

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

October 13, 2023

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

**RE: Notice of Exempt Modification // Site: PORTLAND S CT (ATC: 411257)
191 Middle Haddam Road, Portland CT 06480
N 41.56229196 // W -72.57380339**

Dear Ms. Bachman,

Cellco Partnership d/b/a Verizon Wireless currently maintains fifteen (15) antenna at the 140-ft level on the existing 173ft Tower, located at 191 Middle Haddam Road, Portland, CT. The tower is owned by American Tower. Verizon Wireless proposed modification involves the installation of two (2) interference mitigation filters on Verizon Wireless existing antenna platform and mounting assembly.

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

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2). Enclosed to accommodate this filing are construction drawings dated September 20, 2023, by A.T Engineering Services, LLC, a structural analysis dated September , 2023, by American Tower Corp., and a structural mount analysis by Colliers Engineering and Design dated August 8, 2023, and Non-Ionizing Electromagnetic Radiation (NIER) Study dated September 25, 2023, by Tower Engineering Professionals.

1. The proposed modifications will not result in an increase in the height of the existing structure.
2. The proposed modifications will not require the extension of the site boundary.

3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.
4. The operation of the new antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission safety standard.
5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.
6. The existing structure and its foundation can support the proposed loading, as shown in the attached structural analysis and a structural mount analysis, pursuant to certain conditions defined therein. Design and engineering are fully illustrated within final construction drawings.

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

Sincerely,

Derek Maheux

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

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

cc: Ryan Curley – First Selectman – Chief Elected Official
Dan Bourret – Building Official - as P&Z official
American Tower Corporation - as tower owner
Verizon Wireless – as ground owner

EXHIBIT 1





VICINITY MAP



AMERICAN TOWER®

ATC SITE NAME: MIDDLE HADDAM ROAD-CROWN CT
 ATC SITE NUMBER: 411257
 VERIZON SITE NAME: PORTLAND S CT
 VERIZON SITE NUMBER: 5000392762
 VERIZON FUZE PID: 17123764
 SITE ADDRESS: 191 MIDDLE HADDAM RD
 PORTLAND, CT 06480



LOCATION MAP



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

THE USE AND PUBLICATION OF THESE DRAWINGS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY ARE PREPARED. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO AMERICAN TOWER OR THE SPECIFIED CARRIER IS STRICTLY PROHIBITED. NEITHER THE ARCHITECT NOR THE ENGINEER WILL BE PROVIDING ON-SITE CONSTRUCTION REVIEW OF THIS PROJECT. CONTRACTOR(S) MUST VERIFY ALL DIMENSIONS AND ADVISE AMERICAN TOWER OR THE SPECIFIED CARRIER OF ANY DISCREPANCIES. ANY PRIOR ISSUANCE OF THIS DRAWING IS SUPERSEDED BY THE LATEST VERSION.

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	JM	9/20/2023

ATC SITE NUMBER:
 411257
 ATC SITE NAME:
 MIDDLE HADDAM ROAD-CROWN CT
 VERIZON SITE NAME:
 PORTLAND S CT
 SITE ADDRESS:
 191 MIDDLE HADDAM RD
 PORTLAND, CT 06480



VERIZON AMENDMENT DRAWINGS

COMPLIANCE CODE	PROJECT SUMMARY	PROJECT DESCRIPTION	SHEET INDEX																																																						
<p>ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNMENT AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.</p> <p>1. 2020 NFPA 70, NATIONAL ELECTRIC CODE (NEC) 2. 2022 CONNECTICUT STATE BUILDING CODE 3. 2021 INTERNATIONAL BUILDING CODE (IBC)</p> <p>DESIGN CRITERIA FROM TOWER STRUCTURAL ANALYSIS: BASIC WIND SPEED: 120 MPH BASIC WIND SPEED W/ ICE: 50 MPH CODE(S): ANSITIA-222-H / 2021 IBC / 2022 CONNECTICUT STATE BUILDING CODE</p> <p>EXPOSURE CATEGORY: B RISK CATEGORY: II TOPO FACTOR PROCEDURE: METHOD 1 TOPOGRAPHIC CATEGORY: 1 CREST HEIGHT: 0 SPECTRAL RESPONSE: S_s=0.21 S₁=0.06 SITE CLASS: D-STIFF SOIL</p> <p>INFORMATION TAKEN FROM STRUCTURAL ANALYSIS COMPLETED BY ATC, DATED 08/06/2021.</p>	<p><u>SITE ADDRESS:</u> 191 MIDDLE HADDAM RD PORTLAND, CT 06480 COUNTY: MIDDLESEX</p> <p><u>GEOGRAPHIC COORDINATES:</u> LATITUDE: 41.56229196 LONGITUDE: -72.57380339 GROUND ELEVATION: 250' AMSL</p>	<p>THE PROPOSED PROJECT INCLUDES MODIFYING GROUND BASED AND TOWER MOUNTED EQUIPMENT AS INDICATED PER BELOW: INSTALL MOUNT MODIFICATIONS, (1) SWIVAL MOUNT, (2) FILTER(S) EXISTING (15) ANTENNA(S), (6) RRRH(S), (3) DIPLEXER(S), (1) OVP(S), (1) OMNI ANTENNA, AND (16) 1-5/8" COAX, AND (2) 1-5/8" HYBRIFLEX CABLE(S) TO REMAIN</p>	SHEET NO:	DESCRIPTION:	REV:	DATE:	BY:																																																		
	<p><u>PROJECT TEAM</u></p> <p><u>TOWER OWNER:</u> AMERICAN TOWER 10 PRESIDENTIAL WAY WOBURN, MA 01801</p> <p><u>ENGINEER:</u> ATC TOWER SERVICES, LLC 3500 REGENCY PKWY STE 100 CARY, NC 27518</p> <p><u>PROPERTY OWNER:</u> PHILIP B KNOWLTON 191 MIDDLE HADDAM RD PORTLAND, CT 06480</p> <p><u>APPLICANT:</u> VERIZON WIRELESS</p>	<p>PROJECT NOTES</p> <p>1. THE FACILITY IS UNMANNED. 2. A TECHNICIAN WILL VISIT THE SITE APPROXIMATELY ONCE A MONTH FOR ROUTINE INSPECTION AND MAINTENANCE. 3. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT LAND DISTURBANCE OR EFFECT OF STORM WATER DRAINAGE. 4. NO SANITARY SEWER, POTABLE WATER OR TRASH DISPOSAL IS REQUIRED. 5. HANDICAP ACCESS IS NOT REQUIRED. 6. THE PROJECT DEPICTED IN THESE PLANS QUALIFIES AS AN ELIGIBLE FACILITIES REQUEST ENTITLED TO EXPEDITED REVIEW UNDER 47 U.S.C. § 1455(A) AS A MODIFICATION OF AN EXISTING WIRELESS TOWER THAT INVOLVES THE COLLOCATION, REMOVAL, AND/OR REPLACEMENT OF TRANSMISSION EQUIPMENT THAT IS NOT A SUBSTANTIAL CHANGE UNDER CFR § 1.61000 (B)(7).</p>	<table border="1"> <tr><td>G-001</td><td>TITLE SHEET</td><td>0</td><td>9/20/2023</td><td>JM</td></tr> <tr><td>G-002</td><td>GENERAL NOTES</td><td>0</td><td>9/20/2023</td><td>JM</td></tr> <tr><td>C-101</td><td>DETAILED SITE PLAN</td><td>0</td><td>9/20/2023</td><td>JM</td></tr> <tr><td>C-201</td><td>TOWER ELEVATION</td><td>0</td><td>9/20/2023</td><td>JM</td></tr> <tr><td>C-401</td><td>ANTENNA INFORMATION & SCHEDULE</td><td>0</td><td>9/20/2023</td><td>JM</td></tr> <tr><td>C-501</td><td>CONSTRUCTION DETAILS</td><td>0</td><td>9/20/2023</td><td>JM</td></tr> <tr><td>E-501</td><td>GROUNDING DETAILS</td><td>0</td><td>9/20/2023</td><td>JM</td></tr> <tr><td>R-601</td><td>SUPPLEMENTAL</td><td></td><td></td><td></td></tr> <tr><td>R-602</td><td>SUPPLEMENTAL</td><td></td><td></td><td></td></tr> <tr><td>R-603</td><td>SUPPLEMENTAL</td><td></td><td></td><td></td></tr> </table>	G-001	TITLE SHEET	0	9/20/2023	JM	G-002	GENERAL NOTES	0	9/20/2023	JM	C-101	DETAILED SITE PLAN	0	9/20/2023	JM	C-201	TOWER ELEVATION	0	9/20/2023	JM	C-401	ANTENNA INFORMATION & SCHEDULE	0	9/20/2023	JM	C-501	CONSTRUCTION DETAILS	0	9/20/2023	JM	E-501	GROUNDING DETAILS	0	9/20/2023	JM	R-601	SUPPLEMENTAL				R-602	SUPPLEMENTAL				R-603	SUPPLEMENTAL				<p>CONTRACTOR PMI REQUIREMENTS</p> <p>PMI ACCESSED AT: HTTPS://PMI.VZSMART.COM</p> <p>SMART TOOL VENDOR PROJECT NUMBER: 10208169</p> <p>VZW LOCATION CODE (PSLC): 5000392762</p> <p>***PMI AND REQUIREMENTS ALSO EMBEDDED IN MOUNT ANALYSIS REPORT</p> <p>MOUNT MODIFICATION REQUIRED: YES</p> <p>VZW APPROVED SMART KIT VENDORS: REFER TO MOUNT MODIFICATION DRAWINGS PAGES FOR VZW SMART KIT APPROVED VENDORS</p>			
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R-603	SUPPLEMENTAL																																																								
<p><u>UTILITY COMPANIES</u></p> <p>POWER COMPANY: NORTHEAST UTILITY SERVICE PHONE: (800) 662-7764</p> <p>TELEPHONE COMPANY: N/A PHONE: N/A</p>	<p><u>PROJECT LOCATION DIRECTIONS</u></p> <p>START OUT GOING EAST ON EAST RIVER DR. TOWARD PITKIN ST. MERGE ONTO CT-15 S/WILBUR CROSS HIGHWAY/US-5 S 1.0 MILES. MERGE ONTO I-91 VIA EXIT NUMBER 86 TOWARD NEW HAVEN/NY CITY...MERGE ONTO CT-9 VIA EXIT NUMBER 22S-ON THE LEFT-TOWARD MIDDLETOWN/OLD SAYBROOK....TURN RIGHT ONTO CT-17/ST JOHN'S SQ. CONTINUE TO FOLLOW CT-17...TURN SLIGHT RIGHT ONTO CT -66 E/CT-17 N. MARLBOROUGH ST. CONTINUE TO FOLLOW CT-66E...TURN SLIGHT LEFT ONTO MIDDLE HADDAM RD.....END AT 191 MIDDLE HADDAM RD. PORTLAND CT.</p>																																																								



ATC JOB NO: 14519456_GO
 CUSTOMER ID: PORTLAND S CT
 CUSTOMER #: 5000392762

TITLE SHEET

SHEET NUMBER:
G-001

REVISION:
0



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GENERAL CONSTRUCTION NOTES:

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

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

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

SPECIAL CONSTRUCTION

ANTENNA INSTALLATION NOTES:

1. WORK INCLUDED:
 - A. ANTENNA AND COAXIAL/HYBRID CABLES ARE FURNISHED BY VERIZON UNDER A SEPARATE CONTRACT. THE CONTRACTOR SHALL ASSIST ANTENNA INSTALLATION CONTRACTOR IN TERMS OF COORDINATION AND SITE ACCESS. ERECTION SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF PERSONNEL.
 - B. INSTALL ANTENNAS AS INDICATED ON DRAWINGS AND VERIZON SPECIFICATIONS.
 - C. INSTALL GALVANIZED STEEL ANTENNA MOUNTS AS INDICATED ON DRAWINGS.
 - D. INSTALL FURNISHED GALVANIZED STEEL OR ALUMINUM WAVEGUIDE.
 - E. INSTALL COAXIAL/HYBRID CABLES AND TERMINATING BETWEEN ANTENNAS AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS. WEATHERPROOF ALL CONNECTIONS BETWEEN THE ANTENNA AND EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. TERMINATE ALL COAXIAL/HYBRID CABLE THREE (3) FEET IN EXCESS OF ENTRY PORT LOCATION UNLESS OTHERWISE STATED.
2. ANTENNA AND COAXIAL/HYBRID CABLE GROUNDING:
 - A. ALL EXTERIOR #6 GREEN GROUND WIRE "DAISY CHAIN" CONNECTIONS ARE TO BE WEATHER SEALED WITH RFS CONNECTORS/SPLICE WEATHERPROOFING KIT #221213 OR EQUAL.

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



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

THE USE AND PUBLICATION OF THESE DRAWINGS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY ARE PREPARED. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO AMERICAN TOWER OR THE SPECIFIED CARRIER IS STRICTLY PROHIBITED. NEITHER THE ARCHITECT NOR THE ENGINEER WILL BE PROVIDING ON-SITE CONSTRUCTION REVIEW OF THIS PROJECT. CONTRACTOR(S) MUST VERIFY ALL DIMENSIONS AND ADVISE AMERICAN TOWER OR THE SPECIFIED CARRIER OF ANY DISCREPANCIES. ANY PRIOR ISSUANCE OF THIS DRAWING IS SUPERSEDED BY THE LATEST VERSION.

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	JM	9/20/2023

ATC SITE NUMBER:
 411257
 ATC SITE NAME:
MIDDLE HADDAM ROAD-CROWN
 CT
 VERIZON SITE NAME:
PORTLAND S CT
 SITE ADDRESS:
 191 MIDDLE HADDAM RD
 PORTLAND, CT 06480

SEAL:



Digitally Signed: 2023-09-20



ATC JOB NO:	14519456_G0
CUSTOMER ID:	PORTLAND S CT
CUSTOMER #:	5000392762

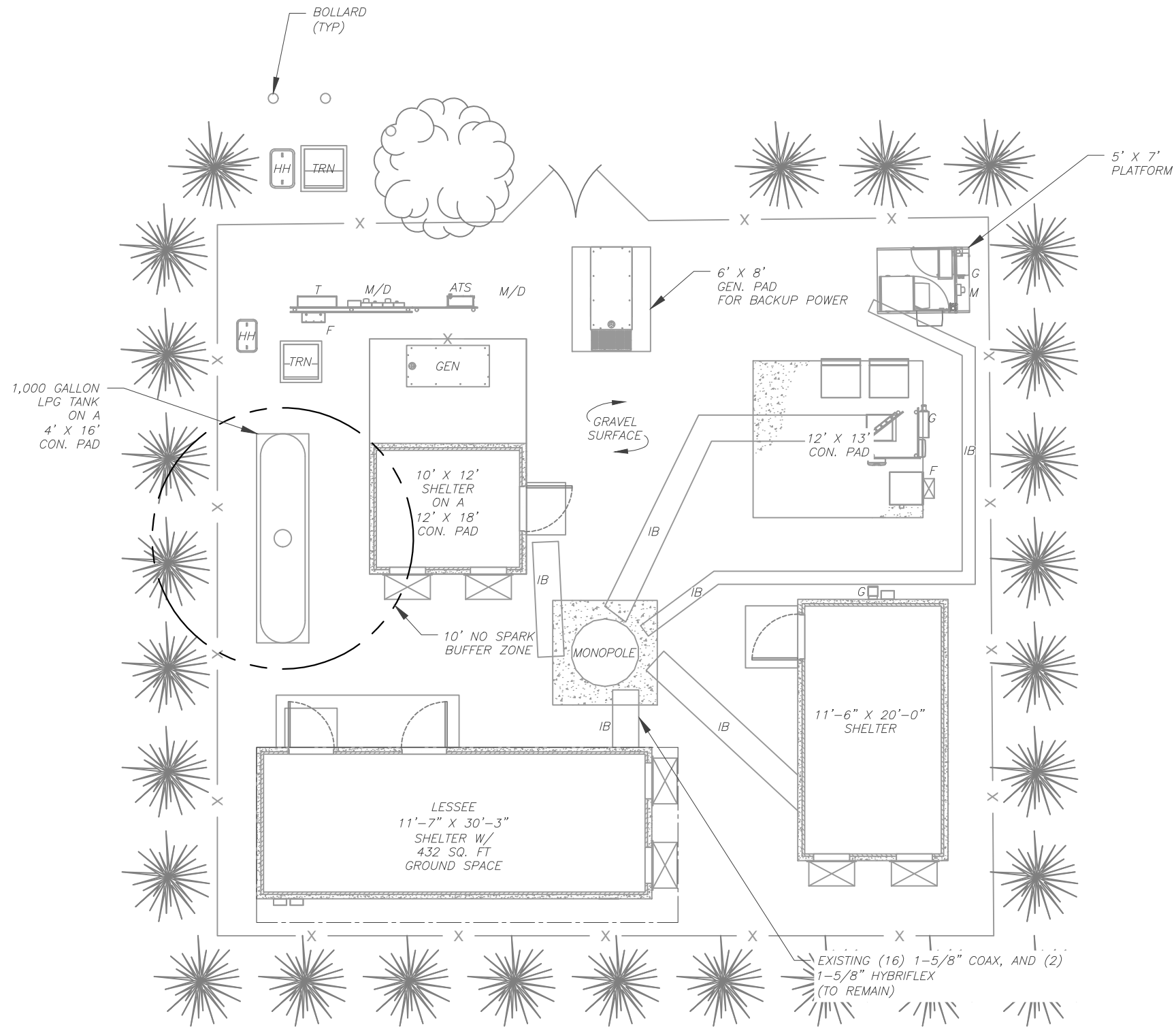
GENERAL NOTES

SHEET NUMBER: G-001	REVISION: 0
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SITE PLAN NOTES:

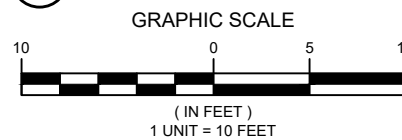
1. THIS SITE PLAN REPRESENTS THE BEST PRESENT KNOWLEDGE AVAILABLE TO THE ENGINEER AT THE TIME OF THIS DESIGN. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO CONSTRUCTION AND VERIFY ALL EXISTING CONDITIONS RELATED TO THE SCOPE OF WORK FOR THIS PROJECT.
2. ICE BRIDGE, CABLE LADDER, COAX PORT, AND COAX CABLE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



LEGEND

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

1 DETAILED SITE PLAN



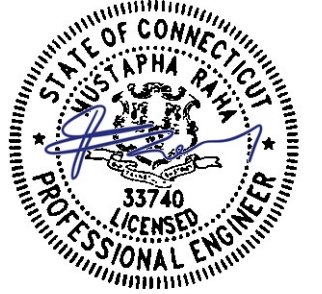

AMERICAN TOWER®
A.T. ENGINEERING SERVICES LLC
 3500 REGENCY PARKWAY
 SUITE 100
 CARY, NC 27518
 PHONE: (919) 468-0112
 PEC.0001553

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REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	JM	9/20/2023

ATC SITE NUMBER:
411257
 ATC SITE NAME:
MIDDLE HADDAM ROAD-CROWN CT
 VERIZON SITE NAME:
PORTLAND S CT
 SITE ADDRESS:
 191 MIDDLE HADDAM RD
 PORTLAND, CT 06480

SEAL:



Digitally Signed: 2023-09-20

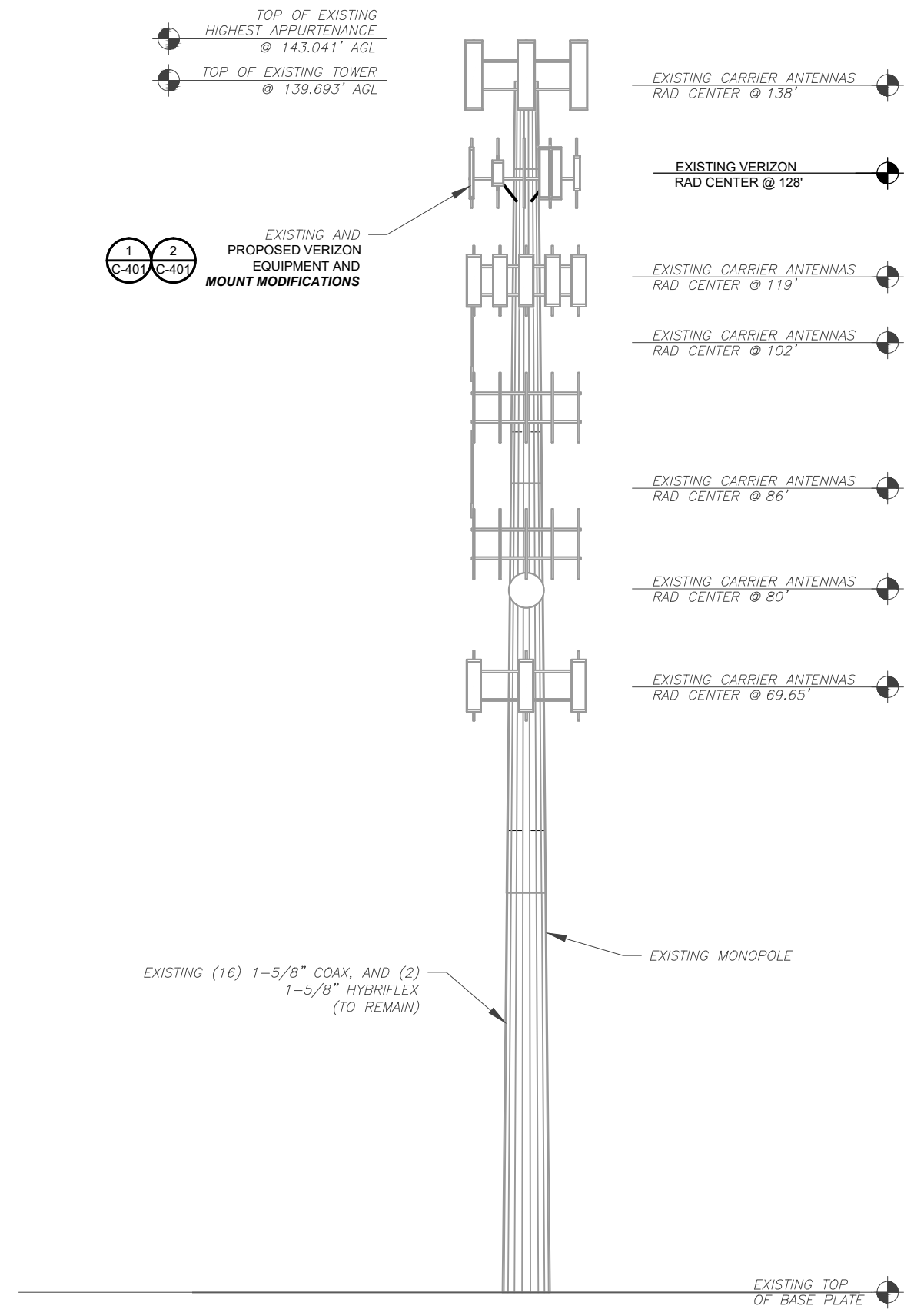


ATC JOB NO:	14519456_G0
CUSTOMER ID:	PORTLAND S CT
CUSTOMER #:	5000392762

DETAILED SITE PLAN

SHEET NUMBER: G-001	REVISION: 0
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PER MOUNT ANALYSIS COMPLETED BY COLLIERS, DATED 08/08/2023, THE EXISTING MOUNT MUST BE MODIFIED TO ADEQUATELY SUPPORT THE PROPOSED LOADING. THE MOUNT MODIFICATION DETAILED AT THE END OF THIS PLAN SET, MUST BE INSTALLED PRIOR TO THE INSTALLATION OF THE PROPOSED ANTENNAS AND OTHER EQUIPMENT.




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REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	JM	9/20/2023


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 VERIZON SITE NAME:
PORTLAND S CT
 SITE ADDRESS:
 191 MIDDLE HADDAM RD
 PORTLAND, CT 06480

SEAL:



Digitally Signed: 2023-09-20

- TOWER NOTE:**
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM WITH THE PROJECT MANAGER THAT THEY HAVE THE MOST RECENT VERSION OF THE STRUCTURAL ANALYSIS BEFORE COMMENCING WORK. EXISTING AND PROPOSED TOWER APPURTENANCES, MOUNTS, AND ANTENNAS ARE SHOWN BASED ON THE STRUCTURAL ANALYSIS. WHERE APPLICABLE, ALL NEW ANTENNAS, EQUIPMENT, MOUNTS, CABLING, ETC. SHALL BE PAINTED/SOCKED TO MATCH EXISTING EQUIPMENT IN ACCORDANCE WITH FAA, JURISDICTION, AND/OR OTHER LOCAL REQUIREMENTS.
 - TOWER ELEVATIONS ARE MEASURED FROM TOP OF BASE PLATE TO MATCH STRUCTURAL ANALYSIS. ELEVATIONS DO NOT REFLECT TRUE ABOVE GROUND LEVEL (A.G.L.)
 - TOWER ELEVATION DEPICTION MAY NOT REFLECT ALL EQUIPMENT INCLUDED IN STRUCTURAL ANALYSIS. REFER TO STRUCTURAL ANALYSIS FOR FULL TOWER LOADING.



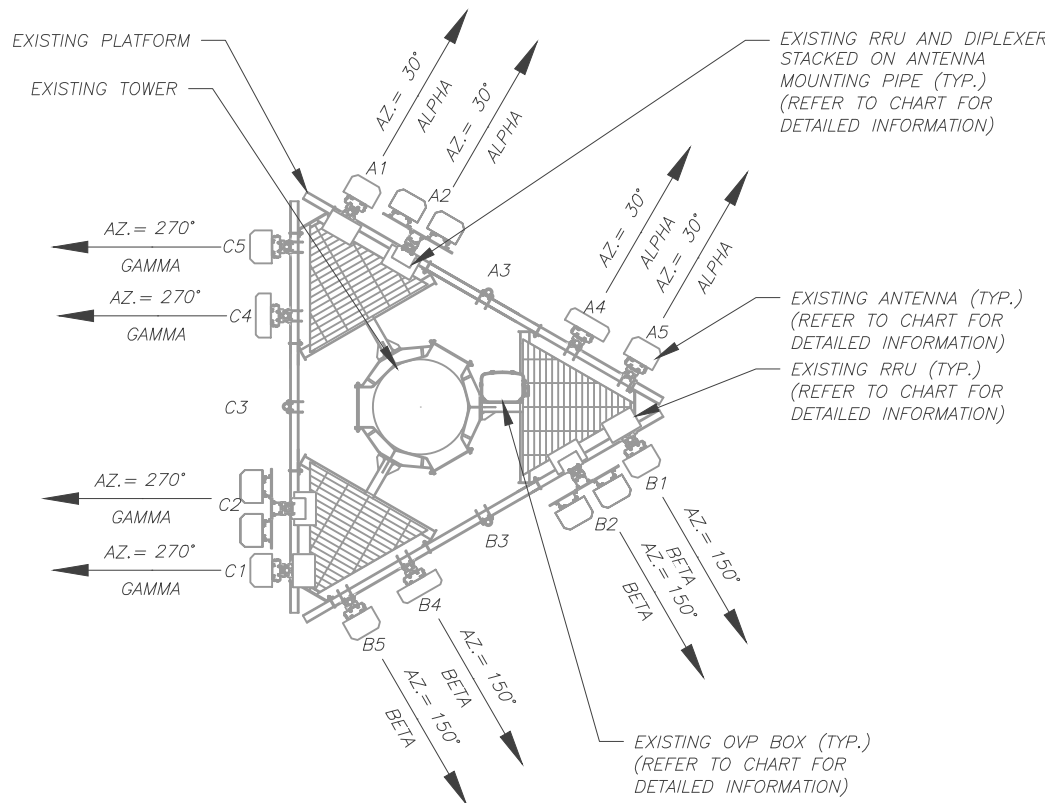
ATC JOB NO:	14519456_GO
CUSTOMER ID:	PORTLAND S CT
CUSTOMER #:	5000392762

TOWER ELEVATION

SHEET NUMBER: G-001	REVISION: 0
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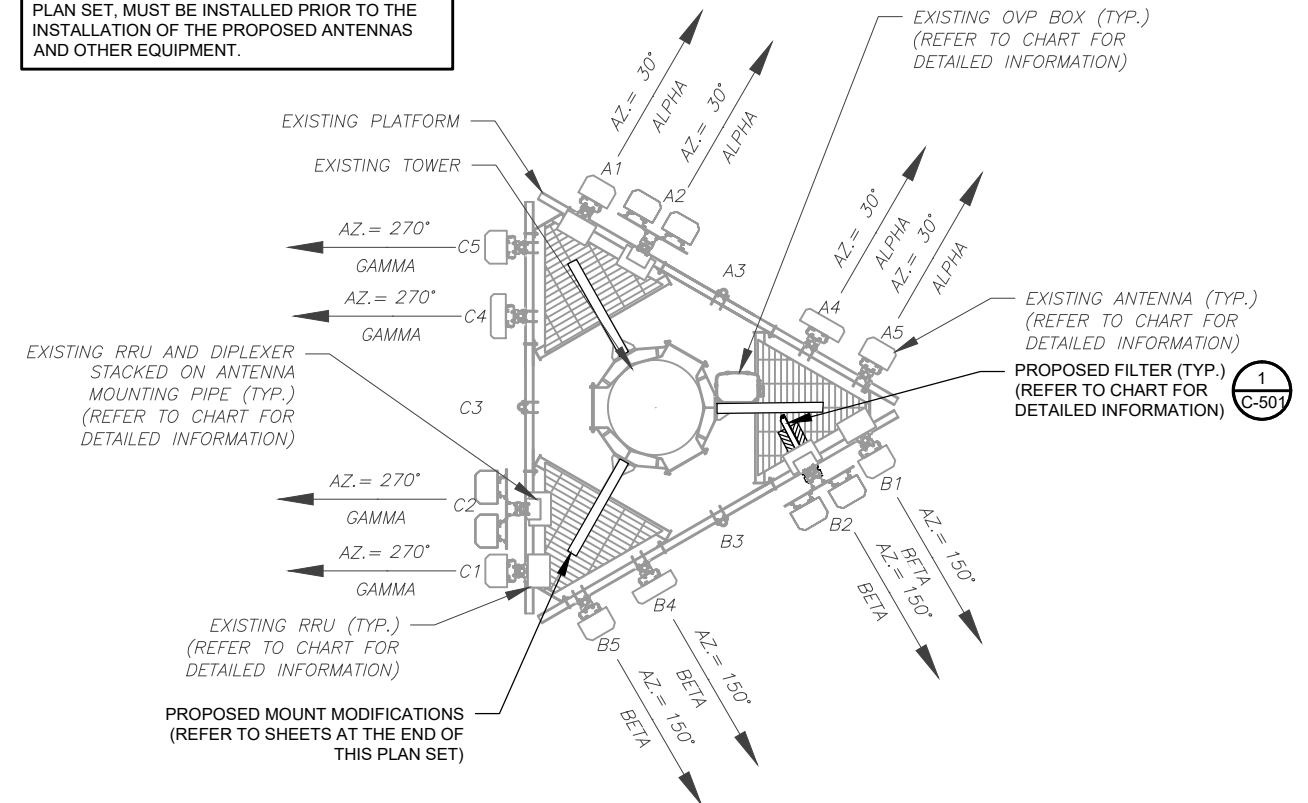
1 TOWER ELEVATION
 SCALE: N.T.S.

