Derek Maheux Program Manager
c/o Cellco Partnership d/b/a Verizon Wireless
Centerline Communications, LLC
750 West Center Street, Suite 301
West Bridgewater, MA 02379
Mobile: (508)649-3407
Dmaheux@clinellc.com

January 9, 2024

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

RE: Notice of Exempt Modification // Site: NEW CANAAN NE2 (ATC: 209477)
183 Soundview Lane, New Canaan CT 06840
N 41.190675 // W -73.495044

Dear Ms. Bachman,

Cellco Partnership d/b/a Verizon Wireless currently maintains twelve (12) antenna at the 71-ft level on the existing 94ft Tower, located at 183 Soundview Lane, New Canaan, CT. The tower is owned by American Tower. Verizon Wireless proposed modification involves the installation of two (2) interference mitigation filters on Verizon Wireless existing antenna platform and mounting assembly.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies §16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to the Chief Elected Official and Land Use Officer.

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2). Enclosed to accommodate this filing are construction drawings dated January 2, 2024, by A.T Engineering Services, LLC, a structural analysis dated November 19, 2023, by American Tower Corp., and a structural mount analysis by Colliers Engineering and Design dated December 6, 2023, and Non-Ionizing Electromagnetic Radiation (NIER) Study dated December 13, 2023, by Tower Engineering Professionals.

1. The proposed modifications will not result in an increase in the height of the existing structure.

2. The proposed modifications will not require the extension of the site boundary.

3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.

4. The operation of the new antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission safety standard.

5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.

6. The existing structure and its foundation can support the proposed loading, as shown in the attached structural analysis and a structural mount analysis, pursuant to certain conditions defined therein. Design and engineering are fully illustrated within final construction drawings.

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

Sincerely,

Derek Maheux

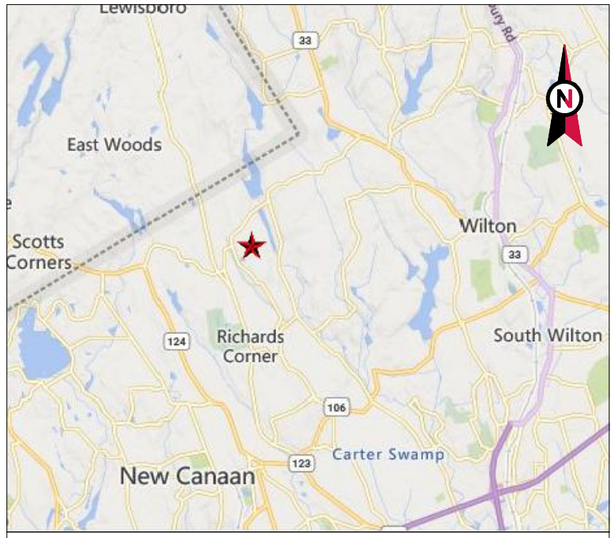
_____

Derek Maheux, Program Manager
c/o Cellco Partnership d/b/a Verizon Wireless
Centerline Communications, LLC
750 West Center Street, Suite 301
West Bridgewater, MA 02379
Mobile: (508) 649 2307
Dmaheux@clinellc.com

Attachments:
Exhibit 1 – Construction Drawings
Exhibit 2 – Property Card and GIS
Exhibit 3 – Structural Analysis
Exhibit 4 – Mount Analysis
Exhibit 5 – RF Emissions Analysis Report Evaluation
Exhibit 6 – Available Original Tower Approval Records
Exhibit 7 – Notice Deliver Confirmations

cc: Dionna Carlson– First Selectman – Chief Elected Official
Sarah Carey – Town Planner - as P&Z official
American Tower Corporation - as tower owner
Keith Richey – as ground owner

EXHIBIT 1



VICINITY MAP

AMERICAN TOWER®

ATC SITE NAME: NEW CANAAN 2
ATC SITE NUMBER: 209477
VERIZON SITE NAME: NEW CANAAN NE2 CT
VERIZON SITE NUMBER: 5000155382
VERIZON FUZE PID: 17123713
SITE ADDRESS: 183 SOUNDVIEW LANE
NEW CANAAN, CT 06840

LOCATION MAP

VERIZON AMENDMENT DRAWINGS

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.

2021 IBC
NATIONAL ELECTRICAL CODE (NFPA 70, NEC 2020 W/ AMND)
2022 CONNECTICUT STATE BUILDING CODE, IMC PORTION (IMC 2021 W/ AMND)
2022 CONNECTICUT STATE BUILDING CODE, IPC PORTION (IPC 2021 W/ AMND)
2022 CONNECTICUT STATE BUILDING CODE, IECC PORTION (IECC 2021 W/ AMND)
PART III OF THE 2022 CT STATE FIRE SAFETY CODE (IFC 2021 W/ AMND)
2022 CONNECTICUT STATE BUILDING CODE, IEBC PORTION (IEBC 2021 W/ AMND)
2022 CONNECTICUT STATE BUILDING CODE
2022 CONNECTICUT STATE BUILDING CODE, IRC PORTION (IRC 2021 W/ AMND)
CONNECTICUT STATE FUEL GAS CODE (IFGC 2021 W/ AMND)

UTILITY COMPANIES

POWER COMPANY: EVERSOURCE
PHONE: 800-286-2000

TELEPHONE COMPANY: UNKNOWN
PHONE: N/A

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

PROJECT SUMMARY

SITE ADDRESS:

183 SOUNDVIEW LANE
NEW CANAAN, CT 06840
COUNTY: FAIRFIELD

GEOGRAPHIC COORDINATES:

LATITUDE: 41° 11' 26.430" N
LONGITUDE: 73° 29' 42.158" W
GROUND ELEVATION: 502' AMSL

PROJECT TEAM

TOWER OWNER:

AMERICAN TOWER
10 PRESIDENTIAL WAY
WOBURN, MA 01801

APPLICANT:

VERIZON WIRELESS

ENGINEER:

ATC TOWER SERVICES, LLC
1 FENTON MAIN, STE 300
CARY, NC 27511

PROPERTY OWNER:

KEITH S RICHEY
183 SOUNDVIEW LANE
NEW CANAAN, CT 06840

PROJECT DESCRIPTION

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

INSTALL MOUNT MODIFICATIONS, (1) SWIVAL MOUNT, (2) FILTER(s)

EXISTING (9) ANTENNA(s), (6) RRH(s), (1) OVP(s), AND (1) 2.02 HYBRID CABLE(s) TO REMAIN

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

FROM NEW CANAAN
TAKE PARK ST TO MAIN ST (0.0 MI)
TURN RIGHT ONTO MAIN ST (272 FT)
CONTINUE ON HERITAGE HILL RD TO CT-123
N/SMITH RIDGE RD (0.5 MI)
CONTINUE ON CT-123 N/ SMITH RIDGE RD TO LAUREL RD (2.6 MI)
CONTINUE ON LAUREL RD. DRIVE TO SOUNDVIEW LN (1.0 MI)

SHEET INDEX

SHEET NO:	DESCRIPTION:	REV:	DATE:	BY:
G-001	TITLE SHEET	0	1/2/2024	JM
G-002	GENERAL NOTES	0	1/2/2024	JM
C-101	DETAILED SITE PLAN	0	1/2/2024	JM
C-201	TOWER ELEVATION	0	1/2/2024	JM
C-401	ANTENNA INFORMATION & SCHEDULE	0	1/2/2024	JM
C-501	CONSTRUCTION DETAILS	0	1/2/2024	JM
E-501	GROUNDING DETAILS	0	1/2/2024	JM
R-601	SUPPLEMENTAL			

CONTRACTOR PMI REQUIREMENTS

PMI ACCESSED AT:	HTTPS://PMI.VZWSMART.COM
SMART TOOL VENDOR PROJECT NUMBER:	10208091
VZW LOCATION CODE (PSLC):	5000155382

***PMI AND REQUIREMENTS ALSO EMBEDDED IN MOUNT ANALYSIS REPORT

MOUNT MODIFICATION REQUIRED:	YES
VZW APPROVED SMART KIT VENDORS:	REFER TO MOUNT MODIFICATION DRAWINGS PAGES FOR VZW SMART KIT APPROVED VENDORS

AMERICAN TOWER®
A.T. ENGINEERING SERVICES LLC
1 FENTON MAIN
SUITE 300
CARY, NC 27511
PHONE: (919) 468-0112
PEC.0001553

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	JM	1/2/2024

ATC SITE NUMBER:
209477
ATC SITE NAME:
NEW CANAAN 2
VERIZON SITE NAME:
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SITE ADDRESS:
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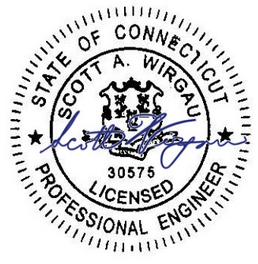
NEW CANAAN, CT 06840

SEAL:



verizon

ATC JOB NO:	14519493_G0
CUSTOMER ID:	NEW CANAAN NE2 CT
CUSTOMER #:	5000155382

TITLE SHEET

SHEET NUMBER:	REVISION:
G-001	0

GENERAL CONSTRUCTION NOTES:

1. OWNER FURNISHED MATERIALS, VERIZON "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 VERIZON 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 VERIZON REP PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH REMEDIAL ACTION SHALL REQUIRE WRITTEN APPROVAL BY THE VERIZON REP PRIOR TO PROCEEDING.
13. EACH CONTRACTOR SHALL COOPERATE WITH THE VERIZON 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 VERIZON 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 VERIZON 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 VERIZON 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 VERIZON 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 VERIZON REP TO DETERMINE IF ANY PERMITS WILL BE OBTAINED BY CONTRACTOR. ALL REQUIRED PERMITS NOT OBTAINED BY VERIZON MUST BE OBTAINED, AND PAID FOR, BY THE CONTRACTOR.
23. CONTRACTOR SHALL INSTALL ALL SITE SIGNAGE IN ACCORDANCE WITH VERIZON SPECIFICATIONS AND REQUIREMENTS.
24. CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO VERIZON FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
25. ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND LOCATED ACCORDING TO VERIZON 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 VERIZON 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. WHEN THE PROJECT SCOPE REQUIRES THE USE OF THE SAFETY CLIMB, THE GENERAL CONTRACTOR SHALL ENSURE THE SAFETY CLIMB IS FREE OF OBSTRUCTIONS, NOT RUBBING ON OR TRAPPED BY ANY INSTALLED CUSTOMER EQUIPMENT, IS VISUALLY TAUT, MEETS MANUFACTURER INSTALLATION SPECIFICATIONS, AND IS FIRMLY SECURED AT ALL CABLE GUIDE LOCATIONS UPON PROJECT COMPLETION.
29. COMPLETION OF PROJECT SHALL NOT OBSTRUCT, TRAP, LOOSEN, OR OTHERWISE CAUSE FAILURE TO MEET MANUFACTURER INSTALLATION REQUIREMENTS FOR THE SAFETY CLIMB.
30. 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.
31. 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.
32. 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 VERIZON REP. ANY WORK FOUND BY THE VERIZON REP TO BE OF INFERIOR QUALITY AND/OR WORKMANSHIP SHALL BE REPLACED AND/OR REWORKED AT CONTRACTOR EXPENSE UNTIL APPROVAL IS OBTAINED.
33. 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.
34. VERIZON FURNISHED EQUIPMENT SHALL BE PICKED-UP AT THE VERIZON 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.
35. VERIZON 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 VERIZON OR THEIR ARCHITECT/ENGINEER.

SPECIAL CONSTRUCTION ANTENNA INSTALLATION NOTES:

1. WORK INCLUDED:
   - A. ANTENNA AND COAXIAL/HYBRID CABLES ARE FURNISHED BY VERIZON 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 VERIZON SPECIFICATIONS.
   - C. INSTALL GALVANIZED STEEL ANTENNA MOUNTS AS INDICATED ON DRAWINGS.
   - D. INSTALL FURNISHED GALVANIZED STEEL OR ALUMINUM WAVEGUIDE.
   - E. INSTALL COAXIAL/HYBRID 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/HYBRID CABLE THREE (3) FEET IN EXCESS OF ENTRY PORT LOCATION UNLESS OTHERWISE STATED.
2. ANTENNA AND COAXIAL/HYBRID CABLE GROUNDING:
   - A. ALL EXTERIOR #6 GREEN GROUND WIRE "DAISY CHAIN" CONNECTIONS ARE TO BE WEATHER SEALED WITH RFS CONNECTORS/SPLICE WEATHERPROOFING KIT #221213 OR EQUAL.
   - B. ALL COAXIAL/HYBRID CABLE GROUNDING KITS ARE TO BE INSTALLED ON STRAIGHT RUNS OF COAXIAL/HYBRID CABLE (NOT WITHIN BENDS)

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

AMERICAN TOWER®
A.T. ENGINEERING SERVICES LLC
1 FENTON MAIN
SUITE 300
CARY, NC 27511
PHONE: (919) 468-0112
PEC.0001553

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	JM	1/2/2024

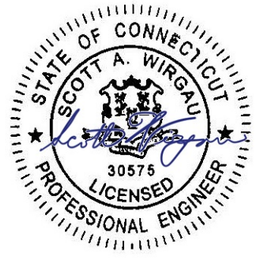
ATC SITE NUMBER:
209477

ATC SITE NAME:
NEW CANAAN 2

VERIZON SITE NAME:
NEW CANAAN NE2 CT

SITE ADDRESS:
183 SOUNDVIEW LANE
NEW CANAAN, CT 06840

SEAL:



Digitally Signed: 2024-01-03

verizon

ATC JOB NO:	14519493_G0
CUSTOMER ID:	NEW CANAAN NE2 CT
CUSTOMER #:	5000155382

GENERAL NOTES

SHEET NUMBER:	REVISION:
G-002	0

SITE PLAN NOTES:

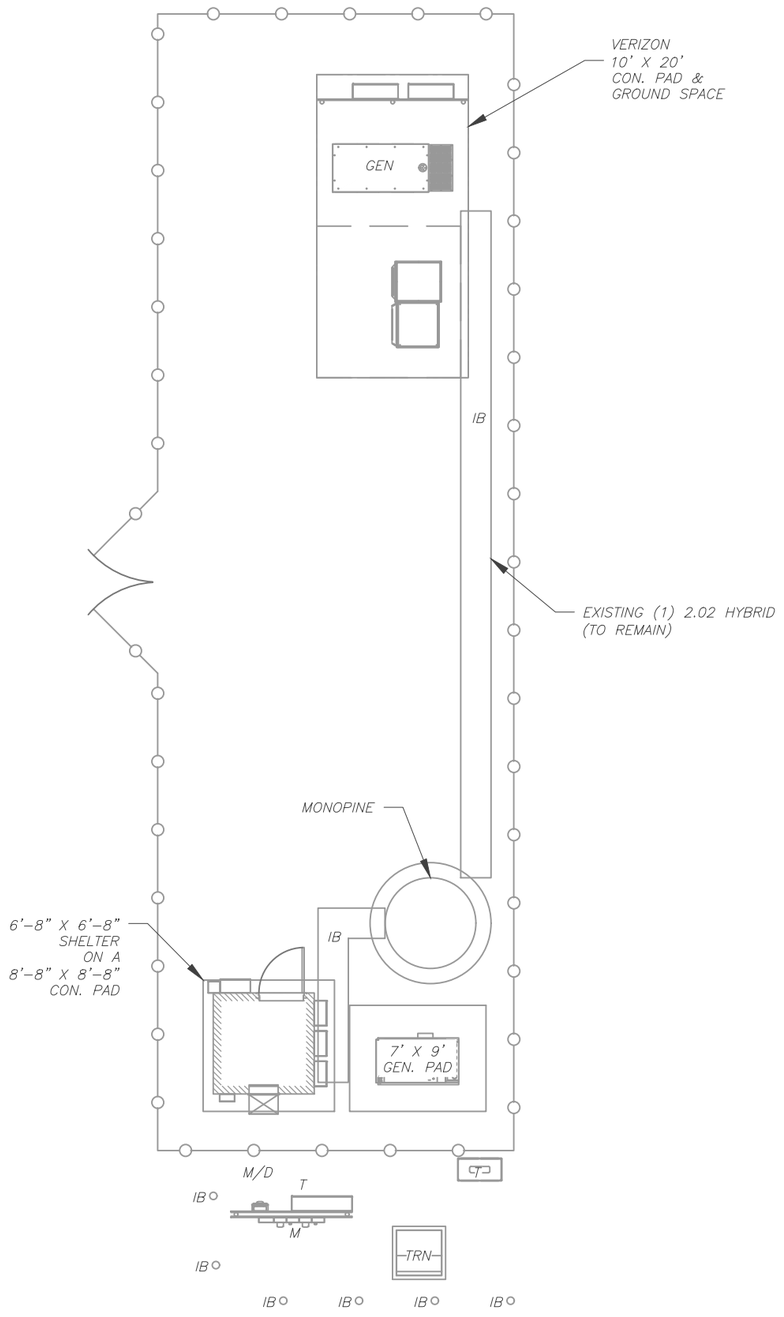
1. THIS SITE PLAN REPRESENTS THE BEST PRESENT KNOWLEDGE AVAILABLE TO THE ENGINEER AT THE TIME OF THIS DESIGN. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO CONSTRUCTION AND VERIFY ALL EXISTING CONDITIONS RELATED TO THE SCOPE OF WORK FOR THIS PROJECT.

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. NO ELECTRICAL SCOPE IS INCLUDED IN THIS PROJECT.

LEGEND

⊗	GROUNDING TEST WELL
ATS	AUTOMATIC TRANSFER SWITCH
B	BOLLARD
CSC	CELL SITE CABINET
D	DISCONNECT
E	ELECTRICAL
F	FIBER
GEN	GENERATOR
G	GENERATOR RECEPTACLE
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
———	CHAINLINK FENCE



1 DETAILED SITE PLAN

GRAPHIC SCALE

10 0 5 10

(IN FEET)
1 UNIT = 10 FEET

AMERICAN TOWER®

A.T. ENGINEERING SERVICES LLC

1 FENTON MAIN
SUITE 300
CARY, NC 27511
PHONE: (919) 468-0112
PEC.0001553

REV.	DESCRIPTION	BY	DATE
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NEW CANAAN 2

VERIZON SITE NAME:
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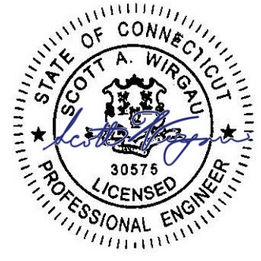
NEW CANAAN, CT 06840

SEAL:



Digitally Signed: 2024-01-03

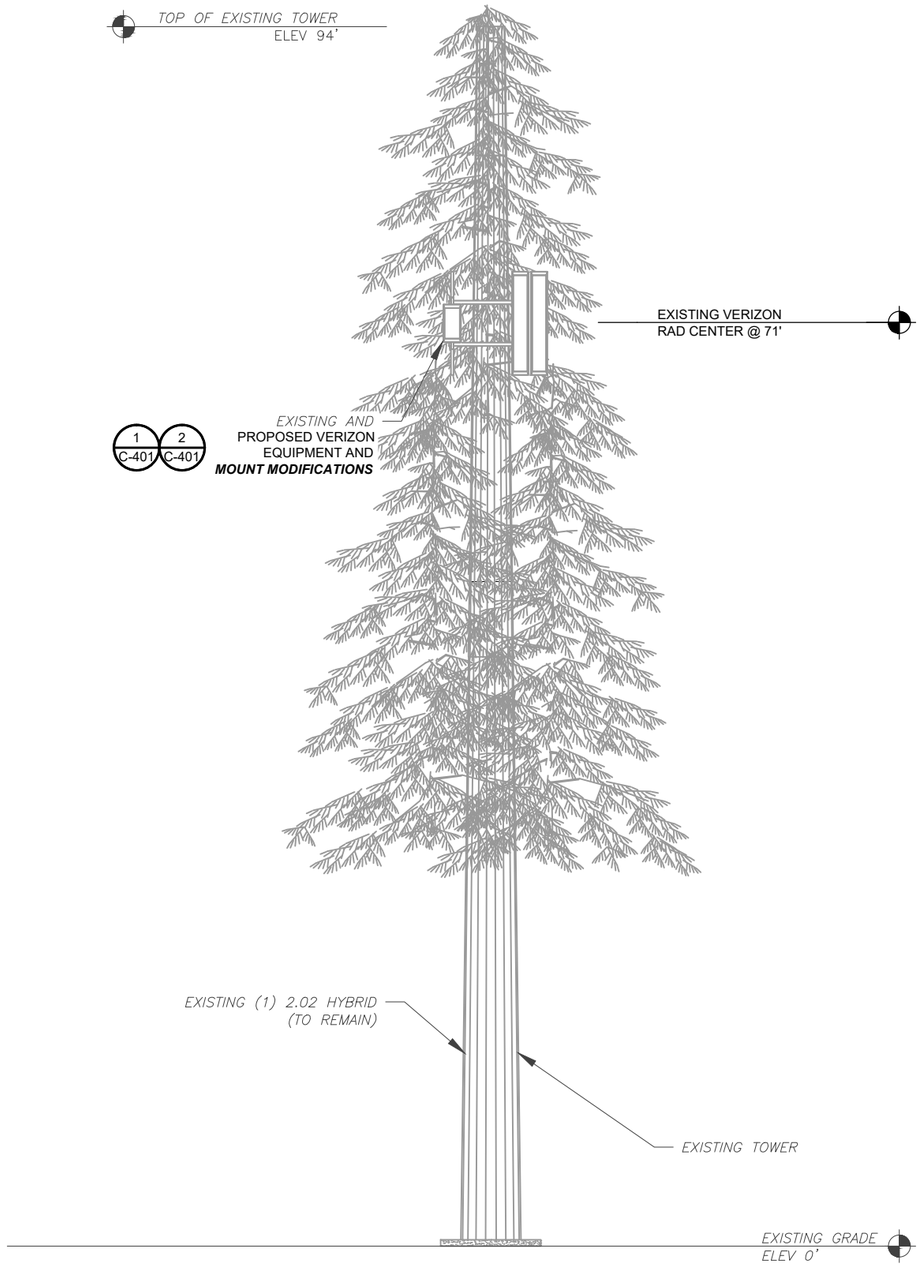
verizon

ATC JOB NO:	14519493_G0
CUSTOMER ID:	NEW CANAAN NE2 CT
CUSTOMER #:	5000155382

DETAILED SITE PLAN

SHEET NUMBER:	REVISION:
C-101	0

PER MOUNT ANALYSIS COMPLETED BY COLLIERS, DATED 12/06/23, 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.

ALL ELEVATIONS REFLECT ABOVE GROUND LEVEL (A.G.L.)

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. TOWER ELEVATION DEPICTION MAY NOT REFLECT ALL EQUIPMENT INCLUDED IN STRUCTURAL ANALYSIS. REFER TO STRUCTURAL ANALYSIS FOR FULL TOWER LOADING.

AMERICAN TOWER®
A.T. ENGINEERING SERVICES LLC
1 FENTON MAIN
SUITE 300
CARY, NC 27511
PHONE: (919) 468-0112
PEC.0001553

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	JM	1/2/2024

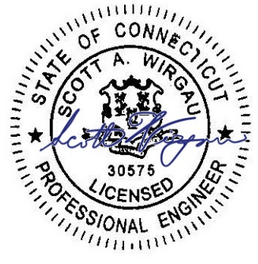
ATC SITE NUMBER:
209477

ATC SITE NAME:
NEW CANAAN 2

VERIZON SITE NAME:
NEW CANAAN NE2 CT

SITE ADDRESS:
183 SOUNDVIEW LANE
NEW CANAAN, CT 06840

SEAL:



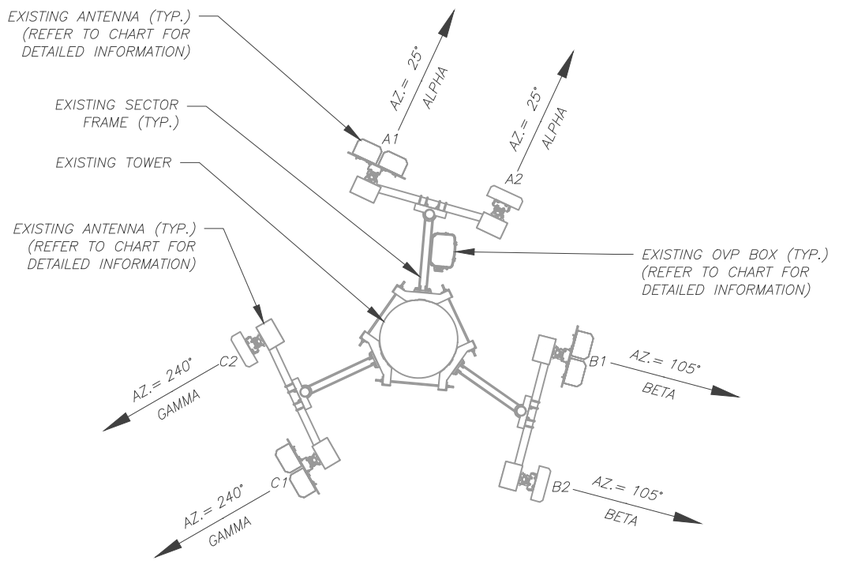
Digitally Signed: 2024-01-03

verizon

ATC JOB NO:	14519493_G0
CUSTOMER ID:	NEW CANAAN NE2 CT
CUSTOMER #:	5000155382

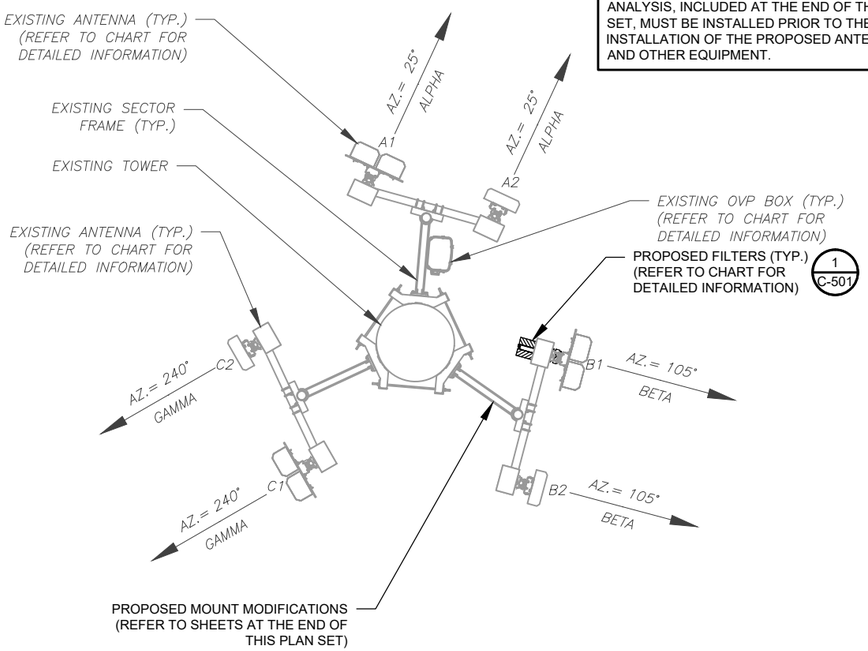
TOWER ELEVATION

SHEET NUMBER:	REVISION:
C-201	0



1 EXISTING ANTENNA PLAN

SCALE: N.T.S.



2 FINAL ANTENNA PLAN

SCALE: N.T.S.

PER MOUNT ANALYSIS COMPLETED BY COLLIERS, DATED 12/06/23, 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.

EXISTING ANTENNA SCHEDULE

LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY	
SECTOR	RAD	AZ	POS	ANTENNA	BAND	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	71'	25°	A1	(2) MX10FRO860	–	RMN	RF4440D-13A	RMN
			A2	MT6407-77A	–	RMN	RF4439D-25A	RMN
BETA		105°	B1	(2) MX10FRO840	–	RMN	RF4440D-13A	RMN
			B2	MT6407-77A	–	RMN	RF4439D-25A	RMN
GAMMA		240°	C1	(2) MX10FRO860	–	RMN	RF4440D-13A	RMN
			C2	MT6407-77A	–	RMN	RF4439D-25A	RMN

NOTES

1. CONFIRM WITH VERIZON 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.

STATUS ABBREVIATIONS

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

CABLE LENGTHS FOR JUMPERS

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

FINAL ANTENNA SCHEDULE

LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY	
SECTOR	RAD	AZ	POS	ANTENNA	BAND	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	71'	25°	A1	(2) MX10FRO860	-	RMN	RF4440D-13A	RMN
			A2	MT6407-77A	-	RMN	RF4439D-25A	RMN
BETA		105°	B1	(2) MX10FRO840	-	RMN	RF4440D-13A	RMN
							(2) KA-6030	ADD
			B2	MT6407-77A	-	RMN	RF4439D-25A	RMN
GAMMA		240°	C1	(2) MX10FRO860	-	RMN	RF4440D-13A	RMN
			C2	MT6407-77A	-	RMN	RF4439D-25A	RMN

EXISTING FIBER DISTRIBUTION / OVP BOX		EXISTING CABLING SUMMARY	
MODEL NUMBER	STATUS	CABLE QTY, SIZE, TYPE	STATUS
RCMDC-6627-PF-48	RMN	(1) 2.02 HYBRID	RMN
–	RMV	----	RMV

3 EQUIPMENT SCHEDULES

FINAL FIBER DISTRIBUTION / OVP BOX		FINAL CABLING SUMMARY	
MODEL NUMBER	STATUS	CABLE QTY, SIZE, TYPE	STATUS
RCMDC-6627-PF-48	RMN	(1) 2.02 HYBRID	RMN
–	RMV	----	ADD

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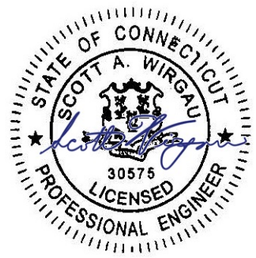


Digitally Signed: 2024-01-03

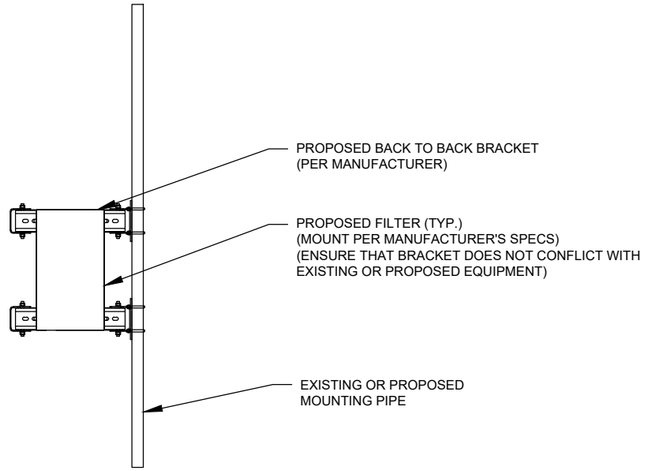
verizon

ATC JOB NO:	14519493_G0
CUSTOMER ID:	NEW CANAAN NE2 CT
CUSTOMER #:	5000155382

ANTENNA INFORMATION & SCHEDULE

SHEET NUMBER:	REVISION:
C-401	0

EXISTING/PROPOSED MOUNTS AND/OR MOUNT MODIFICATIONS NOT SHOWN FOR CLARITY. REFER TO ANTENNA PLANS, MOUNT ANALYSES AND/OR MOUNT MODIFICATION DOCUMENTS FOR ADDITIONAL DETAIL.



1 PROPOSED FILTERS MOUNTING DETAIL - TYPICAL

SCALE: N.T.S.

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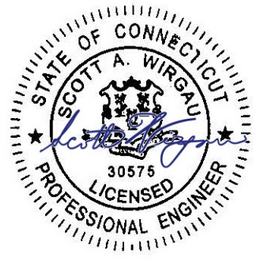


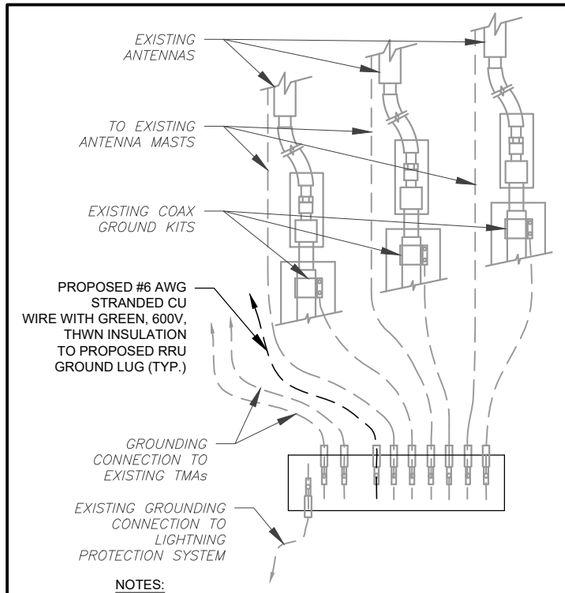
Digitally Signed: 2024-01-03

verizon

ATC JOB NO:	14519493_G0
CUSTOMER ID:	NEW CANAAN NE2 CT
CUSTOMER #:	5000155382

CONSTRUCTION DETAILS

SHEET NUMBER:	REVISION:
C-501	0

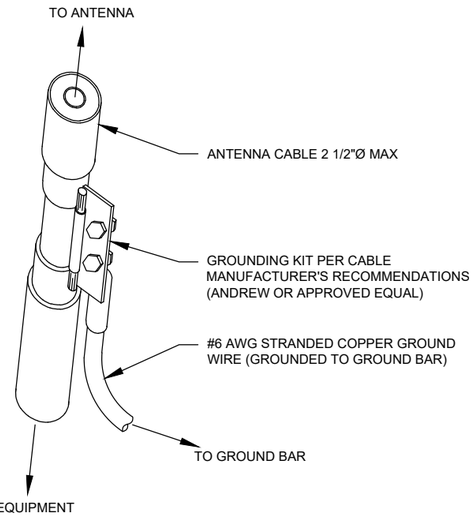


NOTES:

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 VERIZON GROUNDING STANDARDS, LATEST EDITION, AND COMPLY WITH VERIZON 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.

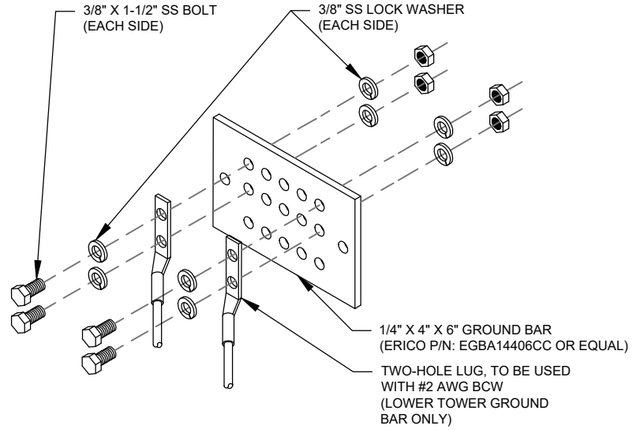


GROUND KIT NOTES:

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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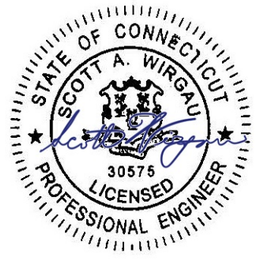


Digitally Signed: 2024-01-03

verizon

ATC JOB NO:	14519493_G0
CUSTOMER ID:	NEW CANAAN NE2 CT
CUSTOMER #:	5000155382

GROUNDING DETAILS

SHEET NUMBER:	REVISION:
E-501	0

Colliers Engineering & Design, Architecture,
Landscaping Architecture, Surveying, CT, P.C.
1055 Washington Boulevard
Stamford, CT 06901
203.324.0800
peter.albano@collierseng.com

Antenna Mount Analysis Report with Hardware Upgrades and PMI Requirements

Mount Analysis

SMART Tool Project #: 10208091
Colliers Engineering & Design Project #: 23777241 (Rev. 1)

December 6, 2023

Site Information

Site ID:	*5000155382-VZW / NEW CANAAN NE2 CT*
Site Name:	*NEW CANAAN NE2 CT*
Carrier Name:	*Verizon Wireless*
Address:	*183 Soundview Lane* *New Canaan, Connecticut 06840* *Fairfield County*
Latitude:	*41.190675°*
Longitude:	*-73.495044°*

Structure Information

Tower Type:	*88-Ft Monopine*
Mount Type:	*6.00-Ft T-Frame*

FUZE ID # 17123713

Analysis Results

T-Frame: **35.4% Pass w/ Hardware Upgrades***

*** Antennas and equipment to be installed in compliance with PMI Requirements of this mount analysis.**

******Contractor PMI Requirements*:**
Included at the end of this MA report
Available & Submitted via portal at https://pmi.vzwsmart.com
For additional questions and support, please reach out to:
pmisupport@colliersengineering.com

Report Prepared By: Frank Centone

Mount Steel (EPA)a per ANSI/TIA-222-H Section 2.6.11.2:

Ice Thickness (In)	Mount Pipes Excluded		Mount Pipes Included	
	Front (EPA)a (Sq. Ft.)	Side (EPA)a (Sq. Ft.)	Front (EPA)a (Sq. Ft.)	Side (EPA)a (Sq. Ft.)
0	6.5	4.0	9.5	7.0
0.5	8.8	5.5	13.0	9.8
1	10.9	6.7	16.4	12.2

Notes:
- (EPA)a values listed above may be used in the absence of more precise information
- (EPA)a values in the table above include 1 sector(s).
- Ka factors included in (EPA)a calculations

Requirements:

The existing mounts will be **SUFFICIENT** for the final loading configuration shown in attachment 2 upon the completion of the requirements listed below.

Replace all mount-tower connection bolts at baseplate with 5/8" dia. A325N bolts to ensure all bolts have a min. of 3 thread pitch beyond the face of the nuts. Contractor to replace one bolt at a time with temporary mount bracing as required

Contractor shall inspect climbing facilities and safety climb and ensure they are in good condition. Contractor shall install safety climb wire rope guides in locations where wire rope is contacting the mount or mount-to-tower connection steel. Wire brush clean any observed corrosion and protect with two (2) coats of cold galvanization (Zinga or Zinc Kote).

Contractor shall install the proposed filter units on new Site Pro 1 Dual Swivel Mount Kit (Part #: RRUDSM or EOR approved equivalent) in the location shown in the placement diagrams.

ANSI/ASSP rigging plan review services compliant with the requirements of ANSI/TIA 322 are available for a Construction Class IV site or other, if required. Separate review fees will apply.

Attachments:

1. **Contractor Required Post Installation Inspection (PMI) Report Deliverables**
2. Antenna Placement Diagrams
3. Mount Photos
4. Mount Mapping Report (for reference only)
5. Analysis Calculations

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.

SUPPLEMENTAL

SHEET NUMBER: R-601

REVISION: 0

KA-6030

TWIN BANDSTOP 900MHZ INTERFERENCE MITIGATION FILTER

The KA-6030 is ideal for co-located 700, 850 and 900 networks. Utilising a 2.6MHz guardband the KA-6030 provides rejection of the 900 UL band while passing 700/850 UL and DL bands. Capable of being used in an outdoor environment the KA-6030 contains two identical bandstop filters, suitable for 2x2 MIMO configuration, offering excellent insertion loss, group delay and rejection.

