September 22, 2020

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

Regarding: Notice of Exempt Modification – AT&T Site CT2126
Address: 133 Horse Fence Hill Road, Southbury, CT 06488

Dear Ms. Bachman:

New Cingular Wireless, PCS, LLC ("AT&T") currently maintains a wireless telecommunications facility on an existing +/- 154' monopole tower at the above-referenced address, latitude 41.45997222, longitude -73.245. Said monopole tower is operated by American Tower Corporation.

AT&T desires to modify its existing telecommunications facility by adding three (3) antennae, adding six (6) remote radio units, adding three (3) diplexers, removing three (3) TMAs, adding one (1) surge arrestor and accompanying feedlines and mount modifications as more particularly detailed and described on the enclosed Construction Drawings prepared by ATC Tower Services, LLC, last revised August 17, 2020. The centerline height of the existing antennas is and will remain at +/- 153 feet.

Please accept this letter as notification pursuant to R.C.S.A §16-50j-73 for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to the following individuals: Jeff Manville, First Selectman of the Town of Southbury; Jessica Townsend, Land Use Inspector/Enforcement Officer of the Town of Southbury; American Tower Corporation, as tower operator, and William Beatty as underlying property owner.

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

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

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

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

4. The operation of the modified facility will not increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission safety standard. *Please see the RF emissions calculation for AT&T's modified facility enclosed herewith.*

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

6. The existing structure and its foundation can support the proposed loading. *Please see the structural analysis dated June 30, 2020 and prepared by American Tower Corporation enclosed herewith.*

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

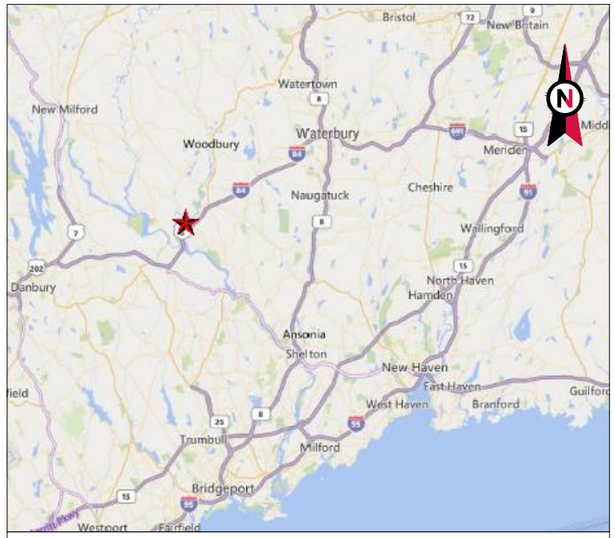
Sincerely,

Jennifer Iliades
Site Acquisition Consultant
Centerline Communications, LLC
750 West Center Street, Suite 301
West Bridgewater, MA 02379
jiliades@clinellc.com

Enclosures:
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 – Original Tower Approval
Exhibit 7 – Notice Delivery Confirmations

cc:
Jeff Manville, First Selectman, Town of Southbury
Jessica Townsend, Land Use Inspector/Enforcement Officer, Town of Southbury
American Tower Corporation
William Beatty

EXHIBIT 1



VICINITY MAP

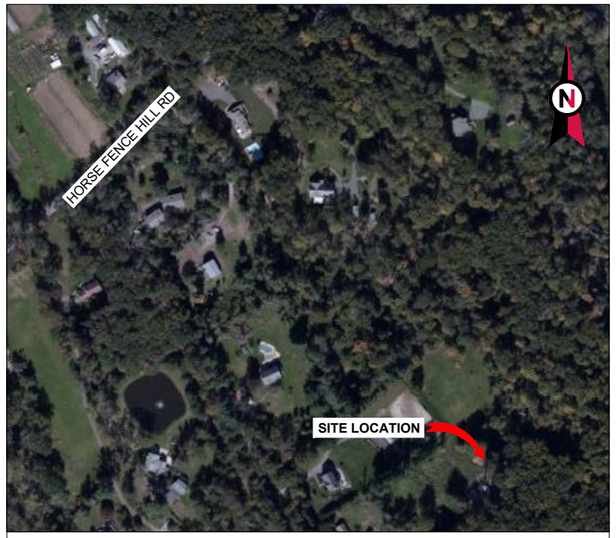
CURRENT PROJECTS:

LTE 5C - PACE #: MRCTB046858
4TX4RX - PACE #: MRCTB046678
5G NR - PACE #: MRCTB046654

AMERICAN TOWER®

ATC SITE NAME: SOUTHBURY
ATC SITE NUMBER: 302519
AT&T PACE NUMBER: MRCTB046858, MRCTB046678, AND MRCTB046654
AT&T SITE ID: CTV2126
AT&T FA CODE:10035064
AT&T SITE NAME: SOUTHBURY
SITE ADDRESS: 133 HORSE FENCE HILL RD
SOUTHBURY, CT 06488

AT&T MOBILITY
ANTENNA AMENDMENT PLAN



LOCATION MAP

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. INTERNATIONAL BUILDING CODE (IBC)
2. NATIONAL ELECTRIC CODE (NEC)
3. LOCAL BUILDING CODE
4. CITY/COUNTY ORDINANCES

UTILITY COMPANIES

POWER COMPANY: CONNECTICUT LIGHT & POWER
PHONE: (800) 286-2000

TELEPHONE COMPANY: FRONTIER COMMUNICATIONS
PHONE: (800) 921-8102

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

PROJECT SUMMARY

SITE ADDRESS:

133 HORSE FENCE HILL RD

SOUTHBURY, CT 06488

COUNTY: NEW HAVEN

GEOGRAPHIC COORDINATES:

LATITUDE: 41.45997222

LONGITUDE: -73.245

GROUND ELEVATION: 346' AMSL

PROJECT TEAM

TOWER OWNER:

AMERICAN TOWER
10 PRESIDENTIAL WAY
WOBURN, MA 01801

ENGINEER:

ATC TOWER SERVICES, LLC
3500 REGENCY PKWY STE 100
CARY, NC 27518

PROPERTY OWNER:

LYNN SMITH FAMILY TRUST
P.O BOX 747
SOUTHBURY, CT 06488

APPLICANT:

AT&T MOBILITY

PROJECT DESCRIPTION

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

TOWER:

REMOVE (3) TT19-08BP111-001 TTA(s)

INSTALL (3) DMP65R-BU6DA ANTENNA(s), (3) 4449 B5/B12 RRH(s), (3) RRUS-32 B66A RRH(s), (3) DBC0061F1V51-2 DIPLEXER(s), (1) DC6-48-60-18-8F SQUID, (2) #6 AWG DC TRUNKS, (1) 2" CONDUIT, AND MOUNT MODIFICATIONS

EXISTING (3) 7770 ANTENNA(s), (3) QS66512-2 ANTENNA(s), (3) HPA-65R-BUU-H6 ANTENNA(s), (3) 4478 B14 RRH(s), (3) RRUS-32 B2 RRH(s), (3) RRUS-11 B12 RRH(s), (3) RRUS-32 B30 RRH(s), (3) TT19-08BP111-001 TTA(s), (3) DBC0061F1V51-1 COMBINER(s), (2) DC6-48-60-18-8F SQUID(s), (4) #8 AWG DC TRUNKS, (2) 18 PAIR FIBER TRUNK(s), (12) 1-1/4" COAX CABLES, AND (2) 2" CONDUIT TO REMAIN

GROUND:

INSTALL (2) 6630 BBU, IDLE CABLE, AND NETSURE 7100

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.

PROJECT LOCATION DIRECTIONS

FROM HARTFORD TAKE I-84 WEST TO EXIT 14. TAKE A RIGHT OFF EXIT, TAKE 3RD LEFT ON HORSE FENCE HILL RD. HALFWAY UP HILL LOOK FOR A GROUP OF 3 MAILBOXES ON LEFT, ONE WILL BE 113. FOLLOW DRIVEWAY TO END PAST LAST HOUSE TURN LEFT AFTER TREES. CHAIN AT BEGINNING OF ACCESS ROAD AT THAT POINT.

SHEET INDEX

SHEET NO:	DESCRIPTION:	REV:	DATE:	BY:
G-001	TITLE SHEET	0	08/17/20	TC
G-002	GENERAL NOTES	0	08/17/20	TC
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C-102	DETAILED EQUIPMENT LAYOUT	0	08/17/20	TC
C-201	TOWER ELEVATION	0	08/17/20	TC
C-401	RF SCHEDULE AND ANTENNA INSTALLATION	0	08/17/20	TC
C-501	CONSTRUCTION DETAILS	0	08/17/20	TC
E-501	GROUNDING DETAILS	0	08/17/20	TC
R-601	SUPPLEMENTAL			
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R-603	SUPPLEMENTAL			
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R-605	SUPPLEMENTAL			
S1	TITLE SHEET			
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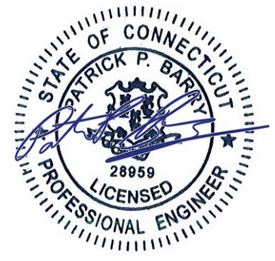
S4	NECESSARY PARTS			

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

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	TC	08/17/20

ATC SITE NUMBER:
302519
ATC SITE NAME:
SOUTHBURY
AT&T MOBILITY SITE NAME:
SOUTHBURY
SITE ADDRESS:
133 HORSE FENCE HILL RD
SOUTHBURY, CT 06488

SEAL:



AT&T

DATE DRAWN:	08/17/20
ATC JOB NO:	13212284_G3
CUSTOMER ID:	SOUTHBURY
CUSTOMER #:	10035064

TITLE SHEET

SHEET NUMBER:	REVISION:
G-001	0

GENERAL CONSTRUCTION NOTES:

1. OWNER FURNISHED MATERIALS, AT&T MOBILITY "THE COMPANY" WILL PROVIDE AND THE CONTRACTOR WILL INSTALL
   - A. BTS EQUIPMENT FRAME (PLATFORM) AND ICEBRIDGE SHELTER (GROUND BUILD/CO-LOCATE ONLY)
   - B. AC/TELCO INTERFACE BOX (PPC)
   - C. ICE BRIDGE (CABLE TRAY WITH COVER) (GROUND BUILD/CO-LOCATE ONLY, GC TO FURNISH AND INSTALL FOR ROOFTOP INSTALLATION)
   - D. TOWERS, MONOPOLES
   - E. TOWER LIGHTING
   - F. GENERATORS & LIQUID PROPANE TANK
   - G. ANTENNA STANDARD BRACKETS, FRAMES AND PIPES FOR MOUNTING
   - H. ANTENNAS (INSTALLED BY OTHERS)
   - I. TRANSMISSION LINE
   - J. TRANSMISSION LINE JUMPERS
   - K. TRANSMISSION LINE CONNECTORS WITH WEATHERPROOFING KITS
   - L. TRANSMISSION LINE GROUND KITS
   - M. HANGERS
   - N. HOISTING GRIPS
   - O. BTS EQUIPMENT
2. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL OTHER MATERIALS FOR THE COMPLETE INSTALLATION OF THE SITE INCLUDING, BUT NOT LIMITED TO, SUCH MATERIALS AS FENCING, STRUCTURAL STEEL SUPPORTING SUB-FRAME FOR PLATFORM, ROOFING LABOR AND MATERIALS, GROUNDING RINGS, GROUNDING WIRES, COPPER-CLAD OR XIT CHEMICAL GROUND ROD(S), BUSS BARS, TRANSFORMERS AND DISCONNECT SWITCHES WHERE APPLICABLE, TEMPORARY ELECTRICAL POWER, CONDUIT, LANDSCAPING COMPOUND STONE, CRANES, CORE DRILLING, SLEEPERS AND RUBBER MATTING, REBAR, CONCRETE CAISSONS, PADS AND/OR AUGER MOUNTS, MISCELLANEOUS FASTENERS, CABLE TRAYS, NON-STANDARD ANTENNA FRAMES AND ALL OTHER MATERIAL AND LABOR REQUIRED TO COMPLETE THE JOB ACCORDING TO THE DRAWINGS AND SPECIFICATIONS. IT IS THE POSITION OF AT&T MOBILITY TO APPLY FOR PERMITTING AND CONTRACTOR RESPONSIBLE FOR PICKUP AND PAYMENT OF REQUIRED PERMITS.
3. ALL WORK SHALL CONFORM TO ALL CURRENT APPLICABLE FEDERAL, STATE, AND LOCAL CODES, INCLUDING ANSI/EIA/TIA-222, AND COMPLY WITH ATC CONSTRUCTION SPECIFICATIONS.
4. CONTRACTOR SHALL CONTACT LOCAL 811 FOR IDENTIFICATION OF UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED INSPECTIONS.
6. ALL DIMENSIONS TO, OF, AND ON EXISTING BUILDINGS, DRAINAGE STRUCTURES, AND SITE IMPROVEMENTS SHALL BE VERIFIED IN FIELD BY CONTRACTOR WITH ALL DISCREPANCIES REPORTED TO THE ENGINEER.
7. DO NOT CHANGE SIZE OR SPACING OF STRUCTURAL ELEMENTS.
8. DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
9. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
10. CONTRACTOR SHALL BRACE STRUCTURES UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: LATERAL BRACING, ANCHOR BOLTS, ETC.
11. CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UTILITIES, GROUNDS DRAINS, DRAIN PIPES, VENTS, ETC. BEFORE COMMENCING WORK.
12. INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE AT&T MOBILITY REP PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH REMEDIAL ACTION SHALL REQUIRE WRITTEN APPROVAL BY THE AT&T MOBILITY REP PRIOR TO PROCEEDING.
13. EACH CONTRACTOR SHALL COOPERATE WITH THE AT&T MOBILITY REP, AND COORDINATE HIS WORK WITH THE WORK OF OTHERS.
14. CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION OF THIS PROJECT TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION OF THE AT&T MOBILITY CONSTRUCTION MANAGER.
15. ALL CABLE/CONDUIT ENTRY/EXIT PORTS SHALL BE WEATHERPROOFED DURING INSTALLATION USING A SILICONE SEALANT.
16. WHERE EXISTING CONDITIONS DO NOT MATCH THOSE SHOWN IN THIS PLAN SET, CONTRACTOR SHALL NOTIFY THE AT&T MOBILITY REP AND ENGINEER OF RECORD IMMEDIATELY.
17. CONTRACTOR SHALL ENSURE ALL SUBCONTRACTORS ARE PROVIDED WITH A COMPLETE AND CURRENT SET OF DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.
18. CONTRACTOR SHALL REMOVE ALL RUBBISH AND DEBRIS FROM THE SITE AT THE END OF EACH DAY.
19. CONTRACTOR SHALL COORDINATE WORK SCHEDULE WITH AMERICAN TOWER CORPORATION (ATC) AND TAKE PRECAUTIONS TO MINIMIZE IMPACT AND DISRUPTION OF OTHER OCCUPANTS OF THE FACILITY.
20. CONTRACTOR SHALL FURNISH AT&T MOBILITY AND AMERICAN TOWER CORPORATION (ATC) WITH A PDF MARKED UP AS-BUILT SET OF DRAWINGS UPON COMPLETION OF WORK.
21. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH AT&T MOBILITY REP TO DETERMINE WHAT, IF ANY, ITEMS WILL BE PROVIDED. ALL ITEMS NOT PROVIDED SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR. CONTRACTOR WILL INSTALL ALL ITEMS PROVIDED.
22. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH AT&T MOBILITY REP TO DETERMINE IF ANY PERMITS WILL BE OBTAINED BY CONTRACTOR. ALL REQUIRED PERMITS NOT OBTAINED BY AT&T MOBILITY MUST BE OBTAINED, AND PAID FOR, BY THE CONTRACTOR.
23. CONTRACTOR SHALL INSTALL ALL SITE SIGNAGE IN ACCORDANCE WITH AT&T MOBILITY SPECIFICATIONS AND REQUIREMENTS.
24. CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO AT&T MOBILITY FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
25. ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND LOCATED ACCORDING TO AT&T MOBILITY SPECIFICATIONS, AND AS SHOWN IN THESE PLANS.
26. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
27. CONTRACTOR SHALL NOTIFY AT&T MOBILITY REP A MINIMUM OF 48 HOURS IN ADVANCE OF POURING CONCRETE OR BACKFILLING ANY UNDERGROUND UTILITIES, FOUNDATIONS OR SEALING ANY WALL, FLOOR OR ROOF PENETRATIONS FOR ENGINEERING REVIEW AND APPROVAL.
28. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY INCLUDING COMPLIANCE WITH ALL APPLICABLE OSHA STANDARDS AND RECOMMENDATIONS AND SHALL PROVIDE ALL NECESSARY SAFETY DEVICES INCLUDING PPE AND PPM AND CONSTRUCTION DEVICES SUCH AS WELDING AND FIRE PREVENTION, TEMPORARY SHORING, SCAFFOLDING, TRENCH BOXES/SLOPING, BARRIERS, ETC.
29. THE CONTRACTOR SHALL PROTECT AT HIS OWN EXPENSE, ALL EXISTING FACILITIES AND SUCH OF HIS NEW WORK LIABLE TO INJURY DURING THE CONSTRUCTION PERIOD. ANY DAMAGE CAUSED BY NEGLECT ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, OR BY THE ELEMENTS DUE TO NEGLECT ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, EITHER TO THE EXISTING WORK, OR TO HIS WORK OR THE WORK OF ANY OTHER CONTRACTOR, SHALL BE REPAIRED AT HIS EXPENSE TO THE OWNER'S SATISFACTION.
30. ALL WORK SHALL BE INSTALLED IN A FIRST CLASS, NEAT AND WORKMANLIKE MANNER BY MECHANICS SKILLED IN THE TRADE INVOLVED. THE QUALITY OF WORKMANSHIP SHALL BE SUBJECT TO THE APPROVAL OF THE AT&T MOBILITY REP. ANY WORK FOUND BY THE AT&T MOBILITY REP TO BE OF INFERIOR QUALITY AND/OR WORKMANSHIP SHALL BE REPLACED AND/OR REWORKED AT CONTRACTOR EXPENSE UNTIL APPROVAL IS OBTAINED.
31. IN ORDER TO ESTABLISH STANDARDS OF QUALITY AND PERFORMANCE, ALL TYPES OF MATERIALS LISTED HEREINAFTER BY MANUFACTURER'S NAMES AND/OR MANUFACTURER'S CATALOG NUMBER SHALL BE PROVIDED BY THESE MANUFACTURERS AS SPECIFIED.
32. AT&T MOBILITY FURNISHED EQUIPMENT SHALL BE PICKED-UP AT THE AT&T MOBILITY WAREHOUSE, NO LATER THAN 48HR AFTER BEING NOTIFIED INSURED, STORED, UNCRATE, PROTECTED AND INSTALLED BY THE CONTRACTOR WITH ALL APPURTENANCES REQUIRED TO PLACE THE EQUIPMENT IN OPERATION, READY FOR USE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE EQUIPMENT AFTER PICKING IT UP.
33. AT&T MOBILITY OR HIS ARCHITECT/ENGINEER RESERVES THE RIGHT TO REJECT ANY EQUIPMENT OR MATERIALS WHICH, IN HIS OWN OPINION ARE NOT IN COMPLIANCE WITH THE CONTRACT DOCUMENTS, EITHER BEFORE OR AFTER INSTALLATION AND THE EQUIPMENT SHALL BE REPLACED WITH EQUIPMENT CONFORMING TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS BY THE CONTRACTOR AT NO COST TO AT&T MOBILITY OR THEIR ARCHITECT/ENGINEER.

SPECIAL CONSTRUCTION ANTENNA INSTALLATION NOTES:

1. WORK INCLUDED:
   - A. ANTENNA AND COAXIAL CABLES ARE FURNISHED BY AT&T MOBILITY UNDER A SEPARATE CONTRACT. THE CONTRACTOR SHALL ASSIST ANTENNA INSTALLATION CONTRACTOR IN TERMS OD COORDINATION AND SITE ACCESS. ERECTION SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF PERSONNEL AND
   - B. INSTALL ANTENNA AS INDICATE ON DRAWINGS AND AT&T MOBILITY SPECIFICATIONS.
   - C. INSTALL GALVANIZED STEEL ANTENNA MOUNTS AS INDICATED ON DRAWINGS
   - D. INSTALL FURNISHED GALVANIZED STEEL OR ALUMINUM WAVEGUIDE AND PROVIDE PRINTOUT OF THAT TEST.
   - E. CONTRACTOR SHALL PROVIDE FOUR (4) SETS OF SWEEP TESTS USING ANRITZU-PACKARD 8713B RF SCALAR NETWORK ANALYZER. SUBMIT FREQUENCY DOMAIN REFLECTOMETER(FDR) TESTS RESULTS TO THE PROJECT MANAGER. SWEEP TESTS SHALL BE AS PER ATTACHED RFS "MINIMUM FIELD TESTING RECOMMENDED FOR ANTENNA AND HELIAX COAXIAL CABLE SYSTEMS" DATED 10/5/93. TESTING SHALL BE PERFORMED BY AN INDEPENDENT TESTING SERVICE AND BE BOUND AND SUBMITTED WITHIN ONE WEEK OF WORK COMPLETION.
   - F. INSTALL COAXIAL CABLES AND TERMINATING BETWEEN ANTENNAS AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS. WEATHERPROOF ALL CONNECTIONS BETWEEN THE ANTENNA AND EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. TERMINATE ALL COAXIAL CABLE THREE (3) FEET IN EXCESS OF ENTRY PORT LOCATION UNLESS OTHERWISE STATED.
   - G. ANTENNA AND COAXIAL CABLE GROUNDING:
2. ALL EXTERIOR #6 GREED GROUND WIRE "DAISY CHAIN" CONNECTIONS ARE TO BE WEATHER SEALED WITH RFS CONNECTORS/SPLICE WEATHERPROOFING KIT #221213 OR EQUAL.
3. ALL COAXIAL CABLE GROUNDING KITS ARE TO BE INSTALLED ON STRAIGHT RUNS OF COAXIAL CABLE (NOT WITHIN BENDS)

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

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

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	TC	08/17/20

ATC SITE NUMBER:
302519
ATC SITE NAME:
SOUTHBURY
AT&T MOBILITY SITE NAME:
SOUTHBURY
SITE ADDRESS:
133 HORSE FENCE HILL RD
SOUTHBURY, CT 06488

SEAL:

AT&T

DATE DRAWN:	08/17/20
ATC JOB NO:	13212284_G3
CUSTOMER ID:	SOUTHBURY
CUSTOMER #:	10035064

GENERAL NOTES

SHEET NUMBER:	REVISION:
G-002	0

SITE PLAN NOTES:

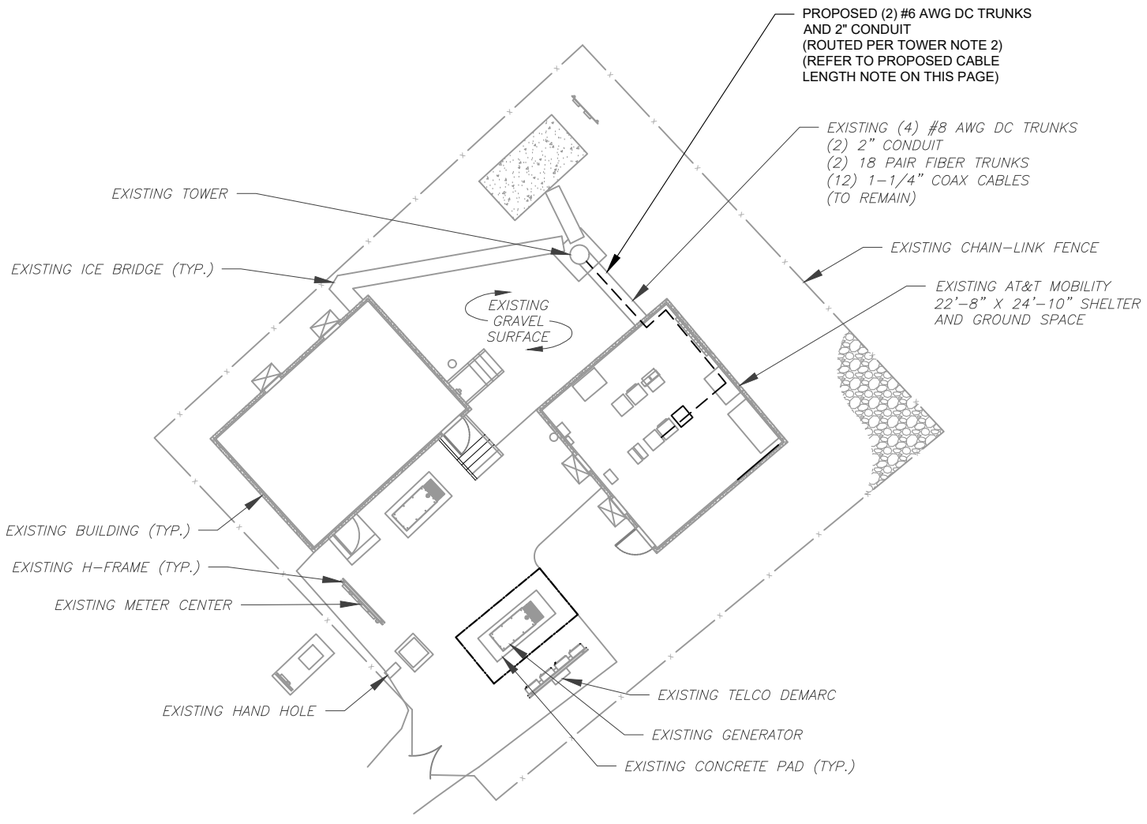
1. THIS SITE PLAN REPRESENTS THE BEST PRESENT KNOWLEDGE AVAILABLE TO THE ENGINEER AT THE TIME OF THIS DESIGN. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO CONSTRUCTION AND VERIFY ALL EXISTING CONDITIONS RELATED TO THE SCOPE OF WORK FOR THIS PROJECT.

2. ICE BRIDGE, CABLE LADDER, COAX PORT, AND COAX CABLE ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL CONFIRM THE EXACT LOCATION OF ALL PROPOSED AND EXISTING EQUIPMENT AND STRUCTURES DEPICTED ON THIS PLAN. BEFORE UTILIZING EXISTING CABLE SUPPORTS, COAX PORTS, INSTALLING NEW PORTS OR ANY OTHER EQUIPMENT, CONTRACTOR SHALL VERIFY ALL ASPECTS OF THE COMPONENTS MEET THE ATC SPECIFICATIONS.

3. THIS PROJECT INCLUDES NO INSTALL OR MODIFICATION AT GRADE.

LEGEND

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



1 DETAILED SITE PLAN

0 20' 40'

SCALE: 1"=20' (11X17)
1"=10' (22X34)

PROPOSED CABLE LENGTH:

1. ESTIMATED LENGTH OF PROPOSED CABLE IS **190'**. ESTIMATED LENGTH OF CABLE WAS PROVIDED BY CUSTOMER OR CALCULATED BY ADDING THE RAD CENTER AND THE DISTANCE FROM THE SHELTER ENTRY PLATE TO THE TOWER (ALONG THE ICE BRIDGE) AND A SAFETY FACTOR MEASUREMENT OF 15% (OF THE TWO PREVIOUS VALUES), CDS DEFER TO GREATEST CABLE LENGTH.
2. ROUTE PROPOSED CABLES ALONG SAME PATH AS EXISTING CABLES AND IN ACCORDANCE WITH STRUCTURAL ANALYSIS. IF ADEQUATE SPACE EXISTS, ROUTE CABLES THROUGH ENTRY PORT HOLE, UP INSIDE OF MONOPOLE, AND THROUGH EXIT PORT HOLE. IF ROUTING OUTSIDE THE MONOPOLE, ATTACH CABLES USING STAND-OFF ADAPTERS MOUNTED TO TOWER USING STAINLESS STEEL BANDING. ADEQUATELY SECURE CABLES USING EITHER APPROPRIATELY SIZED STAINLESS STEEL SNAP-INS OR MOUNTING HARDWARE AND BRACKETS AS SPECIFIED BY CABLE MANUFACTURER.

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

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	TC	08/17/20

ATC SITE NUMBER:
302519

ATC SITE NAME:
SOUTHBURY

AT&T MOBILITY SITE NAME:
SOUTHBURY

SITE ADDRESS:
133 HORSE FENCE HILL RD
SOUTHBURY, CT 06488

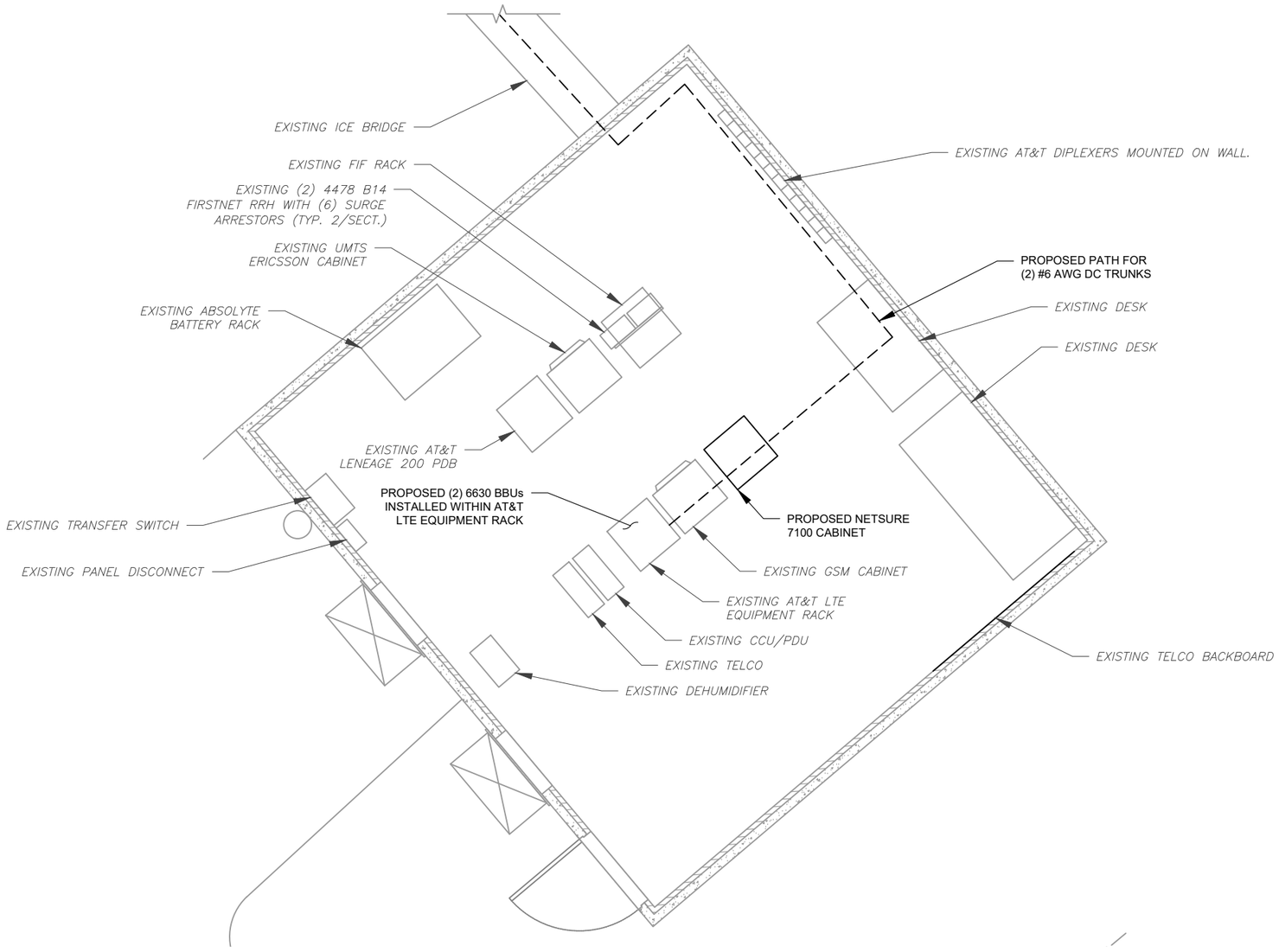
SEAL:

AT&T

DATE DRAWN:	08/17/20
ATC JOB NO:	13212284_G3
CUSTOMER ID:	SOUTHBURY
CUSTOMER #:	10035064

DETAILED SITE PLAN

SHEET NUMBER:	REVISION:
C-101	0



1 DETAILED EQUIPMENT LAYOUT

SCALE: N.T.S.

N

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

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	TC	08/17/20

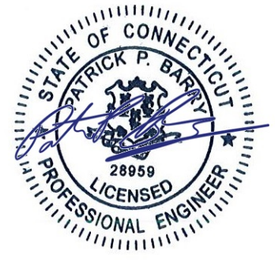
ATC SITE NUMBER:
302519

ATC SITE NAME:
SOUTHBURY

AT&T MOBILITY SITE NAME:
SOUTHBURY

SITE ADDRESS:
133 HORSE FENCE HILL RD
SOUTHBURY, CT 06488

SEAL:

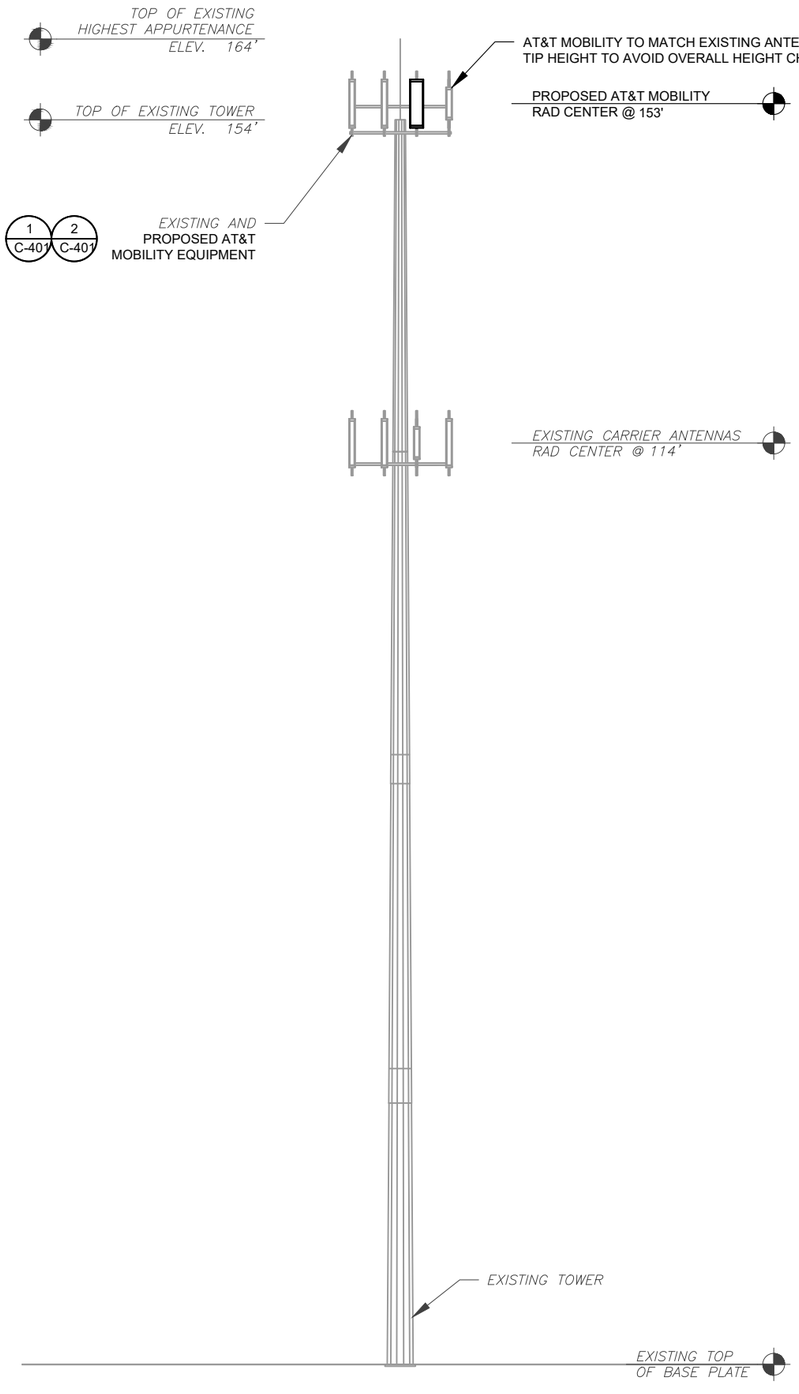


AT&T

DATE DRAWN:	08/17/20
ATC JOB NO:	13212284_G3
CUSTOMER ID:	SOUTHBURY
CUSTOMER #:	10035064

DETAILED EQUIPMENT LAYOUT

SHEET NUMBER:	REVISION:
C-102	0



1 TOWER ELEVATION
SCALE: N.T.S.

PER MOUNT ANALYSIS COMPLETED BY INFINIGY, DATED 08/04/20, THE EXISTING MOUNT CAN NOT 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

TOWER NOTE:

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM WITH THE AMERICAN TOWER CONSTRUCTION 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. ROUTE PROPOSED CABLES ALONG SAME PATH AS EXISTING CABLES AND IN ACCORDANCE WITH STRUCTURAL ANALYSIS. IF ADEQUATE SPACE EXISTS, ROUTE CABLES THROUGH ENTRY PORT HOLE, UP INSIDE OF MONOPOLE, AND THROUGH EXIT PORT HOLE. IF ROUTING OUTSIDE THE MONOPOLE, ATTACH CABLES USING STAND-OFF ADAPTERS MOUNTED TO TOWER USING STAINLESS STEEL BANDING. ADEQUATELY SECURE CABLES USING EITHER APPROPRIATELY SIZED STAINLESS STEEL SNAP-INS OR MOUNTING HARDWARE AND BRACKETS AS SPECIFIED BY CABLE MANUFACTURER.
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.)

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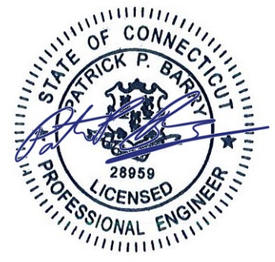
SEAL:



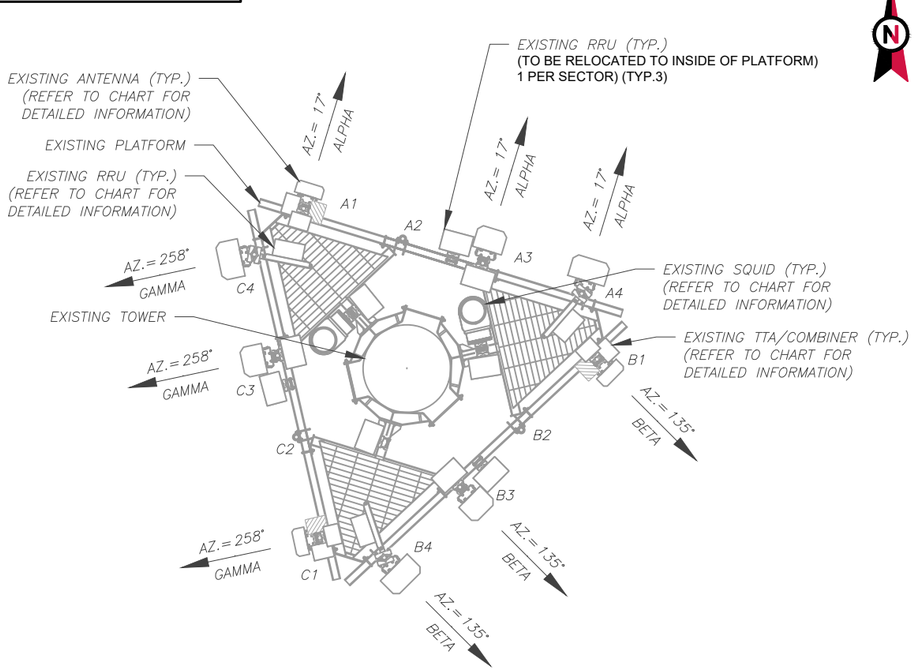
AT&T

DATE DRAWN:	08/17/20
ATC JOB NO:	13212284_G3
CUSTOMER ID:	SOUTHBURY
CUSTOMER #:	10035064

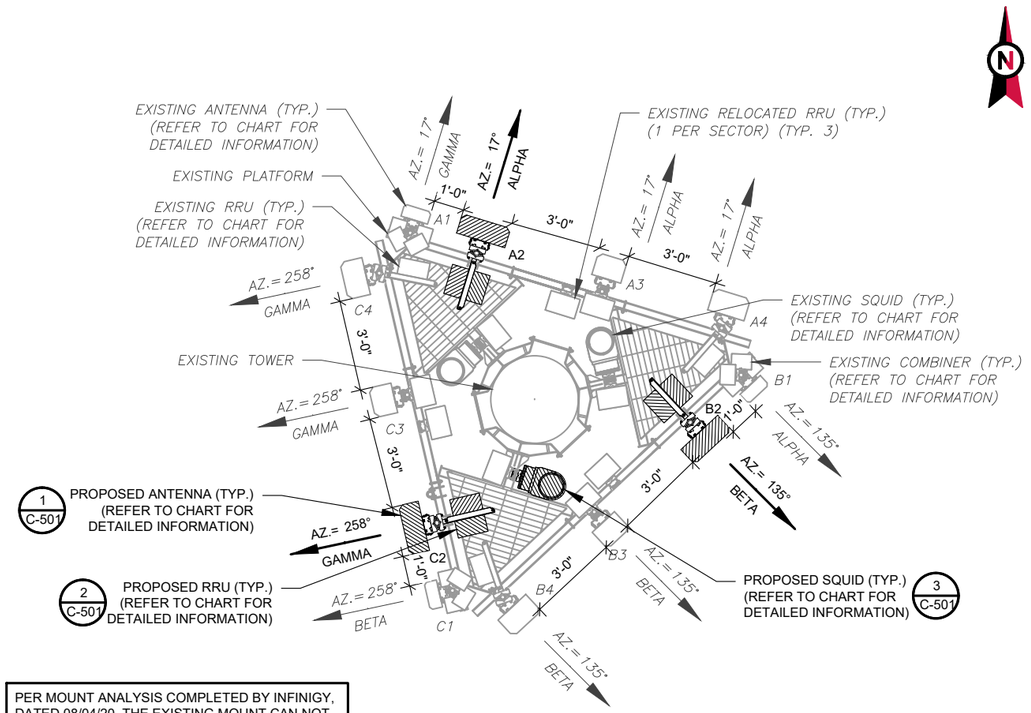
TOWER ELEVATION

SHEET NUMBER:	REVISION:
C-201	0

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



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



PER MOUNT ANALYSIS COMPLETED BY INFINIGY, DATED 08/04/20, THE EXISTING MOUNT CAN NOT ADEQUATELY SUPPORT THE PROPOSED LOADING. THE MOUNT MODIFICATION PROPOSED IN THE MOUNT ANALYSIS, INCLUDED AT THE END OF THIS PLAN SET, MUST BE INSTALLED PRIOR TO THE INSTALLATION OF THE PROPOSED ANTENNAS AND OTHER EQUIPMENT

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

PROPOSED RRUs MUST BE INSTALLED A MINIMUM OF 8" AWAY FROM ALL ANTENNAS

EXISTING ANTENNA SCHEDULE

LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY	
SECTOR	RAD	AZ	POS	ANTENNA	BAND	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	153'	17°	A1	7770	850 UMTS	RMN	TT19-08BP111-001 TT19-08BP111-001 DBC0061F1V51-1 DBC0061F1V51-2	RMV RMN RMN RMN
			A2	–	–	–	–	–
			A3	QS66512-2	700/1900 LTE	RMN	4478 B14 RRUS-32 B2	RMN RMN
			A4	HPA-65R-BUU-H6	700/WCS LTE	RMN	RRUS-11 B12 RRUS-32 B30	RMN RMN
BETA	153'	135°	B1	7770	850 UMTS	RMN	TT19-08BP111-001 TT19-08BP111-001 DBC0061F1V51-1 DBC0061F1V51-2	RMV RMN RMN RMN
			B2	–	–	–	–	–
			B3	QS66512-2	700/1900 LTE	RMN	4478 B14 RRUS-32 B2	RMN RMN
			B4	HPA-65R-BUU-H6	700/WCS LTE	RMN	RRUS-11 B12 RRUS-32 B30	RMN RMN
GAMMA	153'	258°	C1	7770	850 UMTS	RMN	TT19-08BP111-001 TT19-08BP111-001 DBC0061F1V51-1 DBC0061F1V51-2	RMV RMN RMN RMN
			C2	–	–	–	–	–
			C3	QS66512-2	700/1900 LTE	RMN	4478 B14 RRUS-32 B2	RMN RMN
			C4	HPA-65R-BUU-H6	700/WCS LTE	RMN	RRUS-11 B12 RRUS-32 B30	RMN RMN

NOTES

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

FINAL ANTENNA SCHEDULE

LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY	
SECTOR	RAD	AZ	POS	ANTENNA	BAND	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	153'	17°	C1	7770	850 UMTS	RMN	TT19-08BP111-001 DBC0061F1V51-1 DBC0061F1V51-2	RMN RMN ADD
			A2	DMP65R-BU6DA	700/850/AWS LTE 850 5G	ADD	4449 B5/B12 RRUS-32 B66A	ADD ADD
			A3	QS66512-2	700/1900 LTE	RMN	4478 B14 RRUS-32 B2	RMN RMN
			A4	HPA-65R-BUU-H6	WCS LTE	RMN	RRUS-11 B12 RRUS-32 B30	RMN RMN
BETA	153'	135°	A1	7770	850 UMTS	RMN	TT19-08BP111-001 DBC0061F1V51-1 DBC0061F1V51-2	RMN RMN ADD
			B2	DMP65R-BU6DA	700/850/AWS LTE 850 5G	ADD	4449 B5/B12 RRUS-32 B66A	ADD ADD
			B3	QS66512-2	700/1900 LTE	RMN	4478 B14 RRUS-32 B2	RMN RMN
			B4	HPA-65R-BUU-H6	WCS LTE	RMN	RRUS-11 B12 RRUS-32 B30	RMN RMN
GAMMA	153'	258°	B1	7770	850 UMTS	RMN	TT19-08BP111-001 DBC0061F1V51-1 DBC0061F1V51-2	RMN RMN ADD
			C2	DMP65R-BU6DA	700/850/AWS LTE 850 5G	ADD	4449 B5/B12 RRUS-32 B66A	ADD ADD
			C3	QS66512-2	700/1900 LTE	RMN	4478 B14 RRUS-32 B2	RMN RMN
			C4	HPA-65R-BUU-H6	WCS LTE	RMN	RRUS-11 B12 RRUS-32 B30	RMN RMN

EXISTING FIBER DISTRIBUTION/SQUID		EXISTING CABLING SUMMARY			
MODEL NUMBER	STATUS	COAX	DC	FIBER	STATUS
(2) DC6-48-60-18-8F	RMN	(12) 1-1/4"	(4) #8 AWG	(2) 18 PAIR	RMN
–	–	(2) 2" CONDUIT			RMN

STATUS ABBREVIATIONS

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

CABLE LENGTHS FOR JUMPERS

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

3 EQUIPMENT SCHEDULES

FINAL FIBER DISTRIBUTION/SQUID		FINAL CABLING SUMMARY			
MODEL NUMBER	STATUS	COAX	DC	FIBER	STATUS
(2) DC6-48-60-18-8F	RMN	(12) 1-1/4"	(4) #8 AWG	(2) 18 PAIR	RMN
-	-	(2) 2" CONDUIT			RMN
DC6-48-60-18-8F	ADD	-	(2) #6 AWG	-	ADD
-	-	(1) 2" CONDUIT			ADD

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AT&T MOBILITY SITE NAME:
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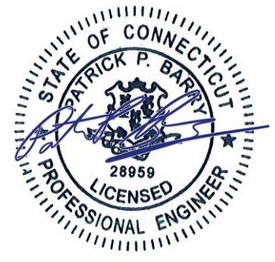
SITE ADDRESS:
133 HORSE FENCE HILL RD
SOUTHBURY, CT 06488

SEAL:

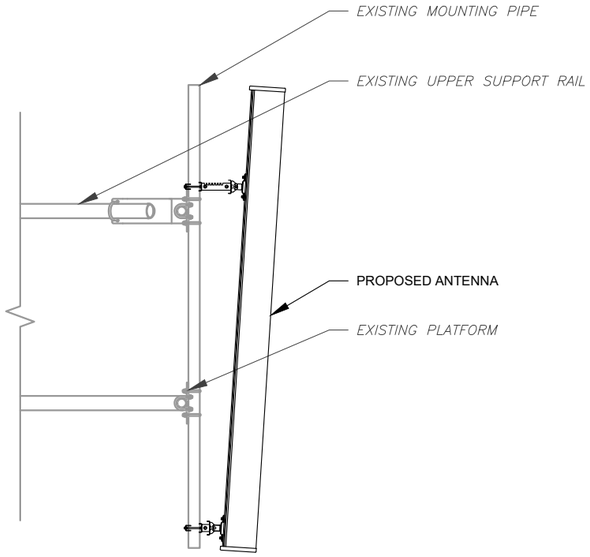


AT&T

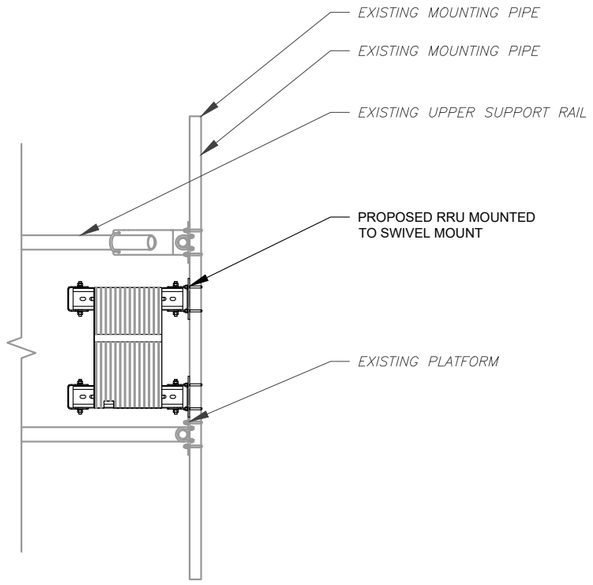
DATE DRAWN:	08/17/20
ATC JOB NO:	13212284_G3
CUSTOMER ID:	SOUTHBURY
CUSTOMER #:	10035064

RF SCHEDULE AND ANTENNA INSTALLATION

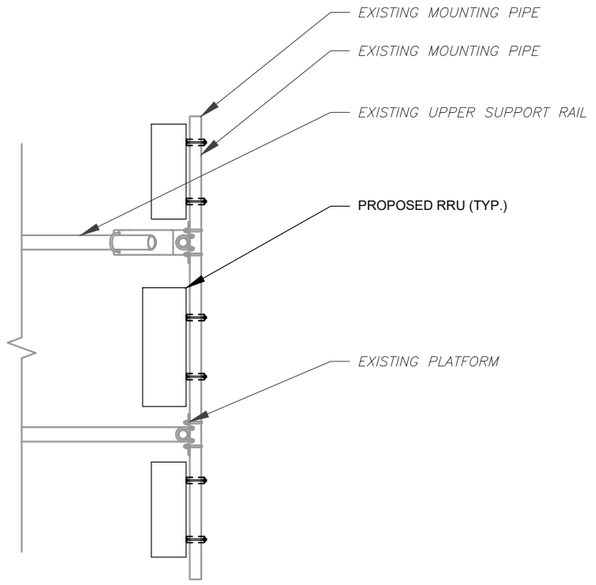
SHEET NUMBER:	REVISION:
C-401	0

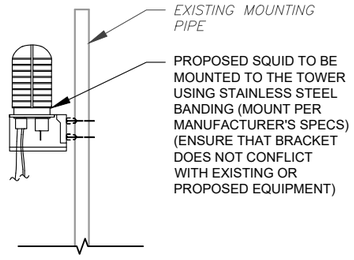


1 ANTENNA DETAIL
SCALE: N.T.S.



2 RRU DETAIL
SCALE: N.T.S.





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

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SOUTHBURY, CT 06488

SEAL:

AT&T

DATE DRAWN:	08/17/20
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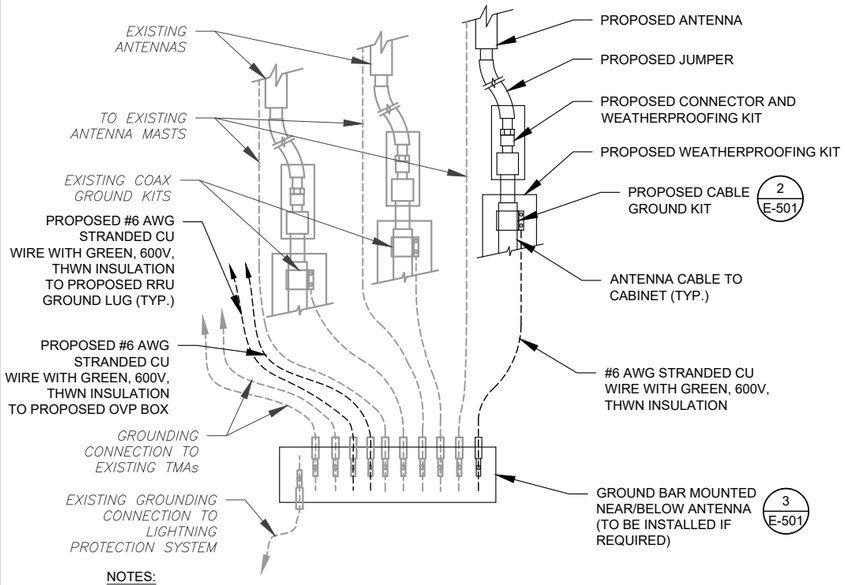
CUSTOMER ID:	SOUTHBURY
CUSTOMER #:	10035064

CONSTRUCTION DETAILS

SHEET NUMBER:	REVISION:
C-501	0

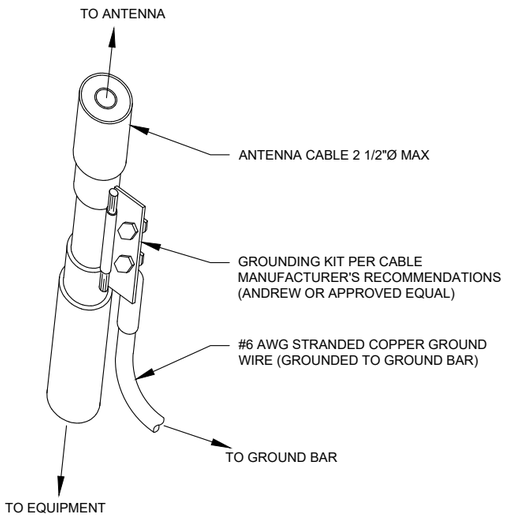


NOTES:

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

1 TYPICAL ANTENNA GROUNDING DIAGRAM

SCALE: N.T.S.

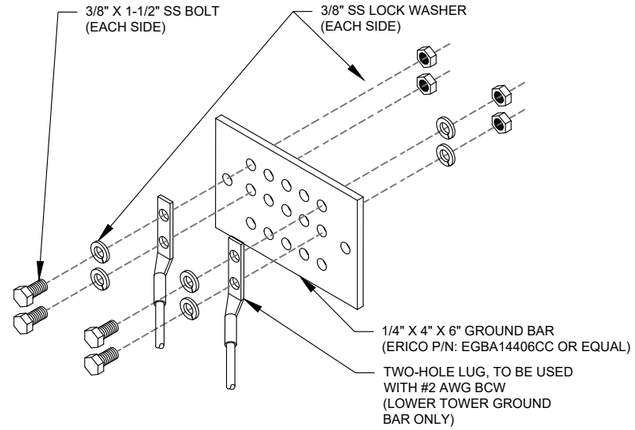


GROUND KIT NOTES:

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

2 CABLE GROUND KIT CONNECTION DETAIL

SCALE: N.T.S.



GROUND BAR NOTES:

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

3 TOWER GROUND BAR DETAIL

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AT&T

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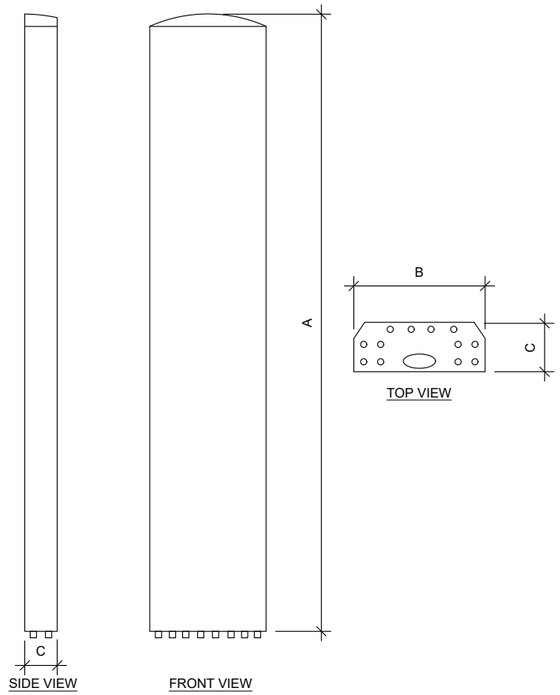
CUSTOMER #:	10035064

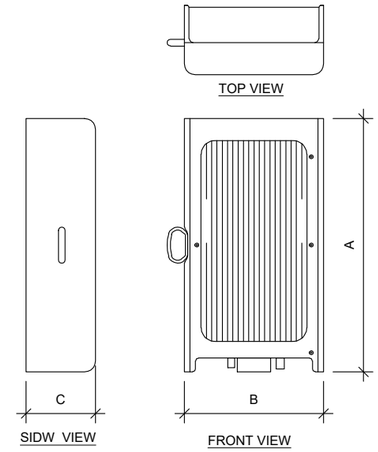
GROUNDING DETAILS

SHEET NUMBER:	REVISION:
E-501	0



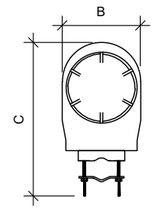
SIDE VIEW FRONT VIEW TOP VIEW

ANTENNA SPECIFICATIONS				
ANTENNA MODEL	A	B	C	WEIGHT (LBS)
DMP65R-BU6DA	71.2"	20.7"	7.7"	79.4

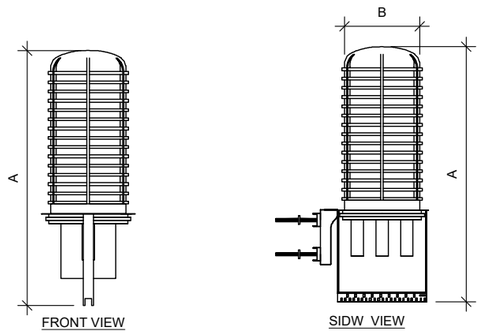


TOP VIEW SIDW VIEW FRONT VIEW

RRU SPECIFICATIONS				
RRU MODEL	A	B	C	WEIGHT (LBS)
4449 B5, B12	17.9"	13.2"	9.4"	71.0
RRUS 32 B66A	27.2"	12.0"	7.0"	50.7



PLAN VIEW



FRONT VIEW SIDW VIEW

RAYCAP SPECIFICATIONS				
RAYCAP MODEL	A	B	C	WEIGHT (LBS)
DC6-48-60-18-8F	24"	11"	11"	31.8

1 EQUIPMENT SPECIFICATIONS

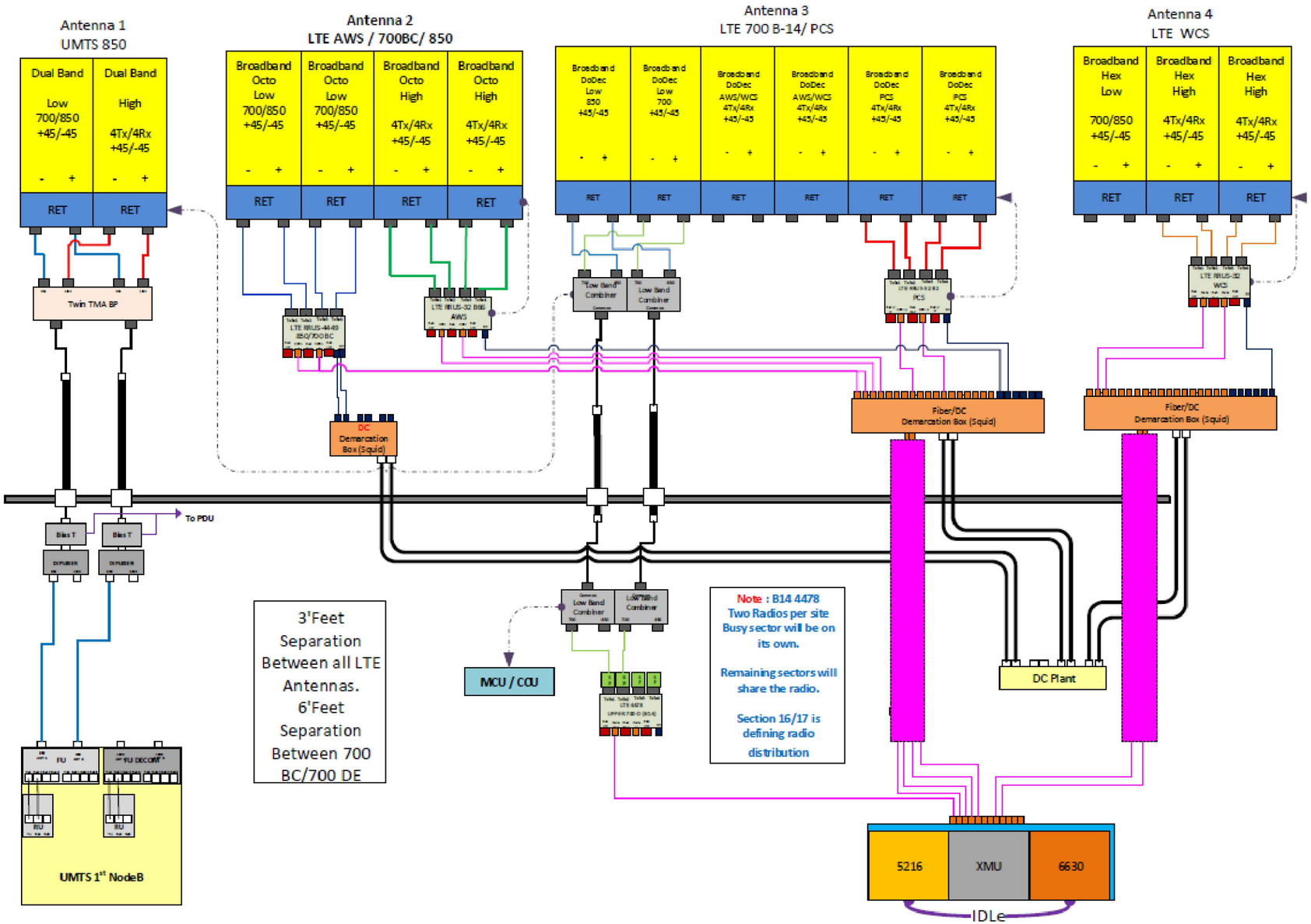
SCALE: N.T.S.

SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-601	0

Diagram - Sector	A	Diagram File Name - FN_5GNR_CT2126_A_B_C_LTE6C_R1.0.vsd					
Atoll Site Name -	CTV2126	Location Name -	SOUTHBURY	Market -	CONNECTICUT	Market Cluster -	NEW ENGLAND

Comments: Important Note: For detailed radio to antenna wiring refer to the latest field notice - Antenna_Radio Connection Drawings Playbook v6.0_Ericsson



1 RFDS PLUMBING DIAGRAM

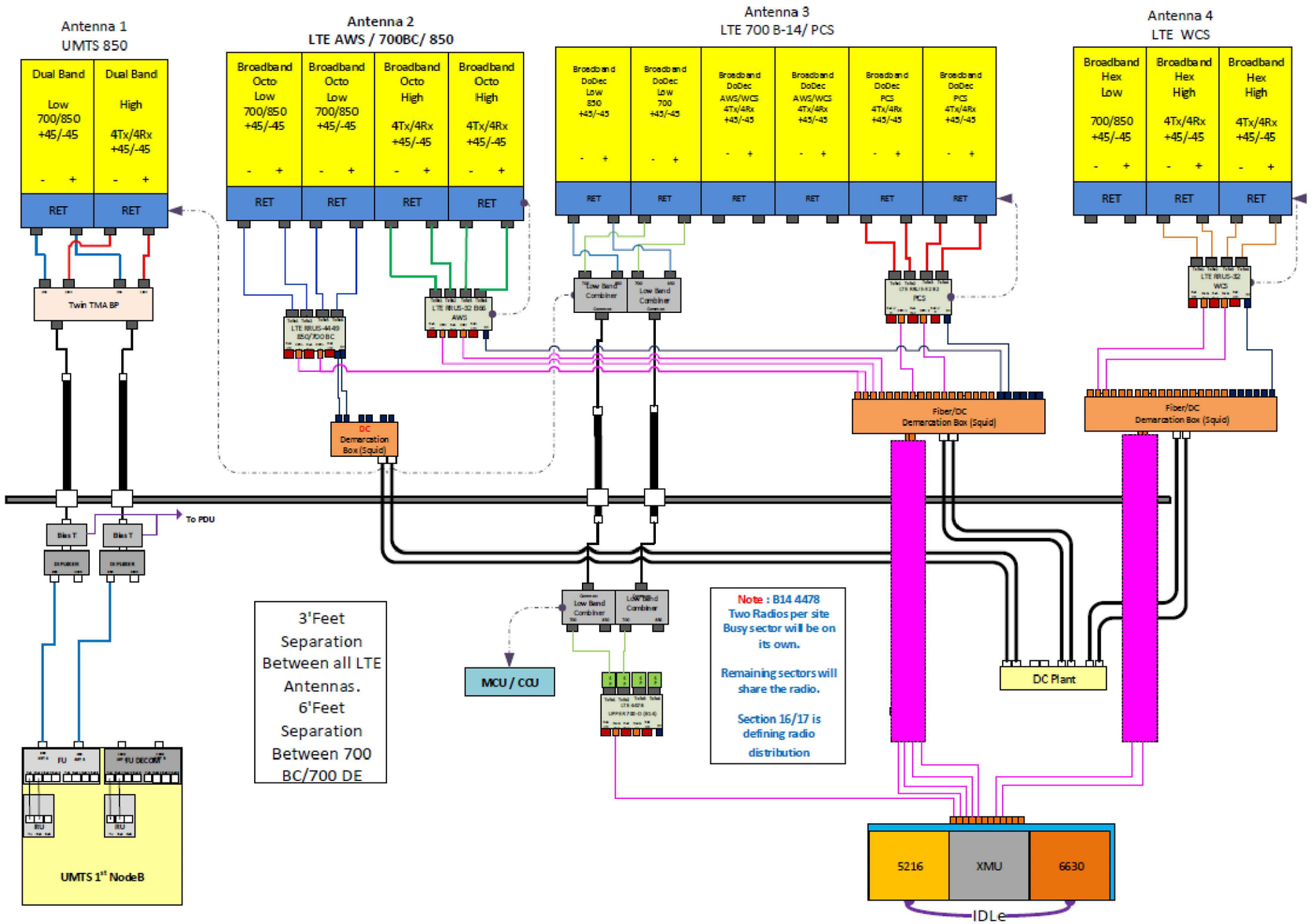
NOTE: THIS SHEET WAS CREATED BY OTHERS AND PROVIDED AT THE REQUEST OF THE CUSTOMER WITHOUT EDIT. GENERAL CONTRACTOR IS TO CHECK WITH THE AT&T MOBILITY CM TO ENSURE THIS IS THE MOST RECENT VERSION OF THE RFDS.

SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-602	0

Diagram - Sector	B	Diagram File Name - FN_5GNR_CT2126_A_B_C_LTE6C_R1.0.vsd					
Atoll Site Name -	CTV2126	Location Name -	SOUTHBURY	Market -	CONNECTICUT	Market Cluster -	NEW ENGLAND

Comments: Important Note: For detailed radio to antenna wiring refer to the latest field notice - Antenna_Radio Connection Drawings Playbook v6.0_Ericsson



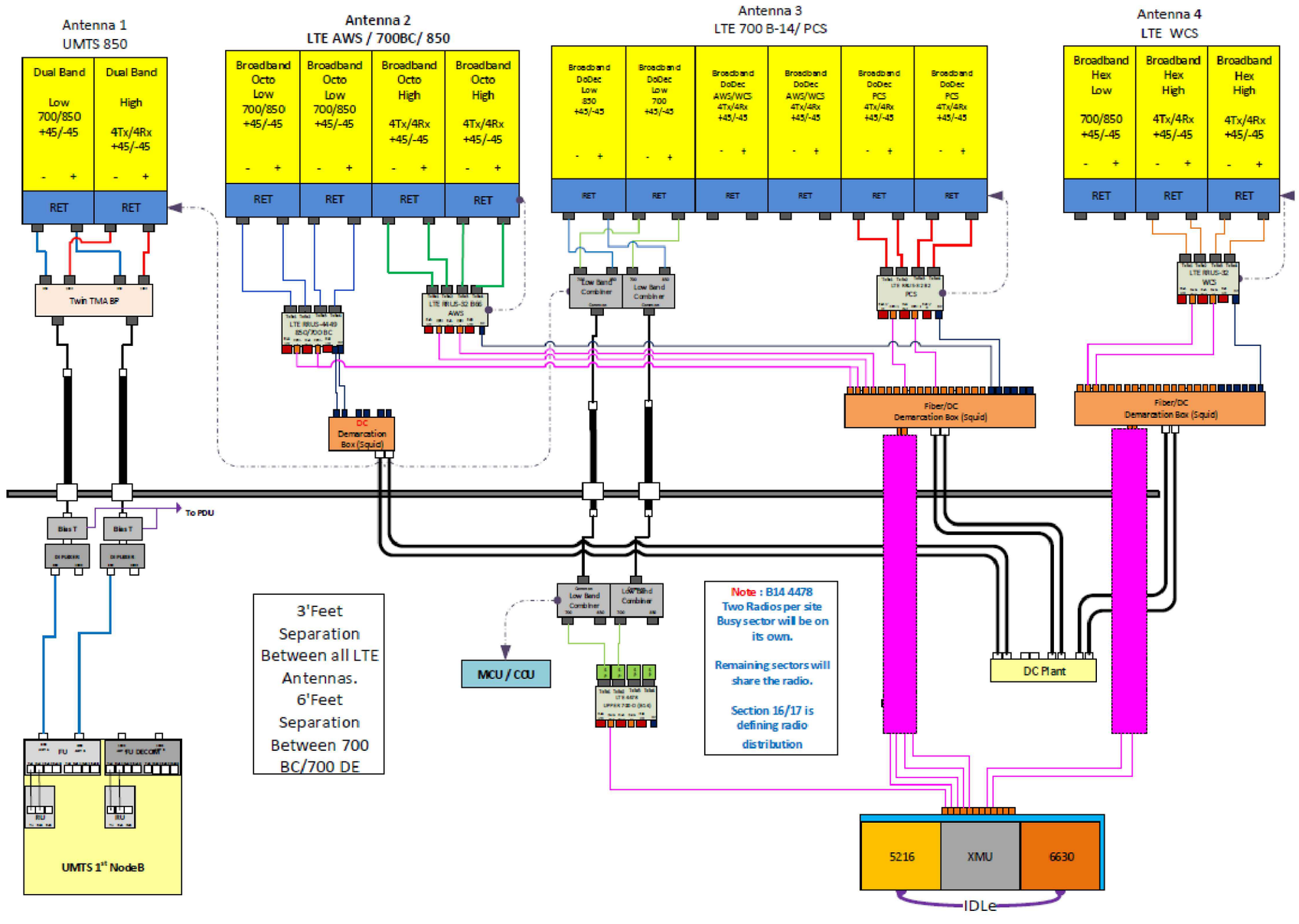
1 RFDS PLUMBING DIAGRAM

NOTE: THIS SHEET WAS CREATED BY OTHERS AND PROVIDED AT THE REQUEST OF THE CUSTOMER WITHOUT EDIT. GENERAL CONTRACTOR IS TO CHECK WITH THE AT&T MOBILITY CM TO ENSURE THIS IS THE MOST RECENT VERSION OF THE RFDS.

SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-603	0

Diagram - Sector	C	Diagram File Name - FN_5GNR_CT2126_A_B_C_LTE6C_R1.0.vsd					
Atoll Site Name -	CTV2126	Location Name -	SOUTHBURY	Market -	CONNECTICUT	Market Cluster -	NEW ENGLAND
Comments: Important Note: For detailed radio to antenna wiring refer to the latest field notice - Antenna_Radio Connection Drawings Playbook v6.0_Ericsson							



1 RFDS PLUMBING DIAGRAM

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SUPPLEMENTAL

SHEET NUMBER:	REVISION:
R-604	0

Post Modification Mount Analysis Report

August 4, 2020

ATC Site Name	Southbury, CT
ATC Site Number	302519
AT&T Site Name	MRCTB046858
AT&T Site Number	CTL02126
Infinigy Job Number	1009-Z0003-B
ATC Engineering Number	13212284_C9_04
Client	ATC
Carrier	AT&T
Site Location	133 Horse Fence Hill Road Southbury, CT 06488 New Haven County 41° 27' 35.9" N NAD83 73° 14' 42.0" W NAD83
Mount Centerline EL.	153.0 ft.
Mount Type	Platform w/ Handrails
Mount Usage Ratio	**90.7%**
Overall Result	**Pass**

Upon reviewing the results of this analysis, it is our opinion that the modified mount does meet the specified TIA code requirements. The modified mount and connections are therefore deemed adequate to support the final loading configuration as listed in this report.

STATE OF CONNECTICUT
JOHN S. STEVENS
24705
LICENSED PROFESSIONAL ENGINEER

08/04/2020

Brenden Archer
Project Engineer II

AZ CA CO FL GA MD NC NH NJ NY TX WA

INFINIGY

Introduction

Infinigy Engineering has been requested to perform a post modification mount analysis on the existing AT&T mounts. All referenced supporting documents have been obtained from the client and are assumed to be accurate and applicable to this site. The mount was analyzed using RISA-3D Version 17.0.4 analysis software.

Supporting Documentation

Collocation Application	Collo App ID No. 13212284, dated May 20, 2020
Construction Drawings	ATC Job No. 13212284_G3, dated June 25, 2020
Proposed Loading	AT&T RFDS Application ID No. 3719805, dated March 25, 2020
Structural Analysis Report	ATC Engineering No. 13212284_C3_03, dated June 30, 2020
Mount Mapping Report	MasTec Network Solutions Job No. 202201, dated June 22, 2020
Mount Analysis Report	Centek Engineering Project No. 18000.13, dated May 3, 2018

Analysis Code Requirements

Wind Speed	116 mph (3-Second Gust)
Wind Speed w/ ice	50 mph (3-Second Gust) w/ 1" ice
TIA Revision	ANSI/TIA-222-H
Risk Category	II
Exposure Category	B
Topographic Factor Procedure	Method 2
Topographic Feature	Hill
Calculated Crest Height	132.0 ft.
Spectral Response	S_s = 0.202 g / S_1 = 0.055 g
Site Class	D-Stiff Soil (Assumed)
HMSL	345.2 ft.

Conclusion

Upon reviewing the results of this analysis, it is our opinion that the modified mount does meet the specified TIA code requirements. The modified mount and connections are therefore deemed adequate to support the final loading configuration as listed in this report.

If you have any questions, require additional information, or actual conditions differ from those as detailed in this report please contact me via the information below:

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Project Engineer II | **INFINIGY**
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NOTE: THIS SHEET WAS CREATED BY OTHERS AND PROVIDED AT THE REQUEST OF THE CUSTOMER WITHOUT EDIT. GENERAL CONTRACTOR IS TO CHECK WITH THE AT&T MOBILITY CM TO ENSURE THIS IS THE MOST RECENT VERSION OF THE RFDS.

SUPPLEMENTAL

SHEET NUMBER: R-605

REVISION: 0

ANTENNA PLATFORM MODIFICATION DRAWINGS

PREPARED BY:

INFINIGY

FROM ZERO TO INFINIGY

the solutions are endless

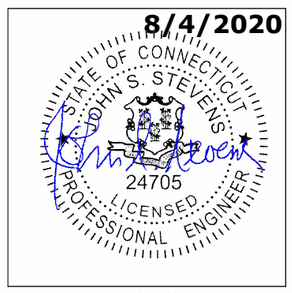
AMERICAN TOWER CORPORATION

at&t

302519
SOUTHBURY
133 HORSE FENCE HILL ROAD
SOUTHBURY, CT 06488

08/04/20

INFINIGY JOB # 1009-Z0003-B



PROFESSIONAL SEAL

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THESE DOCUMENTS.

GENERAL NOTES:

1. THESE DOCUMENTS WERE DESIGNED IN ACCORDANCE WITH THE LATEST VERSION OF APPLICABLE LOCAL/STATE/COUNTY/CITY BUILDING CODES, AS WELL AS ANSI/TIA-222 STANDARD, AWWA-D100 STANDARD, NDS, NEC, MSJC, AND/OR THE LATEST VERSION OF THE INTERNATIONAL BUILDING CODE, UNLESS NOTED OTHERWISE IN THE CORRESPONDING STRUCTURAL REPORT.
2. ALL CONSTRUCTION METHODS SHOULD FOLLOW STANDARDS OF GOOD CONSTRUCTION PRACTICE.
3. ALL WORK INDICATED ON THESE DRAWINGS SHALL BE PERFORMED BY QUALIFIED CONTRACTORS EXPERIENCED IN SIMILAR CONSTRUCTION.
4. ALL NEW WORK SHALL ACCOMMODATE EXISTING CONDITIONS. IF OBSTRUCTIONS ARE FOUND, CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD PRIOR TO CONTINUING WORK.
5. ANY CHANGES OR ADDITIONS MUST CONFORM TO THE REQUIREMENTS OF THESE NOTES AND SPECIFICATIONS, AND SHOULD BE SIMILAR TO THOSE SHOWN. ALL CHANGES OR ADDITIONS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL PRIOR TO FABRICATION AND/OR CONSTRUCTION.
6. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND EXECUTION OF ALL MISCELLANEOUS SHORING, BRACING, TEMPORARY SUPPORTS, ETC. NECESSARY TO PROVIDE A COMPLETE AND STABLE STRUCTURE DURING CONSTRUCTION. TIA-1019-A-2011 IS AN APPROPRIATE REFERENCE FOR THOSE DESIGNS MEETING TIA STANDARDS. THE ENGINEER OF RECORD MAY PROVIDE FORMAL RIGGING PLANS AT THE REQUEST AND EXPENSE OF THE CONTRACTOR.
7. INSTALLATION SHALL NOT INTERFERE NOR DENY ADEQUATE ACCESS TO OR FROM ANY EXISTING OR PROPOSED OPERATIONAL AND SAFETY EQUIPMENT.
8. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO ANY FABRICATION. CONTACT INFINIGY ENGINEERING IF ANY DISCREPANCIES EXIST.

STEEL CONSTRUCTION NOTES:

1. STRUCTURAL STEEL SHALL CONFORM TO THE AISC MANUAL OF STEEL CONSTRUCTION 14TH EDITION, FOR THE DESIGN AND FABRICATION OF STEEL COMPONENTS.
2. ALL FIELD CUT SURFACES, FIELD DRILLED HOLES, AND GROUND SURFACES WHERE EXISTING PAINT OR GALVANIZATION REMOVAL WAS REQUIRED SHALL BE REPAIRED WITH (2) BRUSHED COATS OF ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURERS' RECOMMENDATIONS.
3. ALL FIELD DRILLED HOLES TO BE USED FOR FIELD BOLTING INSTALLATION SHALL BE STANDARD HOLES, AS DEFINED BY AISC, UNLESS NOTED OTHERWISE.
4. ALL EXTERIOR STEEL WORK SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A123.
5. ALL STEEL MEMBERS AND CONNECTIONS SHALL MEET THE FOLLOWING GRADES:
   - ANGLES, CHANNELS, PLATES AND BARS TO BE A36. Fy=36 KSI, U.N.O.
   - W SHAPES TO BE A992. Fy=50 KSI, U.N.O.
   - RECTANGULAR HSS TO BE A500, GRADE B. FY=46 KSI, U.N.O.
   - ROUND HSS TO BE A500, GRADE B. FY=42 KSI, U.N.O.
   - STEEL PIPE TO BE A53, GRADE B. Fy=35 KSI, U.N.O.
   - BOLTS TO BE A325-X. Fu=120 KSI, U.N.O.
   - U-BOLTS AND LAG SCREWS TO BE A307 GR A. Fu=60 KSI, U.N.O.
6. ALL WELDING SHALL BE DONE USING E70XX ELECTRODES, U.N.O.
7. ALL WELDING SHALL CONFORM TO AISC AND AWS D1.1 LATEST EDITION.
8. ALL HILTI ANCHORS TO BE CARBON STEEL, U.N.O.
   - MECHANICAL ANCHORS: KWIK BOLT-TZ, U.N.O.
   - CMU BLOCK ANCHORS: ADHESIVE - HY120, U.N.O.
   - CONCRETE ANCHORS: ADHESIVE - HY150, U.N.O.
   - CONCRETE REBAR: ADHESIVE - RE500, U.N.O.
9. ALL STUDS TO BE NELSON CAPACITOR DISCHARGE 1/4"-20 LOW CARBON STEEL COPPER-FLASH AT 55 KSI ULT/50 KSI YIELD, U.N.O.
10. BOLTS SHALL BE TIGHTENED TO A "SNUG TIGHT" CONDITION AS DEFINED BY AISC.
11. MINIMUM EDGE DISTANCES SHALL CONFORM TO AISC TABLE J3.4.
12. REMOVAL/REPLACEMENT OF STRUCTURAL MEMBERS SHALL BE DONE ONE MEMBER AT A TIME. CONTRACTOR IS RESPONSIBLE FOR ENSURING THE STRUCTURAL INTEGRITY OF THE STRUCTURE DURING ALL PHASES OF CONSTRUCTION.

CONCRETE CONSTRUCTION NOTES:

1. CONCRETE TO BE 4000 PSI @ 28 DAYS. REINFORCING BAR TO CONFORM TO ASTM A615 GRADE 60 SPECIFICATIONS. CONCRETE INSTALLATION TO CONFORM TO ACI-318 BUILDING REQUIREMENTS FOR REINFORCED CONCRETE. ALL CONCRETE TO BE PLACED AGAINST UNDISTURBED EARTH FREE OF WATER AND ALL FOREIGN OBJECTS AND MATERIALS. A MINIMUM OF THREE INCHES OF CONCRETE SHALL COVER ALL REINFORCEMENT. WELDING OF REBAR IS NOT PERMITTED.
2. EXISTING CONCRETE SURFACES THAT ARE TO BE IN CONTACT WITH NEW PROPOSED CONCRETE SHOULD BE WIRE BRUSHED CLEAN AND TREATED WITH APPROPRIATE MECHANICAL SCRATCH COAT AND REPAIR MATERIALS OR APPROPRIATE CHEMICAL METHODS SUCH AS THE APPLICATION OF A BONDING AGENT, EX. SAKRETE OR EQUIVALENT, TO ENSURE A QUALITY BOND BETWEEN EXISTING AND PROPOSED CONCRETE SURFACES.

FIBER REINFORCED POLYMER (FRP) NOTES:

1. FRP PLATES, SHAPES, BOLTS AND NUTS (STUD/NUT ASSEMBLIES) SHALL CONFORM TO ASTM D638, 695, 790. PLATES AND SHAPES TO BE FY = 5.35 KSI LW (SAFETY FACTOR OF 8), .945 KSI CW (SAFETY FACTOR OF 8) MIN.
2. IF FIELD FABRICATION IS REQUIRED, ALL CUT EDGES AND DRILLED HOLES TO BE SEALED USING VINYL ESTER SEALING KIT SUPPLIED BY THE MANUFACTURER.
3. ALL FASTENERS TO BE 1/2" DIA FRP THREADED ROD WITH FIBER REINFORCED THERMOPLASTIC NUT, SPACED AT 12 INCHES ON CENTER MAXIMUM, U.N.O., FOR PANELS AND AS DESIGNED FOR STRUCTURAL MEMBERS.
4. THE COLOR AND SURFACE PATTERN OF EXPOSED FRP PANELS SHALL MATCH THE EXTERIOR OF THE EXISTING BUILDING, U.N.O.
5. STUD/NUT ASSEMBLIES SHOULD BE LUBRICATED FOR INSTALLATION
6. ENSURE BEARING SURFACES OF THE NUTS ARE PARALLEL TO THE SURFACES BEING FASTENED.
7. TORQUE BOLTS ACCORDING TO THE FOLLOWING TABLE:

INSTALLATION TORQUE TABLE

SIZE	ULTIMATE TORQUE STRENGTH	RECOMMENDED MAXIMUM INSTALLATION TORQUE
3/8-16 UNC	8 FT-LBS	4 FT-LBS
1/2-13 UNC	18 FT-LBS	8 FT-LBS
5/8-11 UNC	35 FT-LBS	16 FT-LBS
3/4-10 UNC	50 FT-LBS	24 FT-LBS
1-8 UNC	110 FT-LBS	50 FT-LBS

8. WHEN TIGHTENING FRP STUD/NUT ASSEMBLIES, WRENCHES MUST MAKE FULL CONTACT WITH ALL NUT EDGES. A STANDARD SIX POINT SOCKET IS RECOMMENDED.
9. STUD/NUT ASSEMBLIES SHOULD BE BONDED BY APPLYING BONDING AGENT TO ENTIRE NUT AND EXPOSED STUD.
10. ALL FRP MATERIALS TO BE PROVIDED BY FIBERGRATE COMPOSITE STRUCTURES, DALLAS TX, OR APPROVED EQUAL.
11. ALL FRP SHAPES TO BE DYNAFORM PULTRUDED STRUCTURAL SHAPES.
12. ALL FRP PLATES TO BE FIBERPLATE MOLDED FRP PLATE.
13. ALL FRP PANELS TO BE FIBERPLATE CLADDING PANEL.
14. EACH FRP PANEL TO BE IDENTIFIED WITH LARR#25536 AND FIBERGRATE COMPOSITE STRUCTURAL LABEL.
15. FRP MATERIAL TO BE CLASSIFIED AS CC1 OR BETTER, AND HAVE MAXIMUM FLAME SPREAD OF 50.
16. ALL DESIGN AND CONSTRUCTION TO BE COMPLETED IN ACCORDANCE WITH LOS ANGELES RESEARCH REPORT RR25536, DATED FEBRUARY 1, 2016.
17. SPECIAL INSPECTIONS MUST BE PROVIDED FOR ALL FRP INSTALLMENTS. SEE SPECIAL INSPECTION SECTION, THIS SHEET.

RATIO OF EDGE DISTANCE TO FRP FASTENER DIAMETER

	RANGE	RECOMMENDED
EDGE DISTANCE - CL* BOLT TO END	2.0-4.0	3.0
EDGE DISTANCE - CL* BOLT TO SIDE	1.5-3.5	2.5
BOLT PITCH - CL* TO CL*	4.0-5.0	5.0

WOOD CONSTRUCTION NOTES:

1. ALL EXISTING WOOD SHAPES ARE ASSUMED TO BE DOUGLAS FIR-LARCH WITH A REFERENCE DESIGN BENDING VALUE OF 1000 PSI MIN.
2. ALL PROPOSED WOOD SHAPES ARE TO BE DOUGLAS FIR-LARCH WITH A REFERENCE DESIGN BENDING VALUE OF 1000 PSI MIN. U.N.O.
3. ALL EXISTING AND PROPOSED GLUED LAMINATED TIMBERS ARE TO BE 24F-1.8C DOUGLAS FIR BALANCED WITH A REFERENCE DESIGN BENDING VALUE OF 2400 PSI MIN. U.N.O.

MASONRY CONSTRUCTION NOTES:

1. ALL BRICK TO BE 1500 PSI MIN. REINFORCING BAR (IF APPLICABLE) TO CONFORM TO ASTM A615 GRADE 60 SPECIFICATIONS. ALL MORTAR TO BE 2000 PSI MIN.
   - FOR INTERIOR/ABOVE GRADE APPLICATIONS TYPE N MORTAR HAVING MINIMUM MODULUS OF RUPTURE OF 100 PSI SHALL BE USED. FOR EXTERIOR/BELOW GRADE APPLICATIONS TYPE M OR S MORTAR HAVING A MINIMUM MODULUS OF RUPTURE OF 133 PSI.
   - BRICK AND MORTAR INSTALLATION TO CONFORM TO MSJC BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES.
2. ALL CMU TO BE 1500 PSI MIN. REINFORCING BAR (IF APPLICABLE) TO CONFORM TO ASTM A615 GRADE 60 SPECIFICATIONS. ALL MORTAR TO BE 2000 PSI MIN.
   - FOR INTERIOR/ABOVE GRADE APPLICATIONS, TYPE N MORTAR HAVING MINIMUM MODULUS OF RUPTURE OF 64 PSI SHALL BE USED FOR UNGROUTED BLOCKS, AND 158 PSI FOR FULLY GROUTED BLOCKS.
   - FOR EXTERIOR/BELOW GRADE APPLICATIONS TYPE M OR S MORTAR HAVING A MINIMUM MODULUS OF RUPTURE OF 84 PSI SHALL BE USED FOR UNGROUTED BLOCKS, AND 163 PSI FOR FULLY GROUTED BLOCKS.
   - BRICK AND MORTAR INSTALLATION TO CONFORM TO MSJC BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES.

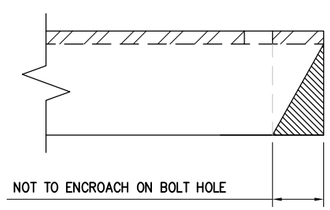
TOWER PLUMB & TENSION NOTES:

1. PLUMB AND TENSION TOWER UPON COMPLETION OF STRUCTURAL MODIFICATIONS DETAILED IN THESE DRAWINGS.
2. RETENSIONING OF EXISTING GUY WIRES SHALL BE PERFORMED AT A TIME WHEN THE WIND VELOCITY IS LESS THAN 10 MPH AT GROUND LEVEL AND WITH NO ICE ON THE STRUCTURE AND GUY WIRES.
3. PLUMB THE TOWER WHILE RETENSIONING THE EXISTING GUY WIRES. THE HORIZONTAL DISTANCE BETWEEN THE VERTICAL CENTERLINES AT ANY TWO ELEVATIONS SHALL NOT EXCEED 0.25% OF THE VERTICAL DISTANCE BETWEEN TWO ELEVATIONS FOR LATTICED STRUCTURES.
4. THE TWIST BETWEEN ANY TWO ELEVATIONS THROUGHOUT THE HEIGHT OF A LATTICE STRUCTURE SHALL NOT EXCEED 0.5 DEGREES IN 10 FEET. THE MAXIMUM TWIST OVER THE LATTICE STRUCTURE HEIGHT SHALL NOT EXCEED 5 DEGREES.

SPECIAL INSPECTIONS NOTES:

1. A QUALIFIED INDEPENDENT TESTING LABORATORY, EMPLOYED BY THE OWNER AND APPROVED BY THE JURISDICTION, SHALL PERFORM INSPECTION AND TESTING IN ACCORDANCE WITH THE THE GOVERNING BUILDING CODE, APPLICABLE SECTION(S) AS REQUIRED BY PROJECT SPECIFICATIONS FOR THE FOLLOWING CONSTRUCTION WORK:
   a. STRUCTURAL WELDING (CONTINUOUS INSPECTION OF FIELD WELDS ONLY).
   b. HIGH STRENGTH BOLTS (PERIODIC INSPECTION OF A325 AND/OR A490 BOLTS) TO BE TIGHTENED PER "TURN-OF-THE-NUT" METHOD.
   c. MECHANICAL AND EPOXIED ANCHORAGES.
   d. FIBER REINFORCED POLYMER.
      - THE SPECIAL INSPECTOR MUST VERIFY THAT THE FRP MATERIAL SPECIFIED ON THE APPROVED DESIGN DOCUMENTS IS BEING INSTALLED.
      - THE SPECIAL INSPECTOR MUST VERIFY THAT ALL CUT EDGES AND DRILLED HOLES ARE PROPERLY SEALED USING A VINYL ESTER SEALING KIT SUPPLIED BY THE MANUFACTURER.
      - THE SPECIAL INSPECTOR MUST VERIFY THAT THE STRUCTURE IS BUILT IN ACCORDANCE WITH THE APPROVED DESIGN DOCUMENTS.
2. THE INSPECTION AGENCY SHALL SUBMIT INSPECTION AND TEST REPORTS TO THE BUILDING DEPARTMENT, THE ENGINEER OF RECORD, AND THE OWNER UNLESS THE FABRICATOR IS APPROVED BY THE BUILDING OFFICIAL TO PERFORM WORK WITHOUT THE SPECIAL INSPECTIONS.

MAXIMUM ALLOWABLE ANGLE CLIP



INFINIGY ENGINEERING, PLLC
6865 DEERPATH ROAD SUITE 152
ELKRIDGE, MD 21075

AMERICAN TOWER CORPORATION

STATE OF CONNECTICUT
JOHN S. STEVENS
24705
LICENSED PROFESSIONAL ENGINEER
8/4/2020

No.	Submittal / Revision	App'd	Date
0	ISSUED FOR REVIEW	BD	08/04/20

Drawn: BE
Designed: BA
Checked: BA

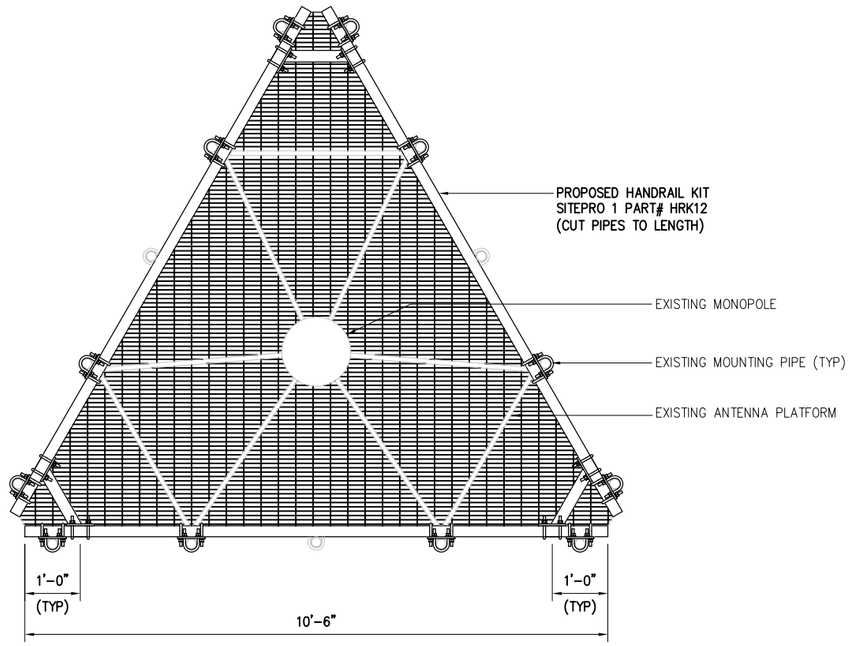
Project Number: 1009-Z0003-B

Project Title:
SOUTHBURY
302519
133 HORSE FENCE HILL ROAD
SOUTHBURY, CT 06488

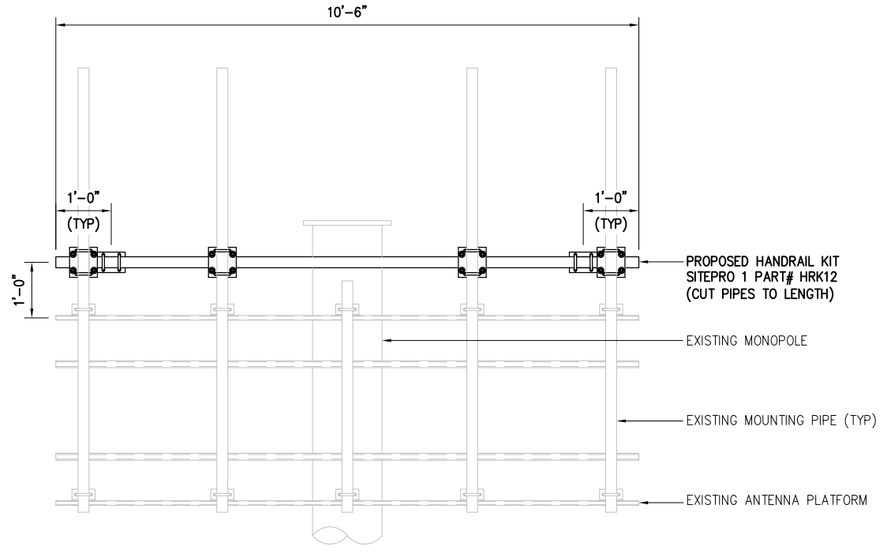
Prepared For:
at&t

Drawing Title
GENERAL NOTES

Drawing Number
S2



1 PLAN VIEW
SCALE: NOT TO SCALE



2 ELEVATION VIEW
SCALE: NOT TO SCALE

NOTES:

1. PROPOSED MODIFICATIONS ARE TYPICAL FOR ALL SECTORS.
2. ALL DESIGNATED PARTS ARE TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS, UNLESS OTHERWISE NOTED.
3. REMOVAL/REPLACEMENT OF STRUCTURAL MEMBERS SHALL BE DONE ONE MEMBER AT A TIME. CONTRACTOR IS RESPONSIBLE FOR ENSURING THE STRUCTURAL INTEGRITY OF THE STRUCTURE DURING ALL PHASES OF CONSTRUCTION.

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1009-Z0003-B

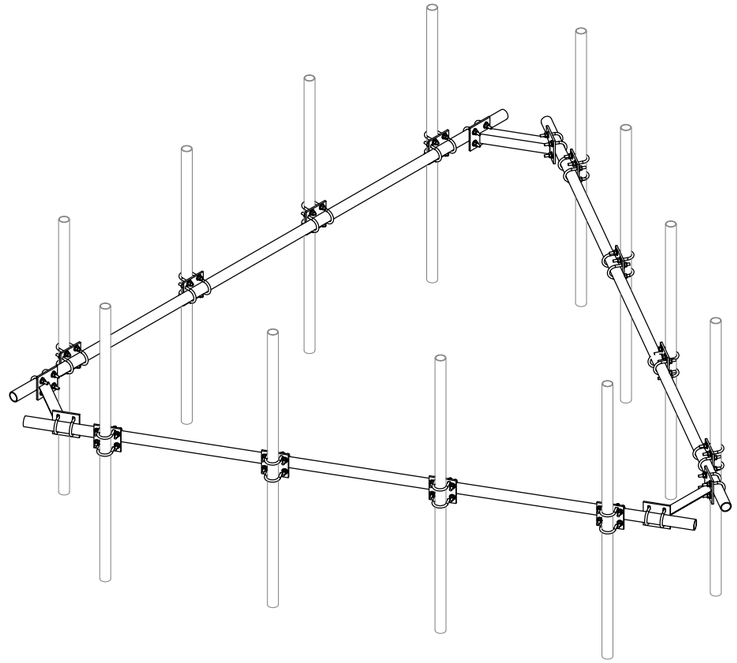
Project Title:
SOUTHBURY

302519
133 HORSE FENCE HILL ROAD
SOUTHBURY, CT 06488

Prepared For:
at&t

Drawing Title
ANTENNA PLATFORM MODIFICATION

Drawing Number
S3



1 ISOMETRIC VIEW (HRK12)
SCALE: NOT TO SCALE

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133 HORSE FENCE HILL ROAD
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Prepared For:
at&t

Drawing Title
NECESSARY PARTS

Drawing Number
S4

EXHIBIT 2

133 HORSE FENCE HILL ROAD

Location	133 HORSE FENCE HILL ROAD	**Mblu**	24/ 92/ 58/ /
Acct#	00214500	**Owner**	BEATTY WILLIAM
Assessment	$197,400	**Appraisal**	$382,600
PID	2310	**Building Count**	1

Current Value

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2017	$89,140	$293,460	$382,600
Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2017	$62,390	$135,010	$197,400

Owner of Record

Owner	BEATTY WILLIAM	**Sale Price**	$175,000
Co-Owner		**Certificate**	
Address	133 HORSE FENCE HILL ROAD SOUTHBURY, CT 06488	**Book & Page**	689/ 156
		Sale Date	05/06/2019
		Instrument	01

Ownership History

Ownership History					
Owner	**Sale Price**	**Certificate**	**Book & Page**	**Instrument**	**Sale Date**
BEATTY WILLIAM	$175,000		689/ 156	01	05/06/2019
BEATTY DAVID	$147,000		681/ 599	00	08/13/2018
SMITH LYNN REV FAM TRUST	$0		493/1152	25	08/19/2005
SMITH SCOTT S & LYNN	$0		1640/ 144	25	03/15/1983

Building Information

Building 1 : Section 1

Year Built:	1950
Living Area:	1,104
Replacement Cost:	$124,272

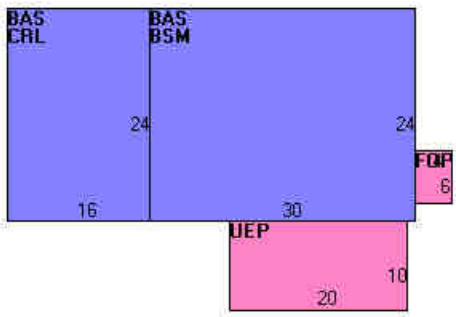
Building Percent Good: 66
Replacement Cost
Less Depreciation: $82,020

Building Attributes	
Field	**Description**
Style	Ranch
Model	Residential
Grade:	D
Stories	1
Occupancy	1
Exterior Wall 1	Clapboard
Exterior Wall 2	
Roof Structure	Gable
Roof Cover	Asphalt
Interior Wall 1	Drywall
Interior Wall 2	
Interior Flr 1	Hardwood
Interior Flr 2	
Heat Fuel	Oil
Heat Type:	Forced Hot Air
AC Percent	0
Total Bedrooms:	3 Bedrooms
Full Bthrms:	2
Half Baths:	0
Extra Fixtures	0
Total Rooms:	5
Bath Style:	Average
Kitchen Style:	Average
Num Kitchens	1
Pln FPL:	0
Det FPL:	0
Gas Fireplace(s)	0
% Attic Fin	0
LF Dormer	0
Foundation	Conc Block
Bsmt Gar(s)	0
Bsmt %	75
SF FBM	0
SF Rec Rm	0
Fin Bsmt Qual	
Bsmt Access	Hatchway

Building Photo

(http://images.vgsi.com/photos/SouthburyCTPhotos//\00\00\11/05.JPG)

Building Layout



(http://images.vgsi.com/photos/SouthburyCTPhotos//Sketches/2310_2310.

Building Sub-Areas (sq ft)			Legend
Code	**Description**	**Gross Area**	**Living Area**
BAS	First Floor	1,104	1,104
BSM	Basement	720	0
CRL	Crawl Space	384	0
FOP	Open Porch	24	0
UEP	Unfin. Enclosed Porch	200	0
		2,432	1,104

Extra Features

Extra Features	Legend
No Data for Extra Features	

Land

Land Use

Use Code	101
Description	Res Dwelling
Zone	R-60
Neighborhood	25
Alt Land Appr	No
Category	

Land Line Valuation

Size (Acres)	3.78
Frontage	0
Depth	0
Assessed Value	$135,010
Appraised Value	$293,460

Outbuildings

Outbuildings						Legend
Code	**Description**	**Sub Code**	**Sub Description**	**Size**	**Value**	**Bldg #**
FGR1	Garage	FR	Frame	336 S.F.	$4,700	1
SHD1	Shed	FR	Frame	200 S.F.	$1,200	1
SHD1	Shed	FR	Frame	160 S.F.	$960	1
SHD1	Shed	FR	Frame	240 S.F.	$260	1

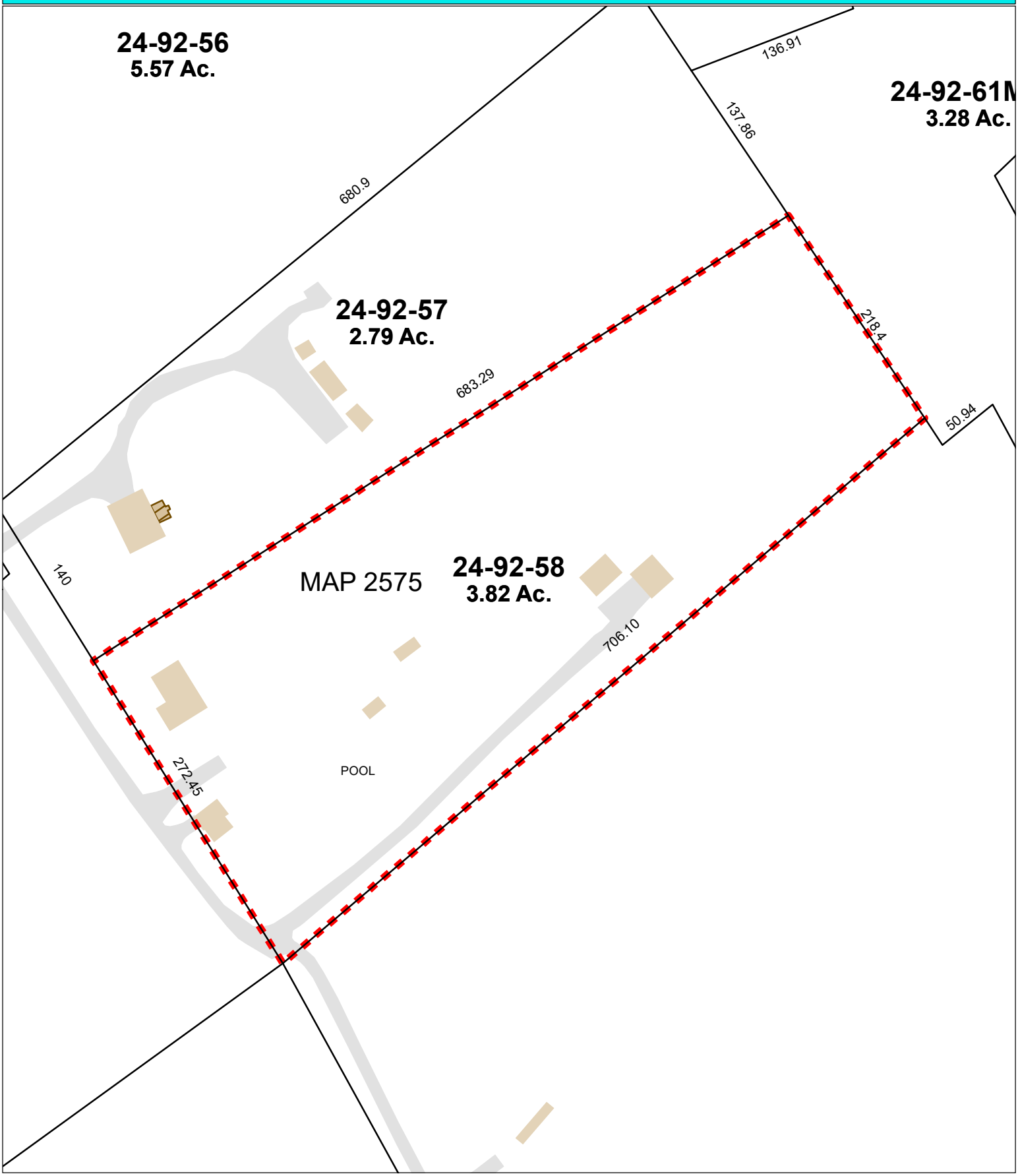
Valuation History

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2017	$89,140	$212,360	$301,500
2016	$99,290	$216,960	$316,250
2012	$99,290	$216,960	$316,250

Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2017	$62,390	$148,650	$211,040
2016	$69,500	$151,870	$221,370
2012	$69,500	$151,870	$221,370

Town of Southbury Connecticut - Assessment Parcel Map

Parcel: 24-92-58 **Location:** 133 HORSE FENCE HILL ROAD



N

Approximate Scale: 1 inch = 100 feet

0 25 50 75 100 Feet

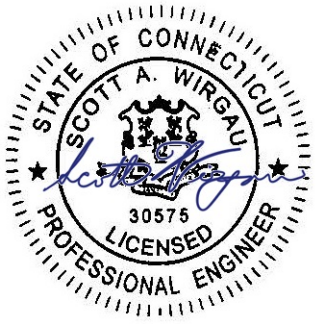
Map Produced Augustl 2019

EXHIBIT 3

AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure	:	**150 ft Monopole**
ATC Site Name	:	**Southbury, CT**
ATC Asset Number	:	**302519**
Engineering Number	:	**13212284_C3_03**
Proposed Carrier	:	**AT&T MOBILITY**
Carrier Site Name	:	**MRCTB046858**
Carrier Site Number	:	**CTL02126**
Site Location	:	**133 Horse Fence Hill Rd** **Southbury, CT 06488-2106** **41.460000,-73.245000**
County	:	**New Haven**
Date	:	**June 30, 2020**
Max Usage	:	**99%**
Result	:	**Pass**



Prepared By:
Jeremy Hosang
Engineering Intern

Reviewed By:

COA: PEC.0001553

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Table of Contents

Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 150 ft monopole to reflect the change in loading by AT&T MOBILITY.

Supporting Documents

Tower Drawings	ITT Meyers Site #CT-0055, dated May 21, 2002
Foundation Drawing	Girard Project #1C140, dated November 19, 1987
Modifications	SpectraSite Site #CT-0055, dated May 21, 2002

Analysis

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

Basic Wind Speed:	116 mph (3-Second Gust)
Basic Wind Speed w/ Ice:	50 mph (3-Second Gust) w/ 1" radial ice concurrent
Code:	ANSI/TIA-222-H / 2015 IBC / 2018 Connecticut State Building Code
Exposure Category:	B
Risk Category:	II
Topographic Factor Procedure:	Method 2
Feature:	Hill
Crest Height (H):	132 ft
Crest Length (L):	456 ft
Spectral Response:	Ss = 0.20, S_1 = 0.05
Site Class:	D - Stiff Soil

Conclusion

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

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

Existing and Reserved Equipment

Elev.[1] (ft)	Qty	Antenna	Mount Type	Lines	Carrier
153.0	6	Powerwave Allgon 7020.00 Dual Band RET	Platform with Handrails	(2) 0.39" (10mm) Fiber Trunk (2) 2" conduit	AT&T MOBILITY
	3	Kaelus DBC0061F1V51-1			
	3	Powerwave Allgon TT19-08BP111-001			
	3	Ericsson RRUS 32 B2			
	3	Quintel QS66512-2			
	3	CCI HPA-65R-BUU-H6			
148.0	3	Ericsson RRUS 11 (Band 12) (55 lb)		(4) 0.78" (19.7mm) 8 AWG 6	
147.0	2	Raycap DC6-48-60-18-8F ("Squid")			
113.0	6	RFS FD9R6004/1C-3L	T-Arm	(12) 1 5/8" Coax (1) 1 5/8" Hybriflex	VERIZON WIRELESS
	3	Alcatel-Lucent RRH2x40-AWS			
	3	Decibel 932DG90T2E-M			
	1	RFS DB-T1-6Z-8AB-0Z			
	3	Andrew HBX-6517DS-VTM (13.2lbs)			
	3	Powerwave Allgon P65-16-XL-2			
	3	Andrew LNX-6514DS-VTM (72.7" height)			

Equipment to be Removed

Elev.[1] (ft)	Qty	Antenna	Mount Type	Lines	Carrier
153.0	3	Powerwave Allgon TT19-08BP111-001	-	(12) 1 5/8" Coax (1) 3" conduit	AT&T MOBILITY
	3	Powerwave Allgon 7770.00			
	3	Ericsson RRUS 32 (55.1 lbs)			

Proposed Equipment

Elev.[1] (ft)	Qty	Antenna	Mount Type	Lines	Carrier
153.0	3	Kaelus DBC0061F1V51-1	Platform with Handrails	(1) 0.39" (10mm) Fiber Trunk (2) 0.78" (19.7mm) 8 AWG 6 (12) 1 1/4" Coax (1) 2" conduit	AT&T MOBILITY
	3	Ericsson RRUS 4478 B14			
	3	Ericsson RRUS 4449 B5, B12			
	3	Ericsson RRUS 32 B66A			
	3	Ericsson RRUS-32 B30 (77 lbs)			
	3	CCI DMP65R-BU6DA			
147.0	1	Raycap DC6-48-60-18-8F ("Squid")		-	

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

Install proposed lines inside the pole shaft.

Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Anchor Bolts	62%	Pass
Shaft	99%	Pass
Base Plate	85%	Pass
Flange	81%	Pass
Reinforcement	94%	Pass

Foundations

Reaction Component	Analysis Reactions	% of Usage
Moment (Kips-Ft)	1,867.9	63%
Axial (Kips)	29.0	45%
Shear (Kips)	17.7	30%

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

Deflection and Sway*

Antenna Elevation (ft)	Antenna	Carrier	Deflection (ft)	Sway (Rotation) (°)
153.0	Kaelus DBC0061F1V51-1	AT&T MOBILITY	0.000	0.000
	Ericsson RRUS 4478 B14			
	Ericsson RRUS 4449 B5, B12			
	Ericsson RRUS 32 B66A			
	Ericsson RRUS-32 B30 (77 lbs)			
	CCI DMP65R-BU6DA			
147.0	Raycap DC6-48-60-18-8F ("Squid")		3.810	3.064

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

Standard Conditions

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

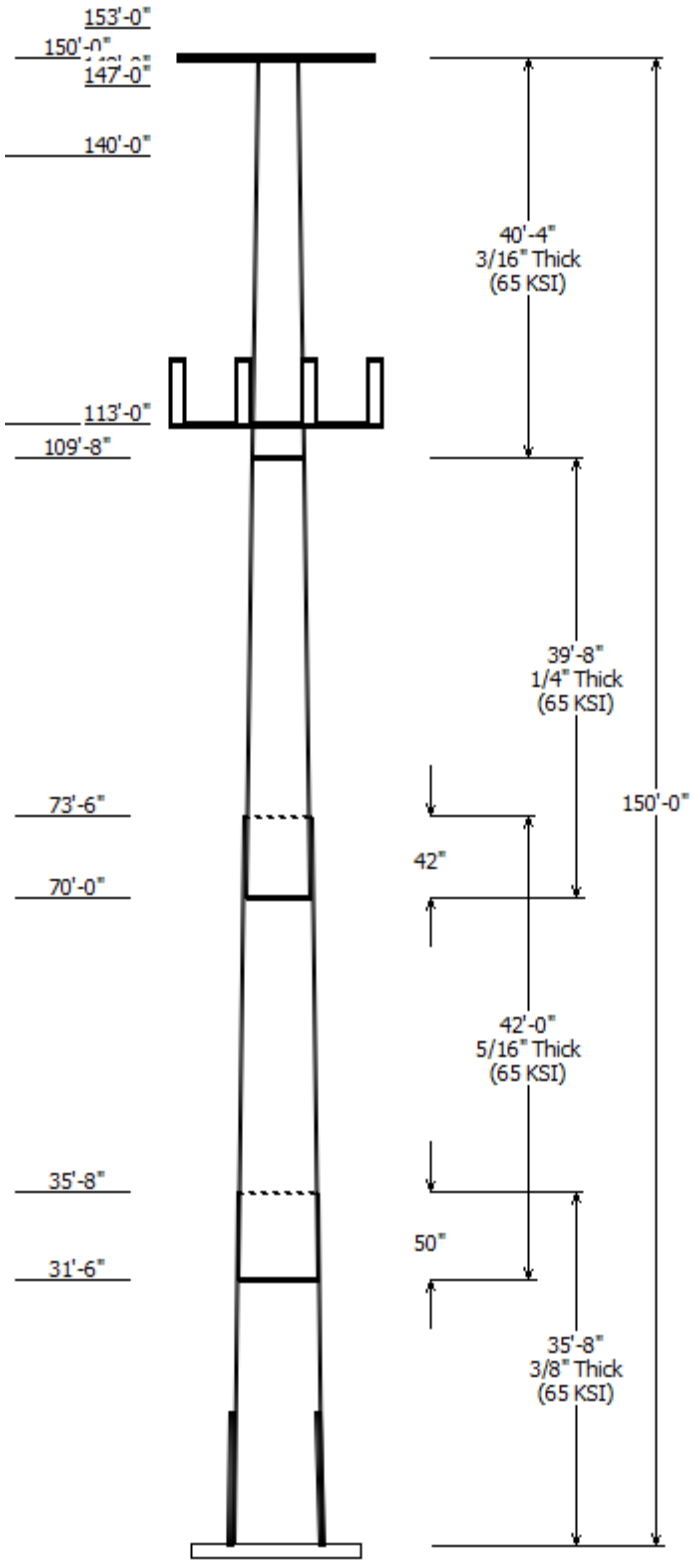
- Information supplied by the client regarding antenna, mounts and feed line loading
- Information from drawings, design and analysis documents, and field notes in the possession of A.T. Engineering Service, PLLC

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

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

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

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



Job Information

Client :	AT&T MOBILITY		
Pole :	302519	Code:	ANSI/TIA-222-H
Location :	Southbury, CT		
Description :	150 ft ITT Meyer Type "B" Monopole	Risk Category :	II
Shape :	12 Sides	Exposure :	B
Height :	150.00 (ft)	Topo Method :	Method 2
Base Elev (ft):	0.00	Topographic Feature :	Hill
Taper:	0.143833 (in/ft)		

Sections Properties

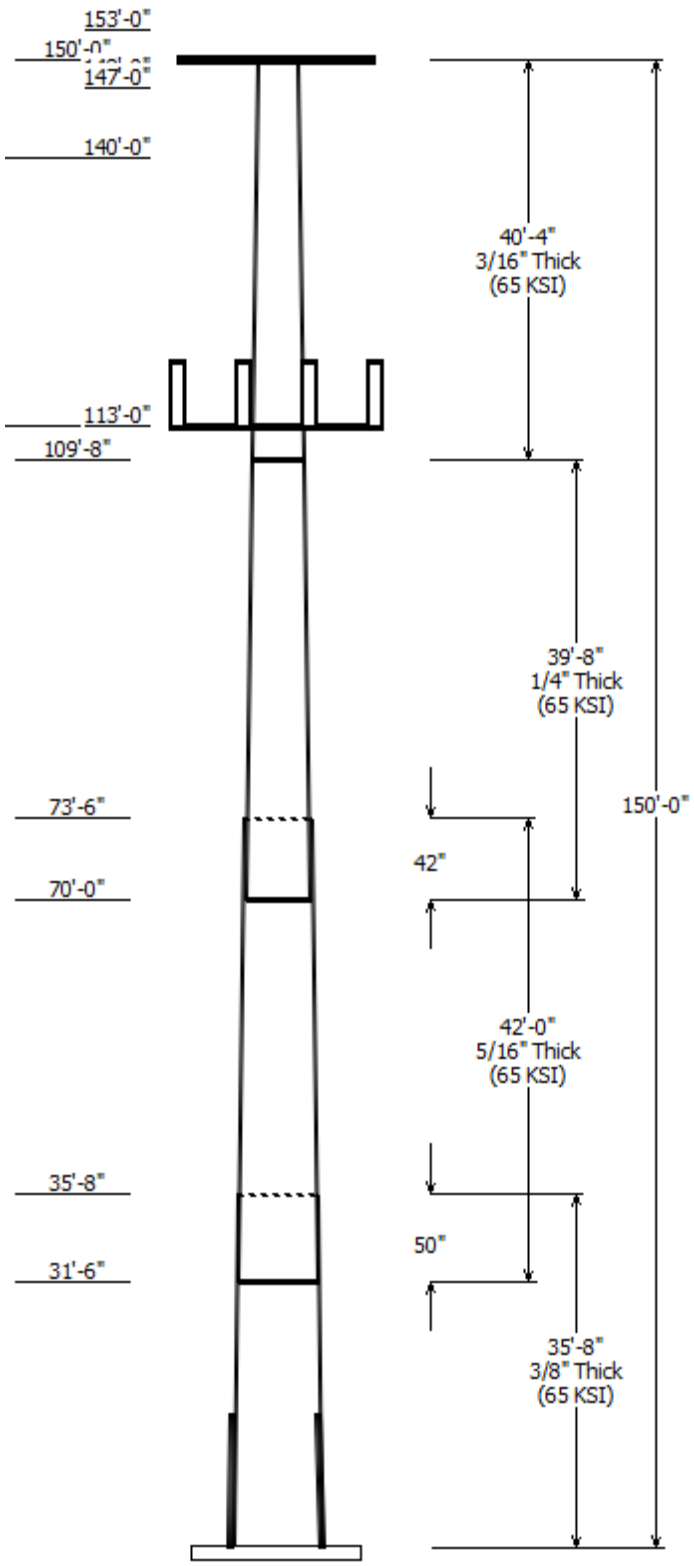
Shaft Section	Length (ft)	Diameter (in) Accross Flats Top	Bottom	Thick (in)	Joint Type	Overlap Length (in)	Shape	Steel Grade (ksi)
1	35.667	30.32	35.45	0.375		0.000	12 Sides	65
2	42.000	25.50	31.54	0.313	Slip Joint	50.000	12 Sides	65
3	39.667	20.80	26.50	0.250	Slip Joint	42.000	12 Sides	65
4	40.333	15.00	20.80	0.188	Butt Joint	0.000	12 Sides	65

Discrete Appurtenance

Attach Elev (ft)	Force Elev (ft)	Qty	Description
153.000	153.000	3	CCI DMP65R-BU6DA
153.000	153.000	3	CCI HPA-65R-BUU-H6
153.000	153.000	3	Quintel QS66512-2
153.000	153.000	3	Ericsson RRUS-32 B30 (77 lbs)
153.000	153.000	3	Ericsson RRUS 32 B2
153.000	153.000	3	Ericsson RRUS 32 B66A
153.000	153.000	3	Ericsson RRUS 4449 B5, B12
153.000	153.000	3	Ericsson RRUS 4478 B14
153.000	153.000	3	Powerwave Allgon TT19-
153.000	153.000	3	Kaelus DBC0061F1V51-1
153.000	153.000	3	Kaelus DBC0061F1V51-1
153.000	153.000	6	Powerwave Allgon 7020.00
150.000	150.000	1	Flat Platform w/ Handrails
148.000	148.000	3	Ericsson RRUS 11 (Band 12) (55
147.000	147.000	1	Raycap DC6-48-60-18-8F
147.000	147.000	2	Raycap DC6-48-60-18-8F
140.000	140.000	3	Flush Mounts
113.000	113.000	3	Round T-Arms
113.000	114.000	3	Andrew LNX-6514DS-VTM
113.000	114.000	3	Powerwave Allgon P65-16-XL-
113.000	114.000	3	Andrew HBX-6517DS-VTM
113.000	114.000	1	RFS DB-T1-6Z-8AB-0Z
113.000	114.000	3	Decibel 932DG90T2E-M
113.000	114.000	3	Alcatel-Lucent RRH2x40-AWS
113.000	113.000	6	RFS FD9R6004/1C-3L

Linear Appurtenance

Elev (ft) From	To	Description	Exposed To Wind
0.000	22.000	#20 Dywidag	Yes
0.000	22.000	#20 Dywidag	Yes
0.000	22.000	#20 Dywidag	Yes
0.000	22.000	#20 Dywidag	Yes
0.000	113.0	1 5/8" Coax	No
0.000	113.0	1 5/8" Hybriflex	No
0.000	147.0	0.78" (19.7mm) 8	Yes
0.000	147.0	0.78" (19.7mm) 8	No
0.000	153.0	0.39" (10mm)	No
0.000	153.0	0.39" (10mm)	No
0.000	153.0	0.78" (19.7mm) 8	No



0.000	153.0	1 1/4" Coax	No
0.000	153.0	2" conduit	No
0.000	153.0	2" conduit	No

Load Cases

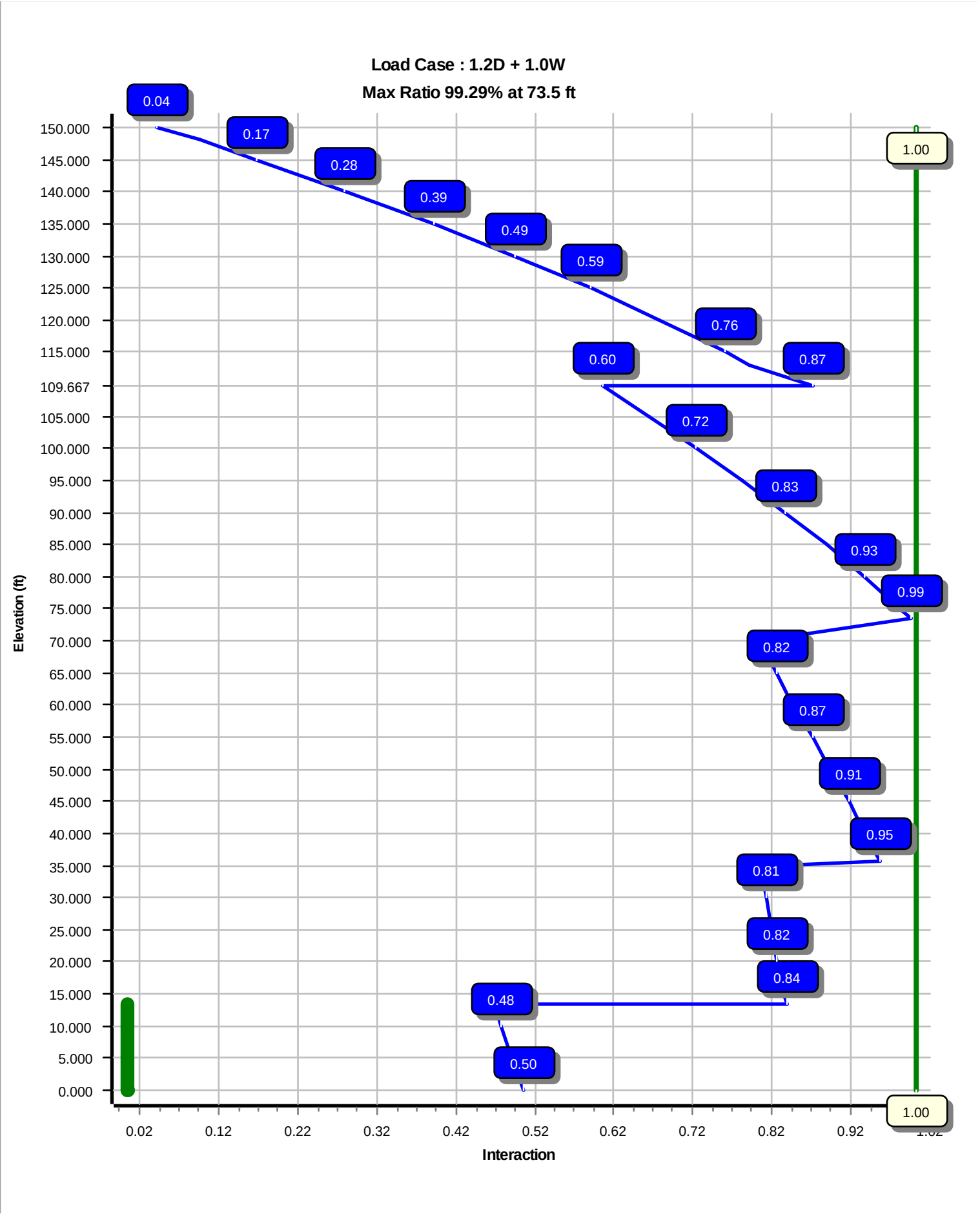
1.2D + 1.0W	116 mph with No Ice
0.9D + 1.0W	116 mph with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	50 mph with 1.00 in Radial Ice
1.2D + 1.0Ev + 1.0Eh	Seismic
0.9D - 1.0Ev + 1.0Eh	Seismic (Reduced DL)
1.0D + 1.0W	Serviceability 60 mph

Reactions

Load Case	Moment (kip-ft)	Shear (kip)	Axial (kip)
1.2D + 1.0W	1867.90	17.67	29.01
0.9D + 1.0W	1818.15	17.66	21.75
1.2D + 1.0Di + 1.0Wi	494.76	4.20	39.54
1.2D + 1.0Ev + 1.0Eh	131.97	0.95	28.58
0.9D - 1.0Ev + 1.0Eh	127.08	0.95	19.70
1.0D + 1.0W	441.71	4.23	24.20

Dish Deflections

Load Case	Attach Elev (ft)	Deflection (in)	Rotation (deg)
	0.00	0.000	0.000


Load Case : 1.2D + 1.0W
Max Ratio 99.29% at 73.5 ft
0.04
0.17
0.28
0.39
0.49
0.59
0.76
0.87
0.60
0.72
0.83
0.93
0.99
0.82
0.87
0.91
0.95
0.81
0.82
0.84
0.48
0.50
1.00
1.00
150.000
145.000
140.000
135.000
130.000
125.000
120.000
115.000
109.667
105.000
100.000
95.000
90.000
85.000
80.000
75.000
70.000
65.000
60.000
55.000
50.000
45.000
40.000
35.000
30.000
25.000
20.000
15.000
10.000
5.000
0.000
Elevation (ft)
0.02
0.12
0.22
0.32
0.42
0.52
0.62
0.72
0.82
0.92
Interaction

Site Number: 302519 | Code: ANSI/TIA-222-H |

Site Name: Southbury, CT | Engineering Number:13212284_C3_03 | 6/30/2020 4:51:33 PM

Customer: AT&T MOBILITY

Analysis Parameters

Location :	New Haven County, CT	Height (ft) :	150
Code :	ANSI/TIA-222-H	Base Diameter (in) :	35.45
Shape :	12 Sides	Top Diameter (in) :	15.00
Pole Type :	Taper	Taper (in/ft) :	0.144
Pole Manfacturer :	ITT Meyer	Rotation (deg) :	0.00
Kd (non-service) :	0.95	Ke :	0.99

Ice & Wind Parameters

Exposure Category:	B	Design Wind Speed Without Ice:	116 mph
Risk Category:	II	Design Wind Speed With Ice:	50 mph
Topographic Factor Procedure:	Method 2	Operational Wind Speed:	60 mph
Feature:	Hill	Design Ice Thickness:	1.00 in
Crest Height (H):	132 ft	HMSL:	346.00 ft
Crest Length (L):	456 ft		
Distance from Apex (x):	379 ft		
Upwind / Downwind	Downwind		

Seismic Parameters

Analysis Method:	Equivalent Lateral Force Method				
Site Class:	D - Stiff Soil				
Period Based on Rayleigh Method (sec):	3.65				
T_L (sec):	6	p:	1.3	C_s:	0.030
S_s:	0.202	S_1:	0.055	C_s Max:	0.030
F_a:	1.600	F_v :	2.400	C_s Min:	0.030
S_{ds}:	0.215	S_{d1}:	0.088		

Load Cases

1.2D + 1.0W	116 mph with No Ice
0.9D + 1.0W	116 mph with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	50 mph with 1.00 in Radial Ice
1.2D + 1.0Ev + 1.0Eh	Seismic
0.9D - 1.0Ev + 1.0Eh	Seismic (Reduced DL)
1.0D + 1.0W	Serviceability 60 mph

Site Number: 302519 Code: ANSI/TIA-222-H

Site Name: Southbury, CT Engineering Number:13212284_C3_03 6/30/2020 4:51:33 PM

Customer: AT&T MOBILITY

Shaft Section Properties

Sect Info	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Slip Joint Len (in)	Weight (lb)	Bottom Dia (in)	Bottom Elev (ft)	Bottom Area (in²)	Bottom Ix (in⁴)	Bottom W/t Ratio	Bottom D/t Ratio	Top Dia (in)	Top Elev (ft)	Top Area (in²)	Top Ix (in⁴)	Top W/t Ratio	Top D/t Ratio	Taper (in/ft)
1-12	35.667	0.3750	65		0.00	4,764	35.45	0.00	42.35	6650.7	22.65	94.53	30.32	35.67	36.16	4138.5	18.99	80.85	0.143833
2-12	42.000	0.3125	65	Slip	50.00	4,057	31.54	31.50	31.43	3912.7	24.37	100.94	25.50	73.50	25.35	2053.1	19.19	81.61	0.143833
3-12	39.667	0.2500	65	Slip	42.00	2,543	26.50	70.00	21.14	1859.9	25.73	106.03	20.80	109.67	16.54	891.9	19.62	83.20	0.143833
4-12	40.333	0.1875	65	Butt	0.00	1,468	20.80	109.67	12.45	675.0	27.05	110.94	15.00	150.00	8.94	250.5	18.76	80.00	0.143833
				Shaft Weight		12,832													

Discrete Appurtenance Properties

Attach Elev (ft)	Description	Qty	Ka	Vert Ecc (ft)	No Ice Weight (lb)	No Ice EPAa (sf)	No Ice Orientation Factor	Ice Weight (lb)	Ice EPAa (sf)	Ice Orientation Factor
153.00	Powerwave Allgon 7020.00 Dual	6	0.75	0.000	2.20	0.339	0.50	9.03	0.613	0.50
153.00	Kaelus DBC0061F1V51-1	3	0.75	0.000	12.70	0.413	0.50	21.26	0.708	0.50
153.00	Kaelus DBC0061F1V51-1	3	0.75	0.000	12.70	0.413	0.50	21.26	0.708	0.50
153.00	Powerwave Allgon TT19-	3	0.75	0.000	16.00	0.553	0.50	29.50	0.895	0.50
153.00	Ericsson RRUS 4478 B14	3	0.75	0.000	59.90	1.842	0.50	96.87	2.442	0.50
153.00	Ericsson RRUS 4449 B5, B12	3	0.75	0.000	71.00	1.969	0.50	114.09	2.593	0.50
153.00	Ericsson RRUS 32 B66A	3	0.75	0.000	50.70	2.720	0.50	99.70	3.498	0.50
153.00	Ericsson RRUS 32 B2	3	0.75	0.000	53.00	2.743	0.50	102.18	3.525	0.50
153.00	Ericsson RRUS-32 B30 (77 lbs)	3	0.75	0.000	77.00	3.314	0.50	142.02	4.172	0.50
153.00	Quintel QS66512-2	3	0.75	0.000	111.00	8.133	0.74	244.24	9.997	0.74
153.00	CCI HPA-65R-BUU-H6	3	0.75	0.000	51.00	9.658	0.69	197.69	11.511	0.69
153.00	CCI DMP65R-BU6DA	3	0.75	0.000	79.40	12.709	0.63	251.63	14.574	0.63
150.00	Flat Platform w/ Handrails	1	1.00	0.000	2,000.00	42.400	1.00	2,950.19	56.422	1.00
148.00	Ericsson RRUS 11 (Band 12) (55	3	0.75	0.000	55.00	2.522	0.50	99.94	3.217	0.50
147.00	Raycap DC6-48-60-18-8F	2	0.75	0.000	31.80	1.470	1.00	72.97	1.936	1.00
147.00	Raycap DC6-48-60-18-8F	1	0.75	0.000	31.80	1.470	1.00	72.97	1.936	1.00
140.00	Flush Mounts	3	1.00	0.000	200.00	3.500	1.00	431.09	5.926	1.00
113.00	RFS FD9R6004/1C-3L	6	0.80	0.000	3.10	0.314	0.50	8.31	0.565	0.50
113.00	Alcatel-Lucent RRH2x40-AWS	3	0.80	1.000	44.00	2.155	0.50	83.40	2.833	0.50
113.00	Decibel 932DG90T2E-M	3	0.80	1.000	9.50	3.490	0.66	58.99	4.065	0.66
113.00	RFS DB-T1-6Z-8AB-0Z	1	0.80	1.000	44.00	4.800	1.00	125.84	5.724	1.00
113.00	Andrew HBX-6517DS-VTM	3	0.80	1.000	13.20	5.243	0.69	74.81	6.830	0.69
113.00	Powerwave Allgon P65-16-XL-2	3	0.80	1.000	33.00	8.133	0.65	133.86	9.946	0.65
113.00	Andrew LNX-6514DS-VTM (72.7"	3	0.80	1.000	38.80	8.173	0.69	153.20	10.006	0.69
113.00	Round T-Arms	3	0.75	0.000	250.00	9.700	0.67	385.90	15.061	0.67
Totals	Num Loadings:25	74			5,884.90			11,623.89		

Linear Appurtenance Properties

Load Case Azimuth (deg) : 90

Elev From (ft)	Elev To (ft)	Qty	Description	Coax Dia (in)	Coax Wt (lb/ft)	Flat	Max Coax / Row	Dist Between Rows (in)	Dist Between Cols (in)	Azimuth (deg)	Dist From Face (in)	Exposed To Wind	Carrier
0.00	153.00	1	0.39" (10mm) Fiber	0.39	0.06	N	0	0.00	0.00	0	0.00	N	AT&T MOBILITY
0.00	153.00	2	0.39" (10mm) Fiber	0.39	0.06	N	0	0.00	0.00	0	0.00	N	AT&T MOBILITY
0.00	153.00	2	0.78" (19.7mm) 8 AWG	0.78	0.59	N	0	0.00	0.00	0	0.00	N	AT&T MOBILITY
0.00	153.00	12	1 1/4" Coax	1.55	0.63	N	0	0.00	0.00	0	0.00	N	AT&T MOBILITY
0.00	153.00	1	2" conduit	2.38	3.65	N	0	0.00	0.00	0	0.00	N	AT&T MOBILITY
0.00	153.00	2	2" conduit	2.38	3.65	N	0	0.00	0.00	0	0.00	N	AT&T MOBILITY
0.00	147.00	2	0.78" (19.7mm) 8 AWG	0.78	0.59	N	2	1.00	1.00	180	1.00	Y	AT&T MOBILITY
0.00	147.00	2	0.78" (19.7mm) 8 AWG	0.78	0.59	N	0	0.00	0.00	0	0.00	N	AT&T MOBILITY
0.00	113.00	12	1 5/8" Coax	1.98	0.82	N	0	0.00	0.00	0	0.00	N	VERIZON WIRELESS
0.00	113.00	1	1 5/8" Hybriflex	1.98	1.30	N	0	0.00	0.00	0	0.00	N	VERIZON WIRELESS

0.00	22.00	1	#20 Dywidag	4.00	0.00	N	1	0.00	0.00	90	0.00	Y	--
0.00	22.00	1	#20 Dywidag	4.00	0.00	N	1	0.00	0.00	180	0.00	Y	--
0.00	22.00	1	#20 Dywidag	4.00	0.00	N	1	0.00	0.00	270	0.00	Y	--
0.00	22.00	1	#20 Dywidag	4.00	0.00	N	1	0.00	0.00	0	0.00	Y	--

Additional Steel

Elev From (ft)	Elev To (ft)	Qty	Description	Fy (ksi)	Offset (in)	Intermediate Connections			Connectors	Continuation?
						Description	Spacing (in)	Len (in)		
0.00	13.50	4	SOL #20 All Thread	80	3.31	6" Angle Bracket	30.0	3.31	5/8" A36 U-Bolt	No

Segment Properties (Max Len : 5. ft)

Seg Top Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	F'y (ksi)	S (in^3)	Z (in^3)	Weight (lb)	Additional Reinforcing Area (in^2)	Additional Reinforcing Ix (in^4)	Additional Reinforcing Weight (lb)
0.00		0.3750	35.450	42.353	6,650.7	22.65	94.53	80.0	362.4	0.0	0.0	19.64	4,885	0.0
5.00		0.3750	34.731	41.485	6,249.9	22.14	92.62	80.6	347.6	0.0	713.2	19.64	4,729	334.0
10.00		0.3750	34.012	40.616	5,865.6	21.62	90.70	81.1	333.2	0.0	698.4	19.64	4,575	334.0
13.50	Reinf. Top	0.3750	33.508	40.008	5,606.2	21.26	89.36	81.5	323.2	0.0	480.1	19.64	4,469	233.8
15.00		0.3750	33.292	39.748	5,497.4	21.11	88.78	81.7	319.0	0.0	203.5			
20.00		0.3750	32.573	38.879	5,144.9	20.60	86.86	81.9	305.1	0.0	668.9			
25.00		0.3750	31.854	38.011	4,807.8	20.08	84.94	81.9	291.6	0.0	654.1			
30.00		0.3750	31.135	37.143	4,485.7	19.57	83.03	81.9	278.3	0.0	639.3			
31.50	Bot - Section 2	0.3750	30.919	36.882	4,392.0	19.41	82.45	81.9	274.4	0.0	188.9			
35.00		0.3750	30.416	36.274	4,178.4	19.05	81.11	81.9	265.4	0.0	806.9			
35.67	Top - Section 1	0.3125	30.945	30.824	3,691.8	23.85	99.02	78.7	230.5	0.0	152.2			
40.00		0.3125	30.322	30.197	3,471.0	23.32	97.03	79.3	221.1	0.0	449.9			
45.00		0.3125	29.603	29.473	3,227.4	22.70	94.73	80.0	210.6	0.0	507.6			
50.00		0.3125	28.883	28.749	2,995.4	22.09	92.43	80.6	200.3	0.0	495.3			
55.00		0.3125	28.164	28.026	2,774.9	21.47	90.13	81.3	190.3	0.0	483.0			
60.00		0.3125	27.445	27.302	2,565.4	20.85	87.82	81.9	180.6	0.0	470.7			
65.00		0.3125	26.726	26.578	2,366.8	20.24	85.52	81.9	171.1	0.0	458.4			
70.00	Bot - Section 3	0.3125	26.007	25.855	2,178.7	19.62	83.22	81.9	161.8	0.0	446.0			
73.50	Top - Section 2	0.2500	26.003	20.731	1,755.0	25.19	104.01	77.2	130.4	0.0	554.2			
75.00		0.2500	25.788	20.558	1,711.3	24.96	103.15	77.5	128.2	0.0	105.4			
80.00		0.2500	25.068	19.979	1,570.7	24.19	100.27	78.3	121.0	0.0	344.8			
85.00		0.2500	24.349	19.400	1,438.1	23.42	97.40	79.2	114.1	0.0	335.0			
90.00		0.2500	23.630	18.821	1,313.2	22.65	94.52	80.0	107.4	0.0	325.1			
95.00		0.2500	22.911	18.242	1,195.7	21.88	91.64	80.9	100.8	0.0	315.3			
100.0		0.2500	22.192	17.663	1,085.4	21.11	88.77	81.7	94.5	0.0	305.4			
105.0		0.2500	21.472	17.084	982.1	20.33	85.89	81.9	88.4	0.0	295.6			
109.6	Top - Section 3	0.2500	20.801	16.544	891.9	19.62	83.20	81.9	82.8	0.0	267.0			
109.6	Bot - Section 4	0.1875	20.801	12.446	675.0	27.05	110.94	75.2	62.7	0.0				
110.0		0.1875	20.753	12.417	670.3	26.98	110.68	75.3	62.4	0.0	14.1			
113.0		0.1875	20.322	12.156	629.0	26.36	108.38	76.0	59.8	0.0	125.4			
115.0		0.1875	20.034	11.982	602.4	25.95	106.85	76.4	58.1	0.0	82.1			
120.0		0.1875	19.315	11.548	539.3	24.92	103.01	77.5	53.9	0.0	200.2			
125.0		0.1875	18.596	11.114	480.7	23.90	99.18	78.7	49.9	0.0	192.8			
130.0		0.1875	17.877	10.680	426.5	22.87	95.34	79.8	46.1	0.0	185.4			
135.0		0.1875	17.158	10.246	376.6	21.84	91.51	80.9	42.4	0.0	178.0			
140.0		0.1875	16.438	9.811	330.7	20.81	87.67	81.9	38.9	0.0	170.6			
145.0		0.1875	15.719	9.377	288.7	19.78	83.84	81.9	35.5	0.0	163.2			
147.0		0.1875	15.432	9.204	273.0	19.37	82.30	81.9	34.2	0.0	63.2			
148.0		0.1875	15.288	9.117	265.3	19.17	81.53	81.9	33.5	0.0	31.2			
150.0		0.1875	15.000	8.943	250.5	18.76	80.00	81.9	32.3	0.0	61.5			
											12,832.1			901.8

