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 2, 2024

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

RE: Notice of Exempt Modification // Site: CHESHIRE NORTH CT (ATC: 370624)
1338 Highland Avenue, Cheshire CT 06410
N 41.536889 // W -72.893297

Dear Ms. Bachman,

Cellco Partnership d/b/a Verizon Wireless currently maintains twelve (12) antenna at the 70-ft level on the existing 74ft Tower, located at 1338 Highland Avenue, Cheshire, 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 Bethany's 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 December 15, 2023, by A.T Engineering Services, LLC, a structural analysis dated December 7, 2023, by American Tower Corp., and a structural mount analysis by Colliers Engineering and Design dated November 14, 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

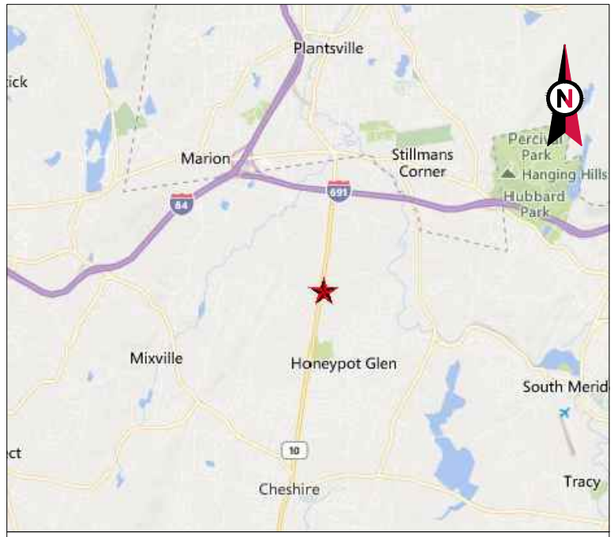
_____

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: Sean Kimball – Town Manager – Chief Elected Official
Michael Glidden – Town Planner - as P&Z official
American Tower Corporation - as tower owner
Mudddm LLC – as ground owner

EXHIBIT 1



VICINITY MAP

AMERICAN TOWER®

ATC SITE NAME: MANKES SILO
ATC SITE NUMBER: 370624
VERIZON SITE NAME: CHESHIRE NORTH CT - ATC STEALTH SILO
VERIZON SITE NUMBER: 5000383173
VERIZON FUZE PID: N/A
SITE ADDRESS: 1338 HIGHLAND AVE
CHESHIRE,CT 06410

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.

1. 2020 NFPA 70, NATIONAL ELECTRIC CODE (NEC)
2. 2022 CONNECTICUT STATE BUILDING CODE
3. 2021 INTERNATIONAL BUILDING CODE (IBC)

DESIGN CRITERIA FROM TOWER STRUCTUAL ANALYSIS:

BASIC WIND SPEED:	118 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
TOPO FACTOR PROCEDURE:	METHOD 1
TOPOGRAPHIC CATEGORY:	1
SPECTRAL RESPONSE:	S_S=0.20, S_1=0.06
SITE CLASS:	D - STIFF SOIL - DEFAULT

INFORMATION TAKEN FROM STRUCTURAL ANALYSIS COMPLETED BY ATC, DATED 12/08/2023.

UTILITY COMPANIES

POWER COMPANY: NORTHEAST UTILITIES
PHONE: (800) 286-2000

TELEPHONE COMPANY: VERIZON
PHONE: (800) 483-0722

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

PROJECT SUMMARY

SITE ADDRESS:

1338 HIGHLAND AVE
CHESHIRE,CT 06410
COUNTY: NEW HAVEN

GEOGRAPHIC COORDINATES:

LATITUDE: 41° 32' 13.000" N
LONGITUDE: 72° 53' 36.000" W
GROUND ELEVATION: 197' 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:

MUDDM LLC
1338 HIGHLAND AVE
CHESHIRE,CT 06410

PROJECT DESCRIPTION

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

INSTALL MOUNT MODIFICATIONS, (2) FILTER(s)

EXISTING (12) ANTENNA(s), (6) RRH(s), (2) OVP(s) AND (2) 1-1/4" HYBRID CABLE 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 HAVEN DRIVE NORTH ON CHURCH STREET WHICH TURNS INTO WHITNEY AVENUE (CT-10) AT THE HAMDEN/ CHESHIRE LINE IT BECOMES HIGHLAND AVENUE CONTINUE NORTH TO ADDRESS 1338 HIGHLAND AVENUE ON THE RIGHT.

SHEET INDEX

SHEET NO:	DESCRIPTION:	REV:	DATE:	BY:
G-001	TITLE SHEET	0	12/15/2023	LLR
G-002	GENERAL NOTES	0	12/15/2023	LLR
-	EXISTING SURVEY	0	12/15/2023	LLR
C-101	DETAILED SITE PLAN	0	12/15/2023	LLR
C-201	TOWER ELEVATION	0	12/15/2023	LLR
C-401	ANTENNA INFORMATION & SCHEDULE	0	12/15/2023	LLR
C-501	CONSTRUCTION DETAILS	0	12/15/2023	LLR
E-501	GROUNDING DETAILS	0	12/15/2023	LLR
R-601	SUPPLEMENTAL			

CONTRACTOR PMI REQUIREMENTS

PMI ACCESSED AT:	HTTPS://PMI.VZWSMART.COM
SMART TOOL VENDOR PROJECT NUMBER:	10208095
VZW LOCATION CODE (PSLC):	5000383173

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

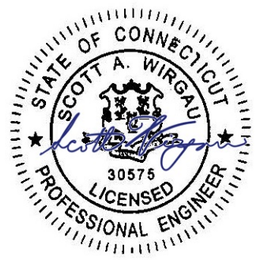
MOUNT MODIFICATION REQUIRED:	YES
VZW APPROVED SMART KIT VENDORS:	REFER TO MOUNT MODIFICATION DRAWINGS PAGES FOR VZW SMART KIT APPROVED VENDORS

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	LLR	12/15/2023

ATC SITE NUMBER:
370624
ATC SITE NAME:
MANKES SILO
VERIZON SITE NAME:
CHESHIRE NORTH CT - ATC STEALTH SILO
SITE ADDRESS:
1338 HIGHLAND AVE
CHESHIRE,CT 06410

SEAL:



verizon

ATC JOB NO:	14519479_G0
CUSTOMER ID:	CHESHIRE NORTH CT - ATC STEALTH SILO
CUSTOMER #:	5000383173

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)

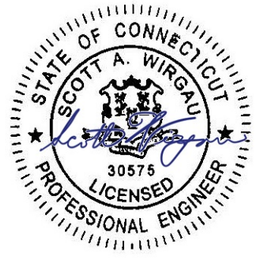
ALL DISCREPANCIES FROM WHAT IS SHOWN ON THESE CONSTRUCTION DRAWINGS SHALL BE COMMUNICATED TO ATC ENGINEERING IMMEDIATELY FOR CORRECTION OR RE-DESIGN. FAILURE TO COMMUNICATE DIRECTLY WITH ATC ENGINEERING OR ANY CHANGES FROM THE DESIGN CONDUCTED WITHOUT PRIOR APPROVAL FROM ATC ENGINEERING SHALL BE THE 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	LLR	12/15/2023

ATC SITE NUMBER:
370624
ATC SITE NAME:
MANKES SILO
VERIZON SITE NAME:
CHESHIRE NORTH CT - ATC STEALTH SILO
SITE ADDRESS:
1338 HIGHLAND AVE
CHESHIRE,CT 06410

SEAL:



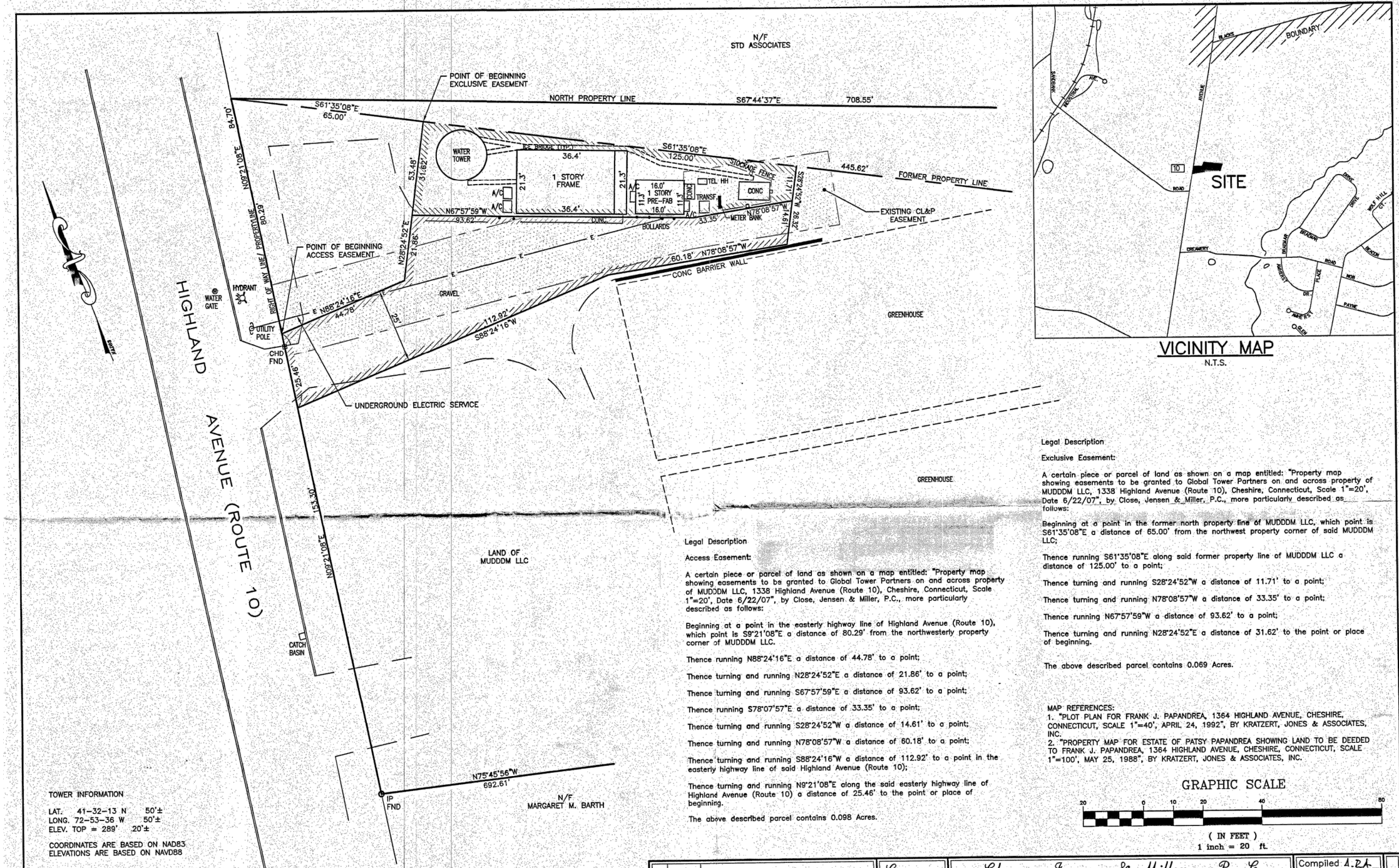
Digitally Signed: 2023-12-15

verizon

ATC JOB NO:	14519479_G0
CUSTOMER ID:	CHESHIRE NORTH CT - ATC STEALTH SILO
CUSTOMER #:	5000383173

GENERAL NOTES

SHEET NUMBER:	REVISION:
G-002	0



VICINITY MAP
N.T.S.

TOWER INFORMATION

LAT. 41-32-13 N 50'±
LONG. 72-53-36 W 50'±
ELEV. TOP = 289' 20'±

COORDINATES ARE BASED ON NAD83
ELEVATIONS ARE BASED ON NAVD88

I HEREBY CERTIFY TO GTP TOWERS I, LLC THAT TO MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

By John H. Miller
JOHN H. MILLER, P.E., L.S.
LIC. NO. 4142

NOTES:

1. THIS SURVEY AND MAP HAS BEEN PREPARED IN ACCORDANCE WITH SECTIONS 20-300B-1 THRU 20-300B-20 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES – "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPT. 26, 1996.
2. THIS IS AN EASEMENT MAP AND IT IS A TYPE OF A SURVEY INTENDED TO DEPICT THE POSITION OF A PROPOSED EASEMENT WITH RESPECT TO BOUNDARY MONUMENTATION; IMPROVEMENTS AND FEATURES; OTHER RECORD EASEMENTS AND VISIBLE EVIDENCE OF THE USE THEREOF; AND UNRESOLVED CONFLICTS WITH RECORD DEED DESCRIPTIONS AND MAPS.
3. PROPERTY LINE DETERMINATION IS BASED UPON A DEPENDENT RESURVEY AND EASEMENT BOUNDARY DETERMINATION IS BASED UPON AN ORIGINAL SURVEY.
3. THIS SURVEY CONFORMS TO CLASS A-2 HORIZONTAL ACCURACY.
4. BEARINGS REFER TO NAD83 DATUM.
5. THE TOWER EASEMENT LIES COMPLETELY WITHIN THE PARENT PARCEL.
6. THIS SURVEY IS NOT VALID WITHOUT A LIVE SIGNATURE AND EMBOSSED SEAL.

Legal Description

Access Easement:

A certain piece or parcel of land as shown on a map entitled: "Property map showing easements to be granted to Global Tower Partners on and across property of MUDDDM LLC, 1338 Highland Avenue (Route 10), Cheshire, Connecticut, Scale 1"=20', Date 6/22/07", by Close, Jensen & Miller, P.C., more particularly described as follows:

Beginning at a point in the easterly highway line of Highland Avenue (Route 10), which point is S9°21'08"E a distance of 80.29' from the northwesterly property corner of MUDDDM LLC.

Thence running N88°24'16"E a distance of 44.78' to a point;

Thence turning and running N28°24'52"E a distance of 21.86' to a point;

Thence turning and running S67°57'59"E a distance of 93.62' to a point;

Thence running S78°07'57"E a distance of 33.35' to a point;

Thence turning and running S28°24'52"W a distance of 14.61' to a point;

Thence turning and running N78°08'57"W a distance of 60.18' to a point;

Thence turning and running S88°24'16"W a distance of 112.92' to a point in the easterly highway line of said Highland Avenue (Route 10);

Thence turning and running N9°21'08"E along the said easterly highway line of Highland Avenue (Route 10) a distance of 25.46' to the point or place of beginning.

The above described parcel contains 0.098 Acres.

Legal Description

Exclusive Easement:

A certain piece or parcel of land as shown on a map entitled: "Property map showing easements to be granted to Global Tower Partners on and across property of MUDDDM LLC, 1338 Highland Avenue (Route 10), Cheshire, Connecticut, Scale 1"=20', Date 6/22/07", by Close, Jensen & Miller, P.C., more particularly described as follows:

Beginning at a point in the former north property line of MUDDDM LLC, which point is S61°35'08"E a distance of 65.00' from the northwest property corner of said MUDDDM LLC;

Thence running S61°35'08"E along said former property line of MUDDDM LLC a distance of 125.00' to a point;

Thence turning and running S28°24'52"W a distance of 11.71' to a point;

Thence turning and running N78°08'57"W a distance of 33.35' to a point;

Thence running N67°57'59"W a distance of 93.62' to a point;

Thence turning and running N28°24'52"E a distance of 31.62' to the point or place of beginning.

The above described parcel contains 0.069 Acres.

MAP REFERENCES:
1. "PLOT PLAN FOR FRANK J. PAPANDREA, 1364 HIGHLAND AVENUE, CHESHIRE, CONNECTICUT, SCALE 1"=40', APRIL 24, 1992", BY KRATZERT, JONES & ASSOCIATES, INC.
2. "PROPERTY MAP FOR ESTATE OF PATSY PAPANDREA SHOWING LAND TO BE DEEDED TO FRANK J. PAPANDREA, 1364 HIGHLAND AVENUE, CHESHIRE, CONNECTICUT, SCALE 1"=100', MAY 25, 1988", BY KRATZERT, JONES & ASSOCIATES, INC.

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

No.	Date	Description
		Revisions

STATE OF CONNECTICUT · JOHN H. MILLER · NO. 4142 · LICENSED LAND SURVEYOR

C. J. M.

Close, Jensen & Miller, P. C.
Consulting Engineers, Land Planners & Surveyors
1137 Silas Deane Highway, Wethersfield, Conn. 06109, Tel. (860)563-9375

PROPERTY MAP

SHOWING EASEMENTS ON AND ACROSS PROPERTY OF
MUDDDM LLC
IN FAVOR OF
GTP TOWERS I, LLC
1338 HIGHLAND AVENUE (ROUTE 10)
CHESHIRE CONNECTICUT

Compiled	A.R.A.
P.C. Check	J.H.M.
Designed	—
Drawn	A.R.A.
Checked	J.H.M.
Scale	1"=20'
Date	6/22/07
Sheet	1
Of	1
Job No.	
File No.	

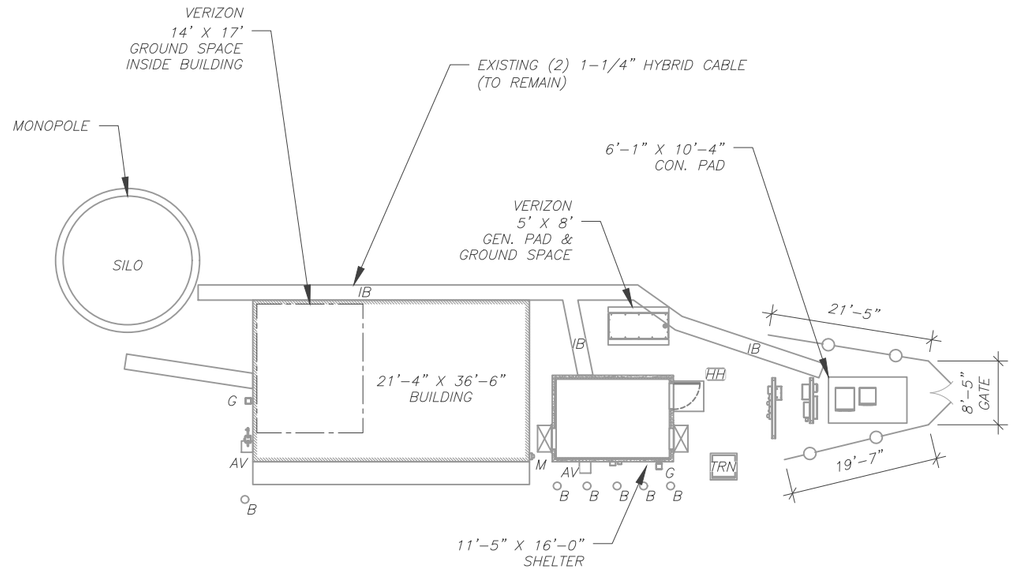
CADD DWG: CELLTOWER/ARA

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

20 0 10 20

(IN FEET)
1 UNIT = 20 FEET

NOTE:
ATC LEASE AREA = 1,620.57 SQ. FT. ±

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	LLR	12/15/2023

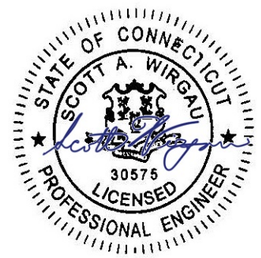
ATC SITE NUMBER:
370624

ATC SITE NAME:
MANKES SILO

VERIZON SITE NAME:
CHESHIRE NORTH CT - ATC STEALTH SILO

SITE ADDRESS:
1338 HIGHLAND AVE
CHESHIRE,CT 06410

SEAL:



Digitally Signed: 2023-12-15

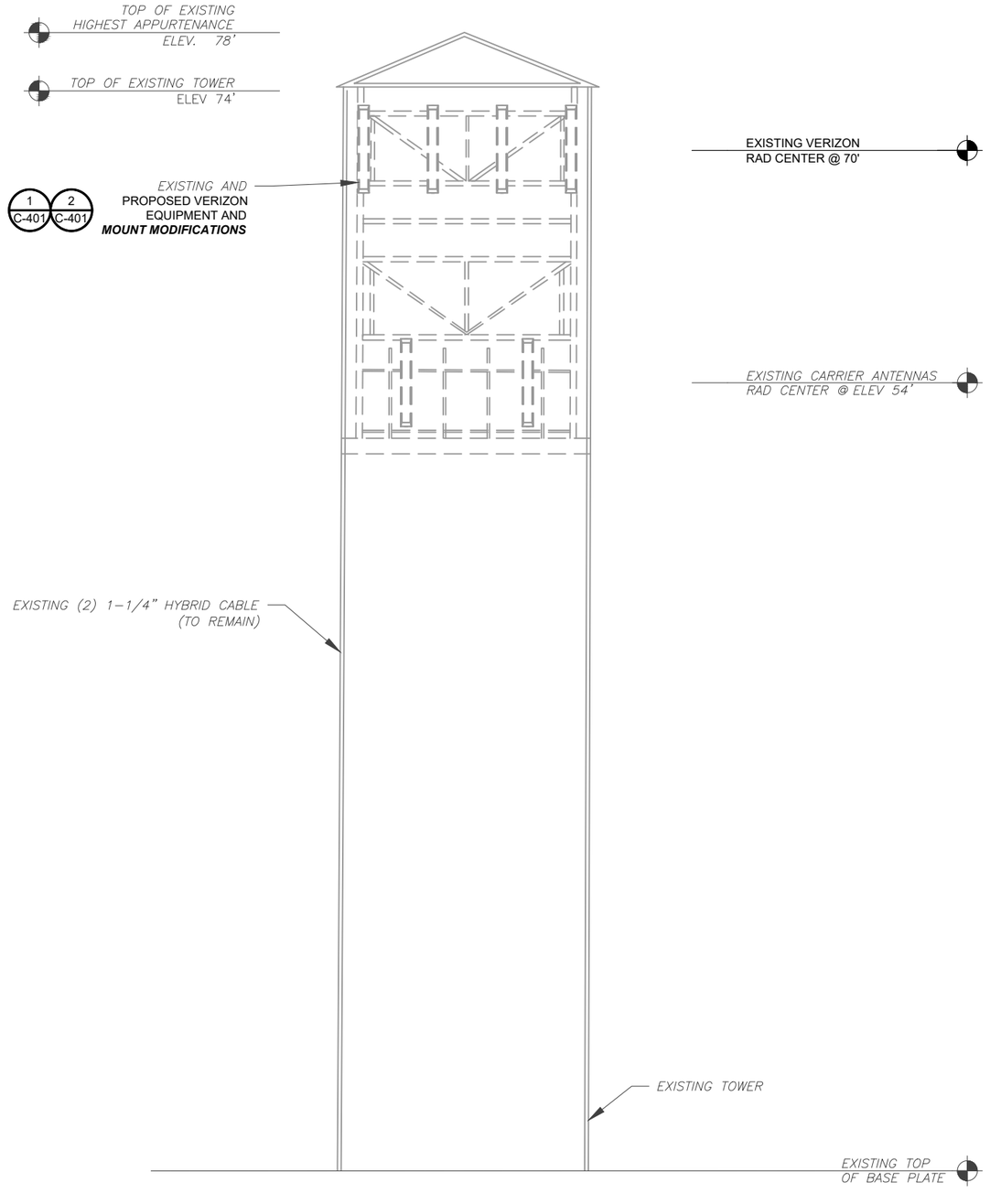
verizon

ATC JOB NO:	14519479_G0
CUSTOMER ID:	CHESHIRE NORTH CT - ATC STEALTH SILO
CUSTOMER #:	5000383173

DETAILED SITE PLAN

SHEET NUMBER:	REVISION:
C-101	0

PER MOUNT ANALYSIS COMPLETED BY COLLIERS ENGINEERING & DESIGN, DATED 11/14/23, 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.

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 ELEVATIONS ARE MEASURED FROM TOP OF BASE PLATE TO MATCH STRUCTURAL ANALYSIS. ELEVATIONS DO NOT REFLECT TRUE ABOVE GROUND LEVEL (A.G.L.)
4. TOWER ELEVATION DEPICTION MAY NOT REFLECT ALL EQUIPMENT INCLUDED IN STRUCTURAL ANALYSIS. REFER TO STRUCTURAL ANALYSIS FOR FULL TOWER LOADING.

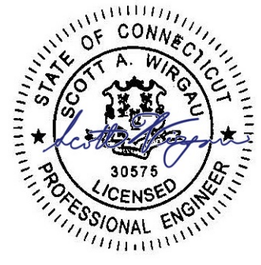
AMERICAN TOWER®
A.T. ENGINEERING SERVICES LLC
1 FENTON MAIN
SUITE 300
CARY, NC 27511
PHONE: (919) 468-0112
PEC.0001553

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	LLR	12/15/2023

ATC SITE NUMBER:
370624
ATC SITE NAME:
MANKES SILO

VERIZON SITE NAME:
CHESHIRE NORTH CT - ATC STEALTH SILO
SITE ADDRESS:
1338 HIGHLAND AVE
CHESHIRE,CT 06410

SEAL:



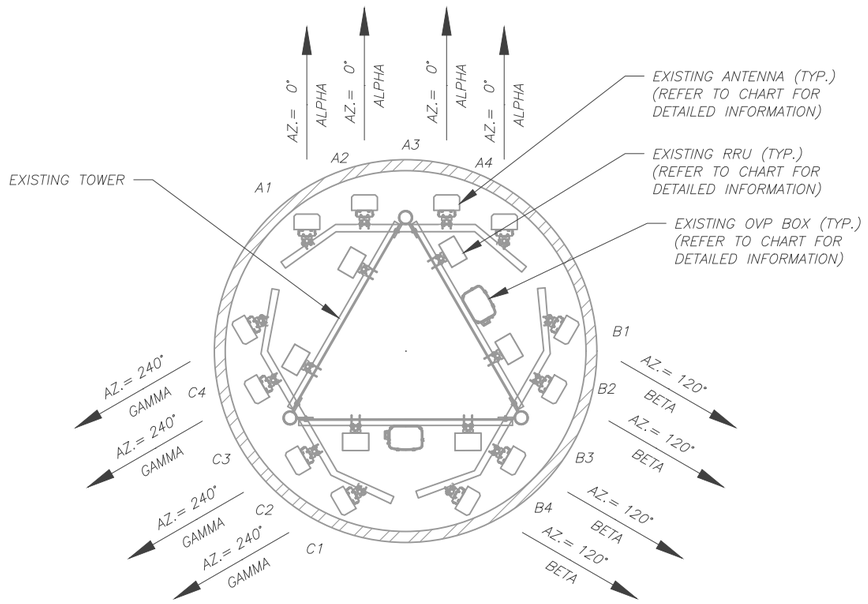
Digitally Signed: 2023-12-15

verizon

ATC JOB NO:	14519479_G0
CUSTOMER ID:	CHESHIRE NORTH CT - ATC STEALTH SILO
CUSTOMER #:	5000383173

TOWER ELEVATION

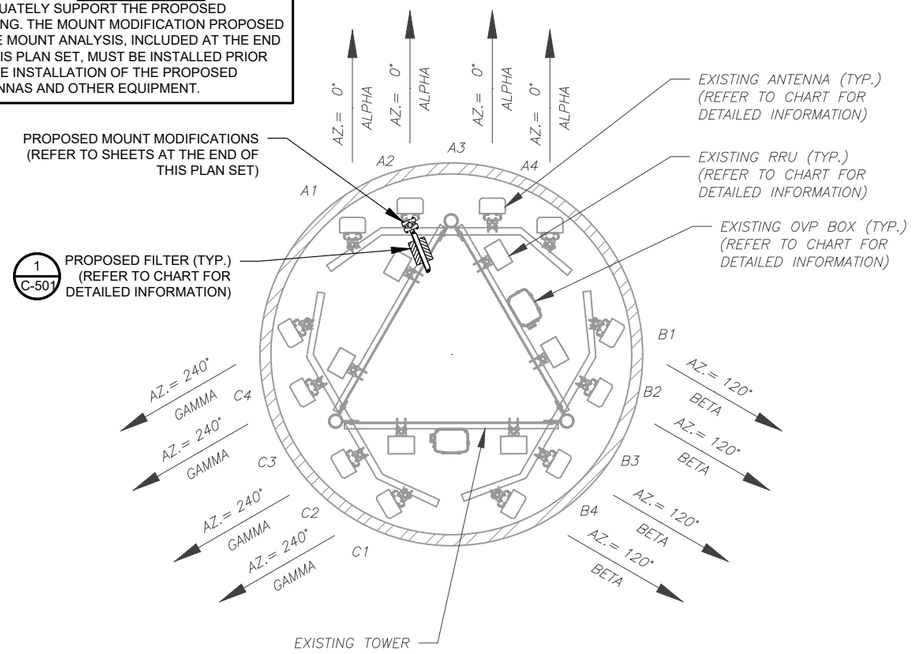
SHEET NUMBER:	REVISION:
C-201	0



1 EXISTING ANTENNA PLAN

SCALE: N.T.S.

PER MOUNT ANALYSIS COMPLETED BY COLLIERS ENGINEERING & DESIGN, DATED 11/14/23, 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.



2 FINAL ANTENNA PLAN

SCALE: N.T.S.

EXISTING ANTENNA SCHEDULE

LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY	
SECTOR	RAD	AZ	POS	ANTENNA	BAND	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	70'	0°	A1	SBNHH-1D65B	-	RMN	-	-
			A2	SBNHH-1D65B	-	RMN	RFV01U-D1A	RMN
			A3	SBNHH-1D65B	-	RMN	RFV01U-D2A	RMN
			A4	SBNHH-1D65B	-	RMN	-	-
BETA	70'	120°	B1	SBNHH-1D65B	-	RMN	-	-
			B2	SBNHH-1D65B	-	RMN	RFV01U-D1A	RMN
			B3	SBNHH-1D65B	-	RMN	RFV01U-D2A	RMN
			B4	SBNHH-1D65B	-	RMN	-	-
GAMMA	70'	240°	C1	SBNHH-1D65B	-	RMN	-	-
			C2	SBNHH-1D65B	-	RMN	RFV01U-D1A	RMN
			C3	SBNHH-1D65B	-	RMN	RFV01U-D2A	RMN
			C4	SBNHH-1D65B	-	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	70'	0°	A1	SBNHH-1D65B	-	RMN	-	-
			A2	SBNHH-1D65B	-	RMN	(2) KA-6030 RFV01U-D1A	ADD RMN
			A3	SBNHH-1D65B	-	RMN	RFV01U-D2A	RMN
			A4	SBNHH-1D65B	-	RMN	-	-
BETA	70'	120°	B1	SBNHH-1D65B	-	RMN	-	-
			B2	SBNHH-1D65B	-	RMN	RFV01U-D1A	RMN
			B3	SBNHH-1D65B	-	RMN	RFV01U-D2A	RMN
			B4	SBNHH-1D65B	-	RMN	-	-
GAMMA	70'	240°	C1	SBNHH-1D65B	-	RMN	-	-
			C2	SBNHH-1D65B	-	RMN	RFV01U-D1A	RMN
			C3	SBNHH-1D65B	-	RMN	RFV01U-D2A	RMN
			C4	SBNHH-1D65B	-	RMN	-	-

EXISTING FIBER DISTRIBUTION / OVP BOX		EXISTING CABLING SUMMARY	
MODEL NUMBER	STATUS	CABLE QTY, SIZE, TYPE	STATUS
(2) RRFDC-3315-PF-48	RMN	(2) 1-1/4" HYBRID CABLE	RMN
-	RMV	----	RMV

FINAL FIBER DISTRIBUTION / OVP BOX		FINAL CABLING SUMMARY	
MODEL NUMBER	STATUS	CABLE QTY, SIZE, TYPE	STATUS
(2) RRFDC-3315-PF-48	RMN	(2) 1-1/4" HYBRID CABLE	RMN
-	RMV	----	ADD

3 EQUIPMENT SCHEDULES

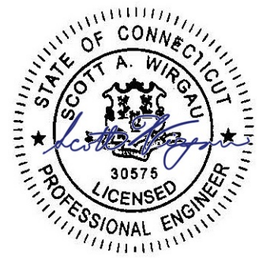
AMERICAN TOWER®
A.T. ENGINEERING SERVICES LLC
1 FENTON MAIN
SUITE 300
CARY, NC 27511
PHONE: (919) 468-0112
PEC.0001553

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	LLR	12/15/2023

ATC SITE NUMBER:
370624
ATC SITE NAME:
MANKES SILO

VERIZON SITE NAME:
CHESHIRE NORTH CT - ATC STEALTH SILO
SITE ADDRESS:
1338 HIGHLAND AVE
CHESHIRE,CT 06410

SEAL:



Digitally Signed: 2023-12-15

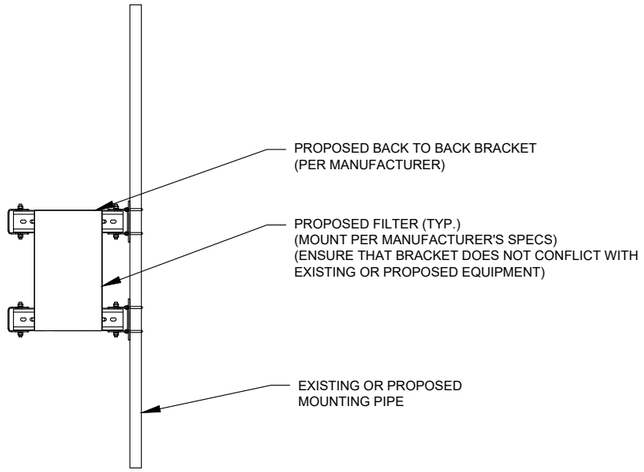
verizon

ATC JOB NO:	14519479_G0
CUSTOMER ID:	CHESHIRE NORTH CT - ATC STEALTH SILO
CUSTOMER #:	5000383173

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.



