTE	2100 MHz (AWS)	2	60
LTE	2300 MHz (WCS)	2	60

Table 1: Channel Data Table



The following antennas listed in *Table 2* were used in the modeling for transmission in the 700 MHz, 850 MHz, 1900 MHz (PCS), 2100 MHz (AWS) and 2300 MHz (WCS) frequency bands. This is based on feedback from the carrier with regards to anticipated antenna selection. Maximum gain values for all antennas are listed in the Inventory and Power Data table below. The maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was used for all calculations. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.

Sector	Antenna Number	Antenna Make / Model	Antenna Centerline (ft)
A	1	Powerwave 7770	165
A	2	Quintel QS66512-3	165
A	3	Commscope SBNHH-1D65A	165
B	1	Powerwave 7770	165
B	2	Quintel QS66512-3	165
B	3	Commscope SBNHH-1D65A	165
C	1	Powerwave 7770	165
C	2	Quintel QS66512-3	165
C	3	Commscope SBNHH-1D65A	165

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.

Antenna ID	Antenna Make / Model	Frequency Bands	Antenna Gain (dBd)	Channel Count	Total TX Power (W)	ERP (W)	MPE %
Antenna A1	Powerwave 7770	850 MHz / 1900 MHz (PCS)	11.4 / 13.4	4	120	2,140.89	0.39
Antenna A2	Quintel QS66512-3	700 MHz / 1900 MHz (PCS) / 2100 MHz (AWS)	10.85 / 13.85 / 14.35	6	360	7,638.60	1.32
Antenna A3	Commscope SBNHH-1D65A	850 MHz / 2300 MHz (WCS) / 700 MHz	10.65 / 15.85 / 10.85	6	360	7,468.26	1.45
Sector A Composite MPE%							3.17
Antenna B1	Powerwave 7770	850 MHz / 1900 MHz (PCS)	11.4 / 13.4	4	120	2,140.89	0.39
Antenna B2	Quintel QS66512-3	700 MHz / 1900 MHz (PCS) / 2100 MHz (AWS)	10.85 / 13.85 / 14.35	6	360	7,638.60	1.32
Antenna B3	Commscope SBNHH-1D65A	850 MHz / 2300 MHz (WCS) / 700 MHz	10.65 / 15.85 / 10.85	6	360	7,468.26	1.45
Sector B Composite MPE%							3.17
Antenna C1	Powerwave 7770	850 MHz / 1900 MHz (PCS)	11.4 / 13.4	4	120	2,140.89	0.39
Antenna C2	Quintel QS66512-3	700 MHz / 1900 MHz (PCS) / 2100 MHz (AWS)	10.85 / 13.85 / 14.35	6	360	7,638.60	1.32
Antenna C3	Commscope SBNHH-1D65A	850 MHz / 2300 MHz (WCS) / 700 MHz	10.65 / 15.85 / 10.85	6	360	7,468.26	1.45
Sector C Composite MPE%							3.17

Table 3: AT&T Emissions Levels



The Following table (*table 4*) shows all additional carriers on site and their MPE% as recorded in the CSC active MPE database for this facility along with the newly calculated maximum AT&T MPE contributions per this report. 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. For this site, all three sectors have the same configuration yielding the same results on all three sectors. *Table 5* below shows a summary for each AT&T Sector as well as the composite MPE value for the site.

Site Composite MPE%	
Carrier	MPE%
AT&T – Max Sector Value	3.17 %
Marcus	0.27 %
Red Star	0.06 %
Metro Call	0.42 %
Clinton Tower	0.43 %
AAT	0.39 %
Nextel	0.15 %
Verizon	1.60 %
Clearwire	0.06 %
Sprint	2.32 %
T-Mobile	1.60 %
MetroPCS	0.52 %
Site Total MPE %:	10.99 %

Table 4: All Carrier MPE Contributions

AT&T Sector A Total:	3.17 %
AT&T Sector B Total:	3.17 %
AT&T Sector C Total:	3.17 %
<hr/>	
Site Total:	10.99 %

Table 5: Site MPE Summary



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 6* below details a breakdown by frequency band and technology for the MPE power values for the maximum calculated AT&T sector(s). For this site, all three sectors have the same configuration yielding the same results on all three sectors.

AT&T _ Frequency Band / Technology (All Sectors)	# Channels	Watts ERP (Per Channel)	Height (feet)	Total Power Density ($\mu\text{W}/\text{cm}^2$)	Frequency (MHz)	Allowable MPE ($\mu\text{W}/\text{cm}^2$)	Calculated % MPE
AT&T 850 MHz UMTS – Antenna 1	2	414.12	165	1.18	850 MHz	567	0.21%
AT&T 1900 MHz (PCS) UMTS – Antenna 1	2	656.33	165	1.87	1900 MHz (PCS)	1000	0.19%
AT&T 700 MHz LTE – Antenna 2	2	729.71	165	2.08	700 MHz	467	0.44%
AT&T 1900 MHz (PCS) LTE – Antenna 2	2	1,455.97	165	4.14	1900 MHz (PCS)	1000	0.41%
AT&T 2100 MHz (AWS) LTE – Antenna 2	2	1,633.62	165	4.65	2100 MHz (AWS)	1000	0.46%
AT&T 850 MHz LTE – Antenna 3	2	696.87	165	1.98	850 MHz	567	0.35%
AT&T 2300 MHz (WCS) LTE – Antenna 3	2	2,307.55	165	6.56	2300 MHz (WCS)	1000	0.66%
AT&T 700 MHz LTE – Antenna 3	2	729.71	165	2.08	700 MHz	467	0.44%
						Total:	3.17%

Table 6: 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:

AT&T Sector	Power Density Value (%)
Sector A:	3.17 %
Sector B:	3.17 %
Sector C:	3.17 %
AT&T Maximum Total (per sector):	3.17 %
Site Total:	10.99 %
Site Compliance Status:	COMPLIANT

The anticipated composite MPE value for this site assuming all carriers present is **10.99 %** of the allowable FCC established general population limit sampled at the ground level. This is based upon values listed in the Connecticut Siting Council database for existing carrier emissions.

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.

A handwritten signature in black ink, appearing to read 'Scott Heffernan', is positioned above the printed name.

Scott Heffernan
RF Engineering Director
Centerline Communications, LLC
95 Ryan Drive, Suite 1
Raynham, MA 02767



AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure : 240 ft Self Supported Tower
ATC Site Name : Tartaglia, CT
ATC Site Number : 383598
Engineering Number : 12132278_C3_02
Proposed Carrier : AT&T Mobility
Carrier Site Name : Bridgeport CT
Carrier Site Number : CT5093
Site Location : 1000 Trumbull Avenue
Bridgeport, CT 06606-0000
41.218800,-73.201700
County : Fairfield
Date : August 17, 2017
Max Usage : 81%
Result : Pass

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

Robert D. Barrett

Reviewed By:

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:	97 mph (3-Second Gust, V_{asd}) / 125 mph (3-Second Gust, V_{ult})
Basic Wind Speed w/ Ice:	50 mph (3-Second Gust) w/ 3/4" radial ice concurrent
Code:	ANSI/TIA-222-G / 2012 IBC / 2016 Connecticut State Building Code
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 AIR32 B66Aa/B2a	Sector Frames	(7) 1 5/8" Coax (1) 1" Hybrid	T-Mobile
		3	Ericsson RRUS11			
		3	Commscope LNX-6515DS-VTM			
		3	Ericsson KRY112 144-1			
		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	Commscope SBNHH-1D65A			
		3	Ericsson RRUS-32 B2			
		3	Quintel QS66512-3			
		1	Commscope WCS-IMFQ-AMT			
		3	Powerwave 7770			
		3	Ericsson RRUS-11			
		3	Ericsson RRUS-32			
		2	Raycap DC6-48-60-18-8F			
		9	Powerwave LGP21401			
		3	CCI DTMABP7819VG12A			
		6	Powerwave 7020			
12	Powerwave LGP21901					



Existing and Reserved Equipment (Continued)

Elevation ¹ (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
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			
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					
No loading considered as to be removed						

Proposed Equipment

Elevation ¹ (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
165.0	165.0	3	Ericsson RRUS 32 B66	Sector Frames	-	AT&T Mobility

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	40%	Pass
Diagonals	81%	Pass
Horizontals	75%	Pass
Anchor Bolts	45%	Pass
Leg Bolts	33%	Pass

Foundations

Reaction Component	Original Design Reactions	Factored Design Reactions*	Analysis Reactions	% of Design
Uplift (Kips)	290.0	391.5	256.4	65%
Axial (Kips)	363.0	490.1	317.5	65%
Shear (Kips)	54.0	72.9	45.9	63%

* The design reactions are factored by 1.35 per ANSI/TIA-222-G, Sec. 15.5.1

The structure base reactions resulting from this analysis are acceptable when compared to those shown on the original structure drawings, 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	0.112	0.016	0.044
	2' HP Dish				
	Andrew VHLP800-11-DW1				
180.6	DragonWave A-ANT-11G-2C	Sprint Nextel	0.104	0.016	0.045
	DragonWave A-ANT-11G-2C				
	DragonWave A-ANT-11G-2C				
165.0	Ericsson RRUS 32 B66	AT&T Mobility	0.089		
22.0	3' Dish	--	0.008	0.003	0.024

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



Standard Conditions

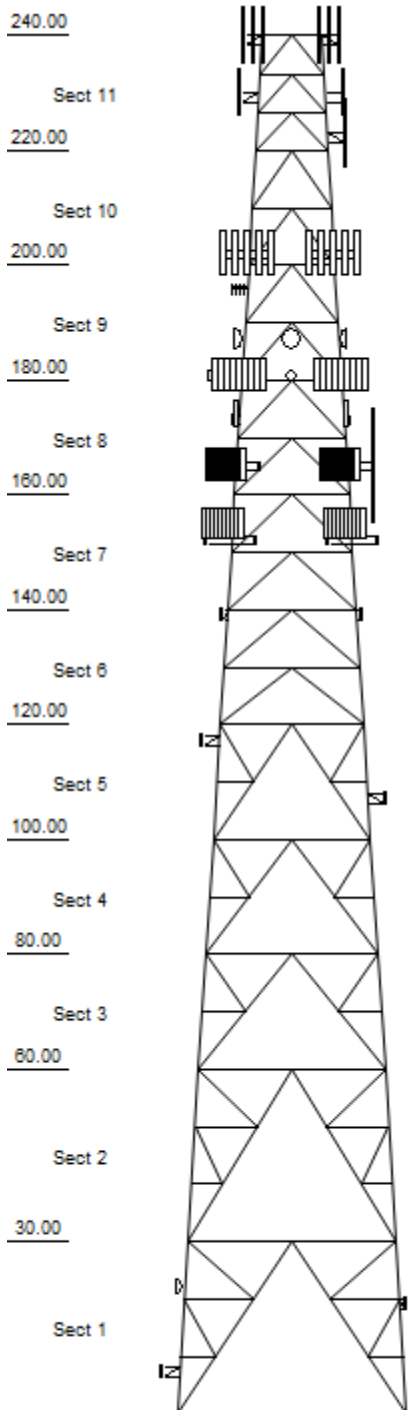
All engineering services are performed on the basis that the information used is current and correct. This information may consist of, but is not necessary limited, to:

- 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 - 2017 by ATC IP LLC. All rights reserved.

Loads: 97 mph no ice
 50 mph w/ 3/4" radial ice
 Site Class: D Ss: 0.21 S1: 0.06
 60 mph Serviceability

Job Information

Tower : 383598 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 AIR32 B66Aa/B2a
202.00	Panel	3	Ericsson RRUS11
202.00	Panel	3	Commscope LNX-6515DS-VTM
202.00	Panel	3	Ericsson KRY112 144-1
202.00	Panel	3	Ericsson AIR21 B2A/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 B66
165.00	Panel	3	Commscope SBNHH-1D65A
165.00	Panel	3	Ericsson RRUS-32 B2
165.00	Panel	3	Quintel QS66512-3
165.00	Panel	1	Commscope WCS-IMFQ-AMT
165.00	Panel	3	Powerwave 7770
165.00	Panel	3	Ericsson RRUS-11
165.00	Panel	3	Ericsson RRUS-32
165.00	Panel	1	Raycap DC6-48-60-18-8F
165.00	Panel	1	Raycap DC6-48-60-18-8F
165.00	Panel	9	Powerwave LGP21401
165.00	Panel	3	CCI DTMABP7819VG12A
165.00	Panel	6	Powerwave 7020
165.00	Panel	12	Powerwave LGP21901
165.00	Mounting Frame	3	Round Sector Frame
165.00	Whip	1	20' Omni

© 2007 - 2017 by ATC IP LLC. All rights reserved.

Job Information		
Tower : 383598	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	6	Andrew CBC78-DF
152.00 Panel	2	RFS DB-T1-6Z-8AB-0Z
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
0.00	240.00	1	1" Conduit
0.00	240.00	1	1 1/4" Coax
0.00	230.00	2	7/8" Coax
0.00	223.00	1	1 1/4" Coax
0.00	202.00	1	Waveguide
0.00	202.00	1	1" Hybrid
0.00	202.00	7	1 5/8" Coax
0.00	196.00	1	7/8" Coax
0.00	187.00	4	1/2" Coax
0.00	180.60	1	Waveguide
0.00	180.60	6	5/16" Coax
0.00	180.60	2	2" Conduit
0.00	180.60	3	1/2" Ethernet
0.00	180.60	1	1.625" Hybrid
0.00	180.60	3	1 1/4" Hybriflex
0.00	174.00	1	Waveguide
0.00	174.00	6	1 5/8" Coax
0.00	165.00	1	Waveguide
0.00	165.00	12	1 5/8" Coax
0.00	165.00	1	1 1/4" Coax
0.00	165.00	2	0.78" 8 AWG 6
0.00	165.00	2	0.78" 8 AWG 6
0.00	165.00	1	0.39" Fiber Trunk
0.00	165.00	1	0.39" Fiber Trunk
0.00	152.00	1	Waveguide
0.00	152.00	1	1 5/8" Hybrid
0.00	152.00	1	1 5/8" Hybrid
0.00	152.00	12	1 5/8" Coax
0.00	118.00	1	7/8" Coax
0.00	108.00	1	1 1/4" Coax
0.00	22.00	1	0.24" Cat 5
0.00	20.00	1	1/2" Coax
0.00	8.00	1	1/2" Coax

Global Base Foundation Design Loads			
Load Case	Moment (k-ft)	Vertical (kip)	Horizontal (kip)
DL + WL	9,874.53	104.50	76.56
DL + WL + IL	3,465.37	250.65	27.45

© 2007 - 2017 by ATC IP LLC. All rights reserved.

Job Information		
Tower : 383598	Location : Tartaglia, CT	
Code : ANSI/TIA-222-G	Shape : Triangle	Base Width : 40.33 ft
Client : AT&T Mobility		Top Width : 10.93 ft

Individual Base Foundation Design Loads		
Vertical (kip)	Uplift (kip)	Horizontal (kip)
317.53	256.39	45.91

Site Number: 383598
Site Name: Tartaglia, CT
Customer: AT&T Mobility

Code: ANSI/TIA-222-G
Engineering Number: 12132278_C3_02

© 2007 - 2017 by ATC IP LLC. All rights reserved.

