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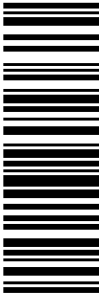
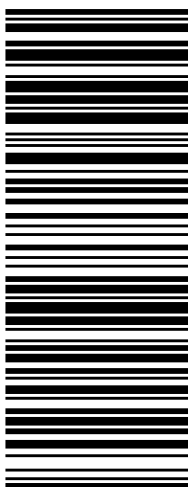

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TOWN LINE GENERAL STORE
450 E CENTER ST
WEST BRIDGEWATER ,MA 02379

FOLD HERE

<p>1 LBS</p> <p>1 OF 1</p> <p>PATRICIA NOWAK 508-265-5599 CENTERLINE COMMUNICATIONS, LLC 750 WEST CENTER STREET WEST BRIDGEWATER MA 02379</p> <p>SHIP TO: MELANIE A. BACHMAN 18608272935 CONNECTICUT SITING COUNCIL EXECUTIVE DIRECTOR TEN FRANKLIN SQUARE NEW BRITAIN CT 06051-2655</p>	<p>CT 067 9-06</p> 	<p>UPS GROUND</p> <p>TRACKING #: 1Z 9Y4 503 03 0185 9399</p> 	<p>BILLING: P/P</p> <p>Reference # 1: CT2103 - CSC</p> <p>CS 22.0.13. WNTNV50 45.0A 04/2021*</p> 
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June 7, 2021

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

Regarding: Notice of Exempt Modification – AT&T Site CT2103
Address: 20 Post Office Lane (aka 0 Maple Lane), Westport, CT 06359

Dear Ms. Bachman:

New Cingular Wireless, PCS, LLC (hereinafter “AT&T”) currently maintains a wireless telecommunications facility on an existing 142’ monopole tower (the “Tower”) at the above-referenced address, latitude 41.1234444, longitude -73.3131. Said Tower is owned by American Tower Corporation.

AT&T desires to modify its existing telecommunications facility on the Tower by adding (3) antennas and adding (3) remote radio units, as well as, other related modifications, as more particularly detailed and described in the enclosed Construction Drawings prepared by Infinigy Engineering, PLLC, dated February 12, 2021 and last revised April 7, 2021. Please note this modification includes B2, B5, and B12 hardware that is both 4G (LTE) and 5G NR capable through remote software configuration and either or both services may be turned on or off at various times. Enclosed please also find an Antenna Mount Analysis Report prepared by American Tower Corporation dated February 3, 2021. The centerline height of the antennas will be at 131 feet.

The Tower was originally approved by the Connecticut Siting Council on August 29, 1995 under Docket No. 166, as amended by Petition No. 394 on August 25, 1998. Enclosed please find a copy of the above mentioned Docket and Petition Decisions.

Please accept this letter as notification pursuant to R.C.S.A §16-50j-73 for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to the following individuals: The Honorable James Marpe, First Selectman of the Town of Westport, CT; Mary Young, Planning and Zoning Director of the Westport, CT; Jay Sherwood as the property owner; and American Tower Corporation, as Tower owner. Enclosed please find a property card and map of the property.

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

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 modified facility will not increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission safety standard. *Please see the enclosed Radio Frequency Emissions Report for AT&T's modified facility enclosed herewith.*
5. The proposed modifications will not cause an ineligible change or alteration in the physical or environmental characteristics of the site.
6. The existing structure and its foundation can support the proposed loading. *Please see the Structural Analysis Report dated January 27, 2021 and prepared 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,

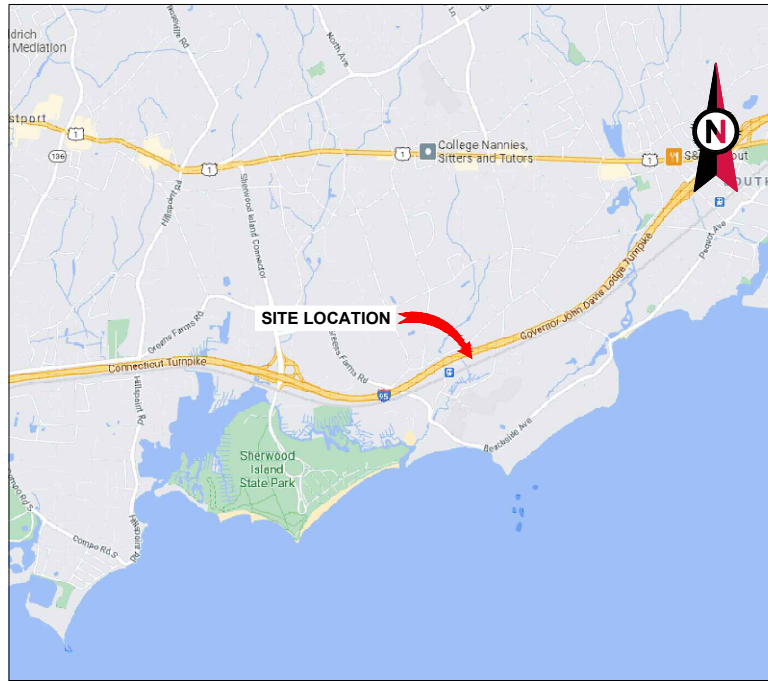


Patricia Nowak
Site Acquisition Consultant
Centerline Communications, LLC
750 West Center Street, Suite 301
West Bridgewater, MA 02379
pnowak@clinellc.com

Enclosures: Exhibit 1 – Construction Drawings
 Exhibit 2 – Mount Analysis
 Exhibit 3 – CSC Decisions
 Exhibit 4 – Property Card and Map
 Exhibit 5 – Radio Frequency Emissions Report
 Exhibit 6 – Structural Analysis

cc: The Honorable James Marpe, First Selectman of the Town of Westport, CT
 Mary Young, Planning and Zoning Director of the Town of Westport, CT
 Jay Sherwood, property owner
 American Tower Corporation, Tower owner

EXHIBIT 1



VICINITY MAP

CURRENT PROJECTS:
LTE 6C - PACE #: MRCTB049079



AMERICAN TOWER®

ATC SITE NAME: WSPT - SOUTH
 ATC SITE NUMBER: 302511
 AT&T PACE NUMBERS: MRCTB049079
 AT&T SITE ID: CTL02103
 AT&T FA CODE: 10035073
 AT&T SITE NAME: WESTPORT SOUTH
 SITE ADDRESS: 19-20 POST OFFICE LANE
 WESTPORT, CT 06880

**AT&T MOBILITY
 ANTENNA AMENDMENT PLAN**



LOCATION MAP

AMERICAN TOWER®
 A.T. ENGINEERING SERVICE, PLLC

INFINIGY®
 ENGINEERING, PLLC
 1033 WATERVLIT SHAKER RD
 ALBANY, NY 12205

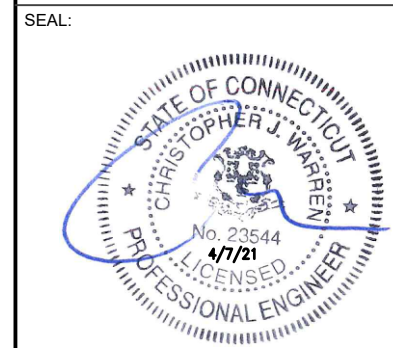
REV.	DESCRIPTION	BY	DATE
A	PRELIM	MN	02/12/21
B	PRELIM	SP	03/22/21
0	FOR CONSTRUCTION	SP	04/07/21

ATC SITE NUMBER:
302511

ATC SITE NAME:
WSPT - SOUTH

AT&T MOBILITY SITE NAME:
WESTPORT SOUTH

SITE ADDRESS:
19-20 POST OFFICE LANE
WESTPORT, CT 06880



DATE DRAWN:	02/12/21
ATC JOB NO:	13333739_G3
CUSTOMER ID:	WESTPORT SOUTH
CUSTOMER #:	10035073

TITLE SHEET

SHEET NUMBER:
G-001

REVISION:
0

COMPLIANCE CODE	PROJECT SUMMARY	PROJECT DESCRIPTION	SHEET INDEX				
<p>ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNMENT AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.</p> <ol style="list-style-type: none"> 2018 INTERNATIONAL BUILDING CODE (IBC) 2017 NATIONAL ELECTRIC CODE (NEC) LOCAL BUILDING CODE CITY/COUNTY ORDINANCES 	<p><u>SITE ADDRESS:</u> 19-20 POST OFFICE LANE WESTPORT, CT 06880 COUNTY: FAIRFIELD</p> <p><u>GEOGRAPHIC COORDINATES:</u> LATITUDE: 41.1234444 LONGITUDE: -73.3131 GROUND ELEVATION: 15' AMSL</p> <p><u>ZONING INFORMATION:</u> JURISDICTION: FAIRFIELD COUNTY PARCEL #: H06017000</p>	<p>THE PROPOSED PROJECT INCLUDES MODIFYING GROUND BASED AND TOWER MOUNTED EQUIPMENT AS INDICATED PER BELOW: <u>TOWER WORK:</u> REMOVE (3) DIPLEXERS, AND (6) COAX CABLES INSTALL (3) MOUNTING PIPES, (3) SECTOR FRAMES, (3) ANTENNAS, (3) RRHS AND (2) DC TRUNKS <u>EXISTING (9) ANTENNAS, (9) RRHS, (6) TMAS, (3) SQUIDS, (2) DC TRUNKS AND (1) FIBER TRUNK TO REMAIN</u> <u>GROUND WORK:</u> REMOVE (1) 3206 INDOOR CABINET INSTALL (1) IDLE <u>EXISTING (1) 3206 INDOOR CABINET TO REMAIN</u></p>	SHEET NO:	DESCRIPTION:	REV:	DATE:	BY:
	<p><u>PROJECT TEAM</u></p> <p><u>TOWER OWNER:</u> AMERICAN TOWER 10 PRESIDENTIAL WAY WOBURN, MA 01801</p> <p><u>APPLICANT:</u> AT&T MOBILITY</p> <p><u>ENGINEER:</u> INFINIGY ENGINEERING, PLLC 1033 WATERVLIT SHAKER RD ALBANY, NY 12205</p> <p><u>PROPERTY OWNER:</u> JAY SHERWOOD 20 POST OFFICE LANE - WESTPORT - CT - 06880</p>	<p><u>PROJECT NOTES</u></p> <ol style="list-style-type: none"> THE FACILITY IS UNMANNED. A TECHNICIAN WILL VISIT THE SITE APPROXIMATELY ONCE A MONTH FOR ROUTINE INSPECTION AND MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT LAND DISTURBANCE OR EFFECT OF STORM WATER DRAINAGE. NO SANITARY SEWER, POTABLE WATER OR TRASH DISPOSAL IS REQUIRED. HANDICAP ACCESS IS NOT REQUIRED. 	G-001	TITLE SHEET	0	4/7/2021	SP
<p><u>UTILITY COMPANIES</u></p> <p>POWER COMPANY: UNITED ILLUMINATING PHONE: (800) 722-5584</p> <p>TELEPHONE COMPANY: N/A PHONE: N/A</p>	<p><u>PROJECT LOCATION DIRECTIONS</u></p> <p>FROM HARTFORD TAKE I-91 SOUTH TO I-95 SOUTH. TAKE EXIT 18 STAYING TO THE RIGHT OFF THE EXIT. AT SECOND LIGHT TAKE A RIGHT AND FOLLOW ABOUT 1.25 MILES AND TURN RIGHT ONTO NEW CREEK ROAD. GO UNDER BRIDGE AND TURN LEFT ONTO POST OFFICE LANE. FOLLOW TO END PAST THE HOUSE TO THE SITE.</p>	G-002	GENERAL NOTES	0	4/7/2021	SP	
<p>811 Know what's below. Call before you dig.</p>	<p><u>PROJECT LOCATION DIRECTIONS</u></p> <p>FROM HARTFORD TAKE I-91 SOUTH TO I-95 SOUTH. TAKE EXIT 18 STAYING TO THE RIGHT OFF THE EXIT. AT SECOND LIGHT TAKE A RIGHT AND FOLLOW ABOUT 1.25 MILES AND TURN RIGHT ONTO NEW CREEK ROAD. GO UNDER BRIDGE AND TURN LEFT ONTO POST OFFICE LANE. FOLLOW TO END PAST THE HOUSE TO THE SITE.</p>	C-001	OVERALL SITE PLAN	0	4/7/2021	SP	
		C-101	DETAILED GROUND PLAN	0	4/7/2021	SP	
		C-102	DETAILED EQUIPMENT LAYOUT	0	4/7/2021	SP	
		C-201	TOWER ELEVATION	0	4/7/2021	SP	
		C-401	RF SCHEDULE AND ANTENNA INSTALLATION	0	4/7/2021	SP	
		C-501	CONSTRUCTION DETAILS	0	4/7/2021	SP	
		C-502	EQUIPMENT SPECIFICATIONS	0	4/7/2021	SP	
		E-501	GROUNDING DETAILS	0	4/7/2021	SP	
		R-601	SUPPLEMENTAL	0	4/7/2021	SP	
		R-602	SUPPLEMENTAL	0	4/7/2021	SP	
		R-603	SUPPLEMENTAL	0	4/7/2021	SP	
		R-604	SUPPLEMENTAL	0	4/7/2021	SP	
		R-605	SUPPLEMENTAL	0	4/7/2021	SP	
		R-606	SUPPLEMENTAL	0	4/7/2021	SP	
		R-607	SUPPLEMENTAL	0	4/7/2021	SP	

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GENERAL CONSTRUCTION NOTES:

1. OWNER FURNISHED MATERIALS, AT&T MOBILITY "THE COMPANY" WILL PROVIDE AND THE CONTRACTOR WILL INSTALL
 - A. BTS EQUIPMENT FRAME (PLATFORM) AND ICEBRIDGE SHELTER (GROUND BUILD/CO-LOCATE ONLY)
 - B. AC/TELCO INTERFACE BOX (PPC)
 - C. ICE BRIDGE (CABLE TRAY WITH COVER) (GROUND BUILD/CO-LOCATE ONLY, GC TO FURNISH AND INSTALL FOR ROOFTOP INSTALLATION)
 - D. TOWERS, MONOPOLES
 - E. TOWER LIGHTING
 - F. GENERATORS & LIQUID PROPANE TANK
 - G. ANTENNA STANDARD BRACKETS, FRAMES AND PIPES FOR MOUNTING
 - H. ANTENNAS (INSTALLED BY OTHERS)
 - I. TRANSMISSION LINE
 - J. TRANSMISSION LINE JUMPERS
 - K. TRANSMISSION LINE CONNECTORS WITH WEATHERPROOFING KITS
 - L. TRANSMISSION LINE GROUND KITS
 - M. HANGERS
 - N. HOISTING GRIPS
 - O. BTS EQUIPMENT
2. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL OTHER MATERIALS FOR THE COMPLETE INSTALLATION OF THE SITE INCLUDING, BUT NOT LIMITED TO, SUCH MATERIALS AS FENCING, STRUCTURAL STEEL SUPPORTING SUB-FRAME FOR PLATFORM, ROOFING LABOR AND MATERIALS, GROUNDING RINGS, GROUNDING WIRES, COPPER-CLAD OR XIT CHEMICAL GROUND ROD(S), BUSS BARS, TRANSFORMERS AND DISCONNECT SWITCHES WHERE APPLICABLE, TEMPORARY ELECTRICAL POWER, CONDUIT, LANDSCAPING COMPOUND STONE, CRANES, CORE DRILLING, SLEEPERS AND RUBBER MATTING, REBAR, CONCRETE CAISSONS, PADS AND/OR AUGER MOUNTS, MISCELLANEOUS FASTENERS, CABLE TRAYS, NON-STANDARD ANTENNA FRAMES AND ALL OTHER MATERIAL AND LABOR REQUIRED TO COMPLETE THE JOB ACCORDING TO THE DRAWINGS AND SPECIFICATIONS. IT IS THE POSITION OF AT&T MOBILITY TO APPLY FOR PERMITTING AND CONTRACTOR RESPONSIBLE FOR PICKUP AND PAYMENT OF REQUIRED PERMITS.
3. ALL WORK SHALL CONFORM TO ALL CURRENT APPLICABLE FEDERAL, STATE, AND LOCAL CODES, INCLUDING ANSIEIA/NTIA-222, AND COMPLY WITH ATC CONSTRUCTION SPECIFICATIONS.
4. CONTRACTOR SHALL CONTACT LOCAL 811 FOR IDENTIFICATION OF UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED INSPECTIONS.
6. ALL DIMENSIONS TO, OF, AND ON EXISTING BUILDINGS, DRAINAGE STRUCTURES, AND SITE IMPROVEMENTS SHALL BE VERIFIED IN FIELD BY CONTRACTOR WITH ALL DISCREPANCIES REPORTED TO THE ENGINEER.
7. DO NOT CHANGE SIZE OR SPACING OF STRUCTURAL ELEMENTS.
8. DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
9. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
10. CONTRACTOR SHALL BRACE STRUCTURES UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: LATERAL BRACING, ANCHOR BOLTS, ETC.
11. CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UTILITIES, GROUNDS DRAINS, DRAIN PIPES, VENTS, ETC. BEFORE COMMENCING WORK.
12. INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE AT&T MOBILITY REP PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH REMEDIAL ACTION SHALL REQUIRE WRITTEN APPROVAL BY THE AT&T MOBILITY REP PRIOR TO PROCEEDING.
13. EACH CONTRACTOR SHALL COOPERATE WITH THE AT&T MOBILITY REP, AND COORDINATE HIS WORK WITH THE WORK OF OTHERS.
14. CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION OF THIS PROJECT TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION OF THE AT&T MOBILITY CONSTRUCTION MANAGER.
15. ALL CABLE/CONDUIT ENTRY/EXIT PORTS SHALL BE WEATHERPROOFED DURING INSTALLATION USING A SILICONE SEALANT.
16. WHERE EXISTING CONDITIONS DO NOT MATCH THOSE SHOWN IN THIS PLAN SET, CONTRACTOR SHALL NOTIFY THE AT&T MOBILITY REP AND ENGINEER OF RECORD IMMEDIATELY.
17. CONTRACTOR SHALL ENSURE ALL SUBCONTRACTORS ARE PROVIDED WITH A COMPLETE AND CURRENT SET OF DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.
18. CONTRACTOR SHALL REMOVE ALL RUBBISH AND DEBRIS FROM THE SITE AT THE END OF EACH DAY.
19. CONTRACTOR SHALL COORDINATE WORK SCHEDULE WITH AMERICAN TOWER CORPORATION (ATC) AND TAKE PRECAUTIONS TO MINIMIZE IMPACT AND DISRUPTION OF OTHER OCCUPANTS OF THE FACILITY.
20. CONTRACTOR SHALL FURNISH AT&T MOBILITY AND AMERICAN TOWER CORPORATION (ATC) WITH A PDF MARKED UP AS-BUILT SET OF DRAWINGS UPON COMPLETION OF WORK.
21. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH AT&T MOBILITY REP TO DETERMINE WHAT, IF ANY, ITEMS WILL BE PROVIDED. ALL ITEMS NOT PROVIDED SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR. CONTRACTOR WILL INSTALL

- ALL ITEMS PROVIDED.
22. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH AT&T MOBILITY REP TO DETERMINE IF ANY PERMITS WILL BE OBTAINED BY CONTRACTOR. ALL REQUIRED PERMITS NOT OBTAINED BY AT&T MOBILITY MUST BE OBTAINED, AND PAID FOR, BY THE CONTRACTOR.
 23. CONTRACTOR SHALL INSTALL ALL SITE SIGNAGE IN ACCORDANCE WITH AT&T MOBILITY SPECIFICATIONS AND REQUIREMENTS.
 24. CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO AT&T MOBILITY FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
 25. ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND LOCATED ACCORDING TO AT&T MOBILITY SPECIFICATIONS, AND AS SHOWN IN THESE PLANS.
 26. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
 27. CONTRACTOR SHALL NOTIFY AT&T MOBILITY REP A MINIMUM OF 48 HOURS IN ADVANCE OF POURING CONCRETE OR BACKFILLING ANY UNDERGROUND UTILITIES, FOUNDATIONS OR SEALING ANY WALL, FLOOR OR ROOF PENETRATIONS FOR ENGINEERING REVIEW AND APPROVAL.
 28. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY INCLUDING COMPLIANCE WITH ALL APPLICABLE OSHA STANDARDS AND RECOMMENDATIONS AND SHALL PROVIDE ALL NECESSARY SAFETY DEVICES INCLUDING PPE AND PPM AND CONSTRUCTION DEVICES SUCH AS WELDING AND FIRE PREVENTION, TEMPORARY SHORING, SCAFFOLDING, TRENCH BOXES/SLOPING, BARRIERS, ETC.
 29. THE CONTRACTOR SHALL PROTECT AT HIS OWN EXPENSE, ALL EXISTING FACILITIES AND SUCH OF HIS NEW WORK LIABLE TO INJURY DURING THE CONSTRUCTION PERIOD. ANY DAMAGE CAUSED BY NEGLIGENCE ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, OR BY THE ELEMENTS DUE TO NEGLIGENCE ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, EITHER TO THE EXISTING WORK, OR TO HIS WORK OR THE WORK OF ANY OTHER CONTRACTOR, SHALL BE REPAIRED AT HIS EXPENSE TO THE OWNER'S SATISFACTION.
 30. ALL WORK SHALL BE INSTALLED IN A FIRST CLASS, NEAT AND WORKMANLIKE MANNER BY MECHANICS SKILLED IN THE TRADE INVOLVED. THE QUALITY OF WORKMANSHIP SHALL BE SUBJECT TO THE APPROVAL OF THE AT&T MOBILITY REP. ANY WORK FOUND BY THE AT&T MOBILITY REP TO BE OF INFERIOR QUALITY AND/OR WORKMANSHIP SHALL BE REPLACED AND/OR REWORKED AT CONTRACTOR EXPENSE UNTIL APPROVAL IS OBTAINED.
 31. IN ORDER TO ESTABLISH STANDARDS OF QUALITY AND PERFORMANCE, ALL TYPES OF MATERIALS LISTED HEREINAFTER BY MANUFACTURER'S NAMES AND/OR MANUFACTURER'S CATALOG NUMBER SHALL BE PROVIDED BY THESE MANUFACTURERS AS SPECIFIED.
 32. AT&T MOBILITY FURNISHED EQUIPMENT SHALL BE PICKED-UP AT THE AT&T MOBILITY WAREHOUSE, NO LATER THAN 48HR AFTER BEING NOTIFIED INSURED, STORED, UNGRATE, PROTECTED AND INSTALLED BY THE CONTRACTOR WITH ALL APPURTENANCES REQUIRED TO PLACE THE EQUIPMENT IN OPERATION, READY FOR USE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE EQUIPMENT AFTER PICKING IT UP.
 33. AT&T MOBILITY OR HIS ARCHITECT/ENGINEER RESERVES THE RIGHT TO REJECT ANY EQUIPMENT OR MATERIALS WHICH, IN HIS OWN OPINION ARE NOT IN COMPLIANCE WITH THE CONTRACT DOCUMENTS, EITHER BEFORE OR AFTER INSTALLATION AND THE EQUIPMENT SHALL BE REPLACED WITH EQUIPMENT CONFORMING TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS BY THE CONTRACTOR AT NO COST TO AT&T MOBILITY OR THEIR ARCHITECT/ENGINEER.

SPECIAL CONSTRUCTION

ANTENNA INSTALLATION NOTES:

1. WORK INCLUDED:
 - A. ANTENNA AND COAXIAL CABLES ARE FURNISHED BY AT&T MOBILITY UNDER A SEPARATE CONTRACT. THE CONTRACTOR SHALL ASSIST ANTENNA INSTALLATION CONTRACTOR IN TERMS OF COORDINATION AND SITE ACCESS. ERECTION SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF PERSONNEL AND
 - B. INSTALL ANTENNA AS INDICATED ON DRAWINGS AND AT&T MOBILITY SPECIFICATIONS.
 - C. INSTALL GALVANIZED STEEL ANTENNA MOUNTS AS INDICATED ON DRAWINGS
 - D. INSTALL FURNISHED GALVANIZED STEEL OR ALUMINUM WAVEGUIDE.
 - E. CONTRACTOR SHALL PROVIDE FOUR (4) SETS OF SWEEP TESTS USING ANRITZU-PACKARD 8713B RF SCALAR NETWORK ANALYZER. SUBMIT FREQUENCY DOMAIN REFLECTOMETER(FDR) TESTS RESULTS TO THE PROJECT MANAGER. SWEEP TESTS SHALL BE AS PER ATTACHED RFS "MINIMUM FIELD TESTING RECOMMENDED FOR ANTENNA AND HELIAX COAXIAL CABLE SYSTEMS" DATED 10/5/93. TESTING SHALL BE PERFORMED BY AN INDEPENDENT TESTING SERVICE AND BE BOUND AND SUBMITTED WITHIN ONE WEEK OF WORK COMPLETION.
 - F. INSTALL COAXIAL CABLES AND TERMINATING BETWEEN ANTENNAS AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS. WEATHERPROOF ALL CONNECTIONS BETWEEN THE ANTENNA AND EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. TERMINATE ALL COAXIAL CABLE THREE (3) FEET IN EXCESS OF ENTRY PORT LOCATION UNLESS OTHERWISE STATED.
 - G. ANTENNA AND COAXIAL CABLE GROUNDING:

2. ALL EXTERIOR #6 GREEN GROUND WIRE "DAISY CHAIN" CONNECTIONS ARE TO BE WEATHER SEALED WITH RFS CONNECTORS/SPLICE WEATHERPROOFING KIT #221213 OR

- EQUAL.
3. ALL COAXIAL CABLE GROUNDING KITS ARE TO BE INSTALLED ON STRAIGHT RUNS OF COAXIAL CABLE (NOT WITHIN BENDS)

ALL DISCREPANCIES FROM WHAT IS SHOWN ON THESE CONSTRUCTION DRAWINGS SHALL BE COMMUNICATED TO ATC ENGINEERING IMMEDIATELY FOR CORRECTION OR RE-DESIGN. FAILURE TO COMMUNICATE DIRECTLY WITH ATC ENGINEERING OR ANY CHANGES FROM THE DESIGN CONDUCTED WITHOUT PRIOR APPROVAL FROM ATC ENGINEERING SHALL BE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR.



INFINIGY
ENGINEERING, PLLC
1033 WATERVLIET SHAKER RD
ALBANY, NY 12205

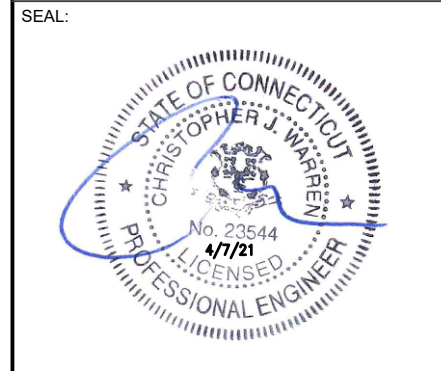
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DATE DRAWN:	02/12/21
ATC JOB NO:	13333739_G3
CUSTOMER ID:	WESTPORT SOUTH
CUSTOMER #:	10035073

GENERAL NOTES

SHEET NUMBER: G-002	REVISION: 0
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NOTES:

- BOUNDARY LINES OBTAINED FROM FAIRFIELD COUNTY ONLINE GIS.
- ZONING INFORMATION OBTAINED FROM FAIRFIELD COUNTY

INFORMATION CONTAINED WITHIN THESE DRAWINGS IS BASED ON PROVIDED INFORMATION. CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION.



INFINIGY
ENGINEERING, PLLC
1033 WATERVLIET SHAKER RD
ALBANY, NY 12205

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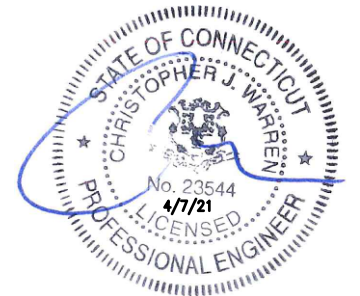
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ATC SITE NAME:
WSPT - SOUTH

AT&T MOBILITY SITE NAME:
WESTPORT SOUTH

SITE ADDRESS:
19-20 POST OFFICE LANE
WESTPORT, CT 06880

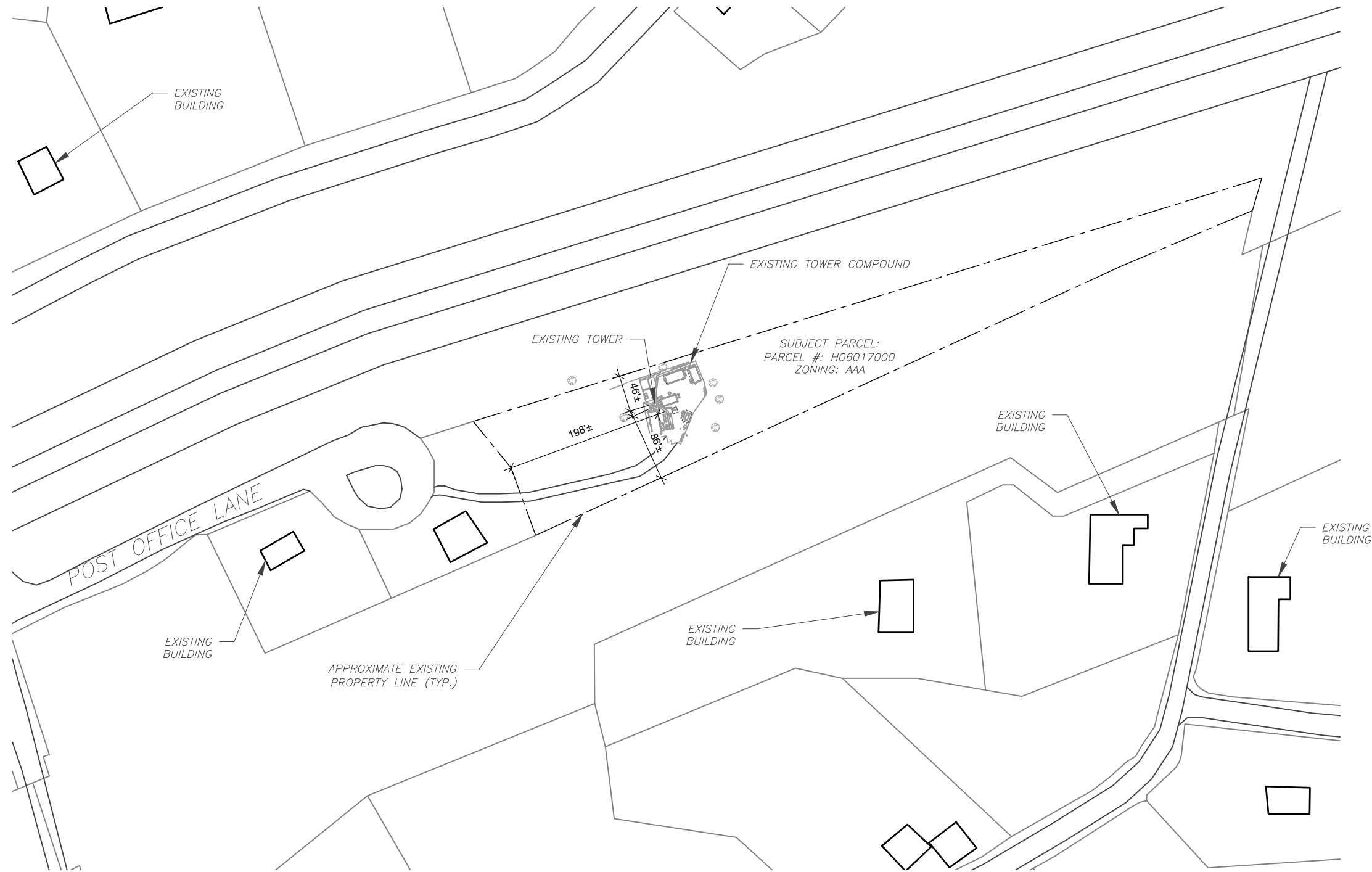
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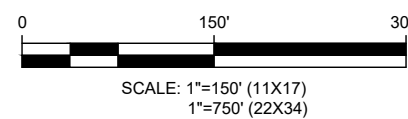
DATE DRAWN:	02/12/21
ATC JOB NO:	13333739_G3
CUSTOMER ID:	WESTPORT SOUTH
CUSTOMER #:	10035073

OVERALL SITE PLAN

SHEET NUMBER:	REVISION:
C-001	0



1 OVERALL SITE PLAN



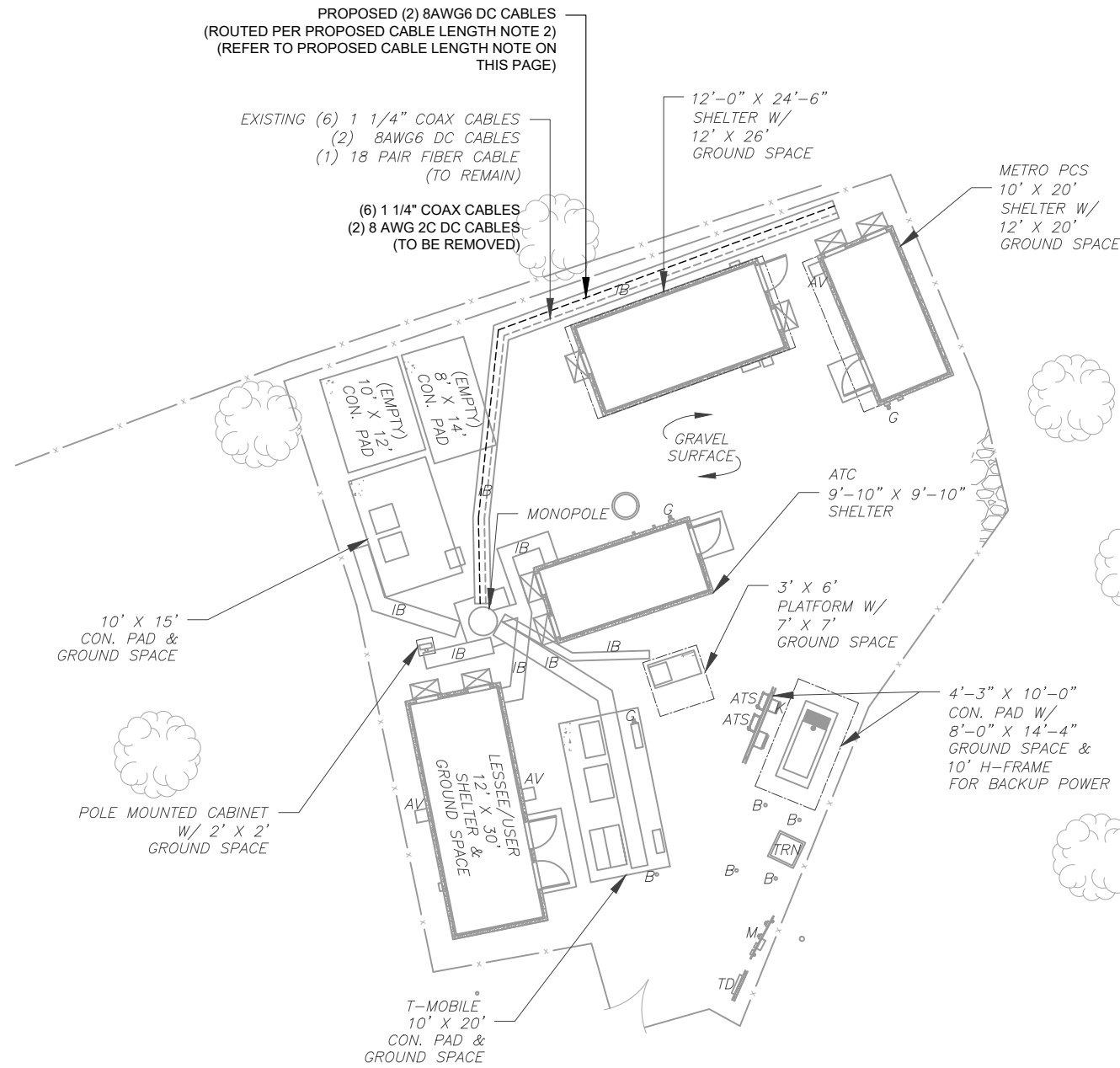
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SITE PLAN NOTES:

1. THIS SITE PLAN REPRESENTS THE BEST PRESENT KNOWLEDGE AVAILABLE TO THE ENGINEER AT THE TIME OF THIS DESIGN. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO CONSTRUCTION AND VERIFY ALL EXISTING CONDITIONS RELATED TO THE SCOPE OF WORK FOR THIS PROJECT.
2. ICE BRIDGE, CABLE LADDER, COAX PORT, AND COAX CABLE ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL CONFIRM THE EXACT LOCATION OF ALL PROPOSED AND EXISTING EQUIPMENT AND STRUCTURES DEPICTED ON THIS PLAN. BEFORE UTILIZING EXISTING CABLE SUPPORTS, COAX PORTS, INSTALLING NEW PORTS OR ANY OTHER EQUIPMENT, CONTRACTOR SHALL VERIFY ALL ASPECTS OF THE COMPONENTS MEET THE ATC SPECIFICATIONS.
3. NO ELECTRICAL SCOPE IS INCLUDED IN THIS PROJECT.

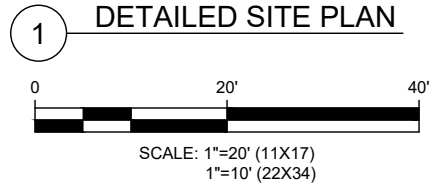
INFORMATION CONTAINED WITHIN THESE DRAWINGS IS BASED ON PROVIDED INFORMATION. CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION.

LEGEND	
⊗	GROUNDING TEST WELL
ATS	AUTOMATIC TRANSFER SWITCH
B	BOLLARD
CSC	CELL SITE CABINET
D	DISCONNECT
E	ELECTRICAL
F	FIBER
GEN	GENERATOR
G	GENERATOR RECEPTACAL
HH, V	HAND HOLE, VAULT
IB	ICE BRIDGE
K	KENTROX BOX
LC	LIGHTING CONTROL
M	METER
PB	PULL BOX
PP	POWER POLE
T	TELCO
TRN	TRANSFORMER
— x —	CHAINLINK FENCE



PROPOSED CABLE LENGTH:

1. ESTIMATED LENGTH OF PROPOSED CABLE IS **240'**. ESTIMATED LENGTH OF CABLE WAS PROVIDED BY CUSTOMER OR CALCULATED BY ADDING THE RAD CENTER AND THE DISTANCE FROM THE SHELTER ENTRY PLATE TO THE TOWER (ALONG THE ICE BRIDGE) AND A SAFETY FACTOR MEASUREMENT OF 15% (OF THE TWO PREVIOUS VALUES). CDS DEFER TO GREATEST CABLE LENGTH.
2. ROUTE PROPOSED CABLES ALONG SAME PATH AS EXISTING CABLES AND IN ACCORDANCE WITH STRUCTURAL ANALYSIS. IF ADEQUATE SPACE EXISTS, ROUTE CABLES THROUGH ENTRY PORT HOLE, UP INSIDE OF MONOPOLE, AND THROUGH EXIT PORT HOLE. IF ROUTING OUTSIDE THE MONOPOLE, ATTACH CABLES USING STAND-OFF ADAPTERS MOUNTED TO TOWER USING STAINLESS STEEL BANDING. ADEQUATELY SECURE CABLES USING EITHER APPROPRIATELY SIZED STAINLESS STEEL SNAP-INS OR MOUNTING HARDWARE AND BRACKETS AS SPECIFIED BY CABLE MANUFACTURER.