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

PER MOUNT ANALYSIS COMPLETED BY COLLIERS, DATED 08/08/2023, THE EXISTING MOUNT MUST BE MODIFIED TO ADEQUATELY SUPPORT THE PROPOSED LOADING. THE MOUNT MODIFICATION DETAILED AT THE END OF THIS PLAN SET, MUST BE INSTALLED PRIOR TO THE INSTALLATION OF THE PROPOSED ANTENNAS AND OTHER EQUIPMENT.



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

EXISTING ANTENNA SCHEDULE								
LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY	
SECTOR	RAD	AZ	POS	ANTENNA	BAND	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	128'	30°	A1	DB846H80E-SX	850 CDMA	RMN	B2/B66A RRH-BR049	RMN
			A2	(2) JAHH-65B-R3B	700/850/1900/AWS LTE/850 5G	RMN	CBC78T-DS-43-2X B5/B13 RRH-BR04C	RMN
			A3	-	-	-	-	-
			A4	MT6407-77A	L-SUB6 5G	RMN	-	-
			A5	DB846H80E-SX	850 CDMA	RMN	-	-
BETA	128'	150°	B1	DB846H80E-SX	850 CDMA	RMN	B2/B66A RRH-BR049	RMN
			B2	(2) JAHH-65B-R3B	700/850/1900/AWS LTE/850 5G	RMN	CBC78T-DS-43-2X B5/B13 RRH-BR04C	RMN
			B3	-	-	-	-	
			B4	MT6407-77A	L-SUB6 5G	RMN	-	-
			B5	DB846H80E-SX	850 CDMA	RMN	-	-
GAMMA	128'	270°	C1	APL866513-44T0	850 CDMA	RMN	B2/B66A RRH-BR049	RMN
			C2	(2) JAHH-65B-R3B	700/850/1900/AWS LTE/850 5G	RMN	CBC78T-DS-43-2X B5/B13 RRH-BR04C	RMN
			C3	-	-	-	-	
			C4	MT6407-77A	L-SUB6 5G	RMN	-	-
			C5	APL866513-44T0	850 CDMA	RMN	-	-

NOTES

- CONFIRM WITH VERIZON REP FOR APPLICABLE UPDATES/REVISIONS AND MOST RECENT RFDS FOR NSN CONFIGURATION (CONFIG). GC TO CAP ALL UNUSED PORTS.
- CONFIRM SPACING OF PROPOSED EQUIP DOES NOT CAUSE TOWER CONFLICTS NOR IMPEDE TOWER CLIMBING PEGS.

STATUS ABBREVIATIONS

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

CABLE LENGTHS FOR JUMPERS

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

FINAL ANTENNA SCHEDULE								
LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY	
SECTOR	RAD	AZ	POS	ANTENNA	BAND	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	128'	30°	A1	DB846H80E-SX	850 CDMA	RMN	B2/B66A RRH-BR049	RMN
			A2	(2) JAHH-65B-R3B	700/850/1900/AWS LTE/850 5G	RMN	CBC78T-DS-43-2X B5/B13 RRH-BR04C	RMN
			A3	-	-	-	-	
			A4	MT6407-77A	L-SUB6 5G	RMN	-	-
			A5	DB846H80E-SX	850 CDMA	RMN	-	-
BETA	128'	150°	B1	DB846H80E-SX	850 CDMA	RMN	B2/B66A RRH-BR049	RMN
			B2	(2) JAHH-65B-R3B	700/850/1900/AWS LTE/850 5G	RMN	CBC78T-DS-43-2X B5/B13 RRH-BR04C (2) KA-6030	RMN ADD
			B3	-	-	-	-	
			B4	MT6407-77A	L-SUB6 5G	RMN	-	-
			B5	DB846H80E-SX	850 CDMA	RMN	-	-
GAMMA	128'	270°	C1	APL866513-44T0	850 CDMA	RMN	B2/B66A RRH-BR049	RMN
			C2	(2) JAHH-65B-R3B	700/850/1900/AWS LTE/850 5G	RMN	CBC78T-DS-43-2X B5/B13 RRH-BR04C	RMN
			C3	-	-	-	-	
			C4	MT6407-77A	L-SUB6 5G	RMN	-	-
			C5	APL866513-44T0	850 CDMA	RMN	-	-

EXISTING FIBER DISTRIBUTION/OVP BOX		EXISTING CABLING SUMMARY	
MODEL NUMBER	STATUS	CABLE QTY, SIZE, TYPE	STATUS
RCMDC-6627-PF-48	RMN	(16) 1-5/8" COAX, AND (2) 1-5/8" HYBRIFLEX	RMN
-	RMV	----	RMV

3 EQUIPMENT SCHEDULES

FINAL FIBER DISTRIBUTION / OVP BOX		FINAL CABLING SUMMARY	
MODEL NUMBER	STATUS	CABLE QTY, SIZE, TYPE	STATUS
RCMDC-6627-PF-48	RMN	(16) 1-5/8" COAX, AND (2) 1-5/8" HYBRIFLEX	RMN
-	ADD	----	ADD

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REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	JM	9/20/2023

ATC SITE NUMBER:
411257
ATC SITE NAME:
MIDDLE HADDAM ROAD-CROWN CT
VERIZON SITE NAME:
PORTLAND S CT
SITE ADDRESS:
191 MIDDLE HADDAM RD
PORTLAND, CT 06480

SEAL:

33740 LICENSED PROFESSIONAL ENGINEER

Digitally Signed: 2023-09-20

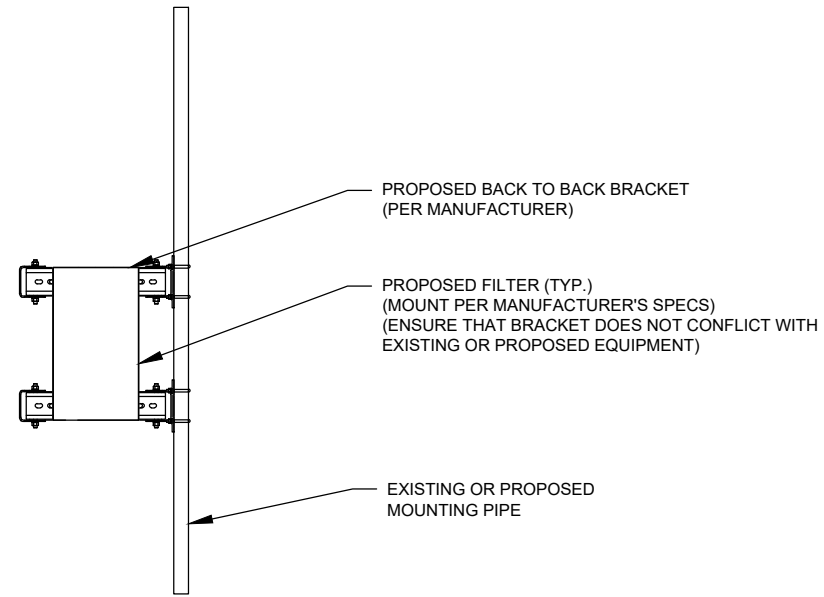
ATC JOB NO: 14519456_GO
CUSTOMER ID: PORTLAND S CT
CUSTOMER #: 5000392762

ANTENNA INFORMATION & SCHEDULE

SHEET NUMBER: **G-001**
REVISION: **0**

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



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



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0	FOR CONSTRUCTION	JM	9/20/2023

ATC SITE NUMBER:
411257
 ATC SITE NAME:
MIDDLE HADDAM ROAD-CROWN
CT
 VERIZON SITE NAME:
PORTLAND S CT
 SITE ADDRESS:
191 MIDDLE HADDAM RD
PORTLAND, CT 06480

SEAL:



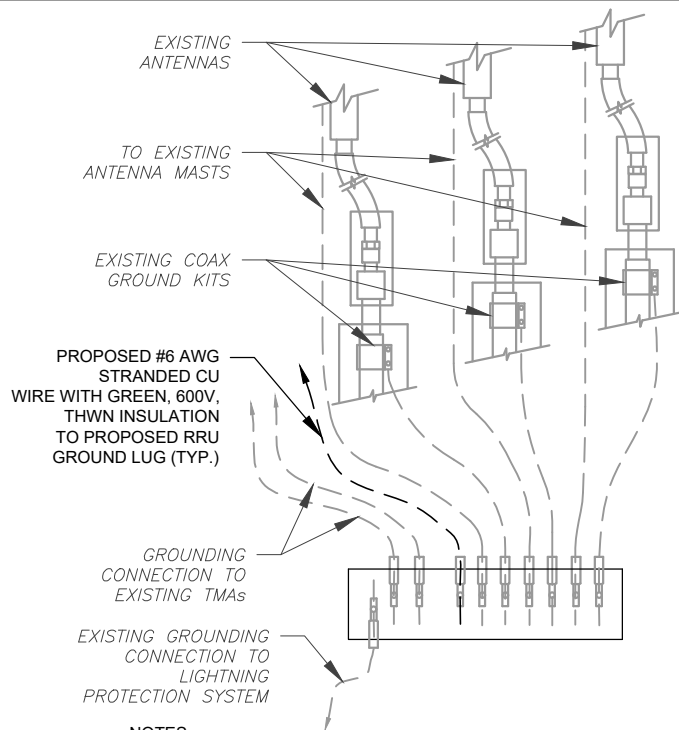
Digitally Signed: 2023-09-20



ATC JOB NO:	14519456_G0
CUSTOMER ID:	PORTLAND S CT
CUSTOMER #:	5000392762

**CONSTRUCTION
DETAILS**

SHEET NUMBER:	REVISION:
G-001	0

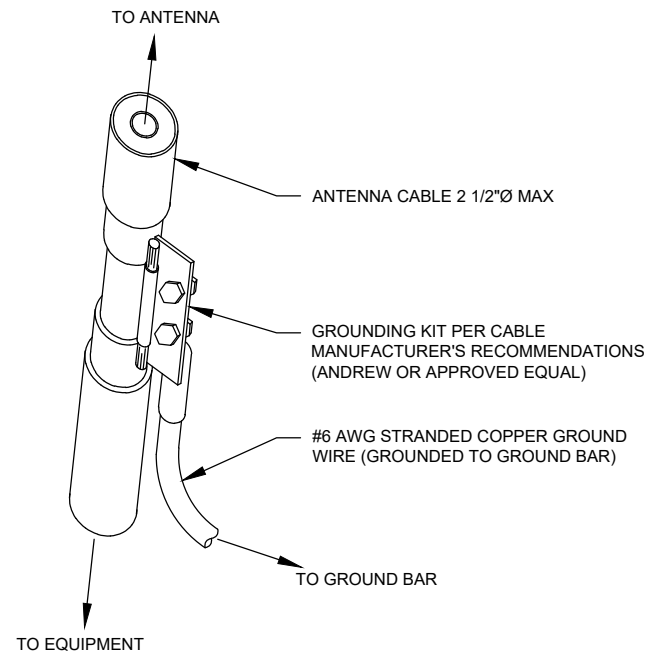


NOTES:

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

1 TYPICAL ANTENNA GROUNDING DIAGRAM

SCALE: N.T.S.

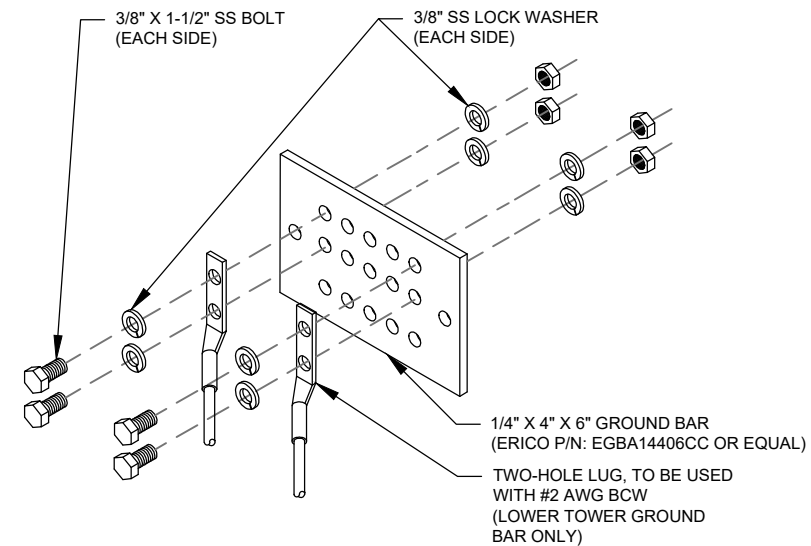


GROUND KIT NOTES:

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

2 CABLE GROUND KIT CONNECTION DETAIL

SCALE: N.T.S.



GROUND BAR NOTES:

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

3 TOWER GROUND BAR DETAIL

SCALE: N.T.S.



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A.T. ENGINEERING SERVICES LLC
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 SUITE 100
 CARY, NC 27518
 PHONE: (919) 468-0112
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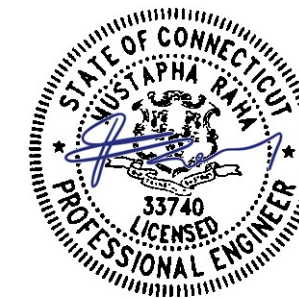
ATC SITE NUMBER:
411257

ATC SITE NAME:
MIDDLE HADDAM ROAD-CROWN CT

VERIZON SITE NAME:
PORTLAND S CT

SITE ADDRESS:
 191 MIDDLE HADDAM RD
 PORTLAND, CT 06480

SEAL:



Digitally Signed: 2023-09-20



ATC JOB NO:	14519456_G0
CUSTOMER ID:	PORTLAND S CT
CUSTOMER #:	5000392762

GROUNDING DETAILS

SHEET NUMBER:	REVISION:
G-001	0



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

Mount Post-Modification Analysis Report
 (3) 13.69-Ft Platform

August 8, 2023
 Site ID: 5000392762-VZW / PORTLAND S CT
 Page | 5

Requirements:

The existing mount will be **SUFFICIENT** for the final loading configuration (attachment 2) **after the modifications detailed in attachment 3 are successfully completed.**

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

Attachments:

1. Contractor Required PMI Report Deliverables
2. Antenna Placement Diagrams
3. Mount Modification Drawings
4. Mount Photos
5. Mount Mapping Report (for reference only)
6. Analysis Calculations

Post-Modification Antenna Mount Analysis Report and PMI Requirements

Mount Fix

SMART Tool Project #: 10208169
 Colliers Engineering & Design CT, P.C. Project #: 23777185

August 8, 2023

Site Information

Site ID: 5000392762-VZW / PORTLAND S CT
 Site Name: PORTLAND S CT
 Carrier Name: Verizon Wireless
 Address: 191 Middle Haddam Road
 Portland, Connecticut 06480
 Middlesex County
 Latitude: 41.562250°
 Longitude: -72.573778°

Structure Information

Tower Type: 138-Ft Monopole
 Mount Type: 13.69-Ft Platform

FUZE ID # 17123764

Analysis Results

Platform: 87.8% Pass w/ Modifications*

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

*****Contractor PMI Requirements:**

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

Report Prepared By: Gianna Argentina



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



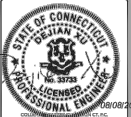
MOUNT MODIFICATION DRAWINGS
EXISTING 13.69' PLATFORM

TOWER OWNER: AMERICAN TOWER CORPORATION
TOWER OWNER SITE NUMBER: 411257

CARRIER SITE NAME: PORTLAND S CT
CARRIER SITE NUMBER: 5000392762
FUZE ID: 17123764

191 MIDDLE HADDAM ROAD
PORTLAND, CT 06480
MIDDLESEX COUNTY

LATITUDE: 41.56225000° N
LONGITUDE: 72.57377800° W



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5000392762
191 MIDDLE HADDAM ROAD
PORTLAND, CT 06480
MIDDLESEX COUNTY
TITLE SHEET
ST-1

BILL OF MATERIALS

SECTION 1 - VZVSMART KITS						
QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)
1		VZVSMART-PLUS	LOCKER KIT	CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE STRUCTURAL STEEL NOTES ON SHEET SGN-1.	291	291
1		VZVSMART-FUJ7	MONOPOLE COLLAR MOUNT ASSEMBLY		180	180
	VZVSMART					

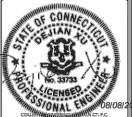
SECTION 2 - OTHER REQUIRED PARTS						
QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)

SECTION 3 - REQUIRED SAFETY CLIMB PARTS						
QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)
1	PERFECT VISION	PV-CHS-RH-U	ROUTING BRACKET	OR EOR APPROVED EQUIVALENT	-	-
1	PERFECT VISION	PV-CHS-CG-RD	WIRE ROPE GUIDE	OR EOR APPROVED EQUIVALENT	-	-
			TOTAL:			411

- NOTES:
- THE MANUFACTURERS LISTED ARE THE APPROVED VENDORS FOR THE VZV MOUNT KITS. EACH MANUFACTURER WILL BE AWARE OF WHICH KITS HAVE BEEN THROUGH THE VZV APPROVAL PROCESS AND THEY ARE IN TURN APPROVED TO SELL. PLEASE NOTE THAT THE MATERIAL UTILIZED ON THE MOUNT MODIFICATIONS WILL BE REVIEWED AS A PART OF THE DESKTOP PH COMPLETED BY THE SMART TOOL VENDOR. IT WILL BE REQUIRED THAT THE VZV KITS SPECIFIED ARE UTILIZED IN THE MODIFICATIONS.
 - ALL MATERIALS REQUIRED FOR THE DESIGNED MODIFICATIONS BUT NOT LISTED IN THIS SHEET ARE ASSUMED TO BE PROVIDED BY THE CONTRACTOR.

VZVSMART KITS - APPROVED VENDORS

COMSCOPE	PERFECTVISION	SITE PRO 1	BETTER METAL, LLC
CONTACT: SALVADOR ANGLIANO PHONE: (817) 984-7972 EMAIL: SALVADOR.ANGLIANO@COMSCOPE.COM WEBSITE: WWW.COMSCOPE.COM	CONTACT: WIRELESS SALES PHONE: (846) 887-4723 EMAIL: SALVADOR.ANGLIANO@PERFECT-VISION.COM WEBSITE: WWW.PERFECT-VISION.COM	CONTACT: PAULA BOYDSELL PHONE: (970) 236-9880 EMAIL: PAULA.BOYDSELL@SABREINDUSTRIAL.COM WEBSITE: WWW.SITPRO1.COM	CONTACT: DAVID STANBERY PHONE: (615) 535-6999 (O), (615) 431-2558 (P) EMAIL: DAVID@BETTERMETAL.COM WEBSITE: WWW.BETTERMETAL.COM
METROSHITE FABRICATORS, LLC	SABRE INDUSTRIES, INC.	NEWAVE	
CONTACT: KEVIN KAMET PHONE: (766) 335-3941 (O), (766) 983-9788 (P) EMAIL: KEVIN@METROSHITE.COM WEBSITE: METROSHITEFABRICATORS.COM	CONTACT: ANGELO VELLOSO PHONE: (846) 488-4937 EMAIL: ANGELO@SABREINDUSTRIAL.COM WEBSITE: WWW.SABREINDUSTRIAL.COM	CONTACT: NEWAVE SALES TEAM PHONE: (871) 238-9162 EMAIL: SALES@NEWAVE.COM WEBSITE: WWW.NEWAVE.COM	



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5000392762
191 MIDDLE HADDAM ROAD
PORTLAND, CT 06480
MIDDLESEX COUNTY
BILL OF MATERIALS
SCM-1

DESIGN CRITERIA

WIND LOADS BASIC WIND SPEED (3 SECOND GUST), V = 120 MPH EXPOSURE CATEGORY C TOPOGRAPHIC CATEGORY 1 TOPOGRAPHIC CONSIDERED: N/A TOPOGRAPHIC METHOD: N/A MEAN SEA LEVELATION (MSL) = 282.62'
ICE LOADS ICE WIND SPEED (3 SECOND GUST), V = 30 MPH ICE THICKNESS: 1/8" IN
SEISMIC LOADS SEISMIC DESIGN CATEGORY B SHORT TERM PEAK GROUND MOTION, S _g = .208 LONG TERM PEAK GROUND MOTION, S _g = .156

PROJECT INFORMATION

APPLICANT/ENGINEER COMPANY: VERIZON WIRELESS
CLIENT REPRESENTATIVE COMPANY: VERIZON WIRELESS
PROJECT MANAGER COMPANY: COLLIER ENGINEERING & DESIGN CONTACT: PETER ALBANO PHONE: 860.222.1111 EMAIL: PETER.ALBANO@COLLIERENGINE.COM
CONTRACTOR PMI REQUIREMENTS PH LOCATION: H77R5PHVZVSMART.COM SHEET TOTAL PROJECT #: 5000392762 ANALYSIS DATE: 08/2022
PMI REQUIREMENTS APPROVED WITHIN MOUNT MODIFICATION REPORT

SHEET INDEX

SHEET	DESCRIPTION
ST-1	TITLE SHEET
SCM-1	BILL OF MATERIALS
SGN-1	GENERAL NOTES
SCF-1	CLIMBING FACILITY DETAIL
BS-1	HOIST PHOTO
BS-2	HOIST PHOTO

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THE DRAWING AND ALL THE INFORMATION CONTAINED HEREIN IS THE PROPERTY OF COLLIER ENGINEERING & DESIGN. NO PART OF THIS DRAWING MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE EXPRESS WRITTEN PERMISSION OF COLLIER ENGINEERING & DESIGN.

- GENERAL NOTES
- THESE MODIFICATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE GOVERNING PROVISIONS OF THE TELECOMMUNICATIONS INDUSTRY STANDARD (TIA-222) MATERIALS AND SERVICES PROVIDED BY THE CONTRACTOR SHALL CONFORM TO THE ABOVE MENTIONED CODES.
 - CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT DAMAGE TO EXISTING STRUCTURE. ANY DAMAGE TO EXISTING STRUCTURE AS A RESULT OF THE CONTRACTOR'S WORK OR FROM DAMAGE DUE TO OTHER CAUSES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
 - CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS BEFORE BEGINNING WORK. ORDERING MATERIAL AND PREPARING OF SHOP DRAWINGS AND DISCREPANCIES BETWEEN FIELD CONDITIONS AND THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER. IF THE CONTRACTOR DISCOVERS ANY EXISTING CONDITIONS THAT ARE NOT REPRESENTED ON THESE DRAWINGS, OR ANY CONDITIONS THAT WOULD INTERFERE WITH THE INSTALLATION OF THE MODIFICATIONS, NOTIFY THE ENGINEER IMMEDIATELY.
 - IT IS ASSUMED THAT ANY STRUCTURAL MODIFICATION WORK SPECIFIED ON THESE PLANS WILL BE ACCOMPLISHED BY KNOWLEDGEABLE WORKMEN WITH TOWER CONSTRUCTION EXPERIENCE.
 - THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION METHODS, MEANS, TECHNIQUES, EQUIPMENT, AND PROCEDURES.
 - ALL CONSTRUCTION METHODS AND PROCEDURES INCLUDING BUT NOT LIMITED TO, ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THE WORK. CONTAINED HEREIN AND SHALL BE AN INDICATOR OF THE GENERAL CONTRACTOR'S RESPONSIBILITY FOR THE EXECUTION OF THE WORK. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS BEFORE BEGINNING WORK. ORDERING MATERIAL AND PREPARING OF SHOP DRAWINGS AND DISCREPANCIES BETWEEN FIELD CONDITIONS AND THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER. IF THE CONTRACTOR DISCOVERS ANY EXISTING CONDITIONS THAT ARE NOT REPRESENTED ON THESE DRAWINGS, OR ANY CONDITIONS THAT WOULD INTERFERE WITH THE INSTALLATION OF THE MODIFICATIONS, NOTIFY THE ENGINEER IMMEDIATELY.
 - THE CONTRACTOR IS SOLELY RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PROGRAMS IN ACCORDANCE WITH APPLICABLE SAFETY CODES.
 - WORK SHALL ONLY BE PERFORMED DURING CALM DRY DAYS (WINDS LESS THAN 10 MPH). THE STRUCTURE SHOWN ON THE DRAWINGS IS STRUCTURALLY SOUND ONLY IN THE COMPLETED FORM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STRENGTH AND STABILITY OF THE STRUCTURE DURING ERECTION. CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORTS, BRACING, AND ANY OTHER STRUCTURAL SYSTEMS AS REQUIRED TO RESIST ALL FORCES THAT MAY OCCUR DURING WINDING AND ERECTION. LIFTING OF THE STRUCTURE SHALL BE COMPLETED USING APPROVED LIFTING METHODS AND PROCEDURES.
 - CONTRACTOR SHALL SECURE SITE BACK TO DISTINGUISH CONDITION UNDER SUPERVISION OF OWNER. ALL TRUCKS, STONE, GEOTECHNICAL, AND SURROUNDING GRADE SHALL BE REPLACED AND REFINISHED AS REQUIRED TO ACHIEVE OWNER APPROVAL. POSITIVE DRAINAGE AWAY FROM TOWER SITE SHALL BE MAINTAINED.
 - CONNECTIONS BETWEEN ITEMS SUPPORTED BY THE STRUCTURE AND THE STRUCTURE NOT SPECIFICALLY DETAILED IN THE CONTRACT DOCUMENTS ARE THE RESPONSIBILITY OF THE CONTRACTOR. SUCH CONNECTIONS SHALL BE DESIGNED, COORDINATED AND INSPECTED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE OF THE PROJECT. SHEET SIGNED AND SEALED CALCULATIONS DURING SHOP DRAWING REVIEW.
 - DO NOT SCALE DRAWINGS.
 - DO NOT USE THESE DRAWINGS FOR ANY OTHER SITE.
 - ALL MATERIAL UTILIZED FOR THIS PROJECT MUST BE NEW AND FREE OF ANY DEFECTS. ANY MATERIAL SUBSTITUTION, INCLUDING BUT NOT LIMITED TO, ALTERED SIZE AND/OR STRENGTH, MUST BE APPROVED BY THE OWNER AND ENGINEER IN WRITING.
 - THE MOUNT UNDER NO CIRCUMSTANCES SHOULD BE USED AS A TIE OFF POINT.

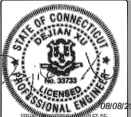
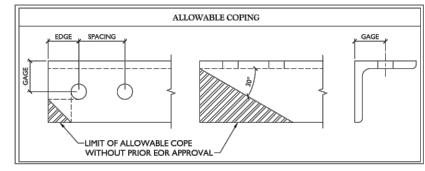
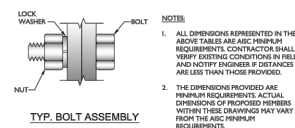
- STRUCTURAL STEEL
- DESIGN, DETAILING, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING PUBLICATIONS EXCEPT AS SPECIFICALLY INDICATED IN THE CONTRACT DOCUMENTS:
 - AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) HANDBOOK OF STEEL CONSTRUCTION (LATEST EDITION)
 - SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS
 - ASCE CODES OF STANDARD PRACTICE
 - STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING UNLESS OTHERWISE SHOWN:
 - CHANNEL ANGLE, PLATE, ETC. ASTM A36 (GR 36)
 - STEEL PIPE ASTM A53 (GR 35)
 - ROUFS ASTM A563
 - NUTS ASTM A490
 - LOCK WASHERS LOCKING STRUCTURAL GRADE
 - ALL SUBSTITUTIONS PROPOSED BY THE CONTRACTOR SHALL BE APPROVED IN WRITING BY THE ENGINEER. CONTRACTOR SHALL PROVIDE DOCUMENTATION TO ENGINEER FOR VERIFYING THE SUBSTITUTE IS SUITABLE FOR USE AND MEETS ORIGINAL DESIGN CRITERIA. DIFFERENCES FROM THE ORIGINAL DESIGN INCLUDING MAINTENANCE, REPAIRS AND REPLACEMENT SHALL BE NOTED. ESTIMATES OF COST DIFFERENCES ASSOCIATED WITH THE SUBSTITUTION (INCLUDING DESIGN COSTS AND COSTS TO SUB CONTRACTORS) SHALL BE PROVIDED TO THE ENGINEER. CONTRACTOR SHALL PROVIDE ADDITIONAL DOCUMENTATION AND/OR SPECIFICATIONS TO THE ENGINEER AS REQUESTED.
 - PROVIDE STRUCTURAL STEEL SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
 - SUBMIT SHOP DRAWINGS TO PETER.ALBANO@COLLIERENGINE.COM
 - PROVIDE COLLIER ENGINEERING & DESIGN PROJECT # AND COLLIER ENGINEERING & DESIGN PROJECT ENGINEER CONTACT # IN THE BODY OF THE EMAIL.
 - DRILL NO HOLES IN ANY NEW OR EXISTING STRUCTURAL STEEL MEMBERS OTHER THAN THOSE SHOWN ON STRUCTURAL DRAWINGS WITHOUT THE APPROVAL OF THE ENGINEER OF RECORD.
 - GALVANIZED WITH ZINC BOLTS SHALL NOT BE USED.
 - ALL NEW STEEL SHALL BE HOT DIP GALVANIZED FOR FULL WEATHER PROTECTION. IN ADDITION ALL NEW STEEL SHALL BE PAINTED TO MATCH EXISTING STEEL. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROTECT STEEL BY ANY OTHER MEANS.
 - ALL BOLT ASSEMBLIES FOR STRUCTURAL MEMBERS SUBMITTED IN THE DRAWINGS REQUIRE LOCKING DEVICES TO BE INSTALLED IN ACCORDANCE WITH TIA-222-SECTION 4.3.2 REQUIREMENTS.
 - WHERE CONNECTIONS ARE NOT FULLY DETAILED ON THESE DRAWINGS, FABRICATOR SHALL DESIGN CONNECTIONS TO RESIST LOADS AND FORCES WHEN SHOWN ON DRAWINGS ARE AS OUTLINED IN SPECIFICATIONS.
 - FOR MEMBERS BEING REPLACED, PROVIDE NEW BOLTS AND NUTS WITH DISTINGUISHING SIZE AND GRADE. MAINTAIN AISC REQUIREMENTS FOR MINIMUM BOLT DISTANCE AND SPACING.
 - ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH SUCH THAT THE END OF THE BOLT IS AT LEAST FLUSH WITH THE FACE OF THE NUT. IT IS NOT PERMITTED FOR THE END TO BE BELOW THE FACE OF THE NUT AFTER TIGHTENING IS COMPLETED.
 - GALVANIZED WITH ZINC BOLTS SHALL NOT BE USED.
 - ALL NEW STEEL SHALL BE HOT DIP GALVANIZED FOR FULL WEATHER PROTECTION. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROTECT STEEL BY ANY OTHER MEANS.
 - ALL EXISTING PAINTED/GALVANIZED SURFACES DAMAGED DURING REPAIR INCLUDING ABRADE UNDER TOWER PLATFORMS SHALL BE WIRE BRUSHED CLEAN, REPAIRED BY COLD GALVANIZING (ZINC COAT OR EOR APPROVED EQUAL), AND REPAINTED TO MATCH THE EXISTING FINISH IF APPLICABLE.
 - ALL HOLES IN STEEL MEMBERS SHALL BE 1/8" LARGER THAN THE BOLT DIAMETER. STANDARD HOLES SHALL BE USED UNLESS NOTED OTHERWISE.