FEATURES

- Passes full 700 and 850 bands
- Low insertion loss
- Rejection of 900MHz uplink
- DC/AISG pass
- Twin unit
- Dual twin mounting available

TECHNICAL SPECIFICATIONS

BAND NAME	700 PATH / 850 UPLINK PATH	850 DOWNLINK PATH
Passband	698 - 849MHz	869 - 891.5MHz
Insertion loss	0.1dB typical / 0.3dB maximum	0.5dB typical, 1.45dB maximum
Return loss	24dB typical, 18dB minimum	
Maximum input power (Per Port)	100W average	200W average and 66W per 5MHz
Rejection	53dB minimum @ 894.1 - 896.5MHz	

ELECTRICAL	
Impedance	50Ohms
Intermodulation products	-160dBc maximum in UL Band (assuming 20MHz Signal), with 2 x 43dBm carriers -153dBc maximum with 2 x 43dBm

DC / AISG	
Passband	0 - 13MHz
Insertion loss	0.3dB maximum
Return loss	15dB minimum
Input voltage range	± 33V
DC current rating	2A continuous, 4A peak
Compliance	3GPP TS 25.461

ENVIRONMENTAL	
For further details of environmental compliance, please contact Kaelus.	
Temperature range	-20ºC to +60ºC | -4°F to +140°F
Ingress protection	IP67
Altitude	2600m | 8530ft
Lightning protection	RF port: ±5kA maximum (8/20us), IEC 61000-4-5 – Unit must be terminated with some lightning protection circuits.
MTBF	>1,000,000 hours
Compliance	ETSI EN 300 019 class 4.1H, RoHS, NEBS GR-487-CORE

MECHANICAL	
Dimensions H x D x W	269 x 277 x 80mm | 10.60 x 10.90 x 3.15in (Excluding brackets and connectors)
Weight	8.0 kg | 17.6 lbs (no bracket)
Finish	Powder coated, light grey (RAL7035)
Connectors	RF: 4.3-10 (F) x 4
Mounting	Optional pole/wall bracket supplied with two metal clamps 45-178mm diameter poles or custom bracket. See ordering information.

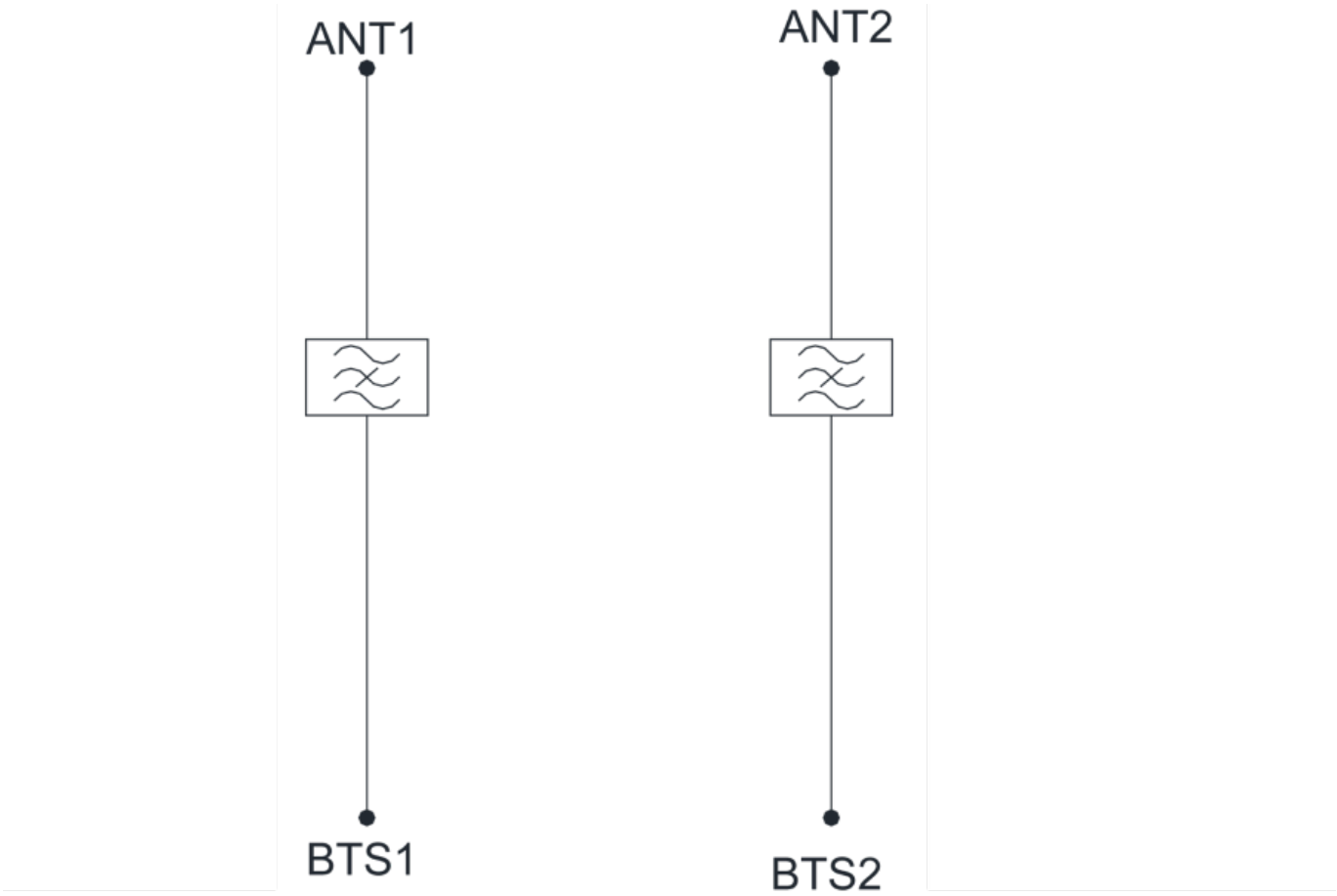
Contact Us: +1 303 768 8080 | +61 (0) 7 3907 1200 | www.kaelus.com

ORDERING INFORMATION

PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS
KA-6030-2032	TWIN, 2 in / 2 out	DC/AISG PASS	4.3-10 (F)

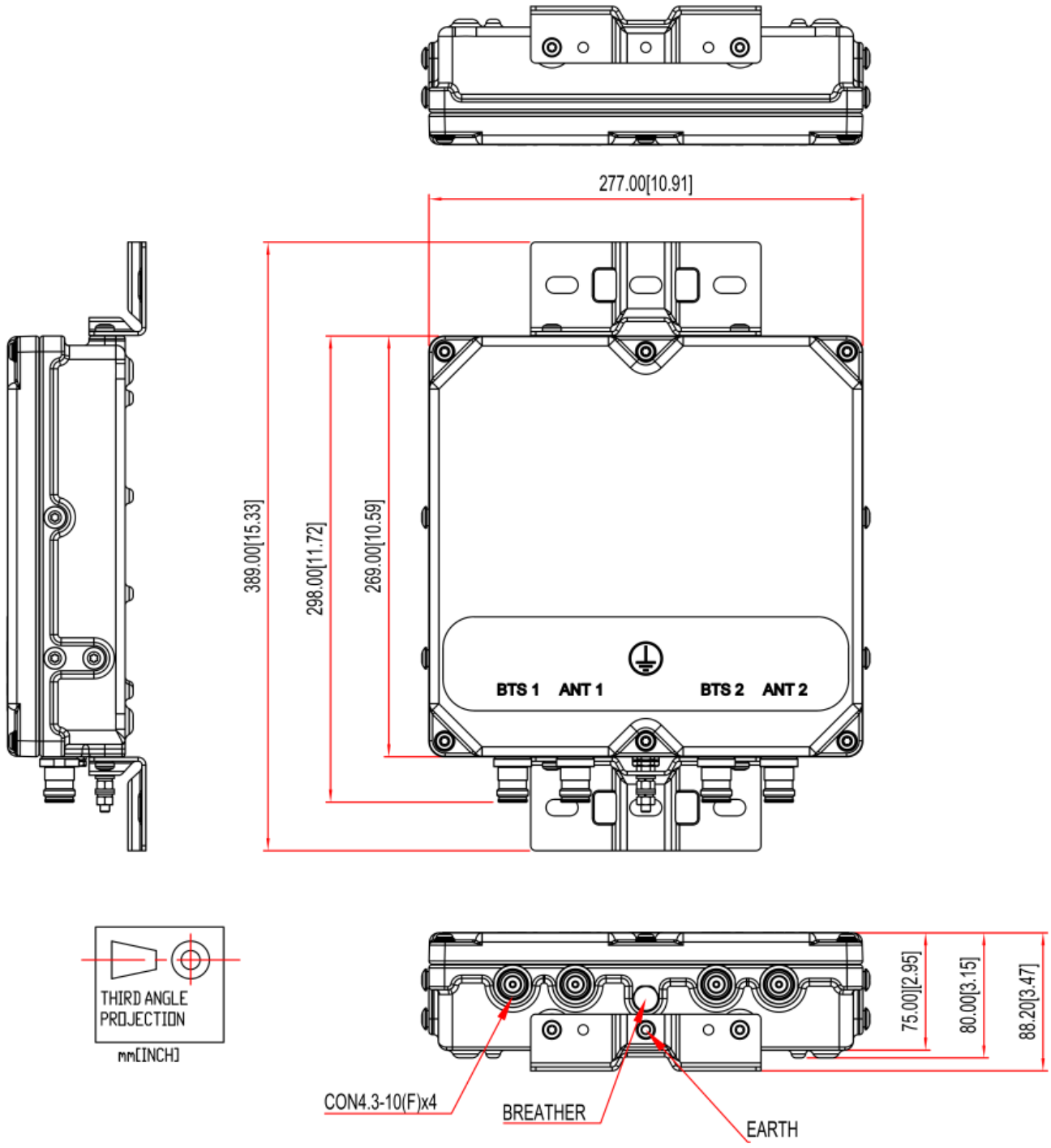
Contact Us: +1 303 768 8080 | +61 (0) 7 3907 1200 | www.kaelus.com

ELECTRICAL BLOCK DIAGRAM



Contact Us: +1 303 768 8080 | +61 (0) 7 3907 1200 | www.kaelus.com

MECHANICAL BLOCK DIAGRAM



Contact Us: +1 303 768 8080 | +61 (0) 7 3907 1200 | www.kaelus.com

EXHIBIT 2

New Canaan

Unique ID: 40 105 74 **Card No:** 1 Of 1

Location:	183 SOUNDVIEW LA	Map Id:	40 105 74	Zone:	4AC	Date Printed:	1/8/2024
		Neighborhood:	3100			Last Update:	11/29/2023

Owner Of Record	Volume/Page	Date	Sales Type	Valid	Sale Price
RICHEY KEITH S	0478/0549	10/9/1997	Warranty Deed	Yes	990,000
MARINA O, 183 SOUNDVIEW LA, NEW CANAAN, CT 06840			Exempt		

Prior Owner History

GRILLS MARGARET J		0383/1039	1/8/1992	Warranty Deed	No	0
GRILLS JOE	MARGARET J	0260/1056	9/3/1980	Warranty Deed	Yes	305,000
LECHNER HERBERT D	BARBARA S	0255/0403	8/30/1979	Warranty Deed	Yes	280,000
HILTON PATRICIA A		0209/0738	8/20/1971	Warranty Deed	No	135,000

Permit Number	Date	Permit Description
21-00312	5/23/2021	CELL TOWER. 85' TALL
20-00931	11/10/2020	INSTALL ANTENNA ARRAY TOWER @81' ON FUTURE HOMELAND TOWER SITE. NEW EQUIP AT GRND LEVEL.
20-00271	4/29/2020	CHIMNEY LINER. INSTALLATION OF 5.5" DIAMETER STAINLESS STEEL CHIMNEY LINER TO SERVICE THE PROPANE SY
19-01056	11/20/2019	ROOF-MOUNTED SOLAR. 48 PANELS AND 2 TESLA ENERGY STORAGE SYSTEM.
19-00990	10/21/2019	ROOF PERMIT
19-00708	9/25/2019	CLOSET ADD. MSTR BDRM ADDITION OVER EXISTING ROOF TO FORM A CLOSET. 1 EXTRA RM-100 SQ FT

Supplemental Data

Census/Tract	00354	2021 GL	
Dev Map ID	5336	Sewer # of Unit	
GIS ID		Sewer rate code	
Route	3	Sewer Rate Fee	
District		Sewer Notes	
Utilities			

Appraised Value

Total Land Value	817,500
Total Building Value	778,600
Total Outbldg Value	57,000
Total Market Value	1,653,100

Acres

Land Type	Acres	490	Total Value
House Lot	4.05	0.00	
Total			817,500

State Item Codes

Code	Quantity	Value
11-Residential Land	4.05	572.250
13-Residential Dwelling	1.00	545.020
14-Residential Outbuilding	3.00	39.900

Assessment History (Prior Years as of Oct 1)

	2023	2022	2021	2020	2019
Land	572,250	571,970	571,970	571,970	571,970
Building	545,020	356,020	356,020	356,020	356,020
Outbuilding	39,900	42,070	42,070	42,070	42,070
Total	**1,157,170**	**970,060**	**970,060**	**970,060**	**970,060**

490 Appraised Totals

Type	Acres	Value	Type	Acres	Value
			Totals	0.00	0

Application Date: **Expiration Date:**

Comments

4/26/2023 CABANA 16 X 12

Revaluation Date: 10/1/2023

Unique ID: 40 105 74 | New Canaan | **Card No:** 1 Of 1

Location:	183 SOUNDVIEW LA
Map Id:	40 105 74

General Description

Building Use	Single Family
Units	
Overall Condition	Average
Class	C+
Stories	2.00
Design (Style)	Colonial
Construction	Wood Frame
Year Built	1971
Percent Complete	100
Finished Area	**3936**

Foundation

Basement Area	1984
Finished Basement	0
Garage Bays	0
Outside Entry	No
Sump Pump	No

HVAC

Heating Type	Hot Water
Fuel	Propane Gas
Cooling Type	Central

Interior

Floors	Hardwood
Attic Access	No
Walls	Wall Board / Wood
Bath Cond	
Kitchen Cond	

Exterior

Exterior	Clapboards
Roof Cover	Asphalt
Roof Type	HIP

Special Features

Type	Count/Area
Bsmt Gar	2
Fin Bsmt	770
Fireplace	2
Gross Basement Area	1984

Room Summary

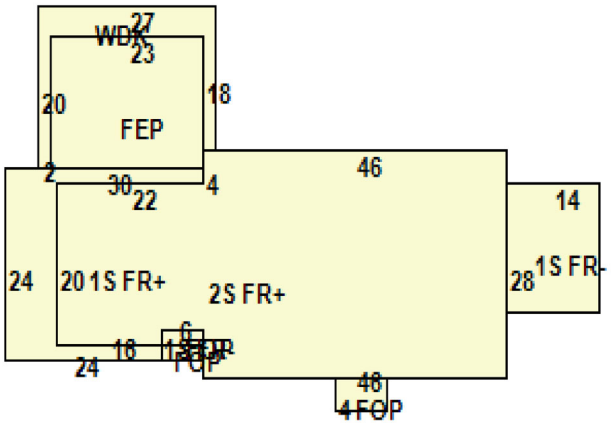
Total	Bedroom	Kitchens	Full Baths	Half Baths
10	4	1	3	2

Description	Area/Qty
Base Rate	3936
Central Air	3936
Fin BasementM	770
Fireplace	2
Full Baths	3
Gross Basement Area	
Half Baths	2

Attached Components

Type	Year	Area
Enclosed Porch	1971	368
Wood Deck	1971	168
Open Porch	1971	32
Open Porch	1971	12
Open Porch	1971	12

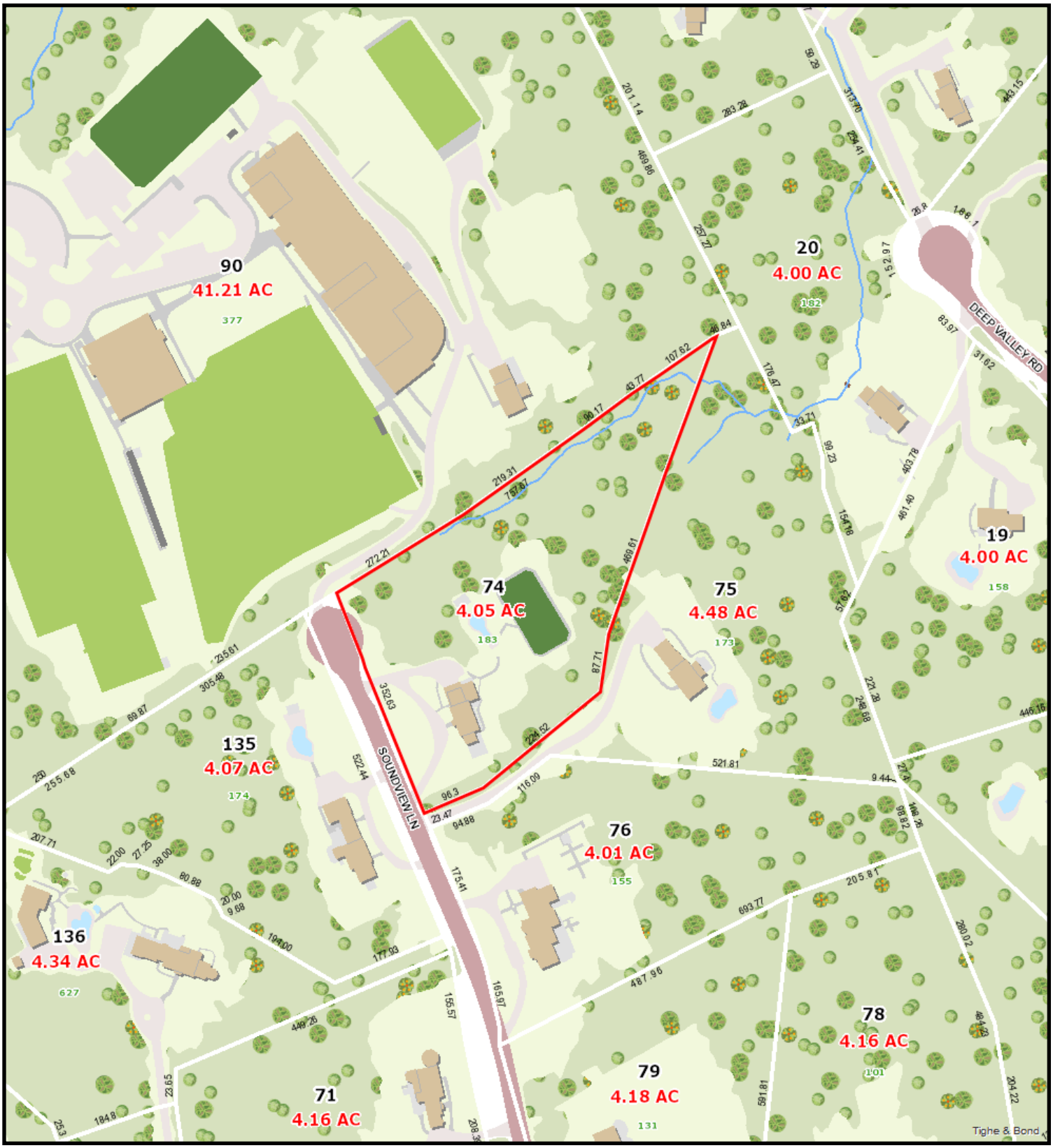
Total Building Value: 778,600



Detached Component Computations

Type	Year	Condition	Area/Qty
Cabana	2018	Average	192
Concrete Pool	1981	Good	684
Tennis Courts	1981	Good	7200

Type	Year	Condition	Area/Qty



Soundview Lane GIS

1/8/2024 4:27:28 PM

Scale: 1"=200'

Scale is approximate

The information depicted on this map is for planning purposes only. It is not adequate for legal boundary definition, regulatory interpretation, or parcel-level analyses.

EXHIBIT 3

AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure	:	94 ft Monopine
ATC Asset Name	:	New Canaan 2
ATC Asset Number	:	209477
Engineering Number	:	14519493_C3_03
Proposed Carrier	:	VERIZON WIRELESS
Carrier Site Name	:	NEW CANAAN NE2 CT
Carrier Site Number	:	5000155382
Site Location	:	183 Soundview Lane New Canaan, CT 06840 41.1907° N, 73.495° W
County	:	Fairfield
Date	:	November 19, 2023
Max Usage	:	79%
Analysis Result	:	Pass

COA: PEC.0001553

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Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 94 ft Monopine tower to reflect the change in loading by VERIZON WIRELESS.

Supporting Documents

Tower:	Valmont Order #498211-P1, dated March 23, 2021
Foundation:	Valmont Order #498211-P1, dated March 18, 2021
Geotechnical:	Delta Oaks Group Project #GEO20-07085-08, dated October 16, 2020

Analysis

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

Basic Wind Speed:	116 mph (3-second gust)
Basic Wind Speed w/ Ice:	50 mph (3-second gust) w/ 1.00" radial ice concurrent
Code(s):	ANSI/TIA-222-H / 2021 IBC / 2022 Connecticut State Building Code
Exposure Category:	B
Risk Category:	II
Topographic Factor Procedure:	Method 1
Topographic Category:	1
Spectral Response:	Ss = 0.25, S_1 = 0.06
Site Class:	D - Stiff Soil - Default

Conclusion

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

If you have any questions or require additional information, please reach out to your American Tower contact. If you do not have an American Tower contact and have an Engineering question, please contact **Engineering@americantower.com** Please include the American Tower asset name, asset number, and engineering number in the subject line for any questions.

Structure Usages

Structural Component	Usage	Control	Result
Pole Shaft	71.7%	1.2D + 1.0W	Pass
Serviceability Usage	23.1%	1.0D + 1.0W	Pass
Upper Flange Plate @ 84.0 ft	25.3%	Bolts	Pass
Base Plate @ 0.0 ft	79.2%	Rods	Pass
Mat & Pier	69.3%	Flexure [Steel (Pier)]	Pass
Pier	52.4%	Shear [Steel]	Pass

Maximum Reactions

Foundation	Moment (k-ft)	Axial (k)	Shear (k)
Monopole Base	4,971.2	40.4	90.8

Reactions shown reflect the results from the Load Case with maximum Moment

Structure base reactions were analyzed using available geotechnical and foundation information.

VERIZON WIRELESS Final Loading

Elev (ft)	Qty	Equipment	Lines
71.0	1	Raycap RCMDC-6627-PF-48	(1) 2.02 (51.2mm) Hybrid
	2	JMA Wireless MX10FRO840-xx	
	2	Kaelus KA-6030	
	3	Samsung MT6407-77A	
	3	Samsung RF4439d-25A	
	3	Samsung RF4440d-13A	
	4	JMA Wireless MX10FRO860-xx	

Other Existing/Reserved Loading

Elev (ft)	Qty	Equipment	Lines	Carrier
81.0	3	CCI HPA-65R-BUU-H8	(2) 0.39" (10mm) Fiber Trunk (6) 0.78" (19.7mm) 8 AWG 6	AT&T MOBILITY
	3	Ericsson RRUS 4415 B30		
	3	Ericsson RRUS 4478 B14		
	3	Ericsson RRUS 8843		
	3	Raycap DC6-48-60-0-8C		
	6	CCI TPA65R-BU8D		
71.0	3	T-Arm	-	-
61.0	3	Light Sector Frame	-	-

(If table breaks across pages, please see previous page for data in merged cells)

Standard Conditions

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

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

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

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

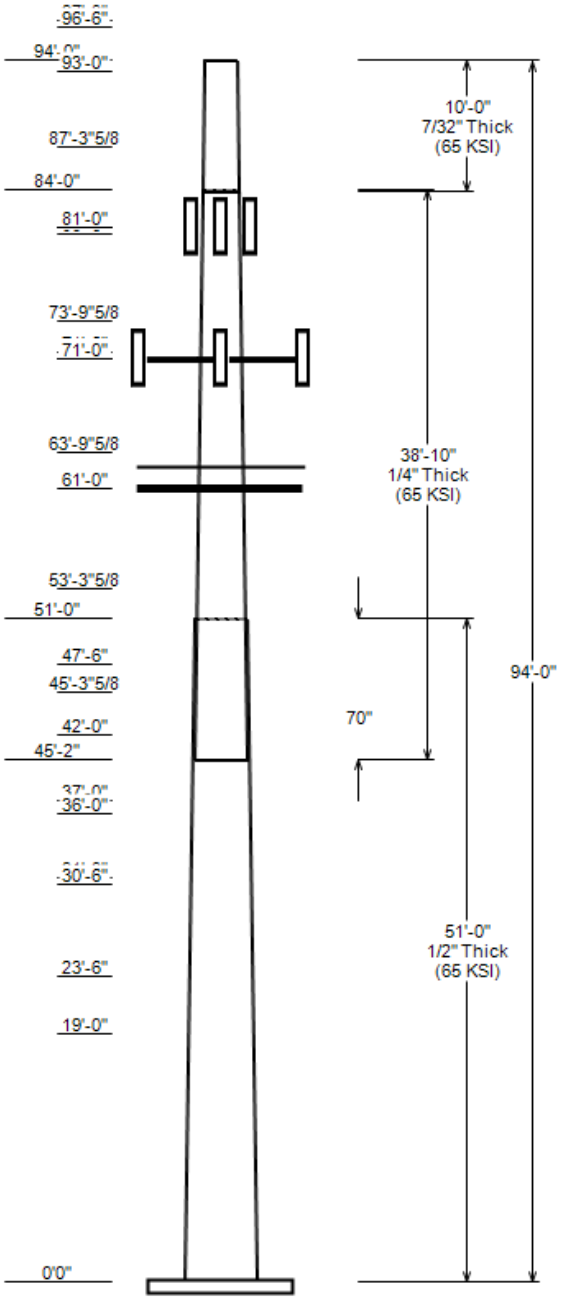
Unless explicitly agreed by both the client and A.T. Engineering Services LLC, all services will be performed in accordance with the current revision of ANSI/TIA-222.

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

ASSET:	209477, New Canaan 2	CODE:	ANSI/TIA-222-H
CUSTOMER:	VERIZON WIRELESS	PROJECT:	14519493

ANALYSIS PARAMETERS

Nominal Wind:	116 mph	**Ice Wind:**	50 mph w/ 1" ice	**Service Wind:**	60 mph
Risk Category:	II	**Exposure:**	B	**S_s:** 0.25	**S_1:** 0.058
Topo Category:	1	**Topo Factor:**	Method 1	**Topo Feature:**	
Structure Height:	94 ft	**Base Elevation:**	0.00 ft	**Structure Type:**	Taper
Base Diameter:	55 in	**Base Rotation:**	0°	**Taper:**	0.3190 (in/ft)



POLE SECTION PROPERTIES

Section	Length (ft)	Flat Diameter (in) Top	Flat Diameter (in) Bottom	Thick (in)	Joint Type	Joint Length (in)	Pole Shape	Yield Strength (ksi)
1	51.000	38.72	55.00	0.500		0.000	18 Sides	65
2	38.833	28.69	41.08	0.250	Slip Joint	70.000	18 Sides	65
3	10.000	25.50	28.69	0.219	Butt Joint	0.000	18 Sides	65

DISCRETE APPURTENANCE

Elev (ft)	Description
97.0	(1) (3) 6 ft Branches
96.5	(1) 5 ft Branches
93.0	(9) 8 ft Branches
87.3	(19) 8 ft Branches
81.0	(3) Ericsson RRUS 4478 B14
81.0	(3) Ericsson RRUS 4415 B30
81.0	(3) Ericsson RRUS 8843
81.0	(3) Raycap DC6-48-60-0-8C
81.0	(3) CCI HPA-65R-BUU-H8
81.0	(6) CCI TPA65R-BU8D
80.5	(19) 8 ft Branches
73.8	(9) 10 ft Branches
71.5	(18) 8 ft Branches
71.0	(2) Kaelus KA-6030
71.0	(3) Samsung RF4440d-13A
71.0	(3) Samsung RF4439d-25A
71.0	(1) Raycap RCMDC-6627-PF-48
71.0	(3) Samsung MT6407-77A
71.0	(3) Generic Flat T-Arm
71.0	(4) JMA Wireless MX10FRO860-xx
71.0	(2) JMA Wireless MX10FRO840-xx
63.8	(25) 10 ft Branches
61.0	(3) Generic Flat Light Sector Fram
53.3	(31) 10 ft Branches
47.5	(4) 12 ft Branches
45.3	(8) 10 ft Branches
42.0	(13) 12 ft Branches
37.0	(13) 12 ft Branches
36.0	(5) 14 ft Branches
31.0	(11) 12 ft Branches
30.5	(8) 14 ft Branches
23.5	(26) 14 ft Branches
19.0	(3) 12 ft Branches

LINEAR APPURTENANCE

Elev To (ft)	Description
81.0	(6) 0.78" (19.7mm) 8 AWG 6
81.0	(2) 0.39" (10mm) Fiber Trunk
71.0	(1) 2.02 (51.2mm) Hybrid

GLOBAL BASE REACTIONS

Load Case	Moment (kip-ft)	Axial (kip)	Shear (kip)
1.2D + 1.0W	4971.17	40.40	90.76
0.9D + 1.0W	4961.94	30.26	90.74
1.2D + 1.0Di + 1.0Wi	1318.65	52.75	24.03
1.2D + 1.0Ev + 1.0Eh	169.61	40.52	2.81
0.9D - 1.0Ev + 1.0Eh	169.18	27.37	2.81
1.0D + 1.0W	1188.78	33.80	21.72

ANALYSIS PARAMETERS

Location:	Fairfield County,CT	**Height:**	94 ft
Type and Shape:	Taper, 18 Sides	**Base Diameter:**	55.00 in
Manufacturer:	Valmont	**Top Diameter:**	25.50 in
K_d (non-service):	0.95	**Taper:**	0.3190 in/ft
K_e:	0.98	**Rotation:**	0.000º

ICE & WIND PARAMETERS

Risk Category:	II	**Design Wind Speed:**	116 mph
Exposure Category:	B	**Design Wind Speed w/ Ice:**	50 mph
Topo Factor Procedure:	Method 1	**Design Ice Thickness:**	1.00 in
Topographic Category:	1	**Service Wind Speed:**	60 mph
Crest Height:	0 ft	**HMSL:**	502.00 ft

SEISMIC PARAMETERS

Analysis Method:	Equivalent Lateral Force Method				
Site Class:	D - Stiff Soil		**Period Based on Rayleigh Method (sec):**		0.74
T_L (sec):	6	**P:**	1	**C_s:**	0.083
S_s:	0.250	**S_1:**	0.058	**C_s Max:**	0.083
F_a:	1.600	**F_v:**	2.400	**C_s Min:**	0.030
S_{ds}:	0.267	**S_{d1}:**	0.093		

LOAD CASES

1.2D + 1.0W	116 mph Wind with No Ice
0.9D + 1.0W	116 mph Wind with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	50 mph Wind with 1" Radial Ice
1.2D + 1.0Ev + 1.0Eh	Seismic
0.9D - 1.0Ev + 1.0Eh	Seismic (Reduced DL)
1.0D + 1.0W	60 mph Wind with No Ice

SHAFT SECTION PROPERTIES

							Bottom						Top						
Section	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Joint Len (in)	Weight (lb)	Dia (in)	Elev (ft)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Dia (in)	Elev (ft)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Taper (in/ft)
1-18	51.00	0.5000	65		0.00	12,768	55.00	0.000	86.49	32,456.7	17.63	110.00	38.72	51.00	60.66	11,197.	11.89	77.45	0.3192
2-18	38.83	0.2500	65	Slip	70.00	3,632	41.08	45.167	32.40	6,826.3	27.21	164.34	28.69	84.00	22.57	2,306.4	18.47	114.76	0.3192
3-18	10.00	0.2188	65	Butt	0.00	635	28.69	84.000	19.77	2,025.2	21.36	131.13	25.50	94.00	17.56	1,417.7	18.79	116.54	0.3192
			Total Shaft Weight			**17,035**													

DISCRETE APPURTENANCE PROPERTIES

Attach Elev (ft)	Description	Qty	Ka	Vert Ecc (ft)	No Ice Weight (lb)	No Ice EPAa (sf)	No Ice Orientation Factor	Ice Weight (lb)	Ice EPAa (sf)	Ice Orientation Factor
97.00	(3) 6 ft Branches	1	1.00	0.000	120.00	7.500	1.00	173.27	10.829	1.00
96.50	5 ft Branches	1	1.00	0.000	33.00	2.250	1.00	47.65	3.249	1.00
93.00	8 ft Branches	9	1.00	0.000	39.50	9.360	1.00	57.00	13.506	1.00
87.30	8 ft Branches	19	1.00	0.000	39.50	9.360	1.00	56.89	13.481	1.00
81.00	Ericsson RRUS 4478 B14	3	0.80	0.000	59.90	1.842	0.50	94.62	2.405	0.50
81.00	Ericsson RRUS 4415 B30	3	0.80	0.000	46.00	1.842	0.50	76.79	2.405	0.50
81.00	Raycap DC6-48-60-0-8C	3	0.80	0.000	16.00	3.048	0.60	62.54	3.764	0.60
81.00	CCI HPA-65R-BUU-H8	3	0.80	0.000	68.00	12.976	0.67	229.34	15.224	0.67
81.00	CCI TPA65R-BU8D	6	0.80	0.000	82.50	18.089	0.63	299.00	20.407	0.63
81.00	Ericsson RRUS 8843	3	0.80	0.000	75.00	1.980	0.50	119.91	2.567	0.50
80.50	8 ft Branches	19	1.00	0.000	39.50	9.360	1.00	56.77	13.452	1.00
73.80	10 ft Branches	9	1.00	0.000	45.10	11.460	1.00	64.62	16.420	1.00
71.50	8 ft Branches	18	1.00	0.000	39.50	9.360	1.00	56.56	13.404	1.00
71.00	Samsung RF4439d-25A	3	0.80	0.000	74.70	2.500	0.67	124.22	3.148	0.67
71.00	Samsung RF4440d-13A	3	0.80	0.000	70.30	1.875	0.50	107.68	2.434	0.50
71.00	Kaelus KA-6030	2	0.80	0.000	17.60	0.963	0.50	32.21	1.368	0.50
71.00	Raycap RCMDC-6627-PF-48	1	0.80	0.000	32.00	4.056	1.00	110.73	4.901	1.00
71.00	JMA Wireless MX10FRO840-xx	2	0.80	0.000	92.00	17.197	0.73	293.33	19.475	0.73
71.00	JMA Wireless MX10FRO860-xx	4	0.80	0.000	68.40	13.716	0.67	234.70	16.019	0.67
71.00	Generic Flat T-Arm	3	0.75	0.000	312.50	12.900	0.67	474.33	17.966	0.67
71.00	Samsung MT6407-77A	3	0.80	0.000	81.60	4.709	0.61	144.74	5.650	0.61
63.80	10 ft Branches	25	1.00	0.000	45.10	11.460	1.00	64.33	16.346	1.00
61.00	Generic Flat Light Sector Fram	3	0.75	0.000	400.00	17.900	0.67	583.60	27.105	0.67
53.30	10 ft Branches	31	1.00	0.000	45.10	11.460	1.00	63.98	16.259	1.00
47.50	12 ft Branches	4	1.00	0.000	57.60	13.670	1.00	81.44	19.328	1.00
45.30	10 ft Branches	8	1.00	0.000	45.10	11.460	1.00	63.72	16.191	1.00
42.00	12 ft Branches	13	1.00	0.000	57.60	13.670	1.00	81.15	19.258	1.00
37.00	12 ft Branches	13	1.00	0.000	57.60	13.670	1.00	80.87	19.193	1.00
36.00	14 ft Branches	5	1.00	0.000	79.10	17.330	1.00	110.97	24.313	1.00
31.00	12 ft Branches	11	1.00	0.000	57.60	13.670	1.00	80.48	19.100	1.00
30.50	14 ft Branches	8	1.00	0.000	79.10	17.330	1.00	110.47	24.202	1.00
23.50	14 ft Branches	26	1.00	0.000	79.10	17.330	1.00	109.45	23.979	1.00
19.00	12 ft Branches	3	1.00	0.000	57.60	13.670	1.00	79.16	18.787	1.00
Totals	**Row Count: 33**	**268**			**16,263.90**			**25,981.52**		

LINEAR APPURTENANCE PROPERTIES

Load Case Azimuth (deg): 0.00

Elev From (ft)	Elev To (ft)	Qty	Description	Diameter (in)	Weight (lb/ft)	Flat	Max/ Row	Distance Between Rows(in)	Distance Between Cols(in)	Azimuth (deg)	Distance From Face (in)	Exposed To Wind	Carrier
0.00	81.00	6	0.78" (19.7mm) 8 AWG	0.78	0.59	N	0	0	0	0	0	N	AT&T MOBILITY
0.00	81.00	2	0.39" (10mm) Fiber Tr	0.39	0.06	N	0	0	0	0	0	N	AT&T MOBILITY
0.00	71.00	1	2.02 (51.2mm) Hybrid	2.02	3.04	N	0	0	0	0	0	N	VERIZON WIRELESS

SEGMENT PROPERTIES

Seg Top Elev (ft)	Description *(Max Length: 5 ft)*	Thick (in)	Flat Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	F'y (ksi)	S (in^3)	Z (in^3)	Weight (lb)
0.00		0.5000	55.000	86.488	32,456.70	17.63	110.00	80.7	1162.3	0.0	0.0