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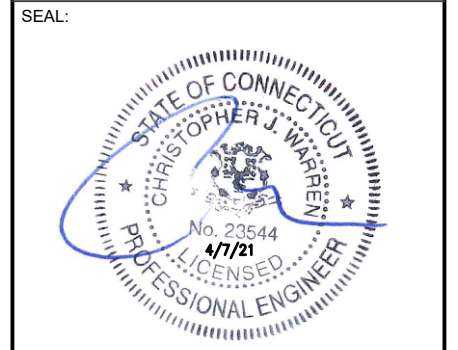
REV.	DESCRIPTION	BY	DATE
A	PRELIM	MN	02/12/21
B	PRELIM	SP	03/22/21
0	FOR CONSTRUCTION	SP	04/07/21

ATC SITE NUMBER:
302511

ATC SITE NAME:
WSPT - SOUTH

AT&T MOBILITY SITE NAME:
WESTPORT SOUTH

SITE ADDRESS:
19-20 POST OFFICE LANE
WESTPORT, CT 06880



DATE DRAWN:	02/12/21
ATC JOB NO:	13333739_G3
CUSTOMER ID:	WESTPORT SOUTH
CUSTOMER #:	10035073

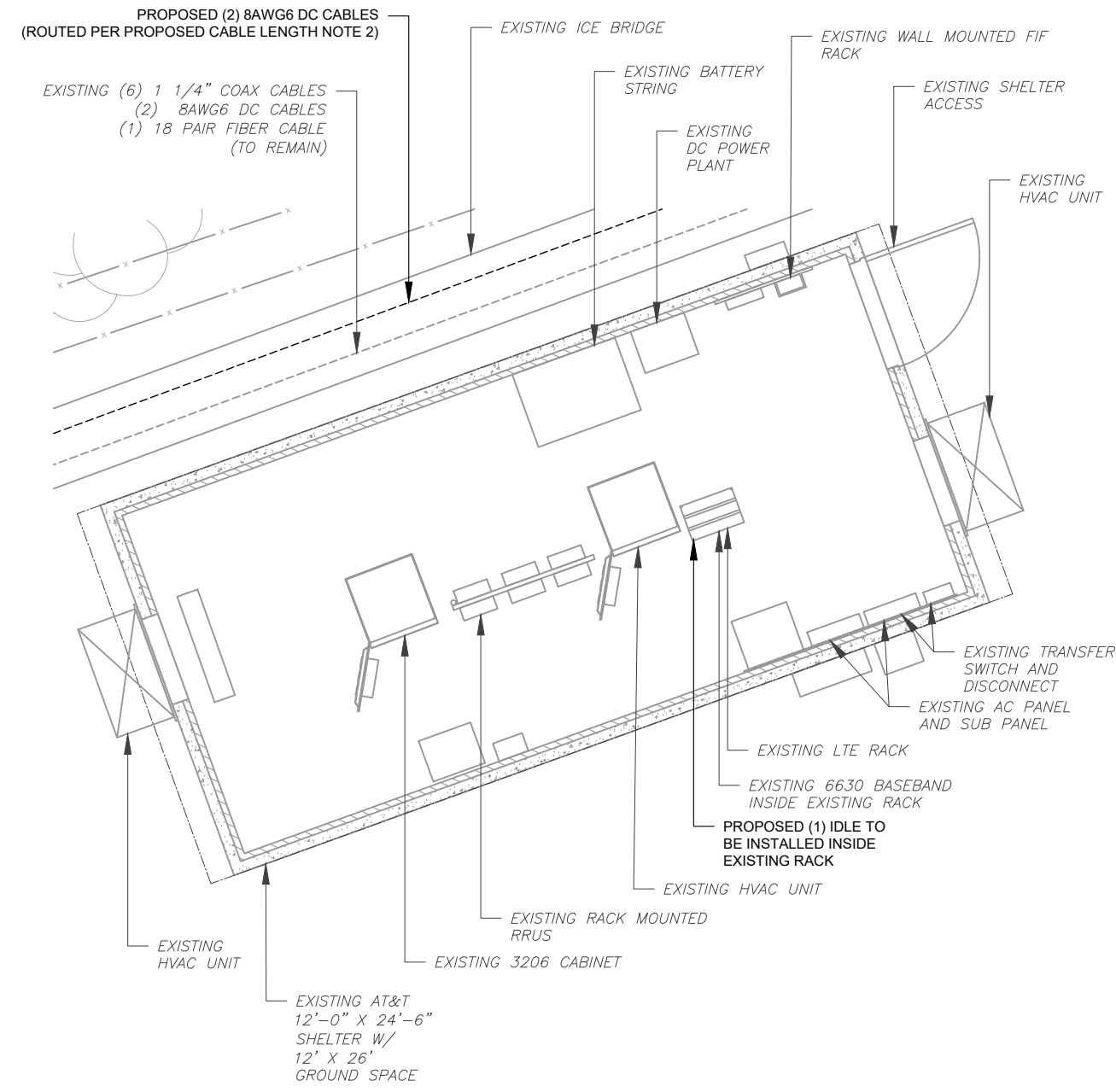
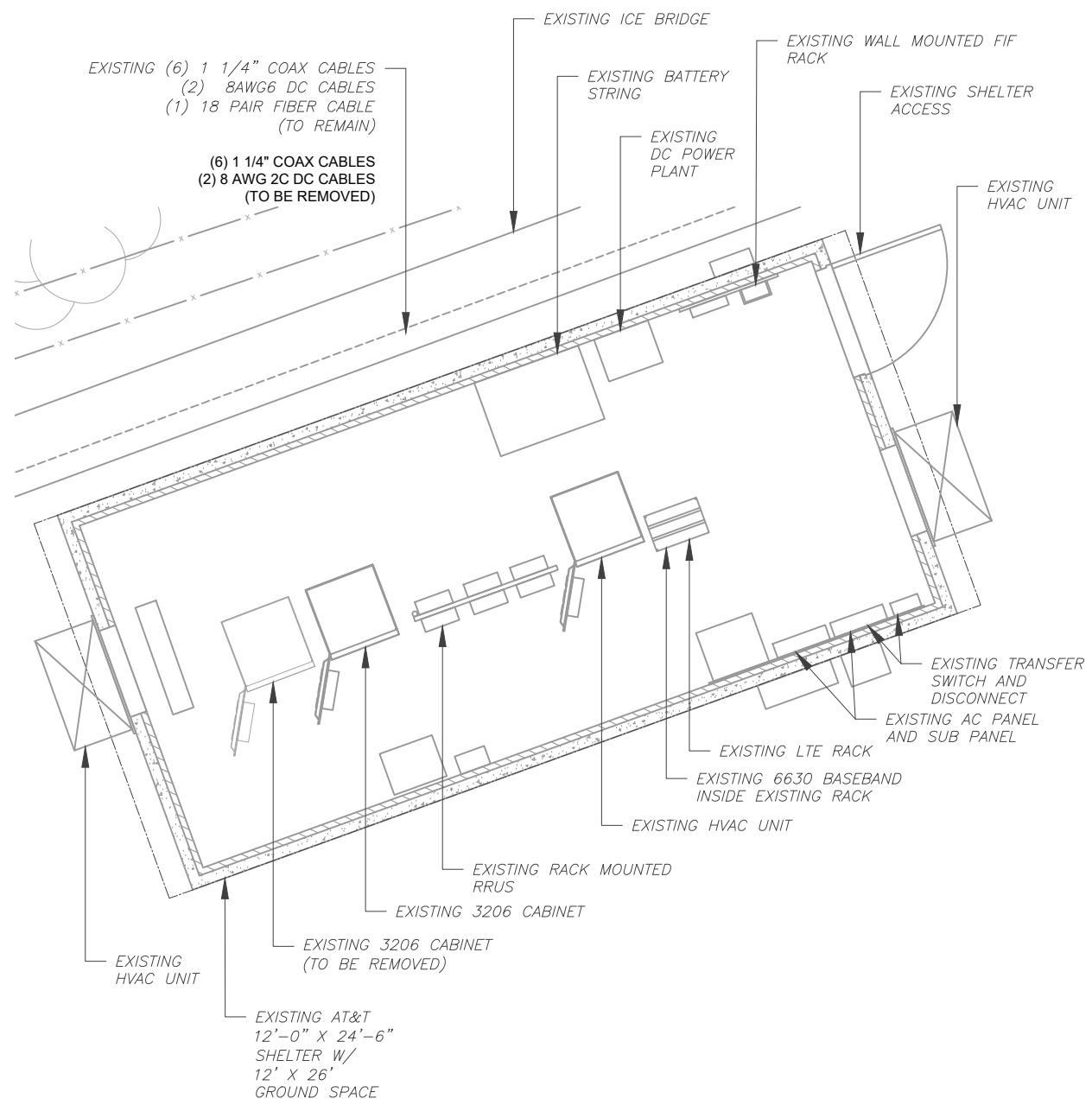
DETAILED SITE PLAN

SHEET NUMBER:
C-101

REVISION:
0

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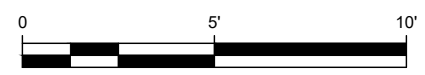
1 EXISTING GROUND EQUIPMENT LAYOUT



SCALE: 1"=5' (11X17)
1"=2.5' (22X34)



2 PROPOSED GROUND EQUIPMENT LAYOUT



SCALE: 1"=5' (11X17)
1"=2.5' (22X34)



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A	PRELIM	MN	02/12/21
B	PRELIM	SP	03/22/21
0	FOR CONSTRUCTION	SP	04/07/21

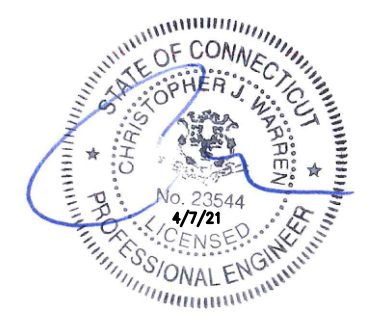
ATC SITE NUMBER:
302511

ATC SITE NAME:
WSPT - SOUTH

AT&T MOBILITY SITE NAME:
WESTPORT SOUTH

SITE ADDRESS:
19-20 POST OFFICE LANE
WESTPORT, CT 06880

SEAL:



DATE DRAWN:	02/12/21
ATC JOB NO:	13333739_G3
CUSTOMER ID:	WESTPORT SOUTH
CUSTOMER #:	10035073

DETAILED GROUND PLAN

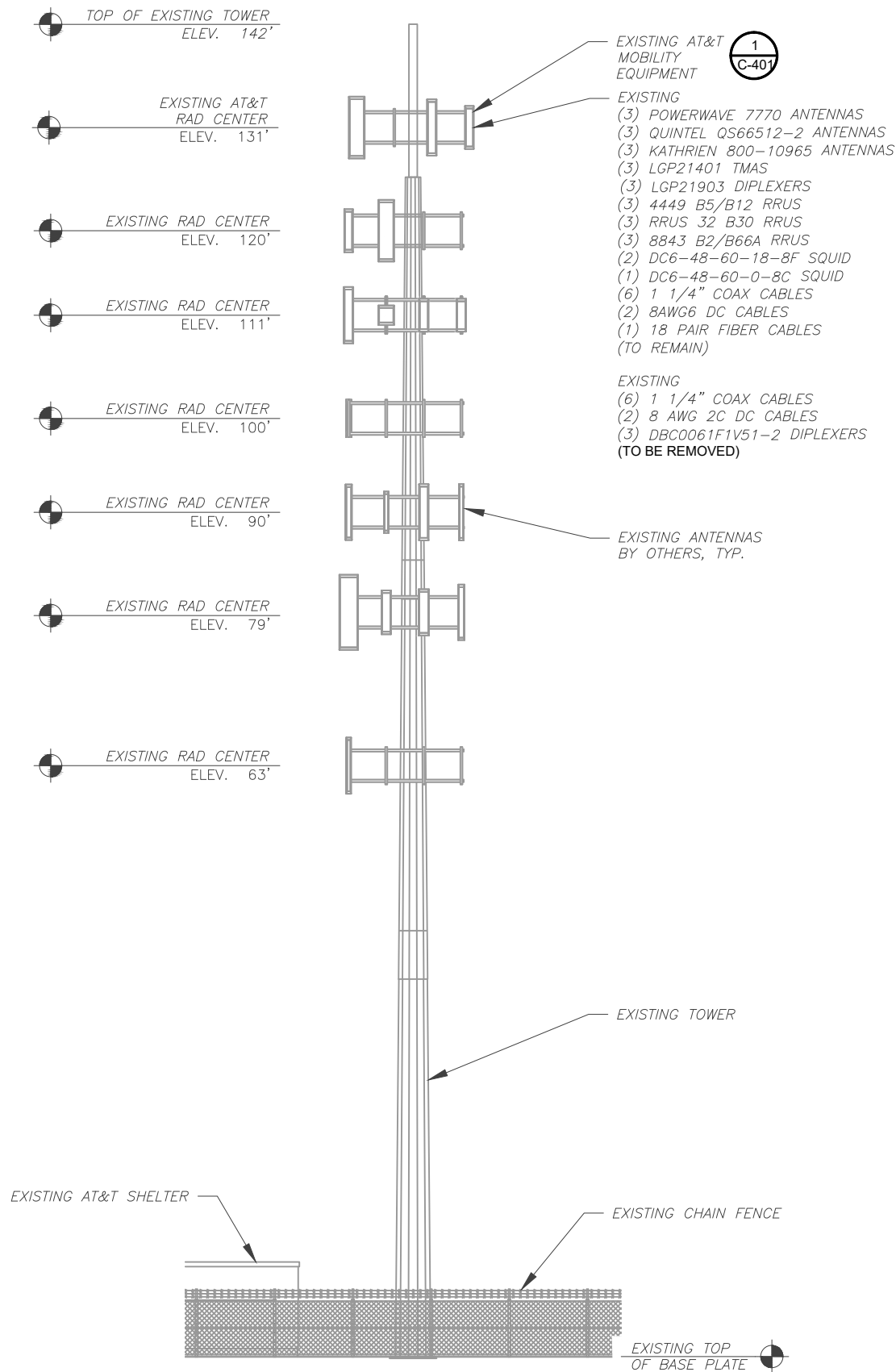
SHEET NUMBER:	REVISION:
C-102	0

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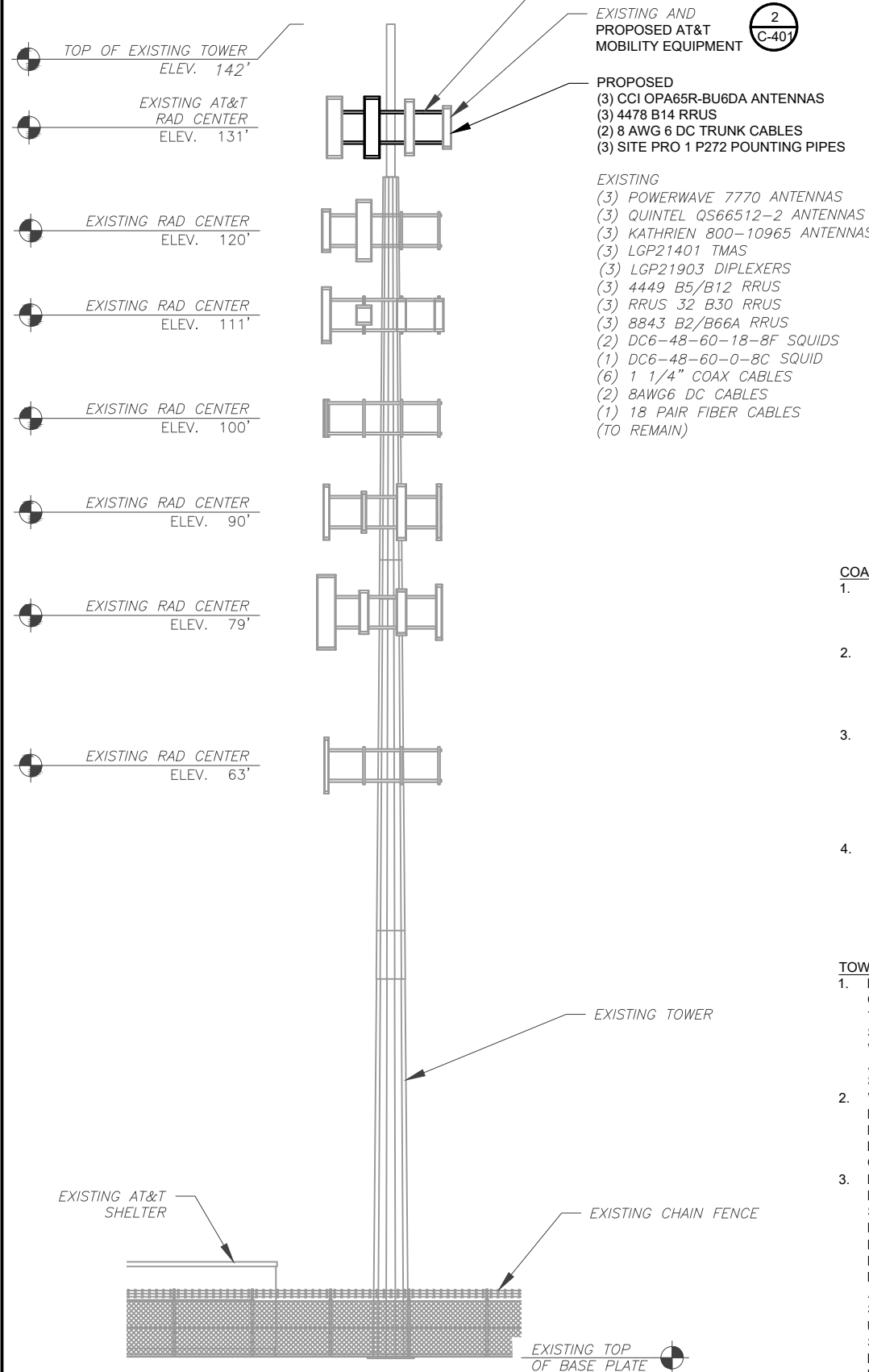
EXISTING CONFIGURATION IS BASED ON RFDS.
CONTRACTOR TO VERIFY EXISTING CONDITIONS.

PER MOUNT ANALYSIS COMPLETED BY ATC,
DATED 02/03/21, THE PROPOSED MOUNT CAN
ADEQUATELY SUPPORT THE PROPOSED LOADING

PER STRUCTURAL ANALYSIS COMPLETED BY ATC,
DATED 01/27/21, THE EXISTING TOWER CAN
ADEQUATELY SUPPORT THE PROPOSED LOADING



1 EXISTING TOWER ELEVATION
SCALE: N.T.S.



2 PROPOSED TOWER ELEVATION
SCALE: N.T.S.

- COAXIAL CABLE NOTES:**
- CONTRACTOR SHALL CONFIRM COAX COLOR CODING PRIOR TO CONSTRUCTION. REFER TO "ANTENNA SYSTEM LABELING STANDARD" ND-00027 LATEST VERISON.
 - CONTRACTOR SHALL WEATHERPROOF ALL ANTENNA CONNECTORS WITH SELF AMALGAMATING TAPE. WEATHERPROOFING SHALL BE COMPLETED IN STRICT ACCORDANCE WITH AT&T STANDARDS.
 - CONTRACTOR SHALL GROUND ALL EQUIPMENT. INCLUDING ANTENNAS, RET MOTORS, TMA'S, COAX CABLES, AND RET CONTROL CBALES AS A COMPLETE SYTEM. GROUNDING SHALL BE EXECUTED BY QUALIFIED WIREMEN IN COMPLIANCE WITH MANUFACTURER'S SPECIFICATION AND RECOMMENDATION.
 - CONTRACTOR TO VERIFY THAT EXISTING COAX HANGERS ARE STACKABLE SNAP IN HANGERS. IF EXISTING HANGERS ARE NOT STACKABLE SNAP IN HANGERS THE CONTRACTOR SHALL REPLACE EXISTING HANGERS WITH NEW SNAP IN HANGERS IF APPLICABLE.
- TOWER NOTE:**
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM WITH THE PROJECT MANAGER THAT THEY HAVE THE MOST RECENT VERSION OF THE STRUCTURAL ANALYSIS BEFORE COMMENCING WORK. EXISTING AND PROPOSED TOWER APPURTENANCES, MOUNTS, AND ANTENNAS ARE SHOWN BASED ON THE STRUCTURAL ANALYSIS.
 - WHERE APPLICABLE, ALL NEW ANTENNAS, EQUIPMENT, MOUNTS, CABLING, ETC. SHALL BE PAINTED/SOCKED TO MATCH EXISTING EQUIPMENT IN ACCORDANCE WITH FAA, JURISDICTION, AND/OR OTHER LOCAL REQUIREMENTS.
 - ROUTE PROPOSED CABLES ALONG SAME PATH AS EXISTING CABLES AND IN ACCORDANCE WITH STRUCTURAL ANALYSIS. IF ADEQUATE SPACE EXISTS, ROUTE CABLES THROUGH ENTRY PORT HOLE, UP INSIDE OF MONOPOLE, AND THROUGH EXIT PORT HOLE. IF ROUTING OUTSIDE THE MONOPOLE, ATTACH CABLES USING STAND-OFF ADAPTERS MOUNTED TO TOWER USING STAINLESS STEEL BANDING. ADEQUATELY SECURE CABLES USING EITHER APPROPRIATELY SIZED STAINLESS STEEL SNAP-INS OR MOUNTING HARDWARE AND BRACKETS AS SPECIFIED BY CABLE MANUFACTURER.
 - TOWER ELEVATIONS ARE MEASURED FROM TOP OF BASE PLATE TO MATCH STRUCTURAL ANALYSIS. ELEVATIONS DO NOT REFLECT TRUE ABOVE GROUND LEVEL (A.G.L.)



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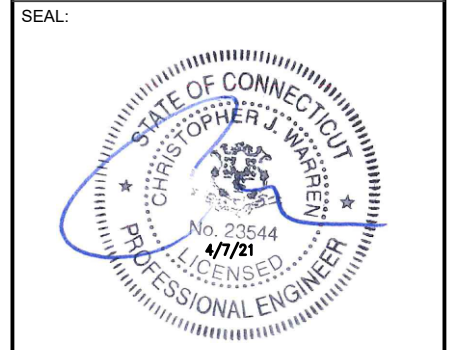
REV.	DESCRIPTION	BY	DATE
A	PRELIM	MN	02/12/21
B	PRELIM	SP	03/22/21
0	FOR CONSTRUCTION	SP	04/07/21

ATC SITE NUMBER:
302511

ATC SITE NAME:
WSPT - SOUTH

AT&T MOBILITY SITE NAME:
WESTPORT SOUTH

SITE ADDRESS:
19-20 POST OFFICE LANE
WESTPORT, CT 06880

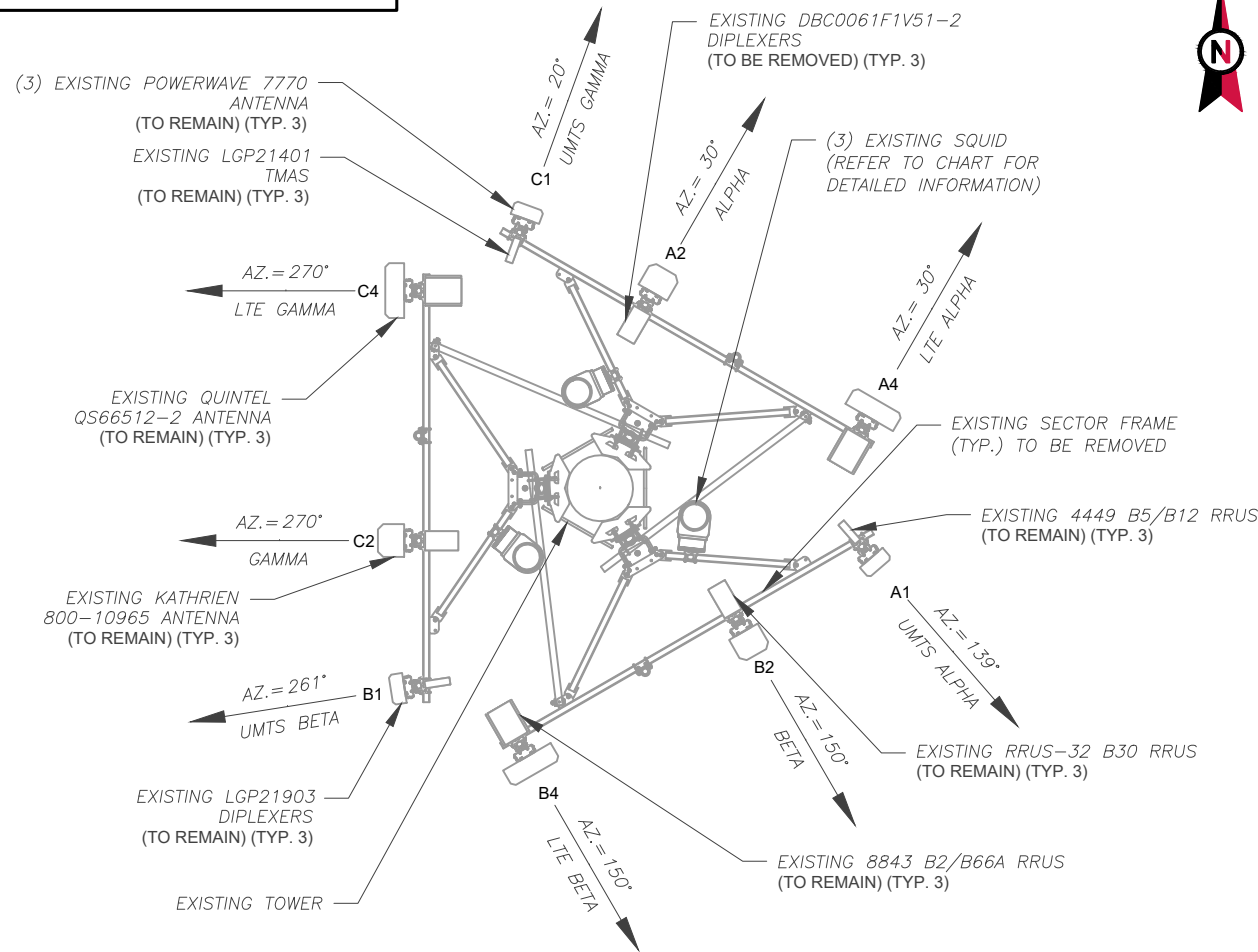


DATE DRAWN:	02/12/21
ATC JOB NO:	13333739_G3
CUSTOMER ID:	WESTPORT SOUTH
CUSTOMER #:	10035073

TOWER ELEVATION	
SHEET NUMBER: C-201	REVISION: 0

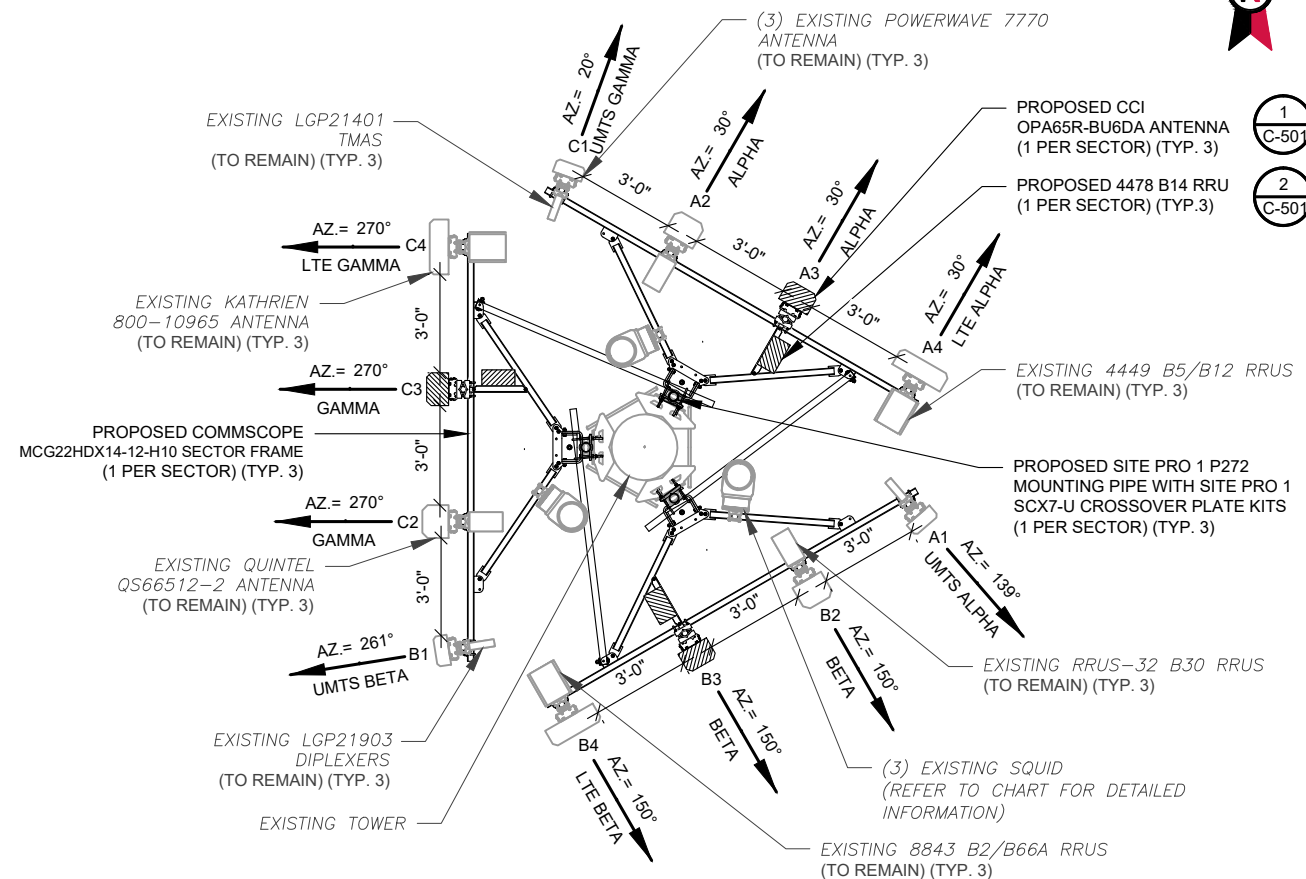
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EXISTING CONFIGURATIONS ARE BASED ON RFDS. CONTRACTOR TO VERIFY EXISTING CONDITIONS.



1 CURRENT ANTENNA PLAN
SCALE: N.T.S.

PER MOUNT ANALYSIS COMPLETED BY ATC, DATED 02/03/21, THE PROPOSED MOUNT CAN ADEQUATELY SUPPORT THE PROPOSED LOADING



2 FINAL ANTENNA PLAN
SCALE: N.T.S.

PROPOSED RRUs MUST BE INSTALLED A MINIMUM OF 12" AWAY FROM ALL ANTENNAS

PER STRUCTURAL ANALYSIS COMPLETED BY ATC, DATED 01/27/21, THE EXISTING TOWER CAN ADEQUATELY SUPPORT THE PROPOSED LOADING

EXISTING ANTENNA SCHEDULE								
LOCATION		ANTENNA SUMMARY					NON ANTENNA SUMMARY	
SECTOR	RAD	AZ	POS	ANTENNA	BAND	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	131'	139°	A1	POWERWAVE 7770	UMTS 850	RMN	LGP21401 TMA	RMN
		30°	A2	QUINTEL QS66512-2	LTE WCS/LTE 1900	RMN	RRUS-32 B30	RMN
		-	A3	-	-	-	-	-
BETA	131'	30°	A4	KATHRIEN 800-10965	LTE 700/LTE AWS LTE 850/5G 850	RMN	4449 B5/B12 8843 B2/B66A	RMN
		261°	B1	POWERWAVE 7770	UMTS 850	RMN	LGP21401 TMA	RMN
		150°	B2	QUINTEL QS66512-2	LTE WCS/LTE 1900	RMN	RRUS-32 B30	RMN
		150°	B3	-	-	-	-	-
GAMMA	131'	150°	B4	KATHRIEN 800-10965	LTE 700/LTE AWS LTE 850/5G 850	RMN	4449 B5/B12 8843 B2/B66A	RMN
		20°	C1	POWERWAVE 7770	UMTS 850	RMN	LGP21401 TMA	RMN
		270°	C2	QUINTEL QS66512-2	LTE WCS/LTE 1900	RMN	RRUS-32 B30	RMN
		270°	C3	-	-	-	-	-
		270°	C4	KATHRIEN 800-10965	LTE 700/LTE AWS LTE 850/5G 850	RMN	4449 B5/B12 8843 B2/B66A	RMN

NOTES

- CONFIRM WITH AT&T MOBILITY REP FOR APPLICABLE UPDATES/REVISIONS AND MOST RECENT RFDS FOR NSN CONFIGURATION (CONFIG). GC TO CAP ALL UNUSED PORTS.
- CONFIRM SPACING OF PROPOSED EQUIP DOES NOT CAUSE TOWER CONFLICTS NOR IMPEDE TOWER CLIMBING PEGS.
- THE ANTENNA ORIENTATION PLAN IS A SCHEMATIC. ATC DID NOT CONFIRM EXISTING SITE CONDITIONS INCLUDING, BUT NOT LIMITED TO, ANTENNA AZIMUTHS, MOUNT CONFIGURATIONS AND TOWER ORIENTATION. SCALES SHOWN ARE FOR REFERENCE ONLY AND EXISTING DIMENSIONS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO INSTALLATION AND NOTIFY ATC OF ANY DISCREPANCIES. CONTRACTOR TO ENSURE PROPER SEPARATION IN ACCORDANCE WITH AT&T'S FIRSTNET REQUIREMENTS (SEE SHEET R-602)
- CONTRACTOR TO ENSURE PROPER SEPARATION IN ACCORDANCE WITH AT&T'S FIRSTNET REQUIREMENTS (SEE SHEET R-602)

FINAL ANTENNA SCHEDULE								
LOCATION		ANTENNA SUMMARY					NON ANTENNA SUMMARY	
SECTOR	RAD	AZ	POS	ANTENNA	BAND	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	131'	139°	A1	POWERWAVE 7770	UMTS 850	RMN	LGP21401 TMA	RMN
		30°	A2	QUINTEL QS66512-2	LTE WCS/LTE 1900	RMN	RRUS-32 B30	RMN
		30°	A3	CCI OPA65R-BU6DA	LTE 700	ADD	4478 B14	ADD
		30°	A4	KATHRIEN 800-10965	LTE 700/LTE AWS LTE 850/5G 850	RMN	4449 B5/B12 8843 B2/B66A	RMN
BETA	131'	261°	B1	POWERWAVE 7770	UMTS 850	RMN	LGP21401 TMA	RMN
		150°	B2	QUINTEL QS66512-2	LTE WCS/LTE 1900	RMN	RRUS-32 B30	RMN
		150°	B3	CCI OPA65R-BU6DA	LTE 700	ADD	4478 B14	ADD
		150°	B4	KATHRIEN 800-10965	LTE 700/LTE AWS LTE 850/5G 850	RMN	4449 B5/B12 8843 B2/B66A	RMN
GAMMA	131'	270°	C1	POWERWAVE 7770	UMTS 850	RMN	LGP21401 TMA	RMN
		270°	C2	QUINTEL QS66512-2	LTE WCS/LTE 1900	RMN	RRUS-32 B30	RMN
		270°	C3	CCI OPA65R-BU6DA	LTE 700	ADD	4478 B14	ADD
		20°	C4	KATHRIEN 800-10965	LTE 700/LTE AWS LTE 850/5G 850	RMN	4449 B5/B12 8843 B2/B66A	RMN

STATUS ABBREVIATIONS
RMV: TO BE REMOVED
RMN: TO REMAIN
REL: TO BE RELOCATED
ADD: TO BE ADDED

CABLE LENGTHS FOR JUMPERS
JUNCTION BOX TO RRU: 15'
RRU TO ANTENNA: 10'

EXISTING FIBER DISTRIBUTION/SQUID			EXISTING CABLING SUMMARY		
MODEL NUMBER	STATUS	COAX	DC	FIBER	STATUS
(2) DC6-48-60-18-8F	RMN	(6) 1 1/4"	(2) 8 AWG 6	(1) 18 PAIR	RMN
DC6-48-60-0-8C	RMN	(6) 1 1/4"	(2) 8 AWG 2C	-	RMV

3 EQUIPMENT SCHEDULES

FINAL FIBER DISTRIBUTION/SQUID			FINAL CABLING SUMMARY		
MODEL NUMBER	STATUS	COAX	DC	FIBER	STATUS
(2) DC6-48-60-18-8F	RMN	(6) 1 1/4"	(2) 8 AWG 6	(1) 18 PAIR	RMN
DC6-48-60-0-8C	RMN	-	(2) 8 AWG 6	-	ADD



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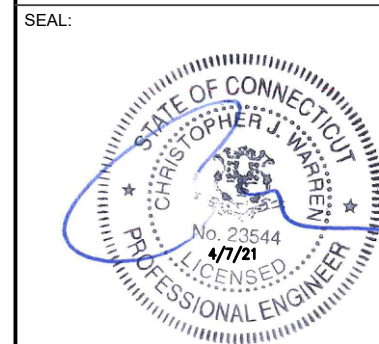
REV.	DESCRIPTION	BY	DATE
A	PRELIM	MN	02/12/21
B	PRELIM	SP	03/22/21
0	FOR CONSTRUCTION	SP	04/07/21

ATC SITE NUMBER:
302511

ATC SITE NAME:
WSPT - SOUTH

AT&T MOBILITY SITE NAME:
WESTPORT SOUTH

SITE ADDRESS:
19-20 POST OFFICE LANE
WESTPORT, CT 06880



DATE DRAWN:	02/12/21
ATC JOB NO:	13333739_G3
CUSTOMER ID:	WESTPORT SOUTH
CUSTOMER #:	10035073

RF SCHEDULE AND ANTENNA INSTALLATION

SHEET NUMBER:
C-401

REVISION:
0

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REV.	DESCRIPTION	BY	DATE
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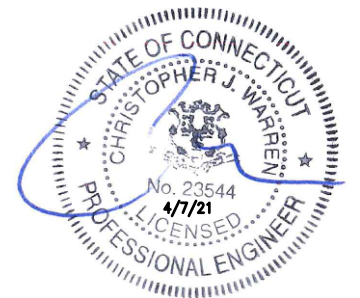
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302511

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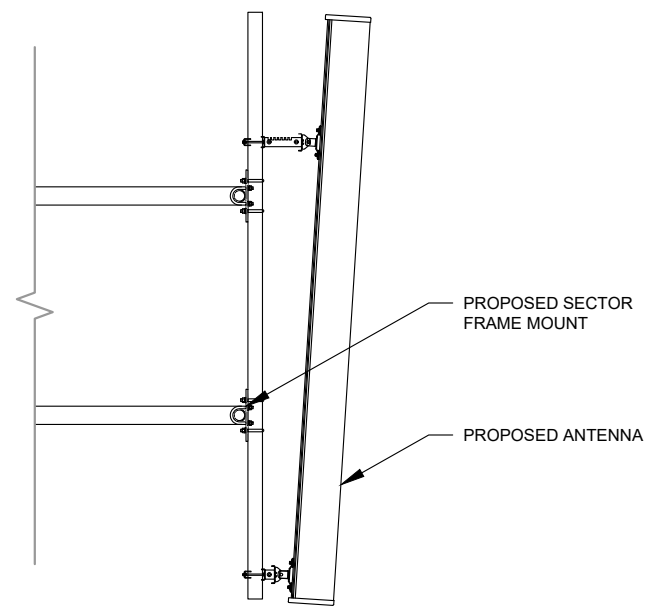
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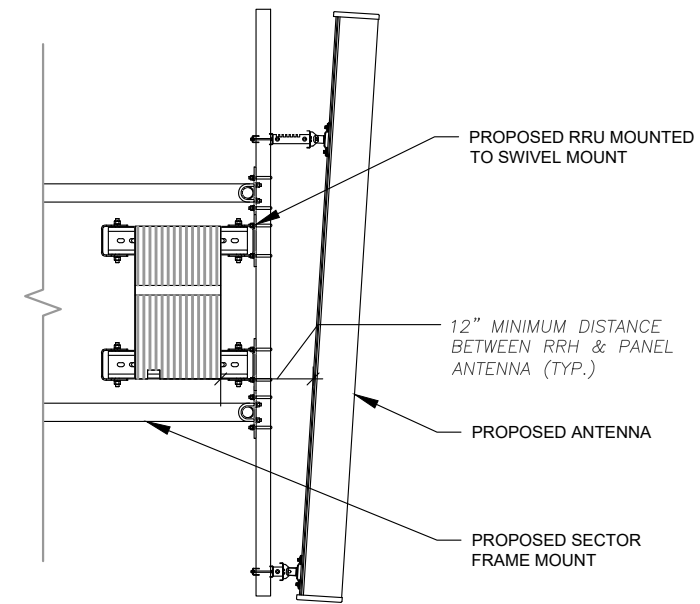
DATE DRAWN:	02/12/21
ATC JOB NO:	13333739_G3
CUSTOMER ID:	WESTPORT SOUTH
CUSTOMER #:	10035073