BOLT SCHEDULE (IN)

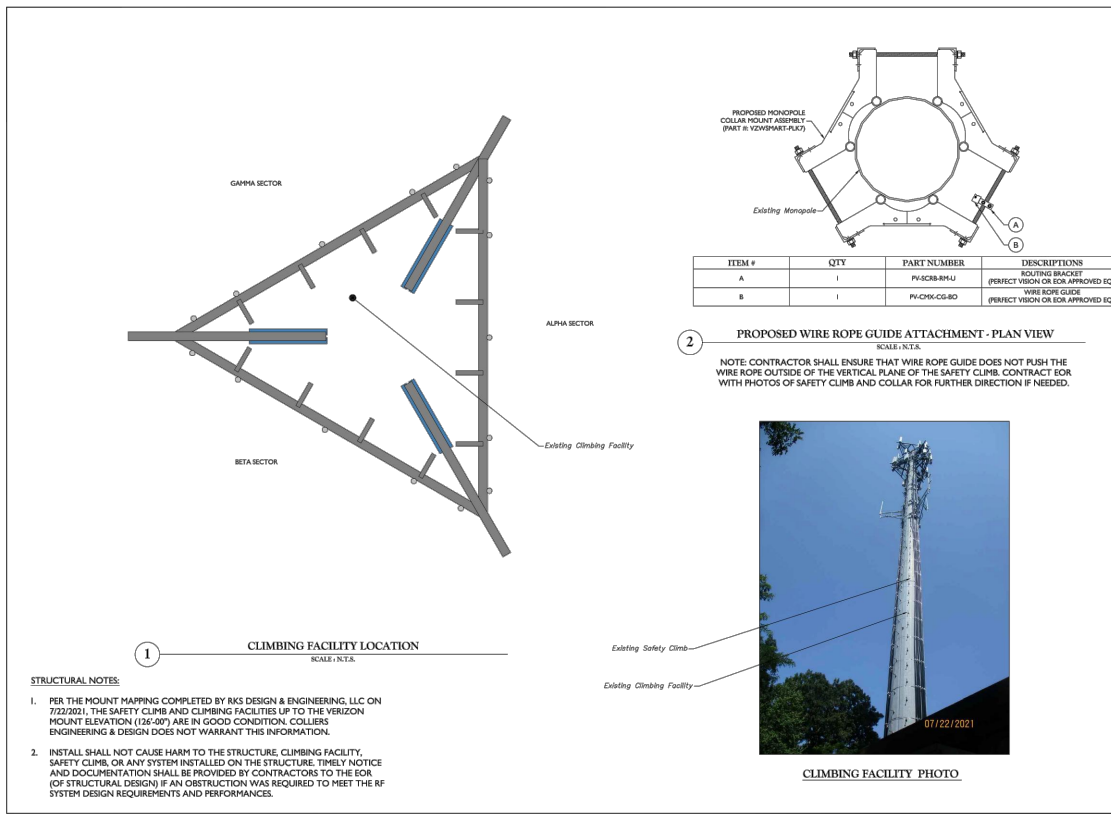
BOLT DIAMETER	STANDARD HOLE	SHORT SLOT	MIN. EDGE DISTANCE	SPACING
1/2	9/16	9/16 x 11/16	7/8	1 1/2
5/8	1 1/16	1 1/16 x 7/8	1 1/8	1 7/8
3/4	1 3/16	1 3/16 x 1	1 1/4	2 1/4
7/8	1 5/16	1 5/16 x 1 1/8	1 1/2	2 5/8
1	1 7/16	1 7/16 x 1 5/16	1 3/4	3

WORKABLE GAGES (IN)

LEG	GAGE
4	2 1/2
3 1/2	2
3	1 3/4
2 1/2	1 3/8
2	1 1/8



Colliers Engineering & Design logo
www.colliersengineering.com
PORTLAND S CT
5000392762
191 MIDDLE HADDAM ROAD
PORTLAND, CT 06480
MIDDLESEX COUNTY
GENERAL NOTES
SGN-1



- STRUCTURAL NOTES:
- PER THE MOUNT MAPPING COMPLETED BY RKS DESIGN & ENGINEERING, LLC ON 7/22/2021, THE SAFETY CLIMB AND CLIMBING FACILITIES UP TO THE VERIZON MOUNT ELEVATION (126'-00") ARE IN GOOD CONDITION. COLLIER ENGINEERING & DESIGN DOES NOT WARRANT THIS INFORMATION.
 - INSTALL SHALL NOT CAUSE HARM TO THE STRUCTURE, CLIMBING FACILITY, SAFETY CLIMB, OR ANY SYSTEM INSTALLED ON THE STRUCTURE. TIMELY NOTICE AND DOCUMENTATION SHALL BE PROVIDED BY CONTRACTORS TO THE EOR (OF STRUCTURAL DESIGN) IF AN OBSTRUCTION WAS REQUIRED TO MEET THE RF SYSTEM DESIGN REQUIREMENTS AND PERFORMANCES.



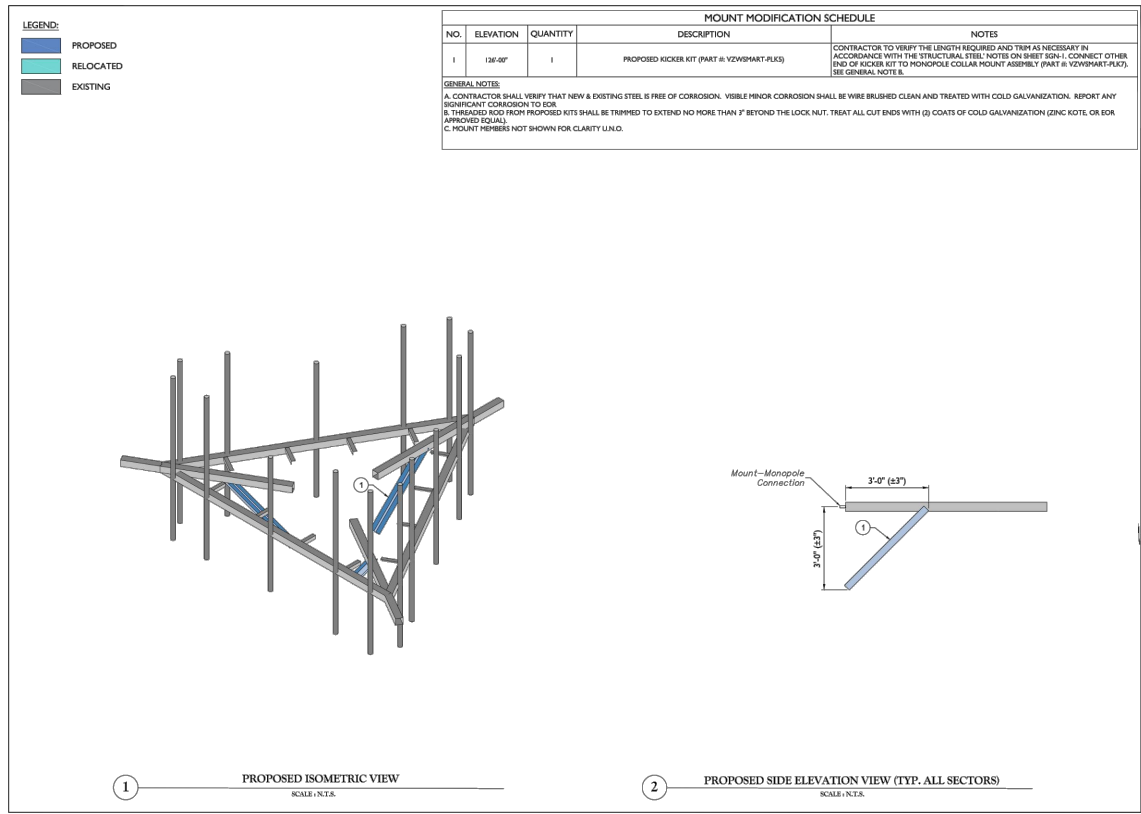
Colliers Engineering & Design logo
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PORTLAND S CT
5000392762
191 MIDDLE HADDAM ROAD
PORTLAND, CT 06480
MIDDLESEX COUNTY
CLIMBING FACILITY DETAIL
SCF-1

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

SUPPLEMENTAL

SHEET NUMBER: G-001
REVISION: 0

1 MOUNT MODIFICATION



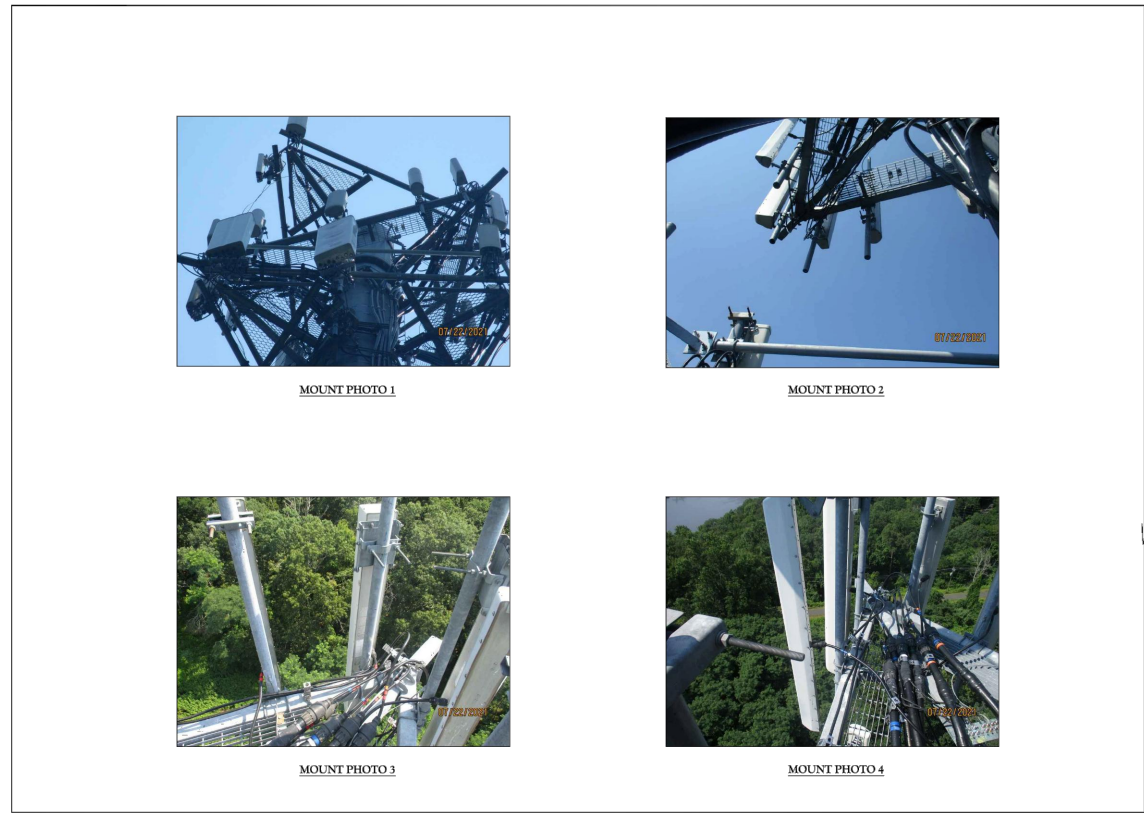
Colliers Engineering & Design
 www.colliersengineering.com

verizon

STATE OF CONNECTICUT
REGISTERED PROFESSIONAL ENGINEER
 No. 3755
 EXPIRES 08/2023

SITE NAME:
 PORTLAND 5 CT
 5000392762
 191 MIDDLE HADSDAM ROAD
 PORTLAND, CT 06480
 MIDDLESEX COUNTY

MODIFICATION DETAILS
 SS-1



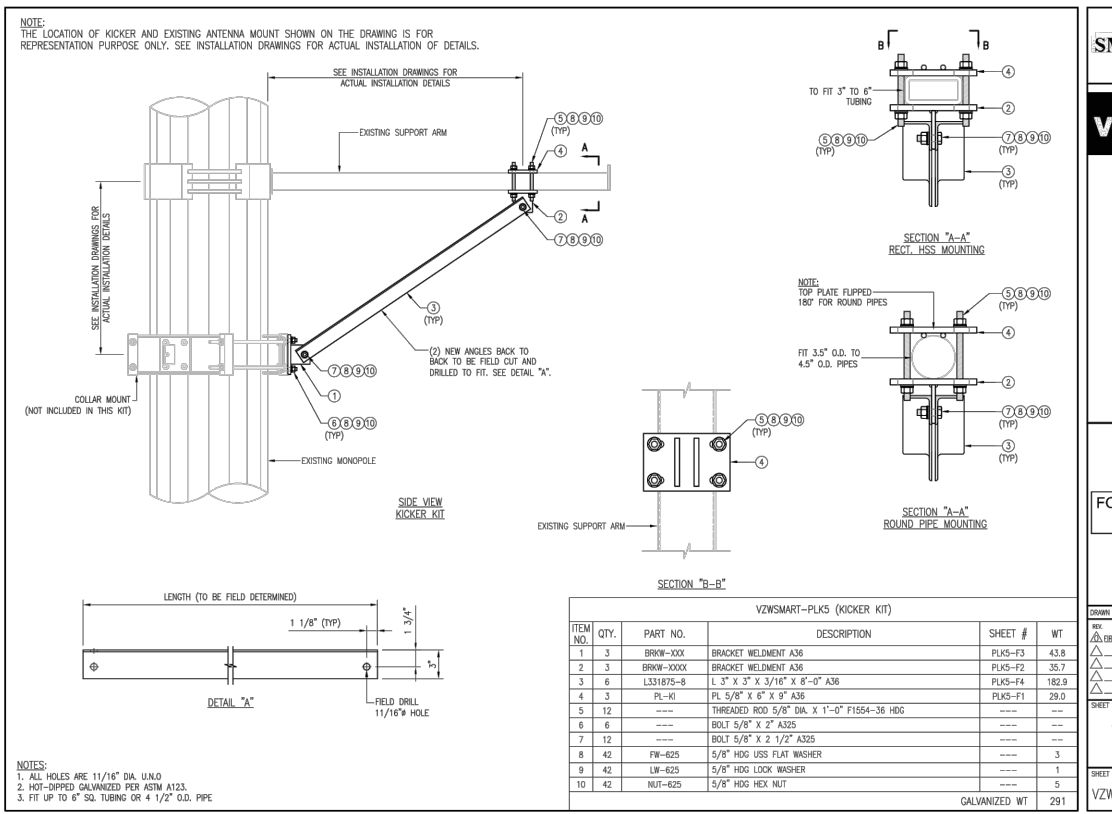
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verizon

STATE OF CONNECTICUT
REGISTERED PROFESSIONAL ENGINEER
 No. 3755
 EXPIRES 08/2023

SITE NAME:
 PORTLAND 5 CT
 5000392762
 191 MIDDLE HADSDAM ROAD
 PORTLAND, CT 06480
 MIDDLESEX COUNTY

MOUNT PHOTOS
 SS-2



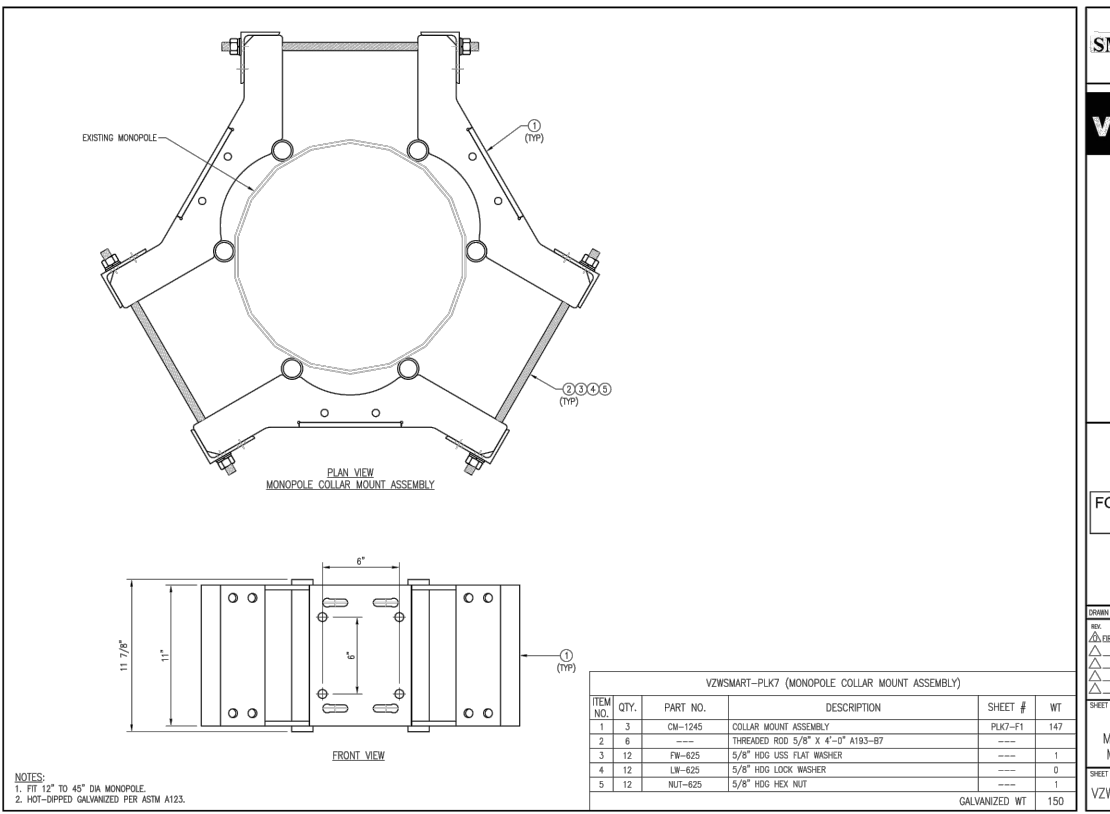
VzW SMART Tool Vendor

verizon

FOR REFERENCE ONLY

VZWSMART-PLK5 KICKER KIT

SHEET NUMBER: VZWSMART-PLK5
REV # 0



VzW SMART Tool Vendor

verizon

FOR REFERENCE ONLY

VZWSMART-PLK7 MONOPOLE COLLAR MOUNT ASSEMBLY

SHEET NUMBER: VZWSMART-PLK7
REV # 0

1 MOUNT MODIFICATION

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

SUPPLEMENTAL

SHEET NUMBER: **G-001**

REVISION: **0**

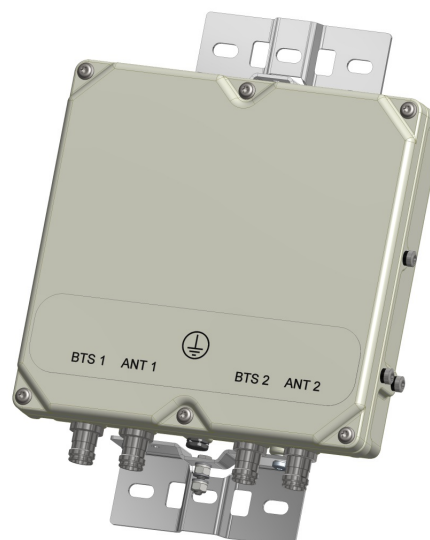
KA-6030

TWIN BANDSTOP 900MHZ INTERFERENCE MITIGATION FILTER

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

FEATURES

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



TECHNICAL SPECIFICATIONS

BAND NAME	700 PATH / 850 UPLINK PATH	850 DOWNLINK PATH
Passband	698 - 849MHz	869 - 891.5MHz
Insertion loss	0.1dB typical / 0.3dB maximum	0.5dB typical, 1.45dB maximum
Return loss	24dB typical, 18dB minimum	
Maximum input power (Per Port)	100W average	200W average and 66W per 5MHz
Rejection	53dB minimum @ 894.1 - 896.5MHz	
ELECTRICAL		
Impedance	50Ohms	
Intermodulation products	-160dBc maximum in UL Band (assuming 20MHz Signal), with 2 x 43dBm carriers -153dBc maximum with 2 x 43dBm	
DC / AISG		
Passband	0 - 13MHz	
Insertion loss	0.3dB maximum	
Return loss	15dB minimum	
Input voltage range	± 33V	
DC current rating	2A continuous, 4A peak	
Compliance	3GPP TS 25.461	
ENVIRONMENTAL		
For further details of environmental compliance, please contact Kaelus.		
Temperature range	-20°C to +60°C -4°F to +140°F	
Ingress protection	IP67	
Altitude	2600m 8530ft	
Lightning protection	RF port: ±5kA maximum (8/20us), IEC 61000-4-5 – Unit must be terminated with some lightning protection circuits.	
MTBF	>1,000,000 hours	
Compliance	ETSI EN 300 019 class 4.1H, RoHS, NEBS GR-487-CORE	
MECHANICAL		
Dimensions H x D x W	269 x 277 x 80mm 10.60 x 10.90 x 3.15in (Excluding brackets and connectors)	
Weight	8.0 kg 17.6 lbs (no bracket)	
Finish	Powder coated, light grey (RAL7035)	
Connectors	RF: 4.3-10 (F) x 4	
Mounting	Optional pole/wall bracket supplied with two metal clamps 45-178mm diameter poles or custom bracket. See ordering information.	

ORDERING INFORMATION

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

ELECTRICAL BLOCK DIAGRAM

ANT1



BTS1

ANT2



BTS2

MECHANICAL BLOCK DIAGRAM

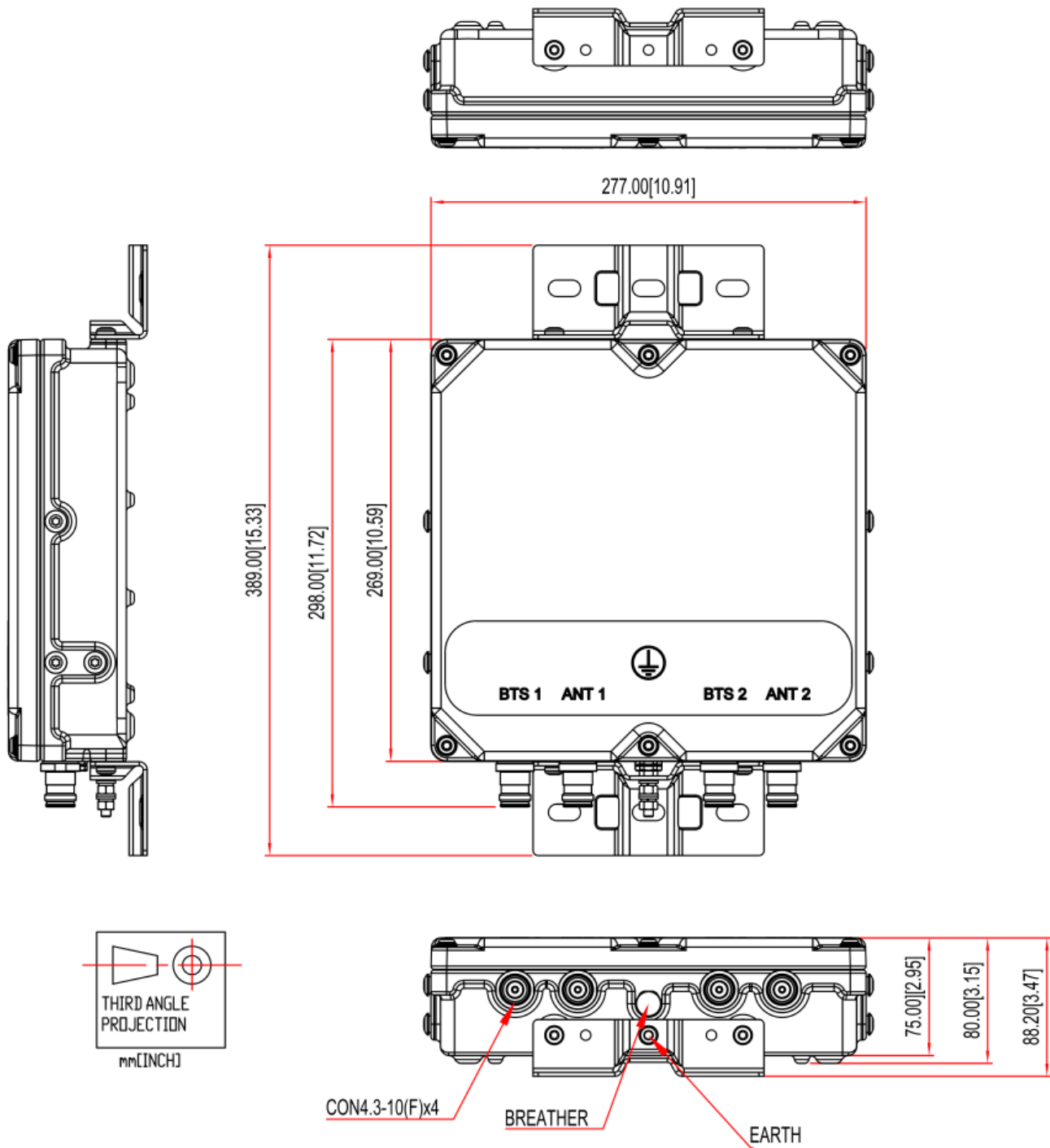


EXHIBIT 2



Town of Portland, CT

Summary

Location Address 191 MIDDLE HADDAM RD
Map-Lot Number 016-0029-1
Alternate ID 00048801
Property Class_Zoning RR
Property Class_User8
State Class Code 300
Land Use (431) Communication Towers
Neighborhood 300
Zoning RR
Town Clerk Map Survey 2532
Total Acres 1
Vol/Page 496/315



[Assessor Map Link](#)

Owner

Owner
 VERIZON WIRELESS
 PO BOX 2549
 ADDISON TX 75001

Valuation

2022 GRAND LIST

	Appraised Values	Assessed Values
Current Land	\$72,000	\$50,400
Current Building	\$199,300	\$139,510
Current Total	\$271,300	\$189,910

Effective Date of Value: 10/01/2021 REVALUATION

Valuation History

Grand List	Appraised Land Value	Appraised Improvements Value	Appraised Total Value	Assessed Land Value	Assessed Improvements Value	Assessed Total Value
2022	\$72,000	\$199,300	\$271,300	\$50,400	\$139,510	\$189,910
2021	\$72,000	\$199,300	\$271,300	\$50,400	\$139,510	\$189,910
2020	\$80,000	\$172,600	\$252,600	\$56,000	\$120,820	\$176,820
2019	\$80,000	\$172,600	\$252,600	\$56,000	\$120,820	\$176,820
2018	\$80,000	\$172,600	\$252,600	\$56,000	\$120,820	\$176,820
2017	\$80,000	\$172,600	\$252,600	\$56,000	\$120,820	\$176,820
2016	\$80,000	\$172,600	\$252,600	\$56,000	\$120,820	\$176,820

Land

Line	Descr	Acres	Land Val
1	PRIMARY	1.0000	\$72,000

Total Acres:
 1.0000
Total Land-Value:
 \$72,000

Commercial

Card 1
Building No 1
Structure TLPHNE EQUIP
Year Built 2004
Effective Year 0
Grade A

Interior/Exterior

Card 1

Line	Sect	From	To	Sec	Occupancy	Occ Descr	Class	Yr Built	Eff Year	Size	Area	Perim	Height	Use Type	Phy Cond	UT	Base RCN	Feat RCN	Base Value	Pct Good	Pct Comp	Adj Value	
1	1	01	01	0				2004	0	24	240	65	10	SPRT AREA	3	3	30,440	0	30,440	73	0	\$22,220	
										x													12

Accessory Information

Card 1

Descr	Full Description	Type	Quantity	Year	Size	Area	Grade	Mods	Cond	F	MD%	Value
FENCE CHAI	FENCE CHAIN	FN1	1	2004	8 x 200	1,600	C-AVERAGE		3	3	0	\$2,520
TOWER CELL	TOWER CELLULAR	TT4	1	2005	1 x 130	130	C-AVERAGE		4	4	0	\$134,590

Other Features

Card 1

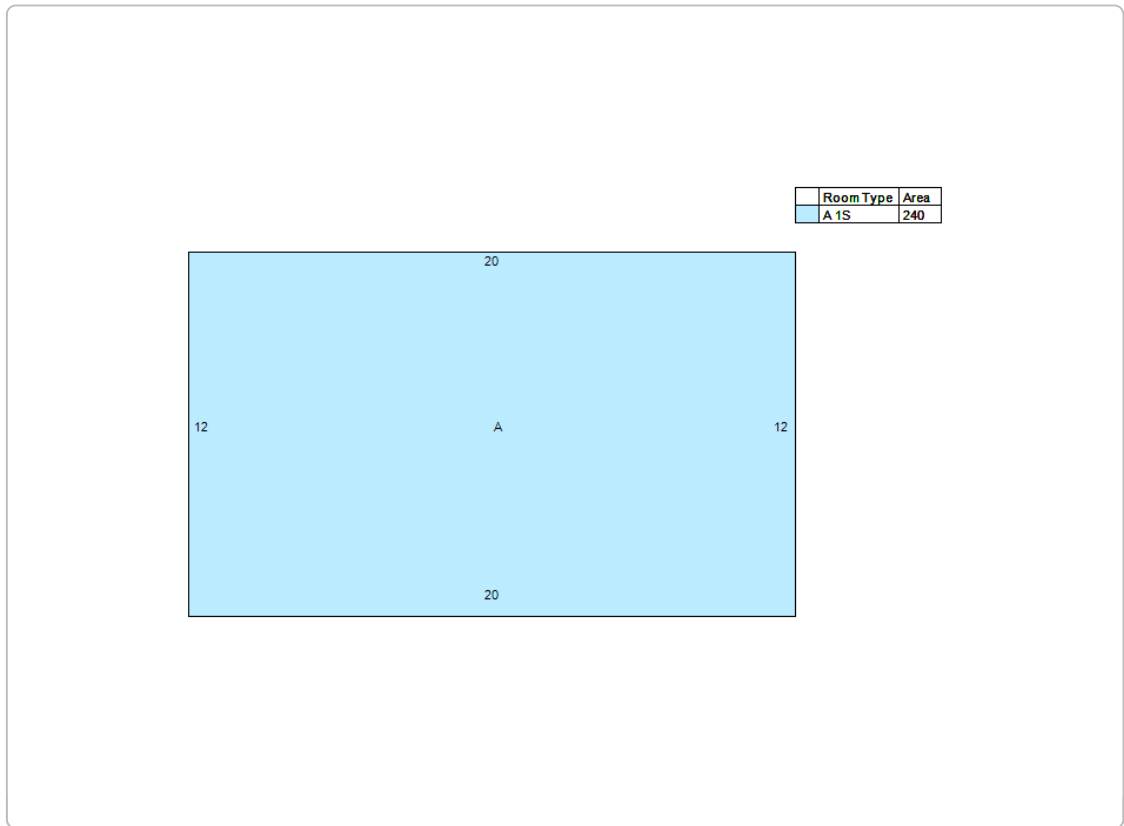
Ln	Code	Descr	Meas 1	Meas 2	Stops	IU	Value
1	VS1	1S	1	240	0	1	\$0

Permits

Date	Number	Purpose	Description
10/04/2022	22-554	73 CREP	ANTENNA
04/05/2022	22-169	81 CELE	
02/14/2022	22-70	OTHER	GENERATOR
02/03/2022	22-50	OTHER	ANTENNAS, BRACKETS
01/24/2022	22-49	OTHER	3 ANTENNAS
05/10/2021	21-252	74 CRER	
12/13/2019	19-593	OTHER	ANTENNAS
02/13/2019	19-49	OTHER	GENERATOR
12/22/2017	17-628	OTHER	PRE FAB EQUIPMENT SHELTER
02/12/2015	15-62	BLDG	NEW TMA
01/13/2015	15-24	BLDG	NEW ANTENNAES
06/22/2012	12-320	BLDG	TOWER EXTENSION
10/14/2009	9650	BLDG	NEW ANTENNAES
03/11/2009	9447	BLDG	NEW ANTENNAES
09/03/2004	7962	BLDG	EQUIP SHED AND
06/29/2004	7879	BLDG	CELL TOWER

Photos

Sketches



Recent Sales In Area

Sale date range:

From: To:

Sales by Neighborhood

No data available for the following modules: Sales, Residential, Other Dwelling Features, Tax History, Additions.

