Dewberry

Dewberry Engineers Inc.
99 Summer Street, Suite 700
Boston, MA 02110-1200

617.695.3400
617.695.3310 fax
www.dewberry.com

February 14, 2023

Shawn Reed, Chief Building Official
Building Department
Stamford Government Center
888 Washington Boulevard
Stamford, CT 06901

Construction Closeout Letter
Building Permit #B-22-1135

ATC Site Name:	**Stamford (Katoona)**
ATC Asset#:	**88018**
AT&T Site#:	**CTL02135**
Site Address:	**168 Catoona Lane** **Stamford, CT 06902**

Dear Mr. Reed,

In accordance with the requirements of the 2018 Connecticut State Building Code, Dewberry Engineers Inc. (Dewberry) reviewed the completed installation at the above location based on Rev-0 Construction Drawings dated 07/18/22. A structural analysis report was completed by Airosmith Engineering, dated 11/24/21 and a mount analysis report was completed by American Tower Corporation dated 06/13/22.

Please see the attached reports and documentation for the completed site.

- February 14, 2023 – Contractor Report
- February 8, 2023 – As-Built drawings

Based on visual observations, it appears that the project is constructed in general conformance with the applicable plans and specifications. If you have any questions, please do not hesitate to contact Dewberry Engineers Inc.

Sincerely,
Dewberry Engineers Inc.

Benjamin Revette, P.E
Associate Vice President

Dewberry

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Statement of Special Inspections

Contractor Report #1

Attn: Mr. Blake Paynter
Project Manager
American Tower Corporation
10 Presidential Way
Woburn, MA 01801

ATC Site Name:	Stamford (Katoona)
ATC Site#/Project#:	88018 / 13683396
Site Address:	168 Catoona Lane Stamford, CT 06902
Contractor:	Centerline Communications, LLC

Dewberry Engineers Inc. (Dewberry) has reviewed the photos and as-built drawings provided by the general contractor of the recently completed site improvements at the aforementioned location. The site review was performed based on Rev-0 Construction Drawings dated 07/18/22. A structural analysis report was completed by Airosmith Engineering, dated 11/24/21 and a mount analysis report was completed by American Tower Corporation dated 06/13/22.

The following are on-site photos from the inspection:

Figure 1: View of installed alpha sector antennas and RRUs on existing sector frame
Figure 2: View of installed beta sector antennas and RRUs on existing sector frame
Figure 3: View of installed gamma sector antennas and RRUs on existing sector frame

All notes and items in this field report are a record of observations provided by the photos. Please notify Dewberry Engineers Inc. in writing of any discrepancies, errors or misinterpretations. Please find attached to this report, the figures and photos of construction and items observed.

Prepared By: _____

Joseph Mazzeo
Engineer

Contractor Photos:

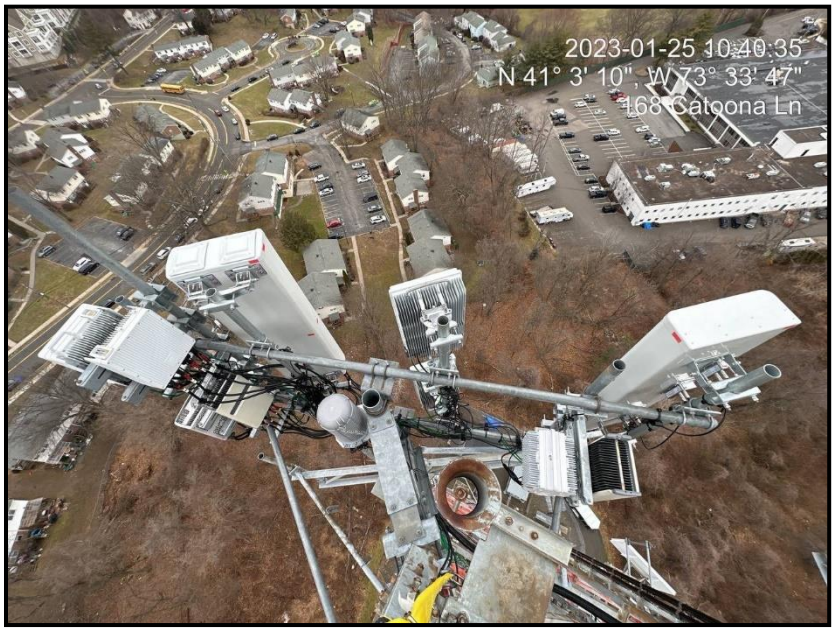
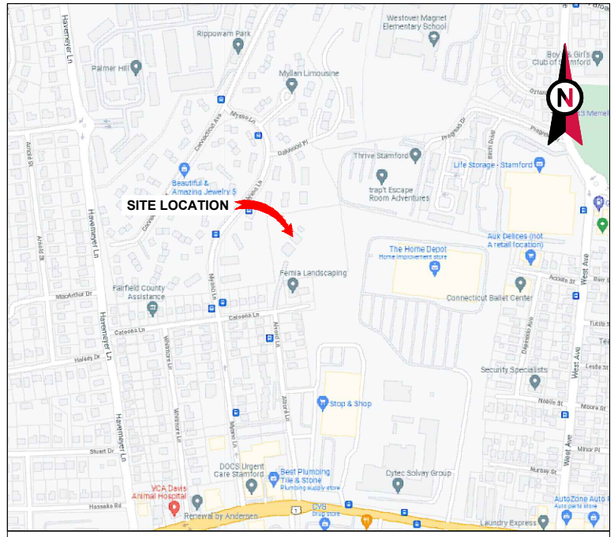


Figure 1: View of installed alpha sector antennas and RRUs on existing sector frame

Figure 2: View of installed beta sector antennas and RRUs on existing sector frame

Figure 3: View of installed gamma sector antennas and RRUs on existing sector frame

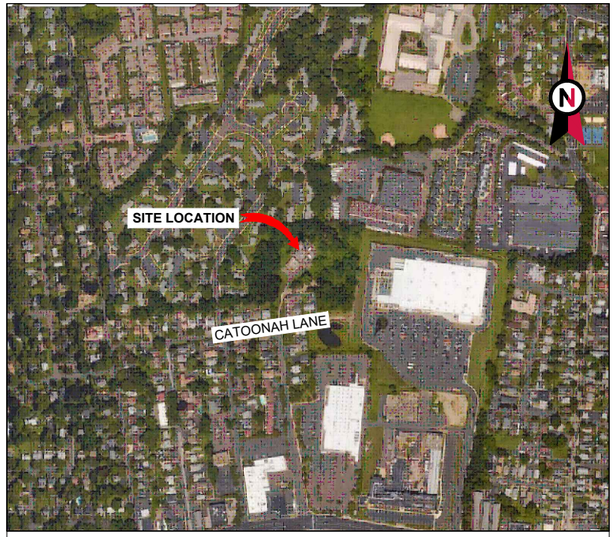
Redlined - C-401, S-103
Centerline Communications
Tristen Spear
2/8/23 8:47 AM



VICINITY MAP

AMERICAN TOWER®

ATC SITE NAME: STAMFORD (KATOONA)
ATC SITE NUMBER: 88018
AT&T PACE NUMBERS: MRCTB052218, MRCTB051710, MRCTB051667, MRCTB051681, MRCTB051674
AT&T SITE ID: CTL02135
AT&T FA CODE:10034997
AT&T SITE NAME: STAMFORD WEST
SITE ADDRESS: 168 CATOONA LANE
STAMFORD,CT 06902-4573



LOCATION MAP

BIRD WATCH SITE:
PLEASE CONTACT BIRD.WATCH@AMERICANTOWER.COM OR AMERICAN TOWER NOC AT 877-518-6937 FOR ASSISTANCE

AT&T 5G NR C-BAND / BBU / CPRI / 4TXRX AMENDMENT PLAN

COMPLIANCE CODE

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.

1. 2018 CONNECTICUT STATE BUILDING CODE-AMENDMENTS TO IBC 2015
2. INTERNATIONAL BUILDING CODE 2015, INTERNATIONAL CODE COUNCIL
3. TIA-222-G-4, STRUCTURAL STANDARD FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS
4. ASCE 7-10 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, AMERICAN SOCIETY OF CIVIL ENGINEERS
5. STEEL CONSTRUCTION MANUAL 14TH EDITION, AMERICAN INSTITUTE OF STEEL CONSTRUCTION
6. CITY/COUNTY ORDINANCES

UTILITY COMPANIES

POWER COMPANY: EVERSOURCE ENERGY/56002
PHONE: 888.783.6617

TELEPHONE COMPANY: ----
PHONE: ----

811 Know what's below. Call before you dig.

PROJECT SUMMARY

SITE ADDRESS:

168 CATOONA LANE
STAMFORD,CT 06902-4573
COUNTY: FAIRFIELD

GEOGRAPHIC COORDINATES:

LATITUDE: 41.052825
LONGITUDE: -73.56304722
GROUND ELEVATION: 50' AMSL

PROJECT TEAM

TOWER OWNER:

AMERICAN TOWER
10 PRESIDENTIAL WAY
WOBURN, MA 01801

ENGINEER:

DEWBERRY ENGINEERS, INC.
99 SUMMER STREET
SUITE 700
BOSTON, MA 02110

PROPERTY OWNER:

---
168 CATOONA LANE
STAMFORD,CT 06902-4573

APPLICANT:

AT&T MOBILITY
550 CHCHITUATE ROAD
SUITES 13&14
FRAMINGHAM, MA 01701

PROJECT DESCRIPTION

THE PROPOSED PROJECT INCLUDES MODIFYING GROUND BASED AND TOWER MOUNTED EQUIPMENT AS INDICATED PER BELOW:

TOWER WORK:

REMOVE (9) ANTENNA(S), (4) RRU(S), (3) DC SQUID(S), (2) DC CABLE(S), AND (3) FIBER CABLE(S)

INSTALL (10) ANTENNA(S), (2) RRU(S), (2) DC SQUID(S) AND MOUNT MODIFICATION(S)

EXISTING (3) ANTENNAS, (2) RRU(S), (2) SQUID(S), (4) DC AND (1) FIBER TRUNKS TO REMAIN

GROUND WORK:

INSTALL (1) 6648, (1) IDLE XCEDE, (1) 6675 FRONTHAUL GATEWAY AND (1) 6630

PROJECT NOTES

1. THE FACILITY IS UNMANNED.
2. A TECHNICIAN WILL VISIT THE SITE APPROXIMATELY ONCE A MONTH FOR ROUTINE INSPECTION AND MAINTENANCE.
3. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT LAND DISTURBANCE OR EFFECT OF STORM WATER DRAINAGE.
4. NO SANITARY SEWER, POTABLE WATER OR TRASH DISPOSAL IS REQUIRED.
5. HANDICAP ACCESS IS NOT REQUIRED.
6. THE PROJECT DEPICTED IN THESE PLANS QUALIFIES AS AN ELIGIBLE FACILITIES REQUEST ENTITLED TO EXPEDITED REVIEW UNDER 47 U.S.C. § 1455(A) AS A MODIFICATION OF AN EXISTING WIRELESS TOWER THAT INVOLVES THE COLLOCATION, REMOVAL, AND/OR REPLACEMENT OF TRANSMISSION EQUIPMENT THAT IS NOT A SUBSTANTIAL CHANGE UNDER CFR § 1.61000 (B)(7).

PROJECT LOCATION DIRECTIONS

COMING FROM NORTH I-95 TAKE EXIT 6. TURN RIGHT ONTO WEST AVE. TURN LEFT AT FIRST LIGHT ONTO W. MAIN ST. TURN RIGHT AT FIRST LIGHT AND FOLLOW ROAD TO END.

SHEET INDEX

SHEET NO:	DESCRIPTION:	REV:	DATE:	BY:
G-001	TITLE SHEET	0	07/18/22	VL
G-002	GENERAL NOTES	0	07/18/22	VL
C-101	DETAILED SITE PLAN	0	07/18/22	VL
C-201	TOWER ELEVATION	0	07/18/22	VL
C-401	RF SCHEDULE AND ANTENNA INSTALLATION	0	07/18/22	VL
C-501	CONSTRUCTION DETAILS	0	07/18/22	VL
E-501	GROUNDING DETAILS	0	07/18/22	VL
R-601	SUPPLEMENTAL			
R-602	SUPPLEMENTAL			
R-603	SUPPLEMENTAL			
	MOUNT MODIFICATION SHEETS (9 PAGES)			

AMERICAN TOWER®

Dewberry®
Dewberry Engineers Inc.
99 SUMMER STREET
SUITE 700
BOSTON, MA 02110
PHONE: 617.695.3400
FAX: 617.695.3310

REV.	DESCRIPTION	BY	DATE
A	PRELIM	FG	12/10/21
B	PRELIM	BR	03/15/22
0	FINAL	VL	07/18/22

ATC SITE NUMBER:
88018

ATC SITE NAME:
STAMFORD (KATOONA)

AT&T SITE NAME:
STAMFORD WEST

SITE ADDRESS:
168 CATOONA LANE
STAMFORD,CT 06902-4573

SEAL:

AT&T

DATE DRAWN:	12/10/21
ATC JOB NO:	13683396_D1
CUSTOMER ID:	CTL02135
CUSTOMER #:	10034997

TITLE SHEET

SHEET NUMBER:	REVISION:
G-001	0

GENERAL CONSTRUCTION NOTES:

1. OWNER FURNISHED MATERIALS, AT&T "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 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 ANSI/EIA/TIA-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 REP PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH REMEDIAL ACTION SHALL REQUIRE WRITTEN APPROVAL BY THE AT&T REP PRIOR TO PROCEEDING.
13. EACH CONTRACTOR SHALL COOPERATE WITH THE AT&T 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 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 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 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 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 REP TO DETERMINE IF ANY PERMITS WILL BE OBTAINED BY CONTRACTOR. ALL REQUIRED PERMITS NOT OBTAINED BY AT&T MUST BE OBTAINED, AND PAID FOR, BY THE CONTRACTOR.
23. CONTRACTOR SHALL INSTALL ALL SITE SIGNAGE IN ACCORDANCE WITH AT&T SPECIFICATIONS AND REQUIREMENTS.
24. CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO AT&T FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
25. ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND LOCATED ACCORDING TO AT&T 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 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 NEGLECT ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, OR BY THE ELEMENTS DUE TO NEGLECT 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 REP. ANY WORK FOUND BY THE AT&T 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 FURNISHED EQUIPMENT SHALL BE PICKED-UP AT THE AT&T WAREHOUSE, NO LATER THAN 48HR AFTER BEING NOTIFIED INSURED, STORED, UNCRATE, 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 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 OR THEIR ARCHITECT/ENGINEER.

STRUCTURAL STEEL NOTES:

1. STRUCTURAL STEEL SHALL CONFORM TO THE LATEST EDITION OF THE AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS."
2. STRUCTURAL STEEL ROLLED SHAPES, PLATES AND BARS SHALL CONFORM TO THE FOLLOWING ASTM DESIGNATIONS:
   - A. ASTM A-572, GRADE 50 - ALL W SHAPES, UNLESS NOTED OR A992 OTHERWISE
   - B. ASTM A-36 - ALL OTHER ROLLED SHAPES, PLATES AND BARS UNLESS NOTED OTHERWISE.
   - C. ASTM A-500, GRADE B - HSS SECTION (SQUARE, RECTANGULAR, AND ROUND)
   - D. ASTM A-325, TYPE SC OR N - ALL BOLTS FOR CONNECTING STRUCTURAL MEMBERS
   - E. ASTM F-1554 07 - ALL ANCHOR BOLTS, UNLESS NOTED OTHERWISE
3. ALL EXPOSED STRUCTURAL STEEL MEMBERS SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION PER ASTM A123. EXPOSED STEEL HARDWARE AND ANCHOR BOLTS SHALL BE GALVANIZED PER ASTM A153 OR B695.
4. ALL FIELD CUT SURFACES, FIELD DRILLED HOLES AND GROUND SURFACES WHERE EXISTING PAINT OR GALVANIZATION REMOVAL WAS REQUIRED SHALL BE REPAIRED WITH (2) BRUSHED COATS OF ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS.
5. DO NOT DRILL HOLES THROUGH STRUCTURAL STEEL MEMBERS EXCEPT AS SHOWN AND DETAILED ON STRUCTURAL DRAWINGS.
6. CONNECTIONS:
   - A. ALL WELDING TO BE PERFORMED BY AWS CERTIFIED WELDERS AND CONDUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE AWS WELDING CODE D1.1.
   - B. ALL WELDS SHALL BE INSPECTED VISUALLY. 25% OF WELDS SHALL BE INSPECTED WITH DYE PENETRANT OR MAGNETIC PARTICLE TO MEET THE ACCEPTANCE CRITERIA OF AWS D1.1. REPAIR ALL WELDS AS NECESSARY.
   - C. INSPECTION SHALL BE PERFORMED BY AN AWS CERTIFIED WELD INSPECTOR.
   - D. IT IS THE CONTRACTORS RESPONSIBILITY TO PROVIDE BURNING/WELDING PERMITS AS REQUIRED BY LOCAL GOVERNING AUTHORITY AND IF REQUIRED SHALL HAVE FIRE DEPARTMENT DETAIL FOR ANY WELDING ACTIVITY.
   - E. ALL ELECTRODES TO BE LOW HYDROGEN, MATCHING FILLER METAL, PER AWS D1.1, UNLESS NOTED OTHERWISE.
   - F. MINIMUM WELD SIZE TO BE 0.1875 INCH FILLET WELDS, UNLESS NOTED OTHERWISE.
   - G. PRIOR TO FIELD WELDING GALVANIZING MATERIAL, CONTRACTOR SHALL GRIND OFF GALVANIZING ½" BEYOND ALL FIELD WELD SURFACES. AFTER WELD AND WELD INSPECTION IS COMPLETE, REPAIR ALL GROUND AND WELDED SURFACES WITH ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURERS RECOMMENDATIONS.
   - H. THE CONTRACTOR SHALL PROVIDE ADEQUATE SHORING AND/OR BRACING WHERE REQUIRED DURING CONSTRUCTION UNTIL ALL CONNECTIONS ARE COMPLETE.
   - I. ANY FIELD CHANGES OR SUBSTITUTIONS SHALL HAVE PRIOR APPROVAL FROM THE ENGINEER, AND T- MOBILE PROJECT MANAGER IN WRITING

SPECIAL CONSTRUCTION ANTENNA INSTALLATION NOTES:

1. WORK INCLUDED:
   - A. ANTENNA AND COAXIAL CABLES ARE FURNISHED BY AT&T 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.
   - B. INSTALL ANTENNAS AS INDICATED ON DRAWINGS AND AT&T SPECIFICATIONS.
   - C. INSTALL GALVANIZED STEEL ANTENNA MOUNTS AS INDICATED ON DRAWINGS.
   - D. INSTALL FURNISHED GALVANIZED STEEL OR ALUMINUM WAVEGUIDE AND PROVIDE PRINTOUT OF THAT TEST.
   - 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).

AS BUILT
Centerline Communications
Tristen Spear
2/8/23 8:47 AM

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.