**CONSTRUCTION
DETAILS**

SHEET NUMBER:	REVISION:
C-501	0



1 ANTENNA DETAIL
SCALE: N.T.S.



2 RRU DETAIL
SCALE: N.T.S.

REV.	DESCRIPTION	BY	DATE
A	PRELIM	MN	02/12/21
B	PRELIM	SP	03/22/21
0	FOR CONSTRUCTION	SP	04/07/21

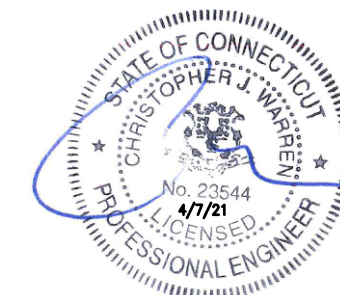
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ATC SITE NAME:
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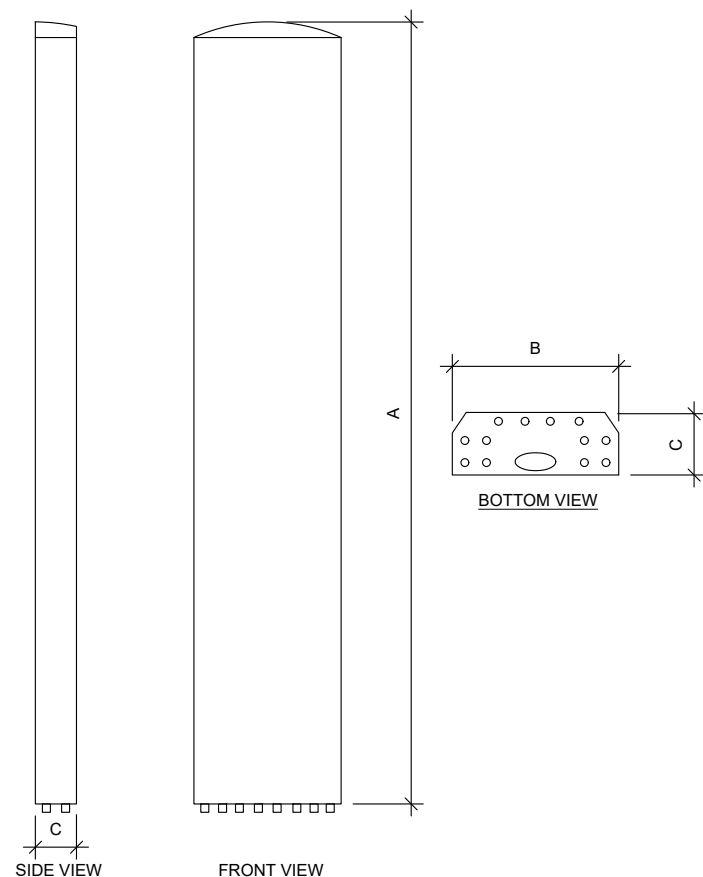
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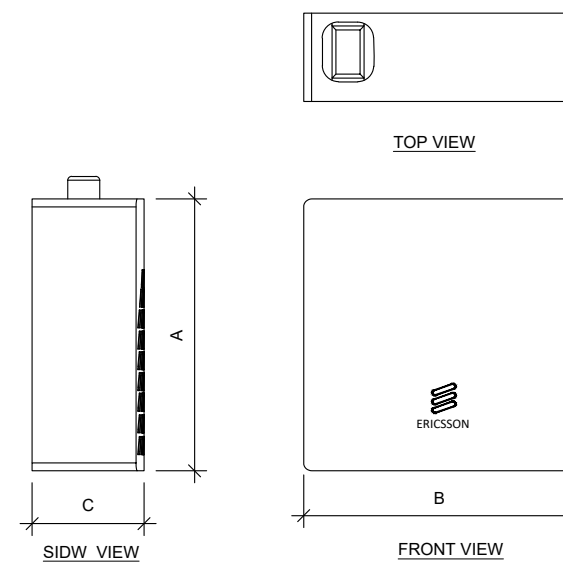
DATE DRAWN:	02/12/21
ATC JOB NO:	13333739_G3
CUSTOMER ID:	WESTPORT SOUTH
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EQUIPMENT SPECIFICATIONS

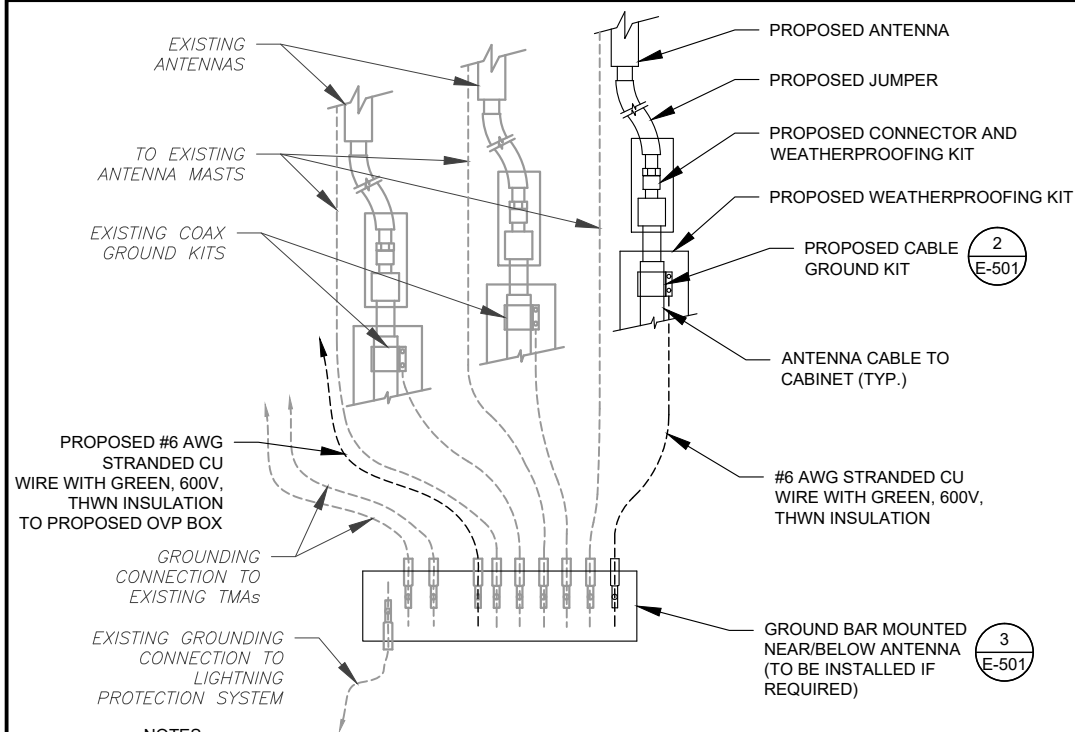
SHEET NUMBER:	REVISION:
C-502	0



ANTENNA SPECIFICATIONS				
ANTENNA MODEL	A	B	C	WEIGHT (LBS)
OPA65R-BU4DA	48.2"	21.0"	7.8"	52.5



RRU SPECIFICATIONS				
RRU MODEL	A	B	C	WEIGHT (LBS)
4478 B14	18.1"	13.4"	8.3"	59.4

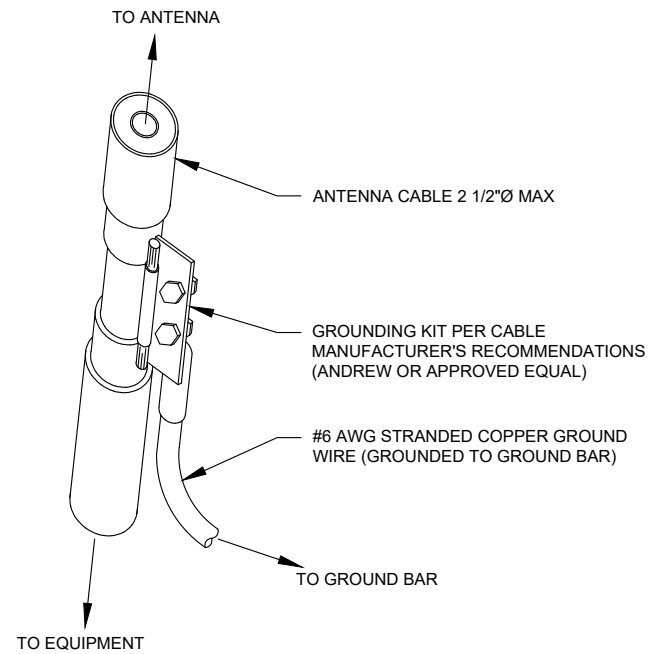


NOTES:

1. THIS DETAIL IS INTENDED TO SHOW THE GENERAL GROUNDING REQUIREMENTS. SLIGHT ADJUSTMENTS MAY BE REQUIRED BASED ON EXISTING SITE CONDITIONS. THE CONTRACTOR SHALL MAKE FIELD ADJUSTMENTS AS NEEDED AND INFORM THE CONSTRUCTION MANAGER OF ANY CONFLICTS.
2. SITE GROUNDING SHALL COMPLY WITH AT&T MOBILITY GROUNDING STANDARDS, LATEST EDITION, AND COMPLY WITH AT&T MOBILITY GROUNDING CHECKLIST, LATEST VERSION. WHEN NATIONAL AND LOCAL GROUNDING CODES ARE MORE STRINGENT THEY SHALL GOVERN.

1 TYPICAL ANTENNA GROUNDING DIAGRAM

SCALE: N.T.S.

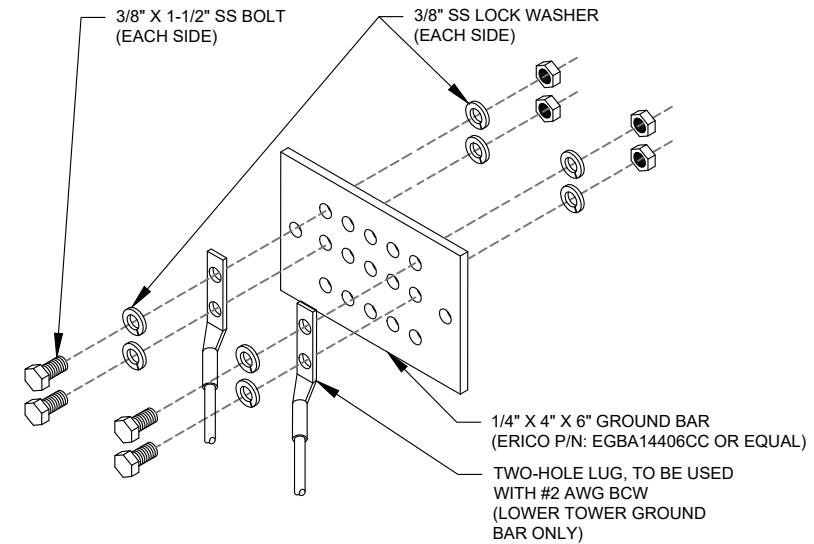


GROUND KIT NOTES:

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
2. CONTRACTOR SHALL PROVIDE WEATHERPROOFING KIT (ANDREW PART NUMBER 221213) AND INSTALL/TAPE PER MANUFACTURER'S SPECIFICATIONS.

2 CABLE GROUND KIT CONNECTION DETAIL

SCALE: N.T.S.



GROUND BAR NOTES:

1. GROUND BAR KITS COME WITH ALL HARDWARE, NUTS, BOLTS, WASHERS, ETC. EXCEPT THE STRUCTURAL MOUNTING MEMBER(S).
2. GROUND BAR TO BE BONDED DIRECTLY TO TOWER.

3 TOWER GROUND BAR DETAIL

SCALE: N.T.S.

ELECTRICAL NOTES:

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE T-MOBILE REPRESENTATIVE AND LOCAL UTILITY COMPANY FOR THE INSTALLATION OF CONDUITS, CONDUCTORS, BREAKERS, DISCONNECTS, OR ANY OTHER EQUIPMENT REQUIRED FOR ELECTRICAL SERVICE. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH LATEST EDITION OF THE STATE AND NATIONAL CODES, ORDINANCES AND REGULATIONS APPLICABLE TO THIS PROJECT.
2. ATC HAS NOT VERIFIED ANY EXISTING T-MOBILE GROUND EQUIPMENT OR ELECTRICAL LOADING. PROPOSED WORK BASED ON INSTALLATION CONFIGURATION PROVIDED BY T-MOBILE. CONTRACTOR TO VERIFY EXISTING T-MOBILE PANEL HAS SUFFICIENT SPACE FOR PROPOSED BREAKER. PROPOSED CABLE AND CONDUIT SHALL BE MINIMUM SIZE PER BELOW:

OCPD SIZE	WIRE SIZE	GROUND SIZE	CONDUIT SIZE
80A/2P	2#3 AWG	#8 AWG	1-1/4"
100/2P	2#2 AWG	#8 AWG	1-1/4"
125A/2P	2#1 AWG	#8 AWG	1-1/2"
150A/2P	2#1/0 AWG	#8 AWG	1-1/2"



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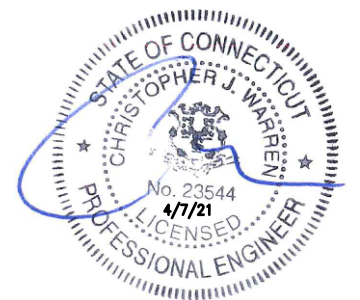
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302511

ATC SITE NAME:
WSPT - SOUTH

AT&T MOBILITY SITE NAME:
WESTPORT SOUTH

SITE ADDRESS:
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SEAL:



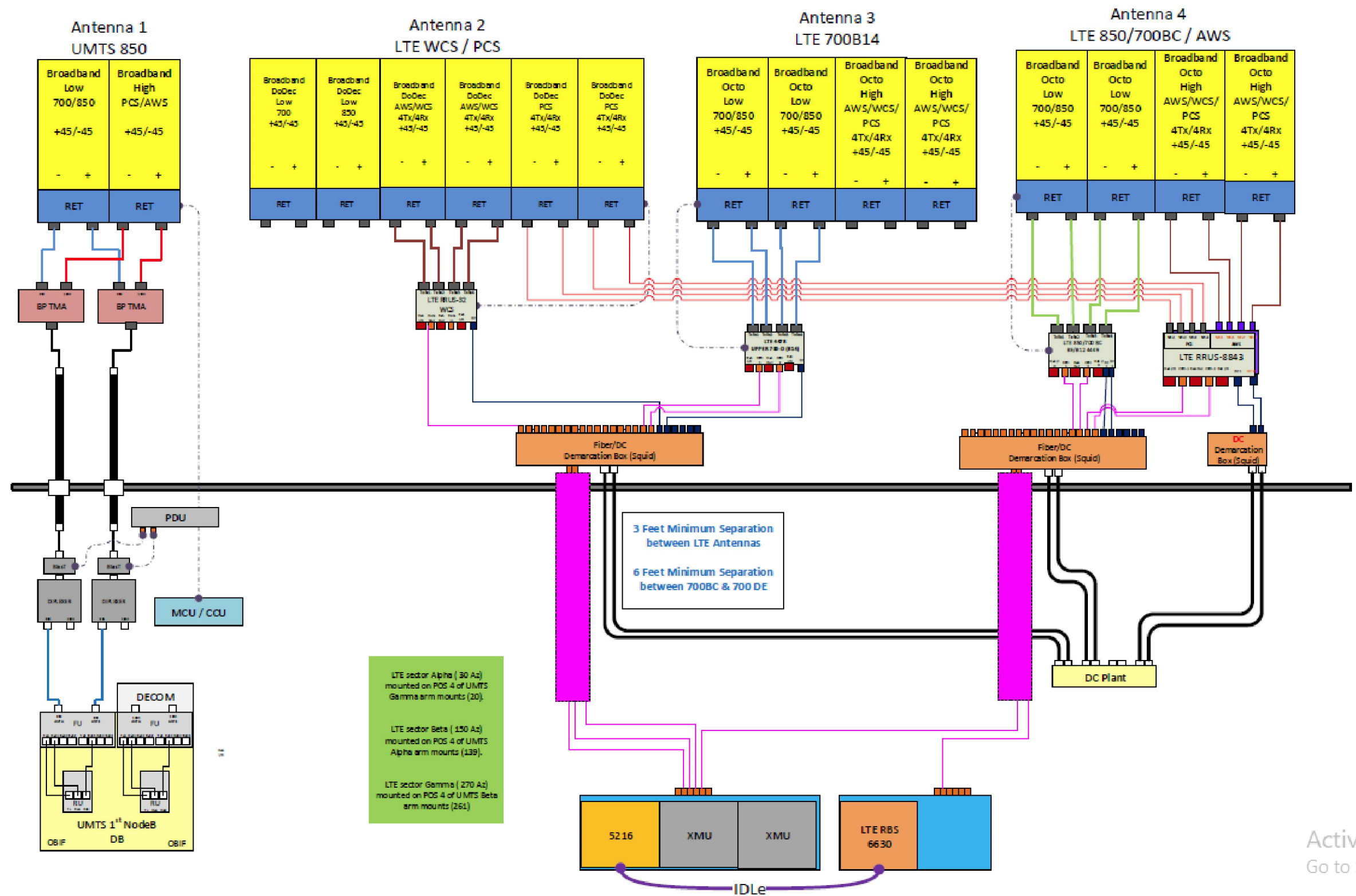
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ATC JOB NO:	13333739_G3
CUSTOMER ID:	WESTPORT SOUTH
CUSTOMER #:	10035073

GROUNDING DETAILS

SHEET NUMBER:
E-501

REVISION:
0

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1 PLUMBING DIAGRAM SCALE: NOT TO SCALE

Activa
Go to Se

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 AT&T MOBILITY SITE NAME:
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19-20 POST OFFICE LANE
WESTPORT, CT 06880

FOR
REFERENCE
ONLY



DATE DRAWN:	02/12/21
ATC JOB NO:	13333739_G3
CUSTOMER ID:	WESTPORT SOUTH
CUSTOMER #:	10035073

SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-601	0

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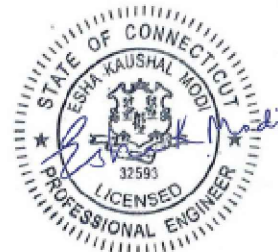


Antenna Mount Analysis Report

ATC Site Name : WSPT - South, CT
ATC Site Number : 302511
Engineering Number : 13333739_C8_01
Mount Elevation : 131 ft
Carrier : AT&T Mobility
Carrier Site Name : MRCTB049079
Carrier Site Number : CTL02103
Site Location : 20 Post Office Lane
 Westport, CT 06880-6226
 41.12344444, -73.3131
County : Fairfield
Date : February 3, 2021
Max Usage : 38%
Result : Contingent Pass

Prepared By:
 Michael Ellis
 Structural Engineer

Reviewed By:



Authorized by "EOR"
 03 Feb 2021 09:12:04 **cosign**

COA: PEC.0001553



Eng. Number 13333739_C8_01
 February 3, 2021
 Page 1

Introduction

The purpose of this report is to summarize results of the antenna mount analysis performed for AT&T Mobility at 131 ft.

Supporting Documents

Specifications Sheet	Commscope MCG22HDX14-12-H10, dated August 8, 2016
Radio Frequency Data Sheet	RFDS ID #10035073, dated January 21, 2021

Analysis

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

Basic Wind Speed:	118 mph (3-Second Gust)
Basic Wind Speed w/ Ice:	50 mph (3-Second Gust) w/ 1" radial ice concurrent
Codes:	ANSI/TIA-222-H
Exposure Category:	C
Risk Category:	II
Topographic Factor Procedure:	Method 2
Feature:	Flat
Crest Height (H):	0 ft
Crest Length (L):	0 ft
Spectral Response:	Ss = 0.226, S1 = 0.055
Site Class:	D - Stiff Soil
Live Loads:	Lm = 500 lbs, Lv = 250 lbs

Conclusion

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

- Install Site Pro 1 P272 antenna mounting pipe – 2-3/8" x 72" (New Mount Pipes M, N, and O) with Site Pro 1 SCX7-U crossover plate kits.

Analysis Based on new Commscope MCG22HDX14-12-H10 sector frames.

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.



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ATC SITE NUMBER:
 302511

ATC SITE NAME:
 WSPT - SOUTH

AT&T MOBILITY SITE NAME:
 WESTPORT SOUTH

SITE ADDRESS:
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DATE DRAWN:	02/12/21
ATC JOB NO:	13333739_G3
CUSTOMER ID:	WESTPORT SOUTH
CUSTOMER #:	10035073

SUPPLEMENTAL

SHEET NUMBER:
R-602

REVISION:
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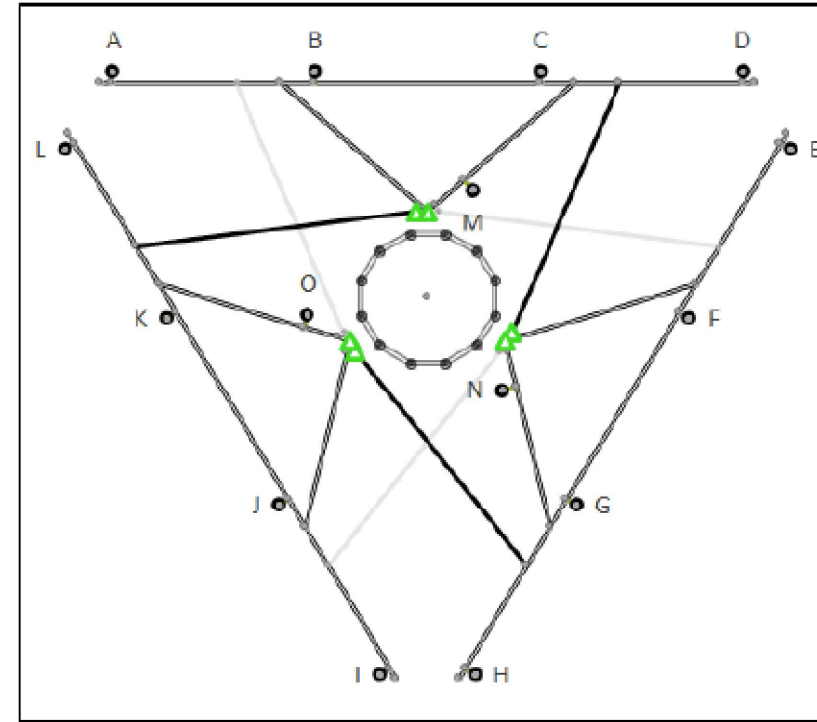
Application Loading

Mount Centerline (ft)	Antenna Centerline (ft)	Qty	Antenna Model
131.0	131.0	3	CCI OPA65R-BU6D
		3	Powerwave Allgon 7770
		3	Quintel QS66512-2
		3	Kathrein Scala 80010965
		1	Raycap DC6-48-60-0-8C
		1	Raycap DC6-48-60-18-8F ("Squid")
		1	Raycap DC6-48-60-18-8F ("Squid")
		3	Ericsson RRUS 4478 B14
		3	Ericsson RRUS 4449 B5, B12
		3	Ericsson RRUS 32 B30
		3	Ericsson RRUS 8843 B2, B66A

Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Horizontals	38%	Pass
Verticals	22%	Pass
Diagonals	13%	Pass
Tie-Backs	12%	Pass
Mount Pipes	25%	Pass

Mount Layout



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ATC SITE NUMBER:
302511

ATC SITE NAME:
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AT&T MOBILITY SITE NAME:
WESTPORT SOUTH

SITE ADDRESS:
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WESTPORT, CT 06880

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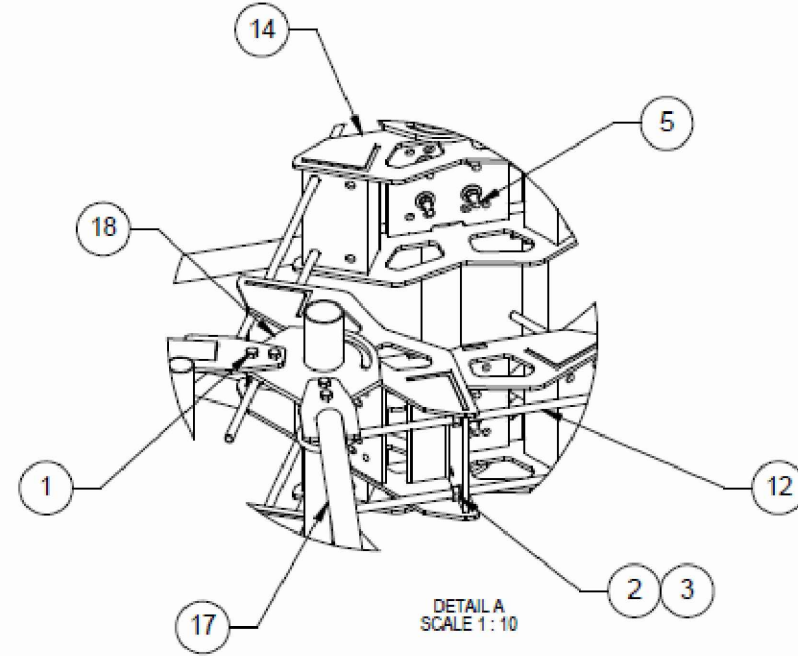


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CUSTOMER ID:	WESTPORT SOUTH
CUSTOMER #:	10035073

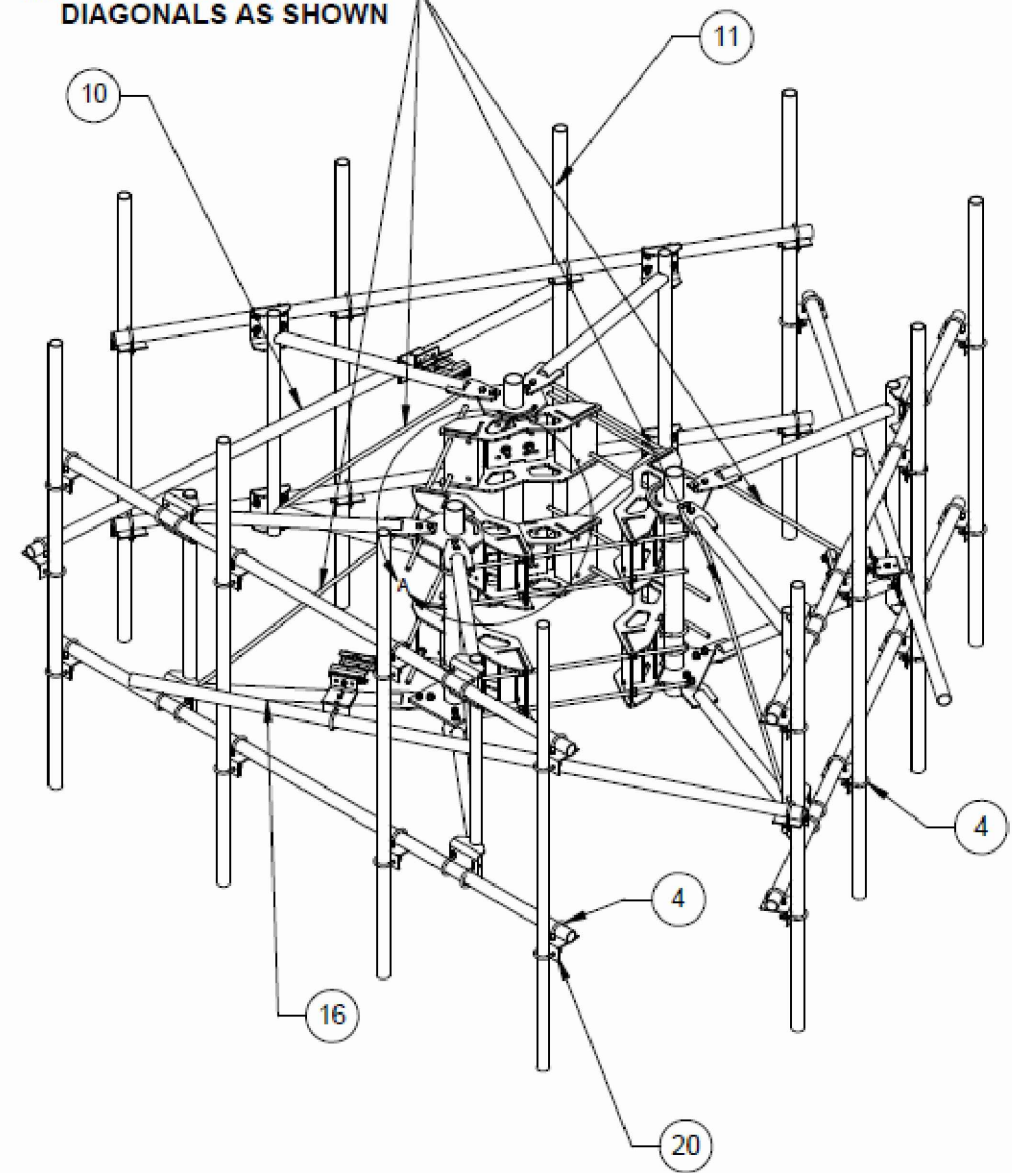
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SHEET NUMBER: R-603	REVISION: 0
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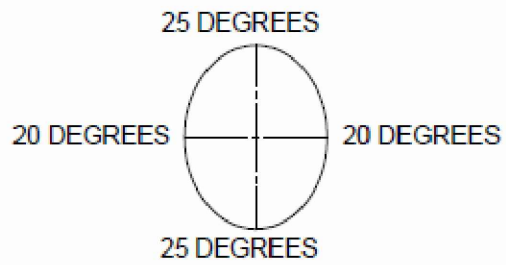


MUST BE INSTALLED WITH DIAGONALS AS SHOWN



ITEM	PART NO.	DESCRIPTION	QTY.	WEIGHT	NOTENO.
1	GB-0520A	5/8" X 2" GALV BOLT KIT (A325)	24	0.26 LBS	
2	GN-06	3/4" GALV HEX NUT	24	0.15 LBS	
3	GWL-06	3/4" GALV LOCK WASHER	24	0.04 LBS	
4	GUB-4240	1/2" X 2-1/2" X 4" GALV U-BOLT	81	0.56 LBS	
5	GUB-53560	5/8" X 3-5/8" X 6" GALV U-BOLT	12	1.28 LBS	
6	GWF-04	1/2" GALV FLAT WASHER	12	0.03 LBS	
7	GWL-04	1/2" GALV LOCK WASHER	12	0.01 LBS	
8	GN-04	1/2" GALV HEX NUT	12	0.04 LBS	
9	MT-379-8	1/2" X 8" GALV THREADED ROD	6	0.44 LBS	
10	MT-537	φ2.375" OD X 128" PIPE	3	30.45 LBS	
11	MT-651-96	φ2.375" OD X 96" PIPE	12	23.00 LBS	
12	MT38440	3/4" X 40" GALV THREADED ROD GRADE B7	12	4.98 LBS	
13	OS15034	3/4" X 1-1/2" OFFSET COLLAR	3	0.14 LBS	
14	RM1550301	15'-50" 3 SECTOR RM WLDMNT	6	66.20 LBS	
15	SAB01	FORMED CLAMP	6	1.35 LBS	
16	SFG2201	SECTOR FRAME ARM WLDMNT	3	52.49 LBS	
17	SFG2202	SECTOR FRAME ARM WLDMNT	3	52.49 LBS	
18	SFG2203	BACK VERTICAL ARM MOUNT	3	48.72 LBS	
19	SFG23126	128" SCH 40 PIPE 2-3/8" OD	6	38.76 LBS	
20	XA2020.01	CROSS OVER ANGLE	33	2.65 LBS	
21	GB-0414A	1/2" X 1-1/2" GALV BOLT KIT (A325)	3	0.13 LBS	
22	GB-0426A	1/2" X 2-3/4" GALV BOLT KIT (A325)	3	0.20 LBS	

ALLOWABLE TIEBACK ANGLE
 ±25 DEGREES VERTICAL
 ±20 DEGREES HORIZONTAL



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			2 OF 6

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1 COMMSCOPE MCG22HDX14-12-H10 SECTOR FRAME DETAIL
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ATC SITE NUMBER:
302511

ATC SITE NAME:
WSPT - SOUTH

AT&T MOBILITY SITE NAME:
WESTPORT SOUTH

SITE ADDRESS:
19-20 POST OFFICE LANE
WESTPORT, CT 06880

FOR REFERENCE ONLY



DATE DRAWN:	02/12/21
ATC JOB NO:	13333739_G3
CUSTOMER ID:	WESTPORT SOUTH
CUSTOMER #:	10035073

SUPPLEMENTAL

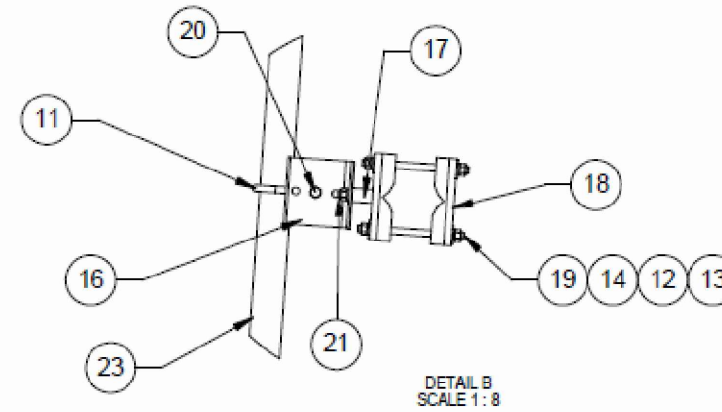
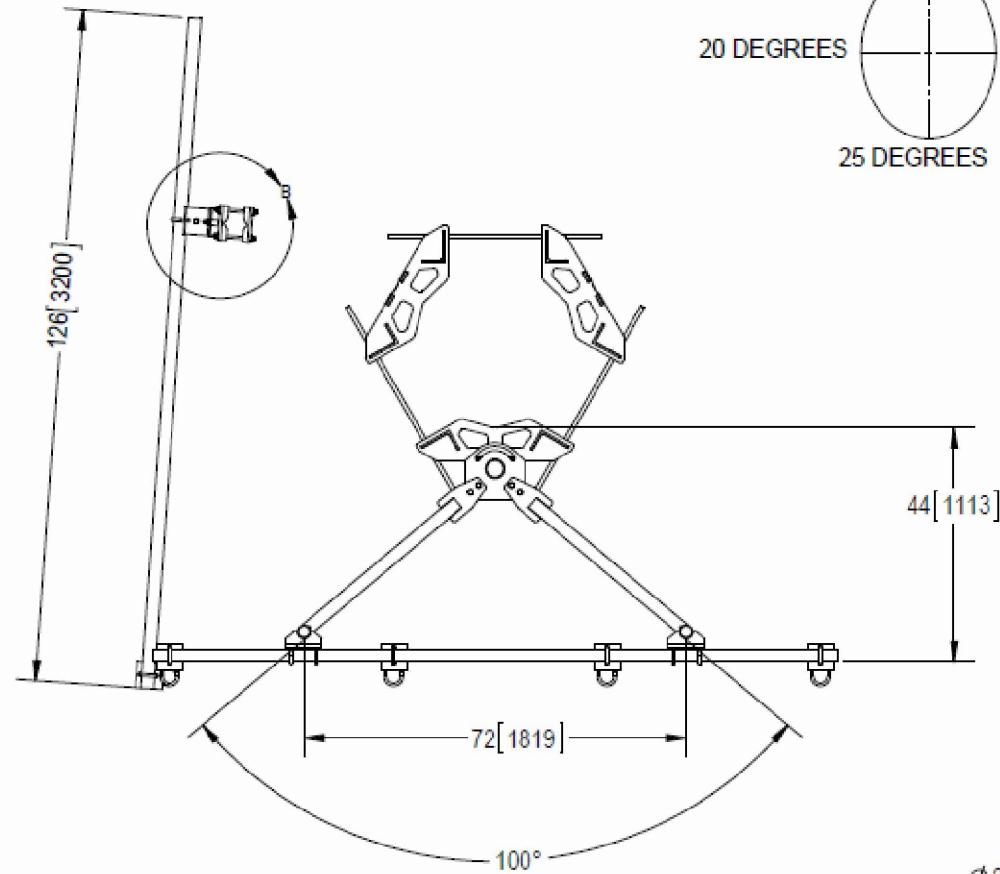
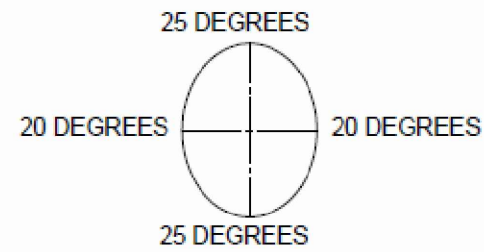
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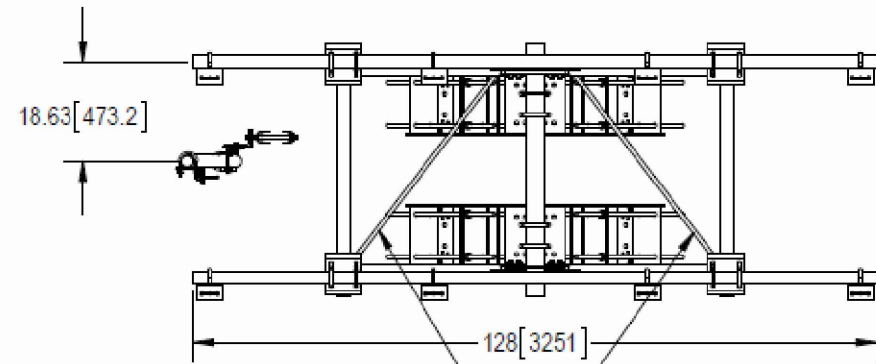
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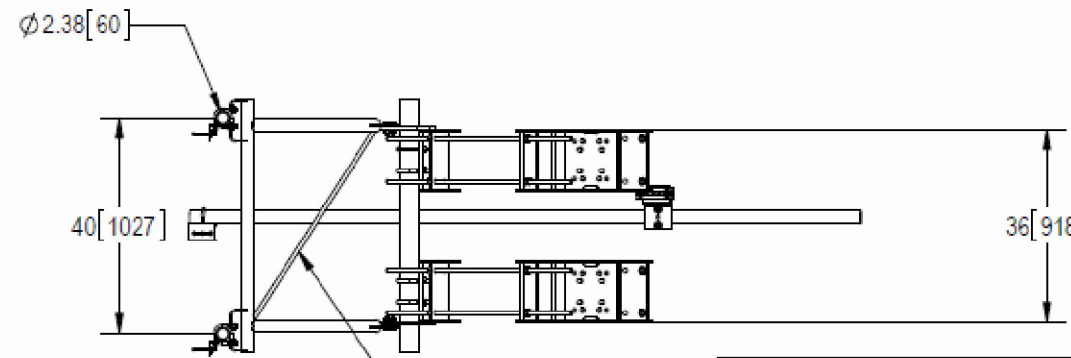
ALLOWABLE TIEBACK ANGLE
 ±25 DEGREES VERTICAL
 ±20 DEGREES HORIZONTAL



SOME ITEMS OMITTED FOR CLARITY



MUST BE INSTALLED WITH DIAGONALS AS SHOWN



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ATC SITE NAME:
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AT&T MOBILITY SITE NAME:
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DATE DRAWN:	02/12/21
ATC JOB NO:	13333739_G3
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CUSTOMER #:	10035073

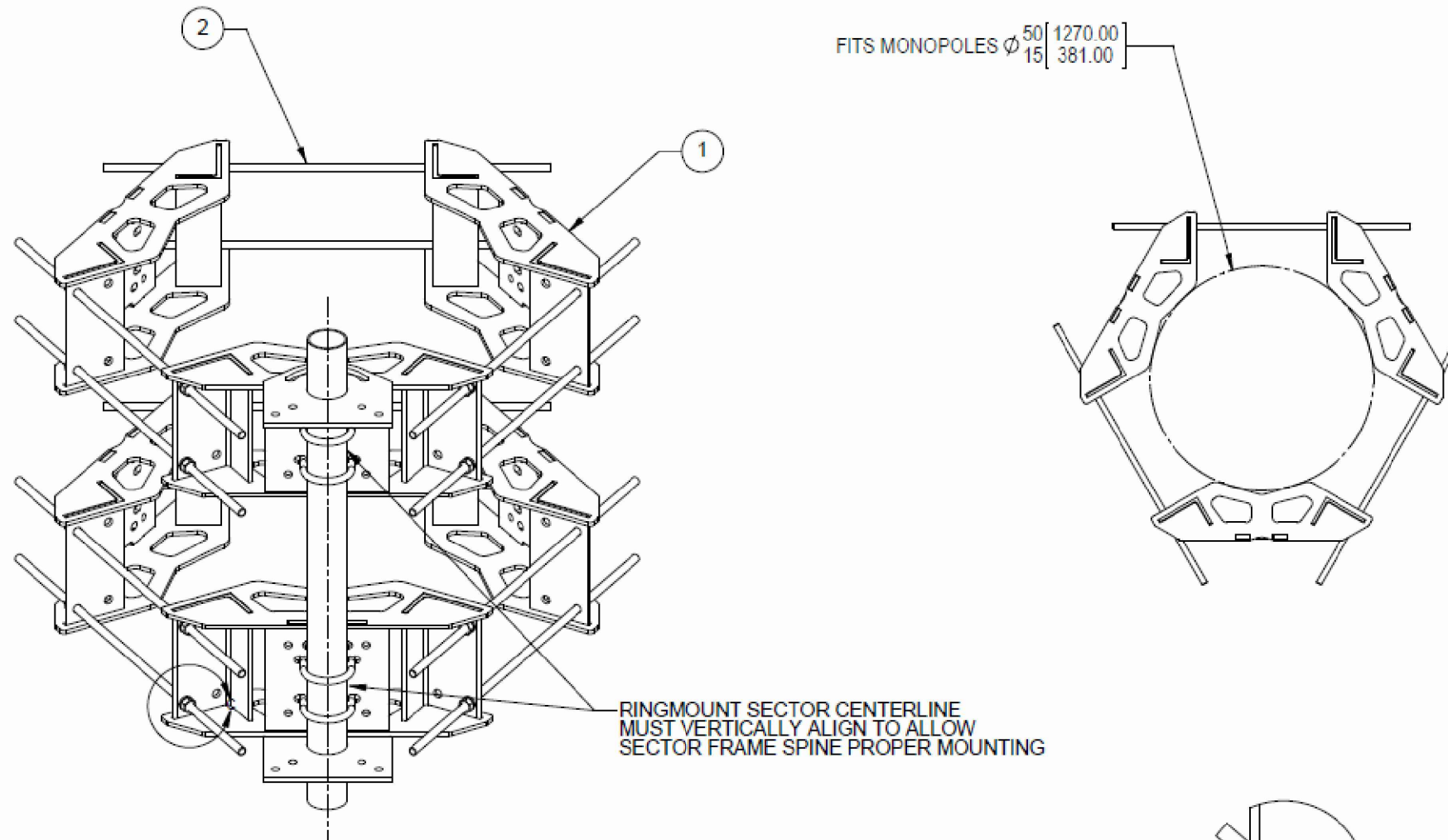
SUPPLEMENTAL

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1 COMMSCOPE MCG22HDX14-12-H10 SECTOR FRAME DETAIL
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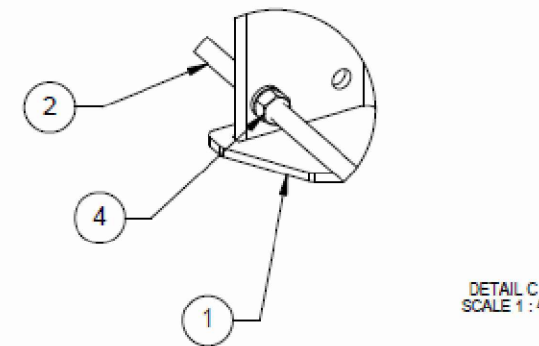


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 15 [381.00]

RINGMOUNT SECTOR CENTERLINE
 MUST VERTICALLY ALIGN TO ALLOW
 SECTOR FRAME SPINE PROPER MOUNTING

SOME ITEMS OMITTED FOR CLARITY

ITEM	PART NO.	DESCRIPTION	QTY.	WEIGHT	NOTE NO.
1	RM1550301	15'-50" 3 SECTOR RM WLDMNT	6	66.20 LBS	
2	MT38440	3/4" X 40" GALV THREADED ROD GRADE B7	12	4.98 LBS	
3	GWL-06	3/4" GALV LOCK WASHER	24	0.04 LBS	
4	GN-06	3/4" GALV HEX NUT	24	0.15 LBS	



DETAIL C
 SCALE 1:4

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1 COMMSCOPE MCG22HDX14-12-H10 SECTOR FRAME DETAIL
 SCALE: N.T.S.