Site Number: 302519 Code: ANSI/TIA-222-H

Site Name: Southbury, CT Engineering Number:13212284_C3_03 6/30/2020 4:51:33 PM

Customer: AT&T MOBILITY

Load Case: 1.2D + 1.0W 116 mph with No Ice 32 Iterations

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

Applied Segment Forces Summary

		Shaft Forces		Discrete Forces				Linear Forces		Sum of Forces			
Seg Elev (ft)	Description	Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Torsion MY (lb-ft)	Moment MZ (lb)
0.00		235.1	0.0					0.0	0.0	235.1	0.0	0.0	0.0
5.00		464.7	855.8					103.5	601.0	568.2	1,456.9	0.0	0.0
10.00		387.1	838.1					103.2	601.0	490.3	1,439.1	0.0	0.0
13.50	Reinf. Top	224.2	576.1					72.1	420.7	296.3	996.8	0.0	0.0
15.00		285.6	244.3					30.9	60.1	316.4	304.3	0.0	0.0
20.00		432.5	802.7					102.7	200.2	535.2	1,002.9	0.0	0.0
25.00		378.6	784.9					102.5	200.2	481.1	985.1	0.0	0.0
30.00		214.1	767.2					0.0	200.2	214.1	967.4	0.0	0.0
31.50	Bot - Section 2	167.1	226.7					0.0	60.1	167.1	286.8	0.0	0.0
35.00		140.6	968.3					0.0	140.2	140.6	1,108.4	0.0	0.0
35.67	Top - Section 1	170.8	182.6					0.0	26.7	170.8	209.3	0.0	0.0
40.00		320.7	539.9					0.0	173.5	320.7	713.4	0.0	0.0
45.00		346.2	609.1					0.0	200.2	346.2	809.3	0.0	0.0
50.00		347.6	594.4					0.0	200.2	347.6	794.6	0.0	0.0
55.00		347.8	579.6					0.0	200.2	347.8	779.8	0.0	0.0
60.00		347.0	564.8					0.0	200.2	347.0	765.0	0.0	0.0
65.00		345.4	550.0					0.0	200.2	345.4	750.3	0.0	0.0
70.00	Bot - Section 3	294.2	535.3					0.0	200.2	294.2	735.5	0.0	0.0
73.50	Top - Section 2	174.0	665.1					0.0	140.2	174.0	805.2	0.0	0.0
75.00		224.4	126.4					0.0	60.1	224.4	186.5	0.0	0.0
80.00		342.7	413.8					0.0	200.2	342.7	614.0	0.0	0.0
85.00		338.4	402.0					0.0	200.2	338.4	602.2	0.0	0.0
90.00		333.5	390.2					0.0	200.2	333.5	590.4	0.0	0.0
95.00		328.2	378.4					0.0	200.2	328.2	578.6	0.0	0.0
100.00		322.3	366.5					0.0	200.2	322.3	566.8	0.0	0.0
105.00		305.7	354.7					0.0	200.2	305.7	554.9	0.0	0.0
109.67	Top - Section 3	156.4	320.4					0.0	186.9	156.4	507.3	0.0	0.0
110.00		102.5	16.9					0.0	13.3	102.5	30.2	0.0	0.0
113.00	Appurtenance(s)	153.0	150.5	2,285.1	0.0	1,721.5	1,473.7	0.0	120.1	2,438.0	1,744.4	0.0	0.0
115.00		210.1	98.6					0.0	53.4	210.1	151.9	0.0	0.0
120.00		294.9	240.2					0.0	133.4	294.9	373.6	0.0	0.0
125.00		287.1	231.3					0.0	133.4	287.1	364.7	0.0	0.0
130.00		279.0	222.5					0.0	133.4	279.0	355.9	0.0	0.0
135.00		270.5	213.6					0.0	133.4	270.5	347.0	0.0	0.0
140.00	Appurtenance(s)	261.8	204.7	408.1	0.0	0.0	720.0	0.0	133.4	669.9	1,058.1	0.0	0.0
145.00		178.9	195.9					0.0	133.4	178.9	329.3	0.0	0.0
147.00	Appurtenance(s)	75.0	75.9	130.3	0.0	0.0	114.5	0.0	53.4	205.3	243.7	0.0	0.0
148.00	Appurtenance(s)	73.9	37.4	112.0	0.0	0.0	198.0	0.0	23.8	185.9	259.2	0.0	0.0
150.00	Appurtenance(s)	49.1	73.7	1,679.6	0.0	0.0	2,400.0	0.0	47.7	1,728.7	2,521.4	0.0	0.0
								Totals:		15,340.3	26,890.3	0.00	0.00

Load Case: 1.2D + 1.0W — 116 mph with No Ice — 32 Iterations

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

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-29.01	-17.67	0.00	-1,867.90	0.00	1,867.90	3,049.83	743.30	2,459.73	2,174.87	0.00	0.00	0.502
5.00	-27.49	-17.21	0.00	-1,779.53	0.00	1,779.53	3,008.23	728.06	2,359.94	2,100.75	0.12	-0.22	0.489
10.00	-26.00	-16.80	0.00	-1,693.48	0.00	1,693.48	2,965.74	712.82	2,262.21	2,027.26	0.48	-0.45	0.476
13.50	-24.97	-16.54	0.00	-1,634.69	0.00	1,634.69	2,935.48	702.15	2,195.03	1,976.22	0.87	-0.61	0.466
13.50	-24.97	-16.54	0.00	-1,634.69	0.00	1,634.69	2,935.48	702.15	2,195.03	1,976.22	0.87	-0.61	0.836
15.00	-24.60	-16.33	0.00	-1,609.88	0.00	1,609.88	2,922.38	697.58	2,166.54	1,954.44	1.07	-0.68	0.833
20.00	-23.49	-15.94	0.00	-1,528.25	0.00	1,528.25	2,865.81	682.34	2,072.95	1,874.26	1.99	-1.08	0.824
25.00	-22.41	-15.60	0.00	-1,448.54	0.00	1,448.54	2,801.80	667.09	1,981.42	1,791.00	3.35	-1.49	0.817
30.00	-21.37	-15.46	0.00	-1,370.53	0.00	1,370.53	2,737.79	651.85	1,891.95	1,709.63	5.13	-1.91	0.810
31.50	-21.03	-15.36	0.00	-1,347.34	0.00	1,347.34	2,718.59	647.28	1,865.51	1,685.59	5.76	-2.04	0.808
35.00	-19.88	-15.24	0.00	-1,293.57	0.00	1,293.57	2,673.78	636.61	1,804.55	1,630.15	7.36	-2.34	0.802
35.67	-19.63	-15.14	0.00	-1,283.41	0.00	1,283.41	2,183.22	540.96	1,563.37	1,360.34	7.69	-2.40	0.953
40.00	-18.82	-14.93	0.00	-1,217.82	0.00	1,217.82	2,154.64	529.95	1,500.42	1,314.94	10.04	-2.77	0.936
45.00	-17.90	-14.69	0.00	-1,143.19	0.00	1,143.19	2,120.84	517.25	1,429.39	1,262.98	13.20	-3.26	0.914
50.00	-17.01	-14.44	0.00	-1,069.75	0.00	1,069.75	2,086.17	504.55	1,360.08	1,211.51	16.87	-3.74	0.892
55.00	-16.13	-14.18	0.00	-997.55	0.00	997.55	2,050.62	491.85	1,292.50	1,160.56	21.05	-4.23	0.868
60.00	-15.28	-13.90	0.00	-926.66	0.00	926.66	2,012.44	479.15	1,226.64	1,109.22	25.74	-4.73	0.844
65.00	-14.44	-13.62	0.00	-857.14	0.00	857.14	1,959.10	466.45	1,162.50	1,050.87	30.95	-5.22	0.824
70.00	-13.64	-13.36	0.00	-789.04	0.00	789.04	1,905.75	453.75	1,100.08	994.10	36.67	-5.72	0.802
73.50	-12.80	-13.16	0.00	-742.29	0.00	742.29	1,441.17	363.84	883.97	755.32	40.98	-6.07	0.993
75.00	-12.56	-13.00	0.00	-722.55	0.00	722.55	1,433.76	360.79	869.22	745.08	42.91	-6.22	0.980
80.00	-11.86	-12.70	0.00	-657.57	0.00	657.57	1,408.50	350.63	820.97	711.14	49.72	-6.79	0.934
85.00	-11.18	-12.40	0.00	-594.05	0.00	594.05	1,382.37	340.47	774.10	677.52	57.11	-7.36	0.886
90.00	-10.53	-12.10	0.00	-532.03	0.00	532.03	1,355.35	330.31	728.60	644.25	65.10	-7.92	0.835
95.00	-9.89	-11.78	0.00	-471.55	0.00	471.55	1,327.47	320.15	684.48	611.38	73.65	-8.46	0.780
100.00	-9.28	-11.46	0.00	-412.63	0.00	412.63	1,298.70	309.99	641.74	578.94	82.76	-8.99	0.721
105.00	-8.69	-11.14	0.00	-355.32	0.00	355.32	1,259.27	299.83	600.38	542.76	92.40	-9.49	0.663
109.67	-8.17	-10.94	0.00	-303.32	0.00	303.32	1,219.44	290.34	563.02	508.77	101.85	-9.93	0.604
109.67	-8.17	-10.94	0.00	-303.32	0.00	303.32	842.50	218.42	424.75	353.65	101.85	-9.93	0.870
110.00	-8.12	-10.86	0.00	-299.68	0.00	299.68	841.37	217.91	422.77	352.35	102.54	-9.97	0.863
113.00	-6.79	-8.19	0.00	-265.38	0.00	265.38	831.08	213.34	405.23	340.67	108.89	-10.33	0.789
115.00	-6.62	-8.00	0.00	-249.00	0.00	249.00	824.04	210.29	393.73	332.91	113.24	-10.56	0.757
120.00	-6.24	-7.70	0.00	-209.01	0.00	209.01	805.83	202.67	365.72	313.65	124.53	-11.10	0.676
125.00	-5.88	-7.39	0.00	-170.54	0.00	170.54	786.74	195.05	338.75	294.59	136.34	-11.60	0.588
130.00	-5.54	-7.09	0.00	-133.58	0.00	133.58	766.78	187.43	312.81	275.79	148.65	-12.05	0.493
135.00	-5.21	-6.78	0.00	-98.15	0.00	98.15	745.94	179.81	287.90	257.27	161.39	-12.44	0.390
140.00	-4.30	-5.91	0.00	-64.25	0.00	64.25	723.20	172.19	264.02	238.74	174.48	-12.74	0.276
145.00	-4.01	-5.68	0.00	-34.68	0.00	34.68	691.20	164.57	241.18	217.96	187.84	-12.96	0.166
147.00	-3.81	-5.42	0.00	-23.33	0.00	23.33	678.39	161.52	232.33	209.92	193.23	-13.01	0.118
148.00	-3.60	-5.19	0.00	-17.90	0.00	17.90	671.99	160.00	227.97	205.95	195.94	-13.04	0.093
150.00	0.00	-4.24	0.00	-7.53	0.00	7.53	659.19	156.95	219.37	198.13	201.36	-13.06	0.039

Site Number: 302519 Code: ANSI/TIA-222-H

Site Name: Southbury, CT Engineering Number:13212284_C3_03 6/30/2020 4:51:36 PM

Customer: AT&T MOBILITY

Load Case: 0.9D + 1.0W — 116 mph with No Ice (Reduced DL) — 32 Iterations

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

Applied Segment Forces Summary

Seg Elev (ft)	Description	Shaft Forces Wind FX (lb)	Shaft Forces Dead Load (lb)	Discrete Forces Wind FX (lb)	Discrete Forces Torsion MY (lb-ft)	Discrete Forces Moment MZ (lb-ft)	Discrete Forces Dead Load (lb)	Linear Forces Wind FX (lb)	Linear Forces Dead Load (lb)	Sum of Forces Wind FX (lb)	Sum of Forces Dead Load (lb)	Sum of Forces Torsion MY (lb-ft)	Sum of Forces Moment MZ (lb)
0.00		235.1	0.0					0.0	0.0	235.1	0.0	0.0	0.0
5.00		464.7	641.9					103.5	450.8	568.2	1,092.6	0.0	0.0
10.00		387.1	628.6					103.2	450.8	490.3	1,079.3	0.0	0.0
13.50	Reinf. Top	224.2	432.1					72.1	315.5	296.3	747.6	0.0	0.0
15.00		285.6	183.2					30.9	45.0	316.4	228.2	0.0	0.0
20.00		432.5	602.0					102.7	150.2	535.2	752.2	0.0	0.0
25.00		378.6	588.7					102.5	150.2	481.1	738.9	0.0	0.0
30.00		214.1	575.4					0.0	150.2	214.1	725.6	0.0	0.0
31.50	Bot - Section 2	167.1	170.0					0.0	45.1	167.1	215.1	0.0	0.0
35.00		140.6	726.2					0.0	105.1	140.6	831.3	0.0	0.0
35.67	Top - Section 1	170.8	137.0					0.0	20.0	170.8	157.0	0.0	0.0
40.00		320.7	404.9					0.0	130.1	320.7	535.0	0.0	0.0
45.00		346.2	456.8					0.0	150.2	346.2	607.0	0.0	0.0
50.00		347.6	445.8					0.0	150.2	347.6	595.9	0.0	0.0
55.00		347.8	434.7					0.0	150.2	347.8	584.8	0.0	0.0
60.00		347.0	423.6					0.0	150.2	347.0	573.8	0.0	0.0
65.00		345.4	412.5					0.0	150.2	345.4	562.7	0.0	0.0
70.00	Bot - Section 3	294.2	401.4					0.0	150.2	294.2	551.6	0.0	0.0
73.50	Top - Section 2	174.0	498.8					0.0	105.1	174.0	603.9	0.0	0.0
75.00		224.4	94.8					0.0	45.0	224.4	139.9	0.0	0.0
80.00		342.7	310.4					0.0	150.2	342.7	460.5	0.0	0.0
85.00		338.4	301.5					0.0	150.2	338.4	451.7	0.0	0.0
90.00		333.5	292.6					0.0	150.2	333.5	442.8	0.0	0.0
95.00		328.2	283.8					0.0	150.2	328.2	433.9	0.0	0.0
100.00		322.3	274.9					0.0	150.2	322.3	425.1	0.0	0.0
105.00		305.7	266.0					0.0	150.2	305.7	416.2	0.0	0.0
109.67	Top - Section 3	156.4	240.3					0.0	140.2	156.4	380.5	0.0	0.0
110.00		102.5	12.7					0.0	10.0	102.5	22.7	0.0	0.0
113.00	Appurtenance(s)	153.0	112.9	2,285.1	0.0	1,721.5	1,105.3	0.0	90.1	2,438.0	1,308.3	0.0	0.0
115.00		210.1	73.9					0.0	40.0	210.1	113.9	0.0	0.0
120.00		294.9	180.2					0.0	100.0	294.9	280.2	0.0	0.0
125.00		287.1	173.5					0.0	100.0	287.1	273.5	0.0	0.0
130.00		279.0	166.9					0.0	100.0	279.0	266.9	0.0	0.0
135.00		270.5	160.2					0.0	100.0	270.5	260.2	0.0	0.0
140.00	Appurtenance(s)	261.8	153.6	408.1	0.0	0.0	540.0	0.0	100.0	669.9	793.6	0.0	0.0
145.00		178.9	146.9					0.0	100.0	178.9	246.9	0.0	0.0
147.00	Appurtenance(s)	75.0	56.9	130.3	0.0	0.0	85.9	0.0	40.0	205.3	182.8	0.0	0.0
148.00	Appurtenance(s)	73.9	28.1	112.0	0.0	0.0	148.5	0.0	17.9	185.9	194.4	0.0	0.0
150.00	Appurtenance(s)	49.1	55.3	1,679.6	0.0	0.0	1,800.0	0.0	35.8	1,728.7	1,891.1	0.0	0.0
								Totals:		15,340.3	20,167.7	0.00	0.00

Load Case: 0.9D + 1.0W — 116 mph with No Ice (Reduced DL) — 32 Iterations

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

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-21.75	-17.66	0.00	-1,818.15	0.00	1,818.15	3,049.83	743.30	2,459.73	2,174.87	0.00	0.00	0.487
5.00	-20.59	-17.17	0.00	-1,729.87	0.00	1,729.87	3,008.23	728.06	2,359.94	2,100.75	0.12	-0.22	0.474
10.00	-19.46	-16.73	0.00	-1,644.04	0.00	1,644.04	2,965.74	712.82	2,262.21	2,027.26	0.46	-0.44	0.461
13.50	-18.69	-16.47	0.00	-1,585.47	0.00	1,585.47	2,935.48	702.15	2,195.03	1,976.22	0.84	-0.59	0.451
13.50	-18.69	-16.47	0.00	-1,585.47	0.00	1,585.47	2,935.48	702.15	2,195.03	1,976.22	0.84	-0.59	0.809
15.00	-18.40	-16.22	0.00	-1,560.77	0.00	1,560.77	2,922.38	697.58	2,166.54	1,954.44	1.04	-0.66	0.805
20.00	-17.54	-15.80	0.00	-1,479.67	0.00	1,479.67	2,865.81	682.34	2,072.95	1,874.26	1.94	-1.05	0.796
25.00	-16.71	-15.42	0.00	-1,400.69	0.00	1,400.69	2,801.80	667.09	1,981.42	1,791.00	3.25	-1.45	0.789
30.00	-15.92	-15.25	0.00	-1,323.61	0.00	1,323.61	2,737.79	651.85	1,891.95	1,709.63	4.98	-1.85	0.781
31.50	-15.65	-15.14	0.00	-1,300.72	0.00	1,300.72	2,718.59	647.28	1,865.51	1,685.59	5.58	-1.98	0.778
35.00	-14.78	-15.01	0.00	-1,247.74	0.00	1,247.74	2,673.78	636.61	1,804.55	1,630.15	7.14	-2.27	0.772
35.67	-14.58	-14.89	0.00	-1,237.74	0.00	1,237.74	2,183.22	540.96	1,563.37	1,360.34	7.46	-2.32	0.917
40.00	-13.95	-14.64	0.00	-1,173.23	0.00	1,173.23	2,154.64	529.95	1,500.42	1,314.94	9.73	-2.68	0.899
45.00	-13.25	-14.38	0.00	-1,100.01	0.00	1,100.01	2,120.84	517.25	1,429.39	1,262.98	12.79	-3.15	0.878
50.00	-12.56	-14.10	0.00	-1,028.13	0.00	1,028.13	2,086.17	504.55	1,360.08	1,211.51	16.33	-3.62	0.855
55.00	-11.89	-13.81	0.00	-957.64	0.00	957.64	2,050.62	491.85	1,292.50	1,160.56	20.37	-4.09	0.832
60.00	-11.23	-13.51	0.00	-888.60	0.00	888.60	2,012.44	479.15	1,226.64	1,109.22	24.90	-4.56	0.807
65.00	-10.59	-13.21	0.00	-821.03	0.00	821.03	1,959.10	466.45	1,162.50	1,050.87	29.92	-5.04	0.787
70.00	-9.97	-12.94	0.00	-754.98	0.00	754.98	1,905.75	453.75	1,100.08	994.10	35.44	-5.51	0.766
73.50	-9.34	-12.74	0.00	-709.70	0.00	709.70	1,441.17	363.84	883.97	755.32	39.60	-5.84	0.947
75.00	-9.14	-12.56	0.00	-690.59	0.00	690.59	1,433.76	360.79	869.22	745.08	41.46	-5.99	0.934
80.00	-8.61	-12.25	0.00	-627.78	0.00	627.78	1,408.50	350.63	820.97	711.14	48.01	-6.54	0.890
85.00	-8.09	-11.94	0.00	-566.51	0.00	566.51	1,382.37	340.47	774.10	677.52	55.13	-7.08	0.843
90.00	-7.59	-11.62	0.00	-506.81	0.00	506.81	1,355.35	330.31	728.60	644.25	62.80	-7.61	0.794
95.00	-7.10	-11.30	0.00	-448.70	0.00	448.70	1,327.47	320.15	684.48	611.38	71.03	-8.13	0.741
100.00	-6.63	-10.98	0.00	-392.20	0.00	392.20	1,298.70	309.99	641.74	578.94	79.77	-8.63	0.684
105.00	-6.19	-10.66	0.00	-337.31	0.00	337.31	1,259.27	299.83	600.38	542.76	89.03	-9.10	0.628
109.67	-5.80	-10.47	0.00	-287.56	0.00	287.56	1,219.44	290.34	563.02	508.77	98.10	-9.53	0.571
109.67	-5.80	-10.47	0.00	-287.56	0.00	287.56	842.50	218.42	424.75	353.65	98.10	-9.53	0.822
110.00	-5.76	-10.38	0.00	-284.07	0.00	284.07	841.37	217.91	422.77	352.35	98.77	-9.56	0.815
113.00	-4.84	-7.78	0.00	-251.21	0.00	251.21	831.08	213.34	405.23	340.67	104.85	-9.90	0.745
115.00	-4.72	-7.58	0.00	-235.65	0.00	235.65	824.04	210.29	393.73	332.91	109.03	-10.12	0.715
120.00	-4.43	-7.28	0.00	-197.72	0.00	197.72	805.83	202.67	365.72	313.65	119.84	-10.63	0.637
125.00	-4.16	-6.98	0.00	-161.31	0.00	161.31	786.74	195.05	338.75	294.59	131.17	-11.10	0.554
130.00	-3.91	-6.68	0.00	-126.40	0.00	126.40	766.78	187.43	312.81	275.79	142.95	-11.53	0.465
135.00	-3.67	-6.39	0.00	-92.99	0.00	92.99	745.94	179.81	287.90	257.27	155.14	-11.90	0.368
140.00	-3.01	-5.58	0.00	-61.05	0.00	61.05	723.20	172.19	264.02	238.74	167.67	-12.19	0.261
145.00	-2.80	-5.36	0.00	-33.16	0.00	33.16	691.20	164.57	241.18	217.96	180.46	-12.39	0.157
147.00	-2.66	-5.12	0.00	-22.44	0.00	22.44	678.39	161.52	232.33	209.92	185.62	-12.44	0.112
148.00	-2.51	-4.90	0.00	-17.33	0.00	17.33	671.99	160.00	227.97	205.95	188.21	-12.47	0.089
150.00	0.00	-4.24	0.00	-7.53	0.00	7.53	659.19	156.95	219.37	198.13	193.39	-12.49	0.039

Load Case: 1.2D + 1.0Di + 1.0Wi — 50 mph with 1.00 in Radial Ice — 31 Iterations

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

Applied Segment Forces Summary

Seg Elev (ft)	Description	Shaft Forces Wind FX (lb)	Shaft Forces Dead Load (lb)	Discrete Forces Wind FX (lb)	Discrete Forces Torsion MY (lb-ft)	Discrete Forces Moment MZ (lb-ft)	Discrete Forces Dead Load (lb)	Linear Forces Wind FX (lb)	Linear Forces Dead Load (lb)	Sum of Forces Wind FX (lb)	Sum of Forces Dead Load (lb)	Sum of Forces Torsion MY (lb-ft)	Sum of Forces Moment MZ (lb)
0.00		46.5	0.0					0.0	0.0	46.5	0.0	0.0	0.0
5.00		92.3	1,036.0					0.0	653.7	92.3	1,689.7	0.0	0.0
10.00		77.5	1,035.4					0.0	660.3	77.5	1,695.8	0.0	0.0
13.50	Reinf. Top	45.1	718.6					0.0	464.3	45.1	1,182.9	0.0	0.0
15.00		57.9	306.1					0.0	79.1	57.9	385.2	0.0	0.0
20.00		88.1	1,008.6					0.0	265.2	88.1	1,273.9	0.0	0.0
25.00		84.7	991.6					0.0	235.0	84.7	1,226.6	0.0	0.0
30.00		53.3	973.4					0.0	214.0	53.3	1,187.4	0.0	0.0
31.50	Bot - Section 2	41.7	288.8					0.0	64.3	41.7	353.1	0.0	0.0
35.00		35.1	1,114.9					0.0	150.0	35.1	1,264.9	0.0	0.0
35.67	Top - Section 1	42.7	210.7					0.0	28.6	42.7	239.2	0.0	0.0
40.00		80.2	719.6					0.0	185.9	80.2	905.5	0.0	0.0
45.00		86.8	814.1					0.0	214.7	86.8	1,028.8	0.0	0.0
50.00		87.3	796.7					0.0	214.9	87.3	1,011.6	0.0	0.0
55.00		87.6	779.0					0.0	215.0	87.6	994.0	0.0	0.0
60.00		87.6	761.1					0.0	215.2	87.6	976.2	0.0	0.0
65.00		87.4	742.9					0.0	215.3	87.4	958.2	0.0	0.0
70.00	Bot - Section 3	74.5	724.6					0.0	215.4	74.5	940.0	0.0	0.0
73.50	Top - Section 2	44.1	798.4					0.0	150.9	44.1	949.2	0.0	0.0
75.00		57.0	183.3					0.0	64.7	57.0	248.0	0.0	0.0
80.00		87.2	599.1					0.0	215.7	87.2	814.7	0.0	0.0
85.00		86.4	583.3					0.0	215.8	86.4	799.0	0.0	0.0
90.00		85.4	567.3					0.0	215.9	85.4	783.2	0.0	0.0
95.00		84.3	551.3					0.0	216.0	84.3	767.3	0.0	0.0
100.00		83.0	535.2					0.0	216.1	83.0	751.3	0.0	0.0
105.00		79.0	519.0					0.0	216.2	79.0	735.1	0.0	0.0
109.67	Top - Section 3	40.5	469.9					0.0	201.8	40.5	671.7	0.0	0.0
110.00		26.6	27.6					0.0	14.4	26.6	42.0	0.0	0.0
113.00	Appurtenance(s)	39.8	244.8	558.4	0.0	394.6	2,767.4	0.0	129.8	598.2	3,142.0	0.0	0.0
115.00		54.8	160.7					0.0	59.8	54.8	220.5	0.0	0.0
120.00		77.1	390.8					0.0	149.6	77.1	540.4	0.0	0.0
125.00		75.4	377.3					0.0	149.6	75.4	526.9	0.0	0.0
130.00		73.6	363.6					0.0	149.7	73.6	513.4	0.0	0.0
135.00		71.7	350.0					0.0	149.8	71.7	499.7	0.0	0.0
140.00	Appurtenance(s)	69.8	336.2	128.4	0.0	0.0	1,263.3	0.0	149.9	198.2	1,749.4	0.0	0.0
145.00		47.9	322.4					0.0	149.9	47.9	472.4	0.0	0.0
147.00	Appurtenance(s)	20.2	125.8	31.9	0.0	0.0	211.4	0.0	60.0	52.0	397.2	0.0	0.0
148.00	Appurtenance(s)	19.9	62.2	26.5	0.0	0.0	303.8	0.0	23.8	46.4	389.8	0.0	0.0
150.00	Appurtenance(s)	13.2	122.4	415.3	0.0	0.0	3,146.2	0.0	47.7	428.5	3,316.3	0.0	0.0
								Totals:		3,653.49	35,642.6	0.00	0.00

Load Case: 1.2D + 1.0Di + 1.0Wi — 50 mph with 1.00 in Radial Ice — 31 Iterations

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

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-39.54	-4.20	0.00	-494.76	0.00	494.76	3,049.83	743.30	2,459.73	2,174.87	0.00	0.00	0.140
5.00	-37.84	-4.15	0.00	-473.76	0.00	473.76	3,008.23	728.06	2,359.94	2,100.75	0.03	-0.06	0.137
10.00	-36.15	-4.10	0.00	-453.03	0.00	453.03	2,965.74	712.82	2,262.21	2,027.26	0.13	-0.12	0.134
13.50	-34.96	-4.07	0.00	-438.68	0.00	438.68	2,935.48	702.15	2,195.03	1,976.22	0.23	-0.16	0.132
13.50	-34.96	-4.07	0.00	-438.68	0.00	438.68	2,935.48	702.15	2,195.03	1,976.22	0.23	-0.16	0.234
15.00	-34.57	-4.05	0.00	-432.58	0.00	432.58	2,922.38	697.58	2,166.54	1,954.44	0.28	-0.18	0.233
20.00	-33.29	-4.02	0.00	-412.34	0.00	412.34	2,865.81	682.34	2,072.95	1,874.26	0.53	-0.29	0.232
25.00	-32.06	-3.99	0.00	-392.24	0.00	392.24	2,801.80	667.09	1,981.42	1,791.00	0.89	-0.40	0.230
30.00	-30.86	-3.97	0.00	-372.29	0.00	372.29	2,737.79	651.85	1,891.95	1,709.63	1.37	-0.51	0.229
31.50	-30.51	-3.95	0.00	-366.34	0.00	366.34	2,718.59	647.28	1,865.51	1,685.59	1.54	-0.55	0.229
35.00	-29.24	-3.93	0.00	-352.50	0.00	352.50	2,673.78	636.61	1,804.55	1,630.15	1.98	-0.63	0.227
35.67	-29.00	-3.91	0.00	-349.88	0.00	349.88	2,183.22	540.96	1,563.37	1,360.34	2.06	-0.65	0.271
40.00	-28.08	-3.88	0.00	-332.92	0.00	332.92	2,154.64	529.95	1,500.42	1,314.94	2.70	-0.75	0.266
45.00	-27.05	-3.84	0.00	-313.51	0.00	313.51	2,120.84	517.25	1,429.39	1,262.98	3.55	-0.88	0.261
50.00	-26.03	-3.80	0.00	-294.30	0.00	294.30	2,086.17	504.55	1,360.08	1,211.51	4.55	-1.02	0.255
55.00	-25.03	-3.75	0.00	-275.30	0.00	275.30	2,050.62	491.85	1,292.50	1,160.56	5.68	-1.15	0.249
60.00	-24.05	-3.70	0.00	-256.54	0.00	256.54	2,012.44	479.15	1,226.64	1,109.22	6.96	-1.29	0.243
65.00	-23.08	-3.65	0.00	-238.03	0.00	238.03	1,959.10	466.45	1,162.50	1,050.87	8.38	-1.42	0.238
70.00	-22.14	-3.59	0.00	-219.80	0.00	219.80	1,905.75	453.75	1,100.08	994.10	9.94	-1.56	0.233
73.50	-21.18	-3.55	0.00	-207.22	0.00	207.22	1,441.17	363.84	883.97	755.32	11.12	-1.66	0.289
75.00	-20.93	-3.52	0.00	-201.90	0.00	201.90	1,433.76	360.79	869.22	745.08	11.65	-1.70	0.286
80.00	-20.11	-3.47	0.00	-184.29	0.00	184.29	1,408.50	350.63	820.97	711.14	13.52	-1.86	0.274
85.00	-19.30	-3.41	0.00	-166.97	0.00	166.97	1,382.37	340.47	774.10	677.52	15.56	-2.02	0.261
90.00	-18.52	-3.34	0.00	-149.94	0.00	149.94	1,355.35	330.31	728.60	644.25	17.76	-2.18	0.246
95.00	-17.74	-3.27	0.00	-133.24	0.00	133.24	1,327.47	320.15	684.48	611.38	20.12	-2.33	0.231
100.00	-16.99	-3.20	0.00	-116.87	0.00	116.87	1,298.70	309.99	641.74	578.94	22.64	-2.48	0.215
105.00	-16.25	-3.13	0.00	-100.86	0.00	100.86	1,259.27	299.83	600.38	542.76	25.31	-2.62	0.199
109.67	-15.58	-3.08	0.00	-86.25	0.00	86.25	1,219.44	290.34	563.02	508.77	27.94	-2.75	0.182
109.67	-15.58	-3.08	0.00	-86.25	0.00	86.25	842.50	218.42	424.75	353.65	27.94	-2.75	0.263
110.00	-15.53	-3.06	0.00	-85.23	0.00	85.23	841.37	217.91	422.77	352.35	28.13	-2.76	0.261
113.00	-12.42	-2.33	0.00	-75.65	0.00	75.65	831.08	213.34	405.23	340.67	29.90	-2.86	0.237
115.00	-12.20	-2.29	0.00	-70.99	0.00	70.99	824.04	210.29	393.73	332.91	31.11	-2.93	0.228
120.00	-11.66	-2.21	0.00	-59.56	0.00	59.56	805.83	202.67	365.72	313.65	34.26	-3.08	0.204
125.00	-11.13	-2.13	0.00	-48.50	0.00	48.50	786.74	195.05	338.75	294.59	37.56	-3.22	0.179
130.00	-10.62	-2.05	0.00	-37.84	0.00	37.84	766.78	187.43	312.81	275.79	41.00	-3.35	0.151
135.00	-10.12	-1.97	0.00	-27.57	0.00	27.57	745.94	179.81	287.90	257.27	44.57	-3.46	0.121
140.00	-8.39	-1.67	0.00	-17.73	0.00	17.73	723.20	172.19	264.02	238.74	48.24	-3.55	0.086
145.00	-7.92	-1.60	0.00	-9.36	0.00	9.36	691.20	164.57	241.18	217.96	51.99	-3.60	0.054
147.00	-7.52	-1.53	0.00	-6.16	0.00	6.16	678.39	161.52	232.33	209.92	53.50	-3.62	0.041
148.00	-7.14	-1.46	0.00	-4.63	0.00	4.63	671.99	160.00	227.97	205.95	54.26	-3.63	0.033
150.00	0.00	-1.00	0.00	-1.72	0.00	1.72	659.19	156.95	219.37	198.13	55.78	-3.63	0.009

Load Case: 1.0D + 1.0W Serviceability 60 mph 30 Iterations

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

Applied Segment Forces Summary

		Shaft Forces		Discrete Forces				Linear Forces		Sum of Forces			
Seg Elev (ft)	Description	Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Torsion MY (lb-ft)	Moment MZ (lb)
0.00		56.3	0.0					0.0	0.0	56.3	0.0	0.0	0.0
5.00		111.2	713.2					24.8	500.8	136.0	1,214.1	0.0	0.0
10.00		92.7	698.4					24.7	500.8	117.4	1,199.3	0.0	0.0
13.50	Reinf. Top	53.7	480.1					17.3	350.6	70.9	830.7	0.0	0.0
15.00		68.4	203.5					7.4	50.1	75.7	253.6	0.0	0.0
20.00		103.5	668.9					24.6	166.8	128.1	835.7	0.0	0.0
25.00		90.6	654.1					24.5	166.8	115.2	821.0	0.0	0.0
30.00		51.2	639.3					0.0	166.8	51.2	806.2	0.0	0.0
31.50	Bot - Section 2	40.0	188.9					0.0	50.1	40.0	239.0	0.0	0.0
35.00		33.7	806.9					0.0	116.8	33.7	923.7	0.0	0.0
35.67	Top - Section 1	40.9	152.2					0.0	22.2	40.9	174.4	0.0	0.0
40.00		76.8	449.9					0.0	144.6	76.8	594.5	0.0	0.0
45.00		82.9	507.6					0.0	166.8	82.9	674.5	0.0	0.0
50.00		83.2	495.3					0.0	166.8	83.2	662.1	0.0	0.0
55.00		83.3	483.0					0.0	166.8	83.3	649.8	0.0	0.0
60.00		83.1	470.7					0.0	166.8	83.1	637.5	0.0	0.0
65.00		82.7	458.4					0.0	166.8	82.7	625.2	0.0	0.0
70.00	Bot - Section 3	70.4	446.0					0.0	166.9	70.4	612.9	0.0	0.0
73.50	Top - Section 2	41.7	554.2					0.0	116.8	41.7	671.0	0.0	0.0
75.00		53.7	105.4					0.0	50.1	53.7	155.4	0.0	0.0
80.00		82.0	344.8					0.0	166.8	82.0	511.7	0.0	0.0
85.00		81.0	335.0					0.0	166.8	81.0	501.8	0.0	0.0
90.00		79.8	325.1					0.0	166.8	79.8	492.0	0.0	0.0
95.00		78.6	315.3					0.0	166.8	78.6	482.1	0.0	0.0
100.00		77.2	305.4					0.0	166.8	77.2	472.3	0.0	0.0
105.00		73.2	295.6					0.0	166.8	73.2	462.4	0.0	0.0
109.67	Top - Section 3	37.4	267.0					0.0	155.7	37.4	422.8	0.0	0.0
110.00		24.5	14.1					0.0	11.1	24.5	25.2	0.0	0.0
113.00	Appurtenance(s)	36.6	125.4	547.0	0.0	412.1	1,228.1	0.0	100.1	583.6	1,453.6	0.0	0.0
115.00		50.3	82.1					0.0	44.5	50.3	126.6	0.0	0.0
120.00		70.6	200.2					0.0	111.1	70.6	311.3	0.0	0.0
125.00		68.7	192.8					0.0	111.1	68.7	303.9	0.0	0.0
130.00		66.8	185.4					0.0	111.1	66.8	296.5	0.0	0.0
135.00		64.8	178.0					0.0	111.1	64.8	289.2	0.0	0.0
140.00	Appurtenance(s)	62.7	170.6	97.7	0.0	0.0	600.0	0.0	111.1	160.4	881.8	0.0	0.0
145.00		42.8	163.2					0.0	111.1	42.8	274.4	0.0	0.0
147.00	Appurtenance(s)	18.0	63.2	31.2	0.0	0.0	95.4	0.0	44.5	49.1	203.1	0.0	0.0
148.00	Appurtenance(s)	17.7	31.2	26.8	0.0	0.0	165.0	0.0	19.9	44.5	216.0	0.0	0.0
150.00	Appurtenance(s)	11.7	61.5	402.1	0.0	0.0	2,000.0	0.0	39.7	413.8	2,101.2	0.0	0.0
								Totals:		3,672.12	22,408.6	0.00	0.00

Load Case: 1.0D + 1.0W Serviceability 60 mph 30 Iterations

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

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-24.20	-4.23	0.00	-441.71	0.00	441.71	3,049.83	743.30	2,459.73	2,174.87	0.00	0.00	0.123
5.00	-22.99	-4.11	0.00	-420.57	0.00	420.57	3,008.23	728.06	2,359.94	2,100.75	0.03	-0.05	0.119
10.00	-21.78	-4.01	0.00	-400.01	0.00	400.01	2,965.74	712.82	2,262.21	2,027.26	0.11	-0.11	0.116
13.50	-20.95	-3.95	0.00	-385.98	0.00	385.98	2,935.48	702.15	2,195.03	1,976.22	0.20	-0.14	0.113
13.50	-20.95	-3.95	0.00	-385.98	0.00	385.98	2,935.48	702.15	2,195.03	1,976.22	0.20	-0.14	0.202
15.00	-20.69	-3.89	0.00	-380.05	0.00	380.05	2,922.38	697.58	2,166.54	1,954.44	0.25	-0.16	0.202
20.00	-19.85	-3.79	0.00	-360.60	0.00	360.60	2,865.81	682.34	2,072.95	1,874.26	0.47	-0.26	0.199
25.00	-19.03	-3.71	0.00	-341.63	0.00	341.63	2,801.80	667.09	1,981.42	1,791.00	0.79	-0.35	0.198
30.00	-18.22	-3.67	0.00	-323.10	0.00	323.10	2,737.79	651.85	1,891.95	1,709.63	1.21	-0.45	0.196
31.50	-17.97	-3.64	0.00	-317.59	0.00	317.59	2,718.59	647.28	1,865.51	1,685.59	1.36	-0.48	0.195
35.00	-17.05	-3.61	0.00	-304.84	0.00	304.84	2,673.78	636.61	1,804.55	1,630.15	1.74	-0.55	0.193
35.67	-16.87	-3.59	0.00	-302.43	0.00	302.43	2,183.22	540.96	1,563.37	1,360.34	1.82	-0.57	0.230
40.00	-16.27	-3.53	0.00	-286.88	0.00	286.88	2,154.64	529.95	1,500.42	1,314.94	2.37	-0.65	0.226
45.00	-15.59	-3.47	0.00	-269.22	0.00	269.22	2,120.84	517.25	1,429.39	1,262.98	3.12	-0.77	0.221
50.00	-14.92	-3.41	0.00	-251.86	0.00	251.86	2,086.17	504.55	1,360.08	1,211.51	3.98	-0.88	0.215
55.00	-14.27	-3.34	0.00	-234.81	0.00	234.81	2,050.62	491.85	1,292.50	1,160.56	4.97	-1.00	0.209
60.00	-13.62	-3.28	0.00	-218.09	0.00	218.09	2,012.44	479.15	1,226.64	1,109.22	6.08	-1.11	0.203
65.00	-12.99	-3.21	0.00	-201.70	0.00	201.70	1,959.10	466.45	1,162.50	1,050.87	7.30	-1.23	0.199
70.00	-12.38	-3.15	0.00	-185.65	0.00	185.65	1,905.75	453.75	1,100.08	994.10	8.66	-1.35	0.193
73.50	-11.71	-3.10	0.00	-174.64	0.00	174.64	1,441.17	363.84	883.97	755.32	9.67	-1.43	0.239
75.00	-11.55	-3.06	0.00	-170.00	0.00	170.00	1,433.76	360.79	869.22	745.08	10.13	-1.47	0.236
80.00	-11.03	-2.99	0.00	-154.70	0.00	154.70	1,408.50	350.63	820.97	711.14	11.73	-1.60	0.225
85.00	-10.52	-2.92	0.00	-139.75	0.00	139.75	1,382.37	340.47	774.10	677.52	13.48	-1.73	0.214
90.00	-10.03	-2.85	0.00	-125.16	0.00	125.16	1,355.35	330.31	728.60	644.25	15.37	-1.86	0.202
95.00	-9.54	-2.77	0.00	-110.93	0.00	110.93	1,327.47	320.15	684.48	611.38	17.39	-1.99	0.189
100.00	-9.07	-2.70	0.00	-97.06	0.00	97.06	1,298.70	309.99	641.74	578.94	19.54	-2.12	0.175
105.00	-8.60	-2.62	0.00	-83.58	0.00	83.58	1,259.27	299.83	600.38	542.76	21.82	-2.23	0.161
109.67	-8.18	-2.58	0.00	-71.33	0.00	71.33	1,219.44	290.34	563.02	508.77	24.06	-2.34	0.147
109.67	-8.18	-2.58	0.00	-71.33	0.00	71.33	842.50	218.42	424.75	353.65	24.06	-2.34	0.212
110.00	-8.15	-2.56	0.00	-70.48	0.00	70.48	841.37	217.91	422.77	352.35	24.22	-2.35	0.210
113.00	-6.72	-1.92	0.00	-62.39	0.00	62.39	831.08	213.34	405.23	340.67	25.72	-2.43	0.191
115.00	-6.60	-1.88	0.00	-58.54	0.00	58.54	824.04	210.29	393.73	332.91	26.75	-2.49	0.184
120.00	-6.29	-1.81	0.00	-49.16	0.00	49.16	805.83	202.67	365.72	313.65	29.42	-2.61	0.165
125.00	-5.98	-1.74	0.00	-40.12	0.00	40.12	786.74	195.05	338.75	294.59	32.22	-2.73	0.144
130.00	-5.69	-1.66	0.00	-31.44	0.00	31.44	766.78	187.43	312.81	275.79	35.14	-2.84	0.122
135.00	-5.40	-1.59	0.00	-23.12	0.00	23.12	745.94	179.81	287.90	257.27	38.16	-2.93	0.097
140.00	-4.52	-1.39	0.00	-15.16	0.00	15.16	723.20	172.19	264.02	238.74	41.27	-3.00	0.070
145.00	-4.25	-1.34	0.00	-8.20	0.00	8.20	691.20	164.57	241.18	217.96	44.44	-3.05	0.044
147.00	-4.05	-1.28	0.00	-5.52	0.00	5.52	678.39	161.52	232.33	209.92	45.72	-3.06	0.032
148.00	-3.84	-1.22	0.00	-4.25	0.00	4.25	671.99	160.00	227.97	205.95	46.36	-3.07	0.026
150.00	0.00	-1.01	0.00	-1.80	0.00	1.80	659.19	156.95	219.37	198.13	47.65	-3.08	0.009

Equivalent Lateral Forces Method Analysis

Spectral Response Acceleration for Short Period (S_s):	0.20
Spectral Response Acceleration at 1.0 Second Period (S_1):	0.05
Long-Period Transition Period (T_L):	6
Importance Factor (I_E):	1.00
Site Coefficient F_a:	1.60
Site Coeffiecient F_v:	2.40
Response Modification Coefficient (R):	1.50
Design Spectral Response Acceleration at Short Period (S_{ds}):	0.22
Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.09
Seismic Response Coefficient (C_s):	0.03
Upper Limit C_s	0.03
Lower Limit C_s	0.03
Period based on Rayleigh Method (sec):	3.65
Redundancy Factor (p):	1.30
Seismic Force Distribution Exponent (k):	2.00
Total Unfactored Dead Load:	24.21 k
Seismic Base Shear (E):	0.94 k

Load Case 1.2D + 1.0Ev + 1.0Eh Seismic

Segment	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
38	149.00	101	2,247	0.011	10	126
37	147.50	51	1,110	0.005	5	63
36	146.00	108	2,295	0.011	10	134
35	142.50	274	5,572	0.027	25	341
34	137.50	282	5,327	0.026	24	350
33	132.50	289	5,077	0.025	23	359
32	127.50	297	4,821	0.023	22	369
31	122.50	304	4,561	0.022	21	378
30	117.50	311	4,298	0.021	20	387
29	114.00	127	1,645	0.008	7	157
28	111.50	226	2,804	0.014	13	280
27	109.83	25	304	0.001	1	31
26	107.33	423	4,870	0.024	22	526
25	102.50	462	4,859	0.023	22	575
24	97.50	472	4,490	0.022	20	587
23	92.50	482	4,125	0.020	19	599
22	87.50	492	3,767	0.018	17	612
21	82.50	502	3,416	0.016	16	624
20	77.50	512	3,073	0.015	14	636
19	74.25	155	857	0.004	4	193
18	71.75	671	3,454	0.017	16	834
17	67.50	613	2,793	0.013	13	762
16	62.50	625	2,442	0.012	11	777
15	57.50	638	2,108	0.010	10	792
14	52.50	650	1,791	0.009	8	808

13	47.50	662	1,494	0.007	7	823
12	42.50	674	1,218	0.006	6	838
11	37.83	594	851	0.004	4	739
10	35.33	174	218	0.001	1	217
9	33.25	924	1,021	0.005	5	1,148
8	30.75	239	226	0.001	1	297
7	27.50	806	610	0.003	3	1,002
6	22.50	821	416	0.002	2	1,021
5	17.50	836	256	0.001	1	1,039
4	14.25	254	51	0.000	0	315
3	11.75	831	115	0.001	1	1,033
2	7.50	1,199	67	0.000	0	1,491
1	2.50	1,214	8	0.000	0	1,509
Powerwave Allgon 702	150.00	13	297	0.001	1	16
Kaelus DBC0061F1V51-	150.00	38	857	0.004	4	47
Kaelus DBC0061F1V51-	150.00	38	857	0.004	4	47
Powerwave Allgon TT1	150.00	48	1,080	0.005	5	60
Ericsson RRUS 4478 B	150.00	180	4,043	0.020	18	223
Ericsson RRUS 4449 B	150.00	213	4,793	0.023	22	265
Ericsson RRUS 32 B66	150.00	152	3,422	0.017	16	189
Ericsson RRUS 32 B2	150.00	159	3,577	0.017	16	198
Ericsson RRUS-32 B30	150.00	231	5,198	0.025	24	287
Quintel QS66512-2	150.00	333	7,493	0.036	34	414
CCI HPA-65R-BUU-H6	150.00	153	3,443	0.017	16	190
CCI DMP65R-BU6DA	150.00	238	5,360	0.026	24	296
Flat Platform w/ Han	150.00	2,000	45,000	0.217	205	2,486
Ericsson RRUS 11 (Ba	148.00	165	3,614	0.017	16	205
Raycap DC6-48-60-18-	147.00	64	1,374	0.007	6	79
Raycap DC6-48-60-18-	147.00	32	687	0.003	3	40
Flush Mounts	140.00	600	11,760	0.057	54	746
RFS FD9R6004/1C-3L	113.00	19	238	0.001	1	23
Alcatel-Lucent RRH2x	113.00	132	1,686	0.008	8	164
Decibel 932DG90T2E-M	113.00	29	364	0.002	2	35
RFS DB-T1-6Z-8AB-0Z	113.00	44	562	0.003	3	55
Andrew HBX-6517DS-VT	113.00	40	506	0.002	2	49
Powerwave Allgon P65	113.00	99	1,264	0.006	6	123
Andrew LNX-6514DS-VT	113.00	116	1,486	0.007	7	145
Round T-Arms	113.00	750	9,577	0.046	44	932
		24,205	207,193	1.000	944	30,089

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

Segment	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
38	149.00	101	2,247	0.011	10	87
37	147.50	51	1,110	0.005	5	44
36	146.00	108	2,295	0.011	10	92
35	142.50	274	5,572	0.027	25	235
34	137.50	282	5,327	0.026	24	241
33	132.50	289	5,077	0.025	23	248
32	127.50	297	4,821	0.023	22	254
31	122.50	304	4,561	0.022	21	260
30	117.50	311	4,298	0.021	20	267
29	114.00	127	1,645	0.008	7	108
28	111.50	226	2,804	0.014	13	193
27	109.83	25	304	0.001	1	22
26	107.33	423	4,870	0.024	22	362
25	102.50	462	4,859	0.023	22	396
24	97.50	472	4,490	0.022	20	405
23	92.50	482	4,125	0.020	19	413
22	87.50	492	3,767	0.018	17	422

21	82.50	502	3,416	0.016	16	430
20	77.50	512	3,073	0.015	14	438
19	74.25	155	857	0.004	4	133
18	71.75	671	3,454	0.017	16	575
17	67.50	613	2,793	0.013	13	525
16	62.50	625	2,442	0.012	11	536
15	57.50	638	2,108	0.010	10	546
14	52.50	650	1,791	0.009	8	557
13	47.50	662	1,494	0.007	7	567
12	42.50	674	1,218	0.006	6	578
11	37.83	594	851	0.004	4	509
10	35.33	174	218	0.001	1	149
9	33.25	924	1,021	0.005	5	792
8	30.75	239	226	0.001	1	205
7	27.50	806	610	0.003	3	691
6	22.50	821	416	0.002	2	703
5	17.50	836	256	0.001	1	716
4	14.25	254	51	0.000	0	217
3	11.75	831	115	0.001	1	712
2	7.50	1,199	67	0.000	0	1,028
1	2.50	1,214	8	0.000	0	1,040
Powerwave Allgon 702	150.00	13	297	0.001	1	11
Kaelus DBC0061F1V51-	150.00	38	857	0.004	4	33
Kaelus DBC0061F1V51-	150.00	38	857	0.004	4	33
Powerwave Allgon TT1	150.00	48	1,080	0.005	5	41
Ericsson RRUS 4478 B	150.00	180	4,043	0.020	18	154
Ericsson RRUS 4449 B	150.00	213	4,793	0.023	22	183
Ericsson RRUS 32 B66	150.00	152	3,422	0.017	16	130
Ericsson RRUS 32 B2	150.00	159	3,577	0.017	16	136
Ericsson RRUS-32 B30	150.00	231	5,198	0.025	24	198
Quintel QS66512-2	150.00	333	7,493	0.036	34	285
CCI HPA-65R-BUU-H6	150.00	153	3,443	0.017	16	131
CCI DMP65R-BU6DA	150.00	238	5,360	0.026	24	204
Flat Platform w/ Han	150.00	2,000	45,000	0.217	205	1,714
Ericsson RRUS 11 (Ba	148.00	165	3,614	0.017	16	141
Raycap DC6-48-60-18-	147.00	64	1,374	0.007	6	54
Raycap DC6-48-60-18-	147.00	32	687	0.003	3	27
Flush Mounts	140.00	600	11,760	0.057	54	514
RFS FD9R6004/1C-3L	113.00	19	238	0.001	1	16
Alcatel-Lucent RRH2x	113.00	132	1,686	0.008	8	113
Decibel 932DG90T2E-M	113.00	29	364	0.002	2	24
RFS DB-T1-6Z-8AB-0Z	113.00	44	562	0.003	3	38
Andrew HBX-6517DS-VT	113.00	40	506	0.002	2	34
Powerwave Allgon P65	113.00	99	1,264	0.006	6	85
Andrew LNX-6514DS-VT	113.00	116	1,486	0.007	7	100
Round T-Arms	113.00	750	9,577	0.046	44	643
		24,205	207,193	1.000	944	20,741

Load Case 1.2D + 1.0Ev + 1.0Eh Seismic

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-28.58	-0.95	0.00	-131.97	0.00	131.97	3,049.83	743.30	2,459.73	2,174.87	0.00	0.00	0.041
5.00	-27.09	-0.95	0.00	-127.23	0.00	127.23	3,008.23	728.06	2,359.94	2,100.75	0.01	-0.02	0.041
10.00	-26.06	-0.96	0.00	-122.46	0.00	122.46	2,965.74	712.82	2,262.21	2,027.26	0.03	-0.03	0.040
13.50	-25.74	-0.96	0.00	-119.10	0.00	119.10	2,935.48	702.15	2,195.03	1,976.22	0.06	-0.04	0.039
13.50	-25.74	-0.96	0.00	-119.10	0.00	119.10	2,935.48	702.15	2,195.03	1,976.22	0.06	-0.04	0.069
15.00	-24.70	-0.97	0.00	-117.65	0.00	117.65	2,922.38	697.58	2,166.54	1,954.44	0.08	-0.05	0.069
20.00	-23.68	-0.98	0.00	-112.81	0.00	112.81	2,865.81	682.34	2,072.95	1,874.26	0.14	-0.08	0.068
25.00	-22.68	-0.99	0.00	-107.92	0.00	107.92	2,801.80	667.09	1,981.42	1,791.00	0.24	-0.11	0.068
30.00	-22.38	-0.99	0.00	-102.99	0.00	102.99	2,737.79	651.85	1,891.95	1,709.63	0.37	-0.14	0.068
31.50	-21.23	-0.99	0.00	-101.50	0.00	101.50	2,718.59	647.28	1,865.51	1,685.59	0.42	-0.15	0.068
35.00	-21.01	-0.99	0.00	-98.04	0.00	98.04	2,673.78	636.61	1,804.55	1,630.15	0.54	-0.17	0.068
35.67	-20.28	-0.99	0.00	-97.38	0.00	97.38	2,183.22	540.96	1,563.37	1,360.34	0.56	-0.18	0.081
40.00	-19.44	-1.00	0.00	-93.07	0.00	93.07	2,154.64	529.95	1,500.42	1,314.94	0.73	-0.21	0.080
45.00	-18.61	-1.00	0.00	-88.09	0.00	88.09	2,120.84	517.25	1,429.39	1,262.98	0.97	-0.24	0.079
50.00	-17.80	-1.00	0.00	-83.10	0.00	83.10	2,086.17	504.55	1,360.08	1,211.51	1.24	-0.28	0.077
55.00	-17.01	-1.00	0.00	-78.10	0.00	78.10	2,050.62	491.85	1,292.50	1,160.56	1.56	-0.32	0.076
60.00	-16.23	-0.99	0.00	-73.12	0.00	73.12	2,012.44	479.15	1,226.64	1,109.22	1.91	-0.36	0.074
65.00	-15.47	-0.98	0.00	-68.16	0.00	68.16	1,959.10	466.45	1,162.50	1,050.87	2.31	-0.40	0.073
70.00	-14.64	-0.97	0.00	-63.24	0.00	63.24	1,905.75	453.75	1,100.08	994.10	2.74	-0.44	0.071
73.50	-14.44	-0.97	0.00	-59.84	0.00	59.84	1,441.17	363.84	883.97	755.32	3.07	-0.46	0.089
75.00	-13.81	-0.96	0.00	-58.39	0.00	58.39	1,433.76	360.79	869.22	745.08	3.22	-0.48	0.088
80.00	-13.18	-0.95	0.00	-53.59	0.00	53.59	1,408.50	350.63	820.97	711.14	3.74	-0.52	0.085
85.00	-12.57	-0.94	0.00	-48.85	0.00	48.85	1,382.37	340.47	774.10	677.52	4.32	-0.57	0.081
90.00	-11.97	-0.92	0.00	-44.17	0.00	44.17	1,355.35	330.31	728.60	644.25	4.94	-0.62	0.077
95.00	-11.38	-0.90	0.00	-39.57	0.00	39.57	1,327.47	320.15	684.48	611.38	5.61	-0.66	0.073
100.00	-10.81	-0.88	0.00	-35.06	0.00	35.06	1,298.70	309.99	641.74	578.94	6.32	-0.71	0.069
105.00	-10.28	-0.86	0.00	-30.65	0.00	30.65	1,259.27	299.83	600.38	542.76	7.08	-0.75	0.065
109.67	-10.25	-0.86	0.00	-26.64	0.00	26.64	1,219.44	290.34	563.02	508.77	7.83	-0.79	0.061
109.67	-10.25	-0.86	0.00	-26.64	0.00	26.64	842.50	218.42	424.75	353.65	7.83	-0.79	0.088
110.00	-9.97	-0.85	0.00	-26.35	0.00	26.35	841.37	217.91	422.77	352.35	7.89	-0.79	0.087
113.00	-8.29	-0.75	0.00	-23.81	0.00	23.81	831.08	213.34	405.23	340.67	8.40	-0.82	0.080
115.00	-7.90	-0.73	0.00	-22.31	0.00	22.31	824.04	210.29	393.73	332.91	8.74	-0.84	0.077
120.00	-7.52	-0.71	0.00	-18.66	0.00	18.66	805.83	202.67	365.72	313.65	9.65	-0.89	0.069
125.00	-7.15	-0.69	0.00	-15.12	0.00	15.12	786.74	195.05	338.75	294.59	10.61	-0.94	0.060
130.00	-6.79	-0.66	0.00	-11.69	0.00	11.69	766.78	187.43	312.81	275.79	11.61	-0.97	0.051
135.00	-6.44	-0.63	0.00	-8.38	0.00	8.38	745.94	179.81	287.90	257.27	12.65	-1.01	0.041
140.00	-5.36	-0.54	0.00	-5.20	0.00	5.20	723.20	172.19	264.02	238.74	13.72	-1.03	0.029
145.00	-5.22	-0.53	0.00	-2.51	0.00	2.51	691.20	164.57	241.18	217.96	14.81	-1.05	0.019
147.00	-5.04	-0.51	0.00	-1.46	0.00	1.46	678.39	161.52	232.33	209.92	15.25	-1.05	0.014
148.00	-4.71	-0.48	0.00	-0.95	0.00	0.95	671.99	160.00	227.97	205.95	15.48	-1.06	0.012
150.00	0.00	-0.39	0.00	0.00	0.00	0.00	659.19	156.95	219.37	198.13	15.92	-1.06	0.000

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

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-19.70	-0.95	0.00	-127.08	0.00	127.08	3,049.83	743.30	2,459.73	2,174.87	0.00	0.00	0.038
5.00	-18.67	-0.95	0.00	-122.36	0.00	122.36	3,008.23	728.06	2,359.94	2,100.75	0.01	-0.02	0.037
10.00	-17.96	-0.95	0.00	-117.61	0.00	117.61	2,965.74	712.82	2,262.21	2,027.26	0.03	-0.03	0.037
13.50	-17.74	-0.96	0.00	-114.27	0.00	114.27	2,935.48	702.15	2,195.03	1,976.22	0.06	-0.04	0.036
13.50	-17.74	-0.96	0.00	-114.27	0.00	114.27	2,935.48	702.15	2,195.03	1,976.22	0.06	-0.04	0.064
15.00	-17.03	-0.96	0.00	-112.84	0.00	112.84	2,922.38	697.58	2,166.54	1,954.44	0.07	-0.05	0.064
20.00	-16.32	-0.96	0.00	-108.04	0.00	108.04	2,865.81	682.34	2,072.95	1,874.26	0.14	-0.08	0.063
25.00	-15.63	-0.97	0.00	-103.22	0.00	103.22	2,801.80	667.09	1,981.42	1,791.00	0.23	-0.10	0.063
30.00	-15.43	-0.97	0.00	-98.38	0.00	98.38	2,737.79	651.85	1,891.95	1,709.63	0.36	-0.13	0.063
31.50	-14.63	-0.97	0.00	-96.92	0.00	96.92	2,718.59	647.28	1,865.51	1,685.59	0.40	-0.14	0.063
35.00	-14.49	-0.97	0.00	-93.52	0.00	93.52	2,673.78	636.61	1,804.55	1,630.15	0.51	-0.17	0.063
35.67	-13.98	-0.97	0.00	-92.88	0.00	92.88	2,183.22	540.96	1,563.37	1,360.34	0.54	-0.17	0.075
40.00	-13.40	-0.97	0.00	-88.67	0.00	88.67	2,154.64	529.95	1,500.42	1,314.94	0.70	-0.20	0.074
45.00	-12.83	-0.97	0.00	-83.82	0.00	83.82	2,120.84	517.25	1,429.39	1,262.98	0.93	-0.23	0.072
50.00	-12.27	-0.97	0.00	-78.98	0.00	78.98	2,086.17	504.55	1,360.08	1,211.51	1.19	-0.27	0.071
55.00	-11.72	-0.96	0.00	-74.15	0.00	74.15	2,050.62	491.85	1,292.50	1,160.56	1.49	-0.30	0.070
60.00	-11.19	-0.95	0.00	-69.34	0.00	69.34	2,012.44	479.15	1,226.64	1,109.22	1.83	-0.34	0.068
65.00	-10.66	-0.95	0.00	-64.57	0.00	64.57	1,959.10	466.45	1,162.50	1,050.87	2.21	-0.38	0.067
70.00	-10.09	-0.93	0.00	-59.84	0.00	59.84	1,905.75	453.75	1,100.08	994.10	2.62	-0.42	0.065
73.50	-9.95	-0.93	0.00	-56.58	0.00	56.58	1,441.17	363.84	883.97	755.32	2.94	-0.44	0.082
75.00	-9.52	-0.92	0.00	-55.19	0.00	55.19	1,433.76	360.79	869.22	745.08	3.08	-0.45	0.081
80.00	-9.08	-0.90	0.00	-50.60	0.00	50.60	1,408.50	350.63	820.97	711.14	3.57	-0.50	0.078
85.00	-8.66	-0.89	0.00	-46.08	0.00	46.08	1,382.37	340.47	774.10	677.52	4.12	-0.54	0.074
90.00	-8.25	-0.87	0.00	-41.63	0.00	41.63	1,355.35	330.31	728.60	644.25	4.71	-0.58	0.071
95.00	-7.84	-0.85	0.00	-37.26	0.00	37.26	1,327.47	320.15	684.48	611.38	5.35	-0.63	0.067
100.00	-7.45	-0.83	0.00	-32.98	0.00	32.98	1,298.70	309.99	641.74	578.94	6.02	-0.67	0.063
105.00	-7.08	-0.81	0.00	-28.81	0.00	28.81	1,259.27	299.83	600.38	542.76	6.75	-0.71	0.059
109.67	-7.06	-0.81	0.00	-25.03	0.00	25.03	1,219.44	290.34	563.02	508.77	7.46	-0.75	0.055
109.67	-7.06	-0.81	0.00	-25.03	0.00	25.03	842.50	218.42	424.75	353.65	7.46	-0.75	0.079
110.00	-6.87	-0.80	0.00	-24.75	0.00	24.75	841.37	217.91	422.77	352.35	7.51	-0.75	0.078
113.00	-5.71	-0.71	0.00	-22.36	0.00	22.36	831.08	213.34	405.23	340.67	7.99	-0.78	0.073
115.00	-5.44	-0.69	0.00	-20.94	0.00	20.94	824.04	210.29	393.73	332.91	8.32	-0.80	0.070
120.00	-5.18	-0.67	0.00	-17.50	0.00	17.50	805.83	202.67	365.72	313.65	9.18	-0.84	0.062
125.00	-4.93	-0.64	0.00	-14.17	0.00	14.17	786.74	195.05	338.75	294.59	10.09	-0.89	0.054
130.00	-4.68	-0.62	0.00	-10.95	0.00	10.95	766.78	187.43	312.81	275.79	11.04	-0.92	0.046
135.00	-4.44	-0.59	0.00	-7.85	0.00	7.85	745.94	179.81	287.90	257.27	12.02	-0.95	0.036
140.00	-3.69	-0.50	0.00	-4.87	0.00	4.87	723.20	172.19	264.02	238.74	13.03	-0.98	0.026
145.00	-3.60	-0.49	0.00	-2.35	0.00	2.35	691.20	164.57	241.18	217.96	14.07	-0.99	0.016
147.00	-3.47	-0.48	0.00	-1.37	0.00	1.37	678.39	161.52	232.33	209.92	14.48	-1.00	0.012
148.00	-3.25	-0.45	0.00	-0.89	0.00	0.89	671.99	160.00	227.97	205.95	14.69	-1.00	0.009
150.00	0.00	-0.39	0.00	0.00	0.00	0.00	659.19	156.95	219.37	198.13	15.11	-1.00	0.000

Analysis Summary

	Reactions						Max Usage	
Load Case	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)	Elev (ft)	Interaction Ratio
1.2D + 1.0W	17.67	0.00	29.01	0.00	0.00	1867.90	73.50	0.99
0.9D + 1.0W	17.66	0.00	21.75	0.00	0.00	1818.15	73.50	0.95
1.2D + 1.0Di + 1.0Wi	4.20	0.00	39.54	0.00	0.00	494.76	73.50	0.29
1.2D + 1.0Ev + 1.0Eh	0.95	0.00	28.58	0.00	0.00	131.97	73.50	0.09
0.9D - 1.0Ev + 1.0Eh	0.95	0.00	19.70	0.00	0.00	127.08	73.50	0.08
1.0D + 1.0W	4.23	0.00	24.20	0.00	0.00	441.71	73.50	0.24

Additional Steel Summary

Elev From (ft)	Elev To (ft)	Member	Intermediate Connectors VQ/I (lb/in)	Shear Applied (kips)	Shear phiVn (kips)	Ratio	Max Member Pu (kip)	phiPn (kip)	Ratio
0.00	13.50	(4) SOL-#20 All Thread Bar	171.8	5.2	16.8	0.307	214.9	330.5	0.650

Elev From (ft)	Elev To (ft)	Member	Upper Termination Connectors MQ/I (kips)	phiVn (kips)	Num Reqd	Num Actual	Ratio	Lower Termination Connectors MQ/I (kips)	phiVn (kips)	Num Reqd	Num Actual	Ratio
0.00	13.50	(4) SOL-#20 All Thread Bar	203.8	12.0	17	18	0.943	0.0	12.0	0	0	0.000

Site Name: Southbury, CT
Site Number: 302519
Tower Type: MP
Design Loads (Factored) - Analysis per TIA-222-H Standards

Monolithic Mat & Pier Foundation Analysis

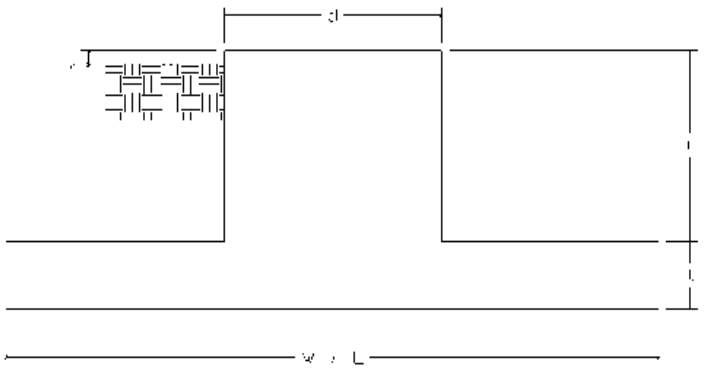
Foundation Analysis Parameters		
Design / Analysis / Mapping:	Analysis	-
Compression/Leg:	29.0	k
Uplift/Leg:	0.0	k
Total Shear:	17.7	k
Moment:	1,867.9	k-ft
Tower + Appurtenance Weight:	29.0	k
Depth to Base of Foundation (l + t - h):	8	ft
Diameter of Pier (d):	5	ft
Length of Pier (l):	5.5	ft
Height of Pier above Ground (h):	0.5	ft
Width of Pad (W):	18	ft
Length of Pad (L):	18	ft
Thickness of Pad (t):	3	ft
Tower Leg Center to Center:	0	ft
Number of Tower Legs:	1	-
Tower Center from Mat Center:	0	ft
Depth Below Ground Surface to Water Table:	10	ft
Unit Weight of Concrete:	150	pcf
Unit Weight of Soil Above Water Table:	113	pcf
Unit Weight of Water:	62.4	pcf
Unit Weight of Soil Below Water Table:	50.6	pcf
Friction Angle of Uplift:	15	°
Coefficient of Shear Friction:	0.35	-
Ultimate Compressive Bearing Pressure:	29,650	psf
Ultimate Passive Pressure on Pad Face:	1,426	psf
$f_{Soil\ and\ Concrete\ Weight}$:	0.9	-
f_{Soil}:	0.75	-

Overturning Moment Usage		
Design OTM:	2018.1	k-ft
OTM Resistance:	3191.1	k-ft
Design OTM / OTM Resistance:	63%	Pass

Soil Bearing Pressure Usage		
Net Bearing Pressure:	6750	psf
Factored Nominal Bearing Pressure:	22238	psf
Factored Nominal (Net) Bearing Pressure:	30%	Pass
Load Direction Controling Design Bearing Pressure:	*Diagonal to Pad Edge*	

Sliding Factor of Safety		
Ultimate Friction Resistance:	125.3	k
Ultimate Passive Pressure Resistance:	57.8	k
Total Factored Sliding Resistance:	137.3	k
Sliding Design / Sliding Resistance:	13%	Pass

Foundation Steel Parameters		
Shear/Leg (Compression):	11.8	k
Shear/Leg (Uplift):	9.7	k
Concrete Strength (f'_c):	3,000	psi
Pad Tension Steel Depth:	32.38	in
Dead Load Factor:	0.9	-
f_{Shear}:	0.75	-
$f_{Flexure\ /\ Tension}$:	0.9	-
$f_{Compression:}$	0.65	-
b:	0.85	-
Bottom Pad Rebar Size #:	10	-
# of Bottom Pad Rebar:	36	-
Pad Bottom Steel Area:	45.72	in^2
Pad Steel F_y:	60,000	psi
Top Pad Rebar Size #:	5	-
# of Top Pad Rebar:	36	-
Pad Top Steel Area:	11.16	in^2
Pier Rebar Size #:	11	-
Pier Steel Area (Single Bar):	1.56	in^2
# of Pier Rebar:	52	-
Pier Steel F_y:	60,000	psi
Pier Cage Diameter:	51.6	in
Rebar Strain Limit:	0.008	-
Steel Elastic Modulus:	29,000	ksi
Tie Rebar Size #:	4	-
Tie Steel Area (Single Bar):	0.20	in^2
Tie Spacing:	12	in
Tie Steel F_y:	60,000	psi
Clear Cover:	3	in