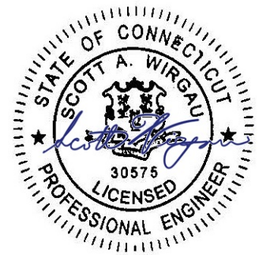
1 PROPOSED RRU MOUNTING DETAIL - TYPICAL
SCALE: N.T.S.

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	LLR	12/15/2023

ATC SITE NUMBER:
370624
ATC SITE NAME:
MANKES SILO
VERIZON SITE NAME:
CHESHIRE NORTH CT - ATC STEALTH SILO
SITE ADDRESS:
1338 HIGHLAND AVE
CHESHIRE,CT 06410

SEAL:



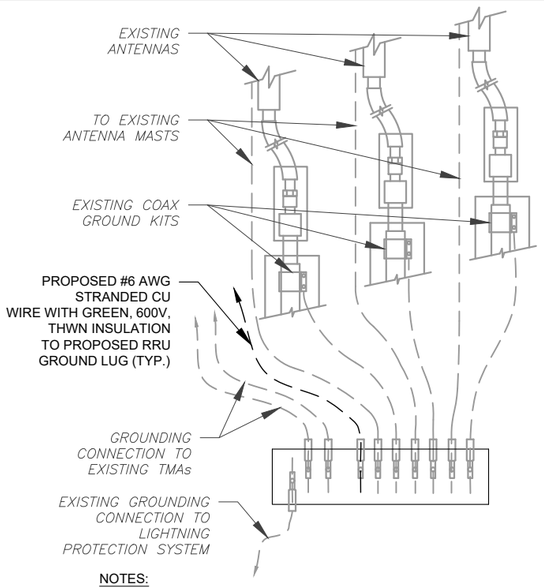
Digitally Signed: 2023-12-15

verizon

ATC JOB NO:	14519479_G0
CUSTOMER ID:	CHESHIRE NORTH CT - ATC STEALTH SILO
CUSTOMER #:	5000383173

CONSTRUCTION DETAILS

SHEET NUMBER:	REVISION:
C-501	0

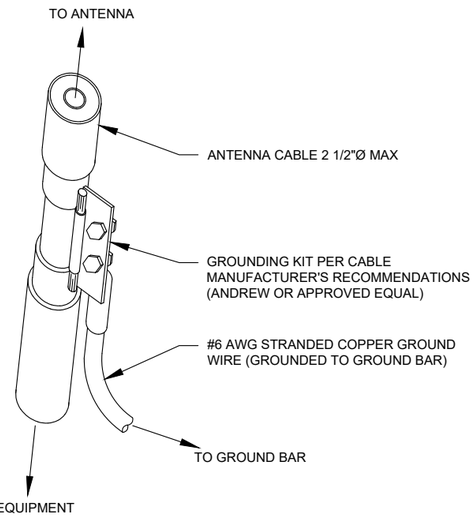


NOTES:

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.

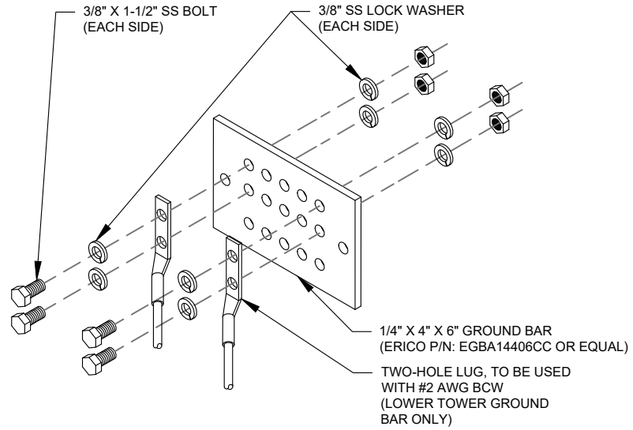


GROUND KIT NOTES:

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.

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	LLR	12/15/2023

ATC SITE NUMBER:
370624
ATC SITE NAME:
MANKES SILO

VERIZON SITE NAME:
CHESHIRE NORTH CT - ATC STEALTH SILO
SITE ADDRESS:
1338 HIGHLAND AVE
CHESHIRE,CT 06410

SEAL:

Digitally Signed: 2023-12-15

verizon

ATC JOB NO:	14519479_G0
CUSTOMER ID:	CHESHIRE NORTH CT - ATC STEALTH SILO
CUSTOMER #:	5000383173

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 #: 10208095
Colliers Engineering & Design Project #: 23777239

November 14, 2023

Site Information	*Site ID:*	*5000383173-VZW / CHESHIRE NORTH CT - ATC Stealth Silo*
	Site Name:	*CHESHIRE NORTH CT - ATC Stealth Silo*
	Carrier Name:	*Verizon Wireless*
	Address:	*1338 Highland Ave SNET Pole #46-S Cheshire, Connecticut 06410 New Haven County*
	Latitude:	*41.536889°*
	Longitude:	*-72.893297°*
Structure Information	*Tower Type:*	*76-Ft Concealment Silo*
	Mount Type:	*12.00-Ft Concealment Mount*

FUZE ID # 17123857

Analysis Results

Concealment Mount: **26.9% 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

STATE OF CONNECTICUT · DEJIAN XU · No. 33733 · LICENSED PROFESSIONAL ENGINEER

11/14/2023

Requirements:

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

Contractor to install any missing bolts between mount face angle and silo framing angle with 3/4" dia. A325N bolt, with a total of two bolts at both top and bottom.

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

1 MOUNT ANALYSIS

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

SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-601	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.

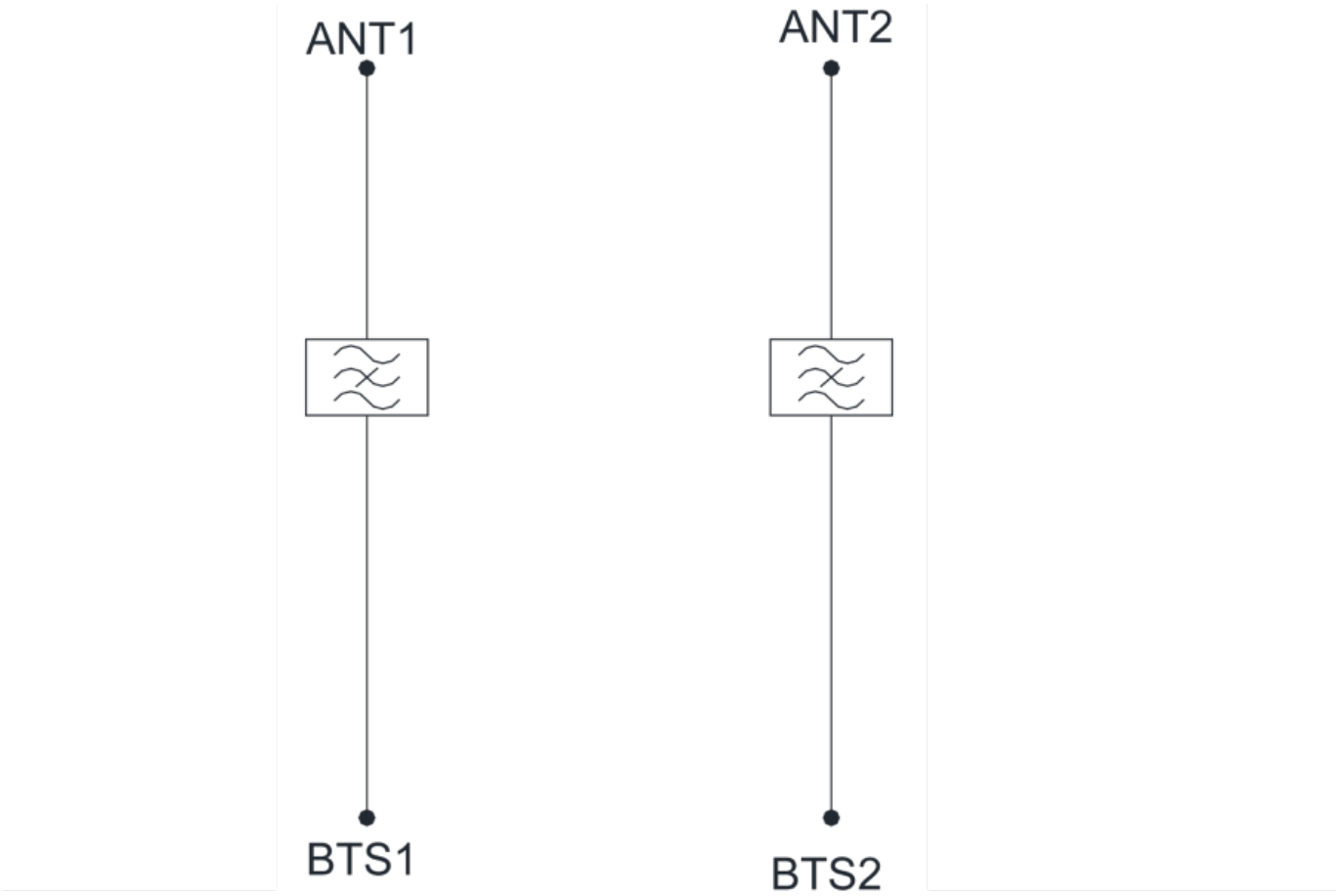
Contact Us: +1 303 768 8080 | +61 (0) 7 3907 1200 | www.kaelus.com

ORDERING INFORMATION

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

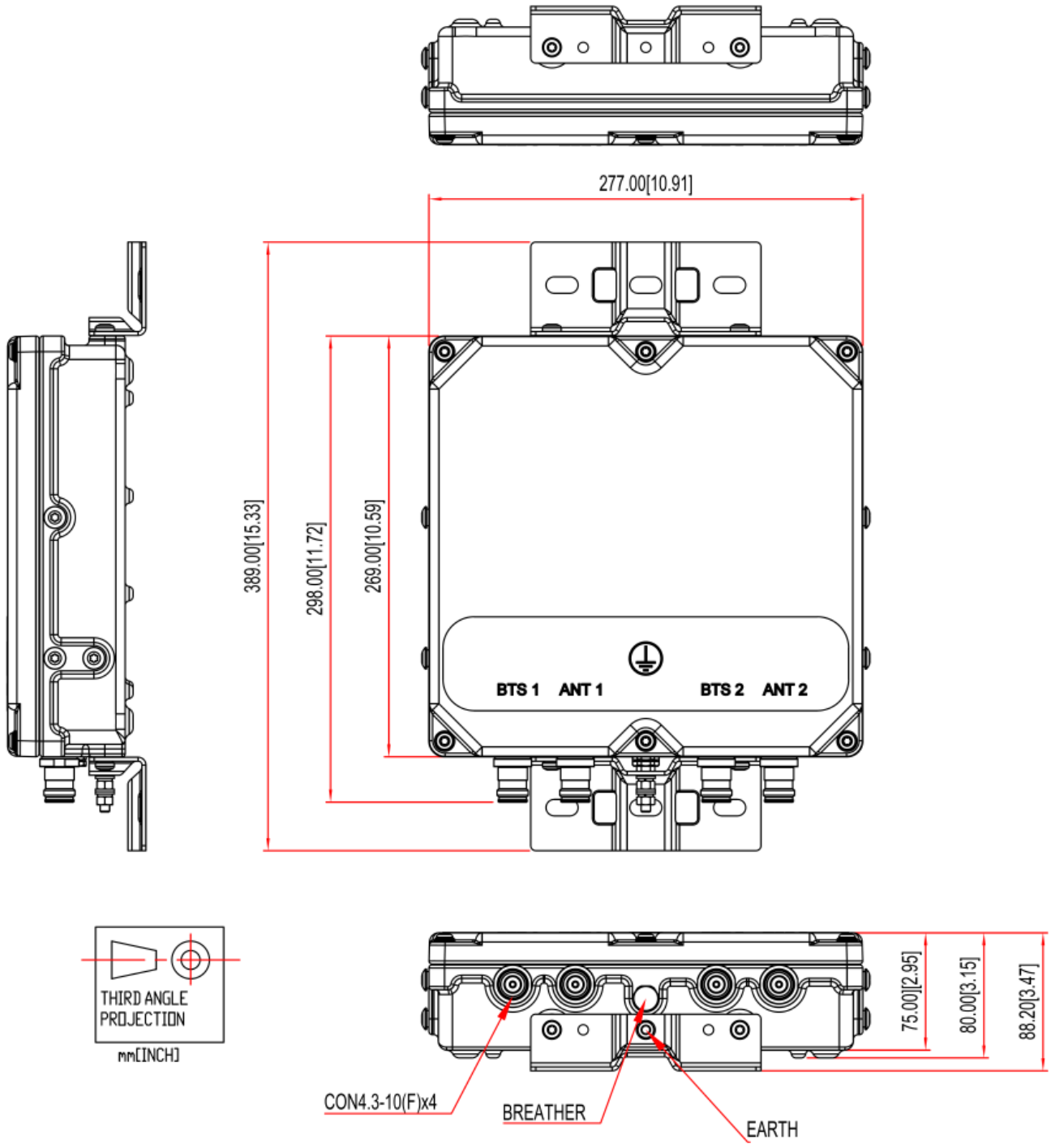
Contact Us: +1 303 768 8080 | +61 (0) 7 3907 1200 | www.kaelus.com

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

Cheshire

Unique ID: 00158400 **Card No:** 1 Of 2

Location:	1338 HIGHLAND AVE	Map Id:	28 15	Zone:	I-2	Date Printed:	1/2/2024
		Neighborhood:	I-1A			Last Update:	11/28/2023

Owner Of Record	Volume/Page	Date	Sales Type	Valid	Sale Price
MUDDDM LLC	1672/0243	3/6/2003	Quit Claim	No	0
1338 HIGHLAND AVE, CHESHIRE, CT 06410			Exempt		
Prior Owner History					
MANKE JONATHAN D & DEBRAH P	1401/0021	4/27/2000	Quit Claim	No	320,000
PAPANDREA FRANK J & NORMA S	0701/0255	12/30/1899	Warranty Deed	No	0

Permit Number	Date	Permit Description
14762	1/3/2017	GAS PIPING FOR GENERATOR
32638	10/14/2016	ANTENNAS AND EQUIPMENT
32593	9/23/2016	12 ANTENNAS

Supplemental Data

Census/Tract	3431	Historic District Prc	
Dev Map ID	18532	Cross Boarder Pro	
GIS ID		490 App Date	
Route			
District			
Utilities			

Appraised Value

Total Land Value	259,000
Total Building Value	23,700
Total Outbldg Value	39,700
Total Market Value	322,400

Acres

Land Type	Acres	490	Total Value
Industrial	3.00	3.00	0
Total	3.0000	3.00	259,000

State Item Codes

Code	Quantity	Value
33-Indust Improve	7.00	27,790
42-Public Util Bldg	1.00	8,770
32-Indust Building	1.00	7,820
61-Farm	3.00	2,660

Assessment History (Prior Years as of Oct 1)

	2023	2022	2021	2020	2019
Land	2,660	311,850	2,920	2,920	2,920
Building	16,590	-140,600	168,330	168,330	168,330
Outbuilding	27,790	46,450	46,450	46,450	46,450
Total	**47,040**	**217,700**	**217,700**	**217,700**	**217,700**

490 Appraised Totals

Type	Acres	Value
Tillable B	3.00	3840
Totals	**3.00**	**3840**

Application Date: **Expiration Date:**

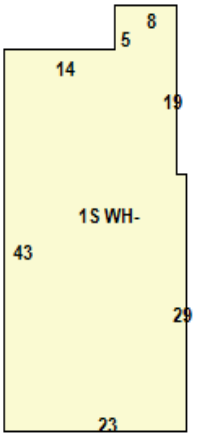
Comments

Information may be deemed reliable, but not guaranteed. **Revaluation Date:** 10/1/2023

Cheshire

Unique ID: 00158400

Location:	1338 HIGHLAND AVE	**Unit**	



Commercial Building Description

Building Use	Industrial
Class	Masonry and Wood Frame
Overall Condition	Average/Fair
Construction Quality	Low Cost
Stories	1.00
Year Built	1952
Remodel	
Percent Complete	100
GLA	**1015**

Basement

Basement Area	0

HVAC

Heating Type	FHA
Fuel Type	Oil
Cooling Type	

Interior

Floors	Concrete
Walls	
Wall Height	

Exterior

Exterior Walls	Concrete Block
Roof Type	Composite Built Up
Roof Cover	Flat

Special Features

Description	Area/Qty
Base Value	1015

Attached Component Computations

Type	Yr Blt	Area/Qty

Detached Component Computations

Type	Year	Condition	Area/Qty
Average Shed	1990	Average	768
Average Shed	1990	Average	100
Frame Garage	1946	Average	756
Gazebo	2004	Average	182
Greenhouse	1946	Fair	6400
Greenhouse	1952	Fair	5600
Greenhouse	1952	Fair	5600

Type	Year	Condition	Area/Qty

Cheshire

Unique ID: 00158400 **Card No:** 2 Of 2

Location:	1338 HIGHLAND AVE	Map Id:	28 15	Zone:	I-2	Date Printed:	1/2/2024
		Neighborhood:	I-1A			Last Update:	11/28/2023

Owner Of Record	Volume/Page	Date	Sales Type	Valid	Sale Price
MUDDDM LLC	1672/0243	3/6/2003	Quit Claim	No	0
1338 HIGHLAND AVE, CHESHIRE, CT 06410			Exempt		
Prior Owner History					
MANKE JONATHAN D & DEBRAH P	1401/0021	4/27/2000	Quit Claim	No	320,000
PAPANDREA FRANK J & NORMA S	0701/0255	12/30/1899	Warranty Deed	No	0

Permit Number	Date	Permit Description
14762	1/3/2017	GAS PIPING FOR GENERATOR
32638	10/14/2016	ANTENNAS AND EQUIPMENT
32593	9/23/2016	12 ANTENNAS

Supplemental Data

Census/Tract	3431	Historic District Prc	
Dev Map ID	18532	Cross Boarder Pro	
GIS ID		490 App Date	
Route			
District			
Utilities			

Appraised Value

Total Land Value	259,000
Total Building Value	23,700
Total Outbldg Value	39,700
Total Market Value	322,400

Acres

Land Type	Acres	490	Total Value
Industrial	3.00	3.00	0
Total	3.0000	3.00	259,000

State Item Codes

Code	Quantity	Value
33-Indust Improve	7.00	27,790
42-Public Util Bldg	1.00	8,770
32-Indust Building	1.00	7,820
61-Farm	3.00	2,660

Assessment History (Prior Years as of Oct 1)

	2023	2022	2021	2020	2019
Land	2,660	311,850	2,920	2,920	2,920
Building	16,590	-140,600	168,330	168,330	168,330
Outbuilding	27,790	46,450	46,450	46,450	46,450
Total	**47,040**	**217,700**	**217,700**	**217,700**	**217,700**

490 Appraised Totals

Type	Acres	Value
Tillable B	3.00	3840
Totals	**3.00**	**3840**

Application Date: **Expiration Date:**

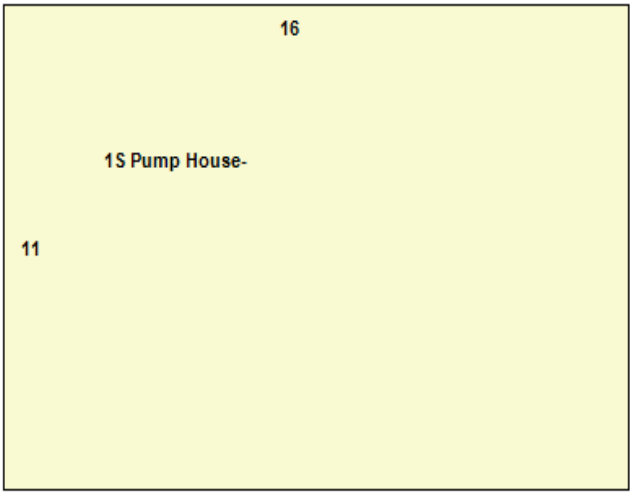
Comments

Information may be deemed reliable, but not guaranteed. **Revaluation Date:** 10/1/2023

Cheshire

Unique ID: 00158400

Location:	1338 HIGHLAND AVE	**Unit**	



Commercial Building Description

Building Use	Industrial
Class	Masonry and Wood Frame
Overall Condition	Average
Construction Quality	Average
Stories	1.00
Year Built	2000
Remodel	
Percent Complete	100
GLA	**176**

Basement

Basement Area	0

HVAC

Heating Type	
Fuel Type	
Cooling Type	

Interior

Floors	Concrete
Walls	
Wall Height	

Exterior

Exterior Walls	Pre-Cast Concrete
Roof Type	Composite Built Up
Roof Cover	Flat

Special Features

Description	Area/Qty
Base Value	176

Attached Component Computations

Type	Yr Blt	Area/Qty

Detached Component Computations

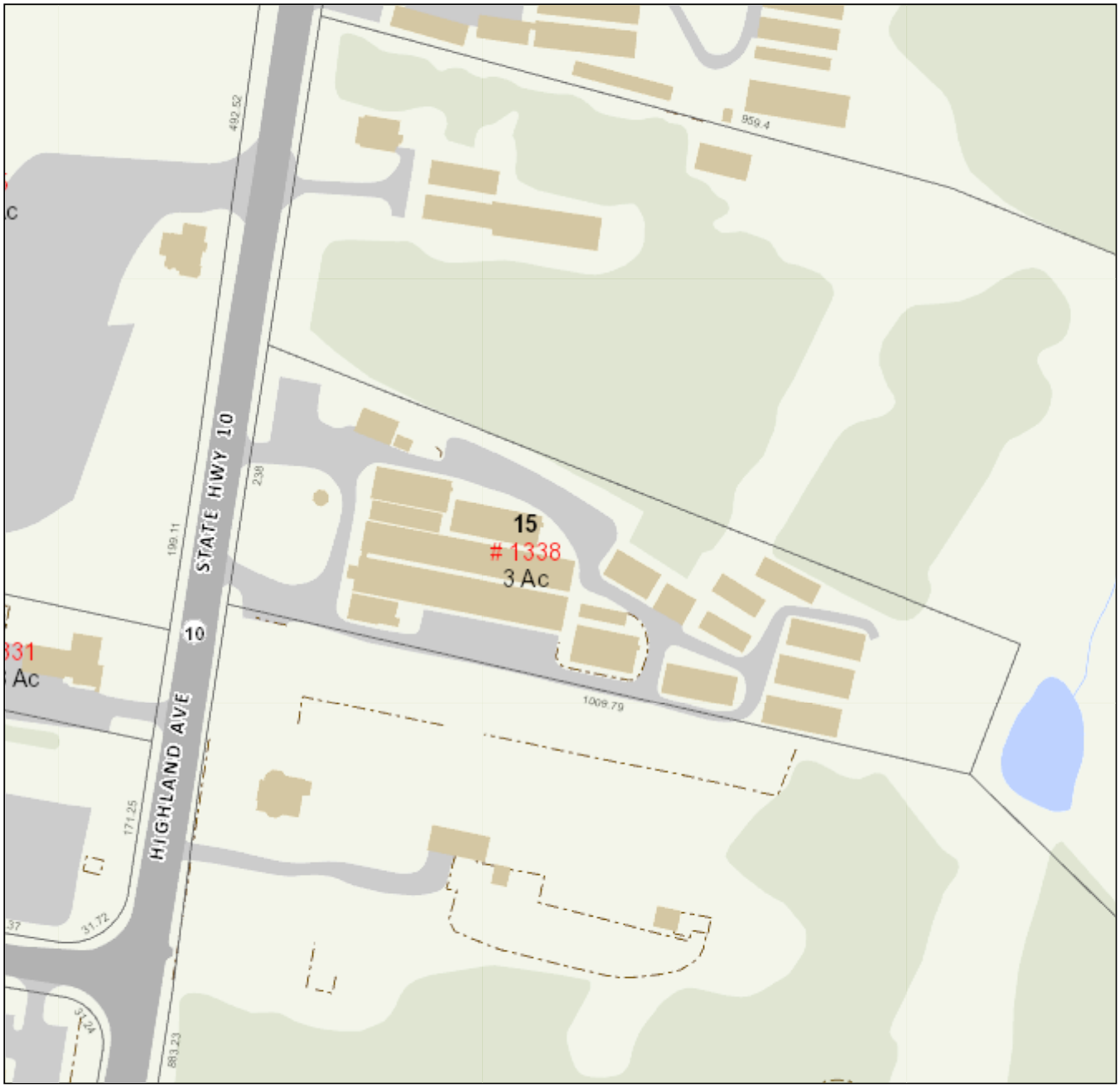
Type	Year	Condition	Area/Qty
Gazebo	2004	Average	182

Type	Year	Condition	Area/Qty

Town of Cheshire

Geographic Information System (GIS)

Date Printed: 10/15/2021



MAP DISCLAIMER - NOTICE OF LIABILITY

This map is for assessment purposes only. It is not for legal description or conveyances. All information is subject to verification by any user. The Town of Cheshire and its mapping contractors assume no legal responsibility for the information contained herein.

Approximate Scale: 1 inch = 150 feet

0 150 Feet

N W E S

EXHIBIT 3

AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure	:	78 ft Concealed Silo Tower
ATC Asset Name	:	Mankes Silo
ATC Asset Number	:	370624
Engineering Number	:	14519479_C3_03
Proposed Carrier	:	VERIZON WIRELESS
Carrier Site Name	:	CHESHIRE NORTH CT - ATC Stealth Silo
Carrier Site Number	:	5000383173
Site Location	:	1338 Highland Ave Cheshire, CT 06410-0000 41.5369, -72.8933
County	:	New Haven
Date	:	December 7, 2023
Max Usage	:	41%
Analysis Result	:	Pass

Created By:

Matthew Reeves, CWI
Structural Engineer III

Table of Contents

Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 78 ft Concealed Silo Tower tower to reflect the change in loading by VERIZON WIRELESS.

Supporting Documents

Tower Drawing:	Mapping by Structural Components Job #140862, dated October 17, 2014
Foundation Drawing:	Mapping by Structural Components Job #140862, dated October 17, 2014
Geotechnical Report:	S&ME Job #1261-08-261M, dated July 30, 2008

Analysis

The tower was analyzed using the most recent version of RISA-3D analysis software. This program considers an elastic three-dimensional model and second-order effects per ANSI/TIA-222.

Basic Wind Speed:	118 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 = 0.20, 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	Result
Legs	4%	Pass
Diagonals	12%	Pass
Horizontals	23%	Pass
Concrete	16%	Pass
Foundation	41%	Pass

Maximum Reactions

Foundation	Moment (k-ft)	Axial (k)	Shear (k)
Base	958.3	371.9	22.1

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
70.0	2	Kaelus KA-6030	(2) 1 1/4" Hybriflex Cable
	2	Raycap RRFDC-3315-PF-48	
	3	Light Sector Frame	
	3	Samsung RFV01U-D1A	
	3	Samsung RFV01U-D2A	
	12	Commscope SBNHH-1D65B (40.6 lbs)	

Install proposed lines inside of silo.

Other Existing/Reserved Loading

Elev (ft)	Qty	Equipment	Lines	Carrier
57.0	3	Ericsson Radio 4460 B25+B66	(1) 1 1/4" Hybriflex Cable (6) 1 5/8" Coax (2) 1" (25.4mm) Hybrid (3) 2.00" (50.8mm) Hybrid	T-MOBILE
	3	Ericsson Radio 4480 B71+B85A		
	3	RFS APXVAALL24 43-U-NA20		
56.0	3	Ericsson AIR 6419 B77G	-	AT&T MOBILITY
54.0	1	CCI DMP65R-BU6EA-K	(3) 0.40" (10.3mm) Fiber (4) 0.82" (20.8mm) 8 AWG 6 (2) 0.92" (23.4mm) Cable (12) 7/8" Coax	AT&T MOBILITY
	1	Kathrein Scala 80010965		
	1	Raycap DC9-48-60-24-8C-EV		
	2	CCI DMP65R-BU8E		
	2	Kathrein Scala 80010966		
	2	Raycap DC6-48-60-18-8F ("Squid")		
	3	Ericsson RRUS 4415 B30		
	3	Ericsson RRUS 4449 B5, B12		
	3	Ericsson RRUS 4478 B14		
	3	Ericsson RRUS 8843 B2, B66A		
52.0	3	Ericsson Air 6449 B77D	-	AT&T MOBILITY

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

Standard Conditions

All engineering services performed by 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:

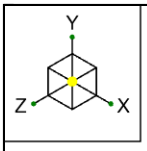
- Information supplied by the client regarding antenna, mounts, and feed line loading
- Information from drawings, design and analysis documents, and field notes in the possession of

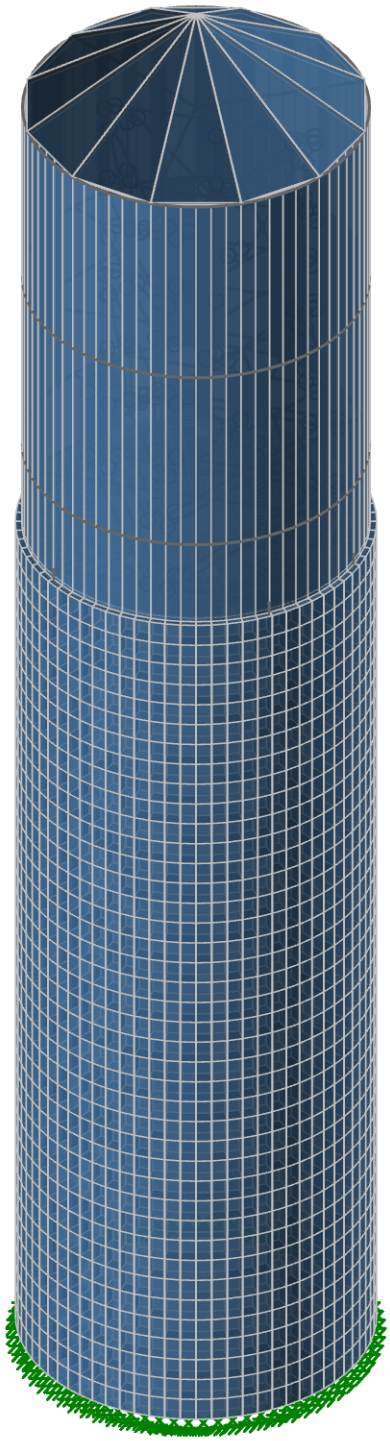
It is the responsibility of the client to ensure that the information provided to and used in the performance of our engineering services is correct and complete.

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.

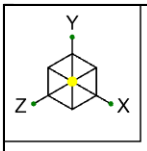
Unless explicitly agreed by both the client and , all services will be performed in accordance with the current revision of ANSI/TIA-222.