SEGMENT PROPERTIES

Seg Top Elev (ft)	Description *(Max Length: 5 ft)*	Thick (in)	Flat Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	F'y (ksi)	S (in^3)	Z (in^3)	Weight (lb)
5.00		0.5000	53.404	83.956	29,688.40	17.07	106.81	81.3	1094.9	0.0	1,450.0
10.00		0.5000	51.809	81.424	27,082.10	16.51	103.62	82	1029.6	0.0	1,406.9
15.00		0.5000	50.213	78.891	24,633.00	15.94	100.43	82.6	966.2	0.0	1,363.8
19.00		0.5000	48.936	76.865	22,783.60	15.49	97.87	82.6	917.0	0.0	1,060.0
20.00		0.5000	48.617	76.359	22,336.20	15.38	97.23	82.6	904.9	0.0	260.7
23.50		0.5000	47.500	74.586	20,816.50	14.99	95.00	82.6	863.2	0.0	898.9
25.00		0.5000	47.021	73.827	20,186.80	14.82	94.04	82.6	845.6	0.0	378.8
30.00		0.5000	45.426	71.294	18,180.00	14.26	90.85	82.6	788.3	0.0	1,234.5
30.50		0.5000	45.266	71.041	17,986.90	14.20	90.53	82.6	782.6	0.0	121.1
31.00		0.5000	45.106	70.788	17,795.30	14.14	90.21	82.6	777.0	0.0	120.7
35.00		0.5000	43.830	68.762	16,310.70	13.69	87.66	82.6	733.0	0.0	949.7
36.00		0.5000	43.511	68.255	15,952.90	13.58	87.02	82.6	722.1	0.0	233.1
37.00		0.5000	43.191	67.749	15,600.40	13.47	86.38	82.6	711.4	0.0	231.4
40.00		0.5000	42.234	66.229	14,574.20	13.13	84.47	82.6	679.7	0.0	683.8
42.00		0.5000	41.596	65.217	13,915.70	12.91	83.19	82.6	658.9	0.0	447.3
45.00		0.5000	40.638	63.697	12,965.50	12.57	81.28	82.6	628.4	0.0	658.0
45.17	Bot - Section 2	0.5000	40.585	63.613	12,914.00	12.55	81.17	82.6	626.7	0.0	36.1
45.30		0.5000	40.543	63.545	12,873.00	12.53	81.09	82.6	625.4	0.0	43.5
47.50		0.5000	39.840	62.431	12,207.60	12.29	79.68	82.6	603.5	0.0	711.8
50.00		0.5000	39.043	61.165	11,479.80	12.01	78.09	82.6	579.1	0.0	793.6
51.00	Top - Section 1	0.2500	39.223	30.924	5,934.50	25.90	156.89	70.9	298.0	0.0	312.9
53.30		0.2500	38.489	30.342	5,605.50	25.38	153.96	71.5	286.9	0.0	239.7
55.00		0.2500	37.947	29.911	5,370.30	25.00	151.79	72	278.7	0.0	174.3
60.00		0.2500	36.351	28.645	4,716.70	23.88	145.40	73.3	255.6	0.0	498.1
61.00		0.2500	36.032	28.392	4,592.70	23.65	144.13	73.6	251.1	0.0	97.0
63.80		0.2500	35.138	27.683	4,257.20	23.02	140.55	74.3	238.6	0.0	267.1
65.00		0.2500	34.755	27.379	4,118.50	22.75	139.02	74.6	233.4	0.0	112.4
70.00		0.2500	33.160	26.113	3,573.10	21.62	132.64	76	212.2	0.0	455.1
71.00		0.2500	32.840	25.860	3,470.20	21.40	131.36	76.2	208.1	0.0	88.4
71.50		0.2500	32.681	25.733	3,419.50	21.29	130.72	76.4	206.1	0.0	43.9
73.80		0.2500	31.947	25.150	3,192.50	20.77	127.79	77	196.8	0.0	199.1
75.00		0.2500	31.564	24.847	3,078.10	20.50	126.26	77.3	192.1	0.0	102.1
80.00		0.2500	29.968	23.580	2,631.10	19.37	119.87	78.6	172.9	0.0	412.0
80.50		0.2500	29.808	23.454	2,589.00	19.26	119.23	78.7	171.1	0.0	40.0
81.00		0.2500	29.649	23.327	2,547.30	19.15	118.60	78.9	169.2	0.0	39.8
84.00	Top - Section 2	0.2500	28.691	22.567	2,306.40	18.47	114.77	79.7	158.3	0.0	234.3
84.00	Bot - Section 3	0.2188	28.691	19.773	2,025.20	21.36	131.13	76.3	139.0	0.0	
85.00		0.2188	28.372	19.551	1,957.90	21.10	129.67	76.6	135.9	0.0	66.9
87.30		0.2188	27.638	19.041	1,808.70	20.51	126.32	77.3	128.9	0.0	151.0
90.00		0.2188	26.777	18.443	1,643.50	19.82	122.38	78.1	120.9	0.0	172.2
93.00		0.2188	25.819	17.778	1,472.10	19.04	118.00	79	112.3	0.0	184.9
94.00		0.2188	25.500	17.556	1,417.70	18.79	116.54	79.3	109.5	0.0	60.1
										Total:	**17,035.0**

CALCULATED FORCES

Load Case: 1.2D + 1.0W — 116 mph Wind with No Ice — 17 Iterations

Gust Response Factor: 1.10
Dead load Factor: 1.20
Wind Load Factor: 1.00

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (ft-kips)	Phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-40.40	-90.76	0.00	-4,971.2	0.00	4,971.17	6,278.64	1,517.87	7,472.14	7,031.52	0	0	0.717
5.00	-38.29	-90.49	0.00	-4,517.4	0.00	4,517.36	6,144.82	1,473.43	7,041.04	6,678.32	0.11	-0.21	0.686
10.00	-36.25	-90.21	0.00	-4,064.9	0.00	4,064.92	6,007.97	1,428.99	6,622.75	6,330.81	0.45	-0.41	0.652
15.00	-34.29	-89.96	0.00	-3,613.8	0.00	3,613.85	5,861.23	1,384.54	6,217.27	5,982.24	0.99	-0.62	0.614
19.00	-32.64	-88.79	0.00	-3,254.0	0.00	3,254.01	5,710.71	1,348.99	5,902.10	5,677.45	1.58	-0.77	0.583
20.00	-32.19	-88.67	0.00	-3,165.2	0.00	3,165.22	5,673.09	1,340.10	5,824.59	5,602.50	1.75	-0.81	0.575
23.50	-28.66	-77.34	0.00	-2,854.9	0.00	2,854.87	5,541.39	1,308.99	5,557.34	5,344.09	2.4	-0.95	0.543
25.00	-28.04	-77.16	0.00	-2,738.9	0.00	2,738.86	5,484.94	1,295.66	5,444.72	5,235.21	2.7	-1.01	0.532
30.00	-26.39	-76.98	0.00	-2,353.1	0.00	2,353.09	5,296.80	1,251.21	5,077.66	4,880.38	3.86	-1.18	0.491
30.50	-25.53	-73.48	0.00	-2,314.6	0.00	2,314.60	5,277.99	1,246.77	5,041.66	4,845.58	3.98	-1.2	0.486

CALCULATED FORCES

31.00	-24.61	-69.58	0.00	-2,277.9	0.00	2,277.86	5,259.17	1,242.32	5,005.79	4,810.90	4.11	-1.22	0.481
35.00	-23.34	-69.41	0.00	-1,999.5	0.00	1,999.54	5,108.66	1,206.77	4,723.41	4,537.99	5.2	-1.36	0.448
36.00	-22.59	-67.08	0.00	-1,930.1	0.00	1,930.12	5,071.03	1,197.88	4,654.10	4,471.01	5.48	-1.39	0.439
37.00	-21.46	-62.26	0.00	-1,863.0	0.00	1,863.05	5,033.40	1,188.99	4,585.30	4,404.53	5.78	-1.43	0.430
40.00	-20.53	-62.10	0.00	-1,676.3	0.00	1,676.26	4,920.52	1,162.33	4,381.97	4,208.06	6.71	-1.52	0.405
42.00	-19.14	-57.06	0.00	-1,552.1	0.00	1,552.07	4,845.26	1,144.55	4,248.98	4,079.57	7.36	-1.59	0.387
45.00	-18.28	-56.94	0.00	-1,380.9	0.00	1,380.88	4,732.38	1,117.88	4,053.33	3,890.58	8.39	-1.68	0.361
45.17	-18.23	-56.93	0.00	-1,371.4	0.00	1,371.39	4,726.11	1,116.40	4,042.60	3,880.21	8.45	-1.68	0.360
45.30	-17.79	-54.29	0.00	-1,363.8	0.00	1,363.80	4,721.09	1,115.22	4,034.02	3,871.93	8.5	-1.68	0.358
47.50	-16.64	-52.57	0.00	-1,244.4	0.00	1,244.35	4,638.31	1,095.66	3,893.82	3,736.51	9.29	-1.75	0.339
50.00	-15.63	-52.43	0.00	-1,112.9	0.00	1,112.93	4,544.23	1,073.44	3,737.51	3,585.55	10.22	-1.82	0.316
51.00	-15.21	-52.31	0.00	-1,060.5	0.00	1,060.50	1,974.29	542.72	1,910.39	1,585.46	10.61	-1.84	0.686
53.30	-13.52	-41.76	0.00	-940.2	0.00	940.18	1,953.73	532.50	1,839.11	1,539.21	11.51	-1.9	0.624
55.00	-13.20	-41.56	0.00	-869.2	0.00	869.18	1,938.13	524.94	1,787.30	1,505.11	12.2	-1.98	0.591
60.00	-12.48	-41.36	0.00	-661.4	0.00	661.37	1,890.21	502.72	1,639.20	1,405.35	14.39	-2.18	0.484
61.00	-10.91	-40.37	0.00	-620.0	0.00	620.02	1,880.26	498.28	1,610.34	1,385.51	14.86	-2.22	0.460
63.80	-9.53	-31.38	0.00	-507.0	0.00	506.99	1,851.77	485.83	1,530.92	1,330.21	16.19	-2.32	0.390
65.00	-9.34	-31.19	0.00	-469.3	0.00	469.34	1,839.28	480.50	1,497.50	1,306.62	16.78	-2.36	0.368
70.00	-8.73	-30.98	0.00	-313.4	0.00	313.41	1,785.33	458.28	1,362.21	1,209.22	19.33	-2.49	0.269
71.00	-6.16	-28.09	0.00	-282.4	0.00	282.43	1,774.17	453.83	1,335.92	1,189.93	19.86	-2.52	0.245
71.50	-5.48	-22.62	0.00	-268.4	0.00	268.39	1,768.55	451.61	1,322.87	1,180.30	20.12	-2.53	0.233
73.80	-4.89	-19.18	0.00	-216.4	0.00	216.37	1,742.31	441.39	1,263.67	1,136.27	21.35	-2.58	0.195
75.00	-4.75	-18.98	0.00	-193.4	0.00	193.36	1,728.36	436.06	1,233.32	1,113.44	22	-2.6	0.178
80.00	-4.23	-18.79	0.00	-98.4	0.00	98.44	1,668.37	413.84	1,110.84	1,019.60	24.76	-2.66	0.101
80.50	-3.55	-12.89	0.00	-89.0	0.00	89.04	1,662.21	411.61	1,098.94	1,010.33	25.04	-2.67	0.091
81.00	-2.09	-9.87	0.00	-82.6	0.00	82.60	1,656.02	409.39	1,087.11	1,001.08	25.32	-2.67	0.084
84.00	-1.82	-9.75	0.00	-53.0	0.00	52.99	1,618.21	396.06	1,017.46	946.11	27.01	-2.7	0.058
84.00	-1.82	-9.75	0.00	-53.0	0.00	52.99	1,357.42	347.01	892.41	795.37	27.01	-2.7	0.069
85.00	-1.74	-9.67	0.00	-43.2	0.00	43.23	1,347.53	343.12	872.52	780.66	27.58	-2.7	0.057
87.30	-0.94	-3.52	0.00	-21.0	0.00	21.00	1,324.32	334.17	827.62	747.05	28.88	-2.71	0.029
90.00	-0.74	-3.38	0.00	-11.5	0.00	11.48	1,296.25	323.67	776.42	708.06	30.42	-2.72	0.017
93.00	-0.24	-0.37	0.00	-1.4	0.00	1.35	1,264.04	312.00	721.46	665.37	32.13	-2.72	0.002
94.00	0.00	-0.36	0.00	-1.0	0.00	0.97	1,253.06	308.11	703.58	651.30	32.7	-2.72	0.001

CALCULATED FORCES

Load Case: 0.9D + 1.0W — 116 mph Wind with No Ice (Reduced DL) — 17 Iterations

Gust Response Factor: 1.10
Dead load Factor: 0.90
Wind Load Factor: 1.00

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (ft-kips)	Phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-30.26	-90.74	0.00	-4,961.9	0.00	4,961.94	6,278.64	1,517.87	7,472.14	7,031.52	0	0	0.714
5.00	-28.60	-90.44	0.00	-4,508.2	0.00	4,508.23	6,144.82	1,473.43	7,041.04	6,678.32	0.11	-0.21	0.683
10.00	-26.98	-90.13	0.00	-4,056.0	0.00	4,056.05	6,007.97	1,428.99	6,622.75	6,330.81	0.45	-0.41	0.649
15.00	-25.45	-89.85	0.00	-3,605.4	0.00	3,605.41	5,861.23	1,384.54	6,217.27	5,982.24	0.99	-0.61	0.611
19.00	-24.18	-88.68	0.00	-3,246.0	0.00	3,246.00	5,710.71	1,348.99	5,902.10	5,677.45	1.58	-0.77	0.580
20.00	-23.80	-88.54	0.00	-3,157.3	0.00	3,157.33	5,673.09	1,340.10	5,824.59	5,602.50	1.74	-0.81	0.572
23.50	-21.17	-77.21	0.00	-2,847.4	0.00	2,847.43	5,541.39	1,308.99	5,557.34	5,344.09	2.39	-0.95	0.540
25.00	-20.66	-77.01	0.00	-2,731.6	0.00	2,731.62	5,484.94	1,295.66	5,444.72	5,235.21	2.7	-1	0.529
30.00	-19.40	-76.83	0.00	-2,346.6	0.00	2,346.56	5,296.80	1,251.21	5,077.66	4,880.38	3.85	-1.18	0.488
30.50	-18.76	-73.34	0.00	-2,308.2	0.00	2,308.15	5,277.99	1,246.77	5,041.66	4,845.58	3.97	-1.2	0.483
31.00	-18.07	-69.43	0.00	-2,271.5	0.00	2,271.48	5,259.17	1,242.32	5,005.79	4,810.90	4.1	-1.22	0.479
35.00	-17.09	-69.26	0.00	-1,993.8	0.00	1,993.75	5,108.66	1,206.77	4,723.41	4,537.99	5.18	-1.35	0.446
36.00	-16.54	-66.93	0.00	-1,924.5	0.00	1,924.49	5,071.03	1,197.88	4,654.10	4,471.01	5.47	-1.39	0.437
37.00	-15.70	-62.11	0.00	-1,857.6	0.00	1,857.56	5,033.40	1,188.99	4,585.30	4,404.53	5.77	-1.42	0.428
40.00	-14.98	-61.94	0.00	-1,671.2	0.00	1,671.22	4,920.52	1,162.33	4,381.97	4,208.06	6.69	-1.52	0.403
42.00	-13.96	-56.91	0.00	-1,547.3	0.00	1,547.33	4,845.26	1,144.55	4,248.98	4,079.57	7.35	-1.58	0.385
45.00	-13.30	-56.80	0.00	-1,376.6	0.00	1,376.59	4,732.38	1,117.88	4,053.33	3,890.58	8.37	-1.67	0.359
45.17	-13.27	-56.79	0.00	-1,367.1	0.00	1,367.13	4,726.11	1,116.40	4,042.60	3,880.21	8.43	-1.68	0.358
45.30	-12.95	-54.15	0.00	-1,359.6	0.00	1,359.55	4,721.09	1,115.22	4,034.02	3,871.93	8.48	-1.68	0.356
47.50	-12.08	-52.43	0.00	-1,240.4	0.00	1,240.43	4,638.31	1,095.66	3,893.82	3,736.51	9.27	-1.74	0.337
50.00	-11.31	-52.29	0.00	-1,109.4	0.00	1,109.36	4,544.23	1,073.44	3,737.51	3,585.55	10.2	-1.81	0.314
51.00	-10.98	-52.18	0.00	-1,057.1	0.00	1,057.07	1,974.29	542.72	1,910.39	1,585.46	10.58	-1.84	0.682
53.30	-9.79	-41.64	0.00	-937.1	0.00	937.07	1,953.73	532.50	1,839.11	1,539.21	11.48	-1.9	0.620
55.00	-9.53	-41.43	0.00	-866.3	0.00	866.29	1,938.13	524.94	1,787.30	1,505.11	12.18	-1.98	0.587
60.00	-8.97	-41.22	0.00	-659.2	0.00	659.16	1,890.21	502.72	1,639.20	1,405.35	14.36	-2.18	0.481
61.00	-7.79	-40.24	0.00	-617.9	0.00	617.94	1,880.26	498.28	1,610.34	1,385.51	14.82	-2.22	0.457
63.80	-6.84	-31.27	0.00	-505.3	0.00	505.27	1,851.77	485.83	1,530.92	1,330.21	16.15	-2.31	0.388
65.00	-6.69	-31.07	0.00	-467.7	0.00	467.74	1,839.28	480.50	1,497.50	1,306.62	16.74	-2.35	0.366
70.00	-6.21	-30.87	0.00	-312.4	0.00	312.39	1,785.33	458.28	1,362.21	1,209.22	19.28	-2.49	0.266
71.00	-4.32	-28.01	0.00	-281.5	0.00	281.52	1,774.17	453.83	1,335.92	1,189.93	19.81	-2.51	0.243
71.50	-3.86	-22.55	0.00	-267.5	0.00	267.52	1,768.55	451.61	1,322.87	1,180.30	20.07	-2.52	0.231
73.80	-3.45	-19.11	0.00	-215.7	0.00	215.66	1,742.31	441.39	1,263.67	1,136.27	21.3	-2.57	0.194
75.00	-3.35	-18.92	0.00	-192.7	0.00	192.73	1,728.36	436.06	1,233.32	1,113.44	21.95	-2.59	0.177
80.00	-2.96	-18.73	0.00	-98.1	0.00	98.13	1,668.37	413.84	1,110.84	1,019.60	24.7	-2.66	0.100
80.50	-2.52	-12.84	0.00	-88.8	0.00	88.77	1,662.21	411.61	1,098.94	1,010.33	24.98	-2.66	0.090
81.00	-1.46	-9.84	0.00	-82.4	0.00	82.35	1,656.02	409.39	1,087.11	1,001.08	25.26	-2.67	0.084
84.00	-1.25	-9.73	0.00	-52.8	0.00	52.83	1,618.21	396.06	1,017.46	946.11	26.94	-2.69	0.057
84.00	-1.25	-9.73	0.00	-52.8	0.00	52.83	1,357.42	347.01	892.41	795.37	26.94	-2.69	0.068
85.00	-1.19	-9.64	0.00	-43.1	0.00	43.10	1,347.53	343.12	872.52	780.66	27.51	-2.7	0.057
87.30	-0.67	-3.51	0.00	-20.9	0.00	20.92	1,324.32	334.17	827.62	747.05	28.81	-2.71	0.029
90.00	-0.52	-3.37	0.00	-11.4	0.00	11.44	1,296.25	323.67	776.42	708.06	30.34	-2.71	0.017
93.00	-0.17	-0.37	0.00	-1.3	0.00	1.34	1,264.04	312.00	721.46	665.37	32.05	-2.72	0.002
94.00	0.00	-0.36	0.00	-1.0	0.00	0.97	1,253.06	308.11	703.58	651.30	32.62	-2.72	0.001

CALCULATED FORCES

Load Case: 1.2D + 1.0Di + 1.0Wi — 50 mph Wind with 1" Radial Ice — 16 Iterations

Gust Response Factor: 1.10 — Ice Dead Load Factor 1.00
Dead load Factor: 1.20 — Ice Importance Factor 1.00
Wind Load Factor: 1.00

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (ft-kips)	Phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-52.75	-24.03	0.00	-1,318.6	0.00	1,318.65	6,278.64	1,517.87	7,472.14	7,031.52	0	0	0.196
5.00	-50.68	-23.94	0.00	-1,198.5	0.00	1,198.52	6,144.82	1,473.43	7,041.04	6,678.32	0.03	-0.06	0.188
10.00	-48.65	-23.86	0.00	-1,078.8	0.00	1,078.80	6,007.97	1,428.99	6,622.75	6,330.81	0.12	-0.11	0.179
15.00	-46.66	-23.79	0.00	-959.5	0.00	959.49	5,861.23	1,384.54	6,217.27	5,982.24	0.26	-0.16	0.169
19.00	-44.86	-23.48	0.00	-864.3	0.00	864.34	5,710.71	1,348.99	5,902.10	5,677.45	0.42	-0.21	0.160
20.00	-44.47	-23.45	0.00	-840.9	0.00	840.86	5,673.09	1,340.10	5,824.59	5,602.50	0.46	-0.22	0.158
23.50	-40.11	-20.52	0.00	-758.8	0.00	758.80	5,541.39	1,308.99	5,557.34	5,344.09	0.64	-0.25	0.149
25.00	-39.55	-20.47	0.00	-728.0	0.00	728.01	5,484.94	1,295.66	5,444.72	5,235.21	0.72	-0.27	0.147
30.00	-37.73	-20.41	0.00	-625.7	0.00	625.67	5,296.80	1,251.21	5,077.66	4,880.38	1.02	-0.31	0.136
30.50	-36.61	-19.51	0.00	-615.5	0.00	615.47	5,277.99	1,246.77	5,041.66	4,845.58	1.06	-0.32	0.134
31.00	-35.48	-18.49	0.00	-605.7	0.00	605.71	5,259.17	1,242.32	5,005.79	4,810.90	1.09	-0.32	0.133
35.00	-34.08	-18.44	0.00	-531.8	0.00	531.77	5,108.66	1,206.77	4,723.41	4,537.99	1.38	-0.36	0.124
36.00	-33.14	-17.82	0.00	-513.3	0.00	513.34	5,071.03	1,197.88	4,654.10	4,471.01	1.46	-0.37	0.122
37.00	-31.68	-16.56	0.00	-495.5	0.00	495.51	5,033.40	1,188.99	4,585.30	4,404.53	1.53	-0.38	0.119
40.00	-30.66	-16.51	0.00	-445.8	0.00	445.84	4,920.52	1,162.33	4,381.97	4,208.06	1.78	-0.4	0.112
42.00	-28.87	-15.18	0.00	-412.8	0.00	412.82	4,845.26	1,144.55	4,248.98	4,079.57	1.95	-0.42	0.107
45.00	-27.90	-15.14	0.00	-367.3	0.00	367.28	4,732.38	1,117.88	4,053.33	3,890.58	2.23	-0.45	0.100
45.17	-27.84	-15.14	0.00	-364.8	0.00	364.76	4,726.11	1,116.40	4,042.60	3,880.21	2.24	-0.45	0.100
45.30	-27.24	-14.44	0.00	-362.7	0.00	362.74	4,721.09	1,115.22	4,034.02	3,871.93	2.26	-0.45	0.100
47.50	-25.90	-13.98	0.00	-331.0	0.00	330.96	4,638.31	1,095.66	3,893.82	3,736.51	2.47	-0.46	0.094
50.00	-24.79	-13.94	0.00	-296.0	0.00	296.01	4,544.23	1,073.44	3,737.51	3,585.55	2.71	-0.48	0.088
51.00	-24.35	-13.90	0.00	-282.1	0.00	282.07	1,974.29	542.72	1,910.39	1,585.46	2.82	-0.49	0.191
53.30	-21.83	-11.11	0.00	-250.1	0.00	250.09	1,953.73	532.50	1,839.11	1,539.21	3.06	-0.51	0.174
55.00	-21.51	-11.05	0.00	-231.2	0.00	231.20	1,938.13	524.94	1,787.30	1,505.11	3.24	-0.53	0.165
60.00	-20.62	-10.98	0.00	-176.0	0.00	175.96	1,890.21	502.72	1,639.20	1,405.35	3.82	-0.58	0.137
61.00	-18.58	-10.70	0.00	-165.0	0.00	164.98	1,880.26	498.28	1,610.34	1,385.51	3.95	-0.59	0.129
63.80	-16.41	-8.30	0.00	-135.0	0.00	135.02	1,851.77	485.83	1,530.92	1,330.21	4.3	-0.62	0.111
65.00	-16.20	-8.24	0.00	-125.1	0.00	125.06	1,839.28	480.50	1,497.50	1,306.62	4.46	-0.63	0.105
70.00	-15.38	-8.18	0.00	-83.8	0.00	83.85	1,785.33	458.28	1,362.21	1,209.22	5.14	-0.66	0.078
71.00	-11.04	-7.49	0.00	-75.7	0.00	75.67	1,774.17	453.83	1,335.92	1,189.93	5.28	-0.67	0.070
71.50	-9.89	-6.03	0.00	-71.9	0.00	71.92	1,768.55	451.61	1,322.87	1,180.30	5.35	-0.67	0.067
73.80	-8.92	-5.10	0.00	-58.1	0.00	58.07	1,742.31	441.39	1,263.67	1,136.27	5.67	-0.68	0.056
75.00	-8.74	-5.04	0.00	-52.0	0.00	51.95	1,728.36	436.06	1,233.32	1,113.44	5.85	-0.69	0.052
80.00	-8.01	-4.97	0.00	-26.8	0.00	26.76	1,668.37	413.84	1,110.84	1,019.60	6.58	-0.71	0.031
80.50	-6.81	-3.39	0.00	-24.3	0.00	24.27	1,662.21	411.61	1,098.94	1,010.33	6.66	-0.71	0.028
81.00	-3.46	-2.70	0.00	-22.6	0.00	22.58	1,656.02	409.39	1,087.11	1,001.08	6.73	-0.71	0.025
84.00	-3.05	-2.66	0.00	-14.5	0.00	14.47	1,618.21	396.06	1,017.46	946.11	7.18	-0.72	0.017
84.00	-3.05	-2.66	0.00	-14.5	0.00	14.47	1,357.42	347.01	892.41	795.37	7.18	-0.72	0.020
85.00	-2.93	-2.63	0.00	-11.8	0.00	11.81	1,347.53	343.12	872.52	780.66	7.33	-0.72	0.017
87.30	-1.53	-0.97	0.00	-5.8	0.00	5.75	1,324.32	334.17	827.62	747.05	7.68	-0.72	0.009
90.00	-1.22	-0.92	0.00	-3.1	0.00	3.13	1,296.25	323.67	776.42	708.06	8.09	-0.72	0.005
93.00	-0.34	-0.10	0.00	-0.4	0.00	0.36	1,264.04	312.00	721.46	665.37	8.54	-0.73	0.001
94.00	0.00	-0.10	0.00	-0.3	0.00	0.26	1,253.06	308.11	703.58	651.30	8.69	-0.73	0.000

CALCULATED FORCES

Load Case: 1.0D + 1.0W — 60 mph Wind with No Ice — 16 Iterations

Gust Response Factor: 1.10
Dead load Factor: 1.00
Wind Load Factor: 1.00

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (ft-kips)	Phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-33.80	-21.72	0.00	-1,188.8	0.00	1,188.78	6,278.64	1,517.87	7,472.14	7,031.52	0	0	0.175
5.00	-32.30	-21.65	0.00	-1,080.2	0.00	1,080.17	6,144.82	1,473.43	7,041.04	6,678.32	0.03	-0.05	0.167
10.00	-30.84	-21.58	0.00	-971.9	0.00	971.91	6,007.97	1,428.99	6,622.75	6,330.81	0.11	-0.1	0.159
15.00	-29.43	-21.52	0.00	-864.0	0.00	864.01	5,861.23	1,384.54	6,217.27	5,982.24	0.24	-0.15	0.150
19.00	-28.16	-21.24	0.00	-777.9	0.00	777.94	5,710.71	1,348.99	5,902.10	5,677.45	0.38	-0.19	0.142
20.00	-27.88	-21.21	0.00	-756.7	0.00	756.70	5,673.09	1,340.10	5,824.59	5,602.50	0.42	-0.19	0.140
23.50	-24.91	-18.49	0.00	-682.5	0.00	682.47	5,541.39	1,308.99	5,557.34	5,344.09	0.57	-0.23	0.132
25.00	-24.51	-18.45	0.00	-654.7	0.00	654.73	5,484.94	1,295.66	5,444.72	5,235.21	0.65	-0.24	0.130
30.00	-23.24	-18.41	0.00	-562.5	0.00	562.49	5,296.80	1,251.21	5,077.66	4,880.38	0.92	-0.28	0.120
30.50	-22.48	-17.57	0.00	-553.3	0.00	553.29	5,277.99	1,246.77	5,041.66	4,845.58	0.95	-0.29	0.119
31.00	-21.72	-16.64	0.00	-544.5	0.00	544.50	5,259.17	1,242.32	5,005.79	4,810.90	0.98	-0.29	0.117
35.00	-20.74	-16.60	0.00	-478.0	0.00	477.96	5,108.66	1,206.77	4,723.41	4,537.99	1.24	-0.32	0.110
36.00	-20.11	-16.04	0.00	-461.4	0.00	461.37	5,071.03	1,197.88	4,654.10	4,471.01	1.31	-0.33	0.107
37.00	-19.12	-14.88	0.00	-445.3	0.00	445.33	5,033.40	1,188.99	4,585.30	4,404.53	1.38	-0.34	0.105
40.00	-18.41	-14.84	0.00	-400.7	0.00	400.68	4,920.52	1,162.33	4,381.97	4,208.06	1.6	-0.36	0.099
42.00	-17.21	-13.64	0.00	-371.0	0.00	370.99	4,845.26	1,144.55	4,248.98	4,079.57	1.76	-0.38	0.095
45.00	-16.53	-13.61	0.00	-330.1	0.00	330.07	4,732.38	1,117.88	4,053.33	3,890.58	2.01	-0.4	0.088
45.17	-16.49	-13.61	0.00	-327.8	0.00	327.80	4,726.11	1,116.40	4,042.60	3,880.21	2.02	-0.4	0.088
45.30	-16.09	-12.98	0.00	-326.0	0.00	325.99	4,721.09	1,115.22	4,034.02	3,871.93	2.03	-0.4	0.088
47.50	-15.13	-12.57	0.00	-297.4	0.00	297.43	4,638.31	1,095.66	3,893.82	3,736.51	2.22	-0.42	0.083
50.00	-14.32	-12.53	0.00	-266.0	0.00	266.02	4,544.23	1,073.44	3,737.51	3,585.55	2.44	-0.43	0.077
51.00	-14.00	-12.51	0.00	-253.5	0.00	253.48	1,974.29	542.72	1,910.39	1,585.46	2.54	-0.44	0.168
53.30	-12.36	-9.98	0.00	-224.7	0.00	224.72	1,953.73	532.50	1,839.11	1,539.21	2.75	-0.45	0.153
55.00	-12.17	-9.93	0.00	-207.8	0.00	207.75	1,938.13	524.94	1,787.30	1,505.11	2.92	-0.47	0.145
60.00	-11.63	-9.88	0.00	-158.1	0.00	158.09	1,890.21	502.72	1,639.20	1,405.35	3.44	-0.52	0.119
61.00	-10.33	-9.65	0.00	-148.2	0.00	148.20	1,880.26	498.28	1,610.34	1,385.51	3.55	-0.53	0.113
63.80	-8.93	-7.50	0.00	-121.2	0.00	121.19	1,851.77	485.83	1,530.92	1,330.21	3.87	-0.55	0.096
65.00	-8.81	-7.45	0.00	-112.2	0.00	112.19	1,839.28	480.50	1,497.50	1,306.62	4.01	-0.56	0.091
70.00	-8.32	-7.40	0.00	-74.9	0.00	74.93	1,785.33	458.28	1,362.21	1,209.22	4.62	-0.6	0.067
71.00	-6.09	-6.72	0.00	-67.5	0.00	67.52	1,774.17	453.83	1,335.92	1,189.93	4.75	-0.6	0.060
71.50	-5.34	-5.41	0.00	-64.2	0.00	64.16	1,768.55	451.61	1,322.87	1,180.30	4.81	-0.6	0.058
73.80	-4.74	-4.58	0.00	-51.7	0.00	51.73	1,742.31	441.39	1,263.67	1,136.27	5.11	-0.62	0.048
75.00	-4.63	-4.54	0.00	-46.2	0.00	46.23	1,728.36	436.06	1,233.32	1,113.44	5.26	-0.62	0.044
80.00	-4.20	-4.49	0.00	-23.5	0.00	23.54	1,668.37	413.84	1,110.84	1,019.60	5.92	-0.64	0.026
80.50	-3.43	-3.08	0.00	-21.3	0.00	21.29	1,662.21	411.61	1,098.94	1,010.33	5.99	-0.64	0.023
81.00	-2.10	-2.36	0.00	-19.8	0.00	19.75	1,656.02	409.39	1,087.11	1,001.08	6.06	-0.64	0.021
84.00	-1.87	-2.33	0.00	-12.7	0.00	12.67	1,618.21	396.06	1,017.46	946.11	6.46	-0.64	0.015
84.00	-1.87	-2.33	0.00	-12.7	0.00	12.67	1,357.42	347.01	892.41	795.37	6.46	-0.64	0.017
85.00	-1.80	-2.31	0.00	-10.3	0.00	10.34	1,347.53	343.12	872.52	780.66	6.59	-0.65	0.015
87.30	-0.92	-0.84	0.00	-5.0	0.00	5.02	1,324.32	334.17	827.62	747.05	6.91	-0.65	0.007
90.00	-0.74	-0.81	0.00	-2.7	0.00	2.74	1,296.25	323.67	776.42	708.06	7.27	-0.65	0.004
93.00	-0.21	-0.09	0.00	-0.3	0.00	0.32	1,264.04	312.00	721.46	665.37	7.68	-0.65	0.001
94.00	0.00	-0.09	0.00	-0.2	0.00	0.23	1,253.06	308.11	703.58	651.30	7.82	-0.65	0.000

EQUIVALENT LATERAL FORCES METHOD ANALYSIS

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

Spectral Response Acceleration for Short Period (S_S):	0.250
Spectral Response Acceleration at 1.0 Second Period (S_1):	0.058
Long-Period Transition Period (T_L – Seconds):	6
Importance Factor (I_e):	1.000
Site Coefficient F_a:	1.600
Site Coefficient F_v:	2.400
Response Modification Coefficient (R):	1.500
Design Spectral Response Acceleration at Short Period (S_{ds}):	0.267
Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.093
Seismic Response Coefficient (C_s):	0.083
Upper Limit C_S:	0.083
Lower Limit C_S:	0.030
Period based on Rayleigh Method (sec):	0.740
Redundancy Factor (p):	1.000
Seismic Force Distribution Exponent (k):	1.120
Total Unfactored Dead Load:	33.810 k
Seismic Base Shear (E):	2.820 k

SEISMIC FORCES

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

Segment	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
41	93.5	60	10	0.004	11	75
40	91.5	185	29	0.012	33	232
39	88.65	172	26	0.010	30	216
38	86.15	151	22	0.009	25	189
37	84.5	67	10	0.004	11	84
36	82.5	234	33	0.013	37	294
35	80.75	42	6	0.002	6	52
34	80.25	42	6	0.002	6	52
33	77.5	430	57	0.023	64	539
32	74.4	106	13	0.005	15	133
31	72.65	208	25	0.010	29	260
30	71.25	46	5	0.002	6	57
29	70.5	95	11	0.004	13	119
28	67.5	489	55	0.022	62	612
27	64.4	120	13	0.005	15	151
26	62.4	286	29	0.012	33	358
25	60.5	104	10	0.004	12	130
24	57.5	532	50	0.020	56	666
23	54.15	186	16	0.006	18	233
22	52.15	255	21	0.009	24	320
21	50.5	320	26	0.010	29	401
20	48.75	810	63	0.025	72	1,016
19	46.4	726	54	0.022	61	911
18	45.2333	44	3	0.001	4	56
17	45.0833	37	3	0.001	3	47
16	43.5	678	47	0.019	53	850
15	41	461	30	0.012	33	577
14	38.5	704	42	0.017	48	882
13	36.5	238	13	0.005	15	298
12	35.5	240	13	0.005	15	301
11	33	977	49	0.020	56	1,224
10	30.75	124	6	0.002	7	155
9	30.25	124	6	0.002	6	156
8	27.5	1,268	52	0.021	59	1,589
7	24.25	389	14	0.006	16	487
6	21.75	922	29	0.012	33	1,156
5	19.5	267	7	0.003	8	335
4	17	1,087	26	0.010	29	1,362

SEISMIC FORCES

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

Segment	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
3	12.5	1,397	24	0.010	27	1,751
2	7.5	1,440	14	0.006	16	1,805
1	2.5	1,483	4	0.002	5	1,859
(3) 6 ft Branches	94	120	20	0.008	22	150
5 ft Branches	94	33	5	0.002	6	41
8 ft Branches	93	356	57	0.023	65	446
8 ft Branches	87.3	750	113	0.045	127	941
8 ft Branches	80.5	750	103	0.041	116	941
8 ft Branches	71.5	711	85	0.034	96	891
Ericsson RRUS 4478 B14	81	180	25	0.010	28	225
Ericsson RRUS 4415 B30	81	138	19	0.008	22	173
Ericsson RRUS 8843	81	225	31	0.012	35	282
Raycap DC6-48-60-0-8C	81	48	7	0.003	7	60
CCI HPA-65R-BUU-H8	81	204	28	0.011	32	256
CCI TPA65R-BU8D	81	495	68	0.027	77	620
10 ft Branches	73.8	406	50	0.020	57	509
10 ft Branches	63.8	1,128	119	0.048	135	1,413
10 ft Branches	53.3	1,398	121	0.048	136	1,752
10 ft Branches	45.3	361	26	0.010	29	452
Kaelus KA-6030	71	35	4	0.002	5	44
Samsung RF4440d-13A	71	211	25	0.010	28	264
Samsung RF4439d-25A	71	224	27	0.011	30	281
Raycap RCMDC-6627-PF-48	71	32	4	0.002	4	40
Samsung MT6407-77A	71	245	29	0.012	33	307
Generic Flat T-Arm	71	938	112	0.045	126	1,175
JMA Wireless MX10FRO860-xx	71	274	33	0.013	37	343
JMA Wireless MX10FRO840-xx	71	184	22	0.009	25	231
Generic Flat Light Sector Frame	61	1,200	121	0.048	136	1,504
12 ft Branches	47.5	230	17	0.007	20	289
12 ft Branches	42	749	49	0.020	56	938
12 ft Branches	37	749	43	0.017	49	938
12 ft Branches	31	634	30	0.012	34	794
12 ft Branches	19	173	5	0.002	5	217
14 ft Branches	36	396	22	0.009	25	496
14 ft Branches	30.5	633	29	0.012	33	793
14 ft Branches	23.5	2,057	71	0.028	80	2,578
	Totals:	**33,811**	**2,493**	**1.000**	**2,817**	**42,377**

SEISMIC FORCES

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

Segment	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
41	93.5	60	10	0.004	11	51
40	91.5	185	29	0.012	33	157
39	88.65	172	26	0.010	30	146
38	86.15	151	22	0.009	25	128
37	84.5	67	10	0.004	11	57
36	82.5	234	33	0.013	37	198
35	80.75	42	6	0.002	6	35
34	80.25	42	6	0.002	6	35
33	77.5	430	57	0.023	64	364
32	74.4	106	13	0.005	15	90
31	72.65	208	25	0.010	29	176
30	71.25	46	5	0.002	6	39
29	70.5	95	11	0.004	13	81
28	67.5	489	55	0.022	62	414
27	64.4	120	13	0.005	15	102
26	62.4	286	29	0.012	33	242
25	60.5	104	10	0.004	12	88
24	57.5	532	50	0.020	56	450
23	54.15	186	16	0.006	18	157