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ATC JOB NO:	13333739_G3
CUSTOMER ID:	WESTPORT SOUTH
CUSTOMER #:	10035073

SUPPLEMENTAL

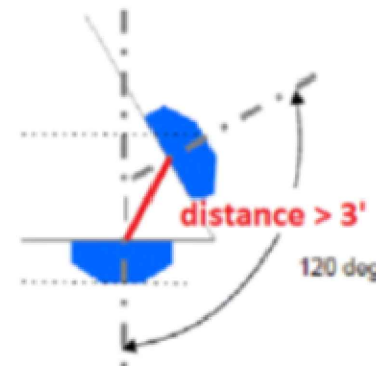
SHEET NUMBER:
R-606

REVISION:
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RF REQUIREMENTS FOR 700 B14 FIRSTNET, 700 B12, 700D B29 ANTENNA SEPARATION

- Horizontal separation (side to side of antenna): $\geq 3'$
- Vertical separation (between the tips of the antennas): $> 3'$
- Inter-sector separation: $> 3'$ between the center of the antenna backplanes.



- Please note additional horizontal separation may be required if B14 antennas azimuth are different from others or antennas are severely angled with respect to the mount.
- Typical 3' horizontal separation can tolerate skew angle up to 6° .



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△			

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REFERENCE
ONLY



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CUSTOMER ID:	WESTPORT SOUTH
CUSTOMER #:	10035073

SUPPLEMENTAL

SHEET NUMBER: R-607	REVISION: 0
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EXHIBIT 2



AMERICAN TOWER®
CORPORATION

Antenna Mount Analysis Report

ATC Site Name : WSPT - South, CT
ATC Site Number : 302511
Engineering Number : 13333739_C8_01
Mount Elevation : 131 ft
Carrier : AT&T Mobility
Carrier Site Name : MRCTB049079
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41.12344444, -73.3131
County : Fairfield
Date : February 3, 2021
Max Usage : 38%
Result : Contingent Pass

Prepared By:
Michael Ellis
Structural Engineer

Reviewed By:



COA: PEC.0001553



Table of Contents

Introduction 1

Supporting Documents 1

Analysis 1

Conclusion 1

Antenna Loading..... 2

Structure Usages..... 2

Mount Layout 3

Equipment Layout 4

Standard Conditions..... 8

Calculations Attached



Introduction

The purpose of this report is to summarize results of the antenna mount analysis performed for AT&T Mobility at 131 ft.

Supporting Documents

Specifications Sheet	Commscope MCG22HDX14-12-H10, dated August 8, 2016
Radio Frequency Data Sheet	RFDS ID #10035073, dated January 21, 2021

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

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

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Analysis Based on new Commscope MCG22HDX14-12-H10 sector frames.

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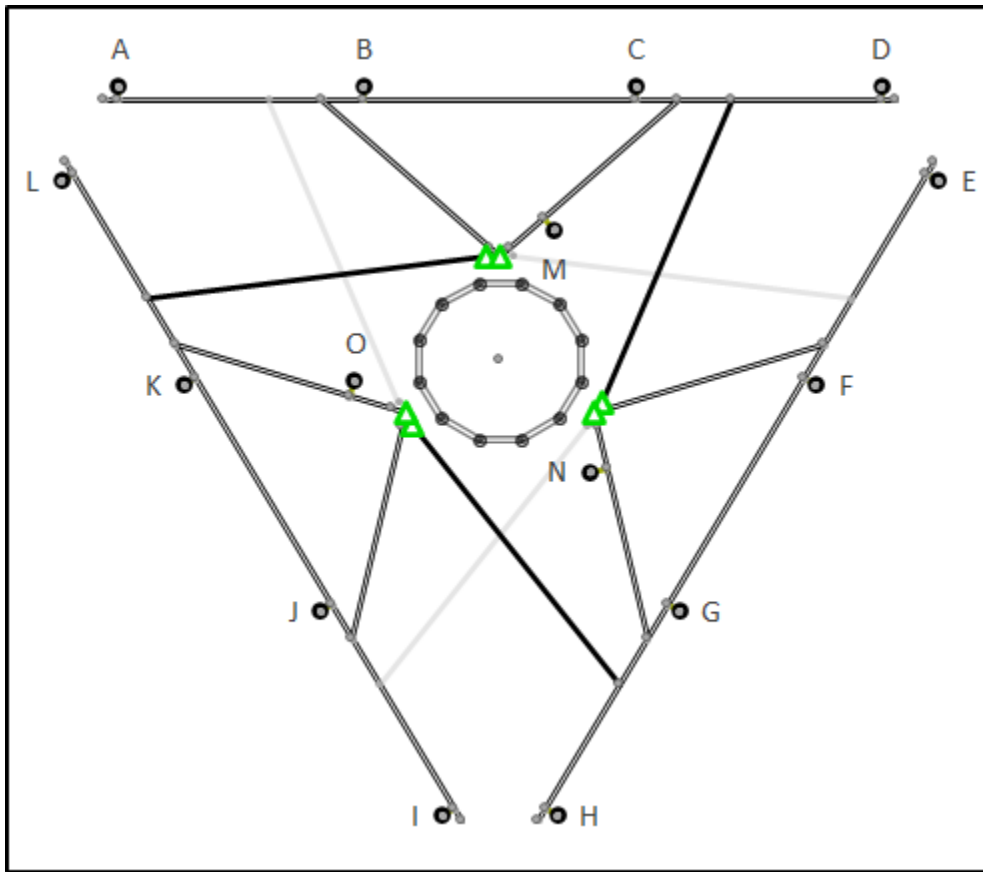
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		1	Raycap DC6-48-60-18-8F ("Squid")
		3	Ericsson RRUS 4478 B14
		3	Ericsson RRUS 4449 B5, B12
		3	Ericsson RRUS 32 B30
		3	Ericsson RRUS 8843 B2, B66A

Structure Usages

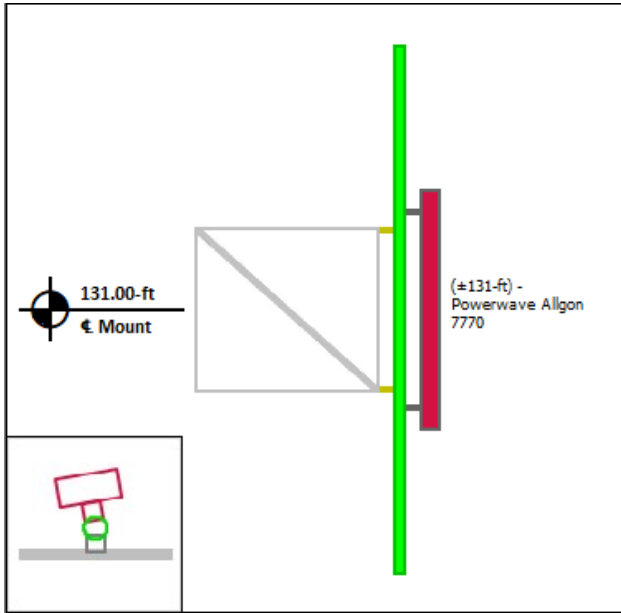
Structural Component	Controlling Usage	Pass/Fail
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Mount Pipes	25%	Pass

Mount Layout

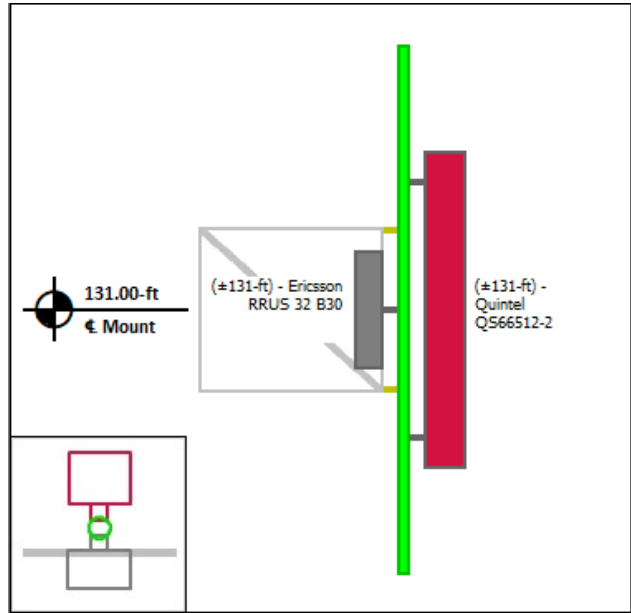


Equipment Layout

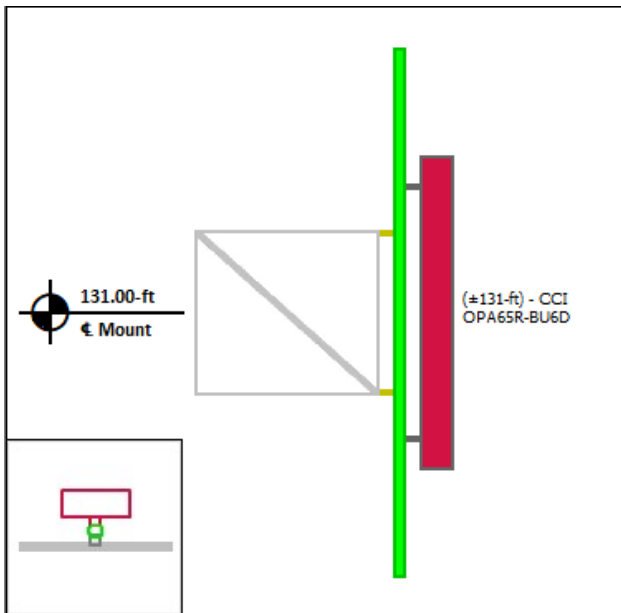
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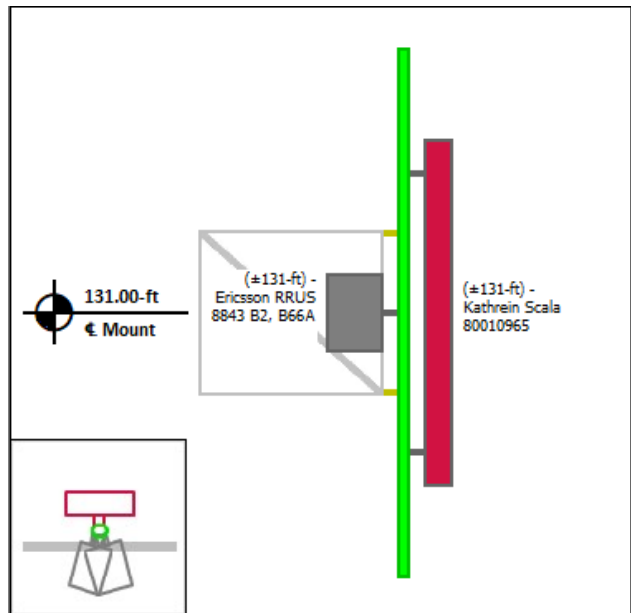
Mount Pipe B



Mount Pipe C

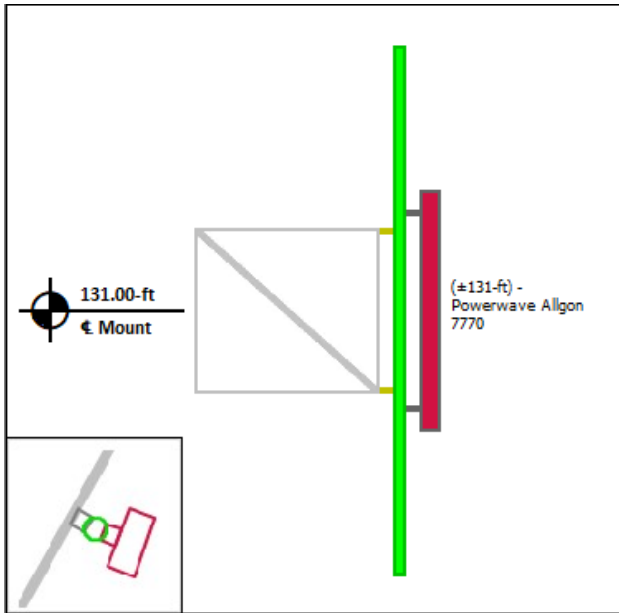


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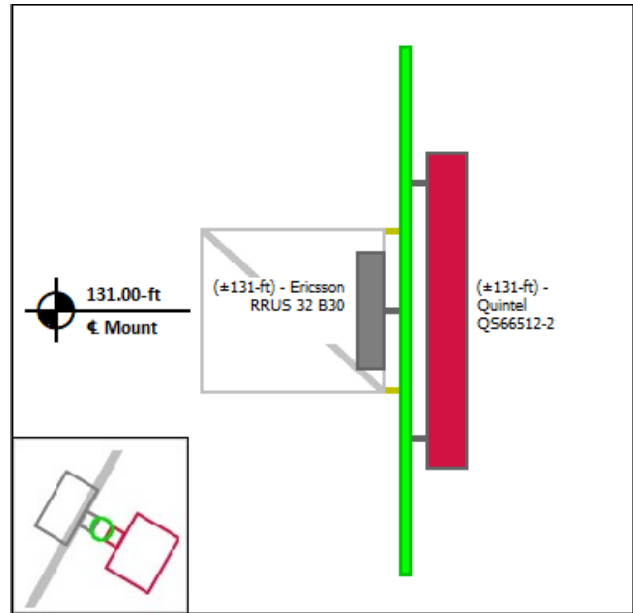


Equipment Layout Cont'd.

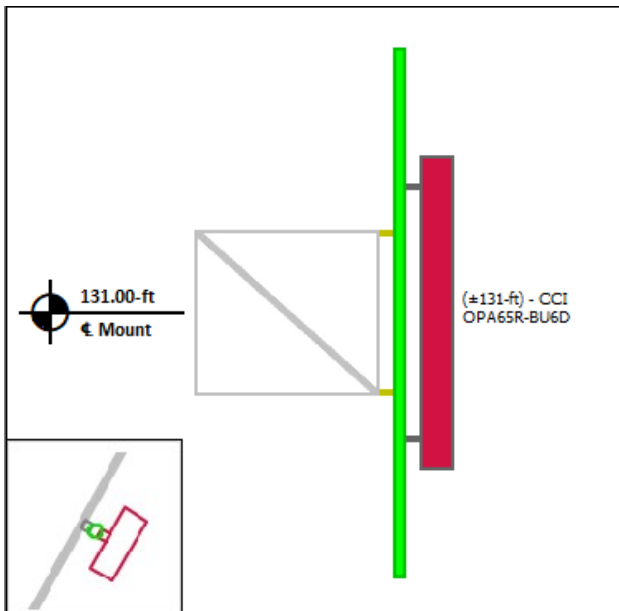
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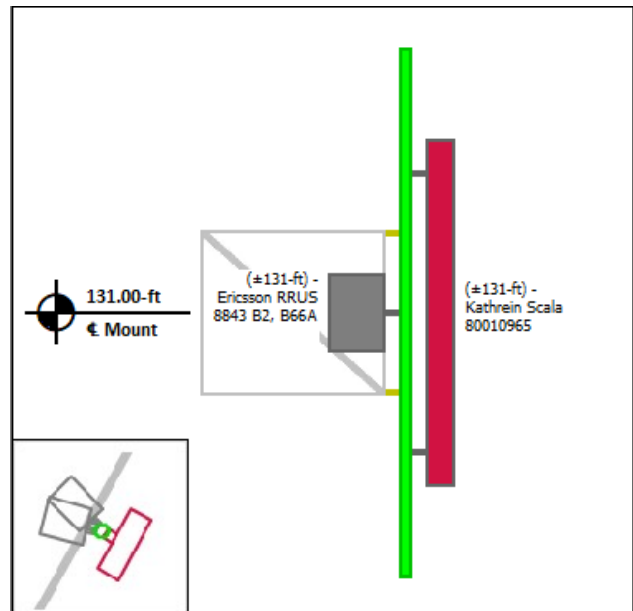
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Mount Pipe G

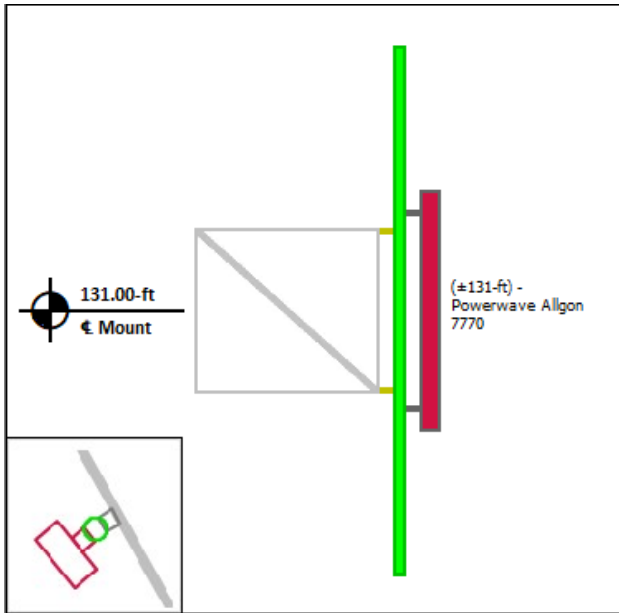


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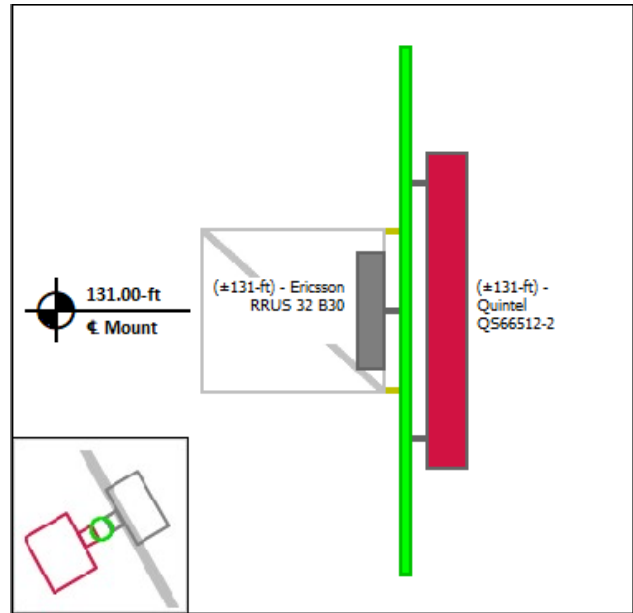


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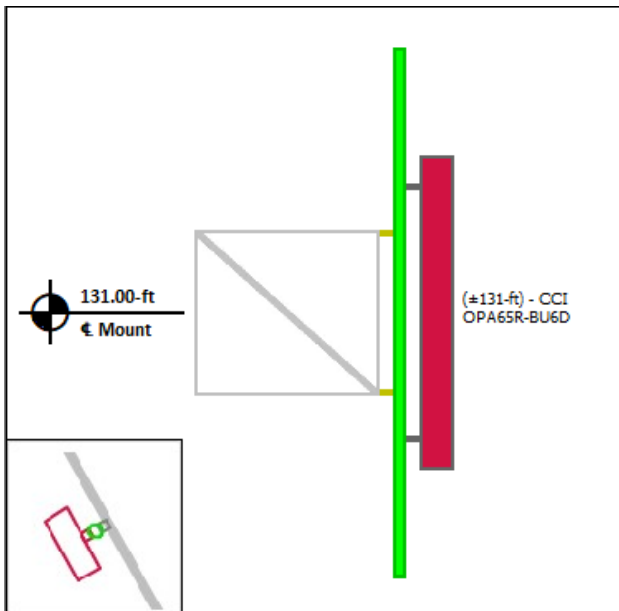
Mount Pipe I



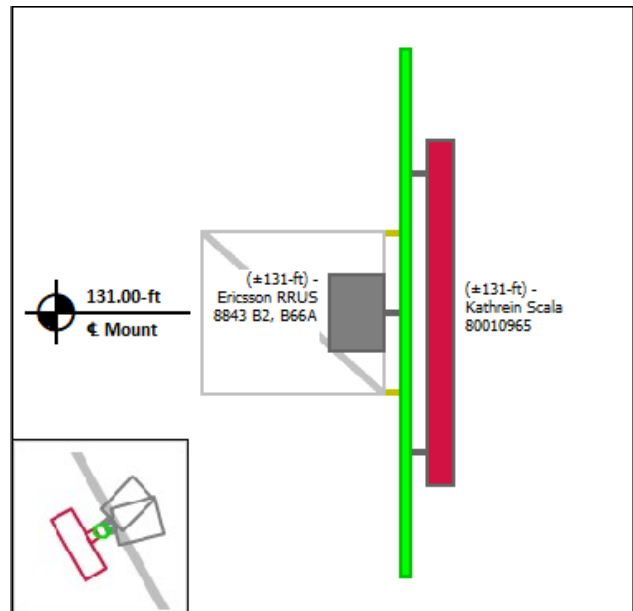
Mount Pipe J



Mount Pipe K

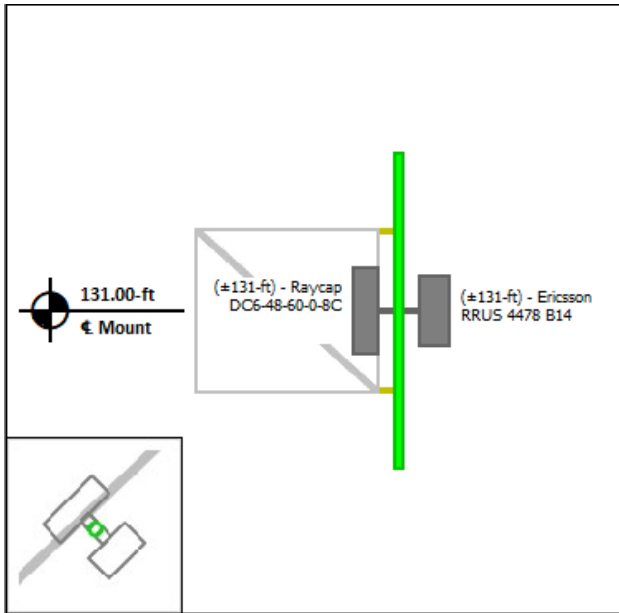


Mount Pipe L

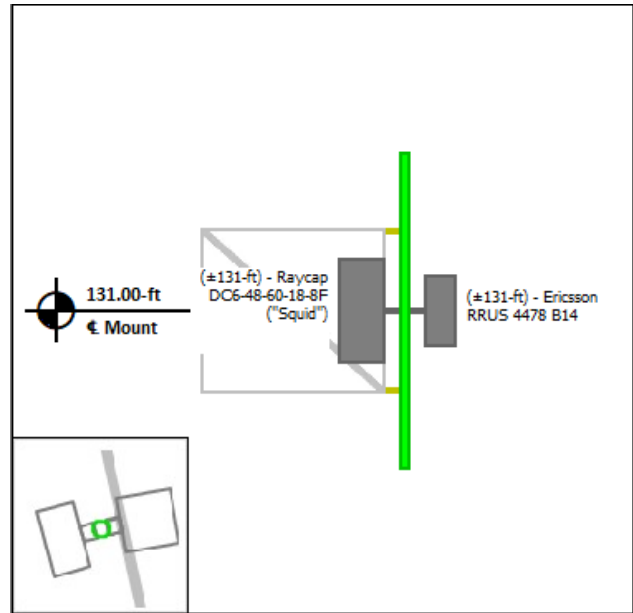


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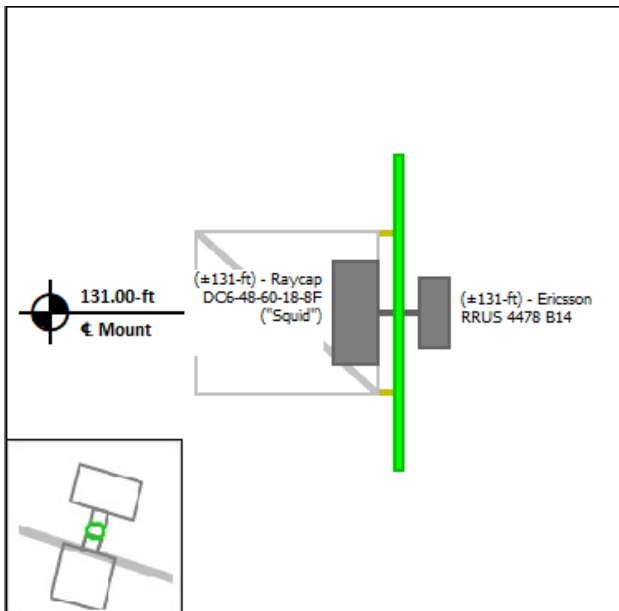
Mount Pipe M



Mount Pipe N



Mount Pipe O





Standard Conditions

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

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

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

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

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

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

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



Site Number: 302511
Project Number: 13333739_C8_01
Carrier: AT&T Mobility
Mount Elevation: 131 ft
Date: 2/3/2021

Mount Analysis Force Calculations

Wind & Ice Load Calculations			
Velocity Pressure Coefficient	K_z	1.34	
Topographic Factor	K_{zt}	1.00	
Rooftop Wind Speed-up Factor	K_s	1.00	
Shielding Factor	K_a	0.90	
Ground Elevation Factor	K_e	1.00	
Wind Direction Probability Factor	K_d	0.95	
Basic Wind Speed	V	118	mph
Velocity Pressure	q_z	45.3	psf
Height Escalation Factor	K_{iz}	1.15	
Thickness of Radial Glaze Ice	T_{iz}	1.15	in

Seismic Load Calculations			
Short Period DSRAP	S_{Ds}	0.241	
1 Second DSRAP	S_{D1}	0.088	
Importance Factor	I	1.0	
Response Modification Coefficient	R	2.0	
Seismic Response Coefficient	C_s	0.121	
Amplification Factor	A	1.0	
Total Weight	W	4253.2	lbs
Total Shear Force	V_s	512.7	lbs
Horizontal Seismic Load	E_h	512.7	lbs
Vertical Seismic Load	E_v	205.1	lbs

Antenna Calculations (Elevations per Application/RFDS)*								
Equipment	Height	Width	Depth	Weight	EPA_N	EPA_T	EPA_{Ni}	EPA_{Ti}
Model #	in	in	in	lbs	sqft	sqft	sqft	sqft
CCI OPA65R-BU6D	71.2	21.0	7.8	63.2	12.87	2.31	14.74	3.09
Powerwave Allgon 7770	55.0	11.0	5.0	35.0	5.51	1.37	6.94	2.08
Quintel QS66512-2	72.0	12.0	9.6	111.0	8.13	2.88	10.00	3.68
Kathrein Scala 80010965	78.7	20.0	6.9	97.6	13.81	2.26	15.85	3.10
Raycap DC6-48-60-0-8C	20.1	18.2	6.4	16.0	3.05	1.10	3.83	1.66
Raycap DC6-48-60-18-8F ("Squid")	24.0	11.0	11.0	31.8	2.20	2.20	2.91	2.91
Raycap DC6-48-60-18-8F ("Squid")	24.0	11.0	11.0	31.8	2.20	2.20	2.91	2.91
Ericsson RRUS 4478 B14	16.5	13.4	7.7	59.9	1.84	1.06	2.46	1.57
Ericsson RRUS 4449 B5, B12	17.9	13.2	9.4	71.0	1.97	1.40	2.61	1.97
Ericsson RRUS 32 B30	27.2	12.1	7.0	60.0	2.74	1.67	3.54	2.40
Ericsson RRUS 8843 B2, B66A	14.9	13.2	10.9	72.0	1.64	1.35	2.22	1.89

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

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IJ	b e J	G E F i H J	i i	F G E	€	
I€	b e €	G E F i H J	F G E	F G E	€	
IF	b e F	H i E i e	F G E	G E i H i i	€	
IG	b e G	E i E i J i	F G E	F i H G i F H	€	
IH	b e H	E F E i J i	F G E	F G E i e i G	€	
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Ii	b e i	F H G	F G E	F J G	€	
Ii	b e i	F H G	i G E	F J i	€	
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I€	b e €	i i	i G E	F J G	€	
IF	b e F	F i	F G E	F J G	€	
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IJ	b e J	E i E i J i	i G E	F i H G i F H	€	
I€	b e €	E i E i F i G	i G E	F i E i F H	€	
IF	b e F	E i E i F i G	F G E	F G E i e i G	€	
IG	b e G	E F E i J i	i G E	F G E i e i G	€	
IH	b e H	E i E i F i G	i G E	F G E i e i G	€	
Ii	b e i	F F E i i i i	F G E	i i E F J G H	€	
Ii	b e i	i E i e	i G E	i i E F J G H	€	
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IG	b e G	i i E i F i G	i G E	G E G H i i i	€	
IH	b e H	i i E i F i G	F G E	i i E F J G H	€	
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Ii	b e i	F F i E i F i G	i G E	F G E i e i G	€	
IJ	b e J	F i F E i F i G	F G E	F i E i F H	€	
J€	b e €	F i E i J i	i G E	F i H G i F H	€	
JF	b e F	F i F E i F i G	i G E	F i E i F H	€	
JG	b e G	F H G	F i F E G	F J i	€	
JH	b e H	F H G	F i F E G	F J i	€	
Ji	b e i	F i	F i F E G	F J i	€	
Ji	b e i	F i	F i F E G	F J i	€	
Ji	b e i	i i	F i F E G	F J i	€	
Ji	b e i	i i	F i F E G	F J i	€	
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FEG	pFEG	Ì È Í JÍ	FÌ FEG	Ì È Í FJGH	€	
F€H	pF€H	Ì È Í JÍ	I FEG	Ì È Í FJGH	€	
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FFG	pFFG	Ì È Í È	FÌ FEG	Ì È Í FJGH	€	
FFH	pFFH	Ì È Í È	I FEG	Ì È Í FJGH	€	
FFI	pFFI	ÈÌ	FÌ FEG	FJÍ	€	
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FFJ	pFFJ	Í F	FQ€	FÍ	€	
FQ€	pFQ€	Ì È È Í F	FQ€	FFÌ È È FJG	€	
FG	pFG	G È È FÍ HJ	FQ€	FGÈÈ JÍ È Í	€	
FGG	pFGG	Í Í	Ì È È	FÍ	€	
FGH	pFGH	Ì È È Í F	Ì È È	FGÈÈ JÍ È Í	€	
FG	pFG	G È È FÍ HJ	Ì È È	FFÌ È È FJG	€	
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FG	pFG	HÌ	FQ€	FÍ G	€	
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FH€	pFH€	G È È FJGH	FQ€	FÈ È È Í JÍ	€	
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FHG	pFHG	HÌ	Ì È È	FÍ G	€	
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EXHIBIT 3

DOCKET NO. 166 - An application of Springwich Cellular Limited Partnership for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a cellular telecommunications facility approximately 250 feet west of Maple Lane, approximately 850 feet west of Maple Lane, or approximately 750 feet west of New Creek Road in the Town of Westport, Connecticut.

Connecticut Siting Council

August 29, 1995

DECISION AND ORDER

Pursuant to the foregoing Findings of Fact and Opinion, the Connecticut Siting Council (Council) finds that the effects associated with the construction, operation, and maintenance of a cellular telecommunications tower and equipment building at the proposed first alternate site in Westport, Connecticut, including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not disproportionate either alone or cumulatively with other effects when compared to need, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the application and therefore directs that a Certificate of Environmental Compatibility and Public Need, as provided by General Statutes § 16-50k, be issued to Springwich Cellular Limited Partnership (Springwich), for the construction, operation, and maintenance of a cellular telecommunications tower, associated equipment, and building at the proposed first alternate site, located approximately 850 feet west of Maple Lane, Westport, Connecticut. We find the effects on scenic resources and adjacent land uses of the second alternate site to be significant and the prime site does not provide full coverage to Interstate 95, and therefore deny certification of these sites.

The facility shall be constructed, operated, and maintained substantially as specified in the Council's record in this matter, and subject to the following conditions:

1. The self-supporting monopole tower shall be no taller than necessary to provide the proposed communications service and the tower shall not exceed a total height of 130 feet above ground level (AGL).
2. The Certificate Holder shall prepare a Development and Management (D&M) Plan for this site in compliance with Sections 16-50j-75 through 16-50j-77 of the Regulations of Connecticut State Agencies. The D&M Plan shall be submitted to and approved by the Council prior to the commencement of facility construction and shall include detailed plans for the tower location and tower foundation; the placement of all antennas to be attached to this tower; plans for the equipment building and security fence; plans for the access road and utility line installation from Post Office Lane; plans for site clearing and tree trimming; plans for water drainage and erosion and sedimentation

controls consistent with the Connecticut Guidelines for Soil Erosion and Sediment Control, as amended; and demarcation of wetlands with conditions that the building and tower shall be 65 feet or more from the wetland, and all grading and other disturbances shall be 25 feet or more from the wetland. No setback restrictions shall apply to the existing access road.

3. Upon the establishment of any new State or federal radio frequency standards applicable to frequencies of this facility, the facility granted herein shall be brought into compliance with such standards.

4. The Certificate Holder shall provide the Council a recalculated report of electromagnetic radio frequency power density if and when circumstances in operation cause a change in power density above the levels originally calculated and provided in the application.

5. The Certificate Holder shall permit public or private entities to share space on the proposed tower for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing.

6. If the facility does not initially provide, or permanently ceases to provide cellular services following completion of construction, this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapplication for any continued or new use shall be made to the Council before any such use is made.

7. Unless otherwise approved by the Council, this Decision and Order shall be void if all construction authorized herein is not completed within three years of the effective date of this Decision and Order or within three years after all appeals to this Decision and Order have been resolved.

8. The Certificate Holder shall notify the Council upon completion of construction and provide the final cost to construct the facility.

Pursuant to General Statutes § 16-50p, we hereby direct that a copy of the Findings of Fact, Opinion, and Decision and Order be served on each person listed below, and notice of issuance shall be published in The Connecticut Post, The Hour, and the Westport News.

By this Decision and Order, the Council disposes of the legal rights, duties, and privileges of each party named or admitted to the proceeding in accordance with Section 16-50j-17 of the Regulations of Connecticut State Agencies.

The parties and intervenors to this proceeding are:

APPLICANT

ITS REPRESENTATIVE

Springwich Cellular Limited Partnership

Peter J. Tyrrell, Esq.
Springwich Cellular Limited Partnership
227 Church Street
New Haven, CT 06510

PARTY

Town of Westport

ITS REPRESENTATIVE

Joseph A. Arcudi
First Selectman
Town of Westport, Town Hall
110 Myrtle Avenue
Westport, CT 06880

INTERVENORS

Bell Atlantic NYNEX Mobile, Inc.

ITS REPRESENTATIVES

Kenneth C. Baldwin, Esq.
Robinson & Cole
One Commercial Plaza
Hartford, CT 06103-3597

Jay Sherwood

Richard J. Diviney, Esq.
Sherwood, Garlick, Cowell, Diviney & Atwood, P.C.
P.O. Box 390
Westport, CT 06881-0390

Greens Farms Association

Robert P. Scholl
Attorney At Law
31 Imperial Avenue
Westport, CT 06880

PETITION NO. 394 - Springwich Cellular Limited Partnership (Springwich) Petition for a Declaratory Ruling that no amendment to the Certificate of Environmental Compatibility and Public Need is required to replace the existing tower and expand the site boundaries to accommodate tower sharing at an existing telecommunications facility located at 20 Post Office Lane in Westport, Connecticut.	} } } } }	Connecticut Siting Council August 25, 1998
--	-----------------------	---

Decision & Order

Pursuant to the foregoing Findings of Fact and Opinion, and in accordance with the provisions of Regulations of Connecticut State Agencies §§ 16-50j-38 through 16-50j-39, the proposed modifications to an existing telecommunications facility located at 20 Post Office Lane in Westport, Connecticut will not have a substantial adverse environmental effect; therefore, an amendment to the Certificate of Environmental Compatibility and Public Need issued in Docket 166 on August 29, 1995, is not required.

The modifications shall be implemented substantially as specified in the Council’s record in this matter and subject to the following conditions:

1. Springwich Cellular Limited Partnership (SCLP) shall provide the Council a recalculated report of electromagnetic radio frequency power density when circumstances in operation cause a change in power density above the levels originally calculated and provided in the petition.
2. If the facility does not provide, or permanently ceases to provide the proposed telecommunications services following completion of construction, this Decision and Order shall be void, and the petitioner shall dismantle and remove the tower, antennas, and all associated equipment within 60 days after such equipment ceases to provide the proposed telecommunications services or reapply to the Council for any proposed new use.
3. SCLP shall provide advance notice two days prior to the commencement of construction. SCLP shall notify the Council upon completion of construction and commencement of operations.
4. No fill material or structures shall be placed in the area adjacent to the facility compound designated as a 100-year flood zone.
5. Low profile platforms, similar in design and appearance, shall be used and painted blue to match the color of the replacement tower.
6. The antenna canister for Omnipoint Communications may not be located above the top of the replacement tower.
7. All other applicable orders issued in the Council’s Decision and Order for Docket 166 remain in effect.