Pad Strength Capacity			
Factored One Way Shear (V_u):	215.1	k	
One Way Shear Capacity (fV_c):	480.7	k	*ACI 318-14 25.5.5.1*
V_u / fV_c:	45%	Pass	
Load Direction Controling Shear Capacity:	*Diagonal to Pad Edge*		
Lower Steel Pad Factored Moment (M_u):	1267.1	k-ft	
Lower Steel Pad Moment Capacity (fM_n):	6225.3	k-ft	*ACI 318-14 22.3.1.1*
M_u / fM_n:	20%	Pass	
Load Direction Controling Flexural Capacity:	*Parallel to Pad Edge*		
Upper Steel Pad Factored Moment (M_u):	386.0	k-ft	
Upper Steel Pad Moment Capacity (fM_n):	1599.9	k-ft	
M_u / fM_n:	24%	Pass	
Lower Pad Flexural Reinforcement Ratio:	0.0065		*OK - ACI 318-14 7.6.1.1 & 8.6.1.1*
Upper Pad Flexural Reinforcement Ratio:	0.0016		*OK - ACI 318-14 7.6.1.1 & 8.6.1.1*
Pad Shrinkage Reinforcement Ratio:	0.0081		*OK - ACI 318-14 24.4.3.2*
Lower Pad Reinforcement Spacing:	6.0	in	*OK - ACI 318-14 7.7.2.3, 8.7.2.2, & 24.4.3.3*
Upper Pad Reinforcement Spacing:	6.0	in	*OK - ACI 318-14 7.7.2.3, 8.7.2.2, & 24.4.3.3*
Ultimate Punching Shear Stress, v_u:	33.44	psi	*ACI 318-14 R8.4.4.2.3*
Nominal Punching Shear Capacity (f_cv_c):	164.3	psi	*ACI 318-14 22.6.5.2*
v_u / f_cv_c:	20%	Pass	
Pier Moment Pad Flexure Transfer Ratio, γ_f:	0.60		*TIA-222-H 9.4.2*
Moment Transfer Effective Flexural Width, B_{eff}:	14.00	ft	*TIA-222-H 9.4.2*
Moment Transfer Through Pad Flexure:	14148.61	k-in	*TIA-222-H 9.4.2*
Moment Transfer Flexural Capacity ($fM_{sc,f}$):	60188.44	k-in	
g_fM_{sc} / $fM_{sc,f}$:	0%	Pass	

Pier Strength Capacity			
Factored Moment in Pier (M_u):	1965.1	k-ft	
Pier Moment Capacity (fM_n):	9214.4	k-ft	
M_u / fM_n:	21%	Pass	
Factored Shear in Pier (V_u):	17.7	k	
Pier Shear Capacity (fV_n):	305.5	k	*ACI 318-14 22.5.1.1*
V_u / fV_c:	6%	Pass	
Pier Shear Reinforcement Ratio:	0.0007		*OK - No Ties Necessary for Shear - ACI11.5.6.1*
Factored Tension in Pier (T_u):	0.0	k	
Pier Tension Capacity (fT_n):	4380.5	k	
T_u / fT_n:	0%	Pass	
Factored Compression in Pier (P_u):	29.0	k	
Pier Compression Capacity (fP_n):	3690.3	k	*ACI 318-14 22.4.2.1*
P_u / fP_n:	1%	Pass	
Pier Compression Reinforcement Ratio:	0.029		*OK - TIA-222-H 9.4.1*
Minimum Depth to Develop Vertical Rebar:	63	in	*ACI 318-14 25.4.2.3*
Minimum Hook Development Length:	31	in	*ACI 318-14 25.4.3.1*
Minimum Mat Thickness / Edge Distance from Pier:	34.0	in	
Minimum Foundation Depth:	8.35	ft	
$M_u/f_BM_n + T_u/f_TT_n$:	21%	Pass	

Base Plate & Anchor Rod Analysis

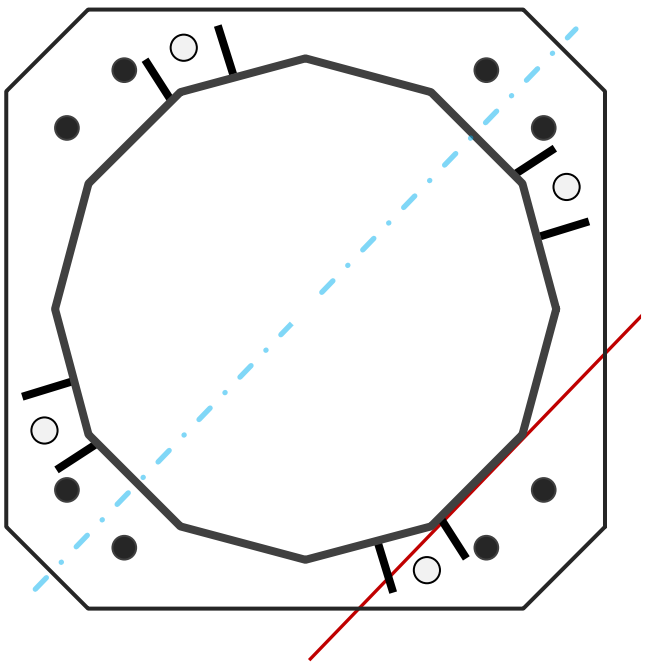
Pole Dimensions		
Number of Sides	12	-
Diameter	35.45	in
Thickness	3/8	in
Orientation Offset		°

Base Reactions		
Moment, Mu	1867.9	k-ft
Axial, Pu	29.0	k
Shear, Vu	17.7	k
Neutral Axis	226	°

Report Capacities		
Component	Capacity	Result
Base Plate	85%	Pass
Anchor Rods	62%	Pass
Dwyidag	56%	Pass

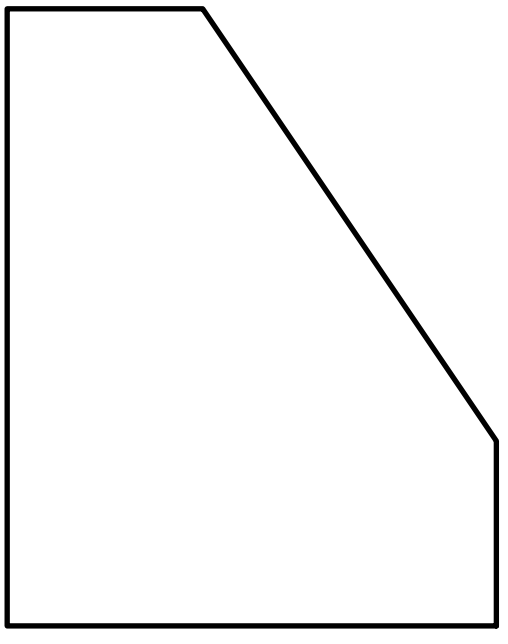
Base Plate		
Shape	Square	-
Width	44	in
Thickness	2 1/2	in
Grade	A36	
Yield Strength, Fy	36	ksi
Tensile Strength, Fu	58	ksi
Clip	6	in
Orientation Offset		°
Anchor Rod Detail	c	η=0.55
Clear Distance	N/A	in
Applied Moment, Mu	1203.9	k
Bending Stress, ϕMn	1419.4	k

Dywidag Reinforcement		
Quantity	4	-
Bar Size	#20	in
Diameter, ø	2.5	in
Bracket Type	Angle	-
Circle	42.33	in
Orientation Offset	25	°
Applied Force, Pu	206.4	k
Dywidag Bar, ϕPn	368.2	k



Original Anchor Rods		
Arrangement	Cluster	-
Quantity	8	-
Diameter, ø	2 1/4	in
Bolt Circle	44	in
Grade	A615-75	
Yield Strength, Fy	75	ksi
Tensile Strength, Fu	100	ksi
Spacing	6.0	in
Orientation Offset		°
Applied Force, Pu	150.7	k
Anchor Rods, ϕPn	243.6	k

Stiffeners		
Arrangement	Cluster	-
Quantity	8	-
Height	5	in
Width	3.75	in
Effective Width	3.750	in
Thickness	5/8	in
Effective Thickness	0.375	in
Notch	0	in
Flat Edge	1.5	in
Grade	A36	-
Yield Strength, Fy	36	ksi
Tensile Strength, Fu	58	ksi
Horizontal Weld	Fillet	
Horizontal Fillet Size	1/4	in
Bevel Depth	0	in
Vertical Weld	Fillet	
Vertical Fillet Size	1/4	in
Weld Strength	60	ksi
Electrode Coefficient	0.857	-
Orientation Offset	70	°
Vertical Weld, ϕRn	42.6	k
Horz. Weld, ϕRn	38.0	k
Ten. Capacity, ϕTn	75.9	k
Comp. Capacity, ϕPn	689.4	k



Calculations for Monopole Base Plate & Anchor Rod Analysis

Reaction Distribution

Reaction	Shear Vu	Moment Mu	Factor
-	k	k-ft	-
Base Forces	17.7	1098.1	0.59
Anchor Rod Forces	17.7	1098.1	0.59
Additional Bolt (Grp1) Forces	0.0	0.0	0.00
Additional Bolt (Grp2) Forces	0.0	0.0	0.00
Dywidag Forces	0.0	769.8	0.41
Stiffener Forces	4.2	260.2	0.14

Geometric Properties

Section	Gross Area	Net Area	Individual Inertia	Threads per Inch	Moment of Inertia
-	in^2	in^2	in^4	#	in^4
Pole	40.8514	3.4043	0.1604		6284.13
Bolt	3.9761	3.2477	0.8393	4.5	6294.24
Bolt1	0.0000	0.0000	0.0000	0	0.00
Bolt2	0.0000	0.0000	0.0000	0	0.00
Dywidag	4.9087	4.9087	1.9175		4405.48
Stiffener	1.4063	1.2656	6.5918		1951.47

Base Plate		
Shape	Square	-
Width, W	44	in
Thickness, t	2.5	in
Yield Strength, Fy	36	ksi
Tensile Strength, Fu	58	ksi
Base Plate Chord	26.063	in
Detail Type	c	-
Detail Factor	0.55	-
Clear Distance	N/A	-

External Base Plate		
Chord Length AA	26.650	in
Additional AA	1.387	in
Section Modulus, Z	43.808	in^3
Applied Moment, Mu	1203.9	k-ft
Bending Capacity, ϕMn	1419.4	k-ft
Capacity, Mu/ϕMn	0.848	OK
Chord Length AB	25.395	in
Additional AB	0.897	in
Section Modulus, Z	41.081	in^3
Applied Moment, Mu	1015.3	k-ft
Bending Capacity, ϕMn	1331.0	k-ft
Capacity, Mu/ϕMn	0.763	OK
Bend Line Length	0.000	in
Additional Bend Line	0.000	in
Section Modulus, Z	0.000	in^3
Applied Moment, Mu	0.0	k-ft
Bending Capacity, ϕMn	0.0	k-ft
Capacity, Mu/ϕMn		

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

Anchor Rods		
Anchor Rod Quantity, N	8	-
Rod Diameter, d	2.25	in
Bolt Circle, BC	44	in
Yield Strength, Fy	75	ksi
Tensile Strength, Fu	100	ksi
Applied Axial, Pu	150.7	k
Applied Shear, Vu	0.5	k
Compressive Capacity, ϕPn	243.6	k
Tensile Capacity, ϕRnt	0.619	OK
Interaction Capacity	0.622	OK

Dywidag Reinforcement		
Dywidag Quantity, N	4	-
Dywidag Diameter, d	2.5	in
Bolt Circle, BC	42.33	in
Yield Strength, Fy	80	ksi
Tensile Strength, Fu	100	ksi
Applied Axial, Pu	206.4	k
Compressive Capacity, ϕPn	368.2	k
Capacity, Pu/ϕPn	0.561	OK

Base Plate Stiffeners		
Applied Axial Force, Pu	39.1	k
Applied Horizontal Force, Vu	0.26	k

Vertical Weld		
Vert.-to-Stiffener a=e_x/l	0.250	-
Spacing Ratio, k	0.125	-
Weld Coefficient, C	3.310	-
Compressive Capacity, ϕPn	42.6	k
Vert.-to-Plate a=e_x/l	0.333	-
Spacing Ratio, k	0.125	-
Weld Coefficient, C	2.970	-
Shear Capacity, ϕVn	38.2	k
$P_u/\phi_P P_n + V_u/\phi_V V_n$	0.927	OK

Horizontal Weld		
Horz.-to-Stiffener a=e_x/l	0.167	-
Spacing Ratio, k	0.167	-
Weld Coefficient, C	3.940	-
Effective Fillet	0.250	in
Compressive Capacity, ϕPn	38.0	k
Horz.-to-Pole a=e_x/l	0.222	-
Spacing Ratio, k	0.167	-
Weld Coefficient, C	3.510	-
Shear Capacity, ϕVn	33.8	k
$P_u/\phi_P P_n + V_u/\phi_V V_n$	1.038	OK

Plate Tension		
Gross Cross Section	1.406	in^2
Net Cross Section	1.266	in^2
Tensile Capacity, ϕTn	75.9	k
Capacity, Tu/ϕTn	0.258	OK

Plate Compression		
Radius of Gyration	0.108	in^3
kl/r	27.71	-
4.71 $\sqrt{}$(E/Fy)	133.68	-
Buckling Stress(Fe)	372.7	-
Crit. Buckling Stress(Fcr)	326.8	ksi
Compressive Capacity, ϕPn	689.4	k
Capacity, Pu/ϕPn	0.028	OK

Flange Plate Analysis

Flange Plate			
	Plate Type	***Flange***	***@ 110 ft***
	Pole Diameter	21.267	in
	Pole Thickness	0.1875	in
	Plate Diameter	30	in
	Plate Thickness	1	in
	Plate Fy	36	ksi
	Weld Length	3/16	in
	f_s Resistance	145.94	k-in
	Applied	93.62	k-in

Code Rev.	***G***		
Moment	303.3 k-ft		
Axial	8.2 k		

Date	6/30/2020
Engineer	Jeremy Hosang
Site #	302519
Carrier	AT&T Mobility

Stiffeners			
	#	***12***	***Show***
	Thickness	1/2	in
	Length	2 3/4	in
	Height	4	in
	Chamfer	0	in
	Offset Angle	0	°
	Fy	36	ksi

Bolts			
	#	***12***	
	Bolt Circle	27	in
	(R)adial / (S)quare	R	
•	Diameter	1	in
	Hole Diameter	1 1/8	in
	Type	A325	
	Fy	92	ksi
	Fu	120	ksi
	f_s Resistance	54.52	k
	Applied	44.23	k

Reinforcement •			
	#		

Extra Bolts O			
	#		

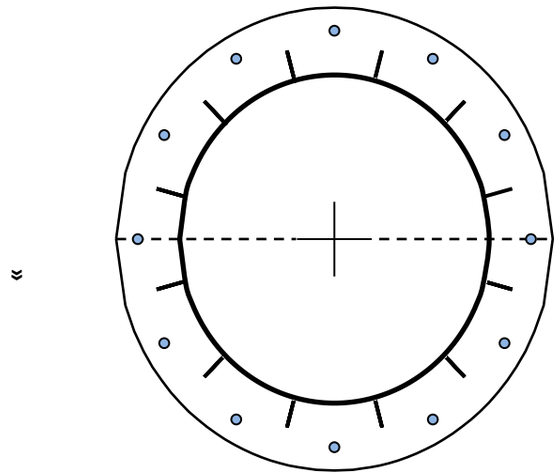


Plate Stress Ratio:

64% Pass

Bolt Stress Ratio:

81% Pass

EXHIBIT 4

INFINIGY

FROM ZERO TO INFINIGY

the solutions are endless

Post Modification Mount Analysis Report

August 4, 2020

ATC Site Name	Southbury, CT
ATC Site Number	302519
AT&T Site Name	MRCTB046858
AT&T Site Number	CTL02126
Infinigy Job Number	1009-Z0003-B
ATC Engineering Number	13212284_C9_04
Client	ATC
Carrier	AT&T
Site Location	133 Horse Fence Hill Road Southbury, CT 06488 New Haven County 41º 27' 35.9" N NAD83 73º 14' 42.0" W NAD83
Mount Centerline EL.	153.0 ft.
Mount Type	Platform w/ Handrails
Mount Usage Ratio	**90.7%**
Overall Result	**Pass**

Upon reviewing the results of this analysis, it is our opinion that the modified mount does meet the specified TIA code requirements. The modified mount and connections are therefore deemed adequate to support the final loading configuration as listed in this report.

STATE OF CONNECTICUT
JOHN S. STEVENS
24705
LICENSED PROFESSIONAL ENGINEER

08/04/2020

Brenden Archer
Project Engineer II

Contents

Introduction

Infinigy Engineering has been requested to perform a post modification mount analysis on the existing AT&T mounts. All referenced supporting documents have been obtained from the client and are assumed to be accurate and applicable to this site. The mount was analyzed using RISA-3D Version 17.0.4 analysis software.

Supporting Documentation

Collocation Application	Collo App ID No. 13212284, dated May 20, 2020
Construction Drawings	ATC Job No. 13212284_G3, dated June 25, 2020
Proposed Loading	AT&T RFDS Application ID No. 3719805, dated March 25, 2020
Structural Analysis Report	ATC Engineering No. 13212284_C3_03, dated June 30, 2020
Mount Mapping Report	MasTec Network Solutions Job No. 202201, dated June 22, 2020
Mount Analysis Report	Centek Engineering Project No. 18000.13, dated May 3, 2018

Analysis Code Requirements

Wind Speed	116 mph (3-Second Gust)
Wind Speed w/ ice	50 mph (3-Second Gust) w/ 1" ice
TIA Revision	ANSI/TIA-222-H
Risk Category	II
Exposure Category	B
Topographic Factor Procedure	Method 2
Topographic Feature	Hill
Calculated Crest Height	132.0 ft.
Spectral Response	S_s = 0.202 g / S_1 = 0.055 g
Site Class	D-Stiff Soil (Assumed)
HMSL	345.2 ft.

Conclusion

Upon reviewing the results of this analysis, it is our opinion that the modified mount does meet the specified TIA code requirements. The modified mount and connections are therefore deemed adequate to support the final loading configuration as listed in this report.

If you have any questions, require additional information, or actual conditions differ from those as detailed in this report please contact me via the information below:

Brenden Archer
Project Engineer II | **INFINIGY**
1033 Watervliet Shaker Rd, Albany, NY 12205
(518) 690-0790
barcher@infinigy.com | www.infinigy.com

Final Configuration Loading

Mount CL (ft)	Rad. HT (ft)	Horiz. O/S (ft)*	Qty	Appurtenance	Carrier
153.0	153.0	10.0	3	CCI DMP65R-BU6DA	AT&T MOBILITY
		7.0	3	CCI HPA-65R-BUU-H6	
		3.0	3	QUINTEL QS66512-2	
		7.0, 10.0	6	POWERWAVE 7020.00 DUAL BAND RET	
		10.0	3	POWERWAVE TT19-08B-P111-001	
		10.0	6	KAELUS DBC0061F1V51-1	
		7.0	3	ERICSSON RRUS 32 B66A	
		7.0	3	ERICSSON RRUS 4449 B5/B12	
		0.0	3	ERICSSON RRUS 32 B30	
		3.0	3	ERICSSON RRUS 4478 B14	
		0.0	3	ERICSSON RRUS 11 B12	
		3.0	3	ERICSSON RRUS 32 B2	
		--	3	RAYCAP DC6-48-60-18-8F**	

***Horizontal Offset is defined as the distance from the left most edge of the mount face horizontal when viewed facing the tower**

**** Raycap assumed to be installed on mount collar.**

Mount Usages

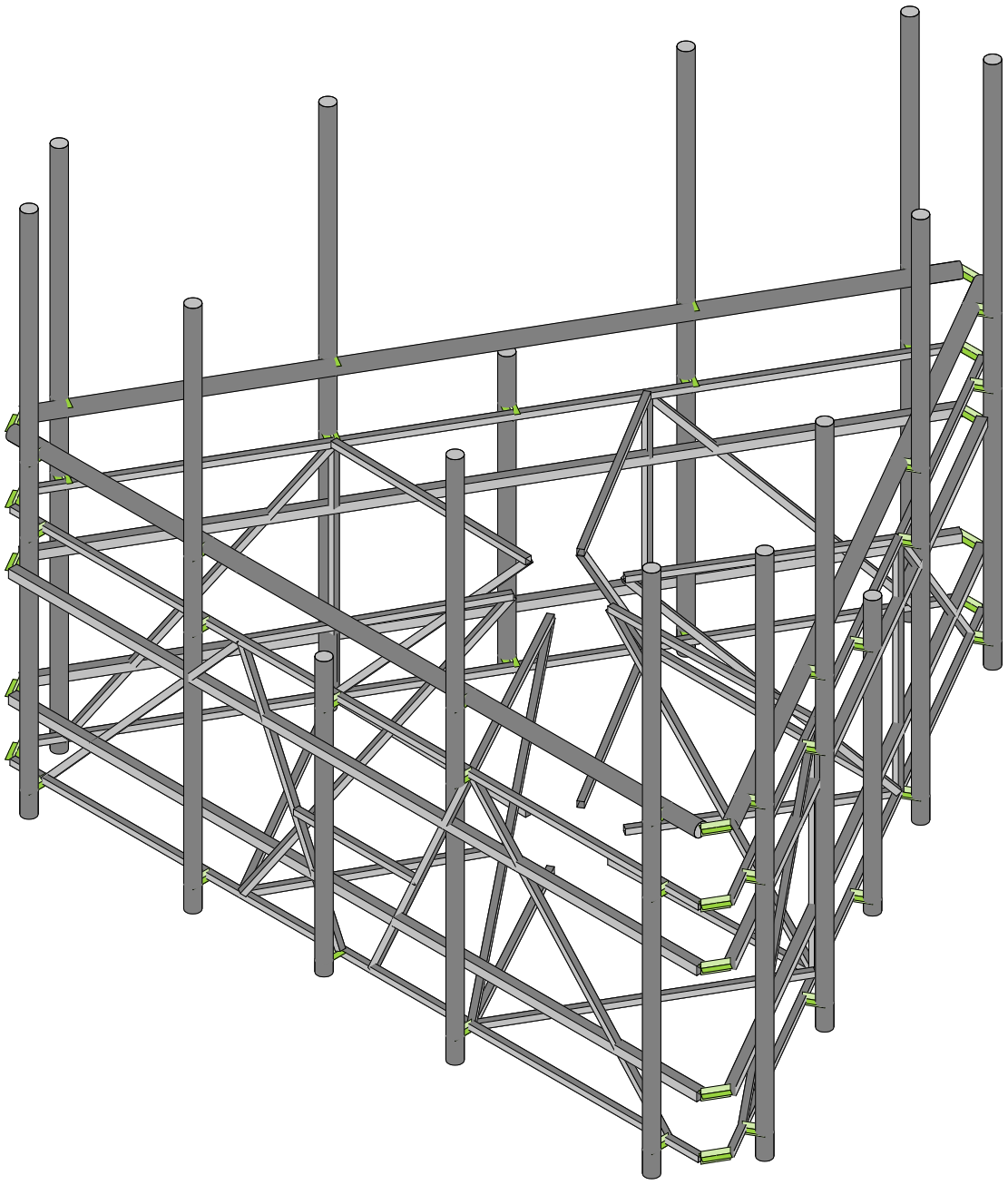
Mount Pipe	56.0%	Pass
Horizontal	34.5%	Pass
Standoff	82.8%	Pass
Bracing	90.7%	Pass
RATING =	**90.7%**	**Pass**

Assumptions and Limitations

Our structural calculations are completed assuming all information provided to Infinigy Engineering is accurate and applicable to this site. For the purposes of calculations, we assume an overall structure condition of "like new" and all members and connections to be free of corrosion and/or structural defects. The structure owner and/or contractor shall verify the structure's condition prior to installation of any proposed equipment. If actual conditions differ from those described in this report Infinigy Engineering should be notified immediately to complete a revised evaluation.

Our evaluation is completed using standard TIA, AISC, ACI, and ASCE methods and procedures. Our structural results are proprietary and should not be used by others as their own. Infinigy Engineering is not responsible for decisions made by others that are or are not based on our supplied assumptions and conclusions.

This report is an evaluation of the proposed carriers mount structure only and does not reflect adequacy of the existing tower, other mounts, or coax mounting attachments. These elements are assumed to be adequate for the purposes of this analysis and are assumed to have been installed per their manufacturer requirements.



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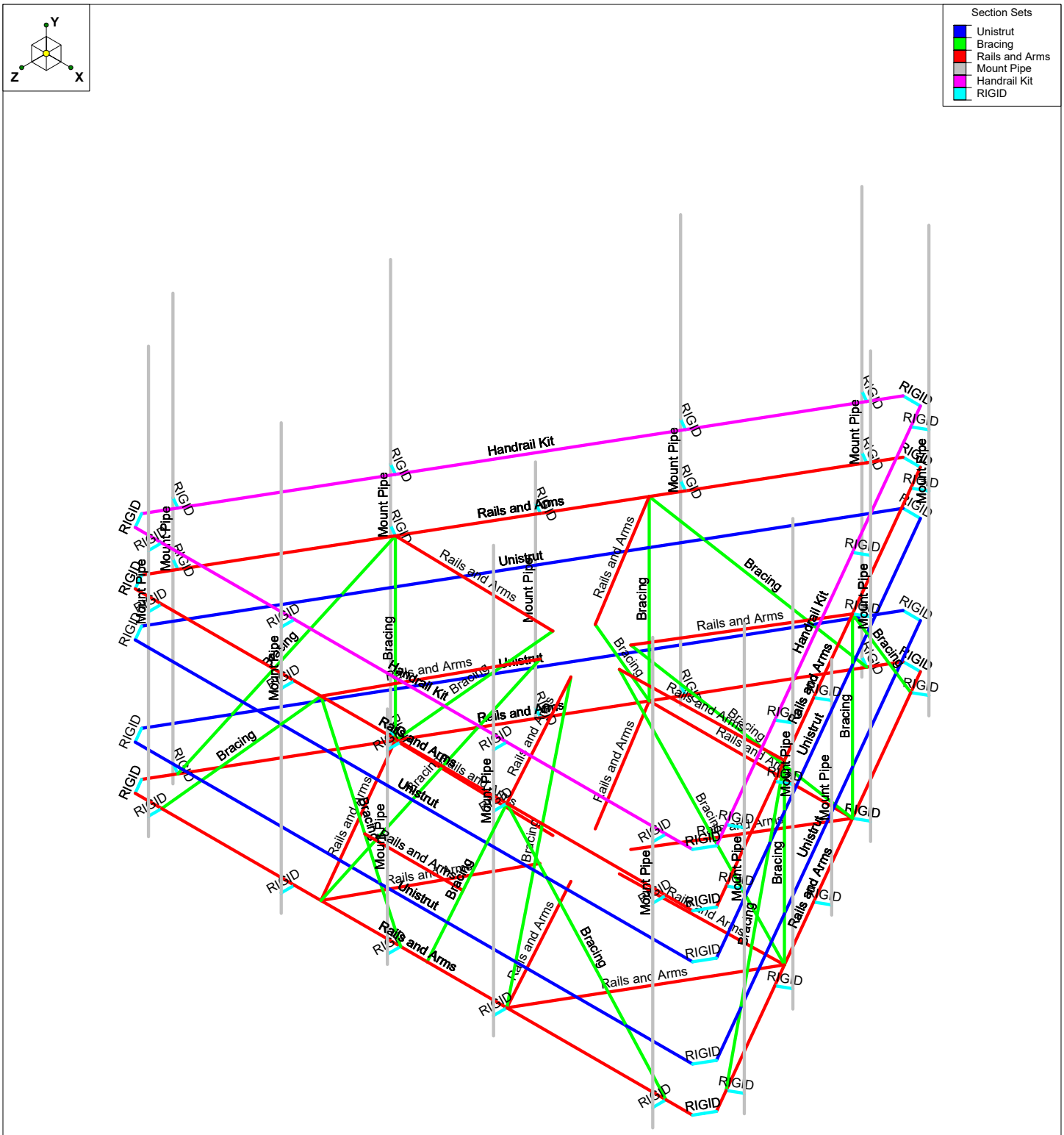

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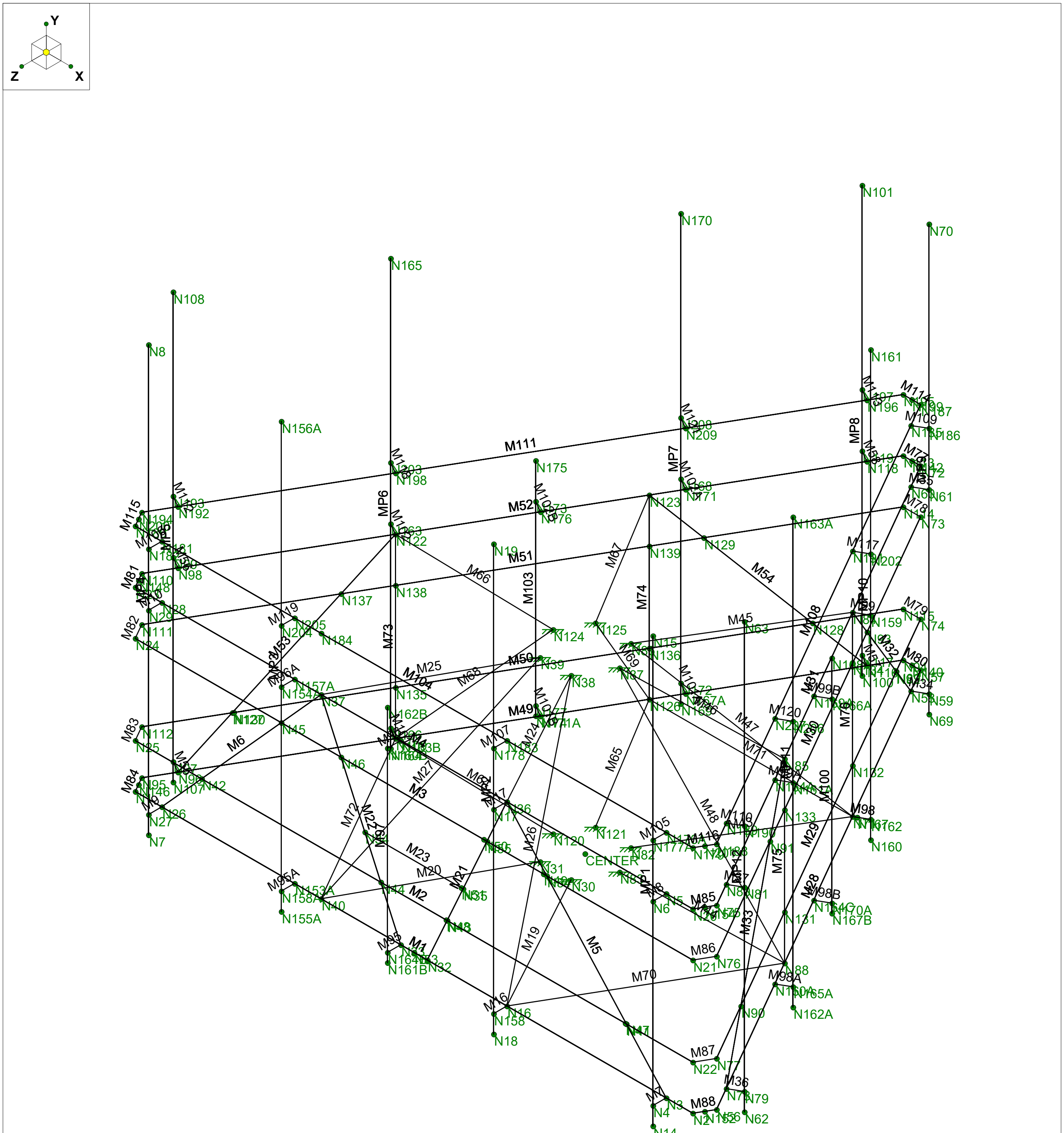

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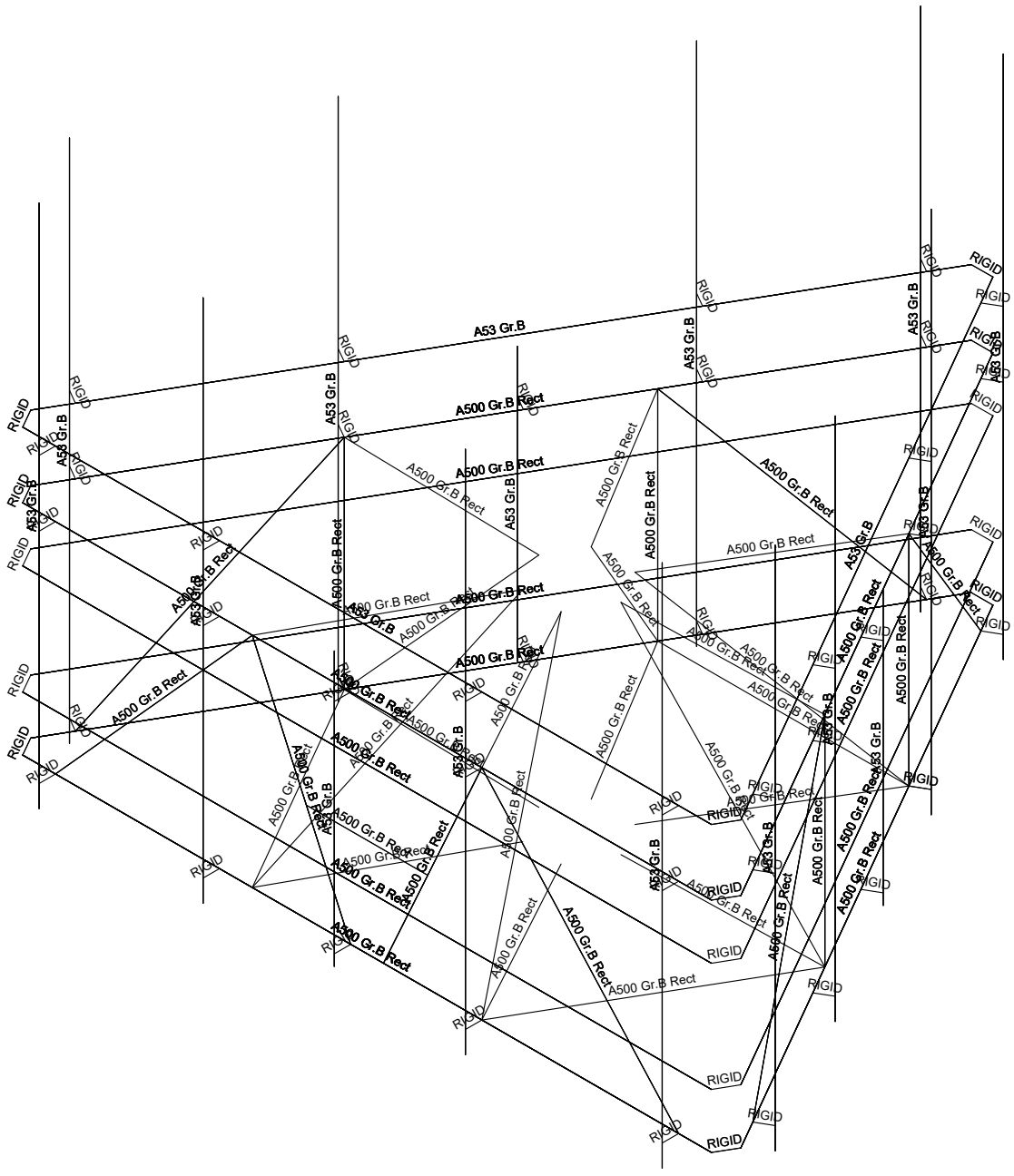

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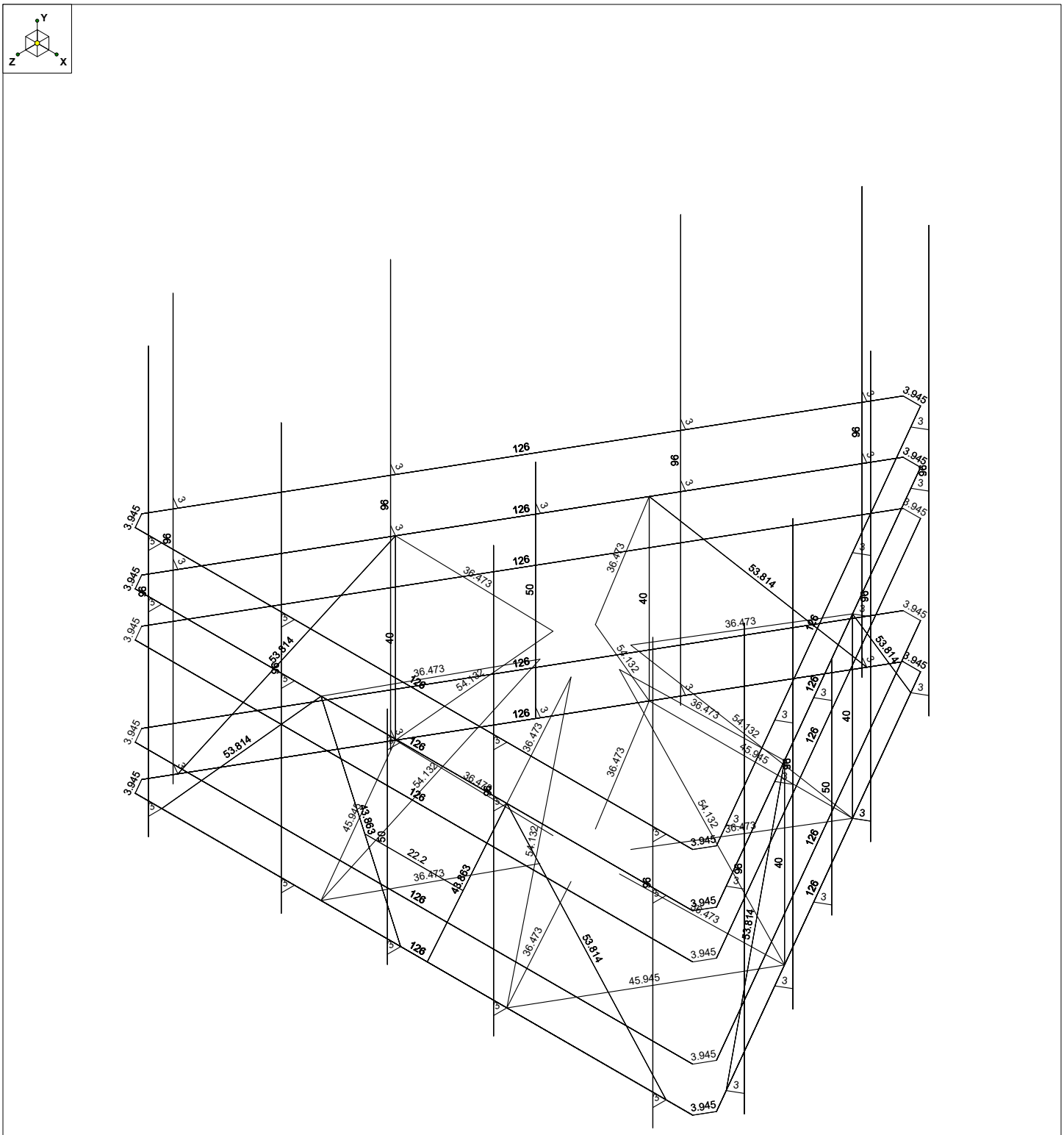

Member Length (in) Displayed

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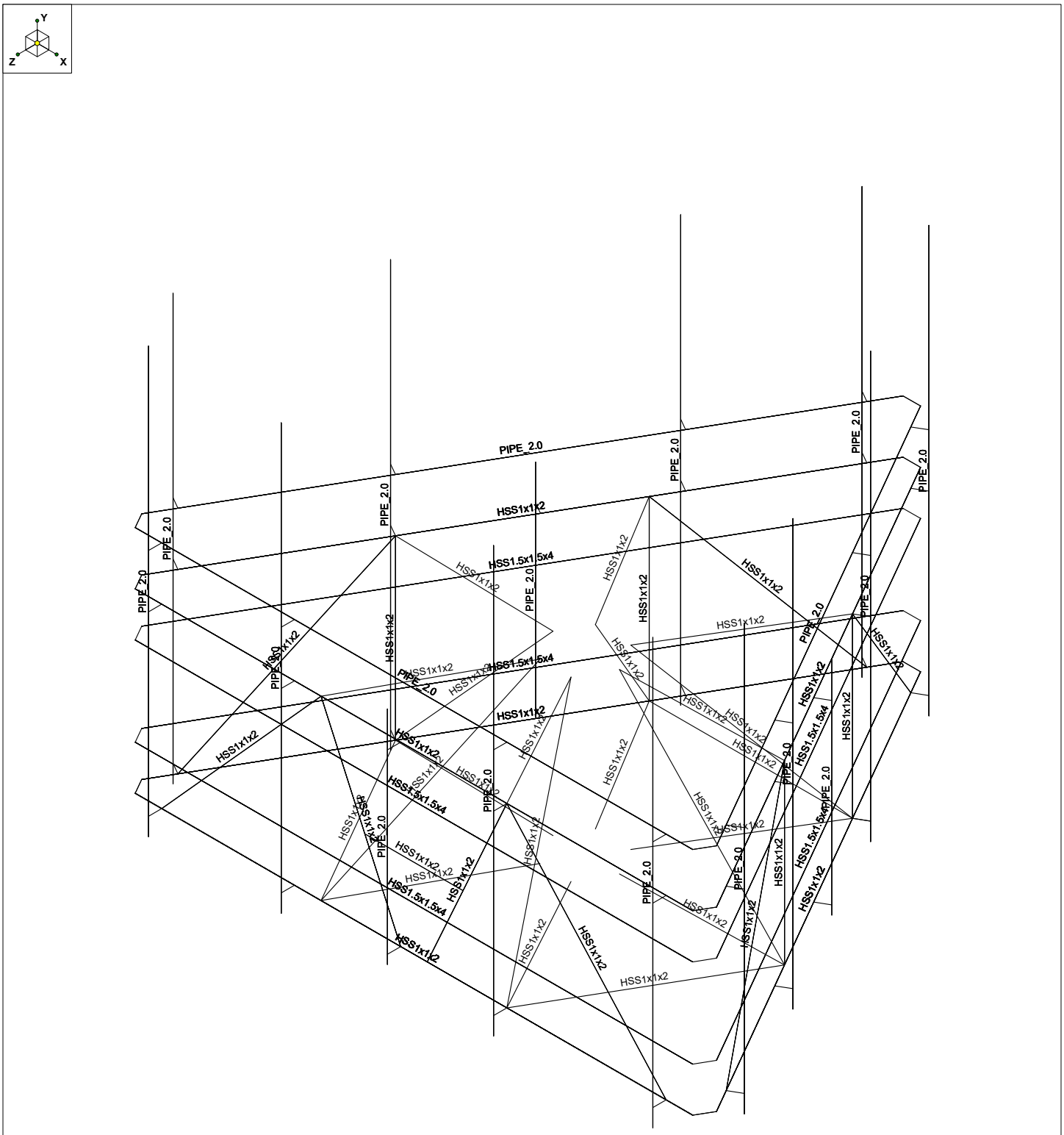

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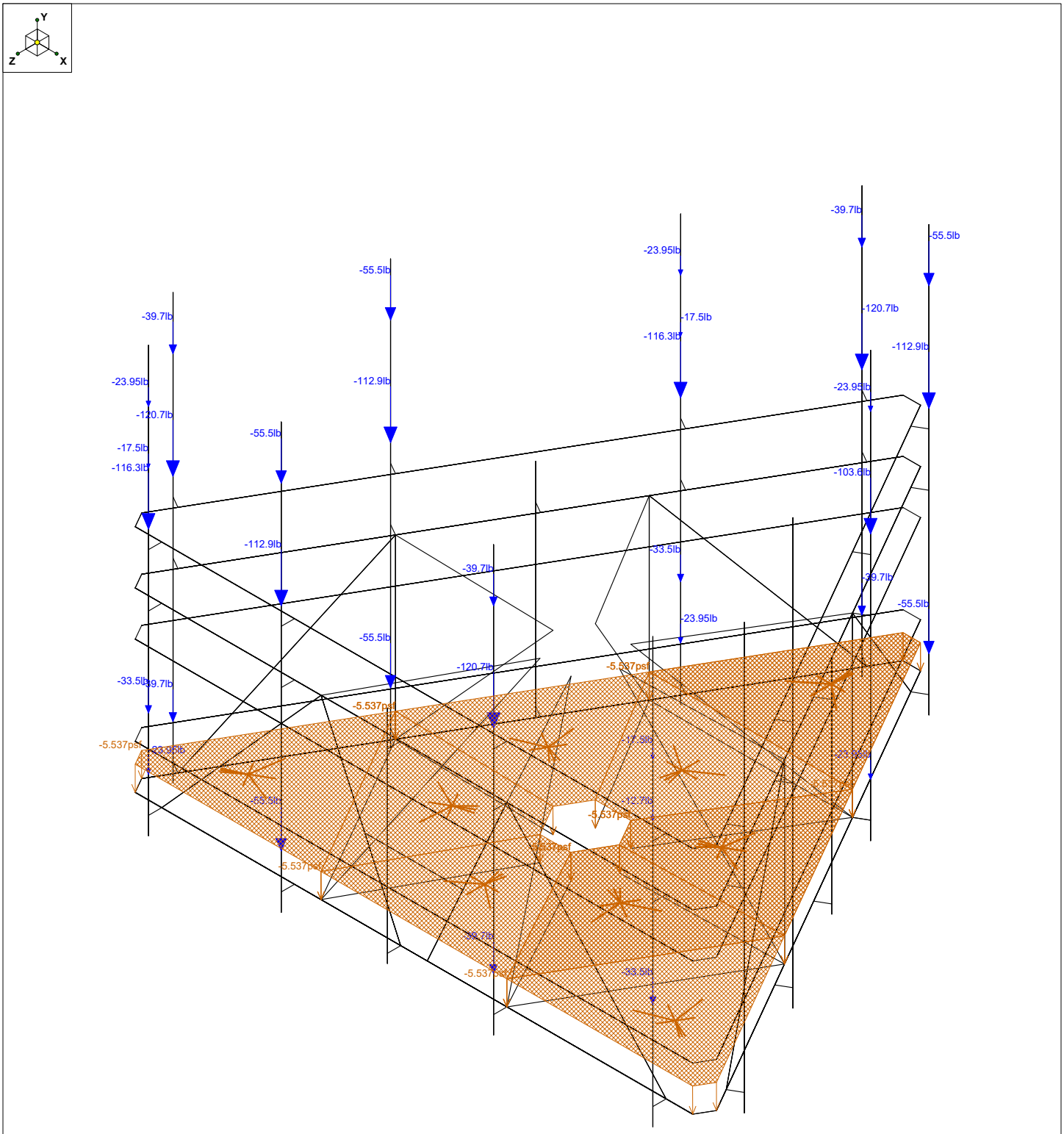

Loads: BLC 1, Self Weight

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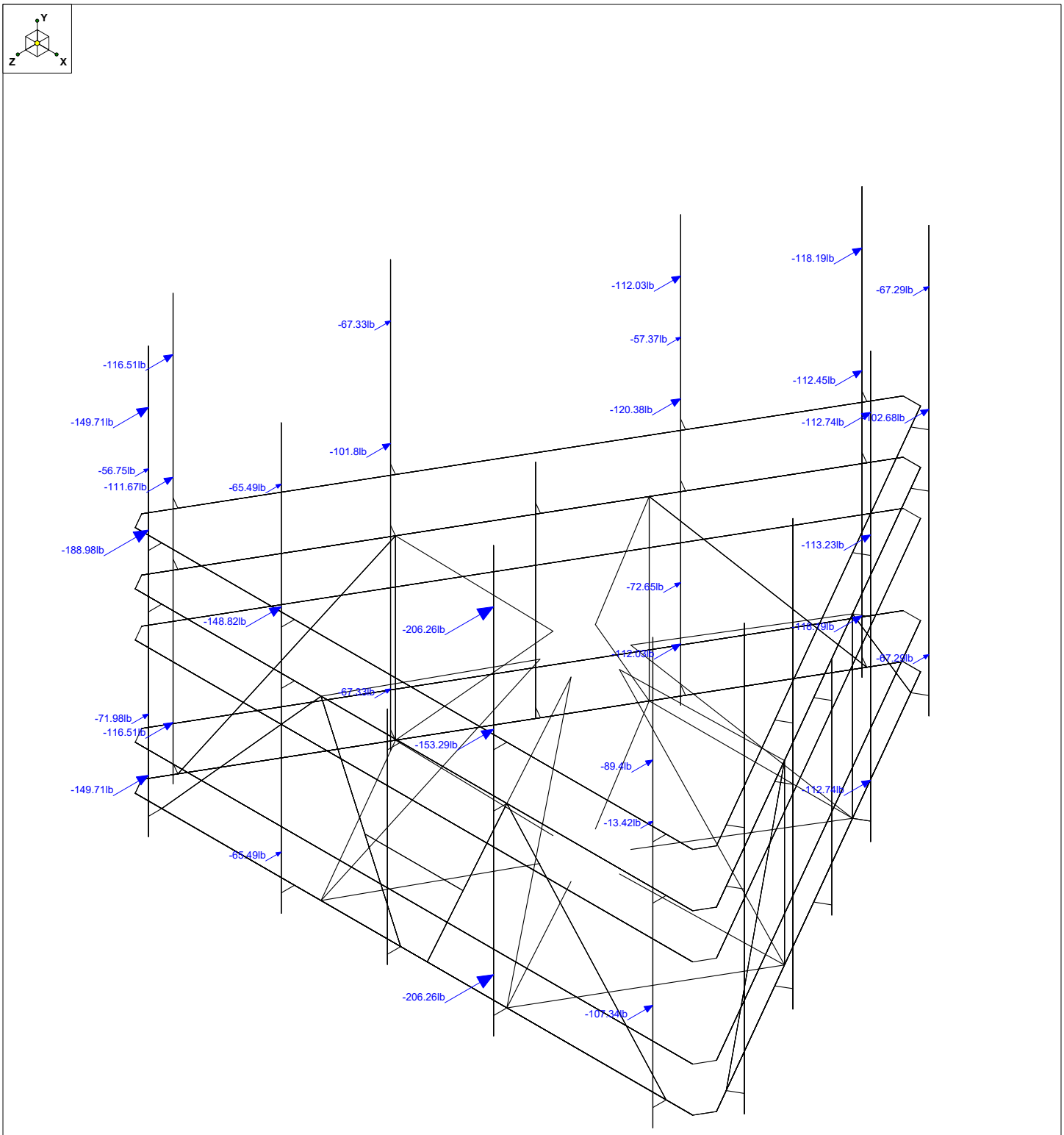

Loads: BLC 2, Wind Load AZI 0

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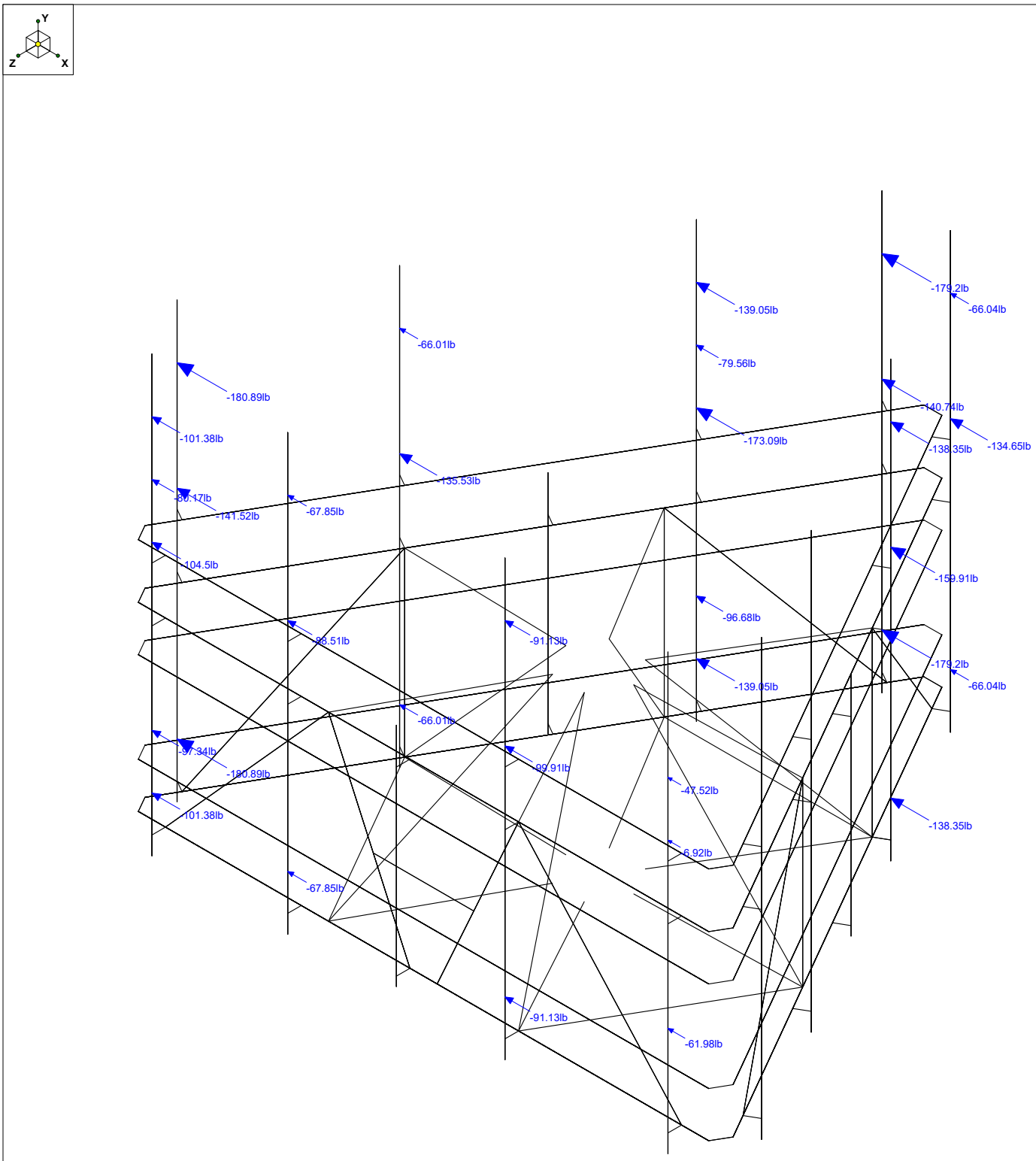

Loads: BLC 5, Wind Load AZI 90

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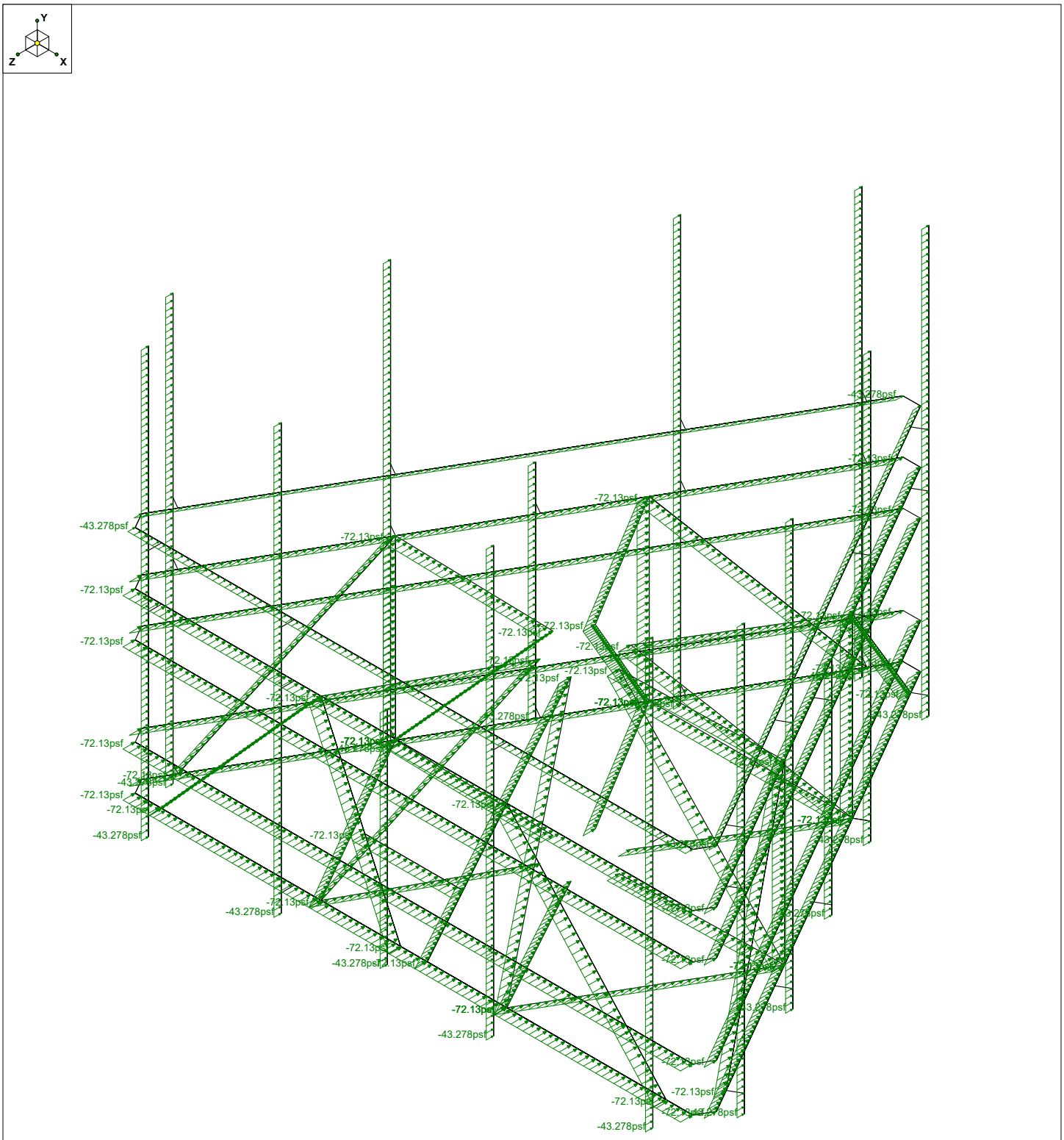

Loads: BLC 14, Distr. Wind Load Z

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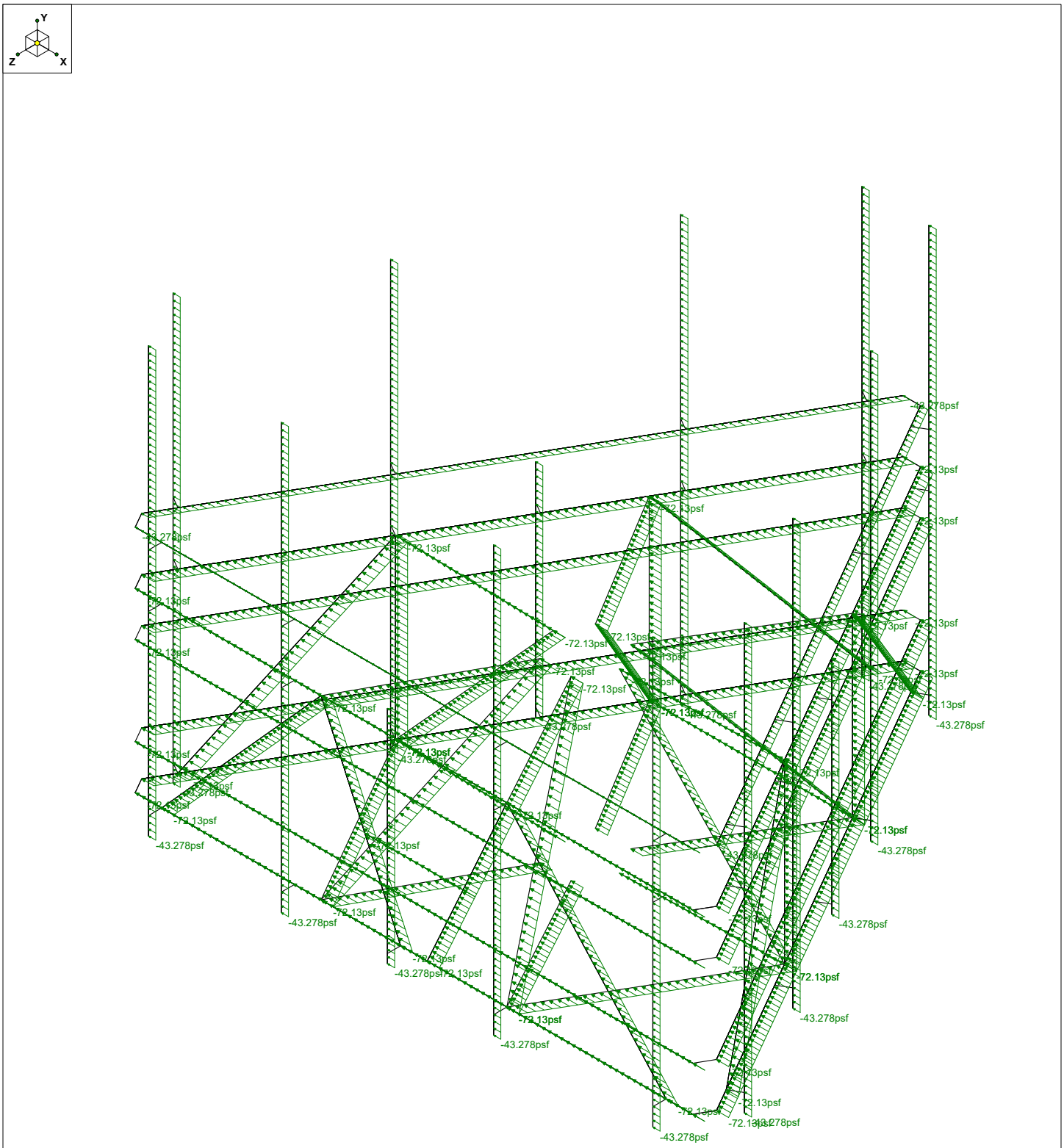

Loads: BLC 15, Distr. Wind Load X

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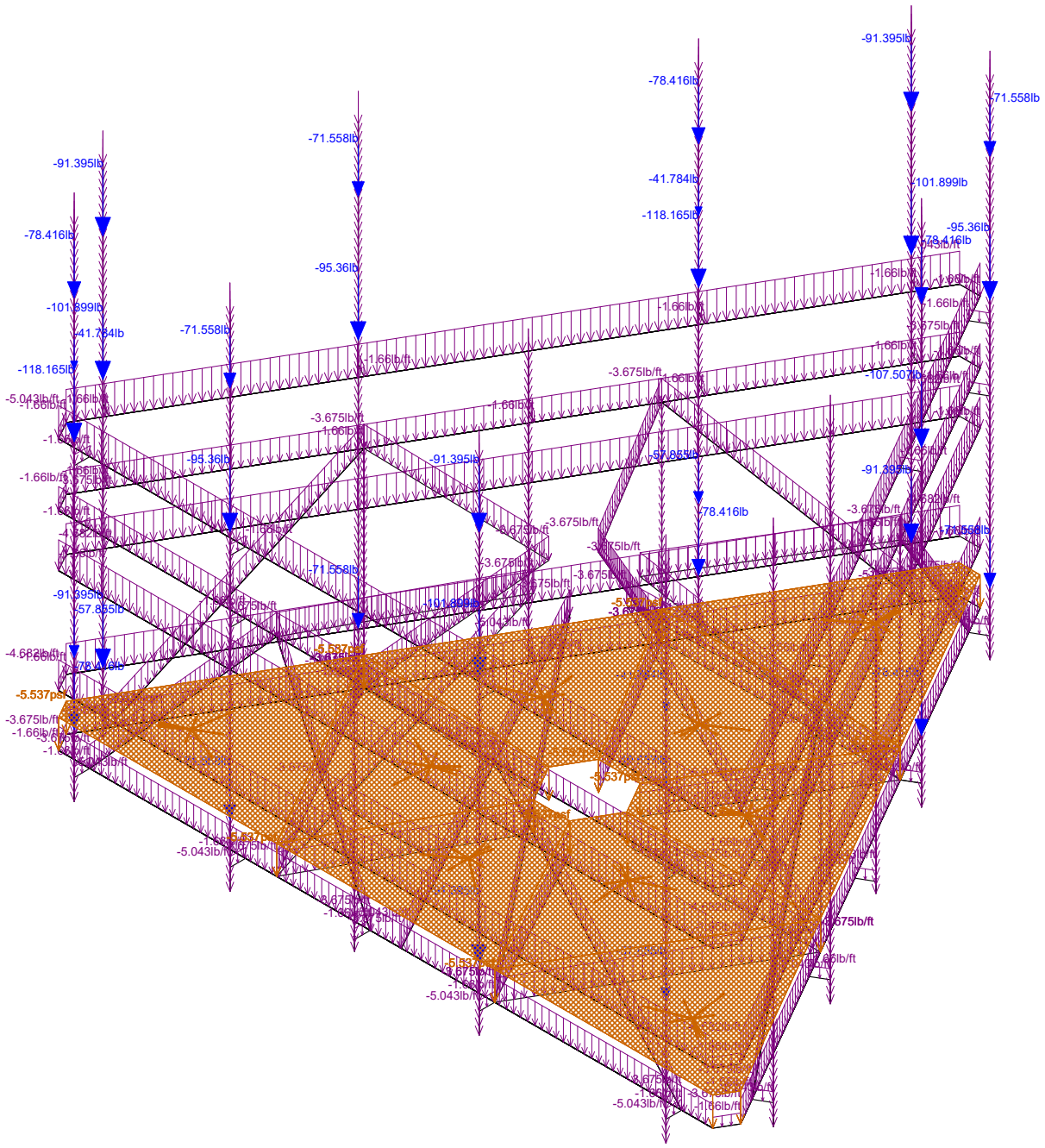

Loads: BLC 16, Ice Weight

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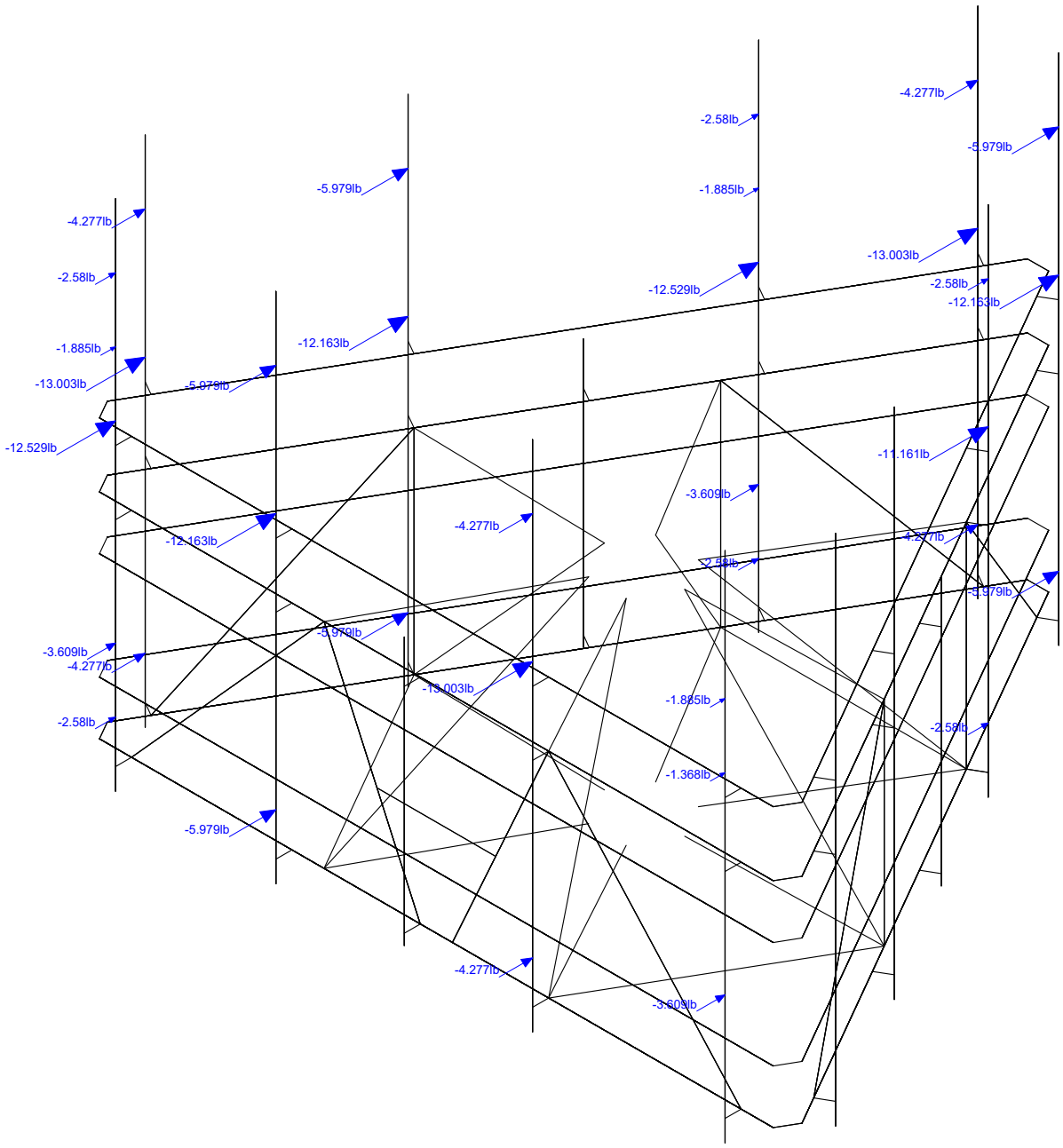
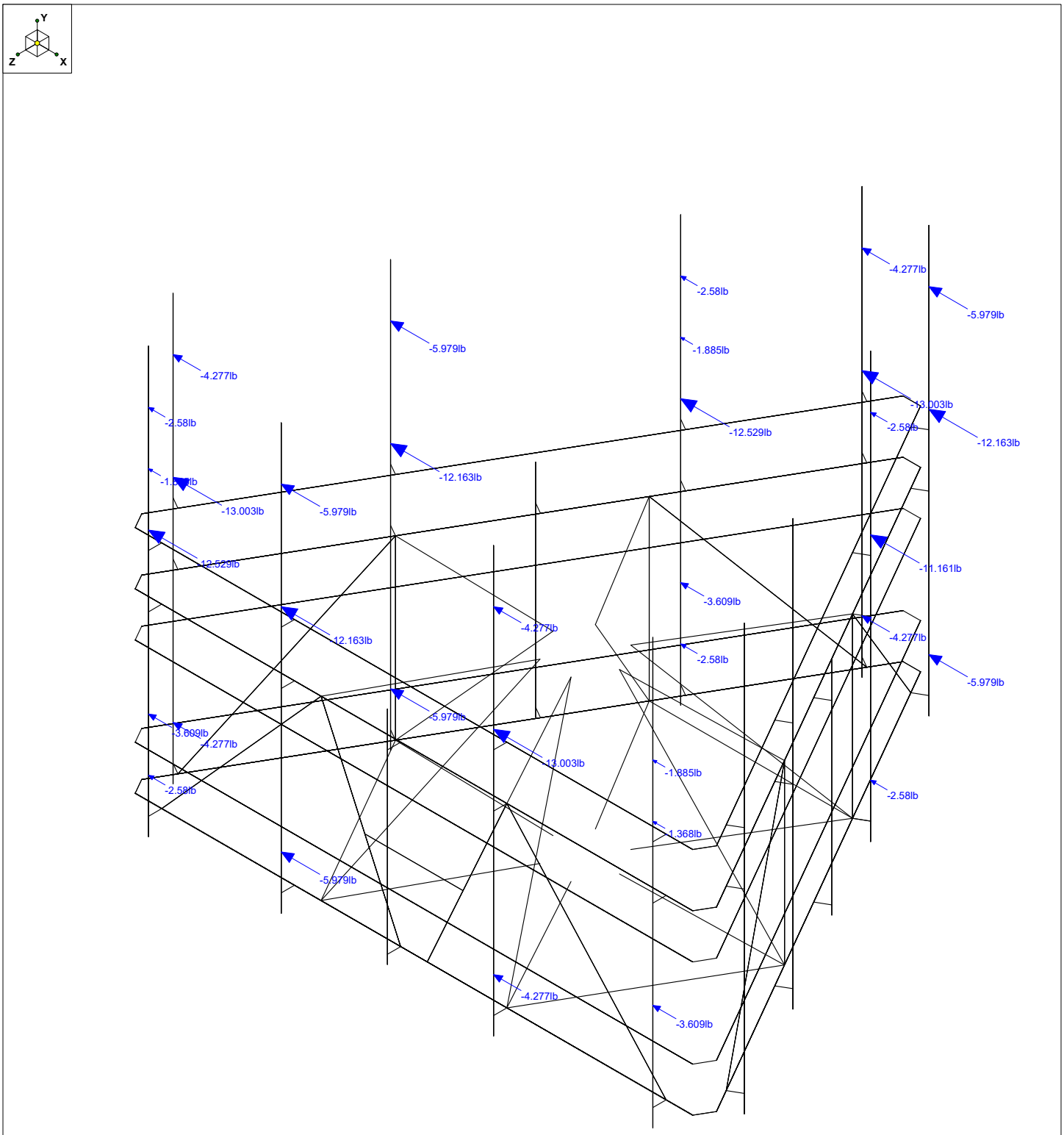


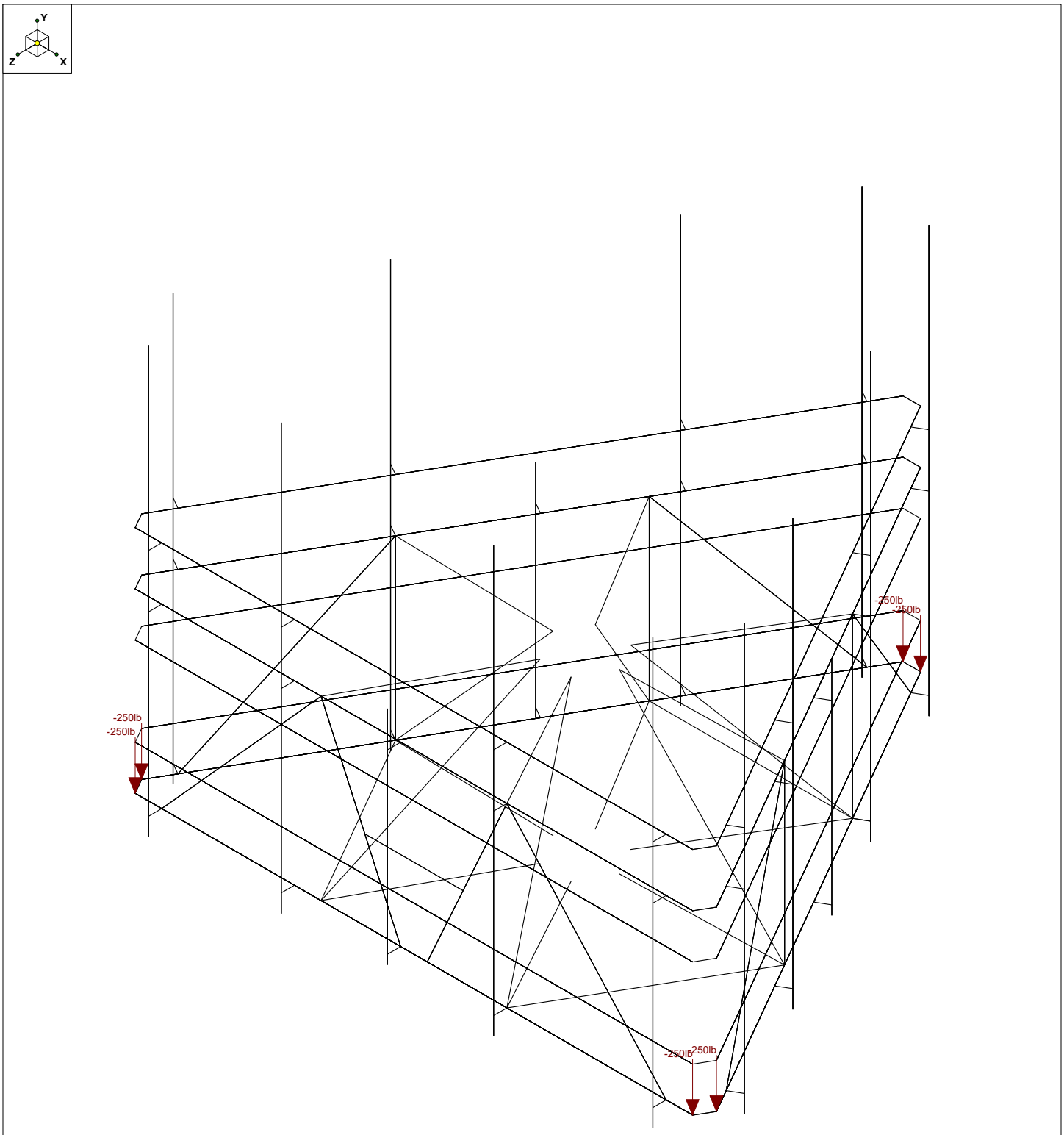
Loads: BLC 31, Seismic Load Z

Infinigy Engineering, LLC	302519_Southbury	Final Configuration
BDA		Aug 4, 2020 at 11:40 AM
1009-Z0003-B		302519_Southbury_Modified_load...