The Town of Portland Assessor makes every effort to produce the most accurate information possible. No warranties, expressed or implied are provided for the data herein, its use or interpretation. The assessment information is from the last certified tax roll. All other data is subject to change.

[User Privacy Policy](#) | [GDPR Privacy Notice](#)

[Last Data Upload: 10/3/2023, 1:18:23 AM](#)

Contact Us





LEGEND
 PARCEL NUMBERS 2
 MATCH LINE 2
 For assessment purpose
 Not to be used for conveyances

DATE OF AERIAL PHOTOGRAPHY 4-1-86
 DATE OF COMPLETION 10-1-87
 DATE OF REVISIONS RLASKY 9/26/2022

TAX MAP
TOWN OF PORTLAND
 MIDDLESEX COUNTY, CONNECTICUT
 PREPARED BY
JAMES W. SWEALL COMPANY, OLD TOWN, MAINE
 SCALE 1 INCH = 100 FEET

	38	
	MAP NUMBER	
28	29	30
	20	

EXHIBIT 3





AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure : 139 ft Monopole
ATC Asset Name : Middle Haddam Road-CROWN CT
ATC Asset Number : 411257
Engineering Number : 14519456_C3_03
Proposed Carrier : VERIZON WIRELESS
Carrier Site Name : PORTLAND S CT
Carrier Site Number : 5000392762
Site Location : 191 Middle Haddam Rd
Portland, CT 06480-1767
41.5623° N, 72.5738° W
County : Middlesex
Date : September 13, 2023
Max Usage : 67%
Analysis Result : Pass

Created By:
Bezakulu Mamo
Structural Engineer I



COA: PEC.0001553



Table of Contents

Introduction3

Supporting Documents.....3

Analysis3

Conclusion3

Structure Usages4

Maximum Reactions4

Tower Loading5

Standard Conditions Attached

Calculations..... Attached

Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 139 ft Monopole tower to reflect the change in loading by VERIZON WIRELESS.

Supporting Documents

Tower:	EI Job #12477 Revision II, dated May 13, 2004 Mapping by HTS, ATC Site #411257, dated March 24, 2016
Foundation:	Mapping by TPS Report #TPS-CT-257, dated October 22, 2015
Geotechnical:	CHA Project #11869.1011.1502, dated September 23, 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:	130 mph (3-second gust)
Basic Wind Speed w/ Ice:	50 mph (3-second gust) w/ 1.00" radial ice concurrent
Code(s):	ANSI/TIA-222-H / 2021 IBC / 2022 Connecticut State Building Code
Exposure Category:	B
Risk Category:	II
Topographic Factor Procedure:	Method 1
Topographic Category:	1
Spectral Response:	$S_s = 0.21$, $S_1 = 0.06$
Site Class:	D - Stiff Soil - Default

Conclusion

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

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

Structure Usages

Structural Component	Usage	Control	Result
Pole Shaft	67.2%	1.2D + 1.0W	Pass
Serviceability Usage	19.7%	1.0D + 1.0W	Pass
Upper Flange Plate @ 128.5 ft	8.4%	Bolts	Pass
Base Plate @ 0.0 ft	49.7%	Rods	Pass
Pier	11.6%	Moment [Soil]	Pass

Maximum Reactions

Foundation	Moment (k-ft)	Axial (k)	Shear (k)
Monopole Base	4,016.3	61.7	40.7

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

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

VERIZON WIRELESS Final Loading

Elev (ft)	Qty	Equipment	Lines
138.0	1	10' Omni	-
134.0	1	Unused Reserve (16529.3200 sqin)	-
128.0	1	Low Profile Platform	(16) 1 5/8" Coax (2) 1 5/8" Hybriflex
	1	Raycap RCMD-6627-PF-48	
	2	Kaelus KA-6030	
	2	RFS APL866513-44T0	
	3	Commscope CBC78T-DS-43-2X	
	3	Mount Reinforcement	
	3	Samsung B2/B66A RRH-BR049	
	3	Samsung B5/B13 RRH-BR04C	
	3	Samsung MT6407-77A	
	4	Decibel DB846H80E-SX	
	6	Commscope JAHH-65B-R3B	

Other Existing/Reserved Loading

Elev (ft)	Qty	Equipment	Lines	Carrier
139.0	3	Commscope VV-65A-R1B	(3) 1.99" (50.7mm) Hybrid	T-MOBILE
	3	Ericsson 4460 BAND 2/25		
	3	Ericsson 4480 BAND 71		
	3	Ericsson AIR 6419 B41		
	3	RFS APXVAALL24 43-U-NA20		
138.0	1	Low Profile Platform	-	T-MOBILE
137.2	3	Ericsson KRY 112 20	-	T-MOBILE
119.0	3	CCI DMP65R-BU6DA	(2) 0.39" (10mm) Fiber Trunk (4) 0.78" (19.7mm) 8 AWG 6 (12) 1 5/8" Coax (1) 1/2" Coax (4) 3" conduit	AT&T MOBILITY
	3	Commscope NNH4-65B-R6		
	3	Ericsson RRUS 4449 B5, B12		
	3	Ericsson Radio 8843 - B2 + B66A		
	3	Powerwave Allgon 7770.00		
	6	Powerwave Allgon LGP21401		
117.0	1	Platform with Handrails	-	AT&T MOBILITY
113.6	2	Raycap DC6-48-60-18-8F	-	AT&T MOBILITY
104.0	1	RFI Antennas CC807-08	(1) 1/2" Coax	CITY OF MIDDLETOWN, CT
100.0	1	Bird DS428E83I01T	(1) 1/2" Coax (1) 7/8" Coax	CITY OF MIDDLETOWN, CT
95.0	3	Side Arm	-	CITY OF MIDDLETOWN, CT
87.0	1	RFI Antennas CC807-08	(1) 7/8" Coax	CITY OF MIDDLETOWN, CT
80.0	1	RFI Antennas OA20-41-DIN	(1) 7/8" Coax	CITY OF MIDDLETOWN, CT
	2	Radio Waves HP3-11	(2) EW90	
69.0	1	Commscope RDIDC-9181-PF-48	(1) 1.60" (40.6mm) Hybrid	DISH WIRELESS L.L.C.
	1	Platform with Handrails		
	3	Fujitsu TA08025-B604		
	3	Fujitsu TA08025-B605		
	3	JMA Wireless MX08FRO665-21		

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



Standard Conditions

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

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

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

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

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

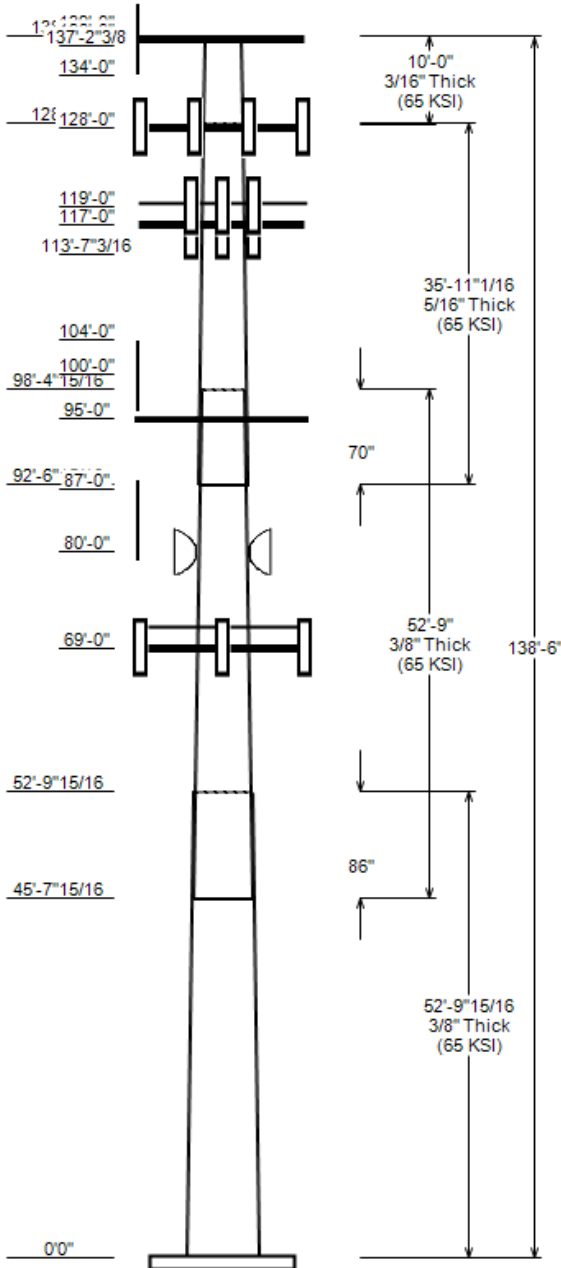
All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. A.T. Engineering Services LLC is not responsible for the conclusions, opinions and recommendations made by others based on the information supplied herein.

ANALYSIS PARAMETERS

Nominal Wind: 130 mph	Ice Wind: 50 mph w/ 1" ice	Service Wind: 60 mph
Risk Category: II	Exposure: B	S _z : 0.21 S _d : 0.056
Topo Category: 1	Topo Factor: Method 1	Topo Feature:
Structure Height: 138.5 ft	Base Elevation: 0.00 ft	Structure Type: Taper
Base Diameter: 64.38 in	Base Rotation: 0°	Taper: 0.2460 (in/ft)

POLE SECTION PROPERTIES

Section	Length (ft)	Flat Diameter (in)		Thick (in)	Joint Type	Joint Length (in)	Pole Shape	Yield Strength (ksi)
		Top	Bottom					
1	52.830	51.41	64.38	0.375		0.000	18 Sides	65
2	52.750	40.97	53.92	0.375	Slip Joint	86.000	18 Sides	65
3	35.920	34.20	43.02	0.312	Slip Joint	70.000	18 Sides	65
4	10.000	31.75	34.20	0.188	Butt Joint	0.000	18 Sides	65



DISCRETE APPURTENANCE

Elev (ft)	Description
139.0	(3) Ericsson 4460 BAND 2/25
139.0	(3) Ericsson 4480 BAND 71
139.0	(3) Ericsson AIR 6419 B41
139.0	(3) Commscope VV-65A-R1B
139.0	(3) RFS APXVAALL24 43-U-NA20
138.0	(1) Generic 10' Omni
138.0	(1) Generic Round Low Profile Plat
137.2	(3) Ericsson KRY 112 20
134.0	(1) Unused Reserve (16529.32 sqin)
134.0	(1) Unused Reserve (16529.3200 sqi)
128.0	(3) Commscope CBC78T-DS-43-2X
128.0	(2) Kaelus KA-6030
128.0	(3) Samsung B5/B13 RRH-BR04C
128.0	(3) Samsung B2/B66A RRH-BR049
128.0	(2) RFS APL866513-44T0
128.0	(1) Raycap RCMDC-6627-PF-48
128.0	(3) Samsung MT6407-77A
128.0	(3) Generic Mount Reinforcement
128.0	(4) Decibel DB846H80E-SX
128.0	(6) Commscope JAHH-65B-R3B
128.0	(1) Generic Flat Low Profile Platf
119.0	(6) Powerwave Allgon LGP21401
119.0	(3) Ericsson Radio 8843 - B2 + B66
119.0	(3) Ericsson RRUS 4449 B5, B12
119.0	(3) Powerwave Allgon 7770.00
119.0	(3) Commscope NNH4-65B-R6
119.0	(3) CCI DMP65R-BU6DA
117.0	(1) Generic Round Platform with Ha
113.6	(2) Raycap DC6-48-60-18-8F
104.0	(1) RFI Antennas CC807-08
100.0	(1) Bird DS428E83I01T
95.0	(3) Flat Side Arm
87.0	(1) RFI Antennas CC807-08
80.0	(1) RFI Antennas OA20-41-DIN
80.0	(2) Radio Waves HP3-11
69.0	(1) Commscope RDIDC-9181-PF-48
69.0	(3) Fujitsu TA08025-B604
69.0	(3) Fujitsu TA08025-B605
69.0	(3) JMA Wireless MX08FRO665-21
69.0	(1) Generic Flat Platform with Han

LINEAR APPURTENANCE

Elev To (ft)	Description
139.0	(3) 1.99" (50.7mm) Hybrid
128.0	(2) 1 5/8" Hybriflex
128.0	(16) 1 5/8" Coax
119.0	(3) 3" conduit
119.0	(1) 3" conduit
119.0	(1) 1/2" Coax
119.0	(12) 1 5/8" Coax
119.0	(4) 0.78" (19.7mm) 8 AWG 6
119.0	(2) 0.39" (10mm) Fiber Trunk
104.0	(1) 1/2" Coax
100.0	(1) 7/8" Coax
100.0	(1) 1/2" Coax
87.0	(1) 7/8" Coax
80.0	(2) EW90
80.0	(1) 7/8" Coax
69.0	(1) 1.60" (40.6mm) Hybrid

DISH SERVICEABILITY

Load Case	Elevation (ft)	Deflection (in)	Rotation (°)
1.0D + 1.0W	80.00	3.576	0.411

GLOBAL BASE REACTIONS

Load Case	Moment (kip-ft)	Axial (kip)	Shear (kip)
1.2D + 1.0W	4016.30	61.67	40.73
0.9D + 1.0W	3987.76	46.24	40.71
1.2D + 1.0Di + 1.0Wi	797.66	82.04	8.10
1.2D + 1.0Ev + 1.0Eh	188.34	62.00	1.73
0.9D - 1.0Ev + 1.0Eh	186.64	42.59	1.73
1.0D + 1.0W	762.09	51.43	7.76

ANALYSIS PARAMETERS

Location:	Middlesex County,CT	Height:	138.5 ft
Type and Shape:	Taper, 18 Sides	Base Diameter:	64.38 in
Manufacturer:	EEL	Top Diameter:	31.75 in
K_d (non-service):	0.95	Taper:	0.2460 in/ft
K_e:	0.99	Rotation:	0.000°

ICE & WIND PARAMETERS

Risk Category:	II	Design Wind Speed:	130 mph
Exposure Category:	B	Design Wind Speed w/ Ice:	50 mph
Topo Factor Procedure:	Method 1	Design Ice Thickness:	1.00 in
Topographic Category:	1	Service Wind Speed:	60 mph
Crest Height:	0 ft	HMSL:	250.00 ft

SEISMIC PARAMETERS

Analysis Method:	Equivalent Lateral Force Method		
Site Class:	D - Stiff Soil	Period Based on Rayleigh Method (sec):	1.78
T_L (sec):	6	P:	1
S_s:	0.210	S₁:	0.056
F_a:	1.600	F_v:	2.400
S_{ds}:	0.224	S_{d1}:	0.090
		C_s:	0.034
		C_s Max:	0.034
		C_s Min:	0.030

LOAD CASES

1.2D + 1.0W	130 mph Wind with No Ice
0.9D + 1.0W	130 mph Wind with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	50 mph Wind with 1" Radial Ice
1.2D + 1.0Ev + 1.0Eh	Seismic
0.9D - 1.0Ev + 1.0Eh	Seismic (Reduced DL)
1.0D + 1.0W	60 mph Wind with No Ice

SHAFT SECTION PROPERTIES

Section	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Joint Len (in)	Weight (lb)	Bottom						Top						
							Dia (in)	Elev (ft)	Area (in ²)	Ix (in ⁴)	W/t Ratio	D/t Ratio	Dia (in)	Elev (ft)	Area (in ²)	Ix (in ⁴)	W/t Ratio	D/t Ratio	Taper (in/ft)
1-18	52.83	0.3750	65		0.00	12,307	64.38	0.000	76.18	39,429.1	28.86	171.68	51.41	52.83	60.74	19,987.	22.76	137.09	0.2455
2-18	52.75	0.3750	65	Slip	86.00	10,055	53.92	45.660	63.73	23,083.3	23.94	143.78	40.97	98.41	48.31	10,057.	17.85	109.25	0.2455
3-18	35.92	0.3125	65	Slip	70.00	4,643	43.02	92.580	42.36	9,764.3	22.87	137.68	34.20	128.50	33.62	4,878.8	17.89	109.46	0.2455
4-18	10.00	0.1875	65	Butt	0.00	664	34.20	128.500	20.24	2,959.8	30.76	182.43	31.75	138.50	18.78	2,364.1	28.45	169.33	0.2455
Total Shaft Weight						27,669													

DISCRETE APPURTENANCE PROPERTIES

Attach Elev (ft)	Description	Qty	Ka	Vert Ecc (ft)	No Ice			Ice		
					Weight (lb)	EPAa (sf)	Orientation Factor	Weight (lb)	EPAa (sf)	Orientation Factor
139.00	RFS APXVAALL24 43-U-NA20	3	0.75	0.000	122.80	20.243	0.63	380.89	22.701	0.63
139.00	Ericsson AIR 6419 B41	3	0.75	0.000	68.50	5.600	0.60	148.56	6.650	0.60
139.00	Commscope VV-65A-R1B	3	0.75	0.000	24.70	5.887	0.63	102.15	7.289	0.63
139.00	Ericsson 4480 BAND 71	3	0.80	0.000	81.00	2.878	0.67	131.44	3.622	0.67
139.00	Ericsson 4460 BAND 2/25	3	0.75	0.000	109.00	2.564	0.67	167.57	3.262	0.67
138.00	Generic Round Low Profile Plat	1	1.00	0.000	1875.00	21.700	1.00	2411.37	34.416	1.00
138.00	Generic 10' Omni	1	1.00	0.000	25.00	3.000	1.00	75.27	5.384	1.00
137.20	Ericsson KRY 112 20	3	0.80	0.000	12.10	0.449	0.50	22.45	0.782	0.50
134.00	Unused Reserve (16529.3200 sqi	1	0.80	0.000	1177.80	114.787	0.90	1718.97	167.529	0.90
128.00	Samsung B5/B13 RRH-BR04C	3	0.80	0.000	70.30	1.875	0.50	107.87	2.468	0.50
128.00	RFS APL866513-44T0	2	0.80	0.000	15.70	4.050	0.82	93.81	4.637	0.82
128.00	Raycap RCMDC-6627-PF-48	1	0.80	0.000	32.00	4.056	1.00	115.47	4.952	1.00
128.00	Samsung MT6407-77A	3	0.80	0.000	81.60	4.709	0.61	148.54	5.707	0.61
128.00	Generic Mount Reinforcement	3	1.00	0.000	200.00	4.980	1.00	327.10	8.245	1.00
128.00	Decibel DB846H80E-SX	4	0.80	0.000	16.00	5.867	0.73	112.31	5.776	0.73
128.00	Commscope JAHH-65B-R3B	6	0.80	0.000	60.60	9.113	0.69	193.46	10.935	0.69
128.00	Kaelus KA-6030	2	0.80	0.000	17.60	0.963	0.50	33.08	1.392	0.50
128.00	Commscope CBC78T-DS-43-2X	3	0.80	0.000	20.70	0.552	0.50	35.21	0.886	0.50
128.00	Generic Flat Low Profile Platf	1	1.00	0.000	1875.00	26.100	1.00	2406.88	38.639	1.00
128.00	Samsung B2/B66A RRH-BR049	3	0.80	0.000	84.40	1.875	0.50	126.30	2.468	0.50
119.00	CCI DMP65R-BU6DA	3	0.75	0.000	79.40	12.709	0.63	247.41	14.528	0.63
119.00	Commscope NNH4-65B-R6	3	0.75	0.000	89.70	12.271	0.64	253.58	14.100	0.64
119.00	Powerwave Allgon 7770.00	3	0.75	-2.000	35.00	5.508	0.65	109.14	6.894	0.65
119.00	Ericsson Radio 8843 - B2 + B66	3	0.75	0.000	71.90	1.650	0.50	112.08	2.203	0.50
119.00	Ericsson RRUS 4449 B5, B12	3	0.75	0.000	71.00	1.969	0.50	113.03	2.577	0.50
119.00	Powerwave Allgon LGP21401	6	0.75	-2.000	14.10	1.104	0.50	30.37	1.569	0.50
117.00	Generic Round Platform with Ha	1	1.00	0.000	2500.00	27.200	1.00	3554.57	43.115	1.00
113.60	Raycap DC6-48-60-18-8F	2	0.75	-2.000	20.00	1.260	1.00	54.16	1.687	1.00
104.00	RFI Antennas CC807-08	1	1.00	-2.000	24.30	2.855	1.00	71.25	5.039	1.00
100.00	Bird DS428E83101T	1	1.00	0.000	8.90	0.465	1.00	20.09	0.769	1.00
95.00	Flat Side Arm	3	1.00	0.000	150.00	6.300	0.67	196.62	7.867	0.67
87.00	RFI Antennas CC807-08	1	1.00	-1.000	24.30	2.855	1.00	70.46	5.002	1.00
80.00	Radio Waves HP3-11	2	1.00	0.000	50.00	8.918	1.00	163.86	10.014	1.00
80.00	RFI Antennas OA20-41-DIN	1	1.00	2.000	28.00	4.410	1.00	104.23	8.408	1.00
69.00	Generic Flat Platform with Han	1	1.00	0.000	2500.00	42.400	1.00	3594.85	55.325	1.00
69.00	Fujitsu TA08025-B604	3	0.75	0.000	63.90	1.962	0.50	99.84	2.529	0.50
69.00	Fujitsu TA08025-B605	3	0.75	0.000	75.00	1.962	0.50	113.61	2.529	0.50
69.00	Commscope RDIDC-9181-PF-48	1	0.75	0.000	21.90	1.867	1.00	56.97	2.422	1.00
69.00	JMA Wireless MX08FRO665-21	3	0.75	0.000	64.50	12.489	0.64	222.91	14.221	0.64
Totals	Row Count: 39	96			15,537.50			26,181.32		

LINEAR APPURTENANCE PROPERTIES

Load Case Azimuth (deg): 0.00

Elev From (ft)	Elev To (ft)	Qty	Description	Diameter (in)	Weight (lb/ft)	Flat	Max/Row	Distance Between Rows (in)	Distance Between Cols (in)	Azimuth (deg)	Distance From Face (in)	Exposed To Wind	Carrier
0.00	139.00	3	1.99" (50.7mm) Hybrid	1.99	1.9	N	0	0	0	0	0	N	T-MOBILE
0.00	128.00	16	1 5/8" Coax	1.98	0.82	N	6	0.5	0.5	90	0.5	Y	VERIZON WIRELESS
0.00	128.00	2	1 5/8" Hybriflex	1.98	1.3	N	0	0	0	0	0	N	VERIZON WIRELESS

LINEAR APPURTENANCE PROPERTIES

Load Case Azimuth (deg): 0.00

Elev From (ft)	Elev To (ft)	Qty	Description	Diameter (in)	Weight (lb/ft)	Flat	Max/Row	Distance Between Rows(in)	Distance Between Cols(in)	Azimuth (deg)	Distance From Face (in)	Exposed To Wind	Carrier
0.00	119.00	12	1 5/8" Coax	1.98	0.82	N	0	0	0	0	0	N	AT&T MOBILITY
0.00	119.00	4	0.78" (19.7mm) 8 AWG	0.78	0.59	N	0	0	0	0	0	N	AT&T MOBILITY
0.00	119.00	3	3" conduit	3.5	7.58	N	0	0	0	0	0	N	AT&T MOBILITY
0.00	119.00	2	0.39" (10mm) Fiber Tr	0.39	0.06	N	0	0	0	0	0	N	AT&T MOBILITY
0.00	119.00	1	3" conduit	3.5	7.58	N	0	0	0	0	0	N	AT&T MOBILITY
0.00	119.00	1	1/2" Coax	0.63	0.15	N	0	0	0	0	0	N	AT&T MOBILITY
0.00	104.00	1	1/2" Coax	0.63	0.15	N	0	0	0	0	0	N	CITY OF MIDDLETOWN, C
0.00	100.00	1	7/8" Coax	1.09	0.33	N	0	0	0	0	0	N	CITY OF MIDDLETOWN, C
0.00	100.00	1	1/2" Coax	0.63	0.15	N	0	0	0	0	0	N	CITY OF MIDDLETOWN, C
0.00	87.00	1	7/8" Coax	1.09	0.33	N	0	0	0	0	0	N	CITY OF MIDDLETOWN, C
0.00	80.00	2	EW90	1.32	0.32	N	0	0	0	0	0	N	CITY OF MIDDLETOWN, C
0.00	80.00	1	7/8" Coax	1.09	0.33	N	0	0	0	0	0	N	CITY OF MIDDLETOWN, C
0.00	69.00	1	1.60" (40.6mm) Hybrid	1.6	2.34	N	0	0	0	0	0	N	DISH WIRELESS L.L.C.