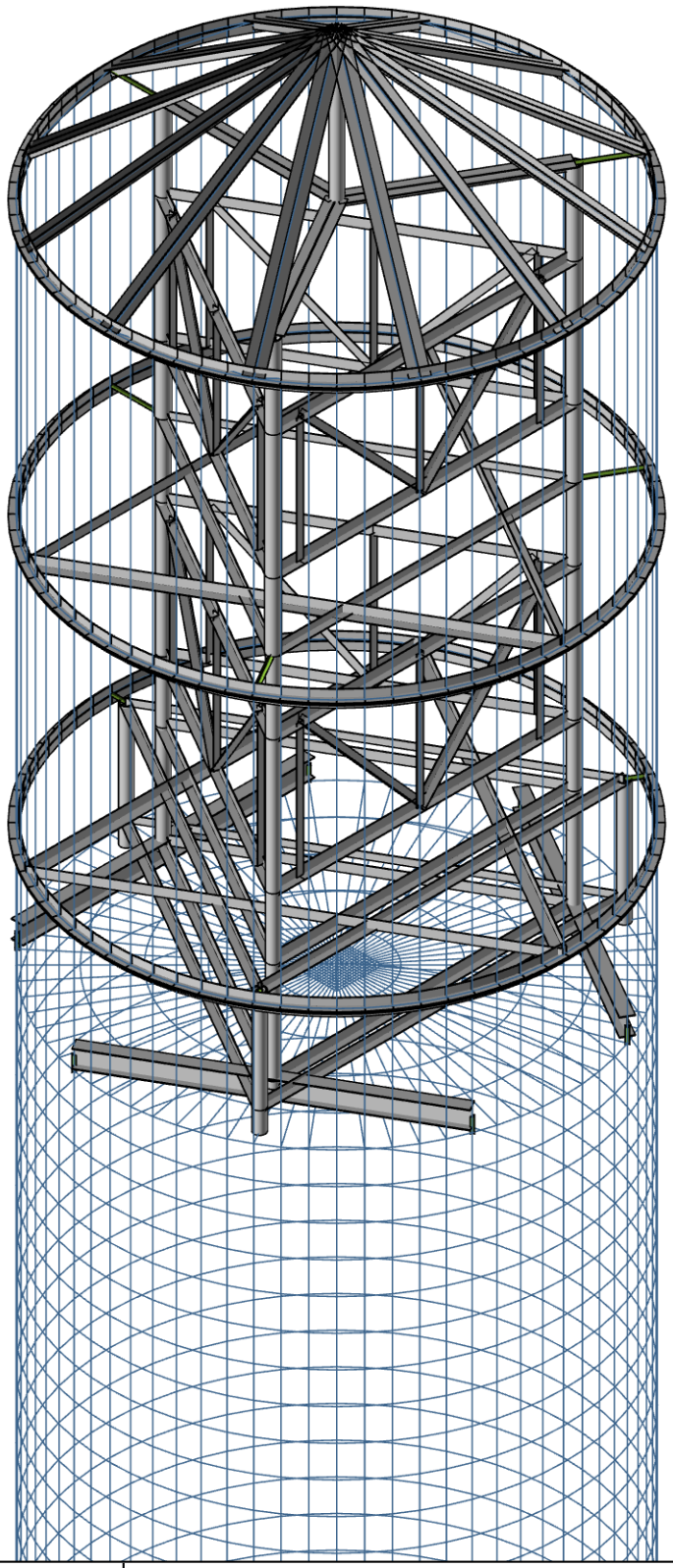
All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. is not responsible for the conclusions, opinions and recommendations made by others based on the information supplied herein.



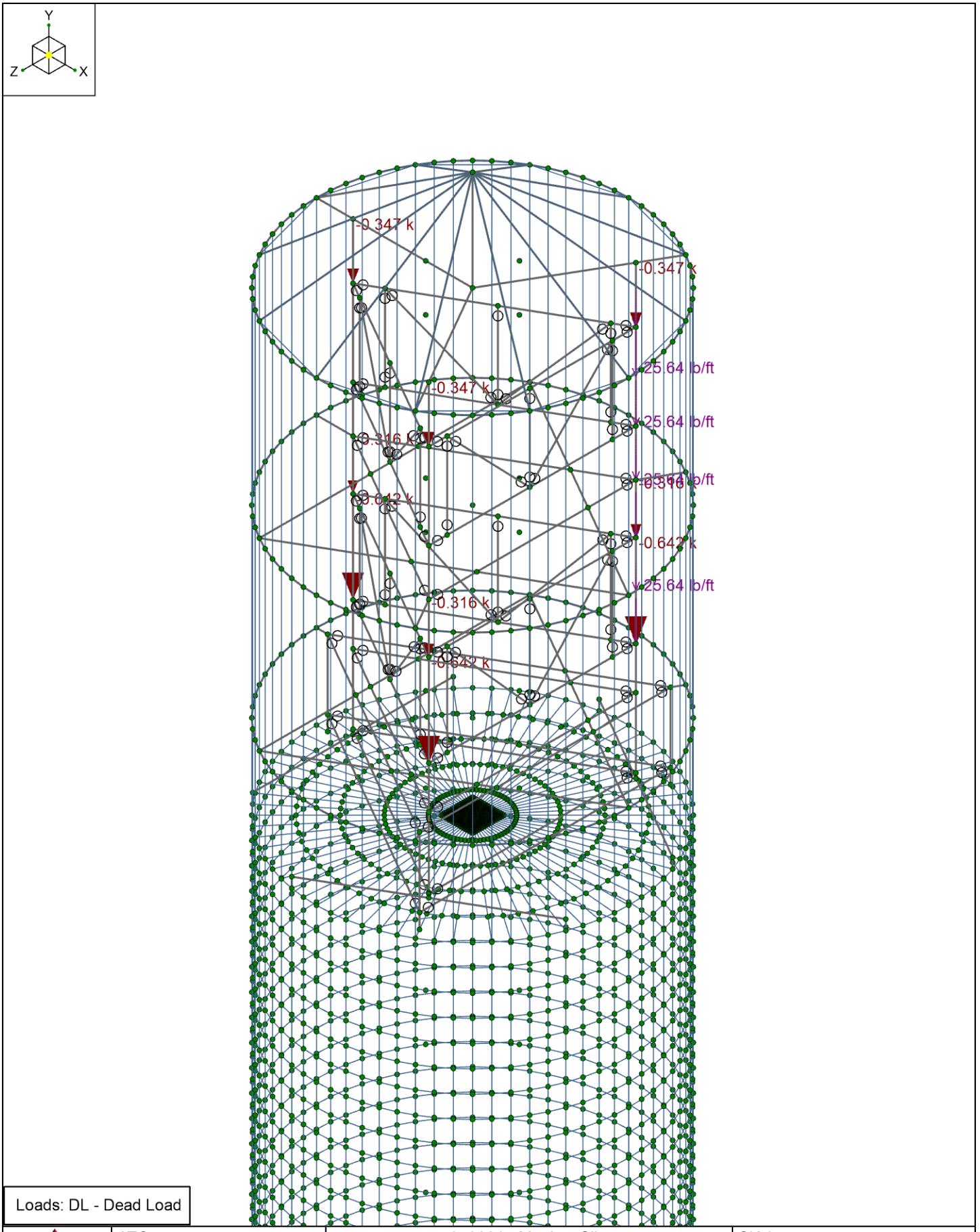


AMERICAN TOWER CORPORATION	ATC	370624 - Mankes Silo	SK-1
	MER		Dec 07, 2023 at 09:46 AM
	14519479_C3_03	Rendered	Mankes Silo, 370624.r3d





AMERICAN TOWER CORPORATION	ATC	370624 - Mankes Silo	SK-2
	MER		Dec 07, 2023 at 09:48 AM
	14519479_C3_03	Rendered	Mankes Silo, 370624.r3d



Loads: DL - Dead Load

AMERICAN TOWER CORPORATION	ATC	370624 - Mankes Silo	SK-3
	MER		Dec 07, 2023 at 09:49 AM
	14519479_C3_03	DL	Mankes Silo, 370624.r3d

Model Settings

Number of Reported Sections	20
Number of Internal Sections	200
Member Area Load Mesh Size (in^2)	144
Consider Shear Deformation	Yes
Consider Torsional Warping	Yes
Approximate Mesh Size (in)	12
Transfer Forces Between Intersecting Wood Walls	Yes
Increase Wood Wall Nailing Capacity for Wind Loads	Yes
Include P-Delta for Walls	Yes
Optimize Masonry and Wood Walls	Yes
Maximum Number of Iterations	3
Single	No
Multiple (Optimum)	Yes
Maximum	No

Global Axis corresponding to vertical direction	Y
Convert Existing Data	Yes
Default Global Plane for z-axis	XZ
Plate Local Axis Orientation	Nodal

Hot Rolled Steel	AISC 15th (360-16): LRFD
Stiffness Adjustment	No
Notional Annex	None
Connections	AISC 15th (360-16): LRFD
Cold Formed Steel	AISI S100-16: LRFD
Stiffness Adjustment	Yes (Iterative)
Wood	AWC NDS-18 / SDPWS-15 ASD
Temperature	< 100F
Concrete	ACI 318-14
Masonry	TMS 402-16: Strength
Aluminum	AA ADM1-15: LRFD
Structure Type	Building
Stiffness Adjustment	Yes (Iterative)
Stainless	AISC 14th (360-10): LRFD
Stiffness Adjustment	Yes (Iterative)

Analysis Methodology	Exact Integration Method
Parme Beta Factor	0.65

Compression Stress Block	Rectangular Stress Block
Analyze using Cracked Sections	Yes
Leave room for horizontal rebar splices (2*d bar spacing)	Yes
List forces which were ignored for design in the Detail Report	Yes

Column Min Steel	1
Column Max Steel	8
Rebar Material Spec	ASTM A615
Warn if beam-column framing arrangement is not understood	No
Number of Shear Regions	4
Region 2 & 3 Spacing Increase Increment (in)	4

Code	ASCE 7-16

Model Settings (Continued)

Risk Category	I or II
Drift Cat	Other
Base Elevation (ft)	
Include the weight of the structure in base shear calcs	Yes
S_1 (g)	0.055
SD_1 (g)	0.087
SD_S (g)	0.212
T_L (sec)	6
T Z (sec)	0.1
T X (sec)	0.1
C_tZ	0.02
C_tX	0.02
C_tExp. Z	0.75
C_tExp. X	0.75
R Z	3
R X	3
Ω_0Z	1
Ω_0X	1
C_dZ	4
C_dX	4
ρ Z	1
ρ X	1

Spectra Scaling Factor

Seismic Code:	ASCE 7-16				
C_tZ:	0.02	T Z (sec):	0.1	R Z:	3
C_tX:	0.02	T X (sec):	0.1	R X:	3
C_tExp. Z:	0.75	C_tExp. X:	0.75	Seismic Weight LC:	1 DL
Risk Category:	I or II	T_L(sec):	6		
SD_1(g):	0.087	SD_s(g):	0.212	S_1(g):	0.055

T Z Used (sec):	0.1	T Z Method A:	0.5249	T Z Upper Limit:	0.8924
T X Used (sec):	0.1	T X Method A:	0.5249	T X Upper Limit:	0.8924
Importance Fac.:	1	Design Cat:	B		
V Z (k):	21.1462	Gov. Eqn.:	ASCE Eqn 12.8-2		
V X (k):	21.1462	Gov. Eqn.:	ASCE Eqn 12.8-2		

Weight (k):	299.2386

Static Base Shear Z (k):	21.1462	Unscaled Base Shear Z (k):	31.7733	Multiplier Z:	1
Static Base Shear X (k):	21.1462	Unscaled Base Shear X (k):	31.7694	Multiplier X:	1

Scaling Factor Z:	0.6655	Scaling Factor X:	0.6656		

Dynamic Data

Number Of Modes	100
Load Combination Number	DL
Acceleration of Gravity	32.2 (ft/sec^2)
Convergence Tolerance	0.0001

Node Boundary Conditions

	Node Label	X [k/in]	Y [k/in]	Z [k/in]
1	N1	Reaction	Reaction	Reaction
2	N2	Reaction	Reaction	Reaction
3	N3	Reaction	Reaction	Reaction
4	N4	Reaction	Reaction	Reaction
5	N5	Reaction	Reaction	Reaction
6	N6	Reaction	Reaction	Reaction
7	N7	Reaction	Reaction	Reaction
8	N8	Reaction	Reaction	Reaction
9	N9	Reaction	Reaction	Reaction
10	N10	Reaction	Reaction	Reaction
11	N11	Reaction	Reaction	Reaction
12	N12	Reaction	Reaction	Reaction
13	N13	Reaction	Reaction	Reaction
14	N14	Reaction	Reaction	Reaction
15	N15	Reaction	Reaction	Reaction
16	N16	Reaction	Reaction	Reaction
17	N17	Reaction	Reaction	Reaction
18	N18	Reaction	Reaction	Reaction
19	N19	Reaction	Reaction	Reaction
20	N20	Reaction	Reaction	Reaction
21	N21	Reaction	Reaction	Reaction
22	N22	Reaction	Reaction	Reaction
23	N23	Reaction	Reaction	Reaction
24	N24	Reaction	Reaction	Reaction
25	N25	Reaction	Reaction	Reaction
26	N26	Reaction	Reaction	Reaction
27	N27	Reaction	Reaction	Reaction
28	N28	Reaction	Reaction	Reaction
29	N29	Reaction	Reaction	Reaction
30	N30	Reaction	Reaction	Reaction
31	N31	Reaction	Reaction	Reaction
32	N32	Reaction	Reaction	Reaction
33	N33	Reaction	Reaction	Reaction
34	N34	Reaction	Reaction	Reaction
35	N35	Reaction	Reaction	Reaction
36	N36	Reaction	Reaction	Reaction
37	N37	Reaction	Reaction	Reaction
38	N38	Reaction	Reaction	Reaction
39	N39	Reaction	Reaction	Reaction
40	N40	Reaction	Reaction	Reaction
41	N41	Reaction	Reaction	Reaction
42	N42	Reaction	Reaction	Reaction
43	N43	Reaction	Reaction	Reaction
44	N44	Reaction	Reaction	Reaction
45	N45	Reaction	Reaction	Reaction
46	N46	Reaction	Reaction	Reaction
47	N47	Reaction	Reaction	Reaction
48	N48	Reaction	Reaction	Reaction
49	N49	Reaction	Reaction	Reaction
50	N50	Reaction	Reaction	Reaction
51	N51	Reaction	Reaction	Reaction
52	N52	Reaction	Reaction	Reaction
53	N53	Reaction	Reaction	Reaction
54	N54	Reaction	Reaction	Reaction
55	N55	Reaction	Reaction	Reaction

Node Boundary Conditions (Continued)

	Node Label	X [k/in]	Y [k/in]	Z [k/in]
56	N56	Reaction	Reaction	Reaction
57	N57	Reaction	Reaction	Reaction
58	N58	Reaction	Reaction	Reaction
59	N59	Reaction	Reaction	Reaction
60	N60	Reaction	Reaction	Reaction
61	N61	Reaction	Reaction	Reaction
62	N62	Reaction	Reaction	Reaction
63	N63	Reaction	Reaction	Reaction
64	N64	Reaction	Reaction	Reaction
65	N65	Reaction	Reaction	Reaction
66	N66	Reaction	Reaction	Reaction
67	N67	Reaction	Reaction	Reaction
68	N68	Reaction	Reaction	Reaction
69	N69	Reaction	Reaction	Reaction
70	N70	Reaction	Reaction	Reaction
71	N71	Reaction	Reaction	Reaction
72	N72	Reaction	Reaction	Reaction

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm. Coeff. [1e^{5}°F^{-1}]	Density [k/ft^{3}]	Yield [ksi]	Ry	Fu [ksi]	Rt
1	A36 Gr.36	29000	11154	0.3	0.65	0.49	36	1.5	58	1.2
2	A572 Gr.50	29000	11154	0.3	0.65	0.49	50	1.1	65	1.1
3	A992	29000	11154	0.3	0.65	0.49	50	1.1	65	1.1
4	A500 Gr.B RND	29000	11154	0.3	0.65	0.49	42	1.4	58	1.3
5	A500 Gr.B Rect	29000	11154	0.3	0.65	0.49	46	1.4	58	1.3
6	A53 Gr.B	29000	11154	0.3	0.65	0.49	35	1.6	60	1.2
7	Link	1e+6		0.3	0.65	0	36	1.5	58	1.2

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rule	Area [in^{2}]	Iyy [in^{4}]	Izz [in^{4}]	J [in^{4}]
1	H1	W8X18	None	None	A992	Typical	5.26	7.97	61.9	0.172
2	H2	L3X3X4	None	None	A36 Gr.36	Typical	1.44	1.23	1.23	0.0313
3	H3	L4X3X4	None	None	A36 Gr.36	Typical	1.69	1.33	2.75	0.0386
4	H4	LL3.5X3.5X5X3	None	None	A36 Gr.36	Typical	4.2	10.6	4.88	0.1462
5	H5	L4X4X4	None	None	A36 Gr.36	Typical	1.93	3	3	0.0438
6	H6	LL3.5X3.5X5X3	None	None	A36 Gr.36	Typical	4.2	10.6	4.88	0.1462
7	Column1	HSS5X0.500	None	None	A53 Gr.B	Typical	6.62	17.2	17.2	34.4
8	Column2	HSS5.563X0.375	None	None	A500 Gr.B Rect	Typical	5.72	19.5	19.5	39
9	V1	L3X3X4	None	None	A36 Gr.36	Typical	1.44	1.23	1.23	0.0313

Node Loads and Enforced Displacements (BLC 14 : DA Weight)

	Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s^{2}/ft, k*s^{2}*ft)]
1	N1641	L	Y	-0.347
2	N1642	L	Y	-0.347
3	N1643	L	Y	-0.347
4	N1469	L	Y	-0.316
5	N1470	L	Y	-0.316
6	N1471	L	Y	-0.316
7	N1466	L	Y	-0.642
8	N1467	L	Y	-0.642
9	N1468	L	Y	-0.642

Member Distributed Loads (BLC 15 : LA Weight)

	Member Label	Direction	Start Magnitude [lb/ft, F, psf, k-ft/ft]	End Magnitude [lb/ft, F, psf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M27	Y	-25.64	-25.64	0	%100
2	M28	Y	-25.64	-25.64	0	%100
3	M241	Y	-25.64	-25.64	0	%100
4	M242	Y	-25.64	-25.64	0	%100

Basic Load Cases

	BLC Description	Category	Y Gravity	Nodal	Distributed	Surface(Plate/Wall)
1	Dead	DL	-1			
2	WLX	WLZ				1554
3	WLZ	WLX				1580
14	DA Weight	DL		9		
15	LA Weight	DL			4	

Load Combinations

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
1	DL	Yes	Y	DL	1										
2	IBC 21/ASCE Strength 1	Yes	Y	DL	1.4										
3	IBC 21/ASCE Strength 4 (a) (a)	Yes	Y	DL	1.2	WLX	1	LL	0.5	LLS	1				
4	IBC 21/ASCE Strength 4 (a) (b)	Yes	Y	DL	1.2	WLZ	1	LL	0.5	LLS	1				
5	IBC 21/ASCE Strength 4 (a) (c)	Yes	Y	DL	1.2	WLX	-1	LL	0.5	LLS	1				
6	IBC 21/ASCE Strength 4 (a) (d)	Yes	Y	DL	1.2	WLZ	-1	LL	0.5	LLS	1				
7	IBC 21/ASCE Strength 5 (a)	Yes	Y	DL	0.9	WLX	1								
8	IBC 21/ASCE Strength 5 (b)	Yes	Y	DL	0.9	WLZ	1								
9	IBC 21/ASCE Strength 5 (c)	Yes	Y	DL	0.9	WLX	-1								
10	IBC 21/ASCE Strength 5 (d)	Yes	Y	DL	0.9	WLZ	-1								
11	IBC 21/ASCE Strength 6 (a)	Yes	Y	DL	1.2	Sds*DL	0.2	SX*SF	1	SZ*SF	0.3	LL	0.5	LLS	1
12	IBC 21/ASCE Strength 6 (b)	Yes	Y	DL	1.2	Sds*DL	0.2	SZ*SF	1	SX*SF	0.3	LL	0.5	LLS	1
13	IBC 21/ASCE Strength 6 (c)	Yes	Y	DL	1.2	Sds*DL	0.2	SX*SF	1	SZ*SF	-0.3	LL	0.5	LLS	1
14	IBC 21/ASCE Strength 6 (d)	Yes	Y	DL	1.2	Sds*DL	0.2	SZ*SF	1	SX*SF	-0.3	LL	0.5	LLS	1
15	IBC 21/ASCE Strength 6 (e)	Yes	Y	DL	1.2	Sds*DL	0.2	SX*SF	-1	SZ*SF	-0.3	LL	0.5	LLS	1
16	IBC 21/ASCE Strength 6 (f)	Yes	Y	DL	1.2	Sds*DL	0.2	SZ*SF	-1	SX*SF	-0.3	LL	0.5	LLS	1
17	IBC 21/ASCE Strength 6 (g)	Yes	Y	DL	1.2	Sds*DL	0.2	SX*SF	-1	SZ*SF	0.3	LL	0.5	LLS	1
18	IBC 21/ASCE Strength 6 (h)	Yes	Y	DL	1.2	Sds*DL	0.2	SZ*SF	-1	SX*SF	0.3	LL	0.5	LLS	1
19	IBC 21/ASCE Strength 7 (a)	Yes	Y	DL	0.9	Sds*DL	-0.2	SX*SF	1	SZ*SF	0.3				
20	IBC 21/ASCE Strength 7 (b)	Yes	Y	DL	0.9	Sds*DL	-0.2	SZ*SF	1	SX*SF	0.3				
21	IBC 21/ASCE Strength 7 (c)	Yes	Y	DL	0.9	Sds*DL	-0.2	SX*SF	1	SZ*SF	-0.3				
22	IBC 21/ASCE Strength 7 (d)	Yes	Y	DL	0.9	Sds*DL	-0.2	SZ*SF	1	SX*SF	-0.3				
23	IBC 21/ASCE Strength 7 (e)	Yes	Y	DL	0.9	Sds*DL	-0.2	SX*SF	-1	SZ*SF	-0.3				
24	IBC 21/ASCE Strength 7 (f)	Yes	Y	DL	0.9	Sds*DL	-0.2	SZ*SF	-1	SX*SF	-0.3				
25	IBC 21/ASCE Strength 7 (g)	Yes	Y	DL	0.9	Sds*DL	-0.2	SX*SF	-1	SZ*SF	0.3				
26	IBC 21/ASCE Strength 7 (h)	Yes	Y	DL	0.9	Sds*DL	-0.2	SZ*SF	-1	SX*SF	0.3				

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

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y-y [k-ft]	phi*Mn z-z [k-ft]	Cb	Eqn
0	M7	W8X18	0.0238	5.4637	15	0.0085	0	y	11	103.2396	236.7	17.475	63.75	2.0615	H1-1b
1	M8	W8X18	0.0243	0	15	0.0086	5.4637	y	15	103.2396	236.7	17.475	63.75	2.0631	H1-1b
2	M9	W8X18	0.0252	5.4637	16	0.0091	0	y	12	103.2396	236.7	17.475	63.75	2.0724	H1-1b
3	M10	W8X18	0.0258	0	16	0.009	5.4637	y	16	103.2396	236.7	17.475	63.75	2.0753	H1-1b
4	M11	W8X18	0.0235	5.4637	16	0.0084	0	y	12	103.2396	236.7	17.475	63.75	2.0623	H1-1b
5	M12	W8X18	0.0239	0	16	0.0086	5.4637	y	16	103.2396	236.7	17.475	63.75	2.0627	H1-1b
6	M13	HSS5X0.500	0.0001	0.8021	2	0	0.8021		15	208.1498	208.53	25.2	25.2	1	H1-1b*

Envelope AISC 15TH (360-16): LRFD Member Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y-y [k-ft]	phi*Mn z-z [k-ft]	Cb	Eqn
7	M14	HSS5X0.500	0.0083	0.2546	18	0.0029	0.2546		16	208.4917	208.53	25.2	25.2	1	H1-1b
8	M15	HSS5X0.500	0.0001	0.8021	2	0	0.8021		11	208.1498	208.53	25.2	25.2	1	H1-1b*
9	M16	HSS5X0.500	0.0088	0.2546	11	0.003	0.2546		11	208.4917	208.53	25.2	25.2	1	H1-1b
10	M17	HSS5X0.500	0.0001	0.8021	2	0	0.8021		16	208.1498	208.53	25.2	25.2	1	H1-1b*
11	M18	HSS5X0.500	0.0084	0.1903	11	0.0028	0.1903		11	208.4917	208.53	25.2	25.2	1	H1-1b
12	M19	HSS5X0.500	0.0147	3.7917	12	0.0013	3.7917		12	200.1968	208.53	25.2	25.2	1	H1-1b
13	M20	HSS5X0.500	0.0122	3.7917	12	0.0026	3.7917		11	200.1968	208.53	25.2	25.2	1	H1-1b
14	M21	HSS5X0.500	0.0146	2.3125	16	0.006	2.3125		15	205.3906	208.53	25.2	25.2	1	H1-1b
15	M22	HSS5X0.500	0.0168	0	16	0.0026	5		11	194.2539	208.53	25.2	25.2	1	H1-1b
16	M23	HSS5X0.500	0.042	2.7188	16	0.008	2.7188		16	204.2031	208.53	25.2	25.2	1	H1-1b
17	M24	HSS5X0.500	0.013	3.7917	16	0.0016	3.7917		16	200.1968	208.53	25.2	25.2	1	H1-1b
18	M25	HSS5X0.500	0.0127	3.7917	12	0.0028	3.7917		15	200.1968	208.53	25.2	25.2	1	H1-1b
19	M26	HSS5X0.500	0.0151	2.3125	15	0.0064	2.3125		11	205.3906	208.53	25.2	25.2	1	H1-1b
20	M27	HSS5X0.500	0.0171	0	15	0.0029	5		15	194.2539	208.53	25.2	25.2	1	H1-1b
21	M28	HSS5X0.500	0.0415	2.7188	14	0.0088	2.7188		11	204.2031	208.53	25.2	25.2	1	H1-1b
22	M29	HSS5X0.500	0.0123	3.7917	11	0.0023	3.7917		16	200.1968	208.53	25.2	25.2	1	H1-1b
23	M30	HSS5X0.500	0.0155	2.3125	11	0.006	2.3125		12	205.3906	208.53	25.2	25.2	1	H1-1b
24	M31	HSS5X0.500	0.0167	0	12	0.0026	5		16	194.2539	208.53	25.2	25.2	1	H1-1b
25	M32	HSS5X0.500	0.0411	2.7188	11	0.0078	2.7188		15	204.2031	208.53	25.2	25.2	1	H1-1b
26	M33	HSS5X0.500	0.0139	3.7917	15	0.0014	3.7917		11	200.1968	208.53	25.2	25.2	1	H1-1b
27	M34	L3X3X4	0.1216	6.835	2	0.0032	13.67	y	2	4.1373	46.656	1.6881	2.3539	1.1364	H2-1
28	M35	L3X3X4	0.1185	6.835	2	0.0032	13.67	y	2	9.7924	46.656	1.6881	2.3539	1.1364	H2-1
29	M36	L3X3X4	0.1185	6.835	2	0.0032	13.67	y	2	9.7924	46.656	1.6881	2.3539	1.1364	H2-1
30	M37	L3X3X4	0.098	3.5254	20	0.0034	13.67	y	15	4.1373	46.656	1.6881	2.4678	1.2497	H2-1
31	M38	L3X3X4	0.0729	3.2376	19	0.0035	13.67	y	16	5.1077	46.656	1.6881	2.4638	1.2455	H2-1
32	M39	L3X3X4	0.098	3.6693	19	0.0035	0	y	11	4.1373	46.656	1.6881	2.4801	1.2629	H2-1
33	M40	L4X3X4	0.0706	5.6391	2	0.0023	11.2782	y	2	10.5075	54.756	1.795	3.1406	1.1364	H2-1
34	M41	L4X3X4	0.0707	5.6391	2	0.0023	11.2782	y	2	8.5111	54.756	1.795	3.1406	1.1364	H2-1
35	M42	L4X3X4	0.0707	5.639	2	0.0023	11.278	y	2	8.5114	54.756	1.795	3.1406	1.1364	H2-1
36	M43	L4X3X4	0.0902	8.6663	11	0.0062	0	y	12	8.5114	54.756	1.795	3.1152	1.1185	H2-1
37	M44	L4X3X4	0.0933	8.6663	12	0.0061	11.278	y	15	8.5114	54.756	1.795	3.1166	1.1194	H2-1
38	M45	L4X3X4	0.0883	8.6663	12	0.0061	11.278	y	16	8.5114	54.756	1.795	3.1188	1.121	H2-1
39	M46	L4X3X4	0.0713	1	12	0.008	0	y	12	49.9861	54.756	1.795	4.8054	1.5	H2-1
40	M47	L4X3X4	0.072	1	13	0.0081	0	y	11	49.9861	54.756	1.795	4.8054	1.5	H2-1
41	M48	L4X3X4	0.0709	1	12	0.0079	0	y	12	49.9861	54.756	1.795	4.8054	1.5	H2-1
42	M49	L4X3X4	0.061	1	12	0.0077	0	y	12	49.9861	54.756	1.795	4.8054	1.5	H2-1
43	M50	L4X3X4	0.0622	1	13	0.0079	0	y	11	49.9861	54.756	1.795	4.8054	1.5	H2-1
44	M51	L4X3X4	0.0604	1	12	0.0077	0	y	12	49.9861	54.756	1.795	4.8054	1.5	H2-1
45	M52	L4X3X4	0.2103	4.5	16	0.0065	4.5	y	16	37.163	54.756	1.8437	4.1298	1.1707	H2-1
46	M53	L4X3X4	0.2109	0	16	0.0062	0	y	12	37.163	54.756	1.8437	4.1228	1.1633	H2-1
47	M54	L4X3X4	0.0725	0	12	0.0068	1.278	y	16	49.5064	54.756	1.795	4.8054	1.5	H2-1
48	M55	L4X3X4	0.2087	4.5	15	0.0065	4.5	y	15	37.163	54.756	1.8437	4.1207	1.161	H2-1
49	M56	L4X3X4	0.209	0	15	0.0062	0	y	11	37.163	54.756	1.8437	4.1174	1.1576	H2-1
50	M57	L4X3X4	0.072	0	13	0.0067	1.278	y	15	49.5064	54.756	1.795	4.8054	1.5	H2-1
51	M58	L4X3X4	0.2111	4.5	16	0.0065	4.5	y	16	37.163	54.756	1.8437	4.136	1.1774	H2-1
52	M59	L4X3X4	0.2116	0	16	0.0062	0	y	12	37.163	54.756	1.8437	4.116	1.1561	H2-1
53	M60	L4X3X4	0.0732	0	12	0.0069	1.278	y	16	49.5064	54.756	1.795	4.8054	1.5	H2-1
54	M61	L4X3X4	0.0993	4.5	16	0.0044	4.5	y	16	37.163	54.756	1.8437	4.0356	1.076	H2-1
55	M62	L4X3X4	0.0993	0	16	0.0041	0	y	12	37.163	54.756	1.8437	4.0181	1.0597	H2-1
56	M63	L4X3X4	0.0603	0	12	0.0061	1.278	y	16	49.5064	54.756	1.795	4.8054	1.5	H2-1
57	M64	L4X3X4	0.0988	4.5	15	0.0045	4.5	y	15	37.163	54.756	1.8437	4.0464	1.0863	H2-1
58	M65	L4X3X4	0.0989	0	15	0.0041	0	y	11	37.163	54.756	1.8437	4.0195	1.0611	H2-1
59	M66	L4X3X4	0.0606	0	13	0.006	1.278	y	15	49.5064	54.756	1.795	4.8054	1.5	H2-1
60	M67	L4X3X4	0.0995	4.5	16	0.0044	4.5	y	16	37.163	54.756	1.8437	4.0363	1.0767	H2-1
61	M68	L4X3X4	0.0997	0	16	0.0042	0	y	12	37.163	54.756	1.8437	4.0179	1.0596	H2-1