AMERICAN TOWER®

Dewberry®
Dewberry Engineers Inc.
99 SUMMER STREET
SUITE 700
BOSTON, MA 02110
PHONE: 617.695.3400
FAX: 617.695.3310

REV.	DESCRIPTION	BY	DATE
A	PRELIM	FG	12/10/21
B	PRELIM	BR	03/15/22
0	FINAL	VL	07/18/22

ATC SITE NUMBER:
88018

ATC SITE NAME:
STAMFORD (KATOONA)

AT&T SITE NAME:
STAMFORD WEST

SITE ADDRESS:
168 CATOONA LANE
STAMFORD,CT 06902-4573

SEAL:

AT&T

DATE DRAWN:	12/10/21
ATC JOB NO:	13683396_D1
CUSTOMER ID:	CTL02135
CUSTOMER #:	10034997

GENERAL NOTES

SHEET NUMBER:	REVISION:
G-002	0

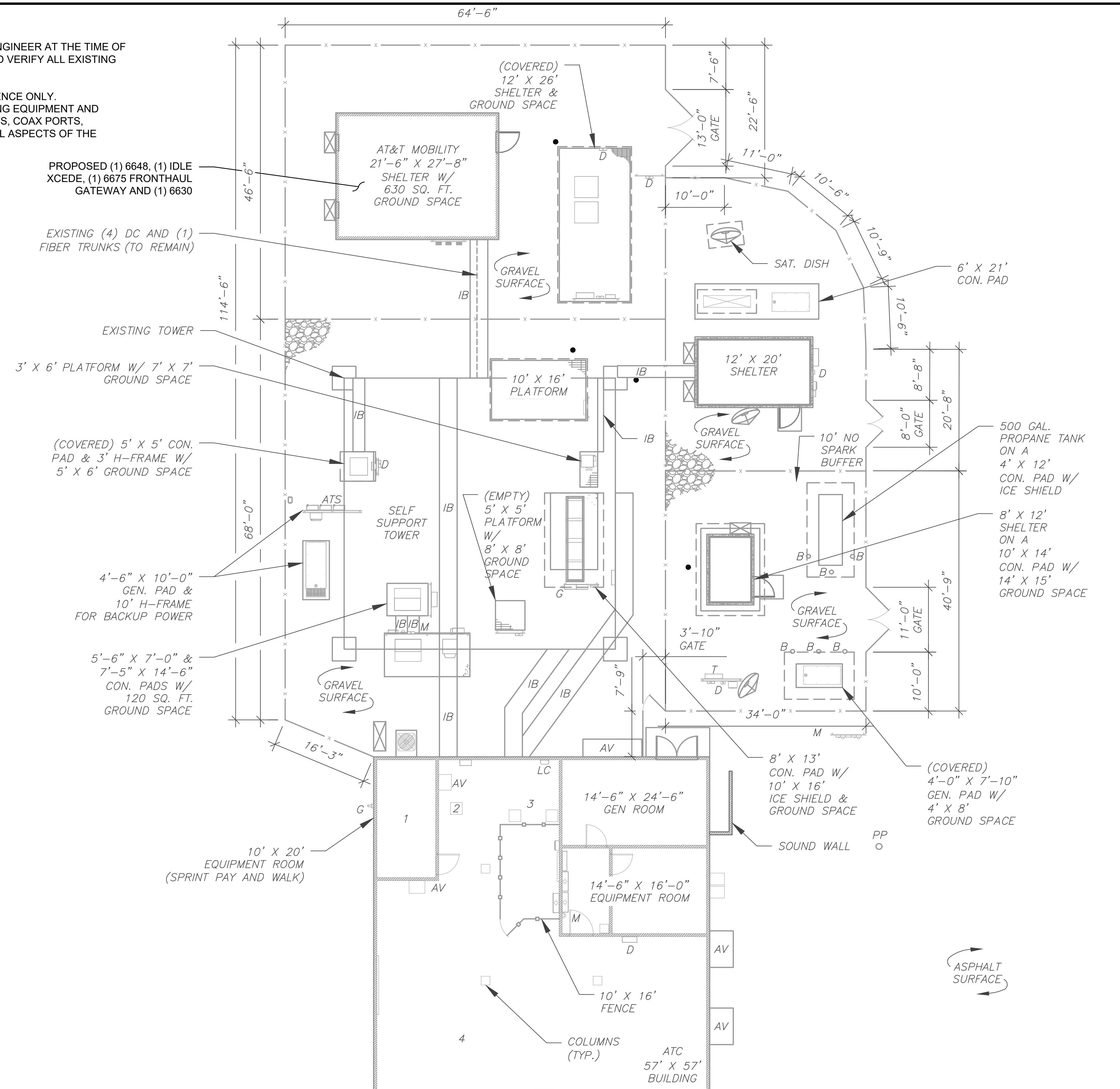
SITE PLAN NOTES:

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. THIS PROJECT INCLUDES NO INSTALL OR MODIFICATION AT GRADE.

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

AS BUILT
Centerline Communications
Tristen Spear
2/8/23 8:47 AM



1 DETAILED SITE PLAN

GRAPHIC SCALE

20 0 10 20

(IN FEET)
1 UNIT = 20 FEET

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Dewberry Engineers Inc.
99 SUMMER STREET
SUITE 700
BOSTON, MA 02110
PHONE: 617.695.3400
FAX: 617.695.3310

REV.	DESCRIPTION	BY	DATE
A	PRELIM	FG	12/10/21
B	PRELIM	BR	03/15/22
0	FINAL	VL	07/18/22

ATC SITE NUMBER:
88018

ATC SITE NAME:
STAMFORD (KATOONA)

AT&T SITE NAME:
STAMFORD WEST

SITE ADDRESS:
168 CATOONA LANE
STAMFORD,CT 06902-4573

SEAL:
STATE OF CONNECTICUT
28971
LICENSED
PROFESSIONAL ENGINEER

AT&T

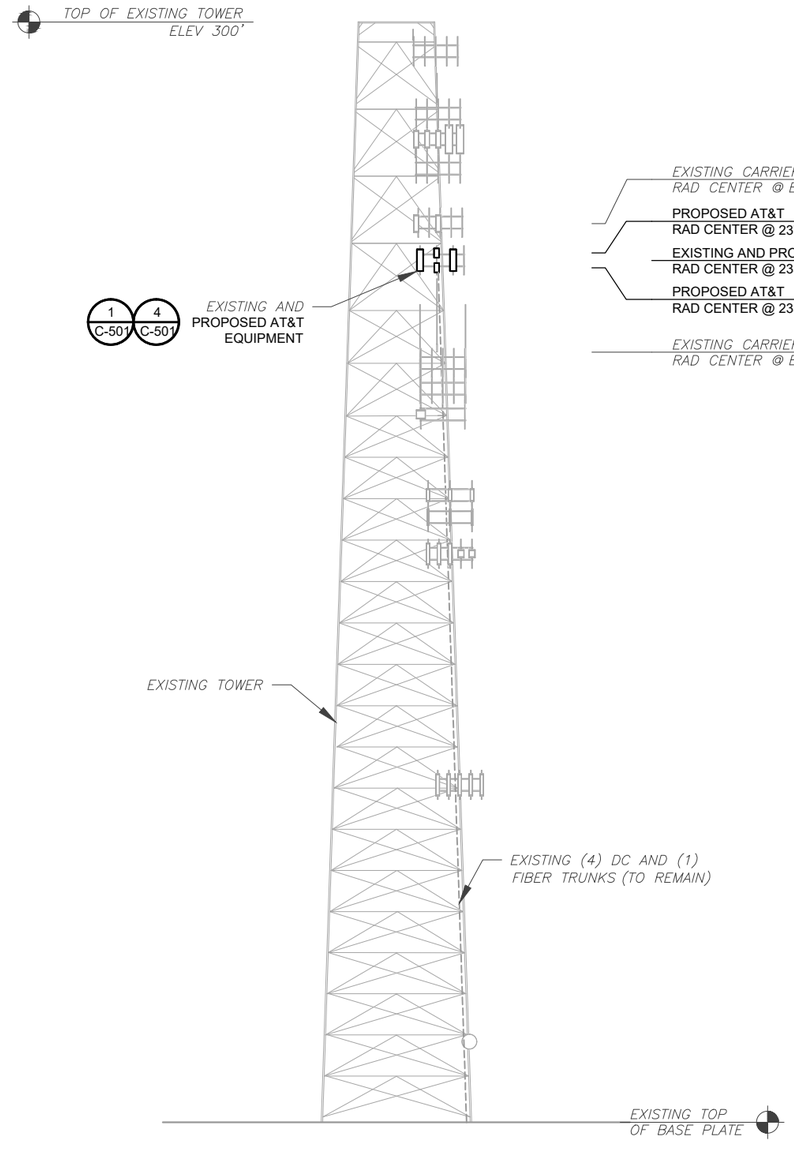
DATE DRAWN:	12/10/21
ATC JOB NO:	13683396_D1
CUSTOMER ID:	CTL02135
CUSTOMER #:	10034997

DETAILED SITE PLAN

SHEET NUMBER: C-101

REVISION: 0

PER MOUNT ANALYSIS COMPLETED BY AMERICAN TOWER CORPORATION, DATED 06/13/22, THE EXISTING MOUNT MUST BE MODIFIED TO ADEQUATELY SUPPORT THE PROPOSED LOADING. THE MOUNT MODIFICATION PROPOSED IN THE MOUNT ANALYSIS, INCLUDED AT THE END OF THIS PLAN SET, MUST BE INSTALLED PRIOR TO THE INSTALLATION OF THE PROPOSED ANTENNAS AND OTHER EQUIPMENT.



1 TOWER ELEVATION
SCALE: N.T.S.

AS BUILT
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2/8/23 8:47 AM

TOWER NOTE:
1. 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.
2. 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.
3. ROUTE PROPOSED CABLES ALONG SAME PATH AS EXISTING CABLES AND IN ACCORDANCE WITH STRUCTURAL ANALYSIS. WHERE POSSIBLE UTILIZE EXISTING CABLE SUPPORT STRUCTURES AS PROVIDED FOR CARRIER TO ADEQUATELY SECURE CABLES, USING EITHER APPROPRIATELY SIZED STAINLESS STEEL SNAP-INS OR MOUNTING HARDWARE AND BRACKETS AS SPECIFIED BY CABLE MANUFACTURER. OTHERWISE, ATTACH CABLES TO HORIZONTAL OR DIAGONAL TOWER MEMBERS USING PROPOSED STAINLESS STEEL ADAPTERS (DO NOT ATTACH TO TOWER LEG).
4. TOWER ELEVATIONS ARE MEASURED FROM TOP OF BASE PLATE TO MATCH STRUCTURAL ANALYSIS. ELEVATIONS DO NOT REFLECT TRUE ABOVE GROUND LEVEL (A.G.L.)
5. TOWER ELEVATION DEPICTION MAY NOT REFLECT ALL EQUIPMENT INCLUDED IN STRUCTURAL ANALYSIS. REFER TO STRUCTURAL ANALYSIS FOR FULL TOWER LOADING.

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AT&T SITE NAME:
STAMFORD WEST

SITE ADDRESS:
168 CATOONA LANE
STAMFORD,CT 06902-4573

SEAL:

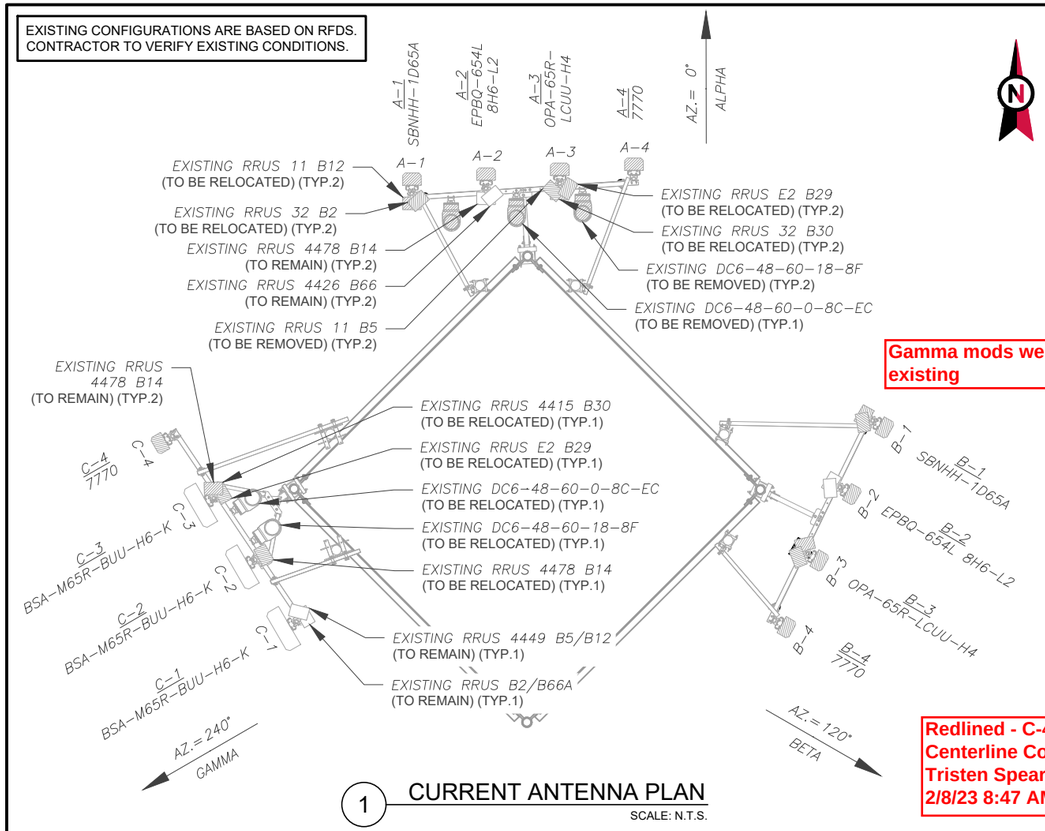
AT&T

DATE DRAWN:	12/10/21
ATC JOB NO:	13683396_D1
CUSTOMER ID:	CTL02135
CUSTOMER #:	10034997

TOWER ELEVATION

SHEET NUMBER:	REVISION:
C-201	0

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

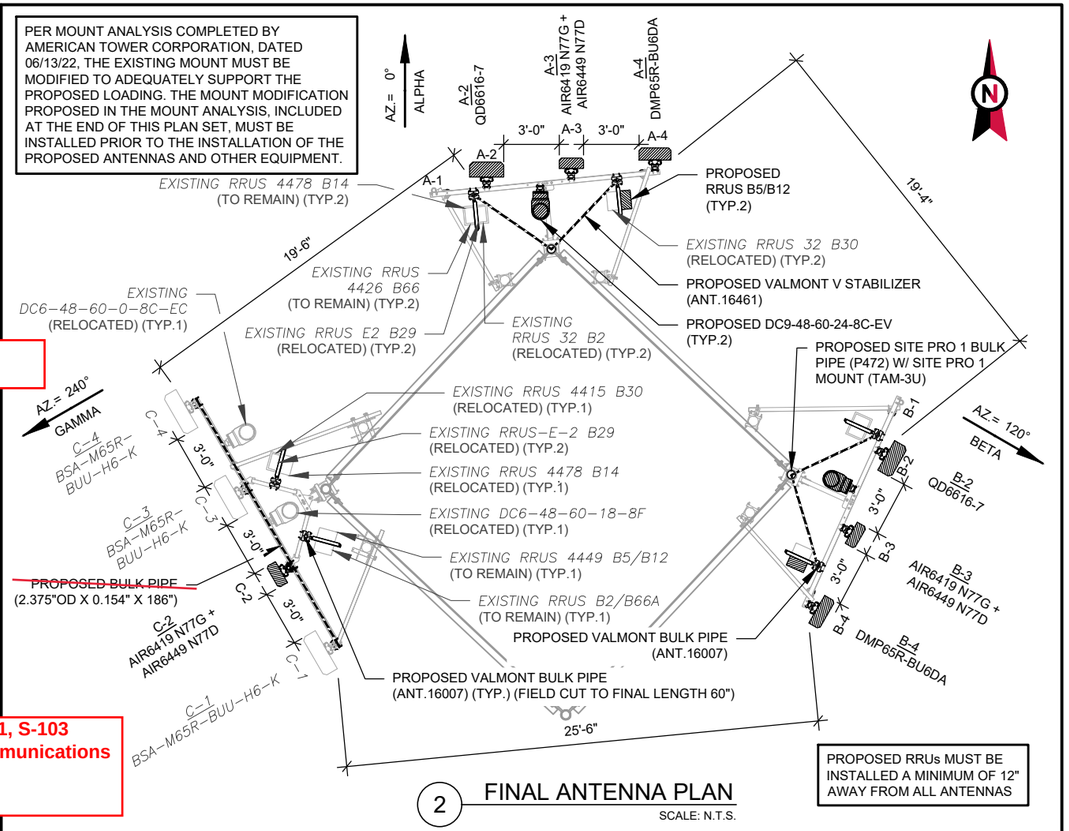


1 CURRENT ANTENNA PLAN
SCALE: N.T.S.

Gamma mods were existing

Redlined - C-401, S-103
Centerline Communications
Tristen Spear
2/8/23 8:47 AM

PER MOUNT ANALYSIS COMPLETED BY AMERICAN TOWER CORPORATION, DATED 06/13/22, THE EXISTING MOUNT MUST BE MODIFIED TO ADEQUATELY SUPPORT THE PROPOSED LOADING. THE MOUNT MODIFICATION PROPOSED IN THE MOUNT ANALYSIS, INCLUDED AT THE END OF THIS PLAN SET, MUST BE INSTALLED PRIOR TO THE INSTALLATION OF THE PROPOSED ANTENNAS AND OTHER EQUIPMENT.



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

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

EXISTING ANTENNA SCHEDULE

LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY	
SECTOR	RAD	AZ	POS	ANTENNA	BAND	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	237'	0°	A1	SBNHH-1D65A	LTE 700/1900/1900	RMV	RRUS 11 B12	RMV
							RRUS 32 B2	REL
			A2	EPBQ-654L 8H6-L2	LTE 700/AWS	RMV	RRUS 4478 B14	RMN
							RRUS 4426 B66	
			A3	OPA-65R-LCUU-H4	LTE 700/850/WCS	RMV	RRUS 11 B5	RMV
							RRUS E2 B29	REL
							RRUS 32 B30	
			A4	7770	UMTS 850	RMV	–	–
BETA	237'	120°	B1	SBNHH-1D65A	LTE 700/1900/1900	RMV	RRUS 11 B12	RMV
							RRUS 32 B2	REL
			B2	EPBQ-654L 8H6-L2	LTE 700/AWS	RMV	RRUS 4478 B14	RMN
							RRUS 4426 B66	
			B3	OPA-65R-LCUU-H4	LTE 700/850/WCS	RMV	RRUS 11 B5	RMV
							RRUS E2 B29	REL
							RRUS 32 B30	
			B4	7770	UMTS 850	RMV	–	–
GAMMA	237'	240°	C1	BSA-M65R-BUU-H6-K	LTE 700/850/1900/19000	RMN	RRUS 4449 B5/B12	RMN
							RRUS 8843 B2/B66A	
			C2	BSA-M65R-BUU-H6-K	LTE 700/AWS	REL	RRUS 4478 B14	REL
			C3	BSA-M65R-BUU-H6-K	LTE 700/WCS	REL	RRUS E2 B29	REL
							RRUS 4415 B30	
			C4	7770	UMTS 850	RMV	–	–

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

NOTES

1. CONFIRM WITH AT&T REP FOR APPLICABLE UPDATES/REVISIONS AND MOST RECENT RFDS FOR NSN CONFIGURATION (CONFIG). GC TO CAP ALL UNUSED PORTS.
2. CONFIRM SPACING OF PROPOSED EQUIP DOES NOT CAUSE TOWER CONFLICTS NOR IMPEDE TOWER CLIMBING PEGS.
3. 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.
4. CONTRACTOR TO ENSURE PROPER SEPARATION IN ACCORDANCE WITH AT&T'S FIRSTNET REQUIREMENTS (SEE SHEET R-602)

CABLE LENGTHS FOR JUMPERS

JUNCTION BOX TO RRU: 15'
RRU TO ANTENNA: 10'