SEISMIC FORCES

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

Segment	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
22	52.15	255	21	0.009	24	216
21	50.5	320	26	0.010	29	271
20	48.75	810	63	0.025	72	686
19	46.4	726	54	0.022	61	615
18	45.2333	44	3	0.001	4	38
17	45.0833	37	3	0.001	3	32
16	43.5	678	47	0.019	53	574
15	41	461	30	0.012	33	390
14	38.5	704	42	0.017	48	596
13	36.5	238	13	0.005	15	202
12	35.5	240	13	0.005	15	203
11	33	977	49	0.020	56	827
10	30.75	124	6	0.002	7	105
9	30.25	124	6	0.002	6	105
8	27.5	1,268	52	0.021	59	1,074
7	24.25	389	14	0.006	16	329
6	21.75	922	29	0.012	33	781
5	19.5	267	7	0.003	8	226
4	17	1,087	26	0.010	29	920
3	12.5	1,397	24	0.010	27	1,183
2	7.5	1,440	14	0.006	16	1,220
1	2.5	1,483	4	0.002	5	1,256
(3) 6 ft Branches	94	120	20	0.008	22	102
5 ft Branches	94	33	5	0.002	6	28
8 ft Branches	93	356	57	0.023	65	301
8 ft Branches	87.3	750	113	0.045	127	635
8 ft Branches	80.5	750	103	0.041	116	635
8 ft Branches	71.5	711	85	0.034	96	602
Ericsson RRUS 4478 B14	81	180	25	0.010	28	152
Ericsson RRUS 4415 B30	81	138	19	0.008	22	117
Ericsson RRUS 8843	81	225	31	0.012	35	190
Raycap DC6-48-60-0-8C	81	48	7	0.003	7	41
CCI HPA-65R-BUU-H8	81	204	28	0.011	32	173
CCI TPA65R-BU8D	81	495	68	0.027	77	419
10 ft Branches	73.8	406	50	0.020	57	344
10 ft Branches	63.8	1,128	119	0.048	135	955
10 ft Branches	53.3	1,398	121	0.048	136	1,184
10 ft Branches	45.3	361	26	0.010	29	305
Kaelus KA-6030	71	35	4	0.002	5	30
Samsung RF4440d-13A	71	211	25	0.010	28	179
Samsung RF4439d-25A	71	224	27	0.011	30	190
Raycap RCMDC-6627-PF-48	71	32	4	0.002	4	27
Samsung MT6407-77A	71	245	29	0.012	33	207
Generic Flat T-Arm	71	938	112	0.045	126	794
JMA Wireless MX10FRO860-xx	71	274	33	0.013	37	232
JMA Wireless MX10FRO840-xx	71	184	22	0.009	25	156
Generic Flat Light Sector Frame	61	1,200	121	0.048	136	1,016
12 ft Branches	47.5	230	17	0.007	20	195
12 ft Branches	42	749	49	0.020	56	634
12 ft Branches	37	749	43	0.017	49	634
12 ft Branches	31	634	30	0.012	34	536
12 ft Branches	19	173	5	0.002	5	146
14 ft Branches	36	396	22	0.009	25	335
14 ft Branches	30.5	633	29	0.012	33	536
14 ft Branches	23.5	2,057	71	0.028	80	1,741
	Totals:	**33,811**	**2,493**	**1.000**	**2,817**	**28,627**

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

CALCULATED FORCES

Seg Elev	Pu	Vu	Tu	Mu	Mu	Resultant	Phi	Phi	Phi	Phi	Total	Rotation	Ratio

CALCULATED FORCES

(ft)	FY (-) (kips)	FX (-) (kips)	MY (ft-kips)	MZ (fr-kips)	Mx (ft-kips)	Moment (ft-kips)	Pn (kips)	Vn (kips)	Tn (kips)	Mn (kips)	Deflect (in)	(deg)	
0.00	-40.52	-2.81	0.00	-169.61	0.00	169.61	6,278.64	1,517.87	7,472	7,031.52	0.00	0.00	0.03
5.00	-38.71	-2.80	0.00	-155.54	0.00	155.54	6,144.82	1,473.43	7,041	6,678.32	0.00	-0.01	0.03
10.00	-36.96	-2.78	0.00	-141.52	0.00	141.52	6,007.97	1,428.99	6,623	6,330.81	0.02	-0.01	0.03
15.00	-35.60	-2.75	0.00	-127.62	0.00	127.62	5,861.23	1,384.54	6,217	5,982.24	0.03	-0.02	0.03
19.00	-35.05	-2.74	0.00	-116.60	0.00	116.60	5,710.71	1,348.99	5,902	5,677.45	0.05	-0.03	0.03
20.00	-33.89	-2.71	0.00	-113.86	0.00	113.86	5,673.09	1,340.10	5,825	5,602.50	0.06	-0.03	0.03
23.50	-30.82	-2.62	0.00	-104.37	0.00	104.37	5,541.39	1,308.99	5,557	5,344.09	0.08	-0.03	0.03
25.00	-29.24	-2.56	0.00	-100.45	0.00	100.45	5,484.94	1,295.66	5,445	5,235.21	0.09	-0.04	0.03
30.00	-29.08	-2.55	0.00	-87.66	0.00	87.66	5,296.80	1,251.21	5,078	4,880.38	0.13	-0.04	0.02
30.50	-28.13	-2.51	0.00	-86.38	0.00	86.38	5,277.99	1,246.77	5,042	4,845.58	0.14	-0.04	0.02
31.00	-26.11	-2.42	0.00	-85.12	0.00	85.12	5,259.17	1,242.32	5,006	4,810.90	0.14	-0.04	0.02
35.00	-25.81	-2.41	0.00	-75.43	0.00	75.43	5,108.66	1,206.77	4,723	4,537.99	0.18	-0.05	0.02
36.00	-25.02	-2.37	0.00	-73.02	0.00	73.02	5,071.03	1,197.88	4,654	4,471.01	0.19	-0.05	0.02
37.00	-23.20	-2.27	0.00	-70.65	0.00	70.65	5,033.40	1,188.99	4,585	4,404.53	0.20	-0.05	0.02
40.00	-22.62	-2.24	0.00	-63.83	0.00	63.83	4,920.52	1,162.33	4,382	4,208.06	0.24	-0.05	0.02
42.00	-20.83	-2.13	0.00	-59.34	0.00	59.34	4,845.26	1,144.55	4,249	4,079.57	0.26	-0.06	0.02
45.00	-20.78	-2.13	0.00	-52.95	0.00	52.95	4,732.38	1,117.88	4,053	3,890.58	0.30	-0.06	0.02
45.17	-20.73	-2.13	0.00	-52.60	0.00	52.60	4,726.11	1,116.40	4,043	3,880.21	0.30	-0.06	0.02
45.30	-19.37	-2.03	0.00	-52.31	0.00	52.31	4,721.09	1,115.22	4,034	3,871.93	0.30	-0.06	0.02
47.50	-18.06	-1.94	0.00	-47.84	0.00	47.84	4,638.31	1,095.66	3,894	3,736.51	0.33	-0.06	0.02
50.00	-17.66	-1.91	0.00	-42.98	0.00	42.98	4,544.23	1,073.44	3,738	3,585.55	0.36	-0.07	0.02
51.00	-17.34	-1.89	0.00	-41.07	0.00	41.07	1,974.29	542.72	1,910	1,585.46	0.38	-0.07	0.04
53.30	-15.36	-1.73	0.00	-36.72	0.00	36.72	1,953.73	532.50	1,839	1,539.21	0.41	-0.07	0.03
55.00	-14.69	-1.68	0.00	-33.78	0.00	33.78	1,938.13	524.94	1,787	1,505.11	0.44	-0.07	0.03
60.00	-14.56	-1.67	0.00	-25.39	0.00	25.39	1,890.21	502.72	1,639	1,405.35	0.52	-0.08	0.03
61.00	-12.70	-1.49	0.00	-23.72	0.00	23.72	1,880.26	498.28	1,610	1,385.51	0.53	-0.08	0.02
63.80	-11.13	-1.34	0.00	-19.54	0.00	19.54	1,851.77	485.83	1,531	1,330.21	0.58	-0.09	0.02
65.00	-10.52	-1.28	0.00	-17.93	0.00	17.93	1,839.28	480.50	1,498	1,306.62	0.60	-0.09	0.02
70.00	-10.40	-1.27	0.00	-11.52	0.00	11.52	1,785.33	458.28	1,362	1,209.22	0.70	-0.09	0.02
71.00	-7.66	-0.97	0.00	-10.25	0.00	10.25	1,774.17	453.83	1,336	1,189.93	0.72	-0.09	0.01
71.50	-6.51	-0.84	0.00	-9.76	0.00	9.76	1,768.55	451.61	1,323	1,180.30	0.73	-0.09	0.01
73.80	-5.87	-0.77	0.00	-7.82	0.00	7.82	1,742.31	441.39	1,264	1,136.27	0.77	-0.09	0.01
75.00	-5.33	-0.71	0.00	-6.90	0.00	6.90	1,728.36	436.06	1,233	1,113.44	0.80	-0.10	0.01
80.00	-5.28	-0.70	0.00	-3.36	0.00	3.36	1,668.37	413.84	1,111	1,019.60	0.90	-0.10	0.01
80.50	-4.28	-0.58	0.00	-3.01	0.00	3.01	1,662.21	411.61	1,099	1,010.33	0.91	-0.10	0.01
81.00	-2.37	-0.33	0.00	-2.73	0.00	2.73	1,656.02	409.39	1,087	1,001.08	0.92	-0.10	0.00
84.00	-2.29	-0.32	0.00	-1.72	0.00	1.72	1,618.21	396.06	1,017	946.11	0.98	-0.10	0.00
84.00	-2.29	-0.32	0.00	-1.72	0.00	1.72	1,357.42	347.01	892	795.37	0.98	-0.10	0.00
85.00	-2.10	-0.30	0.00	-1.40	0.00	1.40	1,347.53	343.12	873	780.66	1.00	-0.10	0.00
87.30	-0.94	-0.14	0.00	-0.72	0.00	0.72	1,324.32	334.17	828	747.05	1.05	-0.10	0.00
90.00	-0.71	-0.11	0.00	-0.34	0.00	0.34	1,296.25	323.67	776	708.06	1.11	-0.10	0.00
93.00	-0.19	-0.03	0.00	-0.03	0.00	0.03	1,264.04	312.00	721	665.37	1.17	-0.10	0.00
94.00	0.00	-0.03	0.00	0.00	0.00	0.00	1,253.06	308.11	704	651.30	1.19	-0.10	0.00

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

CALCULATED FORCES

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (fr-kips)	Mu Mx (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (kips)	Phi Mn (kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-27.37	-2.81	0.00	-169.18	0.00	169.18	6,278.64	1,517.87	7,472	7,031.52	0.00	0.00	0.03
5.00	-26.15	-2.80	0.00	-155.11	0.00	155.11	6,144.82	1,473.43	7,041	6,678.32	0.00	-0.01	0.03
10.00	-24.97	-2.78	0.00	-141.11	0.00	141.11	6,007.97	1,428.99	6,623	6,330.81	0.02	-0.01	0.03
15.00	-24.05	-2.75	0.00	-127.23	0.00	127.23	5,861.23	1,384.54	6,217	5,982.24	0.03	-0.02	0.03
19.00	-23.67	-2.74	0.00	-116.23	0.00	116.23	5,710.71	1,348.99	5,902	5,677.45	0.05	-0.03	0.03
20.00	-22.89	-2.71	0.00	-113.49	0.00	113.49	5,673.09	1,340.10	5,825	5,602.50	0.06	-0.03	0.02
23.50	-20.82	-2.61	0.00	-104.02	0.00	104.02	5,541.39	1,308.99	5,557	5,344.09	0.08	-0.03	0.02
25.00	-19.75	-2.55	0.00	-100.11	0.00	100.11	5,484.94	1,295.66	5,445	5,235.21	0.09	-0.04	0.02
30.00	-19.64	-2.55	0.00	-87.35	0.00	87.35	5,296.80	1,251.21	5,078	4,880.38	0.13	-0.04	0.02
30.50	-19.00	-2.51	0.00	-86.07	0.00	86.07	5,277.99	1,246.77	5,042	4,845.58	0.14	-0.04	0.02
31.00	-17.64	-2.42	0.00	-84.82	0.00	84.82	5,259.17	1,242.32	5,006	4,810.90	0.14	-0.04	0.02
35.00	-17.44	-2.40	0.00	-75.15	0.00	75.15	5,108.66	1,206.77	4,723	4,537.99	0.18	-0.05	0.02

CALCULATED FORCES

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (fr-kips)	Mu Mx (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (kips)	Phi Mn (kips)	Total Deflect (in)	Rotation (deg)	Ratio
36.00	-16.90	-2.36	0.00	-72.75	0.00	72.75	5,071.03	1,197.88	4,654	4,471.01	0.19	-0.05	0.02
37.00	-15.67	-2.27	0.00	-70.39	0.00	70.39	5,033.40	1,188.99	4,585	4,404.53	0.20	-0.05	0.02
40.00	-15.28	-2.23	0.00	-63.59	0.00	63.59	4,920.52	1,162.33	4,382	4,208.06	0.24	-0.05	0.02
42.00	-14.07	-2.12	0.00	-59.12	0.00	59.12	4,845.26	1,144.55	4,249	4,079.57	0.26	-0.06	0.02
45.00	-14.04	-2.12	0.00	-52.75	0.00	52.75	4,732.38	1,117.88	4,053	3,890.58	0.30	-0.06	0.02
45.17	-14.00	-2.12	0.00	-52.39	0.00	52.39	4,726.11	1,116.40	4,043	3,880.21	0.30	-0.06	0.02
45.30	-13.08	-2.03	0.00	-52.11	0.00	52.11	4,721.09	1,115.22	4,034	3,871.93	0.30	-0.06	0.02
47.50	-12.20	-1.94	0.00	-47.65	0.00	47.65	4,638.31	1,095.66	3,894	3,736.51	0.33	-0.06	0.02
50.00	-11.93	-1.91	0.00	-42.81	0.00	42.81	4,544.23	1,073.44	3,738	3,585.55	0.36	-0.07	0.02
51.00	-11.71	-1.88	0.00	-40.90	0.00	40.90	1,974.29	542.72	1,910	1,585.46	0.38	-0.07	0.03
53.30	-10.37	-1.73	0.00	-36.57	0.00	36.57	1,953.73	532.50	1,839	1,539.21	0.41	-0.07	0.03
55.00	-9.92	-1.67	0.00	-33.64	0.00	33.64	1,938.13	524.94	1,787	1,505.11	0.43	-0.07	0.03
60.00	-9.83	-1.66	0.00	-25.29	0.00	25.29	1,890.21	502.72	1,639	1,405.35	0.51	-0.08	0.02
61.00	-8.58	-1.49	0.00	-23.63	0.00	23.63	1,880.26	498.28	1,610	1,385.51	0.53	-0.08	0.02
63.80	-7.52	-1.34	0.00	-19.46	0.00	19.46	1,851.77	485.83	1,531	1,330.21	0.58	-0.09	0.02
65.00	-7.11	-1.28	0.00	-17.85	0.00	17.85	1,839.28	480.50	1,498	1,306.62	0.60	-0.09	0.02
70.00	-7.03	-1.26	0.00	-11.47	0.00	11.47	1,785.33	458.28	1,362	1,209.22	0.70	-0.09	0.01
71.00	-5.17	-0.97	0.00	-10.21	0.00	10.21	1,774.17	453.83	1,336	1,189.93	0.71	-0.09	0.01
71.50	-4.40	-0.84	0.00	-9.72	0.00	9.72	1,768.55	451.61	1,323	1,180.30	0.72	-0.09	0.01
73.80	-3.96	-0.77	0.00	-7.79	0.00	7.79	1,742.31	441.39	1,264	1,136.27	0.77	-0.09	0.01
75.00	-3.60	-0.70	0.00	-6.87	0.00	6.87	1,728.36	436.06	1,233	1,113.44	0.79	-0.10	0.01
80.00	-3.56	-0.70	0.00	-3.35	0.00	3.35	1,668.37	413.84	1,111	1,019.60	0.90	-0.10	0.01
80.50	-2.89	-0.57	0.00	-3.00	0.00	3.00	1,662.21	411.61	1,099	1,010.33	0.91	-0.10	0.01
81.00	-1.60	-0.33	0.00	-2.72	0.00	2.72	1,656.02	409.39	1,087	1,001.08	0.92	-0.10	0.00
84.00	-1.55	-0.32	0.00	-1.72	0.00	1.72	1,618.21	396.06	1,017	946.11	0.98	-0.10	0.00
84.00	-1.55	-0.32	0.00	-1.72	0.00	1.72	1,357.42	347.01	892	795.37	0.98	-0.10	0.00
85.00	-1.42	-0.30	0.00	-1.40	0.00	1.40	1,347.53	343.12	873	780.66	1.00	-0.10	0.00
87.30	-0.64	-0.14	0.00	-0.71	0.00	0.71	1,324.32	334.17	828	747.05	1.05	-0.10	0.00
90.00	-0.48	-0.10	0.00	-0.34	0.00	0.34	1,296.25	323.67	776	708.06	1.10	-0.10	0.00
93.00	-0.13	-0.03	0.00	-0.03	0.00	0.03	1,264.04	312.00	721	665.37	1.17	-0.10	0.00
94.00	0.00	-0.03	0.00	0.00	0.00	0.00	1,253.06	308.11	704	651.30	1.19	-0.10	0.00

ANALYSIS SUMMARY

	Base Reactions						Max Usage	
Load Case	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)	Elev (ft)	Interaction Ratio
1.2D + 1.0W	90.76	0.00	40.40	0.00	0.00	4971.17	0.00	0.72
0.9D + 1.0W	90.74	0.00	30.26	0.00	0.00	4961.94	0.00	0.71
1.2D + 1.0Di + 1.0Wi	24.03	0.00	52.75	0.00	0.00	1318.65	0.00	0.2
1.2D + 1.0Ev + 1.0Eh	2.81	0.00	40.52	0.00	0.00	169.61	51.00	0.03
0.9D - 1.0Ev + 1.0Eh	2.81	0.00	27.37	0.00	0.00	169.18	51.00	0.03
1.0D + 1.0W	21.72	0.00	33.80	0.00	0.00	1188.78	0.00	0.17

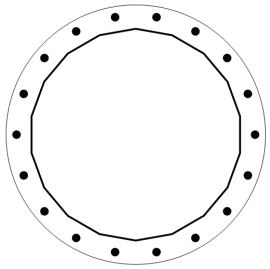
BASE PLATE ANALYSIS @ 0 FT

APPLIED REACTIONS

Moment (k-ft)	Axial (k)	Shear (k)
4971.17	40.4	90.76

PLATE PARAMETERS (ID# 16601)

Width:	68	in
Shape:	Round	
Thickness:	3	in
Grade:	A572-50	
Yield Strength:	50	ksi
Tensile Strength:	65	ksi
Rod Detail Type:	d	
Clear Distance	3	in
Base Weld Size:	0.125	in
Orientation Offset:	10	°
Analysis Type:	Plastic	
Neutral Axis:	50	°



ANCHOR ROD PARAMETERS

Class	Arrangement	Quantity	Diameter (in)	Circle (in)	Grade	F_y (ksi)	F_u (ksi)	Spacing (in)	Offset (°)
Original [ID#16990]	Radial	18	2.25	62.5	A615-75	75	100	-	-

COMPONENT PROPERTIES

Component	ID	Gross Area (in^2)	Net Area (in^2)	Individual Inertia (in^4)	Moment of Inertia (in^4)	Threads/in
Pole	55"ø x 0.5" (18 Sides)	85.1744	-	-	31630.80	-
Bolt Group	Original (18) 2.25"ø	3.9761	3.2477	0.8393	26211.90	4.5

REACTION DISTRIBUTION

Component	ID	Moment M_u (k-ft)	Axial Load P_u (k)	Shear V_u (k)	Moment Factor
Pole	55"ø x 0.5" (18 Sides)	4971.2	40.40	90.76	1.000
Bolt Group	Original (18) 2.25"ø	4971.2	-	90.76	1.000

BASE PLATE BEND LINE ANALYSIS @ 0 FT

POLE PROPERTIES

Flat-to-Flat Diameter:	55.12	in	Flat Width:	9.720	in	Neutral Axis:	50	°
Point-to-Point Diameter:	55.98	in	Flat Radians:	0.349	rad	Bend Line Limits:	1.883 to 3.004	rad
Orientation Offset:	10	°						

PLATE PROPERTIES

Bend Line	Chord Length (in)	Additional Length (in)	Section Modulus (in^3)	Applied Moment M_u (k-in)	Moment Capacity ΦM_n (k-in)	Flexure Result $M_u/\Phi M_n$	
Flats	36.093	0.00	81.210	770.3	3654.4	21.1%	✓
Corners	34.760	0.00	78.210	496.5	3519.4	14.1%	✓
Circumferential	46.639	0.00	104.938	1255.4	4722.2	26.6%	✓

PLASTIC ANCHOR ROD ANALYSIS

Class	Group Quantity	Rod Diameter (in)	Applied Axial Load P_u (k)	Applied Shear Load V_u (k)	Compressive Capacity ΦP_n (k)	Interaction Result	
Original	18	2.25	177.6	7.8	243.6	79.2%	✓

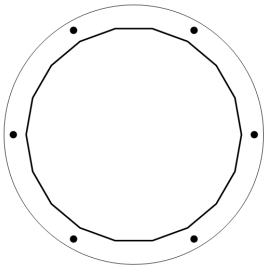
UPPER FLANGE PLATE ANALYSIS @ 84 FT

APPLIED REACTIONS

Moment (k-ft)	Axial (k)	Shear (k)
52.99	1.82	9.75

PLATE PARAMETERS (ID# 16602)

Width:	35.01	in
Shape:	Round	
Thickness:	2	in
Grade:	A572-50	
Yield Strength:	50	ksi
Tensile Strength:	65	ksi
Base Weld Size:	0.125	in
Orientation Offset:	-	°
Analysis Type:	Plastic	
Neutral Axis:	330	°



FLANGE BOLT PARAMETERS

Class	Arrangement	Quantity	Diameter (in)	Circle (in)	Grade	F_y (ksi)	F_u (ksi)	Spacing (in)	Offset (°)
Original [ID#16991]	Radial	6	1	32.51	A325	92	120	-	-

COMPONENT PROPERTIES

Component	ID	Gross Area (in^2)	Net Area (in^2)	Individual Inertia (in^4)	Moment of Inertia (in^4)	Threads/in
Pole	28.6914"ø x 0.2188" (18 Sides)	19.4723	-	-	1973.56	-
Bolt Group	Original (6) 1"ø	0.7854	0.6057	0.0292	444.12	8.0

REACTION DISTRIBUTION

Component	ID	Moment M_u (k-ft)	Axial Load P_u (k)	Shear V_u (k)	Moment Factor
Pole	28.6914"ø x 0.2188" (18 Sides)	53.0	1.82	9.75	1.000
Bolt Group	Original (6) 1"ø	53.0	-	9.75	1.000

UPPER FLANGE PLATE BEND LINE ANALYSIS @ 84 FT

POLE PROPERTIES

Flat-to-Flat Diameter:	28.82	in	Flat Width:	5.081	in	Neutral Axis:	330	°
Point-to-Point Diameter:	29.26	in	Flat Radians:	0.349	rad	Bend Line Limits:	0.134 to 1.961	rad
Orientation Offset:	-	°						

PLATE PROPERTIES

Bend Line	Chord Length (in)	Additional Length (in)	Section Modulus (in^3)	Applied Moment M_u (k-in)	Moment Capacity ΦM_n (k-in)	Flexure Result $M_u/\Phi M_n$	
Flats	18.204	0.00	18.204	16.9	819.2	2.1%	✓
Corners	17.481	0.00	17.481	13.9	786.6	1.8%	✓
Circumferential	34.217	0.00	34.217	13.9	1539.8	0.9%	✓

PLASTIC FLANGE BOLT ANALYSIS

Class	Group Quantity	Bolt Diameter (in)	Applied Axial Load P_u (k)	Applied Shear Load V_u (k)	Compressive Capacity ΦP_n (k)	Interaction Result	
Original	6	1	10.8	2.1	54.5	25.3%	✓

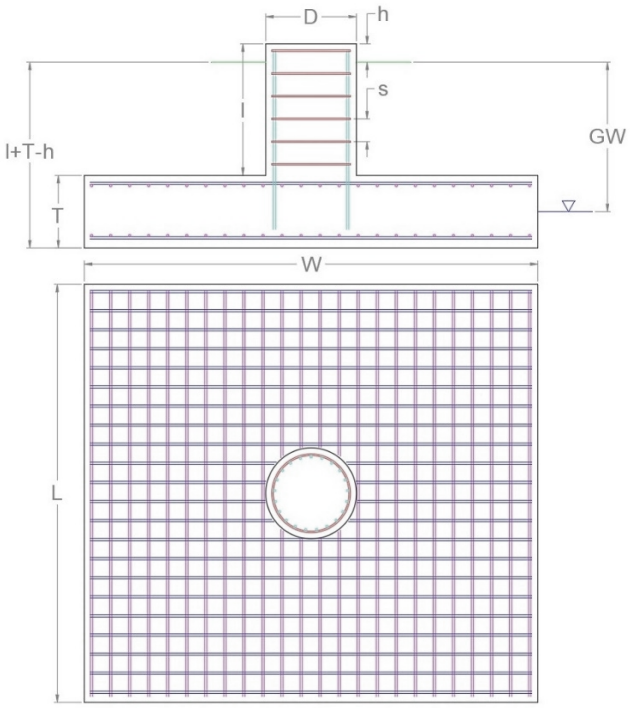
[redacted]

APPLIED GLOBAL REACTIONS

Moment (k-ft)	Axial (k)	Shear (k)
4,971.17	40.40	90.76

FOUNDATION PARAMETERS

Mat Length:	L	26	ft
Mat Width:	W	26	ft
Mat Thickness:	T	3	ft
Base Depth:	L+T-h	7	ft
Pier Shape:		Round	
Pier Diameter:	D	7	ft
Pier Height above Grade:	h	0.5	ft
Concrete Compressive Strength:		4,500	psi
Mat Top Rebar:		(36) #6 bars [60 ksi]	
Mat Bottom Rebar:		(36) #9 bars [60 ksi]	
Pier Vertical Rebar:		(30) #11 bars [60 ksi]	
Pier Rebar Ties:	s	#5 bars @ 12.0" c/c [60 ksi]	
Rebar Clear Cover:		3.0	in
Tower Eccentricity:	ecc	0	ft
Tower Leg Count		1	



SOIL PARAMETERS

Water Table Depth [BGL]:	GW	-	ft
Soil Unit Weight:		130	pcf
Ultimate Skin Friction:		0	psf
Ultimate Bearing Pressure:		30,000	psf
Bearing Pressure Type:		Net	
Coefficient of Shear Friction:		0.35	

SOIL STRENGTH ANALYSIS

Soil Strength Reduction Factor, Φ_s	Uplift Strength Reduction Factor, Φ_s	Asset Dead Load Factor	Dead Load Factor
0.75	0.75	0.9	1.2

SOIL OVERTURNING ANALYSIS

Design Moment, $M_{u,Design}$ (k-ft)	Nominal Overturning Capacity, $\Phi_m M_n$ (k-ft)	Soil Overturning Usage, $M_{u,Design} / \Phi_m M_n$	
5,651.87	8,641.44	**65.4%**	✓

SOIL BEARING ANALYSIS

Net Bearing Pressure, $P_{u,Net}$ (psf)	Nominal Bearing Capacity, $\Phi_b P_n$ (k-ft)	Bearing Pressure Controlling Load Direction	Soil Bearing Usage, $P_{u,net} / \Phi_b P_n$	
2,828.00	23,182.00	Diagonal to Pad Edge	**12.2%**	✓

SOIL SLIDING SHEAR ANALYSIS

Applied Shear Force, V_u (k)	Friction Resistance (k)	Passive Pressure (psf)	Passive Pressure Resistance (k)	Nominal Shear Capacity, $\Phi_s V_n$ (k)	Soil Sliding Shear Usage, $V_u / \Phi_s V_n$	
90.76	0.00	715.0	55.77	224.36	**40.0%**	✓

MAT REINFORCING STEEL STRENGTH ANALYSIS

Steel Elastic Modulus, E (ksi)	Strength Bending/Tension Reduction Factor, Φ_b	Strength Shear Reduction Factor, Φ_v	Strength Compression Reduction Factor, Φ_c
29,000	0.9	0.75	0.65

MAT REINFORCING ONE WAY SHEAR ANALYSIS

One Way Design Shear, V_u (k)	Nominal One Way Shear Capacity, $\Phi_c V_n$ (k)	One Way Shear Controlling Load Direction	Mat One Way Shear Usage, $V_u / \Phi_c V_n$	
286.76	941.31	Diagonal to Pad Edge	**30.5%**	✓

MAT REINFORCING PUNCHING SHEAR ANALYSIS

Punching Shear Design Stress, v_u (psi)	Nominal Punching Shear Capacity, $\Phi_c v_n$ (psi)	Mat Punching Shear Usage, $v_u / \Phi_c v_n$	
58.7	201.2	**29.2%**	✓

MAT REINFORCING MOMENT TRANSFER ANALYSIS

Moment Transfer Effective Flexural Width, w_f (in)	Neutral Axis Depth (in)	Pier Moment at Joint, M_{ut} (k-in)	Nominal Moment Transfer Capacity, $\Phi M_{sc,f}$ (k-in)	Mat Moment Transfer Usage, $0.6\ M_{ut} / \Phi M_{sc,f}$	
16.00	1.88	0.00	38,598.9	**0.0%**	✓

MAT REINFORCING FLEXURE ANALYSIS – UPPER STEEL

Factored Moment, M_u (k-ft)	Nominal Flexural Capacity, ΦM_n (k-ft)	Flexural Steel Controlling Load Direction	Mat Upper Rebar Flexure Usage, $M_u / \Phi M_n$	
1,138.05	2,247.92	Parallel to Pad Edge	**50.6%**	✓

MAT REINFORCING FLEXURE ANALYSIS – LOWER STEEL

Factored Moment, M_u (k-ft)	Nominal Flexural Capacity, ΦM_n (k-ft)	Flexural Steel Controlling Load Direction	Mat Lower Rebar Flexure Usage, $M_u / \Phi M_n$	
2,516.90	5,039.13	Parallel to Pad Edge	**49.9%**	✓

PIER REINFORCING STEEL STRENGTH ANALYSIS

Rebar Cage Diameter (in)	Steel Elastic Modulus, E (ksi)	Strength Bending/Tension Reduction Factor, Φ_b	Strength Shear Reduction Factor, Φ_v	Strength Compression Reduction Factor, Φ_c
75.38	29,000	0.9	0.75	0.65

PIER REINFORCING MOMENT ANALYSIS

Design Moment, M_u (k-ft)	Nominal Moment Capacity, $\Phi_b M_n$ (k-ft)	Bending Reinforcement Ratio	Pier Rebar Flexure Usage, $M_u/\Phi_b M_n$	
5,379.59	7,768.29	0.008	**69.3%**	✓

PIER REINFORCING COMPRESSION ANALYSIS

Design Compression, P_u (k)	Nominal Compressive Capacity, $\Phi_p P_n$ (k)	Pier Rebar Compressive Usage, $P_u / \Phi_p P_n$	
40.40	10,978.17	**0.4%**	✓

PIER REINFORCING SHEAR ANALYSIS

Design Shear, V_u (k)	Nominal Shear Capacity, $\Phi_v V_n$ (k)	Pier Rebar Shear Usage, $V_u / \Phi_v V_n$	
90.76	715.90	**12.7%**	✓

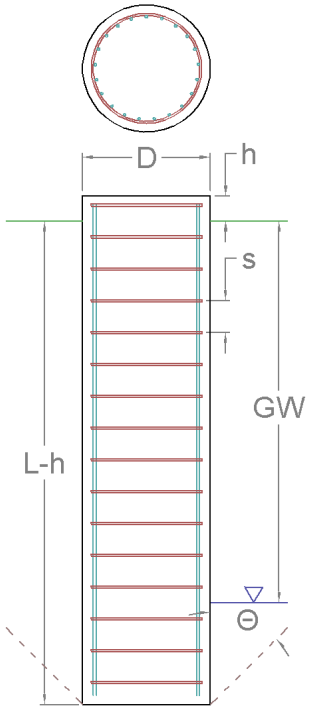
PIER FOUNDATION ANALYSIS

GLOBAL REACTIONS

Moment (k-ft)	Axial (k)	Shear (k)
4,971.17	40.40	90.76

FOUNDATION PARAMETERS

Pier Diameter:	D	7.00	ft
Pier Embedment Depth:	L-h	35.5	ft
Pier Height above Grade:	h	0.50	ft
Concrete Compressive Strength:		4,500	psi
Vertical Rebar:		(64) #11 bars [60 ksi]	
Tie Rebar:	s	#5 bars @ 12.0" c/c [60 ksi]	
Rebar Clear Cover:		4.00	in



SOIL PARAMETERS

Water Table Depth [BGL]:	GW	-	ft

Layer Depth (ft) Top	Layer Depth (ft) Bottom	Unit Weight pcf	Cohesion psf	Friction Angle °	Ultimate Skin Friction psf	Ultimate Net Bearing psf
0	3.4	105	0	0	0	0
3.4	4	130	0	39	180	0
4	6	130	0	40	260	0
6	8	130	0	40	370	0
8	10	130	0	40	480	0
10	15	125	0	37	600	0
15	20	130	0	40	940	0
20	25	130	0	40	1,210	0
25	30	130	0	40	1,480	0
30	35	130	0	40	1,750	0
35	40	130	0	40	1,970	58,750

SOIL STRENGTH ANALYSIS

Volume of Concrete (ft^3)	Buoyant Weight of Concrete (k)	Skin Friction Resistance (k)	Inflection Point [BGL] (ft)
1,385.44	207.82	730.39	25.92

SOIL MOMENT ANALYSIS

Total Lateral Resistance (k)	Moment at Inflection Point, M_u (k-ft)	Additional Resistance (k-ft)	Nominal Moment Capacity, ΦM_n (k-ft)	Soil Moment Usage, $M_u / \Phi M_n$
6,481.30	7,368.82	0.00	32,626.46	**22.6%**

SOIL COMPRESSION ANALYSIS

Compressive Bearing Resistance (k)	Compressive Force, P_u (k)	Additional Resistance (k)	Nominal Compressive Capacity, ΦP_n (k)	Soil Compressive Usage, $P_u / \Phi P_n$
2,260.96	78.27	0.00	2,243.52	**3.5%**

REINFORCING STEEL STRENGTH ANALYSIS

Rebar Cage Diameter (in)	Steel Elastic Modulus, E (ksi)	Strength Bending/Tension Reduction Factor, Φ_b	Strength Shear Reduction Factor, Φ_v	Strength Compression Reduction Factor, Φ_c
73.34	29,000	0.9	0.75	0.65

PIER REINFORCING MOMENT ANALYSIS

Design Moment, M_u (k-ft)	Nominal Moment Capacity, $\Phi_b M_n$ (k-ft)	Bending Reinforcement Ratio	Pier Rebar Flexure Usage, $M_u/\Phi_b M_n$
5,021.71	16,109.88	0.02	**31.2%**

PIER REINFORCING COMPRESSION ANALYSIS

Buoyant Weight of Concrete (k)	Design Compression, P_u (k)	Nominal Compressive Capacity, $\Phi_p P_n$ (k)	Pier Rebar Compressive Usage, $P_u / \Phi_p P_n$
207.82	78.27	13,939.01	**0.6%**

PIER REINFORCING SHEAR ANALYSIS

Design Shear, V_u (k)	Nominal Shear Capacity, $\Phi_v V_n$ (k)	Pier Rebar Shear Usage, $V_u / \Phi_v V_n$
374.90	715.90	**52.4%**

EXHIBIT 4

Colliers Engineering & Design, Architecture,
Landscaping Architecture, Surveying, CT, P.C.
1055 Washington Boulevard
Stamford, CT 06901
203.324.0800
peter.albano@collierseng.com

Antenna Mount Analysis Report with Hardware Upgrades and PMI Requirements

Mount Analysis

SMART Tool Project #: 10208091
Colliers Engineering & Design Project #: 23777241 (Rev. 1)

December 6, 2023

Site Information	*Site ID:*	*5000155382-VZW / NEW CANAAN NE2 CT*
	Site Name:	*NEW CANAAN NE2 CT*
	Carrier Name:	*Verizon Wireless*
	Address:	*183 Soundview Lane*
		New Canaan, Connecticut 06840
		Fairfield County
	Latitude:	*41.190675°*
	Longitude:	*-73.495044°*
Structure Information	*Tower Type:*	*88-Ft Monopine*
	Mount Type:	*6.00-Ft T-Frame*

FUZE ID # 17123713

Analysis Results

T-Frame: **35.4% Pass w/ Hardware Upgrades***

*** Antennas and equipment to be installed in compliance with PMI Requirements of this mount analysis.**

******Contractor PMI Requirements*:**
Included at the end of this MA report
Available & Submitted via portal at https://pmi.vzwsmart.com
For additional questions and support, please reach out to:
pmisupport@colliersengineering.com

Report Prepared By: Frank Centone

Executive Summary:

The objective of this report is to determine the capacity of the antenna support mount at the subject facility for the final wireless telecommunications configuration, per the applicable codes and standards. Any modification listed under Sources of Information was assumed completed and was included in this analysis.

This analysis is inclusive of the mount structure only and does not address the structural capacity of the supporting structure. This mounting frame was not analyzed as an anchor attachment point for fall protection. All climbing activities are required to have a fall protection plan completed by a competent person.

Sources of Information:

Document Type	Remarks
Mount Mapping Report	*Onsight Services, Site ID: 23777241, dated November 1, 2023*
Filter Add Scope	*Provided by Verizon Wireless*

Analysis Criteria:

Codes and Standards:	ANSI/TIA-222-H 2022 Connecticut State Building Code (CSBC), Effective October 1, 2022	
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT}:	120 mph
	Ice Wind Speed (3-sec. Gust):	50 mph
	Design Ice Thickness:	1.00 in
	Risk Category:	I
	Exposure Category:	B
	Topographic Category:	1
	Topographic Feature Considered:	N/A
	Topographic Method:	N/A
	Ground Elevation Factor, K_e:	0.982
Seismic Parameters:	S_S:	0.252 g
	S_1:	0.058 g
Maintenance Parameters:	Wind Speed (3-sec. Gust):	30 mph
	Maintenance Load, Lv:	250 lbs.
	Maintenance Load, Lm:	500 lbs.
Analysis Software:	RISA-3D (V17)	

Final Loading Configuration:

The following equipment has been considered for the analysis of the mounts:

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
71.00	71.00	2	KAelus	KA-6030	Added
		4	JMA Wireless	MX10FRO860-02	Retained
		2	JMA Wireless	MX10FRO840-xx	
		3	Samsung	RF4440d-13A	
		3	Samsung	RF4439d-25A	
		1	Raycap	RCMDC-6627-PF-48	
		3	Samsung	MT6407-77A	

Any proposed antennas not currently installed should be mounted such that the centerline of the antennas does not exceed 6 inches vertically from the center of the antenna mounts.

The recent mount mapping reported existing OVP units. It is acceptable to install up to any three (3) of the OVP model numbers listed below as required at any location other than the mount face without affecting the structural capacity of the mount. If OVP units are installed on the mount face, a mount re-analysis may be required unless replacing an existing OVP.

Model Number	Ports	AKA
DB-B1-6C-12AB-0Z	6	OVP-6
RVZDC-6627-PF-48	12	OVP-12

Standard Conditions:

1. All engineering services are performed on the basis that the information provided to Colliers Engineering & Design and used in this analysis is current and correct. The existing equipment loading has been applied at locations determined from the supplied documentation. Any deviation from the loading locations specified in this report shall be communicated to Colliers Engineering & Design to verify deviation will not adversely impact the analysis.

2. Mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer's specifications.

   Obvious safety and structural issues/deficiencies noticed at the time of the mount mapping and reported in the Mount Mapping Report are assumed to be corrected and documented as part of the PMI process and are not considered in the mount analysis.

   The mount analysis and the mount mapping are not a condition assessment of the mount. Proper maintenance and condition assessments are still required post analysis.

3. For mount analyses completed from other data sources (including new replacement mounts) and not specifically mapped in accordance with the NSTD-446 Standard, the mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer's specifications.

4. All member connections are assumed to have been designed to meet or exceed the load carrying capacity of the connected member unless otherwise specified in this report.

5. The mount was checked up to, and including, the bolts that fasten it to the mount collar/attachment and threaded rod connections in collar members if applicable. Local deformation and interaction between the mount collar/attachment and the supporting tower structure are outside the scope of this analysis.

6. All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. Colliers Engineering & Design is not responsible for the conclusion, opinions, and recommendations made by others based on the information supplied.

7. Structural Steel Grades have been assumed as follows, if applicable, unless otherwise noted in this analysis:
   - Channel, Solid Round, Angle, Plate — ASTM A36 (Gr. 36)
   - HSS (Rectangular) — ASTM 500 (Gr. B-46)
   - Pipe — ASTM A53 (Gr. B-35)
   - Threaded Rod — F1554 (Gr. 36)
   - Bolts — ASTM A325

Discrepancies between in-field conditions and the assumptions listed above may render this analysis invalid unless explicitly approved by Colliers Engineering & Design.

Analysis Results:

Component	Utilization %	Pass/Fail
Standoff	18.8%	Pass
Face Horizontal	35.4%	Pass
Antenna Pipe	30.8%	Pass
Mount Connection	13.7%	Pass

Structure Rating – ***(Controlling Utilization of all Components)***	**35.4%***

***** Results valid after hardware upgrades noted in the PMI Requirements are installed.

Mount Connection Envelope Reactions:

Connection Description	Elev. AGL (Ft)	Node Label	Envelope Wind Reactions				Envelope Wind + Ice Reactions			
			Axial (Lbs)	Lateral (Lbs)	Moment (K-Ft)	Torsion (K-Ft)	Axial (Lbs)	Lateral (Lbs)	Moment (K-Ft)	Torsion (K-Ft)
Sector B Bottom Standoff	68.67	N1	523	874	1.242	1.323	485	198	1.224	0.196
Sector B Top Standoff	73.33	N16	513	845	1.256	1.446	474	199	1.221	0.198

Notes:
- Axial loads act along the axis of the tower leg
- Lateral reactions act perpendicular to the tower leg
- Moment loads introduce bending moment to the tower leg
- Torsion loads introduce twisting moment to the tower leg
- Batch solutions by individual load cases are included at the end of this document

Mount Steel (EPA)a per ANSI/TIA-222-H Section 2.6.11.2:

Ice Thickness (In)	Mount Pipes Excluded		Mount Pipes Included	
	Front (EPA)a (Sq. Ft.)	Side (EPA)a (Sq. Ft.)	Front (EPA)a (Sq. Ft.)	Side (EPA)a (Sq. Ft.)
0	6.5	4.0	9.5	7.0
0.5	8.8	5.5	13.0	9.8
1	10.9	6.7	16.4	12.2

Notes:
- (EPA)a values listed above may be used in the absence of more precise information
- (EPA)a values in the table above include 1 sector(s).
- Ka factors included in (EPA)a calculations

Requirements:

The existing mounts will be **SUFFICIENT** for the final loading configuration shown in attachment 2 upon the completion of the requirements listed below.

Replace all mount-tower connection bolts at baseplate with 5/8" dia. A325N bolts to ensure all bolts have a min. of 3 thread pitch beyond the face of the nuts. Contractor to replace one bolt at a time with temporary mount bracing as required

Contractor shall inspect climbing facilities and safety climb and ensure they are in good condition. Contractor shall install safety climb wire rope guides in locations where wire rope is contacting the mount or mount-to-tower connection steel. Wire brush clean any observed corrosion and protect with two (2) coats of cold galvanization (Zinga or Zinc Kote).

Contractor shall install the proposed filter units on new Site Pro 1 Dual Swivel Mount Kit (Part #: RRUDSM or EOR approved equivalent) in the location shown in the placement diagrams.

ANSI/ASSP rigging plan review services compliant with the requirements of ANSI/TIA 322 are available for a Construction Class IV site or other, if required. Separate review fees will apply.

Attachments:

1. **Contractor Required Post Installation Inspection (PMI) Report Deliverables**
2. Antenna Placement Diagrams
3. Mount Photos
4. Mount Mapping Report (for reference only)
5. Analysis Calculations

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – Passing Mount Analysis

Passing Mount Analysis requires a PMI due to a modification in loading.

Electronic pdf version of this can be downloaded at https://pmi.vzwsmart.com.

For additional questions and support, please reach out to pmisupport@colliersengineering.com

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MDG #: 5000155382 SMART Project #: 10208091 Fuze Project ID: 17123713

Purpose – to provide SMART Tool structural vendor the proper documentation in order to complete the required Mount Desktop review of the Post Modification Inspection Report.

- Contractor is responsible for making certain the photos provided as noted below provide confirmation that the installation was completed in accordance with this Passing Mount Analysis.
- Contractor shall relay any data that can impact the performance of the mount, this includes safety issues.

Base Requirements:

- If installation will cause damage to the structure, the climbing facility, or safety climb if present or any installed system, SMART Tool vendor to be notified prior to install. Any special photos outside of the standard requirements will be indicated on the drawings.
- Provide "as built mount drawings" showing contractor's name, contact information, preparer's signature, and date. Any deviations from the drawings (Proposed modification) shall be shown. NOTE: If loading is different than what is conveyed in the passing mount analysis (MA) contact the SMART Tool vendor immediately.
- Each photo should be time and date stamped
- Photos should be high resolution.
- Contractor shall ensure that the safety climb wire rope is supported and not adversely impacted by the install of the modification components. This may involve the install of wire rope guides, or other items to protect the wire rope. If there is conflict, contact the SMART Tool engineer for recommendations.
- The PMI can be accessed at the following portal: ***https://pmi.vzwsmart.com***

Photo Requirements:

- *Photos taken at ground level*
  - Photo of Gate Signs showing the tower owner, site name, and number.
  - Overall tower structure after installation.
  - Photos of the mount after installation; if the mounts are at different rad elevations, pictures must be provided for all elevations that equipment was installed.
- *Photos taken at Mount Elevation*
  - Photos showing the safety climb wire rope above and below the mount prior to installation.
  - Photos showing the climbing facility and safety climb if present.

- Photos showing each individual sector after installation. Each entire sector shall be in one photo to show the interconnection of members.
    - These photos shall also certify that the placement and geometry of the equipment on the mount is as depicted in the antenna placement diagram in this form.
- Photos that show the model number of each antenna and piece of equipment installed per sector.

Antenna & equipment placement and Geometry Confirmation:

- The contractor shall certify that the antenna & equipment placement and geometry is in accordance with the sketch and table as included in the mount analysis and noted below.

☐ The contractor certifies that the photos support and the equipment on the mount is as depicted on the sketch and table included in this form and with the mount analysis provided.

OR

☐ The contractor notes that the equipment on the mount is not in accordance with the sketch and has noted the differences below and provided photo documentation of any alterations.

Special Instructions / Validation as required from the MA or any other information the contractor deems necessary to share that was identified:

Issue:

Replace all mount-tower connection bolts at baseplate with 5/8" dia. A325N bolts to ensure all bolts have a min. of 3 thread pitch beyond the face of the nuts. Contractor to replace one bolt at a time with temporary mount bracing as required Contractor shall inspect climbing facilities and safety climb and ensure they are in good condition. Contractor shall install safety climb wire rope guides in locations where wire rope is contacting the mount or mount-to-tower connection steel. Wire brush clean any observed corrosion and protect with two (2) coats of cold galvanization (Zinga or Zinc Kote). Contractor shall install the proposed filter units on new Site Pro 1 Dual Swivel Mount Kit (Part #: RRUDSM or EOR approved equivalent) in the location shown in the placement diagrams.

Response:

Special Instruction Confirmation:

☐ The contractor has read and acknowledges the above special instructions.

☐ All hardware listed in the Special Instructions above (if applicable) has been properly installed, and the existing hardware was inspected.

☐ The material utilized was as specified in the SMART Tool engineering vendor Special Instructions above (if applicable) and included in the material certification folder is a packing list or invoice for these materials.

OR

☐ The material utilized was approved by a SMART Tool engineering vendor as an "equivalent" and this approval is included as part of the contractor submission.

Comments:

Contractor certifies that the climbing facility / safety climb was not damaged prior to starting work:

☐ Yes ☐ No

Contractor certifies no new damage created during the current installation:

☐ Yes ☐ No

Contractor to certify the condition of the safety climb and verify no damage when leaving the site:

☐ Safety Climb in Good Condition ☐ Safety Climb Damaged

Certifying Individual:

Company:	
Employee Name:	
Contact Phone:	
Email:	
Date:	

Structure: 5000155382-VZW - NEW CANAAN NE2 CT

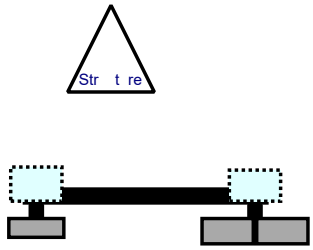
Se tor: **A** 12/6/2023

Str t re Type: Mo opole 10208091

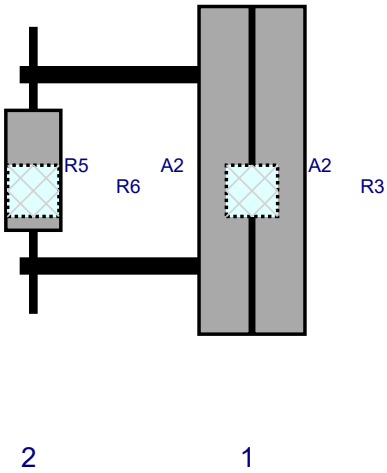
Mo t Elev: 71.00 P ge: 1

Colliers Engineering & Design

Plan View



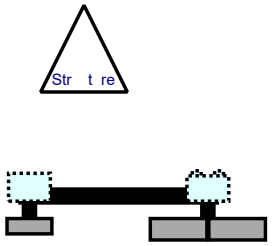
Front View - Loo i g t Str t re



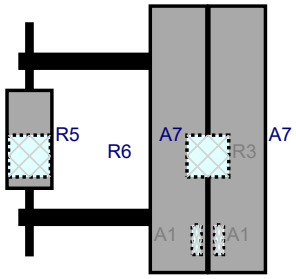
Re #	Model	Height (i)	Width (i)	H Dist Fr L.	Pipe #	Pipe Pos V	A t Pos	C. A t Fr T.	A t H O	St t s	V lid tio
A2	MX10FRO860-02	95.9	15	68	1		Fro t	42	-8	Ret i ed	11/01/2023
A2	MX10FRO860-02	95.9	15	68	1		Fro t	42	8	Ret i ed	11/01/2023
R3	RF4440d-13A	15	15	68	1		Behi d	48	0	Ret i ed	11/01/2023
R5	MT6407-77A	35.1	16.1	4	2		Fro t	42	0	Ret i ed	11/01/2023
R6	RF4439d-25A	15	15	4	2		Behi d	48	0	Ret i ed	11/01/2023
OVP	RCMDC-6627-PF-48	29.5	16.5		Me er					Ret i ed	11/01/2023

Colliers Engineering & Design

Plan View



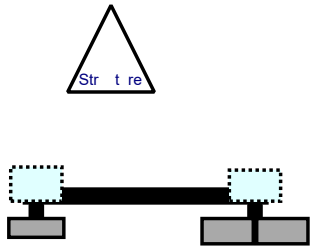
Front View - Loo i g t Str t re



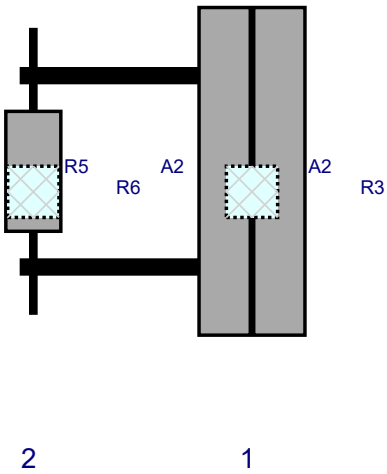
2 1

Re #	Model	Height (i)	Width (i)	H Dist Fr L.	Pipe #	Pipe Pos V	A t Pos	C. A t Fr T.	A t H O	St t s	V lid tio
A7	MX10FRO840-	95.6	20.3	68	1		Fro t	42	10.5	Ret i ed	11/01/2023
A7	MX10FRO840-	95.6	20.3	68	1		Fro t	42	-10.5	Ret i ed	11/01/2023
A1	KA-6030	10.6	3.2	68	1		Behi d	78	4	Added	
A1	KA-6030	10.6	3.2	68	1		Behi d	78	-4	Added	
R3	RF4440d-13A	15	15	68	1		Behi d	48	0	Ret i ed	11/01/2023
R5	MT6407-77A	35.1	16.1	4	2		Fro t	42	0	Ret i ed	11/01/2023
R6	RF4439d-25A	15	15	4	2		Behi d	48	0	Ret i ed	11/01/2023

Plan View



Front View - Loo i g t Str t re



Re #	Model	Height (i)	Width (i)	H Dist Fr L.	Pipe #	Pipe Pos V	A t Pos	C. A t Fr T.	A t H O	St t s	V lid tio
A2	MX10FRO860-02	95.9	15	68	1		Fro t	42	-8	Ret i ed	11/01/2023
A2	MX10FRO860-02	95.9	15	68	1		Fro t	42	8	Ret i ed	11/01/2023
R3	RF4440d-13A	15	15	68	1		Behi d	48	0	Ret i ed	11/01/2023
R5	MT6407-77A	35.1	16.1	4	2		Fro t	42	0	Ret i ed	11/01/2023
R6	RF4439d-25A	15	15	4	2		Behi d	48	0	Ret i ed	11/01/2023

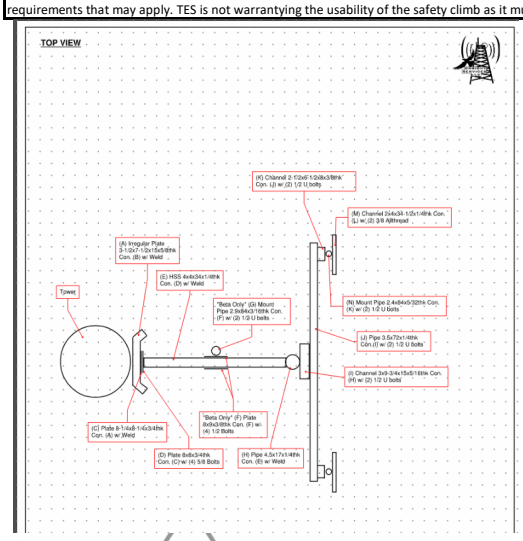
V4.1 Updated on 12-17-2021

Antenna Mount Mapping Form (PATENT PENDING)

FCC #

Colliers Engineering & Design

Tower Owner:	ATC	**Mapping Date:**	11/1/2023
Site Name:	NEW CANAAN NE2 CT	**Tower Type:**	Other
Site Number or ID:	23777241	**Tower Height (Ft.):**	88
Mapping Contractor:	Onsight Services	**Mount Elevation (Ft.):**	71



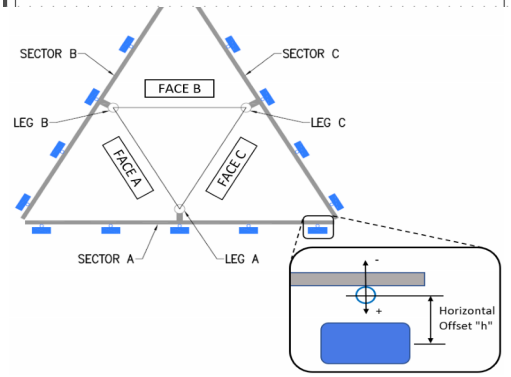
Mount Pipe Configuration and Geometries [Unit = Inches]

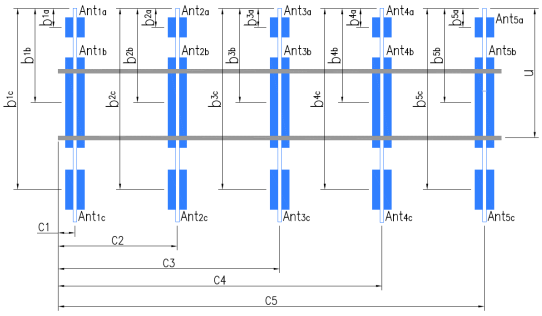
Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."	Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."
A1	2.4X84X5/32	70.00	4.50	C1	2.4X84X5/32	70.00	4.50
A2	2.4X84X5/32	70.00	67.50	C2	2.4X84X5/32	70.00	67.50
A3				C3			
A4				C4			
A5				C5			
A6				C6			
B1	2.4X84X5/32	70.00	4.50	D1			
B2	2.4X84X5/32	70.00	67.50	D2			
B3				D3			
B4				D4			
B5				D5			
B6				D6			

Distance from top of bottom support rail to lowest tip of ant./eqpt. of Carrier above. (N/A if > 10 ft.) :	8.75
Distance from top of bottom support rail to highest tip of ant./eqpt. of Carrier below. (N/A if > 10 ft.) :	

Please enter additional infomation or comments below.

Tower Face Width at Mount Elev. (ft.):		Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.):	31.5



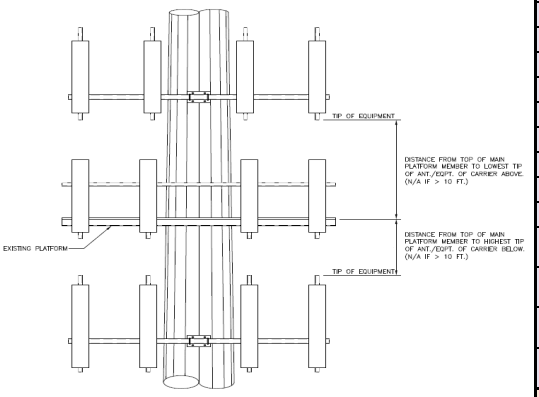


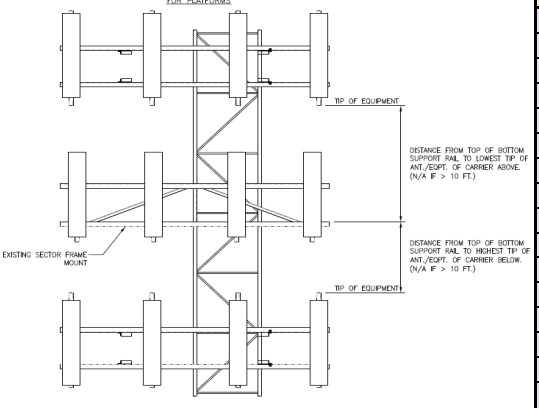
Antenna Layout (Looking Out From Tower)

Ants. Items	Enter antenna model. If not labeled, enter "Unknown". Antenna Models if Known	Width (in.)	Depth (in.)	Height (in.)	Coax Size and Qty	Antenna Center-line (Ft.)	Mounting Locations [Units are inches and degrees] Vertical Distances"b_{1a}, b_{2a}, b_{3a}, b_{1b}...." (Inches)	Horiz. Offset "h" (Use "-" if Ant. is behind)	Antenna Azimuth (Degrees)	Photos of antennas Photo Numbers
Sector A										
Ant_{1a}	RF4440d-13A	15.00	9.00	15.00		71.5	36.00	-10.00		55
Ant_{1b}	MX10FRO860-02	16.00	8.00	96.00		71	32.00	10.00	20.00	55
Ant_{1c}										
Ant_{2a}										
Ant_{2b}	MX10FRO860-02	16.00	8.00	96.00		71	32.00	10.00	20.00	55
Ant_{2c}										
Ant_{3a}	RF4440d-13A	15.00	9.00	15.00		71.5	36.00	10.00		61
Ant_{3b}	n/a	16.00	6.00	35.50		71	32.00		20.00	61
Ant_{3c}										
Ant_{4a}										
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										

Mount Azimuth (Degree) for Each Sector				Tower Leg Azimuth (Degree) for Each Sector	
Sector A:	20.00	Deg	Leg A:		Deg
Sector B:	110.00	Deg	Leg B:		Deg
Sector C:	250.00	Deg	Leg C:		Deg
Sector D:		Deg	Leg D:		Deg

Climbing Facility Information			
Location:	20.00	Deg	Other
Climbing Facility	Corrosion Type:		Good condition.
	Access:		Climbing path was unobstructed.
	Condition:		Good condition.





Sector B										
Ant_{1a}	RF4440d-13A	15.00	9.00	15.00		71	36.00	-10.00		62
Ant_{1b}	MX10FRO860-02	16.00	8.00	96.00		71	32.00	10.00	20.00	65
Ant_{1c}										
Ant_{2a}										
Ant_{2b}	MX10FRO860-02	16.00	8.00	96.00		71	32.00	10.00	20.00	65
Ant_{2c}										
Ant_{3a}	RF4440d-13A	15.00	9.00	15.00		71	36.00	10.00		195
Ant_{3b}	n/a	16.00	6.00	35.50		71	32.00		20.00	195
Ant_{3c}										
Ant_{4a}										
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff	RVZDC-6627-PF-48	13.50	9.50	18.00		71.5	16.00	8.00		96
Ant on Standoff										
Ant on Tower										
Ant on Tower										
Sector C										
Ant_{1a}	RF4440d-13A	15.00	9.00	15.00		71.5	36.00	-10.00		69
Ant_{1b}	MX10FRO860-02	16.00	8.00	96.00		71	32.00	10.00	20.00	71
Ant_{1c}										
Ant_{2a}										
Ant_{2b}	MX10FRO860-02	16.00	8.00	96.00		71	32.00	10.00	20.00	71
Ant_{2c}										
Ant_{3a}	RF4440d-13A	15.00	9.00	15.00		71.5	36.00	10.00		69
Ant_{3b}	n/a	16.00	6.00	35.50		71	32.00		20.00	70
Ant_{3c}										
Ant_{4a}										
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										
Sector D										
Ant_{1a}										
Ant_{1b}										
Ant_{1c}										
Ant_{2a}										
Ant_{2b}										
Ant_{2c}										
Ant_{3a}										
Ant_{3b}										
Ant_{3c}										
Ant_{4a}										
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										

Observed Safety and Structural Issues During the Mount Mapping		
Issue #	Description of Issue	Photo #
1		
2		
3		
4		
5		
6		
7		
8		

Mapping Notes
1. Please report any visible structural or safety issues observed on the antenna mounts (Damaged members, loose connections, tilting mounts, safety climb issues, etc.)
2. If the thickness of the existing pipes or tubing can't be obtained from a general tool (such as Caliper), please use an ultrasonic measurement tool (thickness gauge) to measure the thickness.
3. Please create all required detail sketches of the mounts and insert them into the "Sketches" tab.
4. Please measure and enter the bolt sizes and types under the Members Box in the spreadsheet of the mount type.
5. Take and label the photos of the tower, mounts, connections, antennas and all measurements. Minimum 50 photos are required.
6. Please measure and report the size and length of all existing antenna mounting pipes.
7. Please measure and report the antenna information for all sectors.
8. Don't delete or rearrange any sheet or contents of any sheet from this mapping form.

Standard Conditions
1. Obvious safety and structural issues/deficiencies noticed at the time of the mount mapping are to be reported in this mapping. However, this mount mapping is not a condition assessment of the mount.

V4.1 Updated on 12-17-2021

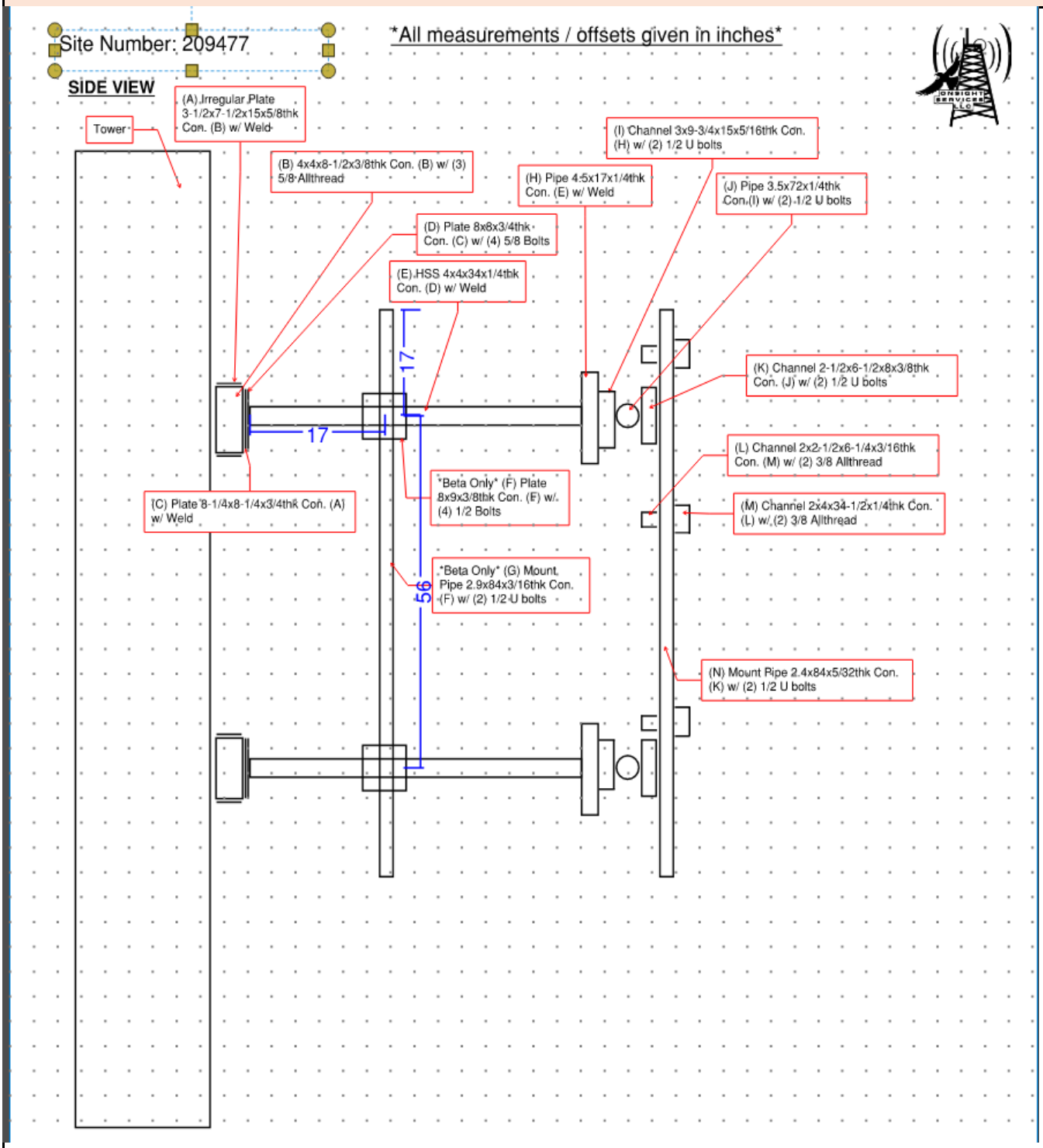
SMART Tool© Vendor

Antenna Mount Mapping Form (PATENT PENDING)

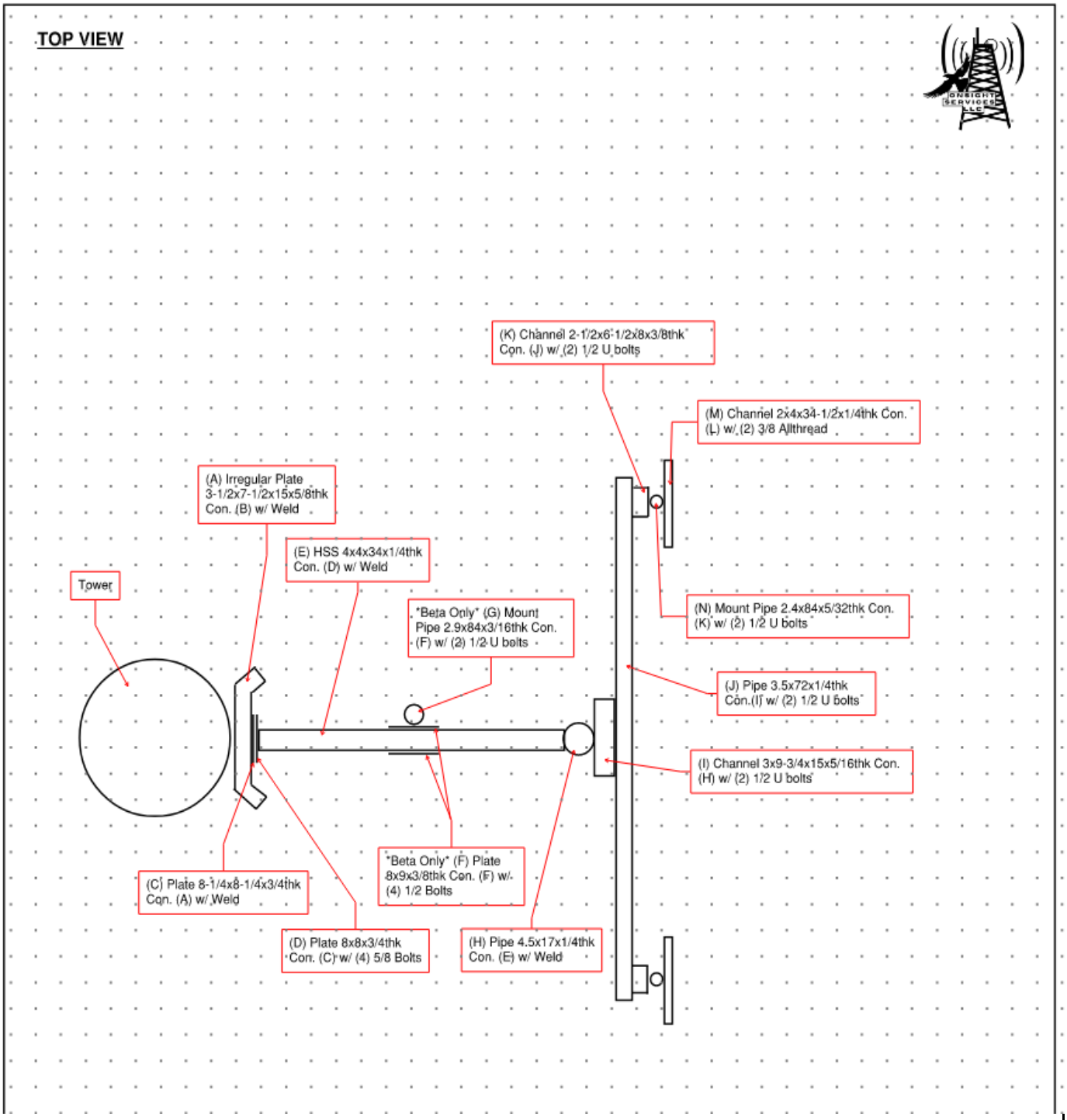
FCC #

Tower Owner:	ATC	**Mapping Date:**	11/1/2023
Site Name:	NEW CANAAN NE2 CT	**Tower Type:**	Other
Site Number or ID:	23777241	**Tower Height (Ft.):**	88
Mapping Contractor:	Onsight Services	**Mount Elevation (Ft.):**	71

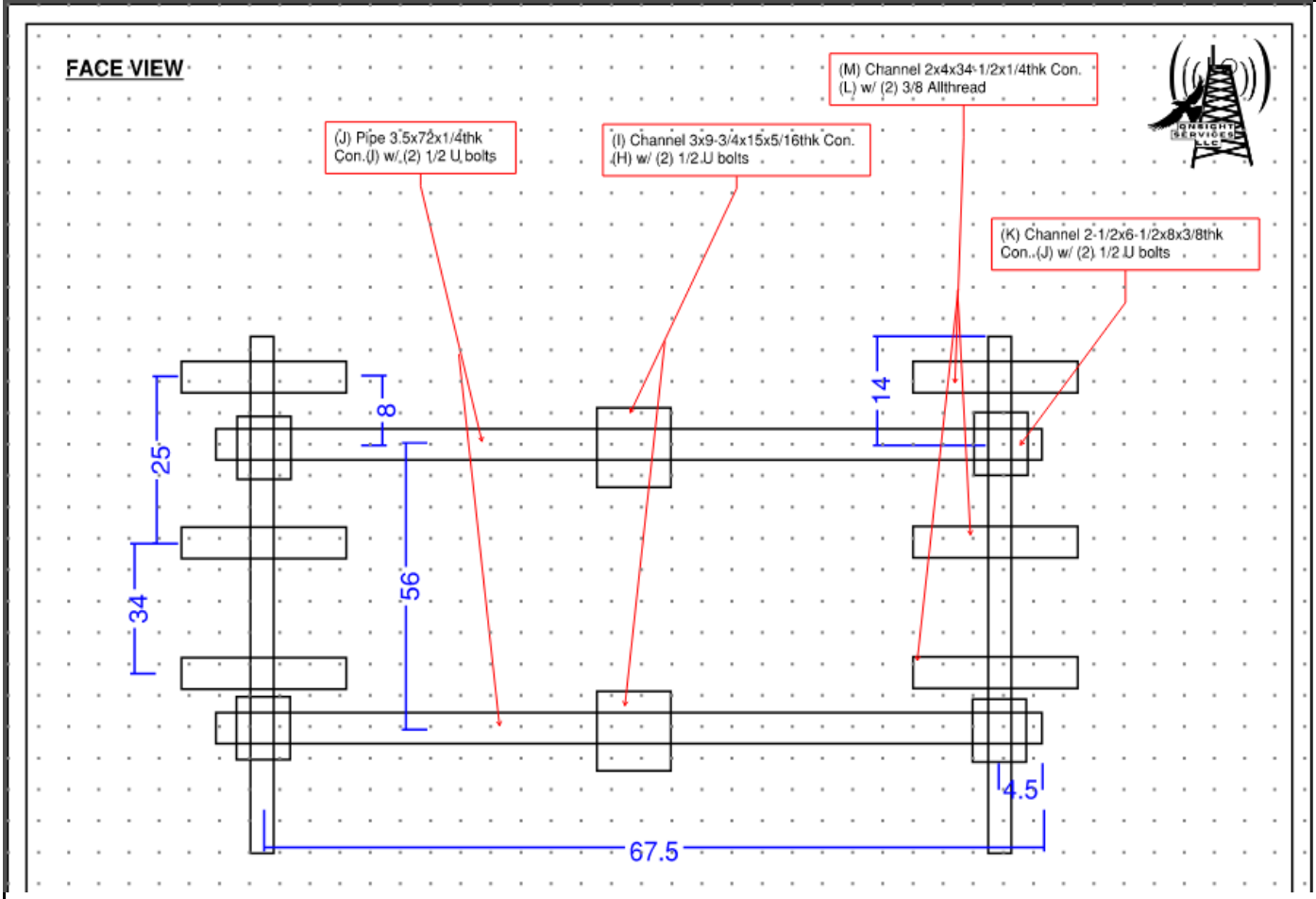
Please Insert Sketches of the Antenna Mount