8/17/2017 5:43:36 PM

Analysis Parameters

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

Ice & Wind Parameters

Structure Class:	II	Design Windspeed Without Ice:	97 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	C_S :	0.051
S_S :	0.207	S_1 :	0.065	C_S , Max:	0.051
F_a :	1.600	F_V :	2.400	C_S , Min:	0.030
S_{ds} :	0.221	S_{d1} :	0.104		

Load Cases

1.2D + 1.6W Normal	97 mph Normal to Face with No Ice
1.2D + 1.6W 60 deg	97 mph 60 degree with No Ice
1.2D + 1.6W 90 deg	97 mph 90 degree with No Ice
1.2D + 1.6W 120 deg	97 mph 120 degree with No Ice
1.2D + 1.6W 180 deg	97 mph 180 degree with No Ice
1.2D + 1.6W 210 deg	97 mph 210 degree with No Ice
1.2D + 1.6W 240 deg	97 mph 240 degree with No Ice
1.2D + 1.6W 300 deg	97 mph 300 degree with No Ice
1.2D + 1.6W 330 deg	97 mph 330 degree with No Ice
0.9D + 1.6W Normal	97 mph Normal to Face with No Ice (Reduced DL)
0.9D + 1.6W 60 deg	97 mph 60 deg with No Ice (Reduced DL)
0.9D + 1.6W 90 deg	97 mph 90 deg with No Ice (Reduced DL)
0.9D + 1.6W 120 deg	97 mph 120 deg with No Ice (Reduced DL)
0.9D + 1.6W 180 deg	97 mph 180 deg with No Ice (Reduced DL)
0.9D + 1.6W 210 deg	97 mph 210 deg with No Ice (Reduced DL)
0.9D + 1.6W 240 deg	97 mph 240 deg with No Ice (Reduced DL)
0.9D + 1.6W 300 deg	97 mph 300 deg with No Ice (Reduced DL)
0.9D + 1.6W 330 deg	97 mph 330 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 deg with 0.75 in Radial Ice
1.2D + 1.0Di + 1.0Wi 90 deg	50 mph 90 deg with 0.75 in Radial Ice

Site Number: 383598
Site Name: Tartaglia, CT
Customer: AT&T Mobility

Code: ANSI/TIA-222-G
Engineering Number: 12132278_C3_02

© 2007 - 2017 by ATC IP LLC. All rights reserved.

8/17/2017 5:43:36 PM

Analysis Parameters

1.2D + 1.0Di + 1.0Wi 120 deg	50 mph 120 deg with 0.75 in Radial Ice
1.2D + 1.0Di + 1.0Wi 180 deg	50 mph 180 deg with 0.75 in Radial Ice
1.2D + 1.0Di + 1.0Wi 210 deg	50 mph 210 deg with 0.75 in Radial Ice
1.2D + 1.0Di + 1.0Wi 240 deg	50 mph 240 deg with 0.75 in Radial Ice
1.2D + 1.0Di + 1.0Wi 300 deg	50 mph 300 deg with 0.75 in Radial Ice
1.2D + 1.0Di + 1.0Wi 330 deg	50 mph 330 deg 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 deg
(1.2 + 0.2Sds) * DL + E 90 deg	Seismic 90 deg
(1.2 + 0.2Sds) * DL + E 120 deg	Seismic 120 deg
(1.2 + 0.2Sds) * DL + E 180 deg	Seismic 180 deg
(1.2 + 0.2Sds) * DL + E 210 deg	Seismic 210 deg
(1.2 + 0.2Sds) * DL + E 240 deg	Seismic 240 deg
(1.2 + 0.2Sds) * DL + E 300 deg	Seismic 300 deg
(1.2 + 0.2Sds) * DL + E 330 deg	Seismic 330 deg
(0.9 - 0.2Sds) * DL + E Normal	Seismic (Reduced DL) Normal
(0.9 - 0.2Sds) * DL + E 60 deg	Seismic (Reduced DL) 60 deg
(0.9 - 0.2Sds) * DL + E 90 deg	Seismic (Reduced DL) 90 deg
(0.9 - 0.2Sds) * DL + E 120 deg	Seismic (Reduced DL) 120 deg
(0.9 - 0.2Sds) * DL + E 180 deg	Seismic (Reduced DL) 180 deg
(0.9 - 0.2Sds) * DL + E 210 deg	Seismic (Reduced DL) 210 deg
(0.9 - 0.2Sds) * DL + E 240 deg	Seismic (Reduced DL) 240 deg
(0.9 - 0.2Sds) * DL + E 300 deg	Seismic (Reduced DL) 300 deg
(0.9 - 0.2Sds) * DL + E 330 deg	Seismic (Reduced DL) 330 deg
1.0D + 1.0W Service Normal	Serviceability - 60 mph Wind Normal
1.0D + 1.0W Service 60 deg	Serviceability - 60 mph Wind 60 deg
1.0D + 1.0W Service 90 deg	Serviceability - 60 mph Wind 90 deg
1.0D + 1.0W Service 120 deg	Serviceability - 60 mph Wind 120 deg
1.0D + 1.0W Service 180 deg	Serviceability - 60 mph Wind 180 deg
1.0D + 1.0W Service 210 deg	Serviceability - 60 mph Wind 210 deg
1.0D + 1.0W Service 240 deg	Serviceability - 60 mph Wind 240 deg
1.0D + 1.0W Service 300 deg	Serviceability - 60 mph Wind 300 deg
1.0D + 1.0W Service 330 deg	Serviceability - 60 mph Wind 330 deg

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	Lightning Rod	1	10	1.0	4.0	3.0	3.0	1.00	1.00	0.0	0.0	31.16	42	14
240.0	10' Omni	1	25	3.0	10.0	3.0	3.0	1.00	1.00	0.0	0.0	31.16	127	36
240.0	Beacon	1	70	4.5	3.0	18.0	18.0	1.00	1.00	0.0	0.0	31.16	191	101
240.0	Empty Round Side	1	150	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	31.16	220	216
230.0	8' Omni	1	40	2.4	8.0	4.0	4.0	1.00	1.00	0.0	0.0	30.88	101	58
230.0	8' Omni	1	40	2.4	8.0	3.0	3.0	1.00	1.00	0.0	0.0	30.88	101	58
230.0	Round Side Arm	3	150	5.2	0.0	0.0	0.0	1.00	0.67	0.0	0.0	30.88	439	648
223.0	12' Omni	1	40	3.6	12.0	4.0	4.0	1.00	1.00	0.0	0.0	30.68	150	58
223.0	Round Side Arm	1	150	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	30.68	217	216
202.0	Ericsson KRY112	3	11	0.4	0.6	6.1	2.7	0.80	0.50	0.0	0.0	30.05	18	48
202.0	Ericsson RRUS11	3	51	2.8	1.6	17.0	7.2	0.80	0.50	0.0	0.0	30.05	137	219
202.0	Ericsson AIR21	3	90	5.8	4.7	12.0	8.0	0.80	0.71	0.0	0.0	30.05	404	389
202.0	Ericsson AIR32	3	132	6.5	4.7	12.9	8.7	0.80	0.71	0.0	0.0	30.05	453	571
202.0	Commscope LNX-	3	50	11.4	8.0	11.9	7.1	0.80	0.70	0.0	0.0	30.05	786	217
202.0	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.67	0.0	0.0	30.05	887	1296
196.0	3' Yagi	1	10	3.0	3.0	36.0	3.0	1.00	1.00	0.0	0.0	29.86	121	14
187.0	2' HP Dish	1	90	4.0	2.0	0.0	0.0	1.00	0.79	0.0	0.0	29.56	126	130
187.0	2' HP Dish	1	90	4.0	2.0	0.0	0.0	1.00	0.97	0.0	0.0	29.56	154	130
187.0	Andrew VHLP800-11-	1	121	16.7	4.1	0.0	0.0	1.00	1.00	0.0	0.0	29.56	672	174
180.6	PCTEL GPS-TMG-HR-	1	1	0.1	0.4	3.2	3.2	0.80	1.00	0.0	0.0	29.35	3	1
180.6	Samsung DAP Heads	3	33	1.8	1.4	11.6	5.3	0.80	0.50	0.0	0.0	29.35	87	143
180.6	Alcatel-Lucent 800	3	64	2.4	1.6	13.0	12.2	0.80	0.50	0.0	0.0	29.35	115	276
180.6	Alcatel-Lucent 1900	6	44	3.8	1.9	17.3	13.0	0.80	0.50	0.0	0.0	29.35	367	380
180.6	Argus LLPX310R	3	29	4.3	3.5	11.8	4.5	0.80	0.63	0.0	0.0	29.35	259	124
180.6	DragonWave A-ANT-	1	27	4.7	2.2	0.0	0.0	0.80	0.55	0.0	0.0	29.35	82	39
180.6	DragonWave A-ANT-	1	27	4.7	2.2	0.0	0.0	0.80	0.61	0.0	0.0	29.35	91	39
180.6	DragonWave A-ANT-	1	27	4.7	2.2	0.0	0.0	0.80	1.00	0.0	0.0	29.35	150	39
180.6	Alcatel-Lucent TD-	3	70	4.7	2.2	18.6	6.7	0.80	0.67	0.0	0.0	29.35	303	302
180.6	RFS APXVTM14-C-I20	3	56	6.3	4.7	12.6	6.3	0.80	0.66	0.0	0.0	29.35	401	242
180.6	RFS APXVSP18-C-	2	57	8.0	6.0	11.8	7.0	0.80	0.71	0.0	0.0	29.35	364	164
180.6	RFS APXV9ERR18-C-	1	62	8.0	6.0	11.8	7.9	0.80	0.71	0.0	0.0	29.35	182	89
180.6	Flat Light Sector	3	400	17.9	0.0	0.0	0.0	0.75	0.67	0.0	0.0	29.35	1077	1728
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	29.12	382	173
174.0	Andrew 950F65T4E-	2	16	4.8	5.0	11.0	7.0	1.00	0.90	0.0	0.0	29.12	339	45
165.0	Powerwave	12	6	0.2	0.5	4.0	3.0	0.80	0.50	0.0	0.0	28.79	38	95
165.0	Powerwave 7020	6	2	0.4	0.4	8.3	2.4	0.80	0.50	0.0	0.0	28.79	38	19
165.0	CCI	3	19	1.0	0.9	11.0	3.8	0.80	0.50	0.0	0.0	28.79	46	83
165.0	Commscope WCS-	1	30	1.0	0.9	10.6	6.9	0.80	1.00	0.0	0.0	28.79	31	42
165.0	Powerwave	9	14	1.1	1.2	9.2	2.6	0.80	0.50	0.0	0.0	28.79	155	183
165.0	Raycap DC6-48-60-	1	20	1.1	2.0	9.7	9.7	0.80	1.00	0.0	0.0	28.79	35	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	28.79	35	29
165.0	Ericsson RRUS-32	3	51	2.7	2.2	12.1	6.8	0.80	0.50	0.0	0.0	28.79	126	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	28.79	126	219
165.0	Ericsson RRUS 32	3	53	2.7	2.3	12.1	7.0	0.80	0.50	0.0	0.0	28.79	129	229
165.0	Ericsson RRUS-11	3	51	2.8	1.6	17.0	7.2	0.80	0.50	0.0	0.0	28.79	131	219
165.0	Powerwave 7770	3	35	5.5	4.6	11.0	5.0	0.80	0.65	0.0	0.0	28.79	336	151
165.0	Commscope SBNHH-	3	41	5.9	4.6	11.9	7.1	0.80	0.69	0.0	0.0	28.79	381	177
165.0	20' Omni	1	55	6.0	20.0	4.0	4.0	0.80	1.00	0.0	0.0	28.79	188	79
165.0	Quintel QS66512-3	3	105	8.1	6.0	12.0	9.6	0.80	0.74	0.0	0.0	28.79	565	454
165.0	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.67	0.0	0.0	28.79	850	1296
152.0	Andrew CBC78-DF	6	7	0.4	0.7	5.9	2.6	0.80	0.50	3.0	125.2	28.42	42	57
152.0	ALU RH_2x60-PCS	3	46	1.8	1.6	11.2	8.2	0.80	0.50	3.0	256.0	28.42	85	199
152.0	ALU RH_2x60-AWS	3	44	1.9	1.7	11.2	7.3	0.80	0.50	3.0	261.6	28.42	87	190
152.0	ALU RH_2x60-700	3	57	2.2	1.8	12.0	9.0	0.80	0.50	3.0	300.5	28.42	100	247

Site Number: 383598

Code:

ANSI/TIA-222-G

© 2007 - 2017 by ATC IP LLC. All rights reserved.

Site Name: Tartaglia, CT

Engineering Number: 12132278_C3_02

8/17/2017 5:43:36 PM

Customer: AT&T Mobility

Tower Loading

152.0	RFS DB-T1-6Z-8AB-	2	7	4.8	2.0	24.0	10.0	0.80	0.50	3.0	445.2	28.42	148	19
152.0	Commscope HBXX-	6	31	5.4	4.2	12.0	6.5	0.80	0.67	3.0	2020.9	28.42	674	264
152.0	Kathrein 800	3	24	5.7	4.4	11.9	3.9	0.80	0.62	3.0	978.2	28.42	326	105
152.0	Antel BXA-80063/6BF	3	19	7.3	5.7	11.2	5.3	0.80	0.66	3.0	1335.1	28.42	445	83
152.0	Flat Light Sector	3	400	17.9	0.0	0.0	0.0	0.75	0.67	0.0	0.0	28.30	1039	1728
140.0	Small Side Lights	3	45	2.0	1.0	8.0	8.0	1.00	1.00	0.0	0.0	27.81	227	194
118.0	10' Omni	1	8	0.1	1.0	2.0	2.0	1.00	1.00	0.0	0.0	26.83	5	12
118.0	Round Side Arm	1	150	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	26.83	190	216
108.0	10' Omni	1	8	0.1	1.0	2.0	2.0	1.00	1.00	0.0	0.0	26.34	5	12
108.0	Round Side Arm	1	150	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	26.34	186	216
80.00	Empty Round Side	1	150	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	24.72	175	216
22.00	3' Dish	1	100	6.1	3.0	0.0	0.0	1.00	0.64	0.0	0.0	18.84	100	144
20.00	GPS	1	10	1.0	1.0	9.0	6.0	1.00	1.00	0.0	0.0	18.47	25	14
8.00	GPS	1	10	1.0	1.0	9.0	6.0	1.00	1.00	0.0	0.0	17.40	24	14
8.00	Round Side Arm	1	150	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	17.40	123	216
Totals		172	11143	742.0										