STATUS ABBREVIATIONS

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

3 EQUIPMENT SCHEDULES

FINAL ANTENNA SCHEDULE

LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY	
SECTOR	RAD	AZ	POS	ANTENNA	BAND	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	235'	0°	A1	-	-	-	-	-
			A2	QD6616-7	LTE 700/700/1900/1900/AWS/ 5G AWS/5G 1900	ADD	RRUS 4478 B14	RMN
							RRUS 4426 B66	
							RRUS 32 B2	REL
							RRUS E2 B29	
	237'		A3	AIR6419 N77G	5G CBAND	ADD	INTEGRATED	ADD
	233'			AIR6449 N77D			INTEGRATED	
	235'		A4	DMP65R-BU6DA	LTE 700/5G 850/LTE WCS	ADD	RRUS 4449 B5/B12	ADD
							RRUS 32 B30	REL
BETA	235'	120°	B1	-	-	-	-	-
			B2	QD6616-7	LTE 700/700/AWS/1900/1900/ 5G AWS/5G 1900	ADD	RRUS 4478 B14	RMN
							RRUS 4426 B66	
							RRUS 32 B2	REL
							RRUS E2 B29	
	237'		B3	AIR6419 N77G	5G CBAND	ADD	INTEGRATED	ADD
	233'			AIR6449 N77D			INTEGRATED	
	235'		B4	DMP65R-BU6DA	LTE 700/5G 850/LTE WCS	ADD	RRUS 4449 B5/B12	ADD
							RRUS 32 B30	REL
GAMMA	235'	240°	C1	BSA-M65R-BUU-H6-K	LTE 700/5G 850/LTE 1900/1900/5G 1900	RMN	RRUS 4449 B5/B12	RMN
							RRUS 8843 B2/B66A	
	237'		C2	AIR6419 N77G	5G CBAND	ADD	INTEGRATED	ADD
	233'			AIR6449 N77D			INTEGRATED	
	235'		C3	BSA-M65R-BUU-H6-K	LTE 700/AWS/5G AWS	REL	RRUS 4478 B14	REL
			C4	BSA-M65R-BUU-H6-K	LTE 700/WCS	REL	RRUS E2 B29	REL
							RRUS 4415 B30	

FINAL FIBER DISTRIBUTION/SQUID		FINAL CABLING SUMMARY			
MODEL NUMBER	STATUS	COAX	DC	FIBER	STATUS
(1) DC6-48-60-18-8F (1) DC6-48-60-0-8C-EC	RMN	-	(4) DC	(1) FIBER	RMN
(2) DC9-48-60-24-8C-EV	ADD	-	-	-	-

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STAMFORD,CT 06902-4573

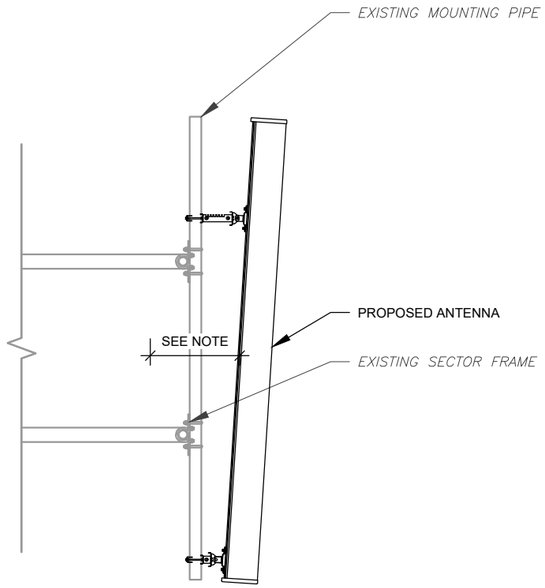
SEAL:

AT&T

DATE DRAWN:	12/10/21
ATC JOB NO:	13683396_D1
CUSTOMER ID:	CTL02135
CUSTOMER #:	10034997

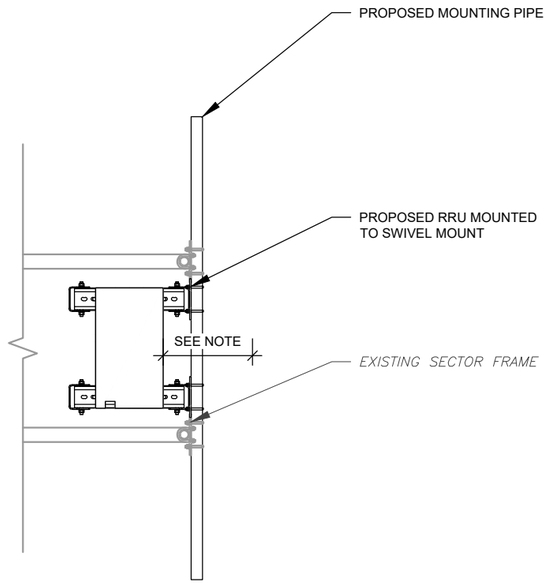
RF SCHEDULE AND ANTENNA INSTALLATION

SHEET NUMBER:	REVISION:
C-401	0



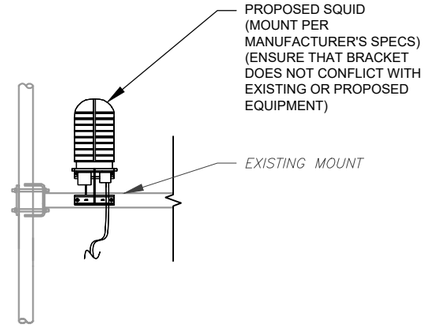
NOTE: 8" MINIMUM SEPARATION FROM BACK OF ANTENNA TO RRU

1 ANTENNA DETAIL
SCALE: N.T.S.

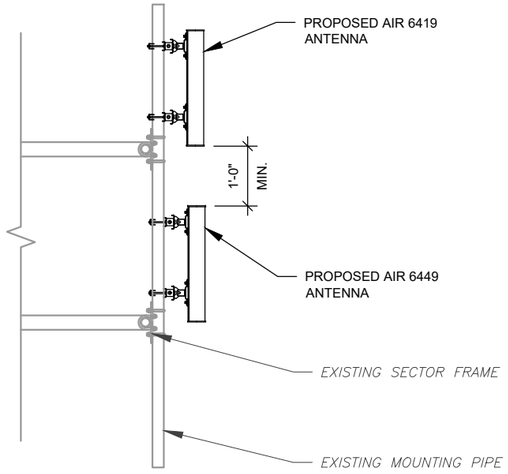


NOTE: 8" MINIMUM SEPARATION FROM BACK OF ANTENNA TO RRU

2 PROPOSED RRU MOUNTING DETAIL - TYPICAL
SCALE: N.T.S.



3 PROPOSED SQUID MOUNTING
SCALE: N.T.S.



4 PROPOSED 5G ANTENNA MOUNTING DETAIL - TYPICAL
SCALE: N.T.S.

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AT&T SITE NAME:
STAMFORD WEST

SITE ADDRESS:
168 CATOONA LANE
STAMFORD,CT 06902-4573

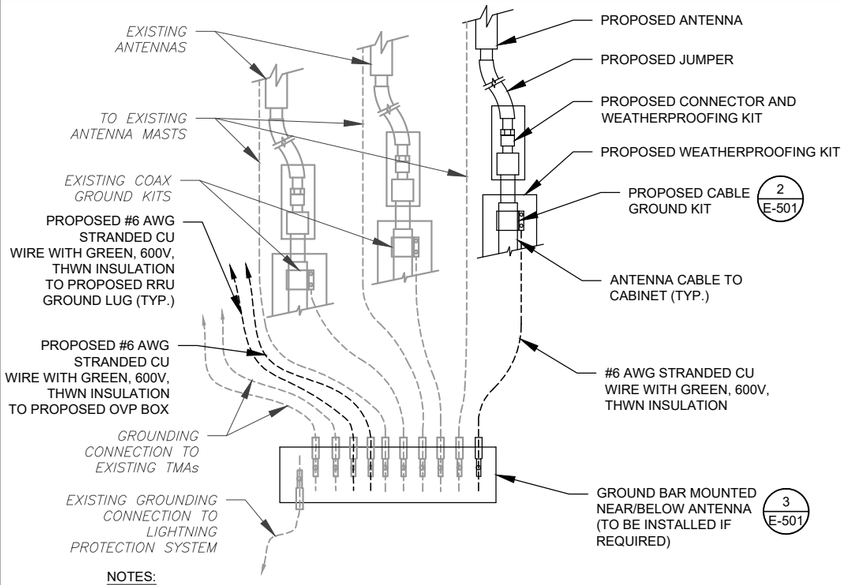
SEAL:

AT&T

DATE DRAWN:	12/10/21
ATC JOB NO:	13683396_D1
CUSTOMER ID:	CTL02135
CUSTOMER #:	10034997

CONSTRUCTION DETAILS

SHEET NUMBER:	REVISION:
C-501	0

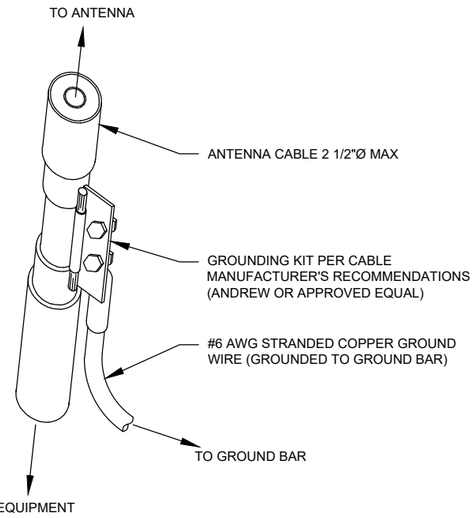


NOTES:

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 GROUNDING STANDARDS, LATEST EDITION, AND COMPLY WITH AT&T 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.

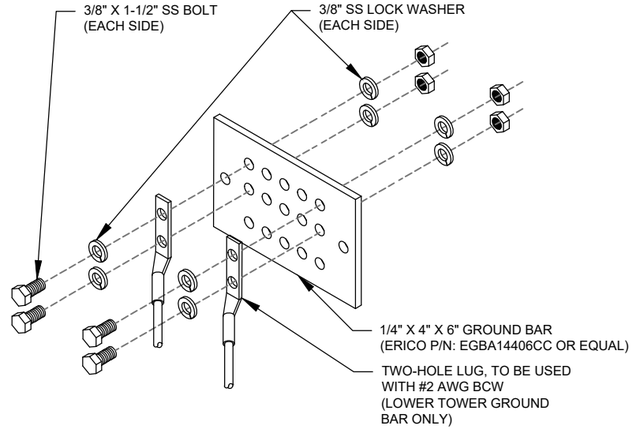


GROUND KIT NOTES:

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.

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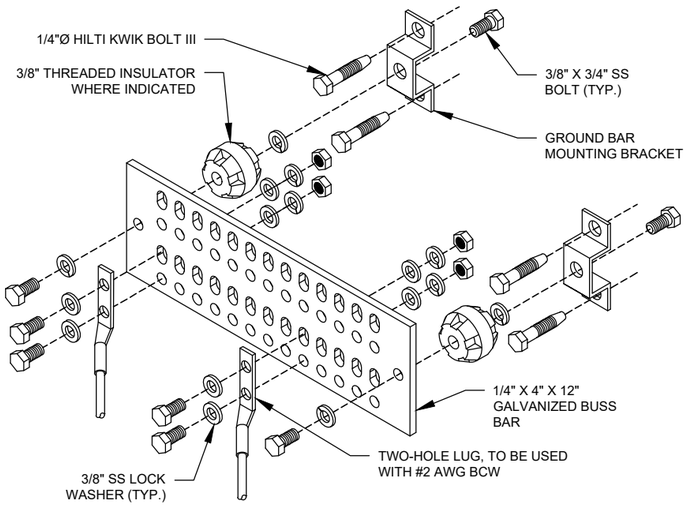
Tristen Spear
2/8/23 8:47 AM

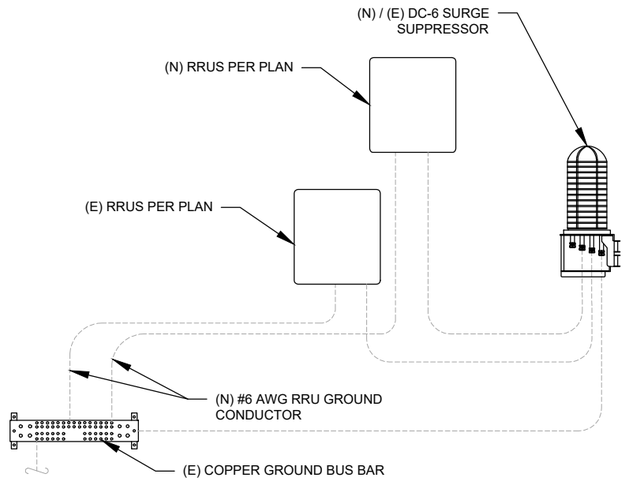


GROUND BAR NOTES

1. GROUND KITS COME WITH ALL HARDWARE, NUTS, BOLTS, WASHERS, ETC. EXCEPT THE STRUCTURAL MOUNTING MEMBER(S).
2. GROUND BAR SHALL BE BOLTED TO STRUCTURAL MEMBER OR ANCHORED TO CONCRETE SLAB W/ HILTI KWIK BOLT III.

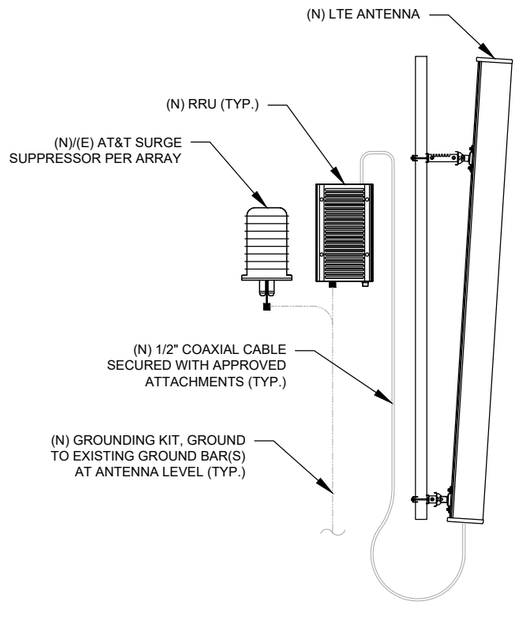
4 MAIN GROUND BAR DETAIL

SCALE: N.T.S.



5 RRU GROUNDING

SCALE: N.T.S.



6 ANTENNA/RRU GROUNDING

SCALE: N.T.S.

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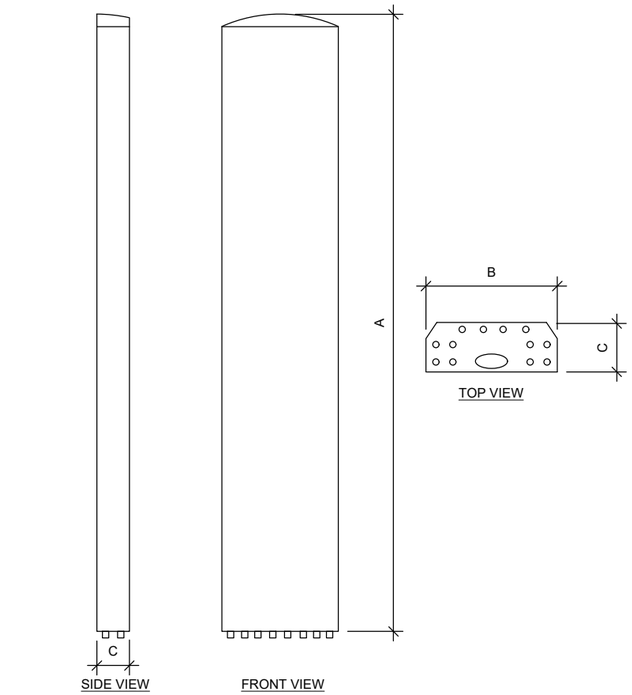
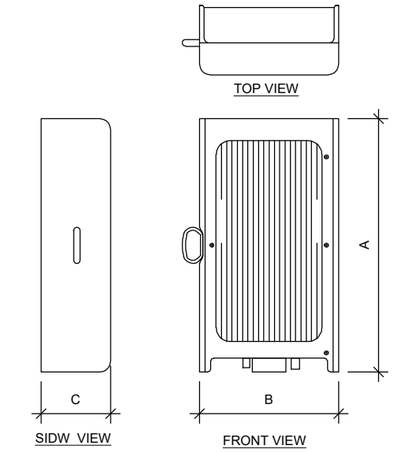
GROUNDING DETAILS

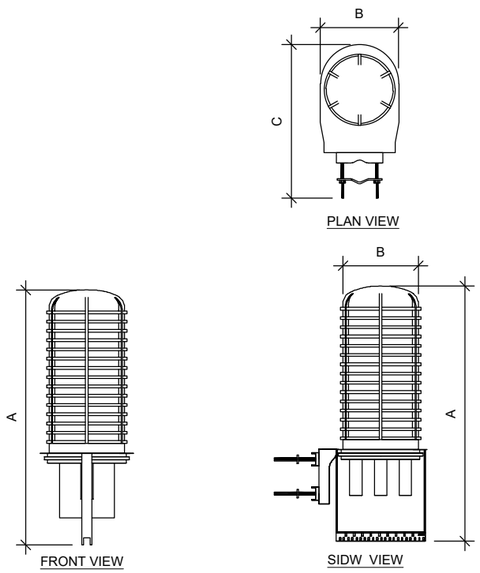
SHEET NUMBER:	REVISION:
E-501	0



ANTENNA SPECIFICATIONS				
ANTENNA MODEL	A	B	C	WEIGHT (LBS)
AIR 6449 N77D	30.4"	15.9"	8.1"	81.6
AIR6419 N77G	15.7"	30"	6.7"	70.0
DMP65R-BU6DA	71.2"	20.7"	7.7"	79.4



RRU SPECIFICATIONS				
RRU MODEL	A	B	C	WEIGHT (LBS)
RRUS 4449 B5, B12	17.9"	13.2"	9.4"	71.0



RAYCAP SPECIFICATIONS				
RAYCAP MODEL	A	B	C	WEIGHT (LBS)
DC9-48-60-24-8C-EV	31.4"	18.3"	10.2"	16.0

AS BUILT
Centerline Communications
Tristen Spear
2/8/23 8:47 AM

1 EQUIPMENT SPECIFICATIONS
SCALE: N.T.S.

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CUSTOMER #:	10034997

SUPPLEMENTAL

SHEET NUMBER:
R-601

AMERICAN TOWER®
CORPORATION

Post Modification Mount Analysis Report

ATC Site Name	:	**STAMFORD (KATOONA), CT**
ATC Site Number	:	**88018**
Engineering Number	:	**13683396_C9_10**
Mount Elevation	:	**236 ft**
Carrier	:	**AT&T Mobility**
Carrier Site Name	:	**MRCTB051681**
Carrier Site Number	:	**N/A**
Site Location	:	**168 Catoona Lane** **Stamford, CT 06902-4573** **41.052825 , -73.56304722**
County	:	**Fairfield**
Date	:	**July 13, 2022**
Max Usage	:	**63%**
Result	:	**Contingent Pass**

Prepared By:
Mitchell Chen
Structural Engineer II

Reviewed By:

STATE OF CONNECTICUT
ESHA KAUSHAL MODI
32593
LICENSED
PROFESSIONAL ENGINEER

COA: PEC.0001553

AMERICAN TOWER®
CORPORATION

Introduction

The purpose of this report is to summarize results of the mount analysis performed for AT&T Mobility at 236 ft.

Supporting Documents

Specification Sheets	Sabre C10857001C, dated November 15, 2021 MTS SF-U12, dated September 17, 2003
Mount Mapping	Engineered Tower Solutions Project #21094494, dated November 4, 2021
Radio Frequency Data Sheet	RFDS ID #10034997, dated October 25, 2021
Reference Photos	Site photos from 2021

Analysis

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

Basic Wind Speed:	117 mph (3-Second Gust)
Basic Wind Speed w/ Ice:	50 mph (3-Second Gust) w/ 1.00" radial ice concurrent
Codes:	ANSI/TIA-222-H
Exposure Category:	B
Risk Category:	II
Topographic Factor Procedure:	Method 2
Feature:	Flat
Crest Height (H):	0 ft
Crest Length (L):	0 ft
Spectral Response:	Ss = 0.265, S1 = 0.059
Site Class:	D - Stiff Soil - Default
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 modification per ATC Drawing #13683396_C9_10

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.