EXHIBIT 4

MAPLE LN

Location MAPLE LN

Mblu H06/ / 017/000 /

Acct# 11910

Owner SHERWOOD JAY

Assessment \$1,034,130

Appraisal \$1,477,400

PID 7785

Building Count 1

Current Value

Appraisal			
Valuation Year	Improvements	Land	Total
2020	\$1,164,400	\$313,000	\$1,477,400

Assessment			
Valuation Year	Improvements	Land	Total
2020	\$815,030	\$219,100	\$1,034,130

Owner of Record

Owner SHERWOOD JAY
Co-Owner
Address P O BOX 48
WESTPORT, CT 06881

Sale Price \$0
Certificate 1
Book & Page 0469/0137
Sale Date 12/08/1977
Instrument 29

Ownership History

Ownership History					
Owner	Sale Price	Certificate	Book & Page	Instrument	Sale Date
SHERWOOD JAY	\$0	1	0469/0137	29	12/08/1977

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	Outbuildings
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 Bthrms:	
Total Half Baths:	
Total Xtra Fixtrs:	
Total Rooms:	
Bath Style:	
Kitchen Style:	
Kitchens	
Whirlpool Tubs	
Hot Tubs	
Sauna (SF Area)	
Fin Basement	
Fin Bsmt Qual	
Bsmt. Garages	
Interior Cond	
Fireplaces	
Ceiling Height	
Elevator	
Sprinklers	
Acc Apts	
Fndtn Cndtn	
Basement	

Building Photo



(<http://images.vgsi.com/photos2/WestportCTPhotos/\00\01\56\27.jpg>)

Building Layout

 Building Layout (ParcelSketch.ashx?pid=7785&bid=7785)

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

Extra Features

Extra Features	<u>Legend</u>
No Data for Extra Features	

Land

Land Use

Use Code 435
Description Cell Site Vac Lnd
Zone AAA
Neighborhood 140
Alt Land Appr Category No

Land Line Valuation

Size (Acres) 2.07
Frontage 0
Depth 0
Assessed Value \$219,100
Appraised Value \$313,000

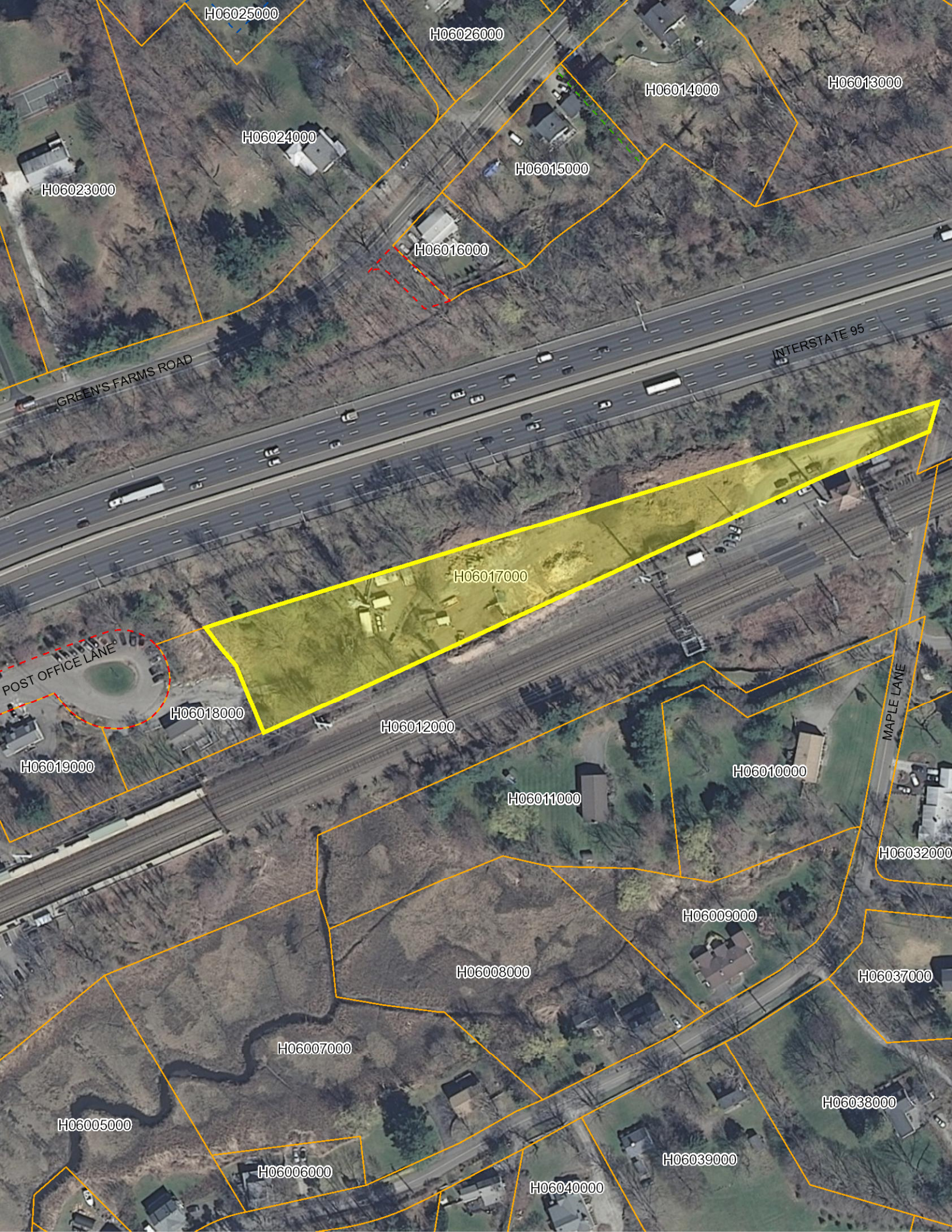
Outbuildings

Outbuildings						<u>Legend</u>
Code	Description	Sub Code	Sub Description	Size	Value	Bldg #
CELL	Cell on TWR	TW		5.00 Sites	\$1,253,900	1

Valuation History

Appraisal			
Valuation Year	Improvements	Land	Total
2020	\$1,164,400	\$313,000	\$1,477,400
2019	\$1,253,969	\$59,360	\$1,313,329
2018	\$1,253,900	\$59,400	\$1,313,300

Assessment			
Valuation Year	Improvements	Land	Total
2020	\$815,030	\$219,100	\$1,034,130
2019	\$877,730	\$41,600	\$919,330
2018	\$877,730	\$41,600	\$919,330



H06025000

H06026000

H06014000

H06013000

H06024000

H06015000

H06023000

H06016000

GREEN'S FARMS ROAD

INTERSTATE 95

H06017000

POST OFFICE LANE

H06018000

H06012000

MAPLE LANE

H06019000

H06011000

H06010000

H06032000

H06009000

H06008000

H06037000

H06007000

H06005000

H06006000

H06040000

H06039000

H06038000

EXHIBIT 5



NIER Study Report

SITE NAME:

302511 WSPT-South

LOCATION:

West Port, Connecticut

COMPANY:

**American Tower
Woburn, Massachusetts**

April 20th, 2021



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POWER DENSITY CALCULATIONS.....	4
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APPENDIX 3 FCC OET-65 MPE LIMIT STUDY	7
APPENDIX 4 TOWER RADIATION PATTERNS	8
APPENDIX 5 ANTENNA LIST.....	9
APPENDIX 6 INFORMATION PERTAINING TO MPE STUDIES.....	10
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Disclaimer Notice

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KINSTON, NORTH CAROLINA



NIER STUDY REPORT

302511 WSPT-South

Westport, CT

INTRODUCTION

Tower Engineering Professionals (TEP) has been retained by American Tower (ATC) of Woburn, Massachusetts to evaluate the RF emissions of an existing tower at this location.

SITE AND FACILITY CONSIDERATIONS

Site WSPT-South is located at 20 Post Office Lane in Westport, CT at coordinates 41.123444, -73.313100. The support structure is a 140' monopole. The installation consists of four antenna levels with radiation centers of 131', 120', 100', & 90' above ground level. All antennae will have a radiation center as described above. All data used in this study was provided by one or more of the following sources:

1. ATC furnished data
2. Compiled from carrier and manufacturer standard configurations
3. Empirical data collected by TEP

A topographic map of the study area is located in Appendix 1. A satellite view of the study area is located in Appendix 2.



POWER DENSITY CALCULATIONS

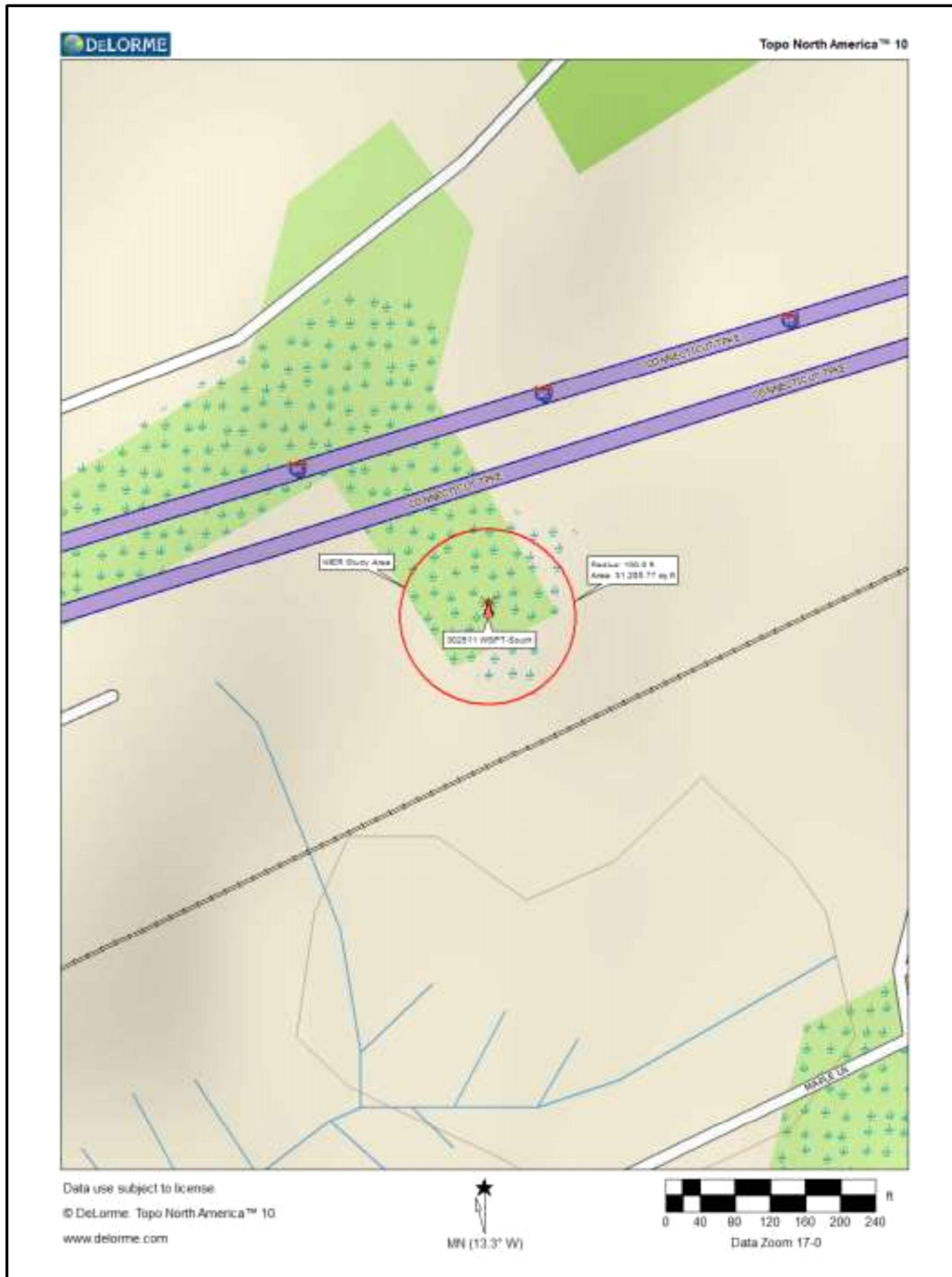
Graphs of the power density at different distances from the transmitter, compared to FCC MPE general population and occupational limits, may be seen in Appendix 3. These limits are based upon the Information Relating to MPE Standards found in Appendix 6. Study methodology may be seen in Appendix 7, which describes the Non-Ionizing Radiation Prediction Models. Approximate radiation patterns may be found in Appendix 4. A list of antenna systems located at this site along with their associated Effective Radiated Power (ERP) may be found in Appendix 5. As ERP varies depending on traffic through the carrier's facility, the ERP listed is the ***maximum*** possible based upon advertised manufacturer specifications and will typically be much less. This site ***IS*** in compliance with FCC OET-65 MPE limits.

April 20th, 2021

Michael W. Hayden NCE CPBE CBNT AMD CPI
Director, RF Design & Services
Tower Engineering Professionals



APPENDIX 1 Topographic Map



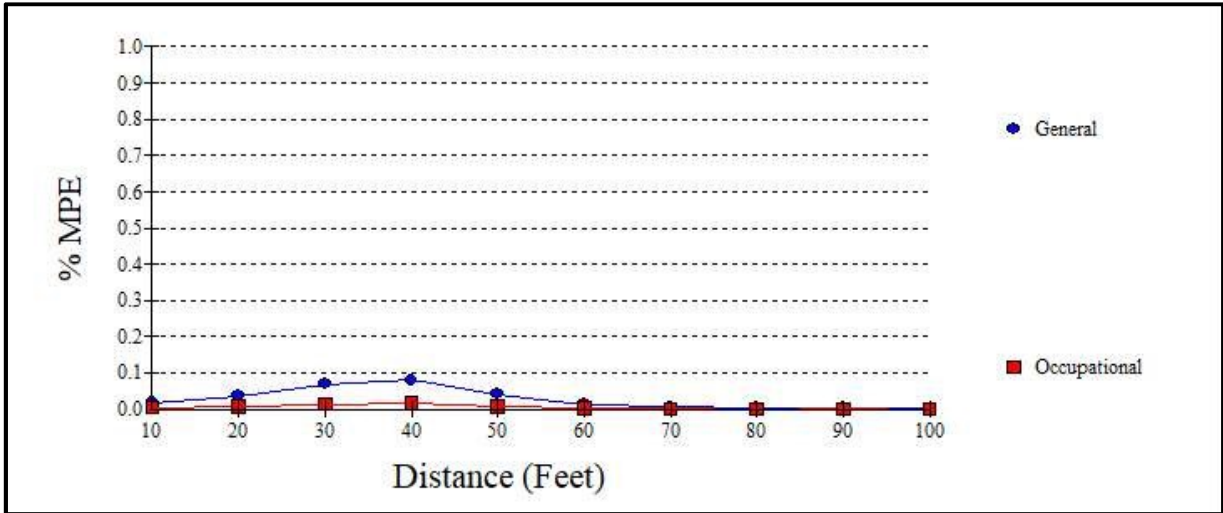


APPENDIX 2 Satellite Photo





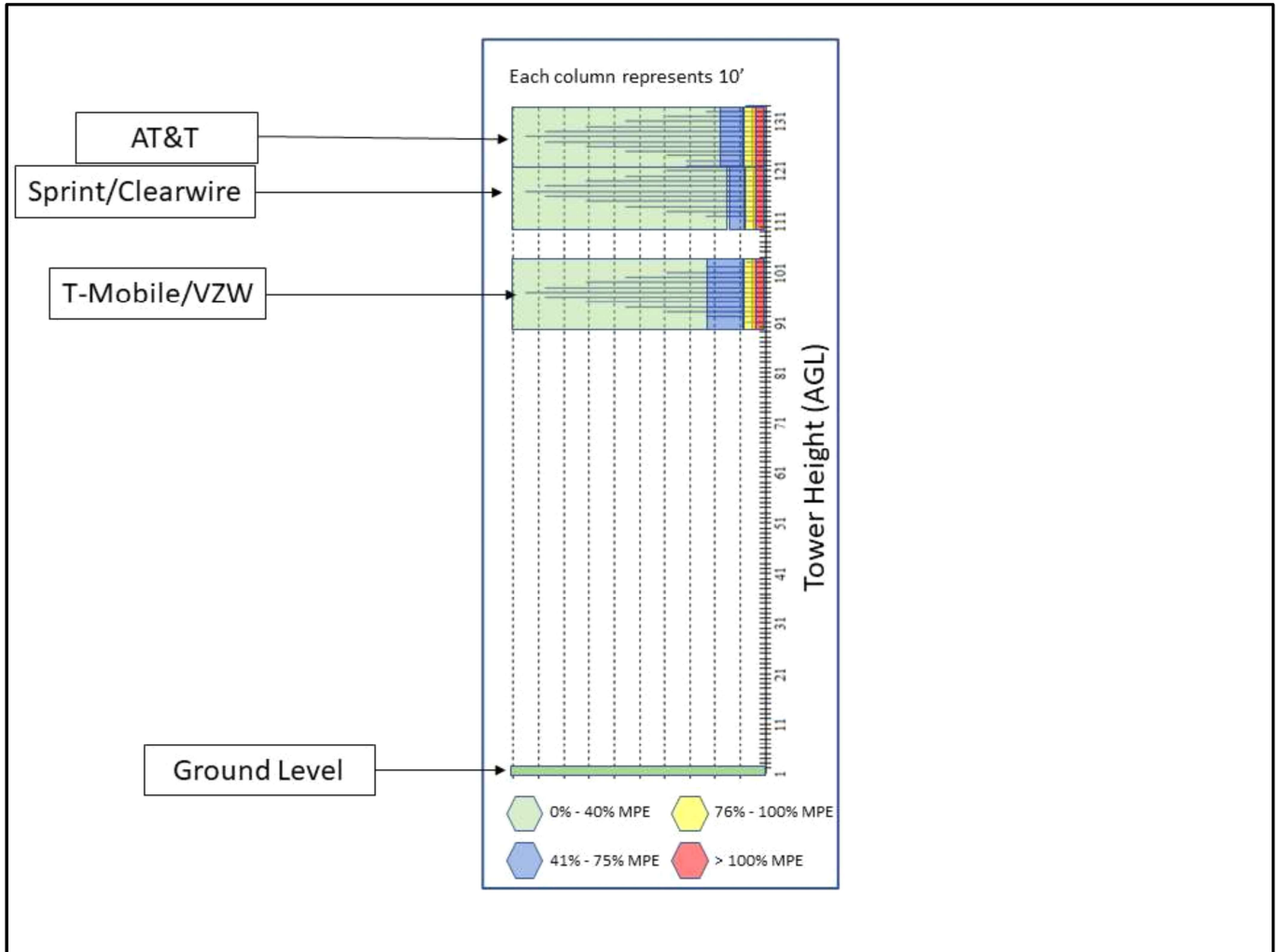
APPENDIX 3 FCC OET-65 MPE Limit Study



Maximum Power Density (@40'):	0.0008 mW/cm ²
General Population MPE (@40'):	0.0797%
Occupational MPE (@40'):	0.0008%



APPENDIX 4 Tower Radiation Patterns





APPENDIX 5 Antenna List

ATC Site 302511 WSPT-South								
Antenna List								
Antenna Owner	Antenna Model	Quantity/Sector	Number of Sectors	Sector Azimuth (°T)	Frequency Bands (UL) (MHz)	Frequency Bands (DL) (MHz)	Max. ERP (watts)	Radiation Center (feet)
AT&T	Kathrein 80010965	1	3	30/150/270	1850-1890, 891-894	1930-1970, 835-849	2383	131
AT&T	Quintel QS66512-2	1	3	30/150/270	824-892, 1850-1890	869-892, 1930-1945	3228	131
AT&T	CCI OPA65R-BUD	1	3	30/150/270	776-793, 805-806	746-776	2877	131
AT&T	Powerwave 7770.00	1	3	139/261/20	835-849, 1850-1855	880-894, 1930-193	2978	131
Sprint	Nokia 2.5G MAAAHC (64T/64R)	1	3	50/130/270	2496-2690	2496-2690	240	120
Sprint	Commscope NNVV-65B-R4	1	3	50/130/270	806-869, 1850-1995	806-869, 1850-1995	1875	120
Clearwire	Argus LLPX310R	1	3	30/150/270	2300-2700	2300-2700	1941	120
Clearwire	Andrew A-ANT-18G-2-C	1	2	Approx. 150/270	18000	18000	10	120
Verizon	Antel BXA-70080/6C	1	3	30/150/270	824-835, 845-847	869-880, 890-892	2812	100
Verizon	Quintel QS6656-5D	1	3	30/150/270	776-787, 1710-1730, 1890-1910	746-757, 869-892, 1970-2130	3540	100
Verizon	Ryma MGD3-800TX	1	3	30/150/270	1890-1895	1970-1975	1986	100
Verizon	Powerwave P65-16-XL-2	1	1	270	806-869, 1850-1995	806-869, 1850-1995	1770	100
Verizon	Antel BXA-171063/1	1	4	40/150/260	824-892, 1850-1890	824-892, 1850-1890	2124	100
T-Mobile	Ericsson AIR32 B2A/B66A	1	4	70/160/270/350	1710-1720	2110-2120	1778	90
T-Mobile	RFS APXVAAR R24 43-U-NA20	1	4	70/160/270/350	627-688, 698-704	627-688, 728-734	1406	90
T-Mobile	AIR 21.1.3M, B2A B4P	1	4	70/160/270/350	1710-1720	2110-2120	1259	90



APPENDIX 6 Information Pertaining to MPE Studies

In 1985, the FCC first adopted guidelines to be used for evaluating human exposure to RF emissions. The FCC revised and updated these guidelines on August 1, 1996, as a result of a rule-making proceeding initiated in 1993. The new guidelines incorporate limits for Maximum Permissible Exposure (MPE) in terms of electric and magnetic field strength and power density for transmitters operating at frequencies between 300 kHz and 100 GHz.

The FCC's MPE limits are based on exposure limits recommended by the National Council on Radiation Protection and Measurements (NCRP) and, over a wide range of frequencies, the exposure limits were developed by the Institute of Electrical and Electronics Engineers, Inc., (IEEE) and adopted by the American National Standards Institute (ANSI) to replace the 1982 ANSI guidelines. Limits for localized absorption are based on recommendations of both ANSI/IEEE and NCRP.

The FCC's limits, and the NCRP and ANSI/IEEE limits on which they are based, are derived from exposure criteria quantified in terms of specific absorption rate (SAR). The basis for these limits is a whole-body averaged SAR threshold level of 4 watts per kilogram (4 W/kg), as averaged over the entire mass of the body, above which expert organizations have determined that potentially hazardous exposures may occur. The MPE limits are derived by incorporating safety factors that lead, in some cases, to limits that are more conservative than the limits originally adopted by the FCC in 1985. Where more conservative limits exist, they do not arise from a fundamental change in the RF safety criteria for whole-body averaged SAR, but from a precautionary desire to protect subgroups of the general population who, potentially, may be more at risk.

The FCC exposure limits are also based on data showing that the human body absorbs RF energy at some frequencies more efficiently than at others. The most restrictive limits occur in the frequency range of 30-300 MHz where whole-body absorption of RF energy by human beings is most efficient. At other frequencies, whole-body absorption is less efficient, and consequently, the MPE limits are less restrictive.



MPE limits are defined in terms of power density (units of milliwatts per centimeter squared: mW/cm^2), electric field strength (units of volts per meter: V/m) and magnetic field strength (units of amperes per meter: A/m). The far-field of a transmitting antenna is where the electric field vector (E), the magnetic field vector (H), and the direction of propagation can be considered to be all mutually orthogonal ("plane-wave" conditions).

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.

General population/uncontrolled exposure limits apply to situations in which the general public 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 public 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. Additional details can be found in FCC OET 65.



APPENDIX 7 MPE Standards Methodology

This study predicts RF field strength and power density levels that emanate from communications system antennae. It considers all transmitter power levels (less filter and line losses) delivered to each active transmitting antenna at the communications site. Calculations are performed to determine power density and MPE levels for each antenna as well as composite levels from all antennas. The calculated levels are based on where a human (Observer) would be standing at various locations at the site. The point of interest where the MPE level is predicted is based on the height of the Observer.

Compliance with the FCC limits on RF emissions are determined by spatially averaging a person's exposure over the projected area of an adult human body, that is approximately six-feet or two-meters, as defined in the ANSI/IEEE C95.1 standard. The MPE limits are specified as time-averaged exposure limits. This means that exposure is averaged over an identifiable time interval. It is 30 minutes for the general population/uncontrolled RF environment and 6 minutes for the occupational/controlled RF environment. However, in the case of the general public, time averaging should not be applied because the general public is typically not aware of RF exposure and they do not have control of their exposure time. Therefore, it should be assumed that any RF exposure to the general public will be continuous.

The FCC's limits for exposure at different frequencies are shown in the following Tables.

Limits for Occupational/Controlled Exposure				
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm²)	Averaging Time E ², H ² or S (minutes)
0.3 - 3.0	614	1.63	100*	6
3.0 - 30	1842/f	4.89/f	900/F ²	6
30 - 300	61.4	0.163	1.0	6
300 - 1500	--	--	f/300	6
1500 - 100,000	--	--	5	6

f = frequency

* = Plane-wave equivalent power density



Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3 - 1.34	614	1.63	100*	30
1.34 - 30	824/f	2.19/f	180/F ²	30
30 -300	27.5	0.073	0.2	30
300 -1500	--	--	f/1500	30
1500 -100,000	--	--	1.0	30

f = frequency

* = Plane-wave equivalent power density

General population/uncontrolled exposures apply in situations in which the general public may be exposed or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

It is important to understand that these limits apply cumulatively to all sources of RF emissions affecting a given area. For example, if several different communications system antennas occupy a shared facility such as a tower or rooftop, then the total exposure from all systems at the facility must be within compliance of the FCC guidelines.

The field strength emanating from an antenna can be estimated based on the characteristics of an antenna radiating in free space. There are basically two field areas associated with a radiating antenna. When close to the antenna, the region is known as the Near Field. Within this region, the characteristics of the RF fields are very complex and the wave front is extremely curved. As you move further from the antenna, the wave front has less curvature and becomes planar. The wave front still has a curvature but it appears to occupy a flat plane in space (plane-wave radiation). This region is known as the Far Field.



Two models are utilized to predict Near and Far field power densities. They are based on the formulae in FCC OET 65. As this study is concerned only with Near Field calculations, we will only describe the model used for this study. For additional details, refer to FCC OET Bulletin 65.

Cylindrical Model (Near Field Predictions)

Spatially averaged plane-wave equivalent power densities parallel to the antenna may be estimated by dividing the antenna input power by the surface area of an imaginary cylinder surrounding the length of the radiating antenna. While the actual power density will vary along the height of the antenna, the average value along its length will closely follow the relation given by the following equation:

$$S = P \div 2\pi RL$$

Where:

S = Power Density

P = Total Power into antenna

R = Distance from the antenna

L = Antenna aperture length

For directional-type antennas, power densities can be estimated by dividing the input power by that portion of a cylindrical surface area corresponding to the angular beam width of the antenna. For example, for the case of a 120-degree azimuthal beam width, the surface area should correspond to 1/3 that of a full cylinder. This would increase the power density near the antenna by a factor of three over that for a purely omni-directional antenna. Mathematically, this can be represented by the following formula:

$$S = (180 / \theta_{BW}) P \div \pi RL$$

Where:

S = Power Density

θ_{BW} = Beam width of antenna in degrees (3 dB half-power point)

P = Total Power into antenna

R = Distance from the antenna

L = Antenna aperture length

If the antenna is a 360-degree omni-directional antenna, this formula would be equivalent to the previous formula.



Spherical Model (Far Field Predictions)

Spatially averaged plane-wave power densities in the Far Field of an antenna may be estimated by considering the additional factors of antenna gain and reflective waves that would contribute to exposure.

The radiation pattern of an antenna has developed in the Far Field region and the power gain needs to be considered in exposure predictions. Also, if the vertical radiation pattern of the antenna is considered, the exposure predictions would most likely be reduced significantly at ground level, resulting in a more realistic estimate of the actual exposure levels.

Additionally, to model a truly "worst case" prediction of exposure levels at or near a surface, such as at ground-level or on a rooftop, reflection off the surface of antenna radiation power can be assumed, resulting in a potential four-fold increase in power density.

These additional factors are considered and the Far Field prediction model is determined by the following equation:

$$S = EIRP \times Rc \div 4\pi R^2$$

Where:

S = Power Density

EIRP = Effective Radiated Power from antenna

Rc = Reflection Coefficient (2.56)

R = Distance from the antenna

The EIRP includes the antenna gain. If the antenna pattern is considered, the antenna gain is relative based on the horizontal and vertical pattern gain values at that particular location in space, on a rooftop or on the ground. However, it is recommended that the antenna radiation pattern characteristics not be considered to provide a conservative "worst case" prediction. This is the equation is utilized for the Far Field exposure predictions herein.

EXHIBIT 6



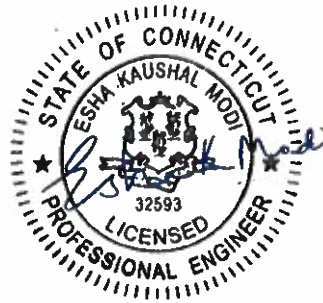
AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure : 142 ft Monopole
ATC Site Name : WSPT - South, CT
ATC Asset Number : 302511
Engineering Number : 13333739_C3_02
Proposed Carrier : AT&T MOBILITY
Carrier Site Name : MRCTB049079
Carrier Site Number : CTL02103
Site Location : 20 Post Office Lane
Westport, CT 06880-6226
41.123400,-73.313100
County : Fairfield
Date : January 27, 2021
Max Usage : 89%
Result : Pass

Prepared By:
Thomas Pham
Structural Engineer I

Reviewed By:



Authorized by "EOR"
28 Jan 2021 08:50:00

COA: PEC.0001553



Table of Contents

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Deflection and Sway	3
Standard Conditions	4
Calculations	Attached



Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 142 ft monopole to reflect the change in loading by AT&T MOBILITY.

Supporting Documents

Tower Drawings	EI Drawing #GS50841, dated March 2, 1998
Foundation Drawing	Mapping by TEP Project #65218-72422, dated December 28, 2015
Geotechnical Report	MB&A Project #011105, dated July 17, 2001
Modifications	EI Drawing #GS54696, dated July 24, 2003 ATC Job #42046633, dated October 16, 2008

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:	95 mph (3-second gust, V_{ASD})/122 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 / 2015 IBC / 2018 Connecticut State Building Code
Structure Class:	II
Exposure Category:	C
Topographic Category:	1
Crest Height:	0 ft
Spectral Response:	$S_s = 0.22, S_1 = 0.07$
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

Elev. ¹ (ft)	Qty	Antenna	Mount Type	Lines	Carrier
131.0	3	Ericsson RRUS 32 B30	Low Profile Platform	(2) 0.39" (10mm) Fiber Trunk (4) 0.78" (19.7mm) 8 AWG 6 (6) 1 1/4" Coax (2) 2" conduit	AT&T MOBILITY
	2	Raycap DC6-48-60-18-8F ("Squid")			
	3	Ericsson RRUS 4449 B5, B12			
	3	Powerwave Allgon 7770.00			
	3	Quintel QS66512-2			
	3	Kathrein Scala 80010965			
	3	Ericsson RRUS 8843 B2, B66A			
120.0	2	DragonWave A-ANT-18G-2-C	Platform with Handrails	(2) 1/2" Coax (2) 2" conduit (6) 5/16" (0.31"-7.9mm) Coax	CLEARWIRE CORPORATION
	3	NextNet BTS-2500			
	2	DragonWave Horizon Compact			
	3	Argus LLPX310R			
	3	Alcatel-Lucent 800 MHz 2X50W RRH w/ Filter	Platform with Handrails	(3) 1 1/4" Hybriflex Cable (2) 1.7" (43.2mm) Hybrid	SPRINT NEXTEL
	3	Alcatel-Lucent 1900 MHz 4X45 RRH			
	3	Nokia 2.5G MAA - AAHC(64T64R)			
	3	Commscope NNVV-65B-R4			
3	Alcatel-Lucent RRH2x50-08				
111.0	9	Decibel DB844G90A-XY	Platform with Handrails	(1) 1/2" Coax (12) 7/8" Coax	
101.0	1	Generic GPS	Platform with Handrails	(2) 1/2" Coax (6) 1 5/8" Coax (2) 1 5/8" Hybriflex (12) 7/8" Coax	VERIZON WIRELESS
100.0	3	Ryma MGD3-800TX			
	3	Samsung B2/B66A RRH-BR049			
	3	Samsung B5/B13 RRH-BR04C			
	1	Generic GPS			
	2	Commscope RC2DC-3315-PF-48			
	3	Antel BXA-70080/6CF__			
	6	Quintel QS6656-5D			
6	RFS FD9R6004/1C-3L				
90.0	3	RFS APXVAARR24_43-U-NA20	Platform with Handrails	(2) 1 1/4" (1.25"-31.8mm) Fiber (1) 1 5/8" (1.63"-41.3mm) Fiber (12) 1 5/8" Coax	T-MOBILE
	4	Ericsson AIR 32 B2A/B66A			
	4	Ericsson AIR 21, 1.3 M, B2A B4P			
	3	Ericsson Radio 4449 B12,B71			
	4	RFS ATMAA1412D-1A20			
79.0	2	Generic 6' Omni	Side Arm	(2) 0.405" (10.3mm) Coax	OTHER
63.0	1	PCTEL GPS-TMG-HR-26N	Stand-Off	(1) 1/2" Coax	SPRINT NEXTEL

Equipment to be Removed

Elev. ¹ (ft)	Qty	Antenna	Mount Type	Lines	Carrier
131.0	12	Powerwave Allgon 7020.00 Dual Band RET	Platform with Handrails	(2) 0.65" (16.4mm) 8 AWG 2C (6) 1 1/4" Coax (1) 2" conduit (1) 3/8" (0.38"-9.5mm) RET Control Cable	AT&T MOBILITY
	6	Powerwave Allgon LGP21401			
	1	Raycap DC6-48-60-0-8C-EV			
	3	Kaelus DBC0061F1V51-2			



Proposed Equipment

Elev. ¹ (ft)	Qty	Antenna	Mount Type	Lines	Carrier
131.0	3	Ericsson RRUS 4478 B14	Low Profile Platform	(2) 0.78" (19.7mm) 8 AWG 6	AT&T MOBILITY
	1	Raycap DC6-48-60-0-8C			
	3	CCI OPA65R-BU6D			

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

Install proposed coax inside the pole shaft.

Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Anchor Bolts	60%	Pass
Shaft	89%	Pass
Base Plate	60%	Pass
Reinforcement	78%	Pass
Flange	39%	Pass
Interface	67%	Pass

Foundations

Reaction Component	Analysis Reactions	% of Usage
Moment (Kips-Ft)	3,738.5	45%
Axial (Kips)	55.0	4%
Shear (Kips)	40.7	38%

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

Deflection and Sway*

Antenna Elevation (ft)	Antenna	Carrier	Deflection (ft)	Sway (Rotation) (°)
131.0	Ericsson RRUS 4478 B14	AT&T MOBILITY	1.753	1.504
	Raycap DC6-48-60-0-8C			
	CCI OPA65R-BU6D			
120.0	DragonWave A-ANT-18G-2-C	CLEARWIRE CORPORATION	1.466	1.471

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

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

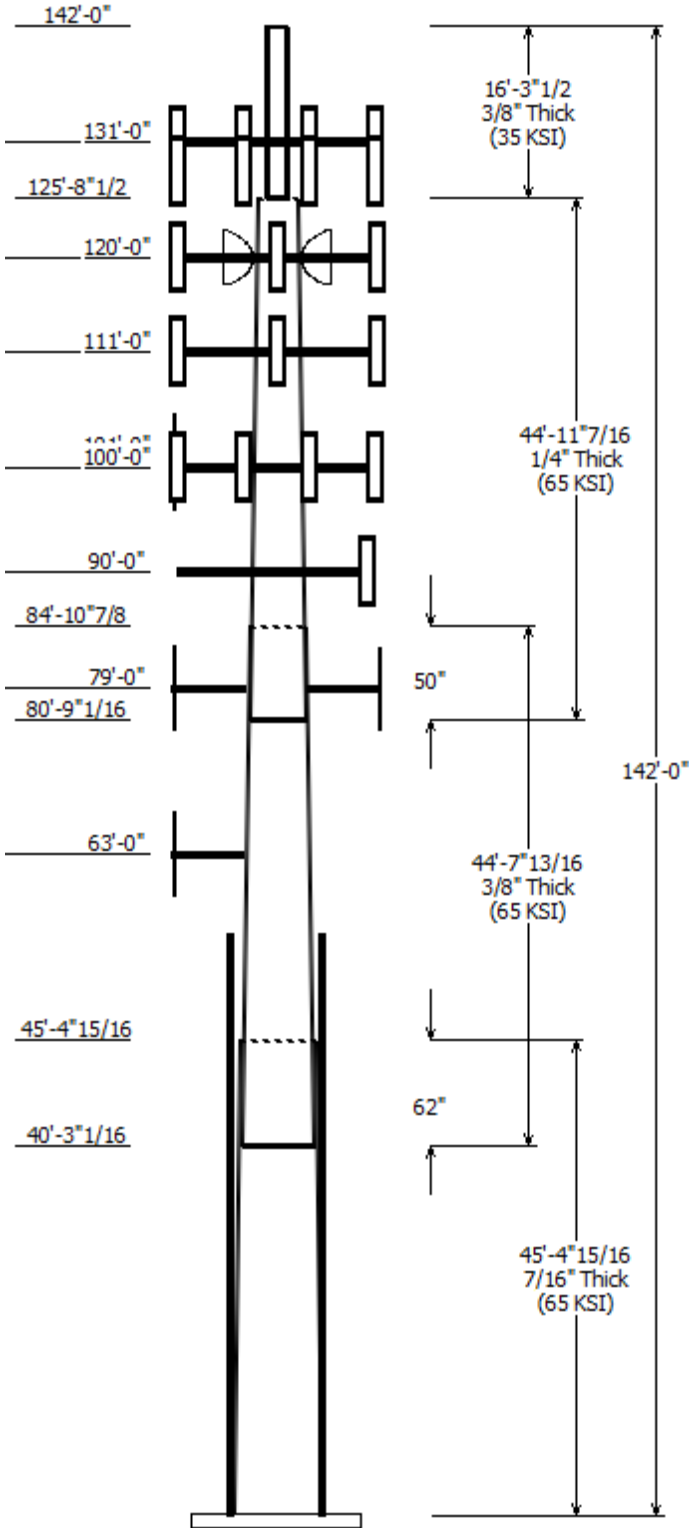
It is the responsibility of the client to ensure that the information provided to A.T. Engineering Service, PLLC and used in the performance of our engineering services is correct and complete.

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

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

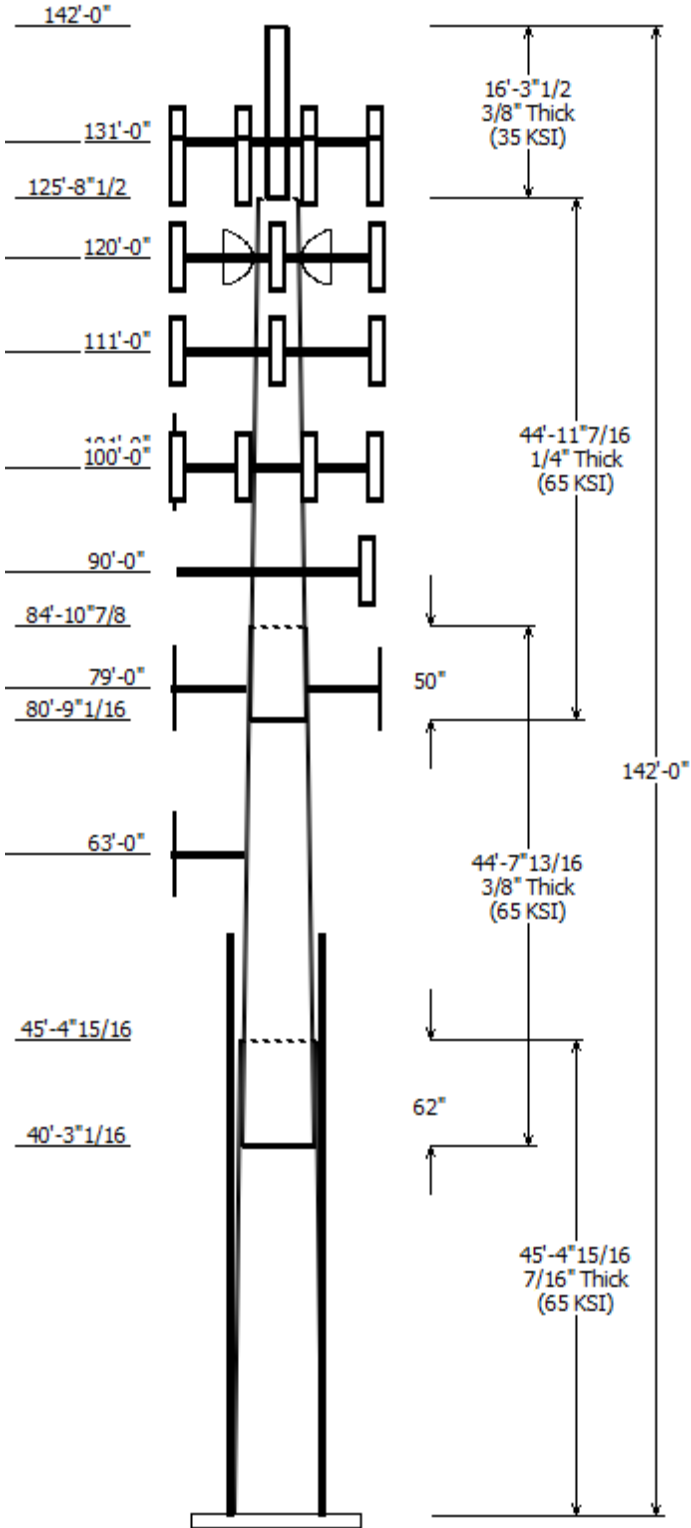
All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. A.T. Engineering Service, PLLC is not responsible for the conclusions, opinions and recommendations made by others based on the information supplied herein.