SEGMENT PROPERTIES

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)
0.00		0.3750	64.380	76.179	39,429.10	28.86	171.68	67.5	1206.3	0.0	0.0
5.00		0.3750	63.152	74.718	37,203.60	28.28	168.41	68.1	1160.3	0.0	1,283.7
10.00		0.3750	61.925	73.257	35,063.50	27.71	165.13	68.8	1115.2	0.0	1,258.8
15.00		0.3750	60.697	71.796	33,007.00	27.13	161.86	69.5	1071.1	0.0	1,234.0
20.00		0.3750	59.470	70.335	31,032.60	26.55	158.59	70.2	1027.8	0.0	1,209.1
25.00		0.3750	58.242	68.874	29,138.50	25.98	155.31	70.8	985.4	0.0	1,184.2
30.00		0.3750	57.014	67.412	27,323.10	25.40	152.04	71.5	943.9	0.0	1,159.4
35.00		0.3750	55.787	65.951	25,584.70	24.82	148.76	72.2	903.3	0.0	1,134.5
40.00		0.3750	54.559	64.490	23,921.60	24.24	145.49	72.9	863.6	0.0	1,109.7
45.00		0.3750	53.331	63.029	22,332.20	23.67	142.22	73.6	824.8	0.0	1,084.8
45.66	Bot - Section 2	0.3750	53.169	62.835	22,126.80	23.59	141.78	73.7	819.7	0.0	142.0
50.00		0.3750	52.104	61.568	20,814.90	23.09	138.94	74.2	786.8	0.0	1,849.0
52.83	Top - Section 1	0.3750	52.159	61.634	20,881.50	23.11	139.09	74.2	788.5	0.0	1,186.4
55.00		0.3750	51.626	61.000	20,243.60	22.86	137.67	74.5	772.3	0.0	452.8
60.00		0.3750	50.399	59.538	18,823.50	22.29	134.40	75.2	735.6	0.0	1,025.4
65.00		0.3750	49.171	58.077	17,471.40	21.71	131.12	75.9	699.8	0.0	1,000.6
69.00		0.3750	48.189	56.908	16,437.60	21.25	128.50	76.4	671.8	0.0	782.5
70.00		0.3750	47.943	56.616	16,185.60	21.13	127.85	76.5	664.9	0.0	193.1
75.00		0.3750	46.716	55.155	14,964.60	20.56	124.58	77.2	630.9	0.0	950.8
80.00		0.3750	45.488	53.694	13,806.50	19.98	121.30	77.9	597.8	0.0	926.0
85.00		0.3750	44.261	52.233	12,709.80	19.40	118.03	78.6	565.6	0.0	901.1
87.00		0.3750	43.769	51.648	12,287.90	19.17	116.72	78.9	553.0	0.0	353.5
90.00		0.3750	43.033	50.772	11,672.80	18.82	114.75	79.3	534.3	0.0	522.8
92.58	Bot - Section 3	0.3750	42.399	50.018	11,160.40	18.53	113.07	79.6	518.4	0.0	442.4
95.00		0.3750	41.805	49.311	10,693.70	18.25	111.48	79.9	503.8	0.0	755.4
98.41	Top - Section 2	0.3125	41.592	40.943	8,814.60	22.06	133.10	75.5	417.4	0.0	1,047.3
100.00		0.3125	41.203	40.556	8,567.40	21.84	131.85	75.7	409.5	0.0	220.0
104.00		0.3125	40.221	39.582	7,964.80	21.28	128.71	76.4	390.0	0.0	545.4
105.00		0.3125	39.975	39.339	7,818.70	21.15	127.92	76.5	385.2	0.0	134.3
110.00		0.3125	38.747	38.121	7,115.00	20.45	123.99	77.3	361.7	0.0	658.9
113.60		0.3125	37.864	37.245	6,635.30	19.95	121.16	77.9	345.2	0.0	461.6
115.00		0.3125	37.520	36.904	6,454.70	19.76	120.06	78.2	338.8	0.0	176.6
117.00		0.3125	37.029	36.417	6,202.50	19.48	118.49	78.5	329.9	0.0	249.5
119.00		0.3125	36.538	35.930	5,957.00	19.21	116.92	78.8	321.1	0.0	246.2
120.00		0.3125	36.292	35.686	5,836.70	19.07	116.13	79	316.8	0.0	121.8
125.00		0.3125	35.065	34.468	5,259.40	18.37	112.21	79.8	295.4	0.0	596.8
128.00		0.3125	34.328	33.738	4,932.00	17.96	109.85	80.3	283.0	0.0	348.1
128.50	Top - Section 3	0.3125	34.205	33.616	4,878.80	17.89	109.46	80.4	280.9	0.0	57.3
128.50	Bot - Section 4	0.1875	34.205	20.244	2,959.80	30.76	182.43	65.2	170.4	0.0	
130.00		0.1875	33.837	20.025	2,864.70	30.41	180.46	65.6	166.8	0.0	102.8
134.00		0.1875	32.855	19.440	2,621.10	29.49	175.23	66.7	157.1	0.0	268.6

SEGMENT PROPERTIES

Seg Top Elev (ft)	Description	(Max Length: 5 ft)	Thick (in)	Flat Dia (in)	Area (in ²)	Ix (in ⁴)	W/t Ratio	D/t Ratio	Fy (ksi)	S (in ³)	Z (in ³)	Weight (lb)
135.00			0.1875	32.609	19.294	2,562.50	29.26	173.92	67	154.8	0.0	65.9
137.20			0.1875	32.069	18.973	2,436.50	28.75	171.04	67.6	149.6	0.0	143.2
138.00			0.1875	31.873	18.856	2,391.80	28.56	169.99	67.8	147.8	0.0	51.5
138.50			0.1875	31.750	18.783	2,364.10	28.45	169.33	67.9	146.7	0.0	32.0
Total:												27,669.8

CALCULATED FORCES

Load Case: 1.2D + 1.0W 130 mph Wind with No Ice 21 Iterations

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

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (ft-kips)	Phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-61.67	-40.73	0.00	-4,016.3	0.00	4,016.30	4,624.80	1,336.95	7,728.54	6,102.72	0	0	0.672
5.00	-59.62	-40.23	0.00	-3,812.6	0.00	3,812.65	4,581.75	1,311.30	7,434.94	5,929.27	0.08	-0.14	0.657
10.00	-57.60	-39.72	0.00	-3,611.5	0.00	3,611.53	4,536.92	1,285.66	7,147.03	5,755.76	0.3	-0.28	0.641
15.00	-55.61	-39.20	0.00	-3,413.0	0.00	3,412.95	4,490.29	1,260.02	6,864.80	5,582.30	0.68	-0.43	0.625
20.00	-53.66	-38.68	0.00	-3,217.0	0.00	3,216.95	4,441.89	1,234.37	6,588.26	5,409.05	1.2	-0.57	0.608
25.00	-51.74	-38.16	0.00	-3,023.6	0.00	3,023.55	4,391.70	1,208.73	6,317.40	5,236.13	1.87	-0.71	0.590
30.00	-49.86	-37.62	0.00	-2,832.8	0.00	2,832.77	4,339.72	1,183.09	6,052.23	5,063.69	2.7	-0.85	0.572
35.00	-48.00	-37.06	0.00	-2,644.7	0.00	2,644.67	4,285.96	1,157.45	5,792.74	4,891.85	3.67	-1	0.553
40.00	-46.18	-36.46	0.00	-2,459.4	0.00	2,459.39	4,230.41	1,131.80	5,538.94	4,720.76	4.79	-1.14	0.533
45.00	-44.43	-36.10	0.00	-2,277.1	0.00	2,277.08	4,173.07	1,106.16	5,290.83	4,550.55	6.06	-1.28	0.512
45.66	-44.17	-35.79	0.00	-2,253.1	0.00	2,253.13	4,165.33	1,102.76	5,258.34	4,528.04	6.24	-1.3	0.509
50.00	-41.54	-35.29	0.00	-2,097.9	0.00	2,097.90	4,113.95	1,080.52	5,048.40	4,381.36	7.48	-1.42	0.490
52.83	-39.86	-34.94	0.00	-1,998.0	0.00	1,998.03	4,116.65	1,081.67	5,059.17	4,388.93	8.34	-1.5	0.466
55.00	-39.09	-34.46	0.00	-1,922.2	0.00	1,922.22	4,090.47	1,070.54	4,955.61	4,315.83	9.04	-1.56	0.456
60.00	-37.40	-33.75	0.00	-1,750.0	0.00	1,749.95	4,028.87	1,044.90	4,721.08	4,148.28	10.74	-1.69	0.432
65.00	-35.74	-33.09	0.00	-1,581.2	0.00	1,581.20	3,965.49	1,019.26	4,492.23	3,982.07	12.58	-1.81	0.407
69.00	-30.78	-29.95	0.00	-1,448.8	0.00	1,448.83	3,913.49	998.74	4,313.24	3,850.16	14.15	-1.91	0.385
70.00	-30.45	-29.51	0.00	-1,418.9	0.00	1,418.88	3,900.32	993.61	4,269.06	3,817.34	14.55	-1.94	0.380
75.00	-28.88	-28.74	0.00	-1,271.3	0.00	1,271.33	3,833.36	967.97	4,051.59	3,654.23	16.64	-2.06	0.356
80.00	-27.23	-27.02	0.00	-1,127.3	0.00	1,127.26	3,764.62	942.33	3,839.79	3,492.87	18.86	-2.17	0.331
85.00	-25.75	-26.44	0.00	-992.2	0.00	992.18	3,694.09	916.69	3,633.69	3,333.39	21.19	-2.28	0.305
87.00	-25.14	-25.92	0.00	-939.3	0.00	939.30	3,665.38	906.43	3,552.83	3,270.16	22.16	-2.32	0.295
90.00	-24.27	-25.45	0.00	-861.6	0.00	861.56	3,621.78	891.04	3,433.26	3,175.95	23.64	-2.39	0.279
92.58	-23.53	-25.03	0.00	-795.9	0.00	795.89	3,583.76	877.81	3,332.07	3,095.54	24.94	-2.44	0.264
95.00	-21.92	-23.95	0.00	-735.3	0.00	735.30	3,547.68	865.40	3,238.53	3,020.66	26.19	-2.48	0.250
98.41	-20.40	-23.48	0.00	-653.6	0.00	653.56	2,780.48	718.55	2,679.07	2,362.30	27.99	-2.55	0.285
100.00	-20.00	-23.00	0.00	-616.3	0.00	616.29	2,763.68	711.77	2,628.75	2,325.70	28.84	-2.58	0.273
104.00	-19.02	-22.43	0.00	-524.3	0.00	524.29	2,720.52	694.67	2,504.01	2,233.97	31.03	-2.65	0.243
105.00	-18.79	-21.93	0.00	-501.9	0.00	501.86	2,709.55	690.40	2,473.30	2,211.17	31.59	-2.67	0.235
110.00	-17.62	-21.17	0.00	-392.2	0.00	392.19	2,653.64	669.03	2,322.58	2,097.99	34.43	-2.75	0.195
113.60	-16.75	-20.63	0.00	-316.0	0.00	315.96	2,612.27	653.64	2,217.00	2,017.41	36.53	-2.8	0.164
115.00	-16.44	-20.33	0.00	-287.1	0.00	287.08	2,595.94	647.66	2,176.60	1,986.29	37.35	-2.82	0.152
117.00	-13.06	-18.57	0.00	-246.4	0.00	246.41	2,572.36	639.11	2,119.53	1,942.06	38.54	-2.84	0.133
119.00	-11.39	-15.89	0.00	-209.3	0.00	209.28	2,548.49	630.56	2,063.23	1,898.09	39.74	-2.87	0.115
120.00	-11.24	-15.38	0.00	-193.4	0.00	193.39	2,536.45	626.29	2,035.36	1,876.21	40.34	-2.88	0.108
125.00	-10.42	-14.67	0.00	-116.5	0.00	116.50	2,475.18	604.92	1,898.85	1,767.88	43.37	-2.91	0.071
128.00	-5.68	-9.09	0.00	-72.5	0.00	72.49	2,437.56	592.10	1,819.22	1,703.78	45.21	-2.93	0.045
128.50	-5.61	-8.99	0.00	-68.0	0.00	67.95	2,431.23	589.96	1,806.12	1,693.17	45.51	-2.93	0.043
128.50	-5.61	-8.99	0.00	-68.0	0.00	67.95	1,188.40	355.28	1,091.56	833.74	45.51	-2.93	0.087
130.00	-5.49	-8.71	0.00	-54.5	0.00	54.46	1,182.87	351.44	1,068.05	820.83	46.44	-2.94	0.072
134.00	-3.95	-4.40	0.00	-19.6	0.00	19.62	1,167.35	341.18	1,006.62	786.29	48.9	-2.95	0.028
135.00	-3.87	-4.24	0.00	-15.2	0.00	15.22	1,163.30	338.62	991.55	777.64	49.52	-2.95	0.023
137.20	-3.65	-4.06	0.00	-5.9	0.00	5.88	1,154.12	332.97	958.79	758.57	50.88	-2.95	0.011
138.00	-1.37	-2.68	0.00	-2.6	0.00	2.63	1,150.69	330.92	947.01	751.64	51.38	-2.96	0.005
138.50	0.00	-2.61	0.00	-1.3	0.00	1.29	1,148.53	329.64	939.69	747.30	51.69	-2.96	0.002

CALCULATED FORCES

Load Case: 0.9D + 1.0W 130 mph Wind with No Ice (Reduced DL) 21 Iterations
 Gust Response Factor: 1.10
 Dead load Factor: 0.90
 Wind Load Factor: 1.00

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (ft-kips)	Phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-46.24	-40.71	0.00	-3,987.8	0.00	3,987.76	4,624.80	1,336.95	7,728.54	6,102.72	0	0	0.664
5.00	-44.68	-40.17	0.00	-3,784.2	0.00	3,784.21	4,581.75	1,311.30	7,434.94	5,929.27	0.08	-0.14	0.649
10.00	-43.14	-39.62	0.00	-3,583.4	0.00	3,583.37	4,536.92	1,285.66	7,147.03	5,755.76	0.3	-0.28	0.633
15.00	-41.63	-39.08	0.00	-3,385.2	0.00	3,385.25	4,490.29	1,260.02	6,864.80	5,582.30	0.67	-0.42	0.617
20.00	-40.14	-38.53	0.00	-3,189.9	0.00	3,189.87	4,441.89	1,234.37	6,588.26	5,409.05	1.19	-0.56	0.600
25.00	-38.68	-37.97	0.00	-2,997.2	0.00	2,997.24	4,391.70	1,208.73	6,317.40	5,236.13	1.86	-0.71	0.582
30.00	-37.25	-37.41	0.00	-2,807.4	0.00	2,807.38	4,339.72	1,183.09	6,052.23	5,063.69	2.67	-0.85	0.564
35.00	-35.84	-36.82	0.00	-2,620.3	0.00	2,620.33	4,285.96	1,157.45	5,792.74	4,891.85	3.64	-0.99	0.545
40.00	-34.46	-36.21	0.00	-2,436.2	0.00	2,436.21	4,230.41	1,131.80	5,538.94	4,720.76	4.75	-1.13	0.525
45.00	-33.13	-35.84	0.00	-2,255.2	0.00	2,255.17	4,173.07	1,106.16	5,290.83	4,550.55	6.01	-1.27	0.505
45.66	-32.93	-35.52	0.00	-2,231.4	0.00	2,231.40	4,165.33	1,102.76	5,258.34	4,528.04	6.19	-1.29	0.502
50.00	-30.95	-35.01	0.00	-2,077.4	0.00	2,077.36	4,113.95	1,080.52	5,048.40	4,381.36	7.42	-1.41	0.483
52.83	-29.67	-34.66	0.00	-1,978.3	0.00	1,978.27	4,116.65	1,081.67	5,059.17	4,388.93	8.27	-1.49	0.459
55.00	-29.09	-34.16	0.00	-1,903.1	0.00	1,903.07	4,090.47	1,070.54	4,955.61	4,315.83	8.96	-1.55	0.449
60.00	-27.81	-33.45	0.00	-1,732.2	0.00	1,732.25	4,028.87	1,044.90	4,721.08	4,148.28	10.65	-1.67	0.426
65.00	-26.56	-32.79	0.00	-1,565.0	0.00	1,565.01	3,965.49	1,019.26	4,492.23	3,982.07	12.48	-1.8	0.401
69.00	-22.85	-29.67	0.00	-1,433.9	0.00	1,433.87	3,913.49	998.74	4,313.24	3,850.16	14.03	-1.9	0.379
70.00	-22.60	-29.23	0.00	-1,404.2	0.00	1,404.20	3,900.32	993.61	4,269.06	3,817.34	14.43	-1.92	0.375
75.00	-21.42	-28.46	0.00	-1,258.0	0.00	1,258.05	3,833.36	967.97	4,051.59	3,654.23	16.5	-2.04	0.351
80.00	-20.18	-26.74	0.00	-1,115.4	0.00	1,115.40	3,764.62	942.33	3,839.79	3,492.87	18.7	-2.15	0.326
85.00	-19.07	-26.16	0.00	-981.7	0.00	981.72	3,694.09	916.69	3,633.69	3,333.39	21.01	-2.26	0.300
87.00	-18.61	-25.64	0.00	-929.4	0.00	929.40	3,665.38	906.43	3,552.83	3,270.16	21.96	-2.3	0.290
90.00	-17.96	-25.18	0.00	-852.5	0.00	852.48	3,621.78	891.04	3,433.26	3,175.95	23.43	-2.36	0.274
92.58	-17.40	-24.76	0.00	-787.5	0.00	787.52	3,583.76	877.81	3,332.07	3,095.54	24.72	-2.42	0.260
95.00	-16.20	-23.69	0.00	-727.6	0.00	727.59	3,547.68	865.40	3,238.53	3,020.66	25.96	-2.46	0.246
98.41	-15.06	-23.24	0.00	-646.7	0.00	646.72	2,780.48	718.55	2,679.07	2,362.30	27.74	-2.52	0.280
100.00	-14.76	-22.76	0.00	-609.8	0.00	609.85	2,763.68	711.77	2,628.75	2,325.70	28.59	-2.55	0.269
104.00	-14.02	-22.19	0.00	-518.8	0.00	518.83	2,720.52	694.67	2,504.01	2,233.97	30.76	-2.63	0.238
105.00	-13.85	-21.69	0.00	-496.6	0.00	496.64	2,709.55	690.40	2,473.30	2,211.17	31.31	-2.65	0.231
110.00	-12.98	-20.94	0.00	-388.2	0.00	388.18	2,653.64	669.03	2,322.58	2,097.99	34.13	-2.73	0.191
113.60	-12.33	-20.41	0.00	-312.8	0.00	312.78	2,612.27	653.64	2,217.00	2,017.41	36.2	-2.78	0.161
115.00	-12.10	-20.11	0.00	-284.2	0.00	284.21	2,595.94	647.66	2,176.60	1,986.29	37.02	-2.79	0.149
117.00	-9.58	-18.39	0.00	-244.0	0.00	243.99	2,572.36	639.11	2,119.53	1,942.06	38.2	-2.82	0.130
119.00	-8.36	-15.73	0.00	-207.2	0.00	207.21	2,548.49	630.56	2,063.23	1,898.09	39.38	-2.84	0.113
120.00	-8.25	-15.22	0.00	-191.5	0.00	191.48	2,536.45	626.29	2,035.36	1,876.21	39.98	-2.85	0.106
125.00	-7.64	-14.52	0.00	-115.4	0.00	115.36	2,475.18	604.92	1,898.85	1,767.88	42.98	-2.89	0.069
128.00	-4.15	-9.01	0.00	-71.8	0.00	71.80	2,437.56	592.10	1,819.22	1,703.78	44.8	-2.9	0.044
128.50	-4.10	-8.91	0.00	-67.3	0.00	67.29	2,431.23	589.96	1,806.12	1,693.17	45.1	-2.9	0.042
128.50	-4.10	-8.91	0.00	-67.3	0.00	67.29	1,188.40	355.28	1,091.56	833.74	45.1	-2.9	0.085
130.00	-4.01	-8.63	0.00	-53.9	0.00	53.93	1,182.87	351.44	1,068.05	820.83	46.01	-2.91	0.070
134.00	-2.91	-4.35	0.00	-19.4	0.00	19.39	1,167.35	341.18	1,006.62	786.29	48.46	-2.92	0.027
135.00	-2.85	-4.19	0.00	-15.0	0.00	15.05	1,163.30	338.62	991.55	777.64	49.07	-2.92	0.022
137.20	-2.69	-4.01	0.00	-5.8	0.00	5.83	1,154.12	332.97	958.79	758.57	50.42	-2.93	0.010
138.00	-0.99	-2.66	0.00	-2.6	0.00	2.62	1,150.69	330.92	947.01	751.64	50.91	-2.93	0.004
138.50	0.00	-2.61	0.00	-1.3	0.00	1.29	1,148.53	329.64	939.69	747.30	51.21	-2.93	0.002

CALCULATED FORCES

Load Case: 1.2D + 1.0Di + 1.0Wi													50 mph Wind with 1" Radial Ice		20 Iterations
Gust Response Factor:		1.10	Ice Dead Load Factor				1.00	Ice Importance Factor					1.00		
Dead Load Factor:		1.20													
Wind Load Factor:		1.00													
Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (ft-kips)	Phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio		
0.00	-82.04	-8.10	0.00	-797.7	0.00	797.66	4,624.80	1,336.95	7,728.54	6,102.72	0	0	0.148		
5.00	-79.67	-7.98	0.00	-757.2	0.00	757.18	4,581.75	1,311.30	7,434.94	5,929.27	0.02	-0.03	0.145		
10.00	-77.29	-7.87	0.00	-717.3	0.00	717.27	4,536.92	1,285.66	7,147.03	5,755.76	0.06	-0.06	0.142		
15.00	-74.93	-7.76	0.00	-677.9	0.00	677.93	4,490.29	1,260.02	6,864.80	5,582.30	0.13	-0.08	0.138		
20.00	-72.59	-7.64	0.00	-639.2	0.00	639.16	4,441.89	1,234.37	6,588.26	5,409.05	0.24	-0.11	0.135		
25.00	-70.28	-7.53	0.00	-600.9	0.00	600.94	4,391.70	1,208.73	6,317.40	5,236.13	0.37	-0.14	0.131		
30.00	-67.99	-7.42	0.00	-563.3	0.00	563.29	4,339.72	1,183.09	6,052.23	5,063.69	0.54	-0.17	0.127		
35.00	-65.74	-7.30	0.00	-526.2	0.00	526.20	4,285.96	1,157.45	5,792.74	4,891.85	0.73	-0.2	0.123		
40.00	-63.52	-7.18	0.00	-489.7	0.00	489.69	4,230.41	1,131.80	5,538.94	4,720.76	0.95	-0.23	0.119		
45.00	-61.33	-7.10	0.00	-453.8	0.00	453.80	4,173.07	1,106.16	5,290.83	4,550.55	1.2	-0.25	0.114		
45.66	-61.04	-7.04	0.00	-449.1	0.00	449.09	4,165.33	1,102.76	5,258.34	4,528.04	1.24	-0.26	0.114		
50.00	-58.06	-6.94	0.00	-418.5	0.00	418.54	4,113.95	1,080.52	5,048.40	4,381.36	1.49	-0.28	0.110		
52.83	-56.13	-6.87	0.00	-398.9	0.00	398.89	4,116.65	1,081.67	5,059.17	4,388.93	1.66	-0.3	0.105		
55.00	-55.20	-6.78	0.00	-384.0	0.00	383.98	4,090.47	1,070.54	4,955.61	4,315.83	1.8	-0.31	0.103		
60.00	-53.09	-6.64	0.00	-350.1	0.00	350.10	4,028.87	1,044.90	4,721.08	4,148.28	2.14	-0.34	0.098		
65.00	-51.02	-6.51	0.00	-316.9	0.00	316.91	3,965.49	1,019.26	4,492.23	3,982.07	2.5	-0.36	0.092		
69.00	-44.22	-5.91	0.00	-290.9	0.00	290.87	3,913.49	998.74	4,313.24	3,850.16	2.81	-0.38	0.087		
70.00	-43.82	-5.83	0.00	-285.0	0.00	284.97	3,900.32	993.61	4,269.06	3,817.34	2.89	-0.39	0.086		
75.00	-41.83	-5.68	0.00	-255.8	0.00	255.83	3,833.36	967.97	4,051.59	3,654.23	3.31	-0.41	0.081		
80.00	-39.49	-5.36	0.00	-227.3	0.00	227.32	3,764.62	942.33	3,839.79	3,492.87	3.75	-0.43	0.076		
85.00	-37.58	-5.25	0.00	-200.6	0.00	200.55	3,694.09	916.69	3,633.69	3,333.39	4.22	-0.45	0.070		
87.00	-36.76	-5.14	0.00	-190.0	0.00	190.05	3,665.38	906.43	3,552.83	3,270.16	4.41	-0.46	0.068		
90.00	-35.64	-5.06	0.00	-174.6	0.00	174.62	3,621.78	891.04	3,433.26	3,175.95	4.71	-0.48	0.065		
92.58	-34.68	-4.98	0.00	-161.6	0.00	161.57	3,583.76	877.81	3,332.07	3,095.54	4.97	-0.49	0.062		
95.00	-32.73	-4.79	0.00	-149.5	0.00	149.51	3,547.68	865.40	3,238.53	3,020.66	5.22	-0.5	0.059		
98.41	-30.92	-4.70	0.00	-133.2	0.00	133.17	2,780.48	718.55	2,679.07	2,362.30	5.58	-0.51	0.068		
100.00	-30.38	-4.62	0.00	-125.7	0.00	125.71	2,763.68	711.77	2,628.75	2,325.70	5.75	-0.52	0.065		
104.00	-29.01	-4.50	0.00	-107.2	0.00	107.23	2,720.52	694.67	2,504.01	2,233.97	6.18	-0.53	0.059		
105.00	-28.69	-4.42	0.00	-102.7	0.00	102.73	2,709.55	690.40	2,473.30	2,211.17	6.3	-0.53	0.057		
110.00	-27.10	-4.29	0.00	-80.6	0.00	80.62	2,653.64	669.03	2,322.58	2,097.99	6.87	-0.55	0.049		
113.60	-25.88	-4.19	0.00	-65.2	0.00	65.17	2,612.27	653.64	2,217.00	2,017.41	7.29	-0.56	0.042		
115.00	-25.45	-4.14	0.00	-59.3	0.00	59.30	2,595.94	647.66	2,176.60	1,986.29	7.45	-0.57	0.040		
117.00	-21.01	-3.75	0.00	-51.0	0.00	51.02	2,572.36	639.11	2,119.53	1,942.06	7.69	-0.57	0.034		
119.00	-17.84	-3.26	0.00	-43.5	0.00	43.52	2,548.49	630.56	2,063.23	1,898.09	7.93	-0.57	0.030		
120.00	-17.59	-3.18	0.00	-40.3	0.00	40.26	2,536.45	626.29	2,035.36	1,876.21	8.05	-0.58	0.028		
125.00	-16.36	-3.06	0.00	-24.4	0.00	24.35	2,475.18	604.92	1,898.85	1,767.88	8.66	-0.58	0.020		
128.00	-8.77	-1.95	0.00	-15.2	0.00	15.18	2,437.56	592.10	1,819.22	1,703.78	9.03	-0.59	0.013		
128.50	-8.67	-1.92	0.00	-14.2	0.00	14.20	2,431.23	589.96	1,806.12	1,693.17	9.09	-0.59	0.012		
128.50	-8.67	-1.92	0.00	-14.2	0.00	14.20	1,188.40	355.28	1,091.56	833.74	9.09	-0.59	0.024		
130.00	-8.46	-1.85	0.00	-11.3	0.00	11.32	1,182.87	351.44	1,068.05	820.83	9.27	-0.59	0.021		
134.00	-6.09	-0.90	0.00	-3.9	0.00	3.92	1,167.35	341.18	1,006.62	786.29	9.77	-0.59	0.010		
135.00	-5.96	-0.86	0.00	-3.0	0.00	3.01	1,163.30	338.62	991.55	777.64	9.89	-0.59	0.009		
137.20	-5.60	-0.81	0.00	-1.1	0.00	1.12	1,154.12	332.97	958.79	758.57	10.16	-0.59	0.006		
138.00	-2.76	-0.48	0.00	-0.5	0.00	0.47	1,150.69	330.92	947.01	751.64	10.26	-0.59	0.003		
138.50	0.00	-0.45	0.00	-0.2	0.00	0.22	1,148.53	329.64	939.69	747.30	10.33	-0.59	0.000		

EQUIVALENT LATERAL FORCES METHOD ANALYSIS

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

Spectral Response Acceleration for Short Period (S_S):	0.210
Spectral Response Acceleration at 1.0 Second Period (S_1):	0.056
Long-Period Transition Period (T_L – Seconds):	6
Importance Factor (I_e):	1.000
Site Coefficient F_a :	1.600
Site Coefficient F_v :	2.400
Response Modification Coefficient (R):	1.500
Design Spectral Response Acceleration at Short Period (S_{DS}):	0.224
Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.090
Seismic Response Coefficient (C_s):	0.034
Upper Limit C_s :	0.034
Lower Limit C_s :	0.030
Period based on Rayleigh Method (sec):	1.780
Redundancy Factor (p):	1.000
Seismic Force Distribution Exponent (k):	1.640
Total Unfactored Dead Load:	51.430 k
Seismic Base Shear (E):	1.720 k

SEISMIC FORCES

1.2D + 1.0Ev + 1.0Eh

Seismic

Segment	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
43	138.25	35	113	0.002	3	43
42	137.6	56	181	0.002	4	70
41	136.1	156	494	0.007	12	194
40	134.5	72	223	0.003	5	89
39	132	291	879	0.012	21	363
38	129.25	111	324	0.004	8	139
37	128.25	60	173	0.002	4	75
36	126.5	412	1,160	0.016	27	513
35	122.5	704	1,878	0.026	44	876
34	119.5	143	367	0.005	9	178
33	118	375	940	0.013	22	466
32	116	378	922	0.013	22	470
31	114.3	267	635	0.009	15	332
30	111.8	693	1,591	0.022	38	862
29	107.5	980	2,110	0.029	50	1,220
28	104.5	198	408	0.006	10	247
27	102	803	1,586	0.022	37	999
26	99.2067	323	609	0.008	14	402
25	96.7067	1,269	2,296	0.032	54	1,579
24	93.79	912	1,570	0.022	37	1,136
23	91.29	610	1,004	0.014	24	759
22	88.5	717	1,122	0.015	27	893
21	86	484	722	0.010	17	602
20	82.5	1,227	1,711	0.023	40	1,527
19	77.5	1,257	1,582	0.022	37	1,564
18	72.5	1,282	1,446	0.020	34	1,595
17	69.5	259	273	0.004	6	323
16	67	1,056	1,047	0.014	25	1,315
15	62.5	1,343	1,187	0.016	28	1,672
14	57.5	1,368	1,055	0.014	25	1,703
13	53.915	601	417	0.006	10	749
12	51.415	1,380	886	0.012	21	1,718
11	47.8317	2,146	1,223	0.017	29	2,671
10	45.3317	187	98	0.001	2	233
9	42.5	1,427	670	0.009	16	1,777
8	37.5	1,452	555	0.008	13	1,808
7	32.5	1,477	447	0.006	11	1,838
6	27.5	1,502	345	0.005	8	1,869