Envelope AISC 15TH (360-16): LRFD Member Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y-y [k-ft]	phi*Mn z-z [k-ft]	Cb	Eqn
62	M69	L4X3X4	0.0616	0	12	0.0061	1.278	y	16	49.5064	54.756	1.795	4.8054	1.5	H2-1
63	M70	L3X3X4	0.0056	0	12	0.005	5	y	16	26.8164	46.656	1.6881	3.2256	1	H2-1
64	M71	L3X3X4	0.0069	0	12	0.0002	5	y	16	26.8164	46.656	1.6881	3.2256	1	H2-1
65	M72	L3X3X4	0.0039	0	12	0.0048	5	y	12	26.8164	46.656	1.6881	3.2256	1	H2-1
66	M73	L3X3X4	0.0057	0	11	0.0049	5	y	15	26.8164	46.656	1.6881	3.2256	1	H2-1
67	M74	L3X3X4	0.0069	0	11	0.0002	5	y	15	26.8164	46.656	1.6881	3.2256	1	H2-1
68	M75	L3X3X4	0.004	0	11	0.0048	5	y	11	26.8164	46.656	1.6881	3.2256	1	H2-1
69	M76	L3X3X4	0.0055	0	12	0.005	5	y	16	26.8164	46.656	1.6881	3.2256	1	H2-1
70	M77	L3X3X4	0.0069	0	12	0.0002	5	y	16	26.8164	46.656	1.6881	3.2256	1	H2-1
71	M78	L3X3X4	0.0041	0	12	0.0048	5	y	12	26.8164	46.656	1.6881	3.2256	1	H2-1
72	M79	L3X3X4	0.0223	3.328	16	0.0023	6.7268	y	16	17.0857	46.656	1.6881	3.0863	1.1364	H2-1
73	M80	L3X3X4	0.0201	3.3988	2	0.0022	6.7268	y	12	17.0857	46.656	1.6881	3.0863	1.1364	H2-1
74	M81	L3X3X4	0.0225	3.328	15	0.0023	6.7268	y	15	17.0857	46.656	1.6881	3.0863	1.1364	H2-1
75	M82	L3X3X4	0.02	3.3988	2	0.0022	6.7268	y	11	17.0857	46.656	1.6881	3.0863	1.1364	H2-1
76	M83	L3X3X4	0.0222	3.328	16	0.0022	6.7268	y	16	17.0857	46.656	1.6881	3.0863	1.1364	H2-1
77	M84	L3X3X4	0.0202	3.3988	2	0.0023	6.7268	y	12	17.0857	46.656	1.6881	3.0863	1.1364	H2-1
78	M85	L4X4X4	0.1044	8.6785	12	0.0134	9.4534	z	12	8.5644	62.532	3.1376	4.7106	1.5	H2-1
79	M86	L4X4X4	0.1035	6.0439	11	0.0137	9.4534	z	12	8.5644	62.532	3.1376	4.7106	1.5	H2-1
80	M87	L4X4X4	0.1022	8.6785	11	0.0134	9.4534	z	11	8.5644	62.532	3.1376	4.7106	1.5	H2-1
81	M88	LL3.5X3.5X5X3	0.019	0	7	0.0024	0.7415	z	16	24.1568	136.08	12.4182	7.7775	1	H1-1b
82	M89	LL3.5X3.5X5X3	0.0166	0.7415	7	0.0009	0	z	12	24.1568	136.08	12.4182	7.7775	1	H1-1b*
83	M90	LL3.5X3.5X5X3	0.0154	0.7415	7	0.001	0.7415	z	16	24.1568	136.08	12.4182	7.7775	1	H1-1b*
84	M91	LL3.5X3.5X5X3	0.0144	0.7415	16	0.0011	0	z	5	24.1568	136.08	12.4182	7.9402	1	H1-1b
85	M92	LL3.5X3.5X5X3	0.0185	0.7415	16	0.0013	0	z	11	24.1568	136.08	12.4182	7.9402	1	H1-1b
86	M93	LL3.5X3.5X5X3	0.0219	0.7415	16	0.0025	0.7415	z	15	24.1568	136.08	12.4182	7.9402	1	H1-1b
87	M94	LL3.5X3.5X5X3	0.0223	0	11	0.0029	0.7415	z	15	24.1568	136.08	12.4182	7.7775	1	H1-1b
88	M95	LL3.5X3.5X5X3	0.0172	0	15	0.0013	0.7415	z	16	24.1568	136.08	12.4182	7.9402	1	H1-1b
89	M96	LL3.5X3.5X5X3	0.0149	0	15	0.001	0.7415	z	16	24.1568	136.08	12.4182	7.9402	1	H1-1b
90	M97	LL3.5X3.5X5X3	0.0118	0	15	0.001	0	z	12	24.1568	136.08	12.4182	7.9402	1	H1-1b
91	M98	LL3.5X3.5X5X3	0.0106	0.7415	8	0.0008	0.7415	z	15	24.1568	136.08	12.4182	7.7775	1	H1-1b*
92	M99	LL3.5X3.5X5X3	0.0121	0.7415	8	0.0024	0	z	11	24.1568	136.08	12.4182	7.7775	1	H1-1b*
93	M100	LL3.5X3.5X5X3	0.0133	0.7415	8	0.0018	0.7415	z	6	24.1568	136.08	12.4182	7.7775	1	H1-1b*
94	M101	LL3.5X3.5X5X3	0.0141	0.7415	6	0.0004	0.7415	z	15	24.1568	136.08	12.4182	7.9402	1	H1-1b
95	M102	LL3.5X3.5X5X3	0.0148	0	6	0.0005	0	z	6	24.1568	136.08	12.4182	7.9402	1	H1-1b
96	M103	LL3.5X3.5X5X3	0.0142	0.7415	8	0.0008	0	z	6	24.1568	136.08	12.4182	7.7775	1	H1-1b*
97	M104	LL3.5X3.5X5X3	0.0145	0.7415	8	0.0007	0.7415	z	4	24.1568	136.08	12.4182	7.9402	1	H1-1b*
98	M105	LL3.5X3.5X5X3	0.0192	0.7415	6	0.0032	0	z	6	24.1568	136.08	12.4182	7.7775	1	H1-1b
99	M106	LL3.5X3.5X5X3	0.019	0	6	0.0032	0.7415	z	6	24.1568	136.08	12.4182	7.7775	1	H1-1b
100	M107	LL3.5X3.5X5X3	0.0144	0.7415	8	0.0007	0	z	4	24.1568	136.08	12.4182	7.9402	1	H1-1b*
101	M108	LL3.5X3.5X5X3	0.014	0.7415	8	0.0008	0.7415	z	6	24.1568	136.08	12.4182	7.7775	1	H1-1b*
102	M109	LL3.5X3.5X5X3	0.0146	0.7415	6	0.0005	0.7415	z	6	24.1568	136.08	12.4182	7.9402	1	H1-1b
103	M110	LL3.5X3.5X5X3	0.0138	0	6	0.0004	0	z	11	24.1568	136.08	12.4182	7.9402	1	H1-1b
104	M111	LL3.5X3.5X5X3	0.0131	0.7415	8	0.0019	0	z	6	24.1568	136.08	12.4182	7.7775	1	H1-1b*
105	M112	LL3.5X3.5X5X3	0.0118	0.7415	8	0.0025	0.7415	z	15	24.1568	136.08	12.4182	7.7775	1	H1-1b*
106	M113	LL3.5X3.5X5X3	0.0103	0.7415	8	0.0008	0	z	11	24.1568	136.08	12.4182	7.7775	1	H1-1b*
107	M114	LL3.5X3.5X5X3	0.0121	0.7415	15	0.0011	0.7415	z	16	24.1568	136.08	12.4182	7.9402	1	H1-1b
108	M115	LL3.5X3.5X5X3	0.0156	0.7415	15	0.0009	0.7415	z	16	24.1568	136.08	12.4182	7.9402	1	H1-1b
109	M116	LL3.5X3.5X5X3	0.0185	0.7415	15	0.0013	0	z	12	24.1568	136.08	12.4182	7.9402	1	H1-1b
110	M117	LL3.5X3.5X5X3	0.0234	0.7415	15	0.0031	0.7415	z	15	24.1568	136.08	12.4182	7.9402	1	H1-1b
111	M118	LL3.5X3.5X5X3	0.0218	0	16	0.0028	0	z	11	24.1568	136.08	12.4182	7.9402	1	H1-1b
112	M119	LL3.5X3.5X5X3	0.0185	0	16	0.0014	0.7415	z	15	24.1568	136.08	12.4182	7.9402	1	H1-1b
113	M120	LL3.5X3.5X5X3	0.0145	0	16	0.0009	0	z	11	24.1568	136.08	12.4182	7.9402	1	H1-1b
114	M121	LL3.5X3.5X5X3	0.0109	0	15	0.0011	0	z	12	24.1568	136.08	12.4182	7.9402	1	H1-1b
115	M122	LL3.5X3.5X5X3	0.009	0	15	0.0009	0.7415	z	16	24.1568	136.08	12.4182	7.9402	1	H1-1b
116	M123	LL3.5X3.5X5X3	0.0104	0.7415	20	0.0026	0	z	12	24.1568	136.08	12.4182	7.7775	1	H1-1b

Envelope AISC 15TH (360-16): LRFD Member Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y-y [k-ft]	phi*Mn z-z [k-ft]	Cb	Eqn
117	M124	LL3.5X3.5X5X3	0.0109	0	20	0.0019	0.7415	z	16	24.1568	136.08	12.4182	7.7775	1	H1-1b
118	M125	LL3.5X3.5X5X3	0.0108	0.7415	16	0.0005	0.7415	z	15	24.1568	136.08	12.4182	7.9402	1	H1-1b
119	M126	LL3.5X3.5X5X3	0.0104	0	16	0.0005	0	z	11	24.1568	136.08	12.4182	7.9402	1	H1-1b
120	M127	LL3.5X3.5X5X3	0.0083	0	16	0.0006	0	z	4	24.1568	136.08	12.4182	7.9402	1	H1-1b
121	M128	LL3.5X3.5X5X3	0.0064	0.7415	4	0.0007	0.7415	z	16	24.1568	136.08	12.4182	7.7775	1	H1-1b
122	M129	LL3.5X3.5X5X3	0.0096	0	4	0.0032	0	z	11	24.1568	136.08	12.4182	7.7775	1	H1-1b
123	M130	LL3.5X3.5X5X3	0.0094	0	11	0.0033	0.7415	z	16	24.1568	136.08	12.4182	7.7775	1	H1-1b
124	M131	LL3.5X3.5X5X3	0.0059	0.7415	15	0.0007	0	z	11	24.1568	136.08	12.4182	7.9402	1	H1-1b
125	M132	LL3.5X3.5X5X3	0.0081	0.7415	16	0.0006	0.7415	z	15	24.1568	136.08	12.4182	7.9402	1	H1-1b
126	M133	LL3.5X3.5X5X3	0.0097	0.7415	15	0.0005	0.7415	z	15	24.1568	136.08	12.4182	7.9402	1	H1-1b
127	M134	LL3.5X3.5X5X3	0.0105	0	15	0.0004	0	z	12	24.1568	136.08	12.4182	7.9402	1	H1-1b
128	M135	LL3.5X3.5X5X3	0.0104	0.7415	19	0.0018	0	z	11	24.1568	136.08	12.4182	7.7775	1	H1-1b
129	M136	LL3.5X3.5X5X3	0.0103	0	19	0.0025	0.7415	z	15	24.1568	136.08	12.4182	7.7775	1	H1-1b
130	M137	LL3.5X3.5X5X3	0.0102	0.7415	15	0.0009	0	z	11	24.1568	136.08	12.4182	7.9402	1	H1-1b
131	M138	LL3.5X3.5X5X3	0.0118	0.7415	16	0.001	0.7415	z	15	24.1568	136.08	12.4182	7.9402	1	H1-1b
132	M139	LL3.5X3.5X5X3	0.0143	0.7415	16	0.001	0	z	11	24.1568	136.08	12.4182	7.9402	1	H1-1b
133	M140	LL3.5X3.5X5X3	0.0168	0	16	0.0012	0	z	11	24.1568	136.08	12.4182	7.9402	1	H1-1b
134	M141	LL3.5X3.5X5X3	0.0211	0.7415	12	0.003	0	z	12	24.1568	136.08	12.4182	7.7775	1	H1-1b
135	M142	LL3.5X3.5X5X3	0.0215	0	12	0.0029	0	z	12	24.1568	136.08	12.4182	7.7775	1	H1-1b
136	M143	LL3.5X3.5X5X3	0.0159	0.7415	16	0.0011	0.7415	z	16	24.1568	136.08	12.4182	7.9402	1	H1-1b
137	M144	LL3.5X3.5X5X3	0.0137	0	16	0.0009	0.7415	z	15	24.1568	136.08	12.4182	7.9402	1	H1-1b
138	M145	LL3.5X3.5X5X3	0.0112	0	16	0.001	0	z	11	24.1568	136.08	12.4182	7.9402	1	H1-1b
139	M146	LL3.5X3.5X5X3	0.0098	0	15	0.0009	0.7415	z	15	24.1568	136.08	12.4182	7.9402	1	H1-1b
140	M147	LL3.5X3.5X5X3	0.01	0.7415	19	0.0024	0	z	11	24.1568	136.08	12.4182	7.7775	1	H1-1b
141	M148	LL3.5X3.5X5X3	0.0104	0.7415	15	0.0017	0.7415	z	5	24.1568	136.08	12.4182	7.9402	1	H1-1b
142	M149	LL3.5X3.5X5X3	0.0106	0	15	0.0007	0.7415	z	5	24.1568	136.08	12.4182	7.9402	1	H1-1b
143	M150	LL3.5X3.5X5X3	0.0098	0	15	0.0007	0	z	3	24.1568	136.08	12.4182	7.9402	1	H1-1b
144	M151	LL3.5X3.5X5X3	0.0081	0	16	0.0008	0	z	3	24.1568	136.08	12.4182	7.9402	1	H1-1b
145	M152	LL3.5X3.5X5X3	0.0084	0.7415	7	0.0008	0.7415	z	5	24.1568	136.08	12.4182	7.9402	1	H1-1b*
146	M153	LL3.5X3.5X5X3	0.0105	0.7415	5	0.0031	0	z	12	24.1568	136.08	12.4182	7.7775	1	H1-1b
147	M154	LL3.5X3.5X5X3	0.0167	0.7415	5	0.0036	0.7415	z	5	24.1568	136.08	12.4182	7.7775	1	H1-1b
148	M155	LL3.5X3.5X5X3	0.0145	0.7415	7	0.0012	0	z	3	24.1568	136.08	12.4182	7.9402	1	H1-1b*
149	M156	LL3.5X3.5X5X3	0.0154	0.7415	7	0.0012	0.7415	z	5	24.1568	136.08	12.4182	7.7775	1	H1-1b*
150	M157	LL3.5X3.5X5X3	0.0162	0.7415	7	0.001	0.7415	z	5	24.1568	136.08	12.4182	7.7775	1	H1-1b*
151	M158	LL3.5X3.5X5X3	0.0174	0.7415	7	0.0007	0	z	3	24.1568	136.08	12.4182	7.7775	1	H1-1b*
152	M159	LL3.5X3.5X5X3	0.0191	0.7415	7	0.0017	0	z	12	24.1568	136.08	12.4182	7.7775	1	H1-1b
153	M160	L3X3X4	0.0464	5.3422	12	0.0044	0	y	12	6.0783	46.656	1.6881	2.6213	1.1809	H2-1
154	M161	L3X3X4	0.0611	5.639	6	0.0044	11.278	y	15	6.0783	46.656	1.6881	2.5966	1.1547	H2-1
155	M162	L3X3X4	0.0467	5.4016	11	0.0044	11.278	y	16	6.0783	46.656	1.6881	2.6277	1.1878	H2-1
156	M163	L4X4X4	0.0845	14.7224	16	0.0062	14.7224	y	16	8.5644	62.532	3.1376	4.7106	1.5	H2-1
157	M164	L4X4X4	0.0869	14.7224	15	0.0063	0	y	12	8.5644	62.532	3.1376	4.7106	1.5	H2-1
158	M165	L4X4X4	0.0956	14.7224	3	0.0061	0	y	11	8.5644	62.532	3.1376	4.7106	1.5	H2-1
159	M166	LL3.5X3.5X5X3	0.0208	0.7415	5	0.0033	0	z	12	24.1568	136.08	12.4182	7.9402	1	H1-1b
160	M167	LL3.5X3.5X5X3	0.0169	0	5	0.0006	0.7415	y	5	24.1568	136.08	12.4182	7.9402	1	H1-1b
161	M168	LL3.5X3.5X5X3	0.012	0.5815	11	0.0008	0	z	12	24.1568	136.08	12.4182	7.7775	1	H1-1b
162	M169	LL3.5X3.5X5X3	0.0139	0.7415	12	0.0009	0	z	3	24.1568	136.08	12.4182	7.7775	1	H1-1b
163	M170	LL3.5X3.5X5X3	0.0215	0.7415	12	0.0016	0.7415	z	15	24.1568	136.08	12.4182	7.7775	1	H1-1b
164	M171	LL3.5X3.5X5X3	0.0446	0.7415	12	0.0075	0	z	11	24.1568	136.08	12.4182	7.7775	1	H1-1b
165	M172	LL3.5X3.5X5X3	0.041	0	11	0.0064	0.7415	z	15	24.1568	136.08	12.4182	7.7775	1	H1-1b
166	M173	LL3.5X3.5X5X3	0.02	0.2303	11	0.0016	0	z	12	24.1568	136.08	12.4182	7.7775	1	H1-1b
167	M174	LL3.5X3.5X5X3	0.0148	0	11	0.0007	0.7415	z	16	24.1568	136.08	12.4182	7.7775	1	H1-1b
168	M175	LL3.5X3.5X5X3	0.0115	0.4761	12	0.0008	0.7415	z	15	24.1568	136.08	12.4182	7.7775	1	H1-1b
169	M176	LL3.5X3.5X5X3	0.0133	0.5737	16	0.0006	0.7415	y	6	24.1568	136.08	12.4182	7.9402	1	H1-1b
170	M177	LL3.5X3.5X5X3	0.0167	0.7415	16	0.0034	0.7415	z	15	24.1568	136.08	12.4182	7.9402	1	H1-1b
171	M178	LL3.5X3.5X5X3	0.0165	0.7415	6	0.003	0	z	12	24.1568	136.08	12.4182	7.9402	1	H1-1b

Envelope AISC 15TH (360-16): LRFD Member Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y-y [k-ft]	phi*Mn z-z [k-ft]	Cb	Eqn
172	M179	LL3.5X3.5X5X3	0.0161	0.2186	6	0.0004	0	z	12	24.1568	136.08	12.4182	7.9402	1	H1-1b
173	M180	LL3.5X3.5X5X3	0.0139	0	6	0.0004	0.7415	z	16	24.1568	136.08	12.4182	7.9402	1	H1-1b
174	M181	LL3.5X3.5X5X3	0.0101	0.7415	8	0.0007	0.7415	z	6	24.1568	136.08	12.4182	7.7775	1	H1-1b*
175	M182	LL3.5X3.5X5X3	0.0111	0.7415	6	0.0005	0.7415	z	15	24.1568	136.08	12.4182	7.7775	1	H1-1b
176	M183	LL3.5X3.5X5X3	0.0221	0.6323	6	0.003	0.7415	z	15	24.1568	136.08	12.4182	7.7775	1	H1-1b
177	M184	LL3.5X3.5X5X3	0.0219	0.0976	6	0.0029	0	z	11	24.1568	136.08	12.4182	7.7775	1	H1-1b
178	M185	LL3.5X3.5X5X3	0.011	0	6	0.0005	0.7415	y	4	24.1568	136.08	12.4182	7.7775	1	H1-1b
179	M186	LL3.5X3.5X5X3	0.01	0.7415	8	0.0007	0	z	6	24.1568	136.08	12.4182	7.7775	1	H1-1b*
180	M187	LL3.5X3.5X5X3	0.0137	0.7415	6	0.0004	0	z	12	24.1568	136.08	12.4182	7.9402	1	H1-1b
181	M188	LL3.5X3.5X5X3	0.0159	0.4839	6	0.0004	0.7415	z	16	24.1568	136.08	12.4182	7.9402	1	H1-1b
182	M189	LL3.5X3.5X5X3	0.0165	0.7415	16	0.0031	0.7415	z	16	24.1568	136.08	12.4182	7.9402	1	H1-1b
183	M190	LL3.5X3.5X5X3	0.0167	0	16	0.0035	0	z	11	24.1568	136.08	12.4182	7.9402	1	H1-1b
184	M191	LL3.5X3.5X5X3	0.0129	0.1639	16	0.0006	0.7415	y	15	24.1568	136.08	12.4182	7.9402	1	H1-1b
185	M192	LL3.5X3.5X5X3	0.0123	0.3473	12	0.0008	0	z	11	24.1568	136.08	12.4182	7.7775	1	H1-1b
186	M193	LL3.5X3.5X5X3	0.0164	0.7415	11	0.0008	0	z	12	24.1568	136.08	12.4182	7.7775	1	H1-1b
187	M194	LL3.5X3.5X5X3	0.0217	0.6205	11	0.0016	0.7415	z	16	24.1568	136.08	12.4182	7.7775	1	H1-1b
188	M195	LL3.5X3.5X5X3	0.0467	0.7415	11	0.0083	0	z	11	24.1568	136.08	12.4182	7.7775	1	H1-1b
189	M196	LL3.5X3.5X5X3	0.0407	0	12	0.0069	0.7415	z	15	24.1568	136.08	12.4182	7.7775	1	H1-1b
190	M197	LL3.5X3.5X5X3	0.0213	0.1327	12	0.0018	0	z	11	24.1568	136.08	12.4182	7.7775	1	H1-1b
191	M198	LL3.5X3.5X5X3	0.0149	0.1717	11	0.0007	0.7415	z	16	24.1568	136.08	12.4182	7.7775	1	H1-1b
192	M199	LL3.5X3.5X5X3	0.013	0.1132	11	0.0008	0.7415	z	16	24.1568	136.08	12.4182	7.7775	1	H1-1b
193	M200	LL3.5X3.5X5X3	0.0123	0	11	0.0006	0.7415	y	12	24.1568	136.08	12.4182	7.7775	1	H1-1b
194	M201	LL3.5X3.5X5X3	0.0159	0.7415	16	0.0035	0.7415	z	16	24.1568	136.08	12.4182	7.9402	1	H1-1b
195	M202	LL3.5X3.5X5X3	0.0167	0	16	0.0032	0	z	12	24.1568	136.08	12.4182	7.9402	1	H1-1b
196	M203	LL3.5X3.5X5X3	0.0148	0.5659	16	0.0005	0	z	6	24.1568	136.08	12.4182	7.9402	1	H1-1b
197	M204	LL3.5X3.5X5X3	0.0124	0	16	0.0004	0.7415	z	4	24.1568	136.08	12.4182	7.9402	1	H1-1b
198	M205	LL3.5X3.5X5X3	0.0087	0	16	0.0005	0.7415	z	4	24.1568	136.08	12.4182	7.9402	1	H1-1b
199	M206	LL3.5X3.5X5X3	0.0072	0.3513	4	0.0005	0.7415	z	16	24.1568	136.08	12.4182	7.7775	1	H1-1b
200	M207	LL3.5X3.5X5X3	0.0127	0.7415	20	0.0028	0.7415	z	15	24.1568	136.08	12.4182	7.7775	1	H1-1b
201	M208	LL3.5X3.5X5X3	0.0119	0	11	0.003	0	z	12	24.1568	136.08	12.4182	7.7775	1	H1-1b
202	M209	LL3.5X3.5X5X3	0.0052	0	19	0.0005	0	z	11	24.1568	136.08	12.4182	7.7775	1	H1-1b
203	M210	LL3.5X3.5X5X3	0.0077	0.7415	15	0.0005	0	z	11	24.1568	136.08	12.4182	7.9402	1	H1-1b
204	M211	LL3.5X3.5X5X3	0.012	0.7415	15	0.0004	0	z	11	24.1568	136.08	12.4182	7.9402	1	H1-1b
205	M212	LL3.5X3.5X5X3	0.0146	0.1873	15	0.0004	0.7415	z	16	24.1568	136.08	12.4182	7.9402	1	H1-1b
206	M213	LL3.5X3.5X5X3	0.0169	0.7415	15	0.0031	0.7415	z	15	24.1568	136.08	12.4182	7.9402	1	H1-1b
207	M214	LL3.5X3.5X5X3	0.0169	0	15	0.0034	0	z	11	24.1568	136.08	12.4182	7.9402	1	H1-1b
208	M215	LL3.5X3.5X5X3	0.0137	0.1483	15	0.0005	0.7415	y	16	24.1568	136.08	12.4182	7.9402	1	H1-1b
209	M216	LL3.5X3.5X5X3	0.0124	0.7415	12	0.0008	0	z	11	24.1568	136.08	12.4182	7.7775	1	H1-1b
210	M217	LL3.5X3.5X5X3	0.0153	0.7415	12	0.0007	0	z	11	24.1568	136.08	12.4182	7.7775	1	H1-1b
211	M218	LL3.5X3.5X5X3	0.0194	0.1444	12	0.0016	0.7415	z	16	24.1568	136.08	12.4182	7.7775	1	H1-1b
212	M219	LL3.5X3.5X5X3	0.0382	0.7415	12	0.0073	0	z	12	24.1568	136.08	12.4182	7.7775	1	H1-1b
213	M220	LL3.5X3.5X5X3	0.0388	0	11	0.007	0.7415	z	16	24.1568	136.08	12.4182	7.7775	1	H1-1b
214	M221	LL3.5X3.5X5X3	0.02	0.6635	12	0.0016	0	z	12	24.1568	136.08	12.4182	7.7775	1	H1-1b
215	M222	LL3.5X3.5X5X3	0.0158	0	12	0.0007	0.7415	z	15	24.1568	136.08	12.4182	7.7775	1	H1-1b
216	M223	LL3.5X3.5X5X3	0.0123	0	12	0.0008	0.7415	z	15	24.1568	136.08	12.4182	7.7775	1	H1-1b
217	M224	LL3.5X3.5X5X3	0.013	0.7298	15	0.0005	0.7415	y	11	24.1568	136.08	12.4182	7.9402	1	H1-1b
218	M225	LL3.5X3.5X5X3	0.0163	0.7415	15	0.0032	0.7415	z	15	24.1568	136.08	12.4182	7.9402	1	H1-1b
219	M226	LL3.5X3.5X5X3	0.0164	0	15	0.0029	0	z	11	24.1568	136.08	12.4182	7.9402	1	H1-1b
220	M227	LL3.5X3.5X5X3	0.0148	0.6674	15	0.0005	0	z	5	24.1568	136.08	12.4182	7.9402	1	H1-1b
221	M228	LL3.5X3.5X5X3	0.0125	0	15	0.0004	0.7415	z	3	24.1568	136.08	12.4182	7.9402	1	H1-1b
222	M229	LL3.5X3.5X5X3	0.0083	0	15	0.0005	0.7415	z	15	24.1568	136.08	12.4182	7.9402	1	H1-1b
223	M230	LL3.5X3.5X5X3	0.007	0.7415	7	0.0005	0.7415	z	15	24.1568	136.08	12.4182	7.9402	1	H1-1b*
224	M231	LL3.5X3.5X5X3	0.0117	0.7415	11	0.0027	0.7415	z	16	24.1568	136.08	12.4182	7.7775	1	H1-1b
225	M232	LL3.5X3.5X5X3	0.0182	0	5	0.0027	0	z	5	24.1568	136.08	12.4182	7.7775	1	H1-1b
226	M233	LL3.5X3.5X5X3	0.0121	0.7415	7	0.0007	0	z	5	24.1568	136.08	12.4182	7.9402	1	H1-1b*

Envelope AISC 15TH (360-16): LRFD Member Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y-y [k-ft]	phi*Mn z-z [k-ft]	Cb	Eqn
227	M234	LL3.5X3.5X5X3	0.0124	0.7415	7	0.0009	0	z	5	24.1568	136.08	12.4182	7.7775	1	H1-1b*
228	M235	LL3.5X3.5X5X3	0.0152	0.7415	5	0.0007	0	z	5	24.1568	136.08	12.4182	7.9402	1	H1-1b
229	M236	LL3.5X3.5X5X3	0.0196	0.7415	5	0.0005	0.7415	z	3	24.1568	136.08	12.4182	7.9402	1	H1-1b
230	M237	LL3.5X3.5X5X3	0.022	0	5	0.0029	0.7415	z	16	24.1568	136.08	12.4182	7.9402	1	H1-1b
231	M238	HSS5.563X0.375	0.0241	0	12	0.0062	2.5417		16	232.5009	236.808	32.775	32.775	1	H1-1b
232	M239	HSS5.563X0.375	0.0094	4.6667	12	0.0028	4.6667		11	222.5987	236.808	32.775	32.775	1	H1-1b
233	M240	HSS5.563X0.375	0.0192	3.0417	16	0.0051	3.0417		16	230.6639	236.808	32.775	32.775	1	H1-1b
234	M241	HSS5.563X0.375	0.0249	0	18	0.0071	2.5417		11	232.5009	236.808	32.775	32.775	1	H1-1b
235	M242	HSS5.563X0.375	0.0092	4.6667	11	0.0029	4.6667		15	222.5987	236.808	32.775	32.775	1	H1-1b
236	M243	HSS5.563X0.375	0.019	3.0417	14	0.0057	3.0417		11	230.6639	236.808	32.775	32.775	1	H1-1b
237	M244	HSS5.563X0.375	0.0245	0	15	0.0059	2.5417		16	232.5009	236.808	32.775	32.775	1	H1-1b
238	M245	HSS5.563X0.375	0.0098	4.6667	15	0.0028	4.6667		12	222.5987	236.808	32.775	32.775	1	H1-1b
239	M246	HSS5.563X0.375	0.0188	3.0417	11	0.0047	3.0417		12	230.6639	236.808	32.775	32.775	1	H1-1b
240	M247	L4X3X4	0.0756	1	12	0.0083	0	y	12	49.9861	54.756	1.795	4.8054	1.5	H2-1
241	M248	L4X3X4	0.0774	1	13	0.0084	0	y	11	49.9861	54.756	1.795	4.8054	1.5	H2-1
242	M249	L4X3X4	0.0754	1	12	0.0081	0	y	12	49.9861	54.756	1.795	4.8054	1.5	H2-1
243	M250	L4X3X4	0.0592	1	12	0.0078	0	y	12	49.9861	54.756	1.795	4.8054	1.5	H2-1
244	M251	L4X3X4	0.0606	1	13	0.0081	0	y	11	49.9861	54.756	1.795	4.8054	1.5	H2-1
245	M252	L4X3X4	0.058	1	12	0.008	0	y	12	49.9861	54.756	1.795	4.8054	1.5	H2-1
246	M253	L4X3X4	0.2335	4.5	16	0.0069	4.5	y	16	37.163	54.756	1.8437	4.1629	1.207	H2-1
247	M254	L4X3X4	0.2315	0	16	0.0065	0	y	12	37.163	54.756	1.8437	4.1606	1.2044	H2-1
248	M255	L4X3X4	0.0778	0	12	0.007	1.278	y	16	49.5064	54.756	1.795	4.8054	1.5	H2-1
249	M256	L4X3X4	0.2311	4.5	15	0.0069	4.5	y	15	37.163	54.756	1.8437	4.1541	1.1972	H2-1
250	M257	L4X3X4	0.2285	0	15	0.0065	0	y	11	37.163	54.756	1.8437	4.1466	1.1889	H2-1
251	M258	L4X3X4	0.0774	0	13	0.0071	1.278	y	15	49.5064	54.756	1.795	4.8054	1.5	H2-1
252	M259	L4X3X4	0.234	4.5	16	0.0069	4.5	y	16	37.163	54.756	1.8437	4.1716	1.2167	H2-1
253	M260	L4X3X4	0.232	0	16	0.0065	0	y	12	37.163	54.756	1.8437	4.1434	1.1854	H2-1
254	M261	L4X3X4	0.078	0	12	0.0073	1.278	y	16	49.5064	54.756	1.795	4.8054	1.5	H2-1
255	M262	L4X3X4	0.1061	4.5	16	0.0045	4.5	y	16	37.163	54.756	1.8437	4.007	1.0496	H2-1
256	M263	L4X3X4	0.1062	0	16	0.0042	0	y	12	37.163	54.756	1.8437	3.9975	1.041	H2-1
257	M264	L4X3X4	0.0594	0	12	0.0063	1.278	y	16	49.5064	54.756	1.795	4.8054	1.5	H2-1
258	M265	L4X3X4	0.1046	4.5	15	0.0045	4.5	y	15	37.163	54.756	1.8437	4.023	1.0643	H2-1
259	M266	L4X3X4	0.1048	0	15	0.0042	0	y	11	37.163	54.756	1.8437	3.9998	1.0431	H2-1
260	M267	L4X3X4	0.0593	0	13	0.0063	1.278	y	15	49.5064	54.756	1.795	4.8054	1.5	H2-1
261	M268	L4X3X4	0.1059	4.5	16	0.0045	4.5	y	16	37.163	54.756	1.8437	4.0142	1.0562	H2-1
262	M269	L4X3X4	0.1059	0	16	0.0042	0	y	12	37.163	54.756	1.8437	3.9971	1.0407	H2-1
263	M270	L4X3X4	0.0609	0	12	0.0063	1.278	y	16	49.5064	54.756	1.795	4.8054	1.5	H2-1
264	M271	L3X3X4	0.0051	0	12	0.0059	4.6667	y	16	28.8004	46.656	1.6881	3.2793	1	H2-1
265	M272	L3X3X4	0.0065	0	12	0.0002	4.6667	y	16	28.8004	46.656	1.6881	3.2793	1	H2-1
266	M273	L3X3X4	0.0038	0	12	0.0057	4.6667	y	12	28.8004	46.656	1.6881	3.2793	1	H2-1
267	M274	L3X3X4	0.0054	0	11	0.0059	4.6667	y	15	28.8004	46.656	1.6881	3.2793	1	H2-1
268	M275	L3X3X4	0.0064	0	11	0.0002	4.6667	y	15	28.8004	46.656	1.6881	3.2793	1	H2-1
269	M276	L3X3X4	0.0037	0	11	0.0057	4.6667	y	11	28.8004	46.656	1.6881	3.2793	1	H2-1
270	M277	L3X3X4	0.0052	0	12	0.006	4.6667	y	16	28.8004	46.656	1.6881	3.2793	1	H2-1
271	M278	L3X3X4	0.0064	0	12	0.0002	4.6667	y	16	28.8004	46.656	1.6881	3.2793	1	H2-1
272	M279	L3X3X4	0.0039	0	11	0.0058	4.6667	y	12	28.8004	46.656	1.6881	3.2793	1	H2-1
273	M280	L3X3X4	0.022	3.2073	16	0.0024	6.4829	y	16	18.3903	46.656	1.6881	3.1178	1.1364	H2-1
274	M281	L3X3X4	0.0196	3.2756	16	0.0024	6.4829	y	12	18.3903	46.656	1.6881	3.1178	1.1364	H2-1
275	M282	L3X3X4	0.0225	3.2073	15	0.0024	6.4829	y	15	18.3903	46.656	1.6881	3.1178	1.1364	H2-1
276	M283	L3X3X4	0.0194	3.2756	15	0.0024	6.4829	y	11	18.3903	46.656	1.6881	3.1178	1.1364	H2-1
277	M284	L3X3X4	0.0222	3.2073	16	0.0024	6.4829	y	16	18.3903	46.656	1.6881	3.1178	1.1364	H2-1
278	M285	L3X3X4	0.0197	3.2756	15	0.0024	6.4829	y	12	18.3903	46.656	1.6881	3.1178	1.1364	H2-1
279	M292	LL3.5X3.5X5X3	0.0125	0	12	0.0015	6.5114	y	2	103.1948	136.08	12.4182	7.5081	1	H1-1b
280	M293	LL3.5X3.5X5X3	0.0128	6.5114	12	0.0016	6.5114	y	2	103.1948	136.08	12.4182	7.5081	1	H1-1b
281	M294	LL3.5X3.5X5X3	0.0118	6.5114	12	0.0015	6.5114	y	2	103.1948	136.08	12.4182	7.5081	1	H1-1b