Job Information		
Client : AT&T MOBILITY	Code: ANSI/TIA-222-G	
Pole : 302511		
Location : WSPT - South, CT	Struct Class : II	
Description : 142 ft EEI Monopole	Exposure : C	
Shape : 12 Sides	Topo : 1	
Height : 142.00 (ft)		
Base Elev (ft): 0.00		
Taper: 0.212634in/ft)		



Sections Properties							
Shaft Section	Length (ft)	Diameter (in)		Thick (in)	Joint Type	Overlap Length (in)	Steel Grade (ksi)
		Across Flats Top	Across Flats Bottom				
1	45.411	35.34	45.00	0.438		0.000	12 Sides 65
2	44.654	27.69	37.19	0.375	Slip Joint	61.875	12 Sides 65
3	44.951	19.52	29.07	0.250	Slip Joint	49.813	12 Sides 65
4	16.291	10.75	10.75	0.365	Butt Joint	0.000	Round 35

Discrete Appurtenance			
Attach Elev (ft)	Force Elev (ft)	Qty	Description
131.000	127.000	2	Raycap DC6-48-60-18-8F
131.000	127.000	3	Kathrein Scala 80010965
131.000	131.000	3	CCI OPA65R-BU6D
131.000	131.000	3	Quintel QS66512-2
131.000	127.000	3	Powerwave Allgon 7770.00
131.000	127.000	3	Ericsson RRUS 32 B30
131.000	131.000	1	Raycap DC6-48-60-0-8C
131.000	127.000	3	Ericsson RRUS 4449 B5, B12
131.000	131.000	3	Ericsson RRUS 4478 B14
131.000	127.000	3	Ericsson RRUS 8843 B2, B66A
131.000	131.000	1	Generic Flat Low Profile Platf
120.000	120.000	1	Flat Platform w/ Handrails
120.000	120.000	3	Commscope NNVV-65B-R4
120.000	120.000	3	Nokia 2.5G MAA -
120.000	120.000	3	Alcatel-Lucent 1900 MHz 4X45
120.000	120.000	3	Alcatel-Lucent 800 MHz 2X50W
120.000	120.000	3	Alcatel-Lucent RRH2x50-08
120.000	120.000	2	DragonWave A-ANT-18G-2-C
120.000	120.000	3	Argus LLPX310R
120.000	120.000	3	NextNet BTS-2500
120.000	120.000	2	DragonWave Horizon Compact
111.000	111.000	1	Flat Platform w/ Handrails
111.000	111.000	9	Decibel DB844G90A-XY
101.000	101.000	1	Generic GPS
100.000	100.000	1	Flat Platform w/ Handrails
100.000	100.000	6	Quintel QS6656-5D
100.000	100.000	3	Antel BXA-70080/6CF__
100.000	100.000	2	Commscope RC2DC-3315-PF-
100.000	100.000	3	Rymsa MGD3-800TX
100.000	100.000	3	Samsung B2/B66A RRH-BR049
100.000	100.000	3	Samsung B5/B13 RRH-BR04C
100.000	100.000	1	Generic GPS
100.000	100.000	6	RFS FD9R6004/1C-3L
90.000	90.000	1	Flat Platform w/ Handrails
90.000	90.000	3	RFS APXVAARR24_43-U-NA20
90.000	90.000	4	Ericsson AIR 32 B2A/B66A
90.000	90.000	4	Ericsson AIR 21, 1.3 M, B2A B4
90.000	90.000	3	Ericsson Radio 4449 B12,B71
90.000	90.000	4	RFS ATMAA1412D-1A20
79.000	79.000	2	Round Side Arm
79.000	79.000	2	Generic 6' Omni
63.000	63.000	1	Stand-Off
63.000	63.000	1	PCTEL GPS-TMG-HR-26N



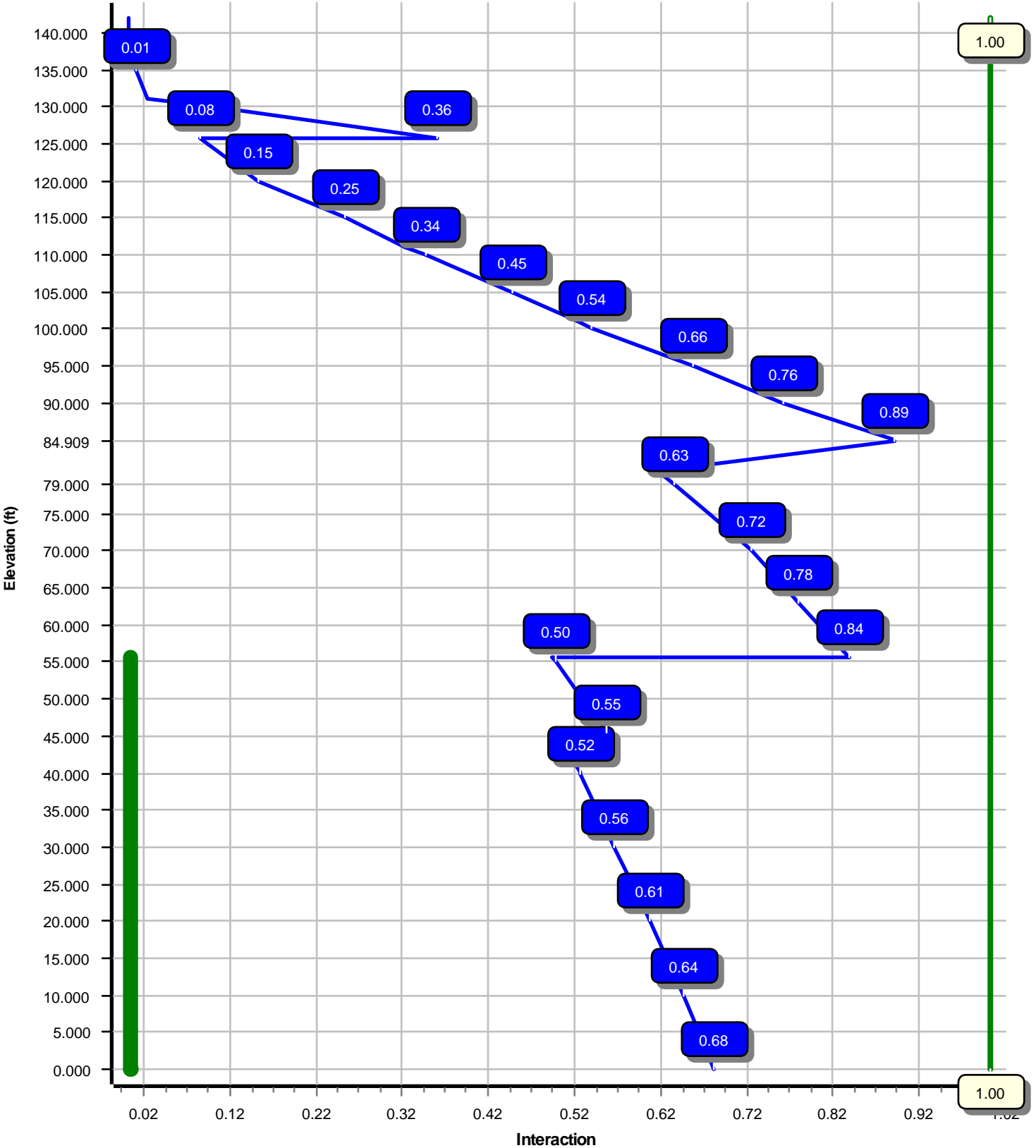
Linear Appurtenance			
Elev (ft)	From To		Exposed To Wind
	Description		
0.000	63.000	1/2" Coax	No
0.000	63.000	DYWIDAG	Yes
0.000	63.000	DYWIDAG	Yes
0.000	63.000	DYWIDAG	Yes
0.000	63.000	DYWIDAG	Yes
0.000	79.000	0.405" (10.3mm)	No
0.000	90.000	1 1/4" (1.25"-	Yes
0.000	90.000	1 5/8" (1.63"-	Yes
0.000	90.000	1 5/8" Coax	No
0.000	90.000	1 5/8" Coax	Yes
0.000	100.0	1 5/8" Coax	No
0.000	100.0	1 5/8" Hybriflex	No
0.000	100.0	1/2" Coax	No
0.000	100.0	7/8" Coax	No
0.000	101.0	1/2" Coax	No
0.000	111.0	1/2" Coax	No
0.000	111.0	7/8" Coax	No
0.000	120.0	1 1/4" Hybriflex	Yes
0.000	120.0	1.7" (43.2mm)	No
0.000	120.0	1/2" Coax	Yes
0.000	120.0	2" conduit	Yes
0.000	120.0	5/16" (0.31"-	No
0.000	131.0	0.39" (10mm)	No
0.000	131.0	0.78" (19.7mm) 8	No
0.000	131.0	0.78" (19.7mm) 8	No
0.000	131.0	1 1/4" Coax	No
0.000	131.0	2" conduit	No

Load Cases	
1.2D + 1.6W	95 mph with No Ice
0.9D + 1.6W	95 mph with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	50 mph with 0.75 in Radial Ice
(1.2 + 0.2Sds) * DL + E	Seismic Equivalent Lateral Forces Method
(1.2 + 0.2Sds) * DL + E	Seismic Equivalent Modal Analysis Method
(0.9 - 0.2Sds) * DL + E	Seismic (Reduced DL) Equivalent Lateral
(0.9 - 0.2Sds) * DL + E	Seismic (Reduced DL) Equivalent Modal
1.0D + 1.0W	Serviceability 60 mph

Reactions			
Load Case	Moment (kip-ft)	Shear (kip)	Axial (kip)
1.2D + 1.6W	3738.54	40.72	54.96
0.9D + 1.6W	3679.48	39.81	41.20
1.2D + 1.0Di + 1.0Wi	1800.88	23.32	85.00
(1.2 + 0.2Sds) * DL + E ELFM	164.07	1.51	54.98
(1.2 + 0.2Sds) * DL + E EMAM	126.47	1.40	54.98
(0.9 - 0.2Sds) * DL + E ELFM	161.48	1.51	37.61
(0.9 - 0.2Sds) * DL + E EMAM	124.28	1.40	37.61
1.0D + 1.0W	825.86	8.89	45.86

Dish Deflections			
Load Case	Attach Elev (ft)	Deflection (in)	Rotation (deg)
1.0D + 1.0W	120.00	17.598	1.471

Load Case : 1.2D + 1.6W
Max Ratio 88.92% at 84.9 ft



Site Number: 302511

Code: ANSI/TIA-222-G

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Site Name: WSPT - South, CT

Engineering Number:13333739_C3_02

1/27/2021 9:31:41 AM

Customer: AT&T MOBILITY

Analysis Parameters

Location :	Fairfield County, CT	Height (ft) :	142
Code :	ANSI/TIA-222-G	Base Diameter (in) :	45.00
Shape :	12 Sides. Sect 4: Round	Top Diameter (in) :	10.75
Pole Type :	Custom	Taper (in/ft) :	0.213
Pole Manufacturer :	EEL	Rotation (deg) :	0.00

Ice & Wind Parameters

Structure Class:	II	Design Wind Speed Without Ice:	95 mph
Exposure Category:	C	Design Wind Speed With Ice:	50 mph
Topographic Category:	1	Operational Wind Speed:	60 mph
Crest Height:	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): 2.27

T _L (sec):	6	p:	1	C _s :	0.033
S _s :	0.220	S ₁ :	0.070	C _s Max:	0.033
F _a :	1.600	F _v :	2.400	C _s Min:	0.030
S _{ds} :	0.235	S _{d1} :	0.112		

Load Cases

1.2D + 1.6W	95 mph with No Ice
0.9D + 1.6W	95 mph with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	50 mph with 0.75 in Radial Ice
(1.2 + 0.2S _{ds}) * DL + E ELFM	Seismic Equivalent Lateral Forces Method
(1.2 + 0.2S _{ds}) * DL + E EMAM	Seismic Equivalent Modal Analysis Method
(0.9 - 0.2S _{ds}) * DL + E ELFM	Seismic (Reduced DL) Equivalent Lateral Forces Method
(0.9 - 0.2S _{ds}) * DL + E EMAM	Seismic (Reduced DL) Equivalent Modal Analysis Method
1.0D + 1.0W	Serviceability 60 mph

Shaft Section Properties

Table with 20 columns: Sect Info, Length (ft), Thick (in), Fy (ksi), Joint Type, Joint Len (in), Weight (lb), Dia (in), Elev (ft), Area (in^2), Ix (in^4), W/t Ratio, D/t Ratio, Dia (in), Elev (ft), Area (in^2), Ix (in^4), W/t Ratio, D/t Ratio, Taper (in/ft). Rows include sections 1-12, 2-12, 3-12, and 4-R with various properties.

Shaft Weight 18,155

Discrete Appurtenance Properties

Table with 11 columns: Attach Elev (ft), Description, Qty, Ka, Vert Ecc (ft), Weight (lb), No Ice EPAa (sf), Orientation Factor, Weight (lb), Ice EPAa (sf), Orientation Factor. Lists various equipment like Raycap, Ericsson, Alcatel-Lucent, etc.

Linear Appurtenance Properties Load Case Azimuth (deg) : 140

Elev From (ft)	Elev To (ft)	Qty	Description	Coax Dia (in)	Coax Wt (lb/ft)	Max Coax / Flat Row	Dist Between Rows (in)	Dist Between Cols (in)	Azimuth (deg)	Dist From Face (in)	Exposed To Wind	Carrier
0.00	131.00	2	0.39" (10mm) Fiber	0.39	0.06	N 0	0.00	0.00	0	0.00	N	AT&T MOBILITY
0.00	131.00	2	0.78" (19.7mm) 8 AWG	0.78	0.59	N 0	0.00	0.00	0	0.00	N	AT&T MOBILITY
0.00	131.00	4	0.78" (19.7mm) 8 AWG	0.78	0.59	N 0	0.00	0.00	0	0.00	N	AT&T MOBILITY
0.00	131.00	6	1 1/4" Coax	1.55	0.63	N 0	0.00	0.00	0	0.00	N	AT&T MOBILITY
0.00	131.00	2	2" conduit	2.38	3.65	N 0	0.00	0.00	0	0.00	N	AT&T MOBILITY
0.00	120.00	3	1 1/4" Hybriflex Cable	1.54	1.00	N 3	0.50	0.50	75	0.50	Y	SPRINT NEXTEL
0.00	120.00	2	1.7" (43.2mm) Hybrid	1.70	1.78	N 0	0.00	0.00	0	0.00	N	SPRINT NEXTEL
0.00	120.00	2	1/2" Coax	0.63	0.15	N 2	0.50	0.50	85	0.50	Y	CLEARWIRE
0.00	120.00	2	2" conduit	2.38	3.65	N 2	0.50	0.50	95	0.50	Y	CLEARWIRE
0.00	120.00	6	5/16" (0.31"-7.9mm)	0.31	0.05	N 0	0.00	0.00	0	0.00	N	CLEARWIRE
0.00	111.00	1	1/2" Coax	0.63	0.15	N 0	0.00	0.00	0	0.00	N	SPRINT NEXTEL
0.00	111.00	12	7/8" Coax	1.09	0.33	N 0	0.00	0.00	0	0.00	N	SPRINT NEXTEL
0.00	101.00	1	1/2" Coax	0.63	0.15	N 0	0.00	0.00	0	0.00	N	VERIZON WIRELESS
0.00	100.00	6	1 5/8" Coax	1.98	0.82	N 0	0.00	0.00	0	0.00	N	VERIZON WIRELESS
0.00	100.00	2	1 5/8" Hybriflex	1.98	1.30	N 0	0.00	0.00	0	0.00	N	VERIZON WIRELESS
0.00	100.00	1	1/2" Coax	0.63	0.15	N 0	0.00	0.00	0	0.00	N	VERIZON WIRELESS
0.00	100.00	12	7/8" Coax	1.09	0.33	N 0	0.00	0.00	0	0.00	N	VERIZON WIRELESS
0.00	90.00	2	1 1/4" (1.25"- 31.8mm)	1.25	1.05	N 2	0.50	0.50	262	0.50	Y	T-MOBILE
0.00	90.00	1	1 5/8" (1.63"-41.3mm)	1.63	1.61	N 1	0.50	0.50	269	0.50	Y	T-MOBILE
0.00	90.00	8	1 5/8" Coax	1.98	0.82	N 0	0.00	0.00	0	0.00	N	T-MOBILE
0.00	90.00	4	1 5/8" Coax	1.98	0.82	N 4	0.50	0.50	285	0.50	Y	T-MOBILE
0.00	79.00	2	0.405" (10.3mm) Coax	0.41	0.11	N 0	0.00	0.00	0	0.00	N	OTHER
0.00	63.00	1	1/2" Coax	0.63	0.15	N 0	0.00	0.00	0	0.00	N	SPRINT NEXTEL
0.00	63.00	1	DYWIDAG	4.00	4.68	N 1	0.00	0.00	40	0.00	Y	
0.00	63.00	1	DYWIDAG	4.00	4.68	N 1	0.00	0.00	130	0.00	Y	
0.00	63.00	1	DYWIDAG	4.00	4.68	N 1	0.00	0.00	220	0.00	Y	
0.00	63.00	1	DYWIDAG	4.00	4.68	N 1	0.00	0.00	310	0.00	Y	

Additional Steel

Elev From (ft)	Elev To (ft)	Qty	Description	Fy (ksi)	Offset (in)	— Intermediate Connections —			Connectors	Continuation?
					Description	Spacing (in)	Len (in)			
0.00	55.68	4	SOL #20 All Thread	80	2.19	6" Angle Bracket	30.0	3.31	5/8" A36 U-Bolt	Yes

Segment Properties (Max Len : 5. ft)

Seg Top Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in²)	Ix (in⁴)	W/t Ratio	D/t Ratio	F'y (ksi)	S (in³)	Z (in³)	Weight (lb)	Additional Reinforcing			
												Area (in²)	Ix (in⁴)	Weight (lb)	
0.00		0.4375	45.000	62.777	15,912.1	25.42	102.86	77.0	683.1	0.0	0.0	19.64	6,615	0.0	
5.00		0.4375	43.937	61.280	14,800.2	24.77	100.43	77.7	650.7	0.0	1,055.3	19.64	6,347	334.0	
10.00		0.4375	42.874	59.782	13,741.3	24.11	98.00	78.4	619.2	0.0	1,029.9	19.64	6,084	334.0	
15.00		0.4375	41.810	58.284	12,734.1	23.46	95.57	79.1	588.4	0.0	1,004.4	19.64	5,827	334.0	
20.00		0.4375	40.747	56.786	11,777.4	22.81	93.14	79.8	558.4	0.0	978.9	19.64	5,576	334.0	
25.00		0.4375	39.684	55.289	10,869.9	22.16	90.71	80.5	529.2	0.0	953.4	19.64	5,330	334.0	
30.00		0.4375	38.621	53.791	10,010.2	21.51	88.28	81.3	500.7	0.0	927.9	19.64	5,090	334.0	
35.00		0.4375	37.558	52.293	9,197.1	20.86	85.85	81.9	473.1	0.0	902.4	19.64	4,855	334.0	
40.00		0.4375	36.494	50.795	8,429.2	20.21	83.42	81.9	446.2	0.0	877.0	19.64	4,626	334.0	
40.26	Bot - Section 2	0.4375	36.440	50.719	8,391.2	20.17	83.29	81.9	444.9	0.0	44.1	19.64	4,614	17.1	
45.00		0.4375	35.431	49.297	7,705.4	19.56	80.99	81.9	420.1	0.0	1,515.3	19.64	4,559	316.9	
45.41	Top - Section 1	0.3750	36.094	43.130	7,023.6	23.65	96.25	78.9	375.9	0.0	129.4	19.64	4,541	27.5	
50.00		0.3750	35.118	41.952	6,463.7	22.95	93.65	79.7	355.6	0.0	664.2	19.64	4,337	306.5	
55.00		0.3750	34.055	40.668	5,888.2	22.19	90.81	80.5	334.0	0.0	702.9	19.64	4,121	334.0	
55.68	Reinf. Top	0.3750	33.911	40.495	5,813.1	22.09	90.43	80.6	331.2	0.0	93.5	19.64	4,092	45.2	
60.00		0.3750	32.992	39.385	5,348.0	21.43	87.98	81.3	313.2	0.0	587.5				
63.00		0.3750	32.354	38.614	5,040.3	20.97	86.28	81.8	301.0	0.0	398.1				
65.00		0.3750	31.929	38.101	4,841.9	20.67	85.14	81.9	293.0	0.0	261.0				
70.00		0.3750	30.865	36.817	4,368.8	19.91	82.31	81.9	273.4	0.0	637.3				
75.00		0.3750	29.802	35.533	3,927.5	19.15	79.47	81.9	254.6	0.0	615.5				
79.00		0.3750	28.952	34.506	3,596.7	18.54	77.20	81.9	240.0	0.0	476.7				
80.00		0.3750	28.739	34.249	3,517.0	18.39	76.64	81.9	236.4	0.0	117.0				
80.76	Bot - Section 3	0.3750	28.578	34.055	3,457.4	18.28	76.21	81.9	233.7	0.0	88.1				
84.91	Top - Section 2	0.2500	28.195	22.496	2,242.3	28.08	112.78	74.1	153.6	0.0	796.3				
85.00		0.2500	28.176	22.480	2,237.7	28.06	112.70	74.1	153.4	0.0	7.0				
90.00		0.2500	27.113	21.624	1,991.7	26.92	108.45	75.4	141.9	0.0	375.2				
95.00		0.2500	26.049	20.768	1,764.4	25.78	104.20	76.6	130.9	0.0	360.6				
100.0		0.2500	24.986	19.913	1,555.2	24.64	99.94	77.8	120.2	0.0	346.1				
101.0		0.2500	24.774	19.741	1,515.4	24.41	99.09	78.1	118.2	0.0	67.5				
105.0		0.2500	23.923	19.057	1,363.1	23.50	95.69	79.1	110.1	0.0	264.0				
110.0		0.2500	22.860	18.201	1,187.6	22.36	91.44	80.3	100.4	0.0	316.9				
111.0		0.2500	22.647	18.030	1,154.4	22.13	90.59	80.6	98.5	0.0	61.6				
115.0		0.2500	21.797	17.345	1,027.8	21.22	87.19	81.6	91.1	0.0	240.7				
120.0		0.2500	20.733	16.489	883.1	20.08	82.93	81.9	82.3	0.0	287.8				
125.0		0.2500	19.670	15.633	752.6	18.94	78.68	81.9	73.9	0.0	273.3				
125.7	Top - Section 3	0.2500	19.519	15.512	735.2	18.78	78.08	81.9	72.8	0.0	37.6				
125.7	Bot - Section 4	0.3650	10.750	11.908	160.7	0.00	29.45	35.0	29.9	39.4					
130.0		0.3650	10.750	11.908	160.7	0.00	29.45	35.0	29.9	39.4	173.9				
131.0		0.3650	10.750	11.908	160.7	0.00	29.45	35.0	29.9	39.4	40.5				
135.0		0.3650	10.750	11.908	160.7	0.00	29.45	35.0	29.9	39.4	162.1				
140.0		0.3650	10.750	11.908	160.7	0.00	29.45	35.0	29.9	39.4	202.6				
142.0		0.3650	10.750	11.908	160.7	0.00	29.45	35.0	29.9	39.4	81.0				
												18,154.6		3,719.2	

Load Case: 1.2D + 1.6W	95 mph with No Ice	25 Iterations
Gust Response Factor :1.10		Wind Importance Factor :1.00
Dead Load Factor :1.20		
Wind Load Factor :1.60		

Applied Segment Forces Summary

Seg Elev (ft)	Description	Shaft Forces		Discrete Forces			Linear Forces		Sum of Forces				
		Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Torsion MY (lb-ft)	Moment MZ (lb)
0.00		384.6	0.0					0.0	0.0	384.6	0.0	0.0	0.0
5.00		764.0	1,266.4					0.0	867.2	764.0	2,133.6	0.0	0.0
10.00		753.4	1,235.8					0.0	867.2	753.4	2,103.0	0.0	0.0
15.00		754.6	1,205.3					0.0	867.2	754.6	2,072.4	0.0	0.0
20.00		775.9	1,174.7					0.0	867.2	775.9	2,041.9	0.0	0.0
25.00		801.9	1,144.1					0.0	867.2	801.9	2,011.3	0.0	0.0
30.00		786.9	1,113.5					0.0	867.2	786.9	1,980.7	0.0	0.0
35.00		761.5	1,082.9					154.4	867.2	915.9	1,950.1	0.0	0.0
40.00		400.5	1,052.4					158.6	867.2	559.1	1,919.5	0.0	0.0
40.26	Bot - Section 2	387.6	52.9					8.2	44.3	395.7	97.2	0.0	0.0
45.00		400.0	1,818.4					153.0	822.9	553.0	2,641.3	0.0	0.0
45.41	Top - Section 1	385.7	155.3					13.4	71.4	399.0	226.7	0.0	0.0
50.00		735.9	797.1					150.2	795.8	886.1	1,592.9	0.0	0.0
55.00		433.5	843.4					165.7	867.2	599.3	1,710.6	0.0	0.0
55.68	Reinf. Top	377.5	112.2					22.6	117.4	400.1	229.6	0.0	0.0
60.00		550.1	705.0					145.2	403.2	695.2	1,108.3	0.0	0.0
63.00	Appurtenance(s)	347.3	477.7	33.7	0.0	0.0	36.7	101.6	279.8	482.6	794.3	0.0	0.0
65.00		428.2	313.3					0.0	141.3	428.2	454.5	0.0	0.0
70.00		603.7	764.8					0.0	353.2	603.7	1,117.9	0.0	0.0
75.00		533.5	738.6					0.0	353.2	533.5	1,091.7	0.0	0.0
79.00	Appurtenance(s)	292.5	572.0	487.9	0.0	0.0	420.0	0.0	282.5	780.5	1,274.5	0.0	0.0
80.00		101.7	140.4					0.0	70.4	101.7	210.7	0.0	0.0
80.76	Bot - Section 3	284.7	105.7					0.0	53.3	284.7	159.0	0.0	0.0
84.91	Top - Section 2	246.2	955.5					0.0	292.1	246.2	1,247.6	0.0	0.0
85.00		290.4	8.4					0.0	6.4	290.4	14.8	0.0	0.0
90.00	Appurtenance(s)	560.9	450.2	4,914.8	0.0	0.0	4,275.5	0.0	351.8	5,475.7	5,077.6	0.0	0.0
95.00		543.4	432.8					0.0	270.5	543.4	703.3	0.0	0.0
100.00	Appurtenance(s)	320.2	415.3	4,600.1	0.0	0.0	3,821.9	0.0	270.5	4,920.3	4,507.7	0.0	0.0
101.00	Appurtenance(s)	259.2	81.0	33.1	0.0	0.0	12.0	0.0	40.2	292.3	133.1	0.0	0.0
105.00		457.1	316.9					0.0	159.9	457.1	476.7	0.0	0.0
110.00		299.4	380.3					0.0	199.9	299.4	580.2	0.0	0.0
111.00	Appurtenance(s)	241.4	74.0	3,009.2	0.0	0.0	2,551.2	0.0	40.0	3,250.6	2,665.1	0.0	0.0
115.00		424.3	288.9					0.0	140.2	424.3	429.1	0.0	0.0
120.00	Appurtenance(s)	454.3	345.4	4,589.6	0.0	0.0	4,007.9	0.0	175.2	5,043.9	4,528.5	0.0	0.0
125.00		253.0	327.9					0.0	88.4	253.0	416.4	0.0	0.0
125.71	Top - Section 3	90.1	45.1					0.0	12.5	90.1	57.6	0.0	0.0
130.00		73.3	208.7					0.0	75.9	73.3	284.6	0.0	0.0
131.00	Appurtenance(s)	69.7	48.6	5,372.6	0.0	-8,275.6	4,396.4	0.0	17.7	5,442.3	4,462.8	0.0	0.0
135.00		126.1	194.5					0.0	0.0	126.1	194.5	0.0	0.0
140.00		98.5	243.1					0.0	0.0	98.5	243.1	0.0	0.0
142.00		28.3	97.3					0.0	0.0	28.3	97.3	0.0	0.0
Totals:										40,994.8	55,041.5	0.00	0.00

Load Case: 0.9D + 1.6W	95 mph with No Ice (Reduced DL)	24 Iterations
Gust Response Factor :1.10		Wind Importance Factor :1.00
Dead Load Factor :0.90		
Wind Load Factor :1.60		

Applied Segment Forces Summary

Seg Elev (ft)	Description	Shaft Forces		Discrete Forces			Linear Forces		Sum of Forces				
		Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Torsion MY (lb-ft)	Moment MZ (lb)
0.00		314.9	0.0					0.0	0.0	314.9	0.0	0.0	0.0
5.00		622.3	949.8					0.0	650.4	622.3	1,600.2	0.0	0.0
10.00		607.3	926.9					0.0	650.4	607.3	1,577.3	0.0	0.0
15.00		601.5	903.9					0.0	650.4	601.5	1,554.3	0.0	0.0
20.00		611.4	881.0					0.0	650.4	611.4	1,531.4	0.0	0.0
25.00		624.4	858.1					0.0	650.4	624.4	1,508.5	0.0	0.0
30.00		695.0	835.1					0.0	650.4	695.0	1,485.5	0.0	0.0
35.00		761.5	812.2					154.4	650.4	915.9	1,462.6	0.0	0.0
40.00		400.5	789.3					158.6	650.4	559.1	1,439.7	0.0	0.0
40.26	Bot - Section 2	387.6	39.7					8.2	33.2	395.7	72.9	0.0	0.0
45.00		400.0	1,363.8					153.0	617.2	553.0	1,980.9	0.0	0.0
45.41	Top - Section 1	385.7	116.5					13.4	53.5	399.0	170.0	0.0	0.0
50.00		735.9	597.8					150.2	596.9	886.1	1,194.7	0.0	0.0
55.00		433.5	632.6					165.7	650.4	599.3	1,282.9	0.0	0.0
55.68	Reinf. Top	377.5	84.1					22.6	88.1	400.1	172.2	0.0	0.0
60.00		550.1	528.8					145.2	302.4	695.2	831.2	0.0	0.0
63.00	Appurtenance(s)	347.3	358.3	33.7	0.0	0.0	27.5	101.6	209.9	482.6	595.7	0.0	0.0
65.00		428.2	234.9					0.0	105.9	428.2	340.9	0.0	0.0
70.00		603.7	573.6					0.0	264.9	603.7	838.5	0.0	0.0
75.00		533.5	553.9					0.0	264.9	533.5	818.8	0.0	0.0
79.00	Appurtenance(s)	292.5	429.0	487.9	0.0	0.0	315.0	0.0	211.9	780.5	955.9	0.0	0.0
80.00		101.7	105.3					0.0	52.8	101.7	158.1	0.0	0.0
80.76	Bot - Section 3	284.7	79.3					0.0	40.0	284.7	119.3	0.0	0.0
84.91	Top - Section 2	246.2	716.6					0.0	219.1	246.2	935.7	0.0	0.0
85.00		288.7	6.3					0.0	4.8	288.7	11.1	0.0	0.0
90.00	Appurtenance(s)	559.2	337.7	4,914.8	0.0	0.0	3,206.6	0.0	263.9	5,473.9	3,808.2	0.0	0.0
95.00		543.4	324.6					0.0	202.9	543.4	527.5	0.0	0.0
100.00	Appurtenance(s)	320.2	311.5	4,600.1	0.0	0.0	2,866.4	0.0	202.9	4,920.3	3,380.8	0.0	0.0
101.00	Appurtenance(s)	259.2	60.7	33.1	0.0	0.0	9.0	0.0	30.1	292.3	99.8	0.0	0.0
105.00		457.1	237.6					0.0	119.9	457.1	357.6	0.0	0.0
110.00		299.4	285.3					0.0	149.9	299.4	435.1	0.0	0.0
111.00	Appurtenance(s)	241.4	55.5	3,009.2	0.0	0.0	1,913.4	0.0	30.0	3,250.6	1,998.9	0.0	0.0
115.00		424.3	216.7					0.0	105.1	424.3	321.8	0.0	0.0
120.00	Appurtenance(s)	454.3	259.0	4,589.6	0.0	0.0	3,005.9	0.0	131.4	5,043.9	3,396.4	0.0	0.0
125.00		253.0	245.9					0.0	66.3	253.0	312.3	0.0	0.0
125.71	Top - Section 3	90.1	33.8					0.0	9.4	90.1	43.2	0.0	0.0
130.00		73.3	156.5					0.0	56.9	73.3	213.4	0.0	0.0
131.00	Appurtenance(s)	69.7	36.5	5,372.6	0.0	-8,275.6	3,297.3	0.0	13.3	5,442.3	3,347.1	0.0	0.0
135.00		126.1	145.9					0.0	0.0	126.1	145.9	0.0	0.0
140.00		98.5	182.3					0.0	0.0	98.5	182.3	0.0	0.0
142.00		28.3	72.9					0.0	0.0	28.3	72.9	0.0	0.0
Totals:										40,046.7	41,281.1	0.00	0.00

Load Case: 1.2D + 1.0Di + 1.0Wi	50 mph with 0.75 in Radial Ice	24 Iterations
Gust Response Factor :1.10	Ice Dead Load Factor :1.00	Wind Importance Factor :1.00
Dead Load Factor :1.20		Ice Importance Factor :1.00
Wind Load Factor :1.00		

Applied Segment Forces Summary

Seg Elev (ft)	Description	Shaft Forces		Discrete Forces			Linear Forces		Sum of Forces				
		Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Torsion MY (lb-ft)	Moment MZ (lb)
0.00		68.7	0.0					0.0	0.0	68.7	0.0	0.0	0.0
5.00		136.3	1,604.9					619.6	1,086.3	755.9	2,691.1	0.0	0.0
10.00		133.7	1,605.8					612.4	1,113.1	746.1	2,718.8	0.0	0.0
15.00		133.0	1,585.8					602.8	1,127.0	735.7	2,712.7	0.0	0.0
20.00		135.6	1,558.9					611.1	1,136.6	746.7	2,695.6	0.0	0.0
25.00		138.9	1,528.5					632.5	1,144.2	771.5	2,672.7	0.0	0.0
30.00		141.0	1,495.8					647.3	1,150.4	788.3	2,646.2	0.0	0.0
35.00		142.1	1,461.6					657.3	1,155.7	799.4	2,617.2	0.0	0.0
40.00		74.9	1,426.2					663.7	1,160.3	738.5	2,586.5	0.0	0.0
40.26	Bot - Section 2	72.5	72.1					34.0	59.3	106.5	131.4	0.0	0.0
45.00		74.9	2,174.9					633.2	1,105.1	708.1	3,280.0	0.0	0.0
45.41	Top - Section 1	72.4	186.3					55.0	96.0	127.4	282.3	0.0	0.0
50.00		138.4	1,136.1					623.4	1,072.1	761.8	2,208.2	0.0	0.0
55.00		81.7	1,205.7					678.8	1,171.5	760.4	2,377.3	0.0	0.0
55.68	Reinf. Top	71.3	161.3					91.8	158.9	163.1	320.2	0.0	0.0
60.00		104.1	1,012.0					584.8	669.3	688.8	1,681.3	0.0	0.0
63.00	Appurtenance(s)	70.5	688.2	9.6	0.0	0.0	51.8	404.2	465.7	484.3	1,205.7	0.0	0.0
65.00		97.7	452.4					251.3	228.2	349.1	680.5	0.0	0.0
70.00		138.1	1,103.4					624.2	571.7	762.3	1,675.1	0.0	0.0
75.00		122.5	1,068.6					617.4	573.4	739.8	1,642.0	0.0	0.0
79.00	Appurtenance(s)	67.3	830.4	131.0	0.0	0.0	609.3	488.3	459.9	686.6	1,899.7	0.0	0.0
80.00		23.5	204.8					121.2	114.9	144.7	319.6	0.0	0.0
80.76	Bot - Section 3	65.7	154.3					91.6	87.1	157.3	241.4	0.0	0.0
84.91	Top - Section 2	56.8	1,219.1					498.3	477.7	555.1	1,696.9	0.0	0.0
85.00		66.9	14.2					11.0	10.5	77.9	24.7	0.0	0.0
90.00	Appurtenance(s)	129.9	758.0	1,149.1	0.0	0.0	7,650.0	599.5	576.8	1,878.5	8,984.8	0.0	0.0
95.00		126.9	730.8					487.4	387.0	614.2	1,117.9	0.0	0.0
100.00	Appurtenance(s)	75.0	703.5	1,135.9	0.0	0.0	6,970.8	477.1	387.8	1,688.0	8,062.0	0.0	0.0
101.00	Appurtenance(s)	61.0	138.3	9.6	0.0	0.0	36.0	94.1	63.7	164.8	238.0	0.0	0.0
105.00		108.0	539.5					372.2	254.3	480.1	793.8	0.0	0.0
110.00		70.9	648.3					455.0	318.4	525.9	966.7	0.0	0.0
111.00	Appurtenance(s)	57.5	127.3	709.2	0.0	0.0	4,687.2	89.6	63.8	856.3	4,878.3	0.0	0.0
115.00		101.5	495.1					353.6	235.6	455.1	730.6	0.0	0.0
120.00	Appurtenance(s)	109.4	592.4	1,110.2	0.0	0.0	7,189.6	430.9	295.0	1,650.5	8,077.1	0.0	0.0
125.00		61.2	564.3					0.0	88.4	61.2	652.7	0.0	0.0
125.71	Top - Section 3	34.6	78.4					0.0	12.5	34.6	91.0	0.0	0.0
130.00		33.5	320.9					0.0	75.9	33.5	396.8	0.0	0.0
131.00	Appurtenance(s)	31.9	74.8	1,294.9	0.0	-1,830.9	8,112.7	0.0	17.7	1,326.8	8,205.2	0.0	0.0
135.00		57.7	299.6					0.0	0.0	57.7	299.6	0.0	0.0
140.00		45.1	375.0					0.0	0.0	45.1	375.0	0.0	0.0
142.00		12.9	150.1					0.0	0.0	12.9	150.1	0.0	0.0
Totals:										23,309.2	85,026.5	0.00	0.00

Load Case: 1.0D + 1.0W	Serviceability 60 mph	23 Iterations
Gust Response Factor :1.10		Wind Importance Factor :1.00
Dead Load Factor :1.00		
Wind Load Factor :1.00		

Applied Segment Forces Summary

Seg Elev (ft)	Description	Shaft Forces		Discrete Forces			Linear Forces		Sum of Forces				
		Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Torsion MY (lb-ft)	Moment MZ (lb)
0.00		70.2	0.0					0.0	0.0	70.2	0.0	0.0	0.0
5.00		138.8	1,055.3					0.0	722.6	138.8	1,778.0	0.0	0.0
10.00		135.5	1,029.9					0.0	722.6	135.5	1,752.5	0.0	0.0
15.00		134.2	1,004.4					0.0	722.6	134.2	1,727.0	0.0	0.0
20.00		136.4	978.9					0.0	722.6	136.4	1,701.5	0.0	0.0
25.00		139.3	953.4					0.0	722.6	139.3	1,676.1	0.0	0.0
30.00		155.0	927.9					0.0	722.6	155.0	1,650.6	0.0	0.0
35.00		169.9	902.4					34.4	722.6	204.3	1,625.1	0.0	0.0
40.00		89.3	877.0					35.5	722.6	124.8	1,599.6	0.0	0.0
40.26	Bot - Section 2	86.5	44.1					1.8	36.9	88.3	81.0	0.0	0.0
45.00		89.2	1,515.3					34.6	685.8	123.8	2,201.1	0.0	0.0
45.41	Top - Section 1	86.0	129.4					3.0	59.5	89.1	188.9	0.0	0.0
50.00		164.2	664.2					34.3	663.2	198.4	1,327.4	0.0	0.0
55.00		96.7	702.9					38.1	722.6	134.8	1,425.5	0.0	0.0
55.68	Reinf. Top	84.2	93.5					5.2	97.8	89.4	191.3	0.0	0.0
60.00		122.7	587.5					33.6	336.0	156.3	923.5	0.0	0.0
63.00	Appurtenance(s)	77.5	398.1	7.5	0.0	0.0	30.6	23.6	233.2	108.6	661.9	0.0	0.0
65.00		95.5	261.0					0.0	117.7	95.5	378.8	0.0	0.0
70.00		134.7	637.3					0.0	294.3	134.7	931.6	0.0	0.0
75.00		119.0	615.5					0.0	294.3	119.0	909.8	0.0	0.0
79.00	Appurtenance(s)	65.3	476.7	108.8	0.0	0.0	350.0	0.0	235.4	174.1	1,062.1	0.0	0.0
80.00		22.7	117.0					0.0	58.6	22.7	175.6	0.0	0.0
80.76	Bot - Section 3	63.5	88.1					0.0	44.4	63.5	132.5	0.0	0.0
84.91	Top - Section 2	54.9	796.3					0.0	243.4	54.9	1,039.7	0.0	0.0
85.00		64.4	7.0					0.0	5.3	64.4	12.3	0.0	0.0
90.00	Appurtenance(s)	124.7	375.2	1,096.3	0.0	0.0	3,562.9	0.0	293.2	1,221.0	4,231.3	0.0	0.0
95.00		121.2	360.6					0.0	225.5	121.2	586.1	0.0	0.0
100.00	Appurtenance(s)	71.4	346.1	1,026.1	0.0	0.0	3,184.9	0.0	225.5	1,097.5	3,756.4	0.0	0.0
101.00	Appurtenance(s)	57.8	67.5	7.4	0.0	0.0	10.0	0.0	33.5	65.2	110.9	0.0	0.0
105.00		102.0	264.0					0.0	133.2	102.0	397.3	0.0	0.0
110.00		66.8	316.9					0.0	166.5	66.8	483.5	0.0	0.0
111.00	Appurtenance(s)	53.8	61.6	671.3	0.0	0.0	2,126.0	0.0	33.3	725.1	2,221.0	0.0	0.0
115.00		94.7	240.7					0.0	116.8	94.7	357.5	0.0	0.0
120.00	Appurtenance(s)	101.3	287.8	1,023.8	0.0	0.0	3,339.9	0.0	146.0	1,125.1	3,773.7	0.0	0.0
125.00		56.4	273.3					0.0	73.7	56.4	347.0	0.0	0.0
125.71	Top - Section 3	20.5	37.6					0.0	10.4	20.5	48.0	0.0	0.0
130.00		16.9	173.9					0.0	63.3	16.9	237.1	0.0	0.0
131.00	Appurtenance(s)	16.0	40.5	1,198.4	0.0	-1,846.0	3,663.7	0.0	14.7	1,214.4	3,719.0	0.0	0.0
135.00		28.8	162.1					0.0	0.0	28.8	162.1	0.0	0.0
140.00		22.5	202.6					0.0	0.0	22.5	202.6	0.0	0.0
142.00		6.4	81.0					0.0	0.0	6.4	81.0	0.0	0.0
Totals:										8,940.61	45,867.9	0.00	0.00