A.T. Engineering Service, PLLC - 3500 Regency Parkway, Suite 100 - Cary, NC 27518 - 919.468.0112 Office - 919.466.5414 Fax - www.americantower.com

AS BUILT
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1 MOUNT ANALYSIS

NOTE: THIS SHEET WAS CREATED BY OTHERS AND PROVIDED AT THE REQUEST OF THE CUSTOMER WITHOUT EDIT. PLEASE REFERENCE THE MOUNT ANALYSIS REPORT FOR COMPLETE MOUNT ANALYSIS CALCULATIONS AND DETAILS. SUPPLEMENTAL PAGES INCLUDED IN THE CONSTRUCTION DRAWINGS ARE FOR REFERENCE ONLY. GENERAL CONTRACTOR IS TO VERYIFY THEY HAVE THE MOST RECENT MOUNT ANALYSIS PRIOR TO CONTRUCTION.

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PHONE: 617.695.3400
FAX: 617.695.3310

ATC SITE NUMBER:
88018

ATC SITE NAME:
STAMFORD (KATOONA)

AT&T SITE NAME:
STAMFORD WEST

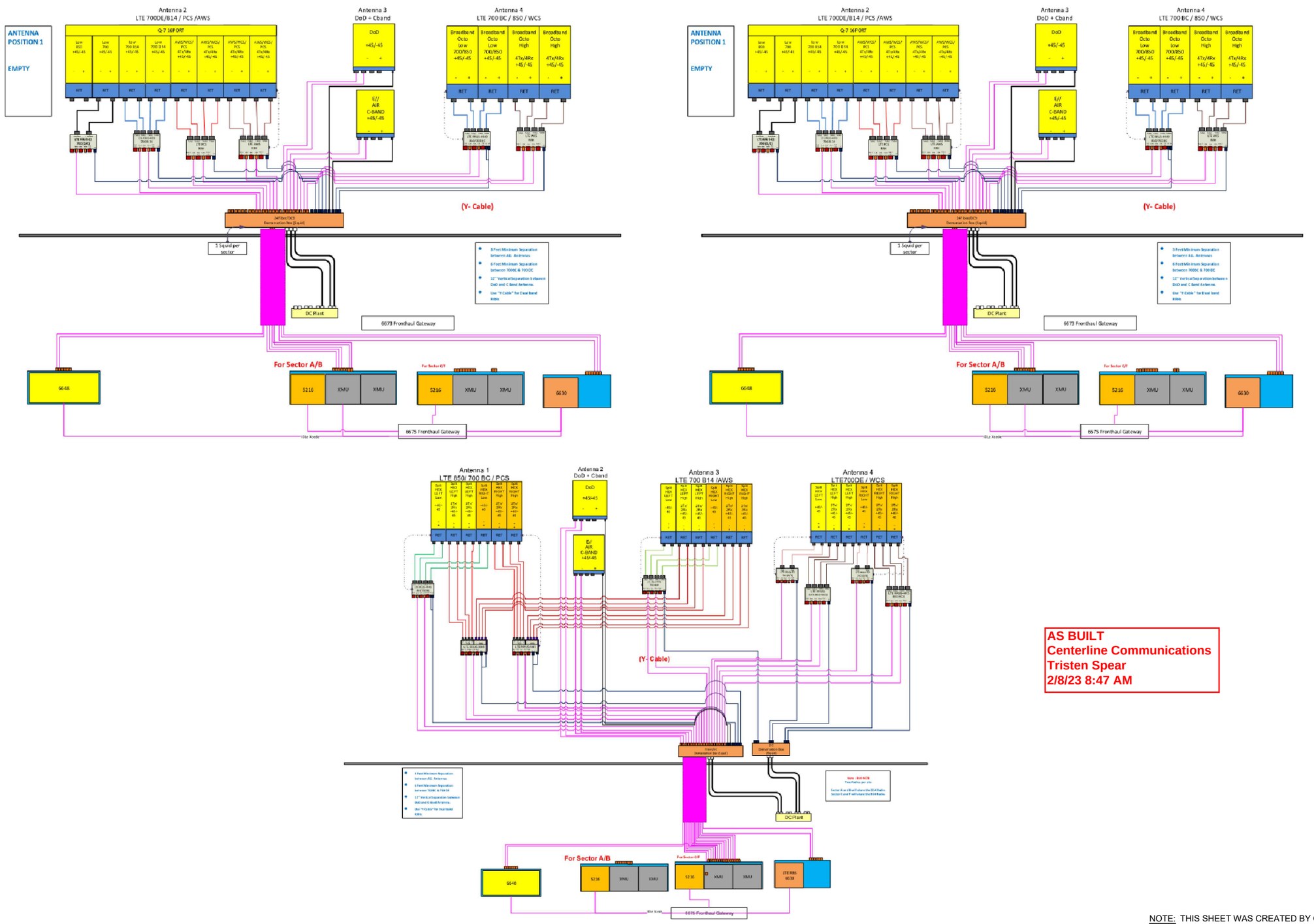
SITE ADDRESS:
168 CATOONA LANE
STAMFORD,CT 06902-4573

AT&T

DATE DRAWN:	12/10/21
ATC JOB NO:	13683396_D1
CUSTOMER ID:	CTL02135
CUSTOMER #:	10034997

SUPPLEMENTAL

SHEET NUMBER:
R-602



1 RFDS PLUMBING DIAGRAM

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AT&T

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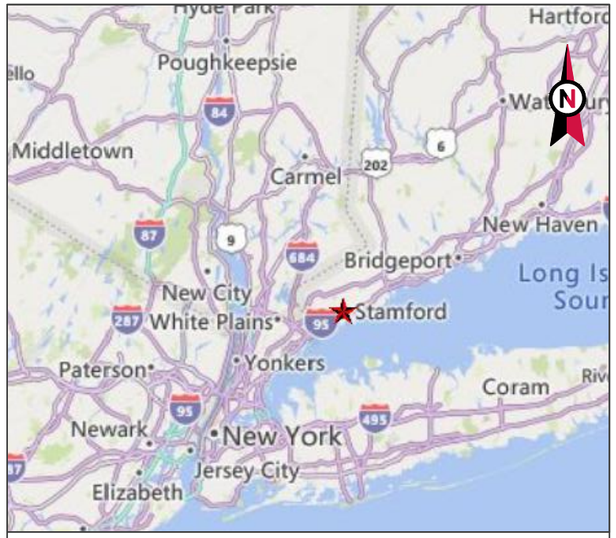
CUSTOMER #:	10034997

SUPPLEMENTAL

SHEET NUMBER:
R-603



VICINITY MAP

AMERICAN TOWER®

SITE NAME: STAMFORD (KATOONA)
SITE NUMBER: 88018
ATC PROJECT NUMBER: 13683396_C9_10
SITE ADDRESS: 168 CATOONA LANE
STAMFORD, CT 06902

LOCATION MAP

BIRD WATCH SITE:
PLEASE CONTACT BIRD.WATCH@AMERICANTOWER.COM OR AMERICAN TOWER NOC AT 877-518-6937 FOR ASSISTANCE

MOUNT REINFORCEMENT DRAWINGS
PREPARED FOR AT&T MOBILITY

PROJECT TEAM

TOWER OWNER

AMERICAN TOWER
10 PRESIDENTAL WAY
WOBURN, MA 01801

ENGINEERED BY

ATC TOWER SERVICES
3500 REGENCY PARKWAY, SUITE 100
CARY, NC 27518

CARRIER INFORMATION

CARRIER: AT&T MOBILITY
CARRIER SITE NAME: MRCTB051681
CARRIER SITE NUMBER: N/A

811 Know what's below. Call before you dig.

PROJECT DESCRIPTION

THE PROJECT DEPICTED IN THESE PLANS ARE BASED ON THE RECOMMENDATIONS OUTLINED IN THE STRUCTURAL ANALYSIS COMPLETED UNDER ENGINEERING PROJECT NUMBER 13683396_C8_09 DATED 07/07/22. SATISFACTORY COMPLETION OF THE WORK INDICATED IN THESE PLANS WILL RESULT IN THE STRUCTURE MEETING THE REQUIREMENTS OF THE SPECIFICATIONS UNDER WHICH THE STRUCTURAL WAS COMPLETED.

PROJECT NOTE

THE PROJECT DEPICTED IN THESE PLANS QUALIFIES AS AN ELIGIBLE FACILITIES REQUEST ENTITLED TO EXPEDITED REVIEW UNDER 47 U.S.C. § 1455(A) AS A MODIFICATION OF AN EXISTING WIRELESS TOWER THAT INVOLVES THE COLLOCATION, REMOVAL, AND/OR REPLACEMENT OF TRANSMISSION EQUIPMENT THAT IS NOT A SUBSTANTIAL CHANGE UNDER CFR § 1.6100 (B)(7).

COMPLIANCE CODE

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.

1. ANSI/TIA/EIA: STRUCTURAL STANDARDS (222-H EDITION)
2. INTERNATIONAL BUILDING CODE (2015 IBC)
3. CONNECTICUT STATE BUILDING CODE (2018)

PROJECT LOCATION

GEOGRAPHIC COORDINATES

LATITUDE: 41.05281657

LONGITUDE: -73.56307265

SHEET	SHEET TITLE	REV.
G-002	IBC GENERAL NOTES & MOUNT MODIFICATION INSPECTION	0
S-101	MODIFICATION PROFILE (ALPHA & BETA SECTORS)	0
S-102	MODIFICATION PROFILE (GAMMA SECTOR)	0
S-103	SAFETY CLIMB LAYOUT	0
R-901	SUPPLEMENTAL	0
R-902	SUPPLEMENTAL	0
R-903	SUPPLEMENTAL	0
R-904	SUPPLEMENTAL	0

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Centerline Communications
Tristen Spear
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COA: PEC.0001553

REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	KPJ	07/14/22

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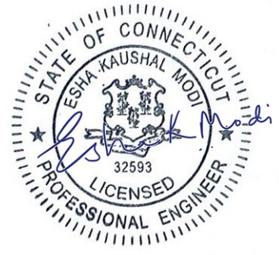


DRAWN BY:	KPJ
APPROVED BY:	MCC
DATE DRAWN:	07/14/22
ATC JOB NO:	13683396_C9_10

COVER

SHEET NUMBER:	REVISION:
G-001	0

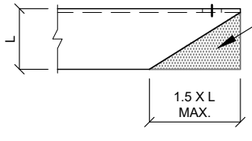
GENERAL

1. ALL WORK TO BE COMPLETED PER APPLICABLE LOCAL, STATE, FEDERAL CODES AND ORDINANCES AND COMPLY WITH ATC CONSTRUCTION SPECIFICATIONS FOR WIRELESS TOWER SITES. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND ABIDING BY ALL REQUIRED PERMITS.
2. ALL WORK INDICATED ON THESE DRAWINGS SHALL BE PERFORMED BY QUALIFIED CONTRACTORS EXPERIENCED IN TOWER AND FOUNDATION CONSTRUCTION.
3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD IMMEDIATELY OF ANY INSTALLATION INTERFERENCES. ALL NEW WORK SHALL ACCOMMODATE EXISTING CONDITIONS. DETAILS NOT SPECIFICALLY SHOWN ON THE DRAWINGS SHALL FOLLOW SIMILAR DETAILS FOR THIS JOB.
4. ANY SUBSTITUTIONS SHALL CONFORM TO THE REQUIREMENTS OF THESE NOTES AND SPECIFICATIONS, AND SHOULD BE SIMILAR TO THOSE SHOWN. ALL SUBSTITUTIONS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
5. ANY MANUFACTURED DESIGN ELEMENTS SHALL CONFORM TO THE REQUIREMENTS OF THESE NOTES AND SPECIFICATIONS AND SHOULD BE SIMILAR TO THOSE SHOWN. THESE DESIGN ELEMENTS MUST BE STAMPED BY AN ENGINEER PROFESSIONALLY REGISTERED IN THE STATE OF THE PROJECT, AND SUBMITTED TO THE ENGINEER OF RECORD FOR APPROVAL PRIOR TO FABRICATION.
6. ALL WORK SHALL BE DONE IN ACCORDANCE WITH LOCAL CODES AND OSHA SAFETY REGULATIONS.
7. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND EXECUTION OF ALL MISCELLANEOUS SHORING, BRACING, TEMPORARY SUPPORTS, ETC. NECESSARY, PER ANSI/TIA-322 AND ANSI/ASSE A10.48, TO PROVIDE A COMPLETE AND STABLE STRUCTURE AS SHOWN ON THESE DRAWINGS.
8. CONTRACTOR'S PROPOSED INSTALLATION SHALL NOT INTERFERE, NOR DENY ACCESS TO, ANY EXISTING OPERATIONAL AND SAFETY EQUIPMENT.

STRUCTURAL STEEL

1. ALL DETAILING, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE AISC SPECIFICATIONS, LATEST EDITION.
2. ALL EXPOSED STRUCTURAL STEEL MEMBERS SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION PER ASTM A123. EXPOSED STEEL HARDWARE AND ANCHOR BOLTS SHALL BE GALVANIZED PER ASTM A153 OR B695.
3. ALL U-BOLTS SHALL BE ASTM A36 OR EQUIVALENT, WITH LOCKING DEVICE, UNLESS NOTED OTHERWISE.
4. FIELD CUT EDGES, EXCEPT DRILLED HOLES, SHALL BE GROUND SMOOTH.
5. ALL FIELD CUT SURFACES, FIELD DRILLED HOLES & GROUND SURFACES WHERE EXISTING PAINT OR GALVANIZATION REMOVAL WAS REQUIRED SHALL BE REPAIRED WITH (2) BRUSHED COATS OF ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURERS RECOMMENDATIONS.
6. ALL STRUCTURAL STEEL EMBEDDED IN THE CONCRETE SHALL BE APPLIED WITH (2) BRUSHED COATS OF POLYGUARD CA-14 MASTIC OR EQUIVALENT. REFER TO THE MANUFACTURER SPECIFICATIONS FOR SURFACE PREPARATION AND APPLICATION. APPLICATION OF POLYGUARD 400 WRAP IS NOT ESSENTIAL.
7. CONTRACTOR SHALL PERFORM WORK ON ONLY ONE (1) TOWER FACE AND REPLACE/REINFORCE ONE (1) BOLT/MEMBER AT A TIME.
8. ALL FIELD DRILLED HOLES TO BE USED FOR FIELD BOLTING INSTALLATION SHALL BE STANDARD HOLES, AS DEFINED BY AISC, UNLESS NOTED OTHERWISE.

MAXIMUM ALLOWABLE ANGLE CLIP



PAINT

1. AS REQUIRED, CLEAN AND PAINT PROPOSED STEEL ACCORDING TO FAA ADVISORY CIRCULAR AC 70/7460-1L.

WELDING

1. ALL WELDING TO BE PERFORMED BY AWS CERTIFIED WELDERS AND CONDUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE AWS WELDING CODE D1.1.
2. ALL WELDS SHALL BE INSPECTED VISUALLY. IF DIRECTED BY ENGINEER OF RECORD, 25% OF WELDS SHALL BE INSPECTED WITH DYE PENETRANT OR MAGNETIC PARTICLE (100% IF REJECTABLE DEFECTS ARE FOUND) TO MEET THE ACCEPTANCE CRITERIA OF AWS D1.1. REPAIR ALL WELDS AS NECESSARY.
3. INSPECTION SHALL BE PERFORMED BY AN AWS CERTIFIED WELD INSPECTOR.
4. ALL ELECTRODES TO BE LOW HYDROGEN, MATCHING FILLER AND/OR BASE METAL, PER AWS D1.1, UNLESS NOTED OTHERWISE.
5. IN CASES WHERE BASE METAL GRADE IS UNKNOWN, ALL WELDING ON LATTICE TOWERS SHALL BE DONE WITH E70XX ELECTRODES; ALL WELDING ON POLE STRUCTURES SHALL BE DONE WITH E80XX ELECTRODES, UNLESS NOTED OTHERWISE.
6. PRIOR TO FIELD WELDING GALVANIZED MATERIAL, CONTRACTOR SHALL GRIND OFF GALVANIZING 1/2" BEYOND ALL FIELD WELD SURFACES. AFTER WELD AND WELD INSPECTION IS COMPLETE, REPAIR ALL GROUND AND WELDED SURFACES WITH ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURERS RECOMMENDATIONS.

BOLT TIGHTENING PROCEDURE

1. STRUCTURAL CONNECTIONS TO BE ASSEMBLED AND INSPECTED IN ACCORDANCE WITH RCSC SPECIFICATIONS.
2. FLANGE BOLTS SHALL BE INSTALLED AND TIGHTENED USING DIRECT TENSION INDICATING (DTI) SQUIRTER WASHERS. DTI SQUIRTER WASHERS ARE TO BE INSTALLED AND ORIENTED / TIGHTENED PER MANUFACTURER SPECIFICATIONS TO ACHIEVE DESIRED LEVEL OF BOLT PRE-TENSION.
3. IN LIEU OF USING DTI SQUIRTER WASHERS, FLANGE BOLTS MAY BE TIGHTENED USING AISC / RCSC "TURN-OF-THE-NUT" METHOD, PENDING APPROVAL BY THE ENGINEER OF RECORD (EOR). TIGHTEN FLANGE BOLTS USING THE CHART BELOW:

BOLT LENGTHS UP TO AND INCLUDING FOUR DIAMETERS

1/2"	BOLTS UP TO AND INCLUDING 2.0 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
5/8"	BOLTS UP TO AND INCLUDING 2.5 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
3/4"	BOLTS UP TO AND INCLUDING 3.0 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
7/8"	BOLTS UP TO AND INCLUDING 3.5 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
1"	BOLTS UP TO AND INCLUDING 4.0 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
1-1/8"	BOLTS UP TO AND INCLUDING 4.5 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
1-1/4"	BOLTS UP TO AND INCLUDING 5.0 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
1-3/8"	BOLTS UP TO AND INCLUDING 5.5 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
1-1/2"	BOLTS UP TO AND INCLUDING 6.0 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT

BOLT LENGTHS OVER FOUR DIAMETERS BUT NOT EXCEEDING EIGHT DIAMETERS

1/2"	BOLTS 2.25 TO 4.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
5/8"	BOLTS 2.75 TO 5.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
3/4"	BOLTS 3.25 TO 6.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
7/8"	BOLTS 3.75 TO 7.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
1"	BOLTS 4.25 TO 8.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
1-1/8"	BOLTS 4.75 TO 9.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
1-1/4"	BOLTS 5.25 TO 10.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
1-3/8"	BOLTS 5.75 TO 11.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
1-1/2"	BOLTS 6.25 TO 12.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT

BOLT TIGHTENING PROCEDURE (CONTINUED)

4. SPLICE BOLTS SUBJECT TO DIRECT TENSION SHALL BE INSTALLED AND TIGHTENED AS PER SECTION 8.2.1 OF THE AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING A325 OR A490 BOLTS", LOCATED IN THE AISC MANUAL OF STEEL CONSTRUCTION. THE INSTALLATION PROCEDURE IS PARAPHRASED AS FOLLOWS:

   FASTENERS SHALL BE INSTALLED IN PROPERLY ALIGNED HOLES AND TIGHTENED BY ONE OF THE METHODS DESCRIBED IN SUBSECTION 8.2.1 THROUGH 8.2.4.

   8.2.1 TURN-OF-NUT PRETENSIONING
   BOLTS SHALL BE INSTALLED IN ALL HOLES OF THE CONNECTION AND BROUGHT TO A SNUG TIGHT CONDITION AS DEFINED IN SECTION 8.1, UNTIL ALL THE BOLTS ARE SIMULTANEOUSLY SNUG TIGHT AND THE CONNECTION IS FULLY COMPACTED. FOLLOWING THIS INITIAL OPERATION ALL BOLTS IN THE CONNECTION SHALL BE TIGHTENED FURTHER BY THE APPLICABLE AMOUNT OF ROTATION SPECIFIED ABOVE. DURING THE TIGHTENING OPERATION THERE SHALL BE NO ROTATION OF THE PART NOT TURNED BY THE WRENCH. TIGHTENING SHALL PROGRESS SYSTEMATICALLY.

5. ALL OTHER BOLTED CONNECTIONS SHALL BE BROUGHT TO A SNUG TIGHT CONDITION AS DEFINED IN SECTION 8.1 OF THE SPECIFICATION.