Envelope AISC 15TH (360-16): LRFD Member Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y-y [k-ft]	phi*Mn z-z [k-ft]	Cb	Eqn
282	M295	LL3.5X3.5X5X3	0.0115	0	12	0.0059	0.7415	z	16	24.1568	136.08	12.4182	7.7775	1	H1-1b
283	M296	LL3.5X3.5X5X3	0.006	0.7415	5	0.0008	0.7415	z	12	24.1568	136.08	12.4182	6.7422	1	H1-1b
284	M297	LL3.5X3.5X5X3	0.0073	0.7415	5	0.0006	0.7415	z	16	24.1568	136.08	12.4182	7.9402	1	H1-1b
285	M298	LL3.5X3.5X5X3	0.0069	0	5	0.0006	0	z	12	24.1568	136.08	12.4182	7.9402	1	H1-1b
286	M299	LL3.5X3.5X5X3	0.0059	0	16	0.0009	0	z	16	24.1568	136.08	12.4182	7.9402	1	H1-1b
287	M300	LL3.5X3.5X5X3	0.0156	0.7415	3	0.0072	0	z	12	24.1568	136.08	12.4182	7.9402	1	H1-1b
288	M301	LL3.5X3.5X5X3	0.0146	0	11	0.0072	0.7415	z	15	24.1568	136.08	12.4182	7.7775	1	H1-1b
289	M302	LL3.5X3.5X5X3	0.0062	0.7415	15	0.0009	0.7415	z	11	24.1568	136.08	12.4182	7.9402	1	H1-1b
290	M303	LL3.5X3.5X5X3	0.0058	0.7415	17	0.0006	0.7415	z	16	24.1568	136.08	12.4182	7.7775	1	H1-1b
291	M304	LL3.5X3.5X5X3	0.0057	0	17	0.0006	0	z	12	24.1568	136.08	12.4182	7.7775	1	H1-1b
292	M305	LL3.5X3.5X5X3	0.0058	0	17	0.0008	0	z	16	24.1568	136.08	12.4182	7.7775	1	H1-1b
293	M306	LL3.5X3.5X5X3	0.0102	0.7415	11	0.0058	0	z	11	24.1568	136.08	12.4182	7.7775	1	H1-1b
294	M307	LL3.5X3.5X5X3	0.01	0	4	0.0059	0.7415	z	15	24.1568	136.08	12.4182	7.9402	1	H1-1b
295	M308	LL3.5X3.5X5X3	0.0068	0.7415	6	0.0005	0.7415	z	5	24.1568	136.08	12.4182	7.9402	1	H1-1b
296	M309	LL3.5X3.5X5X3	0.007	0.7415	5	0.0004	0.7415	z	3	24.1568	136.08	12.4182	7.7775	1	H1-1b
297	M310	LL3.5X3.5X5X3	0.0065	0	5	0.0005	0	z	12	24.1568	136.08	12.4182	7.7775	1	H1-1b
298	M311	LL3.5X3.5X5X3	0.0055	0	17	0.0008	0	z	15	24.1568	136.08	12.4182	7.7775	1	H1-1b
299	M312	LL3.5X3.5X5X3	0.012	0.7415	5	0.0061	0	z	11	24.1568	136.08	12.4182	7.9402	1	H1-1b
300	M313	LL3.5X3.5X5X3	0.0093	0	4	0.0053	0.7415	z	15	24.1568	136.08	12.4182	7.9402	1	H1-1b
301	M314	LL3.5X3.5X5X3	0.0059	0.7415	17	0.0007	0.7415	z	12	24.1568	136.08	12.4182	7.7775	1	H1-1b
302	M315	LL3.5X3.5X5X3	0.0065	0.7415	15	0.0005	0.7415	z	16	24.1568	136.08	12.4182	7.7775	1	H1-1b
303	M316	LL3.5X3.5X5X3	0.0069	0	6	0.0004	0	z	11	24.1568	136.08	12.4182	7.9402	1	H1-1b
304	M317	LL3.5X3.5X5X3	0.0074	0	6	0.0006	0	z	13	24.1568	136.08	12.4182	7.9402	1	H1-1b
305	M318	LL3.5X3.5X5X3	0.0114	0.7415	5	0.0062	0	z	11	24.1568	136.08	12.4182	7.9402	1	H1-1b
306	M319	LL3.5X3.5X5X3	0.0133	0	11	0.0065	0.7415	z	15	24.1568	136.08	12.4182	7.7775	1	H1-1b
307	M320	LL3.5X3.5X5X3	0.006	0.7415	17	0.0008	0.7415	z	12	24.1568	136.08	12.4182	7.7775	1	H1-1b
308	M321	LL3.5X3.5X5X3	0.0056	0.7415	2	0.0007	0.7415	z	16	24.1568	136.08	12.4182	7.7775	1	H1-1b
309	M322	LL3.5X3.5X5X3	0.0056	0	3	0.0006	0	z	12	24.1568	136.08	12.4182	7.7775	1	H1-1b
310	M323	LL3.5X3.5X5X3	0.0062	0	15	0.0009	0	z	16	24.1568	136.08	12.4182	7.9402	1	H1-1b
311	M324	LL3.5X3.5X5X3	0.0173	0.7415	11	0.0079	0	z	11	24.1568	136.08	12.4182	7.7775	1	H1-1b
312	M325	LL3.5X3.5X5X3	0.0159	0	12	0.0079	0.7415	z	15	24.1568	136.08	12.4182	7.7775	1	H1-1b
313	M326	LL3.5X3.5X5X3	0.0064	0.7415	16	0.001	0.7415	z	12	24.1568	136.08	12.4182	7.9402	1	H1-1b
314	M327	LL3.5X3.5X5X3	0.0061	0.7415	3	0.0006	0.7415	z	16	24.1568	136.08	12.4182	7.7775	1	H1-1b
315	M328	LL3.5X3.5X5X3	0.0071	0	3	0.0007	0	z	12	24.1568	136.08	12.4182	7.7775	1	H1-1b
316	M329	LL3.5X3.5X5X3	0.0066	0	3	0.0008	0	z	16	24.1568	136.08	12.4182	7.7775	1	H1-1b
317	M330	LL3.5X3.5X5X3	0.0114	0.7415	11	0.0058	0	z	12	24.1568	136.08	12.4182	7.7775	1	H1-1b
318	M331	LL3.5X3.5X5X3	0.0117	0	14	0.0063	0.7415	z	16	24.1568	136.08	12.4182	7.9402	1	H1-1b
319	M332	LL3.5X3.5X5X3	0.0062	0.7415	16	0.0005	0.7415	z	18	24.1568	136.08	12.4182	7.9402	1	H1-1b
320	M333	LL3.5X3.5X5X3	0.007	0.7415	3	0.0004	0.7415	z	15	24.1568	136.08	12.4182	7.7775	1	H1-1b
321	M334	LL3.5X3.5X5X3	0.0072	0	3	0.0005	0	z	12	24.1568	136.08	12.4182	7.7775	1	H1-1b
322	M335	LL3.5X3.5X5X3	0.0058	0	16	0.0008	0	z	17	24.1568	136.08	12.4182	7.7775	1	H1-1b
323	M336	LL3.5X3.5X5X3	0.0092	0.7415	6	0.0057	0	z	12	24.1568	136.08	12.4182	7.9402	1	H1-1b
324	M337	LL3.5X3.5X5X3	0.0088	0	4	0.0056	0.7415	z	16	24.1568	136.08	12.4182	7.9402	1	H1-1b
325	M338	LL3.5X3.5X5X3	0.0059	0.7415	3	0.0008	0.7415	z	12	24.1568	136.08	12.4182	7.7775	1	H1-1b
326	M339	LL3.5X3.5X5X3	0.0069	0.7415	3	0.0005	0.7415	z	15	24.1568	136.08	12.4182	7.7775	1	H1-1b
327	M340	LL3.5X3.5X5X3	0.0063	0	4	0.0004	0	z	12	24.1568	136.08	12.4182	7.7775	1	H1-1b
328	M341	LL3.5X3.5X5X3	0.0057	0	15	0.0005	0	z	3	24.1568	136.08	12.4182	7.9402	1	H1-1b
329	M342	LL3.5X3.5X5X3	0.0095	0.7415	3	0.0058	0	z	11	24.1568	136.08	12.4182	7.9402	1	H1-1b
330	M343	LL3.5X3.5X5X3	0.0117	0	12	0.006	0.7415	z	16	24.1568	136.08	12.4182	7.7775	1	H1-1b
331	M344	LL3.5X3.5X5X3	0.0056	0.7415	3	0.0009	0.7415	z	13	24.1568	136.08	12.4182	7.7775	1	H1-1b
332	M345	LL3.5X3.5X5X3	0.0066	0.7415	4	0.0007	0.7415	z	15	24.1568	136.08	12.4182	7.7775	1	H1-1b
333	M346	LL3.5X3.5X5X3	0.0066	0	4	0.0006	0	z	11	24.1568	136.08	12.4182	7.7775	1	H1-1b
334	M347	LL3.5X3.5X5X3	0.0057	0	4	0.0009	0	z	15	24.1568	136.08	12.4182	7.7775	1	H1-1b
335	M348	LL3.5X3.5X5X3	0.0151	0.7415	12	0.007	0	z	12	24.1568	136.08	12.4182	7.7775	1	H1-1b
336	M349	LL3.5X3.5X5X3	0.0152	0	12	0.0074	0.7415	z	16	24.1568	136.08	12.4182	7.7775	1	H1-1b

Envelope AISC 15TH (360-16): LRFD Member Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y-y [k-ft]	phi*Mn z-z [k-ft]	Cb	Eqn
337	M350	LL3.5X3.5X5X3	0.0062	0.7415	16	0.001	0.7415	z	11	24.1568	136.08	12.4182	7.9402	1	H1-1b
338	M351	LL3.5X3.5X5X3	0.0064	0.7415	4	0.0006	0.7415	z	15	24.1568	136.08	12.4182	7.7775	1	H1-1b
339	M352	LL3.5X3.5X5X3	0.0067	0	4	0.0006	0	z	11	24.1568	136.08	12.4182	7.7775	1	H1-1b
340	M353	LL3.5X3.5X5X3	0.0063	0	5	0.0008	0	z	17	24.1568	136.08	12.4182	7.7775	1	H1-1b
341	M354	LL3.5X3.5X5X3	0.0107	0.7415	12	0.0052	0	z	12	24.1568	136.08	12.4182	7.7775	1	H1-1b
342	M355	LL3.5X3.5X5X3	0.0115	0	5	0.006	0.7415	z	15	24.1568	136.08	12.4182	7.9402	1	H1-1b
343	M356	LL3.5X3.5X5X3	0.0059	0.7415	15	0.0006	0.7415	z	5	24.1568	136.08	12.4182	7.9402	1	H1-1b
344	M357	LL3.5X3.5X5X3	0.0063	0.7415	4	0.0004	0.7415	z	16	24.1568	136.08	12.4182	7.7775	1	H1-1b
345	M358	LL3.5X3.5X5X3	0.0063	0	15	0.0005	0	z	11	24.1568	136.08	12.4182	7.7775	1	H1-1b
346	M359	LL3.5X3.5X5X3	0.0055	0	16	0.0008	0	z	18	24.1568	136.08	12.4182	7.7775	1	H1-1b
347	M360	LL3.5X3.5X5X3	0.0088	0.7415	3	0.0054	0	z	12	24.1568	136.08	12.4182	7.9402	1	H1-1b
348	M361	LL3.5X3.5X5X3	0.0089	0	6	0.0052	0.7415	z	16	24.1568	136.08	12.4182	7.9402	1	H1-1b
349	M362	LL3.5X3.5X5X3	0.0057	0.7415	16	0.0007	0.7415	z	13	24.1568	136.08	12.4182	7.7775	1	H1-1b
350	M363	LL3.5X3.5X5X3	0.0064	0.7415	16	0.0005	0.7415	z	16	24.1568	136.08	12.4182	7.7775	1	H1-1b
351	M364	LL3.5X3.5X5X3	0.007	0.7415	5	0.0004	0	z	11	24.1568	136.08	12.4182	7.9402	1	H1-1b
352	M365	LL3.5X3.5X5X3	0.0077	0	5	0.0005	0	z	14	24.1568	136.08	12.4182	7.9402	1	H1-1b
353	M366	LL3.5X3.5X5X3	0.0135	0.7415	3	0.0059	0	z	12	24.1568	136.08	12.4182	7.9402	1	H1-1b
354	M370	HSS5X0.500	0.0033	5.455	4	0.0004	5.455		4	191.6502	208.53	25.2	25.2	1	H1-1b
355	M371	LL3.5X3.5X5X3	0.0233	0	2	0.002	10.0999	y	2	69.9445	136.08	12.4182	7.2616	1	H1-1b
356	M372	LL3.5X3.5X5X3	0.0224	10.0999	2	0.002	10.0999	y	2	69.9445	136.08	12.4182	7.2616	1	H1-1b
357	M373	LL3.5X3.5X5X3	0.023	0	2	0.002	10.0999	y	2	69.9445	136.08	12.4182	7.2616	1	H1-1b
358	M374	LL3.5X3.5X5X3	0.0222	0	2	0.002	0	y	2	69.9445	136.08	12.4182	7.2616	1	H1-1b
359	M375	LL3.5X3.5X5X3	0.023	0	2	0.002	10.0999	y	2	69.9445	136.08	12.4182	7.2616	1	H1-1b
360	M376	LL3.5X3.5X5X3	0.0219	0	2	0.002	10.0999	y	2	69.9445	136.08	12.4182	7.2616	1	H1-1b
361	M377	LL3.5X3.5X5X3	0.023	0	2	0.002	10.0999	y	2	69.9445	136.08	12.4182	7.2616	1	H1-1b
362	M378	LL3.5X3.5X5X3	0.0222	0	2	0.002	0	y	2	69.9445	136.08	12.4182	7.2616	1	H1-1b
363	M379	LL3.5X3.5X5X3	0.023	0	2	0.002	10.0999	y	2	69.9445	136.08	12.4182	7.2616	1	H1-1b
364	M380	LL3.5X3.5X5X3	0.0223	0	2	0.002	10.0999	y	2	69.9445	136.08	12.4182	7.2616	1	H1-1b
365	M381	LL3.5X3.5X5X3	0.0233	0	2	0.002	10.0999	y	2	69.9445	136.08	12.4182	7.2616	1	H1-1b
366	M382	LL3.5X3.5X5X3	0.0225	0	2	0.002	0	y	2	69.9445	136.08	12.4182	7.2616	1	H1-1b

Site Name:	Mankes Silo, CT
Site Number:	370624
Engineer:	Matthew.Reeves

Design Loads (Factored) - Analysis per TIA-222-H Standards

Total Compression:	371.9	k
Total Shear:	22.1	k
Overturning Moment:	958.3	k-ft
Foundation Type:	Circular	
Depth to Base of Foundation (l + t - h):	3.75	ft
Diameter of Pier (d):	0.00	ft
Length of Pier (l):	0.00	ft
Height of Pier above Ground (h):	0.00	ft
Outside Diameter of Ring (d_f):	19.00	ft
Width of Ring (W):	0.00	ft
Inside Diameter of Ring (d_o):	0.00	ft
Thickness of Pad (t):	3.75	ft
Depth Below Ground Surface to Water Table:	99.00	ft
Unit Weight of Concrete:	150.0	pcf
Unit Weight of Soil Above Water Table:	100.0	pcf
Unit Weight of Water:	62.4	pcf
Unit Weight of Soil Below Water Table:	37.6	pcf
Ultimate Coefficient of Shear Friction:	0.30	
Ultimate Compressive Bearing Pressure:	10000	psf
Ultimate Passive Pressure on Pad Face:	0.0	psf
$\phi_{\text{Soil and Concrete Weight}}$:	0.9	
ϕ_{Soil}:	0.75	

Overturning Moment Usage

Design OTM:	1041.3	k-ft
OTM Resistance:	4013.1	k-ft
Design OTM / OTM Resistance:	0.26	Result: OK

Soil Bearing Pressure Usage

Factored Net Bearing Pressure:	3045	psf
Factored Nominal Bearing Pressure:	7500	psf
Net Bearing Pressure/Factored Nominal Bearing Pressure:	0.41	Result: OK

Sliding Factor of Safety

Ultimate Friction Resistance:	159.4	k
Ultimate Passive Pressure Resistance:	0.0	k
Total Factored Sliding Resistance:	119.6	k
Sliding Design / Sliding Resistance:	0.19	Result: OK

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 #: 10208095
Colliers Engineering & Design Project #: 23777239

November 14, 2023

Site Information	*Site ID:*	*5000383173-VZW / CHESHIRE NORTH CT - ATC Stealth Silo*
	Site Name:	*CHESHIRE NORTH CT - ATC Stealth Silo*
	Carrier Name:	*Verizon Wireless*
	Address:	*1338 Highland Ave SNET Pole #46-S* *Cheshire, Connecticut 06410* *New Haven County*
	Latitude:	*41.536889°*
	Longitude:	*-72.893297°*
Structure Information	*Tower Type:*	*76-Ft Concealment Silo*
	Mount Type:	*12.00-Ft Concealment Mount*

FUZE ID # 17123857

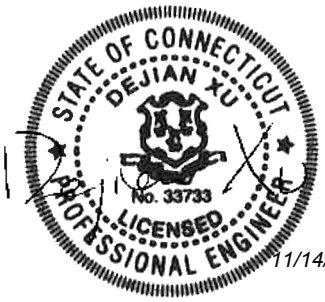
Analysis Results

Concealment Mount: **26.9%** **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



11/14/2023

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: 5000383173, dated November 2, 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:	II
	Exposure Category:	C
	Topographic Category:	1
	Topographic Feature Considered:	N/A
	Topographic Method:	N/A
	Ground Elevation Factor, K_e:	0.992
Seismic Parameters:	S_S:	0.200 g
	S_1:	0.055 g
Maintenance Parameters:	Wind Speed (3-sec. Gust):	N/A
	Maintenance Load, Lv:	N/A
	Maintenance Load, Lm:	N/A
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	73.00	2	Raycap	RRFDC-3315-PF-48*	Retained
		3	Samsung	RFV01U-D1A*	
		3	Samsung	RFV01U-D2A*	
		12	Commscope	SBNHH-1D65B	
		2	KAelus	KA-6030	Added

* Equipment is flush mounted directly to the concealment silo frame. They are not mounted on concealment mounts and are not included in this mount analysis.

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
Mount Pipe	2.4%	Pass
Face Horizontal	26.9%	Pass
Mount Connection	1.9%	Pass

Structure Rating – *(Controlling Utilization of all Components)*	**26.9%***

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

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	8.5	1.2	14.1	6.7
0.5	10.5	1.5	18.4	9.4
1	12.2	1.7	22.5	11.9

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.

Contractor to install any missing bolts between mount face angle and silo framing angle with 3/4" dia. A325N bolt, with a total of two bolts at both top and bottom. 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

---

MDG #: 5000383173 SMART Project #: 10208095 Fuze Project ID: 17123857

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:

Contractor to install any missing bolts between mount face angle and silo framing angle with 3/4" dia. A325N bolt, with a total of two bolts at both top and bottom. 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: 5000383173-VZW - CHESHIRE NORTH CT - ATC Stealth Silo

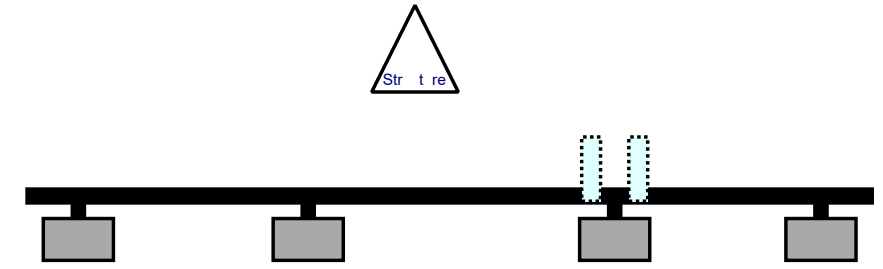
Se tor: **A** 11/9/2023

Str t re Type: Ste lth 10208095

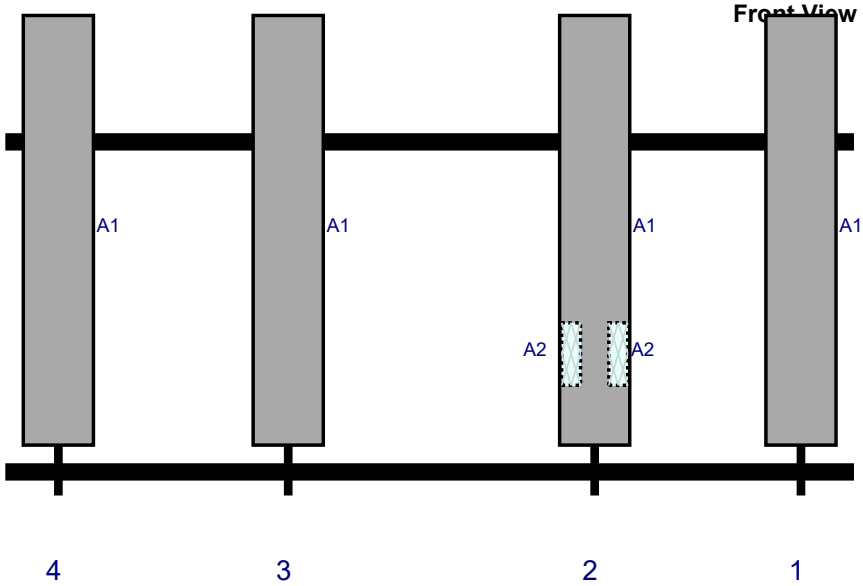
Mo t Elev: 71.00 P ge: 1

Colliers Engineering & Design

Plan View

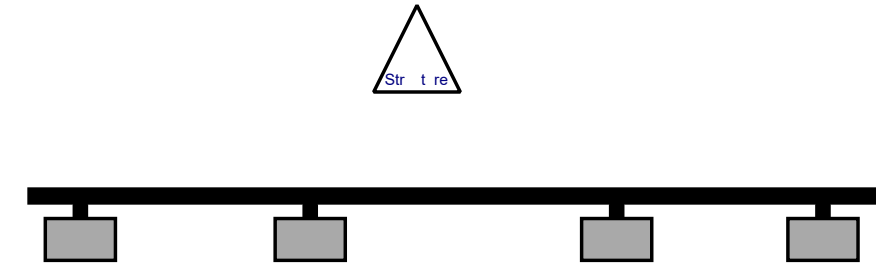


Front View - Loo i g t Str t re

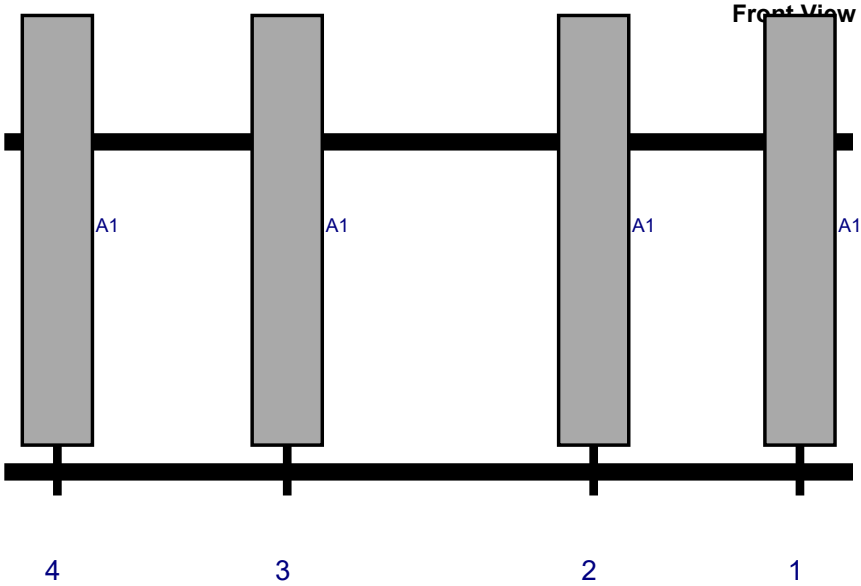


Re #	Model	Height (i)	Width (i)	H Dist Fr L.	Pipe #	Pipe Pos V	A t Pos	C. A t Fr T.	A t H O	St t s	V lid tio
A1	SBNHH-1D65B	72.9	11.9	135	1		Fro t	27	0	Ret i ed	11/02/2023
A1	SBNHH-1D65B	72.9	11.9	100	2		Fro t	27	0	Ret i ed	11/02/2023
A2	KA-6030	10.6	3.2	100	2		Behi d	48	4	Added	
A2	KA-6030	10.6	3.2	100	2		Behi d	48	-4	Added	
A1	SBNHH-1D65B	72.9	11.9	48	3		Fro t	27	0	Ret i ed	11/02/2023
A1	SBNHH-1D65B	72.9	11.9	9	4		Fro t	27	0	Ret i ed	11/02/2023

Plan View

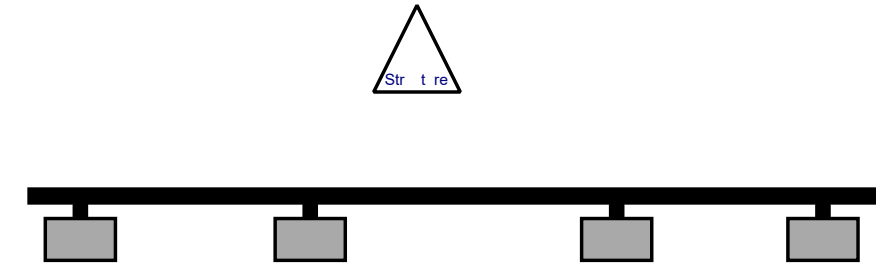


Front View - Loo i g t Str t re

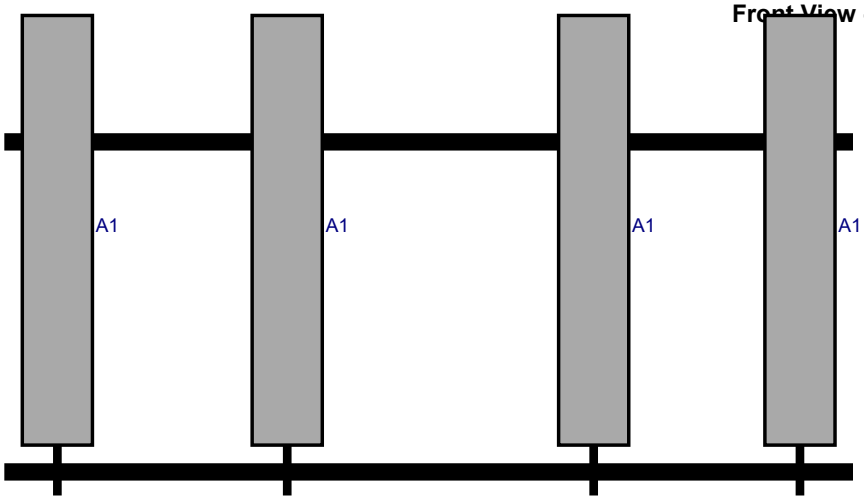


Re #	Model	Height (i)	Width (i)	H Dist Fr L.	Pipe #	Pipe Pos V	A t Pos	C. A t Fr T.	A t H O	St t s	V lid tio
A1	SBNHH-1D65B	72.9	11.9	135	1		Fro t	27	0	Ret i ed	11/02/2023
A1	SBNHH-1D65B	72.9	11.9	100	2		Fro t	27	0	Ret i ed	11/02/2023
A1	SBNHH-1D65B	72.9	11.9	48	3		Fro t	27	0	Ret i ed	11/02/2023
A1	SBNHH-1D65B	72.9	11.9	9	4		Fro t	27	0	Ret i ed	11/02/2023

Plan View



Front View - Loo i g t Str t re



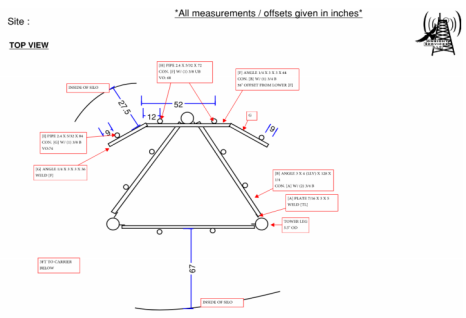
Re #	Model	Height (i)	Width (i)	H Dist Fr L.	Pipe #	Pipe Pos V	A t Pos	C. A t Fr T.	A t H O	St t s	V lid tio
A1	SBNHH-1D65B	72.9	11.9	135	1		Fro t	27	0	Ret i ed	11/02/2023
A1	SBNHH-1D65B	72.9	11.9	100	2		Fro t	27	0	Ret i ed	11/02/2023
A1	SBNHH-1D65B	72.9	11.9	48	3		Fro t	27	0	Ret i ed	11/02/2023
A1	SBNHH-1D65B	72.9	11.9	9	4		Fro t	27	0	Ret i ed	11/02/2023

V4.1 Updated on 12-17-2021

Antenna Mount Mapping Form (PATENT PENDING)

FCC #

Tower Owner:	ATC	**Mapping Date:**	11/2/2023
Site Name:	CHESHIRE NORTH CT	**Tower Type:**	Other
Site Number or ID:	5000383173	**Tower Height (Ft.):**	76
Mapping Contractor:	ONSIGHT SERVICES	**Mount Elevation (Ft.):**	71

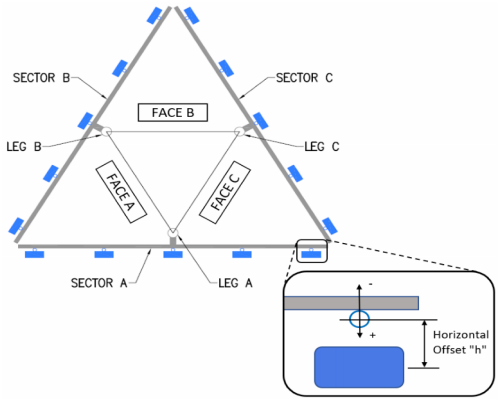


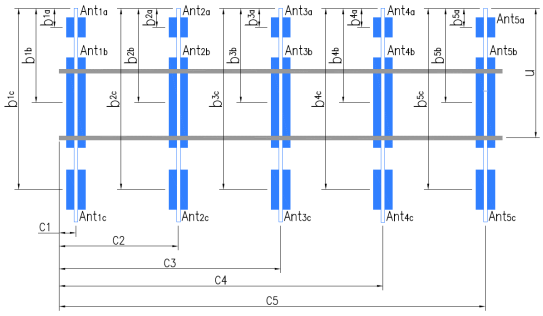
Mount Pipe Configuration and Geometries [Unit = Inches]

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	2.4 X 5/32 X 84	74.00	9.00	C1	2.4 X 5/32 X 84	74.00	9.00
A2	2.4 X 5/32 X 72	68.00	48.00	C2	2.4 X 5/32 X 72	68.00	48.00
A3	2.4 X 5/32 X 72	68.00	88.00	C3	2.4 X 5/32 X 72	68.00	88.00
A4	2.4 X 5/32 X 84	74.00	115.00	C4	2.4 X 5/32 X 84	74.00	115.00
A5				C5			
A6				C6			
B1	2.4 X 5/32 X 84	74.00	9.00	D1			
B2	2.4 X 5/32 X 72	68.00	48.00	D2			
B3	2.4 X 5/32 X 72	68.00	88.00	D3			
B4	2.4 X 5/32 X 84	74.00	115.00	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.) :	
Distance from top of bottom support rail to highest tip of ant./eqpt. of Carrier below. (N/A if > 10 ft.) :	3
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.):	5.6



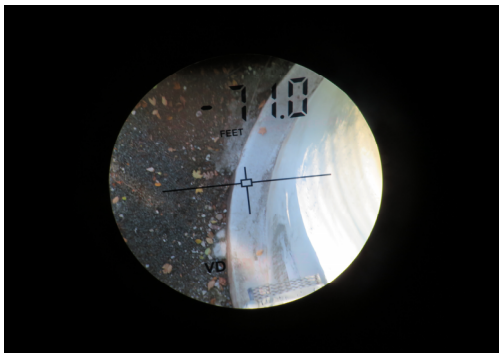


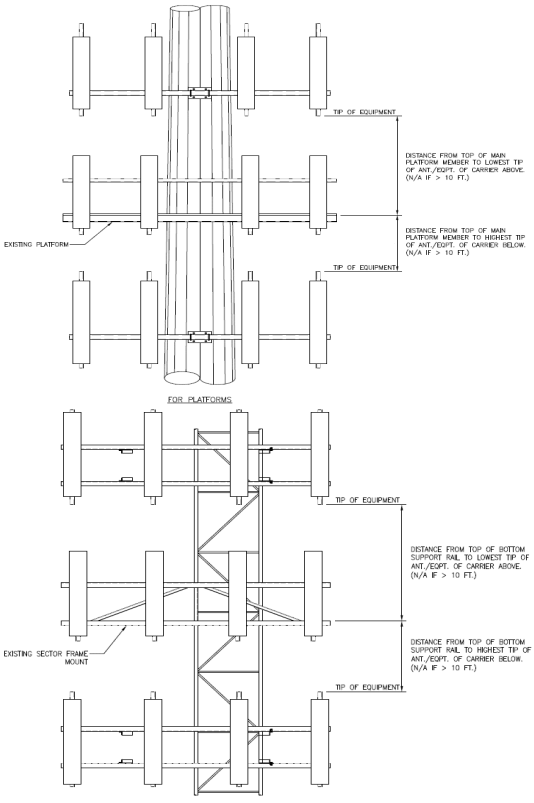
Antenna Layout (Looking Out From Tower)

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}	COMMSCOPE SBNHH	12.00	7.50	73.00			28.00	7.50	0.00	74
Ant_{1b}										
Ant_{1c}										
Ant_{2a}	COMMSCOPE SBNHH	12.00	7.50	73.00			22.00	8.00	0.00	74
Ant_{2b}										
Ant_{2c}										
Ant_{3a}	COMMSCOPE SBNHH	12.00	7.50	73.00			22.00	8.00	0.00	76
Ant_{3b}										
Ant_{3c}										
Ant_{4a}	COMMSCOPE SBNHH	12.00	7.50	73.00			28.00	7.50	0.00	76
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower	SAMSUNG RFV01U-D	15.75	12.00	15.50			16.00	8.50		72
Ant on Tower	SAMSUNG RFV01U-D	15.75	10.00	15.50			25.00	9.50		72

Mount Azimuth (Degree) for Each Sector				Tower Leg Azimuth (Degree) for Each Sector	
Sector A:	320.00	Deg	Leg A:	320.00	Deg
Sector B:	80.00	Deg	Leg B:	80.00	Deg
Sector C:	200.00	Deg	Leg C:	200.00	Deg
Sector D:		Deg	Leg D:		Deg

Climbing Facility Information			
Location:		Deg	N/A
Climbing Facility	Corrosion Type:		N/A
	Access:		N/A
	Condition:		N/A





Sector B										
Ant_{1a}	COMMSCOPE SBNHH	12.00	7.50	73.00			28.00	7.50	120.00	66
Ant_{1b}										
Ant_{1c}										
Ant_{2a}	COMMSCOPE SBNHH	12.00	7.50	73.00			22.00	8.00	120.00	67
Ant_{2b}										
Ant_{2c}										
Ant_{3a}	COMMSCOPE SBNHH	12.00	7.50	73.00			22.00	8.00	120.00	67
Ant_{3b}										
Ant_{3c}										
Ant_{4a}	COMMSCOPE SBNHH	12.00	7.50	73.00			28.00	7.50	120.00	67
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff	RAYCAP RRFDC-3315-PF-48						27.50	7.50		64
Ant on Tower	SAMSUNG RFV01U-D	15.75	12.00	15.50			16.00	8.50		64
Ant on Tower	SAMSUNG RFV01U-D	15.75	10.00	15.50			25.00	9.50		64
Sector C										
Ant_{1a}	COMMSCOPE SBNHH	12.00	7.50	73.00			28.00	7.50	240.00	70
Ant_{1b}										
Ant_{1c}										
Ant_{2a}	COMMSCOPE SBNHH	12.00	7.50	73.00			22.00	8.00	240.00	70
Ant_{2b}										
Ant_{2c}										
Ant_{3a}	COMMSCOPE SBNHH	12.00	7.50	73.00			22.00	8.00	240.00	71
Ant_{3b}										
Ant_{3c}										
Ant_{4a}	COMMSCOPE SBNHH	12.00	7.50	73.00			28.00	7.50	240.00	71
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff	RAYCAP RRFDC-3315-PF-48						27.50	7.50		69
Ant on Tower	SAMSUNG RFV01U-D	15.75	12.00	15.50			16.00	8.50		69
Ant on Tower	SAMSUNG RFV01U-D	15.75	10.00	15.50			25.00	9.50		69
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	85FT MANLIFT REQUIRED	
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.