SEISMIC FORCES

1.2D + 1.0Ev + 1.0Eh	Seismic	Height Above Base (ft)	Weight (lb)	W _z (lb-ft)	C _{vx}	Horizontal Force (lb)	Vertical Force (lb)
Segment							
5		22.5	1,527	253	0.004	6	1,900
4		17.5	1,551	170	0.002	4	1,931
3		12.5	1,576	99	0.001	2	1,962
2		7.5	1,601	44	0.001	1	1,993
1		2.5	1,626	7	0.000	0	2,024
Ericsson 4460 BAND 2/25		138.5	327	1,067	0.015	25	407
Ericsson 4480 BAND 71		138.5	243	793	0.011	19	302
Ericsson AIR 6419 B41		138.5	206	670	0.009	16	256
Commscope VV-65A-R1B		138.5	74	242	0.003	6	92
RFS APXVAALL24 43-U-NA20		138.5	368	1,202	0.016	28	459
Generic 10' Omni		138	25	81	0.001	2	31
Generic Round Low Profile Platform		138	1,875	6,081	0.083	144	2,334
Ericsson KRY 112 20		137.2	36	117	0.002	3	45
Unused Reserve (16529.3200 sqin)		134	1,178	3,640	0.050	86	1,466
Commscope CBC78T-DS-43-2X		128	62	178	0.002	4	77
Kaelus KA-6030		128	35	101	0.001	2	44
Samsung B2/B66A RRH-BR049		128	253	726	0.010	17	315
Samsung B5/B13 RRH-BR04C		128	211	605	0.008	14	263
RFS APL866513-44T0		128	31	90	0.001	2	39
Raycap RCMDC-6627-PF-48		128	32	92	0.001	2	40
Samsung MT6407-77A		128	245	702	0.010	17	305
Generic Mount Reinforcement		128	600	1,720	0.024	41	747
Decibel DB846H80E-SX		128	64	183	0.002	4	80
Commscope JAHH-65B-R3B		128	364	1,042	0.014	25	453
Generic Flat Low Profile Platform		128	1,875	5,375	0.074	127	2,334
Powerwave Allgon LGP21401		119	85	215	0.003	5	105
Ericsson Radio 8843 - B2 + B66A		119	216	549	0.008	13	269
Ericsson RRUS 4449 B5, B12		119	213	542	0.007	13	265
Powerwave Allgon 7770.00		119	105	267	0.004	6	131
Commscope NNH4-65B-R6		119	269	684	0.009	16	335
CCI DMP65R-BU6DA		119	238	606	0.008	14	297
Generic Round Platform with Handrails		117	2,500	6,184	0.085	146	3,112
Raycap DC6-48-60-18-8F		113.6	40	94	0.001	2	50
RFI Antennas CC807-08		104	24	50	0.001	1	30
RFI Antennas CC807-08		87	24	37	0.000	1	30
Bird DS428E83I01T		100	9	17	0.000	0	11
Flat Side Arm		95	450	791	0.011	19	560
RFI Antennas OA20-41-DIN		80	28	37	0.000	1	35
Radio Waves HP3-11		80	100	133	0.002	3	124
Commscope RDIDC-9181-PF-48		69	22	23	0.000	1	27
Fujitsu TA08025-B605		69	225	234	0.003	6	280
Fujitsu TA08025-B604		69	192	199	0.003	5	239
JMA Wireless MX08FRO665-21		69	194	201	0.003	5	241
Generic Flat Platform with Handrails		69	2,500	2,600	0.036	61	3,112
Totals:			51,432	72,990	1.000	1,725	64,023

SEISMIC FORCES

0.9D - 1.0Ev + 1.0Eh	Seismic (Reduced DL)	Height Above Base (ft)	Weight (lb)	W _z (lb-ft)	C _{vx}	Horizontal Force (lb)	Vertical Force (lb)
Segment							
43		138.25	35	113	0.002	3	30
42		137.6	56	181	0.002	4	48
41		136.1	156	494	0.007	12	133
40		134.5	72	223	0.003	5	61
39		132	291	879	0.012	21	249
38		129.25	111	324	0.004	8	95
37		128.25	60	173	0.002	4	51
36		126.5	412	1,160	0.016	27	353
35		122.5	704	1,878	0.026	44	602
34		119.5	143	367	0.005	9	123
33		118	375	940	0.013	22	320

SEISMIC FORCES

0.9D - 1.0Ev + 1.0Eh

Seismic (Reduced DL)

Segment	Height Above Base (ft)	Weight (lb)	W _z (lb-ft)	C _{vx}	Horizontal Force (lb)	Vertical Force (lb)
32	116	378	922	0.013	22	323
31	114.3	267	635	0.009	15	228
30	111.8	693	1,591	0.022	38	592
29	107.5	980	2,110	0.029	50	838
28	104.5	198	408	0.006	10	170
27	102	803	1,586	0.022	37	687
26	99.2067	323	609	0.008	14	276
25	96.7067	1,269	2,296	0.032	54	1,085
24	93.79	912	1,570	0.022	37	780
23	91.29	610	1,004	0.014	24	521
22	88.5	717	1,122	0.015	27	613
21	86	484	722	0.010	17	414
20	82.5	1,227	1,711	0.023	40	1,049
19	77.5	1,257	1,582	0.022	37	1,075
18	72.5	1,282	1,446	0.020	34	1,096
17	69.5	259	273	0.004	6	222
16	67	1,056	1,047	0.014	25	903
15	62.5	1,343	1,187	0.016	28	1,148
14	57.5	1,368	1,055	0.014	25	1,170
13	53.915	601	417	0.006	10	514
12	51.415	1,380	886	0.012	21	1,180
11	47.8317	2,146	1,223	0.017	29	1,835
10	45.3317	187	98	0.001	2	160
9	42.5	1,427	670	0.009	16	1,221
8	37.5	1,452	555	0.008	13	1,242
7	32.5	1,477	447	0.006	11	1,263
6	27.5	1,502	345	0.005	8	1,284
5	22.5	1,527	253	0.004	6	1,306
4	17.5	1,551	170	0.002	4	1,327
3	12.5	1,576	99	0.001	2	1,348
2	7.5	1,601	44	0.001	1	1,369
1	2.5	1,626	7	0.000	0	1,391
Ericsson 4460 BAND 2/25	138.5	327	1,067	0.015	25	280
Ericsson 4480 BAND 71	138.5	243	793	0.011	19	208
Ericsson AIR 6419 B41	138.5	206	670	0.009	16	176
Commscope VV-65A-R1B	138.5	74	242	0.003	6	63
RFS APXVAALL24 43-U-NA20	138.5	368	1,202	0.016	28	315
Generic 10' Omni	138	25	81	0.001	2	21
Generic Round Low Profile Platform	138	1,875	6,081	0.083	144	1,604
Ericsson KRY 112 20	137.2	36	117	0.002	3	31
Unused Reserve (16529.3200 sqin)	134	1,178	3,640	0.050	86	1,007
Commscope CBC78T-DS-43-2X	128	62	178	0.002	4	53
Kaelus KA-6030	128	35	101	0.001	2	30
Samsung B2/B66A RRH-BR049	128	253	726	0.010	17	217
Samsung B5/B13 RRH-BR04C	128	211	605	0.008	14	180
RFS APL866513-44T0	128	31	90	0.001	2	27
Raycap RCMDC-6627-PF-48	128	32	92	0.001	2	27
Samsung MT6407-77A	128	245	702	0.010	17	209
Generic Mount Reinforcement	128	600	1,720	0.024	41	513
Decibel DB846H80E-SX	128	64	183	0.002	4	55
Commscope JAHH-65B-R3B	128	364	1,042	0.014	25	311
Generic Flat Low Profile Platform	128	1,875	5,375	0.074	127	1,604
Powerwave Allgon LGP21401	119	85	215	0.003	5	72
Ericsson Radio 8843 - B2 + B66A	119	216	549	0.008	13	184
Ericsson RRUS 4449 B5, B12	119	213	542	0.007	13	182
Powerwave Allgon 7770.00	119	105	267	0.004	6	90
Commscope NNH4-65B-R6	119	269	684	0.009	16	230
CCI DMP65R-BU6DA	119	238	606	0.008	14	204
Generic Round Platform with Handrails	117	2,500	6,184	0.085	146	2,138
Raycap DC6-48-60-18-8F	113.6	40	94	0.001	2	34
RFI Antennas CC807-08	104	24	50	0.001	1	21

SEISMIC FORCES

0.9D - 1.0Ev + 1.0Eh

Seismic (Reduced DL)

Segment	Height Above Base (ft)	Weight (lb)	W _z (lb-ft)	C _{vx}	Horizontal Force (lb)	Vertical Force (lb)
RFI Antennas CC807-08	87	24	37	0.000	1	21
Bird DS428E83I01T	100	9	17	0.000	0	8
Flat Side Arm	95	450	791	0.011	19	385
RFI Antennas OA20-41-DIN	80	28	37	0.000	1	24
Radio Waves HP3-11	80	100	133	0.002	3	86
Commscope RDIDC-9181-PF-48	69	22	23	0.000	1	19
Fujitsu TA08025-B605	69	225	234	0.003	6	192
Fujitsu TA08025-B604	69	192	199	0.003	5	164
JMA Wireless MX08FRO665-21	69	194	201	0.003	5	165
Generic Flat Platform with Handrails	69	2,500	2,600	0.036	61	2,138
Totals:		51,432	72,990	1.000	1,725	43,985

1.2D + 1.0Ev + 1.0Eh

Seismic

CALCULATED FORCES

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (fr-kips)	Mu Mx (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (kips)	Phi Mn (kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-62.00	-1.73	0.00	-188.34	0.00	188.34	4,624.80	1,336.95	7,729	6,102.72	0.00	0.00	0.04
5.00	-60.01	-1.73	0.00	-179.71	0.00	179.71	4,581.75	1,311.30	7,435	5,929.27	0.00	-0.01	0.04
10.00	-58.04	-1.74	0.00	-171.04	0.00	171.04	4,536.92	1,285.66	7,147	5,755.76	0.01	-0.01	0.04
15.00	-56.11	-1.74	0.00	-162.36	0.00	162.36	4,490.29	1,260.02	6,865	5,582.30	0.03	-0.02	0.04
20.00	-54.21	-1.74	0.00	-153.66	0.00	153.66	4,441.89	1,234.37	6,588	5,409.05	0.06	-0.03	0.04
25.00	-52.34	-1.74	0.00	-144.97	0.00	144.97	4,391.70	1,208.73	6,317	5,236.13	0.09	-0.03	0.04
30.00	-50.50	-1.73	0.00	-136.29	0.00	136.29	4,339.72	1,183.09	6,052	5,063.69	0.13	-0.04	0.04
35.00	-48.69	-1.72	0.00	-127.64	0.00	127.64	4,285.96	1,157.45	5,793	4,891.85	0.17	-0.05	0.04
40.00	-46.92	-1.71	0.00	-119.03	0.00	119.03	4,230.41	1,131.80	5,539	4,720.76	0.23	-0.05	0.04
45.00	-46.68	-1.71	0.00	-110.48	0.00	110.48	4,173.07	1,106.16	5,291	4,550.55	0.29	-0.06	0.04
45.66	-44.01	-1.68	0.00	-109.35	0.00	109.35	4,165.33	1,102.76	5,258	4,528.04	0.30	-0.06	0.04
50.00	-42.30	-1.66	0.00	-102.06	0.00	102.06	4,113.95	1,080.52	5,048	4,381.36	0.36	-0.07	0.03
52.83	-41.55	-1.65	0.00	-97.35	0.00	97.35	4,116.65	1,081.67	5,059	4,388.93	0.40	-0.07	0.03
55.00	-39.84	-1.63	0.00	-93.76	0.00	93.76	4,090.47	1,070.54	4,956	4,315.83	0.43	-0.07	0.03
60.00	-38.17	-1.60	0.00	-85.62	0.00	85.62	4,028.87	1,044.90	4,721	4,148.28	0.51	-0.08	0.03
65.00	-36.86	-1.58	0.00	-77.60	0.00	77.60	3,965.49	1,019.26	4,492	3,982.07	0.60	-0.09	0.03
69.00	-32.64	-1.49	0.00	-71.28	0.00	71.28	3,913.49	998.74	4,313	3,850.16	0.68	-0.09	0.03
70.00	-31.04	-1.46	0.00	-69.78	0.00	69.78	3,900.32	993.61	4,269	3,817.34	0.70	-0.09	0.03
75.00	-29.48	-1.42	0.00	-62.50	0.00	62.50	3,833.36	967.97	4,052	3,654.23	0.80	-0.10	0.03
80.00	-27.79	-1.38	0.00	-55.40	0.00	55.40	3,764.62	942.33	3,840	3,492.87	0.90	-0.10	0.02
85.00	-27.19	-1.36	0.00	-48.52	0.00	48.52	3,694.09	916.69	3,634	3,333.39	1.02	-0.11	0.02
87.00	-26.26	-1.33	0.00	-45.80	0.00	45.80	3,665.38	906.43	3,553	3,270.16	1.06	-0.11	0.02
90.00	-25.50	-1.31	0.00	-41.81	0.00	41.81	3,621.78	891.04	3,433	3,175.95	1.13	-0.12	0.02
92.58	-24.37	-1.27	0.00	-38.44	0.00	38.44	3,583.76	877.81	3,332	3,095.54	1.20	-0.12	0.02
95.00	-22.23	-1.19	0.00	-35.36	0.00	35.36	3,547.68	865.40	3,239	3,020.66	1.26	-0.12	0.02
98.41	-21.83	-1.18	0.00	-31.29	0.00	31.29	2,780.48	718.55	2,679	2,362.30	1.34	-0.12	0.02
100.00	-20.82	-1.14	0.00	-29.43	0.00	29.43	2,763.68	711.77	2,629	2,325.70	1.39	-0.12	0.02
104.00	-20.54	-1.13	0.00	-24.87	0.00	24.87	2,720.52	694.67	2,504	2,233.97	1.49	-0.13	0.02
105.00	-19.32	-1.08	0.00	-23.74	0.00	23.74	2,709.55	690.40	2,473	2,211.17	1.52	-0.13	0.02
110.00	-18.46	-1.04	0.00	-18.36	0.00	18.36	2,653.64	669.03	2,323	2,097.99	1.66	-0.13	0.02
113.60	-18.08	-1.02	0.00	-14.62	0.00	14.62	2,612.27	653.64	2,217	2,017.41	1.76	-0.14	0.01
115.00	-17.61	-1.00	0.00	-13.19	0.00	13.19	2,595.94	647.66	2,177	1,986.29	1.80	-0.14	0.01
117.00	-14.03	-0.82	0.00	-11.20	0.00	11.20	2,572.36	639.11	2,120	1,942.06	1.85	-0.14	0.01
119.00	-12.45	-0.74	0.00	-9.55	0.00	9.55	2,548.49	630.56	2,063	1,898.09	1.91	-0.14	0.01
120.00	-11.57	-0.70	0.00	-8.81	0.00	8.81	2,536.45	626.29	2,035	1,876.21	1.94	-0.14	0.01
125.00	-11.06	-0.67	0.00	-5.34	0.00	5.34	2,475.18	604.92	1,899	1,767.88	2.09	-0.14	0.01
128.00	-6.29	-0.40	0.00	-3.34	0.00	3.34	2,437.56	592.10	1,819	1,703.78	2.18	-0.14	0.01
128.50	-6.15	-0.39	0.00	-3.14	0.00	3.14	2,431.23	589.96	1,806	1,693.17	2.19	-0.14	0.00
128.50	-6.15	-0.39	0.00	-3.14	0.00	3.14	1,188.40	355.28	1,092	833.74	2.19	-0.14	0.01
130.00	-5.79	-0.37	0.00	-2.56	0.00	2.56	1,182.87	351.44	1,068	820.83	2.23	-0.14	0.01
134.00	-4.23	-0.27	0.00	-1.09	0.00	1.09	1,167.35	341.18	1,007	786.29	2.35	-0.14	0.01
135.00	-4.04	-0.26	0.00	-0.82	0.00	0.82	1,163.30	338.62	992	777.64	2.38	-0.14	0.01
137.20	-3.92	-0.25	0.00	-0.25	0.00	0.25	1,154.12	332.97	959	758.57	2.45	-0.14	0.00

CALCULATED FORCES

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (fr-kips)	Mu Mx (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (kips)	Phi Mn (kips)	Total Deflect (in)	Rotation (deg)	Ratio
138.00	-1.52	-0.10	0.00	-0.05	0.00	0.05	1,150.69	330.92	947	751.64	2.47	-0.14	0.00
138.50	0.00	-0.09	0.00	0.00	0.00	0.00	1,148.53	329.64	940	747.30	2.49	-0.14	0.00

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

CALCULATED FORCES

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (fr-kips)	Mu Mx (ft-kips)	Resultant Moment (ft-kips)	Phi Pn (kips)	Phi Vn (kips)	Phi Tn (kips)	Phi Mn (kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-42.59	-1.73	0.00	-186.64	0.00	186.64	4,624.80	1,336.95	7,729	6,102.72	0.00	0.00	0.04
5.00	-41.22	-1.73	0.00	-178.01	0.00	178.01	4,581.75	1,311.30	7,435	5,929.27	0.00	-0.01	0.04
10.00	-39.88	-1.73	0.00	-169.36	0.00	169.36	4,536.92	1,285.66	7,147	5,755.76	0.01	-0.01	0.04
15.00	-38.55	-1.73	0.00	-160.71	0.00	160.71	4,490.29	1,260.02	6,865	5,582.30	0.03	-0.02	0.04
20.00	-37.24	-1.73	0.00	-152.05	0.00	152.05	4,441.89	1,234.37	6,588	5,409.05	0.06	-0.03	0.04
25.00	-35.96	-1.73	0.00	-143.40	0.00	143.40	4,391.70	1,208.73	6,317	5,236.13	0.09	-0.03	0.04
30.00	-34.70	-1.72	0.00	-134.77	0.00	134.77	4,339.72	1,183.09	6,052	5,063.69	0.13	-0.04	0.04
35.00	-33.45	-1.71	0.00	-126.19	0.00	126.19	4,285.96	1,157.45	5,793	4,891.85	0.17	-0.05	0.03
40.00	-32.23	-1.69	0.00	-117.65	0.00	117.65	4,230.41	1,131.80	5,539	4,720.76	0.23	-0.05	0.03
45.00	-32.07	-1.69	0.00	-109.17	0.00	109.17	4,173.07	1,106.16	5,291	4,550.55	0.29	-0.06	0.03
45.66	-30.24	-1.67	0.00	-108.05	0.00	108.05	4,165.33	1,102.76	5,258	4,528.04	0.29	-0.06	0.03
50.00	-29.06	-1.65	0.00	-100.83	0.00	100.83	4,113.95	1,080.52	5,048	4,381.36	0.35	-0.07	0.03
52.83	-28.54	-1.64	0.00	-96.17	0.00	96.17	4,116.65	1,081.67	5,059	4,388.93	0.39	-0.07	0.03
55.00	-27.37	-1.61	0.00	-92.62	0.00	92.62	4,090.47	1,070.54	4,956	4,315.83	0.43	-0.07	0.03
60.00	-26.22	-1.59	0.00	-84.56	0.00	84.56	4,028.87	1,044.90	4,721	4,148.28	0.51	-0.08	0.03
65.00	-25.32	-1.56	0.00	-76.63	0.00	76.63	3,965.49	1,019.26	4,492	3,982.07	0.59	-0.09	0.03
69.00	-22.42	-1.48	0.00	-70.38	0.00	70.38	3,913.49	998.74	4,313	3,850.16	0.67	-0.09	0.02
70.00	-21.32	-1.44	0.00	-68.91	0.00	68.91	3,900.32	993.61	4,269	3,817.34	0.69	-0.09	0.02
75.00	-20.25	-1.40	0.00	-61.71	0.00	61.71	3,833.36	967.97	4,052	3,654.23	0.79	-0.10	0.02
80.00	-19.09	-1.36	0.00	-54.69	0.00	54.69	3,764.62	942.33	3,840	3,492.87	0.89	-0.10	0.02
85.00	-18.68	-1.34	0.00	-47.89	0.00	47.89	3,694.09	916.69	3,634	3,333.39	1.01	-0.11	0.02
87.00	-18.04	-1.31	0.00	-45.21	0.00	45.21	3,665.38	906.43	3,553	3,270.16	1.05	-0.11	0.02
90.00	-17.52	-1.29	0.00	-41.27	0.00	41.27	3,621.78	891.04	3,433	3,175.95	1.12	-0.11	0.02
92.58	-16.74	-1.25	0.00	-37.94	0.00	37.94	3,583.76	877.81	3,332	3,095.54	1.18	-0.12	0.02
95.00	-15.27	-1.18	0.00	-34.91	0.00	34.91	3,547.68	865.40	3,239	3,020.66	1.24	-0.12	0.02
98.41	-15.00	-1.16	0.00	-30.89	0.00	30.89	2,780.48	718.55	2,679	2,362.30	1.33	-0.12	0.02
100.00	-14.30	-1.12	0.00	-29.04	0.00	29.04	2,763.68	711.77	2,629	2,325.70	1.37	-0.12	0.02
104.00	-14.11	-1.11	0.00	-24.54	0.00	24.54	2,720.52	694.67	2,504	2,233.97	1.48	-0.13	0.02
105.00	-13.27	-1.06	0.00	-23.43	0.00	23.43	2,709.55	690.40	2,473	2,211.17	1.50	-0.13	0.02
110.00	-12.68	-1.02	0.00	-18.12	0.00	18.12	2,653.64	669.03	2,323	2,097.99	1.64	-0.13	0.01
113.60	-12.42	-1.01	0.00	-14.43	0.00	14.43	2,612.27	653.64	2,217	2,017.41	1.74	-0.13	0.01
115.00	-12.09	-0.98	0.00	-13.02	0.00	13.02	2,595.94	647.66	2,177	1,986.29	1.78	-0.13	0.01
117.00	-9.64	-0.81	0.00	-11.05	0.00	11.05	2,572.36	639.11	2,120	1,942.06	1.83	-0.14	0.01
119.00	-8.55	-0.73	0.00	-9.43	0.00	9.43	2,548.49	630.56	2,063	1,898.09	1.89	-0.14	0.01
120.00	-7.95	-0.69	0.00	-8.70	0.00	8.70	2,536.45	626.29	2,035	1,876.21	1.92	-0.14	0.01
125.00	-7.60	-0.66	0.00	-5.27	0.00	5.27	2,475.18	604.92	1,899	1,767.88	2.06	-0.14	0.01
128.00	-4.32	-0.39	0.00	-3.29	0.00	3.29	2,437.56	592.10	1,819	1,703.78	2.15	-0.14	0.00
128.50	-4.23	-0.38	0.00	-3.10	0.00	3.10	2,431.23	589.96	1,806	1,693.17	2.17	-0.14	0.00
128.50	-4.23	-0.38	0.00	-3.10	0.00	3.10	1,188.40	355.28	1,092	833.74	2.17	-0.14	0.01
130.00	-3.98	-0.36	0.00	-2.52	0.00	2.52	1,182.87	351.44	1,068	820.83	2.21	-0.14	0.01
134.00	-2.91	-0.27	0.00	-1.08	0.00	1.08	1,167.35	341.18	1,007	786.29	2.33	-0.14	0.00
135.00	-2.77	-0.26	0.00	-0.81	0.00	0.81	1,163.30	338.62	992	777.64	2.36	-0.14	0.00
137.20	-2.70	-0.25	0.00	-0.25	0.00	0.25	1,154.12	332.97	959	758.57	2.42	-0.14	0.00
138.00	-1.04	-0.10	0.00	-0.05	0.00	0.05	1,150.69	330.92	947	751.64	2.44	-0.14	0.00
138.50	0.00	-0.09	0.00	0.00	0.00	0.00	1,148.53	329.64	940	747.30	2.46	-0.14	0.00

ANALYSIS SUMMARY

Load Case	Base Reactions						Max Usage	
	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)	Elev (ft)	Interaction Ratio
1.2D + 1.0W	40.73	0.00	61.67	0.00	0.00	4016.30	0.00	0.67
0.9D + 1.0W	40.71	0.00	46.24	0.00	0.00	3987.76	0.00	0.66
1.2D + 1.0Di + 1.0Wi	8.10	0.00	82.04	0.00	0.00	797.66	0.00	0.15
1.2D + 1.0Ev + 1.0Eh	1.74	0.00	62.00	0.00	0.00	188.34	0.00	0.04
0.9D - 1.0Ev + 1.0Eh	1.73	0.00	42.59	0.00	0.00	186.64	0.00	0.04
1.0D + 1.0W	7.76	0.00	51.43	0.00	0.00	762.09	0.00	0.14

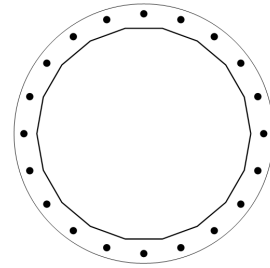
BASE PLATE ANALYSIS @ 0 FT

APPLIED REACTIONS

Moment (k-ft)	Axial (k)	Shear (k)
4016.3	61.67	40.73

PLATE PARAMETERS (ID# 3727)

Width:	79	in
Shape:	Round	
Thickness:	2.25	in
Grade:	A572-60	
Yield Strength:	60	ksi
Tensile Strength:	75	ksi
Rod Detail Type:	d	
Clear Distance	4	in
Base Weld Size:	0.125	in
Orientation Offset:	-	°
Analysis Type:	Plastic	
Neutral Axis:	252	°



ANCHOR ROD PARAMETERS

Class	Arrangement	Quantity	Diameter (in)	Circle (in)	Grade	F _y (ksi)	F _u (ksi)	Spacing (in)	Offset (°)
Original [ID#8078]	Radial	20	2.25	73	A615-75	75	100	-	-

COMPONENT PROPERTIES

Component	ID	Gross Area (in ²)	Net Area (in ²)	Individual Inertia (in ⁴)	Moment of Inertia (in ⁴)	Threads/in
Pole	64.38"ø x 0.375" (18 Sides)	75.0219	-	-	38420.73	-
Bolt Group	Original (20) 2.25"ø	3.9761	3.2477	0.8393	40228.39	4.5

REACTION DISTRIBUTION

Component	ID	Moment M _u (k-ft)	Axial Load P _u (k)	Shear V _u (k)	Moment Factor
Pole	64.38"ø x 0.375" (18 Sides)	4016.3	61.67	40.73	1.000
Bolt Group	Original (20) 2.25"ø	4016.3	-	40.73	1.000

BASE PLATE BEND LINE ANALYSIS @ 0 FT

POLE PROPERTIES

Flat-to-Flat Diameter:	64.50	in	Flat Width:	11.374	in
Point-to-Point Diameter:	65.50	in	Flat Radians:	0.349	rad
Orientation Offset:	-	°			

PLATE PROPERTIES

Neutral Axis:	252	°
Bend Line Limits:	5.475 to 0.179	rad

Bend Line	Chord Length (in)	Additional Length (in)	Section Modulus (in ³)	Applied Moment M _u (k-in)	Moment Capacity ΦM _n (k-in)	Flexure Result M _u /ΦM _n
Flats	40.921	0.00	51.791	734.2	2796.7	26.3%
Corners	39.309	0.00	49.750	531.9	2686.5	19.8%
Circumferential	49.153	0.00	62.209	991.0	3359.3	29.5%

PLASTIC ANCHOR ROD ANALYSIS

Class	Group Quantity	Rod Diameter (in)	Applied Axial Load P _u (k)	Applied Shear Load V _u (k)	Compressive Capacity ΦP _n (k)	Interaction Result
Original	20	2.25	114.7	3.2	243.6	49.7%

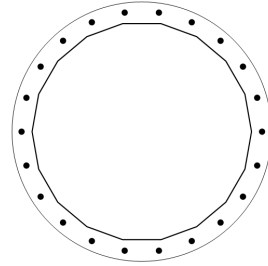
UPPER FLANGE PLATE ANALYSIS @ 128.5 FT

APPLIED REACTIONS

Moment (k-ft)	Axial (k)	Shear (k)
67.95	5.61	8.99

PLATE PARAMETERS (ID# 2224)

Width:	41	in
Shape:	Round	
Thickness:	1	in
Grade:	A572-60	
Yield Strength:	60	ksi
Tensile Strength:	75	ksi
Base Weld Size:	0.125	in
Orientation Offset:	-	°
Analysis Type:	Plastic	
Neutral Axis:	90	°



FLANGE BOLT PARAMETERS

Class	Arrangement	Quantity	Diameter (in)	Circle (in)	Grade	F _y (ksi)	F _u (ksi)	Spacing (in)	Offset (°)
Original [ID#8079]	Radial	22	1	38	A325	92	120	-	-

COMPONENT PROPERTIES

Component	ID	Gross Area (in ²)	Net Area (in ²)	Individual Inertia (in ⁴)	Moment of Inertia (in ⁴)	Threads/in
Pole	34.2052"Ø x 0.1875" (18 Sides)	19.9365	-	-	2884.06	-
Bolt Group	Original (22) 1"Ø	0.7854	0.6057	0.0292	2250.41	8.0

REACTION DISTRIBUTION

Component	ID	Moment M _u (k-ft)	Axial Load P _u (k)	Shear V _u (k)	Moment Factor
Pole	34.2052"Ø x 0.1875" (18 Sides)	68.0	5.61	8.99	1.000
Bolt Group	Original (22) 1"Ø	68.0	-	8.99	1.000

UPPER FLANGE PLATE BEND LINE ANALYSIS @ 128.5 FT

POLE PROPERTIES

Flat-to-Flat Diameter:	34.33	in
Point-to-Point Diameter:	34.86	in
Orientation Offset:	-	°

Flat Width:	6.053	in
Flat Radians:	0.349	rad

PLATE PROPERTIES

Neutral Axis:	90	°
Bend Line Limits:	2.682 to 3.601	rad

Bend Line	Chord Length (in)	Additional Length (in)	Section Modulus (in ³)	Applied Moment M _u (k-in)	Moment Capacity ΦM _n (k-in)	Flexure Result M _u /ΦM _n
Flats	19.688	0.00	4.922	9.0	265.8	3.4%
Corners	18.734	0.00	4.684	5.7	252.9	2.3%
Circumferential	23.541	0.00	5.885	11.8	317.8	3.7%

PLASTIC FLANGE BOLT ANALYSIS

Class	Group Quantity	Bolt Diameter (in)	Applied Axial Load P _u (k)	Applied Shear Load V _u (k)	Compressive Capacity ΦP _n (k)	Interaction Result
Original	22	1	3.7	0.6	54.5	8.4%

PIER FOUNDATION ANALYSIS

GLOBAL REACTIONS

Moment (k-ft)	Axial (k)	Shear (k)
4,016.30	61.67	40.73

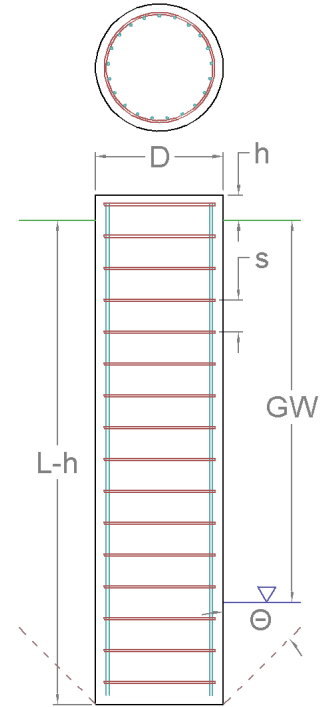
FOUNDATION PARAMETERS

Pier Diameter:	D	8.00	ft
Pier Embedment Depth:	L-h	18.5	ft
Pier Height above Grade:	h	0.50	ft

SOIL PARAMETERS

Water Table Depth [BGL]: GW - ft

Layer Depth (ft)		Unit Weight pcf	Cohesion psf	Friction Angle °	Ultimate Skin Friction psf	Ultimate Net Bearing psf
Top	Bottom					
0	2	105	0	0	0	0
2	4	140	11,323	0	0	0
4	9	140	13,483	0	6,067	0
9	19.5	140	16,171	0	7,277	44,429



SOIL STRENGTH ANALYSIS

Volume of Concrete (ft³)	Buoyant Weight of Concrete (k)	Skin Friction Resistance (k)	Inflection Point [BGL] (ft)
955.04	143.26	2,499.87	10.79

SOIL MOMENT ANALYSIS

Total Lateral Resistance (k)	Moment at Inflection Point, M_u (k-ft)	Additional Resistance (k-ft)	Nominal Moment Capacity, ΦM_n (k-ft)	Soil Moment Usage, $M_u / \Phi M_n$
13,306.50	4,476.19	0.00	38,592.16	11.6% ✓

SOIL COMPRESSION ANALYSIS

Compressive Bearing Resistance (k)	Compressive Force, P_u (k)	Additional Resistance (k)	Nominal Compressive Capacity, ΦP_n (k)	Soil Compressive Usage, $P_u / \Phi P_n$
2,233.25	77.05	0.00	3,549.83	2.2% ✓

EXHIBIT 4



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

Post-Modification Antenna Mount Analysis Report and PMI Requirements

Mount Fix

SMART Tool Project #: 10208169
Colliers Engineering & Design CT. P.C. Project #: 23777185

August 8, 2023

Site Information

Site ID: 5000392762-VZW / PORTLAND S CT
Site Name: PORTLAND S CT
Carrier Name: Verizon Wireless
Address: 191 Middle Haddam Road
Portland, Connecticut 06480
Middlesex County
Latitude: 41.562250°
Longitude: -72.573778°

Structure Information

Tower Type: 138-Ft Monopole
Mount Type: 13.69-Ft Platform

FUZE ID # 17123764

Analysis Results

Platform: 87.8% **Pass w/ Modifications***

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

***Contractor PMI Requirements:

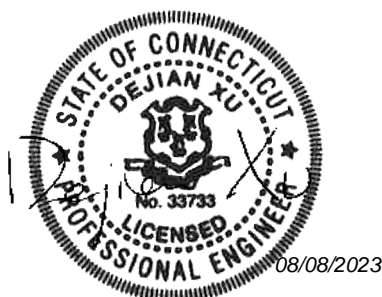
Included at the end of this MA report

Available & Submitted via portal at <https://pmi.vzwsmart.com>

For additional questions and support, please reach out to:

pmisupport@colliersengineering.com

Report Prepared By: Gianna Argentina



Executive Summary:

The objective of this report is to summarize the analysis results of the antenna support mount including the proposed modifications at the subject facility for the final wireless telecommunications configuration, per the applicable codes and standards.