Please Insert Sketches of the Antenna Mount, cont'd

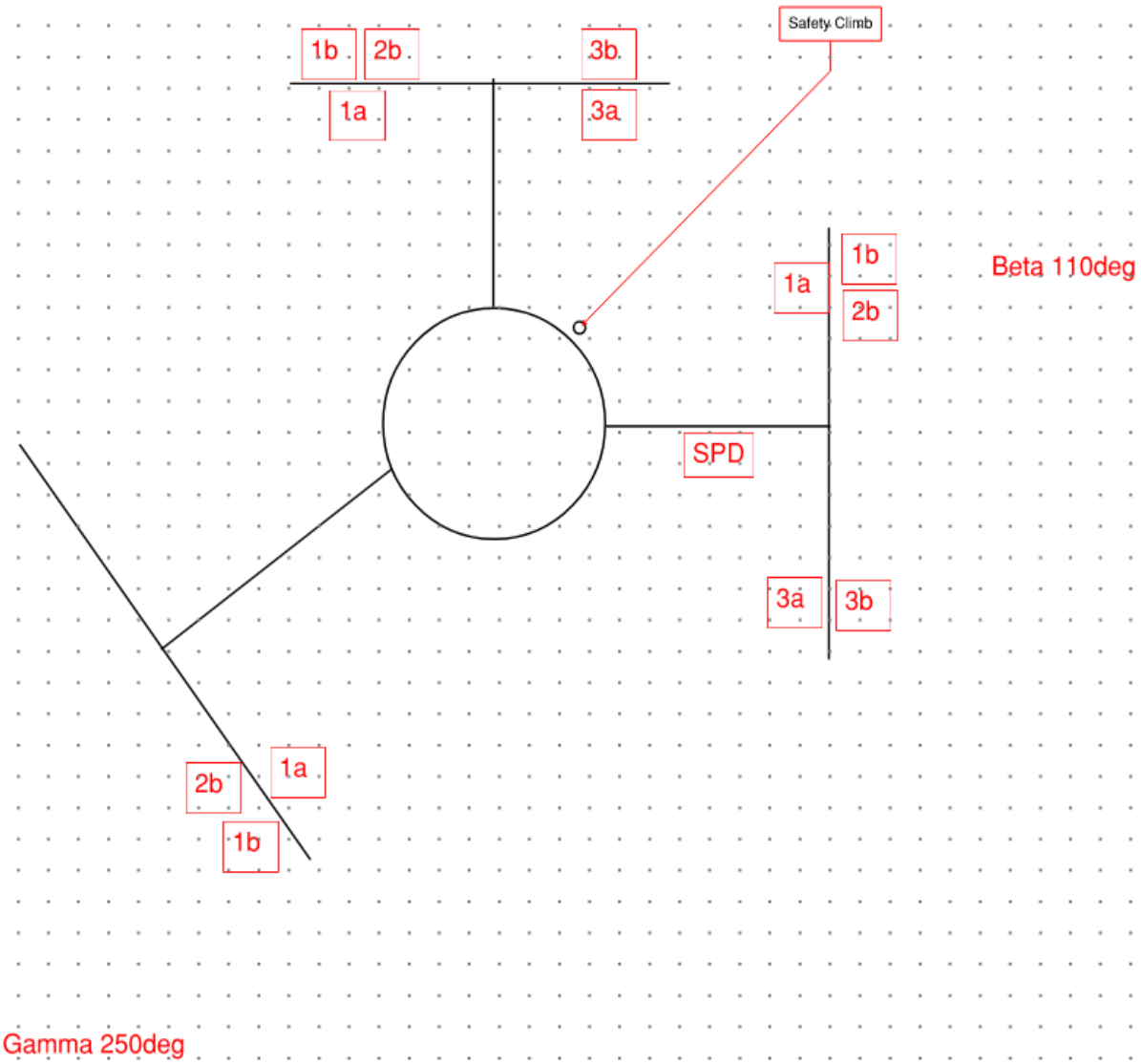


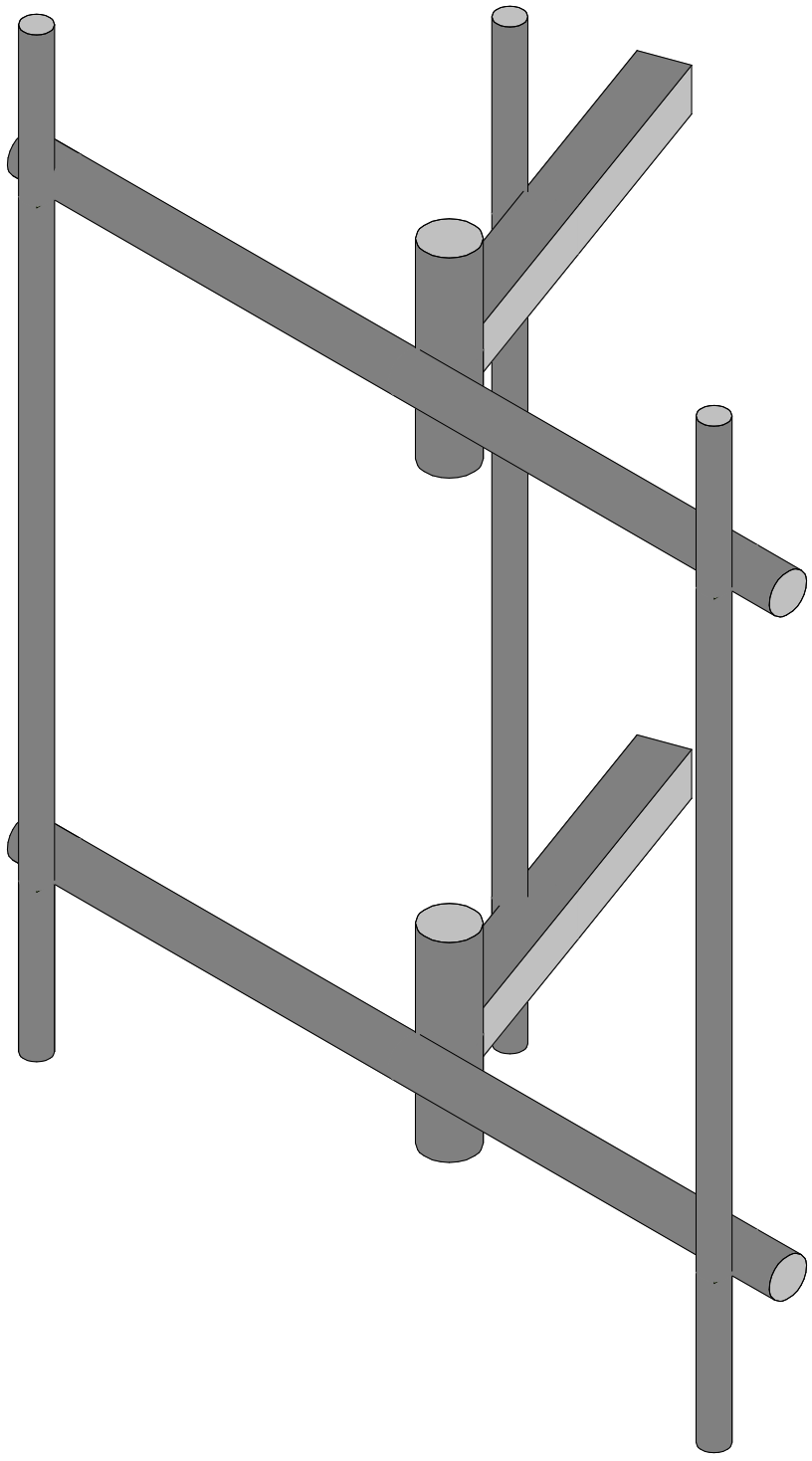
Please Insert Sketches of the Antenna Mount, cont'd



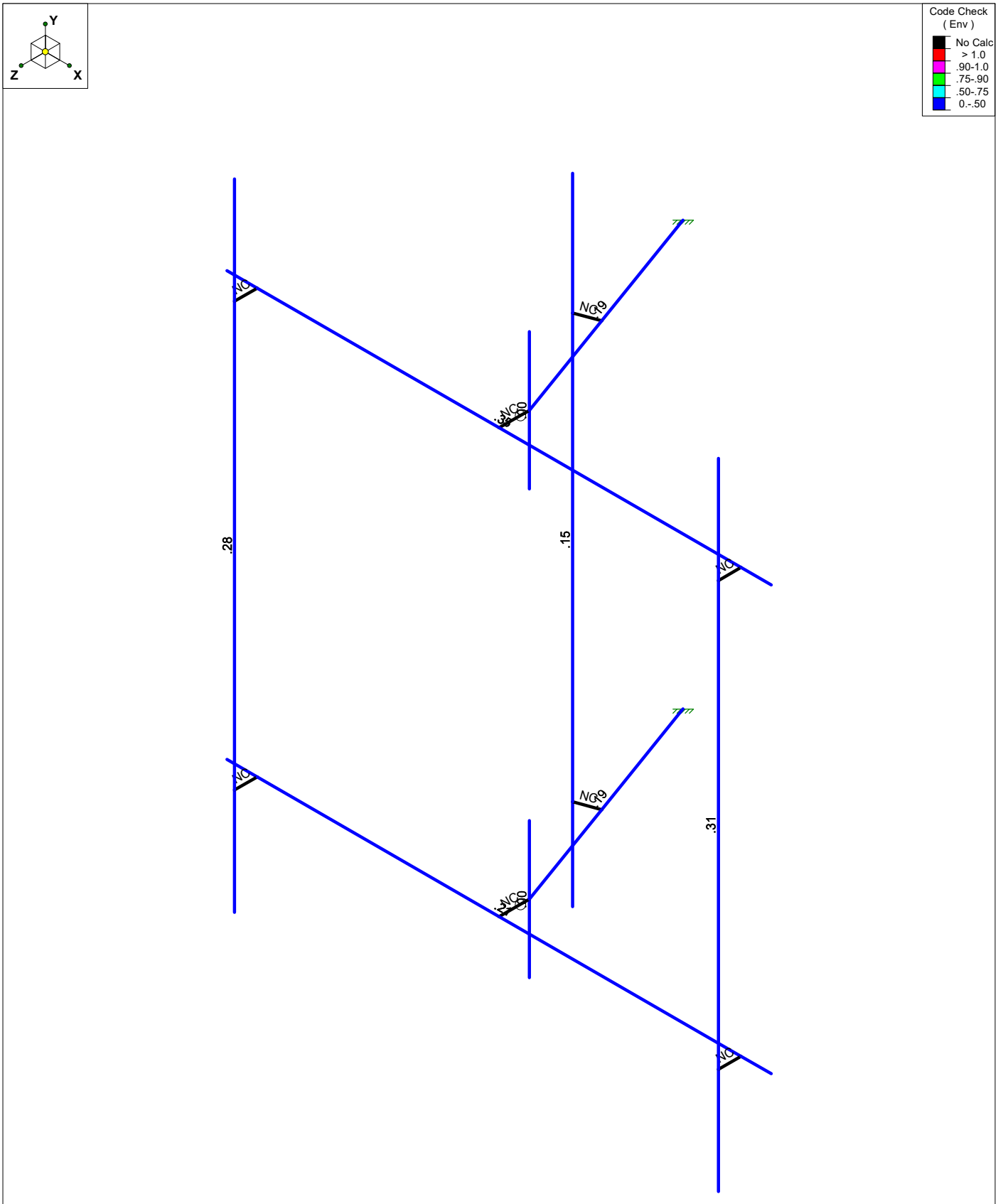
Please Insert Sketches of the Antenna Mount, cont'd

AZIMUTH



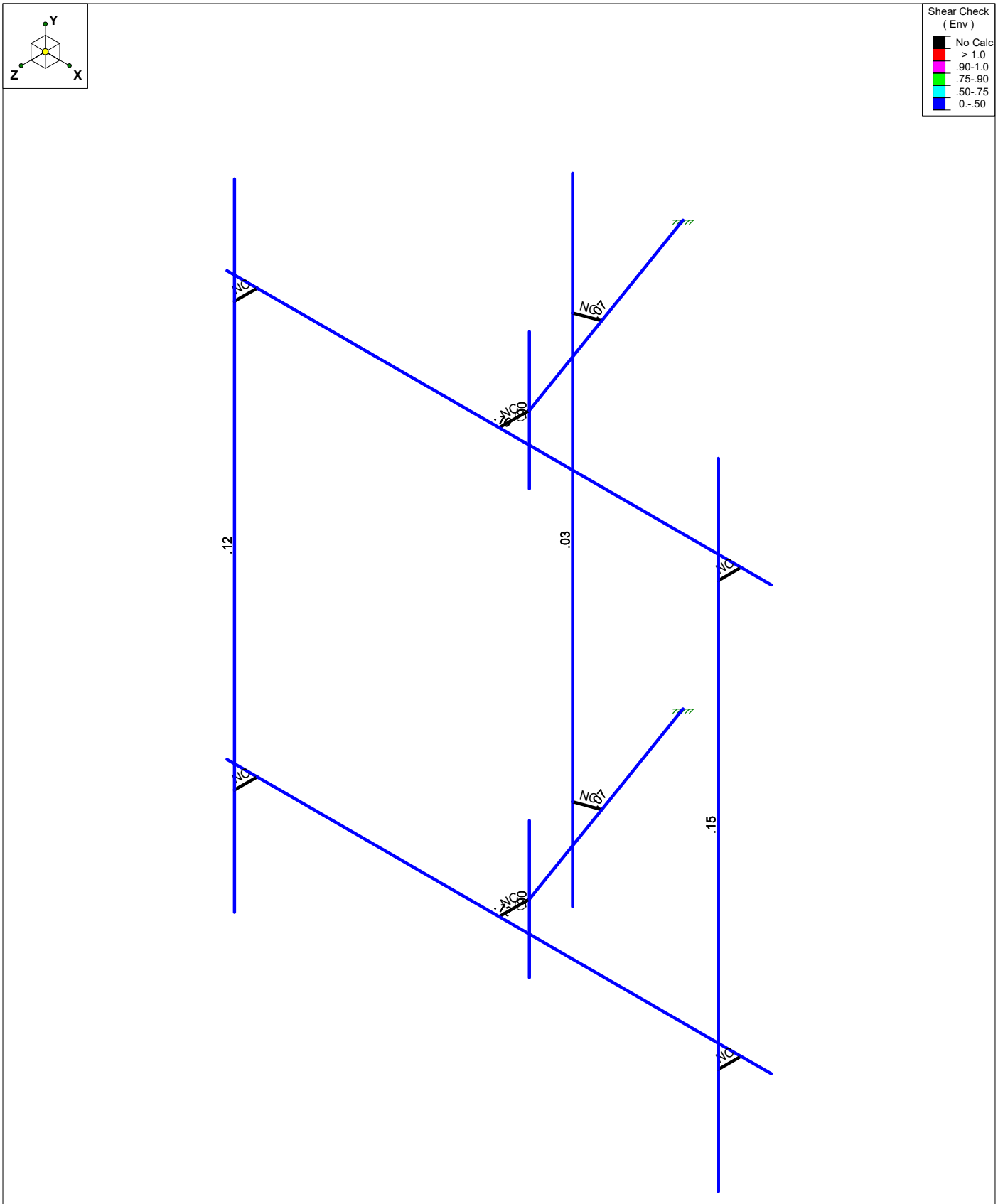


Colliers Engineering & De...	5000155382-VZW_MT_LOT_SectorB_H	SK - 1
		Dec 6, 2023 at 3:22 PM
		5000155382-VZW_MT_LOT_B_...



Member Code Checks Displayed (Enveloped)
Results for LC 1, 1.2D+1.0Wo (0 Deg)

Colliers Engineering & De...	5000155382-VZW_MT_LOT_SectorB_H	SK - 2
		Dec 6, 2023 at 3:22 PM
		5000155382-VZW_MT_LOT_B_...



Member Shear Checks Displayed (Enveloped)
Results for LC 1, 1.2D+1.0Wo (0 Deg)

Colliers Engineering & De...	5000155382-VZW_MT_LOT_SectorB_H	SK - 3
		Dec 6, 2023 at 3:22 PM
		5000155382-VZW_MT_LOT_B_...

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distribut...	Area(Me...	Surface(...
1	Antenna D	None					39			
2	Antenna Di	None								
3	Antenna Wo (0 Deg)	None					39			
4	Antenna Wo (30 Deg)	None					39			
5	Antenna Wo (60 Deg)	None					39			
6	Antenna Wo (90 Deg)	None					39			
7	Antenna Wo (120 Deg)	None					39			
8	Antenna Wo (150 Deg)	None					39			
9	Antenna Wo (180 Deg)	None					39			
10	Antenna Wo (210 Deg)	None					39			
11	Antenna Wo (240 Deg)	None					39			
12	Antenna Wo (270 Deg)	None					39			
13	Antenna Wo (300 Deg)	None					39			
14	Antenna Wo (330 Deg)	None					39			
15	Antenna Wi (0 Deg)	None								
16	Antenna Wi (30 Deg)	None								
17	Antenna Wi (60 Deg)	None								
18	Antenna Wi (90 Deg)	None								
19	Antenna Wi (120 Deg)	None								
20	Antenna Wi (150 Deg)	None								
21	Antenna Wi (180 Deg)	None								
22	Antenna Wi (210 Deg)	None								
23	Antenna Wi (240 Deg)	None								
24	Antenna Wi (270 Deg)	None								
25	Antenna Wi (300 Deg)	None								
26	Antenna Wi (330 Deg)	None								
27	Antenna Wm (0 Deg)	None					39			
28	Antenna Wm (30 Deg)	None					39			
29	Antenna Wm (60 Deg)	None					39			
30	Antenna Wm (90 Deg)	None					39			
31	Antenna Wm (120 Deg)	None					39			
32	Antenna Wm (150 Deg)	None					39			
33	Antenna Wm (180 Deg)	None					39			
34	Antenna Wm (210 Deg)	None					39			
35	Antenna Wm (240 Deg)	None					39			
36	Antenna Wm (270 Deg)	None					39			
37	Antenna Wm (300 Deg)	None					39			
38	Antenna Wm (330 Deg)	None					39			
39	Structure D	None		-1						
40	Structure Di	None								
41	Structure Wo (0 Deg)	None						18		
42	Structure Wo (30 Deg)	None						18		
43	Structure Wo (60 Deg)	None						18		
44	Structure Wo (90 Deg)	None						18		
45	Structure Wo (120 Deg)	None						18		
46	Structure Wo (150 Deg)	None						18		
47	Structure Wo (180 Deg)	None						18		
48	Structure Wo (210 Deg)	None						18		
49	Structure Wo (240 Deg)	None						18		
50	Structure Wo (270 Deg)	None						18		
51	Structure Wo (300 Deg)	None						18		
52	Structure Wo (330 Deg)	None						18		
53	Structure Wi (0 Deg)	None						18		
54	Structure Wi (30 Deg)	None						18		
55	Structure Wi (60 Deg)	None						18		
56	Structure Wi (90 Deg)	None						18		
57	Structure Wi (120 Deg)	None						18		
58	Structure Wi (150 Deg)	None						18		

Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distribut...	Area(Me...	Surface(...
59	Structure Wi (180 Deg)	None						18		
60	Structure Wi (210 Deg)	None						18		
61	Structure Wi (240 Deg)	None						18		
62	Structure Wi (270 Deg)	None						18		
63	Structure Wi (300 Deg)	None						18		
64	Structure Wi (330 Deg)	None						18		
65	Structure Wm (0 Deg)	None						18		
66	Structure Wm (30 Deg)	None						18		
67	Structure Wm (60 Deg)	None						18		
68	Structure Wm (90 Deg)	None						18		
69	Structure Wm (120 Deg)	None						18		
70	Structure Wm (150 Deg)	None						18		
71	Structure Wm (180 Deg)	None						18		
72	Structure Wm (210 Deg)	None						18		
73	Structure Wm (240 Deg)	None						18		
74	Structure Wm (270 Deg)	None						18		
75	Structure Wm (300 Deg)	None						18		
76	Structure Wm (330 Deg)	None						18		
77	Lm1	None					1			
78	Lm2	None					1			
79	Lv1	None					1			
80	Lv2	None					1			
81	Antenna Ev	None					39			
82	Antenna Eh (0 Deg)	None					26			
83	Antenna Eh (90 Deg)	None					26			
84	Structure Ev	ELY								
85	Structure Eh (0 Deg)	ELZ			-.03					
86	Structure Eh (90 Deg)	ELX	.03							

Load Combinations

	Description	So...	P...	S...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...
1	1.2D+1.0Wo (0 Deg)	Yes	Y		1	1.2	39	1.2	3	1	41	1												
2	1.2D+1.0Wo (30 D...	Yes	Y		1	1.2	39	1.2	4	1	42	1												
3	1.2D+1.0Wo (60 D...	Yes	Y		1	1.2	39	1.2	5	1	43	1												
4	1.2D+1.0Wo (90 D...	Yes	Y		1	1.2	39	1.2	6	1	44	1												
5	1.2D+1.0Wo (120 ...	Yes	Y		1	1.2	39	1.2	7	1	45	1												
6	1.2D+1.0Wo (150 ...	Yes	Y		1	1.2	39	1.2	8	1	46	1												
7	1.2D+1.0Wo (180 ...	Yes	Y		1	1.2	39	1.2	9	1	47	1												
8	1.2D+1.0Wo (210 ...	Yes	Y		1	1.2	39	1.2	10	1	48	1												
9	1.2D+1.0Wo (240 ...	Yes	Y		1	1.2	39	1.2	11	1	49	1												
10	1.2D+1.0Wo (270 ...	Yes	Y		1	1.2	39	1.2	12	1	50	1												
11	1.2D+1.0Wo (300 ...	Yes	Y		1	1.2	39	1.2	13	1	51	1												
12	1.2D+1.0Wo (330 ...	Yes	Y		1	1.2	39	1.2	14	1	52	1												
13	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	15	1	53	1								
14	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	16	1	54	1								
15	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	17	1	55	1								
16	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	18	1	56	1								
17	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	19	1	57	1								
18	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	20	1	58	1								
19	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	21	1	59	1								
20	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	22	1	60	1								
21	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	23	1	61	1								
22	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	24	1	62	1								
23	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	25	1	63	1								
24	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	26	1	64	1								
25	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	27	1	65	1										
26	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	28	1	66	1										

Load Combinations (Continued)

	Description	So...	P...	S...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...
27	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	29	1	67	1										
28	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	30	1	68	1										
29	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	31	1	69	1										
30	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	32	1	70	1										
31	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	33	1	71	1										
32	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	34	1	72	1										
33	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	35	1	73	1										
34	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	36	1	74	1										
35	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	37	1	75	1										
36	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	38	1	76	1										
37	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	27	1	65	1										
38	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	28	1	66	1										
39	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	29	1	67	1										
40	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	30	1	68	1										
41	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	31	1	69	1										
42	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	32	1	70	1										
43	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	33	1	71	1										
44	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	34	1	72	1										
45	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	35	1	73	1										
46	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	36	1	74	1										
47	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	37	1	75	1										
48	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	38	1	76	1										
49	1.2D + 1.5Lv1	Yes	Y		1	1.2	39	1.2	79	1.5														
50	1.2D + 1.5Lv2	Yes	Y		1	1.2	39	1.2	80	1.5														
51	1.4D	Yes	Y		1	1.4	39	1.4																
52	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	1	83		ELZ	1	ELX					
53	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.866	83	.5	ELZ	.866	ELX	.5				
54	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.5	83	.866	ELZ	.5	ELX	.866				
55	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82		83	1	ELZ		ELX	1				
56	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.5	83	.866	ELZ	-.5	ELX	.866				
57	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.866	83	.5	ELZ	-.866	ELX	.5				
58	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-1	83		ELZ	-1	ELX					
59	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.866	83	-.5	ELZ	-.866	ELX	-.5				
60	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.5	83	-.866	ELZ	-.5	ELX	-.866				
61	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82		83	-1	ELZ		ELX	-1				
62	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.5	83	-.866	ELZ	.5	ELX	-.866				
63	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.866	83	-.5	ELZ	.866	ELX	-.5				
64	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	1	83		ELZ	1	ELX					
65	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.866	83	.5	ELZ	.866	ELX	.5				
66	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.5	83	.866	ELZ	.5	ELX	.866				
67	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82		83	1	ELZ		ELX	1				
68	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.5	83	.866	ELZ	-.5	ELX	.866				
69	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.866	83	.5	ELZ	-.866	ELX	.5				
70	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-1	83		ELZ	-1	ELX					
71	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.866	83	-.5	ELZ	-.866	ELX	-.5				
72	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.5	83	-.866	ELZ	-.5	ELX	-.866				
73	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82		83	-1	ELZ		ELX	-1				
74	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.5	83	-.866	ELZ	.5	ELX	-.866				
75	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.866	83	-.5	ELZ	.866	ELX	-.5				

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design L...	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Antenna Pipe	PIPE 2.0	Column	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
2	Face Horizontal	PIPE 3.0	Beam	Pipe	A53 Gr. B	Typical	2.07	2.85	2.85	5.69
3	Standoff Vertical	PIPE 4.0	Column	Pipe	A53 Gr. B	Typical	2.96	6.82	6.82	13.6
4	Standoff	HSS4X4X4	Beam	SquareT...	A500 Gr. B 46	Typical	3.37	7.8	7.8	12.8

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M1	N3	N4			RIGID	None	None	RIGID	Typical
2	M3	N1	N3			Standoff	Beam	SquareTube	A500 Gr. ...	Typical
3	M4	N6	N5			Standoff Vertical	Column	Pipe	A53 Gr. B	Typical
4	FACE	N8	N7			Face Horizontal	Beam	Pipe	A53 Gr. B	Typical
5	LIVE1	N11	N14			RIGID	None	None	RIGID	Typical
6	M11A	N20A	N21			RIGID	None	None	RIGID	Typical
7	OVP	N22	N23			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
8	LIVE2	N14A	N15			RIGID	None	None	RIGID	Typical
9	M9	N17	N18			RIGID	None	None	RIGID	Typical
10	M10	N16	N17			Standoff	Beam	SquareTube	A500 Gr. ...	Typical
11	M11B	N20	N19			Standoff Vertical	Column	Pipe	A53 Gr. B	Typical
12	M12	N22A	N21A			Face Horizontal	Beam	Pipe	A53 Gr. B	Typical
13	M13	N23A	N24			RIGID	None	None	RIGID	Typical
14	M14	N25	N26			RIGID	None	None	RIGID	Typical
15	MP2A	N28	N30			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
16	MP1A	N27	N29			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
17	M17	N31	N32			RIGID	None	None	RIGID	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	M1	OOOOXO					Yes	** NA **			None
2	M3						Yes	Default			None
3	M4						Yes	** NA **			None
4	FACE						Yes				None
5	LIVE1						Yes	** NA **			None
6	M11A						Yes	** NA **			None
7	OVP						Yes	** NA **			None
8	LIVE2						Yes	** NA **			None
9	M9	OOOOXO					Yes	** NA **			None
10	M10						Yes	Default			None
11	M11B						Yes	** NA **			None
12	M12						Yes				None
13	M13						Yes	** NA **			None
14	M14						Yes	** NA **			None
15	MP2A						Yes	** NA **			None
16	MP1A						Yes	** NA **			None
17	M17						Yes	** NA **			None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	Y	-8.8	6
2	MP1A	My	.009	6
3	MP1A	Mz	.002	6
4	MP1A	Y	-8.8	7
5	MP1A	My	.009	7
6	MP1A	Mz	.002	7
7	MP1A	Y	-8.8	6
8	MP1A	My	.009	6
9	MP1A	Mz	-.004	6
10	MP1A	Y	-8.8	7
11	MP1A	My	.009	7
12	MP1A	Mz	-.004	7
13	MP1A	Y	-70.3	4
14	MP1A	My	.035	4
15	MP1A	Mz	-.003	4

Member Point Loads (BLC 1 : Antenna D) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
16	OVP	Y	-32	2
17	OVP	My	.005	2
18	OVP	Mz	.015	2
19	MP2A	Y	-43.55	2.5
20	MP2A	My	-.021	2.5
21	MP2A	Mz	-.004	2.5
22	MP2A	Y	-43.55	4.5
23	MP2A	My	-.021	4.5
24	MP2A	Mz	-.004	4.5
25	MP2A	Y	-74.7	4
26	MP2A	My	.037	4
27	MP2A	Mz	-.003	4
28	MP1A	Y	-60.5	1
29	MP1A	My	-.026	1
30	MP1A	Mz	.055	1
31	MP1A	Y	-60.5	6
32	MP1A	My	-.026	6
33	MP1A	Mz	.055	6
34	MP1A	Y	-60.5	1
35	MP1A	My	-.035	1
36	MP1A	Mz	-.05	1
37	MP1A	Y	-60.5	6
38	MP1A	My	-.035	6
39	MP1A	Mz	-.05	6

Member Point Loads (BLC 3 : Antenna Wo (0 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	6
2	MP1A	Z	-13.313	6
3	MP1A	Mx	-.003	6
4	MP1A	X	0	7
5	MP1A	Z	-13.313	7
6	MP1A	Mx	-.003	7
7	MP1A	X	0	6
8	MP1A	Z	-13.313	6
9	MP1A	Mx	.006	6
10	MP1A	X	0	7
11	MP1A	Z	-13.313	7
12	MP1A	Mx	.006	7
13	MP1A	X	0	4
14	MP1A	Z	-42.861	4
15	MP1A	Mx	.002	4
16	OVP	X	0	2
17	OVP	Z	-69.307	2
18	OVP	Mx	-.033	2
19	MP2A	X	0	2.5
20	MP2A	Z	-53.286	2.5
21	MP2A	Mx	.005	2.5
22	MP2A	X	0	4.5
23	MP2A	Z	-53.286	4.5
24	MP2A	Mx	.005	4.5
25	MP2A	X	0	4
26	MP2A	Z	-42.882	4
27	MP2A	Mx	.002	4
28	MP1A	X	0	1
29	MP1A	Z	-213.675	1
30	MP1A	Mx	-.196	1
31	MP1A	X	0	6

Member Point Loads (BLC 3 : Antenna Wo (0 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
32	MP1A	Z	-213.675	6
33	MP1A	Mx	-.196	6
34	MP1A	X	0	1
35	MP1A	Z	-213.675	1
36	MP1A	Mx	.177	1
37	MP1A	X	0	6
38	MP1A	Z	-213.675	6
39	MP1A	Mx	.177	6

Member Point Loads (BLC 4 : Antenna Wo (30 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	6.663	6
2	MP1A	Z	-11.54	6
3	MP1A	Mx	.004	6
4	MP1A	X	6.663	7
5	MP1A	Z	-11.54	7
6	MP1A	Mx	.004	7
7	MP1A	X	6.663	6
8	MP1A	Z	-11.54	6
9	MP1A	Mx	.011	6
10	MP1A	X	6.663	7
11	MP1A	Z	-11.54	7
12	MP1A	Mx	.011	7
13	MP1A	X	18.712	4
14	MP1A	Z	-32.409	4
15	MP1A	Mx	.011	4
16	OVP	X	39.605	2
17	OVP	Z	-68.598	2
18	OVP	Mx	-.025	2
19	MP2A	X	25.096	2.5
20	MP2A	Z	-43.467	2.5
21	MP2A	Mx	-.009	2.5
22	MP2A	X	25.096	4.5
23	MP2A	Z	-43.467	4.5
24	MP2A	Mx	-.009	4.5
25	MP2A	X	19.168	4
26	MP2A	Z	-33.2	4
27	MP2A	Mx	.011	4
28	MP1A	X	82.881	1
29	MP1A	Z	-143.555	1
30	MP1A	Mx	-.166	1
31	MP1A	X	82.881	6
32	MP1A	Z	-143.555	6
33	MP1A	Mx	-.166	6
34	MP1A	X	82.881	1
35	MP1A	Z	-143.555	1
36	MP1A	Mx	.071	1
37	MP1A	X	82.881	6
38	MP1A	Z	-143.555	6
39	MP1A	Mx	.071	6

Member Point Loads (BLC 5 : Antenna Wo (60 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	11.557	6
2	MP1A	Z	-6.673	6
3	MP1A	Mx	.01	6
4	MP1A	X	11.557	7
5	MP1A	Z	-6.673	7

Member Point Loads (BLC 5 : Antenna Wo (60 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
6	MP1A	Mx	.01	7
7	MP1A	X	11.557	6
8	MP1A	Z	-6.673	6
9	MP1A	Mx	.014	6
10	MP1A	X	11.557	7
11	MP1A	Z	-6.673	7
12	MP1A	Mx	.014	7
13	MP1A	X	25.195	4
14	MP1A	Z	-14.546	4
15	MP1A	Mx	.013	4
16	OVP	X	75.59	2
17	OVP	Z	-43.642	2
18	OVP	Mx	-.008	2
19	MP2A	X	28.965	2.5
20	MP2A	Z	-16.723	2.5
21	MP2A	Mx	-.013	2.5
22	MP2A	X	28.965	4.5
23	MP2A	Z	-16.723	4.5
24	MP2A	Mx	-.013	4.5
25	MP2A	X	27.168	4
26	MP2A	Z	-15.685	4
27	MP2A	Mx	.014	4
28	MP1A	X	79.984	1
29	MP1A	Z	-46.179	1
30	MP1A	Mx	-.076	1
31	MP1A	X	79.984	6
32	MP1A	Z	-46.179	6
33	MP1A	Mx	-.076	6
34	MP1A	X	79.984	1
35	MP1A	Z	-46.179	1
36	MP1A	Mx	-.008	1
37	MP1A	X	79.984	6
38	MP1A	Z	-46.179	6
39	MP1A	Mx	-.008	6

Member Point Loads (BLC 6 : Antenna Wo (90 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	13.352	6
2	MP1A	Z	0	6
3	MP1A	Mx	.014	6
4	MP1A	X	13.352	7
5	MP1A	Z	0	7
6	MP1A	Mx	.014	7
7	MP1A	X	13.352	6
8	MP1A	Z	0	6
9	MP1A	Mx	.013	6
10	MP1A	X	13.352	7
11	MP1A	Z	0	7
12	MP1A	Mx	.013	7
13	MP1A	X	26.199	4
14	MP1A	Z	0	4
15	MP1A	Mx	.013	4
16	OVP	X	85.454	2
17	OVP	Z	0	2
18	OVP	Mx	.015	2
19	MP2A	X	19.796	2.5
20	MP2A	Z	0	2.5
21	MP2A	Mx	-.01	2.5

Member Point Loads (BLC 6 : Antenna Wo (90 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
22	MP2A	X	19.796	4.5
23	MP2A	Z	0	4.5
24	MP2A	Mx	-.01	4.5
25	MP2A	X	28.952	4
26	MP2A	Z	0	4
27	MP2A	Mx	.014	4
28	MP1A	X	66.864	1
29	MP1A	Z	0	1
30	MP1A	Mx	-.028	1
31	MP1A	X	66.864	6
32	MP1A	Z	0	6
33	MP1A	Mx	-.028	6
34	MP1A	X	66.864	1
35	MP1A	Z	0	1
36	MP1A	Mx	-.038	1
37	MP1A	X	66.864	6
38	MP1A	Z	0	6
39	MP1A	Mx	-.038	6

Member Point Loads (BLC 7 : Antenna Wo (120 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	11.552	6
2	MP1A	Z	6.67	6
3	MP1A	Mx	.013	6
4	MP1A	X	11.552	7
5	MP1A	Z	6.67	7
6	MP1A	Mx	.013	7
7	MP1A	X	11.552	6
8	MP1A	Z	6.67	6
9	MP1A	Mx	.008	6
10	MP1A	X	11.552	7
11	MP1A	Z	6.67	7
12	MP1A	Mx	.008	7
13	MP1A	X	27.398	4
14	MP1A	Z	15.818	4
15	MP1A	Mx	.013	4
16	OVP	X	65.429	2
17	OVP	Z	37.775	2
18	OVP	Mx	.029	2
19	MP2A	X	19.823	2.5
20	MP2A	Z	11.445	2.5
21	MP2A	Mx	-.011	2.5
22	MP2A	X	19.823	4.5
23	MP2A	Z	11.445	4.5
24	MP2A	Mx	-.011	4.5
25	MP2A	X	29.01	4
26	MP2A	Z	16.749	4
27	MP2A	Mx	.014	4
28	MP1A	X	99.399	1
29	MP1A	Z	57.388	1
30	MP1A	Mx	.011	1
31	MP1A	X	99.399	6
32	MP1A	Z	57.388	6
33	MP1A	Mx	.011	6
34	MP1A	X	99.399	1
35	MP1A	Z	57.388	1
36	MP1A	Mx	-.105	1
37	MP1A	X	99.399	6

Member Point Loads (BLC 7 : Antenna Wo (120 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
38	MP1A	Z	57.388	6
39	MP1A	Mx	-.105	6

Member Point Loads (BLC 8 : Antenna Wo (150 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	6.66	6
2	MP1A	Z	11.535	6
3	MP1A	Mx	.01	6
4	MP1A	X	6.66	7
5	MP1A	Z	11.535	7
6	MP1A	Mx	.01	7
7	MP1A	X	6.66	6
8	MP1A	Z	11.535	6
9	MP1A	Mx	.002	6
10	MP1A	X	6.66	7
11	MP1A	Z	11.535	7
12	MP1A	Mx	.002	7
13	MP1A	X	19.984	4
14	MP1A	Z	34.613	4
15	MP1A	Mx	.008	4
16	OVP	X	33.738	2
17	OVP	Z	58.437	2
18	OVP	Mx	.033	2
19	MP2A	X	19.818	2.5
20	MP2A	Z	34.325	2.5
21	MP2A	Mx	-.013	2.5
22	MP2A	X	19.818	4.5
23	MP2A	Z	34.325	4.5
24	MP2A	Mx	-.013	4.5
25	MP2A	X	20.231	4
26	MP2A	Z	35.042	4
27	MP2A	Mx	.009	4
28	MP1A	X	94.091	1
29	MP1A	Z	162.97	1
30	MP1A	Mx	.109	1
31	MP1A	X	94.091	6
32	MP1A	Z	162.97	6
33	MP1A	Mx	.109	6
34	MP1A	X	94.091	1
35	MP1A	Z	162.97	1
36	MP1A	Mx	-.189	1
37	MP1A	X	94.091	6
38	MP1A	Z	162.97	6
39	MP1A	Mx	-.189	6

Member Point Loads (BLC 9 : Antenna Wo (180 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	6
2	MP1A	Z	13.313	6
3	MP1A	Mx	.003	6
4	MP1A	X	0	7
5	MP1A	Z	13.313	7
6	MP1A	Mx	.003	7
7	MP1A	X	0	6
8	MP1A	Z	13.313	6
9	MP1A	Mx	-.006	6
10	MP1A	X	0	7
11	MP1A	Z	13.313	7

Member Point Loads (BLC 9 : Antenna Wo (180 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
12	MP1A	Mx	-.006	7
13	MP1A	X	0	4
14	MP1A	Z	42.861	4
15	MP1A	Mx	-.002	4
16	OVP	X	0	2
17	OVP	Z	69.307	2
18	OVP	Mx	.033	2
19	MP2A	X	0	2.5
20	MP2A	Z	53.286	2.5
21	MP2A	Mx	-.005	2.5
22	MP2A	X	0	4.5
23	MP2A	Z	53.286	4.5
24	MP2A	Mx	-.005	4.5
25	MP2A	X	0	4
26	MP2A	Z	42.882	4
27	MP2A	Mx	-.002	4
28	MP1A	X	0	1
29	MP1A	Z	213.675	1
30	MP1A	Mx	.196	1
31	MP1A	X	0	6
32	MP1A	Z	213.675	6
33	MP1A	Mx	.196	6
34	MP1A	X	0	1
35	MP1A	Z	213.675	1
36	MP1A	Mx	-.177	1
37	MP1A	X	0	6
38	MP1A	Z	213.675	6
39	MP1A	Mx	-.177	6

Member Point Loads (BLC 10 : Antenna Wo (210 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-6.663	6
2	MP1A	Z	11.54	6
3	MP1A	Mx	-.004	6
4	MP1A	X	-6.663	7
5	MP1A	Z	11.54	7
6	MP1A	Mx	-.004	7
7	MP1A	X	-6.663	6
8	MP1A	Z	11.54	6
9	MP1A	Mx	-.011	6
10	MP1A	X	-6.663	7
11	MP1A	Z	11.54	7
12	MP1A	Mx	-.011	7
13	MP1A	X	-18.712	4
14	MP1A	Z	32.409	4
15	MP1A	Mx	-.011	4
16	OVP	X	-39.605	2
17	OVP	Z	68.598	2
18	OVP	Mx	.025	2
19	MP2A	X	-25.096	2.5
20	MP2A	Z	43.467	2.5
21	MP2A	Mx	.009	2.5
22	MP2A	X	-25.096	4.5
23	MP2A	Z	43.467	4.5
24	MP2A	Mx	.009	4.5
25	MP2A	X	-19.168	4
26	MP2A	Z	33.2	4
27	MP2A	Mx	-.011	4

Member Point Loads (BLC 10 : Antenna Wo (210 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
28	MP1A	X	-82.881	1
29	MP1A	Z	143.555	1
30	MP1A	Mx	.166	1
31	MP1A	X	-82.881	6
32	MP1A	Z	143.555	6
33	MP1A	Mx	.166	6
34	MP1A	X	-82.881	1
35	MP1A	Z	143.555	1
36	MP1A	Mx	-.071	1
37	MP1A	X	-82.881	6
38	MP1A	Z	143.555	6
39	MP1A	Mx	-.071	6

Member Point Loads (BLC 11 : Antenna Wo (240 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-11.557	6
2	MP1A	Z	6.673	6
3	MP1A	Mx	-.01	6
4	MP1A	X	-11.557	7
5	MP1A	Z	6.673	7
6	MP1A	Mx	-.01	7
7	MP1A	X	-11.557	6
8	MP1A	Z	6.673	6
9	MP1A	Mx	-.014	6
10	MP1A	X	-11.557	7
11	MP1A	Z	6.673	7
12	MP1A	Mx	-.014	7
13	MP1A	X	-25.195	4
14	MP1A	Z	14.546	4
15	MP1A	Mx	-.013	4
16	OVP	X	-75.59	2
17	OVP	Z	43.642	2
18	OVP	Mx	.008	2
19	MP2A	X	-28.965	2.5
20	MP2A	Z	16.723	2.5
21	MP2A	Mx	.013	2.5
22	MP2A	X	-28.965	4.5
23	MP2A	Z	16.723	4.5
24	MP2A	Mx	.013	4.5
25	MP2A	X	-27.168	4
26	MP2A	Z	15.685	4
27	MP2A	Mx	-.014	4
28	MP1A	X	-79.984	1
29	MP1A	Z	46.179	1
30	MP1A	Mx	.076	1
31	MP1A	X	-79.984	6
32	MP1A	Z	46.179	6
33	MP1A	Mx	.076	6
34	MP1A	X	-79.984	1
35	MP1A	Z	46.179	1
36	MP1A	Mx	.008	1
37	MP1A	X	-79.984	6
38	MP1A	Z	46.179	6
39	MP1A	Mx	.008	6