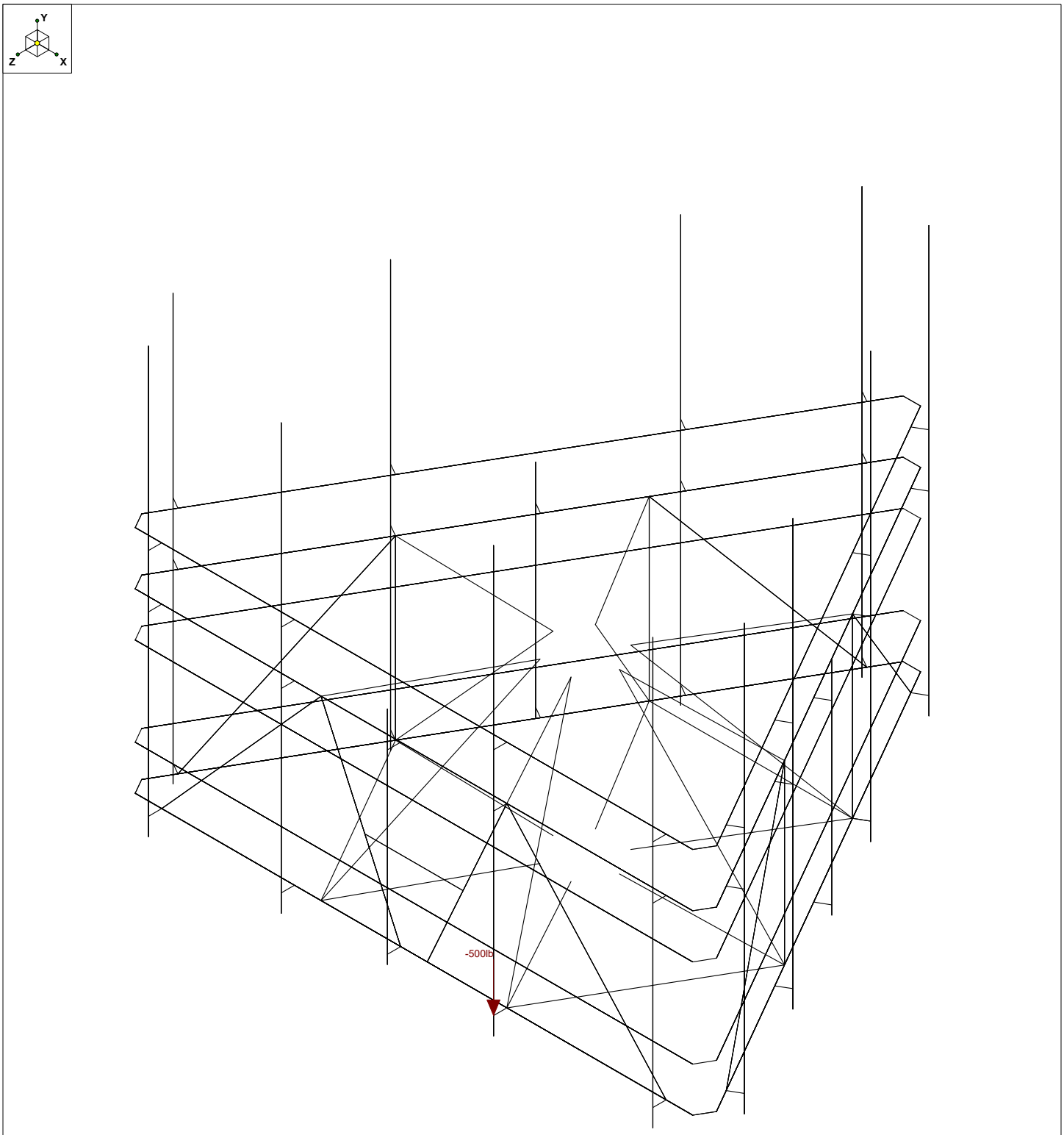
Loads: BLC 32, Seismic Load X

Infinigy Engineering, LLC	302519_Southbury	Final Configuration
BDA		Aug 4, 2020 at 11:40 AM
1009-Z0003-B		302519_Southbury_Modified_load...



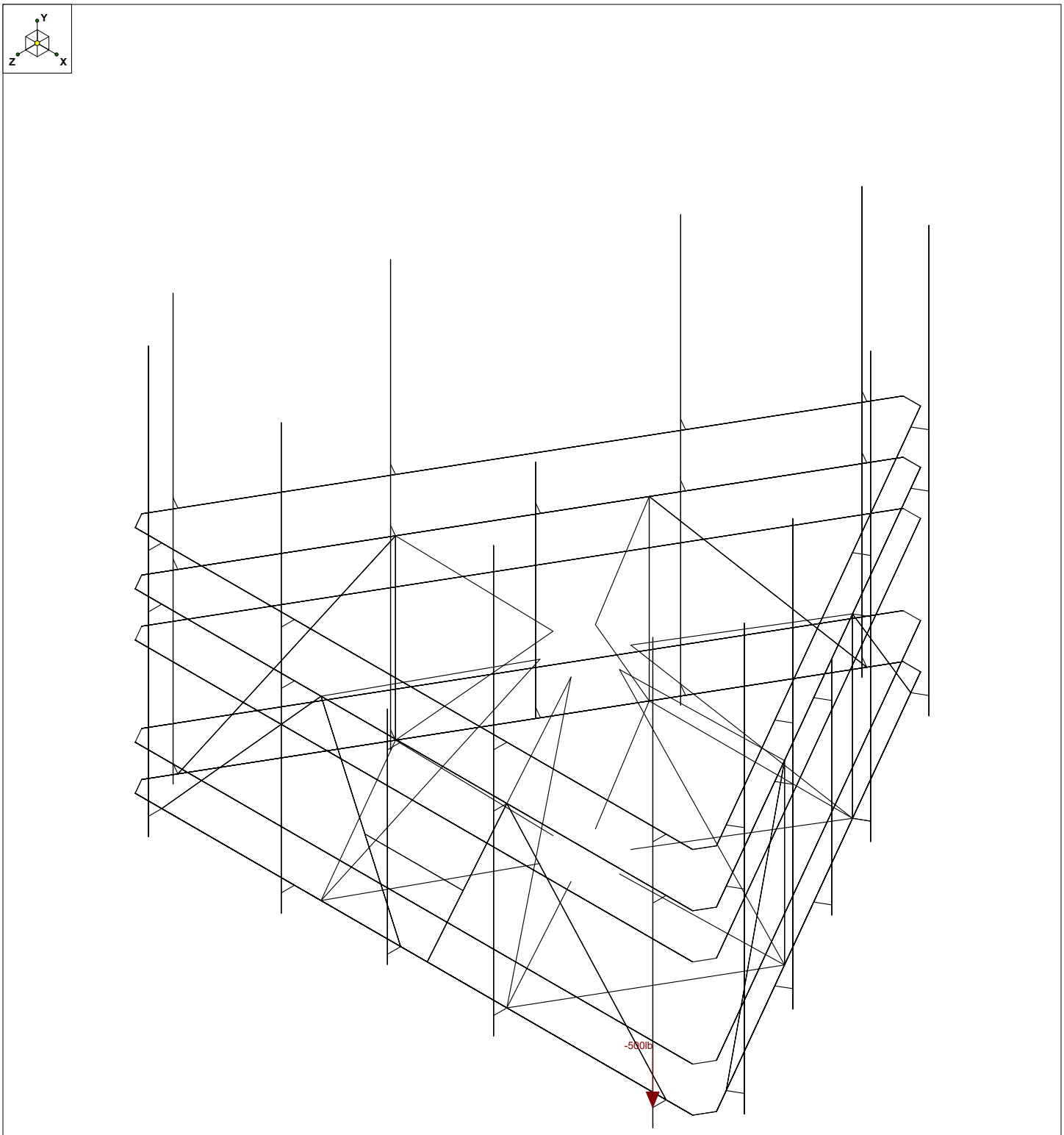
Loads: BLC 33, Service Live Loads

Infinigy Engineering, LLC	302519_Southbury	Final Configuration
BDA		Aug 4, 2020 at 11:41 AM
1009-Z0003-B		302519_Southbury_Modified_load...



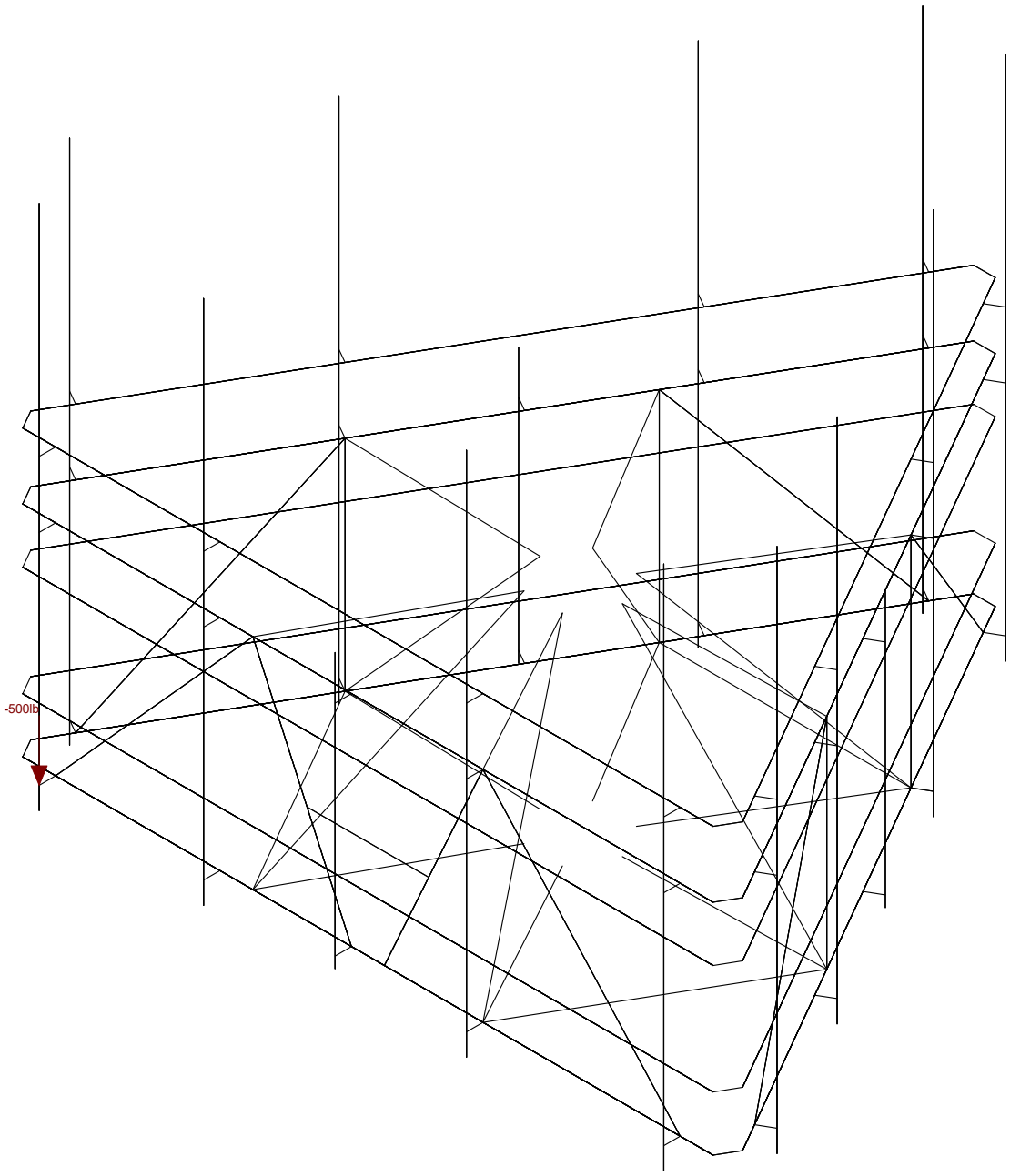
Loads: BLC 36, Maintenance Load 3

Infinigy Engineering, LLC	302519_Southbury	Final Configuration
BDA		Aug 4, 2020 at 11:40 AM
1009-Z0003-B		302519_Southbury_Modified_load...



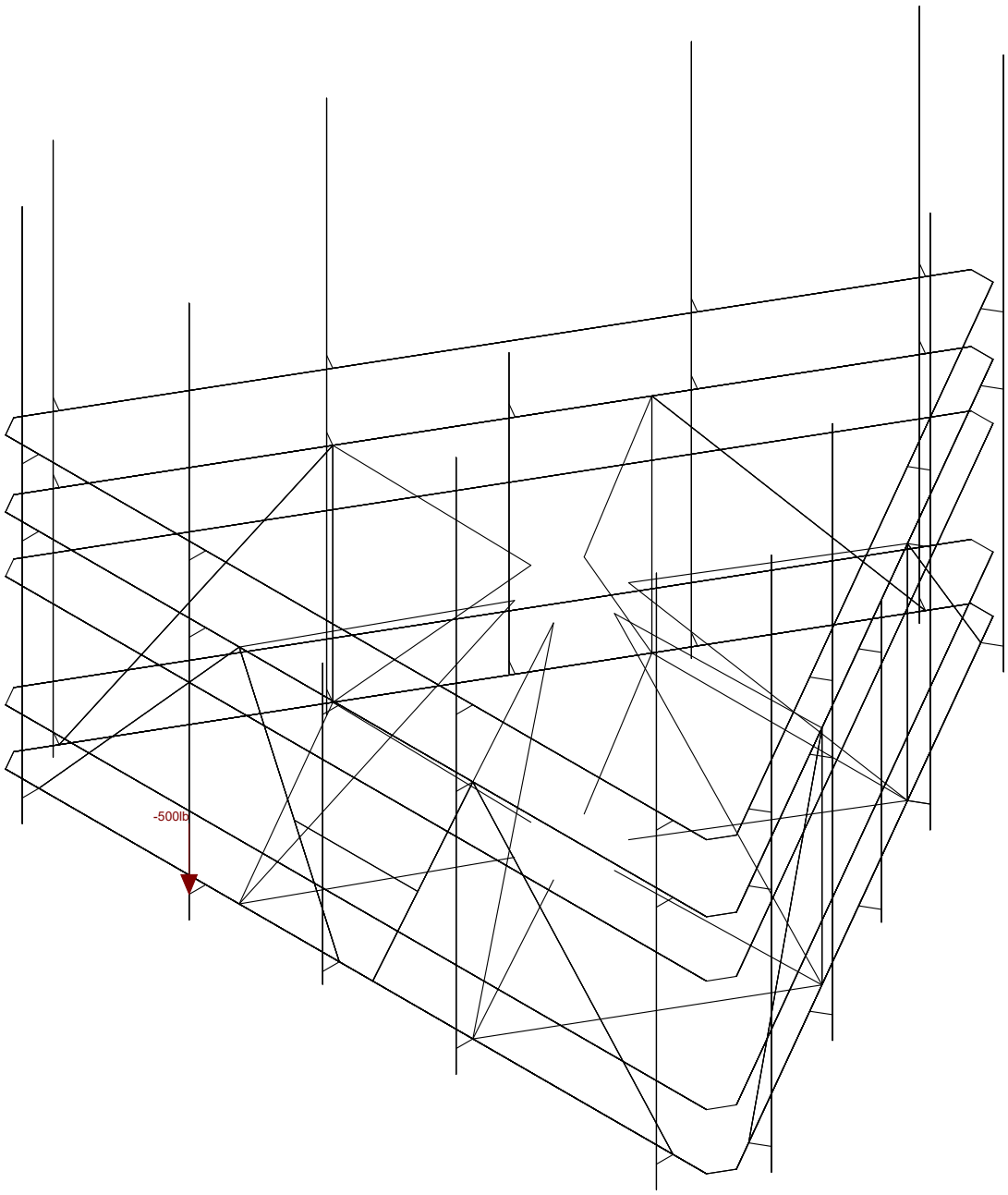
Loads: BLC 35, Maintenance Load 2

Infinigy Engineering, LLC	302519_Southbury	Final Configuration
BDA		Aug 4, 2020 at 11:40 AM
1009-Z0003-B		302519_Southbury_Modified_load...



Loads: BLC 34, Maintenance Load 1

Infinigy Engineering, LLC	302519_Southbury	Final Configuration
BDA		Aug 4, 2020 at 11:40 AM
1009-Z0003-B		302519_Southbury_Modified_load...



Loads: BLC 43, Maintenance Load 10

Infinigy Engineering, LLC	302519_Southbury	Final Configuration
BDA		Aug 4, 2020 at 11:41 AM
1009-Z0003-B		302519_Southbury_Modified_load...

Program Inputs

PROJECT INFORMATION	
Client:	ATC
Carrier:	AT&T
Engineer:	Brenden Archer

SITE INFORMATION		
Risk Category:	II	
Exposure Category:	B	
Topo Factor Procedure:	Method 2	
Site Class:	D - Stiff Soil	
Ground Elevation:	345	ft *Rev H

MOUNT INFORMATION		
Mount Type:	Platform	
Num Sectors:	3	
Centerline AGL:	153.0	ft
Tower Height AGL:	150.0	ft

TOPOGRAPHIC DATA		
Topo Feature:	Hill	
Slope Distance:	456.0	ft
Crest Distance:	379.0	ft
Crest Height:	132.0	ft

FACTORS		
Directionality Fact. (K_d):	0.95	
Ground Ele. Factor (K_e):	0.99	*Rev H Only
Rooftop Speed-Up (K_s):	1.00	*Rev H Only
Topographic Factor (K_{zt}):	1.00	
Gust Effect Factor (G_h):	1.0	

CODE STANDARDS		
Building Code:	2018 IBC	
TIA Standard:	TIA-222-H	
ASCE Standard:	ASCE 7-16	

WIND AND ICE DATA		
Ultimate Wind (V_{ult}):	116	mph
Design Wind (V):	N/A	mph
Ice Wind (V_{ice}):	50	mph
Base Ice Thickness (t_i):	1	in
Flat Pressure:	72.42	psf
Round Pressure:	43.45	psf
Ice Wind Pressure:	8.07	psf

SEISMIC DATA		
Short-Period Accel. (S_s):	0.20	g
1-Second Accel. (S_1):	0.06	g
Short-Period Design (S_{DS}):	0.22	
1-Second Design (S_{D1}):	0.09	
Short-Period Coeff. (F_a):	1.60	
1-Second Coeff. (F_v):	2.40	
Amplification Factor (a_p):	1.00	
Response Mod. (R_p):	2.50	
Overstrength (Ω_o):	1.00	

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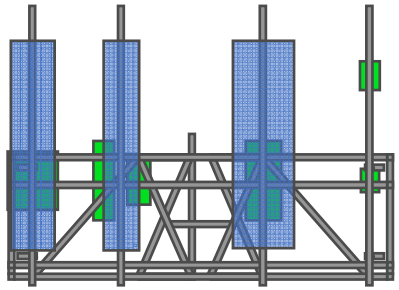
FROM ZERO TO INFINIGY
the solutions are endless

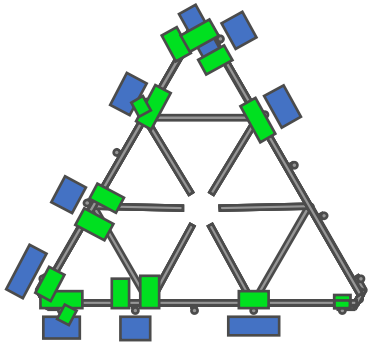
Infinigy Load Calculator V2.1.4

Program Inputs

ELEVATION VIEW



PLAN VIEW



INFINIGY
FROM ZERO TO INFINIGY
the solutions are endless

Infinigy Load Calculator V2.1.4

APPURTENANCE INFORMATION

Appurtenance Name	Elevation	Qty.	K_a	q_z (psf)	EPA_N (ft^2)	EPA_T (ft^2)	Wind F_z (lbs)	Wind F_x (lbs)	Weight (lbs)	Seismic F (lbs)	Member (α sector)
CCI ANTENNAS DMP65R-BU6D	153.0	3	0.90	36.21	12.71	5.62	414.20	183.00	79.40	8.55	MP2
CCI ANTENNAS HPA-65R-BUU-H6	153.0	3	0.90	36.21	9.22	6.25	300.63	203.58	47.90	5.16	MP4
QUINTEL TECHNOLOGY QS66512-2	153.0	3	0.90	36.21	4.04	4.18	131.51	136.25	111.00	11.96	MP3
WAVE TECHNOLOGIES TME-TT19-08B-P	153.0	3	0.90	36.21	0.55	0.45	18.01	14.52	16.00	1.72	MP1
KAELUS DBC0061F1V51-1	153.0	6	0.90	36.21	0.41	0.21	13.47	6.95	12.70	1.37	MP1
ERICSSON TME-RRUS 32 B66	153.0	3	0.90	36.21	2.74	1.67	89.38	54.36	50.70	5.46	MP2
ERICSSON TME-RADIO 4449	153.0	3	0.90	36.21	1.98	1.41	64.53	45.95	70.00	7.54	MP2
ERICSSON TME-RRUS 32 B30	153.0	3	0.90	36.21	2.74	1.67	89.38	54.36	53.00	5.71	MP3
ERICSSON TME-RRUS 4478 B14	153.0	3	0.90	36.21	1.84	1.06	60.05	34.50	59.90	6.45	MP3
ERICSSON TME-RRUS 11 B12	153.0	3	0.90	36.21	2.83	1.18	92.34	38.52	50.70	5.46	MP4
ERICSSON TME-RRUS 32 B2	153.0	3	0.90	36.21	2.73	1.67	89.01	54.36	52.90	5.70	MP4
RAYCAP TME-DC6-48-60-18-8F	153.0	3	0.90	36.21	2.90	2.90	94.54	94.54	32.80	3.53	Leg/Flush
WAVE TECHNOLOGIES 7020.00 DUAL BA	153.0	3	0.90	36.21	0.34	0.10	11.05	3.19	2.20	0.24	MP2
WAVE TECHNOLOGIES 7020.00 DUAL BA	153.0	3	0.90	36.21	0.34	0.10	11.05	3.19	2.20	0.24	MP4

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design Rul...
1	M1	N1	N2			Rails and Arms	Beam	Tube	A500 Gr.B Rect	Typical
2	M2	N25	N22			Unistrut	Beam	Tube	A500 Gr.B Rect	Typical
3	M3	N24	N21			Unistrut	Beam	Tube	A500 Gr.B Rect	Typical
4	M4	N23	N20			Rails and Arms	Beam	Tube	A500 Gr.B Rect	Typical
5	M5	N3	N36			Bracing	VBrace	Tube	A500 Gr.B Rect	Typical
6	MP4	N7	N8			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
7	MP1	N14	N15			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
8	MP2	N18	N19			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
9	M19	N16	N30			Rails and Arms	Beam	Tube	A500 Gr.B Rect	Typical
10	M20	N40	N31			Rails and Arms	Beam	Tube	A500 Gr.B Rect	Typical
11	M21	N16	N36			Bracing	VBrace	Tube	A500 Gr.B Rect	Typical
12	M23	N34	N35			Rails and Arms	Beam	Tube	A500 Gr.B Rect	Typical
13	M24	N36	N38			Rails and Arms	Beam	Tube	A500 Gr.B Rect	Typical
14	M26	N38	N16			Bracing	VBrace	Tube	A500 Gr.B Rect	Typical
15	M27	N39	N40			Bracing	VBrace	Tube	A500 Gr.B Rect	Typical
16	M28	N56	N57			Rails and Arms	Beam	Tube	A500 Gr.B Rect	Typical
17	M29	N77	N74			Unistrut	Beam	Tube	A500 Gr.B Rect	Typical
18	M30	N76	N73			Unistrut	Beam	Tube	A500 Gr.B Rect	Typical
19	M31	N75	N72			Rails and Arms	Beam	Tube	A500 Gr.B Rect	Typical
20	M32	N58	N84			Bracing	VBrace	Tube	A500 Gr.B Rect	Typical
21	M33	N78	N85			Bracing	VBrace	Tube	A500 Gr.B Rect	Typical
22	MP12	N62	N63			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
23	MP9	N69	N70			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
24	M43	N71	N82			Rails and Arms	Beam	Tube	A500 Gr.B Rect	Typical
25	M44	N88	N83			Rails and Arms	Beam	Tube	A500 Gr.B Rect	Typical
26	M45	N84	N86			Rails and Arms	Beam	Tube	A500 Gr.B Rect	Typical
27	M46	N85	N87			Rails and Arms	Beam	Tube	A500 Gr.B Rect	Typical
28	M47	N86	N71			Bracing	VBrace	Tube	A500 Gr.B Rect	Typical
29	M48	N87	N88			Bracing	VBrace	Tube	A500 Gr.B Rect	Typical
30	M49	N94	N95			Rails and Arms	Beam	Tube	A500 Gr.B Rect	Typical
31	M50	N115	N112			Unistrut	Beam	Tube	A500 Gr.B Rect	Typical
32	M51	N114	N111			Unistrut	Beam	Tube	A500 Gr.B Rect	Typical
33	M52	N113	N110			Rails and Arms	Beam	Tube	A500 Gr.B Rect	Typical
34	M53	N96	N122			Bracing	VBrace	Tube	A500 Gr.B Rect	Typical
35	M54	N116	N123			Bracing	VBrace	Tube	A500 Gr.B Rect	Typical
36	MP8	N100	N101			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
37	MP5	N107	N108			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
38	M64	N109	N120			Rails and Arms	Beam	Tube	A500 Gr.B Rect	Typical
39	M65	N126	N121			Rails and Arms	Beam	Tube	A500 Gr.B Rect	Typical
40	M66	N122	N124			Rails and Arms	Beam	Tube	A500 Gr.B Rect	Typical
41	M67	N123	N125			Rails and Arms	Beam	Tube	A500 Gr.B Rect	Typical
42	M68	N124	N109			Bracing	VBrace	Tube	A500 Gr.B Rect	Typical
43	M69	N125	N126			Bracing	VBrace	Tube	A500 Gr.B Rect	Typical
44	M70	N16	N88			Rails and Arms	Beam	Tube	A500 Gr.B Rect	Typical
45	M71	N126	N71			Rails and Arms	Beam	Tube	A500 Gr.B Rect	Typical
46	M72	N109	N40			Rails and Arms	Beam	Tube	A500 Gr.B Rect	Typical
47	M73	N109	N122			Bracing	VBrace	Tube	A500 Gr.B Rect	Typical
48	M74	N126	N123			Bracing	VBrace	Tube	A500 Gr.B Rect	Typical
49	M75	N88	N85			Bracing	VBrace	Tube	A500 Gr.B Rect	Typical
50	M76	N71	N84			Bracing	VBrace	Tube	A500 Gr.B Rect	Typical
51	M77	N72	N113			RIGID	None	None	RIGID	Typical
52	M78	N73	N114			RIGID	None	None	RIGID	Typical
53	M79	N74	N115			RIGID	None	None	RIGID	Typical
54	M80	N57	N94			RIGID	None	None	RIGID	Typical
55	M81	N110	N23			RIGID	None	None	RIGID	Typical
56	M82	N24	N111			RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design Rul...
57	M83	N112	N25			RIGID	None	None	RIGID	Typical
58	M84	N1	N95			RIGID	None	None	RIGID	Typical
59	M85	N75	N20			RIGID	None	None	RIGID	Typical
60	M86	N76	N21			RIGID	None	None	RIGID	Typical
61	M87	N77	N22			RIGID	None	None	RIGID	Typical
62	M88	N56	N2			RIGID	None	None	RIGID	Typical
63	MP3	N155A	N156A			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
64	MP11	N162A	N163A			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
65	MP7	N169	N170			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
66	M97	N161B	N162B			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
67	M100	N167B	N168A			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
68	M103	N174	N175			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
69	M104	N180	N179			Handrail Kit	Beam	Pipe	A53 Gr.B	Typical
70	M105	N176A	N177A			RIGID	None	None	RIGID	Typical
71	M106	N181	N182			RIGID	None	None	RIGID	Typical
72	M107	N183	N178			RIGID	None	None	RIGID	Typical
73	M108	N188	N187			Handrail Kit	Beam	Pipe	A53 Gr.B	Typical
74	M109	N185	N186			RIGID	None	None	RIGID	Typical
75	M110	N189	N190			RIGID	None	None	RIGID	Typical
76	M111	N195	N194			Handrail Kit	Beam	Pipe	A53 Gr.B	Typical
77	M112	N192	N193			RIGID	None	None	RIGID	Typical
78	M113	N196	N197			RIGID	None	None	RIGID	Typical
79	M114	N187	N195			RIGID	None	None	RIGID	Typical
80	M115	N194	N180			RIGID	None	None	RIGID	Typical
81	M116	N188	N179			RIGID	None	None	RIGID	Typical
82	M119	N205	N204			RIGID	None	None	RIGID	Typical
83	M120	N207	N206			RIGID	None	None	RIGID	Typical
84	M121	N209	N208			RIGID	None	None	RIGID	Typical
85	M122	N210	N211			RIGID	None	None	RIGID	Typical
86	M123	N213	N214			RIGID	None	None	RIGID	Typical
87	M124	N215	N212			RIGID	None	None	RIGID	Typical
88	M125	N216	N217			RIGID	None	None	RIGID	Typical
89	M126	N218	N219			RIGID	None	None	RIGID	Typical
90	M127	N221	N222			RIGID	None	None	RIGID	Typical
91	M128	N223	N224			RIGID	None	None	RIGID	Typical
92	M131	N229	N228			RIGID	None	None	RIGID	Typical
93	M132	N231	N230			RIGID	None	None	RIGID	Typical
94	M133	N233	N232			RIGID	None	None	RIGID	Typical
95	M134	N235	N234			RIGID	None	None	RIGID	Typical
96	M135	N237	N236			RIGID	None	None	RIGID	Typical
97	M136	N239	N238			RIGID	None	None	RIGID	Typical
98	M119A	N210A	N211A			RIGID	None	None	RIGID	Typical
99	M120A	N213A	N214A			RIGID	None	None	RIGID	Typical
100	M121A	N212A	N226A			RIGID	None	None	RIGID	Typical
101	M122A	N216A	N217A			RIGID	None	None	RIGID	Typical
102	M123A	N219A	N220			RIGID	None	None	RIGID	Typical
103	M124A	N221A	N222A			RIGID	None	None	RIGID	Typical
104	M125A	N224A	N225			RIGID	None	None	RIGID	Typical
105	M127A	N229A	N230A			RIGID	None	None	RIGID	Typical
106	M128A	N231A	N232A			RIGID	None	None	RIGID	Typical
107	M129A	N233A	N234A			RIGID	None	None	RIGID	Typical
108	M130A	N215A	N235A			RIGID	None	None	RIGID	Typical
109	M131A	N236A	N237A			RIGID	None	None	RIGID	Typical
110	M132A	N238A	N239A			RIGID	None	None	RIGID	Typical
111	M119B	N219B	N221B			Bracing	VBrace	Tube	A500 Gr.B Rect	Typical
112	M121B	N40	N221B			Bracing	VBrace	Tube	A500 Gr.B Rect	Typical
113	M120B	N219C	N221B			Bracing	VBrace	Tube	A500 Gr.B Rect	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design Rul...
114	M121C	N220A	N36			Bracing	VBrace	Tube	A500 Gr.B Rect	Typical
115	MP10	N226B	N227B			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
116	M124B	N230B	N229B			RIGID	None	None	RIGID	Typical
117	M125B	N232B	N231B			RIGID	None	None	RIGID	Typical
118	M126B	N233B	N234B			RIGID	None	None	RIGID	Typical
119	MP6	N235B	N236B			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
120	M128B	N239B	N238B			RIGID	None	None	RIGID	Typical
121	M129B	N241	N240			RIGID	None	None	RIGID	Typical
122	M130B	N242	N243			RIGID	None	None	RIGID	Typical

Material Takeoff

	Material	Size	Pieces	Length[in]	Weight[LB]
1	General				
2	RIGID		57	185.2	0
3	Total General		57	185.2	0
4					
5	Hot Rolled Steel				
6	A500 Gr.B Rect	HSS1.5x1.5x4	6	756	288.203
7	A500 Gr.B Rect	HSS1x1x2	41	2294.5	362.485
8	A53 Gr.B	PIPE_2.0	18	1680	485.917
9	Total HR Steel		65	4730.5	1136.606

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(...
1	Self Weight	DL		-1			48		12	
2	Wind Load AZI 0	WLZ					96			
3	Wind Load AZI 30	None					96			
4	Wind Load AZI 60	None					96			
5	Wind Load AZI 90	WLX					96			
6	Wind Load AZI 120	None					96			
7	Wind Load AZI 150	None					96			
8	Wind Load AZI 180	None					96			
9	Wind Load AZI 210	None					96			
10	Wind Load AZI 240	None					96			
11	Wind Load AZI 270	None					96			
12	Wind Load AZI 300	None					96			
13	Wind Load AZI 330	None					96			
14	Distr. Wind Load Z	WLZ						122		
15	Distr. Wind Load X	WLX						122		
16	Ice Weight	OL1					48	122	12	
17	Ice Wind Load AZI 0	OL2					96			
18	Ice Wind Load AZI 30	None					96			
19	Ice Wind Load AZI 60	None					96			
20	Ice Wind Load AZI 90	OL3					96			
21	Ice Wind Load AZI 120	None					96			
22	Ice Wind Load AZI 150	None					96			
23	Ice Wind Load AZI 180	None					96			
24	Ice Wind Load AZI 210	None					96			
25	Ice Wind Load AZI 240	None					96			
26	Ice Wind Load AZI 270	None					96			
27	Ice Wind Load AZI 300	None					96			
28	Ice Wind Load AZI 330	None					96			
29	Distr. Ice Wind Load Z	OL2						122		
30	Distr. Ice Wind Load X	OL3						122		

Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(...
31	Seismic Load Z	ELZ			-.108		48			
32	Seismic Load X	ELX	-.108				48			
33	Service Live Loads	LL				6				
34	Maintenance Load 1	LL				1				
35	Maintenance Load 2	LL				1				
36	Maintenance Load 3	LL				1				
37	Maintenance Load 4	LL				1				
38	Maintenance Load 5	LL				1				
39	Maintenance Load 6	LL				1				
40	Maintenance Load 7	LL				1				
41	Maintenance Load 8	LL				1				
42	Maintenance Load 9	LL				1				
43	Maintenance Load 10	LL				1				
44	Maintenance Load 11	LL				1				
45	Maintenance Load 12	LL				1				
46	BLC 1 Transient Area Loads	None						120		
47	BLC 16 Transient Area Loads	None						120		

Load Combinations

	Description	S...	PD...	S...	B...	Fact...	BLC	Fact...	BLC	Fact...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
1	1.4DL	Y...	Y		1	1.4																				
2	1.2DL + 1WL AZI 0	Y...	Y		1	1.2	2	1	14	1	15															
3	1.2DL + 1WL AZI 30	Y...	Y		1	1.2	3	1	14	.866	15	.5														
4	1.2DL + 1WL AZI 60	Y...	Y		1	1.2	4	1	14	.5	15	.866														
5	1.2DL + 1WL AZI 90	Y...	Y		1	1.2	5	1	14		15	1														
6	1.2DL + 1WL AZI 120	Y...	Y		1	1.2	6	1	14	-.5	15	.866														
7	1.2DL + 1WL AZI 150	Y...	Y		1	1.2	7	1	14	-.866	15	.5														
8	1.2DL + 1WL AZI 180	Y...	Y		1	1.2	8	1	14	-1	15															
9	1.2DL + 1WL AZI 210	Y...	Y		1	1.2	9	1	14	-.866	15	-.5														
10	1.2DL + 1WL AZI 240	Y...	Y		1	1.2	10	1	14	-.5	15	-.8...														
11	1.2DL + 1WL AZI 270	Y...	Y		1	1.2	11	1	14		15	-1														
12	1.2DL + 1WL AZI 300	Y...	Y		1	1.2	12	1	14	.5	15	-.8...														
13	1.2DL + 1WL AZI 330	Y...	Y		1	1.2	13	1	14	.866	15	-.5														
14	0.9DL + 1WL AZI 0	Y...	Y		1	.9	2	1	14	1	15															
15	0.9DL + 1WL AZI 30	Y...	Y		1	.9	3	1	14	.866	15	.5														
16	0.9DL + 1WL AZI 60	Y...	Y		1	.9	4	1	14	.5	15	.866														
17	0.9DL + 1WL AZI 90	Y...	Y		1	.9	5	1	14		15	1														
18	0.9DL + 1WL AZI 120	Y...	Y		1	.9	6	1	14	-.5	15	.866														
19	0.9DL + 1WL AZI 150	Y...	Y		1	.9	7	1	14	-.866	15	.5														
20	0.9DL + 1WL AZI 180	Y...	Y		1	.9	8	1	14	-1	15															
21	0.9DL + 1WL AZI 210	Y...	Y		1	.9	9	1	14	-.866	15	-.5														
22	0.9DL + 1WL AZI 240	Y...	Y		1	.9	10	1	14	-.5	15	-.8...														
23	0.9DL + 1WL AZI 270	Y...	Y		1	.9	11	1	14		15	-1														
24	0.9DL + 1WL AZI 300	Y...	Y		1	.9	12	1	14	.5	15	-.8...														
25	0.9DL + 1WL AZI 330	Y...	Y		1	.9	13	1	14	.866	15	-.5														
26	1.2D + 1.0Di	Y...	Y		1	1.2	16	1																		
27	1.2D + 1.0Di +1.0Wi AZI 0	Y...	Y		1	1.2	16	1	17	1	29	1	30													
28	1.2D + 1.0Di +1.0Wi AZI 30	Y...	Y		1	1.2	16	1	18	1	29	.866	30	.5												
29	1.2D + 1.0Di +1.0Wi AZI 60	Y...	Y		1	1.2	16	1	19	1	29	.5	30	.866												
30	1.2D + 1.0Di +1.0Wi AZI 90	Y...	Y		1	1.2	16	1	20	1	29		30	1												
31	1.2D + 1.0Di +1.0Wi AZI 120	Y...	Y		1	1.2	16	1	21	1	29	-.5	30	.866												
32	1.2D + 1.0Di +1.0Wi AZI 150	Y...	Y		1	1.2	16	1	22	1	29	-.8...	30	.5												
33	1.2D + 1.0Di +1.0Wi AZI 180	Y...	Y		1	1.2	16	1	23	1	29	-1	30													
34	1.2D + 1.0Di +1.0Wi AZI 210	Y...	Y		1	1.2	16	1	24	1	29	-.8...	30	-.5												
35	1.2D + 1.0Di +1.0Wi AZI 240	Y...	Y		1	1.2	16	1	25	1	29	-.5	30	-.8...												

Load Combinations (Continued)

	Description	S...	PD...	S...	B...	Fact...	BLC	Fact...	BLC	Fact...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
36	1.2D + 1.0Di +1.0Wi AZI 270	Y...	Y		1	1.2	16	1	26	1	29		30	-1										
37	1.2D + 1.0Di +1.0Wi AZI 300	Y...	Y		1	1.2	16	1	27	1	29	.5	30	-.8...										
38	1.2D + 1.0Di +1.0Wi AZI 330	Y...	Y		1	1.2	16	1	28	1	29	.866	30	-.5										
39	(1.2 + 0.2Sds)DL + 1.0E AZI 0	Y...	Y		1	1.243	31	1	32															
40	(1.2 + 0.2Sds)DL + 1.0E AZI 30	Y...	Y		1	1.243	31	.866	32	.5														
41	(1.2 + 0.2Sds)DL + 1.0E AZI 60	Y...	Y		1	1.243	31	.5	32	.866														
42	(1.2 + 0.2Sds)DL + 1.0E AZI 90	Y...	Y		1	1.243	31		32	1														
43	(1.2 + 0.2Sds)DL + 1.0E AZI 120	Y...	Y		1	1.243	31	-.5	32	.866														
44	(1.2 + 0.2Sds)DL + 1.0E AZI 150	Y...	Y		1	1.243	31	-.866	32	.5														
45	(1.2 + 0.2Sds)DL + 1.0E AZI 180	Y...	Y		1	1.243	31	-1	32															
46	(1.2 + 0.2Sds)DL + 1.0E AZI 210	Y...	Y		1	1.243	31	-.866	32	-.5														
47	(1.2 + 0.2Sds)DL + 1.0E AZI 240	Y...	Y		1	1.243	31	-.5	32	-.866														
48	(1.2 + 0.2Sds)DL + 1.0E AZI 270	Y...	Y		1	1.243	31		32	-1														
49	(1.2 + 0.2Sds)DL + 1.0E AZI 300	Y...	Y		1	1.243	31	.5	32	-.866														
50	(1.2 + 0.2Sds)DL + 1.0E AZI 330	Y...	Y		1	1.243	31	.866	32	-.5														
51	(0.9 - 0.2Sds)DL + 1.0E AZI 0	Y...	Y		1	.857	31	1	32															
52	(0.9 - 0.2Sds)DL + 1.0E AZI 30	Y...	Y		1	.857	31	.866	32	.5														
53	(0.9 - 0.2Sds)DL + 1.0E AZI 60	Y...	Y		1	.857	31	.5	32	.866														
54	(0.9 - 0.2Sds)DL + 1.0E AZI 90	Y...	Y		1	.857	31		32	1														
55	(0.9 - 0.2Sds)DL + 1.0E AZI 120	Y...	Y		1	.857	31	-.5	32	.866														
56	(0.9 - 0.2Sds)DL + 1.0E AZI 150	Y...	Y		1	.857	31	-.866	32	.5														
57	(0.9 - 0.2Sds)DL + 1.0E AZI 180	Y...	Y		1	.857	31	-1	32															
58	(0.9 - 0.2Sds)DL + 1.0E AZI 210	Y...	Y		1	.857	31	-.866	32	-.5														
59	(0.9 - 0.2Sds)DL + 1.0E AZI 240	Y...	Y		1	.857	31	-.5	32	-.866														
60	(0.9 - 0.2Sds)DL + 1.0E AZI 270	Y...	Y		1	.857	31		32	-1														
61	(0.9 - 0.2Sds)DL + 1.0E AZI 300	Y...	Y		1	.857	31	.5	32	-.866														
62	(0.9 - 0.2Sds)DL + 1.0E AZI 330	Y...	Y		1	.857	31	.866	32	-.5														
63	1.0DL + 1.5LL + 1.0SWL (60 m...	Y...	Y		1	1	2	.268	14	.268	15		33	1.5										
64	1.0DL + 1.5LL + 1.0SWL (60 m...	Y...	Y		1	1	3	.268	14	.232	15	.134	33	1.5										
65	1.0DL + 1.5LL + 1.0SWL (60 m...	Y...	Y		1	1	4	.268	14	.134	15	.232	33	1.5										
66	1.0DL + 1.5LL + 1.0SWL (60 m...	Y...	Y		1	1	5	.268	14		15	.268	33	1.5										
67	1.0DL + 1.5LL + 1.0SWL (60 m...	Y...	Y		1	1	6	.268	14	-.134	15	.232	33	1.5										
68	1.0DL + 1.5LL + 1.0SWL (60 m...	Y...	Y		1	1	7	.268	14	-.232	15	.134	33	1.5										
69	1.0DL + 1.5LL + 1.0SWL (60 m...	Y...	Y		1	1	8	.268	14	-.268	15		33	1.5										
70	1.0DL + 1.5LL + 1.0SWL (60 m...	Y...	Y		1	1	9	.268	14	-.232	15	-.1...	33	1.5										
71	1.0DL + 1.5LL + 1.0SWL (60 m...	Y...	Y		1	1	10	.268	14	-.134	15	-.2...	33	1.5										
72	1.0DL + 1.5LL + 1.0SWL (60 m...	Y...	Y		1	1	11	.268	14		15	-.2...	33	1.5										
73	1.0DL + 1.5LL + 1.0SWL (60 m...	Y...	Y		1	1	12	.268	14	.134	15	-.2...	33	1.5										
74	1.0DL + 1.5LL + 1.0SWL (60 m...	Y...	Y		1	1	13	.268	14	.232	15	-.1...	33	1.5										
75	1.2DL + 1.5LL	Y...	Y		1	1.2	33	1.5																
76	1.2DL + 1.5LM-MP1 + 1SWL (3...	Y...	Y		1	1.2	34	1.5	2	.067	14	.067	15											
77	1.2DL + 1.5LM-MP1 + 1SWL (3...	Y...	Y		1	1.2	34	1.5	3	.067	14	.058	15	.033										
78	1.2DL + 1.5LM-MP1 + 1SWL (3...	Y...	Y		1	1.2	34	1.5	4	.067	14	.033	15	.058										
79	1.2DL + 1.5LM-MP1 + 1SWL (3...	Y...	Y		1	1.2	34	1.5	5	.067	14		15	.067										
80	1.2DL + 1.5LM-MP1 + 1SWL (3...	Y...	Y		1	1.2	34	1.5	6	.067	14	-.0...	15	.058										
81	1.2DL + 1.5LM-MP1 + 1SWL (3...	Y...	Y		1	1.2	34	1.5	7	.067	14	-.0...	15	.033										
82	1.2DL + 1.5LM-MP1 + 1SWL (3...	Y...	Y		1	1.2	34	1.5	8	.067	14	-.0...	15											
83	1.2DL + 1.5LM-MP1 + 1SWL (3...	Y...	Y		1	1.2	34	1.5	9	.067	14	-.0...	15	-.0...										
84	1.2DL + 1.5LM-MP1 + 1SWL (3...	Y...	Y		1	1.2	34	1.5	10	.067	14	-.0...	15	-.0...										
85	1.2DL + 1.5LM-MP1 + 1SWL (3...	Y...	Y		1	1.2	34	1.5	11	.067	14		15	-.0...										
86	1.2DL + 1.5LM-MP1 + 1SWL (3...	Y...	Y		1	1.2	34	1.5	12	.067	14	.033	15	-.0...										
87	1.2DL + 1.5LM-MP1 + 1SWL (3...	Y...	Y		1	1.2	34	1.5	13	.067	14	.058	15	-.0...										
88	1.2DL + 1.5LM-MP2 + 1SWL (3...	Y...	Y		1	1.2	35	1.5	2	.067	14	.067	15											
89	1.2DL + 1.5LM-MP2 + 1SWL (3...	Y...	Y		1	1.2	35	1.5	3	.067	14	.058	15	.033										
90	1.2DL + 1.5LM-MP2 + 1SWL (3...	Y...	Y		1	1.2	35	1.5	4	.067	14	.033	15	.058										
91	1.2DL + 1.5LM-MP2 + 1SWL (3...	Y...	Y		1	1.2	35	1.5	5	.067	14		15	.067										
92	1.2DL + 1.5LM-MP2 + 1SWL (3...	Y...	Y		1	1.2	35	1.5	6	.067	14	-.0...	15	.058										

Load Combinations (Continued)

	Description	S...	PD...	S...	B...	Fact...	BLC	Fact...	BLC	Fact...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
93	1.2DL + 1.5LM-MP2 + 1SWL (3...	Y...	Y		1	1.2	35	1.5	7	.067	14	-.0...	15	.033										
94	1.2DL + 1.5LM-MP2 + 1SWL (3...	Y...	Y		1	1.2	35	1.5	8	.067	14	-.0...	15											
95	1.2DL + 1.5LM-MP2 + 1SWL (3...	Y...	Y		1	1.2	35	1.5	9	.067	14	-.0...	15	-.0...										
96	1.2DL + 1.5LM-MP2 + 1SWL (3...	Y...	Y		1	1.2	35	1.5	10	.067	14	-.0...	15	-.0...										
97	1.2DL + 1.5LM-MP2 + 1SWL (3...	Y...	Y		1	1.2	35	1.5	11	.067	14		15	-.0...										
98	1.2DL + 1.5LM-MP2 + 1SWL (3...	Y...	Y		1	1.2	35	1.5	12	.067	14	.033	15	-.0...										
99	1.2DL + 1.5LM-MP2 + 1SWL (3...	Y...	Y		1	1.2	35	1.5	13	.067	14	.058	15	-.0...										
100	1.2DL + 1.5LM-MP3 + 1SWL (3...	Y...	Y		1	1.2	36	1.5	2	.067	14	.067	15											
101	1.2DL + 1.5LM-MP3 + 1SWL (3...	Y...	Y		1	1.2	36	1.5	3	.067	14	.058	15	.033										
102	1.2DL + 1.5LM-MP3 + 1SWL (3...	Y...	Y		1	1.2	36	1.5	4	.067	14	.033	15	.058										
103	1.2DL + 1.5LM-MP3 + 1SWL (3...	Y...	Y		1	1.2	36	1.5	5	.067	14		15	.067										
104	1.2DL + 1.5LM-MP3 + 1SWL (3...	Y...	Y		1	1.2	36	1.5	6	.067	14	-.0...	15	.058										
105	1.2DL + 1.5LM-MP3 + 1SWL (3...	Y...	Y		1	1.2	36	1.5	7	.067	14	-.0...	15	.033										
106	1.2DL + 1.5LM-MP3 + 1SWL (3...	Y...	Y		1	1.2	36	1.5	8	.067	14	-.0...	15											
107	1.2DL + 1.5LM-MP3 + 1SWL (3...	Y...	Y		1	1.2	36	1.5	9	.067	14	-.0...	15	-.0...										
108	1.2DL + 1.5LM-MP3 + 1SWL (3...	Y...	Y		1	1.2	36	1.5	10	.067	14	-.0...	15	-.0...										
109	1.2DL + 1.5LM-MP3 + 1SWL (3...	Y...	Y		1	1.2	36	1.5	11	.067	14		15	-.0...										
110	1.2DL + 1.5LM-MP3 + 1SWL (3...	Y...	Y		1	1.2	36	1.5	12	.067	14	.033	15	-.0...										
111	1.2DL + 1.5LM-MP3 + 1SWL (3...	Y...	Y		1	1.2	36	1.5	13	.067	14	.058	15	-.0...										
112	1.2DL + 1.5LM-MP4 + 1SWL (3...	Y...	Y		1	1.2	37	1.5	2	.067	14	.067	15											
113	1.2DL + 1.5LM-MP4 + 1SWL (3...	Y...	Y		1	1.2	37	1.5	3	.067	14	.058	15	.033										
114	1.2DL + 1.5LM-MP4 + 1SWL (3...	Y...	Y		1	1.2	37	1.5	4	.067	14	.033	15	.058										
115	1.2DL + 1.5LM-MP4 + 1SWL (3...	Y...	Y		1	1.2	37	1.5	5	.067	14		15	.067										
116	1.2DL + 1.5LM-MP4 + 1SWL (3...	Y...	Y		1	1.2	37	1.5	6	.067	14	-.0...	15	.058										
117	1.2DL + 1.5LM-MP4 + 1SWL (3...	Y...	Y		1	1.2	37	1.5	7	.067	14	-.0...	15	.033										
118	1.2DL + 1.5LM-MP4 + 1SWL (3...	Y...	Y		1	1.2	37	1.5	8	.067	14	-.0...	15											
119	1.2DL + 1.5LM-MP4 + 1SWL (3...	Y...	Y		1	1.2	37	1.5	9	.067	14	-.0...	15	-.0...										
120	1.2DL + 1.5LM-MP4 + 1SWL (3...	Y...	Y		1	1.2	37	1.5	10	.067	14	-.0...	15	-.0...										
121	1.2DL + 1.5LM-MP4 + 1SWL (3...	Y...	Y		1	1.2	37	1.5	11	.067	14		15	-.0...										
122	1.2DL + 1.5LM-MP4 + 1SWL (3...	Y...	Y		1	1.2	37	1.5	12	.067	14	.033	15	-.0...										
123	1.2DL + 1.5LM-MP4 + 1SWL (3...	Y...	Y		1	1.2	37	1.5	13	.067	14	.058	15	-.0...										
124	1.2DL + 1.5LM-MP5 + 1SWL (3...	Y...	Y		1	1.2	38	1.5	2	.067	14	.067	15											
125	1.2DL + 1.5LM-MP5 + 1SWL (3...	Y...	Y		1	1.2	38	1.5	3	.067	14	.058	15	.033										
126	1.2DL + 1.5LM-MP5 + 1SWL (3...	Y...	Y		1	1.2	38	1.5	4	.067	14	.033	15	.058										
127	1.2DL + 1.5LM-MP5 + 1SWL (3...	Y...	Y		1	1.2	38	1.5	5	.067	14		15	.067										
128	1.2DL + 1.5LM-MP5 + 1SWL (3...	Y...	Y		1	1.2	38	1.5	6	.067	14	-.0...	15	.058										
129	1.2DL + 1.5LM-MP5 + 1SWL (3...	Y...	Y		1	1.2	38	1.5	7	.067	14	-.0...	15	.033										
130	1.2DL + 1.5LM-MP5 + 1SWL (3...	Y...	Y		1	1.2	38	1.5	8	.067	14	-.0...	15											
131	1.2DL + 1.5LM-MP5 + 1SWL (3...	Y...	Y		1	1.2	38	1.5	9	.067	14	-.0...	15	-.0...										
132	1.2DL + 1.5LM-MP5 + 1SWL (3...	Y...	Y		1	1.2	38	1.5	10	.067	14	-.0...	15	-.0...										
133	1.2DL + 1.5LM-MP5 + 1SWL (3...	Y...	Y		1	1.2	38	1.5	11	.067	14		15	-.0...										
134	1.2DL + 1.5LM-MP5 + 1SWL (3...	Y...	Y		1	1.2	38	1.5	12	.067	14	.033	15	-.0...										
135	1.2DL + 1.5LM-MP5 + 1SWL (3...	Y...	Y		1	1.2	38	1.5	13	.067	14	.058	15	-.0...										
136	1.2DL + 1.5LM-MP6 + 1SWL (3...	Y...	Y		1	1.2	39	1.5	2	.067	14	.067	15											
137	1.2DL + 1.5LM-MP6 + 1SWL (3...	Y...	Y		1	1.2	39	1.5	3	.067	14	.058	15	.033										
138	1.2DL + 1.5LM-MP6 + 1SWL (3...	Y...	Y		1	1.2	39	1.5	4	.067	14	.033	15	.058										
139	1.2DL + 1.5LM-MP6 + 1SWL (3...	Y...	Y		1	1.2	39	1.5	5	.067	14		15	.067										
140	1.2DL + 1.5LM-MP6 + 1SWL (3...	Y...	Y		1	1.2	39	1.5	6	.067	14	-.0...	15	.058										
141	1.2DL + 1.5LM-MP6 + 1SWL (3...	Y...	Y		1	1.2	39	1.5	7	.067	14	-.0...	15	.033										
142	1.2DL + 1.5LM-MP6 + 1SWL (3...	Y...	Y		1	1.2	39	1.5	8	.067	14	-.0...	15											
143	1.2DL + 1.5LM-MP6 + 1SWL (3...	Y...	Y		1	1.2	39	1.5	9	.067	14	-.0...	15	-.0...										
144	1.2DL + 1.5LM-MP6 + 1SWL (3...	Y...	Y		1	1.2	39	1.5	10	.067	14	-.0...	15	-.0...										
145	1.2DL + 1.5LM-MP6 + 1SWL (3...	Y...	Y		1	1.2	39	1.5	11	.067	14		15	-.0...										
146	1.2DL + 1.5LM-MP6 + 1SWL (3...	Y...	Y		1	1.2	39	1.5	12	.067	14	.033	15	-.0...										
147	1.2DL + 1.5LM-MP6 + 1SWL (3...	Y...	Y		1	1.2	39	1.5	13	.067	14	.058	15	-.0...										
148	1.2DL + 1.5LM-MP7 + 1SWL (3...	Y...	Y		1	1.2	40	1.5	2	.067	14	.067	15											
149	1.2DL + 1.5LM-MP7 + 1SWL (3...	Y...	Y		1	1.2	40	1.5	3	.067	14	.058	15	.033										

Load Combinations (Continued)

	Description	S...	PD...	S...	B...	Fact...	BLC	Fact...	BLC	Fact...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
150	1.2DL + 1.5LM-MP7 + 1SWL (3...	Y...	Y		1	1.2	40	1.5	4	.067	14	.033	15	.058										
151	1.2DL + 1.5LM-MP7 + 1SWL (3...	Y...	Y		1	1.2	40	1.5	5	.067	14		15	.067										
152	1.2DL + 1.5LM-MP7 + 1SWL (3...	Y...	Y		1	1.2	40	1.5	6	.067	14	-.0...	15	.058										
153	1.2DL + 1.5LM-MP7 + 1SWL (3...	Y...	Y		1	1.2	40	1.5	7	.067	14	-.0...	15	.033										
154	1.2DL + 1.5LM-MP7 + 1SWL (3...	Y...	Y		1	1.2	40	1.5	8	.067	14	-.0...	15											
155	1.2DL + 1.5LM-MP7 + 1SWL (3...	Y...	Y		1	1.2	40	1.5	9	.067	14	-.0...	15	-.0...										
156	1.2DL + 1.5LM-MP7 + 1SWL (3...	Y...	Y		1	1.2	40	1.5	10	.067	14	-.0...	15	-.0...										
157	1.2DL + 1.5LM-MP7 + 1SWL (3...	Y...	Y		1	1.2	40	1.5	11	.067	14		15	-.0...										
158	1.2DL + 1.5LM-MP7 + 1SWL (3...	Y...	Y		1	1.2	40	1.5	12	.067	14	.033	15	-.0...										
159	1.2DL + 1.5LM-MP7 + 1SWL (3...	Y...	Y		1	1.2	40	1.5	13	.067	14	.058	15	-.0...										
160	1.2DL + 1.5LM-MP8 + 1SWL (3...	Y...	Y		1	1.2	41	1.5	2	.067	14	.067	15											
161	1.2DL + 1.5LM-MP8 + 1SWL (3...	Y...	Y		1	1.2	41	1.5	3	.067	14	.058	15	.033										
162	1.2DL + 1.5LM-MP8 + 1SWL (3...	Y...	Y		1	1.2	41	1.5	4	.067	14	.033	15	.058										
163	1.2DL + 1.5LM-MP8 + 1SWL (3...	Y...	Y		1	1.2	41	1.5	5	.067	14		15	.067										
164	1.2DL + 1.5LM-MP8 + 1SWL (3...	Y...	Y		1	1.2	41	1.5	6	.067	14	-.0...	15	.058										
165	1.2DL + 1.5LM-MP8 + 1SWL (3...	Y...	Y		1	1.2	41	1.5	7	.067	14	-.0...	15	.033										
166	1.2DL + 1.5LM-MP8 + 1SWL (3...	Y...	Y		1	1.2	41	1.5	8	.067	14	-.0...	15											
167	1.2DL + 1.5LM-MP8 + 1SWL (3...	Y...	Y		1	1.2	41	1.5	9	.067	14	-.0...	15	-.0...										
168	1.2DL + 1.5LM-MP8 + 1SWL (3...	Y...	Y		1	1.2	41	1.5	10	.067	14	-.0...	15	-.0...										
169	1.2DL + 1.5LM-MP8 + 1SWL (3...	Y...	Y		1	1.2	41	1.5	11	.067	14		15	-.0...										
170	1.2DL + 1.5LM-MP8 + 1SWL (3...	Y...	Y		1	1.2	41	1.5	12	.067	14	.033	15	-.0...										
171	1.2DL + 1.5LM-MP8 + 1SWL (3...	Y...	Y		1	1.2	41	1.5	13	.067	14	.058	15	-.0...										
172	1.2DL + 1.5LM-MP9 + 1SWL (3...	Y...	Y		1	1.2	42	1.5	2	.067	14	.067	15											
173	1.2DL + 1.5LM-MP9 + 1SWL (3...	Y...	Y		1	1.2	42	1.5	3	.067	14	.058	15	.033										
174	1.2DL + 1.5LM-MP9 + 1SWL (3...	Y...	Y		1	1.2	42	1.5	4	.067	14	.033	15	.058										
175	1.2DL + 1.5LM-MP9 + 1SWL (3...	Y...	Y		1	1.2	42	1.5	5	.067	14		15	.067										
176	1.2DL + 1.5LM-MP9 + 1SWL (3...	Y...	Y		1	1.2	42	1.5	6	.067	14	-.0...	15	.058										
177	1.2DL + 1.5LM-MP9 + 1SWL (3...	Y...	Y		1	1.2	42	1.5	7	.067	14	-.0...	15	.033										
178	1.2DL + 1.5LM-MP9 + 1SWL (3...	Y...	Y		1	1.2	42	1.5	8	.067	14	-.0...	15											
179	1.2DL + 1.5LM-MP9 + 1SWL (3...	Y...	Y		1	1.2	42	1.5	9	.067	14	-.0...	15	-.0...										
180	1.2DL + 1.5LM-MP9 + 1SWL (3...	Y...	Y		1	1.2	42	1.5	10	.067	14	-.0...	15	-.0...										
181	1.2DL + 1.5LM-MP9 + 1SWL (3...	Y...	Y		1	1.2	42	1.5	11	.067	14		15	-.0...										
182	1.2DL + 1.5LM-MP9 + 1SWL (3...	Y...	Y		1	1.2	42	1.5	12	.067	14	.033	15	-.0...										
183	1.2DL + 1.5LM-MP9 + 1SWL (3...	Y...	Y		1	1.2	42	1.5	13	.067	14	.058	15	-.0...										
184	1.2DL + 1.5LM-MP10 + 1SWL (...	Y...	Y		1	1.2	43	1.5	2	.067	14	.067	15											
185	1.2DL + 1.5LM-MP10 + 1SWL (...	Y...	Y		1	1.2	43	1.5	3	.067	14	.058	15	.033										
186	1.2DL + 1.5LM-MP10 + 1SWL (...	Y...	Y		1	1.2	43	1.5	4	.067	14	.033	15	.058										
187	1.2DL + 1.5LM-MP10 + 1SWL (...	Y...	Y		1	1.2	43	1.5	5	.067	14		15	.067										
188	1.2DL + 1.5LM-MP10 + 1SWL (...	Y...	Y		1	1.2	43	1.5	6	.067	14	-.0...	15	.058										
189	1.2DL + 1.5LM-MP10 + 1SWL (...	Y...	Y		1	1.2	43	1.5	7	.067	14	-.0...	15	.033										
190	1.2DL + 1.5LM-MP10 + 1SWL (...	Y...	Y		1	1.2	43	1.5	8	.067	14	-.0...	15											
191	1.2DL + 1.5LM-MP10 + 1SWL (...	Y...	Y		1	1.2	43	1.5	9	.067	14	-.0...	15	-.0...										
192	1.2DL + 1.5LM-MP10 + 1SWL (...	Y...	Y		1	1.2	43	1.5	10	.067	14	-.0...	15	-.0...										
193	1.2DL + 1.5LM-MP10 + 1SWL (...	Y...	Y		1	1.2	43	1.5	11	.067	14		15	-.0...										
194	1.2DL + 1.5LM-MP10 + 1SWL (...	Y...	Y		1	1.2	43	1.5	12	.067	14	.033	15	-.0...										
195	1.2DL + 1.5LM-MP10 + 1SWL (...	Y...	Y		1	1.2	43	1.5	13	.067	14	.058	15	-.0...										
196	1.2DL + 1.5LM-MP11 + 1SWL (...	Y...	Y		1	1.2	44	1.5	2	.067	14	.067	15											
197	1.2DL + 1.5LM-MP11 + 1SWL (...	Y...	Y		1	1.2	44	1.5	3	.067	14	.058	15	.033										
198	1.2DL + 1.5LM-MP11 + 1SWL (...	Y...	Y		1	1.2	44	1.5	4	.067	14	.033	15	.058										
199	1.2DL + 1.5LM-MP11 + 1SWL (...	Y...	Y		1	1.2	44	1.5	5	.067	14		15	.067										
200	1.2DL + 1.5LM-MP11 + 1SWL (...	Y...	Y		1	1.2	44	1.5	6	.067	14	-.0...	15	.058										
201	1.2DL + 1.5LM-MP11 + 1SWL (...	Y...	Y		1	1.2	44	1.5	7	.067	14	-.0...	15	.033										
202	1.2DL + 1.5LM-MP11 + 1SWL (...	Y...	Y		1	1.2	44	1.5	8	.067	14	-.0...	15											
203	1.2DL + 1.5LM-MP11 + 1SWL (...	Y...	Y		1	1.2	44	1.5	9	.067	14	-.0...	15	-.0...										
204	1.2DL + 1.5LM-MP11 + 1SWL (...	Y...	Y		1	1.2	44	1.5	10	.067	14	-.0...	15	-.0...										
205	1.2DL + 1.5LM-MP11 + 1SWL (...	Y...	Y		1	1.2	44	1.5	11	.067	14		15	-.0...										
206	1.2DL + 1.5LM-MP11 + 1SWL (...	Y...	Y		1	1.2	44	1.5	12	.067	14	.033	15	-.0...										