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

Sources of Information:

Document Type	Remarks
Radio Frequency Data Sheet (RFDS)	Verizon RFDS, Site ID: 675017, dated June 14, 2021
Mount Mapping Report	RKS Design & Engineering, LLC, Site ID: ATC: 411257, dated July 22, 2021
Previous Mount Analysis Report	NB+C, Project #: 100820, dated August 2, 2021
Post-Modification Inspection Report	NB+C, Project #: 100820, dated August 9, 2022
Filter Add Scope	Provided by Verizon Wireless
Previous Mount Analysis	Colliers Engineering & Design CT, P.C., Project #: 23777185 dated July 24, 2023
Mount Modification Drawings	Colliers Engineering & Design CT, P.C., Project #: 23777185 dated August 8, 2023

Analysis Criteria:

Codes and Standards:	ANSI/TIA-222-H Connecticut State Building Code, Effective October 1, 2022	
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT} : Ice Wind Speed (3-sec. Gust): Design Ice Thickness: Risk Category: Exposure Category: Topographic Category: Topographic Feature Considered: Topographic Method: Ground Elevation Factor, K_e :	120 mph 50 mph 1.00 in II C 1 N/A N/A 0.991
Seismic Parameters:	S_s : S_1 :	0.208 g 0.056 g
Maintenance Parameters:	Wind Speed (3-sec. Gust): Maintenance Load, L_v : Maintenance Load, L_m :	30 mph 250 lbs. 500 lbs.
Analysis Software:	RISA-3D (V17)	

Final Loading Configuration:

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

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
126.00	127.00	3	Samsung	MT6407-77A	Retained
		3	Samsung	B2/B66A RRH-BR049	
		3	Samsung	B5/B13 RRH-BR04C	
		6	Commscope	JAHH-65B-R3B	
		2	RFS	APL866513	
		4	Andrew	DB846H80E-SX	
		3	Commscope	CBC78T-DS-43-2X	
		1	Raycap	OVP-12*	
		2	KAelus	KA-6030	Added

* Equipment is flush mounted directly to the Monopole. It is not mounted on platform and is not included in this mount analysis.

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

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

Standard Conditions:

1. All engineering services are performed on the basis that the information provided to Colliers Engineering & Design CT, P.C. and used in this analysis is current and correct. The existing equipment loading has been applied at locations determined from the supplied documentation. Any deviation from the loading locations specified in this report shall be communicated to Colliers Engineering & Design CT, P.C. to verify deviation will not adversely impact the analysis.
2. Mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer’s specifications.

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

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

3. For mount analyses completed from other data sources (including new replacement mounts) and not specifically mapped in accordance with the NSTD-446 Standard, the mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer’s specifications.
4. All member connections are assumed to have been designed to meet or exceed the load carrying capacity of the connected member unless otherwise specified in this report.

5. The mount was checked up to, and including, the bolts that fasten it to the mount collar/attachment and threaded rod connections in collar members if applicable. Local deformation and interaction between the mount collar/attachment and the supporting tower structure are outside the scope of this analysis.
6. All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. Colliers Engineering & Design CT, P.C. is not responsible for the conclusion, opinions, and recommendations made by others based on the information supplied.
7. Structural Steel Grades have been assumed as follows, if applicable, unless otherwise noted in this analysis:
 - o Channel, Solid Round, Angle, Plate ASTM A36 (Gr. 36)
 - o HSS (Rectangular) ASTM 500 (Gr. B-46)
 - o Pipe ASTM A53 (Gr. B-35)
 - o Threaded Rod F1554 (Gr. 36)
 - o Bolts ASTM A325
8. Any mount modifications listed under Sources of Information are assumed to have been installed per the design specifications.

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

Analysis Results:

Component	Utilization %	Pass/Fail
Standoff Arm	24.9 %	Pass
Grating Angle	7.2 %	Pass
Footrail	22.4 %	Pass
Mount Pipe	87.8 %	Pass
Kicker	10.9 %	Pass
Mount Connection	76.5 %	Pass

Structure Rating – (Controlling Utilization of all Components)	87.8%
---	--------------

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

Ice Thickness (In)	Mount Pipes Excluded		Mount Pipes Included	
	Front (EPA)a (Sq. Ft.)	Side (EPA)a (Sq. Ft.)	Front (EPA)a (Sq. Ft.)	Side (EPA)a (Sq. Ft.)
0	19.9	19.9	43.2	43.2
0.5	25.0	25.0	58.3	58.3
1	29.5	29.5	72.6	72.6

Notes:

- (EPA)a values listed above may be used in the absence of more precise information
- (EPA)a values in the table above include 3 sector(s).
- Ka factors included in (EPA)a calculations

Requirements:

The existing mount will be **SUFFICIENT** for the final loading configuration (attachment 2) **after the modifications detailed in attachment 3 are successfully completed.**

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

Attachments:

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

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – Mount Modification

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

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

MDG #: 5000392762

SMART Project #: 10208169

Fuze Project ID: 17123764

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

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

Base Requirements:

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

Photo Requirements:

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

- Photos showing each individual sector after installation of modifications. Each entire sector must be in one photo to show the interconnection of members.
 - These photos shall also certify that the placement and geometry of the equipment on the mount is as depicted in the antenna placement diagram in this form.
- Photos that show the model number of each antenna and piece of equipment installed per sector.
- Photos of each installed modification per the modification drawings; pictures shall also include connection hardware (U-bolts, bolts, nuts, all-threaded rods, etc.)
- Photos showing the distances (relative distance between collars) of the installed modifications from the appropriate reference locations shown in the modification drawings.
- Photos showing the installed modifications onto the tower (i.e. ring/collar mounts, tie-backs, V-bracing kits, etc.); if the existing mount elevation needs to be changed according to the modification drawings, an elevation measurement shall be provided before the elevation change.

Material Certification:

- Materials utilized must be as per specification on the drawings or the equivalent as validated by the SMART Tool vendor.
 - If the materials are as specified on the drawings
 - The contractor shall provide the packing list, or the materials certifications for the materials utilized to perform the mount modification
 - Commscope, Metrosite, Perfect Vision, Sabre, and Site Pro have all agreed to support Verizon vendors with the necessary material certifications
 - If seeking permission to use an equivalent
 - It is required that the SMART Tool engineering vendor approval of such is included in the contractor submission package. There may be an additional charge for approval if the equivalent submission doesn't meet specifications as prescribed in the drawings.

All hardware has been properly installed, and the existing hardware was inspected.

The material utilized was as specified on the SMART Tool engineering vendor Mount Modification Drawings and included in the material certification folder is a packing list or invoice for these materials.

OR

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

Antenna & Equipment Placement and Geometry Confirmation:

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

OR

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

Comments:

Was the mount modification completed in conjunction with the equipment change / installation?

- Yes No

Special Instructions / Validation as required from the MA or Mod Drawings:

Issue:

Response:

Special Instruction Confirmation:

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

Comments:

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

- Yes No

Contractor certifies no new damage created during the current installation:

- Yes No

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

- Safety Climb in Good Condition Safety Climb Damaged

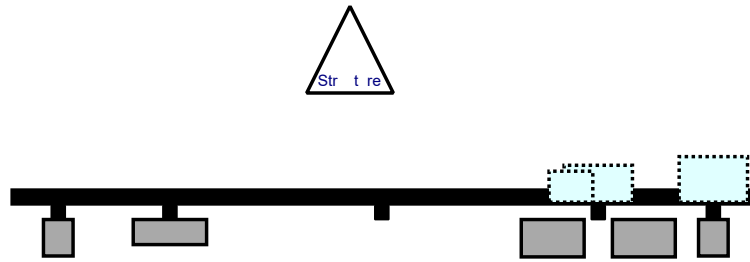
Comments:

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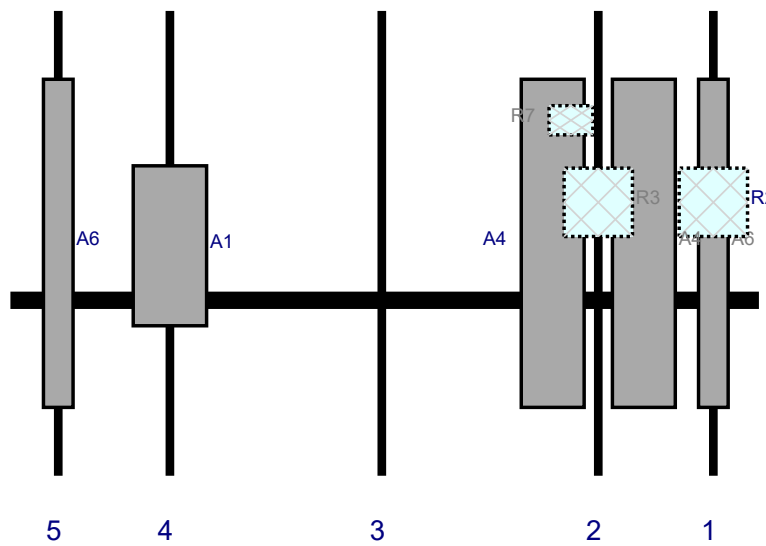
Certifying Individual:

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

Plan View

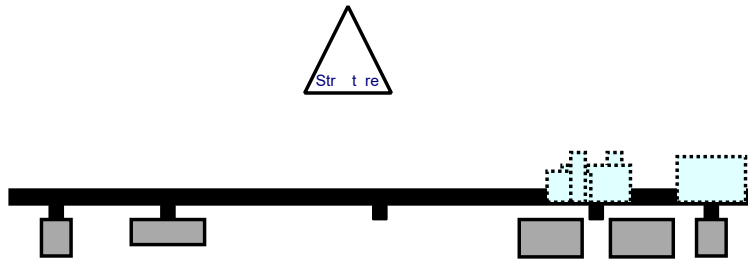


Front View - Looking at Structure

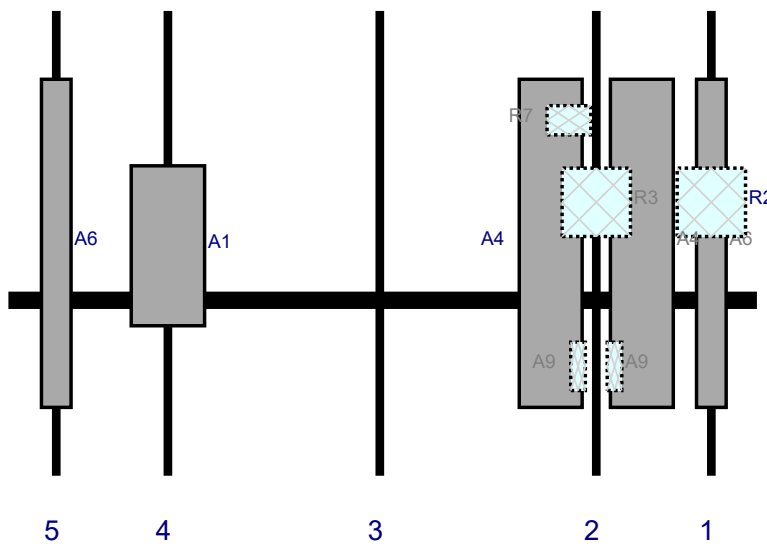


Re #	Model	Height (i)	Width (i)	H Dist Fr L.	Pipe #	Pipe Pos V	A t Pos	C. A t Fr T.	A t H O	St t s	V lid tio
A6	DB846H80E-SX	72	6.5	154.25	1		Fro t	51	0	Ret i ed	07/30/2022
R2	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	154.25	1		Behi d	42	0	Ret i ed	07/30/2022
A4	JAHH-65B-R3B	72	13.8	129	2		Fro t	51	10	Ret i ed	07/30/2022
A4	JAHH-65B-R3B	72	13.8	129	2		Fro t	51	-10	Ret i ed	07/30/2022
R3	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	129	2		Behi d	42	0	Ret i ed	07/30/2022
R7	CBC78T-DS-43-2X	6.4	9.6	129	2		Behi d	24	-6	Ret i ed	07/30/2022
A1	MT6407-77A	35.1	16.1	35	4		Fro t	51.54	0	Ret i ed	07/30/2022
A6	DB846H80E-SX	72	6.5	10.5	5		Fro t	51	0	Ret i ed	07/30/2022

Plan View

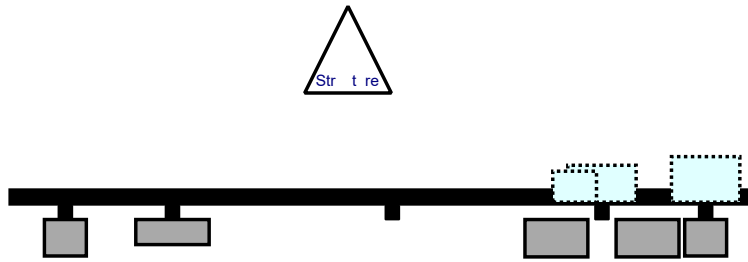


Front View - Looking at Structure

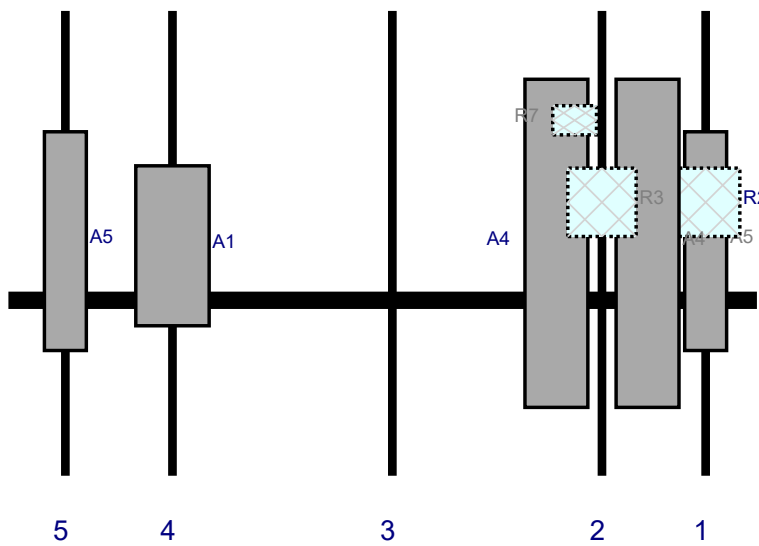


Re #	Model	Height (i)	Width (i)	H Dist Fr L.	Pipe #	Pipe Pos V	A t Pos	C. A t Fr T.	A t H O	St t s	V lid tio
A6	DB846H80E-SX	72	6.5	154.25	1		Fro t	51	0	Ret i ed	07/30/2022
R2	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	154.25	1		Behi d	42	0	Ret i ed	07/30/2022
A4	JAHH-65B-R3B	72	13.8	129	2		Fro t	51	10	Ret i ed	07/30/2022
A4	JAHH-65B-R3B	72	13.8	129	2		Fro t	51	-10	Ret i ed	07/30/2022
R3	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	129	2		Behi d	42	0	Ret i ed	07/30/2022
R7	CBC78T-DS-43-2X	6.4	9.6	129	2		Behi d	24	-6	Ret i ed	07/30/2022
A9	KA-6030	10.6	3.2	129	2		Behi d	78	-4	Added	
A9	KA-6030	10.6	3.2	129	2		Behi d	78	4	Added	
A1	MT6407-77A	35.1	16.1	35	4		Fro t	51.54	0	Ret i ed	07/30/2022
A6	DB846H80E-SX	72	6.5	10.5	5		Fro t	51	0	Ret i ed	07/30/2022

Plan View



Front View - Looking at Structure



Re #	Model	Height (i)	Width (i)	H Dist Fr L.	Pipe #	Pipe Pos V	A t Pos	C. A t Fr T.	A t H O	St t s	V lid tio
A5	APL866513	48	9.2	153	1		Fro t	50.52	0	Ret i ed	07/30/2022
R2	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	153	1		Behi d	42	0	Ret i ed	07/30/2022
A4	JAHH-65B-R3B	72	13.8	130.25	2		Fro t	51	10	Ret i ed	07/30/2022
A4	JAHH-65B-R3B	72	13.8	130.25	2		Fro t	51	-10	Ret i ed	07/30/2022
R3	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	130.25	2		Behi d	42	0	Ret i ed	07/30/2022
R7	CBC78T-DS-43-2X	6.4	9.6	130.25	2		Behi d	24	-6	Ret i ed	07/30/2022
A1	MT6407-77A	35.1	16.1	36	4		Fro t	51.54	0	Ret i ed	07/30/2022
A5	APL866513	48	9.2	12.5	5		Fro t	50.52	0	Ret i ed	07/30/2022



MOUNT MODIFICATION DRAWINGS
EXISTING 13.69' PLATFORM

TOWER OWNER: AMERICAN TOWER CORPORATION
TOWER OWNER SITE NUMBER: 411257

CARRIER SITE NAME: PORTLAND S CT
CARRIER SITE NUMBER: 5000392762
FUZE ID: 17123764

191 MIDDLE HADDAM ROAD
PORTLAND, CT 06480
MIDDLESEX COUNTY

LATITUDE: 41.56225000° N
LONGITUDE: 72.57377800° W



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SCALE: AS SHOWN JOB NUMBER: 23777185

REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
0	08/08/23	ISSUED FOR CONSTRUCTION	GA	DK

COLLIERS ENGINEERING & DESIGN CT, P.C.
C.T. JPC-0000131

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

SITE NAME:

PORTLAND S CT
5000392762
191 MIDDLE HADDAM ROAD
PORTLAND, CT 06480
MIDDLESEX COUNTY

STAMFORD
1055 Washington Boulevard
Stamford, CT 06901
Phone: 203.324.0800
COLLIERS ENGINEERING & DESIGN CT, P.C.
DOING BUSINESS AS MASER CONSULTING

SHEET TITLE:
TITLE SHEET

SHEET NUMBER:
ST-1

DESIGN CRITERIA
WIND LOADS BASIC WIND SPEED (3 SECOND GUST), V = 120 MPH EXPOSURE CATEGORY C TOPOGRAPHIC CATEGORY: 1 TOPOGRAPHIC CONSIDERED: N/A TOPOGRAPHIC METHOD: N/A MEAN BASE ELEVATION (AMSL) = 250.62'
ICE LOADS ICE WIND SPEED (3 SECOND GUST), V = 50 MPH ICE THICKNESS = 1.00 IN
SEISMIC LOADS SEISMIC DESIGN CATEGORY B SHORT TERM MCER GROUND MOTION, S _s = .208 LONG TERM MCER GROUND MOTION, S _l = .056

PROJECT INFORMATION
APPLICANT/LESSEE COMPANY: VERIZON WIRELESS CLIENT REPRESENTATIVE COMPANY: VERIZON WIRELESS PROJECT MANAGER COMPANY: COLLIERS ENGINEERING & DESIGN CONTACT: PETER ALBANO PHONE: 856.797.0412 E-MAIL: PETER.ALBANO@COLLIERSENG.COM
CONTRACTOR PMI REQUIREMENTS PMI LOCATION: HTTPS://PMI.VZWSMART.COM SMART TOOL PROJECT #: 10208169 VZW MDG #: 5000392762 ANALYSIS DATE: 8/8/2023 PMI REQUIREMENTS EMBEDDED WITHIN MOUNT MODIFICATION REPORT

SHEET INDEX
SHEET DESCRIPTION
ST-1 TITLE SHEET
SBOM-1 BILL OF MATERIALS
SGN-1 GENERAL NOTES
SCF-1 CLIMBING FACILITY DETAIL
SS-1 MODIFICATION DETAILS
SS-2 MOUNT PHOTOS
SPECIFICATION SHEETS

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BILL OF MATERIALS

SECTION 1 - VZWSMART KITS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)
1	VZWSMART	VZWSMART-PLK5	KICKER KIT	CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET SGN-1.	291	291
1		VZWSMART-PLK7	MONOPOLE COLLAR MOUNT ASSEMBLY		150	150

SECTION 2 - OTHER REQUIRED PARTS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)

SECTION 3 - REQUIRED SAFETY CLIMB PARTS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS.)	WEIGHT (LBS.)
1	PERFECT VISION	PV-SCRB-RM-U	ROUTING BRACKET	OR EOR APPROVED EQUIVALENT	-	-
1	PERFECT VISION	PV-CMX-CG-BO	WIRE ROPE GUIDE	OR EOR APPROVED EQUIVALENT	-	-
TOTAL:						441

NOTES:

- THE MANUFACTURERS LISTED ARE THE APPROVED VENDORS FOR THE VZW MOUNT KITS. EACH MANUFACTURER WILL BE AWARE OF WHICH KITS HAVE BEEN THROUGH THE VZW APPROVAL PROCESS AND THEY ARE IN TURN APPROVED TO SELL. PLEASE NOTE THAT THE MATERIAL UTILIZED ON THE MOUNT MODIFICATIONS WILL BE REVIEWED AS A PART OF THE DESKTOP PMI COMPLETED BY THE SMART TOOL VENDOR. IT WILL BE REQUIRED THAT THE VZW KITS SPECIFIED ARE UTILIZED IN THE MODIFICATIONS.
- ALL MATERIALS REQUIRED FOR THE DESIGNED MODIFICATIONS BUT NOT LISTED IN THIS SHEET ARE ASSUMED TO BE PROVIDED BY THE CONTRACTOR.

VZWSMART KITS - APPROVED VENDORS

COMMSCOPE	
CONTACT	SALVADOR ANGUIANO
PHONE	(817) 304-7492
EMAIL	SALVADOR.ANGUIANO@COMMSCOPE.COM
WEBSITE	WWW.COMMSCOPE.COM
METROSITE FABRICATORS, LLC	
CONTACT	KENT RAMEY
PHONE	(706) 335-7045 (O), (706) 982-9788 (M)
EMAIL	KENT@METROSITELLC.COM
WEBSITE	METROSITEFABRICATORS.COM

PERFECTVISION	
CONTACT	WIRELESS SALES
PHONE	(844) 887-6723
EMAIL	WWW.PERFECT-VISION.COM
WEBSITE	WIRELESSSALES@PERFECT-VISION.COM
SABRE INDUSTRIES, INC.	
CONTACT	ANGIE WELCH
PHONE	(866) 428-6937
EMAIL	AKWELCH@SABREINDUSTRIES.COM
WEBSITE	WWW.SABRESITESOLUTIONS.COM

SITE PRO 1	
CONTACT	PAULA BOSWELL
PHONE	(972) 236-9843
EMAIL	PAULA.BOSWELL@VALMONT.COM
WEBSITE	WWW.SITEPRO1.COM
NEWAVE	
CONTACT	NEWAVE SALES TEAM
PHONE	(971) 239-4762
EMAIL	SALES@NEWAVETC.COM
WEBSITE	WWW.NEWAVETC.COM

BETTER METAL, LLC	
CONTACT	DAVID STANSBERRY
PHONE	(615) 535-0990 (O), (615) 631-2520 (M)
EMAIL	DLS@BETTERMETAL.COM
WEBSITE	WWW.BETTERMETAL.COM



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REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY	

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BILL OF MATERIALS

SHEET NUMBER: **SBOM-1**

GENERAL NOTES

- THESE MODIFICATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE GOVERNING PROVISIONS OF THE TELECOMMUNICATIONS INDUSTRY STANDARD TIA-222-H. MATERIALS AND SERVICES PROVIDED BY THE CONTRACTOR SHALL CONFORM TO THE ABOVE MENTIONED CODES.
- CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT DAMAGE TO EXISTING STRUCTURES. ANY DAMAGE TO EXISTING STRUCTURES AS A RESULT OF THE CONTRACTOR'S WORK OR FROM DAMAGE DUE TO OTHER CAUSES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS BEFORE BEGINNING WORK, ORDERING MATERIAL, AND PREPARING OF SHOP DRAWINGS. ANY DISCREPANCIES BETWEEN FIELD CONDITIONS AND THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER. IF THE CONTRACTOR DISCOVERS ANY EXISTING CONDITIONS THAT ARE NOT REPRESENTED ON THESE DRAWINGS, OR ANY CONDITIONS THAT WOULD INTERFERE WITH THE INSTALLATION OF THE MODIFICATIONS, NOTIFY THE ENGINEER IMMEDIATELY.
- IT IS ASSUMED THAT ANY STRUCTURAL MODIFICATION WORK SPECIFIED ON THESE PLANS WILL BE ACCOMPLISHED BY KNOWLEDGEABLE WORKMEN WITH TOWER CONSTRUCTION EXPERIENCE.
- THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION METHODS, MEANS, TECHNIQUES, SEQUENCES, AND PROCEDURES.
- ALL CONSTRUCTION MEANS AND METHODS; INCLUDING BUT NOT LIMITED TO, ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THE WORK CONTAINED HEREIN AND SHALL MEET ANSI/TIA-322 (LATEST EDITION), OSHA, AND GENERAL INDUSTRY STANDARDS. ALL RIGGING PLANS SHALL ADHERE TO ANSI/TIA-322 (LATEST EDITION) INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PROGRAMS IN ACCORDANCE WITH APPLICABLE SAFETY CODES.
- WORK SHALL ONLY BE PERFORMED DURING CALM DRY DAYS (WINDS LESS THAN 30-MPH). THE STRUCTURE SHOWN ON THE DRAWINGS IS STRUCTURALLY SOUND ONLY IN THE COMPLETED FORM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STRENGTH AND STABILITY OF THE STRUCTURE DURING ERECTION. CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT, SHORING, BRACING AND ANY OTHER STRUCTURAL SYSTEMS AS REQUIRED TO RESIST ALL FORCES THAT MAY OCCUR DURING HANDLING AND ERECTION UNTIL THE STRUCTURE IS FULLY COMPLETED. TEMPORARY SUPPORTS, BRACING AND OTHER STRUCTURAL SYSTEMS REQUIRED DURING CONSTRUCTION SHALL REMAIN THE CONTRACTOR'S PROPERTY AFTER THEIR USE.
- ALL INSTALLATIONS PERFORMED ON THIS STRUCTURE SHALL BE COMPLETED IN ACCORDANCE WITH THE GOVERNING PROVISIONS OF THE STANDARD FOR INSTALLATION, ALTERATION AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS, ANSI/TIA-322.
- CONTRACTOR SHALL SECURE SITE BACK TO EXISTING CONDITION UNDER SUPERVISION OF OWNER. ALL FENCE, STONE, GEOFABRIC, GROUNDING, AND SURROUNDING GRADE SHALL BE REPLACED AND REPAIRED AS REQUIRED TO ACHIEVE OWNER APPROVAL. POSITIVE DRAINAGE AWAY FROM TOWER SITE SHALL BE MAINTAINED.
- CONNECTIONS BETWEEN ITEMS SUPPORTED BY THE STRUCTURE AND THE STRUCTURE NOT SPECIFICALLY DETAILED IN THE CONTRACT DOCUMENTS ARE THE RESPONSIBILITY OF THE CONTRACTOR. SUCH CONNECTIONS SHALL BE DESIGNED, COORDINATED AND INSPECTED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE OF THE PROJECT. SUBMIT SIGNED AND SEALED CALCULATIONS DURING SHOP DRAWING REVIEW.
- DO NOT SCALE DRAWINGS.
- DO NOT USE THESE DRAWINGS FOR ANY OTHER SITE.
- ALL MATERIAL UTILIZED FOR THIS PROJECT MUST BE NEW AND FREE OF ANY DEFECTS. ANY MATERIAL SUBSTITUTIONS, INCLUDING BUT NOT LIMITED TO ALTERED SIZE AND/OR STRENGTHS, MUST BE APPROVED BY THE OWNER AND ENGINEER IN WRITING.
- THE MOUNT UNDER NO CIRCUMSTANCES SHOULD BE USED AS A TIE OFF POINT.