Member Point Loads (BLC 12 : Antenna Wo (270 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-13.352	6

Member Point Loads (BLC 12 : Antenna Wo (270 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
2	MP1A	Z	0	6
3	MP1A	Mx	-.014	6
4	MP1A	X	-13.352	7
5	MP1A	Z	0	7
6	MP1A	Mx	-.014	7
7	MP1A	X	-13.352	6
8	MP1A	Z	0	6
9	MP1A	Mx	-.013	6
10	MP1A	X	-13.352	7
11	MP1A	Z	0	7
12	MP1A	Mx	-.013	7
13	MP1A	X	-26.199	4
14	MP1A	Z	0	4
15	MP1A	Mx	-.013	4
16	OVP	X	-85.454	2
17	OVP	Z	0	2
18	OVP	Mx	-.015	2
19	MP2A	X	-19.796	2.5
20	MP2A	Z	0	2.5
21	MP2A	Mx	.01	2.5
22	MP2A	X	-19.796	4.5
23	MP2A	Z	0	4.5
24	MP2A	Mx	.01	4.5
25	MP2A	X	-28.952	4
26	MP2A	Z	0	4
27	MP2A	Mx	-.014	4
28	MP1A	X	-66.864	1
29	MP1A	Z	0	1
30	MP1A	Mx	.028	1
31	MP1A	X	-66.864	6
32	MP1A	Z	0	6
33	MP1A	Mx	.028	6
34	MP1A	X	-66.864	1
35	MP1A	Z	0	1
36	MP1A	Mx	.038	1
37	MP1A	X	-66.864	6
38	MP1A	Z	0	6
39	MP1A	Mx	.038	6

Member Point Loads (BLC 13 : Antenna Wo (300 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-11.552	6
2	MP1A	Z	-6.67	6
3	MP1A	Mx	-.013	6
4	MP1A	X	-11.552	7
5	MP1A	Z	-6.67	7
6	MP1A	Mx	-.013	7
7	MP1A	X	-11.552	6
8	MP1A	Z	-6.67	6
9	MP1A	Mx	-.008	6
10	MP1A	X	-11.552	7
11	MP1A	Z	-6.67	7
12	MP1A	Mx	-.008	7
13	MP1A	X	-27.398	4
14	MP1A	Z	-15.818	4
15	MP1A	Mx	-.013	4
16	OVP	X	-65.429	2
17	OVP	Z	-37.775	2

Member Point Loads (BLC 13 : Antenna Wo (300 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	OVP	Mx	-.029	2
19	MP2A	X	-19.823	2.5
20	MP2A	Z	-11.445	2.5
21	MP2A	Mx	.011	2.5
22	MP2A	X	-19.823	4.5
23	MP2A	Z	-11.445	4.5
24	MP2A	Mx	.011	4.5
25	MP2A	X	-29.01	4
26	MP2A	Z	-16.749	4
27	MP2A	Mx	-.014	4
28	MP1A	X	-99.399	1
29	MP1A	Z	-57.388	1
30	MP1A	Mx	-.011	1
31	MP1A	X	-99.399	6
32	MP1A	Z	-57.388	6
33	MP1A	Mx	-.011	6
34	MP1A	X	-99.399	1
35	MP1A	Z	-57.388	1
36	MP1A	Mx	.105	1
37	MP1A	X	-99.399	6
38	MP1A	Z	-57.388	6
39	MP1A	Mx	.105	6

Member Point Loads (BLC 14 : Antenna Wo (330 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-6.66	6
2	MP1A	Z	-11.535	6
3	MP1A	Mx	-.01	6
4	MP1A	X	-6.66	7
5	MP1A	Z	-11.535	7
6	MP1A	Mx	-.01	7
7	MP1A	X	-6.66	6
8	MP1A	Z	-11.535	6
9	MP1A	Mx	-.002	6
10	MP1A	X	-6.66	7
11	MP1A	Z	-11.535	7
12	MP1A	Mx	-.002	7
13	MP1A	X	-19.984	4
14	MP1A	Z	-34.613	4
15	MP1A	Mx	-.008	4
16	OVP	X	-33.738	2
17	OVP	Z	-58.437	2
18	OVP	Mx	-.033	2
19	MP2A	X	-19.818	2.5
20	MP2A	Z	-34.325	2.5
21	MP2A	Mx	.013	2.5
22	MP2A	X	-19.818	4.5
23	MP2A	Z	-34.325	4.5
24	MP2A	Mx	.013	4.5
25	MP2A	X	-20.231	4
26	MP2A	Z	-35.042	4
27	MP2A	Mx	-.009	4
28	MP1A	X	-94.091	1
29	MP1A	Z	-162.97	1
30	MP1A	Mx	-.109	1
31	MP1A	X	-94.091	6
32	MP1A	Z	-162.97	6
33	MP1A	Mx	-.109	6

Member Point Loads (BLC 14 : Antenna Wo (330 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
34	MP1A	X	-94.091	1
35	MP1A	Z	-162.97	1
36	MP1A	Mx	.189	1
37	MP1A	X	-94.091	6
38	MP1A	Z	-162.97	6
39	MP1A	Mx	.189	6

Member Point Loads (BLC 27 : Antenna Wm (0 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	6
2	MP1A	Z	-.832	6
3	MP1A	Mx	-.000204	6
4	MP1A	X	0	7
5	MP1A	Z	-.832	7
6	MP1A	Mx	-.000204	7
7	MP1A	X	0	6
8	MP1A	Z	-.832	6
9	MP1A	Mx	.000349	6
10	MP1A	X	0	7
11	MP1A	Z	-.832	7
12	MP1A	Mx	.000349	7
13	MP1A	X	0	4
14	MP1A	Z	-2.679	4
15	MP1A	Mx	.000117	4
16	OVP	X	0	2
17	OVP	Z	-4.332	2
18	OVP	Mx	-.002	2
19	MP2A	X	0	2.5
20	MP2A	Z	-3.33	2.5
21	MP2A	Mx	.000289	2.5
22	MP2A	X	0	4.5
23	MP2A	Z	-3.33	4.5
24	MP2A	Mx	.000289	4.5
25	MP2A	X	0	4
26	MP2A	Z	-2.68	4
27	MP2A	Mx	.000117	4
28	MP1A	X	0	1
29	MP1A	Z	-13.355	1
30	MP1A	Mx	-.012	1
31	MP1A	X	0	6
32	MP1A	Z	-13.355	6
33	MP1A	Mx	-.012	6
34	MP1A	X	0	1
35	MP1A	Z	-13.355	1
36	MP1A	Mx	.011	1
37	MP1A	X	0	6
38	MP1A	Z	-13.355	6
39	MP1A	Mx	.011	6

Member Point Loads (BLC 28 : Antenna Wm (30 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	.416	6
2	MP1A	Z	-.721	6
3	MP1A	Mx	.00025	6
4	MP1A	X	.416	7
5	MP1A	Z	-.721	7
6	MP1A	Mx	.00025	7
7	MP1A	X	.416	6

Member Point Loads (BLC 28 : Antenna Wm (30 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
8	MP1A	Z	-.721	6
9	MP1A	Mx	.000705	6
10	MP1A	X	.416	7
11	MP1A	Z	-.721	7
12	MP1A	Mx	.000705	7
13	MP1A	X	1.169	4
14	MP1A	Z	-2.026	4
15	MP1A	Mx	.000671	4
16	OVP	X	2.475	2
17	OVP	Z	-4.287	2
18	OVP	Mx	-.002	2
19	MP2A	X	1.568	2.5
20	MP2A	Z	-2.717	2.5
21	MP2A	Mx	-.000536	2.5
22	MP2A	X	1.568	4.5
23	MP2A	Z	-2.717	4.5
24	MP2A	Mx	-.000536	4.5
25	MP2A	X	1.198	4
26	MP2A	Z	-2.075	4
27	MP2A	Mx	.000687	4
28	MP1A	X	5.18	1
29	MP1A	Z	-8.972	1
30	MP1A	Mx	-.01	1
31	MP1A	X	5.18	6
32	MP1A	Z	-8.972	6
33	MP1A	Mx	-.01	6
34	MP1A	X	5.18	1
35	MP1A	Z	-8.972	1
36	MP1A	Mx	.004	1
37	MP1A	X	5.18	6
38	MP1A	Z	-8.972	6
39	MP1A	Mx	.004	6

Member Point Loads (BLC 29 : Antenna Wm (60 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	.722	6
2	MP1A	Z	-.417	6
3	MP1A	Mx	.000638	6
4	MP1A	X	.722	7
5	MP1A	Z	-.417	7
6	MP1A	Mx	.000638	7
7	MP1A	X	.722	6
8	MP1A	Z	-.417	6
9	MP1A	Mx	.000873	6
10	MP1A	X	.722	7
11	MP1A	Z	-.417	7
12	MP1A	Mx	.000873	7
13	MP1A	X	1.575	4
14	MP1A	Z	-.909	4
15	MP1A	Mx	.000824	4
16	OVP	X	4.724	2
17	OVP	Z	-2.728	2
18	OVP	Mx	-.000474	2
19	MP2A	X	1.81	2.5
20	MP2A	Z	-1.045	2.5
21	MP2A	Mx	-.000801	2.5
22	MP2A	X	1.81	4.5
23	MP2A	Z	-1.045	4.5

Member Point Loads (BLC 29 : Antenna Wm (60 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
24	MP2A	Mx	-.000801	4.5
25	MP2A	X	1.698	4
26	MP2A	Z	-.98	4
27	MP2A	Mx	.000888	4
28	MP1A	X	4.999	1
29	MP1A	Z	-2.886	1
30	MP1A	Mx	-.005	1
31	MP1A	X	4.999	6
32	MP1A	Z	-2.886	6
33	MP1A	Mx	-.005	6
34	MP1A	X	4.999	1
35	MP1A	Z	-2.886	1
36	MP1A	Mx	-.000481	1
37	MP1A	X	4.999	6
38	MP1A	Z	-2.886	6
39	MP1A	Mx	-.000481	6

Member Point Loads (BLC 30 : Antenna Wm (90 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	.834	6
2	MP1A	Z	0	6
3	MP1A	Mx	.000855	6
4	MP1A	X	.834	7
5	MP1A	Z	0	7
6	MP1A	Mx	.000855	7
7	MP1A	X	.834	6
8	MP1A	Z	0	6
9	MP1A	Mx	.000807	6
10	MP1A	X	.834	7
11	MP1A	Z	0	7
12	MP1A	Mx	.000807	7
13	MP1A	X	1.637	4
14	MP1A	Z	0	4
15	MP1A	Mx	.000815	4
16	OVP	X	5.341	2
17	OVP	Z	0	2
18	OVP	Mx	.000913	2
19	MP2A	X	1.237	2.5
20	MP2A	Z	0	2.5
21	MP2A	Mx	-.000609	2.5
22	MP2A	X	1.237	4.5
23	MP2A	Z	0	4.5
24	MP2A	Mx	-.000609	4.5
25	MP2A	X	1.809	4
26	MP2A	Z	0	4
27	MP2A	Mx	.000901	4
28	MP1A	X	4.179	1
29	MP1A	Z	0	1
30	MP1A	Mx	-.002	1
31	MP1A	X	4.179	6
32	MP1A	Z	0	6
33	MP1A	Mx	-.002	6
34	MP1A	X	4.179	1
35	MP1A	Z	0	1
36	MP1A	Mx	-.002	1
37	MP1A	X	4.179	6
38	MP1A	Z	0	6
39	MP1A	Mx	-.002	6

Member Point Loads (BLC 31 : Antenna Wm (120 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	.722	6
2	MP1A	Z	.417	6
3	MP1A	Mx	.000842	6
4	MP1A	X	.722	7
5	MP1A	Z	.417	7
6	MP1A	Mx	.000842	7
7	MP1A	X	.722	6
8	MP1A	Z	.417	6
9	MP1A	Mx	.000523	6
10	MP1A	X	.722	7
11	MP1A	Z	.417	7
12	MP1A	Mx	.000523	7
13	MP1A	X	1.712	4
14	MP1A	Z	.989	4
15	MP1A	Mx	.00081	4
16	OVP	X	4.089	2
17	OVP	Z	2.361	2
18	OVP	Mx	.002	2
19	MP2A	X	1.239	2.5
20	MP2A	Z	.715	2.5
21	MP2A	Mx	-.000672	2.5
22	MP2A	X	1.239	4.5
23	MP2A	Z	.715	4.5
24	MP2A	Mx	-.000672	4.5
25	MP2A	X	1.813	4
26	MP2A	Z	1.047	4
27	MP2A	Mx	.000857	4
28	MP1A	X	6.212	1
29	MP1A	Z	3.587	1
30	MP1A	Mx	.000663	1
31	MP1A	X	6.212	6
32	MP1A	Z	3.587	6
33	MP1A	Mx	.000663	6
34	MP1A	X	6.212	1
35	MP1A	Z	3.587	1
36	MP1A	Mx	-.007	1
37	MP1A	X	6.212	6
38	MP1A	Z	3.587	6
39	MP1A	Mx	-.007	6

Member Point Loads (BLC 32 : Antenna Wm (150 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	.416	6
2	MP1A	Z	.721	6
3	MP1A	Mx	.000603	6
4	MP1A	X	.416	7
5	MP1A	Z	.721	7
6	MP1A	Mx	.000603	7
7	MP1A	X	.416	6
8	MP1A	Z	.721	6
9	MP1A	Mx	.0001	6
10	MP1A	X	.416	7
11	MP1A	Z	.721	7
12	MP1A	Mx	.0001	7
13	MP1A	X	1.249	4
14	MP1A	Z	2.163	4
15	MP1A	Mx	.000528	4
16	OVP	X	2.109	2

Member Point Loads (BLC 32 : Antenna Wm (150 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	OVP	Z	3.652	2
18	OVP	Mx	.002	2
19	MP2A	X	1.239	2.5
20	MP2A	Z	2.145	2.5
21	MP2A	Mx	-.000796	2.5
22	MP2A	X	1.239	4.5
23	MP2A	Z	2.145	4.5
24	MP2A	Mx	-.000796	4.5
25	MP2A	X	1.264	4
26	MP2A	Z	2.19	4
27	MP2A	Mx	.000534	4
28	MP1A	X	5.881	1
29	MP1A	Z	10.186	1
30	MP1A	Mx	.007	1
31	MP1A	X	5.881	6
32	MP1A	Z	10.186	6
33	MP1A	Mx	.007	6
34	MP1A	X	5.881	1
35	MP1A	Z	10.186	1
36	MP1A	Mx	-.012	1
37	MP1A	X	5.881	6
38	MP1A	Z	10.186	6
39	MP1A	Mx	-.012	6

Member Point Loads (BLC 33 : Antenna Wm (180 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	6
2	MP1A	Z	.832	6
3	MP1A	Mx	.000204	6
4	MP1A	X	0	7
5	MP1A	Z	.832	7
6	MP1A	Mx	.000204	7
7	MP1A	X	0	6
8	MP1A	Z	.832	6
9	MP1A	Mx	-.000349	6
10	MP1A	X	0	7
11	MP1A	Z	.832	7
12	MP1A	Mx	-.000349	7
13	MP1A	X	0	4
14	MP1A	Z	2.679	4
15	MP1A	Mx	-.000117	4
16	OVP	X	0	2
17	OVP	Z	4.332	2
18	OVP	Mx	.002	2
19	MP2A	X	0	2.5
20	MP2A	Z	3.33	2.5
21	MP2A	Mx	-.000289	2.5
22	MP2A	X	0	4.5
23	MP2A	Z	3.33	4.5
24	MP2A	Mx	-.000289	4.5
25	MP2A	X	0	4
26	MP2A	Z	2.68	4
27	MP2A	Mx	-.000117	4
28	MP1A	X	0	1
29	MP1A	Z	13.355	1
30	MP1A	Mx	.012	1
31	MP1A	X	0	6
32	MP1A	Z	13.355	6

Member Point Loads (BLC 33 : Antenna Wm (180 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	MP1A	Mx	.012	6
34	MP1A	X	0	1
35	MP1A	Z	13.355	1
36	MP1A	Mx	-.011	1
37	MP1A	X	0	6
38	MP1A	Z	13.355	6
39	MP1A	Mx	-.011	6

Member Point Loads (BLC 34 : Antenna Wm (210 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-.416	6
2	MP1A	Z	.721	6
3	MP1A	Mx	-.00025	6
4	MP1A	X	-.416	7
5	MP1A	Z	.721	7
6	MP1A	Mx	-.00025	7
7	MP1A	X	-.416	6
8	MP1A	Z	.721	6
9	MP1A	Mx	-.000705	6
10	MP1A	X	-.416	7
11	MP1A	Z	.721	7
12	MP1A	Mx	-.000705	7
13	MP1A	X	-1.169	4
14	MP1A	Z	2.026	4
15	MP1A	Mx	-.000671	4
16	OVP	X	-2.475	2
17	OVP	Z	4.287	2
18	OVP	Mx	.002	2
19	MP2A	X	-1.568	2.5
20	MP2A	Z	2.717	2.5
21	MP2A	Mx	.000536	2.5
22	MP2A	X	-1.568	4.5
23	MP2A	Z	2.717	4.5
24	MP2A	Mx	.000536	4.5
25	MP2A	X	-1.198	4
26	MP2A	Z	2.075	4
27	MP2A	Mx	-.000687	4
28	MP1A	X	-5.18	1
29	MP1A	Z	8.972	1
30	MP1A	Mx	.01	1
31	MP1A	X	-5.18	6
32	MP1A	Z	8.972	6
33	MP1A	Mx	.01	6
34	MP1A	X	-5.18	1
35	MP1A	Z	8.972	1
36	MP1A	Mx	-.004	1
37	MP1A	X	-5.18	6
38	MP1A	Z	8.972	6
39	MP1A	Mx	-.004	6

Member Point Loads (BLC 35 : Antenna Wm (240 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-.722	6
2	MP1A	Z	.417	6
3	MP1A	Mx	-.000638	6
4	MP1A	X	-.722	7
5	MP1A	Z	.417	7
6	MP1A	Mx	-.000638	7

Member Point Loads (BLC 35 : Antenna Wm (240 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
7	MP1A	X	-.722	6
8	MP1A	Z	.417	6
9	MP1A	Mx	-.000873	6
10	MP1A	X	-.722	7
11	MP1A	Z	.417	7
12	MP1A	Mx	-.000873	7
13	MP1A	X	-1.575	4
14	MP1A	Z	.909	4
15	MP1A	Mx	-.000824	4
16	OVP	X	-4.724	2
17	OVP	Z	2.728	2
18	OVP	Mx	.000474	2
19	MP2A	X	-1.81	2.5
20	MP2A	Z	1.045	2.5
21	MP2A	Mx	.000801	2.5
22	MP2A	X	-1.81	4.5
23	MP2A	Z	1.045	4.5
24	MP2A	Mx	.000801	4.5
25	MP2A	X	-1.698	4
26	MP2A	Z	.98	4
27	MP2A	Mx	-.000888	4
28	MP1A	X	-4.999	1
29	MP1A	Z	2.886	1
30	MP1A	Mx	.005	1
31	MP1A	X	-4.999	6
32	MP1A	Z	2.886	6
33	MP1A	Mx	.005	6
34	MP1A	X	-4.999	1
35	MP1A	Z	2.886	1
36	MP1A	Mx	.000481	1
37	MP1A	X	-4.999	6
38	MP1A	Z	2.886	6
39	MP1A	Mx	.000481	6

Member Point Loads (BLC 36 : Antenna Wm (270 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-.834	6
2	MP1A	Z	0	6
3	MP1A	Mx	-.000855	6
4	MP1A	X	-.834	7
5	MP1A	Z	0	7
6	MP1A	Mx	-.000855	7
7	MP1A	X	-.834	6
8	MP1A	Z	0	6
9	MP1A	Mx	-.000807	6
10	MP1A	X	-.834	7
11	MP1A	Z	0	7
12	MP1A	Mx	-.000807	7
13	MP1A	X	-1.637	4
14	MP1A	Z	0	4
15	MP1A	Mx	-.000815	4
16	OVP	X	-5.341	2
17	OVP	Z	0	2
18	OVP	Mx	-.000913	2
19	MP2A	X	-1.237	2.5
20	MP2A	Z	0	2.5
21	MP2A	Mx	.000609	2.5
22	MP2A	X	-1.237	4.5

Member Point Loads (BLC 36 : Antenna Wm (270 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
23	MP2A	Z	0	4.5
24	MP2A	Mx	.000609	4.5
25	MP2A	X	-1.809	4
26	MP2A	Z	0	4
27	MP2A	Mx	-.000901	4
28	MP1A	X	-4.179	1
29	MP1A	Z	0	1
30	MP1A	Mx	.002	1
31	MP1A	X	-4.179	6
32	MP1A	Z	0	6
33	MP1A	Mx	.002	6
34	MP1A	X	-4.179	1
35	MP1A	Z	0	1
36	MP1A	Mx	.002	1
37	MP1A	X	-4.179	6
38	MP1A	Z	0	6
39	MP1A	Mx	.002	6

Member Point Loads (BLC 37 : Antenna Wm (300 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-.722	6
2	MP1A	Z	-.417	6
3	MP1A	Mx	-.000842	6
4	MP1A	X	-.722	7
5	MP1A	Z	-.417	7
6	MP1A	Mx	-.000842	7
7	MP1A	X	-.722	6
8	MP1A	Z	-.417	6
9	MP1A	Mx	-.000523	6
10	MP1A	X	-.722	7
11	MP1A	Z	-.417	7
12	MP1A	Mx	-.000523	7
13	MP1A	X	-1.712	4
14	MP1A	Z	-.989	4
15	MP1A	Mx	-.00081	4
16	OVP	X	-4.089	2
17	OVP	Z	-2.361	2
18	OVP	Mx	-.002	2
19	MP2A	X	-1.239	2.5
20	MP2A	Z	-.715	2.5
21	MP2A	Mx	.000672	2.5
22	MP2A	X	-1.239	4.5
23	MP2A	Z	-.715	4.5
24	MP2A	Mx	.000672	4.5
25	MP2A	X	-1.813	4
26	MP2A	Z	-1.047	4
27	MP2A	Mx	-.000857	4
28	MP1A	X	-6.212	1
29	MP1A	Z	-3.587	1
30	MP1A	Mx	-.000663	1
31	MP1A	X	-6.212	6
32	MP1A	Z	-3.587	6
33	MP1A	Mx	-.000663	6
34	MP1A	X	-6.212	1
35	MP1A	Z	-3.587	1
36	MP1A	Mx	.007	1
37	MP1A	X	-6.212	6
38	MP1A	Z	-3.587	6

Member Point Loads (BLC 37 : Antenna Wm (300 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
39	MP1A	Mx	.007	6

Member Point Loads (BLC 38 : Antenna Wm (330 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-.416	6
2	MP1A	Z	-.721	6
3	MP1A	Mx	-.000603	6
4	MP1A	X	-.416	7
5	MP1A	Z	-.721	7
6	MP1A	Mx	-.000603	7
7	MP1A	X	-.416	6
8	MP1A	Z	-.721	6
9	MP1A	Mx	-.0001	6
10	MP1A	X	-.416	7
11	MP1A	Z	-.721	7
12	MP1A	Mx	-.0001	7
13	MP1A	X	-1.249	4
14	MP1A	Z	-2.163	4
15	MP1A	Mx	-.000528	4
16	OVP	X	-2.109	2
17	OVP	Z	-3.652	2
18	OVP	Mx	-.002	2
19	MP2A	X	-1.239	2.5
20	MP2A	Z	-2.145	2.5
21	MP2A	Mx	.000796	2.5
22	MP2A	X	-1.239	4.5
23	MP2A	Z	-2.145	4.5
24	MP2A	Mx	.000796	4.5
25	MP2A	X	-1.264	4
26	MP2A	Z	-2.19	4
27	MP2A	Mx	-.000534	4
28	MP1A	X	-5.881	1
29	MP1A	Z	-10.186	1
30	MP1A	Mx	-.007	1
31	MP1A	X	-5.881	6
32	MP1A	Z	-10.186	6
33	MP1A	Mx	-.007	6
34	MP1A	X	-5.881	1
35	MP1A	Z	-10.186	1
36	MP1A	Mx	.012	1
37	MP1A	X	-5.881	6
38	MP1A	Z	-10.186	6
39	MP1A	Mx	.012	6

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	LIVE1	Y	-500	0

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	LIVE2	Y	-500	0

Member Point Loads (BLC 79 : Lv1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	FACE	Y	-250	%100

Member Point Loads (BLC 80 : Lv2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	FACE	Y	-250	%50

Member Point Loads (BLC 81 : Antenna Ev)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	Y	0	6
2	MP1A	My	0	6
3	MP1A	Mz	0	6
4	MP1A	Y	0	7
5	MP1A	My	0	7
6	MP1A	Mz	0	7
7	MP1A	Y	0	6
8	MP1A	My	0	6
9	MP1A	Mz	0	6
10	MP1A	Y	0	7
11	MP1A	My	0	7
12	MP1A	Mz	0	7
13	MP1A	Y	0	4
14	MP1A	My	0	4
15	MP1A	Mz	0	4
16	OVP	Y	0	2
17	OVP	My	0	2
18	OVP	Mz	0	2
19	MP2A	Y	0	2.5
20	MP2A	My	0	2.5
21	MP2A	Mz	0	2.5
22	MP2A	Y	0	4.5
23	MP2A	My	0	4.5
24	MP2A	Mz	0	4.5
25	MP2A	Y	0	4
26	MP2A	My	0	4
27	MP2A	Mz	0	4
28	MP1A	Y	0	1
29	MP1A	My	0	1
30	MP1A	Mz	0	1
31	MP1A	Y	0	6
32	MP1A	My	0	6
33	MP1A	Mz	0	6
34	MP1A	Y	0	1
35	MP1A	My	0	1
36	MP1A	Mz	0	1
37	MP1A	Y	0	6
38	MP1A	My	0	6
39	MP1A	Mz	0	6

Member Point Loads (BLC 82 : Antenna Eh (0 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	Z	-.264	6
2	MP1A	Mx	-6.5e-5	6
3	MP1A	Z	-.264	7
4	MP1A	Mx	-6.5e-5	7
5	MP1A	Z	-.264	6
6	MP1A	Mx	.000111	6
7	MP1A	Z	-.264	7
8	MP1A	Mx	.000111	7
9	MP1A	Z	-2.109	4
10	MP1A	Mx	9.2e-5	4
11	OVP	Z	-.96	2
12	OVP	Mx	-.000451	2

Member Point Loads (BLC 82 : Antenna Eh (0 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
13	MP2A	Z	-1.306	2.5
14	MP2A	Mx	.000113	2.5
15	MP2A	Z	-1.306	4.5
16	MP2A	Mx	.000113	4.5
17	MP2A	Z	-2.241	4
18	MP2A	Mx	9.8e-5	4
19	MP1A	Z	-1.815	1
20	MP1A	Mx	-.002	1
21	MP1A	Z	-1.815	6
22	MP1A	Mx	-.002	6
23	MP1A	Z	-1.815	1
24	MP1A	Mx	.002	1
25	MP1A	Z	-1.815	6
26	MP1A	Mx	.002	6

Member Point Loads (BLC 83 : Antenna Eh (90 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	.264	6
2	MP1A	Mx	.000271	6
3	MP1A	X	.264	7
4	MP1A	Mx	.000271	7
5	MP1A	X	.264	6
6	MP1A	Mx	.000255	6
7	MP1A	X	.264	7
8	MP1A	Mx	.000255	7
9	MP1A	X	2.109	4
10	MP1A	Mx	.001	4
11	OVP	X	.96	2
12	OVP	Mx	.000164	2
13	MP2A	X	1.306	2.5
14	MP2A	Mx	-.000643	2.5
15	MP2A	X	1.306	4.5
16	MP2A	Mx	-.000643	4.5
17	MP2A	X	2.241	4
18	MP2A	Mx	.001	4
19	MP1A	X	1.815	1
20	MP1A	Mx	-.000766	1
21	MP1A	X	1.815	6
22	MP1A	Mx	-.000766	6
23	MP1A	X	1.815	1
24	MP1A	Mx	-.001	1
25	MP1A	X	1.815	6
26	MP1A	Mx	-.001	6

Member Area Loads

Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
No Data to Print ...						

Envelope Joint Reactions

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	N1	max	491.341	11	888.506	36	863.716	1	-.833	70	1.323	8	1.37	31
2		min	-307.103	5	359.675	69	-599.27	7	-2.023	36	-1.095	2	.265	37
3	N16	max	304.134	9	821.909	42	578.89	1	-.832	74	1.215	8	1.325	32
4		min	-488.196	3	351.859	75	-843.334	7	-1.998	26	-1.446	2	.249	38
5	N18	max	NC		NC		NC		NC		LOCKED		NC	

Envelope Joint Reactions (Continued)

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
6		min	NC		NC		NC		NC		LOCKED		NC	
7	Totals:	max	784.769	11	1702.699	31	1442.605	1						
8		min	-784.77	5	714.521	66	-1442.604	7						

Joint Reactions (By Combination)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
1	1	N1	133.128	507.173	863.716	-1.137	-.462	.414
2	1	N16	-133.131	445.521	578.89	-1.12	-.888	.409
3	1	N18	NC	NC	NC	NC	LOCKED	NC
4	1	Totals:	-.002	952.695	1442.605			
5	1	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
6	2	N1	-184.625	485.19	673.926	-1.132	-1.095	.427
7	2	N16	-435.814	467.505	400.702	-1.122	-1.446	.401
8	2	N18	NC	NC	NC	NC	LOCKED	NC
9	2	Totals:	-620.44	952.695	1074.628			
10	2	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
11	3	N1	-266.801	472.062	350.175	-1.122	-.977	.466
12	3	N16	-488.196	480.632	85.726	-1.118	-1.216	.427
13	3	N18	NC	NC	NC	NC	LOCKED	NC
14	3	Totals:	-754.998	952.695	435.9			
15	3	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
16	4	N1	-252.503	460.305	132.976	-1.107	-.737	.488
17	4	N16	-451.945	492.389	-132.976	-1.111	-.913	.451
18	4	N18	NC	NC	NC	NC	LOCKED	NC
19	4	Totals:	-704.447	952.695	0			
20	4	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
21	5	N1	-307.103	444.414	-95.671	-1.092	-.695	.51
22	5	N16	-477.667	508.281	-357.416	-1.105	-.827	.482
23	5	N18	NC	NC	NC	NC	LOCKED	NC
24	5	Totals:	-784.77	952.695	-453.088			
25	5	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
26	6	N1	-254.921	439.657	-428.211	-1.085	-.265	.56
27	6	N16	-382.706	513.038	-676.189	-1.103	-.33	.542
28	6	N18	NC	NC	NC	NC	LOCKED	NC
29	6	Totals:	-637.628	952.695	-1104.401			
30	6	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
31	7	N1	51.351	455.957	-599.27	-1.086	.691	.602
32	7	N16	-51.349	496.739	-843.334	-1.1	.655	.601
33	7	N18	NC	NC	NC	NC	LOCKED	NC
34	7	Totals:	.002	952.695	-1442.604			
35	7	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
36	8	N1	368.698	477.918	-409.39	-1.091	1.323	.59
37	8	N16	251.742	474.777	-665.236	-1.098	1.215	.61
38	8	N18	NC	NC	NC	NC	LOCKED	NC
39	8	Totals:	620.439	952.695	-1074.626			
40	8	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
41	9	N1	450.864	491.018	-85.705	-1.101	1.206	.551
42	9	N16	304.134	461.678	-350.194	-1.102	.987	.584
43	9	N18	NC	NC	NC	NC	LOCKED	NC
44	9	Totals:	754.998	952.695	-435.899			
45	9	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
46	10	N1	436.637	502.769	131.467	-1.117	.967	.528
47	10	N16	267.81	449.926	-131.466	-1.109	.683	.56
48	10	N18	NC	NC	NC	NC	LOCKED	NC
49	10	Totals:	704.447	952.695	.001			
50	10	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
51	11	N1	491.341	518.673	360.088	-1.132	.926	.506

Joint Reactions (By Combination) (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
52	11	N16	293.428	434.022	93.002	-1.115	.597	.529
53	11	N18	NC	NC	NC	NC	LOCKED	NC
54	11	Totals:	784.769	952.695	453.089			
55	11	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
56	12	N1	439.47	523.456	692.559	-1.139	.497	.456
57	12	N16	198.158	429.239	411.843	-1.118	.099	.467
58	12	N18	NC	NC	NC	NC	LOCKED	NC
59	12	Totals:	637.627	952.695	1104.402			
60	12	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
61	13	N1	92.089	484.85	174.11	-1.113	.08	.509
62	13	N16	-92.089	467.845	-89.53	-1.109	-.15	.504
63	13	N18	NC	NC	NC	NC	LOCKED	NC
64	13	Totals:	0	952.695	84.58			
65	13	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
66	14	N1	71.734	484.459	167.863	-1.113	.039	.509
67	14	N16	-113.276	468.235	-95.909	-1.109	-.193	.503
68	14	N18	NC	NC	NC	NC	LOCKED	NC
69	14	Totals:	-41.542	952.695	71.953			
70	14	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
71	15	N1	61.265	483.284	150.203	-1.112	.034	.509
72	15	N16	-124.199	469.411	-113.868	-1.109	-.198	.503
73	15	N18	NC	NC	NC	NC	LOCKED	NC
74	15	Totals:	-62.934	952.695	36.336			
75	15	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
76	16	N1	60.91	481.637	132.235	-1.112	.048	.509
77	16	N16	-124.661	471.058	-132.234	-1.11	-.185	.504
78	16	N18	NC	NC	NC	NC	LOCKED	NC
79	16	Totals:	-63.752	952.695	0			
80	16	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
81	17	N1	64.476	479.961	116.121	-1.111	.064	.508
82	17	N16	-120.982	472.734	-148.744	-1.111	-.168	.505
83	17	N18	NC	NC	NC	NC	LOCKED	NC
84	17	Totals:	-56.506	952.695	-32.623			
85	17	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
86	18	N1	73.585	478.705	99.808	-1.111	.097	.507
87	18	N16	-111.415	473.99	-165.332	-1.111	-.134	.506
88	18	N18	NC	NC	NC	NC	LOCKED	NC
89	18	Totals:	-37.831	952.695	-65.524			
90	18	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
91	19	N1	92.082	478.205	90.319	-1.111	.15	.507
92	19	N16	-92.082	474.49	-174.898	-1.111	-.08	.507
93	19	N18	NC	NC	NC	NC	LOCKED	NC
94	19	Totals:	0	952.695	-84.579			
95	19	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
96	20	N1	112.437	478.595	96.567	-1.111	.191	.507
97	20	N16	-70.895	474.1	-168.518	-1.111	-.037	.507
98	20	N18	NC	NC	NC	NC	LOCKED	NC
99	20	Totals:	41.542	952.695	-71.952			
100	20	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
101	21	N1	122.906	479.771	114.226	-1.111	.196	.507
102	21	N16	-59.972	472.924	-150.56	-1.111	-.032	.507
103	21	N18	NC	NC	NC	NC	LOCKED	NC
104	21	Totals:	62.934	952.695	-36.334			
105	21	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
106	22	N1	123.261	481.417	132.195	-1.112	.182	.508
107	22	N16	-59.51	471.278	-132.194	-1.11	-.045	.507
108	22	N18	NC	NC	NC	NC	LOCKED	NC
109	22	Totals:	63.751	952.695	0			
110	22	COG (ft):	X: .535	Y: 2.181	Z: 2.879			

Joint Reactions (By Combination) (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
111	23	N1	119.695	483.093	148.308	-1.112	.166	.508
112	23	N16	-63.189	469.602	-115.684	-1.11	-.062	.506
113	23	N18	NC	NC	NC	NC	LOCKED	NC
114	23	Totals:	56.506	952.695	32.625			
115	23	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
116	24	N1	110.586	484.349	164.621	-1.113	.133	.509
117	24	N16	-72.756	468.346	-99.096	-1.109	-.096	.505
118	24	N18	NC	NC	NC	NC	LOCKED	NC
119	24	Totals:	37.831	952.695	65.525			
120	24	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
121	25	N1	321.12	887.485	274.429	-2.023	.544	1.358
122	25	N16	-321.12	815.213	-184.264	-1.998	-.627	1.313
123	25	N18	NC	NC	NC	NC	LOCKED	NC
124	25	Totals:	0	1702.699	90.164			
125	25	COG (ft):	X: 1.474	Y: 1.22	Z: 2.914			
126	26	N1	301.257	886.109	262.573	-2.023	.504	1.359
127	26	N16	-340.031	816.59	-195.409	-1.998	-.662	1.312
128	26	N18	NC	NC	NC	NC	LOCKED	NC
129	26	Totals:	-38.774	1702.699	67.164			
130	26	COG (ft):	X: 1.474	Y: 1.22	Z: 2.914			
131	27	N1	296.112	885.287	242.385	-2.022	.511	1.361
132	27	N16	-343.297	817.411	-215.142	-1.998	-.648	1.314
133	27	N18	NC	NC	NC	NC	LOCKED	NC
134	27	Totals:	-47.186	1702.699	27.243			
135	27	COG (ft):	X: 1.474	Y: 1.22	Z: 2.914			
136	28	N1	297.001	884.553	228.841	-2.021	.526	1.363
137	28	N16	-341.026	818.145	-228.84	-1.997	-.629	1.315
138	28	N18	NC	NC	NC	NC	LOCKED	NC
139	28	Totals:	-44.025	1702.699	0			
140	28	COG (ft):	X: 1.474	Y: 1.22	Z: 2.914			
141	29	N1	293.574	883.56	214.573	-2.02	.529	1.364
142	29	N16	-342.62	819.138	-242.892	-1.997	-.623	1.317
143	29	N18	NC	NC	NC	NC	LOCKED	NC
144	29	Totals:	-49.046	1702.699	-28.319			
145	29	COG (ft):	X: 1.474	Y: 1.22	Z: 2.914			
146	30	N1	296.819	883.264	193.844	-2.02	.556	1.367
147	30	N16	-336.672	819.434	-262.868	-1.997	-.592	1.321
148	30	N18	NC	NC	NC	NC	LOCKED	NC
149	30	Totals:	-39.853	1702.699	-69.025			
150	30	COG (ft):	X: 1.474	Y: 1.22	Z: 2.914			
151	31	N1	315.973	884.285	183.196	-2.02	.616	1.37
152	31	N16	-315.974	818.413	-273.359	-1.997	-.531	1.325
153	31	N18	NC	NC	NC	NC	LOCKED	NC
154	31	Totals:	0	1702.699	-90.162			
155	31	COG (ft):	X: 1.474	Y: 1.22	Z: 2.914			
156	32	N1	335.835	885.661	195.052	-2.02	.655	1.369
157	32	N16	-297.062	817.037	-262.214	-1.997	-.496	1.325
158	32	N18	NC	NC	NC	NC	LOCKED	NC
159	32	Totals:	38.773	1702.699	-67.162			
160	32	COG (ft):	X: 1.474	Y: 1.22	Z: 2.914			
161	33	N1	340.98	886.483	215.24	-2.021	.648	1.367
162	33	N16	-293.795	816.216	-242.481	-1.997	-.51	1.324
163	33	N18	NC	NC	NC	NC	LOCKED	NC
164	33	Totals:	47.185	1702.699	-27.241			
165	33	COG (ft):	X: 1.474	Y: 1.22	Z: 2.914			
166	34	N1	340.091	887.217	228.784	-2.022	.633	1.365
167	34	N16	-296.066	815.481	-228.783	-1.997	-.529	1.322
168	34	N18	NC	NC	NC	NC	LOCKED	NC
169	34	Totals:	44.024	1702.699	0			