SMART Tool© Vendor

Antenna Mount Mapping Form (PATENT PENDING)

FCC #

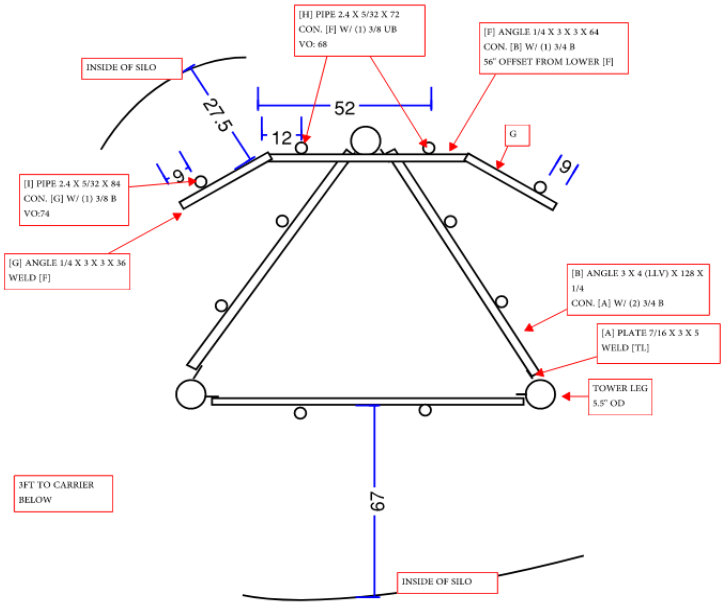
Tower Owner:	ATC	**Mapping Date:**	11/2/2023
Site Name:	CHESHIRE NORTH CT	**Tower Type:**	Other
Site Number or ID:	5000383173	**Tower Height (Ft.):**	76
Mapping Contractor:	ONSIGHT SERVICES	**Mount Elevation (Ft.):**	71

Please Insert Sketches of the Antenna Mount

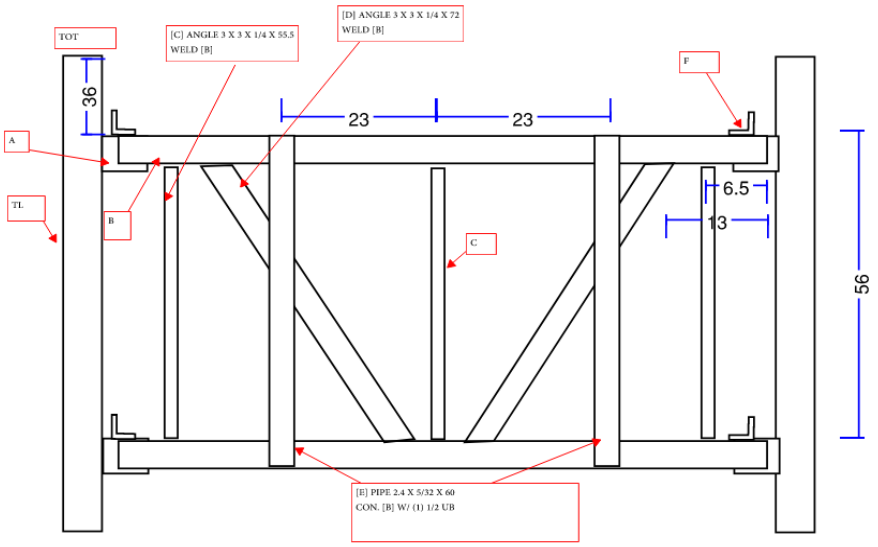
Site :

All measurements / offsets given in inches

TOP VIEW



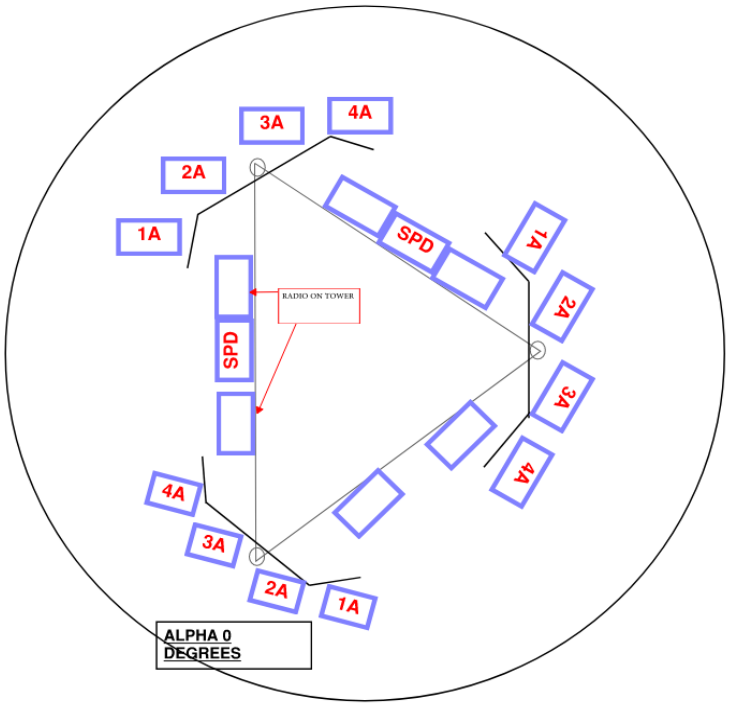
FRONT VIEW (tower face)

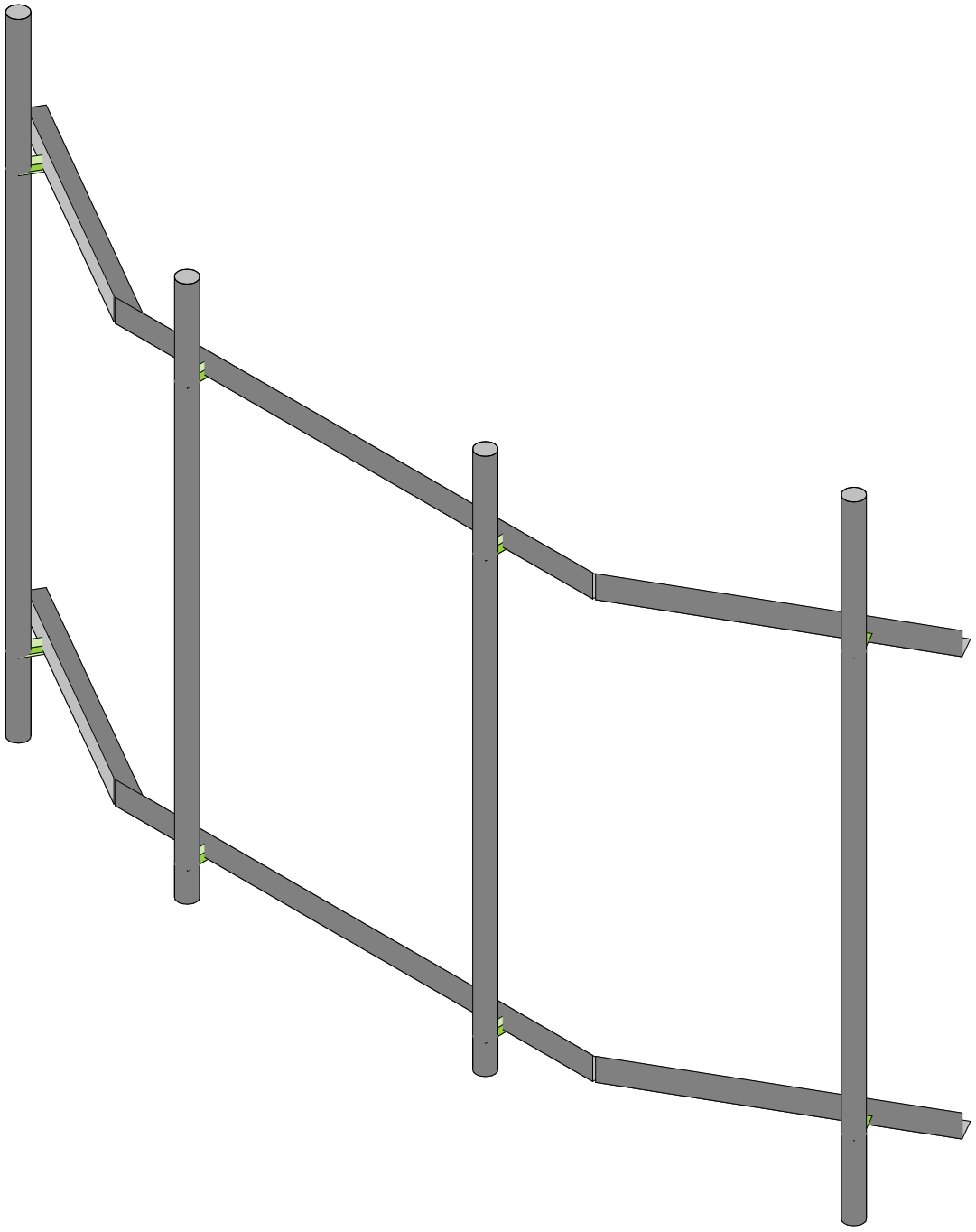


Please Insert Sketches of the Antenna Mount, cont'd

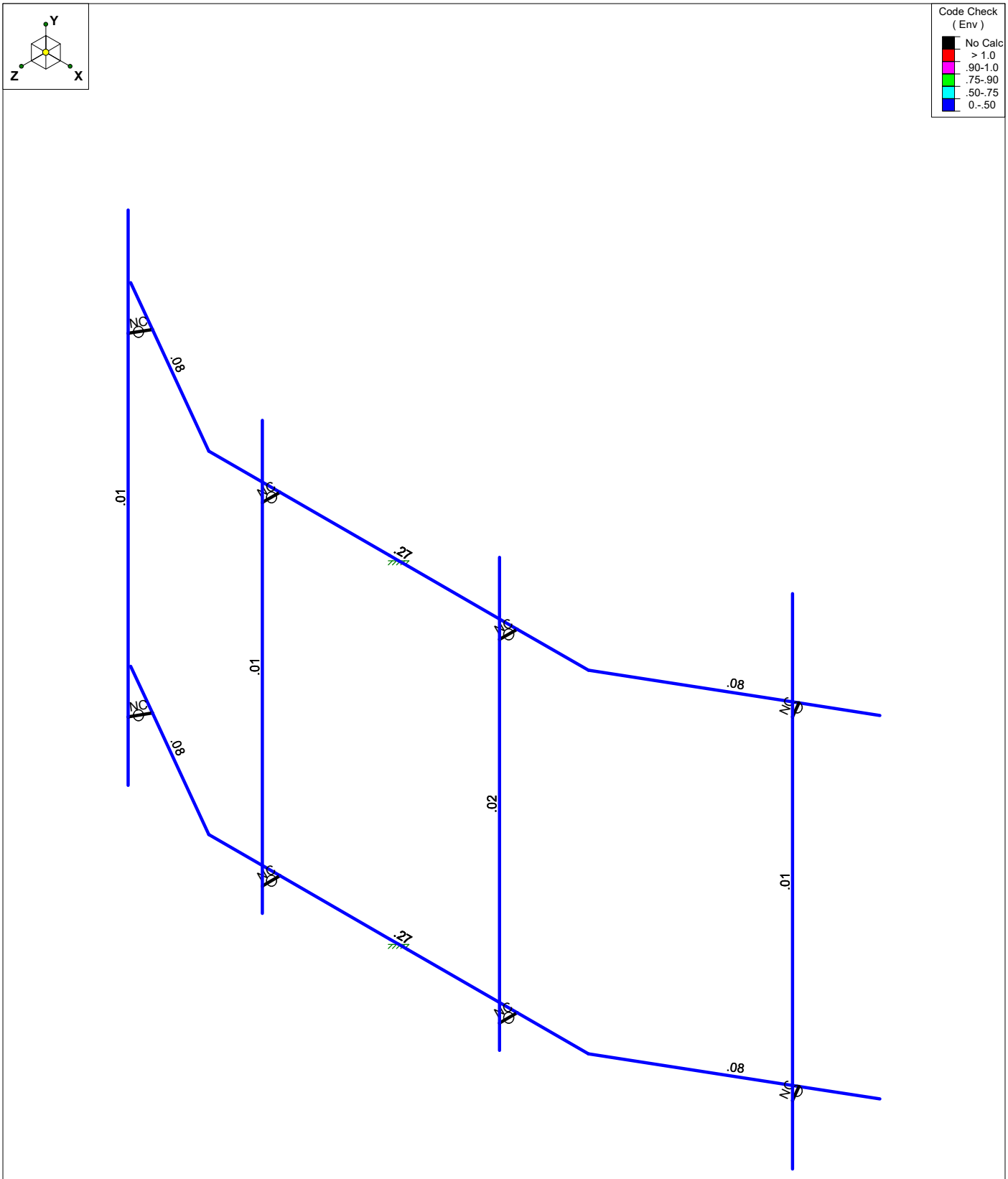
AZIMUTH

(2) 1.55" OD HYBRID



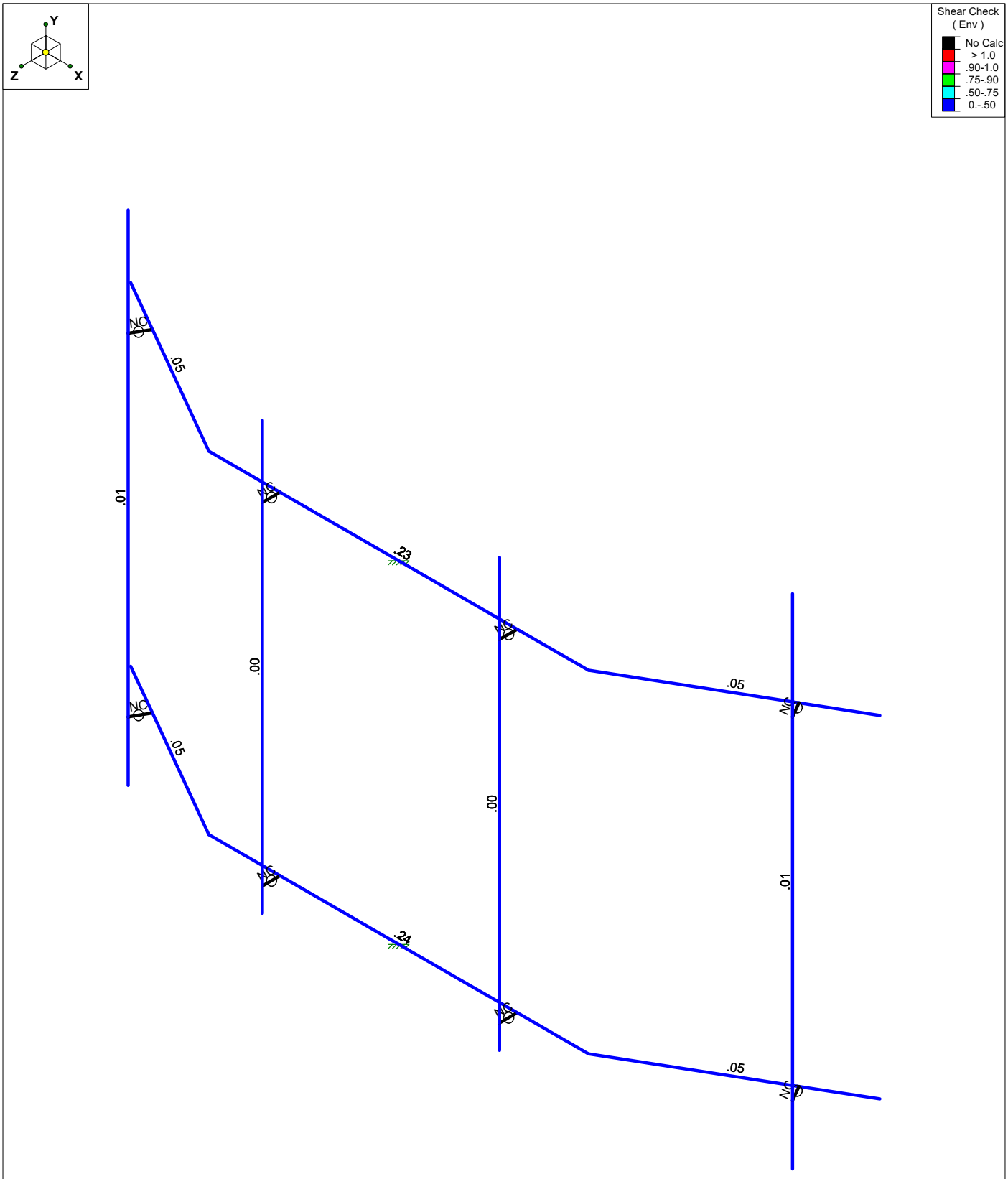


Colliers Engineering & De...	Mount Analysis	SK - 1
		Nov 14, 2023 at 12:42 PM
		5000383173-VZW_MT_LOT_A_...



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

Colliers Engineering & De...	Mount Analysis	SK - 2
		Nov 14, 2023 at 12:42 PM
		5000383173-VZW_MT_LOT_A_...



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

Colliers Engineering & De...	Mount Analysis	SK - 3
		Nov 14, 2023 at 12:42 PM
		5000383173-VZW_MT_LOT_A_...

Basic Load Cases

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

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						20		
60	Structure Wi (210 Deg)	None						20		
61	Structure Wi (240 Deg)	None						20		
62	Structure Wi (270 Deg)	None						20		
63	Structure Wi (300 Deg)	None						20		
64	Structure Wi (330 Deg)	None						20		
65	Structure Wm (0 Deg)	None						20		
66	Structure Wm (30 Deg)	None						20		
67	Structure Wm (60 Deg)	None						20		
68	Structure Wm (90 Deg)	None						20		
69	Structure Wm (120 Deg)	None						20		
70	Structure Wm (150 Deg)	None						20		
71	Structure Wm (180 Deg)	None						20		
72	Structure Wm (210 Deg)	None						20		
73	Structure Wm (240 Deg)	None						20		
74	Structure Wm (270 Deg)	None						20		
75	Structure Wm (300 Deg)	None						20		
76	Structure Wm (330 Deg)	None						20		
77	Lm1	None					1			
78	Lm2	None					1			
79	Lv1	None					1			
80	Lv2	None					1			
81	Antenna Ev	None					36			
82	Antenna Eh (0 Deg)	None					24			
83	Antenna Eh (90 Deg)	None					24			
84	Structure Ev	ELY		-.042						
85	Structure Eh (0 Deg)	ELZ			-.106					
86	Structure Eh (90 Deg)	ELX	.106							

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				

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N1	.125	0	0	0	
2	N2	2.666667	0	0	0	
3	N3	-2.666667	0	0	0	
4	N4	5.264743	0	-1.5	0	
5	N5	.125	-4.666667	0	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
6	N6	2.666667	-4.666667	0	0	
7	N7	-2.666667	-4.666667	0	0	
8	N8	5.264743	-4.666667	-1.5	0	
9	N9	1.666667	0	0	0	
10	N10	1.666667	-4.666667	0	0	
11	N11	-1.666667	0	0	0	
12	N12	-1.666667	-4.666667	0	0	
13	N13	1.666667	0	.25	0	
14	N14	1.666667	-4.666667	.25	0	
15	N15	-1.666667	0	.25	0	
16	N16	-1.666667	-4.666667	.25	0	
17	N17	1.666667	1	.25	0	
18	N18	-1.666667	1	.25	0	
19	N19	1.666667	-5	.25	0	
20	N20	-1.666667	-5	.25	0	
21	N21	4.543055	0	-1.083333	0	
22	N22	4.543055	-4.666667	-1.083333	0	
23	N23	4.668055	0	-0.866827	0	
24	N24	4.668055	-4.666667	-0.866827	0	
25	N25	4.668055	1.5	-0.866827	0	
26	N26	4.668055	-5.5	-0.866827	0	
27	N29	-5.264743	0	-1.5	0	
28	N32	-5.264743	-4.666667	-1.5	0	
29	N33	-4.543055	0	-1.083333	0	
30	N34	-4.543055	-4.666667	-1.083333	0	
31	N35	-4.668055	0	-0.866827	0	
32	N36	-4.668055	-4.666667	-0.866827	0	
33	N37	-4.668055	1.5	-0.866827	0	
34	N38	-4.668055	-5.5	-0.866827	0	
35	N35A	0	0	0	0	
36	N36A	0	-4.666667	0	0	
37	N37A	-.125	0	0	0	
38	N38A	-.125	-4.666667	0	0	

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design L...	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Mount Pipe	PIPE_2.0	Beam	Tube	A53 Gr. B	Typical	1.02	.627	.627	1.25
2	Face Horizontal	L3X3X4	Column	Pipe	A36 Gr.36	Typical	1.44	1.23	1.23	.031