Load Combinations (Continued)

	Description	S...	PD...	S...	B...	Fact...	BLC	Fact...	BLC	Fact...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
207	1.2DL + 1.5LM-MP11 + 1SWL (...	Y...	Y		1	1.2	45	1.5	13	.067	14	.058	15	-.0...										
208	1.2DL + 1.5LM-MP12 + 1SWL (...	Y...	Y		1	1.2	45	1.5	2	.067	14	.067	15											
209	1.2DL + 1.5LM-MP12 + 1SWL (...	Y...	Y		1	1.2	45	1.5	3	.067	14	.058	15	.033										
210	1.2DL + 1.5LM-MP12 + 1SWL (...	Y...	Y		1	1.2	45	1.5	4	.067	14	.033	15	.058										
211	1.2DL + 1.5LM-MP12 + 1SWL (...	Y...	Y		1	1.2	45	1.5	5	.067	14		15	.067										
212	1.2DL + 1.5LM-MP12 + 1SWL (...	Y...	Y		1	1.2	45	1.5	6	.067	14	-.0...	15	.058										
213	1.2DL + 1.5LM-MP12 + 1SWL (...	Y...	Y		1	1.2	45	1.5	7	.067	14	-.0...	15	.033										
214	1.2DL + 1.5LM-MP12 + 1SWL (...	Y...	Y		1	1.2	45	1.5	8	.067	14	-.0...	15											
215	1.2DL + 1.5LM-MP12 + 1SWL (...	Y...	Y		1	1.2	45	1.5	9	.067	14	-.0...	15	-.0...										
216	1.2DL + 1.5LM-MP12 + 1SWL (...	Y...	Y		1	1.2	45	1.5	10	.067	14	-.0...	15	-.0...										
217	1.2DL + 1.5LM-MP12 + 1SWL (...	Y...	Y		1	1.2	45	1.5	11	.067	14		15	-.0...										
218	1.2DL + 1.5LM-MP12 + 1SWL (...	Y...	Y		1	1.2	45	1.5	12	.067	14	.033	15	-.0...										

Envelope Joint Reactions

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC
1	N120	max	696.958	19	50.375	37	121.719	24	8.842	25	368.047	24	-1.743	19
2		min	-1604.753	13	7.25	18	-184.361	18	-10.145	7	-361.691	18	-37.436	37
3	N121	max	212.261	25	51.001	33	708.617	24	33.752	34	367.91	24	9.081	25
4		min	-749.447	7	5.34	14	-1461.093	6	5.006	14	-361.512	18	-23.374	7
5	N31	max	193.281	15	49.484	38	895.216	36	9.207	19	360.233	24	5.125	20
6		min	-519.929	9	-6.177	19	-195.051	16	-31.31	13	-353.634	18	-19.283	27
7	N30	max	328.116	105	59.718	28	691.747	6	-5.877	22	359.808	24	20.345	38
8		min	-108.767	22	14.36	21	-480.517	24	-33.217	29	-354.76	18	-.361	18
9	N83	max	799.716	15	74.289	29	177.123	6	9.421	15	364.219	24	45.961	28
10		min	-838.145	9	19.513	21	-178.552	24	-9.954	9	-357.727	18	8.071	21
11	N82	max	619.754	10	61.016	33	505.624	17	37.016	32	364.396	24	21.216	34
12		min	-285.657	15	16.405	14	-1026.333	11	12.886	55	-356.893	18	-4.083	15
13	N86	max	914.32	18	1969.6	12	2037.278	12	102.233	12	482.431	24	83.455	6
14		min	-1585.102	12	-787.219	18	-1129.366	18	-81.638	18	-486.47	6	-73.908	24
15	N125	max	1314.668	5	2084.452	29	2234.109	3	83.79	5	579.447	12	84.399	18
16		min	-560.871	22	-367.587	22	-981.316	21	-63.296	23	-562.981	18	-99.845	12
17	N124	max	2417.671	4	2008.63	29	288.094	2	102.436	6	575.708	24	29.046	22
18		min	-1005.671	22	-308.291	22	-298.7	6	-103.147	24	-569.451	6	-53.646	4
19	N39	max	897.666	7	2191.659	7	754.815	25	57.649	18	124.581	12	70.083	24
20		min	-384.417	25	-889.185	25	-1813.693	7	-67.046	12	-120.106	18	-71.452	6
21	N38	max	1062.039	15	1589.39	9	1653.785	15	57.719	14	431.2	12	71.457	12
22		min	-1461.077	9	-840.237	15	-2206.457	9	-72.878	8	-413.692	18	-64.58	18
23	N87	max	1325.494	18	1272.737	12	174.758	6	94.869	12	501.881	24	34.089	12
24		min	-1677.8	12	-785.753	18	-241.219	24	-90.318	18	-501.786	6	-22.361	18
25	Totals:	max	5651.865	5	8643.363	29	5767.275	2						
26		min	-5651.835	11	2872.223	59	-5767.275	20						

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

	Member	Shape	Code Che...	Loc[in]	LC	Shear Ch...	Loc[in]	Dir	LC	phi*Pnc [lb]	phi*P...	phi*M...	phi*M.....		Eqn
1	M76	HSS1x1x2	.907	30	12	.225	40	y	12	19274.611	2144...	572.7	572.7	...	H1-1b
2	M73	HSS1x1x2	.853	30	4	.197	0	z	6	19274.611	2144...	572.7	572.7	...	H1-1b
3	M66	HSS1x1x2	.828	36.473	24	.074	36.473	z	6	10394.189	2144...	572.7	572.7	...	H1-1b
4	M64	HSS1x1x2	.760	36.473	12	.064	36.473	z	6	10394.189	2144...	572.7	572.7	...	H1-1b
5	M65	HSS1x1x2	.757	36.473	6	.070	36.473	z	12	10394.189	2144...	572.7	572.7	...	H1-1b
6	M74	HSS1x1x2	.756	10	7	.192	0	z	7	20880.648	2144...	572.7	572.7	...	H1-1b
7	M46	HSS1x1x2	.748	36.473	6	.063	0	z	6	10394.189	2144...	572.7	572.7	...	H1-1b
8	M67	HSS1x1x2	.747	36.473	6	.069	36.473	z	2	10394.189	2144...	572.7	572.7	...	H1-1b
9	M45	HSS1x1x2	.717	36.473	18	.068	36.473	z	12	10394.189	2144...	572.7	572.7	...	H1-1b
10	M20	HSS1x1x2	.717	36.473	12	.058	0	z	6	10394.189	2144...	572.7	572.7	...	H1-1b

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

	Member	Shape	Code Che...	Loc[in]	LC	Shear Ch...	Loc[in]	Dir	LC	phi*Pnc [lb]	phi*P...	phi*M...	phi*M.....		Eqn
11	M43	HSS1x1x2	.712	36.473	12	.059	0	z	3	10394.189	2144...	572.7	572.7	...	H1-1b
12	M19	HSS1x1x2	.686	36.473	6	.069	0	z	12	10394.189	2144...	572.7	572.7	...	H1-1b
13	M44	HSS1x1x2	.676	36.473	12	.058	0	z	9	10394.189	2144...	572.7	572.7	...	H1-1b
14	M24	HSS1x1x2	.614	36.473	3	.057	36.473	z	3	10394.189	2144...	572.7	572.7	...	H1-1b
15	M21	HSS1x1x2	.597	30	8	.157	40	z	14	19274.611	2144...	572.7	572.7	...	H1-1b
16	MP2	PIPE_2.0	.560	34	2	.097	34		8	14916.096	32130	1871....	1871....	...	H1-1b
17	M121C	HSS1x1x2	.533	31.545	8	.126	42.059	z	8	13377.398	2144...	572.7	572.7	...	H1-1b
18	M27	HSS1x1x2	.495	0	25	.084	54.132	z	12	4934.182	2144...	572.7	572.7	...	H1-1a
19	M47	HSS1x1x2	.494	0	18	.090	0	z	6	4934.182	2144...	572.7	572.7	...	H1-1a
20	M54	HSS1x1x2	.476	40.361	3	.197	53.814	z	3	9903.669	2144...	572.7	572.7	...	H1-1b
21	M53	HSS1x1x2	.472	13.454	2	.164	0	y	2	9903.669	2144...	572.7	572.7	...	H1-1b
22	M48	HSS1x1x2	.468	0	18	.086	54.132	z	12	4934.182	2144...	572.7	572.7	...	H1-1a
23	M75	HSS1x1x2	.465	30	5	.132	0	z	11	19274.611	2144...	572.7	572.7	...	H1-1b
24	MP10	PIPE_2.0	.440	34	12	.062	34		11	14916.096	32130	1871....	1871....	...	H1-1b
25	M26	HSS1x1x2	.435	0	15	.078	54.132	z	24	4934.182	2144...	572.7	572.7	...	H1-1a
26	MP6	PIPE_2.0	.430	34	4	.102	34		13	14916.096	32130	1871....	1871....	...	H1-1b
27	MP7	PIPE_2.0	.414	34	9	.113	56		4	14916.096	32130	1871....	1871....	...	H1-1b
28	M69	HSS1x1x2	.390	0	6	.105	0	z	12	4934.182	2144...	572.7	572.7	...	H1-1b
29	M32	HSS1x1x2	.370	13.454	11	.151	0	y	11	9903.669	2144...	572.7	572.7	...	H1-1b
30	M68	HSS1x1x2	.369	0	6	.098	0	z	6	4934.182	2144...	572.7	572.7	...	H1-1b
31	M120B	HSS1x1x2	.354	0	6	.116	0	y	12	13377.398	2144...	572.7	572.7	...	H1-1b
32	M33	HSS1x1x2	.352	40.361	18	.158	53.814	z	6	9903.669	2144...	572.7	572.7	...	H1-1b
33	MP5	PIPE_2.0	.349	56	4	.099	56		10	14916.096	32130	1871....	1871....	...	H1-1b
34	MP8	PIPE_2.0	.346	56	5	.098	56		10	14916.096	32130	1871....	1871....	...	H1-1b
35	M49	HSS1x1x2	.345	5.25	67	.205	5.25	y	6	13395.254	2144...	572.7	572.7	1	H1-1b
36	M5	HSS1x1x2	.344	40.361	14	.181	53.814	z	2	9903.669	2144...	572.7	572.7	...	H1-1b
37	M28	HSS1x1x2	.330	120.75	73	.199	126	y	5	13395.254	2144...	572.7	572.7	1	H1-1b
38	M111	PIPE_2.0	.330	126	9	.367	5.25		5	29898.885	32130	1871....	1871....	1	H3-6
39	M121B	HSS1x1x2	.327	0	9	.117	0	y	12	20880.648	2144...	572.7	572.7	...	H1-1b
40	M1	HSS1x1x2	.322	55.125	6	.191	0	y	3	13395.254	2144...	572.7	572.7	1	H1-1b
41	MP4	PIPE_2.0	.315	56	8	.117	34		8	14916.096	32130	1871....	1871....	...	H1-1b
42	M119B	HSS1x1x2	.308	0	70	.115	0	y	9	9903.669	2144...	572.7	572.7	...	H1-1b
43	M30	HSS1.5x1.5...	.306	84	12	.321	84	z	12	41751.706	51750	2048....	2048....	1	H3-6
44	M104	PIPE_2.0	.291	0	3	.344	0		2	29898.885	32130	1871....	1871....	1	H3-6
45	M51	HSS1.5x1.5...	.261	84	3	.318	84	y	10	41751.706	51750	2048....	2048....	1	H3-6
46	M103	PIPE_2.0	.256	12.5	13	.064	12.5		13	26092.12	32130	1871....	1871....	...	H1-1b
47	MP11	PIPE_2.0	.255	34	5	.072	34		13	14916.096	32130	1871....	1871....	...	H1-1b
48	MP3	PIPE_2.0	.254	34	10	.100	34		9	14916.096	32130	1871....	1871....	...	H1-1b
49	M50	HSS1.5x1.5...	.245	119.437	3	.138	111.562	y	3	41751.706	51750	2048....	2048....	1	H1-1b
50	M3	HSS1.5x1.5...	.234	84	9	.313	84	z	8	41751.706	51750	2048....	2048....	1	H3-6
51	M70	HSS1x1x2	.230	45.945	12	.021	45.945	y	13	12211.181	2144...	572.7	572.7	...	H1-1b
52	M29	HSS1.5x1.5...	.230	119.437	12	.132	111.562	y	12	41751.706	51750	2048....	2048....	1	H1-1b
53	M72	HSS1x1x2	.225	45.945	8	.015	0	z	6	12211.181	2144...	572.7	572.7	...	H1-1b
54	MP9	PIPE_2.0	.225	14	12	.083	34		11	14916.096	32130	1871....	1871....	...	H1-1b
55	M31	HSS1x1x2	.220	84	12	.049	84	z	12	13395.254	2144...	572.7	572.7	1	H1-1b
56	M108	PIPE_2.0	.217	126	11	.289	126		5	29898.885	32130	1871....	1871....	1	H1-1b
57	M97	PIPE_2.0	.214	12.5	5	.101	12.5		7	26092.12	32130	1871....	1871....	...	H1-1b
58	M71	HSS1x1x2	.212	0	6	.019	0	z	12	12211.181	2144...	572.7	572.7	...	H1-1b
59	M2	HSS1.5x1.5...	.205	6.563	8	.119	84	y	8	41751.706	51750	2048....	2048....	1	H1-1b
60	M4	HSS1x1x2	.187	84	3	.072	84	z	8	13395.254	2144...	572.7	572.7	1	H1-1b
61	M100	PIPE_2.0	.177	12.5	3	.046	12.5		3	26092.12	32130	1871....	1871....	...	H1-1b
62	MP1	PIPE_2.0	.174	14	8	.087	34		8	14916.096	32130	1871....	1871....	...	H1-1b
63	M52	HSS1x1x2	.164	42	13	.044	42	z	3	13395.254	2144...	572.7	572.7	1	H1-1b
64	MP12	PIPE_2.0	.158	14	13	.058	34		13	14916.096	32130	1871....	1871....	...	H1-1b
65	M23	HSS1x1x2	.085	27.7	5	.029	0	y	7	17475.555	2144...	572.7	572.7	...	H1-1b

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design R...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Unistrut	HSS1.5x1.5x4	Beam	Tube	A500 Gr.B Re...	Typical	1.25	.339	.339	.488
2	Bracing	HSS1x1x2	VBrace	Tube	A500 Gr.B Re...	Typical	.518	.064	.064	.093
3	Rails and Arms	HSS1x1x2	Beam	Tube	A500 Gr.B Re...	Typical	.518	.064	.064	.093
4	Corner Channel	C3X6	Beam	Channel	A36 Gr.36	Typical	1.76	.3	2.07	.072
5	Corner Angle	L4X4X4	Column	Single Angle	A36 Gr.36	Typical	1.93	3	3	.044
6	Mount Pipe	PIPE_2.0	Column	Pipe	A53 Gr.B	Typical	1.02	.627	.627	1.25
7	Handrail Kit	PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical	1.02	.627	.627	1.25

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				None
2	M2						Yes				None
3	M3						Yes				None
4	M4						Yes				None
5	M5						Yes	** NA **			None
6	MP4						Yes	** NA **			None
7	MP1						Yes	** NA **			None
8	MP2						Yes	** NA **			None
9	M19						Yes				None
10	M20						Yes				None
11	M21						Yes	** NA **			None
12	M23						Yes				None
13	M24						Yes				None
14	M26						Yes	** NA **			None
15	M27						Yes	** NA **			None
16	M28						Yes				None
17	M29						Yes				None
18	M30						Yes				None
19	M31						Yes				None
20	M32						Yes	** NA **			None
21	M33						Yes	** NA **			None
22	MP12						Yes	** NA **			None
23	MP9						Yes	** NA **			None
24	M43						Yes				None
25	M44						Yes				None
26	M45						Yes				None
27	M46						Yes				None
28	M47						Yes	** NA **			None
29	M48						Yes	** NA **			None
30	M49						Yes				None
31	M50						Yes				None
32	M51						Yes				None
33	M52						Yes				None
34	M53						Yes	** NA **			None
35	M54						Yes	** NA **			None
36	MP8						Yes	** NA **			None
37	MP5						Yes	** NA **			None
38	M64						Yes				None
39	M65						Yes				None
40	M66						Yes				None
41	M67						Yes				None
42	M68						Yes	** NA **			None
43	M69						Yes	** NA **			None
44	M70						Yes				None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
45	M71						Yes				None
46	M72						Yes				None
47	M73						Yes	** NA **			None
48	M74						Yes	** NA **			None
49	M75						Yes	** NA **			None
50	M76						Yes	** NA **			None
51	M77						Yes	** NA **			None
52	M78						Yes	** NA **			None
53	M79						Yes	** NA **			None
54	M80						Yes	** NA **			None
55	M81						Yes	** NA **			None
56	M82						Yes	** NA **			None
57	M83						Yes	** NA **			None
58	M84						Yes	** NA **			None
59	M85						Yes	** NA **			None
60	M86						Yes	** NA **			None
61	M87						Yes	** NA **			None
62	M88						Yes	** NA **			None
63	MP3						Yes	** NA **			None
64	MP11						Yes	** NA **			None
65	MP7						Yes	** NA **			None
66	M97						Yes	** NA **			None
67	M100						Yes	** NA **			None
68	M103						Yes	** NA **			None
69	M104						Yes				None
70	M105						Yes	** NA **			None
71	M106						Yes	** NA **			None
72	M107						Yes	** NA **			None
73	M108						Yes				None
74	M109						Yes	** NA **			None
75	M110						Yes	** NA **			None
76	M111						Yes				None
77	M112						Yes	** NA **			None
78	M113						Yes	** NA **			None
79	M114						Yes	** NA **			None
80	M115						Yes	** NA **			None
81	M116						Yes	** NA **			None
82	M119						Yes	** NA **			None
83	M120						Yes	** NA **			None
84	M121						Yes	** NA **			None
85	M122						Yes	** NA **			None
86	M123						Yes	** NA **			None
87	M124						Yes	** NA **			None
88	M125						Yes	** NA **			None
89	M126						Yes	** NA **			None
90	M127						Yes	** NA **			None
91	M128						Yes	** NA **			None
92	M131						Yes	** NA **			None
93	M132						Yes	** NA **			None
94	M133						Yes	** NA **			None
95	M134						Yes	** NA **			None
96	M135						Yes	** NA **			None
97	M136						Yes	** NA **			None
98	M119A						Yes	** NA **			None
99	M120A						Yes	** NA **			None
100	M121A						Yes	** NA **			None
101	M122A						Yes	** NA **			None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
102	M123A						Yes	** NA **			None
103	M124A						Yes	** NA **			None
104	M125A						Yes	** NA **			None
105	M127A						Yes	** NA **			None
106	M128A						Yes	** NA **			None
107	M129A						Yes	** NA **			None
108	M130A						Yes	** NA **			None
109	M131A						Yes	** NA **			None
110	M132A						Yes	** NA **			None
111	M119B						Yes	** NA **			None
112	M121B						Yes	** NA **			None
113	M120B						Yes	** NA **			None
114	M121C						Yes	** NA **			None
115	MP10						Yes	** NA **			None
116	M124B						Yes	** NA **			None
117	M125B						Yes	** NA **			None
118	M126B						Yes	** NA **			None
119	MP6						Yes	** NA **			None
120	M128B						Yes	** NA **			None
121	M129B						Yes	** NA **			None
122	M130B						Yes	** NA **			None

Hot Rolled Steel Design Parameters

	Label	Shape	Length[in]	Lbyy[in]	Lbzz[in]	Lcomp top[in]	Lcomp bot[in]	L-torq...	Kyy	Kzz	Cb	Function
1	M1	Rails and Ar...	126	42	42	42	42		.7	.7		Lateral
2	M2	Unistrut	126	42	42	42	42		.7	.7		Lateral
3	M3	Unistrut	126	42	42	42	42		.7	.7		Lateral
4	M4	Rails and Ar...	126	42	42	42	42		.7	.7		Lateral
5	M5	Bracing	53.814			Lbyy			.7	.7		Lateral
6	MP4	Mount Pipe	96			Lbyy						Lateral
7	MP1	Mount Pipe	96			Lbyy						Lateral
8	MP2	Mount Pipe	96			Lbyy						Lateral
9	M19	Rails and Ar...	36.473			Lbyy						Lateral
10	M20	Rails and Ar...	36.473			Lbyy						Lateral
11	M21	Bracing	40	Segment	Segment	Segment	Segment	Segm...	.7	.7		Lateral
12	M23	Rails and Ar...	27.7			Lbyy			.7	.7		Lateral
13	M24	Rails and Ar...	36.473			Lbyy						Lateral
14	M26	Bracing	54.132			Lbyy						Lateral
15	M27	Bracing	54.132			Lbyy						Lateral
16	M28	Rails and Ar...	126	42	42	42	42		.7	.7		Lateral
17	M29	Unistrut	126	42	42	42	42		.7	.7		Lateral
18	M30	Unistrut	126	42	42	42	42		.7	.7		Lateral
19	M31	Rails and Ar...	126	42	42	42	42		.7	.7		Lateral
20	M32	Bracing	53.814			Lbyy			.7	.7		Lateral
21	M33	Bracing	53.814			Lbyy			.7	.7		Lateral
22	MP12	Mount Pipe	96			Lbyy						Lateral
23	MP9	Mount Pipe	96			Lbyy						Lateral
24	M43	Rails and Ar...	36.473			Lbyy						Lateral
25	M44	Rails and Ar...	36.473			Lbyy						Lateral
26	M45	Rails and Ar...	36.473			Lbyy						Lateral
27	M46	Rails and Ar...	36.473			Lbyy						Lateral
28	M47	Bracing	54.132			Lbyy						Lateral
29	M48	Bracing	54.132			Lbyy						Lateral
30	M49	Rails and Ar...	126	42	42	42	42		.7	.7		Lateral
31	M50	Unistrut	126	42	42	42	42		.7	.7		Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length[in]	Lbyy[in]	Lbzz[in]	Lcomp top[in]	Lcomp bot[in]	L-torq...	Kyy	Kzz	Cb	Function
32	M51	Unistrut	126	42	42	42	42		.7	.7		Lateral
33	M52	Rails and Ar...	126	42	42	42	42		.7	.7		Lateral
34	M53	Bracing	53.814			Lbyy			.7	.7		Lateral
35	M54	Bracing	53.814			Lbyy			.7	.7		Lateral
36	MP8	Mount Pipe	96			Lbyy						Lateral
37	MP5	Mount Pipe	96			Lbyy						Lateral
38	M64	Rails and Ar...	36.473			Lbyy						Lateral
39	M65	Rails and Ar...	36.473			Lbyy						Lateral
40	M66	Rails and Ar...	36.473			Lbyy						Lateral
41	M67	Rails and Ar...	36.473			Lbyy						Lateral
42	M68	Bracing	54.132			Lbyy						Lateral
43	M69	Bracing	54.132			Lbyy						Lateral
44	M70	Rails and Ar...	45.945			Lbyy			.7	.7		Lateral
45	M71	Rails and Ar...	45.945			Lbyy			.7	.7		Lateral
46	M72	Rails and Ar...	45.945			Lbyy			.7	.7		Lateral
47	M73	Bracing	40	Segment	Segment	Segment	Segment	Segm...	.7	.7		Lateral
48	M74	Bracing	40	Segment	Segment	Segment	Segment	Segm...	.7	.7		Lateral
49	M75	Bracing	40	Segment	Segment	Segment	Segment	Segm...	.7	.7		Lateral
50	M76	Bracing	40	Segment	Segment	Segment	Segment	Segm...	.7	.7		Lateral
51	MP3	Mount Pipe	96			Lbyy						Lateral
52	MP11	Mount Pipe	96			Lbyy						Lateral
53	MP7	Mount Pipe	96			Lbyy						Lateral
54	M97	Mount Pipe	50			Lbyy						Lateral
55	M100	Mount Pipe	50			Lbyy						Lateral
56	M103	Mount Pipe	50			Lbyy						Lateral
57	M104	Handrail Kit	126	42	42	42	42		.7	.7		Lateral
58	M108	Handrail Kit	126	42	42	42	42		.7	.7		Lateral
59	M111	Handrail Kit	126	42	42	42	42		.7	.7		Lateral
60	M119B	Bracing	53.814			Lbyy			.7	.7		Lateral
61	M121B	Bracing	40	Segment	Segment	Segment	Segment	Segm...	.7	.7		Lateral
62	M120B	Bracing	42.059						.7	.7		Lateral
63	M121C	Bracing	42.059						.7	.7		Lateral
64	MP10	Mount Pipe	96			Lbyy						Lateral
65	MP6	Mount Pipe	96			Lbyy						Lateral

Joint Loads and Enforced Displacements (BLC 33 : Service Live Loads)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^2*i...
1	N1	L	Y	-250
2	N2	L	Y	-250
3	N56	L	Y	-250
4	N57	L	Y	-250
5	N94	L	Y	-250
6	N95	L	Y	-250

Joint Loads and Enforced Displacements (BLC 34 : Maintenance Load 1)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^2*i...
1	N214A	L	Y	-500

Joint Loads and Enforced Displacements (BLC 35 : Maintenance Load 2)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^2*i...
1	N211A	L	Y	-500

Joint Loads and Enforced Displacements (BLC 36 : Maintenance Load 3)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^2*i...

Joint Loads and Enforced Displacements (BLC 36 : Maintenance Load 3) (Continued)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^2*i...
1	N226A	L	Y	-500

Joint Loads and Enforced Displacements (BLC 37 : Maintenance Load 4)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^2*i...
1	N220	L	Y	-500

Joint Loads and Enforced Displacements (BLC 38 : Maintenance Load 5)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^2*i...
1	N217A	L	Y	-500

Joint Loads and Enforced Displacements (BLC 39 : Maintenance Load 6)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^2*i...
1	N225	L	Y	-500

Joint Loads and Enforced Displacements (BLC 40 : Maintenance Load 7)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^2*i...
1	N222A	L	Y	-500

Joint Loads and Enforced Displacements (BLC 41 : Maintenance Load 8)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^2*i...
1	N230A	L	Y	-500

Joint Loads and Enforced Displacements (BLC 42 : Maintenance Load 9)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^2*i...
1	N232A	L	Y	-500

Joint Loads and Enforced Displacements (BLC 43 : Maintenance Load 10)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^2*i...
1	N234A	L	Y	-500

Joint Loads and Enforced Displacements (BLC 44 : Maintenance Load 11)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^2*i...
1	N234B	L	Y	-500

Joint Loads and Enforced Displacements (BLC 45 : Maintenance Load 12)

	Joint Label	L,D,M	Direction	Magnitude[(lb,lb-ft), (in,rad), (lb*s^2/in, lb*s^2*i...
1	N243	L	Y	-500

Member Point Loads (BLC 1 : Self Weight)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP2	Y	-39.7	12
2	MP2	Y	-39.7	84
3	MP4	Y	-23.95	12
4	MP4	Y	-23.95	84
5	MP3	Y	-55.5	12
6	MP3	Y	-55.5	84
7	MP1	Y	-16	24
8	MP1	Y	-12.7	60
9	MP2	Y	-50.7	60
10	MP2	Y	-70	60
11	MP3	Y	-53	60

Member Point Loads (BLC 1 : Self Weight) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
12	MP3	Y	-59.9	60
13	MP4	Y	-50.7	60
14	MP4	Y	-52.9	60
15	MP2	Y	-2.2	60
16	MP4	Y	-2.2	60
17	MP5	Y	-39.7	12
18	MP5	Y	-39.7	84
19	MP7	Y	-23.95	12
20	MP7	Y	-23.95	84
21	MP6	Y	-55.5	12
22	MP6	Y	-55.5	84
23	MP4	Y	-16	24
24	MP4	Y	-12.7	60
25	MP5	Y	-50.7	60
26	MP5	Y	-70	60
27	MP6	Y	-53	60
28	MP6	Y	-59.9	60
29	MP7	Y	-50.7	60
30	MP7	Y	-52.9	60
31	MP5	Y	-2.2	60
32	MP7	Y	-2.2	60
33	MP8	Y	-39.7	12
34	MP8	Y	-39.7	84
35	MP10	Y	-23.95	12
36	MP10	Y	-23.95	84
37	MP9	Y	-55.5	12
38	MP9	Y	-55.5	84
39	MP7	Y	-16	24
40	MP7	Y	-12.7	60
41	MP8	Y	-50.7	60
42	MP8	Y	-70	60
43	MP9	Y	-53	60
44	MP9	Y	-59.9	60
45	MP10	Y	-50.7	60
46	MP10	Y	-52.9	60
47	MP8	Y	-2.2	60
48	MP10	Y	-2.2	60

Member Point Loads (BLC 2 : Wind Load AZI_0)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP2	X	0	12
2	MP2	Z	-207.1	12
3	MP2	X	0	84
4	MP2	Z	-207.1	84
5	MP4	X	0	12
6	MP4	Z	-150.31	12
7	MP4	X	0	84
8	MP4	Z	-150.31	84
9	MP3	X	0	12
10	MP3	Z	-65.76	12
11	MP3	X	0	84
12	MP3	Z	-65.76	84
13	MP1	X	0	24
14	MP1	Z	-18.01	24
15	MP1	X	0	60
16	MP1	Z	-13.47	60

Member Point Loads (BLC 2 : Wind Load AZI 0) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
17	MP2	X	0	60
18	MP2	Z	-89.38	60
19	MP2	X	0	60
20	MP2	Z	-64.53	60
21	MP3	X	0	60
22	MP3	Z	-89.38	60
23	MP3	X	0	60
24	MP3	Z	-60.05	60
25	MP4	X	0	60
26	MP4	Z	-92.34	60
27	MP4	X	0	60
28	MP4	Z	-89.01	60
29	MP2	X	0	60
30	MP2	Z	-11.05	60
31	MP4	X	0	60
32	MP4	Z	-11.05	60
33	MP5	X	0	12
34	MP5	Z	-116.98	12
35	MP5	X	0	84
36	MP5	Z	-116.98	84
37	MP7	X	0	12
38	MP7	Z	-112.48	12
39	MP7	X	0	84
40	MP7	Z	-112.48	84
41	MP6	X	0	12
42	MP6	Z	-67.6	12
43	MP6	X	0	84
44	MP6	Z	-67.6	84
45	MP4	X	0	24
46	MP4	Z	-15.29	24
47	MP4	X	0	60
48	MP4	Z	-8.39	60
49	MP5	X	0	60
50	MP5	Z	-62.08	60
51	MP5	X	0	60
52	MP5	Z	-50.05	60
53	MP6	X	0	60
54	MP6	Z	-62.08	60
55	MP6	X	0	60
56	MP6	Z	-40.13	60
57	MP7	X	0	60
58	MP7	Z	-50.39	60
59	MP7	X	0	60
60	MP7	Z	-62	60
61	MP5	X	0	60
62	MP5	Z	-4.92	60
63	MP7	X	0	60
64	MP7	Z	-4.92	60
65	MP8	X	0	12
66	MP8	Z	-118.67	12
67	MP8	X	0	84
68	MP8	Z	-118.67	84
69	MP10	X	0	12
70	MP10	Z	-113.19	12
71	MP10	X	0	84
72	MP10	Z	-113.19	84
73	MP9	X	0	12

Member Point Loads (BLC 2 : Wind Load AZI 0) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
74	MP9	Z	-67.57	12
75	MP9	X	0	84
76	MP9	Z	-67.57	84
77	MP7	X	0	24
78	MP7	Z	-15.34	24
79	MP7	X	0	60
80	MP7	Z	-8.48	60
81	MP8	X	0	60
82	MP8	Z	-62.59	60
83	MP8	X	0	60
84	MP8	Z	-50.32	60
85	MP9	X	0	60
86	MP9	Z	-62.59	60
87	MP9	X	0	60
88	MP9	Z	-40.51	60
89	MP10	X	0	60
90	MP10	Z	-51.17	60
91	MP10	X	0	60
92	MP10	Z	-62.51	60
93	MP8	X	0	60
94	MP8	Z	-5.04	60
95	MP10	X	0	60
96	MP10	Z	-5.04	60

Member Point Loads (BLC 3 : Wind Load AZI 30)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP2	X	-89.1	12
2	MP2	Z	-154.33	12
3	MP2	X	-89.1	84
4	MP2	Z	-154.33	84
5	MP4	X	-69.09	12
6	MP4	Z	-119.67	12
7	MP4	X	-69.09	84
8	MP4	Z	-119.67	84
9	MP3	X	-33.17	12
10	MP3	Z	-57.46	12
11	MP3	X	-33.17	84
12	MP3	Z	-57.46	84
13	MP1	X	-8.57	24
14	MP1	Z	-14.84	24
15	MP1	X	-5.92	60
16	MP1	Z	-10.25	60
17	MP2	X	-40.31	60
18	MP2	Z	-69.83	60
19	MP2	X	-29.94	60
20	MP2	Z	-51.86	60
21	MP3	X	-40.31	60
22	MP3	Z	-69.83	60
23	MP3	X	-26.83	60
24	MP3	Z	-46.47	60
25	MP4	X	-39.44	60
26	MP4	Z	-68.32	60
27	MP4	X	-40.18	60
28	MP4	Z	-69.59	60
29	MP2	X	-4.54	60
30	MP2	Z	-7.87	60

Member Point Loads (BLC 3 : Wind Load AZI 30) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
31	MP4	X	-4.54	60
32	MP4	Z	-7.87	60
33	MP5	X	-87.32	12
34	MP5	Z	-151.24	12
35	MP5	X	-87.32	84
36	MP5	Z	-151.24	84
37	MP7	X	-68.34	12
38	MP7	Z	-118.38	12
39	MP7	X	-68.34	84
40	MP7	Z	-118.38	84
41	MP6	X	-33.21	12
42	MP6	Z	-57.52	12
43	MP6	X	-33.21	84
44	MP6	Z	-57.52	84
45	MP4	X	-8.52	24
46	MP4	Z	-14.75	24
47	MP4	X	-5.82	60
48	MP4	Z	-10.08	60
49	MP5	X	-39.77	60
50	MP5	Z	-68.89	60
51	MP5	X	-29.66	60
52	MP5	Z	-51.37	60
53	MP6	X	-39.77	60
54	MP6	Z	-68.89	60
55	MP6	X	-26.44	60
56	MP6	Z	-45.79	60
57	MP7	X	-38.61	60
58	MP7	Z	-66.88	60
59	MP7	X	-39.64	60
60	MP7	Z	-68.66	60
61	MP5	X	-4.42	60
62	MP5	Z	-7.66	60
63	MP7	X	-4.42	60
64	MP7	Z	-7.66	60
65	MP8	X	-45.77	12
66	MP8	Z	-79.27	12
67	MP8	X	-45.77	84
68	MP8	Z	-79.27	84
69	MP10	X	-50.9	12
70	MP10	Z	-88.17	12
71	MP10	X	-50.9	84
72	MP10	Z	-88.17	84
73	MP9	X	-34.06	12
74	MP9	Z	-59	12
75	MP9	X	-34.06	84
76	MP9	Z	-59	84
77	MP7	X	-7.26	24
78	MP7	Z	-12.57	24
79	MP7	X	-3.48	60
80	MP7	Z	-6.02	60
81	MP8	X	-27.19	60
82	MP8	Z	-47.09	60
83	MP8	X	-22.98	60
84	MP8	Z	-39.8	60
85	MP9	X	-27.19	60
86	MP9	Z	-47.09	60
87	MP9	X	-17.26	60

Member Point Loads (BLC 3 : Wind Load AZI 30) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
88	MP9	Z	-29.89	60
89	MP10	X	-19.27	60
90	MP10	Z	-33.38	60
91	MP10	X	-27.19	60
92	MP10	Z	-47.09	60
93	MP8	X	-1.6	60
94	MP8	Z	-2.77	60
95	MP10	X	-1.6	60
96	MP10	Z	-2.77	60

Member Point Loads (BLC 4 : Wind Load AZI 60)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP2	X	-104.27	12
2	MP2	Z	-60.2	12
3	MP2	X	-104.27	84
4	MP2	Z	-60.2	84
5	MP4	X	-98.66	12
6	MP4	Z	-56.96	12
7	MP4	X	-98.66	84
8	MP4	Z	-56.96	84
9	MP3	X	-58.48	12
10	MP3	Z	-33.77	12
11	MP3	X	-58.48	84
12	MP3	Z	-33.77	84
13	MP1	X	-13.33	24
14	MP1	Z	-7.7	24
15	MP1	X	-7.43	60
16	MP1	Z	-4.29	60
17	MP2	X	-54.66	60
18	MP2	Z	-31.56	60
19	MP2	X	-43.82	60
20	MP2	Z	-25.3	60
21	MP3	X	-54.66	60
22	MP3	Z	-31.56	60
23	MP3	X	-35.41	60
24	MP3	Z	-20.45	60
25	MP4	X	-45.01	60
26	MP4	Z	-25.99	60
27	MP4	X	-54.58	60
28	MP4	Z	-31.51	60
29	MP2	X	-4.47	60
30	MP2	Z	-2.58	60
31	MP4	X	-4.47	60
32	MP4	Z	-2.58	60
33	MP5	X	-179.23	12
34	MP5	Z	-103.48	12
35	MP5	X	-179.23	84
36	MP5	Z	-103.48	84
37	MP7	X	-130.12	12
38	MP7	Z	-75.13	12
39	MP7	X	-130.12	84
40	MP7	Z	-75.13	84
41	MP6	X	-56.95	12
42	MP6	Z	-32.88	12
43	MP6	X	-56.95	84
44	MP6	Z	-32.88	84

Member Point Loads (BLC 4 : Wind Load AZI 60) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
45	MP4	X	-15.6	24
46	MP4	Z	-9	24
47	MP4	X	-11.66	60
48	MP4	Z	-6.73	60
49	MP5	X	-77.37	60
50	MP5	Z	-44.67	60
51	MP5	X	-55.86	60
52	MP5	Z	-32.25	60
53	MP6	X	-77.37	60
54	MP6	Z	-44.67	60
55	MP6	X	-51.98	60
56	MP6	Z	-30.01	60
57	MP7	X	-79.91	60
58	MP7	Z	-46.14	60
59	MP7	X	-77.05	60
60	MP7	Z	-44.49	60
61	MP5	X	-9.56	60
62	MP5	Z	-5.52	60
63	MP7	X	-9.56	60
64	MP7	Z	-5.52	60
65	MP8	X	-105.8	12
66	MP8	Z	-61.08	12
67	MP8	X	-105.8	84
68	MP8	Z	-61.08	84
69	MP10	X	-99.3	12
70	MP10	Z	-57.33	12
71	MP10	X	-99.3	84
72	MP10	Z	-57.33	84
73	MP9	X	-58.45	12
74	MP9	Z	-33.75	12
75	MP9	X	-58.45	84
76	MP9	Z	-33.75	84
77	MP7	X	-13.38	24
78	MP7	Z	-7.72	24
79	MP7	X	-7.52	60
80	MP7	Z	-4.34	60
81	MP8	X	-55.13	60
82	MP8	Z	-31.83	60
83	MP8	X	-44.06	60
84	MP8	Z	-25.44	60
85	MP9	X	-55.13	60
86	MP9	Z	-31.83	60
87	MP9	X	-35.75	60
88	MP9	Z	-20.64	60
89	MP10	X	-45.73	60
90	MP10	Z	-26.4	60
91	MP10	X	-55.04	60
92	MP10	Z	-31.78	60
93	MP8	X	-4.57	60
94	MP8	Z	-2.64	60
95	MP10	X	-4.57	60
96	MP10	Z	-2.64	60

Member Point Loads (BLC 5 : Wind Load AZI 90)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP2	X	-91.5	12

Member Point Loads (BLC 5 : Wind Load AZI 90) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
2	MP2	Z	0	12
3	MP2	X	-91.5	84
4	MP2	Z	0	84
5	MP4	X	-101.79	12
6	MP4	Z	0	12
7	MP4	X	-101.79	84
8	MP4	Z	0	84
9	MP3	X	-68.12	12
10	MP3	Z	0	12
11	MP3	X	-68.12	84
12	MP3	Z	0	84
13	MP1	X	-14.52	24
14	MP1	Z	0	24
15	MP1	X	-6.95	60
16	MP1	Z	0	60
17	MP2	X	-54.36	60
18	MP2	Z	0	60
19	MP2	X	-45.95	60
20	MP2	Z	0	60
21	MP3	X	-54.36	60
22	MP3	Z	0	60
23	MP3	X	-34.5	60
24	MP3	Z	0	60
25	MP4	X	-38.52	60
26	MP4	Z	0	60
27	MP4	X	-54.36	60
28	MP4	Z	0	60
29	MP2	X	-3.19	60
30	MP2	Z	0	60
31	MP4	X	-3.19	60
32	MP4	Z	0	60
33	MP5	X	-181.62	12
34	MP5	Z	0	12
35	MP5	X	-181.62	84
36	MP5	Z	0	84
37	MP7	X	-139.62	12
38	MP7	Z	0	12
39	MP7	X	-139.62	84
40	MP7	Z	0	84
41	MP6	X	-66.28	12
42	MP6	Z	0	12
43	MP6	X	-66.28	84
44	MP6	Z	0	84
45	MP4	X	-17.24	24
46	MP4	Z	0	24
47	MP4	X	-12.03	60
48	MP4	Z	0	60
49	MP5	X	-81.67	60
50	MP5	Z	0	60
51	MP5	X	-60.43	60
52	MP5	Z	0	60
53	MP6	X	-81.67	60
54	MP6	Z	0	60
55	MP6	X	-54.42	60
56	MP6	Z	0	60
57	MP7	X	-80.48	60
58	MP7	Z	0	60

Member Point Loads (BLC 5 : Wind Load AZI 90) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
59	MP7	X	-81.38	60
60	MP7	Z	0	60
61	MP5	X	-9.31	60
62	MP5	Z	0	60
63	MP7	X	-9.31	60
64	MP7	Z	0	60
65	MP8	X	-179.93	12
66	MP8	Z	0	12
67	MP8	X	-179.93	84
68	MP8	Z	0	84
69	MP10	X	-138.91	12
70	MP10	Z	0	12
71	MP10	X	-138.91	84
72	MP10	Z	0	84
73	MP9	X	-66.31	12
74	MP9	Z	0	12
75	MP9	X	-66.31	84
76	MP9	Z	0	84
77	MP7	X	-17.19	24
78	MP7	Z	0	24
79	MP7	X	-11.94	60
80	MP7	Z	0	60
81	MP8	X	-81.15	60
82	MP8	Z	0	60
83	MP8	X	-60.16	60
84	MP8	Z	0	60
85	MP9	X	-81.15	60
86	MP9	Z	0	60
87	MP9	X	-54.04	60
88	MP9	Z	0	60
89	MP10	X	-79.69	60
90	MP10	Z	0	60
91	MP10	X	-80.87	60
92	MP10	Z	0	60
93	MP8	X	-9.2	60
94	MP8	Z	0	60
95	MP10	X	-9.2	60
96	MP10	Z	0	60

Member Point Loads (BLC 6 : Wind Load AZI 120)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP2	X	-104.27	12
2	MP2	Z	60.2	12
3	MP2	X	-104.27	84
4	MP2	Z	60.2	84
5	MP4	X	-98.66	12
6	MP4	Z	56.96	12
7	MP4	X	-98.66	84
8	MP4	Z	56.96	84
9	MP3	X	-58.48	12
10	MP3	Z	33.77	12
11	MP3	X	-58.48	84
12	MP3	Z	33.77	84
13	MP1	X	-13.33	24
14	MP1	Z	7.7	24
15	MP1	X	-7.43	60

Member Point Loads (BLC 6 : Wind Load AZI 120) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
16	MP1	Z	4.29	60
17	MP2	X	-54.66	60
18	MP2	Z	31.56	60
19	MP2	X	-43.82	60
20	MP2	Z	25.3	60
21	MP3	X	-54.66	60
22	MP3	Z	31.56	60
23	MP3	X	-35.41	60
24	MP3	Z	20.45	60
25	MP4	X	-45.01	60
26	MP4	Z	25.99	60
27	MP4	X	-54.58	60
28	MP4	Z	31.51	60
29	MP2	X	-4.47	60
30	MP2	Z	2.58	60
31	MP4	X	-4.47	60
32	MP4	Z	2.58	60
33	MP5	X	-107.35	12
34	MP5	Z	61.98	12
35	MP5	X	-107.35	84
36	MP5	Z	61.98	84
37	MP7	X	-99.95	12
38	MP7	Z	57.71	12
39	MP7	X	-99.95	84
40	MP7	Z	57.71	84
41	MP6	X	-58.42	12
42	MP6	Z	33.73	12
43	MP6	X	-58.42	84
44	MP6	Z	33.73	84
45	MP4	X	-13.42	24
46	MP4	Z	7.75	24
47	MP4	X	-7.61	60
48	MP4	Z	4.39	60
49	MP5	X	-55.6	60
50	MP5	Z	32.1	60
51	MP5	X	-44.31	60
52	MP5	Z	25.58	60
53	MP6	X	-55.6	60
54	MP6	Z	32.1	60
55	MP6	X	-36.09	60
56	MP6	Z	20.84	60
57	MP7	X	-46.45	60
58	MP7	Z	26.82	60
59	MP7	X	-55.51	60
60	MP7	Z	32.05	60
61	MP5	X	-4.68	60
62	MP5	Z	2.7	60
63	MP7	X	-4.68	60
64	MP7	Z	2.7	60
65	MP8	X	-179.32	12
66	MP8	Z	103.53	12
67	MP8	X	-179.32	84
68	MP8	Z	103.53	84
69	MP10	X	-130.16	12
70	MP10	Z	75.15	12
71	MP10	X	-130.16	84
72	MP10	Z	75.15	84

Member Point Loads (BLC 6 : Wind Load AZI 120) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
73	MP9	X	-56.95	12
74	MP9	Z	32.88	12
75	MP9	X	-56.95	84
76	MP9	Z	32.88	84
77	MP7	X	-15.6	24
78	MP7	Z	9.01	24
79	MP7	X	-11.66	60
80	MP7	Z	6.73	60
81	MP8	X	-77.4	60
82	MP8	Z	44.69	60
83	MP8	X	-55.88	60
84	MP8	Z	32.26	60
85	MP9	X	-77.4	60
86	MP9	Z	44.69	60
87	MP9	X	-52	60
88	MP9	Z	30.02	60
89	MP10	X	-79.95	60
90	MP10	Z	46.16	60
91	MP10	X	-77.08	60
92	MP10	Z	44.5	60
93	MP8	X	-9.56	60
94	MP8	Z	5.52	60
95	MP10	X	-9.56	60
96	MP10	Z	5.52	60

Member Point Loads (BLC 7 : Wind Load AZI 150)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP2	X	-89.1	12
2	MP2	Z	154.33	12
3	MP2	X	-89.1	84
4	MP2	Z	154.33	84
5	MP4	X	-69.09	12
6	MP4	Z	119.67	12
7	MP4	X	-69.09	84
8	MP4	Z	119.67	84
9	MP3	X	-33.17	12
10	MP3	Z	57.46	12
11	MP3	X	-33.17	84
12	MP3	Z	57.46	84
13	MP1	X	-8.57	24
14	MP1	Z	14.84	24
15	MP1	X	-5.92	60
16	MP1	Z	10.25	60
17	MP2	X	-40.31	60
18	MP2	Z	69.83	60
19	MP2	X	-29.94	60
20	MP2	Z	51.86	60
21	MP3	X	-40.31	60
22	MP3	Z	69.83	60
23	MP3	X	-26.83	60
24	MP3	Z	46.47	60
25	MP4	X	-39.44	60
26	MP4	Z	68.32	60
27	MP4	X	-40.18	60
28	MP4	Z	69.59	60
29	MP2	X	-4.54	60

Member Point Loads (BLC 7 : Wind Load AZI 150) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
30	MP2	Z	7.87	60
31	MP4	X	-4.54	60
32	MP4	Z	7.87	60
33	MP5	X	-45.82	12
34	MP5	Z	79.36	12
35	MP5	X	-45.82	84
36	MP5	Z	79.36	84
37	MP7	X	-50.92	12
38	MP7	Z	88.2	12
39	MP7	X	-50.92	84
40	MP7	Z	88.2	84
41	MP6	X	-34.06	12
42	MP6	Z	58.99	12
43	MP6	X	-34.06	84
44	MP6	Z	58.99	84
45	MP4	X	-7.26	24
46	MP4	Z	12.58	24
47	MP4	X	-3.48	60
48	MP4	Z	6.03	60
49	MP5	X	-27.2	60
50	MP5	Z	47.12	60
51	MP5	X	-22.99	60
52	MP5	Z	39.82	60
53	MP6	X	-27.2	60
54	MP6	Z	47.12	60
55	MP6	X	-17.27	60
56	MP6	Z	29.91	60
57	MP7	X	-19.3	60
58	MP7	Z	33.42	60
59	MP7	X	-27.2	60
60	MP7	Z	47.12	60
61	MP5	X	-1.6	60
62	MP5	Z	2.77	60
63	MP7	X	-1.6	60
64	MP7	Z	2.77	60
65	MP8	X	-88.22	12
66	MP8	Z	152.8	12
67	MP8	X	-88.22	84
68	MP8	Z	152.8	84
69	MP10	X	-68.72	12
70	MP10	Z	119.03	12
71	MP10	X	-68.72	84
72	MP10	Z	119.03	84
73	MP9	X	-33.19	12
74	MP9	Z	57.49	12
75	MP9	X	-33.19	84
76	MP9	Z	57.49	84
77	MP7	X	-8.54	24
78	MP7	Z	14.8	24
79	MP7	X	-5.87	60
80	MP7	Z	10.17	60
81	MP8	X	-40.05	60
82	MP8	Z	69.36	60
83	MP8	X	-29.8	60
84	MP8	Z	51.62	60
85	MP9	X	-40.05	60
86	MP9	Z	69.36	60

Member Point Loads (BLC 7 : Wind Load AZI 150) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
87	MP9	X	-26.64	60
88	MP9	Z	46.13	60
89	MP10	X	-39.03	60
90	MP10	Z	67.61	60
91	MP10	X	-39.91	60
92	MP10	Z	69.13	60
93	MP8	X	-4.48	60
94	MP8	Z	7.76	60
95	MP10	X	-4.48	60
96	MP10	Z	7.76	60

Member Point Loads (BLC 8 : Wind Load AZI 180)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP2	X	0	12
2	MP2	Z	207.1	12
3	MP2	X	0	84
4	MP2	Z	207.1	84
5	MP4	X	0	12
6	MP4	Z	150.31	12
7	MP4	X	0	84
8	MP4	Z	150.31	84
9	MP3	X	0	12
10	MP3	Z	65.76	12
11	MP3	X	0	84
12	MP3	Z	65.76	84
13	MP1	X	0	24
14	MP1	Z	18.01	24
15	MP1	X	0	60
16	MP1	Z	13.47	60
17	MP2	X	0	60
18	MP2	Z	89.38	60
19	MP2	X	0	60
20	MP2	Z	64.53	60
21	MP3	X	0	60
22	MP3	Z	89.38	60
23	MP3	X	0	60
24	MP3	Z	60.05	60
25	MP4	X	0	60
26	MP4	Z	92.34	60
27	MP4	X	0	60
28	MP4	Z	89.01	60
29	MP2	X	0	60
30	MP2	Z	11.05	60
31	MP4	X	0	60
32	MP4	Z	11.05	60
33	MP5	X	0	12
34	MP5	Z	116.98	12
35	MP5	X	0	84
36	MP5	Z	116.98	84
37	MP7	X	0	12
38	MP7	Z	112.48	12
39	MP7	X	0	84
40	MP7	Z	112.48	84
41	MP6	X	0	12
42	MP6	Z	67.6	12
43	MP6	X	0	84

Member Point Loads (BLC 8 : Wind Load AZI 180) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
44	MP6	Z	67.6	84
45	MP4	X	0	24
46	MP4	Z	15.29	24
47	MP4	X	0	60
48	MP4	Z	8.39	60
49	MP5	X	0	60
50	MP5	Z	62.08	60
51	MP5	X	0	60
52	MP5	Z	50.05	60
53	MP6	X	0	60
54	MP6	Z	62.08	60
55	MP6	X	0	60
56	MP6	Z	40.13	60
57	MP7	X	0	60
58	MP7	Z	50.39	60
59	MP7	X	0	60
60	MP7	Z	62	60
61	MP5	X	0	60
62	MP5	Z	4.92	60
63	MP7	X	0	60
64	MP7	Z	4.92	60
65	MP8	X	0	12
66	MP8	Z	118.67	12
67	MP8	X	0	84
68	MP8	Z	118.67	84
69	MP10	X	0	12
70	MP10	Z	113.19	12
71	MP10	X	0	84
72	MP10	Z	113.19	84
73	MP9	X	0	12
74	MP9	Z	67.57	12
75	MP9	X	0	84
76	MP9	Z	67.57	84
77	MP7	X	0	24
78	MP7	Z	15.34	24
79	MP7	X	0	60
80	MP7	Z	8.48	60
81	MP8	X	0	60
82	MP8	Z	62.59	60
83	MP8	X	0	60
84	MP8	Z	50.32	60
85	MP9	X	0	60
86	MP9	Z	62.59	60
87	MP9	X	0	60
88	MP9	Z	40.51	60
89	MP10	X	0	60
90	MP10	Z	51.17	60
91	MP10	X	0	60
92	MP10	Z	62.51	60
93	MP8	X	0	60
94	MP8	Z	5.04	60
95	MP10	X	0	60
96	MP10	Z	5.04	60

Member Point Loads (BLC 9 : Wind Load AZI 210)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]

Member Point Loads (BLC 9 : Wind Load AZI 210) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP2	X	89.1	12
2	MP2	Z	154.33	12
3	MP2	X	89.1	84
4	MP2	Z	154.33	84
5	MP4	X	69.09	12
6	MP4	Z	119.67	12
7	MP4	X	69.09	84
8	MP4	Z	119.67	84
9	MP3	X	33.17	12
10	MP3	Z	57.46	12
11	MP3	X	33.17	84
12	MP3	Z	57.46	84
13	MP1	X	8.57	24
14	MP1	Z	14.84	24
15	MP1	X	5.92	60
16	MP1	Z	10.25	60
17	MP2	X	40.31	60
18	MP2	Z	69.83	60
19	MP2	X	29.94	60
20	MP2	Z	51.86	60
21	MP3	X	40.31	60
22	MP3	Z	69.83	60
23	MP3	X	26.83	60
24	MP3	Z	46.47	60
25	MP4	X	39.44	60
26	MP4	Z	68.32	60
27	MP4	X	40.18	60
28	MP4	Z	69.59	60
29	MP2	X	4.54	60
30	MP2	Z	7.87	60
31	MP4	X	4.54	60
32	MP4	Z	7.87	60
33	MP5	X	87.32	12
34	MP5	Z	151.24	12
35	MP5	X	87.32	84
36	MP5	Z	151.24	84
37	MP7	X	68.34	12
38	MP7	Z	118.38	12
39	MP7	X	68.34	84
40	MP7	Z	118.38	84
41	MP6	X	33.21	12
42	MP6	Z	57.52	12
43	MP6	X	33.21	84
44	MP6	Z	57.52	84
45	MP4	X	8.52	24
46	MP4	Z	14.75	24
47	MP4	X	5.82	60
48	MP4	Z	10.08	60
49	MP5	X	39.77	60
50	MP5	Z	68.89	60
51	MP5	X	29.66	60
52	MP5	Z	51.37	60
53	MP6	X	39.77	60
54	MP6	Z	68.89	60
55	MP6	X	26.44	60
56	MP6	Z	45.79	60
57	MP7	X	38.61	60

Member Point Loads (BLC 9 : Wind Load AZI 210) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
58	MP7	Z	66.88	60
59	MP7	X	39.64	60
60	MP7	Z	68.66	60
61	MP5	X	4.42	60
62	MP5	Z	7.66	60
63	MP7	X	4.42	60
64	MP7	Z	7.66	60
65	MP8	X	45.77	12
66	MP8	Z	79.27	12
67	MP8	X	45.77	84
68	MP8	Z	79.27	84
69	MP10	X	50.9	12
70	MP10	Z	88.17	12
71	MP10	X	50.9	84
72	MP10	Z	88.17	84
73	MP9	X	34.06	12
74	MP9	Z	59	12
75	MP9	X	34.06	84
76	MP9	Z	59	84
77	MP7	X	7.26	24
78	MP7	Z	12.57	24
79	MP7	X	3.48	60
80	MP7	Z	6.02	60
81	MP8	X	27.19	60
82	MP8	Z	47.09	60
83	MP8	X	22.98	60
84	MP8	Z	39.8	60
85	MP9	X	27.19	60
86	MP9	Z	47.09	60
87	MP9	X	17.26	60
88	MP9	Z	29.89	60
89	MP10	X	19.27	60
90	MP10	Z	33.38	60
91	MP10	X	27.19	60
92	MP10	Z	47.09	60
93	MP8	X	1.6	60
94	MP8	Z	2.77	60
95	MP10	X	1.6	60
96	MP10	Z	2.77	60

Member Point Loads (BLC 10 : Wind Load AZI 240)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP2	X	104.27	12
2	MP2	Z	60.2	12
3	MP2	X	104.27	84
4	MP2	Z	60.2	84
5	MP4	X	98.66	12
6	MP4	Z	56.96	12
7	MP4	X	98.66	84
8	MP4	Z	56.96	84
9	MP3	X	58.48	12
10	MP3	Z	33.77	12
11	MP3	X	58.48	84
12	MP3	Z	33.77	84
13	MP1	X	13.33	24
14	MP1	Z	7.7	24

Member Point Loads (BLC 10 : Wind Load AZI 240) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
15	MP1	X	7.43	60
16	MP1	Z	4.29	60
17	MP2	X	54.66	60
18	MP2	Z	31.56	60
19	MP2	X	43.82	60
20	MP2	Z	25.3	60
21	MP3	X	54.66	60
22	MP3	Z	31.56	60
23	MP3	X	35.41	60
24	MP3	Z	20.45	60
25	MP4	X	45.01	60
26	MP4	Z	25.99	60
27	MP4	X	54.58	60
28	MP4	Z	31.51	60
29	MP2	X	4.47	60
30	MP2	Z	2.58	60
31	MP4	X	4.47	60
32	MP4	Z	2.58	60
33	MP5	X	179.23	12
34	MP5	Z	103.48	12
35	MP5	X	179.23	84
36	MP5	Z	103.48	84
37	MP7	X	130.12	12
38	MP7	Z	75.13	12
39	MP7	X	130.12	84
40	MP7	Z	75.13	84
41	MP6	X	56.95	12
42	MP6	Z	32.88	12
43	MP6	X	56.95	84
44	MP6	Z	32.88	84
45	MP4	X	15.6	24
46	MP4	Z	9	24
47	MP4	X	11.66	60
48	MP4	Z	6.73	60
49	MP5	X	77.37	60
50	MP5	Z	44.67	60
51	MP5	X	55.86	60
52	MP5	Z	32.25	60
53	MP6	X	77.37	60
54	MP6	Z	44.67	60
55	MP6	X	51.98	60
56	MP6	Z	30.01	60
57	MP7	X	79.91	60
58	MP7	Z	46.14	60
59	MP7	X	77.05	60
60	MP7	Z	44.49	60
61	MP5	X	9.56	60
62	MP5	Z	5.52	60
63	MP7	X	9.56	60
64	MP7	Z	5.52	60
65	MP8	X	105.8	12
66	MP8	Z	61.08	12
67	MP8	X	105.8	84
68	MP8	Z	61.08	84
69	MP10	X	99.3	12
70	MP10	Z	57.33	12
71	MP10	X	99.3	84

Member Point Loads (BLC 10 : Wind Load AZI 240) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
72	MP10	Z	57.33	84
73	MP9	X	58.45	12
74	MP9	Z	33.75	12
75	MP9	X	58.45	84
76	MP9	Z	33.75	84
77	MP7	X	13.38	24
78	MP7	Z	7.72	24
79	MP7	X	7.52	60
80	MP7	Z	4.34	60
81	MP8	X	55.13	60
82	MP8	Z	31.83	60
83	MP8	X	44.06	60
84	MP8	Z	25.44	60
85	MP9	X	55.13	60
86	MP9	Z	31.83	60
87	MP9	X	35.75	60
88	MP9	Z	20.64	60
89	MP10	X	45.73	60
90	MP10	Z	26.4	60
91	MP10	X	55.04	60
92	MP10	Z	31.78	60
93	MP8	X	4.57	60
94	MP8	Z	2.64	60
95	MP10	X	4.57	60
96	MP10	Z	2.64	60

Member Point Loads (BLC 11 : Wind Load AZI 270)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP2	X	91.5	12
2	MP2	Z	0	12
3	MP2	X	91.5	84
4	MP2	Z	0	84
5	MP4	X	101.79	12
6	MP4	Z	0	12
7	MP4	X	101.79	84
8	MP4	Z	0	84
9	MP3	X	68.12	12
10	MP3	Z	0	12
11	MP3	X	68.12	84
12	MP3	Z	0	84
13	MP1	X	14.52	24
14	MP1	Z	0	24
15	MP1	X	6.95	60
16	MP1	Z	0	60
17	MP2	X	54.36	60
18	MP2	Z	0	60
19	MP2	X	45.95	60
20	MP2	Z	0	60
21	MP3	X	54.36	60
22	MP3	Z	0	60
23	MP3	X	34.5	60
24	MP3	Z	0	60
25	MP4	X	38.52	60
26	MP4	Z	0	60
27	MP4	X	54.36	60
28	MP4	Z	0	60

Member Point Loads (BLC 11 : Wind Load AZI 270) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
29	MP2	X	3.19	60
30	MP2	Z	0	60
31	MP4	X	3.19	60
32	MP4	Z	0	60
33	MP5	X	181.62	12
34	MP5	Z	0	12
35	MP5	X	181.62	84
36	MP5	Z	0	84
37	MP7	X	139.62	12
38	MP7	Z	0	12
39	MP7	X	139.62	84
40	MP7	Z	0	84
41	MP6	X	66.28	12
42	MP6	Z	0	12
43	MP6	X	66.28	84
44	MP6	Z	0	84
45	MP4	X	17.24	24
46	MP4	Z	0	24
47	MP4	X	12.03	60
48	MP4	Z	0	60
49	MP5	X	81.67	60
50	MP5	Z	0	60
51	MP5	X	60.43	60
52	MP5	Z	0	60
53	MP6	X	81.67	60
54	MP6	Z	0	60
55	MP6	X	54.42	60
56	MP6	Z	0	60
57	MP7	X	80.48	60
58	MP7	Z	0	60
59	MP7	X	81.38	60
60	MP7	Z	0	60
61	MP5	X	9.31	60
62	MP5	Z	0	60
63	MP7	X	9.31	60
64	MP7	Z	0	60
65	MP8	X	179.93	12
66	MP8	Z	0	12
67	MP8	X	179.93	84
68	MP8	Z	0	84
69	MP10	X	138.91	12
70	MP10	Z	0	12
71	MP10	X	138.91	84
72	MP10	Z	0	84
73	MP9	X	66.31	12
74	MP9	Z	0	12
75	MP9	X	66.31	84
76	MP9	Z	0	84
77	MP7	X	17.19	24
78	MP7	Z	0	24
79	MP7	X	11.94	60
80	MP7	Z	0	60
81	MP8	X	81.15	60
82	MP8	Z	0	60
83	MP8	X	60.16	60
84	MP8	Z	0	60
85	MP9	X	81.15	60

Member Point Loads (BLC 11 : Wind Load AZI 270) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
86	MP9	Z	0	60
87	MP9	X	54.04	60
88	MP9	Z	0	60
89	MP10	X	79.69	60
90	MP10	Z	0	60
91	MP10	X	80.87	60
92	MP10	Z	0	60
93	MP8	X	9.2	60
94	MP8	Z	0	60
95	MP10	X	9.2	60
96	MP10	Z	0	60

Member Point Loads (BLC 12 : Wind Load AZI 300)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP2	X	104.27	12
2	MP2	Z	-60.2	12
3	MP2	X	104.27	84
4	MP2	Z	-60.2	84
5	MP4	X	98.66	12
6	MP4	Z	-56.96	12
7	MP4	X	98.66	84
8	MP4	Z	-56.96	84
9	MP3	X	58.48	12
10	MP3	Z	-33.77	12
11	MP3	X	58.48	84
12	MP3	Z	-33.77	84
13	MP1	X	13.33	24
14	MP1	Z	-7.7	24
15	MP1	X	7.43	60
16	MP1	Z	-4.29	60
17	MP2	X	54.66	60
18	MP2	Z	-31.56	60
19	MP2	X	43.82	60
20	MP2	Z	-25.3	60
21	MP3	X	54.66	60
22	MP3	Z	-31.56	60
23	MP3	X	35.41	60
24	MP3	Z	-20.45	60
25	MP4	X	45.01	60
26	MP4	Z	-25.99	60
27	MP4	X	54.58	60
28	MP4	Z	-31.51	60
29	MP2	X	4.47	60
30	MP2	Z	-2.58	60
31	MP4	X	4.47	60
32	MP4	Z	-2.58	60
33	MP5	X	107.35	12
34	MP5	Z	-61.98	12
35	MP5	X	107.35	84
36	MP5	Z	-61.98	84
37	MP7	X	99.95	12
38	MP7	Z	-57.71	12
39	MP7	X	99.95	84
40	MP7	Z	-57.71	84
41	MP6	X	58.42	12
42	MP6	Z	-33.73	12

Member Point Loads (BLC 12 : Wind Load AZI 300) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
43	MP6	X	58.42	84
44	MP6	Z	-33.73	84
45	MP4	X	13.42	24
46	MP4	Z	-7.75	24
47	MP4	X	7.61	60
48	MP4	Z	-4.39	60
49	MP5	X	55.6	60
50	MP5	Z	-32.1	60
51	MP5	X	44.31	60
52	MP5	Z	-25.58	60
53	MP6	X	55.6	60
54	MP6	Z	-32.1	60
55	MP6	X	36.09	60
56	MP6	Z	-20.84	60
57	MP7	X	46.45	60
58	MP7	Z	-26.82	60
59	MP7	X	55.51	60
60	MP7	Z	-32.05	60
61	MP5	X	4.68	60
62	MP5	Z	-2.7	60
63	MP7	X	4.68	60
64	MP7	Z	-2.7	60
65	MP8	X	179.32	12
66	MP8	Z	-103.53	12
67	MP8	X	179.32	84
68	MP8	Z	-103.53	84
69	MP10	X	130.16	12
70	MP10	Z	-75.15	12
71	MP10	X	130.16	84
72	MP10	Z	-75.15	84
73	MP9	X	56.95	12
74	MP9	Z	-32.88	12
75	MP9	X	56.95	84
76	MP9	Z	-32.88	84
77	MP7	X	15.6	24
78	MP7	Z	-9.01	24
79	MP7	X	11.66	60
80	MP7	Z	-6.73	60
81	MP8	X	77.4	60
82	MP8	Z	-44.69	60
83	MP8	X	55.88	60
84	MP8	Z	-32.26	60
85	MP9	X	77.4	60
86	MP9	Z	-44.69	60
87	MP9	X	52	60
88	MP9	Z	-30.02	60
89	MP10	X	79.95	60
90	MP10	Z	-46.16	60
91	MP10	X	77.08	60
92	MP10	Z	-44.5	60
93	MP8	X	9.56	60
94	MP8	Z	-5.52	60
95	MP10	X	9.56	60
96	MP10	Z	-5.52	60

Member Point Loads (BLC 13 : Wind Load AZI 330)

Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]

Member Point Loads (BLC 13 : Wind Load AZI 330) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP2	X	89.1	12
2	MP2	Z	-154.33	12
3	MP2	X	89.1	84
4	MP2	Z	-154.33	84
5	MP4	X	69.09	12
6	MP4	Z	-119.67	12
7	MP4	X	69.09	84
8	MP4	Z	-119.67	84
9	MP3	X	33.17	12
10	MP3	Z	-57.46	12
11	MP3	X	33.17	84
12	MP3	Z	-57.46	84
13	MP1	X	8.57	24
14	MP1	Z	-14.84	24
15	MP1	X	5.92	60
16	MP1	Z	-10.25	60
17	MP2	X	40.31	60
18	MP2	Z	-69.83	60
19	MP2	X	29.94	60
20	MP2	Z	-51.86	60
21	MP3	X	40.31	60
22	MP3	Z	-69.83	60
23	MP3	X	26.83	60
24	MP3	Z	-46.47	60
25	MP4	X	39.44	60
26	MP4	Z	-68.32	60
27	MP4	X	40.18	60
28	MP4	Z	-69.59	60
29	MP2	X	4.54	60
30	MP2	Z	-7.87	60
31	MP4	X	4.54	60
32	MP4	Z	-7.87	60
33	MP5	X	45.82	12
34	MP5	Z	-79.36	12
35	MP5	X	45.82	84
36	MP5	Z	-79.36	84
37	MP7	X	50.92	12
38	MP7	Z	-88.2	12
39	MP7	X	50.92	84
40	MP7	Z	-88.2	84
41	MP6	X	34.06	12
42	MP6	Z	-58.99	12
43	MP6	X	34.06	84
44	MP6	Z	-58.99	84
45	MP4	X	7.26	24
46	MP4	Z	-12.58	24
47	MP4	X	3.48	60
48	MP4	Z	-6.03	60
49	MP5	X	27.2	60
50	MP5	Z	-47.12	60
51	MP5	X	22.99	60
52	MP5	Z	-39.82	60
53	MP6	X	27.2	60
54	MP6	Z	-47.12	60
55	MP6	X	17.27	60
56	MP6	Z	-29.91	60
57	MP7	X	19.3	60

Member Point Loads (BLC 13 : Wind Load AZI 330) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
58	MP7	Z	-33.42	60
59	MP7	X	27.2	60
60	MP7	Z	-47.12	60
61	MP5	X	1.6	60
62	MP5	Z	-2.77	60
63	MP7	X	1.6	60
64	MP7	Z	-2.77	60
65	MP8	X	88.22	12
66	MP8	Z	-152.8	12
67	MP8	X	88.22	84
68	MP8	Z	-152.8	84
69	MP10	X	68.72	12
70	MP10	Z	-119.03	12
71	MP10	X	68.72	84
72	MP10	Z	-119.03	84
73	MP9	X	33.19	12
74	MP9	Z	-57.49	12
75	MP9	X	33.19	84
76	MP9	Z	-57.49	84
77	MP7	X	8.54	24
78	MP7	Z	-14.8	24
79	MP7	X	5.87	60
80	MP7	Z	-10.17	60
81	MP8	X	40.05	60
82	MP8	Z	-69.36	60
83	MP8	X	29.8	60
84	MP8	Z	-51.62	60
85	MP9	X	40.05	60
86	MP9	Z	-69.36	60
87	MP9	X	26.64	60
88	MP9	Z	-46.13	60
89	MP10	X	39.03	60
90	MP10	Z	-67.61	60
91	MP10	X	39.91	60
92	MP10	Z	-69.13	60
93	MP8	X	4.48	60
94	MP8	Z	-7.76	60
95	MP10	X	4.48	60
96	MP10	Z	-7.76	60

Member Point Loads (BLC 16 : Ice Weight)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP2	Y	-91.538	12
2	MP2	Y	-91.538	84
3	MP4	Y	-78.54	12
4	MP4	Y	-78.54	84
5	MP3	Y	-71.672	12
6	MP3	Y	-71.672	84
7	MP1	Y	-16.101	24
8	MP1	Y	-10.678	60
9	MP2	Y	-54.312	60
10	MP2	Y	-47.756	60
11	MP3	Y	-54.312	60
12	MP3	Y	-41.206	60
13	MP4	Y	-53.511	60
14	MP4	Y	-54.174	60