   ALL BOLT HOLES SHALL BE ALIGNED TO PERMIT INSERTION OF THE BOLTS WITHOUT UNDUE DAMAGE TO THE THREADS. BOLTS SHALL BE PLACED IN ALL HOLES WITH WASHERS POSITIONED AS REQUIRED AND NUTS THREADED TO COMPLETE THE ASSEMBLY. COMPACTING THE JOINT TO THE SNUG-TIGHT CONDITION SHALL PROGRESS SYSTEMATICALLY FROM THE MOST RIGID PART OF THE JOINT. THE SNUG-TIGHTENED CONDITION IS THE TIGHTNESS THAT IS ATTAINED WITH A FEW IMPACTS OF AN IMPACT WRENCH OR THE FULL EFFORT OF AN IRONWORKER USING AN ORDINARY SPUD WRENCH TO BRING THE CONNECTED PLIES INTO FIRM CONTACT.

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2/8/23 8:47 AM

MODIFICATION INSPECTION NOTES

THE MOUNT MODIFICATION INSPECTION (MMI) PROCEDURE IS INTENDED TO CONFIRM THAT CONSTRUCTION AND INSTALLATION MEETS ENGINEERING DESIGN, ATC PROCEDURES AND ATC STANDARD SPECIFICATIONS FOR WIRELESS TOWER SITES.

TO ENSURE THAT THE REQUIREMENTS OF THE MMI ARE MET, IT IS VITAL THAT THE GENERAL CONTRACTOR SUBMIT ALL REQUIRED PHOTOGRAPHS AND DRAWINGS TO AMERICAN TOWER CORPORATION (ATC).

GENERAL CONTRACTOR

THE GENERAL CONTRACTOR IS REQUIRED TO:

- REVIEW THE REQUIREMENTS OF THE MMI CHECKLIST.
- UNDERSTAND ALL INSPECTION REQUIREMENTS.

THE GENERAL CONTRACTOR SHALL PERFORM AND RECORD THE INSPECTION RESULTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE MMI CHECKLIST.

MOUNT MODIFICATION INSPECTION CHECKLIST

INSPECTION DOCUMENT	DESCRIPTION	INSPECTION TESTING REQUIRED	RESPONSIBILITY
ON-SITE COLD GALVANIZING VERIFICATION	PHOTOGRAPHIC EVIDENCE OF COLD GALVANIZATION TYPE AND APPLICATION IN ALL APPLICABLE LOCATIONS TO BE INCLUDED WITHIN THE MMI REPORT	✔	GC
GC AS-BUILT DRAWINGS WITH CONSTRUCTION RED-LINES	"AS-BUILT" DRAWINGS INDICATING ANY APPROVED CHANGES TO ENGINEERED PLANS TO MMI FOR APPROVAL/REVIEW AND INCLUSION IN MMI REPORT	✔	GC
PHOTOGRAPHS	PHOTOGRAPHIC EVIDENCE OF MOUNT MODIFICATION INSPECTION, ON SITE REMEDIATION, AND ITEMS FAILING INSPECTION & REQUIRING FOLLOW UP TO BE INCLUDED WITHIN THE MMI REPORT. COMPLETE PHOTO LOG IS TO BE SUBMITTED WITHIN MMI REPORT.	✔	GC

TABLE KEY:
MMI - MOUNT MODIFICATION INSPECTION
GC - GENERAL CONTRACTOR
ATC - AMERICAN TOWER CORPORATION

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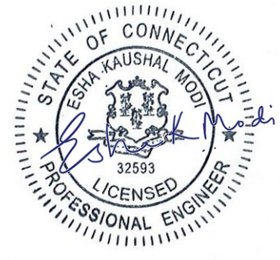

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APPROVED BY:	MCC
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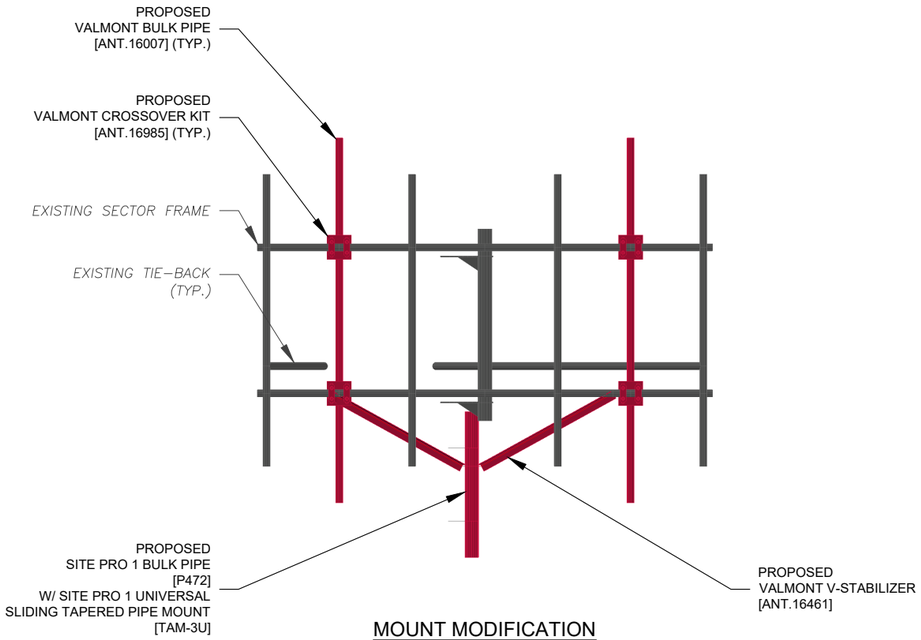
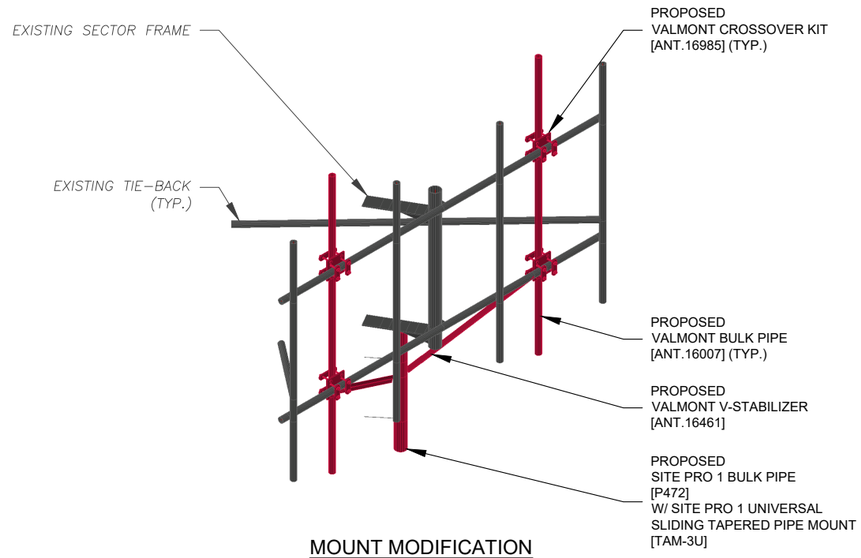
IBC GENERAL NOTES & MOUNT MODIFICATION INSPECTION

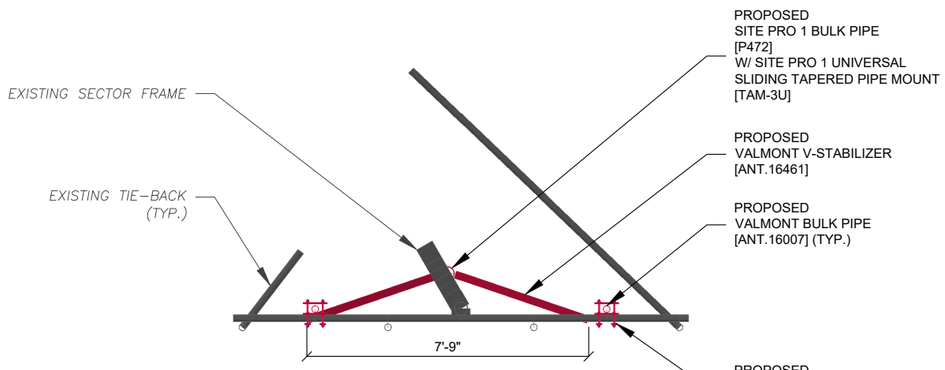
SHEET NUMBER:	REVISION:
G-002	0



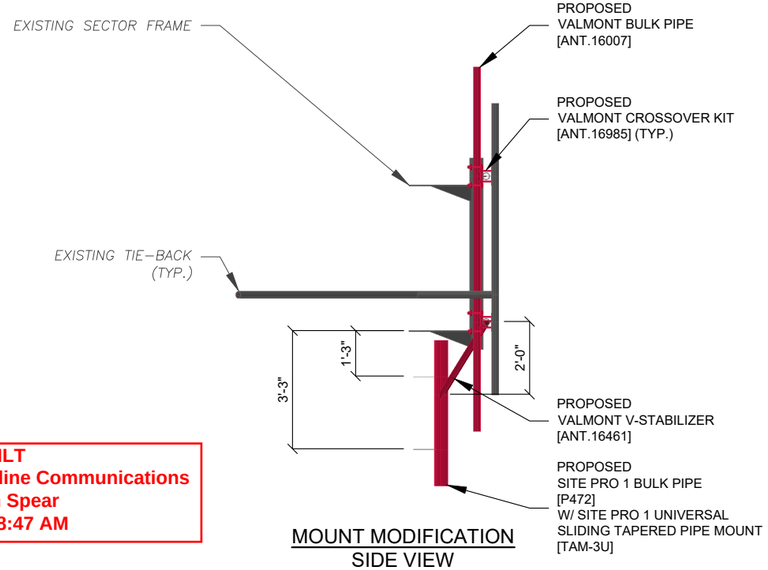
MOUNT MODIFICATION
FRONT VIEW



MOUNT MODIFICATION
ISOMETRIC VIEW



MOUNT MODIFICATION
TOP VIEW



MOUNT MODIFICATION
SIDE VIEW

AS BUILT
Centerline Communications
Tristen Spear
2/8/23 8:47 AM

REINFORCEMENT MATERIALS LIST (ALL SECTORS)

QUANTITY REQUIRED	MANUFACTURER	PART NUMBER	DESCRIPTION	LENGTH	PART WEIGHT (lb)	WEIGHT (lb)	NOTES
2	VALMONT	ANT.16461	SECTOR FRAME STABILIZER - VERTICAL	---	65.66	131	*OR EQUIVALENT SITE PRO 1 - SFS-V*
6	VALMONT	ANT.16007	PIPE 2-3/8"OD X 126", ASTM A53 GRADE B, SCHEDULE 40	10'-6"	39	234	*OR EQUIVALENT SITE PRO 1 - P2126*
20	VALMONT	ANT.16985	CROSSOVER PLATE	---	11.98	240	*OR EQUIVALENT SITE PRO 1 - SCX7-U*
2	SITE PRO 1	P472	PIPE 4-1/2"OD X 72", ASTM A53 GRADE B, SCHEDULE 40	6'-0"	65	130	*GALVANIZED*
2	SITE PRO 1	TAM-3U	1' STAND-OFF, 3-1/2" AND 4-1/2" OD PIPE UNIVERSAL SLIDING TAI	---	78.72	157	
2	---	---	2.375" OD X 0.154" PIPE	15'-6"	59.4	119	
					TOTAL WEIGHT (lb)	1,011	

NOTE:
IN THE EVENT A PROPOSED MODIFICATION PART LISTED IN THE DRAWINGS IS NOT AVAILABLE, AN APPROVED EQUIVALENT CAN BE SUBSTITUTED. FOR APPROVAL OF EQUIVALENT PART OR QUESTIONS PLEASE CONTACT AMERICAN TOWER PMI INBOX AT PMI@AMERICANTOWER.COM.

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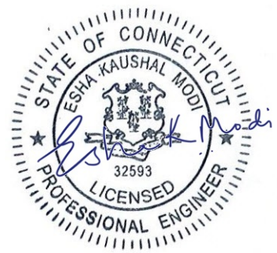
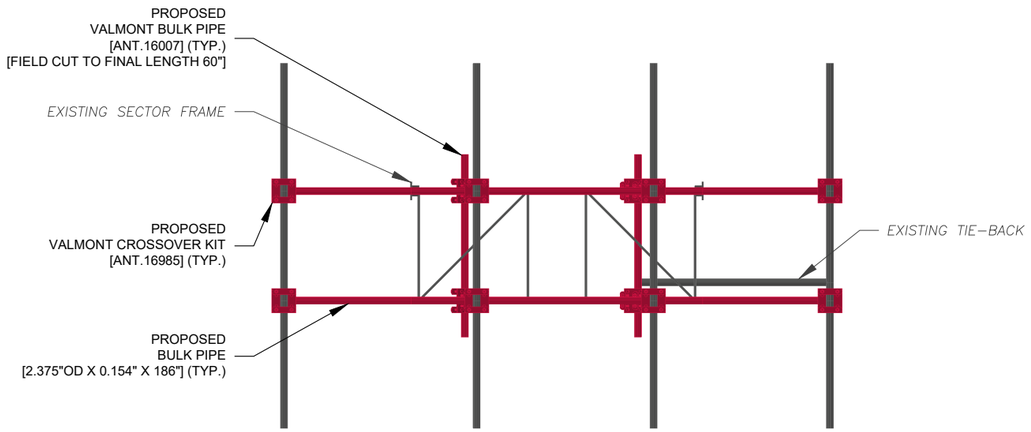
168 CATOONA LANE
STAMFORD, CT 06902



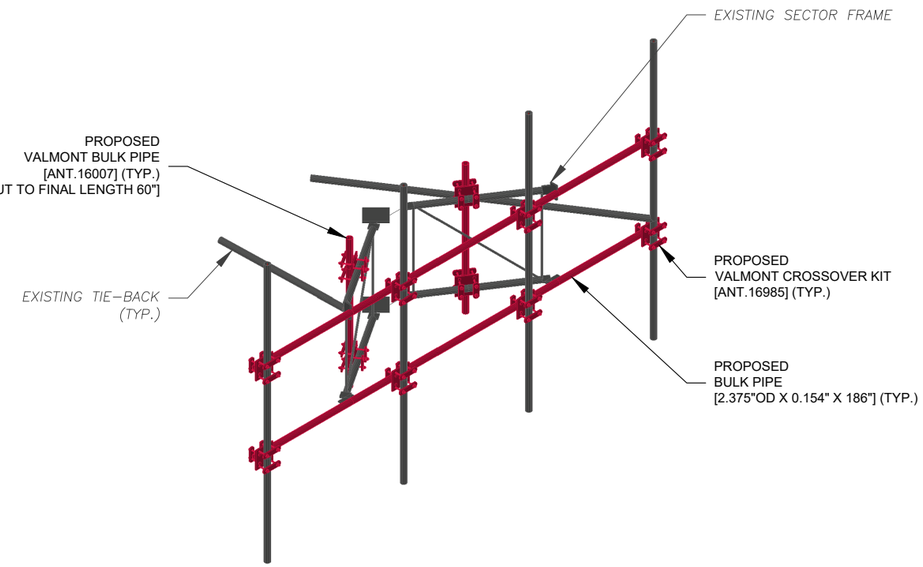
DRAWN BY:	KPJ
APPROVED BY:	MCC
DATE DRAWN:	07/14/22
ATC JOB NO:	13683396_C9_10

MODIFICATION PROFILE
(ALPHA & BETA SECTORS)

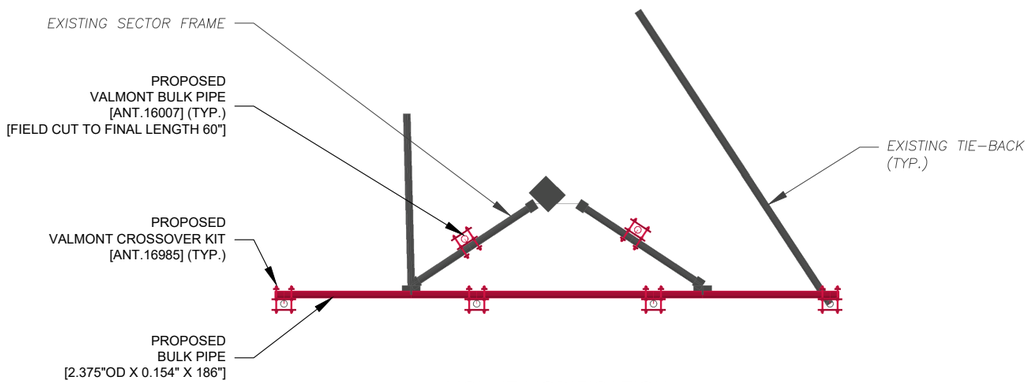
SHEET NUMBER:	REVISION:
S-101	0



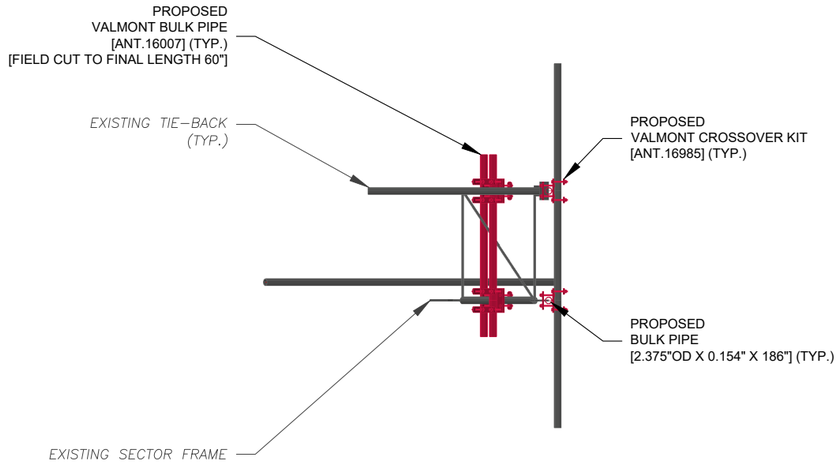
MOUNT MODIFICATION
FRONT VIEW



MOUNT MODIFICATION
ISOMETRIC VIEW



MOUNT MODIFICATION
TOP VIEW



MOUNT MODIFICATION
SIDE VIEW

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NOTES:
1. **CONTRACTOR TO REPLACE EXISTING FACE HORIZONTAL PIPES.**
2. **IN THE EVENT A PROPOSED MODIFICATION PART LISTED IN THE DRAWINGS IS NOT AVAILABLE, AN APPROVED EQUIVALENT CAN BE SUBSTITUTED. FOR APPROVAL OF EQUIVALENT PART OR QUESTIONS PLEASE CONTACT AMERICAN TOWER PMI INBOX AT PMI@AMERICANTOWER.COM.**

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PHONE: (919) 468-0112
COA: PEC.0001553

REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	KPJ	07/14/22

ATC SITE NUMBER:
88018

ATC SITE NAME:
STAMFORD (KATOONA)

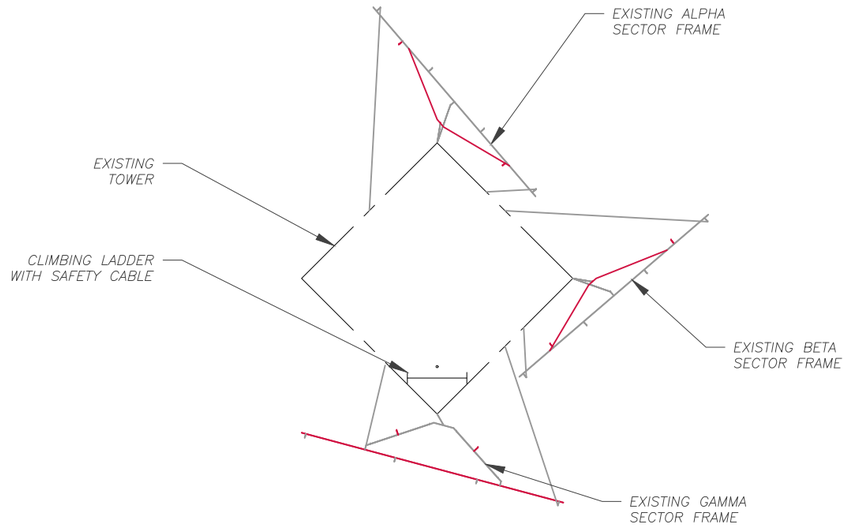
CONNECTICUT

SITE ADDRESS:
168 CATOONA LANE
STAMFORD, CT 06902

DRAWN BY:	KPJ
APPROVED BY:	MCC
DATE DRAWN:	07/14/22
ATC JOB NO:	13683396_C9_10

MODIFICATION PROFILE
(GAMMA SECTOR)