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	Lightning Rod	1	10	1.0	4.0	3.0	3.0	1.00	1.00	0.0	0.0	31.16	42	8
240.0	10' Omni	1	25	3.0	10.0	3.0	3.0	1.00	1.00	0.0	0.0	31.16	127	20
240.0	Beacon	1	70	4.5	3.0	18.0	18.0	1.00	1.00	0.0	0.0	31.16	191	57
240.0	Empty Round Side	1	150	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	31.16	220	122
230.0	8' Omni	1	40	2.4	8.0	4.0	4.0	1.00	1.00	0.0	0.0	30.88	101	32
230.0	8' Omni	1	40	2.4	8.0	3.0	3.0	1.00	1.00	0.0	0.0	30.88	101	32
230.0	Round Side Arm	3	150	5.2	0.0	0.0	0.0	1.00	0.67	0.0	0.0	30.88	439	365
223.0	12' Omni	1	40	3.6	12.0	4.0	4.0	1.00	1.00	0.0	0.0	30.68	150	32
223.0	Round Side Arm	1	150	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	30.68	217	122
202.0	Ericsson KRY112	3	11	0.4	0.6	6.1	2.7	0.80	0.50	0.0	0.0	30.05	18	27
202.0	Ericsson RRUS11	3	51	2.8	1.6	17.0	7.2	0.80	0.50	0.0	0.0	30.05	137	123
202.0	Ericsson AIR21	3	90	5.8	4.7	12.0	8.0	0.80	0.71	0.0	0.0	30.05	404	219
202.0	Ericsson AIR32	3	132	6.5	4.7	12.9	8.7	0.80	0.71	0.0	0.0	30.05	453	321
202.0	Commscope LNX-	3	50	11.4	8.0	11.9	7.1	0.80	0.70	0.0	0.0	30.05	786	122
202.0	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.67	0.0	0.0	30.05	887	729
196.0	3' Yagi	1	10	3.0	3.0	36.0	3.0	1.00	1.00	0.0	0.0	29.86	121	8
187.0	2' HP Dish	1	90	4.0	2.0	0.0	0.0	1.00	0.79	0.0	0.0	29.56	126	73
187.0	2' HP Dish	1	90	4.0	2.0	0.0	0.0	1.00	0.97	0.0	0.0	29.56	154	73
187.0	Andrew VHLP800-11-	1	121	16.7	4.1	0.0	0.0	1.00	1.00	0.0	0.0	29.56	672	98
180.6	PCTEL GPS-TMG-HR-	1	1	0.1	0.4	3.2	3.2	0.80	1.00	0.0	0.0	29.35	3	0
180.6	Samsung DAP Heads	3	33	1.8	1.4	11.6	5.3	0.80	0.50	0.0	0.0	29.35	87	80
180.6	Alcatel-Lucent 800	3	64	2.4	1.6	13.0	12.2	0.80	0.50	0.0	0.0	29.35	115	156
180.6	Alcatel-Lucent 1900	6	44	3.8	1.9	17.3	13.0	0.80	0.50	0.0	0.0	29.35	367	214
180.6	Argus LLPX310R	3	29	4.3	3.5	11.8	4.5	0.80	0.63	0.0	0.0	29.35	259	69
180.6	DragonWave A-ANT-	1	27	4.7	2.2	0.0	0.0	0.80	0.55	0.0	0.0	29.35	82	22
180.6	DragonWave A-ANT-	1	27	4.7	2.2	0.0	0.0	0.80	0.61	0.0	0.0	29.35	91	22
180.6	DragonWave A-ANT-	1	27	4.7	2.2	0.0	0.0	0.80	1.00	0.0	0.0	29.35	150	22
180.6	Alcatel-Lucent TD-	3	70	4.7	2.2	18.6	6.7	0.80	0.67	0.0	0.0	29.35	303	170
180.6	RFS APXVMT14-C-I20	3	56	6.3	4.7	12.6	6.3	0.80	0.66	0.0	0.0	29.35	401	136
180.6	RFS APXVSPP18-C-	2	57	8.0	6.0	11.8	7.0	0.80	0.71	0.0	0.0	29.35	364	92
180.6	RFS APXV9ERR18-C-	1	62	8.0	6.0	11.8	7.9	0.80	0.71	0.0	0.0	29.35	182	50
180.6	Flat Light Sector	3	400	17.9	0.0	0.0	0.0	0.75	0.67	0.0	0.0	29.35	1077	972
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	29.12	382	97
174.0	Andrew 950F65T4E-	2	16	4.8	5.0	11.0	7.0	1.00	0.90	0.0	0.0	29.12	339	25
165.0	Powerwave	12	6	0.2	0.5	4.0	3.0	0.80	0.50	0.0	0.0	28.79	38	53

Site Number: 383598
 Site Name: Tartaglia, CT
 Customer: AT&T Mobility

Code: ANSI/TIA-222-G
 Engineering Number: 12132278_C3_02

© 2007 - 2017 by ATC IP LLC. All rights reserved.

8/17/2017 5:43:36 PM

Tower Loading

165.0	Powerwave 7020	6	2	0.4	0.4	8.3	2.4	0.80	0.50	0.0	0.0	28.79	38	11
165.0	CCI	3	19	1.0	0.9	11.0	3.8	0.80	0.50	0.0	0.0	28.79	46	47
165.0	Commscope WCS-	1	30	1.0	0.9	10.6	6.9	0.80	1.00	0.0	0.0	28.79	31	24
165.0	Powerwave	9	14	1.1	1.2	9.2	2.6	0.80	0.50	0.0	0.0	28.79	155	103
165.0	Raycap DC6-48-60-	1	20	1.1	2.0	9.7	9.7	0.80	1.00	0.0	0.0	28.79	35	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	28.79	35	16
165.0	Ericsson RRUS-32	3	51	2.7	2.2	12.1	6.8	0.80	0.50	0.0	0.0	28.79	126	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	28.79	126	123
165.0	Ericsson RRUS 32	3	53	2.7	2.3	12.1	7.0	0.80	0.50	0.0	0.0	28.79	129	129
165.0	Ericsson RRUS-11	3	51	2.8	1.6	17.0	7.2	0.80	0.50	0.0	0.0	28.79	131	123
165.0	Powerwave 7770	3	35	5.5	4.6	11.0	5.0	0.80	0.65	0.0	0.0	28.79	336	85
165.0	Commscope SBNHH-	3	41	5.9	4.6	11.9	7.1	0.80	0.69	0.0	0.0	28.79	381	99
165.0	20' Omni	1	55	6.0	20.0	4.0	4.0	0.80	1.00	0.0	0.0	28.79	188	45
165.0	Quintel QS66512-3	3	105	8.1	6.0	12.0	9.6	0.80	0.74	0.0	0.0	28.79	565	255
165.0	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.67	0.0	0.0	28.79	850	729
152.0	Andrew CBC78-DF	6	7	0.4	0.7	5.9	2.6	0.80	0.50	3.0	125.2	28.42	42	32
152.0	ALU RH_2x60-PCS	3	46	1.8	1.6	11.2	8.2	0.80	0.50	3.0	256.0	28.42	85	112
152.0	ALU RH_2x60-AWS	3	44	1.9	1.7	11.2	7.3	0.80	0.50	3.0	261.6	28.42	87	107
152.0	ALU RH_2x60-700	3	57	2.2	1.8	12.0	9.0	0.80	0.50	3.0	300.5	28.42	100	139
152.0	RFS DB-T1-6Z-8AB-	2	7	4.8	2.0	24.0	10.0	0.80	0.50	3.0	445.2	28.42	148	11
152.0	Commscope HBXX-	6	31	5.4	4.2	12.0	6.5	0.80	0.67	3.0	2020.9	28.42	674	149
152.0	Kathrein 800	3	24	5.7	4.4	11.9	3.9	0.80	0.62	3.0	978.2	28.42	326	59
152.0	Antel BXA-80063/6BF	3	19	7.3	5.7	11.2	5.3	0.80	0.66	3.0	1335.1	28.42	445	47
152.0	Flat Light Sector	3	400	17.9	0.0	0.0	0.0	0.75	0.67	0.0	0.0	28.30	1039	972
140.0	Small Side Lights	3	45	2.0	1.0	8.0	8.0	1.00	1.00	0.0	0.0	27.81	227	109
118.0	10' Omni	1	8	0.1	1.0	2.0	2.0	1.00	1.00	0.0	0.0	26.83	5	6
118.0	Round Side Arm	1	150	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	26.83	190	122
108.0	10' Omni	1	8	0.1	1.0	2.0	2.0	1.00	1.00	0.0	0.0	26.34	5	6
108.0	Round Side Arm	1	150	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	26.34	186	122
80.00	Empty Round Side	1	150	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	24.72	175	122
22.00	3' Dish	1	100	6.1	3.0	0.0	0.0	1.00	0.64	0.0	0.0	18.84	100	81
20.00	GPS	1	10	1.0	1.0	9.0	6.0	1.00	1.00	0.0	0.0	18.47	25	8
8.00	GPS	1	10	1.0	1.0	9.0	6.0	1.00	1.00	0.0	0.0	17.40	24	8
8.00	Round Side Arm	1	150	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	17.40	123	122
Totals		172	11143	742.0										

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	Lightning Rod	1	70	1.9	4.0	3.0	3.0	1.00	1.00	0.0	0.0	8.28	14	86
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
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	Ericsson KRY112	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 RRUS11	3	140	3.5	1.6	17.0	7.2	0.80	0.50	0.0	0.0	7.98	28	539
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 AIR32	3	321	7.7	4.7	12.9	8.7	0.80	0.71	0.0	0.0	7.98	89	1250
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	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

Site Number: 383598

Code:

ANSI/TIA-222-G

© 2007 - 2017 by ATC IP LLC. All rights reserved.

Site Name: Tartaglia, CT

Engineering Number: 12132278_C3_02

8/17/2017 5:43:37 PM

Tower Loading

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	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	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
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 1900	6	172	4.0	1.9	17.3	13.0	0.80	0.50	0.0	0.0	7.80	64	1300
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	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	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	RFS APXVSPP18-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 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	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
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	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	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	CCI	3	54	1.4	0.9	11.0	3.8	0.80	0.50	0.0	0.0	7.65	11	208
165.0	Commscope WCS-	1	175	1.3	0.9	10.6	6.9	0.80	1.00	0.0	0.0	7.65	7	218
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	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	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	Ericsson RRUS 32	3	141	3.5	2.3	12.1	7.0	0.80	0.50	0.0	0.0	7.65	27	546
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	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	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	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	Quintel QS66512-3	3	332	9.4	6.0	12.0	9.6	0.80	0.74	0.0	0.0	7.65	109	1272
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	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	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	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_2x60-700	3	139	2.8	1.8	12.0	9.0	0.80	0.50	3.0	64.4	7.55	21	541
152.0	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
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	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	Antel BXA-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	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
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	172	30825	1104.7										

Tower Loading

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	Lightning Rod	1	10	1.0	4.0	3.0	3.0	1.00	1.00	0.0	0.0	11.92	10	10
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
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	Ericsson KRY112	3	11	0.4	0.6	6.1	2.7	0.80	0.50	0.0	0.0	11.50	4	33
202.0	Ericsson RRUS11	3	51	2.8	1.6	17.0	7.2	0.80	0.50	0.0	0.0	11.50	33	152
202.0	Ericsson AIR21	3	90	5.8	4.7	12.0	8.0	0.80	0.71	0.0	0.0	11.50	97	270
202.0	Ericsson AIR32	3	132	6.5	4.7	12.9	8.7	0.80	0.71	0.0	0.0	11.50	108	397
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	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	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	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
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 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	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	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	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	RFS APXVSP18-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 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	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
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	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	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	CCI	3	19	1.0	0.9	11.0	3.8	0.80	0.50	0.0	0.0	11.02	11	58
165.0	Commscope WCS-	1	30	1.0	0.9	10.6	6.9	0.80	1.00	0.0	0.0	11.02	7	30
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	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	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	Ericsson RRUS 32	3	53	2.7	2.3	12.1	7.0	0.80	0.50	0.0	0.0	11.02	31	159
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	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	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	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	Quintel QS66512-3	3	105	8.1	6.0	12.0	9.6	0.80	0.74	0.0	0.0	11.02	135	315
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	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	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	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_2x60-700	3	57	2.2	1.8	12.0	9.0	0.80	0.50	3.0	71.9	10.87	24	172

Site Number: 383598
 Site Name: Tartaglia, CT
 Customer: AT&T Mobility

Code: ANSI/TIA-222-G
 Engineering Number: 12132278_C3_02

© 2007 - 2017 by ATC IP LLC. All rights reserved.

8/17/2017 5:43:37 PM

Tower Loading

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
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	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	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	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
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
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	172	11143	742.0										

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	1" Hybrid	1	1.00	0.65	0	Lin App	Individual	0.00	N	1.00	1.00	0.01
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	0.00	1.00	0.00
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	0.00
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	0.00
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	0.00	1.00	0.00
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	0.00	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	0.00
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: 383598
 Site Name: Tartaglia, CT
 Customer: AT&T Mobility

Code: ANSI/TIA-222-G
 Engineering Number: 12132278_C3_02

© 2007 - 2017 by ATC IP LLC. All rights reserved.

8/17/2017 5:43:38 PM

Force/Stress Summary

Section: 1		1		Bot Elev (ft): 0.00				Height (ft): 30.000							
		Pu	Len	Bracing %			F'y	Phic Pn	Num	Shear	Bear	Use			
		(kip)	(ft)	X	Y	Z	(ksi)	(kip)	Bolts	Holes	phiRnv	phiRn	%	Controls	
Max Compression Member															
LEG	PX - 10" DIA PIPE	-273.87	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 - 3-1/2" DIA PIP	-14.74	1.2D + 1.6W 90	18.29	100	100	100	163.8	50.0	22.56	2	0	0.00	42.31	65 Member X
DIAG	PST - 3" DIA PIPE	-29.52	1.2D + 1.6W 90	36.16	32	32	32	0.0	0.0	41.40	3	0	0.00	60.65	71 User Input
Max Tension Member															
		Pu	Load Case	Fy	Fu	Phit Pn	Num	Num	Shear	Bear	Blk Shear	Use			
		(kip)		(ksi)	(ksi)	(kip)	Bolts	Holes	phiRnv	phiRn	phiRn	%	Controls		
LEG	PX - 10" DIA PIPE	218.38	0.9D + 1.6W 60	50	65	724.50	0	0	0.00	0.00			30	Member	
HORIZ	PST - 3-1/2" DIA PIP	15.50	1.2D + 1.6W 90	50	65	120.60	2	0	0.00	33.93	0.00		45	Bolt Bear	
DIAG	PST - 3" DIA PIPE	27.49	1.2D + 1.6W 90	50	65	100.35	3	0	0.00	52.65	0.00		52	Bolt Bear	
Max Splice Forces															
		Pu	Load Case	phiRnt	Use	Num									
		(kip)		(kip)	%	Bolts	Bolt Type								
Top Tension		217.08	0.9D + 1.6W 180	0.00	0	0									
Top Compression		272.21	1.2D + 1.6W	0.00	0										
Bot Tension		259.92	0.9D + 1.6W 180	726.84	45	12	1" A193-B7								
Bot Compression		318.20	1.2D + 1.6W	0.00	0										

Section: 2		2		Bot Elev (ft): 30.00				Height (ft): 30.000							
		Pu	Len	Bracing %			F'y	Phic Pn	Num	Shear	Bear	Use			
		(kip)	(ft)	X	Y	Z	(ksi)	(kip)	Bolts	Holes	phiRnv	phiRn	%	Controls	
Max Compression Member															
LEG	PX - 10" DIA PIPE	-224.12	1.2D + 1.6W	30.08	33	33	33	32.8	50.0	669.65	0	0	0.00	0.00	33 Member X
HORIZ	PST - 3" DIA PIPE	-14.33	0.9D + 1.6W 90	16.41	96	96	96	163.0	50.0	18.95	2	0	0.00	40.44	75 Member X
DIAG	PST - 3" DIA PIPE	-32.21	1.2D + 1.6W 90	35.15	31	31	31	112.7	50.0	39.62	3	0	0.00	60.65	81 Member X
Max Tension Member															
		Pu	Load Case	Fy	Fu	Phit Pn	Num	Num	Shear	Bear	Blk Shear	Use			
		(kip)		(ksi)	(ksi)	(kip)	Bolts	Holes	phiRnv	phiRn	phiRn	%	Controls		
LEG	PX - 10" DIA PIPE	175.54	0.9D + 1.6W 60	50	65	724.50	0	0	0.00	0.00			24	Member	
HORIZ	PST - 3" DIA PIPE	15.13	1.2D + 1.6W 90	50	65	100.35	2	0	0.00	32.43	0.00		46	Bolt Bear	
DIAG	PST - 3" DIA PIPE	29.64	1.2D + 1.6W 90	50	65	100.35	3	0	0.00	52.65	0.00		56	Bolt Bear	
Max Splice Forces															
		Pu	Load Case	phiRnt	Use	Num									
		(kip)		(kip)	%	Bolts	Bolt Type								
Top Tension		174.36	0.9D + 1.6W 180	0.00	0	0									
Top Compression		222.53	1.2D + 1.6W	0.00	0										
Bot Tension		217.08	0.9D + 1.6W 180	654.24	33	12	1 A325								
Bot Compression		272.21	1.2D + 1.6W	0.00	0										

Site Number: 383598
 Site Name: Tartaglia, CT
 Customer: AT&T Mobility

Code: ANSI/TIA-222-G
 Engineering Number: 12132278_C3_02

© 2007 - 2017 by ATC IP LLC. All rights reserved.