Member Point Loads (BLC 16 : Ice Weight) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
15	MP2	Y	-8.643	60
16	MP4	Y	-8.643	60
17	MP5	Y	-91.538	12
18	MP5	Y	-91.538	84
19	MP7	Y	-78.54	12
20	MP7	Y	-78.54	84
21	MP6	Y	-71.672	12
22	MP6	Y	-71.672	84
23	MP4	Y	-16.101	24
24	MP4	Y	-10.678	60
25	MP5	Y	-54.312	60
26	MP5	Y	-47.756	60
27	MP6	Y	-54.312	60
28	MP6	Y	-41.206	60
29	MP7	Y	-53.511	60
30	MP7	Y	-54.174	60
31	MP5	Y	-8.643	60
32	MP7	Y	-8.643	60
33	MP8	Y	-91.538	12
34	MP8	Y	-91.538	84
35	MP10	Y	-78.54	12
36	MP10	Y	-78.54	84
37	MP9	Y	-71.672	12
38	MP9	Y	-71.672	84
39	MP7	Y	-16.101	24
40	MP7	Y	-10.678	60
41	MP8	Y	-54.312	60
42	MP8	Y	-47.756	60
43	MP9	Y	-54.312	60
44	MP9	Y	-41.206	60
45	MP10	Y	-53.511	60
46	MP10	Y	-54.174	60
47	MP8	Y	-8.643	60
48	MP10	Y	-8.643	60

Member Point Loads (BLC 17 : Ice Wind Load AZI 0)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP2	X	0	12
2	MP2	Z	-18.35	12
3	MP2	X	0	84
4	MP2	Z	-18.35	84
5	MP4	X	0	12
6	MP4	Z	-14.74	12
7	MP4	X	0	84
8	MP4	Z	-14.74	84
9	MP3	X	0	12
10	MP3	Z	-13.8	12
11	MP3	X	0	84
12	MP3	Z	-13.8	84
13	MP1	X	0	24
14	MP1	Z	-3.23	24
15	MP1	X	0	60
16	MP1	Z	-2.6	60
17	MP2	X	0	60
18	MP2	Z	-9.93	60
19	MP2	X	0	60

Member Point Loads (BLC 17 : Ice Wind Load AZI 0) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
20	MP2	Z	-7.1	60
21	MP3	X	0	60
22	MP3	Z	-9.93	60
23	MP3	X	0	60
24	MP3	Z	-6.62	60
25	MP4	X	0	60
26	MP4	Z	-9.08	60
27	MP4	X	0	60
28	MP4	Z	-9.91	60
29	MP2	X	0	60
30	MP2	Z	-2.08	60
31	MP4	X	0	60
32	MP4	Z	-2.08	60
33	MP5	X	0	12
34	MP5	Z	-13.32	12
35	MP5	X	0	84
36	MP5	Z	-13.32	84
37	MP7	X	0	12
38	MP7	Z	-13.11	12
39	MP7	X	0	84
40	MP7	Z	-13.11	84
41	MP6	X	0	12
42	MP6	Z	-13.09	12
43	MP6	X	0	84
44	MP6	Z	-13.09	84
45	MP4	X	0	24
46	MP4	Z	-2.88	24
47	MP4	X	0	60
48	MP4	Z	-1.88	60
49	MP5	X	0	60
50	MP5	Z	-8.51	60
51	MP5	X	0	60
52	MP5	Z	-6.36	60
53	MP6	X	0	60
54	MP6	Z	-8.51	60
55	MP6	X	0	60
56	MP6	Z	-5.55	60
57	MP7	X	0	60
58	MP7	Z	-6.68	60
59	MP7	X	0	60
60	MP7	Z	-8.5	60
61	MP5	X	0	60
62	MP5	Z	-1.24	60
63	MP7	X	0	60
64	MP7	Z	-1.24	60
65	MP8	X	0	12
66	MP8	Z	-13.41	12
67	MP8	X	0	84
68	MP8	Z	-13.41	84
69	MP10	X	0	12
70	MP10	Z	-13.14	12
71	MP10	X	0	84
72	MP10	Z	-13.14	84
73	MP9	X	0	12
74	MP9	Z	-13.1	12
75	MP9	X	0	84
76	MP9	Z	-13.1	84

Member Point Loads (BLC 17 : Ice Wind Load AZI 0) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
77	MP7	X	0	24
78	MP7	Z	-2.89	24
79	MP7	X	0	60
80	MP7	Z	-1.9	60
81	MP8	X	0	60
82	MP8	Z	-8.53	60
83	MP8	X	0	60
84	MP8	Z	-6.37	60
85	MP9	X	0	60
86	MP9	Z	-8.53	60
87	MP9	X	0	60
88	MP9	Z	-5.57	60
89	MP10	X	0	60
90	MP10	Z	-6.72	60
91	MP10	X	0	60
92	MP10	Z	-8.53	60
93	MP8	X	0	60
94	MP8	Z	-1.26	60
95	MP10	X	0	60
96	MP10	Z	-1.26	60

Member Point Loads (BLC 18 : Ice Wind Load AZI 30)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP2	X	-8.37	12
2	MP2	Z	-14.5	12
3	MP2	X	-8.37	84
4	MP2	Z	-14.5	84
5	MP4	X	-7.11	12
6	MP4	Z	-12.31	12
7	MP4	X	-7.11	84
8	MP4	Z	-12.31	84
9	MP3	X	-6.79	12
10	MP3	Z	-11.75	12
11	MP3	X	-6.79	84
12	MP3	Z	-11.75	84
13	MP1	X	-1.56	24
14	MP1	Z	-2.7	24
15	MP1	X	-1.18	60
16	MP1	Z	-2.05	60
17	MP2	X	-4.74	60
18	MP2	Z	-8.2	60
19	MP2	X	-3.43	60
20	MP2	Z	-5.94	60
21	MP3	X	-4.74	60
22	MP3	Z	-8.2	60
23	MP3	X	-3.14	60
24	MP3	Z	-5.44	60
25	MP4	X	-4.15	60
26	MP4	Z	-7.2	60
27	MP4	X	-4.73	60
28	MP4	Z	-8.19	60
29	MP2	X	-.91	60
30	MP2	Z	-1.57	60
31	MP4	X	-.91	60
32	MP4	Z	-1.57	60
33	MP5	X	-8.27	12

Member Point Loads (BLC 18 : Ice Wind Load AZI 30) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
34	MP5	Z	-14.32	12
35	MP5	X	-8.27	84
36	MP5	Z	-14.32	84
37	MP7	X	-7.08	12
38	MP7	Z	-12.26	12
39	MP7	X	-7.08	84
40	MP7	Z	-12.26	84
41	MP6	X	-6.77	12
42	MP6	Z	-11.73	12
43	MP6	X	-6.77	84
44	MP6	Z	-11.73	84
45	MP4	X	-1.55	24
46	MP4	Z	-2.69	24
47	MP4	X	-1.17	60
48	MP4	Z	-2.03	60
49	MP5	X	-4.71	60
50	MP5	Z	-8.16	60
51	MP5	X	-3.42	60
52	MP5	Z	-5.92	60
53	MP6	X	-4.71	60
54	MP6	Z	-8.16	60
55	MP6	X	-3.12	60
56	MP6	Z	-5.4	60
57	MP7	X	-4.11	60
58	MP7	Z	-7.11	60
59	MP7	X	-4.7	60
60	MP7	Z	-8.14	60
61	MP5	X	-.89	60
62	MP5	Z	-1.54	60
63	MP7	X	-.89	60
64	MP7	Z	-1.54	60
65	MP8	X	-5.95	12
66	MP8	Z	-10.3	12
67	MP8	X	-5.95	84
68	MP8	Z	-10.3	84
69	MP10	X	-6.32	12
70	MP10	Z	-10.95	12
71	MP10	X	-6.32	84
72	MP10	Z	-10.95	84
73	MP9	X	-6.45	12
74	MP9	Z	-11.16	12
75	MP9	X	-6.45	84
76	MP9	Z	-11.16	84
77	MP7	X	-1.39	24
78	MP7	Z	-2.41	24
79	MP7	X	-.84	60
80	MP7	Z	-1.46	60
81	MP8	X	-4.05	60
82	MP8	Z	-7.02	60
83	MP8	X	-3.07	60
84	MP8	Z	-5.32	60
85	MP9	X	-4.05	60
86	MP9	Z	-7.02	60
87	MP9	X	-2.63	60
88	MP9	Z	-4.55	60
89	MP10	X	-3	60
90	MP10	Z	-5.2	60

Member Point Loads (BLC 18 : Ice Wind Load AZI 30) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
91	MP10	X	-4.05	60
92	MP10	Z	-7.02	60
93	MP8	X	-.5	60
94	MP8	Z	-.87	60
95	MP10	X	-.5	60
96	MP10	Z	-.87	60

Member Point Loads (BLC 19 : Ice Wind Load AZI 60)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP2	X	-11.7	12
2	MP2	Z	-6.76	12
3	MP2	X	-11.7	84
4	MP2	Z	-6.76	84
5	MP4	X	-11.4	12
6	MP4	Z	-6.58	12
7	MP4	X	-11.4	84
8	MP4	Z	-6.58	84
9	MP3	X	-11.36	12
10	MP3	Z	-6.56	12
11	MP3	X	-11.36	84
12	MP3	Z	-6.56	84
13	MP1	X	-2.51	24
14	MP1	Z	-1.45	24
15	MP1	X	-1.66	60
16	MP1	Z	-.96	60
17	MP2	X	-7.41	60
18	MP2	Z	-4.28	60
19	MP2	X	-5.53	60
20	MP2	Z	-3.19	60
21	MP3	X	-7.41	60
22	MP3	Z	-4.28	60
23	MP3	X	-4.84	60
24	MP3	Z	-2.8	60
25	MP4	X	-5.86	60
26	MP4	Z	-3.38	60
27	MP4	X	-7.41	60
28	MP4	Z	-4.28	60
29	MP2	X	-1.1	60
30	MP2	Z	-.64	60
31	MP4	X	-1.1	60
32	MP4	Z	-.64	60
33	MP5	X	-15.89	12
34	MP5	Z	-9.17	12
35	MP5	X	-15.89	84
36	MP5	Z	-9.17	84
37	MP7	X	-12.77	12
38	MP7	Z	-7.37	12
39	MP7	X	-12.77	84
40	MP7	Z	-7.37	84
41	MP6	X	-11.95	12
42	MP6	Z	-6.9	12
43	MP6	X	-11.95	84
44	MP6	Z	-6.9	84
45	MP4	X	-2.8	24
46	MP4	Z	-1.62	24
47	MP4	X	-2.25	60

Member Point Loads (BLC 19 : Ice Wind Load AZI 60) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
48	MP4	Z	-1.3	60
49	MP5	X	-8.6	60
50	MP5	Z	-4.96	60
51	MP5	X	-6.15	60
52	MP5	Z	-3.55	60
53	MP6	X	-8.6	60
54	MP6	Z	-4.96	60
55	MP6	X	-5.73	60
56	MP6	Z	-3.31	60
57	MP7	X	-7.86	60
58	MP7	Z	-4.54	60
59	MP7	X	-8.58	60
60	MP7	Z	-4.95	60
61	MP5	X	-1.8	60
62	MP5	Z	-1.04	60
63	MP7	X	-1.8	60
64	MP7	Z	-1.04	60
65	MP8	X	-11.79	12
66	MP8	Z	-6.8	12
67	MP8	X	-11.79	84
68	MP8	Z	-6.8	84
69	MP10	X	-11.43	12
70	MP10	Z	-6.6	12
71	MP10	X	-11.43	84
72	MP10	Z	-6.6	84
73	MP9	X	-11.37	12
74	MP9	Z	-6.57	12
75	MP9	X	-11.37	84
76	MP9	Z	-6.57	84
77	MP7	X	-2.51	24
78	MP7	Z	-1.45	24
79	MP7	X	-1.67	60
80	MP7	Z	-.96	60
81	MP8	X	-7.44	60
82	MP8	Z	-4.29	60
83	MP8	X	-5.54	60
84	MP8	Z	-3.2	60
85	MP9	X	-7.44	60
86	MP9	Z	-4.29	60
87	MP9	X	-4.86	60
88	MP9	Z	-2.81	60
89	MP10	X	-5.9	60
90	MP10	Z	-3.41	60
91	MP10	X	-7.43	60
92	MP10	Z	-4.29	60
93	MP8	X	-1.12	60
94	MP8	Z	-.65	60
95	MP10	X	-1.12	60
96	MP10	Z	-.65	60

Member Point Loads (BLC 20 : Ice Wind Load AZI 90)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP2	X	-11.9	12
2	MP2	Z	0	12
3	MP2	X	-11.9	84
4	MP2	Z	0	84

Member Point Loads (BLC 20 : Ice Wind Load AZI 90) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
5	MP4	X	-12.64	12
6	MP4	Z	0	12
7	MP4	X	-12.64	84
8	MP4	Z	0	84
9	MP3	X	-12.89	12
10	MP3	Z	0	12
11	MP3	X	-12.89	84
12	MP3	Z	0	84
13	MP1	X	-2.79	24
14	MP1	Z	0	24
15	MP1	X	-1.68	60
16	MP1	Z	0	60
17	MP2	X	-8.1	60
18	MP2	Z	0	60
19	MP2	X	-6.14	60
20	MP2	Z	0	60
21	MP3	X	-8.1	60
22	MP3	Z	0	60
23	MP3	X	-5.25	60
24	MP3	Z	0	60
25	MP4	X	-6	60
26	MP4	Z	0	60
27	MP4	X	-8.1	60
28	MP4	Z	0	60
29	MP2	X	-1.01	60
30	MP2	Z	0	60
31	MP4	X	-1.01	60
32	MP4	Z	0	60
33	MP5	X	-16.93	12
34	MP5	Z	0	12
35	MP5	X	-16.93	84
36	MP5	Z	0	84
37	MP7	X	-14.28	12
38	MP7	Z	0	12
39	MP7	X	-14.28	84
40	MP7	Z	0	84
41	MP6	X	-13.6	12
42	MP6	Z	0	12
43	MP6	X	-13.6	84
44	MP6	Z	0	84
45	MP4	X	-3.13	24
46	MP4	Z	0	24
47	MP4	X	-2.4	60
48	MP4	Z	0	60
49	MP5	X	-9.53	60
50	MP5	Z	0	60
51	MP5	X	-6.89	60
52	MP5	Z	0	60
53	MP6	X	-9.53	60
54	MP6	Z	0	60
55	MP6	X	-6.32	60
56	MP6	Z	0	60
57	MP7	X	-8.4	60
58	MP7	Z	0	60
59	MP7	X	-9.51	60
60	MP7	Z	0	60
61	MP5	X	-1.84	60

Member Point Loads (BLC 20 : Ice Wind Load AZI 90) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
62	MP5	Z	0	60
63	MP7	X	-1.84	60
64	MP7	Z	0	60
65	MP8	X	-16.84	12
66	MP8	Z	0	12
67	MP8	X	-16.84	84
68	MP8	Z	0	84
69	MP10	X	-14.25	12
70	MP10	Z	0	12
71	MP10	X	-14.25	84
72	MP10	Z	0	84
73	MP9	X	-13.58	12
74	MP9	Z	0	12
75	MP9	X	-13.58	84
76	MP9	Z	0	84
77	MP7	X	-3.13	24
78	MP7	Z	0	24
79	MP7	X	-2.38	60
80	MP7	Z	0	60
81	MP8	X	-9.5	60
82	MP8	Z	0	60
83	MP8	X	-6.88	60
84	MP8	Z	0	60
85	MP9	X	-9.5	60
86	MP9	Z	0	60
87	MP9	X	-6.3	60
88	MP9	Z	0	60
89	MP10	X	-8.36	60
90	MP10	Z	0	60
91	MP10	X	-9.49	60
92	MP10	Z	0	60
93	MP8	X	-1.83	60
94	MP8	Z	0	60
95	MP10	X	-1.83	60
96	MP10	Z	0	60

Member Point Loads (BLC 21 : Ice Wind Load AZI 120)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP2	X	-11.7	12
2	MP2	Z	6.76	12
3	MP2	X	-11.7	84
4	MP2	Z	6.76	84
5	MP4	X	-11.4	12
6	MP4	Z	6.58	12
7	MP4	X	-11.4	84
8	MP4	Z	6.58	84
9	MP3	X	-11.36	12
10	MP3	Z	6.56	12
11	MP3	X	-11.36	84
12	MP3	Z	6.56	84
13	MP1	X	-2.51	24
14	MP1	Z	1.45	24
15	MP1	X	-1.66	60
16	MP1	Z	.96	60
17	MP2	X	-7.41	60
18	MP2	Z	4.28	60

Member Point Loads (BLC 21 : Ice Wind Load AZI 120) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
19	MP2	X	-5.53	60
20	MP2	Z	3.19	60
21	MP3	X	-7.41	60
22	MP3	Z	4.28	60
23	MP3	X	-4.84	60
24	MP3	Z	2.8	60
25	MP4	X	-5.86	60
26	MP4	Z	3.38	60
27	MP4	X	-7.41	60
28	MP4	Z	4.28	60
29	MP2	X	-1.1	60
30	MP2	Z	.64	60
31	MP4	X	-1.1	60
32	MP4	Z	.64	60
33	MP5	X	-11.87	12
34	MP5	Z	6.85	12
35	MP5	X	-11.87	84
36	MP5	Z	6.85	84
37	MP7	X	-11.46	12
38	MP7	Z	6.62	12
39	MP7	X	-11.46	84
40	MP7	Z	6.62	84
41	MP6	X	-11.38	12
42	MP6	Z	6.57	12
43	MP6	X	-11.38	84
44	MP6	Z	6.57	84
45	MP4	X	-2.52	24
46	MP4	Z	1.46	24
47	MP4	X	-1.68	60
48	MP4	Z	.97	60
49	MP5	X	-7.46	60
50	MP5	Z	4.31	60
51	MP5	X	-5.55	60
52	MP5	Z	3.21	60
53	MP6	X	-7.46	60
54	MP6	Z	4.31	60
55	MP6	X	-4.88	60
56	MP6	Z	2.82	60
57	MP7	X	-5.94	60
58	MP7	Z	3.43	60
59	MP7	X	-7.46	60
60	MP7	Z	4.31	60
61	MP5	X	-1.13	60
62	MP5	Z	.65	60
63	MP7	X	-1.13	60
64	MP7	Z	.65	60
65	MP8	X	-15.89	12
66	MP8	Z	9.18	12
67	MP8	X	-15.89	84
68	MP8	Z	9.18	84
69	MP10	X	-12.77	12
70	MP10	Z	7.37	12
71	MP10	X	-12.77	84
72	MP10	Z	7.37	84
73	MP9	X	-11.95	12
74	MP9	Z	6.9	12
75	MP9	X	-11.95	84

Member Point Loads (BLC 21 : Ice Wind Load AZI 120) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
76	MP9	Z	6.9	84
77	MP7	X	-2.8	24
78	MP7	Z	1.62	24
79	MP7	X	-2.25	60
80	MP7	Z	1.3	60
81	MP8	X	-8.6	60
82	MP8	Z	4.96	60
83	MP8	X	-6.15	60
84	MP8	Z	3.55	60
85	MP9	X	-8.6	60
86	MP9	Z	4.96	60
87	MP9	X	-5.73	60
88	MP9	Z	3.31	60
89	MP10	X	-7.86	60
90	MP10	Z	4.54	60
91	MP10	X	-8.58	60
92	MP10	Z	4.96	60
93	MP8	X	-1.8	60
94	MP8	Z	1.04	60
95	MP10	X	-1.8	60
96	MP10	Z	1.04	60

Member Point Loads (BLC 22 : Ice Wind Load AZI 150)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP2	X	-8.37	12
2	MP2	Z	14.5	12
3	MP2	X	-8.37	84
4	MP2	Z	14.5	84
5	MP4	X	-7.11	12
6	MP4	Z	12.31	12
7	MP4	X	-7.11	84
8	MP4	Z	12.31	84
9	MP3	X	-6.79	12
10	MP3	Z	11.75	12
11	MP3	X	-6.79	84
12	MP3	Z	11.75	84
13	MP1	X	-1.56	24
14	MP1	Z	2.7	24
15	MP1	X	-1.18	60
16	MP1	Z	2.05	60
17	MP2	X	-4.74	60
18	MP2	Z	8.2	60
19	MP2	X	-3.43	60
20	MP2	Z	5.94	60
21	MP3	X	-4.74	60
22	MP3	Z	8.2	60
23	MP3	X	-3.14	60
24	MP3	Z	5.44	60
25	MP4	X	-4.15	60
26	MP4	Z	7.2	60
27	MP4	X	-4.73	60
28	MP4	Z	8.19	60
29	MP2	X	-.91	60
30	MP2	Z	1.57	60
31	MP4	X	-.91	60
32	MP4	Z	1.57	60

Member Point Loads (BLC 22 : Ice Wind Load AZI 150) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
33	MP5	X	-5.95	12
34	MP5	Z	10.31	12
35	MP5	X	-5.95	84
36	MP5	Z	10.31	84
37	MP7	X	-6.32	12
38	MP7	Z	10.95	12
39	MP7	X	-6.32	84
40	MP7	Z	10.95	84
41	MP6	X	-6.45	12
42	MP6	Z	11.16	12
43	MP6	X	-6.45	84
44	MP6	Z	11.16	84
45	MP4	X	-1.39	24
46	MP4	Z	2.41	24
47	MP4	X	-.84	60
48	MP4	Z	1.46	60
49	MP5	X	-4.05	60
50	MP5	Z	7.02	60
51	MP5	X	-3.07	60
52	MP5	Z	5.32	60
53	MP6	X	-4.05	60
54	MP6	Z	7.02	60
55	MP6	X	-2.63	60
56	MP6	Z	4.55	60
57	MP7	X	-3	60
58	MP7	Z	5.2	60
59	MP7	X	-4.05	60
60	MP7	Z	7.02	60
61	MP5	X	-.5	60
62	MP5	Z	.87	60
63	MP7	X	-.5	60
64	MP7	Z	.87	60
65	MP8	X	-8.32	12
66	MP8	Z	14.41	12
67	MP8	X	-8.32	84
68	MP8	Z	14.41	84
69	MP10	X	-7.09	12
70	MP10	Z	12.29	12
71	MP10	X	-7.09	84
72	MP10	Z	12.29	84
73	MP9	X	-6.78	12
74	MP9	Z	11.74	12
75	MP9	X	-6.78	84
76	MP9	Z	11.74	84
77	MP7	X	-1.56	24
78	MP7	Z	2.7	24
79	MP7	X	-1.18	60
80	MP7	Z	2.04	60
81	MP8	X	-4.72	60
82	MP8	Z	8.18	60
83	MP8	X	-3.42	60
84	MP8	Z	5.93	60
85	MP9	X	-4.72	60
86	MP9	Z	8.18	60
87	MP9	X	-3.13	60
88	MP9	Z	5.42	60
89	MP10	X	-4.13	60

Member Point Loads (BLC 22 : Ice Wind Load AZI 150) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
90	MP10	Z	7.16	60
91	MP10	X	-4.72	60
92	MP10	Z	8.17	60
93	MP8	X	-.9	60
94	MP8	Z	1.55	60
95	MP10	X	-.9	60
96	MP10	Z	1.55	60

Member Point Loads (BLC 23 : Ice Wind Load AZI 180)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP2	X	0	12
2	MP2	Z	18.35	12
3	MP2	X	0	84
4	MP2	Z	18.35	84
5	MP4	X	0	12
6	MP4	Z	14.74	12
7	MP4	X	0	84
8	MP4	Z	14.74	84
9	MP3	X	0	12
10	MP3	Z	13.8	12
11	MP3	X	0	84
12	MP3	Z	13.8	84
13	MP1	X	0	24
14	MP1	Z	3.23	24
15	MP1	X	0	60
16	MP1	Z	2.6	60
17	MP2	X	0	60
18	MP2	Z	9.93	60
19	MP2	X	0	60
20	MP2	Z	7.1	60
21	MP3	X	0	60
22	MP3	Z	9.93	60
23	MP3	X	0	60
24	MP3	Z	6.62	60
25	MP4	X	0	60
26	MP4	Z	9.08	60
27	MP4	X	0	60
28	MP4	Z	9.91	60
29	MP2	X	0	60
30	MP2	Z	2.08	60
31	MP4	X	0	60
32	MP4	Z	2.08	60
33	MP5	X	0	12
34	MP5	Z	13.32	12
35	MP5	X	0	84
36	MP5	Z	13.32	84
37	MP7	X	0	12
38	MP7	Z	13.11	12
39	MP7	X	0	84
40	MP7	Z	13.11	84
41	MP6	X	0	12
42	MP6	Z	13.09	12
43	MP6	X	0	84
44	MP6	Z	13.09	84
45	MP4	X	0	24
46	MP4	Z	2.88	24

Member Point Loads (BLC 23 : Ice Wind Load AZI 180) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
47	MP4	X	0	60
48	MP4	Z	1.88	60
49	MP5	X	0	60
50	MP5	Z	8.51	60
51	MP5	X	0	60
52	MP5	Z	6.36	60
53	MP6	X	0	60
54	MP6	Z	8.51	60
55	MP6	X	0	60
56	MP6	Z	5.55	60
57	MP7	X	0	60
58	MP7	Z	6.68	60
59	MP7	X	0	60
60	MP7	Z	8.5	60
61	MP5	X	0	60
62	MP5	Z	1.24	60
63	MP7	X	0	60
64	MP7	Z	1.24	60
65	MP8	X	0	12
66	MP8	Z	13.41	12
67	MP8	X	0	84
68	MP8	Z	13.41	84
69	MP10	X	0	12
70	MP10	Z	13.14	12
71	MP10	X	0	84
72	MP10	Z	13.14	84
73	MP9	X	0	12
74	MP9	Z	13.1	12
75	MP9	X	0	84
76	MP9	Z	13.1	84
77	MP7	X	0	24
78	MP7	Z	2.89	24
79	MP7	X	0	60
80	MP7	Z	1.9	60
81	MP8	X	0	60
82	MP8	Z	8.53	60
83	MP8	X	0	60
84	MP8	Z	6.37	60
85	MP9	X	0	60
86	MP9	Z	8.53	60
87	MP9	X	0	60
88	MP9	Z	5.57	60
89	MP10	X	0	60
90	MP10	Z	6.72	60
91	MP10	X	0	60
92	MP10	Z	8.53	60
93	MP8	X	0	60
94	MP8	Z	1.26	60
95	MP10	X	0	60
96	MP10	Z	1.26	60

Member Point Loads (BLC 24 : Ice Wind Load AZI 210)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP2	X	8.37	12
2	MP2	Z	14.5	12
3	MP2	X	8.37	84

Member Point Loads (BLC 24 : Ice Wind Load AZI 210) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
4	MP2	Z	14.5	84
5	MP4	X	7.11	12
6	MP4	Z	12.31	12
7	MP4	X	7.11	84
8	MP4	Z	12.31	84
9	MP3	X	6.79	12
10	MP3	Z	11.75	12
11	MP3	X	6.79	84
12	MP3	Z	11.75	84
13	MP1	X	1.56	24
14	MP1	Z	2.7	24
15	MP1	X	1.18	60
16	MP1	Z	2.05	60
17	MP2	X	4.74	60
18	MP2	Z	8.2	60
19	MP2	X	3.43	60
20	MP2	Z	5.94	60
21	MP3	X	4.74	60
22	MP3	Z	8.2	60
23	MP3	X	3.14	60
24	MP3	Z	5.44	60
25	MP4	X	4.15	60
26	MP4	Z	7.2	60
27	MP4	X	4.73	60
28	MP4	Z	8.19	60
29	MP2	X	.91	60
30	MP2	Z	1.57	60
31	MP4	X	.91	60
32	MP4	Z	1.57	60
33	MP5	X	8.27	12
34	MP5	Z	14.32	12
35	MP5	X	8.27	84
36	MP5	Z	14.32	84
37	MP7	X	7.08	12
38	MP7	Z	12.26	12
39	MP7	X	7.08	84
40	MP7	Z	12.26	84
41	MP6	X	6.77	12
42	MP6	Z	11.73	12
43	MP6	X	6.77	84
44	MP6	Z	11.73	84
45	MP4	X	1.55	24
46	MP4	Z	2.69	24
47	MP4	X	1.17	60
48	MP4	Z	2.03	60
49	MP5	X	4.71	60
50	MP5	Z	8.16	60
51	MP5	X	3.42	60
52	MP5	Z	5.92	60
53	MP6	X	4.71	60
54	MP6	Z	8.16	60
55	MP6	X	3.12	60
56	MP6	Z	5.4	60
57	MP7	X	4.11	60
58	MP7	Z	7.11	60
59	MP7	X	4.7	60
60	MP7	Z	8.14	60

Member Point Loads (BLC 24 : Ice Wind Load AZI 210) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
61	MP5	X	.89	60
62	MP5	Z	1.54	60
63	MP7	X	.89	60
64	MP7	Z	1.54	60
65	MP8	X	5.95	12
66	MP8	Z	10.3	12
67	MP8	X	5.95	84
68	MP8	Z	10.3	84
69	MP10	X	6.32	12
70	MP10	Z	10.95	12
71	MP10	X	6.32	84
72	MP10	Z	10.95	84
73	MP9	X	6.45	12
74	MP9	Z	11.16	12
75	MP9	X	6.45	84
76	MP9	Z	11.16	84
77	MP7	X	1.39	24
78	MP7	Z	2.41	24
79	MP7	X	.84	60
80	MP7	Z	1.46	60
81	MP8	X	4.05	60
82	MP8	Z	7.02	60
83	MP8	X	3.07	60
84	MP8	Z	5.32	60
85	MP9	X	4.05	60
86	MP9	Z	7.02	60
87	MP9	X	2.63	60
88	MP9	Z	4.55	60
89	MP10	X	3	60
90	MP10	Z	5.2	60
91	MP10	X	4.05	60
92	MP10	Z	7.02	60
93	MP8	X	.5	60
94	MP8	Z	.87	60
95	MP10	X	.5	60
96	MP10	Z	.87	60

Member Point Loads (BLC 25 : Ice Wind Load AZI 240)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP2	X	11.7	12
2	MP2	Z	6.76	12
3	MP2	X	11.7	84
4	MP2	Z	6.76	84
5	MP4	X	11.4	12
6	MP4	Z	6.58	12
7	MP4	X	11.4	84
8	MP4	Z	6.58	84
9	MP3	X	11.36	12
10	MP3	Z	6.56	12
11	MP3	X	11.36	84
12	MP3	Z	6.56	84
13	MP1	X	2.51	24
14	MP1	Z	1.45	24
15	MP1	X	1.66	60
16	MP1	Z	.96	60
17	MP2	X	7.41	60

Member Point Loads (BLC 25 : Ice Wind Load AZI 240) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
18	MP2	Z	4.28	60
19	MP2	X	5.53	60
20	MP2	Z	3.19	60
21	MP3	X	7.41	60
22	MP3	Z	4.28	60
23	MP3	X	4.84	60
24	MP3	Z	2.8	60
25	MP4	X	5.86	60
26	MP4	Z	3.38	60
27	MP4	X	7.41	60
28	MP4	Z	4.28	60
29	MP2	X	1.1	60
30	MP2	Z	.64	60
31	MP4	X	1.1	60
32	MP4	Z	.64	60
33	MP5	X	15.89	12
34	MP5	Z	9.17	12
35	MP5	X	15.89	84
36	MP5	Z	9.17	84
37	MP7	X	12.77	12
38	MP7	Z	7.37	12
39	MP7	X	12.77	84
40	MP7	Z	7.37	84
41	MP6	X	11.95	12
42	MP6	Z	6.9	12
43	MP6	X	11.95	84
44	MP6	Z	6.9	84
45	MP4	X	2.8	24
46	MP4	Z	1.62	24
47	MP4	X	2.25	60
48	MP4	Z	1.3	60
49	MP5	X	8.6	60
50	MP5	Z	4.96	60
51	MP5	X	6.15	60
52	MP5	Z	3.55	60
53	MP6	X	8.6	60
54	MP6	Z	4.96	60
55	MP6	X	5.73	60
56	MP6	Z	3.31	60
57	MP7	X	7.86	60
58	MP7	Z	4.54	60
59	MP7	X	8.58	60
60	MP7	Z	4.95	60
61	MP5	X	1.8	60
62	MP5	Z	1.04	60
63	MP7	X	1.8	60
64	MP7	Z	1.04	60
65	MP8	X	11.79	12
66	MP8	Z	6.8	12
67	MP8	X	11.79	84
68	MP8	Z	6.8	84
69	MP10	X	11.43	12
70	MP10	Z	6.6	12
71	MP10	X	11.43	84
72	MP10	Z	6.6	84
73	MP9	X	11.37	12
74	MP9	Z	6.57	12

Member Point Loads (BLC 25 : Ice Wind Load AZI 240) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
75	MP9	X	11.37	84
76	MP9	Z	6.57	84
77	MP7	X	2.51	24
78	MP7	Z	1.45	24
79	MP7	X	1.67	60
80	MP7	Z	.96	60
81	MP8	X	7.44	60
82	MP8	Z	4.29	60
83	MP8	X	5.54	60
84	MP8	Z	3.2	60
85	MP9	X	7.44	60
86	MP9	Z	4.29	60
87	MP9	X	4.86	60
88	MP9	Z	2.81	60
89	MP10	X	5.9	60
90	MP10	Z	3.41	60
91	MP10	X	7.43	60
92	MP10	Z	4.29	60
93	MP8	X	1.12	60
94	MP8	Z	.65	60
95	MP10	X	1.12	60
96	MP10	Z	.65	60

Member Point Loads (BLC 26 : Ice Wind Load AZI 270)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP2	X	11.9	12
2	MP2	Z	0	12
3	MP2	X	11.9	84
4	MP2	Z	0	84
5	MP4	X	12.64	12
6	MP4	Z	0	12
7	MP4	X	12.64	84
8	MP4	Z	0	84
9	MP3	X	12.89	12
10	MP3	Z	0	12
11	MP3	X	12.89	84
12	MP3	Z	0	84
13	MP1	X	2.79	24
14	MP1	Z	0	24
15	MP1	X	1.68	60
16	MP1	Z	0	60
17	MP2	X	8.1	60
18	MP2	Z	0	60
19	MP2	X	6.14	60
20	MP2	Z	0	60
21	MP3	X	8.1	60
22	MP3	Z	0	60
23	MP3	X	5.25	60
24	MP3	Z	0	60
25	MP4	X	6	60
26	MP4	Z	0	60
27	MP4	X	8.1	60
28	MP4	Z	0	60
29	MP2	X	1.01	60
30	MP2	Z	0	60
31	MP4	X	1.01	60

Member Point Loads (BLC 26 : Ice Wind Load AZI 270) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
32	MP4	Z	0	60
33	MP5	X	16.93	12
34	MP5	Z	0	12
35	MP5	X	16.93	84
36	MP5	Z	0	84
37	MP7	X	14.28	12
38	MP7	Z	0	12
39	MP7	X	14.28	84
40	MP7	Z	0	84
41	MP6	X	13.6	12
42	MP6	Z	0	12
43	MP6	X	13.6	84
44	MP6	Z	0	84
45	MP4	X	3.13	24
46	MP4	Z	0	24
47	MP4	X	2.4	60
48	MP4	Z	0	60
49	MP5	X	9.53	60
50	MP5	Z	0	60
51	MP5	X	6.89	60
52	MP5	Z	0	60
53	MP6	X	9.53	60
54	MP6	Z	0	60
55	MP6	X	6.32	60
56	MP6	Z	0	60
57	MP7	X	8.4	60
58	MP7	Z	0	60
59	MP7	X	9.51	60
60	MP7	Z	0	60
61	MP5	X	1.84	60
62	MP5	Z	0	60
63	MP7	X	1.84	60
64	MP7	Z	0	60
65	MP8	X	16.84	12
66	MP8	Z	0	12
67	MP8	X	16.84	84
68	MP8	Z	0	84
69	MP10	X	14.25	12
70	MP10	Z	0	12
71	MP10	X	14.25	84
72	MP10	Z	0	84
73	MP9	X	13.58	12
74	MP9	Z	0	12
75	MP9	X	13.58	84
76	MP9	Z	0	84
77	MP7	X	3.13	24
78	MP7	Z	0	24
79	MP7	X	2.38	60
80	MP7	Z	0	60
81	MP8	X	9.5	60
82	MP8	Z	0	60
83	MP8	X	6.88	60
84	MP8	Z	0	60
85	MP9	X	9.5	60
86	MP9	Z	0	60
87	MP9	X	6.3	60
88	MP9	Z	0	60

Member Point Loads (BLC 26 : Ice Wind Load AZI 270) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
89	MP10	X	8.36	60
90	MP10	Z	0	60
91	MP10	X	9.49	60
92	MP10	Z	0	60
93	MP8	X	1.83	60
94	MP8	Z	0	60
95	MP10	X	1.83	60
96	MP10	Z	0	60

Member Point Loads (BLC 27 : Ice Wind Load AZI 300)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP2	X	11.7	12
2	MP2	Z	-6.76	12
3	MP2	X	11.7	84
4	MP2	Z	-6.76	84
5	MP4	X	11.4	12
6	MP4	Z	-6.58	12
7	MP4	X	11.4	84
8	MP4	Z	-6.58	84
9	MP3	X	11.36	12
10	MP3	Z	-6.56	12
11	MP3	X	11.36	84
12	MP3	Z	-6.56	84
13	MP1	X	2.51	24
14	MP1	Z	-1.45	24
15	MP1	X	1.66	60
16	MP1	Z	-.96	60
17	MP2	X	7.41	60
18	MP2	Z	-4.28	60
19	MP2	X	5.53	60
20	MP2	Z	-3.19	60
21	MP3	X	7.41	60
22	MP3	Z	-4.28	60
23	MP3	X	4.84	60
24	MP3	Z	-2.8	60
25	MP4	X	5.86	60
26	MP4	Z	-3.38	60
27	MP4	X	7.41	60
28	MP4	Z	-4.28	60
29	MP2	X	1.1	60
30	MP2	Z	-.64	60
31	MP4	X	1.1	60
32	MP4	Z	-.64	60
33	MP5	X	11.87	12
34	MP5	Z	-6.85	12
35	MP5	X	11.87	84
36	MP5	Z	-6.85	84
37	MP7	X	11.46	12
38	MP7	Z	-6.62	12
39	MP7	X	11.46	84
40	MP7	Z	-6.62	84
41	MP6	X	11.38	12
42	MP6	Z	-6.57	12
43	MP6	X	11.38	84
44	MP6	Z	-6.57	84
45	MP4	X	2.52	24

Member Point Loads (BLC 27 : Ice Wind Load AZI 300) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
46	MP4	Z	-1.46	24
47	MP4	X	1.68	60
48	MP4	Z	-.97	60
49	MP5	X	7.46	60
50	MP5	Z	-4.31	60
51	MP5	X	5.55	60
52	MP5	Z	-3.21	60
53	MP6	X	7.46	60
54	MP6	Z	-4.31	60
55	MP6	X	4.88	60
56	MP6	Z	-2.82	60
57	MP7	X	5.94	60
58	MP7	Z	-3.43	60
59	MP7	X	7.46	60
60	MP7	Z	-4.31	60
61	MP5	X	1.13	60
62	MP5	Z	-.65	60
63	MP7	X	1.13	60
64	MP7	Z	-.65	60
65	MP8	X	15.89	12
66	MP8	Z	-9.18	12
67	MP8	X	15.89	84
68	MP8	Z	-9.18	84
69	MP10	X	12.77	12
70	MP10	Z	-7.37	12
71	MP10	X	12.77	84
72	MP10	Z	-7.37	84
73	MP9	X	11.95	12
74	MP9	Z	-6.9	12
75	MP9	X	11.95	84
76	MP9	Z	-6.9	84
77	MP7	X	2.8	24
78	MP7	Z	-1.62	24
79	MP7	X	2.25	60
80	MP7	Z	-1.3	60
81	MP8	X	8.6	60
82	MP8	Z	-4.96	60
83	MP8	X	6.15	60
84	MP8	Z	-3.55	60
85	MP9	X	8.6	60
86	MP9	Z	-4.96	60
87	MP9	X	5.73	60
88	MP9	Z	-3.31	60
89	MP10	X	7.86	60
90	MP10	Z	-4.54	60
91	MP10	X	8.58	60
92	MP10	Z	-4.96	60
93	MP8	X	1.8	60
94	MP8	Z	-1.04	60
95	MP10	X	1.8	60
96	MP10	Z	-1.04	60

Member Point Loads (BLC 28 : Ice Wind Load AZI 330)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP2	X	8.37	12
2	MP2	Z	-14.5	12

Member Point Loads (BLC 28 : Ice Wind Load AZI 330) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
3	MP2	X	8.37	84
4	MP2	Z	-14.5	84
5	MP4	X	7.11	12
6	MP4	Z	-12.31	12
7	MP4	X	7.11	84
8	MP4	Z	-12.31	84
9	MP3	X	6.79	12
10	MP3	Z	-11.75	12
11	MP3	X	6.79	84
12	MP3	Z	-11.75	84
13	MP1	X	1.56	24
14	MP1	Z	-2.7	24
15	MP1	X	1.18	60
16	MP1	Z	-2.05	60
17	MP2	X	4.74	60
18	MP2	Z	-8.2	60
19	MP2	X	3.43	60
20	MP2	Z	-5.94	60
21	MP3	X	4.74	60
22	MP3	Z	-8.2	60
23	MP3	X	3.14	60
24	MP3	Z	-5.44	60
25	MP4	X	4.15	60
26	MP4	Z	-7.2	60
27	MP4	X	4.73	60
28	MP4	Z	-8.19	60
29	MP2	X	.91	60
30	MP2	Z	-1.57	60
31	MP4	X	.91	60
32	MP4	Z	-1.57	60
33	MP5	X	5.95	12
34	MP5	Z	-10.31	12
35	MP5	X	5.95	84
36	MP5	Z	-10.31	84
37	MP7	X	6.32	12
38	MP7	Z	-10.95	12
39	MP7	X	6.32	84
40	MP7	Z	-10.95	84
41	MP6	X	6.45	12
42	MP6	Z	-11.16	12
43	MP6	X	6.45	84
44	MP6	Z	-11.16	84
45	MP4	X	1.39	24
46	MP4	Z	-2.41	24
47	MP4	X	.84	60
48	MP4	Z	-1.46	60
49	MP5	X	4.05	60
50	MP5	Z	-7.02	60
51	MP5	X	3.07	60
52	MP5	Z	-5.32	60
53	MP6	X	4.05	60
54	MP6	Z	-7.02	60
55	MP6	X	2.63	60
56	MP6	Z	-4.55	60
57	MP7	X	3	60
58	MP7	Z	-5.2	60
59	MP7	X	4.05	60

Member Point Loads (BLC 28 : Ice Wind Load AZI 330) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
60	MP7	Z	-7.02	60
61	MP5	X	.5	60
62	MP5	Z	-.87	60
63	MP7	X	.5	60
64	MP7	Z	-.87	60
65	MP8	X	8.32	12
66	MP8	Z	-14.41	12
67	MP8	X	8.32	84
68	MP8	Z	-14.41	84
69	MP10	X	7.09	12
70	MP10	Z	-12.29	12
71	MP10	X	7.09	84
72	MP10	Z	-12.29	84
73	MP9	X	6.78	12
74	MP9	Z	-11.74	12
75	MP9	X	6.78	84
76	MP9	Z	-11.74	84
77	MP7	X	1.56	24
78	MP7	Z	-2.7	24
79	MP7	X	1.18	60
80	MP7	Z	-2.04	60
81	MP8	X	4.72	60
82	MP8	Z	-8.18	60
83	MP8	X	3.42	60
84	MP8	Z	-5.93	60
85	MP9	X	4.72	60
86	MP9	Z	-8.18	60
87	MP9	X	3.13	60
88	MP9	Z	-5.42	60
89	MP10	X	4.13	60
90	MP10	Z	-7.16	60
91	MP10	X	4.72	60
92	MP10	Z	-8.17	60
93	MP8	X	.9	60
94	MP8	Z	-1.55	60
95	MP10	X	.9	60
96	MP10	Z	-1.55	60

Member Point Loads (BLC 31 : Seismic Load Z)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP2	Z	-4.277	12
2	MP2	Z	-4.277	84
3	MP4	Z	-2.58	12
4	MP4	Z	-2.58	84
5	MP3	Z	-5.979	12
6	MP3	Z	-5.979	84
7	MP1	Z	-1.724	24
8	MP1	Z	-1.368	60
9	MP2	Z	-5.462	60
10	MP2	Z	-7.541	60
11	MP3	Z	-5.71	60
12	MP3	Z	-6.453	60
13	MP4	Z	-5.462	60
14	MP4	Z	-5.699	60
15	MP2	Z	-.237	60
16	MP4	Z	-.237	60

Member Point Loads (BLC 31 : Seismic Load Z) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
17	MP5	Z	-4.277	12
18	MP5	Z	-4.277	84
19	MP7	Z	-2.58	12
20	MP7	Z	-2.58	84
21	MP6	Z	-5.979	12
22	MP6	Z	-5.979	84
23	MP4	Z	-1.724	24
24	MP4	Z	-1.368	60
25	MP5	Z	-5.462	60
26	MP5	Z	-7.541	60
27	MP6	Z	-5.71	60
28	MP6	Z	-6.453	60
29	MP7	Z	-5.462	60
30	MP7	Z	-5.699	60
31	MP5	Z	-.237	60
32	MP7	Z	-.237	60
33	MP8	Z	-4.277	12
34	MP8	Z	-4.277	84
35	MP10	Z	-2.58	12
36	MP10	Z	-2.58	84
37	MP9	Z	-5.979	12
38	MP9	Z	-5.979	84
39	MP7	Z	-1.724	24
40	MP7	Z	-1.368	60
41	MP8	Z	-5.462	60
42	MP8	Z	-7.541	60
43	MP9	Z	-5.71	60
44	MP9	Z	-6.453	60
45	MP10	Z	-5.462	60
46	MP10	Z	-5.699	60
47	MP8	Z	-.237	60
48	MP10	Z	-.237	60

Member Point Loads (BLC 32 : Seismic Load X)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
1	MP2	X	-4.277	12
2	MP2	X	-4.277	84
3	MP4	X	-2.58	12
4	MP4	X	-2.58	84
5	MP3	X	-5.979	12
6	MP3	X	-5.979	84
7	MP1	X	-1.724	24
8	MP1	X	-1.368	60
9	MP2	X	-5.462	60
10	MP2	X	-7.541	60
11	MP3	X	-5.71	60
12	MP3	X	-6.453	60
13	MP4	X	-5.462	60
14	MP4	X	-5.699	60
15	MP2	X	-.237	60
16	MP4	X	-.237	60
17	MP5	X	-4.277	12
18	MP5	X	-4.277	84
19	MP7	X	-2.58	12
20	MP7	X	-2.58	84
21	MP6	X	-5.979	12

Member Point Loads (BLC 32 : Seismic Load X) (Continued)

	Member Label	Direction	Magnitude[lb,lb-ft]	Location[in,%]
22	MP6	X	-5.979	84
23	MP4	X	-1.724	24
24	MP4	X	-1.368	60
25	MP5	X	-5.462	60
26	MP5	X	-7.541	60
27	MP6	X	-5.71	60
28	MP6	X	-6.453	60
29	MP7	X	-5.462	60
30	MP7	X	-5.699	60
31	MP5	X	-.237	60
32	MP7	X	-.237	60
33	MP8	X	-4.277	12
34	MP8	X	-4.277	84
35	MP10	X	-2.58	12
36	MP10	X	-2.58	84
37	MP9	X	-5.979	12
38	MP9	X	-5.979	84
39	MP7	X	-1.724	24
40	MP7	X	-1.368	60
41	MP8	X	-5.462	60
42	MP8	X	-7.541	60
43	MP9	X	-5.71	60
44	MP9	X	-6.453	60
45	MP10	X	-5.462	60
46	MP10	X	-5.699	60
47	MP8	X	-.237	60
48	MP10	X	-.237	60

Member Distributed Loads (BLC 14 : Distr. Wind Load Z)

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft,F,psf]	Start Locatio...	End Location[...
1	M1	SZ	-72.423	-72.423	0	%100
2	M2	SZ	-72.423	-72.423	0	%100
3	M3	SZ	-72.423	-72.423	0	%100
4	M4	SZ	-72.423	-72.423	0	%100
5	M5	SZ	-72.423	-72.423	0	%100
6	MP4	SZ	-43.454	-43.454	0	%100
7	MP1	SZ	-43.454	-43.454	0	%100
8	MP2	SZ	-43.454	-43.454	0	%100
9	M19	SZ	-72.423	-72.423	0	%100
10	M20	SZ	-72.423	-72.423	0	%100
11	M21	SZ	-72.423	-72.423	0	%100
12	M23	SZ	-72.423	-72.423	0	%100
13	M24	SZ	-72.423	-72.423	0	%100
14	M26	SZ	-72.423	-72.423	0	%100
15	M27	SZ	-72.423	-72.423	0	%100
16	M28	SZ	-72.423	-72.423	0	%100
17	M29	SZ	-72.423	-72.423	0	%100
18	M30	SZ	-72.423	-72.423	0	%100
19	M31	SZ	-72.423	-72.423	0	%100
20	M32	SZ	-72.423	-72.423	0	%100
21	M33	SZ	-72.423	-72.423	0	%100
22	MP12	SZ	-43.454	-43.454	0	%100
23	MP9	SZ	-43.454	-43.454	0	%100
24	M43	SZ	-72.423	-72.423	0	%100
25	M44	SZ	-72.423	-72.423	0	%100

Member Distributed Loads (BLC 14 : Distr. Wind Load Z) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft,F,psf]	Start Locatio...	End Location[...
26	M45	SZ	-72.423	-72.423	0	%100
27	M46	SZ	-72.423	-72.423	0	%100
28	M47	SZ	-72.423	-72.423	0	%100
29	M48	SZ	-72.423	-72.423	0	%100
30	M49	SZ	-72.423	-72.423	0	%100
31	M50	SZ	-72.423	-72.423	0	%100
32	M51	SZ	-72.423	-72.423	0	%100
33	M52	SZ	-72.423	-72.423	0	%100
34	M53	SZ	-72.423	-72.423	0	%100
35	M54	SZ	-72.423	-72.423	0	%100
36	MP8	SZ	-43.454	-43.454	0	%100
37	MP5	SZ	-43.454	-43.454	0	%100
38	M64	SZ	-72.423	-72.423	0	%100
39	M65	SZ	-72.423	-72.423	0	%100
40	M66	SZ	-72.423	-72.423	0	%100
41	M67	SZ	-72.423	-72.423	0	%100
42	M68	SZ	-72.423	-72.423	0	%100
43	M69	SZ	-72.423	-72.423	0	%100
44	M70	SZ	-72.423	-72.423	0	%100
45	M71	SZ	-72.423	-72.423	0	%100
46	M72	SZ	-72.423	-72.423	0	%100
47	M73	SZ	-72.423	-72.423	0	%100
48	M74	SZ	-72.423	-72.423	0	%100
49	M75	SZ	-72.423	-72.423	0	%100
50	M76	SZ	-72.423	-72.423	0	%100
51	M77	SZ	0	0	0	%100
52	M78	SZ	0	0	0	%100
53	M79	SZ	0	0	0	%100
54	M80	SZ	0	0	0	%100
55	M81	SZ	0	0	0	%100
56	M82	SZ	0	0	0	%100
57	M83	SZ	0	0	0	%100
58	M84	SZ	0	0	0	%100
59	M85	SZ	0	0	0	%100
60	M86	SZ	0	0	0	%100
61	M87	SZ	0	0	0	%100
62	M88	SZ	0	0	0	%100
63	MP3	SZ	-43.454	-43.454	0	%100
64	MP11	SZ	-43.454	-43.454	0	%100
65	MP7	SZ	-43.454	-43.454	0	%100
66	M97	SZ	-43.454	-43.454	0	%100
67	M100	SZ	-43.454	-43.454	0	%100
68	M103	SZ	-43.454	-43.454	0	%100
69	M104	SZ	-43.454	-43.454	0	%100
70	M105	SZ	0	0	0	%100
71	M106	SZ	0	0	0	%100
72	M107	SZ	0	0	0	%100
73	M108	SZ	-43.454	-43.454	0	%100
74	M109	SZ	0	0	0	%100
75	M110	SZ	0	0	0	%100
76	M111	SZ	-43.454	-43.454	0	%100
77	M112	SZ	0	0	0	%100
78	M113	SZ	0	0	0	%100
79	M114	SZ	0	0	0	%100
80	M115	SZ	0	0	0	%100
81	M116	SZ	0	0	0	%100
82	M119	SZ	0	0	0	%100

Member Distributed Loads (BLC 14 : Distr. Wind Load Z) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft,F,psf]	Start Locatio...	End Location[...
83	M120	SZ	0	0	0	%100
84	M121	SZ	0	0	0	%100
85	M122	SZ	0	0	0	%100
86	M123	SZ	0	0	0	%100
87	M124	SZ	0	0	0	%100
88	M125	SZ	0	0	0	%100
89	M126	SZ	0	0	0	%100
90	M127	SZ	0	0	0	%100
91	M128	SZ	0	0	0	%100
92	M131	SZ	0	0	0	%100
93	M132	SZ	0	0	0	%100
94	M133	SZ	0	0	0	%100
95	M134	SZ	0	0	0	%100
96	M135	SZ	0	0	0	%100
97	M136	SZ	0	0	0	%100
98	M119A	SZ	0	0	0	%100
99	M120A	SZ	0	0	0	%100
100	M121A	SZ	0	0	0	%100
101	M122A	SZ	0	0	0	%100
102	M123A	SZ	0	0	0	%100
103	M124A	SZ	0	0	0	%100
104	M125A	SZ	0	0	0	%100
105	M127A	SZ	0	0	0	%100
106	M128A	SZ	0	0	0	%100
107	M129A	SZ	0	0	0	%100
108	M130A	SZ	0	0	0	%100
109	M131A	SZ	0	0	0	%100
110	M132A	SZ	0	0	0	%100
111	M119B	SZ	-72.423	-72.423	0	%100
112	M121B	SZ	-72.423	-72.423	0	%100
113	M120B	SZ	-72.423	-72.423	0	%100
114	M121C	SZ	-72.423	-72.423	0	%100
115	MP10	SZ	-43.454	-43.454	0	%100
116	M124B	SZ	0	0	0	%100
117	M125B	SZ	0	0	0	%100
118	M126B	SZ	0	0	0	%100
119	MP6	SZ	-43.454	-43.454	0	%100
120	M128B	SZ	0	0	0	%100
121	M129B	SZ	0	0	0	%100
122	M130B	SZ	0	0	0	%100

Member Distributed Loads (BLC 15 : Distr. Wind Load X)

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft,F,psf]	Start Locatio...	End Location[...
1	M1	SX	-72.423	-72.423	0	%100
2	M2	SX	-72.423	-72.423	0	%100
3	M3	SX	-72.423	-72.423	0	%100
4	M4	SX	-72.423	-72.423	0	%100
5	M5	SX	-72.423	-72.423	0	%100
6	MP4	SX	-43.454	-43.454	0	%100
7	MP1	SX	-43.454	-43.454	0	%100
8	MP2	SX	-43.454	-43.454	0	%100
9	M19	SX	-72.423	-72.423	0	%100
10	M20	SX	-72.423	-72.423	0	%100
11	M21	SX	-72.423	-72.423	0	%100
12	M23	SX	-72.423	-72.423	0	%100
13	M24	SX	-72.423	-72.423	0	%100

Member Distributed Loads (BLC 15 : Distr. Wind Load X) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft,F,psf]	Start Locatio...	End Location[...
14	M26	SX	-72.423	-72.423	0	%100
15	M27	SX	-72.423	-72.423	0	%100
16	M28	SX	-72.423	-72.423	0	%100
17	M29	SX	-72.423	-72.423	0	%100
18	M30	SX	-72.423	-72.423	0	%100
19	M31	SX	-72.423	-72.423	0	%100
20	M32	SX	-72.423	-72.423	0	%100
21	M33	SX	-72.423	-72.423	0	%100
22	MP12	SX	-43.454	-43.454	0	%100
23	MP9	SX	-43.454	-43.454	0	%100
24	M43	SX	-72.423	-72.423	0	%100
25	M44	SX	-72.423	-72.423	0	%100
26	M45	SX	-72.423	-72.423	0	%100
27	M46	SX	-72.423	-72.423	0	%100
28	M47	SX	-72.423	-72.423	0	%100
29	M48	SX	-72.423	-72.423	0	%100
30	M49	SX	-72.423	-72.423	0	%100
31	M50	SX	-72.423	-72.423	0	%100
32	M51	SX	-72.423	-72.423	0	%100
33	M52	SX	-72.423	-72.423	0	%100
34	M53	SX	-72.423	-72.423	0	%100
35	M54	SX	-72.423	-72.423	0	%100
36	MP8	SX	-43.454	-43.454	0	%100
37	MP5	SX	-43.454	-43.454	0	%100
38	M64	SX	-72.423	-72.423	0	%100
39	M65	SX	-72.423	-72.423	0	%100
40	M66	SX	-72.423	-72.423	0	%100
41	M67	SX	-72.423	-72.423	0	%100
42	M68	SX	-72.423	-72.423	0	%100
43	M69	SX	-72.423	-72.423	0	%100
44	M70	SX	-72.423	-72.423	0	%100
45	M71	SX	-72.423	-72.423	0	%100
46	M72	SX	-72.423	-72.423	0	%100
47	M73	SX	-72.423	-72.423	0	%100
48	M74	SX	-72.423	-72.423	0	%100
49	M75	SX	-72.423	-72.423	0	%100
50	M76	SX	-72.423	-72.423	0	%100
51	M77	SX	0	0	0	%100
52	M78	SX	0	0	0	%100
53	M79	SX	0	0	0	%100
54	M80	SX	0	0	0	%100
55	M81	SX	0	0	0	%100
56	M82	SX	0	0	0	%100
57	M83	SX	0	0	0	%100
58	M84	SX	0	0	0	%100
59	M85	SX	0	0	0	%100
60	M86	SX	0	0	0	%100
61	M87	SX	0	0	0	%100
62	M88	SX	0	0	0	%100
63	MP3	SX	-43.454	-43.454	0	%100
64	MP11	SX	-43.454	-43.454	0	%100
65	MP7	SX	-43.454	-43.454	0	%100
66	M97	SX	-43.454	-43.454	0	%100
67	M100	SX	-43.454	-43.454	0	%100
68	M103	SX	-43.454	-43.454	0	%100
69	M104	SX	-43.454	-43.454	0	%100
70	M105	SX	0	0	0	%100

Member Distributed Loads (BLC 15 : Distr. Wind Load X) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft,F,psf]	Start Locatio...	End Location[...
71	M106	SX	0	0	0	%100
72	M107	SX	0	0	0	%100
73	M108	SX	-43.454	-43.454	0	%100
74	M109	SX	0	0	0	%100
75	M110	SX	0	0	0	%100
76	M111	SX	-43.454	-43.454	0	%100
77	M112	SX	0	0	0	%100
78	M113	SX	0	0	0	%100
79	M114	SX	0	0	0	%100
80	M115	SX	0	0	0	%100
81	M116	SX	0	0	0	%100
82	M119	SX	0	0	0	%100
83	M120	SX	0	0	0	%100
84	M121	SX	0	0	0	%100
85	M122	SX	0	0	0	%100
86	M123	SX	0	0	0	%100
87	M124	SX	0	0	0	%100
88	M125	SX	0	0	0	%100
89	M126	SX	0	0	0	%100
90	M127	SX	0	0	0	%100
91	M128	SX	0	0	0	%100
92	M131	SX	0	0	0	%100
93	M132	SX	0	0	0	%100
94	M133	SX	0	0	0	%100
95	M134	SX	0	0	0	%100
96	M135	SX	0	0	0	%100
97	M136	SX	0	0	0	%100
98	M119A	SX	0	0	0	%100
99	M120A	SX	0	0	0	%100
100	M121A	SX	0	0	0	%100
101	M122A	SX	0	0	0	%100
102	M123A	SX	0	0	0	%100
103	M124A	SX	0	0	0	%100
104	M125A	SX	0	0	0	%100
105	M127A	SX	0	0	0	%100
106	M128A	SX	0	0	0	%100
107	M129A	SX	0	0	0	%100
108	M130A	SX	0	0	0	%100
109	M131A	SX	0	0	0	%100
110	M132A	SX	0	0	0	%100
111	M119B	SX	-72.423	-72.423	0	%100
112	M121B	SX	-72.423	-72.423	0	%100
113	M120B	SX	-72.423	-72.423	0	%100
114	M121C	SX	-72.423	-72.423	0	%100
115	MP10	SX	-43.454	-43.454	0	%100
116	M124B	SX	0	0	0	%100
117	M125B	SX	0	0	0	%100
118	M126B	SX	0	0	0	%100
119	MP6	SX	-43.454	-43.454	0	%100
120	M128B	SX	0	0	0	%100
121	M129B	SX	0	0	0	%100
122	M130B	SX	0	0	0	%100

Member Distributed Loads (BLC 16 : Ice Weight)

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft,F,psf]	Start Locatio...	End Location[...
1	M1	Y	-3.682	-3.682	0	%100

Member Distributed Loads (BLC 16 : Ice Weight) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft,F,psf]	Start Locatio...	End Location[...
2	M2	Y	-4.691	-4.691	0	%100
3	M3	Y	-4.691	-4.691	0	%100
4	M4	Y	-3.682	-3.682	0	%100
5	M5	Y	-3.682	-3.682	0	%100
6	MP4	Y	-5.053	-5.053	0	%100
7	MP1	Y	-5.053	-5.053	0	%100
8	MP2	Y	-5.053	-5.053	0	%100
9	M19	Y	-3.682	-3.682	0	%100
10	M20	Y	-3.682	-3.682	0	%100
11	M21	Y	-3.682	-3.682	0	%100
12	M23	Y	-3.682	-3.682	0	%100
13	M24	Y	-3.682	-3.682	0	%100
14	M26	Y	-3.682	-3.682	0	%100
15	M27	Y	-3.682	-3.682	0	%100
16	M28	Y	-3.682	-3.682	0	%100
17	M29	Y	-4.691	-4.691	0	%100
18	M30	Y	-4.691	-4.691	0	%100
19	M31	Y	-3.682	-3.682	0	%100
20	M32	Y	-3.682	-3.682	0	%100
21	M33	Y	-3.682	-3.682	0	%100
22	MP12	Y	-5.053	-5.053	0	%100
23	MP9	Y	-5.053	-5.053	0	%100
24	M43	Y	-3.682	-3.682	0	%100
25	M44	Y	-3.682	-3.682	0	%100
26	M45	Y	-3.682	-3.682	0	%100
27	M46	Y	-3.682	-3.682	0	%100
28	M47	Y	-3.682	-3.682	0	%100
29	M48	Y	-3.682	-3.682	0	%100
30	M49	Y	-3.682	-3.682	0	%100
31	M50	Y	-4.691	-4.691	0	%100
32	M51	Y	-4.691	-4.691	0	%100
33	M52	Y	-3.682	-3.682	0	%100
34	M53	Y	-3.682	-3.682	0	%100
35	M54	Y	-3.682	-3.682	0	%100
36	MP8	Y	-5.053	-5.053	0	%100
37	MP5	Y	-5.053	-5.053	0	%100
38	M64	Y	-3.682	-3.682	0	%100
39	M65	Y	-3.682	-3.682	0	%100
40	M66	Y	-3.682	-3.682	0	%100
41	M67	Y	-3.682	-3.682	0	%100
42	M68	Y	-3.682	-3.682	0	%100
43	M69	Y	-3.682	-3.682	0	%100
44	M70	Y	-3.682	-3.682	0	%100
45	M71	Y	-3.682	-3.682	0	%100
46	M72	Y	-3.682	-3.682	0	%100
47	M73	Y	-3.682	-3.682	0	%100
48	M74	Y	-3.682	-3.682	0	%100
49	M75	Y	-3.682	-3.682	0	%100
50	M76	Y	-3.682	-3.682	0	%100
51	M77	Y	-1.665	-1.665	0	%100
52	M78	Y	-1.665	-1.665	0	%100
53	M79	Y	-1.665	-1.665	0	%100
54	M80	Y	-1.665	-1.665	0	%100
55	M81	Y	-1.665	-1.665	0	%100
56	M82	Y	-1.665	-1.665	0	%100
57	M83	Y	-1.665	-1.665	0	%100
58	M84	Y	-1.665	-1.665	0	%100

Member Distributed Loads (BLC 16 : Ice Weight) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft,F,psf]	Start Locatio...	End Location[...
59	M85	Y	-1.665	-1.665	0	%100
60	M86	Y	-1.665	-1.665	0	%100
61	M87	Y	-1.665	-1.665	0	%100
62	M88	Y	-1.665	-1.665	0	%100
63	MP3	Y	-5.053	-5.053	0	%100
64	MP11	Y	-5.053	-5.053	0	%100
65	MP7	Y	-5.053	-5.053	0	%100
66	M97	Y	-5.053	-5.053	0	%100
67	M100	Y	-5.053	-5.053	0	%100
68	M103	Y	-5.053	-5.053	0	%100
69	M104	Y	-5.053	-5.053	0	%100
70	M105	Y	-1.665	-1.665	0	%100
71	M106	Y	-1.665	-1.665	0	%100
72	M107	Y	-1.665	-1.665	0	%100
73	M108	Y	-5.053	-5.053	0	%100
74	M109	Y	-1.665	-1.665	0	%100
75	M110	Y	-1.665	-1.665	0	%100
76	M111	Y	-5.053	-5.053	0	%100
77	M112	Y	-1.665	-1.665	0	%100
78	M113	Y	-1.665	-1.665	0	%100
79	M114	Y	-1.665	-1.665	0	%100
80	M115	Y	-1.665	-1.665	0	%100
81	M116	Y	-1.665	-1.665	0	%100
82	M119	Y	-1.665	-1.665	0	%100
83	M120	Y	-1.665	-1.665	0	%100
84	M121	Y	-1.665	-1.665	0	%100
85	M122	Y	-1.665	-1.665	0	%100
86	M123	Y	-1.665	-1.665	0	%100
87	M124	Y	-1.665	-1.665	0	%100
88	M125	Y	-1.665	-1.665	0	%100
89	M126	Y	-1.665	-1.665	0	%100
90	M127	Y	-1.665	-1.665	0	%100
91	M128	Y	-1.665	-1.665	0	%100
92	M131	Y	-1.665	-1.665	0	%100
93	M132	Y	-1.665	-1.665	0	%100
94	M133	Y	-1.665	-1.665	0	%100
95	M134	Y	-1.665	-1.665	0	%100
96	M135	Y	-1.665	-1.665	0	%100
97	M136	Y	-1.665	-1.665	0	%100
98	M119A	Y	-1.665	-1.665	0	%100
99	M120A	Y	-1.665	-1.665	0	%100
100	M121A	Y	-1.665	-1.665	0	%100
101	M122A	Y	-1.665	-1.665	0	%100
102	M123A	Y	-1.665	-1.665	0	%100
103	M124A	Y	-1.665	-1.665	0	%100
104	M125A	Y	-1.665	-1.665	0	%100
105	M127A	Y	-1.665	-1.665	0	%100
106	M128A	Y	-1.665	-1.665	0	%100
107	M129A	Y	-1.665	-1.665	0	%100
108	M130A	Y	-1.665	-1.665	0	%100
109	M131A	Y	-1.665	-1.665	0	%100
110	M132A	Y	-1.665	-1.665	0	%100
111	M119B	Y	-3.682	-3.682	0	%100
112	M121B	Y	-3.682	-3.682	0	%100
113	M120B	Y	-3.682	-3.682	0	%100
114	M121C	Y	-3.682	-3.682	0	%100
115	MP10	Y	-5.053	-5.053	0	%100

Member Distributed Loads (BLC 16 : Ice Weight) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft,F,psf]	Start Locatio...	End Location[...
116	M124B	Y	-1.665	-1.665	0	%100
117	M125B	Y	-1.665	-1.665	0	%100
118	M126B	Y	-1.665	-1.665	0	%100
119	MP6	Y	-5.053	-5.053	0	%100
120	M128B	Y	-1.665	-1.665	0	%100
121	M129B	Y	-1.665	-1.665	0	%100
122	M130B	Y	-1.665	-1.665	0	%100

Member Distributed Loads (BLC 29 : Distr. Ice Wind Load Z)

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft,F,psf]	Start Locatio...	End Location[...
1	M1	SZ	-21.402	-21.402	0	%100
2	M2	SZ	-16.959	-16.959	0	%100
3	M3	SZ	-16.959	-16.959	0	%100
4	M4	SZ	-21.402	-21.402	0	%100
5	M5	SZ	-21.402	-21.402	0	%100
6	MP4	SZ	-16.01	-16.01	0	%100
7	MP1	SZ	-16.01	-16.01	0	%100
8	MP2	SZ	-16.01	-16.01	0	%100
9	M19	SZ	-21.402	-21.402	0	%100
10	M20	SZ	-21.402	-21.402	0	%100
11	M21	SZ	-21.402	-21.402	0	%100
12	M23	SZ	-21.402	-21.402	0	%100
13	M24	SZ	-21.402	-21.402	0	%100
14	M26	SZ	-21.402	-21.402	0	%100
15	M27	SZ	-21.402	-21.402	0	%100
16	M28	SZ	-21.402	-21.402	0	%100
17	M29	SZ	-16.959	-16.959	0	%100
18	M30	SZ	-16.959	-16.959	0	%100
19	M31	SZ	-21.402	-21.402	0	%100
20	M32	SZ	-21.402	-21.402	0	%100
21	M33	SZ	-21.402	-21.402	0	%100
22	MP12	SZ	-16.01	-16.01	0	%100
23	MP9	SZ	-16.01	-16.01	0	%100
24	M43	SZ	-21.402	-21.402	0	%100
25	M44	SZ	-21.402	-21.402	0	%100
26	M45	SZ	-21.402	-21.402	0	%100
27	M46	SZ	-21.402	-21.402	0	%100
28	M47	SZ	-21.402	-21.402	0	%100
29	M48	SZ	-21.402	-21.402	0	%100
30	M49	SZ	-21.402	-21.402	0	%100
31	M50	SZ	-16.959	-16.959	0	%100
32	M51	SZ	-16.959	-16.959	0	%100
33	M52	SZ	-21.402	-21.402	0	%100
34	M53	SZ	-21.402	-21.402	0	%100
35	M54	SZ	-21.402	-21.402	0	%100
36	MP8	SZ	-16.01	-16.01	0	%100
37	MP5	SZ	-16.01	-16.01	0	%100
38	M64	SZ	-21.402	-21.402	0	%100
39	M65	SZ	-21.402	-21.402	0	%100
40	M66	SZ	-21.402	-21.402	0	%100
41	M67	SZ	-21.402	-21.402	0	%100
42	M68	SZ	-21.402	-21.402	0	%100
43	M69	SZ	-21.402	-21.402	0	%100
44	M70	SZ	-21.402	-21.402	0	%100
45	M71	SZ	-21.402	-21.402	0	%100
46	M72	SZ	-21.402	-21.402	0	%100