SHEET NUMBER:	REVISION:
S-102	0



Gamma mods were existing

Redlined - C-401, S-103
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2/8/23 8:47 AM

SAFETY CLIMB LOCATION

NOTE:
CONTRACTOR TO INSTALL MOUNT MODIFICATIONS PER THE MANUFACTURERS SPECIFICATION. MODIFICATIONS SHALL NOT OBSTRUCT, INTERFERE, OR BLOCK EXISTING SAFETY CLIMB SYSTEM. IF ANY OF THESE OCCURS DURING INSTALLATION CONTACT THE AMERICAN TOWER PMI INBOX PMI@AMERICANTOWER.COM

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COA: PEC.0001553

REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	KPJ	07/14/22

ATC SITE NUMBER:
88018

ATC SITE NAME:
STAMFORD (KATOONA)

CONNECTICUT

SITE ADDRESS:
168 CATOONA LANE
STAMFORD, CT 06902

DRAWN BY:	KPJ
APPROVED BY:	MCC
DATE DRAWN:	07/14/22
ATC JOB NO:	13683396_C9_10

SAFETY CLIMB LAYOUT

SHEET NUMBER:	REVISION:
S-103	0

1:43 PM 7/13/2022

Option 1 - Modify: Estimate for AT&T Mobility @ 88018 (STAMFORD (KATOONA)) -- 13683396_C9_10

Site Data and Design Parameters	
Asset OTM #	88018
Asset Name	STAMFORD (KATOONA)
State	Connecticut
County	Fairfield
City	Stamford
Failing Analysis Eng. #	13683396_C8_09
Mod. Drawing Eng. #	13683396_C9_10

Dates and Designers		
Mount Analysis Date / By	7/7/2022 /	BH
Design Date / By	7/13/2022 /	MCC
Checked Date / By	/	
Detailer (Prev/Current/Level)	/	/
Software	*RISA*	
Tower Type	Self-Support	4-sided
Mount Type	T-Frame	

Building Codes	TIA/IBC:	ANSI/TIA-222-H / 2015 IBC
	Local:	2018 Connecticut State Building Code
Failing Analysis % / Code	103% /	TIA-H
Post Mod % / Controlling Member	63% /	Connections
Usage Limit % / Reason	100% /	Jurisdiction

Carriers	
# of RADs	1
Carrier	AT&T Mobility

Any modification design comments or assumptions? **Yes** *(including notes to the Estimator)*

Gamma Sector: No structural failures were addressed with the noted modifications. Modifications address Carrier's antenna spacing requirements.

Modification Summary

Item #	Scope Item
1	Install Site Pro 1 SFS-V V Style Stabilizer (ANT.16461) on A & B sector(s)
2	Install 2.0" Pipe x 186" Pipe w/ Site Pro 1 SCX7-U (ANT.16985) crossovers on Gamma sector(s)*
3	Install 2.0" Pipe x 186" Pipe w/ Site Pro 1 SCX7-U (ANT.16985) crossovers on Gamma sector(s)*
4	Install Site Pro 1 P2126 (ANT.16007) MP w/ Site Pro 1 SCX7-U (ANT.16985) crossovers on A & B sector(s) at position 2.*
5	Install Site Pro 1 P2126 (ANT.16007) MP w/ Site Pro 1 SCX7-U (ANT.16985) crossovers on A & B sector(s) at position 5.*
6	Install Site Pro 1 P2126 (ANT.16007) MP w/ Site Pro 1 SCX7-U (ANT.16985) crossovers on Gamma sector(s) at position 5.*
7	Install Site Pro 1 P2126 (ANT.16007) MP w/ Site Pro 1 SCX7-U (ANT.16985) crossovers on Gamma sector(s) at position 6.*
8	Install Site Pro 1 TAM-3U Leg Mount with P472 Pipe on A & B tower legs

Estimated Modification Cost	$16,000

X:\S-V\Stamford (Katoona), CT (88018)\13683396 AT&T MOBILITY\13683396_10_MOUNT_DRW\Mount Modification SOW v1.5

Option 2 - Replace: Estimate for AT&T Mobility @ 88018 (STAMFORD (KATOONA)) -- 13683396_C9_10

Tower Info	
Tower Number	88018
Tower Name	STAMFORD (KATOONA)
State	Connecticut

Jurisdictional Codes	
Design TIA Code	Unknown
Current TIA Code	ANSI/TIA-222-H
IBC	2015 IBC
Other	2018 Connecticut State Building Code

Project Requirements		
New Mount Face Width	150	in
Number of Sectors	3	

Project Information	
Carrier	AT&T Mobility
Structure Type	Self-Support

Recommended Mount Replacement
Sabre C10857007C*

***or approved equivalent**

Estimated Replacement Cost	$ 36,000.00

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SUPPLEMENTAL

SHEET NUMBER: R-901

REVISION: 0

AMERICAN TOWER®
CORPORATION

Post Modification Mount Analysis Report

ATC Site Name	:	**STAMFORD (KATOONA), CT**
ATC Site Number	:	**88018**
Engineering Number	:	**13683396_C9_10**
Mount Elevation	:	**236 ft**
Carrier	:	**AT&T Mobility**
Carrier Site Name	:	**MRCTB051681**
Carrier Site Number	:	**N/A**
Site Location	:	**168 Catoona Lane Stamford, CT 06902-4573 41.052825 , -73.56304722**
County	:	**Fairfield**
Date	:	**July 13, 2022**
Max Usage	:	**63%**
Result	:	**Contingent Pass**

Prepared By:
Mitchell Chen
Structural Engineer II

Reviewed By:

STATE OF CONNECTICUT · ESHA KAUSHAL MODI · 32593 · LICENSED PROFESSIONAL ENGINEER

COA: PEC.0001553

Table of Contents

Introduction

The purpose of this report is to summarize results of the mount analysis performed for AT&T Mobility at 236 ft.

Supporting Documents

Specification Sheets	Sabre C10857001C, dated November 15, 2021 MTS SF-U12, dated September 17, 2003
Mount Mapping	Engineered Tower Solutions Project #21094494, dated November 4, 2021
Radio Frequency Data Sheet	RFDS ID #10034997, dated October 25, 2021
Reference Photos	Site photos from 2021

Analysis

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

Basic Wind Speed:	117 mph (3-Second Gust)
Basic Wind Speed w/ Ice:	50 mph (3-Second Gust) w/ 1.00" radial ice concurrent
Codes:	ANSI/TIA-222-H
Exposure Category:	B
Risk Category:	II
Topographic Factor Procedure:	Method 2
Feature:	Flat
Crest Height (H):	0 ft
Crest Length (L):	0 ft
Spectral Response:	Ss = 0.265, S1 = 0.059
Site Class:	D - Stiff Soil - Default
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 modification per ATC Drawing #13683396_C9_10

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

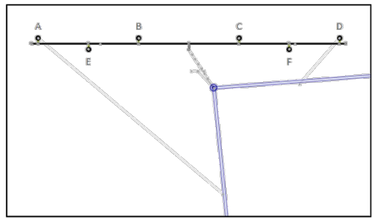
Application Loading

Mount Centerline (ft)	Equipment Centerline (ft)	Qty	Equipment Manufacturer & Model
236.0	237.0	3	Ericsson AIR 6449 n77D
	235.0	6	CCI BSA-M65R-BUU-H6 (101 lbs)
		2	CCI DMP65R-BU6DA
		2	Quintel QD6616-7
		3	Powerwave Allgon TT19-08BP111-001
		2	Raycap DC9-48-60-24-8C-EV
		2	Raycap DC6-48-60-18-8C-EV
		4	Ericsson RRUS E2 B29
		2	Ericsson RRUS 4415 B30
		3	Ericsson RRUS 4449 B5, B12
		2	Ericsson RRUS 4426 B66
		2	Ericsson RRUS 32 B30 (53 lbs)
		2	Ericsson RRUS 32 B2
		2	Ericsson RRUS 8843 B2, B66A
		3	Ericsson RRUS 4478 B14
	233.0	3	Ericsson AIR 6419 N77G

Structure Usages

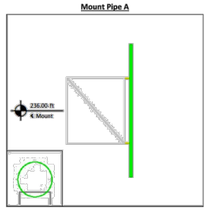
Structural Component	Controlling Usage	Pass/Fail
Horizontals	52%	Pass
Verticals	15%	Pass
Diagonals	18%	Pass
Tie-Backs	10%	Pass
Mount Pipes	32%	Pass
Tower Leg Check	63%	Pass

Mount Layout

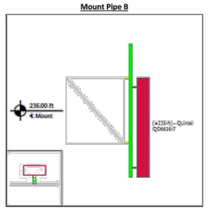


Equipment Layout

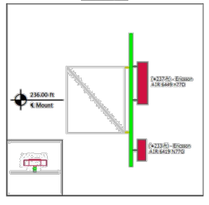
Mount Pipe A



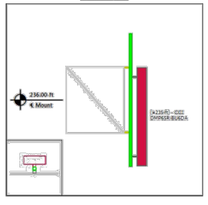
Mount Pipe B



Mount Pipe C

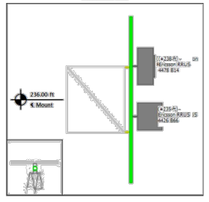


Mount Pipe D

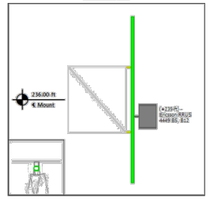


Equipment Layout Cont'd.

Mount Pipe E



Mount Pipe F



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Standard Conditions

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

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

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

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

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

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

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

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

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CARY, NC 27518
PHONE: (919) 468-0112
COA: PEC.0001553

REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	KPJ	07/14/22

ATC SITE NUMBER:
88018

ATC SITE NAME:
STAMFORD (KATOONA)

CONNECTICUT

SITE ADDRESS:
168 CATOONA LANE
STAMFORD, CT 06902

STATE OF CONNECTICUT · ESHA KAUSHAL MODI · 32593 · LICENSED PROFESSIONAL ENGINEER

DRAWN BY:	KPJ
APPROVED BY:	MCC
DATE DRAWN:	07/14/22
ATC JOB NO:	13683396_C9_10

SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-902	0

Site Number:	88018
Project Number:	13683396_C9_10
Carrier:	AT&T Mobility
Mount Elevation:	236 ft
Date:	7/13/2022

Mount Analysis Force Calculations

Wind & Ice Load Calculations			
Velocity Pressure Coefficient	K_z	1.26	
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	117	mph
Velocity Pressure	q_z	42.0	psf
Height Escalation Factor	K_{iz}	1.22	
Thickness of Radial Glaze Ice	T_{iz}	1.22	in

Seismic Load Calculations			
Short Period DSRAP	S_{DS}	0.212	
1 Second DSRAP	S_{D1}	0.094	
Importance Factor	I	1.0	
Response Modification Coefficient	R	2.0	
Seismic Response Coefficient	C_S	0.106	
Amplification Factor	A	1.0	
Total Weight	W	1322.4	lbs
Total Shear Force	V_S	140.2	lbs
Horizontal Seismic Load	Eh	140.2	lbs
Vertical Seismic Load	Ev	56.1	lbs

Antenna Calculations (Elevations per Application/RFDS)*

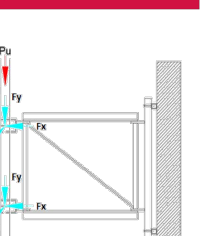
Equipment	Height	Width	Depth	Weight	EPA_N	EPA_T	EPA_{Ni}	EPA_{Ti}
Model #	in	in	in	lbs	sqft	sqft	sqft	sqft
Ericsson AIR 6449 n77D	30.4	15.9	8.1	81.6	4.03	1.34	5.02	1.88
CCI BSA-M65R-BUU-H6 (101 lbs)	72.0	28.5	9.7	101.0	N/A	N/A	N/A	N/A
CCI DMP65R-BU6DA	71.2	20.7	7.7	79.4	12.71	2.28	14.69	3.11
Quintel QD6616-7	72.0	22.0	9.6	130.0	13.58	2.88	15.59	3.73
Powerwave Allgon TT19-08BP111-001	9.9	6.7	5.4	16.0	N/A	N/A	N/A	N/A
Raycap DC9-48-60-24-8C-EV	31.4	18.3	10.2	16.0	N/A	N/A	N/A	N/A
Raycap DC6-48-60-18-8C-EV	31.4	18.3	10.2	16.0	N/A	N/A	N/A	N/A
Ericsson RRUS E2 B29	20.4	18.5	7.5	60.0	3.15	1.29	3.98	1.91
Ericsson RRUS 4415 B30	16.5	13.4	5.9	46.0	1.84	0.82	2.50	1.33
Ericsson RRUS 4449 B5, B12	17.9	13.2	9.4	71.0	1.97	1.40	2.65	2.01
Ericsson RRUS 4426 B66	15.0	13.2	5.8	48.4	1.65	0.73	2.27	1.20
Ericsson RRUS 32 B30 (53 lbs)	27.2	12.1	7.0	53.0	N/A	N/A	N/A	N/A
Ericsson RRUS 32 B2	27.2	12.1	7.0	53.0	2.74	1.67	3.59	2.45
Ericsson RRUS 8843 B2, B66A	14.9	13.2	10.9	72.0	N/A	N/A	N/A	N/A
Ericsson RRUS 4478 B14	16.5	13.4	7.7	59.9	1.84	1.06	2.50	1.60
Ericsson AIR 6419 N77G	15.7	30.0	6.7	70.0	3.93	0.38	4.90	0.59

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

Site Number:	88018
Project Number:	13683396_C9_10
Carrier:	AT&T Mobility
Mount Elevation:	236 ft
Date:	7/13/2022

Tower Leg Reaction Analysis

Applied Loads from RISA 3D					
Controlling Load Combination			72		
Leg Node Label(s)		N006	N067	N069	
Force in X, Fx		-307.0	-286.2	-259.2	lbs
Force in Y, Fy		184.9	752.6	267.0	lbs
Force in Z, Fz		-25.3	414.3	214.8	lbs
Moment about X, Mx		-50.8	-636.2	-40.5	lb-ft
Moment about Y, My		-987.8	-396.2	-385.2	lb-ft
Moment about Z, Mz		45.6	451.5	358.8	lb-ft



Tower Leg Properties			
Leg Type		Single Angle	
Leg Member		L6x6x9/16	
Leg Bay Height	Hb	6.27	ft
Upper Mount Offset	Gm	6.00	in
Tower Axial Load	Pu_t	0	k
Leg Grade		A36	
Leg Yield Strength	Fy	36	ksi
Cross Sectional Area	Ag	6.450	in^2
Radius of Gyration	r	1.180	in
Moment of Inertia	I	8.900	in^4
Section Modulus	S_{min}	3.730	in^3
Plastic Modulus	Z_{min}	9.180	in^3
Torsional Constant	J	0.704	in^4
Elastic Modulus	E	29,000	ksi
Shear Modulus	G	11,200	ksi
Slenderness Limit	4.71√(E/Fy)	133.7	-
Member Slenderness	KL/r	63.8	-
Rotation of Leg	Θ	0.0000	rads
Leg Torsional Stiffness	k	**1181.5**	k-in/rad

Tower Leg Analysis				
Critical Stress	F_{cr}	31.4	ksi	
Axial Stress	σ_a	0.19	ksi	
Shear Stress	τ_b	0.17	ksi	
Bending Stress	σ_b	3.41	ksi	
Torsional Stress	τ_t	11.99	ksi	
Normal Stress Limit State	F_{un}	32.4	ksi	
Shear Stress Limit State	F_{uv}	19.4	ksi	
Bending Stress Limit State	F_{cb}	54.0	ksi	
Buckling Limit State	F_{ca}	31.4	ksi	
Torsional/Shear Impact	$\Sigma\tau / F_{uv}$	63%	Pass
Buckling/Axial Impact	$\Sigma\sigma / F_{un}$	6%	Pass

**** This analysis confirms the impact of the antenna mount on the tower leg. Axial loads in the leg from the tower analysis were not considered.***

v1.1

Company : American Tower Corp.
Designer : Mitchell.Chen
Job Number : 13683396_C9_10
Model Name : 88018, STAMFORD (KATOONA)

7/13/2022
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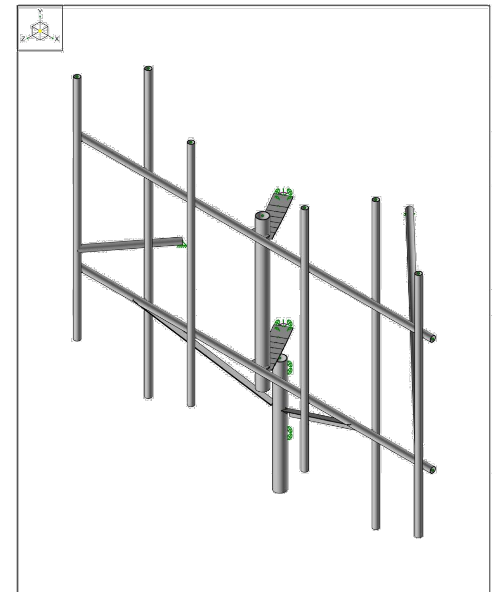
Checked By : -



American Tower Corp.	88018, STAMFORD (KATOONA)	SK-1
Mitchell.Chen		Jul 13, 2022
13683396_C9_10	3D Rendering (Final Configuration) - Alpha/Beta Sector	R3D. AT&T MOBILITY @ 88018, ...

Company : American Tower Corp.
Designer : Mitchell.Chen
Job Number : 13683396_C9_10
Model Name : 88018, STAMFORD (KATOONA)

7/13/2022
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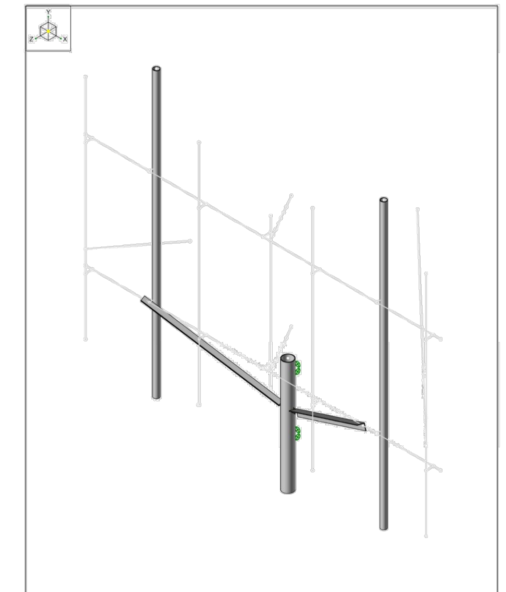

American Tower Corp.	88018, STAMFORD (KATOONA)	SK-2
Mitchell.Chen		Jul 13, 2022
13683396_C9_10	3D Rendering (Proposed Configuration) - Alpha/Beta S...	R3D. AT&T MOBILITY @ 88018, ...