8/17/2017 5:43:38 PM

Force/Stress Summary

Section: 3		3		Bot Elev (ft): 60.00				Height (ft): 20.000							
		Pu	Len	Bracing %			F'y	Phic Pn	Num	Num	Shear	Bear	Use		
		(kip)	(ft)	X	Y	Z	KL/R	(ksi)	(kip)	Bolts	Holes	phiRnv	phiRn	%	Controls
		Load Case										(kip)	(kip)		
Max Compression Member															
LEG	PX - 10" DIA PIPE	-190.07	20.05	50	50	50	33.1	50.0	668.58	0	0	0.00	0.00	28	Member X
HORIZ	PST - 3" DIA PIPE	-12.99	15.16	100	100	100	156.9	50.0	20.47	2	0	0.00	40.44	63	Member X
DIAG	PST - 3" DIA PIPE	-23.60	25.88	48	48	48	128.5	50.0	30.49	3	0	0.00	50.54	77	Member X
Max Tension Member															
LEG	PX - 10" DIA PIPE	148.02		50	65	724.50	0	0	0.00					20	Member
HORIZ	PST - 3" DIA PIPE	13.72		50	65	100.35	2	0	0.00			32.43	0.00	42	Bolt Bear
DIAG	PST - 3" DIA PIPE	21.64		50	65	100.35	3	0	0.00			43.80	0.00	49	Bolt Bear
Max Splice Forces															
Top Tension		146.97													
Top Compression		188.61													
Bot Tension		174.36								12	1				
Bot Compression		222.53													

Section: 4		4		Bot Elev (ft): 80.00				Height (ft): 20.000							
		Pu	Len	Bracing %			F'y	Phic Pn	Num	Num	Shear	Bear	Use		
		(kip)	(ft)	X	Y	Z	KL/R	(ksi)	(kip)	Bolts	Holes	phiRnv	phiRn	%	Controls
		Load Case										(kip)	(kip)		
Max Compression Member															
LEG	PX - 8" DIA PIPE	-157.39	20.06	50	50	50	41.8	50.0	506.95	0	0	0.00	0.00	31	Member X
HORIZ	PST - 3" DIA PIPE	-11.83	13.83	100	100	100	143.2	50.0	24.58	2	0	0.00	40.44	48	Member X
DIAG	PST - 3" DIA PIPE	-22.42	25.11	48	48	48	124.7	50.0	32.40	3	0	0.00	50.54	69	Member X
Max Tension Member															
LEG	PX - 8" DIA PIPE	115.36		50	65	576.00	0	0	0.00					20	Member
HORIZ	PST - 3" DIA PIPE	12.22		50	65	100.35	2	0	0.00			32.43	0.00	37	Bolt Bear
DIAG	PST - 3" DIA PIPE	20.72		50	65	100.35	3	0	0.00			43.80	0.00	47	Bolt Bear
Max Splice Forces															
Top Tension		119.52													
Top Compression		156.04													
Bot Tension		146.97								12	1				
Bot Compression		188.61													

Site Number: 383598
 Site Name: Tartaglia, CT
 Customer: AT&T Mobility

Code: ANSI/TIA-222-G
 Engineering Number: 12132278_C3_02

© 2007 - 2017 by ATC IP LLC. All rights reserved.

8/17/2017 5:43:38 PM

Force/Stress Summary

Section: 5		5		Bot Elev (ft): 100.0				Height (ft): 20.000						
		Pu	Len	Bracing %			F'y	Phic Pn	Num	Num	Shear	Bear	Use	
		(kip)	(ft)	X	Y	Z	KL/R	(kip)	Bolts	Holes	phiRnv	phiRn	%	Controls
		Load Case									(kip)	(kip)		
Max Compression Member														
LEG	PX - 8" DIA PIPE	-124.12	20.05	50	50	50	41.8	50.0	507.00	0	0	0.00	0.00	24 Member X
HORIZ	PST - 2-1/2" DIA PIP	-10.78	12.58	98	98	98	156.3	50.0	15.75	2	0	0.00	38.00	68 Member X
DIAG	PST - 2-1/2" DIA PIP	-22.18	24.33	48	48	48	0.0	0.0	28.20	3	0	0.00	47.50	78 User Input
Max Tension Member														
LEG	PX - 8" DIA PIPE	92.37	180	50	65	576.00	0	0	0.00	0	0.00			16 Member
HORIZ	PST - 2-1/2" DIA PIP	11.52	90	50	65	76.68	2	0	0.00	0	30.48	0.00		37 Bolt Bear
DIAG	PST - 2-1/2" DIA PIP	20.61	90	50	65	76.68	3	0	0.00	0	41.17	0.00		50 Bolt Bear
Max Splice Forces														
		Pu	Load Case	phiRnt	Use	Num	Bolt Type							
		(kip)		(kip)	%	Bolts								
	Top Tension	91.23	0.9D + 1.6W 180	0.00	0	0								
	Top Compression	122.91	1.2D + 1.6W	0.00	0									
	Bot Tension	119.52	0.9D + 1.6W 180	654.24	18	12	1 A325							
	Bot Compression	156.04	1.2D + 1.6W	0.00	0									

Section: 6		6		Bot Elev (ft): 120.0				Height (ft): 20.000						
		Pu	Len	Bracing %			F'y	Phic Pn	Num	Num	Shear	Bear	Use	
		(kip)	(ft)	X	Y	Z	KL/R	(kip)	Bolts	Holes	phiRnv	phiRn	%	Controls
		Load Case									(kip)	(kip)		
Max Compression Member														
LEG	PX - 8" DIA PIPE	-107.20	10.03	100	100	100	41.8	50.0	507.00	0	0	0.00	0.00	21 Member X
HORIZ	PST - 2-1/2" DIA PIP	-9.89	11.96	100	100	100	151.6	50.0	16.75	2	0	0.00	31.67	59 Member X
DIAG	PST - 3" DIA PIPE	-14.32	16.08	96	96	96	159.7	50.0	19.75	3	0	0.00	50.54	72 Member X
Max Tension Member														
LEG	PX - 8" DIA PIPE	75.13	180	50	65	576.00	0	0	0.00	0	0.00			13 Member
HORIZ	PST - 2-1/2" DIA PIP	10.61	90	50	65	76.68	2	0	0.00	0	25.33	0.00		41 Bolt Bear
DIAG	PST - 3" DIA PIPE	13.21	90	50	65	100.35	3	0	0.00	0	43.80	0.00		30 Bolt Bear
Max Splice Forces														
		Pu	Load Case	phiRnt	Use	Num	Bolt Type							
		(kip)		(kip)	%	Bolts								
	Top Tension	64.42	0.9D + 1.6W 180	0.00	0	0								
	Top Compression	90.04	1.2D + 1.6W	0.00	0									
	Bot Tension	91.23	0.9D + 1.6W 180	436.16	21	8	1 A325							
	Bot Compression	122.91	1.2D + 1.6W	0.00	0									

Site Number: 383598
 Site Name: Tartaglia, CT
 Customer: AT&T Mobility

Code: ANSI/TIA-222-G
 Engineering Number: 12132278_C3_02

© 2007 - 2017 by ATC IP LLC. All rights reserved.

8/17/2017 5:43:38 PM

Force/Stress Summary

Section: 7		7		Bot Elev (ft): 140.0				Height (ft): 20.000							
		Pu		Len	Bracing %			F'y	Phic Pn	Num	Num	Shear	Bear		
		(kip)	Load Case	(ft)	X	Y	Z	KL/R	(ksi)	(kip)	Bolts	Holes	phiRnv	phiRn	Use
													(kip)	(kip)	% Controls
Max Compression Member															
LEG	PX - 8" DIA PIPE	-75.02	1.2D + 1.6W	10.03	100	100	100	41.8	50.0	507.00	0	0	0.00	0.00	14 Member X
HORIZ	PST - 2-1/2" DIA PIP	-8.78	0.9D + 1.6W	10.71	100	100	100	135.8	50.0	20.89	2	0	0.00	31.67	42 Member X
DIAG	PST - 2-1/2" DIA PIP	-13.19	1.2D + 1.6W	15.12	100	100	100	0.0	0.0	23.40	3	0	0.00	47.50	56 User Input
Max Tension Member															
LEG	PX - 8" DIA PIPE	48.37	1.2D + 1.6W 60	50	65	576.00	0	0	0.00	0.00					8 Member
HORIZ	PST - 2-1/2" DIA PIP	9.27	1.2D + 1.6W 210	50	65	76.68	2	0	0.00	25.33			0.00		36 Bolt Bear
DIAG	PST - 2-1/2" DIA PIP	11.96	1.2D + 1.6W 90	50	65	76.68	3	0	0.00	41.17			0.00		29 Bolt Bear
Max Splice Forces															
		Pu	Load Case		phiRnt	Use	Num								
		(kip)			(kip)	%	Bolts	Bolt Type							
	Top Tension	39.66	0.9D + 1.6W 60		0.00	0	0								
	Top Compression	59.03	1.2D + 1.6W 120		0.00	0									
	Bot Tension	64.42	0.9D + 1.6W 180		436.16	15	8	1 A325							
	Bot Compression	90.04	1.2D + 1.6W		0.00	0									

Section: 8		8		Bot Elev (ft): 160.0				Height (ft): 20.000							
		Pu		Len	Bracing %			F'y	Phic Pn	Num	Num	Shear	Bear		
		(kip)	Load Case	(ft)	X	Y	Z	KL/R	(ksi)	(kip)	Bolts	Holes	phiRnv	phiRn	Use
													(kip)	(kip)	% Controls
Max Compression Member															
LEG	PX - 8" DIA PIPE	-46.73	1.2D + 1.6W	10.03	100	100	100	41.8	50.0	507.00	0	0	0.00	0.00	9 Member X
HORIZ	PST - 2-1/2" DIA PIP	-5.71	1.2D + 1.6W 90	9.464	100	100	100	119.9	50.0	26.77	2	0	0.00	31.67	21 Member X
DIAG	PST - 2-1/2" DIA PIP	-9.30	1.2D + 1.6W 90	14.20	96	96	96	172.9	50.0	12.88	3	0	0.00	47.50	72 Member X
Max Tension Member															
LEG	PX - 8" DIA PIPE	28.98	1.2D + 1.6W 60	50	65	576.00	0	0	0.00	0.00					5 Member
HORIZ	PST - 2-1/2" DIA PIP	6.14	1.2D + 1.6W 90	50	65	76.68	2	0	0.00	25.33			0.00		24 Bolt Bear
DIAG	PST - 2-1/2" DIA PIP	8.53	1.2D + 1.6W 90	50	65	76.68	3	0	0.00	41.17			0.00		20 Bolt Bear
Max Splice Forces															
		Pu	Load Case		phiRnt	Use	Num								
		(kip)			(kip)	%	Bolts	Bolt Type							
	Top Tension	21.35	0.9D + 1.6W 60		0.00	0	0								
	Top Compression	34.84	1.2D + 1.6W 120		0.00	0									
	Bot Tension	39.66	0.9D + 1.6W 60		436.16	9	8	1 A325							
	Bot Compression	59.03	1.2D + 1.6W 120		0.00	0									

Site Number: 383598
 Site Name: Tartaglia, CT
 Customer: AT&T Mobility

Code: ANSI/TIA-222-G
 Engineering Number: 12132278_C3_02

© 2007 - 2017 by ATC IP LLC. All rights reserved.

8/17/2017 5:43:38 PM

Force/Stress Summary

Section: 9 9		Bot Elev (ft): 180.0		Height (ft): 20.000									
Max Compression Member		Pu (kip)	Load Case	Len (ft)	Bracing % X Y Z	F'y (ksi)	Phic Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG	PX - 8" DIA PIPE	-25.66	1.2D + 1.6W	10.03	100 100 100	41.8	507.00	0	0	0.00	0.00	5	Member X
HORIZ	PST - 2" DIA PIPE	-3.51	1.2D + 1.6W 90	8.214	100 100 100	125.2	50.0	2	0	0.00	24.02	22	Member X
DIAG	PST - 2-1/2" DIA PIP	-6.23	1.2D + 1.6W 90	13.35	100 100 100	169.2	50.0	3	0	0.00	47.50	46	Member X
Max Tension Member		Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls
LEG	PX - 8" DIA PIPE	14.20	1.2D + 1.6W 60	50	65	576.00	0	0	0.00	0.00		2	Member
HORIZ	PST - 2" DIA PIPE	3.79	1.2D + 1.6W 90	50	65	48.15	2	0	0.00	19.22	0.00	19	Bolt Bear
DIAG	PST - 2-1/2" DIA PIP	5.65	1.2D + 1.6W 90	50	65	76.68	3	0	0.00	41.17	0.00	13	Bolt Bear
Max Splice Forces		Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type						
Top Tension		9.28	0.9D + 1.6W 180	0.00	0	0							
Top Compression		17.56	1.2D + 1.6W	0.00	0								
Bot Tension		21.35	0.9D + 1.6W 60	436.16	5	8	1 A325						
Bot Compression		34.84	1.2D + 1.6W 120	0.00	0								
Section: 10 10		Bot Elev (ft): 200.0		Height (ft): 20.000									
Max Compression Member		Pu (kip)	Load Case	Len (ft)	Bracing % X Y Z	F'y (ksi)	Phic Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG	PX - 8" DIA PIPE	-11.65	1.2D + 1.6W	10.02	100 100 100	41.8	507.06	0	0	0.00	0.00	2	Member X
HORIZ	PST - 2" DIA PIPE	-1.67	1.2D + 1.6W 90	7.026	100 100 100	107.1	50.0	2	0	0.00	24.02	8	Member X
DIAG	PST - 2-1/2" DIA PIP	-3.56	1.2D + 1.6W 90	12.55	100 100 100	159.1	50.0	3	0	0.00	47.50	23	Member X
Max Tension Member		Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls
LEG	PX - 8" DIA PIPE	6.17	0.9D + 1.6W 60	50	65	576.00	0	0	0.00	0.00		1	Member
HORIZ	PST - 2" DIA PIPE	1.75	1.2D + 1.6W 60	50	65	48.15	2	0	0.00	19.22	0.00	9	Bolt Bear
DIAG	PST - 2-1/2" DIA PIP	3.05	1.2D + 1.6W 90	50	65	76.68	3	0	0.00	41.17	0.00	7	Bolt Bear
Max Splice Forces		Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type						
Top Tension		2.59	0.9D + 1.6W 180	0.00	0	0							
Top Compression		6.64	1.2D + 1.6W	0.00	0								
Bot Tension		9.28	0.9D + 1.6W 180	436.16	2	8	1 A325						
Bot Compression		17.56	1.2D + 1.6W	0.00	0								