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M1	N3	N2		270	Face Horizontal	Column	Pipe	A36 Gr.36	Typical
2	M2	N2	N4		270	Face Horizontal	Column	Pipe	A36 Gr.36	Typical
3	FACE2	N7	N6		270	Face Horizontal	Column	Pipe	A36 Gr.36	Typical
4	FACE3	N6	N8		270	Face Horizontal	Column	Pipe	A36 Gr.36	Typical
5	M5	N11	N15			RIGID	None	None	RIGID	Typical
6	M6	N9	N13			RIGID	None	None	RIGID	Typical
7	LIVE1	N10	N14			RIGID	None	None	RIGID	Typical
8	LIVE2	N12	N16			RIGID	None	None	RIGID	Typical
9	MP2A	N17	N19			Mount Pipe	Beam	Tube	A53 Gr. B	Typical
10	MP3A	N18	N20			Mount Pipe	Beam	Tube	A53 Gr. B	Typical
11	M11	N21	N23			RIGID	None	None	RIGID	Typical
12	M12	N22	N24			RIGID	None	None	RIGID	Typical
13	MP1A	N25	N26			Mount Pipe	Beam	Tube	A53 Gr. B	Typical
14	M14	N3	N29			Face Horizontal	Column	Pipe	A36 Gr.36	Typical
15	FACE1	N7	N32			Face Horizontal	Column	Pipe	A36 Gr.36	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
16	M16	N33	N35			RIGID	None	None	RIGID	Typical
17	M17	N34	N36			RIGID	None	None	RIGID	Typical
18	MP4A	N37	N38			Mount Pipe	Beam	Tube	A53 Gr. B	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						Yes	** NA **			None
2	M2						Yes	** NA **			None
3	FACE2						Yes	** NA **			None
4	FACE3						Yes	** NA **			None
5	M5		OOOXOO				Yes	** NA **			None
6	M6		OOOXOO				Yes	** NA **			None
7	LIVE1		OOOXOO				Yes	** NA **			None
8	LIVE2		OOOXOO				Yes	** NA **			None
9	MP2A						Yes				None
10	MP3A						Yes				None
11	M11		OOOXOO				Yes	** NA **			None
12	M12		OOOXOO				Yes	** NA **			None
13	MP1A						Yes				None
14	M14						Yes	** NA **			None
15	FACE1						Yes	** NA **			None
16	M16		OOOXOO				Yes	** NA **			None
17	M17		OOOXOO				Yes	** NA **			None
18	MP4A						Yes				None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	Y	-20.3	.5
2	MP1A	My	-.01	.5
3	MP1A	Mz	0	.5
4	MP1A	Y	-20.3	4
5	MP1A	My	-.01	4
6	MP1A	Mz	0	4
7	MP2A	Y	-20.3	.5
8	MP2A	My	-.01	.5
9	MP2A	Mz	0	.5
10	MP2A	Y	-20.3	4
11	MP2A	My	-.01	4
12	MP2A	Mz	0	4
13	MP3A	Y	-20.3	.5
14	MP3A	My	-.01	.5
15	MP3A	Mz	0	.5
16	MP3A	Y	-20.3	4
17	MP3A	My	-.01	4
18	MP3A	Mz	0	4
19	MP4A	Y	-20.3	.5
20	MP4A	My	-.01	.5
21	MP4A	Mz	0	.5
22	MP4A	Y	-20.3	4
23	MP4A	My	-.01	4
24	MP4A	Mz	0	4
25	MP2A	Y	-8.8	4.5
26	MP2A	My	.009	4.5
27	MP2A	Mz	.003	4.5
28	MP2A	Y	-8.8	5.5
29	MP2A	My	.009	5.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
30	MP2A	Mz	.003	5.5
31	MP2A	Y	-8.8	4.5
32	MP2A	My	.009	4.5
33	MP2A	Mz	-.003	4.5
34	MP2A	Y	-8.8	5.5
35	MP2A	My	.009	5.5
36	MP2A	Mz	-.003	5.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.5
2	MP1A	Z	0	.5
3	MP1A	Mx	0	.5
4	MP1A	X	0	4
5	MP1A	Z	0	4
6	MP1A	Mx	0	4
7	MP2A	X	0	.5
8	MP2A	Z	0	.5
9	MP2A	Mx	0	.5
10	MP2A	X	0	4
11	MP2A	Z	0	4
12	MP2A	Mx	0	4
13	MP3A	X	0	.5
14	MP3A	Z	0	.5
15	MP3A	Mx	0	.5
16	MP3A	X	0	4
17	MP3A	Z	0	4
18	MP3A	Mx	0	4
19	MP4A	X	0	.5
20	MP4A	Z	0	.5
21	MP4A	Mx	0	.5
22	MP4A	X	0	4
23	MP4A	Z	0	4
24	MP4A	Mx	0	4
25	MP2A	X	0	4.5
26	MP2A	Z	0	4.5
27	MP2A	Mx	0	4.5
28	MP2A	X	0	5.5
29	MP2A	Z	0	5.5
30	MP2A	Mx	0	5.5
31	MP2A	X	0	4.5
32	MP2A	Z	0	4.5
33	MP2A	Mx	0	4.5
34	MP2A	X	0	5.5
35	MP2A	Z	0	5.5
36	MP2A	Mx	0	5.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.5
2	MP1A	Z	0	.5
3	MP1A	Mx	0	.5
4	MP1A	X	0	4
5	MP1A	Z	0	4
6	MP1A	Mx	0	4
7	MP2A	X	0	.5
8	MP2A	Z	0	.5
9	MP2A	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
10	MP2A	X	0	4
11	MP2A	Z	0	4
12	MP2A	Mx	0	4
13	MP3A	X	0	.5
14	MP3A	Z	0	.5
15	MP3A	Mx	0	.5
16	MP3A	X	0	4
17	MP3A	Z	0	4
18	MP3A	Mx	0	4
19	MP4A	X	0	.5
20	MP4A	Z	0	.5
21	MP4A	Mx	0	.5
22	MP4A	X	0	4
23	MP4A	Z	0	4
24	MP4A	Mx	0	4
25	MP2A	X	0	4.5
26	MP2A	Z	0	4.5
27	MP2A	Mx	0	4.5
28	MP2A	X	0	5.5
29	MP2A	Z	0	5.5
30	MP2A	Mx	0	5.5
31	MP2A	X	0	4.5
32	MP2A	Z	0	4.5
33	MP2A	Mx	0	4.5
34	MP2A	X	0	5.5
35	MP2A	Z	0	5.5
36	MP2A	Mx	0	5.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.5
2	MP1A	Z	0	.5
3	MP1A	Mx	0	.5
4	MP1A	X	0	4
5	MP1A	Z	0	4
6	MP1A	Mx	0	4
7	MP2A	X	0	.5
8	MP2A	Z	0	.5
9	MP2A	Mx	0	.5
10	MP2A	X	0	4
11	MP2A	Z	0	4
12	MP2A	Mx	0	4
13	MP3A	X	0	.5
14	MP3A	Z	0	.5
15	MP3A	Mx	0	.5
16	MP3A	X	0	4
17	MP3A	Z	0	4
18	MP3A	Mx	0	4
19	MP4A	X	0	.5
20	MP4A	Z	0	.5
21	MP4A	Mx	0	.5
22	MP4A	X	0	4
23	MP4A	Z	0	4
24	MP4A	Mx	0	4
25	MP2A	X	0	4.5
26	MP2A	Z	0	4.5
27	MP2A	Mx	0	4.5
28	MP2A	X	0	5.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
29	MP2A	Z	0	5.5
30	MP2A	Mx	0	5.5
31	MP2A	X	0	4.5
32	MP2A	Z	0	4.5
33	MP2A	Mx	0	4.5
34	MP2A	X	0	5.5
35	MP2A	Z	0	5.5
36	MP2A	Mx	0	5.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.5
2	MP1A	Z	0	.5
3	MP1A	Mx	0	.5
4	MP1A	X	0	4
5	MP1A	Z	0	4
6	MP1A	Mx	0	4
7	MP2A	X	0	.5
8	MP2A	Z	0	.5
9	MP2A	Mx	0	.5
10	MP2A	X	0	4
11	MP2A	Z	0	4
12	MP2A	Mx	0	4
13	MP3A	X	0	.5
14	MP3A	Z	0	.5
15	MP3A	Mx	0	.5
16	MP3A	X	0	4
17	MP3A	Z	0	4
18	MP3A	Mx	0	4
19	MP4A	X	0	.5
20	MP4A	Z	0	.5
21	MP4A	Mx	0	.5
22	MP4A	X	0	4
23	MP4A	Z	0	4
24	MP4A	Mx	0	4
25	MP2A	X	0	4.5
26	MP2A	Z	0	4.5
27	MP2A	Mx	0	4.5
28	MP2A	X	0	5.5
29	MP2A	Z	0	5.5
30	MP2A	Mx	0	5.5
31	MP2A	X	0	4.5
32	MP2A	Z	0	4.5
33	MP2A	Mx	0	4.5
34	MP2A	X	0	5.5
35	MP2A	Z	0	5.5
36	MP2A	Mx	0	5.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.5
2	MP1A	Z	0	.5
3	MP1A	Mx	0	.5
4	MP1A	X	0	4
5	MP1A	Z	0	4
6	MP1A	Mx	0	4
7	MP2A	X	0	.5
8	MP2A	Z	0	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
9	MP2A	Mx	0	.5
10	MP2A	X	0	4
11	MP2A	Z	0	4
12	MP2A	Mx	0	4
13	MP3A	X	0	.5
14	MP3A	Z	0	.5
15	MP3A	Mx	0	.5
16	MP3A	X	0	4
17	MP3A	Z	0	4
18	MP3A	Mx	0	4
19	MP4A	X	0	.5
20	MP4A	Z	0	.5
21	MP4A	Mx	0	.5
22	MP4A	X	0	4
23	MP4A	Z	0	4
24	MP4A	Mx	0	4
25	MP2A	X	0	4.5
26	MP2A	Z	0	4.5
27	MP2A	Mx	0	4.5
28	MP2A	X	0	5.5
29	MP2A	Z	0	5.5
30	MP2A	Mx	0	5.5
31	MP2A	X	0	4.5
32	MP2A	Z	0	4.5
33	MP2A	Mx	0	4.5
34	MP2A	X	0	5.5
35	MP2A	Z	0	5.5
36	MP2A	Mx	0	5.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.5
2	MP1A	Z	0	.5
3	MP1A	Mx	0	.5
4	MP1A	X	0	4
5	MP1A	Z	0	4
6	MP1A	Mx	0	4
7	MP2A	X	0	.5
8	MP2A	Z	0	.5
9	MP2A	Mx	0	.5
10	MP2A	X	0	4
11	MP2A	Z	0	4
12	MP2A	Mx	0	4
13	MP3A	X	0	.5
14	MP3A	Z	0	.5
15	MP3A	Mx	0	.5
16	MP3A	X	0	4
17	MP3A	Z	0	4
18	MP3A	Mx	0	4
19	MP4A	X	0	.5
20	MP4A	Z	0	.5
21	MP4A	Mx	0	.5
22	MP4A	X	0	4
23	MP4A	Z	0	4
24	MP4A	Mx	0	4
25	MP2A	X	0	4.5
26	MP2A	Z	0	4.5
27	MP2A	Mx	0	4.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
28	MP2A	X	0	5.5
29	MP2A	Z	0	5.5
30	MP2A	Mx	0	5.5
31	MP2A	X	0	4.5
32	MP2A	Z	0	4.5
33	MP2A	Mx	0	4.5
34	MP2A	X	0	5.5
35	MP2A	Z	0	5.5
36	MP2A	Mx	0	5.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.5
2	MP1A	Z	0	.5
3	MP1A	Mx	0	.5
4	MP1A	X	0	4
5	MP1A	Z	0	4
6	MP1A	Mx	0	4
7	MP2A	X	0	.5
8	MP2A	Z	0	.5
9	MP2A	Mx	0	.5
10	MP2A	X	0	4
11	MP2A	Z	0	4
12	MP2A	Mx	0	4
13	MP3A	X	0	.5
14	MP3A	Z	0	.5
15	MP3A	Mx	0	.5
16	MP3A	X	0	4
17	MP3A	Z	0	4
18	MP3A	Mx	0	4
19	MP4A	X	0	.5
20	MP4A	Z	0	.5
21	MP4A	Mx	0	.5
22	MP4A	X	0	4
23	MP4A	Z	0	4
24	MP4A	Mx	0	4
25	MP2A	X	0	4.5
26	MP2A	Z	0	4.5
27	MP2A	Mx	0	4.5
28	MP2A	X	0	5.5
29	MP2A	Z	0	5.5
30	MP2A	Mx	0	5.5
31	MP2A	X	0	4.5
32	MP2A	Z	0	4.5
33	MP2A	Mx	0	4.5
34	MP2A	X	0	5.5
35	MP2A	Z	0	5.5
36	MP2A	Mx	0	5.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.5
2	MP1A	Z	0	.5
3	MP1A	Mx	0	.5
4	MP1A	X	0	4
5	MP1A	Z	0	4
6	MP1A	Mx	0	4
7	MP2A	X	0	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
8	MP2A	Z	0	.5
9	MP2A	Mx	0	.5
10	MP2A	X	0	4
11	MP2A	Z	0	4
12	MP2A	Mx	0	4
13	MP3A	X	0	.5
14	MP3A	Z	0	.5
15	MP3A	Mx	0	.5
16	MP3A	X	0	4
17	MP3A	Z	0	4
18	MP3A	Mx	0	4
19	MP4A	X	0	.5
20	MP4A	Z	0	.5
21	MP4A	Mx	0	.5
22	MP4A	X	0	4
23	MP4A	Z	0	4
24	MP4A	Mx	0	4
25	MP2A	X	0	4.5
26	MP2A	Z	0	4.5
27	MP2A	Mx	0	4.5
28	MP2A	X	0	5.5
29	MP2A	Z	0	5.5
30	MP2A	Mx	0	5.5
31	MP2A	X	0	4.5
32	MP2A	Z	0	4.5
33	MP2A	Mx	0	4.5
34	MP2A	X	0	5.5
35	MP2A	Z	0	5.5
36	MP2A	Mx	0	5.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.5
2	MP1A	Z	0	.5
3	MP1A	Mx	0	.5
4	MP1A	X	0	4
5	MP1A	Z	0	4
6	MP1A	Mx	0	4
7	MP2A	X	0	.5
8	MP2A	Z	0	.5
9	MP2A	Mx	0	.5
10	MP2A	X	0	4
11	MP2A	Z	0	4
12	MP2A	Mx	0	4
13	MP3A	X	0	.5
14	MP3A	Z	0	.5
15	MP3A	Mx	0	.5
16	MP3A	X	0	4
17	MP3A	Z	0	4
18	MP3A	Mx	0	4
19	MP4A	X	0	.5
20	MP4A	Z	0	.5
21	MP4A	Mx	0	.5
22	MP4A	X	0	4
23	MP4A	Z	0	4
24	MP4A	Mx	0	4
25	MP2A	X	0	4.5
26	MP2A	Z	0	4.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
27	MP2A	Mx	0	4.5
28	MP2A	X	0	5.5
29	MP2A	Z	0	5.5
30	MP2A	Mx	0	5.5
31	MP2A	X	0	4.5
32	MP2A	Z	0	4.5
33	MP2A	Mx	0	4.5
34	MP2A	X	0	5.5
35	MP2A	Z	0	5.5
36	MP2A	Mx	0	5.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.5
2	MP1A	Z	0	.5
3	MP1A	Mx	0	.5
4	MP1A	X	0	4
5	MP1A	Z	0	4
6	MP1A	Mx	0	4
7	MP2A	X	0	.5
8	MP2A	Z	0	.5
9	MP2A	Mx	0	.5
10	MP2A	X	0	4
11	MP2A	Z	0	4
12	MP2A	Mx	0	4
13	MP3A	X	0	.5
14	MP3A	Z	0	.5
15	MP3A	Mx	0	.5
16	MP3A	X	0	4
17	MP3A	Z	0	4
18	MP3A	Mx	0	4
19	MP4A	X	0	.5
20	MP4A	Z	0	.5
21	MP4A	Mx	0	.5
22	MP4A	X	0	4
23	MP4A	Z	0	4
24	MP4A	Mx	0	4
25	MP2A	X	0	4.5
26	MP2A	Z	0	4.5
27	MP2A	Mx	0	4.5
28	MP2A	X	0	5.5
29	MP2A	Z	0	5.5
30	MP2A	Mx	0	5.5
31	MP2A	X	0	4.5
32	MP2A	Z	0	4.5
33	MP2A	Mx	0	4.5
34	MP2A	X	0	5.5
35	MP2A	Z	0	5.5
36	MP2A	Mx	0	5.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.5
2	MP1A	Z	0	.5
3	MP1A	Mx	0	.5
4	MP1A	X	0	4
5	MP1A	Z	0	4
6	MP1A	Mx	0	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
7	MP2A	X	0	.5
8	MP2A	Z	0	.5
9	MP2A	Mx	0	.5
10	MP2A	X	0	4
11	MP2A	Z	0	4
12	MP2A	Mx	0	4
13	MP3A	X	0	.5
14	MP3A	Z	0	.5
15	MP3A	Mx	0	.5
16	MP3A	X	0	4
17	MP3A	Z	0	4
18	MP3A	Mx	0	4
19	MP4A	X	0	.5
20	MP4A	Z	0	.5
21	MP4A	Mx	0	.5
22	MP4A	X	0	4
23	MP4A	Z	0	4
24	MP4A	Mx	0	4
25	MP2A	X	0	4.5
26	MP2A	Z	0	4.5
27	MP2A	Mx	0	4.5
28	MP2A	X	0	5.5
29	MP2A	Z	0	5.5
30	MP2A	Mx	0	5.5
31	MP2A	X	0	4.5
32	MP2A	Z	0	4.5
33	MP2A	Mx	0	4.5
34	MP2A	X	0	5.5
35	MP2A	Z	0	5.5
36	MP2A	Mx	0	5.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.5
2	MP1A	Z	0	.5
3	MP1A	Mx	0	.5
4	MP1A	X	0	4
5	MP1A	Z	0	4
6	MP1A	Mx	0	4
7	MP2A	X	0	.5
8	MP2A	Z	0	.5
9	MP2A	Mx	0	.5
10	MP2A	X	0	4
11	MP2A	Z	0	4
12	MP2A	Mx	0	4
13	MP3A	X	0	.5
14	MP3A	Z	0	.5
15	MP3A	Mx	0	.5
16	MP3A	X	0	4
17	MP3A	Z	0	4
18	MP3A	Mx	0	4
19	MP4A	X	0	.5
20	MP4A	Z	0	.5
21	MP4A	Mx	0	.5
22	MP4A	X	0	4
23	MP4A	Z	0	4
24	MP4A	Mx	0	4
25	MP2A	X	0	4.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
26	MP2A	Z	0	4.5
27	MP2A	Mx	0	4.5
28	MP2A	X	0	5.5
29	MP2A	Z	0	5.5
30	MP2A	Mx	0	5.5
31	MP2A	X	0	4.5
32	MP2A	Z	0	4.5
33	MP2A	Mx	0	4.5
34	MP2A	X	0	5.5
35	MP2A	Z	0	5.5
36	MP2A	Mx	0	5.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.5
2	MP1A	Z	0	.5
3	MP1A	Mx	0	.5
4	MP1A	X	0	4
5	MP1A	Z	0	4
6	MP1A	Mx	0	4
7	MP2A	X	0	.5
8	MP2A	Z	0	.5
9	MP2A	Mx	0	.5
10	MP2A	X	0	4
11	MP2A	Z	0	4
12	MP2A	Mx	0	4
13	MP3A	X	0	.5
14	MP3A	Z	0	.5
15	MP3A	Mx	0	.5
16	MP3A	X	0	4
17	MP3A	Z	0	4
18	MP3A	Mx	0	4
19	MP4A	X	0	.5
20	MP4A	Z	0	.5
21	MP4A	Mx	0	.5
22	MP4A	X	0	4
23	MP4A	Z	0	4
24	MP4A	Mx	0	4
25	MP2A	X	0	4.5
26	MP2A	Z	0	4.5
27	MP2A	Mx	0	4.5
28	MP2A	X	0	5.5
29	MP2A	Z	0	5.5
30	MP2A	Mx	0	5.5
31	MP2A	X	0	4.5
32	MP2A	Z	0	4.5
33	MP2A	Mx	0	4.5
34	MP2A	X	0	5.5
35	MP2A	Z	0	5.5
36	MP2A	Mx	0	5.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.5
2	MP1A	Z	0	.5
3	MP1A	Mx	0	.5
4	MP1A	X	0	4
5	MP1A	Z	0	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
6	MP1A	Mx	0	4
7	MP2A	X	0	.5
8	MP2A	Z	0	.5
9	MP2A	Mx	0	.5
10	MP2A	X	0	4
11	MP2A	Z	0	4
12	MP2A	Mx	0	4
13	MP3A	X	0	.5
14	MP3A	Z	0	.5
15	MP3A	Mx	0	.5
16	MP3A	X	0	4
17	MP3A	Z	0	4
18	MP3A	Mx	0	4
19	MP4A	X	0	.5
20	MP4A	Z	0	.5
21	MP4A	Mx	0	.5
22	MP4A	X	0	4
23	MP4A	Z	0	4
24	MP4A	Mx	0	4
25	MP2A	X	0	4.5
26	MP2A	Z	0	4.5
27	MP2A	Mx	0	4.5
28	MP2A	X	0	5.5
29	MP2A	Z	0	5.5
30	MP2A	Mx	0	5.5
31	MP2A	X	0	4.5
32	MP2A	Z	0	4.5
33	MP2A	Mx	0	4.5
34	MP2A	X	0	5.5
35	MP2A	Z	0	5.5
36	MP2A	Mx	0	5.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.5
2	MP1A	Z	0	.5
3	MP1A	Mx	0	.5
4	MP1A	X	0	4
5	MP1A	Z	0	4
6	MP1A	Mx	0	4
7	MP2A	X	0	.5
8	MP2A	Z	0	.5
9	MP2A	Mx	0	.5
10	MP2A	X	0	4
11	MP2A	Z	0	4
12	MP2A	Mx	0	4
13	MP3A	X	0	.5
14	MP3A	Z	0	.5
15	MP3A	Mx	0	.5
16	MP3A	X	0	4
17	MP3A	Z	0	4
18	MP3A	Mx	0	4
19	MP4A	X	0	.5
20	MP4A	Z	0	.5
21	MP4A	Mx	0	.5
22	MP4A	X	0	4
23	MP4A	Z	0	4
24	MP4A	Mx	0	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
25	MP2A	X	0	4.5
26	MP2A	Z	0	4.5
27	MP2A	Mx	0	4.5
28	MP2A	X	0	5.5
29	MP2A	Z	0	5.5
30	MP2A	Mx	0	5.5
31	MP2A	X	0	4.5
32	MP2A	Z	0	4.5
33	MP2A	Mx	0	4.5
34	MP2A	X	0	5.5
35	MP2A	Z	0	5.5
36	MP2A	Mx	0	5.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.5
2	MP1A	Z	0	.5
3	MP1A	Mx	0	.5
4	MP1A	X	0	4
5	MP1A	Z	0	4
6	MP1A	Mx	0	4
7	MP2A	X	0	.5
8	MP2A	Z	0	.5
9	MP2A	Mx	0	.5
10	MP2A	X	0	4
11	MP2A	Z	0	4
12	MP2A	Mx	0	4
13	MP3A	X	0	.5
14	MP3A	Z	0	.5
15	MP3A	Mx	0	.5
16	MP3A	X	0	4
17	MP3A	Z	0	4
18	MP3A	Mx	0	4
19	MP4A	X	0	.5
20	MP4A	Z	0	.5
21	MP4A	Mx	0	.5
22	MP4A	X	0	4
23	MP4A	Z	0	4
24	MP4A	Mx	0	4
25	MP2A	X	0	4.5
26	MP2A	Z	0	4.5
27	MP2A	Mx	0	4.5
28	MP2A	X	0	5.5
29	MP2A	Z	0	5.5
30	MP2A	Mx	0	5.5
31	MP2A	X	0	4.5
32	MP2A	Z	0	4.5
33	MP2A	Mx	0	4.5
34	MP2A	X	0	5.5
35	MP2A	Z	0	5.5
36	MP2A	Mx	0	5.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.5
2	MP1A	Z	0	.5
3	MP1A	Mx	0	.5
4	MP1A	X	0	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
5	MP1A	Z	0	4
6	MP1A	Mx	0	4
7	MP2A	X	0	.5
8	MP2A	Z	0	.5
9	MP2A	Mx	0	.5
10	MP2A	X	0	4
11	MP2A	Z	0	4
12	MP2A	Mx	0	4
13	MP3A	X	0	.5
14	MP3A	Z	0	.5
15	MP3A	Mx	0	.5
16	MP3A	X	0	4
17	MP3A	Z	0	4
18	MP3A	Mx	0	4
19	MP4A	X	0	.5
20	MP4A	Z	0	.5
21	MP4A	Mx	0	.5
22	MP4A	X	0	4
23	MP4A	Z	0	4
24	MP4A	Mx	0	4
25	MP2A	X	0	4.5
26	MP2A	Z	0	4.5
27	MP2A	Mx	0	4.5
28	MP2A	X	0	5.5
29	MP2A	Z	0	5.5
30	MP2A	Mx	0	5.5
31	MP2A	X	0	4.5
32	MP2A	Z	0	4.5
33	MP2A	Mx	0	4.5
34	MP2A	X	0	5.5
35	MP2A	Z	0	5.5
36	MP2A	Mx	0	5.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.5
2	MP1A	Z	0	.5
3	MP1A	Mx	0	.5
4	MP1A	X	0	4
5	MP1A	Z	0	4
6	MP1A	Mx	0	4
7	MP2A	X	0	.5
8	MP2A	Z	0	.5
9	MP2A	Mx	0	.5
10	MP2A	X	0	4
11	MP2A	Z	0	4
12	MP2A	Mx	0	4
13	MP3A	X	0	.5
14	MP3A	Z	0	.5
15	MP3A	Mx	0	.5
16	MP3A	X	0	4
17	MP3A	Z	0	4
18	MP3A	Mx	0	4
19	MP4A	X	0	.5
20	MP4A	Z	0	.5
21	MP4A	Mx	0	.5
22	MP4A	X	0	4
23	MP4A	Z	0	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
24	MP4A	Mx	0	4
25	MP2A	X	0	4.5
26	MP2A	Z	0	4.5
27	MP2A	Mx	0	4.5
28	MP2A	X	0	5.5
29	MP2A	Z	0	5.5
30	MP2A	Mx	0	5.5
31	MP2A	X	0	4.5
32	MP2A	Z	0	4.5
33	MP2A	Mx	0	4.5
34	MP2A	X	0	5.5
35	MP2A	Z	0	5.5
36	MP2A	Mx	0	5.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.5
2	MP1A	Z	0	.5
3	MP1A	Mx	0	.5
4	MP1A	X	0	4
5	MP1A	Z	0	4
6	MP1A	Mx	0	4
7	MP2A	X	0	.5
8	MP2A	Z	0	.5
9	MP2A	Mx	0	.5
10	MP2A	X	0	4
11	MP2A	Z	0	4
12	MP2A	Mx	0	4
13	MP3A	X	0	.5
14	MP3A	Z	0	.5
15	MP3A	Mx	0	.5
16	MP3A	X	0	4
17	MP3A	Z	0	4
18	MP3A	Mx	0	4
19	MP4A	X	0	.5
20	MP4A	Z	0	.5
21	MP4A	Mx	0	.5
22	MP4A	X	0	4
23	MP4A	Z	0	4
24	MP4A	Mx	0	4
25	MP2A	X	0	4.5
26	MP2A	Z	0	4.5
27	MP2A	Mx	0	4.5
28	MP2A	X	0	5.5
29	MP2A	Z	0	5.5
30	MP2A	Mx	0	5.5
31	MP2A	X	0	4.5
32	MP2A	Z	0	4.5
33	MP2A	Mx	0	4.5
34	MP2A	X	0	5.5
35	MP2A	Z	0	5.5
36	MP2A	Mx	0	5.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.5
2	MP1A	Z	0	.5
3	MP1A	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
4	MP1A	X	0	4
5	MP1A	Z	0	4
6	MP1A	Mx	0	4
7	MP2A	X	0	.5
8	MP2A	Z	0	.5
9	MP2A	Mx	0	.5
10	MP2A	X	0	4
11	MP2A	Z	0	4
12	MP2A	Mx	0	4
13	MP3A	X	0	.5
14	MP3A	Z	0	.5
15	MP3A	Mx	0	.5
16	MP3A	X	0	4
17	MP3A	Z	0	4
18	MP3A	Mx	0	4
19	MP4A	X	0	.5
20	MP4A	Z	0	.5
21	MP4A	Mx	0	.5
22	MP4A	X	0	4
23	MP4A	Z	0	4
24	MP4A	Mx	0	4
25	MP2A	X	0	4.5
26	MP2A	Z	0	4.5
27	MP2A	Mx	0	4.5
28	MP2A	X	0	5.5
29	MP2A	Z	0	5.5
30	MP2A	Mx	0	5.5
31	MP2A	X	0	4.5
32	MP2A	Z	0	4.5
33	MP2A	Mx	0	4.5
34	MP2A	X	0	5.5
35	MP2A	Z	0	5.5
36	MP2A	Mx	0	5.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.5
2	MP1A	Z	0	.5
3	MP1A	Mx	0	.5
4	MP1A	X	0	4
5	MP1A	Z	0	4
6	MP1A	Mx	0	4
7	MP2A	X	0	.5
8	MP2A	Z	0	.5
9	MP2A	Mx	0	.5
10	MP2A	X	0	4
11	MP2A	Z	0	4
12	MP2A	Mx	0	4
13	MP3A	X	0	.5
14	MP3A	Z	0	.5
15	MP3A	Mx	0	.5
16	MP3A	X	0	4
17	MP3A	Z	0	4
18	MP3A	Mx	0	4
19	MP4A	X	0	.5
20	MP4A	Z	0	.5
21	MP4A	Mx	0	.5
22	MP4A	X	0	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
23	MP4A	Z	0	4
24	MP4A	Mx	0	4
25	MP2A	X	0	4.5
26	MP2A	Z	0	4.5
27	MP2A	Mx	0	4.5
28	MP2A	X	0	5.5
29	MP2A	Z	0	5.5
30	MP2A	Mx	0	5.5
31	MP2A	X	0	4.5
32	MP2A	Z	0	4.5
33	MP2A	Mx	0	4.5
34	MP2A	X	0	5.5
35	MP2A	Z	0	5.5
36	MP2A	Mx	0	5.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.5
2	MP1A	Z	0	.5
3	MP1A	Mx	0	.5
4	MP1A	X	0	4
5	MP1A	Z	0	4
6	MP1A	Mx	0	4
7	MP2A	X	0	.5
8	MP2A	Z	0	.5
9	MP2A	Mx	0	.5
10	MP2A	X	0	4
11	MP2A	Z	0	4
12	MP2A	Mx	0	4
13	MP3A	X	0	.5
14	MP3A	Z	0	.5
15	MP3A	Mx	0	.5
16	MP3A	X	0	4
17	MP3A	Z	0	4
18	MP3A	Mx	0	4
19	MP4A	X	0	.5
20	MP4A	Z	0	.5
21	MP4A	Mx	0	.5
22	MP4A	X	0	4
23	MP4A	Z	0	4
24	MP4A	Mx	0	4
25	MP2A	X	0	4.5
26	MP2A	Z	0	4.5
27	MP2A	Mx	0	4.5
28	MP2A	X	0	5.5
29	MP2A	Z	0	5.5
30	MP2A	Mx	0	5.5
31	MP2A	X	0	4.5
32	MP2A	Z	0	4.5
33	MP2A	Mx	0	4.5
34	MP2A	X	0	5.5
35	MP2A	Z	0	5.5
36	MP2A	Mx	0	5.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.5
2	MP1A	Z	0	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
3	MP1A	Mx	0	.5
4	MP1A	X	0	4
5	MP1A	Z	0	4
6	MP1A	Mx	0	4
7	MP2A	X	0	.5
8	MP2A	Z	0	.5
9	MP2A	Mx	0	.5
10	MP2A	X	0	4
11	MP2A	Z	0	4
12	MP2A	Mx	0	4
13	MP3A	X	0	.5
14	MP3A	Z	0	.5
15	MP3A	Mx	0	.5
16	MP3A	X	0	4
17	MP3A	Z	0	4
18	MP3A	Mx	0	4
19	MP4A	X	0	.5
20	MP4A	Z	0	.5
21	MP4A	Mx	0	.5
22	MP4A	X	0	4
23	MP4A	Z	0	4
24	MP4A	Mx	0	4
25	MP2A	X	0	4.5
26	MP2A	Z	0	4.5
27	MP2A	Mx	0	4.5
28	MP2A	X	0	5.5
29	MP2A	Z	0	5.5
30	MP2A	Mx	0	5.5
31	MP2A	X	0	4.5
32	MP2A	Z	0	4.5
33	MP2A	Mx	0	4.5
34	MP2A	X	0	5.5
35	MP2A	Z	0	5.5
36	MP2A	Mx	0	5.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.5
2	MP1A	Z	0	.5
3	MP1A	Mx	0	.5
4	MP1A	X	0	4
5	MP1A	Z	0	4
6	MP1A	Mx	0	4
7	MP2A	X	0	.5
8	MP2A	Z	0	.5
9	MP2A	Mx	0	.5
10	MP2A	X	0	4
11	MP2A	Z	0	4
12	MP2A	Mx	0	4
13	MP3A	X	0	.5
14	MP3A	Z	0	.5
15	MP3A	Mx	0	.5
16	MP3A	X	0	4
17	MP3A	Z	0	4
18	MP3A	Mx	0	4
19	MP4A	X	0	.5
20	MP4A	Z	0	.5
21	MP4A	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
22	MP4A	X	0	4
23	MP4A	Z	0	4
24	MP4A	Mx	0	4
25	MP2A	X	0	4.5
26	MP2A	Z	0	4.5
27	MP2A	Mx	0	4.5
28	MP2A	X	0	5.5
29	MP2A	Z	0	5.5
30	MP2A	Mx	0	5.5
31	MP2A	X	0	4.5
32	MP2A	Z	0	4.5
33	MP2A	Mx	0	4.5
34	MP2A	X	0	5.5
35	MP2A	Z	0	5.5
36	MP2A	Mx	0	5.5

Member Point Loads (BLC 77 : Lm1)

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

Member Point Loads (BLC 78 : Lm2)

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

Member Point Loads (BLC 79 : Lv1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	FACE2	Y	0	%50

Member Point Loads (BLC 80 : Lv2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	FACE3	Y	0	%100

Member Point Loads (BLC 81 : Antenna Ev)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	Y	-.862	.5
2	MP1A	My	-.000431	.5
3	MP1A	Mz	0	.5
4	MP1A	Y	-.862	4
5	MP1A	My	-.000431	4
6	MP1A	Mz	0	4
7	MP2A	Y	-.862	.5
8	MP2A	My	-.000431	.5
9	MP2A	Mz	0	.5
10	MP2A	Y	-.862	4
11	MP2A	My	-.000431	4
12	MP2A	Mz	0	4
13	MP3A	Y	-.862	.5
14	MP3A	My	-.000431	.5
15	MP3A	Mz	0	.5
16	MP3A	Y	-.862	4
17	MP3A	My	-.000431	4
18	MP3A	Mz	0	4
19	MP4A	Y	-.862	.5
20	MP4A	My	-.000431	.5
21	MP4A	Mz	0	.5
22	MP4A	Y	-.862	4

Member Point Loads (BLC 81 : Antenna Ev) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
23	MP4A	My	-.000431	4
24	MP4A	Mz	0	4
25	MP2A	Y	-.374	4.5
26	MP2A	My	.000374	4.5
27	MP2A	Mz	.000125	4.5
28	MP2A	Y	-.374	5.5
29	MP2A	My	.000374	5.5
30	MP2A	Mz	.000125	5.5
31	MP2A	Y	-.374	4.5
32	MP2A	My	.000374	4.5
33	MP2A	Mz	-.000125	4.5
34	MP2A	Y	-.374	5.5
35	MP2A	My	.000374	5.5
36	MP2A	Mz	-.000125	5.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	Z	-2.155	.5
2	MP1A	Mx	0	.5
3	MP1A	Z	-2.155	4
4	MP1A	Mx	0	4
5	MP2A	Z	-2.155	.5
6	MP2A	Mx	0	.5
7	MP2A	Z	-2.155	4
8	MP2A	Mx	0	4
9	MP3A	Z	-2.155	.5
10	MP3A	Mx	0	.5
11	MP3A	Z	-2.155	4
12	MP3A	Mx	0	4
13	MP4A	Z	-2.155	.5
14	MP4A	Mx	0	.5
15	MP4A	Z	-2.155	4
16	MP4A	Mx	0	4
17	MP2A	Z	-.934	4.5
18	MP2A	Mx	-.000311	4.5
19	MP2A	Z	-.934	5.5
20	MP2A	Mx	-.000311	5.5
21	MP2A	Z	-.934	4.5
22	MP2A	Mx	.000311	4.5
23	MP2A	Z	-.934	5.5
24	MP2A	Mx	.000311	5.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	2.155	.5
2	MP1A	Mx	-.001	.5
3	MP1A	X	2.155	4
4	MP1A	Mx	-.001	4
5	MP2A	X	2.155	.5
6	MP2A	Mx	-.001	.5
7	MP2A	X	2.155	4
8	MP2A	Mx	-.001	4
9	MP3A	X	2.155	.5
10	MP3A	Mx	-.001	.5
11	MP3A	X	2.155	4
12	MP3A	Mx	-.001	4
13	MP4A	X	2.155	.5
14	MP4A	Mx	-.001	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
15	MP4A	X	2.155	4
16	MP4A	Mx	-.001	4
17	MP2A	X	.934	4.5
18	MP2A	Mx	.000934	4.5
19	MP2A	X	.934	5.5
20	MP2A	Mx	.000934	5.5
21	MP2A	X	.934	4.5
22	MP2A	Mx	.000934	4.5
23	MP2A	X	.934	5.5
24	MP2A	Mx	.000934	5.5

Member Distributed Loads (BLC 41 : Structure Wo (0 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	FACE2	X	0	0	0	%100
6	FACE2	Z	0	0	0	%100
7	FACE3	X	0	0	0	%100
8	FACE3	Z	0	0	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	0	0	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	0	0	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	0	0	0	%100
17	FACE1	X	0	0	0	%100
18	FACE1	Z	0	0	0	%100
19	MP4A	X	0	0	0	%100
20	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 42 : Structure Wo (30 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	FACE2	X	0	0	0	%100
6	FACE2	Z	0	0	0	%100
7	FACE3	X	0	0	0	%100
8	FACE3	Z	0	0	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	0	0	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	0	0	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	0	0	0	%100
17	FACE1	X	0	0	0	%100
18	FACE1	Z	0	0	0	%100
19	MP4A	X	0	0	0	%100
20	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 43 : Structure Wo (60 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	FACE2	X	0	0	0	%100
6	FACE2	Z	0	0	0	%100
7	FACE3	X	0	0	0	%100
8	FACE3	Z	0	0	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	0	0	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	0	0	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	0	0	0	%100
17	FACE1	X	0	0	0	%100
18	FACE1	Z	0	0	0	%100
19	MP4A	X	0	0	0	%100
20	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 44 : Structure Wo (90 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	FACE2	X	0	0	0	%100
6	FACE2	Z	0	0	0	%100
7	FACE3	X	0	0	0	%100
8	FACE3	Z	0	0	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	0	0	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	0	0	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	0	0	0	%100
17	FACE1	X	0	0	0	%100
18	FACE1	Z	0	0	0	%100
19	MP4A	X	0	0	0	%100
20	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 45 : Structure Wo (120 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft,...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	FACE2	X	0	0	0	%100
6	FACE2	Z	0	0	0	%100
7	FACE3	X	0	0	0	%100
8	FACE3	Z	0	0	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	0	0	0	%100

Member Distributed Loads (BLC 45 : Structure Wo (120 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
13	MP1A	X	0	0	0	%100
14	MP1A	Z	0	0	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	0	0	0	%100
17	FACE1	X	0	0	0	%100
18	FACE1	Z	0	0	0	%100
19	MP4A	X	0	0	0	%100
20	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 46 : Structure Wo (150 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	FACE2	X	0	0	0	%100
6	FACE2	Z	0	0	0	%100
7	FACE3	X	0	0	0	%100
8	FACE3	Z	0	0	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	0	0	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	0	0	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	0	0	0	%100
17	FACE1	X	0	0	0	%100
18	FACE1	Z	0	0	0	%100
19	MP4A	X	0	0	0	%100
20	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 47 : Structure Wo (180 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	FACE2	X	0	0	0	%100
6	FACE2	Z	0	0	0	%100
7	FACE3	X	0	0	0	%100
8	FACE3	Z	0	0	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	0	0	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	0	0	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	0	0	0	%100
17	FACE1	X	0	0	0	%100
18	FACE1	Z	0	0	0	%100
19	MP4A	X	0	0	0	%100
20	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 48 : Structure Wo (210 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...