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Tristen Spear
2/8/23 8:47 AM

Company : American Tower Corp.
Designer : Mitchell.Chen
Job Number : 13683396_C9_10
Model Name : 88018, STAMFORD (KATOONA)

7/13/2022
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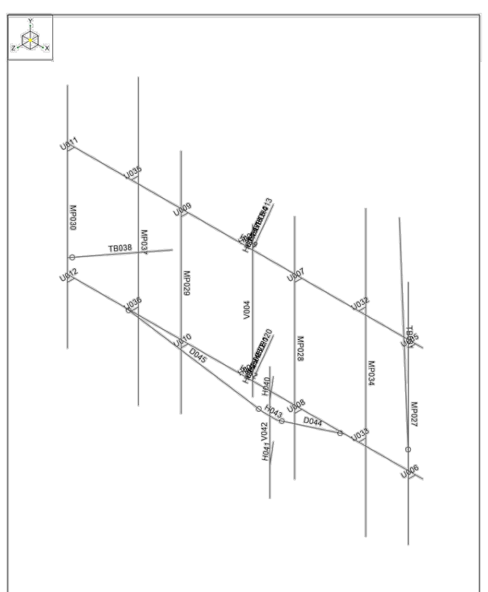

American Tower Corp.	88018, STAMFORD (KATOONA)	SK-3
Mitchell.Chen		Jul 13, 2022
13683396_C9_10	Alpha/Beta Sector	R3D. AT&T MOBILITY @ 88018, ...

Company : American Tower Corp.
Designer : Mitchell.Chen
Job Number : 13683396_C9_10
Model Name : 88018, STAMFORD (KATOONA)

7/13/2022
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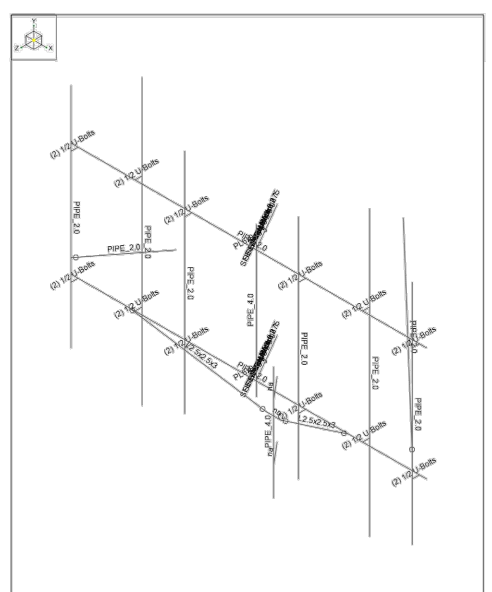

American Tower Corp.	88018, STAMFORD (KATOONA)	SK-4
Mitchell.Chen		Jul 13, 2022
13683396_C9_10	Alpha/Beta Sector	R3D. AT&T MOBILITY @ 88018, ...

Company : American Tower Corp.
Designer : Mitchell.Chen
Job Number : 13683396_C9_10
Model Name : 88018, STAMFORD (KATOONA)

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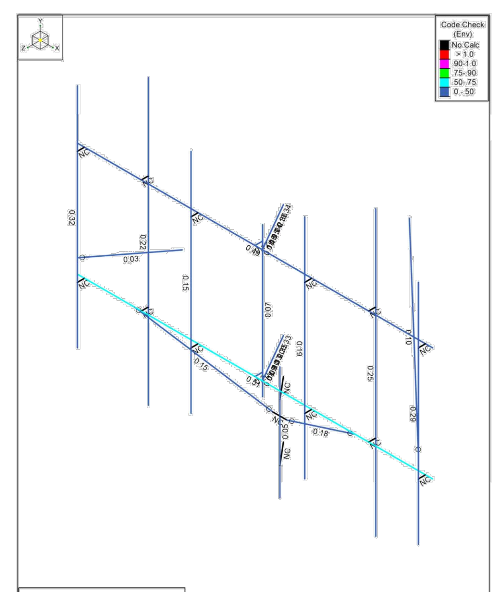

American Tower Corp.	88018, STAMFORD (KATOONA)	SK-5
Mitchell.Chen		Jul 13, 2022
13683396_C9_10	Alpha/Beta Sector	R3D. AT&T MOBILITY @ 88018, ...

Company : American Tower Corp.
Designer : Mitchell.Chen
Job Number : 13683396_C9_10
Model Name : 88018, STAMFORD (KATOONA)

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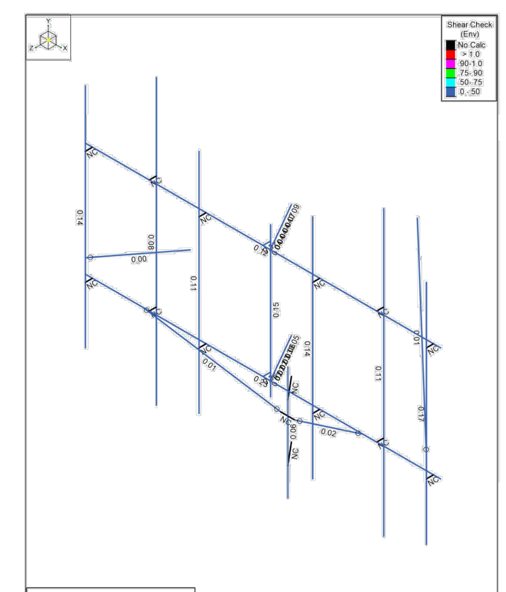

American Tower Corp.	88018, STAMFORD (KATOONA)	SK-6
Mitchell.Chen		Jul 13, 2022
13683396_C9_10	Alpha/Beta Sector	R3D. AT&T MOBILITY @ 88018, ...

AMERICAN TOWER®
A.T. ENGINEERING SERVICE, PLLC
3500 REGENCY PARKWAY
SUITE 100
CARY, NC 27518
PHONE: (919) 468-0112
COA: PEC.0001553

REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	KPJ	07/14/22

ATC SITE NUMBER:
88018

ATC SITE NAME:
STAMFORD (KATOONA)

CONNECTICUT

SITE ADDRESS:
168 CATOONA LANE
STAMFORD, CT 06902

STATE OF CONNECTICUT
ESHA KAUSHAL MODI
32593
LICENSED
PROFESSIONAL ENGINEER

[illegible]

DRAWN BY:	KPJ
APPROVED BY:	MCC
DATE DRAWN:	07/14/22
ATC JOB NO:	13683396_C9_10

SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-903	0

Company : American Tower Corp.
Designer : Mitchell.Chen
Job Number : 13683396_C9_10
Model Name : 88018, STAMFORD (KATOONA)

7/13/2022
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Basic Load Cases

	BLC Description	Category	Y Gravity	Nodal	Point	Distributed
1	D	DL	-1		13	
2	Di	IL			13	30
3	W 0	WL			13	44
4	W 30	WL			26	86
5	W 60	WL			26	86
6	W 90	WL			13	43
7	W 120	WL			26	86
8	W 150	WL			26	86
9	W 180	WL			13	44
10	W 210	WL			26	86
11	W 240	WL			26	86
12	W 270	WL			13	43
13	W 300	WL			26	86
14	W 330	WL			26	86
15	Wi 0	WL			13	44
16	Wi 30	WL			26	86
17	Wi 60	WL			26	86
18	Wi 90	WL			13	43
19	Wi 120	WL			26	86
20	Wi 150	WL			26	86
21	Wi 180	WL			13	44
22	Wi 210	WL			26	86
23	Wi 240	WL			26	86
24	Wi 270	WL			13	43
25	Wi 300	WL			26	86
26	Wi 330	WL			26	86
27	Ws 0	WL			13	44
28	Ws 30	WL			26	86
29	Ws 60	WL			26	86
30	Ws 90	WL			13	43
31	Ws 120	WL			26	86
32	Ws 150	WL			26	86
33	Ws 180	WL			13	44
34	Ws 210	WL			26	86
35	Ws 240	WL			26	86
36	Ws 270	WL			13	43
37	Ws 300	WL			26	86
38	Ws 330	WL			26	86
39	Ev -Y	ELY				30
40	Eh -Z	ELZ				30
41	Eh -X	ELX				30
42	Lv (1)	LL			1	
43	Lv (2)	LL			1	
44	Lv (3)	LL		1		
45	Lm (1)	LL		1		
46	Lm (2)	LL		1		
47	Lm (3)	LL		1		
48	Lm (4)	LL		1		
49	Lm (5)	LL		1		
50	Lm (6)	LL		1		

Company : American Tower Corp.
Designer : Mitchell.Chen
Job Number : 13683396_C9_10
Model Name : 88018, STAMFORD (KATOONA)

7/13/2022
1:41:48 PM
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Load Combinations

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
1	1.4D	Yes	Y	DL	1.4						
2	1.2D + 1.0W [0°]	Yes	Y	DL	1.2	3	1				
3	1.2D + 1.0W [30°]	Yes	Y	DL	1.2	4	1				
4	1.2D + 1.0W [60°]	Yes	Y	DL	1.2	5	1				
5	1.2D + 1.0W [90°]	Yes	Y	DL	1.2	6	1				
6	1.2D + 1.0W [120°]	Yes	Y	DL	1.2	7	1				
7	1.2D + 1.0W [150°]	Yes	Y	DL	1.2	8	1				
8	1.2D + 1.0W [180°]	Yes	Y	DL	1.2	9	1				
9	1.2D + 1.0W [210°]	Yes	Y	DL	1.2	10	1				
10	1.2D + 1.0W [240°]	Yes	Y	DL	1.2	11	1				
11	1.2D + 1.0W [270°]	Yes	Y	DL	1.2	12	1				
12	1.2D + 1.0W [300°]	Yes	Y	DL	1.2	13	1				
13	1.2D + 1.0W [330°]	Yes	Y	DL	1.2	14	1				
14	0.9D + 1.0W [0°]	Yes	Y	DL	0.9	3	1				
15	0.9D + 1.0W [30°]	Yes	Y	DL	0.9	4	1				
16	0.9D + 1.0W [60°]	Yes	Y	DL	0.9	5	1				
17	0.9D + 1.0W [90°]	Yes	Y	DL	0.9	6	1				
18	0.9D + 1.0W [120°]	Yes	Y	DL	0.9	7	1				
19	0.9D + 1.0W [150°]	Yes	Y	DL	0.9	8	1				
20	0.9D + 1.0W [180°]	Yes	Y	DL	0.9	9	1				
21	0.9D + 1.0W [210°]	Yes	Y	DL	0.9	10	1				
22	0.9D + 1.0W [240°]	Yes	Y	DL	0.9	11	1				
23	0.9D + 1.0W [270°]	Yes	Y	DL	0.9	12	1				
24	0.9D + 1.0W [300°]	Yes	Y	DL	0.9	13	1				
25	0.9D + 1.0W [330°]	Yes	Y	DL	0.9	14	1				
26	1.2D + 1.0Di + 1.0Wi [0°] + 1.0Ti	Yes	Y	DL	1.2	IL	1	15	1		
27	1.2D + 1.0Di + 1.0Wi [30°] + 1.0Ti	Yes	Y	DL	1.2	IL	1	16	1		
28	1.2D + 1.0Di + 1.0Wi [60°] + 1.0Ti	Yes	Y	DL	1.2	IL	1	17	1		
29	1.2D + 1.0Di + 1.0Wi [90°] + 1.0Ti	Yes	Y	DL	1.2	IL	1	18	1		
30	1.2D + 1.0Di + 1.0Wi [120°] + 1.0Ti	Yes	Y	DL	1.2	IL	1	19	1		
31	1.2D + 1.0Di + 1.0Wi [150°] + 1.0Ti	Yes	Y	DL	1.2	IL	1	20	1		
32	1.2D + 1.0Di + 1.0Wi [180°] + 1.0Ti	Yes	Y	DL	1.2	IL	1	21	1		
33	1.2D + 1.0Di + 1.0Wi [210°] + 1.0Ti	Yes	Y	DL	1.2	IL	1	22	1		
34	1.2D + 1.0Di + 1.0Wi [240°] + 1.0Ti	Yes	Y	DL	1.2	IL	1	23	1		
35	1.2D + 1.0Di + 1.0Wi [270°] + 1.0Ti	Yes	Y	DL	1.2	IL	1	24	1		
36	1.2D + 1.0Di + 1.0Wi [300°] + 1.0Ti	Yes	Y	DL	1.2	IL	1	25	1		
37	1.2D + 1.0Di + 1.0Wi [330°] + 1.0Ti	Yes	Y	DL	1.2	IL	1	26	1		
38	1.2D + 1.0Ev + 1.0Eh [0°]	Yes	Y	DL	1.2	ELY	1	ELZ	1	ELX	0.001
39	1.2D + 1.0Ev + 1.0Eh [30°]	Yes	Y	DL	1.2	ELY	1	ELZ	0.866	ELX	0.5
40	1.2D + 1.0Ev + 1.0Eh [60°]	Yes	Y	DL	1.2	ELY	1	ELZ	0.5	ELX	0.866
41	1.2D + 1.0Ev + 1.0Eh [90°]	Yes	Y	DL	1.2	ELY	1	ELZ	0.001	ELX	1
42	1.2D + 1.0Ev + 1.0Eh [120°]	Yes	Y	DL	1.2	ELY	1	ELZ	-0.5	ELX	0.866
43	1.2D + 1.0Ev + 1.0Eh [150°]	Yes	Y	DL	1.2	ELY	1	ELZ	-0.866	ELX	0.5
44	1.2D + 1.0Ev + 1.0Eh [180°]	Yes	Y	DL	1.2	ELY	1	ELZ	-1	ELX	0.001
45	1.2D + 1.0Ev + 1.0Eh [210°]	Yes	Y	DL	1.2	ELY	1	ELZ	-0.866	ELX	-0.5
46	1.2D + 1.0Ev + 1.0Eh [240°]	Yes	Y	DL	1.2	ELY	1	ELZ	-0.5	ELX	-0.866
47	1.2D + 1.0Ev + 1.0Eh [270°]	Yes	Y	DL	1.2	ELY	1	ELZ	0.001	ELX	-1
48	1.2D + 1.0Ev + 1.0Eh [300°]	Yes	Y	DL	1.2	ELY	1	ELZ	0.5	ELX	-0.866
49	1.2D + 1.0Ev + 1.0Eh [330°]	Yes	Y	DL	1.2	ELY	1	ELZ	0.866	ELX	-0.5
50	0.9D + 1.0Ev + 1.0Eh [0°]	Yes	Y	DL	0.9	ELY	1	ELZ	1	ELX	0.001
51	0.9D + 1.0Ev + 1.0Eh [30°]	Yes	Y	DL	0.9	ELY	1	ELZ	0.866	ELX	0.5
52	0.9D + 1.0Ev + 1.0Eh [60°]	Yes	Y	DL	0.9	ELY	1	ELZ	0.5	ELX	0.866
53	0.9D + 1.0Ev + 1.0Eh [90°]	Yes	Y	DL	0.9	ELY	1	ELZ	0.001	ELX	1
54	0.9D + 1.0Ev + 1.0Eh [120°]	Yes	Y	DL	0.9	ELY	1	ELZ	-0.5	ELX	0.866
55	0.9D + 1.0Ev + 1.0Eh [150°]	Yes	Y	DL	0.9	ELY	1	ELZ	-0.866	ELX	0.5

Company : American Tower Corp.
Designer : Mitchell.Chen
Job Number : 13683396_C9_10
Model Name : 88018, STAMFORD (KATOONA)

7/13/2022
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Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
56	0.9D + 1.0Ev + 1.0Eh [180°]	Yes	Y	DL	0.9	ELY	1	ELZ	-1	ELX	0.001
57	0.9D + 1.0Ev + 1.0Eh [210°]	Yes	Y	DL	0.9	ELY	1	ELZ	-0.866	ELX	-0.5
58	0.9D + 1.0Ev + 1.0Eh [240°]	Yes	Y	DL	0.9	ELY	1	ELZ	-0.5	ELX	-0.866
59	0.9D + 1.0Ev + 1.0Eh [270°]	Yes	Y	DL	0.9	ELY	1	ELZ	0.001	ELX	-1
60	0.9D + 1.0Ev + 1.0Eh [300°]	Yes	Y	DL	0.9	ELY	1	ELZ	0.5	ELX	-0.866
61	0.9D + 1.0Ev + 1.0Eh [330°]	Yes	Y	DL	0.9	ELY	1	ELZ	0.866	ELX	-0.5
62	1.2D + 1.0W [0°]*TF	Yes	Y	DL	1.2	3	0.845				
63	1.2D + 1.0W [30°]*TF	Yes	Y	DL	1.2	4	0.845				
64	1.2D + 1.0W [60°]*TF	Yes	Y	DL	1.2	5	0.845				
65	1.2D + 1.0W [90°]*TF	Yes	Y	DL	1.2	6	0.845				
66	1.2D + 1.0W [120°]*TF	Yes	Y	DL	1.2	7	0.845				
67	1.2D + 1.0W [150°]*TF	Yes	Y	DL	1.2	8	0.845				
68	1.2D + 1.0W [180°]*TF	Yes	Y	DL	1.2	9	0.845				
69	1.2D + 1.0W [210°]*TF	Yes	Y	DL	1.2	10	0.845				
70	1.2D + 1.0W [240°]*TF	Yes	Y	DL	1.2	11	0.845				
71	1.2D + 1.0W [270°]*TF	Yes	Y	DL	1.2	12	0.845				
72	1.2D + 1.0W [300°]*TF	Yes	Y	DL	1.2	13	0.845				
73	1.2D + 1.0W [330°]*TF	Yes	Y	DL	1.2	14	0.845				
74	0.9D + 1.0W [0°]*TF	Yes	Y	DL	0.9	3	0.845				
75	0.9D + 1.0W [30°]*TF	Yes	Y	DL	0.9	4	0.845				
76	0.9D + 1.0W [60°]*TF	Yes	Y	DL	0.9	5	0.845				
77	0.9D + 1.0W [90°]*TF	Yes	Y	DL	0.9	6	0.845				
78	0.9D + 1.0W [120°]*TF	Yes	Y	DL	0.9	7	0.845				
79	0.9D + 1.0W [150°]*TF	Yes	Y	DL	0.9	8	0.845				
80	0.9D + 1.0W [180°]*TF	Yes	Y	DL	0.9	9	0.845				
81	0.9D + 1.0W [210°]*TF	Yes	Y	DL	0.9	10	0.845				
82	0.9D + 1.0W [240°]*TF	Yes	Y	DL	0.9	11	0.845				
83	0.9D + 1.0W [270°]*TF	Yes	Y	DL	0.9	12	0.845				
84	0.9D + 1.0W [300°]*TF	Yes	Y	DL	0.9	13	0.845				
85	0.9D + 1.0W [330°]*TF	Yes	Y	DL	0.9	14	0.845				
86	1.2D + 1.0Di + 1.0Wi [0°]*TF + 1.0Ti	Yes	Y	DL	1.2	IL	1	15	0.845		
87	1.2D + 1.0Di + 1.0Wi [30°]*TF + 1.0Ti	Yes	Y	DL	1.2	IL	1	16	0.845		
88	1.2D + 1.0Di + 1.0Wi [60°]*TF + 1.0Ti	Yes	Y	DL	1.2	IL	1	17	0.845		
89	1.2D + 1.0Di + 1.0Wi [90°]*TF + 1.0Ti	Yes	Y	DL	1.2	IL	1	18	0.845		
90	1.2D + 1.0Di + 1.0Wi [120°]*TF + 1.0Ti	Yes	Y	DL	1.2	IL	1	19	0.845		
91	1.2D + 1.0Di + 1.0Wi [150°]*TF + 1.0Ti	Yes	Y	DL	1.2	IL	1	20	0.845		
92	1.2D + 1.0Di + 1.0Wi [180°]*TF + 1.0Ti	Yes	Y	DL	1.2	IL	1	21	0.845		
93	1.2D + 1.0Di + 1.0Wi [210°]*TF + 1.0Ti	Yes	Y	DL	1.2	IL	1	22	0.845		
94	1.2D + 1.0Di + 1.0Wi [240°]*TF + 1.0Ti	Yes	Y	DL	1.2	IL	1	23	0.845		
95	1.2D + 1.0Di + 1.0Wi [270°]*TF + 1.0Ti	Yes	Y	DL	1.2	IL	1	24	0.845		
96	1.2D + 1.0Di + 1.0Wi [300°]*TF + 1.0Ti	Yes	Y	DL	1.2	IL	1	25	0.845		
97	1.2D + 1.0Di + 1.0Wi [330°]*TF + 1.0Ti	Yes	Y	DL	1.2	IL	1	26	0.845		
98	1.2D + 1.5Lv(1)	Yes	Y	DL	1.2	42	1.5				
99	1.2D + 1.5Lv(2)	Yes	Y	DL	1.2	43	1.5				
100	1.2D + 1.5Lv(3)	Yes	Y	DL	1.2	44	1.5				
101	1.2D + 1.5Lm(1) + 1.0Wm [0°]	Yes	Y	DL	1.2	45	1.5	27	1		
102	1.2D + 1.5Lm(1) + 1.0Wm [30°]	Yes	Y	DL	1.2	45	1.5	28	1		
103	1.2D + 1.5Lm(1) + 1.0Wm [60°]	Yes	Y	DL	1.2	45	1.5	29	1		
104	1.2D + 1.5Lm(1) + 1.0Wm [90°]	Yes	Y	DL	1.2	45	1.5	30	1		
105	1.2D + 1.5Lm(1) + 1.0Wm [120°]	Yes	Y	DL	1.2	45	1.5	31	1		
106	1.2D + 1.5Lm(1) + 1.0Wm [150°]	Yes	Y	DL	1.2	45	1.5	32	1		
107	1.2D + 1.5Lm(1) + 1.0Wm [180°]	Yes	Y	DL	1.2	45	1.5	33	1		
108	1.2D + 1.5Lm(1) + 1.0Wm [210°]	Yes	Y	DL	1.2	45	1.5	34	1		
109	1.2D + 1.5Lm(1) + 1.0Wm [240°]	Yes	Y	DL	1.2	45	1.5	35	1		
110	1.2D + 1.5Lm(1) + 1.0Wm [270°]	Yes	Y	DL	1.2	45	1.5	36	1		