Site Number: 383598
 Site Name: Tartaglia, CT
 Customer: AT&T Mobility

Code: ANSI/TIA-222-G
 Engineering Number: 12132278_C3_02

© 2007 - 2017 by ATC IP LLC. All rights reserved.
 8/17/2017 5:43:38 PM

Force/Stress Summary

Section: 11 11		Bot Elev (ft): 220.0		Height (ft): 20.000												
		Pu	Len	Bracing %			F'y	Phic Pn Num	Num	Shear phiRnv	Bear phiRn	Use				
		(kip)	(ft)	X	Y	Z	(ksi)	(kip) Bolts	Holes	(kip)	(kip)	%	Controls			
Max Compression Member																
LEG	PX - 8" DIA PIPE	-3.98	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	-0.87	1.2D + 1.6W	6.130	100	100	100	93.5	50.0	25.42	2	0	0.00	24.02	3	Member X
	DIAG PST - 2" DIA PIPE	-1.84	1.2D + 1.6W 90	9.288	100	100	100	141.6	50.0	12.05	3	0	0.00	36.04	15	Member X
Max Tension Member																
	LEG PX - 8" DIA PIPE	0.79	1.2D + 1.6W 60	50	65	576.00	0	0	0.00	0.00					0	Member
	HORIZ PST - 2" DIA PIPE	1.06	1.2D + 1.6W 60	50	65	48.15	2	0	0.00	19.22			0.00		5	Bolt Bear
	DIAG PST - 2" DIA PIPE	1.26	1.2D + 1.6W	50	65	48.15	3	0	0.00	31.23			0.00		4	Bolt Bear
Max Splice Forces																
		Pu	Load Case	phiRnt	Use	Num	Bolt Type									
		(kip)		(kip)	%	Bolts										
	Top Tension	0.00		0.00	0	0										
	Top Compression	0.80	1.2D + 1.0Di +	0.00	0											
	Bot Tension	2.59	0.9D + 1.6W 180	436.16	1	8	1 A325									
	Bot Compression	6.64	1.2D + 1.6W	0.00	0											

PROJECT INFORMATION

SCOPE OF WORK: ITEMS TO BE MOUNTED ON THE EXISTING TOWER:
 • NEW AT&T RRUS: RRUS-32-B66 (AWS) AT POSITION 2 (TYP OF 1 PER SECTOR, TOTAL OF 3).
 • NEW JUMPER CABLES: COAX JUMPERS (2) FROM EACH RRU (TOTAL OF 6).
 • NEW FIBER JUMPERS: FIBER JUMPERS (1) FROM THE SQUID TO EACH RRU (TOTAL OF 3).
ITEMS TO BE MOUNTED INSIDE EXISTING EQUIPMENT ROOM:
 • INSTALL (3) RRUS-E2 (700 DE) ON EXISTING RRU RACK
 • UPGRADE DUS TO (2) 5216, ADD IDLE.
 • INSTALL (3) 30AMP BREAKERS AND (5) 25 AMP BREAKERS TO EXISTING POWERPLANT.

ITEMS TO REMAIN:
 • (9) ANTENNAS, (9) RRU'S, (12) COAX CABLES, (4) DC POWER CABLES, (2) FIBER RUNS & (2) SURGE ARRESTOR.

SITE ADDRESS: 1320 CHOPSEY HILL ROAD
BRIDGEPORT, CT 06606

LATITUDE: 41.219391 N, 41° 13' 09.81" N
 LONGITUDE: 73.202198 W, 73° 12' 07.91" W
 TYPE OF SITE: SELF SUPPORT TOWER / EQUIPMENT SHELTER
 TOWER HEIGHT: 240'-0"±
 RAD CENTER: 165'-0"±
 CURRENT USE: TELECOMMUNICATIONS FACILITY
 PROPOSED USE: TELECOMMUNICATIONS FACILITY



SITE NUMBER: CT5093

SITE NAME: BRIDGEPORT BEARDSLEY

PROJECT: LTE 5C-6C

DRAWING INDEX

SHEET NO.	DESCRIPTION	REV.
T-1	TITLE SHEET	1
GN-1	GENERAL NOTES	1
A-1	COMPOUND & EQUIPMENT PLANS	1
A-2	ANTENNA LAYOUTS AND ELEVATION	1
A-3	DETAILS	1
G-1	GROUNDING DETAILS	1
RF-1	RF PLUMBING DIAGRAM	1

VICINITY MAP

DIRECTIONS TO SITE:
 TURN LEFT ONTO CAPITOL BLVD. 0.3 MI. TURN LEFT ONTO WEST STREET. 0.3 MI. TAKE RAMP LEFT FOR I-91 S. 9.7 MI. AT EXIT 17, TAKE RAMP RIGHT FOR CT-15 SOUTH TOWARD NEW HAVEN. 30.2 MI. AT EXIT 52, TAKE RAMP RIGHT FOR CT-8 SOUTH TOWARD BRIDGEPORT. 1.9 MI. AT EXIT 7, TAKE RAMP FOR CT-127/WHITE PLAINS ROAD. 0.3 MI. STAY STRAIGHT TO GO ONTO OLD TOWN ROAD. 0.6 MI. OLD TOWN ROAD BECOMES TRUMBULL AVENUE. 0.6 MI. TURN RIGHT ONTO CHOPSEY HILL ROAD. 0.1 MI. ARRIVE AT 1320 CHOPSEY HILL ROAD ON THE RIGHT



GENERAL NOTES

1. THIS DOCUMENT IS THE CREATION, DESIGN, PROPERTY AND COPYRIGHTED WORK OF AT&T. ANY DUPLICATION OR USE WITHOUT EXPRESS WRITTEN CONSENT IS STRICTLY PROHIBITED. DUPLICATION AND USE BY GOVERNMENT AGENCIES FOR THE PURPOSES OF CONDUCTING THEIR LAWFULLY AUTHORIZED REGULATORY AND ADMINISTRATIVE FUNCTIONS IS SPECIFICALLY ALLOWED.
2. THE FACILITY IS AN UNMANNED PRIVATE AND SECURED EQUIPMENT INSTALLATION. IT IS ONLY ACCESSED BY TRAINED TECHNICIANS FOR PERIODIC ROUTINE MAINTENANCE AND THEREFORE DOES NOT REQUIRE ANY WATER OR SANITARY SEWER SERVICE. THE FACILITY IS NOT GOVERNED BY REGULATIONS REQUIRING PUBLIC ACCESS PER ADA REQUIREMENTS.
3. CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE AT&T MOBILITY REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

72 HOURS



CALL BEFORE YOU DIG



CALL TOLL FREE 1-800-922-4455

OR CALL 811

UNDERGROUND SERVICE ALERT



45 BEECHWOOD DRIVE
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586



95 RYAN DRIVE
RAYNHAM, MA 02767

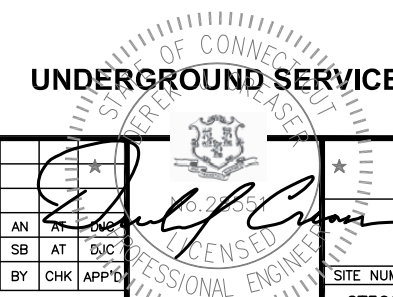
SITE NUMBER: CT5093
SITE NAME: BRIDGEPORT BEARDSLEY

1320 CHOPSEY HILL ROAD
BRIDGEPORT, CT 06606
FAIRFIELD COUNTY



500 ENTERPRISE DRIVE, SUITE 3A
ROCKY HILL, CT 06067

NO.	DATE	REVISIONS	BY	CHK	APP'D
1	10/17/17	ISSUED FOR CONSTRUCTION	AN	AT	AT
A	08/07/17	ISSUED FOR REVIEW	SB	AT	BJC



AT&T

TITLE SHEET
(LTE 5C-6C)

SITE NUMBER	DRAWING NUMBER	REV
CT5093	T-1	1

SCALE: AS SHOWN DESIGNED BY: AT DRAWN BY: SB

GROUNDING NOTES

1. THE SUBCONTRACTOR SHALL REVIEW AND INSPECT THE EXISTING FACILITY GROUNDING SYSTEM AND LIGHTNING PROTECTION SYSTEM (AS DESIGNED AND INSTALLED) FOR STRICT COMPLIANCE WITH THE NEC (AS ADOPTED BY THE AHJ), THE SITE-SPECIFIC (UL, LPI, OR NFPA) LIGHTING PROTECTION CODE, AND GENERAL COMPLIANCE WITH TELCORDIA AND TIA GROUNDING STANDARDS. THE SUBCONTRACTOR SHALL REPORT ANY VIOLATIONS OR ADVERSE FINDINGS TO THE CONTRACTOR FOR RESOLUTION.
2. ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION, AND AC POWER GES'S) SHALL BE BONDED TOGETHER, AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
3. THE SUBCONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR NEW GROUND ELECTRODE SYSTEMS. THE SUBCONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.
4. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.
5. EACH BTS CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, 6 AWG STRANDED COPPER OR LARGER FOR INDOOR BTS 2 AWG STRANDED COPPER FOR OUTDOOR BTS.
6. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
7. APPROVED ANTIOXIDANT COATINGS (I.E., CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
8. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO GROUND BAR.
9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
10. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
11. METAL CONDUIT SHALL BE MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH 6 AWS COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
12. ALL NEW STRUCTURES WITH A FOUNDATION AND/OR FOOTING HAVING 20 FT. OR MORE OF 1/2 IN. OR GREATER ELECTRICALLY CONDUCTIVE REINFORCING STEEL MUST HAVE IT BONDED TO THE GROUND RING USING AN EXOTHERMIC WELD CONNECTION USING #2 AWG SOLID BARE TINNED COPPER GROUND WIRE, PER NEC 250.50

GENERAL NOTES

1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:
 CONTRACTOR – ERICSSON
 SUBCONTRACTOR – GENERAL CONTRACTOR (CONSTRUCTION)
 OWNER – AT&T MOBILITY
2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.
3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
4. DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO SHOW OUTLINE ONLY.
5. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
6. "KITTING LIST" SUPPLIED WITH THE BID PACKAGE IDENTIFIES ITEMS THAT WILL BE SUPPLIED BY CONTRACTOR. ITEMS NOT INCLUDED IN THE BILL OF MATERIALS AND KITTING LIST SHALL BE SUPPLIED BY THE SUBCONTRACTOR.
7. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
8. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE CONTRACTOR.
9. SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING. SUBCONTRACTOR SHALL UTILIZE EXISTING TRAYS AND/OR SHALL ADD NEW TRAYS AS NECESSARY. SUBCONTRACTOR SHALL CONFIRM THE ACTUAL ROUTING WITH THE CONTRACTOR.
10. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
11. SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
12. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.
13. ALL CONCRETE REPAIR WORK SHALL BE DONE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) 301.

14. ANY NEW CONCRETE NEEDED FOR THE CONSTRUCTION SHALL BE AIR-ENTRAINED AND SHALL HAVE 4000 PSI STRENGTH AT 28 DAYS. ALL CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH ACI 318 CODE REQUIREMENTS.
15. ALL STRUCTURAL STEEL WORK SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH AISC SPECIFICATIONS. ALL STRUCTURAL STEEL SHALL BE ASTM A36 (Fy = 36 ksi) UNLESS OTHERWISE NOTED. PIPES SHALL BE ASTM A53 TYPE E (Fy = 36 ksi). ALL STEEL EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED. TOUCHUP ALL SCRATCHES AND OTHER MARKS IN THE FIELD AFTER STEEL IS ERECTED USING A COMPATIBLE ZINC RICH PAINT.
16. CONSTRUCTION SHALL COMPLY WITH SPECIFICATIONS AND "GENERAL CONSTRUCTION SERVICES FOR CONSTRUCTION OF AT&T SITES."
17. SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
18. THE EXISTING CELL SITE IS IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY SUBCONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH CONTRACTOR. ALSO, WORK SHOULD BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.
19. SINCE THE CELL SITE IS ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE ADVISED TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.
20. APPLICABLE BUILDING CODES:
 SUBCONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION. THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.
 BUILDING CODE: IBC 2012 WITH 2016 CT BUILDING CODE AMENDMENTS
 ELECTRICAL CODE: REFER TO ELECTRICAL DRAWINGS
 LIGHTNING CODE: REFER TO ELECTRICAL DRAWINGS

 SUBCONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:

 AMERICAN CONCRETE INSTITUTE (ACI) 318; BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE;

 AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)
 MANUAL OF STEEL CONSTRUCTION, ASD, FOURTEENTH EDITION;

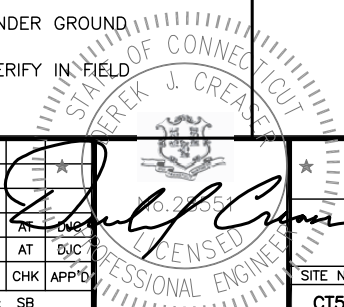
 TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-G,
 STRUCTURAL STANDARDS FOR STEEL

 EQUIPMENT AND ANTENNA SUPPORTING STRUCTURES; REFER TO ELECTRICAL DRAWINGS FOR SPECIFIC ELECTRICAL STANDARDS.

 FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

ABBREVIATIONS

AGL	ABOVE GRADE LEVEL	EQ	EQUAL	REQ	REQUIRED
AWG	AMERICAN WIRE GAUGE	GC	GENERAL CONTRACTOR	RF	RADIO FREQUENCY
BBU	BATTERY BACKUP UNIT	GRC	GALVANIZED RIGID CONDUIT	TBD	TO BE DETERMINED
BTCW	BARE TINNED SOLID COPPER WIRE	MGB	MASTER GROUND BAR	TBR	TO BE REMOVED
BGR	BURIED GROUND RING	MIN	MINIMUM	TBRR	TO BE REMOVED AND REPLACED
BTS	BASE TRANSCEIVER STATION	P	PROPOSED	TYP	TYPICAL
E	EXISTING	NTS	NOT TO SCALE	UG	UNDER GROUND
EGB	EQUIPMENT GROUND BAR	RAD	RADIATION CENTER LINE (ANTENNA)	VIF	VERIFY IN FIELD
EGR	EQUIPMENT GROUND RING	REF	REFERENCE		



HUDSON
Design Group LLC
45 BEECHWOOD DRIVE
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586

CENTERLINE
COMMUNICATIONS
95 RYAN DRIVE
RAYNHAM, MA 02767

SITE NUMBER: CT5093
SITE NAME: BRIDGEPORT BEARDSLEY

1320 CHOPSEY HILL ROAD
BRIDGEPORT, CT 06606
FAIRFIELD COUNTY

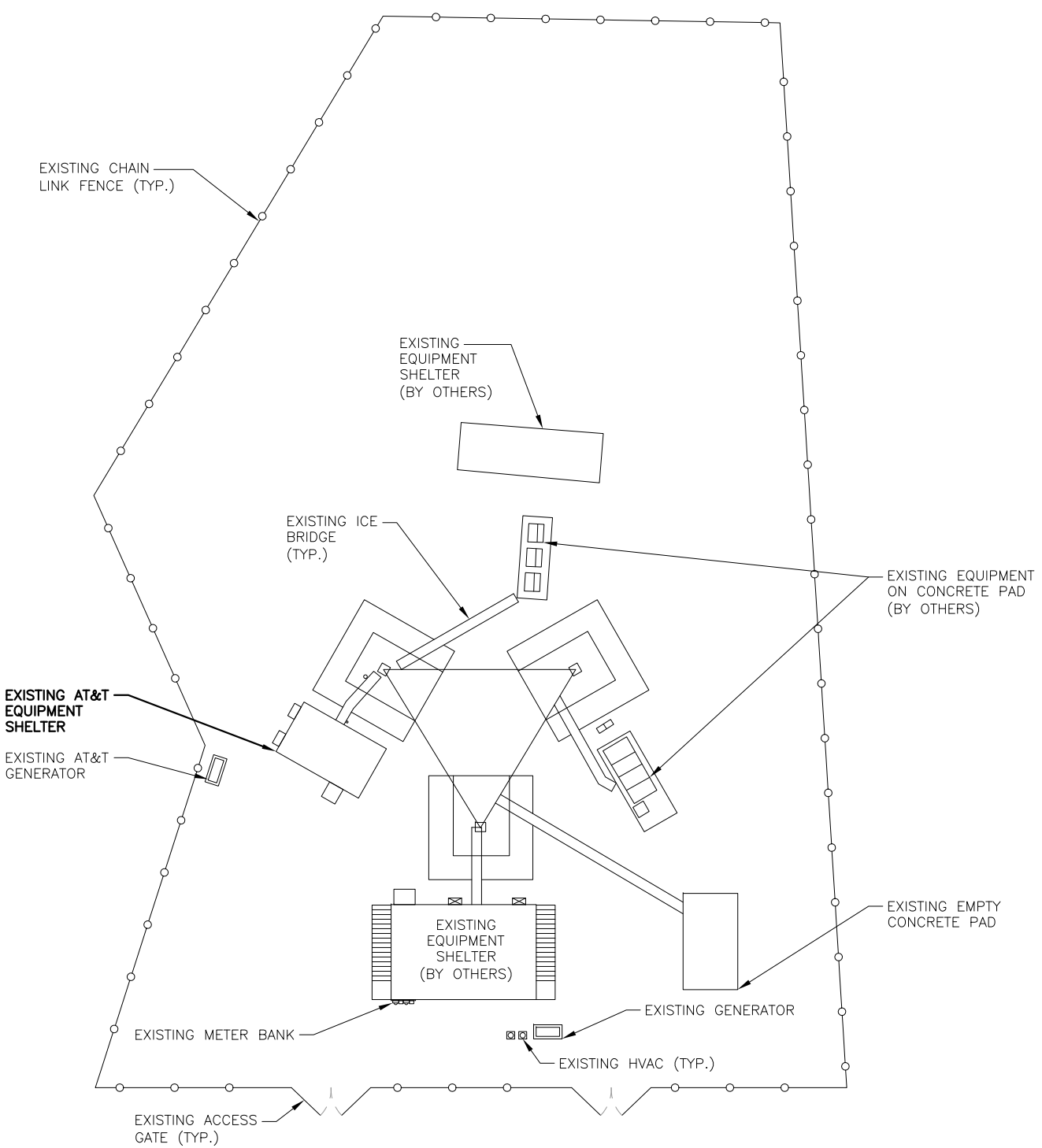
at&t
500 ENTERPRISE DRIVE, SUITE 3A
ROCKY HILL, CT 06067

NO.	DATE	REVISIONS	BY	CHK	APP'D
1	10/17/17	ISSUED FOR CONSTRUCTION	AN	AT	AT
A	08/07/17	ISSUED FOR REVIEW	SB	AT	BJC
SCALE: AS SHOWN		DESIGNED BY: AT	DRAWN BY: SB		

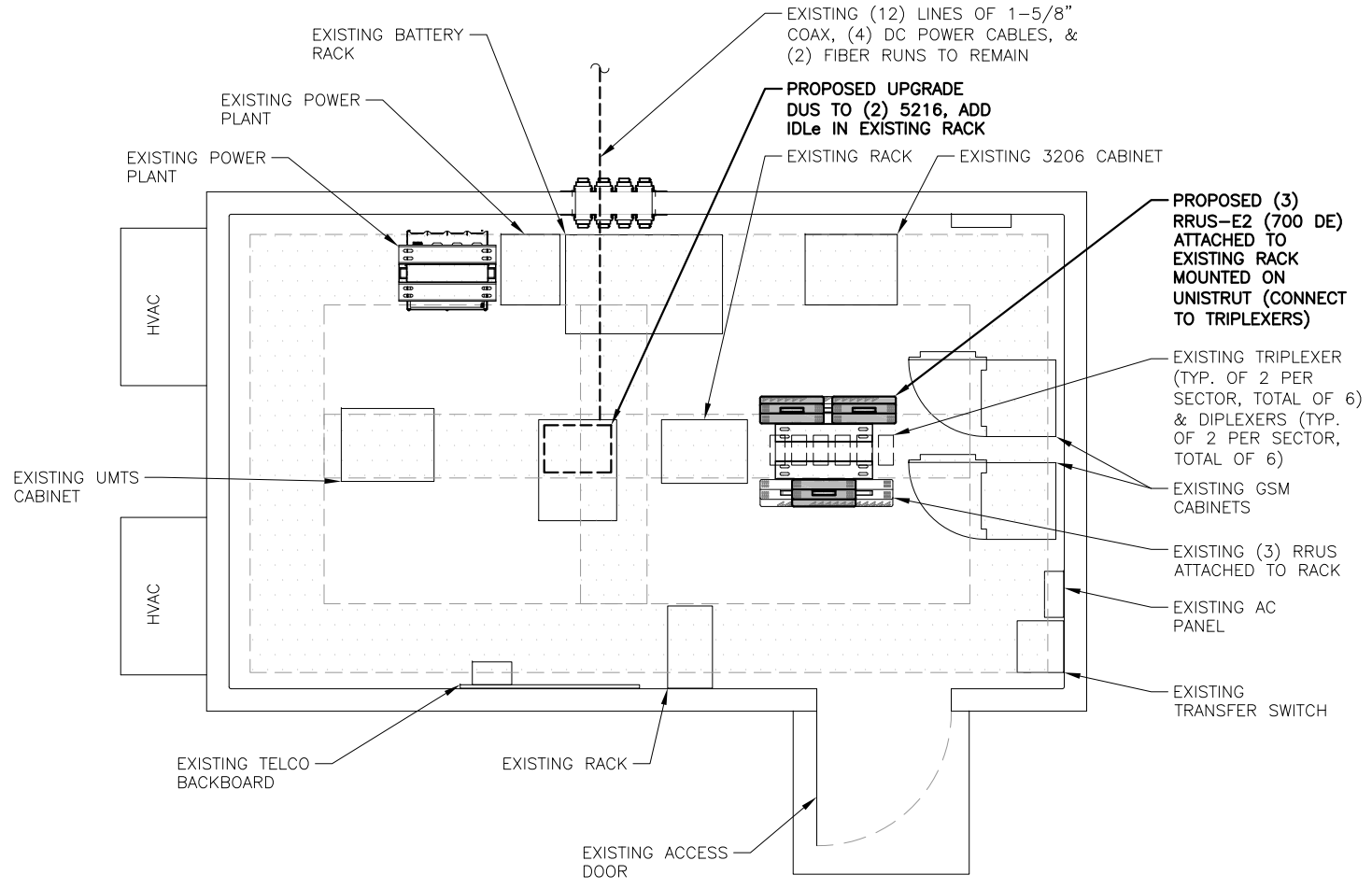
AT&T
GENERAL NOTES
(LTE 5C-6C)
SITE NUMBER: CT5093
DRAWING NUMBER: GN-1
REV: 1

NOTE:
REFER TO THE FINAL RF DATA SHEET FOR FINAL ANTENNA SETTINGS.

NOTE:
AN ANALYSIS FOR THE CAPACITY OF THE EXISTING STRUCTURES TO SUPPORT THE PROPOSED EQUIPMENT SHALL BE DETERMINED PRIOR TO CONSTRUCTION.



COMPOUND PLAN
22x34 SCALE: 1/16"=1'-0"
11x17 SCALE: 1/32"=1'-0"
1 13°25' TRUE NORTH
13°25' MAGNETIC NORTH



POWER PANEL NOTE:
ADD (3) 30AMP BREAKERS & (5) 25 AMP BREAKERS FOR NEW RRU ADDS, IF NEEDED

EQUIPMENT PLAN
22x34 SCALE: 1/2"=1'-0"
11x17 SCALE: 1/4"=1'-0"
1 13°25' TRUE NORTH
13°25' MAGNETIC NORTH

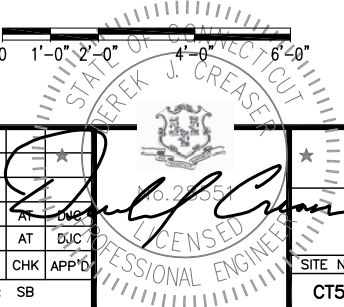
HGD HUDSON
Design Group LLC
45 BEECHWOOD DRIVE
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586

CENTERLINE
COMMUNICATIONS
95 RYAN DRIVE
RAYNHAM, MA 02767

SITE NUMBER: CT5093
SITE NAME: BRIDGEPORT BEARDSLEY
1320 CHOPSEY HILL ROAD
BRIDGEPORT, CT 06606
FAIRFIELD COUNTY

at&t
500 ENTERPRISE DRIVE, SUITE 3A
ROCKY HILL, CT 06067

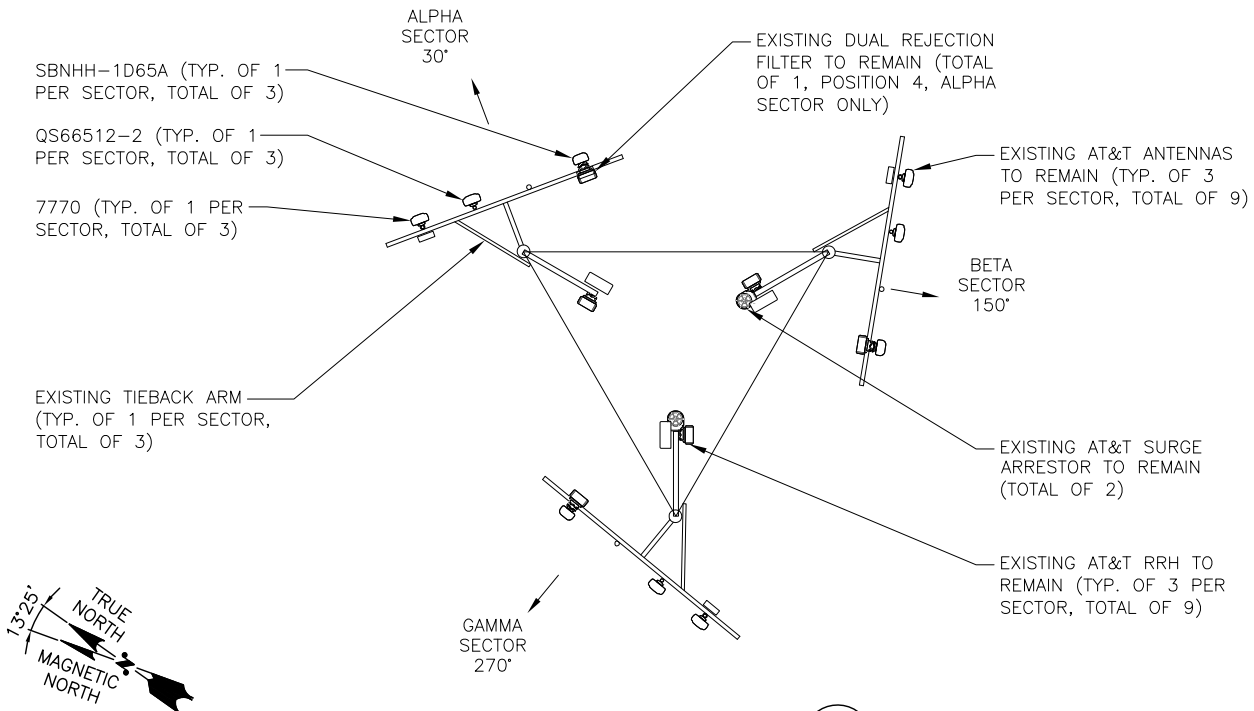
1	10/17/17	ISSUED FOR CONSTRUCTION	AN	AT	CHK
A	08/07/17	ISSUED FOR REVIEW	SB	AT	APP'D
NO.	DATE	REVISIONS	BY	CHK	APP'D
SCALE: AS SHOWN		DESIGNED BY: AT	DRAWN BY: SB		



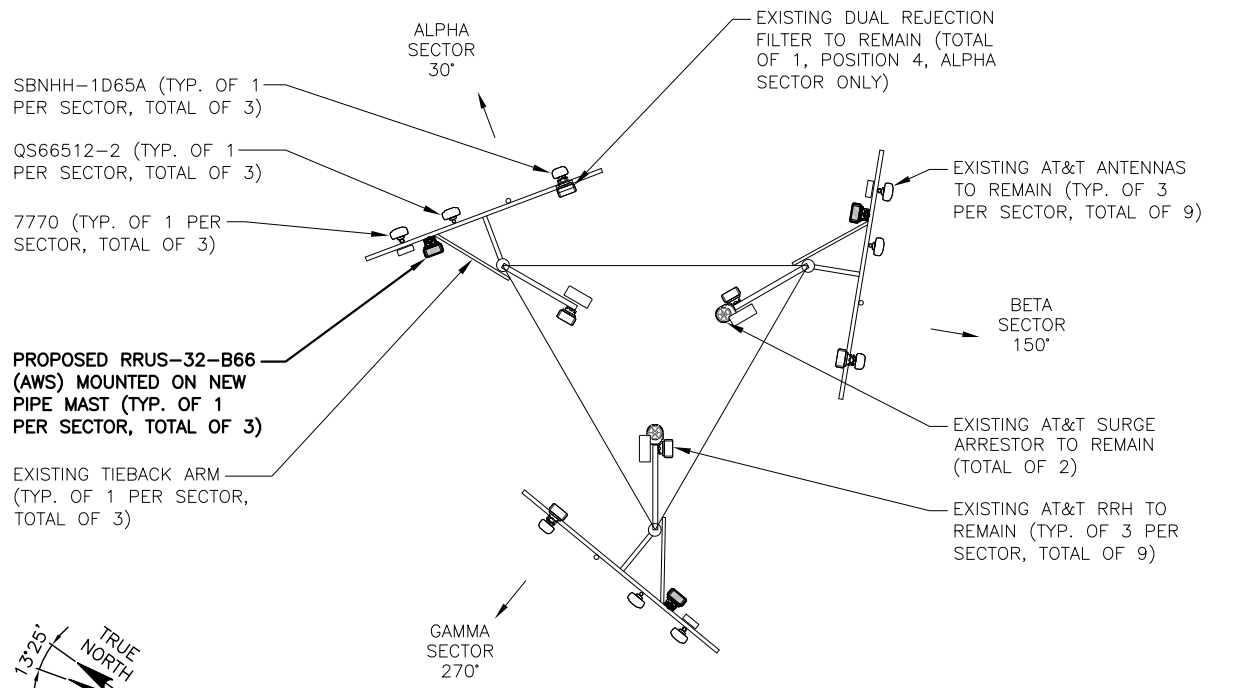
AT&T
PLANS, ELEVATION, & DETAILS
(LTE 5C-6C)
SITE NUMBER: CT5093
DRAWING NUMBER: A-1
REV: 1

NOTE:
REFER TO THE FINAL RF DATA SHEET FOR FINAL ANTENNA SETTINGS.