Member Distributed Loads (BLC 48 : Structure Wo (210 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	FACE2	X	0	0	0	%100
6	FACE2	Z	0	0	0	%100
7	FACE3	X	0	0	0	%100
8	FACE3	Z	0	0	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	0	0	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	0	0	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	0	0	0	%100
17	FACE1	X	0	0	0	%100
18	FACE1	Z	0	0	0	%100
19	MP4A	X	0	0	0	%100
20	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 49 : Structure Wo (240 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	FACE2	X	0	0	0	%100
6	FACE2	Z	0	0	0	%100
7	FACE3	X	0	0	0	%100
8	FACE3	Z	0	0	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	0	0	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	0	0	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	0	0	0	%100
17	FACE1	X	0	0	0	%100
18	FACE1	Z	0	0	0	%100
19	MP4A	X	0	0	0	%100
20	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 50 : Structure Wo (270 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	FACE2	X	0	0	0	%100
6	FACE2	Z	0	0	0	%100
7	FACE3	X	0	0	0	%100
8	FACE3	Z	0	0	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	0	0	0	%100

Member Distributed Loads (BLC 50 : Structure Wo (270 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
13	MP1A	X	0	0	0	%100
14	MP1A	Z	0	0	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	0	0	0	%100
17	FACE1	X	0	0	0	%100
18	FACE1	Z	0	0	0	%100
19	MP4A	X	0	0	0	%100
20	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 51 : Structure Wo (300 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	FACE2	X	0	0	0	%100
6	FACE2	Z	0	0	0	%100
7	FACE3	X	0	0	0	%100
8	FACE3	Z	0	0	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	0	0	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	0	0	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	0	0	0	%100
17	FACE1	X	0	0	0	%100
18	FACE1	Z	0	0	0	%100
19	MP4A	X	0	0	0	%100
20	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 52 : Structure Wo (330 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	FACE2	X	0	0	0	%100
6	FACE2	Z	0	0	0	%100
7	FACE3	X	0	0	0	%100
8	FACE3	Z	0	0	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	0	0	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	0	0	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	0	0	0	%100
17	FACE1	X	0	0	0	%100
18	FACE1	Z	0	0	0	%100
19	MP4A	X	0	0	0	%100
20	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 53 : Structure Wi (0 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...

Member Distributed Loads (BLC 53 : Structure Wi (0 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	FACE2	X	0	0	0	%100
6	FACE2	Z	0	0	0	%100
7	FACE3	X	0	0	0	%100
8	FACE3	Z	0	0	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	0	0	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	0	0	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	0	0	0	%100
17	FACE1	X	0	0	0	%100
18	FACE1	Z	0	0	0	%100
19	MP4A	X	0	0	0	%100
20	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 54 : Structure Wi (30 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	FACE2	X	0	0	0	%100
6	FACE2	Z	0	0	0	%100
7	FACE3	X	0	0	0	%100
8	FACE3	Z	0	0	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	0	0	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	0	0	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	0	0	0	%100
17	FACE1	X	0	0	0	%100
18	FACE1	Z	0	0	0	%100
19	MP4A	X	0	0	0	%100
20	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 55 : Structure Wi (60 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	FACE2	X	0	0	0	%100
6	FACE2	Z	0	0	0	%100
7	FACE3	X	0	0	0	%100
8	FACE3	Z	0	0	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	0	0	0	%100

Member Distributed Loads (BLC 55 : Structure Wi (60 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
13	MP1A	X	0	0	0	%100
14	MP1A	Z	0	0	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	0	0	0	%100
17	FACE1	X	0	0	0	%100
18	FACE1	Z	0	0	0	%100
19	MP4A	X	0	0	0	%100
20	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 56 : Structure Wi (90 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	FACE2	X	0	0	0	%100
6	FACE2	Z	0	0	0	%100
7	FACE3	X	0	0	0	%100
8	FACE3	Z	0	0	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	0	0	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	0	0	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	0	0	0	%100
17	FACE1	X	0	0	0	%100
18	FACE1	Z	0	0	0	%100
19	MP4A	X	0	0	0	%100
20	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 57 : Structure Wi (120 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	FACE2	X	0	0	0	%100
6	FACE2	Z	0	0	0	%100
7	FACE3	X	0	0	0	%100
8	FACE3	Z	0	0	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	0	0	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	0	0	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	0	0	0	%100
17	FACE1	X	0	0	0	%100
18	FACE1	Z	0	0	0	%100
19	MP4A	X	0	0	0	%100
20	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 58 : Structure Wi (150 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...

Member Distributed Loads (BLC 58 : Structure Wi (150 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	FACE2	X	0	0	0	%100
6	FACE2	Z	0	0	0	%100
7	FACE3	X	0	0	0	%100
8	FACE3	Z	0	0	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	0	0	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	0	0	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	0	0	0	%100
17	FACE1	X	0	0	0	%100
18	FACE1	Z	0	0	0	%100
19	MP4A	X	0	0	0	%100
20	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 59 : Structure Wi (180 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	FACE2	X	0	0	0	%100
6	FACE2	Z	0	0	0	%100
7	FACE3	X	0	0	0	%100
8	FACE3	Z	0	0	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	0	0	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	0	0	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	0	0	0	%100
17	FACE1	X	0	0	0	%100
18	FACE1	Z	0	0	0	%100
19	MP4A	X	0	0	0	%100
20	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 60 : Structure Wi (210 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	FACE2	X	0	0	0	%100
6	FACE2	Z	0	0	0	%100
7	FACE3	X	0	0	0	%100
8	FACE3	Z	0	0	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	0	0	0	%100

Member Distributed Loads (BLC 60 : Structure Wi (210 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
13	MP1A	X	0	0	0	%100
14	MP1A	Z	0	0	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	0	0	0	%100
17	FACE1	X	0	0	0	%100
18	FACE1	Z	0	0	0	%100
19	MP4A	X	0	0	0	%100
20	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 61 : Structure Wi (240 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	FACE2	X	0	0	0	%100
6	FACE2	Z	0	0	0	%100
7	FACE3	X	0	0	0	%100
8	FACE3	Z	0	0	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	0	0	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	0	0	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	0	0	0	%100
17	FACE1	X	0	0	0	%100
18	FACE1	Z	0	0	0	%100
19	MP4A	X	0	0	0	%100
20	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 62 : Structure Wi (270 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	FACE2	X	0	0	0	%100
6	FACE2	Z	0	0	0	%100
7	FACE3	X	0	0	0	%100
8	FACE3	Z	0	0	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	0	0	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	0	0	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	0	0	0	%100
17	FACE1	X	0	0	0	%100
18	FACE1	Z	0	0	0	%100
19	MP4A	X	0	0	0	%100
20	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 63 : Structure Wi (300 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...

Member Distributed Loads (BLC 63 : Structure Wi (300 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	FACE2	X	0	0	0	%100
6	FACE2	Z	0	0	0	%100
7	FACE3	X	0	0	0	%100
8	FACE3	Z	0	0	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	0	0	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	0	0	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	0	0	0	%100
17	FACE1	X	0	0	0	%100
18	FACE1	Z	0	0	0	%100
19	MP4A	X	0	0	0	%100
20	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 64 : Structure Wi (330 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	FACE2	X	0	0	0	%100
6	FACE2	Z	0	0	0	%100
7	FACE3	X	0	0	0	%100
8	FACE3	Z	0	0	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	0	0	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	0	0	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	0	0	0	%100
17	FACE1	X	0	0	0	%100
18	FACE1	Z	0	0	0	%100
19	MP4A	X	0	0	0	%100
20	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 65 : Structure Wm (0 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	FACE2	X	0	0	0	%100
6	FACE2	Z	0	0	0	%100
7	FACE3	X	0	0	0	%100
8	FACE3	Z	0	0	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	0	0	0	%100

Member Distributed Loads (BLC 65 : Structure Wm (0 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
13	MP1A	X	0	0	0	%100
14	MP1A	Z	0	0	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	0	0	0	%100
17	FACE1	X	0	0	0	%100
18	FACE1	Z	0	0	0	%100
19	MP4A	X	0	0	0	%100
20	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 66 : Structure Wm (30 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	FACE2	X	0	0	0	%100
6	FACE2	Z	0	0	0	%100
7	FACE3	X	0	0	0	%100
8	FACE3	Z	0	0	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	0	0	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	0	0	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	0	0	0	%100
17	FACE1	X	0	0	0	%100
18	FACE1	Z	0	0	0	%100
19	MP4A	X	0	0	0	%100
20	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 67 : Structure Wm (60 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	FACE2	X	0	0	0	%100
6	FACE2	Z	0	0	0	%100
7	FACE3	X	0	0	0	%100
8	FACE3	Z	0	0	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	0	0	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	0	0	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	0	0	0	%100
17	FACE1	X	0	0	0	%100
18	FACE1	Z	0	0	0	%100
19	MP4A	X	0	0	0	%100
20	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 68 : Structure Wm (90 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...

Member Distributed Loads (BLC 68 : Structure Wm (90 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	FACE2	X	0	0	0	%100
6	FACE2	Z	0	0	0	%100
7	FACE3	X	0	0	0	%100
8	FACE3	Z	0	0	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	0	0	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	0	0	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	0	0	0	%100
17	FACE1	X	0	0	0	%100
18	FACE1	Z	0	0	0	%100
19	MP4A	X	0	0	0	%100
20	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 69 : Structure Wm (120 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	FACE2	X	0	0	0	%100
6	FACE2	Z	0	0	0	%100
7	FACE3	X	0	0	0	%100
8	FACE3	Z	0	0	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	0	0	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	0	0	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	0	0	0	%100
17	FACE1	X	0	0	0	%100
18	FACE1	Z	0	0	0	%100
19	MP4A	X	0	0	0	%100
20	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 70 : Structure Wm (150 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	FACE2	X	0	0	0	%100
6	FACE2	Z	0	0	0	%100
7	FACE3	X	0	0	0	%100
8	FACE3	Z	0	0	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	0	0	0	%100

Member Distributed Loads (BLC 70 : Structure Wm (150 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
13	MP1A	X	0	0	0	%100
14	MP1A	Z	0	0	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	0	0	0	%100
17	FACE1	X	0	0	0	%100
18	FACE1	Z	0	0	0	%100
19	MP4A	X	0	0	0	%100
20	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 71 : Structure Wm (180 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	FACE2	X	0	0	0	%100
6	FACE2	Z	0	0	0	%100
7	FACE3	X	0	0	0	%100
8	FACE3	Z	0	0	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	0	0	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	0	0	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	0	0	0	%100
17	FACE1	X	0	0	0	%100
18	FACE1	Z	0	0	0	%100
19	MP4A	X	0	0	0	%100
20	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 72 : Structure Wm (210 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	FACE2	X	0	0	0	%100
6	FACE2	Z	0	0	0	%100
7	FACE3	X	0	0	0	%100
8	FACE3	Z	0	0	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	0	0	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	0	0	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	0	0	0	%100
17	FACE1	X	0	0	0	%100
18	FACE1	Z	0	0	0	%100
19	MP4A	X	0	0	0	%100
20	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 73 : Structure Wm (240 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...

Member Distributed Loads (BLC 73 : Structure Wm (240 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	FACE2	X	0	0	0	%100
6	FACE2	Z	0	0	0	%100
7	FACE3	X	0	0	0	%100
8	FACE3	Z	0	0	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	0	0	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	0	0	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	0	0	0	%100
17	FACE1	X	0	0	0	%100
18	FACE1	Z	0	0	0	%100
19	MP4A	X	0	0	0	%100
20	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 74 : Structure Wm (270 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	FACE2	X	0	0	0	%100
6	FACE2	Z	0	0	0	%100
7	FACE3	X	0	0	0	%100
8	FACE3	Z	0	0	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	0	0	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	0	0	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	0	0	0	%100
17	FACE1	X	0	0	0	%100
18	FACE1	Z	0	0	0	%100
19	MP4A	X	0	0	0	%100
20	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 75 : Structure Wm (300 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	FACE2	X	0	0	0	%100
6	FACE2	Z	0	0	0	%100
7	FACE3	X	0	0	0	%100
8	FACE3	Z	0	0	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	0	0	0	%100

Member Distributed Loads (BLC 75 : Structure Wm (300 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
13	MP1A	X	0	0	0	%100
14	MP1A	Z	0	0	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	0	0	0	%100
17	FACE1	X	0	0	0	%100
18	FACE1	Z	0	0	0	%100
19	MP4A	X	0	0	0	%100
20	MP4A	Z	0	0	0	%100

Member Distributed Loads (BLC 76 : Structure Wm (330 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location[ft...	End Location[ft,...
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	FACE2	X	0	0	0	%100
6	FACE2	Z	0	0	0	%100
7	FACE3	X	0	0	0	%100
8	FACE3	Z	0	0	0	%100
9	MP2A	X	0	0	0	%100
10	MP2A	Z	0	0	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	0	0	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	0	0	0	%100
15	M14	X	0	0	0	%100
16	M14	Z	0	0	0	%100
17	FACE1	X	0	0	0	%100
18	FACE1	Z	0	0	0	%100
19	MP4A	X	0	0	0	%100
20	MP4A	Z	0	0	0	%100

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	N35A	max	25.444	61	271.72	51	16.993	64	.082	51	-.005	68	.045	51
2		min	-25.443	67	164.359	70	-37.692	58	.05	64	-.016	62	.027	65
3	N36A	max	16.894	73	286.729	51	29.149	52	.082	51	.019	57	.037	51
4		min	-16.895	55	173.478	64	-8.435	70	.05	71	.002	75	.022	69
5	Totals:	max	42.338	61	558.449	51	42.346	52						
6		min	-42.337	67	342.068	70	-42.329	70						

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	M1	L3X3X4	.269	2.667	51	.233	4.333	z	51	24846.436	46656	1.688	3.371	1....	H2-1
2	M2	L3X3X4	.079	0	51	.051	0	z	51	38223.022	46656	1.688	3.756	2....	H2-1
3	FACE2	L3X3X4	.273	2.667	51	.237	4.333	z	51	24846.436	46656	1.688	3.365	1....	H2-1
4	FACE3	L3X3X4	.078	0	51	.052	0	z	51	38223.022	46656	1.688	3.756	2....	H2-1
5	MP2A	PIPE_2.0	.024	4.438	51	.004	5.625		56	20866.733	32130	1.872	1.872	1	H1-1b
6	MP3A	PIPE_2.0	.008	1	51	.005	1		58	20866.733	32130	1.872	1.872	1	H1-1b
7	MP1A	PIPE_2.0	.009	1.458	58	.005	1.531		58	17855.085	32130	1.872	1.872	1	H1-1b

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

	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
8	M14	L3X3X4	.079	0	51	.050	0	y	51	38223.022	46656	1.688	3.756	2....	H2-1
9	FACE1	L3X3X4	.078	0	51	.052	0	y	51	38223.022	46656	1.688	3.756	2....	H2-1
10	MP4A	PIPE_2.0	.009	1.458	58	.006	1.531		59	17855.085	32130	1.872	1.872	1	H1-1b

VzW SMART Tool© Vendor

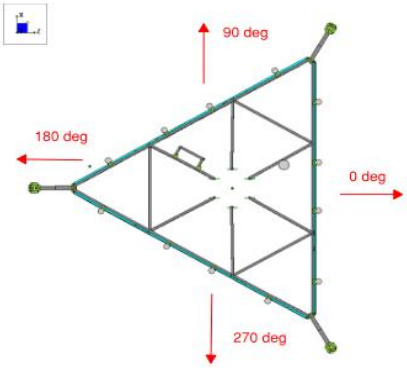
Client:	Verizon Wireless	Date:	11/14/2023
Site Name:	CHESHIRE NORTH CT - ATC Stealth Silo		
MDG #:	5000383173		
Fuze ID #:	17123857	Page:	1

Version 1.01

I. Mount-to-Tower Connection Check

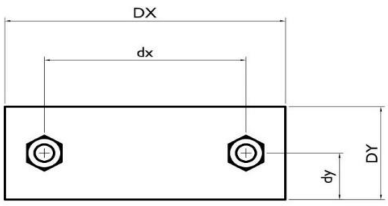
Custom Orientation Required — Yes

Nodes (labeled per Risa)	Orientation (per graphic of typical platform)
N35A	0
M36A	0



Tower Connection Bolt Checks — Yes

Bolt Orientation — Perpendicular



Bolt Quantity per Reaction:	2 (Horizontal)
d_x (in) *(Delta X of typ. bolt config. sketch)*:	5
d_y (in) *(Delta Y of typ. bolt config. sketch)*:	1.5
Bolt Type:	A325N
Bolt Diameter (in):	0.75
Required Tensile Strength / bolt (kips):	0.2
Required Shear Strength / bolt (kips):	0.3
Tensile Capacity / bolt (kips):	29.8
Shear Capacity / bolt (kips):	17.9
Bolt Overall Utilization:	**1.9%**

Tower Connection Baseplate Checks — No

EXHIBIT 5

326 TRYON ROAD
RALEIGH, NC 27607
919.661.6351
WWW.TEPGROUP.NET

Non-Ionizing Electromagnetic Radiation (NIER) Study

Site Number:
370624

Site Name:
Mankes Silo

Location:
Cheshire, Connecticut

Tenants:
Verizon Wireless, AT&T Mobility, & T-Mobile

Prepared For:

American Tower, Inc.
Woburn, Massachusetts

December 13th, 2023

143405 P-412374

Prepared By:

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

Approved By:

TOWER ENGINEERING PROFESSIONALS

326 TRYON ROAD
RALEIGH, NC 27607
919.661.6351
WWW.TEPGROUP.NET

Contents

326 TRYON ROAD
RALEIGH, NC 27607
919.661.6351
WWW.TEPGROUP.NET

Disclaimer Notice

This work is based upon our best interpretation of available information. However, these data and their interpretation are constantly changing. Therefore, we do not warrant that any undertaking based on this report will be successful, or that others will not require further research or actions in support of this proposal or future undertaking. In the event of errors, our liability is strictly limited to the replacement of this document with a corrected one. Liability for consequential damages is specifically denied. Any use of this document constitutes an agreement to hold Tower Engineering Professionals and its employees harmless and indemnify it for all liability, claims, demands, and litigation expenses and attorney's fees arising out of such use.

Work product documents released prior to account settlement remain the sole property of Tower Engineering Professionals and must be returned on demand. Underlying work notes and data relating to this document remain the property of Tower Engineering Professionals. This document shall not be reproduced in whole or part without the permission of Tower Engineering Professionals. Any dispute hereunder shall be adjudicated in North Carolina. Any use or retention of this document constitutes acceptance of these terms, the entire work product, and all charges associated therewith.

TOWER ENGINEERING PROFESSIONALS

326 TRYON ROAD
RALEIGH, NC 27607
919.661.6351
WWW.TEPGROUP.NET

Non-Ionizing Electromagnetic Radiation (NIER) Study

370624 Mankes Silo
Cheshire, 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 370624 Mankes Silo is located at 1338 Highland Ave., in Cheshire, Connecticut at coordinates 41.536944, -72.893333. The support structure is 75' 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) & T-Mobile. 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 100' from the base of the tower with a height of 6' above ground level was used, beyond 100' 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.

326 TRYON ROAD
RALEIGH, NC 27607
919.661.6351
WWW.TEPGROUP.NET

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 370624 Mankes Silo.RF NIER Study 11/15/23.
- 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.

TOWER ENGINEERING PROFESSIONALS

326 TRYON ROAD
RALEIGH, NC 27607
919.661.6351
WWW.TEPGROUP.NET

APPENDIX 1 Site Photos

Aerial View of Site

TOWER ENGINEERING PROFESSIONALS

326 TRYON ROAD
RALEIGH, NC 27607
919.661.6351
WWW.TEPGROUP.NET

Appendix 2 Antenna Inventory

370624 Mankes Silo

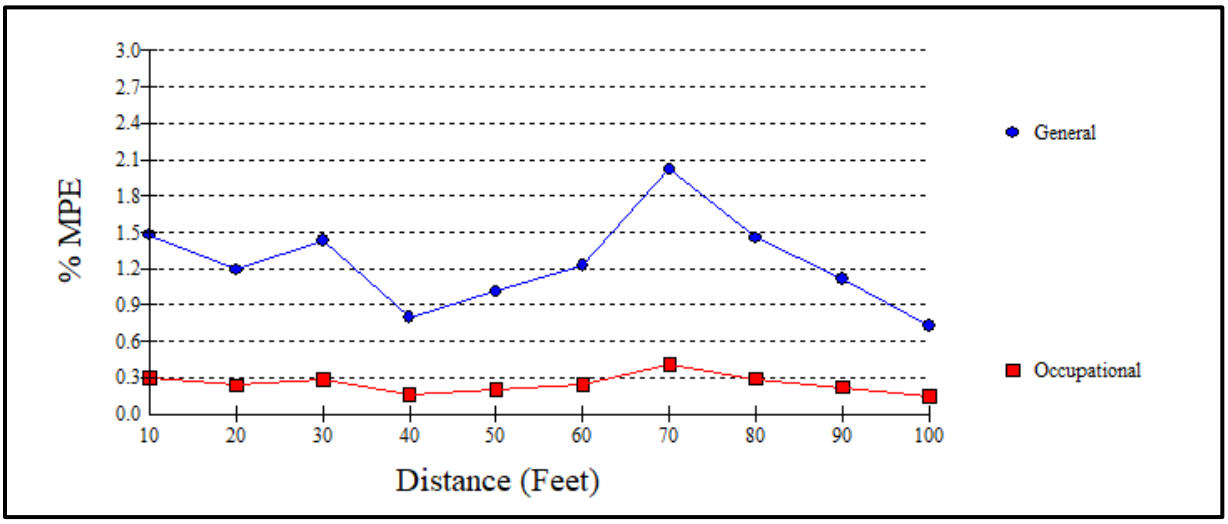
Antenna Inventory

Antenna #	Carrier	Antenna Manufacturer	Antenna Model	Frequency Band (MHz)	Azmiuth (°)	Effective Radiated Power (W)	Radiation Center (ft)
1	Verizon	Commscope	SBNHH-1D65B	700/800	000	27758	70.0
2	Verizon	Commscope	SBNHH-1D65B	700/800	120	27758	70.0
3	Verizon	Commscope	SBNHH-1D65B	700/800	240	27758	70.0
4	Verizon	Commscope	SBNHH-1D65B	700/800	000	27758	70.0
5	Verizon	Commscope	SBNHH-1D65B	700/800	120	27758	70.0
6	Verizon	Commscope	SBNHH-1D65B	700/800	240	27758	70.0
7	Verizon	Commscope	SBNHH-1D65B	700/800	000	27758	70.0
8	Verizon	Commscope	SBNHH-1D65B	700/800	120	27758	70.0
9	Verizon	Commscope	SBNHH-1D65B	700/800	240	27758	70.0
10	Verizon	Commscope	SBNHH-1D65B	700/800	000	27758	70.0
11	Verizon	Commscope	SBNHH-1D65B	700/800	120	27758	70.0
12	Verizon	Commscope	SBNHH-1D65B	700/800	240	27758	70.0
13	T-Mobile	RFS	APXVAALL24	600/700/1900/2100	030	23200	57.0
14	T-Mobile	RFS	APXVAALL24	600/700/1900/2100	150	23200	57.0
15	T-Mobile	RFS	APXVAALL24	600/700/1900/2100	270	23200	57.0
16	AT&T	Ericsson	Air 6419	3500-3700	023	24400	56.0
17	AT&T	Ericsson	Air 6419	3500-3700	143	24400	56.0
18	AT&T	Ericsson	Air 6419	3500-3700	263	24400	56.0
19	AT&T	Scala	80010966	700/800/2300	023	33222	54.0
20	AT&T	Scala	80010965	700/800/2300	143	33222	54.0
21	AT&T	Scala	80010966	700/800/2300	263	33222	54.0
22	AT&T	CCI	DMP65R-BU6EA-K	800/1700/1900/2100	143	57987	54.0
23	AT&T	CCI	DMP65R-BU8D	800/1700/1900/2100	23	57987	54.0
24	AT&T	CCI	DMP65R-BU8D	800/1700/1900/2100	263	57987	54.0
25	AT&T	Ericsson	Air 6449	3500-3700	023	71639	53.0
26	AT&T	Ericsson	Air 6449	3500-3700	143	71639	52.0
27	AT&T	Ericsson	Air 6449	3500-3700	263	71639	52.0

TOWER ENGINEERING PROFESSIONALS

326 TRYON ROAD
RALEIGH, NC 27607
919.661.6351
WWW.TEPGROUP.NET

Appendix 3.1 MPE Limit Study

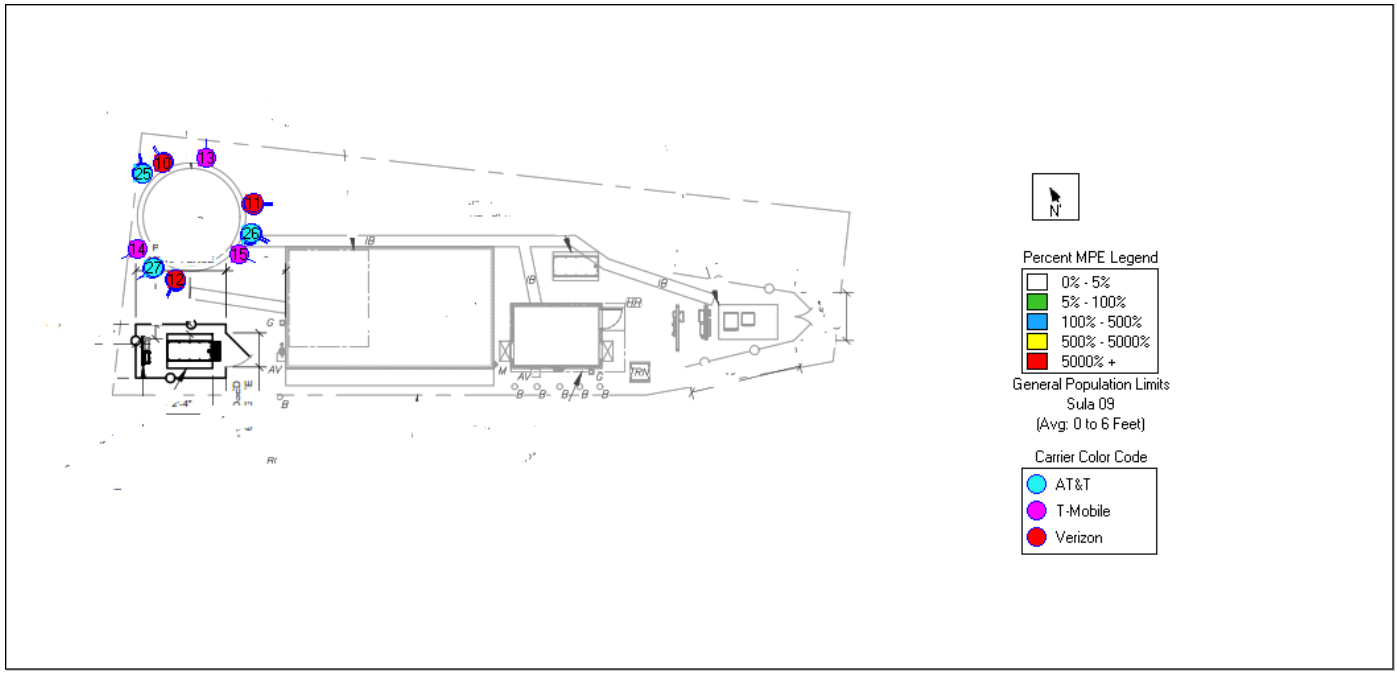


Maximum Power Density (@70'):	0.0124 mW/cm²
General Population MPE (@70'):	2.09190%
Occupational MPE (@70'):	0.4038%

TOWER ENGINEERING PROFESSIONALS

326 TRYON ROAD
RALEIGH, NC 27607
919.661.6351
WWW.TEPGROUP.NET

Appendix 3.2 MPE Limit Study



TOWER ENGINEERING PROFESSIONALS

326 TRYON ROAD
RALEIGH, NC 27607
919.661.6351
WWW.TEPGROUP.NET

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.

326 TRYON ROAD
RALEIGH, NC 27607
919.661.6351
WWW.TEPGROUP.NET

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.

TOWER ENGINEERING PROFESSIONALS

326 TRYON ROAD
RALEIGH, NC 27607
919.661.6351
WWW.TEPGROUP.NET

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.

TOWER ENGINEERING PROFESSIONALS

326 TRYON ROAD
RALEIGH, NC 27607
919.661.6351
WWW.TEPGROUP.NET

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

326 TRYON ROAD
RALEIGH, NC 27607
919.661.6351
WWW.TEPGROUP.NET

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.

326 TRYON ROAD
RALEIGH, NC 27607
919.661.6351
WWW.TEPGROUP.NET

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

326 TRYON ROAD
RALEIGH, NC 27607
919.661.6351
WWW.TEPGROUP.NET

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.

326 TRYON ROAD
RALEIGH, NC 27607
919.661.6351
WWW.TEPGROUP.NET

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

TOWN OF CHESHIRE

Planning & Zoning Commission
84 South Main Street
Cheshire, Connecticut 06410
203-271-6670 • Fax 203-271-6664

CERTIFIED MAIL

December 3, 1999

Springwich Cellular Limited Partnership
c/o Keith Coppins
500 Enterprise Drive -Suite 3A
Rocky Hill, CT 06067

RE: Site Plan Application MAD 12/28/99
Springwich Cellular Limited Partnership
1338 Highland Avenue
To Install a cellular antennae and placement of an Equipment cabinet

Dear Mr. Coppins:

At the regular meeting of the Planning and Zoning Commission held on November 22, 1999, the following motion was unanimously approved:

MOTION: That the Zoning Committee recommends that the Planning and Zoning Commission approve the site plan application of Springwich Cellular Limited Partnership for a cellular antennae and equipment cabinet for property located at 1338 Highland Avenue, in an I-2 zone, as shown on the current Assessor's Map No. 28, Lot No. 15, and shown on the following plans entitled:

SNET Mobility Inc., 1338 Highland Avenue
Cheshire, CT., Springwich Cellular Site, Cheshire-
Tower Farms, October 15, 1999 sheets T-1, C-1, and C-2

With the following stipulation:

1. The applicant shall comply with comments in a memo from the Police Department dated November 4, 1999 and attached hereto.

Moved by Mrs. Mouris, seconded by Mr. Gaudio and unanimously approved.

Very truly yours,

William C. Freitag

William C. Freitag, Secretary
Cheshire Planning and Zoning Commission

EXHIBIT 7

Hello, your package has been delivered.

Delivery Date: Wednesday, 01/03/2024
Delivery Time: 11:58 AM
Signed by: DONNA

CENTERLINE SITE ACQUISITION

Tracking Number:	1Z9Y45030319305962
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:	14519479

Discover more about UPS:

Visit www.ups.com

Sign Up For Additional E-Mail From UPS

Read Compass Online

If you would like to make other delivery arrangements, please select Change My Delivery .

View Less

We were unable to deliver your package on our final delivery attempt.

Your shipment
1Z9Y45030316712956

Estimated delivery
The delivery date will be provided as soon as possible.

- Label Created
- On the Way
- **Final Delivery Attempt Made**
- Return to Sender

Ship To
CHESHIRE, CT US

Get Updates | Change My Delivery | File a Claim

View Details

Hello, your package has been delivered.

Delivery Date: Wednesday, 01/03/2024
Delivery Time: 12:02 PM
Signed by: SHEPARD

CENTERLINE SITE ACQUISITION

Tracking Number:	1Z9Y45030305732937
Ship To:	TOWN OF CHESHIRE 84 SOUTH MAIN STREET CHESHIRE, CT 064103108 US
Number of Packages:	1
UPS Service:	UPS Ground
Package Weight:	1.0 LBS
Reference Number:	14519479

Discover more about UPS:

Visit www.ups.com

Sign Up For Additional E-Mail From UPS

Read Compass Online

Hello, your package has been delivered.

Delivery Date: Wednesday, 01/03/2024
Delivery Time: 12:02 PM
Signed by: KING

CENTERLINE SITE ACQUISITION

Tracking Number:	1Z9Y45030312321948
Ship To:	TOWN OF CHESHIRE 84 SOUTH MAIN STREET CHESHIRE, CT 064103108 US
Number of Packages:	1
UPS Service:	UPS Ground
Package Weight:	1.0 LBS
Reference Number:	14519479

Discover more about UPS:

Visit www.ups.com

Sign Up For Additional E-Mail From UPS

Read Compass Online