Company : American Tower Corp.
Designer : Mitchell.Chen
Job Number : 13683396_C9_10
Model Name : 88018, STAMFORD (KATOONA)

7/13/2022
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Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
111	1.2D + 1.5Lm(1) + 1.0Wm [300°]	Yes	Y	DL	1.2	45	1.5	37	1		
112	1.2D + 1.5Lm(1) + 1.0Wm [330°]	Yes	Y	DL	1.2	45	1.5	38	1		
113	1.2D + 1.5Lm(2) + 1.0Wm [0°]	Yes	Y	DL	1.2	46	1.5	27	1		
114	1.2D + 1.5Lm(2) + 1.0Wm [30°]	Yes	Y	DL	1.2	46	1.5	28	1		
115	1.2D + 1.5Lm(2) + 1.0Wm [60°]	Yes	Y	DL	1.2	46	1.5	29	1		
116	1.2D + 1.5Lm(2) + 1.0Wm [90°]	Yes	Y	DL	1.2	46	1.5	30	1		
117	1.2D + 1.5Lm(2) + 1.0Wm [120°]	Yes	Y	DL	1.2	46	1.5	31	1		
118	1.2D + 1.5Lm(2) + 1.0Wm [150°]	Yes	Y	DL	1.2	46	1.5	32	1		
119	1.2D + 1.5Lm(2) + 1.0Wm [180°]	Yes	Y	DL	1.2	46	1.5	33	1		
120	1.2D + 1.5Lm(2) + 1.0Wm [210°]	Yes	Y	DL	1.2	46	1.5	34	1		
121	1.2D + 1.5Lm(2) + 1.0Wm [240°]	Yes	Y	DL	1.2	46	1.5	35	1		
122	1.2D + 1.5Lm(2) + 1.0Wm [270°]	Yes	Y	DL	1.2	46	1.5	36	1		
123	1.2D + 1.5Lm(2) + 1.0Wm [300°]	Yes	Y	DL	1.2	46	1.5	37	1		
124	1.2D + 1.5Lm(2) + 1.0Wm [330°]	Yes	Y	DL	1.2	46	1.5	38	1		
125	1.2D + 1.5Lm(3) + 1.0Wm [0°]	Yes	Y	DL	1.2	47	1.5	27	1		
126	1.2D + 1.5Lm(3) + 1.0Wm [30°]	Yes	Y	DL	1.2	47	1.5	28	1		
127	1.2D + 1.5Lm(3) + 1.0Wm [60°]	Yes	Y	DL	1.2	47	1.5	29	1		
128	1.2D + 1.5Lm(3) + 1.0Wm [90°]	Yes	Y	DL	1.2	47	1.5	30	1		
129	1.2D + 1.5Lm(3) + 1.0Wm [120°]	Yes	Y	DL	1.2	47	1.5	31	1		
130	1.2D + 1.5Lm(3) + 1.0Wm [150°]	Yes	Y	DL	1.2	47	1.5	32	1		
131	1.2D + 1.5Lm(3) + 1.0Wm [180°]	Yes	Y	DL	1.2	47	1.5	33	1		
132	1.2D + 1.5Lm(3) + 1.0Wm [210°]	Yes	Y	DL	1.2	47	1.5	34	1		
133	1.2D + 1.5Lm(3) + 1.0Wm [240°]	Yes	Y	DL	1.2	47	1.5	35	1		
134	1.2D + 1.5Lm(3) + 1.0Wm [270°]	Yes	Y	DL	1.2	47	1.5	36	1		
135	1.2D + 1.5Lm(3) + 1.0Wm [300°]	Yes	Y	DL	1.2	47	1.5	37	1		
136	1.2D + 1.5Lm(3) + 1.0Wm [330°]	Yes	Y	DL	1.2	47	1.5	38	1		
137	1.2D + 1.5Lm(4) + 1.0Wm [0°]	Yes	Y	DL	1.2	48	1.5	27	1		
138	1.2D + 1.5Lm(4) + 1.0Wm [30°]	Yes	Y	DL	1.2	48	1.5	28	1		
139	1.2D + 1.5Lm(4) + 1.0Wm [60°]	Yes	Y	DL	1.2	48	1.5	29	1		
140	1.2D + 1.5Lm(4) + 1.0Wm [90°]	Yes	Y	DL	1.2	48	1.5	30	1		
141	1.2D + 1.5Lm(4) + 1.0Wm [120°]	Yes	Y	DL	1.2	48	1.5	31	1		
142	1.2D + 1.5Lm(4) + 1.0Wm [150°]	Yes	Y	DL	1.2	48	1.5	32	1		
143	1.2D + 1.5Lm(4) + 1.0Wm [180°]	Yes	Y	DL	1.2	48	1.5	33	1		
144	1.2D + 1.5Lm(4) + 1.0Wm [210°]	Yes	Y	DL	1.2	48	1.5	34	1		
145	1.2D + 1.5Lm(4) + 1.0Wm [240°]	Yes	Y	DL	1.2	48	1.5	35	1		
146	1.2D + 1.5Lm(4) + 1.0Wm [270°]	Yes	Y	DL	1.2	48	1.5	36	1		
147	1.2D + 1.5Lm(4) + 1.0Wm [300°]	Yes	Y	DL	1.2	48	1.5	37	1		
148	1.2D + 1.5Lm(4) + 1.0Wm [330°]	Yes	Y	DL	1.2	48	1.5	38	1		
149	1.2D + 1.5Lm(5) + 1.0Wm [0°]	Yes	Y	DL	1.2	49	1.5	27	1		
150	1.2D + 1.5Lm(5) + 1.0Wm [30°]	Yes	Y	DL	1.2	49	1.5	28	1		
151	1.2D + 1.5Lm(5) + 1.0Wm [60°]	Yes	Y	DL	1.2	49	1.5	29	1		
152	1.2D + 1.5Lm(5) + 1.0Wm [90°]	Yes	Y	DL	1.2	49	1.5	30	1		
153	1.2D + 1.5Lm(5) + 1.0Wm [120°]	Yes	Y	DL	1.2	49	1.5	31	1		
154	1.2D + 1.5Lm(5) + 1.0Wm [150°]	Yes	Y	DL	1.2	49	1.5	32	1		
155	1.2D + 1.5Lm(5) + 1.0Wm [180°]	Yes	Y	DL	1.2	49	1.5	33	1		
156	1.2D + 1.5Lm(5) + 1.0Wm [210°]	Yes	Y	DL	1.2	49	1.5	34	1		
157	1.2D + 1.5Lm(5) + 1.0Wm [240°]	Yes	Y	DL	1.2	49	1.5	35	1		
158	1.2D + 1.5Lm(5) + 1.0Wm [270°]	Yes	Y	DL	1.2	49	1.5	36	1		
159	1.2D + 1.5Lm(5) + 1.0Wm [300°]	Yes	Y	DL	1.2	49	1.5	37	1		
160	1.2D + 1.5Lm(5) + 1.0Wm [330°]	Yes	Y	DL	1.2	49	1.5	38	1		
161	1.2D + 1.5Lm(6) + 1.0Wm [0°]	Yes	Y	DL	1.2	50	1.5	27	1		
162	1.2D + 1.5Lm(6) + 1.0Wm [30°]	Yes	Y	DL	1.2	50	1.5	28	1		
163	1.2D + 1.5Lm(6) + 1.0Wm [60°]	Yes	Y	DL	1.2	50	1.5	29	1		
164	1.2D + 1.5Lm(6) + 1.0Wm [90°]	Yes	Y	DL	1.2	50	1.5	30	1		
165	1.2D + 1.5Lm(6) + 1.0Wm [120°]	Yes	Y	DL	1.2	50	1.5	31	1		

Company : American Tower Corp.
Designer : Mitchell.Chen
Job Number : 13683396_C9_10
Model Name : 88018, STAMFORD (KATOONA)

7/13/2022
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Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
166	1.2D + 1.5Lm(6) + 1.0Wm [150°]	Yes	Y	DL	1.2	50	1.5	32	1		
167	1.2D + 1.5Lm(6) + 1.0Wm [180°]	Yes	Y	DL	1.2	50	1.5	33	1		
168	1.2D + 1.5Lm(6) + 1.0Wm [210°]	Yes	Y	DL	1.2	50	1.5	34	1		
169	1.2D + 1.5Lm(6) + 1.0Wm [240°]	Yes	Y	DL	1.2	50	1.5	35	1		
170	1.2D + 1.5Lm(6) + 1.0Wm [270°]	Yes	Y	DL	1.2	50	1.5	36	1		
171	1.2D + 1.5Lm(6) + 1.0Wm [300°]	Yes	Y	DL	1.2	50	1.5	37	1		
172	1.2D + 1.5Lm(6) + 1.0Wm [330°]	Yes	Y	DL	1.2	50	1.5	38	1		

Member Primary Data

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
1	H001	N005	N003	90	PL6x0.375	Beam	None	A36	Typical
2	H002	N009	N010		PIPE_2.0	Beam	None	A53 Gr. B	Typical
3	H003	N011	N008	90	PL6x0.375	Beam	None	A36	Typical
4	V004	N012	N013		PIPE_4.0	Column	None	A53 Gr. B	Typical
5	U005	N014	N018		(2) 1/2 U-Bolts	Beam	None	A36	Typical
6	U006	N019	N020		(2) 1/2 U-Bolts	Beam	None	A36	Typical
7	U007	N015	N021		(2) 1/2 U-Bolts	Beam	None	A36	Typical
8	U008	N022	N023		(2) 1/2 U-Bolts	Beam	None	A36	Typical
9	U009	N016	N024		(2) 1/2 U-Bolts	Beam	None	A36	Typical
10	U010	N025	N026		(2) 1/2 U-Bolts	Beam	None	A36	Typical
11	U011	N017	N027		(2) 1/2 U-Bolts	Beam	None	A36	Typical
12	U012	N028	N029		(2) 1/2 U-Bolts	Beam	None	A36	Typical
13	H013	N001	N032	90	PL6x0.375	Beam	None	A36	Typical
14	H014	N032	N033		SFU Wedge 1	Beam	None	A992	Typical
15	H015	N033	N034		SFU Wedge 2	Beam	None	A992	Typical
16	H016	N034	N035		SFU Wedge 3	Beam	None	A992	Typical
17	H017	N035	N036		SFU Wedge 4	Beam	None	A992	Typical
18	H018	N036	N037		SFU Wedge 5	Beam	None	A992	Typical
19	H019	N037	N002		SFU Wedge 6	Beam	None	A992	Typical
20	H020	N006	N038	90	PL6x0.375	Beam	None	A36	Typical
21	H021	N038	N039		SFU Wedge 1	Beam	None	A992	Typical
22	H022	N039	N040		SFU Wedge 2	Beam	None	A992	Typical
23	H023	N040	N041		SFU Wedge 3	Beam	None	A992	Typical
24	H024	N041	N042		SFU Wedge 4	Beam	None	A992	Typical
25	H025	N042	N043		SFU Wedge 5	Beam	None	A992	Typical
26	H026	N043	N007		SFU Wedge 6	Beam	None	A992	Typical
27	MP027	N044	N045		PIPE_2.0	Column	None	A53 Gr. B	Typical
28	MP028	N046	N047		PIPE_2.0	Column	None	A53 Gr. B	Typical
29	MP029	N048	N049		PIPE_2.0	Column	None	A53 Gr. B	Typical
30	MP030	N050	N051		PIPE_2.0	Column	None	A53 Gr. B	Typical
31	TB031	N031	N030		PIPE_2.0	Beam	None	A53 Gr. B	Typical
32	U032	N052	N054		(2) 1/2 U-Bolts	Beam	None	A36	Typical
33	U033	N055	N056		(2) 1/2 U-Bolts	Beam	None	A36	Typical
34	MP034	N057	N058		PIPE_2.0	Column	None	A53 Gr. B	Typical
35	U035	N053	N059		(2) 1/2 U-Bolts	Beam	None	A36	Typical
36	U036	N060	N061		(2) 1/2 U-Bolts	Beam	None	A36	Typical
37	MP037	N062	N063		PIPE_2.0	Column	None	A53 Gr. B	Typical
38	TB038	N064	N065		PIPE_2.0	Beam	None	A53 Gr. B	Typical
39	H039	N004	N066		PIPE_2.0	Beam	None	A53 Gr. B	Typical
40	H040	N067	N068		RIGID	None	None	RIGID	Typical
41	H041	N069	N070		RIGID	None	None	RIGID	Typical
42	V042	N072	N071		PIPE_4.0	Column	None	A53 Gr. B	Typical
43	H043	N075	N073		RIGID	None	None	RIGID	Typical
44	D044	N075	N077	90	L2.5x2.5x3	Column	None	A36	Typical
45	D045	N073	N076	180	L2.5x2.5x3	Column	None	A36	Typical

Company : American Tower Corp.
Designer : Mitchell.Chen
Job Number : 13683396_C9_10
Model Name : 88018, STAMFORD (KATOONA)

7/13/2022
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Hot Rolled Steel Design Parameters

	Label	Shape	Length [in]	Lb y-y [in]	Lb z-z [in]	Lcomp top [in]	L-Torque [in]	K y-y	K z-z	Function
1	H001	PL6x0.375	3.215			Lbyy		0.65	0.65	Lateral
2	H002	PIPE_2.0	150			Lbyy		1	1	Lateral
3	H003	PL6x0.375	3.215			Lbyy		0.65	0.65	Lateral
4	V004	PIPE_4.0	63			Lbyy		1	1	Lateral
5	U005	(2) 1/2 U-Bolts	3			Lbyy		0.5	0.5	Lateral
6	U006	(2) 1/2 U-Bolts	3			Lbyy		0.5	0.5	Lateral
7	U007	(2) 1/2 U-Bolts	3			Lbyy		0.5	0.5	Lateral
8	U008	(2) 1/2 U-Bolts	3			Lbyy		0.5	0.5	Lateral
9	U009	(2) 1/2 U-Bolts	3			Lbyy		0.5	0.5	Lateral
10	U010	(2) 1/2 U-Bolts	3			Lbyy		0.5	0.5	Lateral
11	U011	(2) 1/2 U-Bolts	3			Lbyy		0.5	0.5	Lateral
12	U012	(2) 1/2 U-Bolts	3			Lbyy		0.5	0.5	Lateral
13	H013	PL6x0.375	6			Lbyy		1	1	Lateral
14	H014	SFU Wedge 1	3			Lbyy		0.65	0.65	Lateral
15	H015	SFU Wedge 2	3			Lbyy		0.65	0.65	Lateral
16	H016	SFU Wedge 3	3			Lbyy		0.65	0.65	Lateral
17	H017	SFU Wedge 4	3			Lbyy		0.65	0.65	Lateral
18	H018	SFU Wedge 5	3			Lbyy		0.65	0.65	Lateral
19	H019	SFU Wedge 6	3			Lbyy		0.65	0.65	Lateral
20	H020	PL6x0.375	6			Lbyy		1	1	Lateral
21	H021	SFU Wedge 1	3			Lbyy		0.65	0.65	Lateral
22	H022	SFU Wedge 2	3			Lbyy		0.65	0.65	Lateral
23	H023	SFU Wedge 3	3			Lbyy		0.65	0.65	Lateral
24	H024	SFU Wedge 4	3			Lbyy		0.65	0.65	Lateral
25	H025	SFU Wedge 5	3			Lbyy		0.65	0.65	Lateral
26	H026	SFU Wedge 6	3			Lbyy		0.65	0.65	Lateral
27	MP027	PIPE_2.0	96	Segment	Segment	Lbyy	Segment	2.1	2.1	Lateral
28	MP028	PIPE_2.0	96	Segment	Segment	Lbyy	Segment	2.1	2.1	Lateral
29	MP029	PIPE_2.0	96	Segment	Segment	Lbyy	Segment	2.1	2.1	Lateral
30	MP030	PIPE_2.0	96	Segment	Segment	Lbyy	Segment	2.1	2.1	Lateral
31	TB031	PIPE_2.0	122.341			Lbyy		1	1	Lateral
32	U032	(2) 1/2 U-Bolts	3			Lbyy		0.5	0.5	Lateral
33	U033	(2) 1/2 U-Bolts	3			Lbyy		0.5	0.5	Lateral
34	MP034	PIPE_2.0	120	Segment	Segment	Lbyy	Segment	2.1	2.1	Lateral
35	U035	(2) 1/2 U-Bolts	3			Lbyy		0.5	0.5	Lateral
36	U036	(2) 1/2 U-Bolts	3			Lbyy		0.5	0.5	Lateral
37	MP037	PIPE_2.0	120	Segment	Segment	Lbyy	Segment	2.1	2.1	Lateral
38	TB038	PIPE_2.0	31.559			Lbyy		1	1	Lateral
39	H039	PIPE_2.0	150			Lbyy		1	1	Lateral
40	V042	PIPE_4.0	48			Lbyy		1	1	Lateral
41	D044	L2.5x2.5x3	51.841			Lbyy		1	1	Lateral
42	D045	L2.5x2.5x3	51.841			Lbyy		1	1	Lateral

Node Boundary Conditions

	Node Label	X [lb/in]	Y [lb/in]	Z [lb/in]	X Rot [k-in/rad]	Y Rot [k-in/rad]	Z Rot [k-in/rad]
1	N001	Reaction	Reaction	Reaction	Reaction	S496.4	Reaction
2	N006	Reaction	Reaction	Reaction	Reaction	S1181.522	Reaction
3	N031	Reaction	Reaction	Reaction			
4	N065	Reaction	Reaction	Reaction			
5	N067	Reaction	Reaction	Reaction	Reaction	S1181.522	Reaction
6	N069	Reaction	Reaction	Reaction	Reaction	S1181.522	Reaction

AS BUILT
Centerline Communications
Tristen Spear
2/8/23 8:47 AM

AMERICAN TOWER®
A.T. ENGINEERING SERVICE, PLLC
3500 REGENCY PARKWAY
SUITE 100
CARY, NC 27518
PHONE: (919) 468-0112
COA: PEC.0001553

REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	KPJ	07/14/22

ATC SITE NUMBER:
88018

ATC SITE NAME:
STAMFORD (KATOONA)

CONNECTICUT

SITE ADDRESS:
168 CATOONA LANE
STAMFORD, CT 06902

DRAWN BY:	KPJ
APPROVED BY:	MCC
DATE DRAWN:	07/14/22
ATC JOB NO:	13683396_C9_10

SUPPLEMENTAL

SHEET NUMBER: R-904

REVISION: 0