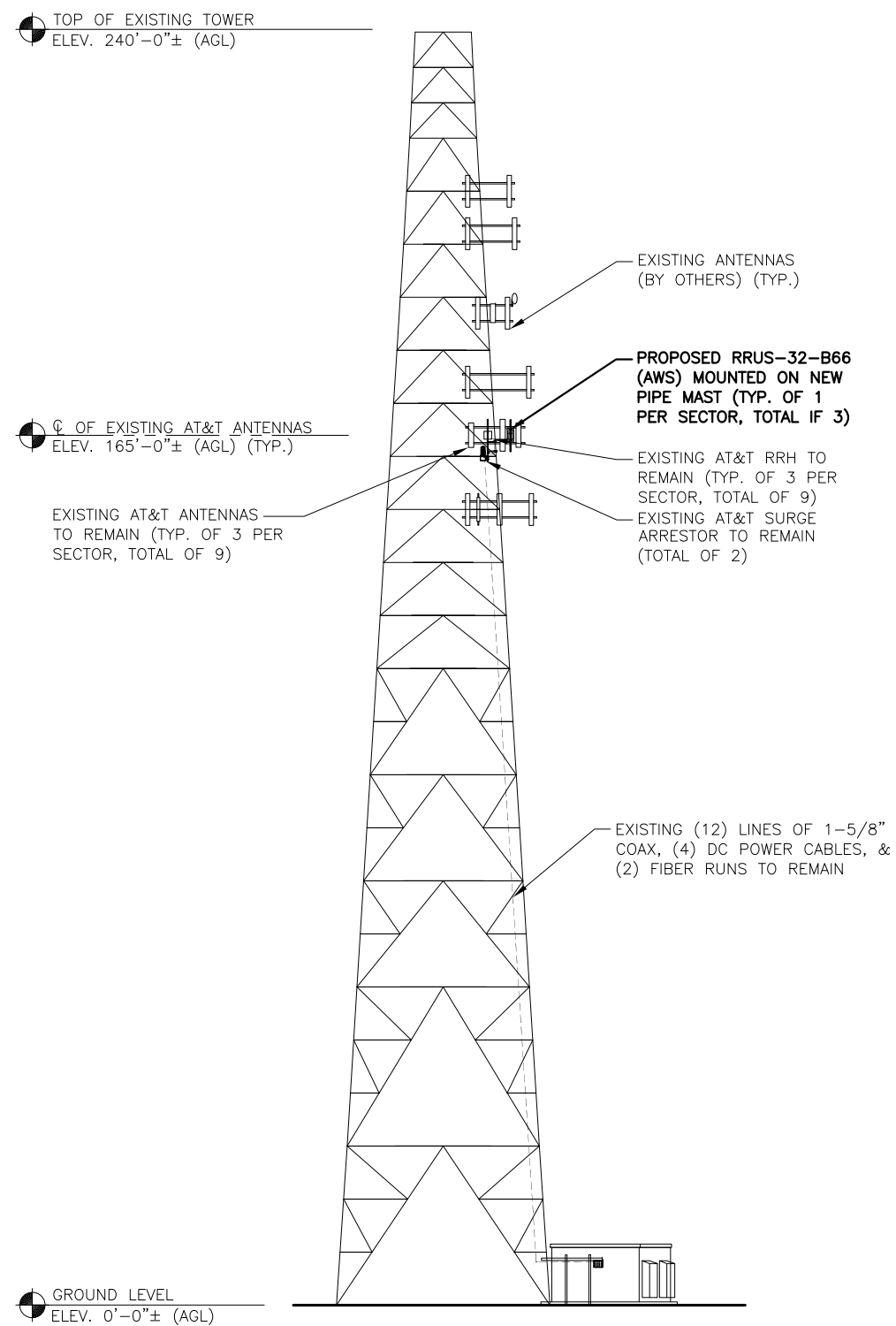
NOTE:
AN ANALYSIS FOR THE CAPACITY OF THE EXISTING STRUCTURES TO SUPPORT THE PROPOSED EQUIPMENT SHALL BE DETERMINED PRIOR TO CONSTRUCTION.



EXISTING ANTENNA LAYOUT 1
SCALE: N.T.S. A-2



PROPOSED ANTENNA LAYOUT 2
SCALE: N.T.S. A-2



WEST ELEVATION 3
22x34 SCALE: 1/16"=1'-0" A-2
11x17 SCALE: 1/32"=1'-0" A-2
GROUND LEVEL ELEV. 0'-0"± (AGL)
TOP OF EXISTING TOWER ELEV. 240'-0"± (AGL)
ELEV. 165'-0"± (AGL) (TYP.)

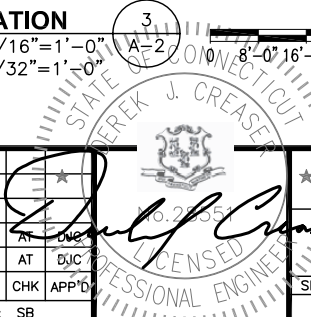
HG HUDSON
Design Group LLC
45 BEECHWOOD DRIVE
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586

CENTERLINE
COMMUNICATIONS
95 RYAN DRIVE
RAYNHAM, MA 02767

SITE NUMBER: CT5093
SITE NAME: BRIDGEPORT BEARDSLEY
1320 CHOPSEY HILL ROAD
BRIDGEPORT, CT 06606
FAIRFIELD COUNTY

at&t
500 ENTERPRISE DRIVE, SUITE 3A
ROCKY HILL, CT 06067

1	10/17/17	ISSUED FOR CONSTRUCTION	AN	AT	CHK
A	08/07/17	ISSUED FOR REVIEW	SB	AT	APP'D
NO.	DATE	REVISIONS	BY	CHK	APP'D
SCALE: AS SHOWN		DESIGNED BY: AT	DRAWN BY: SB		



AT&T
ANTENNA LAYOUTS & ELEVATION
(LTE 5C-6C)
SITE NUMBER: CT5093
DRAWING NUMBER: A-1
REV: 1

NOTE:
REFER TO THE FINAL RF DATA SHEET FOR FINAL ANTENNA SETTINGS.

NOTE:
AN ANALYSIS FOR THE CAPACITY OF THE EXISTING STRUCTURES TO SUPPORT THE PROPOSED EQUIPMENT SHALL BE DETERMINED PRIOR TO CONSTRUCTION.

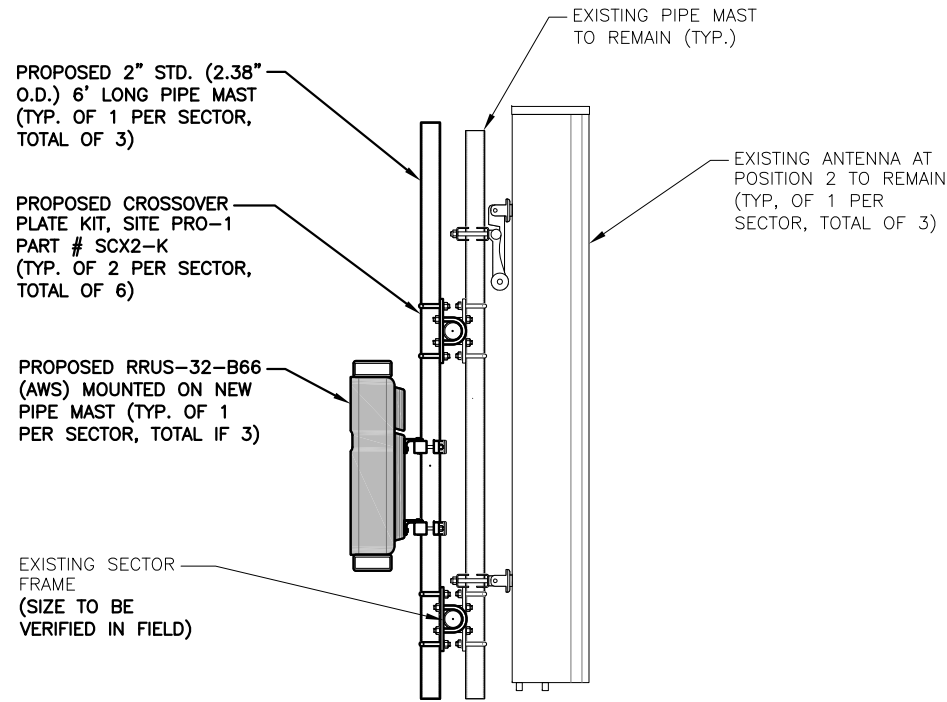
FINAL ANTENNA CONFIGURATION								
SECTOR	BAND	ANTENNA	ANTENNA CENTERLINE HEIGHT	AZIMUTH	TMA	RRUS	COAX JUMPERS	FIBER JUMPERS
ALPHA	700 MHZ/1900 MHZ 850 MHZ/1900 MHZ 850 MHZ/1900 MHZ	(E) (1) 7770 (E) (1) QS66512-2 (E) (1) SBNHH-1D65A	165'±	30°	DTMABP7819VG12A	(1) RRUS-11(700) (E) (1) RRUS-32-B2 (1900) (E) (1) RRUS-32 (WCS) (E) (1) RRUS-12 (850) (E) (GROUND) (1) RRUS-12 (700) (P) (GROUND) (1) RRUS-32-B66 (AWS) (P)	- - - - - 2*	- - - - - 1**
BETA	700 MHZ/1900 MHZ 850 MHZ/1900 MHZ 850 MHZ/1900 MHZ	(E) (1) 7770 (E) (1) QS66512-2 (E) (1) SBNHH-1D65A	165'±	150°	DTMABP7819VG12A	(1) RRUS-11(700) (E) (1) RRUS-32-B2 (1900) (E) (1) RRUS-32 (WCS) (E) (1) RRUS-12 (850) (E) (GROUND) (1) RRUS-12 (700) (P) (GROUND) (1) RRUS-32-B66 (AWS) (P)	- - - - - 2*	- - - - - 1**
GAMMA	700 MHZ/1900 MHZ 850 MHZ/1900 MHZ 850 MHZ/1900 MHZ	(E) (1) 7770 (E) (1) QS66512-2 (E) (1) SBNHH-1D65A	165'±	270°	DTMABP7819VG12A	(1) RRUS-11(700) (E) (1) RRUS-32-B2 (1900) (E) (1) RRUS-32 (WCS) (E) (1) RRUS-12 (850) (E) (GROUND) (1) RRUS-12 (700) (P) (GROUND) (1) RRUS-32-B66 (AWS) (P)	- - - - - 2*	- - - - - 1**

FINAL ANTENNA CONFIGURATION TABLE

3
A-4

***COAX JUMPER NOTE:**
COAX JUMPERS (2) PER SECTOR, FROM EACH RRU (TOTAL OF 6).

****FIBER JUMPER NOTE:**
FIBER JUMPERS (1) PER SECTOR, FROM THE SQUID TO EACH RRU (TOTAL OF 3).



PROPOSED RRH MOUNTING DETAIL

22x34 SCALE: 1"=1'-0"
11x17 SCALE: 1/2"=1'-0"

1
A-3



RRU CHART					
QUANTITY	MODEL	L	W	D	
3(E)	RRUS-11	19.7"	17.0"	7.2"	
-	RRUS-12	20.4"	18.5"	7.5"	
6(E), 3(P)	RRUS-32	27.2"	12.1"	7.0"	
-	RRUS-E2	20.4"	18.5"	7.5"	
-	LTE-A2	16.4"	15.2"	3.4"	

NOTE:
MOUNT PER MANUFACTURER'S SPECIFICATIONS

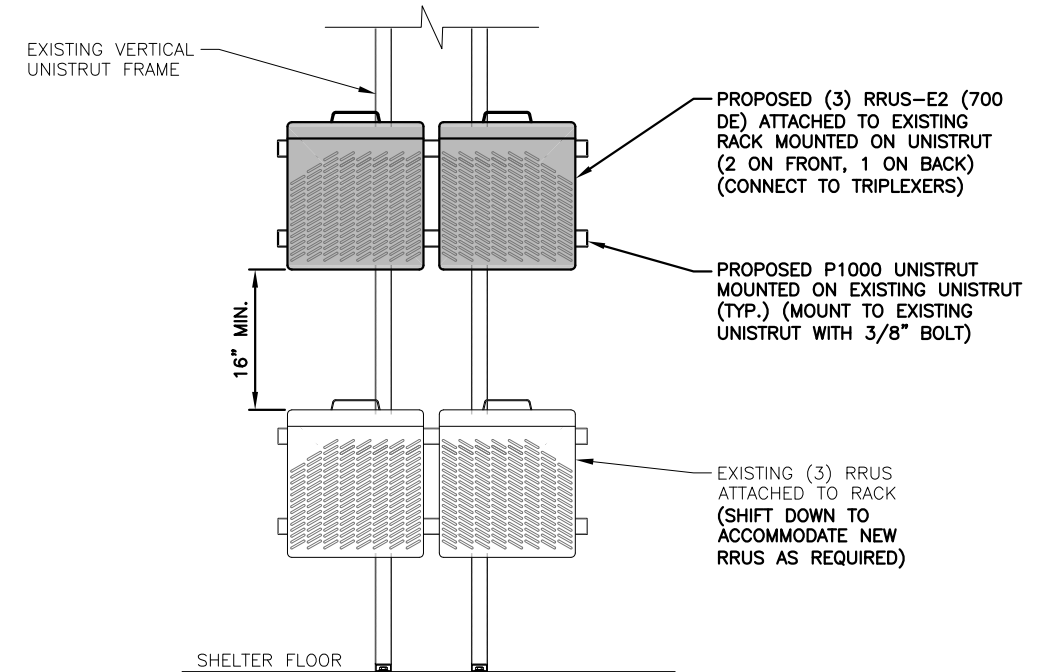
NOTE:
SEE RFDS FOR RRH FREQUENCY AND MODEL NUMBER

PROPOSED RRU REFER TO THE FINAL RFDS AND CHART FOR QUANTITY, MODEL AND DIMENSIONS

PROPOSED RRH DETAIL

SCALE: N.T.S

2
A-3



PROPOSED RRH DETAIL

SCALE: N.T.S

3
A-3



45 BEECHWOOD DRIVE
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586



95 RYAN DRIVE
RAYNHAM, MA 02767

SITE NUMBER: CT5093
SITE NAME: BRIDGEPORT BEARDSLEY

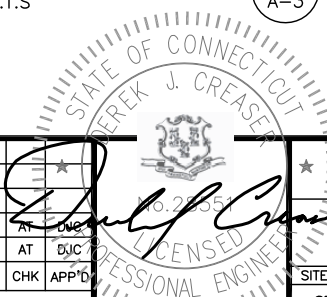
1320 CHOPSEY HILL ROAD
BRIDGEPORT, CT 06606
FAIRFIELD COUNTY