Joint Reactions (By Combination) (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
170	34	COG (ft):	X: 1.474	Y: 1.22	Z: 2.914			
171	35	N1	343.519	888.21	243.051	-2.023	.63	1.364
172	35	N16	-294.473	814.488	-214.731	-1.998	-.535	1.32
173	35	N18	NC	NC	NC	NC	LOCKED	NC
174	35	Totals:	49.045	1702.699	28.32			
175	35	COG (ft):	X: 1.474	Y: 1.22	Z: 2.914			
176	36	N1	340.275	888.506	263.781	-2.023	.604	1.361
177	36	N16	-300.423	814.192	-194.754	-1.998	-.566	1.316
178	36	N18	NC	NC	NC	NC	LOCKED	NC
179	36	Totals:	39.852	1702.699	69.026			
180	36	COG (ft):	X: 1.474	Y: 1.22	Z: 2.914			
181	37	N1	-73.748	884.999	275.901	-2.018	-.391	.265
182	37	N16	73.748	817.695	-185.736	-1.996	.307	.25
183	37	N18	NC	NC	NC	NC	LOCKED	NC
184	37	Totals:	0	1702.694	90.165			
185	37	COG (ft):	X: -.875	Y: 1.22	Z: 2.914			
186	38	N1	-93.594	883.627	264.019	-2.018	-.431	.266
187	38	N16	54.82	819.066	-196.855	-1.996	.272	.249
188	38	N18	NC	NC	NC	NC	LOCKED	NC
189	38	Totals:	-38.773	1702.694	67.165			
190	38	COG (ft):	X: -.875	Y: 1.22	Z: 2.914			
191	39	N1	-98.742	882.809	243.736	-2.017	-.424	.269
192	39	N16	51.557	819.884	-216.492	-1.996	.286	.251
193	39	N18	NC	NC	NC	NC	LOCKED	NC
194	39	Totals:	-47.185	1702.694	27.244			
195	39	COG (ft):	X: -.875	Y: 1.22	Z: 2.914			
196	40	N1	-97.855	882.076	230.132	-2.016	-.409	.27
197	40	N16	53.831	820.618	-230.131	-1.995	.305	.252
198	40	N18	NC	NC	NC	NC	LOCKED	NC
199	40	Totals:	-44.024	1702.694	.002			
200	40	COG (ft):	X: -.875	Y: 1.22	Z: 2.914			
201	41	N1	-101.277	881.083	215.814	-2.016	-.406	.271
202	41	N16	52.231	821.611	-244.132	-1.995	.311	.254
203	41	N18	NC	NC	NC	NC	LOCKED	NC
204	41	Totals:	-49.045	1702.694	-28.318			
205	41	COG (ft):	X: -.875	Y: 1.22	Z: 2.914			
206	42	N1	-98.038	880.785	194.976	-2.015	-.379	.274
207	42	N16	58.185	821.909	-264	-1.995	.342	.258
208	42	N18	NC	NC	NC	NC	LOCKED	NC
209	42	Totals:	-39.852	1702.694	-69.024			
210	42	COG (ft):	X: -.875	Y: 1.22	Z: 2.914			
211	43	N1	-78.908	881.802	184.235	-2.015	-.319	.277
212	43	N16	78.908	820.892	-274.397	-1.994	.403	.262
213	43	N18	NC	NC	NC	NC	LOCKED	NC
214	43	Totals:	0	1702.694	-90.162			
215	43	COG (ft):	X: -.875	Y: 1.22	Z: 2.914			
216	44	N1	-59.063	883.173	196.117	-2.015	-.28	.276
217	44	N16	97.837	819.521	-263.279	-1.994	.438	.262
218	44	N18	NC	NC	NC	NC	LOCKED	NC
219	44	Totals:	38.774	1702.694	-67.162			
220	44	COG (ft):	X: -.875	Y: 1.22	Z: 2.914			
221	45	N1	-53.915	883.991	216.4	-2.016	-.287	.274
222	45	N16	101.101	818.703	-243.641	-1.994	.424	.261
223	45	N18	NC	NC	NC	NC	LOCKED	NC
224	45	Totals:	47.186	1702.694	-27.241			
225	45	COG (ft):	X: -.875	Y: 1.22	Z: 2.914			
226	46	N1	-54.802	884.724	230.004	-2.017	-.302	.272
227	46	N16	98.827	817.97	-230.003	-1.995	.405	.259
228	46	N18	NC	NC	NC	NC	LOCKED	NC

Joint Reactions (By Combination) (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
229	46	Totals:	44.025	1702.694	.002			
230	46	COG (ft):	X: -.875	Y: 1.22	Z: 2.914			
231	47	N1	-51.38	885.718	244.322	-2.018	-.305	.271
232	47	N16	100.426	816.976	-216.001	-1.995	.4	.257
233	47	N18	NC	NC	NC	NC	LOCKED	NC
234	47	Totals:	49.046	1702.694	28.321			
235	47	COG (ft):	X: -.875	Y: 1.22	Z: 2.914			
236	48	N1	-54.618	886.016	265.16	-2.019	-.332	.268
237	48	N16	94.471	816.678	-196.133	-1.996	.369	.253
238	48	N18	NC	NC	NC	NC	LOCKED	NC
239	48	Totals:	39.853	1702.694	69.027			
240	48	COG (ft):	X: -.875	Y: 1.22	Z: 2.914			
241	49	N1	220.706	706.715	180.774	-1.57	.385	.955
242	49	N16	-220.706	620.982	-180.773	-1.549	-.385	.946
243	49	N18	NC	NC	NC	NC	LOCKED	NC
244	49	Totals:	0	1327.697	0			
245	49	COG (ft):	X: 1.231	Y: 1.565	Z: 2.901			
246	50	N1	106.562	543.558	180.241	-1.541	.114	.669
247	50	N16	-106.562	784.137	-180.24	-1.58	-.114	.64
248	50	N18	NC	NC	NC	NC	LOCKED	NC
249	50	Totals:	0	1327.695	.001			
250	50	COG (ft):	X: .384	Y: 1.565	Z: 2.901			
251	51	N1	107.431	561.757	154.25	-1.297	.134	.593
252	51	N16	-107.431	549.72	-154.25	-1.295	-.134	.59
253	51	N18	NC	NC	NC	NC	LOCKED	NC
254	51	Totals:	0	1111.477	0			
255	51	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
256	52	N1	92.418	482.732	144.773	-1.113	.105	.508
257	52	N16	-92.418	469.963	-120.955	-1.11	-.126	.504
258	52	N18	NC	NC	NC	NC	LOCKED	NC
259	52	Totals:	0	952.695	23.818			
260	52	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
261	53	N1	86.207	482.121	143.092	-1.112	.09	.507
262	53	N16	-98.116	470.574	-122.466	-1.11	-.138	.504
263	53	N18	NC	NC	NC	NC	LOCKED	NC
264	53	Totals:	-11.909	952.695	20.627			
265	53	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
266	54	N1	81.572	481.35	138.497	-1.112	.083	.507
267	54	N16	-102.198	471.345	-126.588	-1.11	-.144	.504
268	54	N18	NC	NC	NC	NC	LOCKED	NC
269	54	Totals:	-20.626	952.695	11.909			
270	54	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
271	55	N1	79.753	480.627	132.219	-1.112	.084	.507
272	55	N16	-103.571	472.068	-132.218	-1.11	-.143	.505
273	55	N18	NC	NC	NC	NC	LOCKED	NC
274	55	Totals:	-23.817	952.695	0			
275	55	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
276	56	N1	81.24	480.145	125.939	-1.111	.093	.508
277	56	N16	-101.865	472.55	-137.847	-1.11	-.134	.505
278	56	N18	NC	NC	NC	NC	LOCKED	NC
279	56	Totals:	-20.626	952.695	-11.908			
280	56	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
281	57	N1	85.631	480.033	121.341	-1.111	.109	.508
282	57	N16	-97.54	472.662	-141.966	-1.11	-.119	.506
283	57	N18	NC	NC	NC	NC	LOCKED	NC
284	57	Totals:	-11.909	952.695	-20.625			
285	57	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
286	58	N1	91.753	480.322	119.656	-1.111	.126	.509
287	58	N16	-91.753	472.373	-143.473	-1.11	-.104	.506

Joint Reactions (By Combination) (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
288	58	N18	NC	NC	NC	NC	LOCKED	NC
289	58	Totals:	0	952.695	-23.817			
290	58	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
291	59	N1	97.964	480.933	121.337	-1.111	.14	.509
292	59	N16	-86.055	471.762	-141.962	-1.11	-.092	.507
293	59	N18	NC	NC	NC	NC	LOCKED	NC
294	59	Totals:	11.909	952.695	-20.625			
295	59	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
296	60	N1	102.599	481.704	125.932	-1.112	.147	.509
297	60	N16	-81.973	470.991	-137.84	-1.11	-.085	.507
298	60	N18	NC	NC	NC	NC	LOCKED	NC
299	60	Totals:	20.626	952.695	-11.908			
300	60	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
301	61	N1	104.418	482.427	132.211	-1.112	.146	.509
302	61	N16	-80.6	470.268	-132.21	-1.11	-.087	.506
303	61	N18	NC	NC	NC	NC	LOCKED	NC
304	61	Totals:	23.817	952.695	0			
305	61	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
306	62	N1	102.931	482.909	138.49	-1.112	.137	.509
307	62	N16	-82.306	469.786	-126.581	-1.11	-.096	.505
308	62	N18	NC	NC	NC	NC	LOCKED	NC
309	62	Totals:	20.626	952.695	11.909			
310	62	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
311	63	N1	98.539	483.021	143.088	-1.113	.121	.508
312	63	N16	-86.631	469.674	-122.462	-1.11	-.111	.505
313	63	N18	NC	NC	NC	NC	LOCKED	NC
314	63	Totals:	11.909	952.695	20.627			
315	63	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
316	64	N1	69.398	362.374	111.719	-.835	.076	.381
317	64	N16	-69.398	352.147	-87.901	-.833	-.097	.378
318	64	N18	NC	NC	NC	NC	LOCKED	NC
319	64	Totals:	0	714.521	23.818			
320	64	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
321	65	N1	63.188	361.763	110.038	-.834	.062	.38
322	65	N16	-75.096	352.758	-89.412	-.833	-.11	.378
323	65	N18	NC	NC	NC	NC	LOCKED	NC
324	65	Totals:	-11.909	714.521	20.626			
325	65	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
326	66	N1	58.553	360.992	105.444	-.834	.054	.38
327	66	N16	-79.179	353.529	-93.534	-.833	-.116	.378
328	66	N18	NC	NC	NC	NC	LOCKED	NC
329	66	Totals:	-20.626	714.521	11.909			
330	66	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
331	67	N1	56.734	360.269	99.165	-.834	.055	.38
332	67	N16	-80.552	354.252	-99.165	-.833	-.114	.378
333	67	N18	NC	NC	NC	NC	LOCKED	NC
334	67	Totals:	-23.817	714.521	0			
335	67	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
336	68	N1	58.221	359.787	92.885	-.833	.065	.381
337	68	N16	-78.847	354.734	-104.794	-.833	-.105	.379
338	68	N18	NC	NC	NC	NC	LOCKED	NC
339	68	Totals:	-20.626	714.521	-11.908			
340	68	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
341	69	N1	62.613	359.675	88.288	-.833	.08	.381
342	69	N16	-74.521	354.846	-108.913	-.833	-.091	.38
343	69	N18	NC	NC	NC	NC	LOCKED	NC
344	69	Totals:	-11.909	714.521	-20.625			
345	69	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
346	70	N1	68.734	359.963	86.603	-.833	.097	.382

Joint Reactions (By Combination) (Continued)

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
347	70	N16	-68.734	354.558	-110.42	-.833	-.075	.38
348	70	N18	NC	NC	NC	NC	LOCKED	NC
349	70	Totals:	0	714.521	-23.817			
350	70	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
351	71	N1	74.944	360.575	88.283	-.833	.111	.382
352	71	N16	-63.035	353.946	-108.909	-.833	-.063	.38
353	71	N18	NC	NC	NC	NC	LOCKED	NC
354	71	Totals:	11.909	714.521	-20.625			
355	71	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
356	72	N1	79.579	361.345	92.878	-.834	.118	.382
357	72	N16	-58.953	353.176	-104.786	-.833	-.057	.38
358	72	N18	NC	NC	NC	NC	LOCKED	NC
359	72	Totals:	20.626	714.521	-11.908			
360	72	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
361	73	N1	81.397	362.069	99.156	-.834	.117	.382
362	73	N16	-57.58	352.453	-99.156	-.832	-.058	.38
363	73	N18	NC	NC	NC	NC	LOCKED	NC
364	73	Totals:	23.817	714.521	0			
365	73	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
366	74	N1	79.911	362.551	105.436	-.834	.108	.382
367	74	N16	-59.285	351.97	-93.527	-.832	-.068	.379
368	74	N18	NC	NC	NC	NC	LOCKED	NC
369	74	Totals:	20.626	714.521	11.909			
370	74	COG (ft):	X: .535	Y: 2.181	Z: 2.879			
371	75	N1	75.519	362.663	110.034	-.835	.093	.381
372	75	N16	-63.61	351.859	-89.408	-.832	-.082	.378
373	75	N18	NC	NC	NC	NC	LOCKED	NC
374	75	Totals:	11.909	714.521	20.626			
375	75	COG (ft):	X: .535	Y: 2.181	Z: 2.879			

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

	Member	Shape	Code C...	Loc[ft]	LC	Shear ...	Loc[ft]	Dir	LC	phi*Pnc [lb]	phi*Pnt [lb]	phi*Mn y-...	phi*Mn z-...	Cb	Eqn
1	M3	HSS4X4X4	.188	0	32	.073	1.505	y	31	134908.4...	139518	16.181	16.181	1....	H1-1b
2	M4	PIPE_4.0	.000	.75	6	.000	.75		6	92571.332	93240	10.631	10.631	1....	H1-1b
3	FACE	PIPE_3.0	.210	3	36	.121	3		1	53775.839	65205	5.749	5.749	1....	H1-1b
4	OVP	PIPE_2.0	.146	5.979	35	.032	1.385		6	17855.085	32130	1.872	1.872	1....	H1-1b
5	M10	HSS4X4X4	.186	0	26	.067	1.505	y	31	134908.4...	139518	16.181	16.181	1....	H1-1b
6	M11B	PIPE_4.0	.000	.75	6	.000	.75		6	92571.332	93240	10.631	10.631	1....	H1-1b
7	M12	PIPE_3.0	.354	3	7	.102	3		1	53775.839	65205	5.749	5.749	1....	H1-1b
8	MP2A	PIPE_2.0	.281	5.833	1	.120	5.833		7	17855.085	32130	1.872	1.872	1....	H1-1b
9	MP1A	PIPE_2.0	.308	1.167	31	.147	5.833		1	17855.085	32130	1.872	1.872	1....	H1-1b

EXHIBIT 5

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Non-Ionizing Electromagnetic Radiation (NIER) Study

Site Number:
209477

Site Name:
New Canaan 2

Location:
New Canaan, Connecticut

Tenants:
Verizon Wireless & AT&T Mobility

Prepared For:

American Tower, Inc.
Woburn, Massachusetts

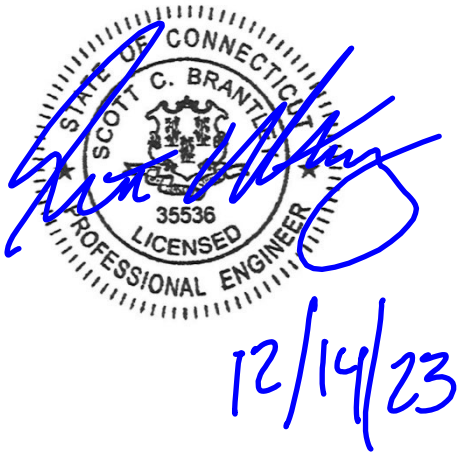
December 13th, 2023

260220 P-411642

Prepared By:

Adam Carlson MS, CBRE, CPI
Program Manager RF Design & Service
Tower Engineering Professionals

Approved By:



12/14/23

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Non-Ionizing Electromagnetic Radiation (NIER) Study

209477 New Canaan 2
New Canaan, Connecticut

INTRODUCTION

Tower Engineering Professionals RF Design & Services Division (TEP-RF) of Raleigh, North Carolina, has been retained by American Tower, Inc. (ATC), of Woburn, Massachusetts to evaluate the RF emissions compared to the Maximum Permissible Exposure (MPE) limit for facilities at this location. This evaluation uses compliance standards as outlined in Federal Communications Commission (FCC) document OET-65.

SITE AND FACILITY CONSIDERATIONS

Site 209477 New Canaan 2 is located at 183 Soundview Lane, in New Canaan, Connecticut at coordinates 41.190675, -73.495044. The support structure is 91' stealth tower. An aerial view of the tower can be found in Appendix 1, Site Photos. The tenants are Verizon Wireless (VZW), & AT&T Mobility (AT&T). A table listing all antennae and effective radiated power (ERP) levels that were used in this study may be found in Appendix 2, Antenna Inventory.

POWER DENSITY CALCULATIONS

Power densities were calculated based on FCC MPE limits for both General Population/Uncontrolled and Occupational/Controlled environments.

For the purpose of this study, a radius of 90' from the base of the tower with a height of 6' above ground level was used, beyond 90' the MPE levels become *di minimus*. This study utilized FCC recognized and accepted software programs using the maximum ERP levels for the antenna models provided by ATC. Diagrams depicting the predicted spatial average power density level at any specific location may be found in Appendix 3, MPE Limit Study. A discussion regarding the FCC limits may be found in Appendix 4, Information Pertaining to MPE Studies. Study methodology describing Non-ionizing Radiation Prediction Models used in this study may be found in Appendix 5, MPE Standards Methodology.

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All data used in this study was collected from one or more of the following sources:

- ATC furnished data and does not include other unidentified communication facilities.
- Load List at Load List at 209477 New Canaan 2.RF NIER Study 11/16/23.
- FCC databases.
- Carrier standard configurations.
- Empirical data collected by TEP.

SITE MITIGATION & CONTROL

In order to comply with FCC, tenant, & ATC requirements, TEP recommends the placement of signage at the base of the tower and all compound access points to alert workers of potential exposure to RF fields while working on or near the antennae.

TEP recommends that all personnel working on this tower be trained in RF safety procedures and carry a personal RF monitor at all times.

COMPLIANCE DETERMINATION

This installation ***IS*** in compliance with current FCC MPE limits as described in FCC OET-65.

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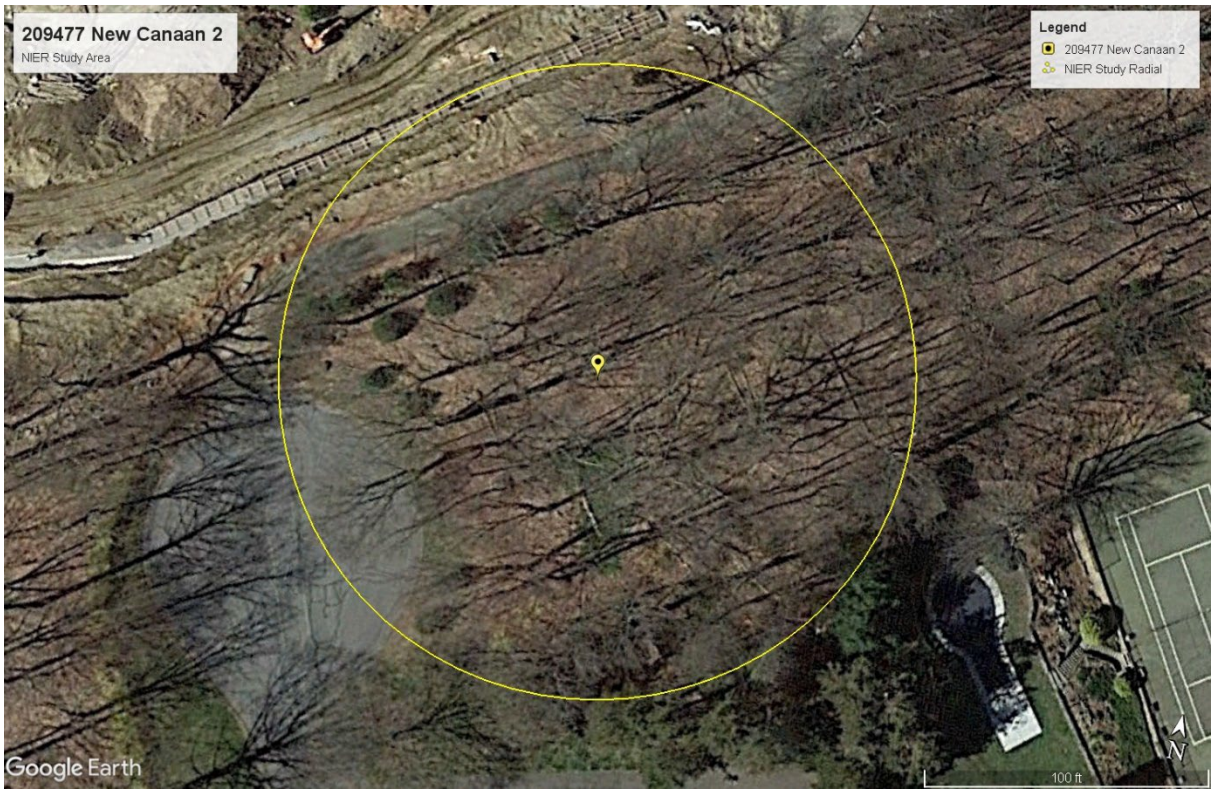
APPENDIX 1 Site Photos



Aerial View of Site

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Appendix 2 Antenna Inventory

209477 New Canaan 2							
Antenna Inventory							
Antenna #	Carrier	Antenna Manufacturer	Antenna Model	Frequency Band (MHz)	Azmiuth (°)	Effective Radiated Power (W)	Radiation Center (ft)
1	AT&T	CCI	HPA-65R-BUU-H8	1900	150	11039	81.0
2	AT&T	CCI	HPA-65R-BUU-H8	1900	150	11039	81.0
3	AT&T	CCI	HPA-65R-BUU-H8	1900	150	11039	81.0
4	AT&T	CCI	TPA65R-BU8D	700/800	040	11039	81.0
5	AT&T	CCI	TPA65R-BU8D	700/800	280	11039	81.0
6	AT&T	CCI	TPA65R-BU8D	700/800	040	11039	81.0
7	AT&T	CCI	TPA65R-BU8D	700/800	280	11039	81.0
8	AT&T	CCI	TPA65R-BU8D	700/800	040	11039	81.0
9	AT&T	CCI	TPA65R-BU8D	700/800	280	11039	81.0
10	Verizon	Samsung	MT6407	3700/3800/3900	028	18286	71.0
11	Verizon	Samsung	MT6407	3700/3800/3900	156	18286	71.0
12	Verizon	Samsung	MT6407	3700/3800/3900	262	18286	71.0
13	Verizon	JMA	MX10FRO840-xx	700/800	105	11700	71.0
14	Verizon	JMA	MX10FRO840-xx	700/800	105	11700	71.0
15	Verizon	JMA	MX10FRO860-xx	700/800	025	11700	71.0
16	Verizon	JMA	MX10FRO860-xx	700/800	240	11700	71.0
17	Verizon	JMA	MX10FRO860-xx	700/800	025	11700	71.0
18	Verizon	JMA	MX10FRO860-xx	700/800	240	11700	71.0

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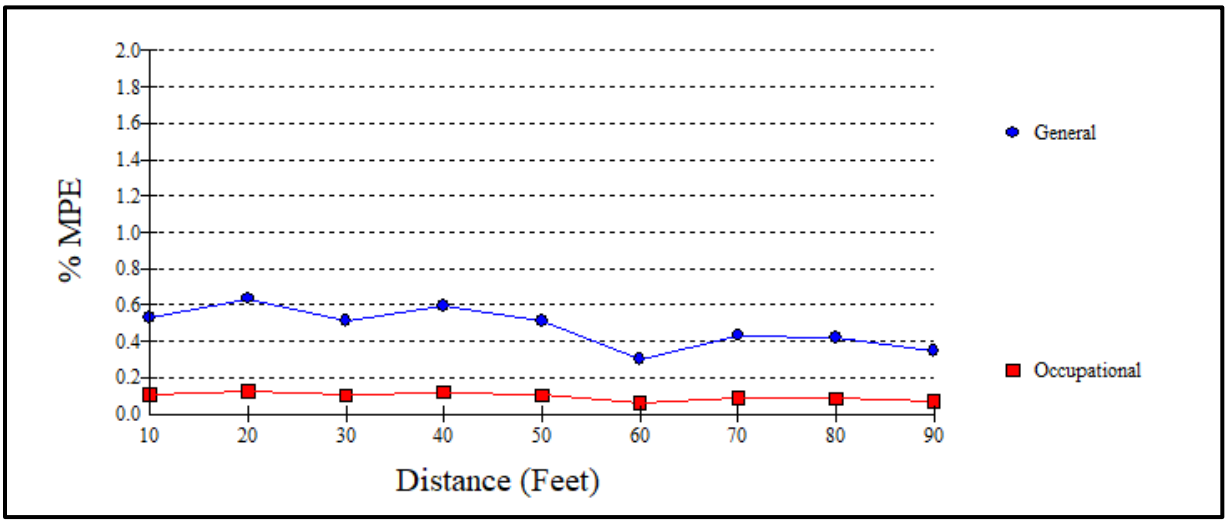
Appendix 3.1 MPE Limit Study



Maximum Power Density (@20'):	0.0042 mW/cm²
General Population MPE (@20'):	0.6350%
Occupational MPE (@20'):	0.1270%

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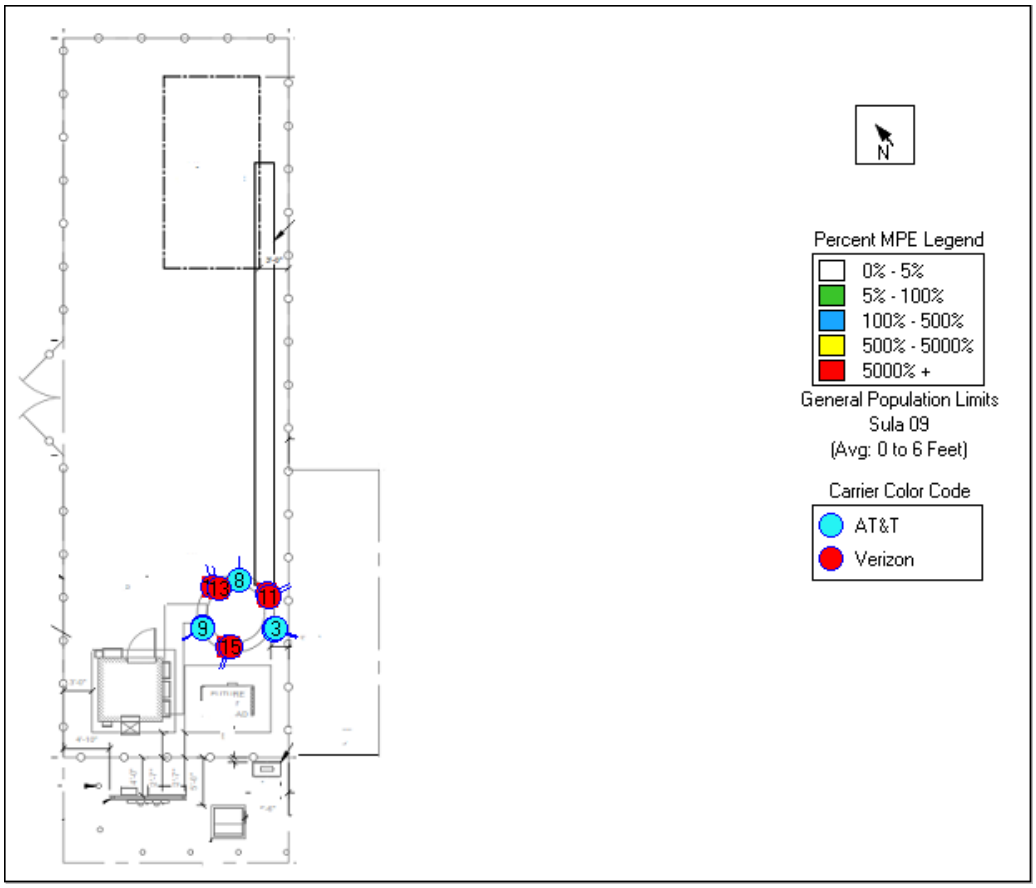
Appendix 3.2 MPE Limit Study



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Appendix 4 Information Pertaining to MPE Studies

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

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

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

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

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

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

General population/uncontrolled exposure limits apply to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public would always be considered under this category when exposure is not employment-related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area. Additional details can be found in FCC OET 65.

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Appendix 5 MPE Standards Methodology

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

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

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

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

f = frequency

* = Plane-wave equivalent power density

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

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

f = frequency

* = Plane-wave equivalent power density

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

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

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

Two models are utilized to predict Near and Far field power densities. They are based on the formulae in FCC OET 65.

Cylindrical Model (Near Field Predictions)

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

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

Where:

S = Power Density

P = Total Power into antenna

R = Distance from the antenna

L = Antenna aperture length

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

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

Where:

S = Power Density

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

P = Total Power into antenna

R = Distance from the antenna

L = Antenna aperture length

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

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Spherical Model (Far Field Predictions)

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

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

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

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

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

Where:

S = Power Density

EIRP = Effective Radiated Power from antenna

Rc = Reflection Coefficient (2.56)

R = Distance from the antenna

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

EXHIBIT 6

DOCKET NO. 487 – Homeland Towers, LLC and New Cingular Wireless PCS, LLC d/b/a AT&T application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a telecommunications facility located at 183 Soundview Lane, New Canaan, Connecticut.	}	Connecticut Siting Council

September 24, 2020

Decision and Order

Pursuant to Connecticut General Statutes §16-50p and the foregoing Findings of Fact and Opinion, the Connecticut Siting Council (Council) finds that the effects associated with the construction, maintenance, and operation of a telecommunications facility, including effects on the natural environment, ecological balance, public health and safety, scenic, historic, and recreational values, agriculture, forests and parks, air and water purity, and fish, aquaculture and wildlife are not disproportionate, either alone or cumulatively with other effects, when compared to need, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the application, and therefore directs that a Certificate of Environmental Compatibility and Public Need, as provided by General Statutes **§** 16-50k, be issued to Homeland Towers, LLC, hereinafter referred to as the Certificate Holder, for a telecommunications facility at 183 Soundview Lane, New Canaan, Connecticut.

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

1. The tower shall be constructed as a stealth "tree" monopole at a height of 85 feet above ground level to provide the proposed wireless services, sufficient to accommodate the antennas of New Cingular Wireless PCS, LLC and other entities, both public and private. The height of the "tree branches" at the top of the monopole shall not exceed 90 feet above ground level and the density and configuration of the "tree branches" shall conceal the antennas. The height of the tower may be extended after the date of this Decision and Order pursuant to regulations of the Federal Communications Commission.

2. The Certificate Holder shall prepare a Development and Management (D&M) Plan for this site in compliance with Sections 16-50j-75 through 16-50j-77 of the Regulations of Connecticut State Agencies. The D&M Plan shall be submitted to and approved by the Council prior to the commencement of facility construction and shall include:
    a) a certified letter from a wireless telecommunications carrier with a firm commitment to install associated wireless equipment at the facility upon completion of construction;
    b) final site plan(s) for development of the facility that employ the governing standard in the State of Connecticut for tower design in accordance with the currently adopted International Building Code and include specifications for the tower, tower foundation, antennas and equipment compound including, but not limited to, fence design including finish/color, landscaping including taller plantings to conceal the equipment cabinet, lower growth plantings in front of the taller plantings and a warranty for the plantings, ground equipment, equipment cabinet including plans to minimize the cabinet's total height above grade, access road, utility installation and emergency backup generator;
    c) the tower shall be designed with a yield point to ensure that the tower setback radius remains within the boundaries of the subject property;
    d) construction plans for site clearing, grading, landscaping, water drainage and stormwater control, and erosion and sedimentation controls consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended; and

e) proposed hours and days of the week for construction activities.

3. Prior to the commencement of operation, the Certificate Holder shall provide the Council worst-case modeling of the electromagnetic radio frequency power density of all proposed entities' antennas at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin No. 65, August 1997. The Certificate Holder shall ensure a recalculated report of the electromagnetic radio frequency power density be submitted to the Council if and when circumstances in operation cause a change in power density above the levels calculated and provided pursuant to this Decision and Order.

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

5. The Certificate Holder shall provide the Council with a copy of necessary permits from any other state or federal agency with concurrent jurisdiction prior to the commencement of construction.

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

7. Unless otherwise approved by the Council, if the facility authorized herein is not fully constructed with at least one fully operational wireless telecommunications carrier providing wireless service within eighteen months from the date of the mailing of the Council's Findings of Fact, Opinion, and Decision and Order (collectively called "Final Decision"), this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made. The time between the filing and resolution of any appeals of the Council's Final Decision shall not be counted in calculating this deadline. Authority to monitor and modify this schedule, as necessary, is delegated to the Executive Director. The Certificate Holder shall provide written notice to the Executive Director of any schedule changes as soon as is practicable.

8. Any request for extension of the time period referred to in Condition 7 shall be filed with the Council not later than 60 days prior to the expiration date of this Certificate and shall be served on all parties and intervenors, as listed in the service list, and the Town of New Canaan.

9. If the facility ceases to provide wireless services for a period of one year, this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council within 90 days from the one year period of cessation of service. The Certificate Holder may submit a written request to the Council for an extension of the 90 day period not later than 60 days prior to the expiration of the 90 day period.

10. Any nonfunctioning antenna, and associated antenna mounting equipment, on this facility shall be removed within 60 days of the date the antenna ceased to function.

11. In accordance with Section 16-50j-77 of the Regulations of Connecticut State Agencies, the Certificate Holder shall provide the Council with written notice two weeks prior to the commencement of site construction activities. In addition, the Certificate Holder shall provide the Council with written notice of the completion of site construction, and the commencement of site operation.

12. The Certificate Holder shall remit timely payments associated with annual assessments and invoices submitted by the Council for expenses attributable to the facility under Conn. Gen. Stat. §16-50v.

13. This Certificate may be transferred in accordance with Conn. Gen. Stat. §16-50k(b), provided both the Certificate Holder/transferor and the transferee are current with payments to the Council for their respective annual assessments and invoices under Conn. Gen. Stat. §16-50v. In addition, both the Certificate Holder/transferor and the transferee shall provide the Council a written agreement as to the entity responsible for any quarterly assessment charges under Conn. Gen. Stat. §16-50v(b)(2) that may be associated with this facility. If construction has not been completed in accordance with Condition 7 of this Decision and Order at the time the Certificate is requested to be transferred, a certified letter from a wireless telecommunications carrier with a firm commitment to install associated wireless equipment at the facility upon completion of construction shall also be provided.

14. The Certificate Holder shall maintain the facility and associated equipment, including but not limited to, the tower, tower foundation, antennas, equipment compound, radio equipment, access road, utility line and landscaping in a reasonable physical and operational condition that is consistent with this Decision and Order and a Development and Management Plan to be approved by the Council.

15. If the Certificate Holder is a wholly-owned subsidiary of a corporation or other entity and is sold/transferred to another corporation or other entity, the Council shall be notified of such sale and/or transfer and of any change in contact information for the individual or representative responsible for management and operations of the Certificate Holder within 30 days of the sale and/or transfer.

16. This Certificate may be surrendered by the Certificate Holder upon written notification and acknowledgment by the Council.

We hereby direct that a copy of the Findings of Fact, Opinion, and Decision and Order be served on each person listed in the Service List, dated July 8, 2020, and notice of issuance published in The New Canaan Advertiser.

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

EXHIBIT 7

Hello, your package has been delivered.

Delivery Date: Wednesday, 01/10/2024
Delivery Time: 12:22 PM
Signed by: DONNA

CENTERLINE SITE ACQUISITION

Tracking Number:	1Z9Y45030336949977
Ship To:	AMERICAN TOWER 10 PRESIDENTIAL WAY WOBURN, MA 018011053 US
Number of Packages:	1
UPS Service:	UPS Ground
Package Weight:	1.0 LBS
Reference Number:	14519493

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UPS Delivery Notification, Tracking Number 1Z9Y45030335862366

UPS <pkginfo@ups.com>
Wed 1/10/2024 10:17 AM
To:Barbara Kassabian <bkassabian@clinellc.com>

Hello, your package has been delivered.

Delivery Date: Wednesday, 01/10/2024
Delivery Time: 10:15 AM
Signed by: SELECTMAN

CENTERLINE SITE ACQUISITION

Tracking Number:	**1Z9Y45030335862366**
Ship To:	DIONNA CARLSON 77 MAIN STREET TOWN HALL, 2ND FLOOR NEW CANAAN, CT 068404710 US
Number of Packages:	1
UPS Service:	UPS Ground
Package Weight:	1.0 LBS
Reference Number:	14519493

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UPS Delivery Notification, Tracking Number 1Z9Y45030311273234

UPS <pkginfo@ups.com>

Wed 1/10/2024 11:56 AM

To:Barbara Kassabian <bkassabian@clinellc.com>

UPS logo

Hello, your package has been delivered.

Delivery Date: Wednesday, 01/10/2024
Delivery Time: 11:54 AM
Left At: FRONT DOOR

Set Delivery Instructions Manage Preferences View My Packages

CENTERLINE SITE ACQUISITION

Tracking Number:	1Z9Y45030311273234
Ship To:	KEITH RICHEY 183 SOUNDVIEW LANE NEW CANAAN, CT 068402734 US
Number of Packages:	1
UPS Service:	UPS Ground
Package Weight:	1.0 LBS
Reference Number:	14519493

UPS Delivery Notification, Tracking Number 1Z9Y45030306026225

UPS <pkginfo@ups.com>
Wed 1/10/2024 10:18 AM
To:Barbara Kassabian <bkassabian@clinellc.com>

Hello, your package has been delivered.

Delivery Date: Wednesday, 01/10/2024
Delivery Time: 10:17 AM
Signed by: PLANNER

CENTERLINE SITE ACQUISITION

Tracking Number:	**1Z9Y45030306026225**
Ship To:	SARAH CAREY 77 MAIN STREET TOWN HALL, LOWER LEVEL NEW CANAAN, CT 068404710 US
Number of Packages:	1
UPS Service:	UPS Ground
Package Weight:	1.0 LBS
Reference Number:	14519493

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