Equivalent Lateral Forces Method Analysis

(Based on ASCE7-10 Chapters 11, 12, 15)

Spectral Response Acceleration for Short Period (S_s):	0.22
Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.07
Long-Period Transition Period (T_L):	6
Importance Factor (I_E):	1.00
Site Coefficient F_a :	1.60
Site Coefficient F_v :	2.40
Response Modification Coefficient (R):	1.50
Design Spectral Response Acceleration at Short Period (S_{ds}):	0.23
Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.11
Seismic Response Coefficient (C_s):	0.03
Upper Limit C_s	0.03
Lower Limit C_s	0.03
Period based on Rayleigh Method (sec):	2.27
Redundancy Factor (ρ):	1.00
Seismic Force Distribution Exponent (k):	1.89
Total Unfactored Dead Load:	45.87 k
Seismic Base Shear (E):	1.51 k

Load Case (1.2 + 0.2Sds) * DL + E ELFM

Seismic Equivalent Lateral Forces Method

Segment	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
40	141.00	81	915	0.005	8	101
39	137.50	203	2,181	0.012	18	253
38	133.00	162	1,639	0.009	14	202
37	130.50	55	539	0.003	5	69
36	127.85	237	2,225	0.012	19	296
35	125.35	48	434	0.002	4	60
34	122.50	347	3,004	0.017	25	433
33	117.50	434	3,472	0.019	29	541
32	113.00	358	2,658	0.015	22	446
31	110.50	95	677	0.004	6	118
30	107.50	483	3,272	0.018	27	603
29	103.00	397	2,480	0.014	21	495
28	100.50	101	602	0.003	5	126
27	97.50	572	3,217	0.018	27	713
26	92.50	586	2,987	0.017	25	731
25	87.50	668	3,068	0.017	26	833
24	84.95	12	53	0.000	0	15
23	82.83	1,040	4,304	0.024	36	1,296
22	80.38	133	518	0.003	4	165
21	79.50	176	673	0.004	6	219
20	77.00	712	2,569	0.014	21	888
19	72.50	910	2,929	0.016	24	1,134
18	67.50	932	2,622	0.015	22	1,162

17	64.00	379	964	0.005	8	472
16	61.50	631	1,491	0.008	12	787
15	57.84	924	1,942	0.011	16	1,152
14	55.34	191	370	0.002	3	239
13	52.50	1,425	2,497	0.014	21	1,778
12	47.71	1,327	1,941	0.011	16	1,655
11	45.21	189	250	0.001	2	236
10	42.63	2,201	2,604	0.014	22	2,745
9	40.13	81	85	0.000	1	101
8	37.50	1,600	1,486	0.008	12	1,995
7	32.50	1,625	1,153	0.006	10	2,026
6	27.50	1,651	854	0.005	7	2,058
5	22.50	1,676	594	0.003	5	2,090
4	17.50	1,702	376	0.002	3	2,122
3	12.50	1,727	202	0.001	2	2,153
2	7.50	1,753	78	0.000	1	2,185
1	2.50	1,778	10	0.000	0	2,217
Raycap DC6-48-60-18-	131.00	64	625	0.003	5	79
Ericsson RRUS 8843 B	131.00	216	2,122	0.012	18	269
Ericsson RRUS 4478 B	131.00	180	1,765	0.010	15	224
Ericsson RRUS 4449 B	131.00	213	2,093	0.012	17	266
Raycap DC6-48-60-0-8	131.00	16	157	0.001	1	20
Ericsson RRUS 32 B30	131.00	180	1,768	0.010	15	224
Powerwave Allgon 777	131.00	105	1,032	0.006	9	131
Quintel QS66512-2	131.00	333	3,272	0.018	27	415
CCI OPA65R-BU6D	131.00	190	1,863	0.010	16	236
Kathrein Scala 80010	131.00	293	2,877	0.016	24	365
Generic Flat Low Pro	131.00	1,875	18,421	0.102	154	2,338
DragonWave Horizon C	120.00	21	177	0.001	1	26
Alcatel-Lucent RRH2x	120.00	159	1,321	0.007	11	198
NextNet BTS-2500	120.00	105	874	0.005	7	131
Alcatel-Lucent 800 M	120.00	192	1,599	0.009	13	239
Alcatel-Lucent 1900	120.00	180	1,499	0.008	13	224
Nokia 2.5G MAA - AAH	120.00	311	2,588	0.014	22	388
Argus LLPX310R	120.00	86	714	0.004	6	107
DragonWave A-ANT-18G	120.00	54	451	0.002	4	68
Commscope NNVV-65B-R	120.00	232	1,934	0.011	16	290
Flat Platform w/ Han	120.00	2,000	16,654	0.092	139	2,494
Decibel DB844G90A-XY	111.00	126	906	0.005	8	157
Flat Platform w/ Han	111.00	2,000	14,377	0.080	120	2,494
Generic GPS	101.00	10	60	0.000	1	12
RFS FD9R6004/1C-3L	100.00	19	110	0.001	1	23
Generic GPS	100.00	10	59	0.000	0	12
Samsung B5/B13 RRH-B	100.00	211	1,245	0.007	10	263
Samsung B2/B66A RRH-	100.00	253	1,495	0.008	12	316
Ryma MGD3-800TX	100.00	46	273	0.002	2	58
Commscope RC2DC-3315	100.00	64	378	0.002	3	80
Antel BXA-70080/6CF_	100.00	54	319	0.002	3	67
Quintel QS6656-5D	100.00	528	3,118	0.017	26	658
Flat Platform w/ Han	100.00	2,000	11,809	0.065	99	2,494
RFS ATMAA1412D-1A20	90.00	52	252	0.001	2	65
Ericsson Radio 4449	90.00	222	1,075	0.006	9	277
Ericsson AIR 21, 1.3	90.00	332	1,607	0.009	13	414
Ericsson AIR 32 B2A/	90.00	573	2,775	0.015	23	715
RFS APXVAARR24_43-U-	90.00	384	1,857	0.010	16	478
Flat Platform w/ Han	90.00	2,000	9,681	0.054	81	2,494
Generic 6' Omni	79.00	50	189	0.001	2	62
Round Side Arm	79.00	300	1,136	0.006	9	374
PCTEL GPS-TMG-HR-26N	63.00	1	1	0.000	0	1
Stand-Off	63.00	30	74	0.000	1	37
		45,868	180,536	1.000	1,508	57,194

Load Case (0.9 - 0.2Sds) * DL + E EFLM

Seismic (Reduced DL) Equivalent Lateral Forces Method

Segment	Height Above Base (ft)	Weight (lb)	W _z (lb-ft)	C _{vx}	Horizontal Force (lb)	Vertical Force (lb)
40	141.00	81	915	0.005	8	69
39	137.50	203	2,181	0.012	18	173
38	133.00	162	1,639	0.009	14	138
37	130.50	55	539	0.003	5	47
36	127.85	237	2,225	0.012	19	202
35	125.35	48	434	0.002	4	41
34	122.50	347	3,004	0.017	25	296
33	117.50	434	3,472	0.019	29	370
32	113.00	358	2,658	0.015	22	305
31	110.50	95	677	0.004	6	81
30	107.50	483	3,272	0.018	27	412
29	103.00	397	2,480	0.014	21	339
28	100.50	101	602	0.003	5	86
27	97.50	572	3,217	0.018	27	488
26	92.50	586	2,987	0.017	25	500
25	87.50	668	3,068	0.017	26	570
24	84.95	12	53	0.000	0	11
23	82.83	1,040	4,304	0.024	36	887
22	80.38	133	518	0.003	4	113
21	79.50	176	673	0.004	6	150
20	77.00	712	2,569	0.014	21	607
19	72.50	910	2,929	0.016	24	776
18	67.50	932	2,622	0.015	22	795
17	64.00	379	964	0.005	8	323
16	61.50	631	1,491	0.008	12	539
15	57.84	924	1,942	0.011	16	788
14	55.34	191	370	0.002	3	163
13	52.50	1,425	2,497	0.014	21	1,216
12	47.71	1,327	1,941	0.011	16	1,132
11	45.21	189	250	0.001	2	161
10	42.63	2,201	2,604	0.014	22	1,878
9	40.13	81	85	0.000	1	69
8	37.50	1,600	1,486	0.008	12	1,365
7	32.50	1,625	1,153	0.006	10	1,386
6	27.50	1,651	854	0.005	7	1,408
5	22.50	1,676	594	0.003	5	1,430
4	17.50	1,702	376	0.002	3	1,452
3	12.50	1,727	202	0.001	2	1,473
2	7.50	1,753	78	0.000	1	1,495
1	2.50	1,778	10	0.000	0	1,517
Raycap DC6-48-60-18-	131.00	64	625	0.003	5	54
Ericsson RRUS 8843 B	131.00	216	2,122	0.012	18	184
Ericsson RRUS 4478 B	131.00	180	1,765	0.010	15	153
Ericsson RRUS 4449 B	131.00	213	2,093	0.012	17	182
Raycap DC6-48-60-0-8	131.00	16	157	0.001	1	14
Ericsson RRUS 32 B30	131.00	180	1,768	0.010	15	154
Powerwave Allgon 777	131.00	105	1,032	0.006	9	90
Quintel QS66512-2	131.00	333	3,272	0.018	27	284
CCI OPA65R-BU6D	131.00	190	1,863	0.010	16	162
Kathrein Scala 80010	131.00	293	2,877	0.016	24	250
Generic Flat Low Pro	131.00	1,875	18,421	0.102	154	1,599
DragonWave Horizon C	120.00	21	177	0.001	1	18
Alcatel-Lucent RRH2x	120.00	159	1,321	0.007	11	135
NextNet BTS-2500	120.00	105	874	0.005	7	90
Alcatel-Lucent 800 M	120.00	192	1,599	0.009	13	164
Alcatel-Lucent 1900	120.00	180	1,499	0.008	13	154
Nokia 2.5G MAA - AAH	120.00	311	2,588	0.014	22	265

Site Number: 302511

Code: ANSI/TIA-222-G

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Site Name: WSPT - South, CT

Engineering Number: 13333739_C3_02

1/27/2021 9:32:05 AM

Customer: AT&T MOBILITY

Argus LLPX310R	120.00	86	714	0.004	6	73
DragonWave A-ANT-18G	120.00	54	451	0.002	4	46
Commscope NNVV-65B-R	120.00	232	1,934	0.011	16	198
Flat Platform w/ Han	120.00	2,000	16,654	0.092	139	1,706
Decibel DB844G90A-XY	111.00	126	906	0.005	8	107
Flat Platform w/ Han	111.00	2,000	14,377	0.080	120	1,706
Generic GPS	101.00	10	60	0.000	1	9
RFS FD9R6004/1C-3L	100.00	19	110	0.001	1	16
Generic GPS	100.00	10	59	0.000	0	9
Samsung B5/B13 RRH-B	100.00	211	1,245	0.007	10	180
Samsung B2/B66A RRH-	100.00	253	1,495	0.008	12	216
Rymosa MGD3-800TX	100.00	46	273	0.002	2	39
Commscope RC2DC-3315	100.00	64	378	0.002	3	55
Antel BXA-70080/6CF_	100.00	54	319	0.002	3	46
Quintel QS6656-5D	100.00	528	3,118	0.017	26	450
Flat Platform w/ Han	100.00	2,000	11,809	0.065	99	1,706
RFS ATMAA1412D-1A20	90.00	52	252	0.001	2	44
Ericsson Radio 4449	90.00	222	1,075	0.006	9	189
Ericsson AIR 21, 1.3	90.00	332	1,607	0.009	13	283
Ericsson AIR 32 B2A/	90.00	573	2,775	0.015	23	489
RFS APXVAARR24_43-U-	90.00	384	1,857	0.010	16	327
Flat Platform w/ Han	90.00	2,000	9,681	0.054	81	1,706
Generic 6' Omni	79.00	50	189	0.001	2	43
Round Side Arm	79.00	300	1,136	0.006	9	256
PCTEL GPS-TMG-HR-26N	63.00	1	1	0.000	0	1
Stand-Off	63.00	30	74	0.000	1	26
		45,868	180,536	1.000	1,508	39,128

Load Case (1.2 + 0.2Sds) * DL + E ELFM Seismic Equivalent Lateral Forces Method

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-54.98	-1.51	0.00	-164.07	0.00	164.07	4,350.13	2,175.06	7,987.32	3,944.64	0.00	0.00	0.039
5.00	-52.79	-1.52	0.00	-156.50	0.00	156.50	4,285.51	2,142.75	7,679.11	3,792.42	0.01	-0.01	0.038
10.00	-50.64	-1.53	0.00	-148.90	0.00	148.90	4,218.97	2,109.49	7,373.27	3,641.38	0.02	-0.02	0.037
15.00	-48.52	-1.53	0.00	-141.26	0.00	141.26	4,150.52	2,075.26	7,070.06	3,491.64	0.05	-0.03	0.036
20.00	-46.43	-1.53	0.00	-133.60	0.00	133.60	4,080.16	2,040.08	6,769.73	3,343.32	0.09	-0.04	0.036
25.00	-44.37	-1.53	0.00	-125.93	0.00	125.93	4,007.88	2,003.94	6,472.54	3,196.54	0.14	-0.05	0.035
30.00	-42.34	-1.53	0.00	-118.26	0.00	118.26	3,933.69	1,966.85	6,178.73	3,051.44	0.20	-0.06	0.034
35.00	-40.35	-1.52	0.00	-110.61	0.00	110.61	3,854.52	1,927.26	5,883.88	2,905.83	0.27	-0.07	0.033
40.00	-40.24	-1.53	0.00	-102.99	0.00	102.99	3,744.12	1,872.06	5,549.75	2,740.81	0.35	-0.08	0.032
40.26	-37.50	-1.50	0.00	-102.60	0.00	102.60	3,738.48	1,869.24	5,532.95	2,732.52	0.35	-0.08	0.031
45.00	-37.26	-1.51	0.00	-95.46	0.00	95.46	3,633.72	1,816.86	5,225.39	2,580.62	0.44	-0.10	0.031
45.41	-35.61	-1.49	0.00	-94.84	0.00	94.84	3,063.65	1,531.82	4,505.80	2,225.25	0.45	-0.10	0.034
50.00	-33.83	-1.47	0.00	-88.01	0.00	88.01	3,008.67	1,504.34	4,302.82	2,125.00	0.55	-0.11	0.032
55.00	-33.59	-1.47	0.00	-80.65	0.00	80.65	2,946.93	1,473.46	4,084.17	2,017.02	0.67	-0.12	0.031
55.68	-32.44	-1.46	0.00	-79.65	0.00	79.65	2,938.42	1,469.21	4,054.78	2,002.51	0.68	-0.12	0.031
55.68	-32.44	-1.46	0.00	-79.65	0.00	79.65	2,938.42	1,469.21	4,054.78	2,002.51	0.68	-0.12	0.051
60.00	-31.65	-1.45	0.00	-73.36	0.00	73.36	2,883.27	1,441.64	3,868.42	1,910.47	0.79	-0.13	0.049
63.00	-31.14	-1.44	0.00	-69.01	0.00	69.01	2,844.16	1,422.08	3,740.46	1,847.27	0.88	-0.14	0.048
65.00	-29.98	-1.43	0.00	-66.12	0.00	66.12	2,808.41	1,404.21	3,643.77	1,799.52	0.94	-0.15	0.047
70.00	-28.85	-1.41	0.00	-59.00	0.00	59.00	2,713.79	1,356.89	3,400.96	1,679.60	1.10	-0.17	0.046
75.00	-27.96	-1.39	0.00	-51.96	0.00	51.96	2,619.16	1,309.58	3,166.52	1,563.83	1.29	-0.18	0.044
79.00	-27.30	-1.38	0.00	-46.40	0.00	46.40	2,543.45	1,271.73	2,985.00	1,474.18	1.45	-0.20	0.042
80.00	-27.14	-1.37	0.00	-45.02	0.00	45.02	2,524.53	1,262.26	2,940.46	1,452.18	1.49	-0.20	0.042
80.76	-25.84	-1.34	0.00	-43.98	0.00	43.98	2,510.19	1,255.09	2,906.93	1,435.62	1.52	-0.20	0.041
84.91	-25.82	-1.34	0.00	-38.43	0.00	38.43	1,500.12	750.06	1,728.77	853.77	1.70	-0.22	0.062
85.00	-24.99	-1.32	0.00	-38.31	0.00	38.31	1,499.54	749.77	1,726.89	852.85	1.71	-0.22	0.062
90.00	-19.82	-1.13	0.00	-31.74	0.00	31.74	1,466.64	733.32	1,624.12	802.09	1.95	-0.24	0.053
95.00	-19.10	-1.11	0.00	-26.07	0.00	26.07	1,431.82	715.91	1,522.23	751.77	2.21	-0.26	0.048
100.00	-15.01	-0.93	0.00	-20.52	0.00	20.52	1,395.09	697.54	1,421.47	702.01	2.50	-0.28	0.040
101.00	-14.50	-0.91	0.00	-19.59	0.00	19.59	1,387.51	693.76	1,401.48	692.14	2.56	-0.28	0.039
105.00	-13.90	-0.88	0.00	-15.96	0.00	15.96	1,356.44	678.22	1,322.10	652.93	2.80	-0.30	0.035
110.00	-13.78	-0.88	0.00	-11.55	0.00	11.55	1,315.88	657.94	1,224.36	604.67	3.12	-0.31	0.030
111.00	-10.68	-0.71	0.00	-10.67	0.00	10.67	1,307.54	653.77	1,205.03	595.12	3.18	-0.31	0.026
115.00	-10.14	-0.68	0.00	-7.82	0.00	7.82	1,273.40	636.70	1,128.51	557.33	3.45	-0.32	0.022
120.00	-5.55	-0.40	0.00	-4.41	0.00	4.41	1,215.41	607.71	1,023.37	505.40	3.79	-0.33	0.013
125.00	-5.49	-0.40	0.00	-2.41	0.00	2.41	1,152.33	576.16	919.28	454.00	4.14	-0.34	0.010
125.71	-5.19	-0.38	0.00	-2.13	0.00	2.13	1,143.39	571.69	904.98	446.93	4.20	-0.34	0.009
125.71	-5.19	-0.38	0.00	-2.13	0.00	2.13	375.11	187.56	156.71	103.37	4.20	-0.34	0.034
130.00	-5.12	-0.37	0.00	-0.52	0.00	0.52	375.11	187.56	156.71	103.37	4.50	-0.34	0.019
131.00	-0.35	-0.03	0.00	-0.15	0.00	0.15	375.11	187.56	156.71	103.37	4.57	-0.34	0.002
135.00	-0.10	-0.01	0.00	-0.04	0.00	0.04	375.11	187.56	156.71	103.37	4.86	-0.34	0.001
140.00	0.00	0.00	0.00	0.00	0.00	0.00	375.11	187.56	156.71	103.37	5.21	-0.34	0.000
142.00	0.00	0.00	0.00	0.00	0.00	0.00	375.11	187.56	156.71	103.37	5.36	-0.34	0.000

Load Case (0.9 - 0.2Sds) * DL + E ELMF

Seismic (Reduced DL) Equivalent Lateral Forces Method

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-37.61	-1.51	0.00	-161.48	0.00	161.48	4,350.13	2,175.06	7,987.32	3,944.64	0.00	0.00	0.036
5.00	-36.12	-1.52	0.00	-153.93	0.00	153.93	4,285.51	2,142.75	7,679.11	3,792.42	0.01	-0.01	0.035
10.00	-34.64	-1.52	0.00	-146.35	0.00	146.35	4,218.97	2,109.49	7,373.27	3,641.38	0.02	-0.02	0.034
15.00	-33.19	-1.52	0.00	-138.75	0.00	138.75	4,150.52	2,075.26	7,070.06	3,491.64	0.05	-0.03	0.033
20.00	-31.76	-1.52	0.00	-131.13	0.00	131.13	4,080.16	2,040.08	6,769.73	3,343.32	0.09	-0.04	0.032
25.00	-30.35	-1.52	0.00	-123.52	0.00	123.52	4,007.88	2,003.94	6,472.54	3,196.54	0.13	-0.05	0.032
30.00	-28.97	-1.51	0.00	-115.92	0.00	115.92	3,933.69	1,966.85	6,178.73	3,051.44	0.19	-0.06	0.031
35.00	-27.60	-1.51	0.00	-108.35	0.00	108.35	3,854.52	1,927.26	5,883.88	2,905.83	0.26	-0.07	0.030
40.00	-27.53	-1.51	0.00	-100.83	0.00	100.83	3,744.12	1,872.06	5,549.75	2,740.81	0.34	-0.08	0.029
40.26	-25.65	-1.48	0.00	-100.44	0.00	100.44	3,738.48	1,869.24	5,532.95	2,732.52	0.35	-0.08	0.029
45.00	-25.49	-1.48	0.00	-93.40	0.00	93.40	3,633.72	1,816.86	5,225.39	2,580.62	0.44	-0.09	0.028
45.41	-24.36	-1.47	0.00	-92.79	0.00	92.79	3,063.65	1,531.82	4,505.80	2,225.25	0.44	-0.09	0.031
50.00	-23.14	-1.45	0.00	-86.05	0.00	86.05	3,008.67	1,504.34	4,302.82	2,125.00	0.54	-0.10	0.029
55.00	-22.98	-1.45	0.00	-78.80	0.00	78.80	2,946.93	1,473.46	4,084.17	2,017.02	0.65	-0.11	0.028
55.68	-22.19	-1.43	0.00	-77.81	0.00	77.81	2,938.42	1,469.21	4,054.78	2,002.51	0.67	-0.12	0.028
55.68	-22.19	-1.43	0.00	-77.81	0.00	77.81	2,938.42	1,469.21	4,054.78	2,002.51	0.67	-0.12	0.046
60.00	-21.65	-1.42	0.00	-71.62	0.00	71.62	2,883.27	1,441.64	3,868.42	1,910.47	0.78	-0.13	0.045
63.00	-21.30	-1.42	0.00	-67.35	0.00	67.35	2,844.16	1,422.08	3,740.46	1,847.27	0.86	-0.14	0.044
65.00	-20.51	-1.40	0.00	-64.51	0.00	64.51	2,808.41	1,404.21	3,643.77	1,799.52	0.92	-0.14	0.043
70.00	-19.73	-1.38	0.00	-57.52	0.00	57.52	2,713.79	1,356.89	3,400.96	1,679.60	1.08	-0.16	0.042
75.00	-19.13	-1.36	0.00	-50.63	0.00	50.63	2,619.16	1,309.58	3,166.52	1,563.83	1.26	-0.18	0.040
79.00	-18.68	-1.34	0.00	-45.19	0.00	45.19	2,543.45	1,271.73	2,985.00	1,474.18	1.42	-0.19	0.038
80.00	-18.56	-1.34	0.00	-43.84	0.00	43.84	2,524.53	1,262.26	2,940.46	1,452.18	1.46	-0.20	0.038
80.76	-17.68	-1.30	0.00	-42.82	0.00	42.82	2,510.19	1,255.09	2,906.93	1,435.62	1.49	-0.20	0.037
84.91	-17.67	-1.31	0.00	-37.41	0.00	37.41	1,500.12	750.06	1,728.77	853.77	1.67	-0.21	0.056
85.00	-17.10	-1.28	0.00	-37.29	0.00	37.29	1,499.54	749.77	1,726.89	852.85	1.67	-0.21	0.055
90.00	-13.56	-1.10	0.00	-30.88	0.00	30.88	1,466.64	733.32	1,624.12	802.09	1.91	-0.24	0.048
95.00	-13.07	-1.08	0.00	-25.36	0.00	25.36	1,431.82	715.91	1,522.23	751.77	2.17	-0.26	0.043
100.00	-10.27	-0.91	0.00	-19.96	0.00	19.96	1,395.09	697.54	1,421.47	702.01	2.44	-0.27	0.036
101.00	-9.92	-0.88	0.00	-19.06	0.00	19.06	1,387.51	693.76	1,401.48	692.14	2.50	-0.28	0.035
105.00	-9.51	-0.86	0.00	-15.52	0.00	15.52	1,356.44	678.22	1,322.10	652.93	2.74	-0.29	0.031
110.00	-9.43	-0.85	0.00	-11.23	0.00	11.23	1,315.88	657.94	1,224.36	604.67	3.05	-0.30	0.026
111.00	-7.31	-0.69	0.00	-10.37	0.00	10.37	1,307.54	653.77	1,205.03	595.12	3.12	-0.31	0.023
115.00	-6.94	-0.66	0.00	-7.60	0.00	7.60	1,273.40	636.70	1,128.51	557.33	3.38	-0.32	0.019
120.00	-3.79	-0.39	0.00	-4.29	0.00	4.29	1,215.41	607.71	1,023.37	505.40	3.71	-0.32	0.012
125.00	-3.75	-0.38	0.00	-2.35	0.00	2.35	1,152.33	576.16	919.28	454.00	4.05	-0.33	0.008
125.71	-3.55	-0.37	0.00	-2.07	0.00	2.07	1,143.39	571.69	904.98	446.93	4.10	-0.33	0.008
125.71	-3.55	-0.37	0.00	-2.07	0.00	2.07	375.11	187.56	156.71	103.37	4.10	-0.33	0.030
130.00	-3.50	-0.36	0.00	-0.51	0.00	0.51	375.11	187.56	156.71	103.37	4.40	-0.33	0.014
131.00	-0.24	-0.03	0.00	-0.15	0.00	0.15	375.11	187.56	156.71	103.37	4.47	-0.33	0.002
135.00	-0.07	-0.01	0.00	-0.04	0.00	0.04	375.11	187.56	156.71	103.37	4.75	-0.33	0.001
140.00	0.00	0.00	0.00	0.00	0.00	0.00	375.11	187.56	156.71	103.37	5.10	-0.33	0.000
142.00	0.00	0.00	0.00	0.00	0.00	0.00	375.11	187.56	156.71	103.37	5.24	-0.33	0.000

Equivalent Modal Analysis Method

(Based on ASCE7-10 Chapters 11, 12 & 15 and ANSI/TIA-G, section 2.7)

Spectral Response Acceleration for Short Period (S_s):	0.22
Spectral Response Acceleration at 1.0 Second Period (S_1):	0.07
Importance Factor (I_E):	1.00
Site Coefficient F_a :	1.60
Site Coefficient F_v :	2.40
Response Modification Coefficient (R):	1.50
Design Spectral Response Acceleration at Short Period (S_{ds}):	0.23
Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.11
Period Based on Rayleigh Method (sec):	2.27
Redundancy Factor (ρ):	1.00

Load Case (1.2 + 0.2Sds) * DL + E EMAM Seismic Equivalent Modal Analysis Method

Segment	Height Above Base (ft)	Weight (lb)	a	b	c	Saz	Horizontal Force (lb)	Vertical Force (lb)
40	141.00	81	1.863	1.843	1.090	0.424	23	101
39	137.50	203	1.772	1.415	0.930	0.355	48	253
38	133.00	162	1.658	0.969	0.752	0.274	30	202
37	130.50	55	1.596	0.767	0.665	0.233	9	69
36	127.85	237	1.532	0.584	0.582	0.193	31	296
35	125.35	48	1.473	0.436	0.511	0.158	5	60
34	122.50	347	1.407	0.296	0.439	0.121	28	433
33	117.50	434	1.294	0.112	0.331	0.065	19	541
32	113.00	358	1.197	0.002	0.252	0.024	6	446
31	110.50	95	1.144	-0.041	0.215	0.004	0	118
30	107.50	483	1.083	-0.079	0.177	-0.016	-5	603
29	103.00	397	0.994	-0.111	0.129	-0.038	-10	495
28	100.50	101	0.947	-0.119	0.107	-0.047	-3	126
27	97.50	572	0.891	-0.122	0.084	-0.054	-21	713
26	92.50	586	0.802	-0.112	0.054	-0.057	-22	731
25	87.50	668	0.718	-0.092	0.033	-0.051	-23	833
24	84.95	12	0.676	-0.079	0.025	-0.044	0	15
23	82.83	1,040	0.643	-0.068	0.020	-0.037	-26	1,296
22	80.38	133	0.606	-0.055	0.015	-0.027	-2	165
21	79.50	176	0.592	-0.050	0.014	-0.023	-3	219
20	77.00	712	0.556	-0.037	0.010	-0.012	-6	888
19	72.50	910	0.493	-0.013	0.007	0.009	5	1,134
18	67.50	932	0.427	0.009	0.006	0.030	18	1,162
17	64.00	379	0.384	0.023	0.007	0.041	10	472
16	61.50	631	0.355	0.032	0.008	0.048	20	787
15	57.84	924	0.314	0.042	0.011	0.056	34	1,152
14	55.34	191	0.287	0.048	0.013	0.059	8	239
13	52.50	1,425	0.258	0.054	0.016	0.062	59	1,778
12	47.71	1,327	0.213	0.061	0.021	0.065	57	1,655
11	45.21	189	0.192	0.064	0.024	0.065	8	236
10	42.63	2,201	0.170	0.066	0.027	0.065	95	2,745
9	40.13	81	0.151	0.068	0.030	0.064	3	101
8	37.50	1,600	0.132	0.069	0.033	0.064	68	1,995
7	32.50	1,625	0.099	0.071	0.037	0.062	67	2,026

6	27.50	1,651	0.071	0.072	0.041	0.060	66	2,058
5	22.50	1,676	0.047	0.071	0.042	0.058	65	2,090
4	17.50	1,702	0.029	0.068	0.040	0.056	63	2,122
3	12.50	1,727	0.015	0.060	0.035	0.051	58	2,153
2	7.50	1,753	0.005	0.045	0.026	0.040	47	2,185
1	2.50	1,778	0.001	0.019	0.010	0.019	23	2,217
Raycap DC6-48-60-18-	131.00	64	1.609	0.805	0.682	0.241	10	79
Ericsson RRUS 8843 B	131.00	216	1.609	0.805	0.682	0.241	35	269
Ericsson RRUS 4478 B	131.00	180	1.609	0.805	0.682	0.241	29	224
Ericsson RRUS 4449 B	131.00	213	1.609	0.805	0.682	0.241	34	266
Raycap DC6-48-60-0-8	131.00	16	1.609	0.805	0.682	0.241	3	20
Ericsson RRUS 32 B30	131.00	180	1.609	0.805	0.682	0.241	29	224
Powerwave Allgon 777	131.00	105	1.609	0.805	0.682	0.241	17	131
Quintel QS66512-2	131.00	333	1.609	0.805	0.682	0.241	54	415
CCI OPA65R-BU6D	131.00	190	1.609	0.805	0.682	0.241	31	236
Kathrein Scala 80010	131.00	293	1.609	0.805	0.682	0.241	47	365
Generic Flat Low Pro	131.00	1,875	1.609	0.805	0.682	0.241	302	2,338
DragonWave Horizon C	120.00	21	1.350	0.195	0.382	0.092	1	26
Alcatel-Lucent RRH2x	120.00	159	1.350	0.195	0.382	0.092	10	198
NextNet BTS-2500	120.00	105	1.350	0.195	0.382	0.092	6	131
Alcatel-Lucent 800 M	120.00	192	1.350	0.195	0.382	0.092	12	239
Alcatel-Lucent 1900	120.00	180	1.350	0.195	0.382	0.092	11	224
Nokia 2.5G MAA - AAH	120.00	311	1.350	0.195	0.382	0.092	19	388
Argus LLPX310R	120.00	86	1.350	0.195	0.382	0.092	5	107
DragonWave A-ANT-18G	120.00	54	1.350	0.195	0.382	0.092	3	68
Commscope NNVV-	120.00	232	1.350	0.195	0.382	0.092	14	290
Flat Platform w/ Han	120.00	2,000	1.350	0.195	0.382	0.092	122	2,494
Decibel DB844G90A-XY	111.00	126	1.155	-0.034	0.223	0.008	1	157
Flat Platform w/ Han	111.00	2,000	1.155	-0.034	0.223	0.008	10	2,494
Generic GPS	101.00	10	0.956	-0.118	0.111	-0.045	0	12
RFS FD9R6004/1C-3L	100.00	19	0.937	-0.120	0.102	-0.048	-1	23
Generic GPS	100.00	10	0.937	-0.120	0.102	-0.048	0	12
Samsung B5/B13 RRH-B	100.00	211	0.937	-0.120	0.102	-0.048	-7	263
Samsung B2/B66A RRH-	100.00	253	0.937	-0.120	0.102	-0.048	-8	316
Rymosa MGD3-800TX	100.00	46	0.937	-0.120	0.102	-0.048	-1	58
Commscope RC2DC-	100.00	64	0.937	-0.120	0.102	-0.048	-2	80
Antel BXA-70080/6CF_	100.00	54	0.937	-0.120	0.102	-0.048	-2	67
Quintel QS6656-5D	100.00	528	0.937	-0.120	0.102	-0.048	-17	658
Flat Platform w/ Han	100.00	2,000	0.937	-0.120	0.102	-0.048	-64	2,494
RFS ATMAA1412D-1A20	90.00	52	0.759	-0.103	0.043	-0.055	-2	65
Ericsson Radio 4449	90.00	222	0.759	-0.103	0.043	-0.055	-8	277
Ericsson AIR 21, 1.3	90.00	332	0.759	-0.103	0.043	-0.055	-12	414
Ericsson AIR 32 B2A/	90.00	573	0.759	-0.103	0.043	-0.055	-21	715
RFS APXVAARR24_43-U-	90.00	384	0.759	-0.103	0.043	-0.055	-14	478
Flat Platform w/ Han	90.00	2,000	0.759	-0.103	0.043	-0.055	-74	2,494
Generic 6' Omni	79.00	50	0.585	-0.047	0.013	-0.021	-1	62
Round Side Arm	79.00	300	0.585	-0.047	0.013	-0.021	-4	374
PCTEL GPS-TMG-HR-	63.00	1	0.372	0.027	0.008	0.044	0	1
Stand-Off	63.00	30	0.372	0.027	0.008	0.044	1	37
		45,868	76.449	15.269	19.965	5.241	1,420	57,194

Load Case (0.9 - 0.2Sds) * DL + E EMAM

Seismic (Reduced DL) Equivalent Modal Analysis Method

Segment	Height Above Base (ft)	Weight (lb)	a	b	c	Saz	Horizontal Force (lb)	Vertical Force (lb)
40	141.00	81	1.863	1.843	1.090	0.424	23	69
39	137.50	203	1.772	1.415	0.930	0.355	48	173
38	133.00	162	1.658	0.969	0.752	0.274	30	138
37	130.50	55	1.596	0.767	0.665	0.233	9	47

36	127.85	237	1.532	0.584	0.582	0.193	31	202
35	125.35	48	1.473	0.436	0.511	0.158	5	41
34	122.50	347	1.407	0.296	0.439	0.121	28	296
33	117.50	434	1.294	0.112	0.331	0.065	19	370
32	113.00	358	1.197	0.002	0.252	0.024	6	305
31	110.50	95	1.144	-0.041	0.215	0.004	0	81
30	107.50	483	1.083	-0.079	0.177	-0.016	-5	412
29	103.00	397	0.994	-0.111	0.129	-0.038	-10	339
28	100.50	101	0.947	-0.119	0.107	-0.047	-3	86
27	97.50	572	0.891	-0.122	0.084	-0.054	-21	488
26	92.50	586	0.802	-0.112	0.054	-0.057	-22	500
25	87.50	668	0.718	-0.092	0.033	-0.051	-23	570
24	84.95	12	0.676	-0.079	0.025	-0.044	0	11
23	82.83	1,040	0.643	-0.068	0.020	-0.037	-26	887
22	80.38	133	0.606	-0.055	0.015	-0.027	-2	113
21	79.50	176	0.592	-0.050	0.014	-0.023	-3	150
20	77.00	712	0.556	-0.037	0.010	-0.012	-6	607
19	72.50	910	0.493	-0.013	0.007	0.009	5	776
18	67.50	932	0.427	0.009	0.006	0.030	18	795
17	64.00	379	0.384	0.023	0.007	0.041	10	323
16	61.50	631	0.355	0.032	0.008	0.048	20	539
15	57.84	924	0.314	0.042	0.011	0.056	34	788
14	55.34	191	0.287	0.048	0.013	0.059	8	163
13	52.50	1,425	0.258	0.054	0.016	0.062	59	1,216
12	47.71	1,327	0.213	0.061	0.021	0.065	57	1,132
11	45.21	189	0.192	0.064	0.024	0.065	8	161
10	42.63	2,201	0.170	0.066	0.027	0.065	95	1,878
9	40.13	81	0.151	0.068	0.030	0.064	3	69
8	37.50	1,600	0.132	0.069	0.033	0.064	68	1,365
7	32.50	1,625	0.099	0.071	0.037	0.062	67	1,386
6	27.50	1,651	0.071	0.072	0.041	0.060	66	1,408
5	22.50	1,676	0.047	0.071	0.042	0.058	65	1,430
4	17.50	1,702	0.029	0.068	0.040	0.056	63	1,452
3	12.50	1,727	0.015	0.060	0.035	0.051	58	1,473
2	7.50	1,753	0.005	0.045	0.026	0.040	47	1,495
1	2.50	1,778	0.001	0.019	0.010	0.019	23	1,517
Raycap DC6-48-60-18-	131.00	64	1.609	0.805	0.682	0.241	10	54
Ericsson RRUS 8843 B	131.00	216	1.609	0.805	0.682	0.241	35	184
Ericsson RRUS 4478 B	131.00	180	1.609	0.805	0.682	0.241	29	153
Ericsson RRUS 4449 B	131.00	213	1.609	0.805	0.682	0.241	34	182
Raycap DC6-48-60-0-8	131.00	16	1.609	0.805	0.682	0.241	3	14
Ericsson RRUS 32 B30	131.00	180	1.609	0.805	0.682	0.241	29	154
Powerwave Allgon 777	131.00	105	1.609	0.805	0.682	0.241	17	90
Quintel QS66512-2	131.00	333	1.609	0.805	0.682	0.241	54	284
CCI OPA65R-BU6D	131.00	190	1.609	0.805	0.682	0.241	31	162
Kathrein Scala 80010	131.00	293	1.609	0.805	0.682	0.241	47	250
Generic Flat Low Pro	131.00	1,875	1.609	0.805	0.682	0.241	302	1,599
DragonWave Horizon C	120.00	21	1.350	0.195	0.382	0.092	1	18
Alcatel-Lucent RRH2x	120.00	159	1.350	0.195	0.382	0.092	10	135
NextNet BTS-2500	120.00	105	1.350	0.195	0.382	0.092	6	90
Alcatel-Lucent 800 M	120.00	192	1.350	0.195	0.382	0.092	12	164
Alcatel-Lucent 1900	120.00	180	1.350	0.195	0.382	0.092	11	154
Nokia 2.5G MAA - AAH	120.00	311	1.350	0.195	0.382	0.092	19	265
Argus LLPX310R	120.00	86	1.350	0.195	0.382	0.092	5	73
DragonWave A-ANT-18G	120.00	54	1.350	0.195	0.382	0.092	3	46
Commscope NNVV-	120.00	232	1.350	0.195	0.382	0.092	14	198
Flat Platform w/ Han	120.00	2,000	1.350	0.195	0.382	0.092	122	1,706
Decibel DB844G90A-XY	111.00	126	1.155	-0.034	0.223	0.008	1	107
Flat Platform w/ Han	111.00	2,000	1.155	-0.034	0.223	0.008	10	1,706
Generic GPS	101.00	10	0.956	-0.118	0.111	-0.045	0	9
RFS FD9R6004/1C-3L	100.00	19	0.937	-0.120	0.102	-0.048	-1	16
Generic GPS	100.00	10	0.937	-0.120	0.102	-0.048	0	9
Samsung B5/B13 RRH-B	100.00	211	0.937	-0.120	0.102	-0.048	-7	180
Samsung B2/B66A RRH-	100.00	253	0.937	-0.120	0.102	-0.048	-8	216

Site Number: 302511

Code: ANSI/TIA-222-G

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Site Name: WSPT - South, CT

Engineering Number: 13333739_C3_02

1/27/2021 9:32:05 AM

Customer: AT&T MOBILITY

Ryma MGD3-800TX	100.00	46	0.937	-0.120	0.102	-0.048	-1	39
Commscope RC2DC-	100.00	64	0.937	-0.120	0.102	-0.048	-2	55
Antel BXA-70080/6CF_	100.00	54	0.937	-0.120	0.102	-0.048	-2	46
Quintel QS6656-5D	100.00	528	0.937	-0.120	0.102	-0.048	-17	450
Flat Platform w/ Han	100.00	2,000	0.937	-0.120	0.102	-0.048	-64	1,706
RFS ATMAA1412D-1A20	90.00	52	0.759	-0.103	0.043	-0.055	-2	44
Ericsson Radio 4449	90.00	222	0.759	-0.103	0.043	-0.055	-8	189
Ericsson AIR 21, 1.3	90.00	332	0.759	-0.103	0.043	-0.055	-12	283
Ericsson AIR 32 B2A/	90.00	573	0.759	-0.103	0.043	-0.055	-21	489
RFS APXVAARR24_43-U-	90.00	384	0.759	-0.103	0.043	-0.055	-14	327
Flat Platform w/ Han	90.00	2,000	0.759	-0.103	0.043	-0.055	-74	1,706
Generic 6' Omni	79.00	50	0.585	-0.047	0.013	-0.021	-1	43
Round Side Arm	79.00	300	0.585	-0.047	0.013	-0.021	-4	256
PCTEL GPS-TMG-HR-	63.00	1	0.372	0.027	0.008	0.044	0	1
Stand-Off	63.00	30	0.372	0.027	0.008	0.044	1	26
		45,868	76.449	15.269	19.965	5.241	1,420	39,128