500 ENTERPRISE DRIVE, SUITE 3A
ROCKY HILL, CT 06067

NO.	DATE	REVISIONS	BY	CHK	APP'D
1	10/17/17	ISSUED FOR CONSTRUCTION	AN	AT	SB
A	08/07/17	ISSUED FOR REVIEW	SB	AT	BJC

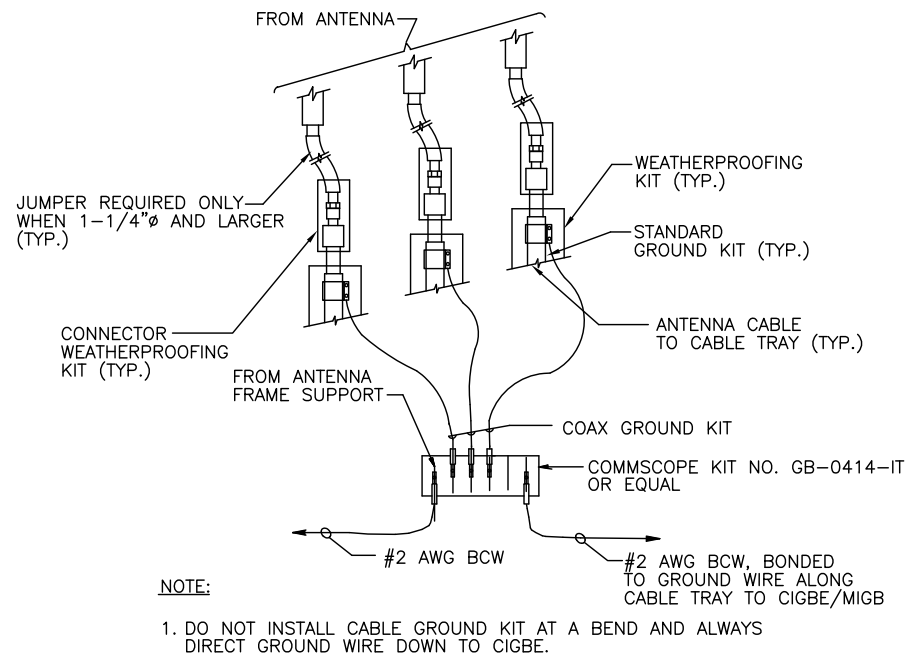
SCALE: AS SHOWN DESIGNED BY: AT DRAWN BY: SB



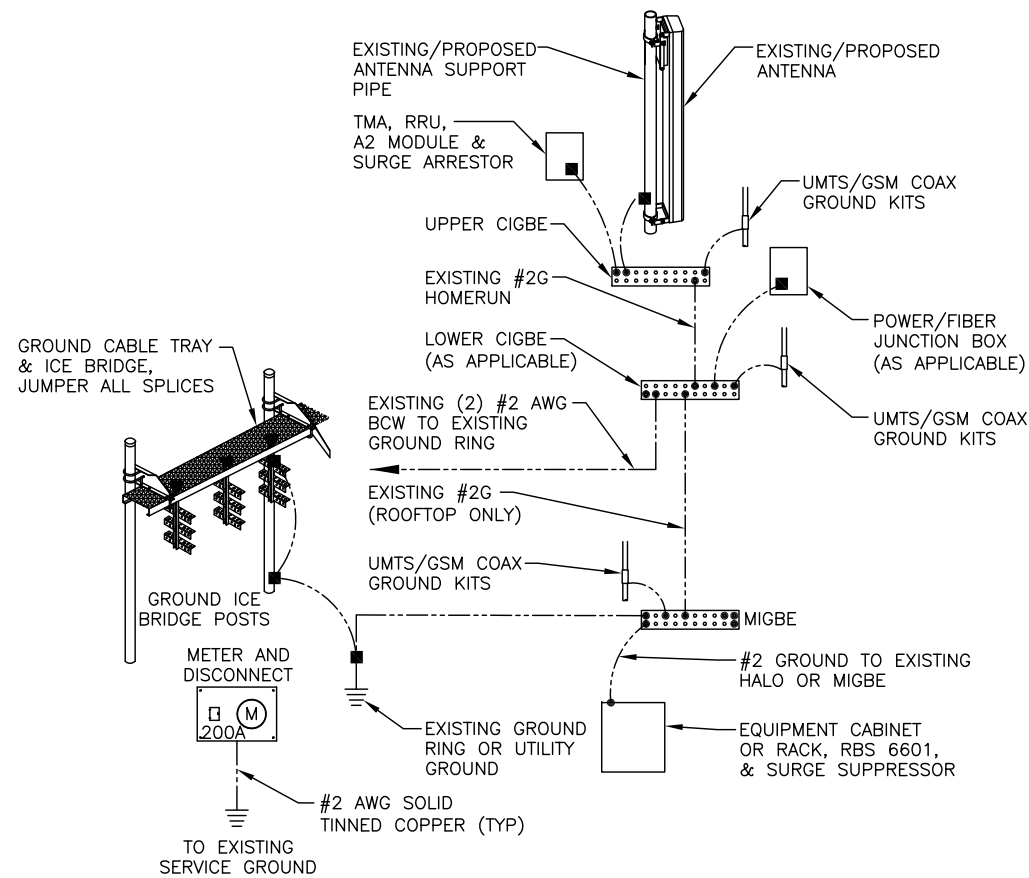
AT&T

DETAILS
(LTE 5C-6C)

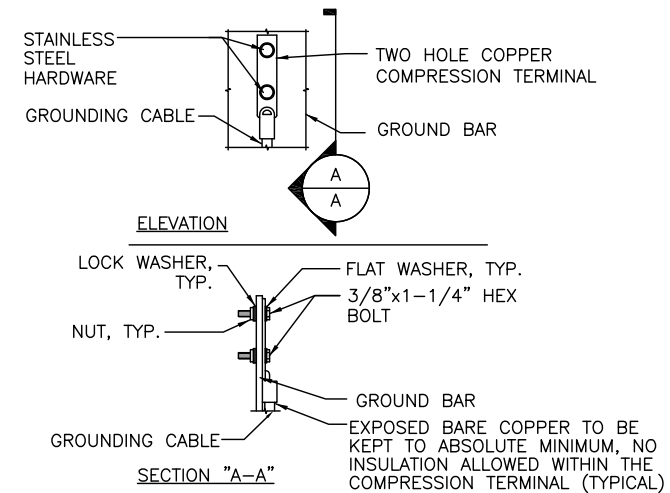
SITE NUMBER	DRAWING NUMBER	REV
CT5093	A-3	1



GROUND WIRE TO GROUND BAR CONNECTION DETAIL 1
SCALE: N.T.S. G-1



GROUNDING RISER DIAGRAM 2
SCALE: N.T.S. G-1



- NOTE:
- "DOUBLING UP" OR "STACKING" OF CONNECTION IS NOT PERMITTED.
 - OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATION.
 - CADWELDED DOWNLEADS FROM UPPER EGB, LOWER EGB, AND MGB

TYPICAL GROUND BAR CONNECTION DETAIL 3
SCALE: N.T.S. G-1

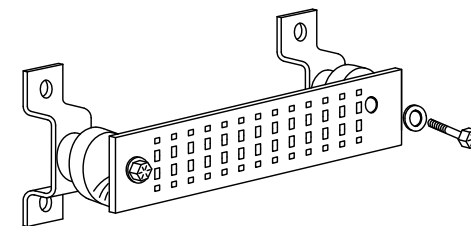
EACH GROUND CONDUCTOR TERMINATING ON ANY GROUND BAR SHALL HAVE AN IDENTIFICATION TAG ATTACHED AT EACH END THAT WILL IDENTIFY ITS ORIGIN AND DESTINATION.

SECTION "P" - SURGE PRODUCERS

- CABLE ENTRY PORTS (HATCH PLATES) (#2)
- GENERATOR FRAMEWORK (IF AVAILABLE) (#2)
- TELCO GROUND BAR
- COMMERCIAL POWER COMMON NEUTRAL/GROUND BOND (#2)
- +24V POWER SUPPLY RETURN BAR (#2)
- 48V POWER SUPPLY RETURN BAR (#2)
- RECTIFIER FRAMES.

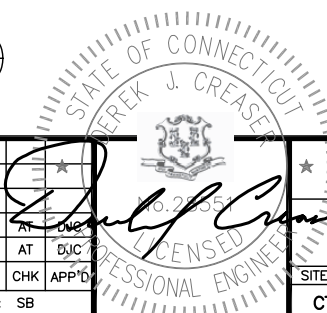
SECTION "A" - SURGE ABSORBERS

- INTERIOR GROUND RING (#2)
- EXTERNAL EARTH GROUND FIELD (BURIED GROUND RING) (#2)
- METALLIC COLD WATER PIPE (IF AVAILABLE) (#2)
- BUILDING STEEL (IF AVAILABLE) (#2)

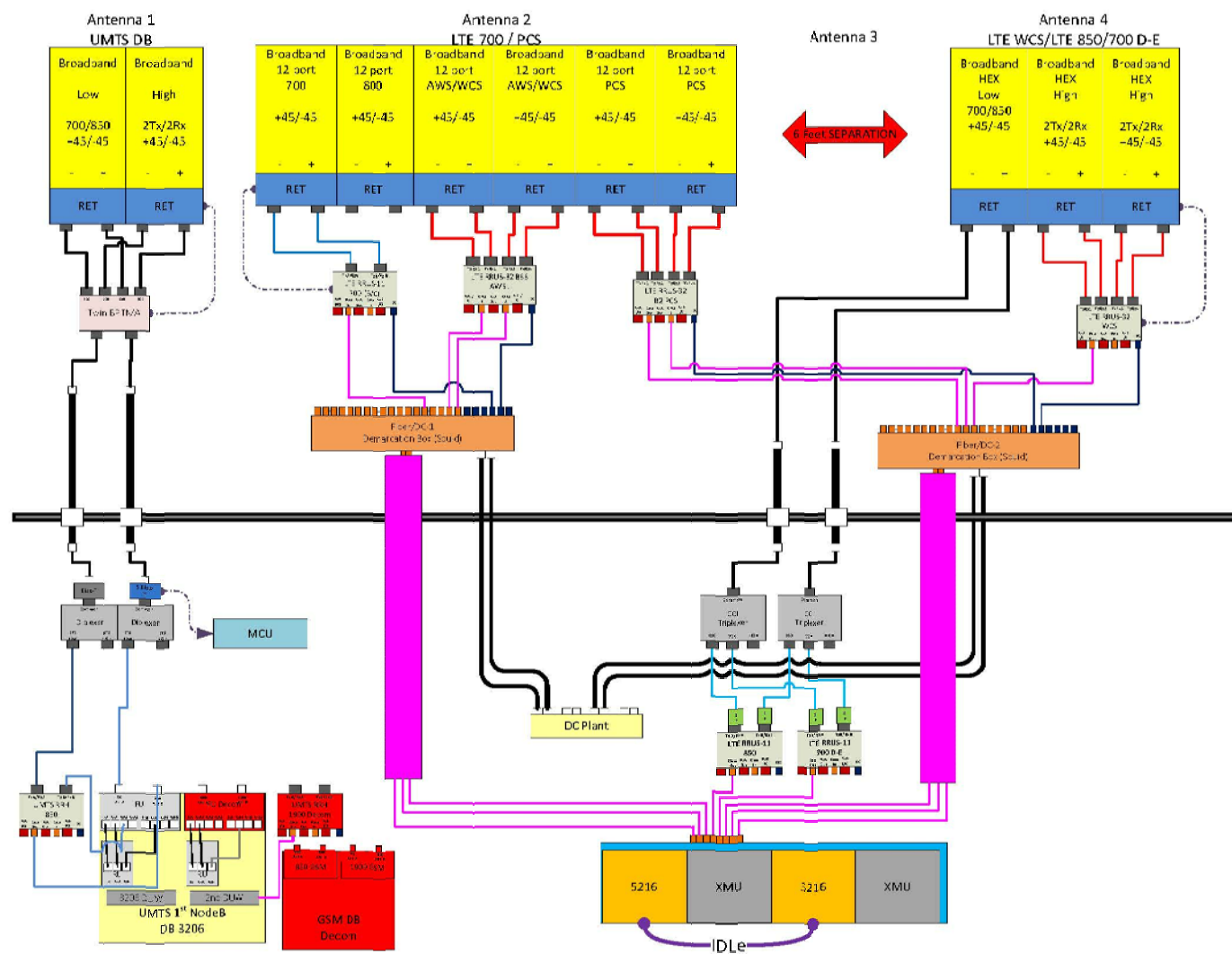


GROUND BAR - DETAIL 4
SCALE: N.T.S. G-1

1	10/17/17	ISSUED FOR CONSTRUCTION	AN	AT	CHK
A	08/07/17	ISSUED FOR REVIEW	SB	AT	CHK
NO.	DATE	REVISIONS	BY	CHK	APP'D
SCALE: AS SHOWN		DESIGNED BY: AT	DRAWN BY: SB		



AT&T		
GROUNDING DETAILS (LTE 5C-6C)		
SITE NUMBER	DRAWING NUMBER	REV
CT5093	G-1	1



RF PLUMBING DIAGRAM 1
 SCALE: N.T.S RF-1

NOTE:
 1. CONTRACTOR TO CONFIRM ALL PARTS.
 2. INSTALL ALL EQUIPMENT TO MANUFACTURER'S RECOMMENDATIONS

NOTE:
 REFER TO THE FINAL RF DATA SHEET FOR FINAL ANTENNA SETTINGS.

HGD HUDSON
 Design Group LLC
 45 BEECHWOOD DRIVE
 N. ANDOVER, MA 01845
 TEL: (978) 557-5553
 FAX: (978) 336-5586

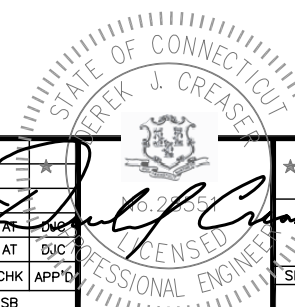
CENTERLINE
 COMMUNICATIONS
 95 RYAN DRIVE
 RAYNHAM, MA 02767

SITE NUMBER: CT5093
SITE NAME: BRIDGEPORT BEARDSLEY
 1320 CHOPSEY HILL ROAD
 BRIDGEPORT, CT 06606
 FAIRFIELD COUNTY

at&t
 500 ENTERPRISE DRIVE, SUITE 3A
 ROCKY HILL, CT 06067

NO.	DATE	REVISIONS	BY	CHK	APP'D
1	10/17/17	ISSUED FOR CONSTRUCTION	AN	AT	CHK
A	08/07/17	ISSUED FOR REVIEW	SB	AT	CHK

SCALE: AS SHOWN DESIGNED BY: AT DRAWN BY: SB



AT&T		
RF PLUMBING DIAGRAM (LTE 5C-6C)		
SITE NUMBER	DRAWING NUMBER	REV
CT5093	RF-1	1