Member Distributed Loads (BLC 29 : Distr. Ice Wind Load Z) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft,F,psf]	Start Locatio...	End Location[...
47	M73	SZ	-21.402	-21.402	0	%100
48	M74	SZ	-21.402	-21.402	0	%100
49	M75	SZ	-21.402	-21.402	0	%100
50	M76	SZ	-21.402	-21.402	0	%100
51	M77	SZ	0	0	0	%100
52	M78	SZ	0	0	0	%100
53	M79	SZ	0	0	0	%100
54	M80	SZ	0	0	0	%100
55	M81	SZ	0	0	0	%100
56	M82	SZ	0	0	0	%100
57	M83	SZ	0	0	0	%100
58	M84	SZ	0	0	0	%100
59	M85	SZ	0	0	0	%100
60	M86	SZ	0	0	0	%100
61	M87	SZ	0	0	0	%100
62	M88	SZ	0	0	0	%100
63	MP3	SZ	-16.01	-16.01	0	%100
64	MP11	SZ	-16.01	-16.01	0	%100
65	MP7	SZ	-16.01	-16.01	0	%100
66	M97	SZ	-16.01	-16.01	0	%100
67	M100	SZ	-16.01	-16.01	0	%100
68	M103	SZ	-16.01	-16.01	0	%100
69	M104	SZ	-16.01	-16.01	0	%100
70	M105	SZ	0	0	0	%100
71	M106	SZ	0	0	0	%100
72	M107	SZ	0	0	0	%100
73	M108	SZ	-16.01	-16.01	0	%100
74	M109	SZ	0	0	0	%100
75	M110	SZ	0	0	0	%100
76	M111	SZ	-16.01	-16.01	0	%100
77	M112	SZ	0	0	0	%100
78	M113	SZ	0	0	0	%100
79	M114	SZ	0	0	0	%100
80	M115	SZ	0	0	0	%100
81	M116	SZ	0	0	0	%100
82	M119	SZ	0	0	0	%100
83	M120	SZ	0	0	0	%100
84	M121	SZ	0	0	0	%100
85	M122	SZ	0	0	0	%100
86	M123	SZ	0	0	0	%100
87	M124	SZ	0	0	0	%100
88	M125	SZ	0	0	0	%100
89	M126	SZ	0	0	0	%100
90	M127	SZ	0	0	0	%100
91	M128	SZ	0	0	0	%100
92	M131	SZ	0	0	0	%100
93	M132	SZ	0	0	0	%100
94	M133	SZ	0	0	0	%100
95	M134	SZ	0	0	0	%100
96	M135	SZ	0	0	0	%100
97	M136	SZ	0	0	0	%100
98	M119A	SZ	0	0	0	%100
99	M120A	SZ	0	0	0	%100
100	M121A	SZ	0	0	0	%100
101	M122A	SZ	0	0	0	%100
102	M123A	SZ	0	0	0	%100
103	M124A	SZ	0	0	0	%100

Member Distributed Loads (BLC 29 : Distr. Ice Wind Load Z) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft,F,psf]	Start Locatio...	End Location[...
104	M125A	SZ	0	0	0	%100
105	M127A	SZ	0	0	0	%100
106	M128A	SZ	0	0	0	%100
107	M129A	SZ	0	0	0	%100
108	M130A	SZ	0	0	0	%100
109	M131A	SZ	0	0	0	%100
110	M132A	SZ	0	0	0	%100
111	M119B	SZ	-21.402	-21.402	0	%100
112	M121B	SZ	-21.402	-21.402	0	%100
113	M120B	SZ	-21.402	-21.402	0	%100
114	M121C	SZ	-21.402	-21.402	0	%100
115	MP10	SZ	-16.01	-16.01	0	%100
116	M124B	SZ	0	0	0	%100
117	M125B	SZ	0	0	0	%100
118	M126B	SZ	0	0	0	%100
119	MP6	SZ	-16.01	-16.01	0	%100
120	M128B	SZ	0	0	0	%100
121	M129B	SZ	0	0	0	%100
122	M130B	SZ	0	0	0	%100

Member Distributed Loads (BLC 30 : Distr. Ice Wind Load X)

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft,F,psf]	Start Locatio...	End Location[...
1	M1	SX	-21.402	-21.402	0	%100
2	M2	SX	-16.959	-16.959	0	%100
3	M3	SX	-16.959	-16.959	0	%100
4	M4	SX	-21.402	-21.402	0	%100
5	M5	SX	-21.402	-21.402	0	%100
6	MP4	SX	-16.01	-16.01	0	%100
7	MP1	SX	-16.01	-16.01	0	%100
8	MP2	SX	-16.01	-16.01	0	%100
9	M19	SX	-21.402	-21.402	0	%100
10	M20	SX	-21.402	-21.402	0	%100
11	M21	SX	-21.402	-21.402	0	%100
12	M23	SX	-21.402	-21.402	0	%100
13	M24	SX	-21.402	-21.402	0	%100
14	M26	SX	-21.402	-21.402	0	%100
15	M27	SX	-21.402	-21.402	0	%100
16	M28	SX	-21.402	-21.402	0	%100
17	M29	SX	-16.959	-16.959	0	%100
18	M30	SX	-16.959	-16.959	0	%100
19	M31	SX	-21.402	-21.402	0	%100
20	M32	SX	-21.402	-21.402	0	%100
21	M33	SX	-21.402	-21.402	0	%100
22	MP12	SX	-16.01	-16.01	0	%100
23	MP9	SX	-16.01	-16.01	0	%100
24	M43	SX	-21.402	-21.402	0	%100
25	M44	SX	-21.402	-21.402	0	%100
26	M45	SX	-21.402	-21.402	0	%100
27	M46	SX	-21.402	-21.402	0	%100
28	M47	SX	-21.402	-21.402	0	%100
29	M48	SX	-21.402	-21.402	0	%100
30	M49	SX	-21.402	-21.402	0	%100
31	M50	SX	-16.959	-16.959	0	%100
32	M51	SX	-16.959	-16.959	0	%100
33	M52	SX	-21.402	-21.402	0	%100
34	M53	SX	-21.402	-21.402	0	%100

Member Distributed Loads (BLC 30 : Distr. Ice Wind Load X) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft,F,psf]	Start Locatio...	End Location[...
35	M54	SX	-21.402	-21.402	0	%100
36	MP8	SX	-16.01	-16.01	0	%100
37	MP5	SX	-16.01	-16.01	0	%100
38	M64	SX	-21.402	-21.402	0	%100
39	M65	SX	-21.402	-21.402	0	%100
40	M66	SX	-21.402	-21.402	0	%100
41	M67	SX	-21.402	-21.402	0	%100
42	M68	SX	-21.402	-21.402	0	%100
43	M69	SX	-21.402	-21.402	0	%100
44	M70	SX	-21.402	-21.402	0	%100
45	M71	SX	-21.402	-21.402	0	%100
46	M72	SX	-21.402	-21.402	0	%100
47	M73	SX	-21.402	-21.402	0	%100
48	M74	SX	-21.402	-21.402	0	%100
49	M75	SX	-21.402	-21.402	0	%100
50	M76	SX	-21.402	-21.402	0	%100
51	M77	SX	0	0	0	%100
52	M78	SX	0	0	0	%100
53	M79	SX	0	0	0	%100
54	M80	SX	0	0	0	%100
55	M81	SX	0	0	0	%100
56	M82	SX	0	0	0	%100
57	M83	SX	0	0	0	%100
58	M84	SX	0	0	0	%100
59	M85	SX	0	0	0	%100
60	M86	SX	0	0	0	%100
61	M87	SX	0	0	0	%100
62	M88	SX	0	0	0	%100
63	MP3	SX	-16.01	-16.01	0	%100
64	MP11	SX	-16.01	-16.01	0	%100
65	MP7	SX	-16.01	-16.01	0	%100
66	M97	SX	-16.01	-16.01	0	%100
67	M100	SX	-16.01	-16.01	0	%100
68	M103	SX	-16.01	-16.01	0	%100
69	M104	SX	-16.01	-16.01	0	%100
70	M105	SX	0	0	0	%100
71	M106	SX	0	0	0	%100
72	M107	SX	0	0	0	%100
73	M108	SX	-16.01	-16.01	0	%100
74	M109	SX	0	0	0	%100
75	M110	SX	0	0	0	%100
76	M111	SX	-16.01	-16.01	0	%100
77	M112	SX	0	0	0	%100
78	M113	SX	0	0	0	%100
79	M114	SX	0	0	0	%100
80	M115	SX	0	0	0	%100
81	M116	SX	0	0	0	%100
82	M119	SX	0	0	0	%100
83	M120	SX	0	0	0	%100
84	M121	SX	0	0	0	%100
85	M122	SX	0	0	0	%100
86	M123	SX	0	0	0	%100
87	M124	SX	0	0	0	%100
88	M125	SX	0	0	0	%100
89	M126	SX	0	0	0	%100
90	M127	SX	0	0	0	%100
91	M128	SX	0	0	0	%100

Member Distributed Loads (BLC 30 : Distr. Ice Wind Load X) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft,F,psf]	Start Locatio...	End Location[...
92	M131	SX	0	0	0	%100
93	M132	SX	0	0	0	%100
94	M133	SX	0	0	0	%100
95	M134	SX	0	0	0	%100
96	M135	SX	0	0	0	%100
97	M136	SX	0	0	0	%100
98	M119A	SX	0	0	0	%100
99	M120A	SX	0	0	0	%100
100	M121A	SX	0	0	0	%100
101	M122A	SX	0	0	0	%100
102	M123A	SX	0	0	0	%100
103	M124A	SX	0	0	0	%100
104	M125A	SX	0	0	0	%100
105	M127A	SX	0	0	0	%100
106	M128A	SX	0	0	0	%100
107	M129A	SX	0	0	0	%100
108	M130A	SX	0	0	0	%100
109	M131A	SX	0	0	0	%100
110	M132A	SX	0	0	0	%100
111	M119B	SX	-21.402	-21.402	0	%100
112	M121B	SX	-21.402	-21.402	0	%100
113	M120B	SX	-21.402	-21.402	0	%100
114	M121C	SX	-21.402	-21.402	0	%100
115	MP10	SX	-16.01	-16.01	0	%100
116	M124B	SX	0	0	0	%100
117	M125B	SX	0	0	0	%100
118	M126B	SX	0	0	0	%100
119	MP6	SX	-16.01	-16.01	0	%100
120	M128B	SX	0	0	0	%100
121	M129B	SX	0	0	0	%100
122	M130B	SX	0	0	0	%100

Member Distributed Loads (BLC 46 : BLC 1 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft,F,psf]	Start Locatio...	End Location[...
1	M1	Y	-2.357	-.777	75.6	81.9
2	M1	Y	-.777	-.921	81.9	88.2
3	M1	Y	-.891	-2.997	88.2	94.5
4	M1	Y	-2.997	-5.127	94.5	100.8
5	M1	Y	-5.127	-5.219	100.8	107.1
6	M1	Y	-5.219	-4.046	107.1	113.4
7	M1	Y	-4.046	-2.554	113.4	119.7
8	M1	Y	-2.554	-1.121	119.7	126
9	M28	Y	-1.853	-2.968	0	6.3
10	M28	Y	-2.968	-4.731	6.3	12.6
11	M28	Y	-4.731	-5.533	12.6	18.9
12	M28	Y	-5.533	-4.611	18.9	25.2
13	M28	Y	-4.611	-3.145	25.2	31.5
14	M28	Y	-3.145	-1.116	31.5	37.8
15	M28	Y	-1.237	-2.068	37.8	44.1
16	M28	Y	-2.068	-4.748	44.1	50.4
17	M70	Y	-.175	-5.085	0	6.564
18	M70	Y	-5.085	-11.662	6.564	13.127
19	M70	Y	-11.662	-15.96	13.127	19.691
20	M70	Y	-15.96	-15.305	19.691	26.254
21	M70	Y	-15.305	-11.218	26.254	32.818
22	M70	Y	-11.218	-5.672	32.818	39.381

Member Distributed Loads (BLC 46 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft,F,psf]	Start Locatio...	End Location[...
23	M70	Y	-5.672	-.757	39.381	45.945
24	M88	Y	-.812	-.812	.953	3.945
25	M1	Y	-1.121	-2.554	0	6.3
26	M1	Y	-2.554	-4.046	6.3	12.6
27	M1	Y	-4.046	-5.219	12.6	18.9
28	M1	Y	-5.219	-5.127	18.9	25.2
29	M1	Y	-5.127	-2.997	25.2	31.5
30	M1	Y	-2.997	-.891	31.5	37.8
31	M1	Y	-.951	-1.252	37.8	44.1
32	M1	Y	-1.252	-2.403	44.1	50.4
33	M49	Y	-2.393	-1.052	75.6	81.9
34	M49	Y	-1.052	-1.176	81.9	88.2
35	M49	Y	-1.116	-3.145	88.2	94.5
36	M49	Y	-3.145	-4.611	94.5	100.8
37	M49	Y	-4.611	-5.533	100.8	107.1
38	M49	Y	-5.533	-4.731	107.1	113.4
39	M49	Y	-4.731	-2.968	113.4	119.7
40	M49	Y	-2.968	-1.853	119.7	126
41	M72	Y	-.703	-3.521	0	6.564
42	M72	Y	-3.521	-7.342	6.564	13.127
43	M72	Y	-7.342	-10.388	13.127	19.691
44	M72	Y	-10.388	-10.188	19.691	26.254
45	M72	Y	-10.188	-7.536	26.254	32.818
46	M72	Y	-7.536	-3.536	32.818	39.381
47	M72	Y	-3.536	-.121	39.381	45.945
48	M84	Y	-.812	-.812	0	2.991
49	M28	Y	-4.709	-1.554	75.6	81.9
50	M28	Y	-1.554	-1.841	81.9	88.2
51	M28	Y	-1.782	-5.994	88.2	94.5
52	M28	Y	-5.994	-10.257	94.5	100.8
53	M28	Y	-10.257	-10.443	100.8	107.1
54	M28	Y	-10.443	-8.094	107.1	113.4
55	M28	Y	-8.094	-5.105	113.4	119.7
56	M28	Y	-5.105	-2.242	119.7	126
57	M49	Y	-3.702	-5.938	0	6.3
58	M49	Y	-5.938	-9.465	6.3	12.6
59	M49	Y	-9.465	-11.067	12.6	18.9
60	M49	Y	-11.067	-9.222	18.9	25.2
61	M49	Y	-9.222	-6.289	25.2	31.5
62	M49	Y	-6.289	-2.232	31.5	37.8
63	M49	Y	-2.262	-.612	37.8	44.1
64	M49	Y	-.612	-2.382	44.1	50.4
65	M71	Y	-1.353	-5.291	0	6.564
66	M71	Y	-5.291	-10.64	6.564	13.127
67	M71	Y	-10.64	-15.288	13.127	19.691
68	M71	Y	-15.288	-15.173	19.691	26.254
69	M71	Y	-15.173	-11.11	26.254	32.818
70	M71	Y	-11.11	-5.121	32.818	39.381
71	M71	Y	-5.121	-.189	39.381	45.945
72	M80	Y	-1.624	-1.624	0	2.991
73	M1	Y	-2.358	-3.952	50.4	56.7
74	M1	Y	-3.952	-4.536	56.7	63
75	M1	Y	-4.536	-3.98	63	69.3
76	M1	Y	-3.98	-2.312	69.3	75.6
77	M19	Y	-1.817	-5.185	0	6.079
78	M19	Y	-5.185	-8.677	6.079	12.158
79	M19	Y	-8.677	-13.691	12.158	18.236

Member Distributed Loads (BLC 46 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft,F,psf]	Start Locatio...	End Location[...
80	M19	Y	-13.691	-15.804	18.236	24.315
81	M19	Y	-15.804	-11.915	24.315	30.394
82	M19	Y	-11.915	-6.326	30.394	36.473
83	M20	Y	-.4	-2.963	0	6.079
84	M20	Y	-2.963	-6.584	6.079	12.158
85	M20	Y	-6.584	-10.069	12.158	18.236
86	M20	Y	-10.069	-10.245	18.236	24.315
87	M20	Y	-10.245	-7.645	24.315	30.394
88	M20	Y	-7.645	-4.795	30.394	36.473
89	M43	Y	-2.808	-5.594	0	6.079
90	M43	Y	-5.594	-9.28	6.079	12.158
91	M43	Y	-9.28	-14.791	12.158	18.236
92	M43	Y	-14.791	-15.402	18.236	24.315
93	M43	Y	-15.402	-10.312	24.315	30.394
94	M43	Y	-10.312	-5.349	30.394	36.473
95	M65	Y	-1.538	-3.62	0	6.079
96	M65	Y	-3.62	-5.922	6.079	12.158
97	M65	Y	-5.922	-9.339	12.158	18.236
98	M65	Y	-9.339	-10.462	18.236	24.315
99	M65	Y	-10.462	-7.555	24.315	30.394
100	M65	Y	-7.555	-3.809	30.394	36.473
101	M28	Y	-4.713	-7.893	50.4	56.7
102	M28	Y	-7.893	-9.057	56.7	63
103	M28	Y	-9.057	-7.949	63	69.3
104	M28	Y	-7.949	-4.62	69.3	75.6
105	M44	Y	-.801	-5.925	0	6.079
106	M44	Y	-5.925	-13.158	6.079	12.158
107	M44	Y	-13.158	-20.131	12.158	18.236
108	M44	Y	-20.131	-20.492	18.236	24.315
109	M44	Y	-20.492	-15.287	24.315	30.394
110	M44	Y	-15.287	-9.593	30.394	36.473
111	M64	Y	-.389	-3.045	0	6.079
112	M64	Y	-3.045	-6.397	6.079	12.158
113	M64	Y	-6.397	-9.637	12.158	18.236
114	M64	Y	-9.637	-10.452	18.236	24.315
115	M64	Y	-10.452	-8.078	24.315	30.394
116	M64	Y	-8.078	-4.545	30.394	36.473
117	M49	Y	-2.312	-3.98	50.4	56.7
118	M49	Y	-3.98	-4.536	56.7	63
119	M49	Y	-4.536	-3.952	63	69.3
120	M49	Y	-3.952	-2.358	69.3	75.6

Member Distributed Loads (BLC 47 : BLC 16 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft,F,psf]	Start Locatio...	End Location[...
1	M1	Y	-2.36	-.779	75.6	81.9
2	M1	Y	-.779	-.922	81.9	88.2
3	M1	Y	-.892	-3.001	88.2	94.5
4	M1	Y	-3.001	-5.135	94.5	100.8
5	M1	Y	-5.135	-5.226	100.8	107.1
6	M1	Y	-5.226	-4.052	107.1	113.4
7	M1	Y	-4.052	-2.557	113.4	119.7
8	M1	Y	-2.557	-1.123	119.7	126
9	M28	Y	-1.856	-2.973	0	6.3
10	M28	Y	-2.973	-4.738	6.3	12.6
11	M28	Y	-4.738	-5.541	12.6	18.9
12	M28	Y	-5.541	-4.618	18.9	25.2

Member Distributed Loads (BLC 47 : BLC 16 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft,F,psf]	Start Locatio...	End Location[...
13	M28	Y	-4.618	-3.149	25.2	31.5
14	M28	Y	-3.149	-1.117	31.5	37.8
15	M28	Y	-1.239	-2.071	37.8	44.1
16	M28	Y	-2.071	-4.755	44.1	50.4
17	M70	Y	-.175	-5.092	0	6.564
18	M70	Y	-5.092	-11.678	6.564	13.127
19	M70	Y	-11.678	-15.983	13.127	19.691
20	M70	Y	-15.983	-15.327	19.691	26.254
21	M70	Y	-15.327	-11.234	26.254	32.818
22	M70	Y	-11.234	-5.68	32.818	39.381
23	M70	Y	-5.68	-.758	39.381	45.945
24	M88	Y	-.813	-.813	.953	3.945
25	M1	Y	-1.123	-2.557	0	6.3
26	M1	Y	-2.557	-4.052	6.3	12.6
27	M1	Y	-4.052	-5.226	12.6	18.9
28	M1	Y	-5.226	-5.135	18.9	25.2
29	M1	Y	-5.135	-3.001	25.2	31.5
30	M1	Y	-3.001	-.892	31.5	37.8
31	M1	Y	-.953	-1.254	37.8	44.1
32	M1	Y	-1.254	-2.406	44.1	50.4
33	M49	Y	-2.396	-1.053	75.6	81.9
34	M49	Y	-1.053	-1.178	81.9	88.2
35	M49	Y	-1.117	-3.149	88.2	94.5
36	M49	Y	-3.149	-4.618	94.5	100.8
37	M49	Y	-4.618	-5.541	100.8	107.1
38	M49	Y	-5.541	-4.738	107.1	113.4
39	M49	Y	-4.738	-2.973	113.4	119.7
40	M49	Y	-2.973	-1.856	119.7	126
41	M72	Y	-.704	-3.526	0	6.564
42	M72	Y	-3.526	-7.352	6.564	13.127
43	M72	Y	-7.352	-10.402	13.127	19.691
44	M72	Y	-10.402	-10.202	19.691	26.254
45	M72	Y	-10.202	-7.546	26.254	32.818
46	M72	Y	-7.546	-3.541	32.818	39.381
47	M72	Y	-3.541	-.122	39.381	45.945
48	M84	Y	-.813	-.813	0	2.991
49	M28	Y	-4.716	-1.557	75.6	81.9
50	M28	Y	-1.557	-1.844	81.9	88.2
51	M28	Y	-1.784	-6.002	88.2	94.5
52	M28	Y	-6.002	-10.271	94.5	100.8
53	M28	Y	-10.271	-10.458	100.8	107.1
54	M28	Y	-10.458	-8.105	107.1	113.4
55	M28	Y	-8.105	-5.112	113.4	119.7
56	M28	Y	-5.112	-2.246	119.7	126
57	M49	Y	-3.707	-5.946	0	6.3
58	M49	Y	-5.946	-9.478	6.3	12.6
59	M49	Y	-9.478	-11.083	12.6	18.9
60	M49	Y	-11.083	-9.235	18.9	25.2
61	M49	Y	-9.235	-6.298	25.2	31.5
62	M49	Y	-6.298	-2.235	31.5	37.8
63	M49	Y	-2.265	-.613	37.8	44.1
64	M49	Y	-.613	-2.385	44.1	50.4
65	M71	Y	-1.355	-5.298	0	6.564
66	M71	Y	-5.298	-10.655	6.564	13.127
67	M71	Y	-10.655	-15.31	13.127	19.691
68	M71	Y	-15.31	-15.194	19.691	26.254
69	M71	Y	-15.194	-11.126	26.254	32.818

Member Distributed Loads (BLC 47 : BLC 16 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F,psf]	End Magnitude[lb/ft,F,psf]	Start Locatio...	End Location[...
70	M71	Y	-11.126	-5.128	32.818	39.381
71	M71	Y	-5.128	-.189	39.381	45.945
72	M80	Y	-1.626	-1.626	0	2.991
73	M1	Y	-2.361	-3.957	50.4	56.7
74	M1	Y	-3.957	-4.543	56.7	63
75	M1	Y	-4.543	-3.986	63	69.3
76	M1	Y	-3.986	-2.315	69.3	75.6
77	M19	Y	-1.819	-5.193	0	6.079
78	M19	Y	-5.193	-8.689	6.079	12.158
79	M19	Y	-8.689	-13.711	12.158	18.236
80	M19	Y	-13.711	-15.826	18.236	24.315
81	M19	Y	-15.826	-11.932	24.315	30.394
82	M19	Y	-11.932	-6.335	30.394	36.473
83	M20	Y	-.401	-2.967	0	6.079
84	M20	Y	-2.967	-6.593	6.079	12.158
85	M20	Y	-6.593	-10.083	12.158	18.236
86	M20	Y	-10.083	-10.26	18.236	24.315
87	M20	Y	-10.26	-7.655	24.315	30.394
88	M20	Y	-7.655	-4.802	30.394	36.473
89	M43	Y	-2.812	-5.602	0	6.079
90	M43	Y	-5.602	-9.293	6.079	12.158
91	M43	Y	-9.293	-14.812	12.158	18.236
92	M43	Y	-14.812	-15.424	18.236	24.315
93	M43	Y	-15.424	-10.327	24.315	30.394
94	M43	Y	-10.327	-5.357	30.394	36.473
95	M65	Y	-1.54	-3.626	0	6.079
96	M65	Y	-3.626	-5.93	6.079	12.158
97	M65	Y	-5.93	-9.352	12.158	18.236
98	M65	Y	-9.352	-10.477	18.236	24.315
99	M65	Y	-10.477	-7.566	24.315	30.394
100	M65	Y	-7.566	-3.815	30.394	36.473
101	M28	Y	-4.72	-7.904	50.4	56.7
102	M28	Y	-7.904	-9.07	56.7	63
103	M28	Y	-9.07	-7.961	63	69.3
104	M28	Y	-7.961	-4.626	69.3	75.6
105	M44	Y	-.802	-5.933	0	6.079
106	M44	Y	-5.933	-13.177	6.079	12.158
107	M44	Y	-13.177	-20.159	12.158	18.236
108	M44	Y	-20.159	-20.521	18.236	24.315
109	M44	Y	-20.521	-15.309	24.315	30.394
110	M44	Y	-15.309	-9.607	30.394	36.473
111	M64	Y	-.39	-3.049	0	6.079
112	M64	Y	-3.049	-6.406	6.079	12.158
113	M64	Y	-6.406	-9.651	12.158	18.236
114	M64	Y	-9.651	-10.467	18.236	24.315
115	M64	Y	-10.467	-8.089	24.315	30.394
116	M64	Y	-8.089	-4.552	30.394	36.473
117	M49	Y	-2.315	-3.986	50.4	56.7
118	M49	Y	-3.986	-4.543	56.7	63
119	M49	Y	-4.543	-3.957	63	69.3
120	M49	Y	-3.957	-2.361	69.3	75.6

Member Area Loads (BLC 1 : Self Weight)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[psf]
1	N16	N88	N56	N2	Y	Two Way	-5.537

Member Area Loads (BLC 1 : Self Weight) (Continued)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[psf]
2	N95	N1	N40	N109	Y	Two Way	-5.537
3	N71	N126	N94	N57	Y	Two Way	-5.537
4	N40	N31	N30	N16	Y	Two Way	-5.537
5	N126	N121	N82	N71	Y	Two Way	-5.537
6	N82	N71	N88	N83	Y	Two Way	-5.537
7	N30	N83	N88	N16	Y	Two Way	-5.537
8	N109	N120	N31	N40	Y	Two Way	-5.537
9	N109	N120	N121	N126	Y	Two Way	-5.537
10	N126	N94	N57	N71	Y	Two Way	-5.537
11	N82	N71	N88	N83	Y	Two Way	-5.537
12	N30	N83	N88	N16	Y	Two Way	-5.537

Member Area Loads (BLC 16 : Ice Weight)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[psf]
1	N16	N88	N56	N2	Y	Two Way	-5.545
2	N95	N1	N40	N109	Y	Two Way	-5.545
3	N71	N126	N94	N57	Y	Two Way	-5.545
4	N40	N31	N30	N16	Y	Two Way	-5.545
5	N126	N121	N82	N71	Y	Two Way	-5.545
6	N82	N71	N88	N83	Y	Two Way	-5.545
7	N30	N83	N88	N16	Y	Two Way	-5.545
8	N109	N120	N31	N40	Y	Two Way	-5.545
9	N109	N120	N121	N126	Y	Two Way	-5.545
10	N126	N94	N57	N71	Y	Two Way	-5.545
11	N82	N71	N88	N83	Y	Two Way	-5.545
12	N30	N83	N88	N16	Y	Two Way	-5.545

Site Number:	8/4/2020
Client:	ATC
Carrier	AT&T
Job #:	1009-Z0003-B
Estimator:	BDA
Date:	8/4/2020

Mount upgrade pricing

Notes:
- All Costs Incdue hardware.
- This is an estimate, prices may vary and are dependant on many factors. An official quote will be provide at the time of construction.
- All Costs are per mount unless noted.
- Estimate does not include a crane, manlift, etc.
-Estimate does not include delivery

Total Mod Cost Limit:	$ 20,000.00	
Total Day of Labor:	2	Days

Existing		
Structure Type:	Monopole	
Mount type:	Platform	
Mount Elevation:	153	ft.
Number of Sectors:	3	
Mount Location:	Top of Tower	

Replacement		
Mount Replacement Type:	Platform	
Mount Manufacture:	Site_Pro_1	
Mount Model:	RMQP-496-HK	
Notes:	Heavy Duty Platform with monopole attachment hardware. Includes mount pipes and all attachment hardware.	
Pipe Model:	10-2AMP	
Notes:	5. MOUNTING PIPE (QTY=1) – 2" Sch 40 (2.375" OD x 0.154" wall thickness) x 10' long, ASTM A53 Grade B (minimum), plus connection hardware to attach to mount.	
Number of Pipes:	12	
Total Day of Labor:	3	Days

Mount Replacement Cost:		
Labor:	$	12,000.00
Material:	$	5,044.00
Total:	$	17,044.00

Mount Mod Cost:		
Labor:	$	8,000.00
Material:	$	648.00
Total:	$	8,648.00

Conlusion:
Modify Mount

Mount Analysis and Mapping Checklist

Mount Detail	Both
Mount Type	Platform
Mount Model Number	10' Platfrom
If RT, then how is it attached	
If WT, then how is it attached	
Result of previous mount analysis or PE opinion letter	

Inspector (Mapping)
(Vendor name)
(Inspector name)
(Contact phone)
(Contact email)

Mount Mapping Detail	Both
Material condition (discoloration, cracks, pitting)	Good
Mfg. drawing, cutsheet, spec. available?	No
Date of previous mount mapping	6/22/2020
Searched prior OEM for material?	
Photos of installation available?	
Original tower drawings show mounts?	No
Searched for previous mapping?	Yes
Is latest mod design (dwgs) available?	No
Is the latest structural analysis available?	No

Project Detail	Both
Market	Northeast
PACE Project ID	MRCTB046654
Site Name	Southbury, CT
City, State	Southbury, CT
RFDS Version Number	1
Initiative (list mult., if applicable)	5G NR Radio
Tower Owner	ATC
SA Vendor	
A&E firm (for structural analysis)	Centek Engineering
A&E firm (for mapping, if different)	MasTec Network Solutions
Last amendment date or last site visit	6/22/2020

Site Information	Both
Original Lease Date	
FA Code	
Tower Type	Monopole
Tower Height (Ft)	150
AT&T Rad Center # 1	153
AT&T Rad Center # 2	

Note: For each table in this form, note whether the information applies to "Mapping" only, or "Both" mount analysis and mapping. Equipment detail is for "Mapping" but is not labeled. Sketches are only required for mapping.

Measurements and Deliverables on sketches	Mapping
Pipe / Angle dimenions and lengths	
bolt diameters and lengths	
U-Bolt diameters and lengths	
Steel Grade if indicated	
welds :length and sizes	
appurtenance relative locations	
Grounding Condition	

Equipment Detail Alpha Sector	Model Number for Ant, MW, RRU, TMA, Squid / Size of Coax, DC-Fiber Trunks & Jumpers	Height / COAX-DC-Fiber Trunk & Jumper Lengths in feet	Approx Az	mount position location
Antennas	0	0	0	0
MW	0	0	0	0
RRU	0	0	0	0
TMA	0	0	0	0
Coax	0	0	0	0
RET (not imbedded in antenna)	0	0	0	0
DC Cable	0	0	0	0
Fiber Cable	0	0	0	0
Squid	0	0	0	0
Equipment Detail Beta Sector				
Antennas	0	0	0	0
MW	0	0	0	0
RRU	0	0	0	0
TMA	0	0	0	0
Coax	0	0	0	0
RET (not imbedded in antenna)	0	0	0	0
DC Cable	0	0	0	0
Fiber Cable	0	0	0	0
Squid	0	0	0	0
Equipment Detail Gamma Sector				
Antennas	0	0	0	0
MW	0	0	0	0
RRU	0	0	0	0
TMA	0	0	0	0
Coax	0	0	0	0
RET (not imbedded in antenna)	0	0	0	0
DC Cable	0	0	0	0
Fiber Cable	0	0	0	0
Squid	0	0	0	0

Comments

ANTENNA PLATFORM MODIFICATION DRAWINGS

PREPARED BY:

INFINIGY

FROM ZERO TO INFINIGY

the solutions are endless

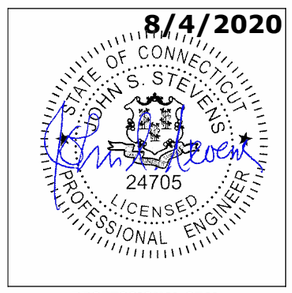
AMERICAN TOWER CORPORATION

at&t

302519
SOUTHBURY
133 HORSE FENCE HILL ROAD
SOUTHBURY, CT 06488

08/04/20

INFINIGY JOB # 1009-Z0003-B



PROFESSIONAL SEAL

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THESE DOCUMENTS.

GENERAL NOTES:

1. THESE DOCUMENTS WERE DESIGNED IN ACCORDANCE WITH THE LATEST VERSION OF APPLICABLE LOCAL/STATE/COUNTY/CITY BUILDING CODES, AS WELL AS ANSI/TIA-222 STANDARD, AWWA-D100 STANDARD, NDS, NEC, MSJC, AND/OR THE LATEST VERSION OF THE INTERNATIONAL BUILDING CODE, UNLESS NOTED OTHERWISE IN THE CORRESPONDING STRUCTURAL REPORT.
2. ALL CONSTRUCTION METHODS SHOULD FOLLOW STANDARDS OF GOOD CONSTRUCTION PRACTICE.
3. ALL WORK INDICATED ON THESE DRAWINGS SHALL BE PERFORMED BY QUALIFIED CONTRACTORS EXPERIENCED IN SIMILAR CONSTRUCTION.
4. ALL NEW WORK SHALL ACCOMMODATE EXISTING CONDITIONS. IF OBSTRUCTIONS ARE FOUND, CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD PRIOR TO CONTINUING WORK.
5. ANY CHANGES OR ADDITIONS MUST CONFORM TO THE REQUIREMENTS OF THESE NOTES AND SPECIFICATIONS, AND SHOULD BE SIMILAR TO THOSE SHOWN. ALL CHANGES OR ADDITIONS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL PRIOR TO FABRICATION AND/OR CONSTRUCTION.
6. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND EXECUTION OF ALL MISCELLANEOUS SHORING, BRACING, TEMPORARY SUPPORTS, ETC. NECESSARY TO PROVIDE A COMPLETE AND STABLE STRUCTURE DURING CONSTRUCTION. TIA-1019-A-2011 IS AN APPROPRIATE REFERENCE FOR THOSE DESIGNS MEETING TIA STANDARDS. THE ENGINEER OF RECORD MAY PROVIDE FORMAL RIGGING PLANS AT THE REQUEST AND EXPENSE OF THE CONTRACTOR.
7. INSTALLATION SHALL NOT INTERFERE NOR DENY ADEQUATE ACCESS TO OR FROM ANY EXISTING OR PROPOSED OPERATIONAL AND SAFETY EQUIPMENT.
8. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO ANY FABRICATION. CONTACT INFINIGY ENGINEERING IF ANY DISCREPANCIES EXIST.

STEEL CONSTRUCTION NOTES:

1. STRUCTURAL STEEL SHALL CONFORM TO THE AISC MANUAL OF STEEL CONSTRUCTION 14TH EDITION, FOR THE DESIGN AND FABRICATION OF STEEL COMPONENTS.
2. ALL FIELD CUT SURFACES, FIELD DRILLED HOLES, AND GROUND SURFACES WHERE EXISTING PAINT OR GALVANIZATION REMOVAL WAS REQUIRED SHALL BE REPAIRED WITH (2) BRUSHED COATS OF ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURERS' RECOMMENDATIONS.
3. ALL FIELD DRILLED HOLES TO BE USED FOR FIELD BOLTING INSTALLATION SHALL BE STANDARD HOLES, AS DEFINED BY AISC, UNLESS NOTED OTHERWISE.
4. ALL EXTERIOR STEEL WORK SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A123.
5. ALL STEEL MEMBERS AND CONNECTIONS SHALL MEET THE FOLLOWING GRADES:
   - ANGLES, CHANNELS, PLATES AND BARS TO BE A36. Fy=36 KSI, U.N.O.
   - W SHAPES TO BE A992. Fy=50 KSI, U.N.O.
   - RECTANGULAR HSS TO BE A500, GRADE B. FY=46 KSI, U.N.O.
   - ROUND HSS TO BE A500, GRADE B. FY=42 KSI, U.N.O.
   - STEEL PIPE TO BE A53, GRADE B. Fy=35 KSI, U.N.O.
   - BOLTS TO BE A325-X. Fu=120 KSI, U.N.O.
   - U-BOLTS AND LAG SCREWS TO BE A307 GR A. Fu=60 KSI, U.N.O.
6. ALL WELDING SHALL BE DONE USING E70XX ELECTRODES, U.N.O.
7. ALL WELDING SHALL CONFORM TO AISC AND AWS D1.1 LATEST EDITION.
8. ALL HILTI ANCHORS TO BE CARBON STEEL, U.N.O.
   - MECHANICAL ANCHORS: KWIK BOLT-TZ, U.N.O.
   - CMU BLOCK ANCHORS: ADHESIVE - HY120, U.N.O.
   - CONCRETE ANCHORS: ADHESIVE - HY150, U.N.O.
   - CONCRETE REBAR: ADHESIVE - RE500, U.N.O.
9. ALL STUDS TO BE NELSON CAPACITOR DISCHARGE 1/4"-20 LOW CARBON STEEL COPPER-FLASH AT 55 KSI ULT/50 KSI YIELD, U.N.O.
10. BOLTS SHALL BE TIGHTENED TO A "SNUG TIGHT" CONDITION AS DEFINED BY AISC.
11. MINIMUM EDGE DISTANCES SHALL CONFORM TO AISC TABLE J3.4.
12. REMOVAL/REPLACEMENT OF STRUCTURAL MEMBERS SHALL BE DONE ONE MEMBER AT A TIME. CONTRACTOR IS RESPONSIBLE FOR ENSURING THE STRUCTURAL INTEGRITY OF THE STRUCTURE DURING ALL PHASES OF CONSTRUCTION.

CONCRETE CONSTRUCTION NOTES:

1. CONCRETE TO BE 4000 PSI @ 28 DAYS. REINFORCING BAR TO CONFORM TO ASTM A615 GRADE 60 SPECIFICATIONS. CONCRETE INSTALLATION TO CONFORM TO ACI-318 BUILDING REQUIREMENTS FOR REINFORCED CONCRETE. ALL CONCRETE TO BE PLACED AGAINST UNDISTURBED EARTH FREE OF WATER AND ALL FOREIGN OBJECTS AND MATERIALS. A MINIMUM OF THREE INCHES OF CONCRETE SHALL COVER ALL REINFORCEMENT. WELDING OF REBAR IS NOT PERMITTED.
2. EXISTING CONCRETE SURFACES THAT ARE TO BE IN CONTACT WITH NEW PROPOSED CONCRETE SHOULD BE WIRE BRUSHED CLEAN AND TREATED WITH APPROPRIATE MECHANICAL SCRATCH COAT AND REPAIR MATERIALS OR APPROPRIATE CHEMICAL METHODS SUCH AS THE APPLICATION OF A BONDING AGENT, EX. SAKRETE OR EQUIVALENT, TO ENSURE A QUALITY BOND BETWEEN EXISTING AND PROPOSED CONCRETE SURFACES.

FIBER REINFORCED POLYMER (FRP) NOTES:

1. FRP PLATES, SHAPES, BOLTS AND NUTS (STUD/NUT ASSEMBLIES) SHALL CONFORM TO ASTM D638, 695, 790. PLATES AND SHAPES TO BE FY = 5.35 KSI LW (SAFETY FACTOR OF 8), .945 KSI CW (SAFETY FACTOR OF 8) MIN.
2. IF FIELD FABRICATION IS REQUIRED, ALL CUT EDGES AND DRILLED HOLES TO BE SEALED USING VINYL ESTER SEALING KIT SUPPLIED BY THE MANUFACTURER.
3. ALL FASTENERS TO BE 1/2" DIA FRP THREADED ROD WITH FIBER REINFORCED THERMOPLASTIC NUT, SPACED AT 12 INCHES ON CENTER MAXIMUM, U.N.O., FOR PANELS AND AS DESIGNED FOR STRUCTURAL MEMBERS.
4. THE COLOR AND SURFACE PATTERN OF EXPOSED FRP PANELS SHALL MATCH THE EXTERIOR OF THE EXISTING BUILDING, U.N.O.
5. STUD/NUT ASSEMBLIES SHOULD BE LUBRICATED FOR INSTALLATION
6. ENSURE BEARING SURFACES OF THE NUTS ARE PARALLEL TO THE SURFACES BEING FASTENED.
7. TORQUE BOLTS ACCORDING TO THE FOLLOWING TABLE:

INSTALLATION TORQUE TABLE

SIZE	ULTIMATE TORQUE STRENGTH	RECOMMENDED MAXIMUM INSTALLATION TORQUE
3/8-16 UNC	8 FT-LBS	4 FT-LBS
1/2-13 UNC	18 FT-LBS	8 FT-LBS
5/8-11 UNC	35 FT-LBS	16 FT-LBS
3/4-10 UNC	50 FT-LBS	24 FT-LBS
1-8 UNC	110 FT-LBS	50 FT-LBS

8. WHEN TIGHTENING FRP STUD/NUT ASSEMBLIES, WRENCHES MUST MAKE FULL CONTACT WITH ALL NUT EDGES. A STANDARD SIX POINT SOCKET IS RECOMMENDED.
9. STUD/NUT ASSEMBLIES SHOULD BE BONDED BY APPLYING BONDING AGENT TO ENTIRE NUT AND EXPOSED STUD.
10. ALL FRP MATERIALS TO BE PROVIDED BY FIBERGRATE COMPOSITE STRUCTURES, DALLAS TX, OR APPROVED EQUAL.
11. ALL FRP SHAPES TO BE DYNAFORM PULTRUDED STRUCTURAL SHAPES.
12. ALL FRP PLATES TO BE FIBERPLATE MOLDED FRP PLATE.
13. ALL FRP PANELS TO BE FIBERPLATE CLADDING PANEL.
14. EACH FRP PANEL TO BE IDENTIFIED WITH LARR#25536 AND FIBERGRATE COMPOSITE STRUCTURAL LABEL.
15. FRP MATERIAL TO BE CLASSIFIED AS CC1 OR BETTER, AND HAVE MAXIMUM FLAME SPREAD OF 50.
16. ALL DESIGN AND CONSTRUCTION TO BE COMPLETED IN ACCORDANCE WITH LOS ANGELES RESEARCH REPORT RR25536, DATED FEBRUARY 1, 2016.
17. SPECIAL INSPECTIONS MUST BE PROVIDED FOR ALL FRP INSTALLMENTS. SEE SPECIAL INSPECTION SECTION, THIS SHEET.

RATIO OF EDGE DISTANCE TO FRP FASTENER DIAMETER

	RANGE	RECOMMENDED
EDGE DISTANCE - CL* BOLT TO END	2.0-4.0	3.0
EDGE DISTANCE - CL* BOLT TO SIDE	1.5-3.5	2.5
BOLT PITCH - CL* TO CL*	4.0-5.0	5.0

WOOD CONSTRUCTION NOTES:

1. ALL EXISTING WOOD SHAPES ARE ASSUMED TO BE DOUGLAS FIR-LARCH WITH A REFERENCE DESIGN BENDING VALUE OF 1000 PSI MIN.
2. ALL PROPOSED WOOD SHAPES ARE TO BE DOUGLAS FIR-LARCH WITH A REFERENCE DESIGN BENDING VALUE OF 1000 PSI MIN. U.N.O.
3. ALL EXISTING AND PROPOSED GLUED LAMINATED TIMBERS ARE TO BE 24F-1.8C DOUGLAS FIR BALANCED WITH A REFERENCE DESIGN BENDING VALUE OF 2400 PSI MIN. U.N.O.

MASONRY CONSTRUCTION NOTES:

1. ALL BRICK TO BE 1500 PSI MIN. REINFORCING BAR (IF APPLICABLE) TO CONFORM TO ASTM A615 GRADE 60 SPECIFICATIONS. ALL MORTAR TO BE 2000 PSI MIN.
   - FOR INTERIOR/ABOVE GRADE APPLICATIONS TYPE N MORTAR HAVING MINIMUM MODULUS OF RUPTURE OF 100 PSI SHALL BE USED. FOR EXTERIOR/BELOW GRADE APPLICATIONS TYPE M OR S MORTAR HAVING A MINIMUM MODULUS OF RUPTURE OF 133 PSI.
   - BRICK AND MORTAR INSTALLATION TO CONFORM TO MSJC BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES.
2. ALL CMU TO BE 1500 PSI MIN. REINFORCING BAR (IF APPLICABLE) TO CONFORM TO ASTM A615 GRADE 60 SPECIFICATIONS. ALL MORTAR TO BE 2000 PSI MIN.
   - FOR INTERIOR/ABOVE GRADE APPLICATIONS, TYPE N MORTAR HAVING MINIMUM MODULUS OF RUPTURE OF 64 PSI SHALL BE USED FOR UNGROUTED BLOCKS, AND 158 PSI FOR FULLY GROUTED BLOCKS.
   - FOR EXTERIOR/BELOW GRADE APPLICATIONS TYPE M OR S MORTAR HAVING A MINIMUM MODULUS OF RUPTURE OF 84 PSI SHALL BE USED FOR UNGROUTED BLOCKS, AND 163 PSI FOR FULLY GROUTED BLOCKS.
   - BRICK AND MORTAR INSTALLATION TO CONFORM TO MSJC BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES.

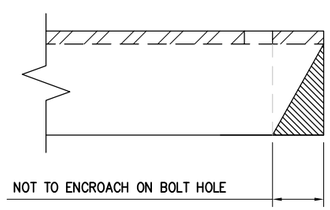
TOWER PLUMB & TENSION NOTES:

1. PLUMB AND TENSION TOWER UPON COMPLETION OF STRUCTURAL MODIFICATIONS DETAILED IN THESE DRAWINGS.
2. RETENSIONING OF EXISTING GUY WIRES SHALL BE PERFORMED AT A TIME WHEN THE WIND VELOCITY IS LESS THAN 10 MPH AT GROUND LEVEL AND WITH NO ICE ON THE STRUCTURE AND GUY WIRES.
3. PLUMB THE TOWER WHILE RETENSIONING THE EXISTING GUY WIRES. THE HORIZONTAL DISTANCE BETWEEN THE VERTICAL CENTERLINES AT ANY TWO ELEVATIONS SHALL NOT EXCEED 0.25% OF THE VERTICAL DISTANCE BETWEEN TWO ELEVATIONS FOR LATTICED STRUCTURES.
4. THE TWIST BETWEEN ANY TWO ELEVATIONS THROUGHOUT THE HEIGHT OF A LATTICE STRUCTURE SHALL NOT EXCEED 0.5 DEGREES IN 10 FEET. THE MAXIMUM TWIST OVER THE LATTICE STRUCTURE HEIGHT SHALL NOT EXCEED 5 DEGREES.

SPECIAL INSPECTIONS NOTES:

1. A QUALIFIED INDEPENDENT TESTING LABORATORY, EMPLOYED BY THE OWNER AND APPROVED BY THE JURISDICTION, SHALL PERFORM INSPECTION AND TESTING IN ACCORDANCE WITH THE THE GOVERNING BUILDING CODE, APPLICABLE SECTION(S) AS REQUIRED BY PROJECT SPECIFICATIONS FOR THE FOLLOWING CONSTRUCTION WORK:
   a. STRUCTURAL WELDING (CONTINUOUS INSPECTION OF FIELD WELDS ONLY).
   b. HIGH STRENGTH BOLTS (PERIODIC INSPECTION OF A325 AND/OR A490 BOLTS) TO BE TIGHTENED PER "TURN-OF-THE-NUT" METHOD.
   c. MECHANICAL AND EPOXIED ANCHORAGES.
   d. FIBER REINFORCED POLYMER.
      - THE SPECIAL INSPECTOR MUST VERIFY THAT THE FRP MATERIAL SPECIFIED ON THE APPROVED DESIGN DOCUMENTS IS BEING INSTALLED.
      - THE SPECIAL INSPECTOR MUST VERIFY THAT ALL CUT EDGES AND DRILLED HOLES ARE PROPERLY SEALED USING A VINYL ESTER SEALING KIT SUPPLIED BY THE MANUFACTURER.
      - THE SPECIAL INSPECTOR MUST VERIFY THAT THE STRUCTURE IS BUILT IN ACCORDANCE WITH THE APPROVED DESIGN DOCUMENTS.
2. THE INSPECTION AGENCY SHALL SUBMIT INSPECTION AND TEST REPORTS TO THE BUILDING DEPARTMENT, THE ENGINEER OF RECORD, AND THE OWNER UNLESS THE FABRICATOR IS APPROVED BY THE BUILDING OFFICIAL TO PERFORM WORK WITHOUT THE SPECIAL INSPECTIONS.

MAXIMUM ALLOWABLE ANGLE CLIP



INFINIGY ENGINEERING, PLLC
6865 DEERPATH ROAD SUITE 152
ELKRIDGE, MD 21075

AMERICAN TOWER CORPORATION

STATE OF CONNECTICUT
JOHN S. STEVENS
24705
LICENSED PROFESSIONAL ENGINEER
8/4/2020

No.	Submittal / Revision	App'd	Date
0	ISSUED FOR REVIEW	BD	08/04/20

Drawn: BE
Designed: BA
Checked: BA

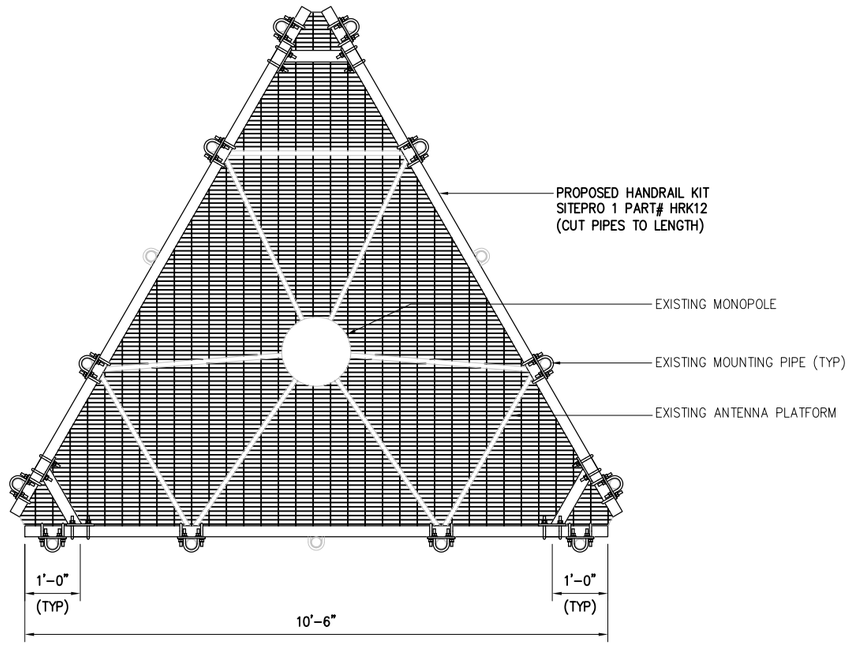
Project Number: 1009-Z0003-B

Project Title:
SOUTHBURY
302519
133 HORSE FENCE HILL ROAD
SOUTHBURY, CT 06488

Prepared For:
at&t

Drawing Title
GENERAL NOTES

Drawing Number
S2



1 PLAN VIEW
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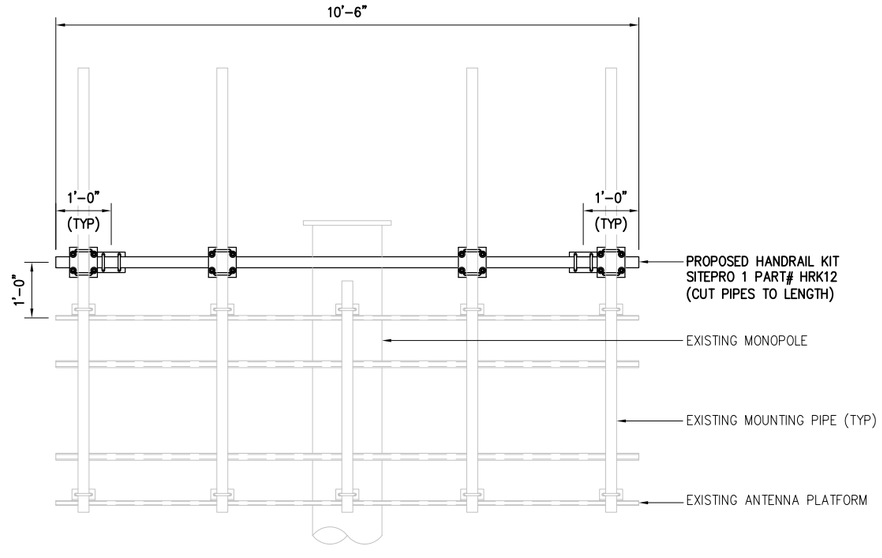

2 ELEVATION VIEW
SCALE: NOT TO SCALE

NOTES:

1. PROPOSED MODIFICATIONS ARE TYPICAL FOR ALL SECTORS.
2. ALL DESIGNATED PARTS ARE TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS, UNLESS OTHERWISE NOTED.
3. REMOVAL/REPLACEMENT OF STRUCTURAL MEMBERS SHALL BE DONE ONE MEMBER AT A TIME. CONTRACTOR IS RESPONSIBLE FOR ENSURING THE STRUCTURAL INTEGRITY OF THE STRUCTURE DURING ALL PHASES OF CONSTRUCTION.

INFINIGY ENGINEERING, PLLC
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ELKRIDGE, MD 21075

AMERICAN TOWER CORPORATION

8/4/2020

STATE OF CONNECTICUT
JOHN S. STEVENS
24705
LICENSED PROFESSIONAL ENGINEER

No.	Submittal / Revision	App'd	Date
0	ISSUED FOR REVIEW	BD	08/04/20

Drawn: BE
Designed: BA
Checked: BA

Project Number:
1009-Z0003-B

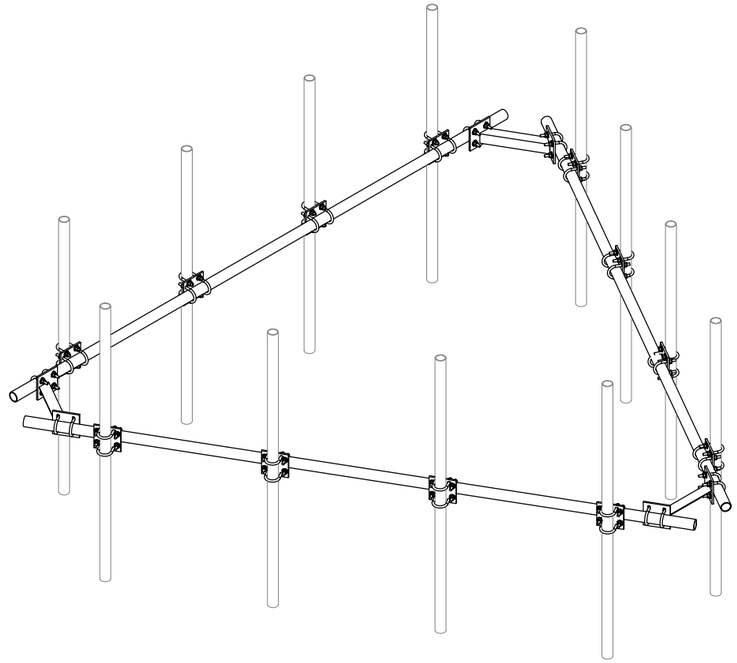
Project Title:
SOUTHBURY

302519
133 HORSE FENCE HILL ROAD
SOUTHBURY, CT 06488

Prepared For:
at&t

Drawing Title
ANTENNA PLATFORM MODIFICATION

Drawing Number
S3



1 ISOMETRIC VIEW (HRK12)
SCALE: NOT TO SCALE

INFINIGY ENGINEERING, PLLC
6865 DEERPATH ROAD SUITE 152
ELKRIDGE, MD 21075

AMERICAN TOWER CORPORATION

8/4/2020

STATE OF CONNECTICUT
JOHN S. STEVENS
24705
LICENSED PROFESSIONAL ENGINEER

No.	Submittal / Revision	App'd	Date
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Drawn: BE
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1009-Z0003-B

Project Title:
SOUTHBURY

302519
133 HORSE FENCE HILL ROAD
SOUTHBURY, CT 06488

Prepared For:
at&t

Drawing Title
NECESSARY PARTS

Drawing Number
S4

EXHIBIT 5

EXHIBIT 6

CT-652

TOWN OF SOUTHBURY

ZONING COMMISSION
501 Main Street South
Southbury, Connecticut 06488-2295
(203) 262-0665
FAX: (203) 264-3719

Zoning Permit

Permit Number	4546	*Issue Date*	3/19/03
Permission is granted t	SMITH, SCOTT & LYNN		
To build	CELL TOWER/CO-LOCATE		
Address	133 HORSE FENCE HILL ROAD	*Lot*	58

This permit is granted subject to compliance with the state law of Connecticut and zoning and building ordinances of the Town of Southbury.

Zoning Enforcement Officer

NOTE: As of March 1, 1985, on completion of the foundations, a certified plot plan will be required and filed in the zoning department (as built).

Z/B/A

EXHIBIT 7

UPS CampusShip: View/Print Label

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

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

3. **GETTING YOUR SHIPMENT TO UPS**
   Customers with a Daily Pickup
   Your driver will pickup your shipment(s) as usual.

   Customers without a Daily Pickup
   Take your package to any location of The UPS Store®, UPS Access Point(TM) location, UPS Drop Box, UPS Customer Center, Staples® or Authorized Shipping Outlet near you. Items sent via UPS Return Services(SM) (including via Ground) are also accepted at Drop Boxes. To find the location nearest you, please visit the Resources area of CampusShip and select UPS Locations.
   Schedule a same day or future day Pickup to have a UPS driver pickup all your CampusShip packages.
   Hand the package to any UPS driver in your area.

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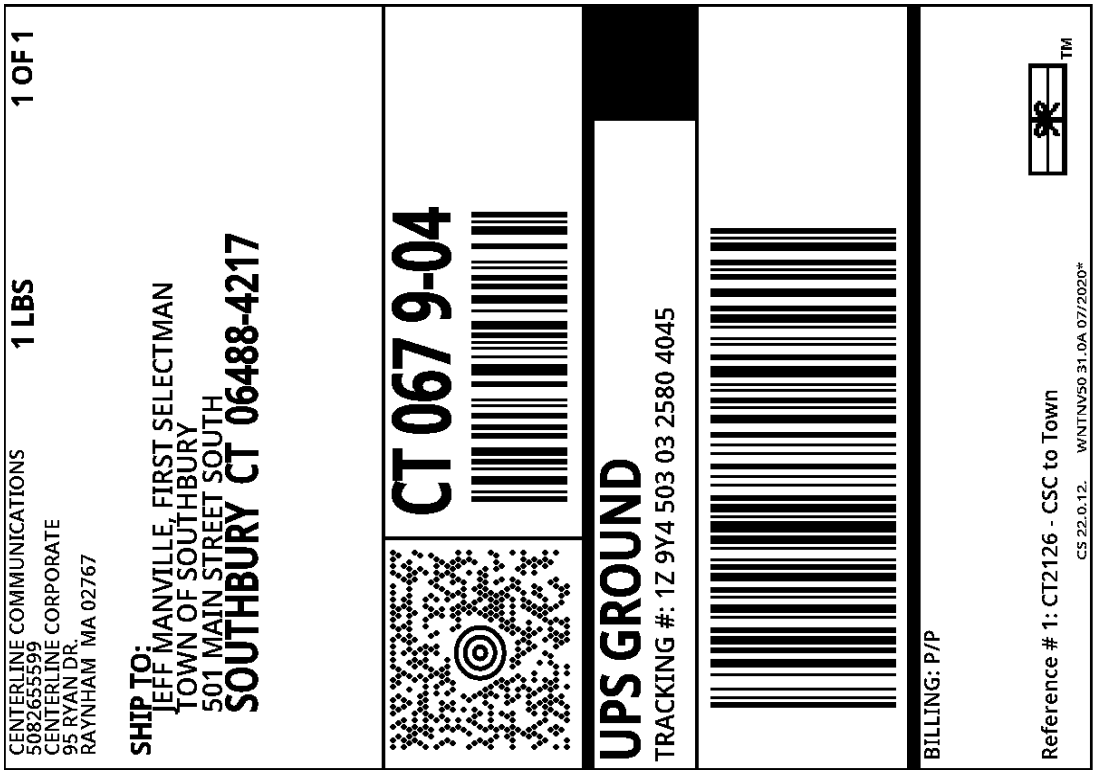
UPS Access Point™
CVS STORE # 7232
689 DEPOT ST
NORTH EASTON ,MA 02356

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

FOLD HERE



Jennifer Iliades

From: UPS Quantum View <pkginfo@ups.com>
Sent: Thursday, September 24, 2020 12:32 PM
To: Jennifer Iliades
Subject: UPS Delivery Notification, Tracking Number 1Z9Y45030325804045

Hello, your package has been delivered.

Delivery Date: Thursday, 09/24/2020
Delivery Time: 12:30 PM
Left At: OFFICE
Signed by: ROSA

CENTERLINE SITE ACQUISITION

Tracking Number:	1Z9Y45030325804045
Ship To:	TOWN OF SOUTHBURY 501 MAIN STREET SOUTH SOUTHBURY, CT 064884217 US
Number of Packages:	1
UPS Service:	UPS Ground
Package Weight:	0.2 LBS
Reference Number:	CT2126 - CSC TO TOWN

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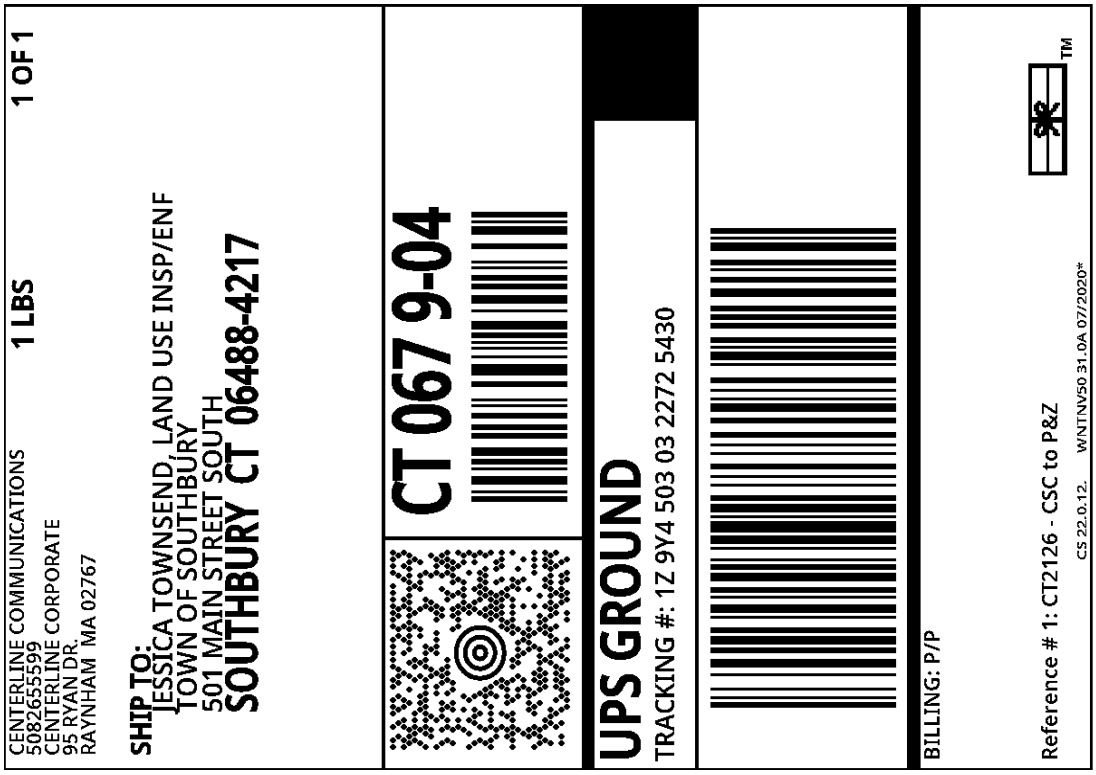

Jennifer Iliades

From: UPS Quantum View <pkginfo@ups.com>
Sent: Thursday, September 24, 2020 12:32 PM
To: Jennifer Iliades
Subject: UPS Delivery Notification, Tracking Number 1Z9Y45030322725430

Hello, your package has been delivered.

Delivery Date: Thursday, 09/24/2020
Delivery Time: 12:30 PM
Left At: OFFICE
Signed by: ROSA

CENTERLINE SITE ACQUISITION

Tracking Number:	1Z9Y45030322725430
Ship To:	TOWN OF SOUTHBURY 501 MAIN STREET SOUTH SOUTHBURY, CT 064884217 US
Number of Packages:	1
UPS Service:	UPS Ground
Package Weight:	0.2 LBS
Reference Number:	CT2126 - CSC TO P&Z

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UPS CampusShip: View/Print Label

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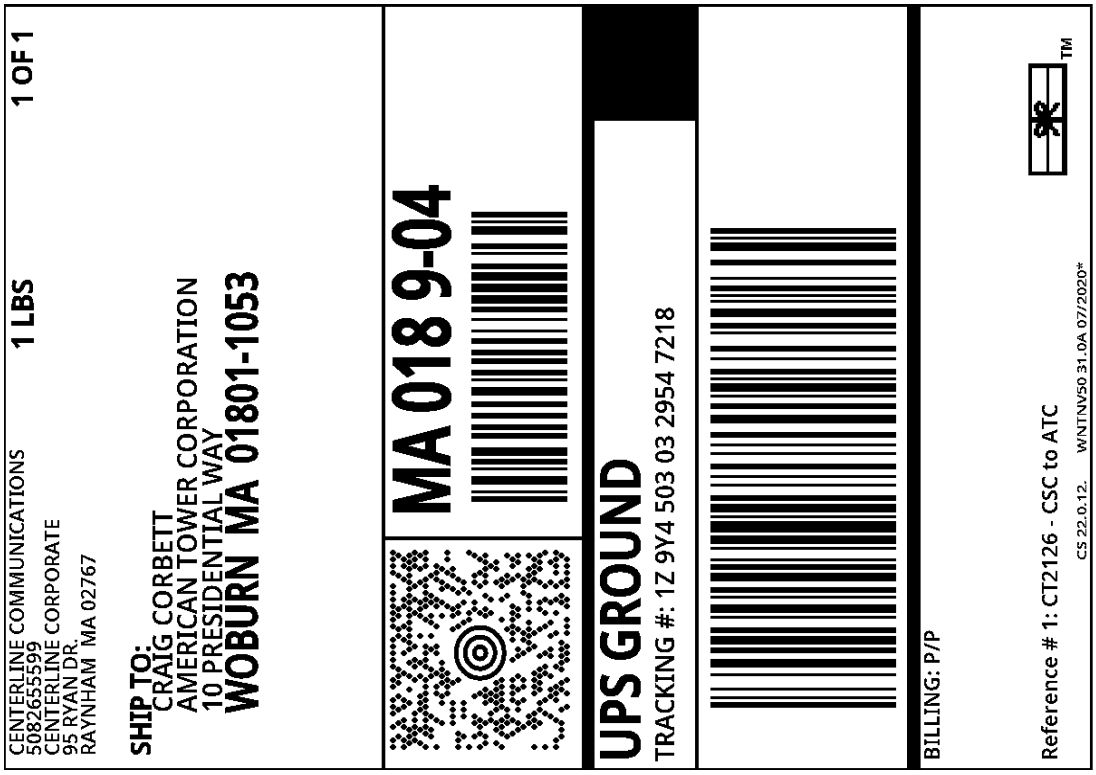

Jennifer Iliades

From: UPS Quantum View <pkginfo@ups.com>
Sent: Thursday, September 24, 2020 10:31 AM
To: Jennifer Iliades
Subject: UPS Delivery Notification, Tracking Number 1Z9Y45030329547218

Hello, your package has been delivered.

Delivery Date: Thursday, 09/24/2020
Delivery Time: 10:29 AM
Left At: FRONT DESK
Signed by: ANCRI

CENTERLINE SITE ACQUISITION

Tracking Number:	1Z9Y45030329547218
Ship To:	AMERICAN TOWER CORPORATION 10 PRESIDENTIAL WAY WOBURN, MA 018011053 US
Number of Packages:	1
UPS Service:	UPS Ground
Package Weight:	0.2 LBS
Reference Number:	CT2126 - CSC TO ATC

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UPS CampusShip: View/Print Label

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

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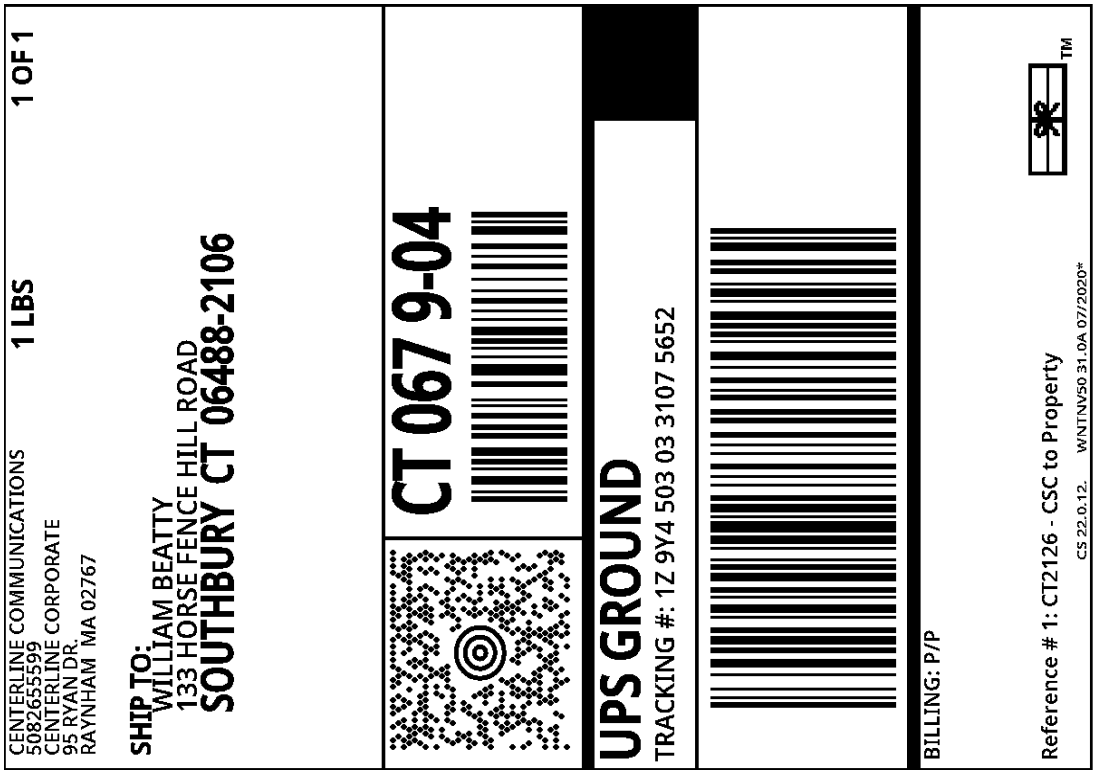

Jennifer Iliades

From: UPS Quantum View <pkginfo@ups.com>
Sent: Thursday, September 24, 2020 11:02 AM
To: Jennifer Iliades
Subject: UPS Delivery Notification, Tracking Number 1Z9Y45030331075652

UPS My Choice®

Hello, your package has been delivered.

Delivery Date: Thursday, 09/24/2020
Delivery Time: 11:00 AM
Left At: SIDE DOOR

You're in Charge

Personalize your home deliveries with the NEW UPS My Choice® experience.

Log In

Set Delivery Instructions | Manage Preferences | View My Packages

CENTERLINE SITE ACQUISITION

Tracking Number:	1Z9Y45030331075652
Ship To:	WILLIAM BEATTY 133 HORSE FENCE HILL ROAD SOUTHBURY, CT 064882106 US
Number of Packages:	1
UPS Service:	UPS Ground
Package Weight:	0.2 LBS
Reference Number:	CT2126 - CSC TO PROPERTY

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