Load Case (1.2 + 0.2Sds) * DL + E EMAM Seismic Equivalent Modal Analysis Method

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-54.98	-1.40	0.00	-126.47	0.00	126.47	4,350.13	2,175.06	7,987.32	3,944.64	0.00	0.00	0.032
5.00	-52.79	-1.36	0.00	-119.47	0.00	119.47	4,285.51	2,142.75	7,679.11	3,792.42	0.00	-0.01	0.031
10.00	-50.64	-1.31	0.00	-112.67	0.00	112.67	4,218.97	2,109.49	7,373.27	3,641.38	0.02	-0.02	0.030
15.00	-48.52	-1.25	0.00	-106.12	0.00	106.12	4,150.52	2,075.26	7,070.06	3,491.64	0.04	-0.02	0.030
20.00	-46.43	-1.19	0.00	-99.87	0.00	99.87	4,080.16	2,040.08	6,769.73	3,343.32	0.07	-0.03	0.029
25.00	-44.37	-1.13	0.00	-93.91	0.00	93.91	4,007.88	2,003.94	6,472.54	3,196.54	0.10	-0.04	0.028
30.00	-42.34	-1.07	0.00	-88.26	0.00	88.26	3,933.69	1,966.85	6,178.73	3,051.44	0.15	-0.05	0.027
35.00	-40.35	-1.00	0.00	-82.93	0.00	82.93	3,854.52	1,927.26	5,883.88	2,905.83	0.20	-0.06	0.026
40.00	-40.25	-1.00	0.00	-77.91	0.00	77.91	3,744.12	1,872.06	5,549.75	2,740.81	0.26	-0.06	0.026
40.26	-37.50	-0.91	0.00	-77.65	0.00	77.65	3,738.48	1,869.24	5,532.95	2,732.52	0.27	-0.06	0.026
45.00	-37.27	-0.90	0.00	-73.35	0.00	73.35	3,633.72	1,816.86	5,225.39	2,580.62	0.34	-0.07	0.025
45.41	-35.61	-0.85	0.00	-72.98	0.00	72.98	3,063.65	1,531.82	4,505.80	2,225.25	0.34	-0.07	0.028
50.00	-33.83	-0.79	0.00	-69.10	0.00	69.10	3,008.67	1,504.34	4,302.82	2,125.00	0.42	-0.08	0.027
55.00	-33.59	-0.78	0.00	-65.15	0.00	65.15	2,946.93	1,473.46	4,084.17	2,017.02	0.50	-0.09	0.027
55.68	-32.44	-0.75	0.00	-64.62	0.00	64.62	2,938.42	1,469.21	4,054.78	2,002.51	0.52	-0.09	0.026
55.68	-32.44	-0.75	0.00	-64.62	0.00	64.62	2,938.42	1,469.21	4,054.78	2,002.51	0.52	-0.09	0.043
60.00	-31.66	-0.73	0.00	-61.38	0.00	61.38	2,883.27	1,441.64	3,868.42	1,910.47	0.60	-0.10	0.043
63.00	-31.14	-0.73	0.00	-59.18	0.00	59.18	2,844.16	1,422.08	3,740.46	1,847.27	0.67	-0.11	0.043
65.00	-29.98	-0.71	0.00	-57.73	0.00	57.73	2,808.41	1,404.21	3,643.77	1,799.52	0.71	-0.11	0.043
70.00	-28.85	-0.71	0.00	-54.18	0.00	54.18	2,713.79	1,356.89	3,400.96	1,679.60	0.84	-0.13	0.043
75.00	-27.96	-0.72	0.00	-50.62	0.00	50.62	2,619.16	1,309.58	3,166.52	1,563.83	0.99	-0.15	0.043
79.00	-27.30	-0.73	0.00	-47.73	0.00	47.73	2,543.45	1,271.73	2,985.00	1,474.18	1.12	-0.16	0.043
80.00	-27.14	-0.74	0.00	-47.00	0.00	47.00	2,524.53	1,262.26	2,940.46	1,452.18	1.15	-0.17	0.043
80.76	-25.84	-0.76	0.00	-46.44	0.00	46.44	2,510.19	1,255.09	2,906.93	1,435.62	1.18	-0.17	0.043
84.91	-25.83	-0.77	0.00	-43.27	0.00	43.27	1,500.12	750.06	1,728.77	853.77	1.33	-0.18	0.068
85.00	-24.99	-0.79	0.00	-43.20	0.00	43.20	1,499.54	749.77	1,726.89	852.85	1.33	-0.18	0.067
90.00	-19.82	-0.94	0.00	-39.24	0.00	39.24	1,466.64	733.32	1,624.12	802.09	1.54	-0.21	0.062
95.00	-19.11	-0.96	0.00	-34.55	0.00	34.55	1,431.82	715.91	1,522.23	751.77	1.78	-0.24	0.059
100.00	-15.01	-1.06	0.00	-29.73	0.00	29.73	1,395.09	697.54	1,421.47	702.01	2.04	-0.26	0.053
101.00	-14.50	-1.07	0.00	-28.68	0.00	28.68	1,387.51	693.76	1,401.48	692.14	2.09	-0.27	0.052
105.00	-13.90	-1.07	0.00	-24.41	0.00	24.41	1,356.44	678.22	1,322.10	652.93	2.33	-0.29	0.048
110.00	-13.78	-1.08	0.00	-19.04	0.00	19.04	1,315.88	657.94	1,224.36	604.67	2.64	-0.31	0.042
111.00	-10.68	-1.05	0.00	-17.96	0.00	17.96	1,307.54	653.77	1,205.03	595.12	2.71	-0.32	0.038
115.00	-10.14	-1.03	0.00	-13.78	0.00	13.78	1,273.40	636.70	1,128.51	557.33	2.98	-0.33	0.033
120.00	-5.54	-0.77	0.00	-8.65	0.00	8.65	1,215.41	607.71	1,023.37	505.40	3.33	-0.35	0.022
125.00	-5.48	-0.76	0.00	-4.81	0.00	4.81	1,152.33	576.16	919.28	454.00	3.70	-0.36	0.015
125.71	-5.19	-0.73	0.00	-4.27	0.00	4.27	1,143.39	571.69	904.98	446.93	3.75	-0.36	0.014
125.71	-5.19	-0.73	0.00	-4.27	0.00	4.27	375.11	187.56	156.71	103.37	3.75	-0.36	0.055
130.00	-5.12	-0.72	0.00	-1.13	0.00	1.13	375.11	187.56	156.71	103.37	4.08	-0.36	0.025
131.00	-0.35	-0.07	0.00	-0.41	0.00	0.41	375.11	187.56	156.71	103.37	4.16	-0.36	0.005
135.00	-0.10	-0.02	0.00	-0.12	0.00	0.12	375.11	187.56	156.71	103.37	4.46	-0.37	0.001
140.00	0.00	0.00	0.00	0.00	0.00	0.00	375.11	187.56	156.71	103.37	4.85	-0.37	0.000
142.00	0.00	0.00	0.00	0.00	0.00	0.00	375.11	187.56	156.71	103.37	5.00	-0.37	0.000

Load Case (0.9 - 0.2Sds) * DL + E EMAM Seismic (Reduced DL) Equivalent Modal Analysis Method

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-37.61	-1.40	0.00	-124.28	0.00	124.28	4,350.13	2,175.06	7,987.32	3,944.64	0.00	0.00	0.029
5.00	-36.12	-1.36	0.00	-117.28	0.00	117.28	4,285.51	2,142.75	7,679.11	3,792.42	0.00	-0.01	0.028
10.00	-34.64	-1.30	0.00	-110.50	0.00	110.50	4,218.97	2,109.49	7,373.27	3,641.38	0.02	-0.02	0.027
15.00	-33.19	-1.24	0.00	-103.98	0.00	103.98	4,150.52	2,075.26	7,070.06	3,491.64	0.04	-0.02	0.026
20.00	-31.76	-1.18	0.00	-97.76	0.00	97.76	4,080.16	2,040.08	6,769.73	3,343.32	0.06	-0.03	0.026
25.00	-30.35	-1.12	0.00	-91.85	0.00	91.85	4,007.88	2,003.94	6,472.54	3,196.54	0.10	-0.04	0.025
30.00	-28.97	-1.05	0.00	-86.26	0.00	86.26	3,933.69	1,966.85	6,178.73	3,051.44	0.15	-0.05	0.024
35.00	-27.60	-0.99	0.00	-80.99	0.00	80.99	3,854.52	1,927.26	5,883.88	2,905.83	0.20	-0.05	0.023
40.00	-27.53	-0.99	0.00	-76.04	0.00	76.04	3,744.12	1,872.06	5,549.75	2,740.81	0.26	-0.06	0.023
40.26	-25.66	-0.89	0.00	-75.79	0.00	75.79	3,738.48	1,869.24	5,532.95	2,732.52	0.26	-0.06	0.023
45.00	-25.49	-0.89	0.00	-71.55	0.00	71.55	3,633.72	1,816.86	5,225.39	2,580.62	0.33	-0.07	0.022
45.41	-24.36	-0.83	0.00	-71.18	0.00	71.18	3,063.65	1,531.82	4,505.80	2,225.25	0.33	-0.07	0.025
50.00	-23.15	-0.77	0.00	-67.38	0.00	67.38	3,008.67	1,504.34	4,302.82	2,125.00	0.41	-0.08	0.024
55.00	-22.98	-0.77	0.00	-63.52	0.00	63.52	2,946.93	1,473.46	4,084.17	2,017.02	0.49	-0.09	0.024
55.68	-22.19	-0.73	0.00	-63.00	0.00	63.00	2,938.42	1,469.21	4,054.78	2,002.51	0.51	-0.09	0.024
55.68	-22.19	-0.73	0.00	-63.00	0.00	63.00	2,938.42	1,469.21	4,054.78	2,002.51	0.51	-0.09	0.039
60.00	-21.66	-0.71	0.00	-59.83	0.00	59.83	2,883.27	1,441.64	3,868.42	1,910.47	0.59	-0.10	0.039
63.00	-21.31	-0.71	0.00	-57.69	0.00	57.69	2,844.16	1,422.08	3,740.46	1,847.27	0.65	-0.11	0.039
65.00	-20.51	-0.69	0.00	-56.28	0.00	56.28	2,808.41	1,404.21	3,643.77	1,799.52	0.70	-0.11	0.039
70.00	-19.74	-0.69	0.00	-52.83	0.00	52.83	2,713.79	1,356.89	3,400.96	1,679.60	0.82	-0.13	0.039
75.00	-19.13	-0.70	0.00	-49.39	0.00	49.39	2,619.16	1,309.58	3,166.52	1,563.83	0.97	-0.14	0.039
79.00	-18.68	-0.71	0.00	-46.60	0.00	46.60	2,543.45	1,271.73	2,985.00	1,474.18	1.09	-0.16	0.039
80.00	-18.57	-0.71	0.00	-45.89	0.00	45.89	2,524.53	1,262.26	2,940.46	1,452.18	1.13	-0.16	0.039
80.76	-17.68	-0.74	0.00	-45.35	0.00	45.35	2,510.19	1,255.09	2,906.93	1,435.62	1.15	-0.16	0.039
84.91	-17.67	-0.74	0.00	-42.30	0.00	42.30	1,500.12	750.06	1,728.77	853.77	1.30	-0.18	0.061
85.00	-17.10	-0.76	0.00	-42.23	0.00	42.23	1,499.54	749.77	1,726.89	852.85	1.30	-0.18	0.061
90.00	-13.56	-0.91	0.00	-38.41	0.00	38.41	1,466.64	733.32	1,624.12	802.09	1.51	-0.21	0.057
95.00	-13.07	-0.94	0.00	-33.85	0.00	33.85	1,431.82	715.91	1,522.23	751.77	1.74	-0.23	0.054
100.00	-10.27	-1.03	0.00	-29.17	0.00	29.17	1,395.09	697.54	1,421.47	702.01	1.99	-0.26	0.049
101.00	-9.92	-1.04	0.00	-28.14	0.00	28.14	1,387.51	693.76	1,401.48	692.14	2.05	-0.26	0.048
105.00	-9.51	-1.05	0.00	-23.96	0.00	23.96	1,356.44	678.22	1,322.10	652.93	2.27	-0.28	0.044
110.00	-9.42	-1.05	0.00	-18.71	0.00	18.71	1,315.88	657.94	1,224.36	604.67	2.58	-0.30	0.038
111.00	-7.31	-1.03	0.00	-17.66	0.00	17.66	1,307.54	653.77	1,205.03	595.12	2.65	-0.31	0.035
115.00	-6.94	-1.01	0.00	-13.56	0.00	13.56	1,273.40	636.70	1,128.51	557.33	2.91	-0.32	0.030
120.00	-3.79	-0.76	0.00	-8.52	0.00	8.52	1,215.41	607.71	1,023.37	505.40	3.26	-0.34	0.020
125.00	-3.75	-0.75	0.00	-4.74	0.00	4.74	1,152.33	576.16	919.28	454.00	3.62	-0.35	0.014
125.71	-3.55	-0.72	0.00	-4.21	0.00	4.21	1,143.39	571.69	904.98	446.93	3.67	-0.35	0.013
125.71	-3.55	-0.72	0.00	-4.21	0.00	4.21	375.11	187.56	156.71	103.37	3.67	-0.35	0.050
130.00	-3.50	-0.71	0.00	-1.12	0.00	1.12	375.11	187.56	156.71	103.37	3.99	-0.36	0.020
131.00	-0.24	-0.07	0.00	-0.41	0.00	0.41	375.11	187.56	156.71	103.37	4.06	-0.36	0.005
135.00	-0.07	-0.02	0.00	-0.12	0.00	0.12	375.11	187.56	156.71	103.37	4.36	-0.36	0.001
140.00	0.00	0.00	0.00	0.00	0.00	0.00	375.11	187.56	156.71	103.37	4.74	-0.36	0.000
142.00	0.00	0.00	0.00	0.00	0.00	0.00	375.11	187.56	156.71	103.37	4.89	-0.36	0.000

Site Number: 302511

Code: ANSI/TIA-222-G

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Site Name: WSPT - South, CT

Engineering Number: 13333739_C3_02

1/27/2021 9:32:06 AM

Customer: AT&T MOBILITY

Analysis Summary

Load Case	Reactions						Max Usage	
	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)	Elev (ft)	Interaction Ratio
1.2D + 1.6W	40.72	0.00	54.96	0.00	0.00	3738.54	84.91	0.89
0.9D + 1.6W	39.81	0.00	41.20	0.00	0.00	3679.48	84.91	0.87
1.2D + 1.0Di + 1.0Wi	23.32	0.00	85.00	0.00	0.00	1800.88	55.68	0.36
(1.2 + 0.2Sds) * DL + E ELFM	1.51	0.00	54.98	0.00	0.00	164.07	84.91	0.06
(1.2 + 0.2Sds) * DL + E EMAM	1.40	0.00	54.98	0.00	0.00	126.47	84.91	0.07
(0.9 - 0.2Sds) * DL + E ELFM	1.51	0.00	37.61	0.00	0.00	161.48	84.91	0.06
(0.9 - 0.2Sds) * DL + E EMAM	1.40	0.00	37.61	0.00	0.00	124.28	84.91	0.06
1.0D + 1.0W	8.89	0.00	45.86	0.00	0.00	825.86	84.91	0.21

Site Number: 302511

Code: ANSI/TIA-222-G

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Site Name: WSPT - South, CT

Engineering Number: 13333739_C3_02

1/27/2021 9:32:06 AM

Customer: AT&T MOBILITY

Additional Steel Summary

			Intermediate Connectors				Max Member		
Elev From (ft)	Elev To (ft)	Member	VQ/I (lb/in)	Shear Applied (kips)	Shear phiVn (kips)	Ratio	Pu (kip)	phiPn (kip)	Ratio
0.00	55.68	(4) SOL-#20 All Thread Bar	332.2	10.0	16.8	0.593	256.9	330.5	0.777

			Upper Termination Connectors				Lower Termination Connectors					
Elev From (ft)	Elev To (ft)	Member	MQ/I (kips)	phiVn (kips)	Num Reqd	Num Actual	Ratio	MQ/I (kips)	phiVn (kips)	Num Reqd	Num Actual	Ratio
0.00	55.68	(4) SOL-#20 All Thread Bar	200.5	12.0	17	22	0.759	0.0	12.0	0	0	0.000

Site Name: WSPT - South, CT
Site Number: 302511
Tower Type: MP
Design Loads (Factored) - Analysis per TIA-222-G Standards

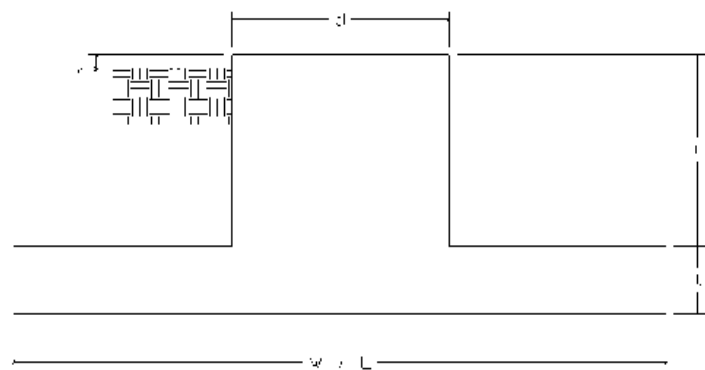
Monolithic Mat & Pier Foundation Analysis

Foundation Analysis Parameters		
Design / Analysis / Mapping:	Mapping	-
Compression/Leg:	55.0	k
Uplift/Leg:	0.0	k
Total Shear:	40.7	k
Moment:	3,738.5	k-ft
Tower + Appurtenance Weight:	55.0	k
Depth to Base of Foundation (l + t - h):	7	ft
Diameter of Pier (d):	6.5	ft
Length of Pier (l):	4.5	ft
Height of Pier above Ground (h):	0.5	ft
Width of Pad (W):	26.5	ft
Length of Pad (L):	26.5	ft
Thickness of Pad (t):	3	ft
Tower Leg Center to Center:	0	ft
Number of Tower Legs:	1	-
Tower Center from Mat Center:	0	ft
Depth Below Ground Surface to Water Table:	9.5	ft
Unit Weight of Concrete:	150	pcf
Unit Weight of Soil Above Water Table:	120	pcf
Unit Weight of Water:	62.4	pcf
Unit Weight of Soil Below Water Table:	57.6	pcf
Friction Angle of Uplift:	15	°
Coefficient of Shear Friction:	0.2	-
Ultimate Compressive Bearing Pressure:	50,400	psf
Ultimate Passive Pressure on Pad Face:	0	psf
$f_{\text{Soil and Concrete Weight}}$:	0.9	-
f_{Soil} :	0.75	-

Overturning Moment Usage		
Design OTM:	4043.9	k-ft
OTM Resistance:	8921.1	k-ft
Design OTM / OTM Resistance:	45%	Pass

Soil Bearing Pressure Usage		
Net Bearing Pressure:	1565	psf
Factored Nominal Bearing Pressure:	37800	psf
Factored Nominal (Net) Bearing Pressure:	4%	Pass
Load Direction Controlling Design Bearing Pressure:	<i>Diagonal to Pad Edge</i>	

Sliding Factor of Safety		
Ultimate Friction Resistance:	141.1	k
Ultimate Passive Pressure Resistance:	0.0	k
Total Factored Sliding Resistance:	105.8	k
Sliding Design / Sliding Resistance:	38%	Pass





Base Plate & Anchor Rod Analysis

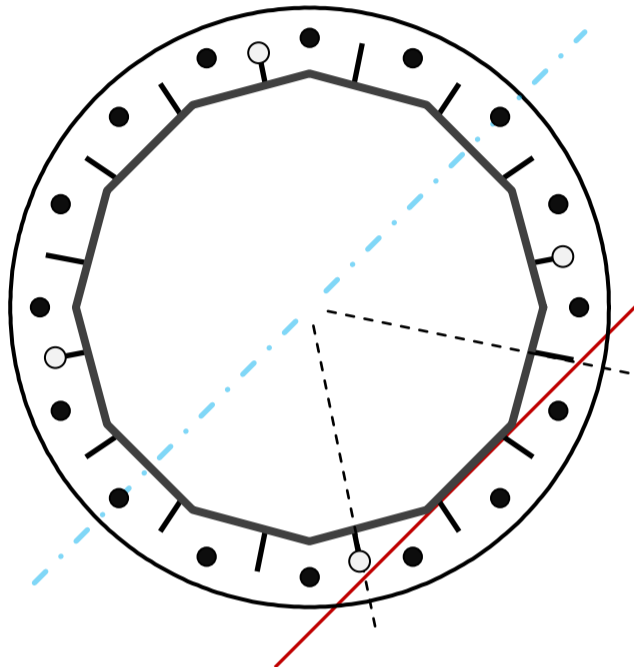
Pole Dimensions		
Number of Sides	12	-
Diameter	45	in
Thickness	0.4375	in
Orientation Offset	0	°

Base Reactions		
Moment, Mu	3738.5	k-ft
Axial, Pu	55.0	k
Shear, Vu	40.7	k
Neutral Axis	225	°

Report Capacities		
Component	Capacity	Result
Base Plate	60%	Pass
Anchor Rods	60%	Pass
Dwyidag	57%	Pass

Base Plate		
Shape	Round	-
Diameter, ϕ	60	in
Thickness	2	in
Grade	A36	
Yield Strength, Fy	36	ksi
Tensile Strength, Fu	58	ksi
Clip	N/A	in
Orientation Offset	0	°
Anchor Rod Detail	c	$\eta=0.55$
Clear Distance	N/A	in
Applied Moment, Mu	834.6	k
Bending Stress, ϕMn	1379.8	k

Dwyidag Reinforcement		
Quantity	4	-
Bar Size	#20	in
Diameter, ϕ	2.5	in
Bracket Type	Angle	-
Circle	51.88	in
Orientation Offset	11.25	°
Applied Force, Pu	223.6	k
Dwyidag Bar, ϕPn	392.7	k



Original Anchor Rods		
Arrangement	Radial	-
Quantity	16	-
Diameter, ϕ	2 1/4	in
Bolt Circle	54	in
Grade	A615-75	
Yield Strength, Fy	75	ksi
Tensile Strength, Fu	100	ksi
Spacing	10.6	in
Orientation Offset	0	°
Applied Force, Pu	153.1	k
Anchor Rods, ϕPn	259.8	k

Stiffeners		
Arrangement	Radial	-
Quantity	16	-
Height	10	in
Width	4	in
Effective Width	4.000	in
Thickness	1/2	in
Effective Thickness	0.500	in
Notch	0.5	in
Flat Edge	4	in
Grade	A36	
Yield Strength, Fy	36	ksi
Tensile Strength, Fu	58	ksi
Horizontal Weld	Fillet	
Horizontal Fillet Size	5/16	in
Bevel Depth	0	in
Vertical Weld	Fillet	
Vertical Fillet Size	5/16	in
Weld Strength	70	ksi
Electrode Coefficient	1	-
Orientation Offset	0	°
Vertical Weld, ϕRn	139.5	k
Horz. Weld, ϕRn	59.1	k
Ten. Capacity, ϕTn	56.7	k
Comp. Capacity, ϕPn	228.8	k



Calculations for Monopole Base Plate & Anchor Rod Analysis

Reaction Distribution

Reaction	Shear Vu	Moment Mu	Factor
-	k	k-ft	-
Base Forces	40.7	2596.4	0.69
Anchor Rod Forces	40.7	2596.4	0.69
Additional Bolt (Grp1) Forces	0.0	0.0	0.00
Additional Bolt (Grp2) Forces	0.0	0.0	0.00
Dywidag Forces	0.0	1142.2	0.31
Stiffener Forces	13.7	870.6	0.23

Geometric Properties

Section	Gross Area	Net Area	Individual Inertia	Threads per Inch	Moment of Inertia
-	in ²	in ²	in ⁴	#	in ⁴
Pole	60.5515	5.0460	0.3235		15034.41
Bolt	3.9761	3.2477	0.8393	4.5	17324.53
Bolt1	0.0000	0.0000	0.0000	0	0.00
Bolt2	0.0000	0.0000	0.0000	0	0.00
Dywidag	4.9087	4.9087	1.9175		6613.69
Stiffener	1.7500	1.5750	10.6667		7584.82

Base Plate		
Shape	Round	-
Diameter, D	60	in
Thickness, t	2	in
Yield Strength, Fy	36	ksi
Tensile Strength, Fu	58	ksi
Base Plate Chord	39.686	in
Detail Type	c	-
Detail Factor	0.55	-
Clear Distance	N/A	-

Anchor Rods		
Anchor Rod Quantity, N	16	-
Rod Diameter, d	2.25	in
Bolt Circle, BC	54	in
Yield Strength, Fy	75	ksi
Tensile Strength, Fu	100	ksi
Applied Axial, Pu	153.1	k
Applied Shear, Vu	1.2	k
Compressive Capacity, φPn	259.8	k
Tensile Capacity, φRnt	0.589	OK
Interaction Capacity	0.598	OK

Base Plate Stiffeners		
Applied Axial Force, Pu	52.9	k
Applied Horizontal Force, Vu	0.43	k
Vertical Weld		
Vert.-to-Stiffener a=e _x /l	0.133	-
Spacing Ratio, k	0.050	-
Weld Coefficient, C	3.720	-
Compressive Capacity, φPn	139.5	k
Vert.-to-Plate a=e _x /l	0.333	-
Spacing Ratio, k	0.050	-
Weld Coefficient, C	2.940	-
Shear Capacity, φVn	110.3	k
P _u /φ _p P _n + V _u /φ _v V _n	0.383	OK

External Base Plate		
Chord Length AA	33.833	in
Additional AA	8.753	in
Section Modulus, Z	42.586	in ³
Applied Moment, Mu	834.6	k-ft
Bending Capacity, φMn	1379.8	k-ft
Capacity, Mu/φMn	0.605	OK
Chord Length AB	31.586	in
Additional AB	6.620	in
Section Modulus, Z	38.206	in ³
Applied Moment, Mu	486.2	k-ft
Bending Capacity, φMn	1237.9	k-ft
Capacity, Mu/φMn	0.393	OK

Horizontal Weld		
Horz.-to-Stiffener a=e _x /l	0.167	-
Spacing Ratio, k	0.125	-
Weld Coefficient, C	3.940	-
Effective Fillet	0.313	in
Compressive Capacity, φPn	59.1	k
Horz.-to-Pole a=e _x /l	0.417	-
Spacing Ratio, k	0.125	-
Weld Coefficient, C	2.670	-
Shear Capacity, φVn	40.1	k
P _u /φ _p P _n + V _u /φ _v V _n	0.906	OK

Bend Line Length	33.351	in
Additional Bend Line	50.762	in
Section Modulus, Z	84.113	in ³
Applied Moment, Mu	834.6	k-ft
Bending Capacity, φMn	2725.3	k-ft
Capacity, Mu/φMn	0.306	OK

Plate Tension		
Gross Cross Section	1.750	in ²
Net Cross Section	1.575	in ²
Tensile Capacity, φTn	56.7	k
Capacity, Tu/φTn	0.467	OK

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

Dywidag Reinforcement		
Dywidag Quantity, N	4	-
Dywidag Diameter, d	2.5	in
Bolt Circle, BC	51.88	in
Yield Strength, Fy	80	ksi
Tensile Strength, Fu	100	ksi
Applied Axial, Pu	223.6	k
Compressive Capacity, φPn	392.7	k
Capacity, Pu/φPn	0.569	OK

Plate Compression		
Radius of Gyration	0.144	in ³
kl/r	41.57	-
4.71 √(E/Fy)	133.68	-
Buckling Stress(F _e)	165.6	-
Crit. Buckling Stress(F _{cr})	145.3	ksi
Compressive Capacity, φPn	228.8	k
Capacity, Pu/φPn	0.116	OK

Site ID	302511
Site Name	WSPT-South
Project #	13333739_C3_02
Date	Wednesday, January 27, 2021
Engineer	THP

Version
1.0
12/6/2017



EXTENSION INTERFACE

Analysis Details		
Strength Reduction Factor, ϕ	0.9	

$k = Z/S$	1.75	
Weld Strength Reduction Factor, ϕ	0.75	

Section & Loading		
Extension Interface Elevation	125	ft
Total Moment, Mu_t	35.7	kip-ft
Total Shear, Vu_t	6.4	kip
Total Axial Load, Pu_t	4.6	kip

Forces on Single Interface Weldment		
Axial Compression, Pu	31.92	kip
Flexure (from Compression), Mu_P	155.47	kip-in
Axial Tension, Tu	28.88	kip
Flexure (from Tension), Mu_T	140.66	kip-in

Design Tensile Strength		
Design Tensile Strength, ϕPn	380.5	k
Usage	7.6%	Pass

Design Compressive Strength		
Effective Length Factor, k	1.0	-
Unbraced Length, Lu	22 1/2	in
Radius of Gyration, r	1.79	in
kL/r	12.60	-
Fcr	35.70	ksi
Design Compressive Strength, ϕPn	377.38	k
Usage	8.5%	Pass

Design Flexural Strength		
Yield Moment, My	257.3	kip-in
Plastic Moment (Stem in T), Mp_T	411.72	kip-in
Plastic Moment (Stem in C), Mp_C	257.33	kip-in
Lateral Torsional Bucking Variable, B	3.30	-
Nominal Moment (Stem in T), Mn_T	153032.76	kip-in
Nominal Moment (Stem in C), Mn_C	3366.26	kip-in
Limiting w-t Ratio (Flange), λp	10.79	-
w-t Ratio (Flange), λ	1.46	-
FLB Apply?	NO	-
Design Flexural Strength, ϕMn_T	370.55	kip-in
Usage	38.0%	Pass
Design Flexural Strength, ϕMn_C	231.59	kip-in
Usage	67.1%	Pass

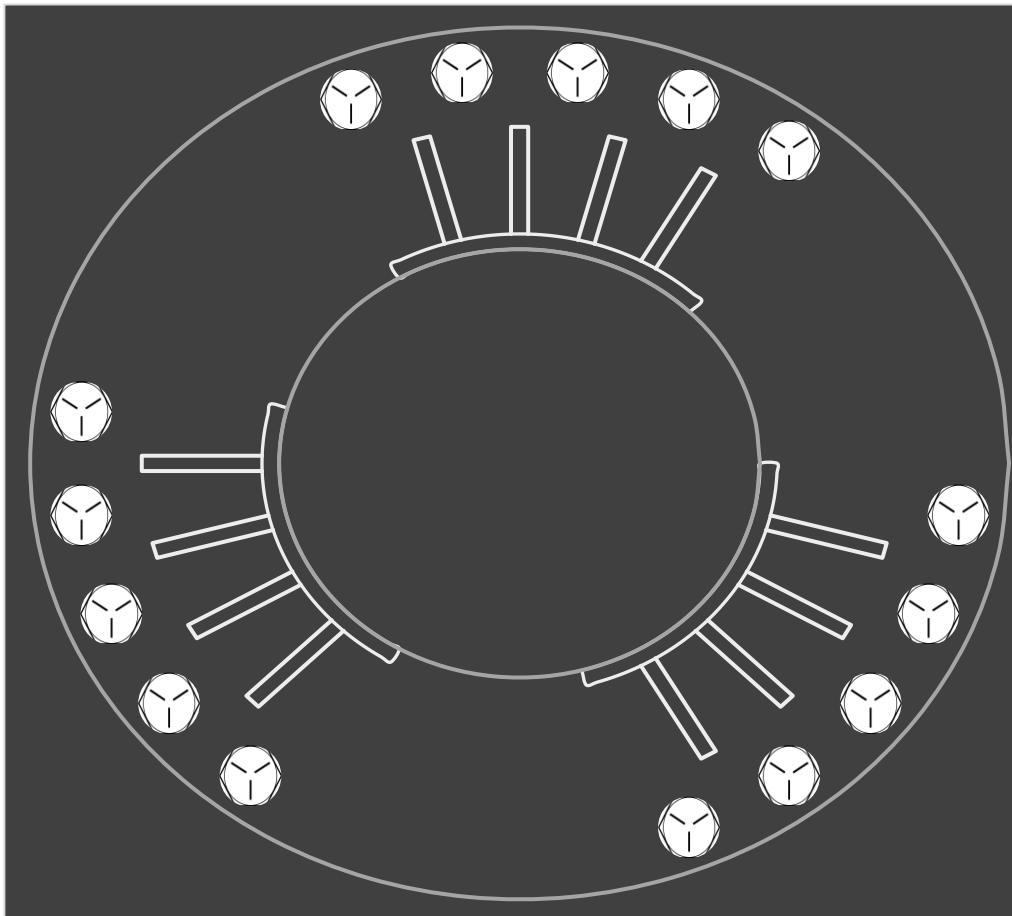
Weld Strength		
Weld Size, $D/16$	5/16	in
Weld Electrode Strength	70	ksi
Eccentricity, e_x	1.75	in
Weld Length	22 1/2	in
$a = (e_x/L)$	0.08	-
Weld Coefficient, C	3.72	-
Electrode Strength Coefficient, C_1	1.0	-
Pu_weld	63.0	kip
Design Strength, ϕRn	313.7	k
Usage	20.1%	Pass

Single Interface Weldment Section Properties		
Distance From Center to Centroid, d	8.00	in
Distance Between Centroids, e	4.87	in
Width of Stiffener, W	3.50	in
Thickness of Stiffener, t	0.50	in
Width of Pipe b/t Stiffener Plates, bf	1.46	in
Gross Area, Ag	11.75	in ²
Min Radius of Gyration, r	1.79	in
Section Modulus - Stiffener, Sx_s	7.15	in ³
Plastic Section Modulus, Zx	12.51	in ³
Moment of Inertia, Iy	83.120	in ⁴
Torsional Constant, J	0.979	in ⁴

Material Properties		
Stiffener Plate Grade	A36	-
Yield Strength, Fy (ksi)	36	ksi
Tensile Strength, Fu (ksi)	58	ksi
Modulus of Elasticity, E	29000	ksi
Shear Modulus of Elasticity, G	11200	ksi

Top of Tower Flange Details			Show Top Flange?	Y
Tower Flange Diameter	28.5	(in)		
Tower Flange Opening Dia	14	(in)		
Flange Bolt Circle	25.75	(in)		
Flange Bolt Size	1	(in)		
Number of bolts on flange	24	Works best with 3 and 4 pieces!		
Rotation of bolts	15.0°	7.5° half bolt rotation angle		

Interface Weldment Section Properties		
Rotation of shapes	7.5°	
Length of Stiffener Plate, L	22.50	(in)
Number of Pieces	3	3 or 4
Interface angles	75.0°	40° to 115°
Stiffener offset angle	15.0°	Min ang: 4.375°
Opening angles and width	45° & 10.61"	
Pipe Diameter	15	(in)
Pipe Thickness	0.5	(in)
Stiffener Base	3.5	(in)
Stiffener Thickness	0.5	(in)
Internal Stiffeners	2	



Stiffener Angle Overrides	

Equivalent Round Section for SES	

Flange Plate Analysis

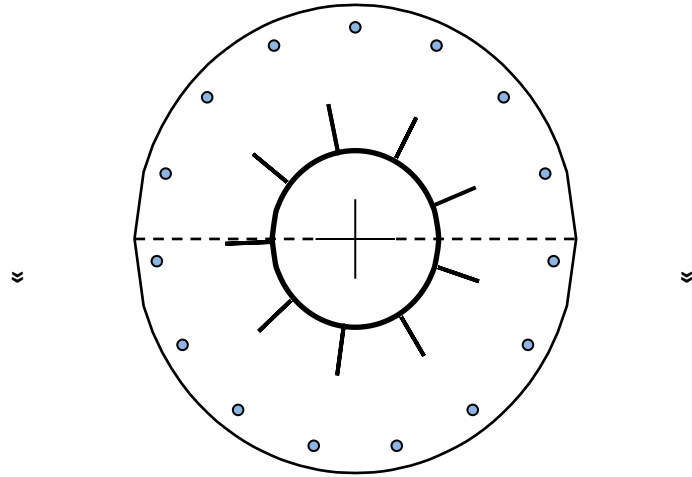
Flange Plate	Plate Type	Flange	@ 125 ft
	Pole Diameter	10.75	in
	Pole Thickness	0.365	in
	Plate Diameter	28.5	in
	Plate Thickness	0.75	in
	Plate Fy	36	ksi
	Weld Length	0.3125	in
	f _s Resistance	71.42	k-in
	Applied	27.86	k-in

Code Rev.	G
Moment	35.7 k-ft
Axial	4.6 k

Date	1/27/2021
Engineer	THP
Site #	302511
Carrier	AT&T MOBILITY

Stiffeners	#	9	Show
	Thickness	0.375	in
	Length	3.5	in
	Height	5	in
	Chamfer	0.5	in
	Offset Angle	0	°
	Fy	36	ksi

Bolts	#	15	
	Bolt Circle	25.75	in
	(R)adial / (S)quare	R	
	Bolt Gap	6	in
	Diameter	0.75	in
	Hole Diameter	0.875	in
	Type	A325	
	Fy	92	ksi
	Fu	120	ksi
f _s Resistance	30.10	k	
Applied	4.13	k	



Reinforcement	#		
---------------	---	--	--

Extra Bolts	O	#	
-------------	---	---	--

Plate Stress Ratio:
39% Pass

Bolt Stress Ratio:
14% Pass

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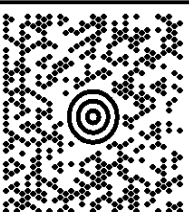
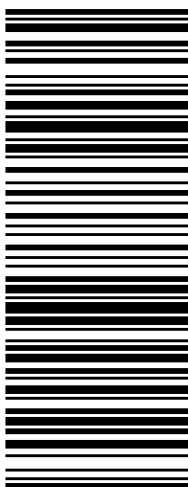

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Customers without a Daily Pickup

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 Resources area of CampusShip and select UPS Locations.


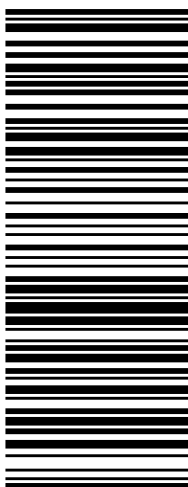

Schedule a same day or future day Pickup to have a UPS driver pickup all your CampusShip packages.
Hand the package to any UPS driver in your area.

UPS Access Point™
CVS STORE # 972
555 WASHINGTON ST
SOUTH EASTON ,MA 02375

UPS Access Point™
CVS STORE # 7232
689 DEPOT ST
NORTH EASTON ,MA 02356

UPS Access Point™
TOWN LINE GENERAL STORE
450 E CENTER ST
WEST BRIDGEWATER ,MA 02379

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<p>1 LBS</p> <p>1 OF 1</p> <p>PATRICIA NOWAK 508-265-5599 CENTERLINE COMMUNICATIONS, LLC 750 WEST CENTER STREET WEST BRIDGEWATER MA 02379</p> <p>SHIP TO: MARY YOUNG TOWN OF WESTPORT PLANNING AND ZONING DIRECTOR 110 MYRTLE AVE. WESTPORT CT 06880-3514</p>	<p>CT 066 9-02</p> 	<p>UPS GROUND</p> <p>TRACKING #: 1Z 9Y4 503 03 0819 5432</p> 	<p>BILLING: P/P</p> <p>Reference # 1: CT2103 - P&Z</p> <p>CS 22.0.13. WNTNV50 45.0A 04/2021*</p> 
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UPS CampusShip: 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.

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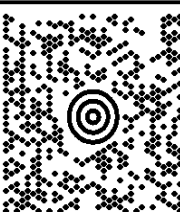
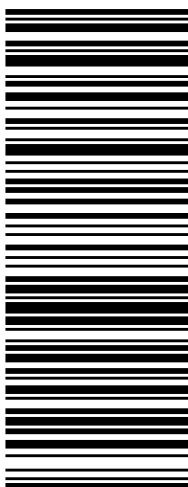

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<p>PATRICIA NOWAK 508-265-5599 CENTERLINE COMMUNICATIONS, LLC 750 WEST CENTER STREET WEST BRIDGEWATER MA 02379</p> <p>SHIP TO: JAY SHERWOOD PO BOX 48 WESTPORT CT 06881-0105</p>	<p>CT 066 9-02</p>  	<p>UPS GROUND</p> <p>TRACKING #: 1Z 9Y4 503 03 0182 3417</p> 	<p>BILLING: P/P</p>	 <p>Reference # 1: CT2103 - Land owner</p> <p><small>CS 22.0.13. WNTNV50 45.0A 04/2021*</small></p>
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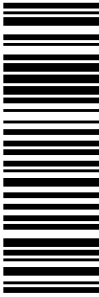


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