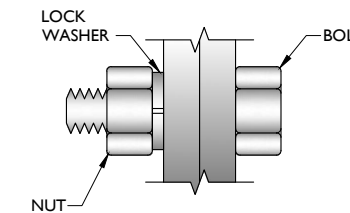
STRUCTURAL STEEL

- DESIGN, DETAILING, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING PUBLICATIONS EXCEPT AS SPECIFICALLY INDICATED IN THE CONTRACT DOCUMENTS.
 - AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) MANUAL OF STEEL CONSTRUCTION (15TH EDITION)
 - SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS
 - AISC CODE OF STANDARD PRACTICE
- STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING UNLESS OTHERWISE SHOWN:

CHANNELS, ANGLES, PLATES, ETC.	ASTM A36 (GR 36)
STEEL PIPE	ASTM A53 (GR 35)
BOLTS	ASTM A325
NUTS	ASTM A563
LOCK WASHERS	LOCKING STRUCTURAL GRADE
- ALL SUBSTITUTIONS PROPOSED BY THE CONTRACTOR SHALL BE APPROVED IN WRITING BY THE ENGINEER. CONTRACTOR SHALL PROVIDE DOCUMENTATION TO ENGINEER FOR VERIFYING THE SUBSTITUTE IS SUITABLE FOR USE AND MEETS ORIGINAL DESIGN CRITERIA. DIFFERENCES FROM THE ORIGINAL DESIGN, INCLUDING MAINTENANCE, REPAIR AND REPLACEMENT, SHALL BE NOTED. ESTIMATES OF COSTS/CREDITS ASSOCIATED WITH THE SUBSTITUTION (INCLUDING RE-DESIGN COSTS AND COSTS TO SUB-CONTRACTORS) SHALL BE PROVIDED TO THE ENGINEER. CONTRACTOR SHALL PROVIDE ADDITIONAL DOCUMENTATION AND/OR SPECIFICATIONS TO THE ENGINEER AS REQUESTED.
- PROVIDE STRUCTURAL STEEL SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
 - SUBMIT SHOP DRAWINGS TO
PETER.ALBANO@COLLIERSENG.COM
 - PROVIDE COLLIERS ENGINEERING & DESIGN PROJECT # AND COLLIERS ENGINEERING & DESIGN PROJECT ENGINEER CONTACT IN THE BODY OF THE EMAIL.
- DRILL NO HOLES IN ANY NEW OR EXISTING STRUCTURAL STEEL MEMBERS OTHER THAN THOSE SHOWN ON STRUCTURAL DRAWINGS WITHOUT THE APPROVAL OF THE ENGINEER OF RECORD.
- GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.
- ALL NEW STEEL SHALL BE HOT BE DIPPED GALVANIZED FOR FULL WEATHER PROTECTION. IN ADDITION ALL NEW STEEL SHALL BE PAINTED TO MATCH EXISTING STEEL. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROTECT STEEL BY ANY OTHER MEANS.
- ALL BOLT ASSEMBLIES FOR STRUCTURAL MEMBERS REPRESENTED IN THIS DRAWING REQUIRE LOCKING DEVICES TO BE INSTALLED IN ACCORDANCE WITH TIA-222-H SECTION 4.9.2 REQUIREMENTS.
- WHERE CONNECTIONS ARE NOT FULLY DETAILED ON THESE DRAWINGS, FABRICATOR SHALL DESIGN CONNECTIONS TO RESIST LOADS AND FORCES WHERE SHOWN ON DRAWINGS AND AS OUTLINED IN SPECIFICATIONS.
- FOR MEMBERS BEING REPLACED, PROVIDE NEW BOLTS AND MATCH EXISTING SIZE AND GRADE. MAINTAIN AISC REQUIREMENTS FOR MINIMUM BOLT DISTANCE AND SPACING.
- ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH SUCH THAT THE END OF THE BOLT IS AT LEAST FLUSH WITH THE FACE OF THE NUT. IT IS NOT PERMITTED FOR THE BOLT END TO BE BELOW THE FACE OF THE NUT AFTER TIGHTENING IS COMPLETED.
- GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.
- ALL NEW STEEL SHALL BE HOT BE DIPPED GALVANIZED FOR FULL WEATHER PROTECTION. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROTECT STEEL BY ANY OTHER MEANS.
- ALL EXISTING PAINTED/GALVANIZED SURFACES DAMAGED DURING REHAB INCLUDING AREAS UNDER STIFFENER PLATES SHALL BE WIRE BRUSHED CLEAN, REPAIRED BY COLD GALVANIZING (ZINC COTE, OR EOR APPROVED EQUAL), AND REPAINTED TO MATCH THE EXISTING FINISH (IF APPLICABLE).
- ALL HOLES IN STEEL MEMBERS SHALL BE SIZED 1/16" LARGER THAN THE BOLT DIAMETER. STANDARD HOLES SHALL BE USED UNLESS NOTED OTHERWISE.

BOLT SCHEDULE (IN.)				
BOLT DIAMETER	STANDARD HOLE	SHORT SLOT	MIN. EDGE DISTANCE	SPACING
1/2	9/16	9/16 x 1 1/16	7/8	1 1/2
5/8	1 1/16	1 1/16 x 7/8	1 1/8	1 7/8
3/4	1 3/16	1 3/16 x 1	1 1/4	2 1/4
7/8	1 5/16	1 5/16 x 1 1/8	1 1/2	2 5/8
1	1 7/16	1 7/16 x 1 5/16	1 3/4	3

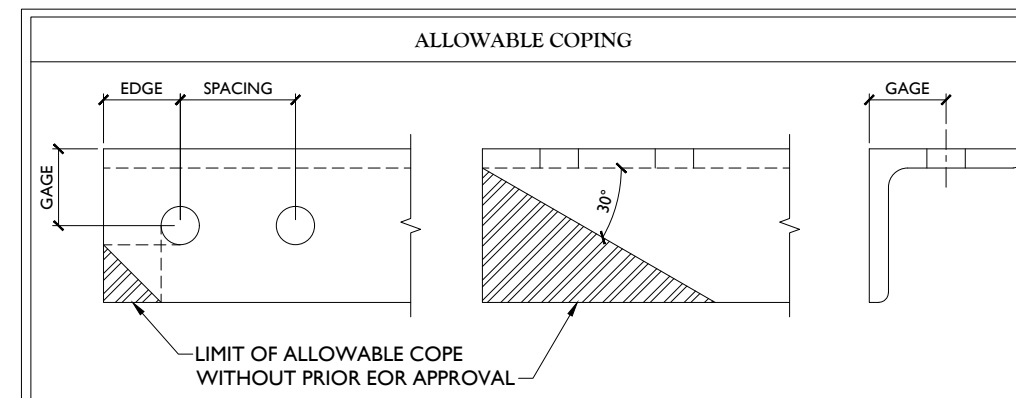
WORKABLE GAGES (IN.)	
LEG	GAGE
4	2 1/2
3 1/2	2
3	1 3/4
2 1/2	1 3/8
2	1 1/8



TYP. BOLT ASSEMBLY

NOTES:

- ALL DIMENSIONS REPRESENTED IN THE ABOVE TABLES ARE AISC MINIMUM REQUIREMENTS. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS IN FIELD AND NOTIFY ENGINEER IF DISTANCES ARE LESS THAN THOSE PROVIDED.
- THE DIMENSIONS PROVIDED ARE MINIMUM REQUIREMENTS. ACTUAL DIMENSIONS OF PROPOSED MEMBERS WITHIN THESE DRAWINGS MAY VARY FROM THE AISC MINIMUM REQUIREMENTS.
- SHORT SLOT HOLES SHALL ONLY BE USED WHEN DEPICTED IN THE DRAWINGS
- MATCH EXISTING GAGES WHEN APPLICABLE, UNLESS MINIMUM EDGE DISTANCES ARE COMPROMISED.



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MIDDLESEX COUNTY

SHEET TITLE:
GENERAL NOTES

SHEET NUMBER:
SGN-I



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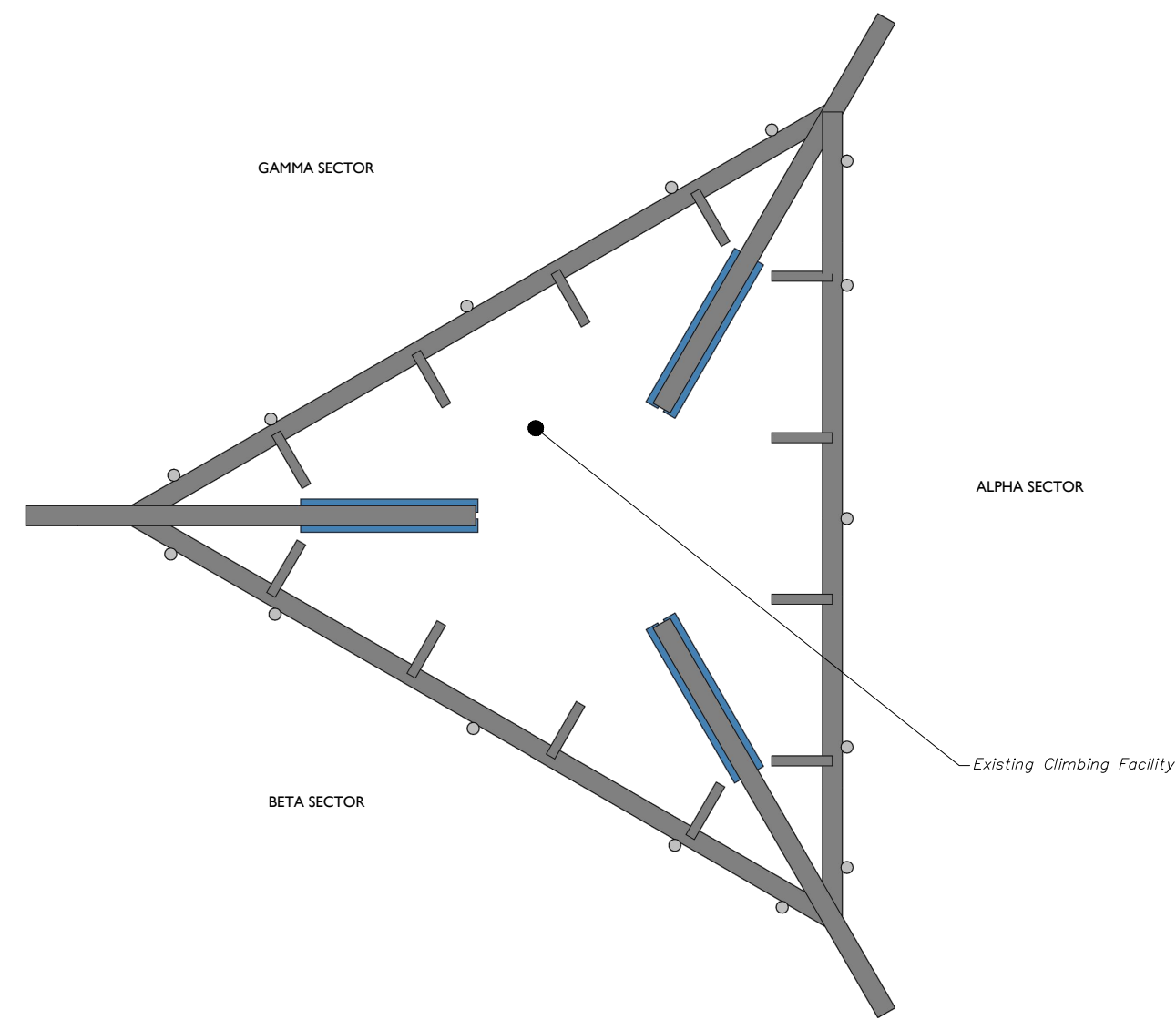
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 STAMFORD
 1055 Washington Boulevard
 Stamford, CT 06901
 Phone: 203.324.0800
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SHEET TITLE:
 CLIMBING FACILITY DETAIL

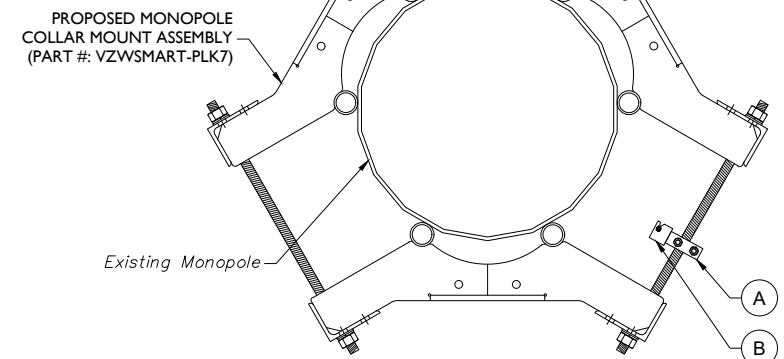
SHEET NUMBER:
 SCF-1



1 CLIMBING FACILITY LOCATION
 SCALE : N.T.S.

STRUCTURAL NOTES:

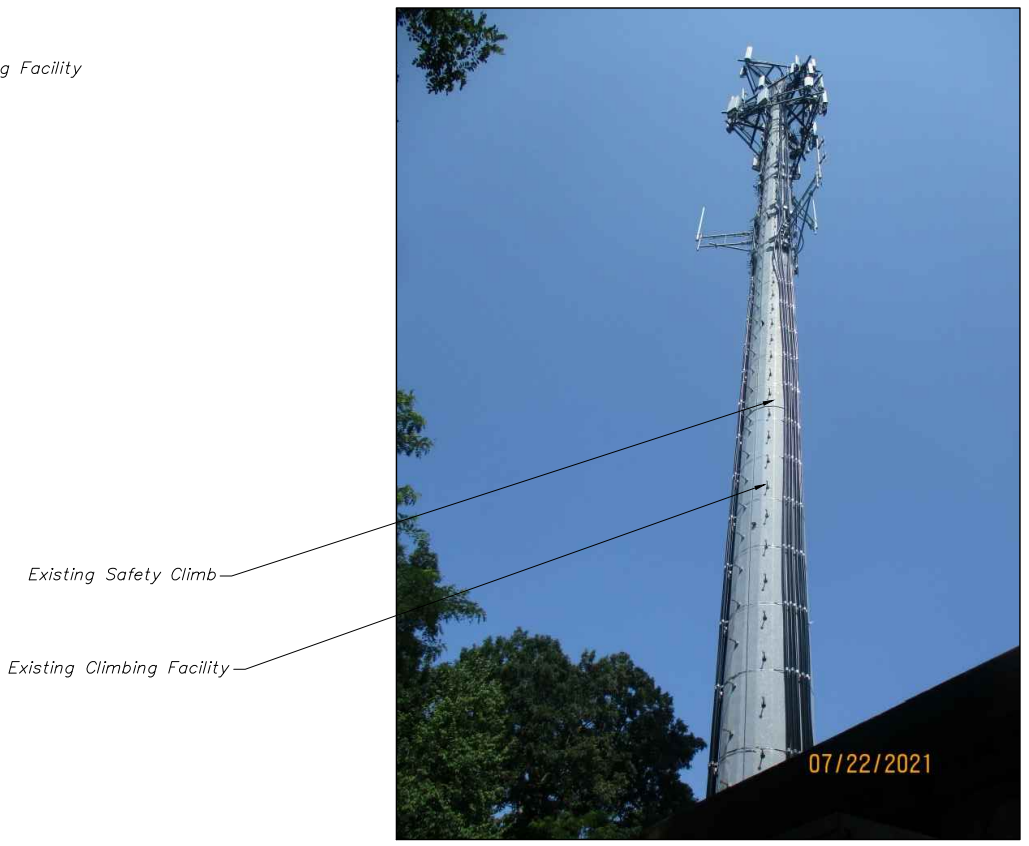
- PER THE MOUNT MAPPING COMPLETED BY RKS DESIGN & ENGINEERING, LLC ON 7/22/2021, THE SAFETY CLIMB AND CLIMBING FACILITIES UP TO THE VERIZON MOUNT ELEVATION (126'-00") ARE IN GOOD CONDITION. COLLIERS ENGINEERING & DESIGN DOES NOT WARRANT THIS INFORMATION.
- INSTALL SHALL NOT CAUSE HARM TO THE STRUCTURE, CLIMBING FACILITY, SAFETY CLIMB, OR ANY SYSTEM INSTALLED ON THE STRUCTURE. TIMELY NOTICE AND DOCUMENTATION SHALL BE PROVIDED BY CONTRACTORS TO THE EOR (OF STRUCTURAL DESIGN) IF AN OBSTRUCTION WAS REQUIRED TO MEET THE RF SYSTEM DESIGN REQUIREMENTS AND PERFORMANCES.



ITEM #	QTY	PART NUMBER	DESCRIPTIONS
A	1	PV-SCRB-RM-U	ROUTING BRACKET (PERFECT VISION OR EOR APPROVED EQ.)
B	1	PV-CMX-CG-BO	WIRE ROPE GUIDE (PERFECT VISION OR EOR APPROVED EQ.)

2 PROPOSED WIRE ROPE GUIDE ATTACHMENT - PLAN VIEW
 SCALE : N.T.S.

NOTE: CONTRACTOR SHALL ENSURE THAT WIRE ROPE GUIDE DOES NOT PUSH THE WIRE ROPE OUTSIDE OF THE VERTICAL PLANE OF THE SAFETY CLIMB. CONTRACT EOR WITH PHOTOS OF SAFETY CLIMB AND COLLAR FOR FURTHER DIRECTION IF NEEDED.



CLIMBING FACILITY PHOTO

LEGEND:

- PROPOSED
- RELOCATED
- EXISTING

MOUNT MODIFICATION SCHEDULE

NO.	ELEVATION	QUANTITY	DESCRIPTION	NOTES
1	126'-00"	1	PROPOSED KICKER KIT (PART #: VZWSMART-PLK5)	CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE 'STRUCTURAL STEEL' NOTES ON SHEET SGN-1. CONNECT OTHER END OF KICKER KIT TO MONOPOLE COLLAR MOUNT ASSEMBLY (PART #: VZWSMART-PLK7). SEE GENERAL NOTE B.

GENERAL NOTES:

- A. CONTRACTOR SHALL VERIFY THAT NEW & EXISTING STEEL IS FREE OF CORROSION. VISIBLE MINOR CORROSION SHALL BE WIRE BRUSHED CLEAN AND TREATED WITH COLD GALVANIZATION. REPORT ANY SIGNIFICANT CORROSION TO EOR
- B. THREADED ROD FROM PROPOSED KITS SHALL BE TRIMMED TO EXTEND NO MORE THAN 3" BEYOND THE LOCK NUT. TREAT ALL CUT ENDS WITH (2) COATS OF COLD GALVANIZATION (ZINC KOTE, OR EOR APPROVED EQUAL).
- C. MOUNT MEMBERS NOT SHOWN FOR CLARITY U.N.O.



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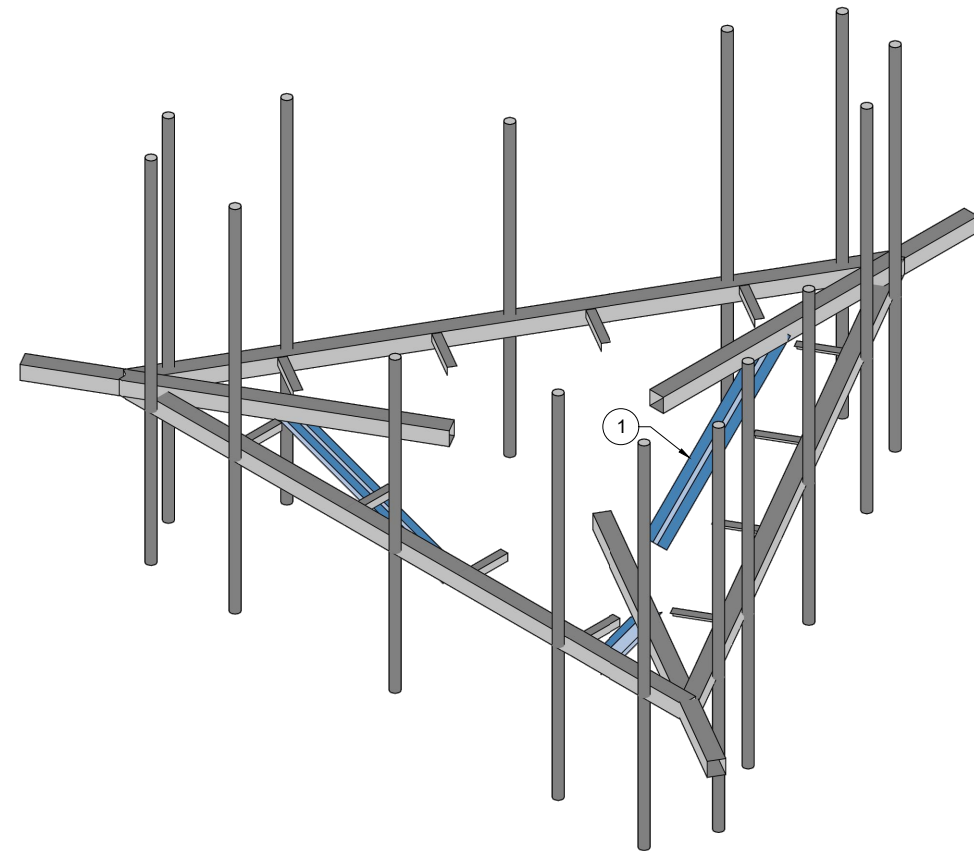
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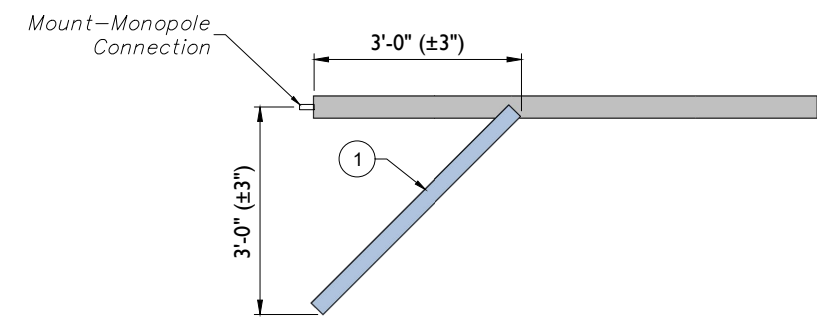
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SHEET TITLE:
MODIFICATION DETAILS

SHEET NUMBER:
SS-1



1 PROPOSED ISOMETRIC VIEW
 SCALE : N.T.S.



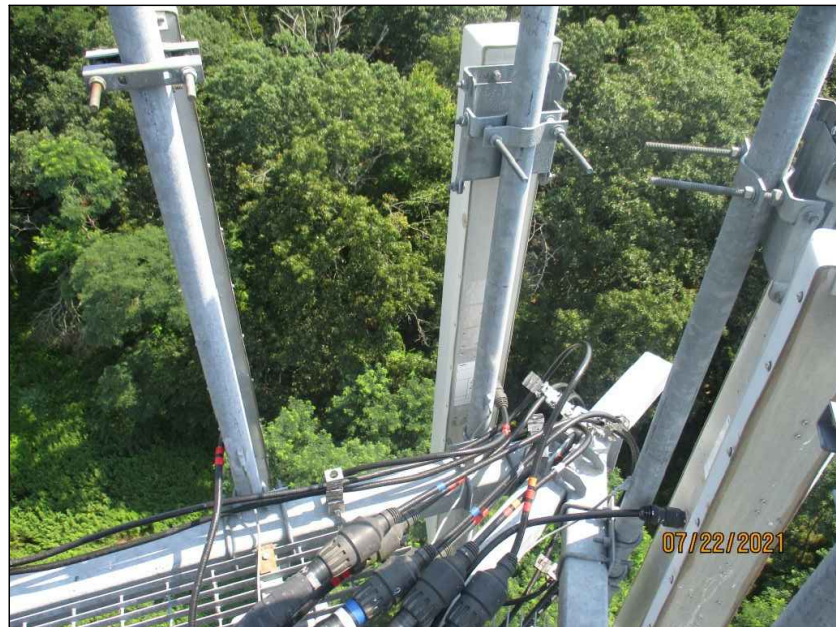
2 PROPOSED SIDE ELEVATION VIEW (TYP. ALL SECTORS)
 SCALE : N.T.S.



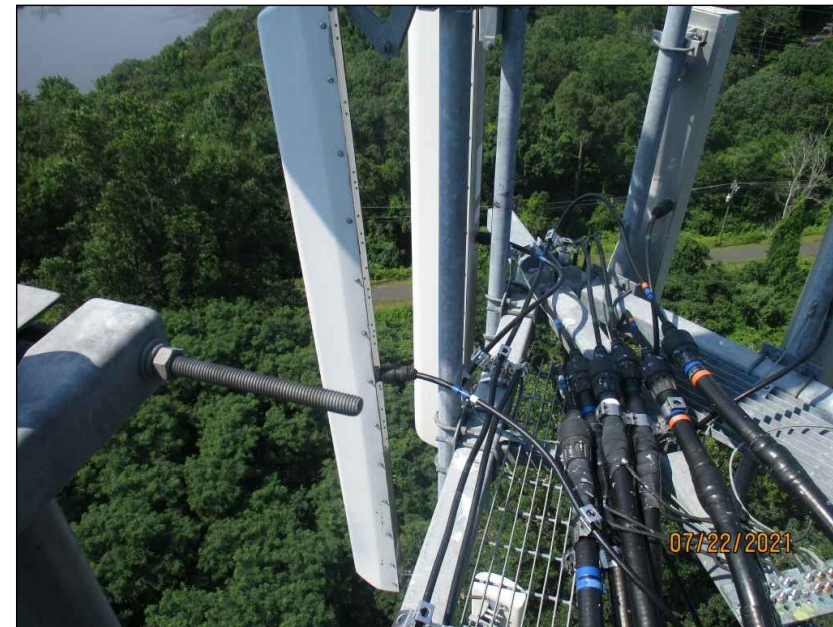
MOUNT PHOTO 1



MOUNT PHOTO 2



MOUNT PHOTO 3



MOUNT PHOTO 4



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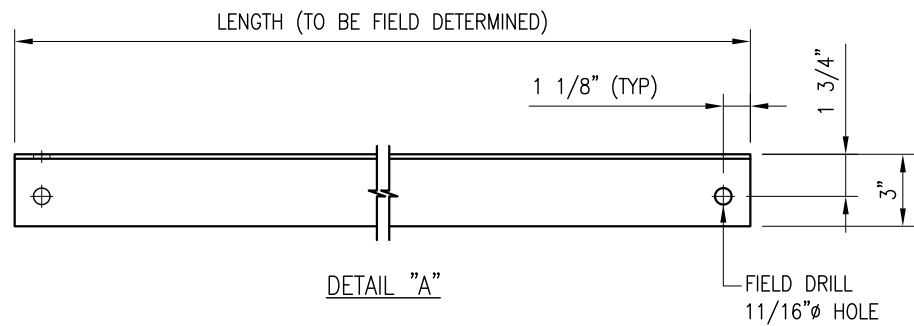
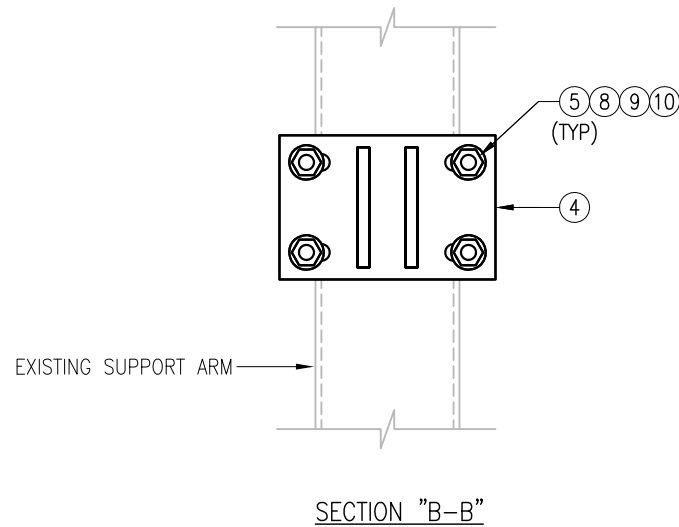
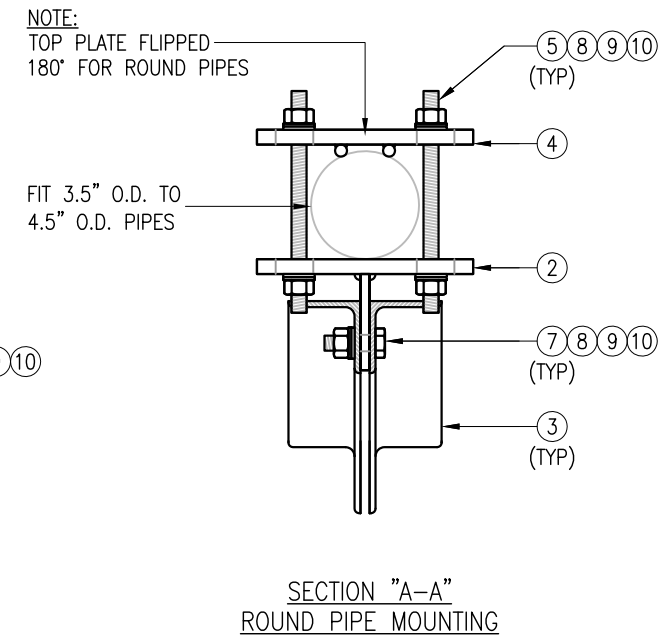
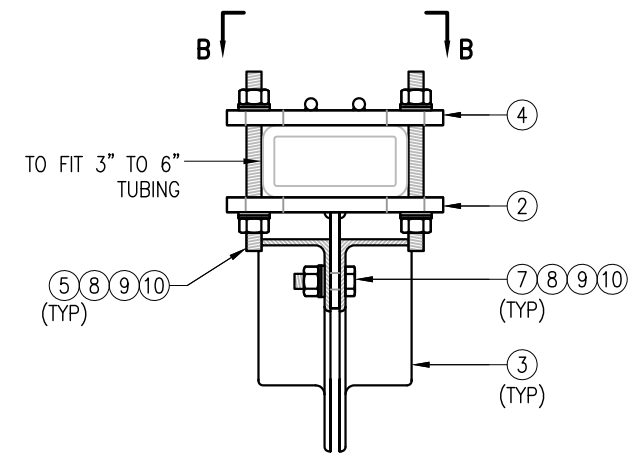
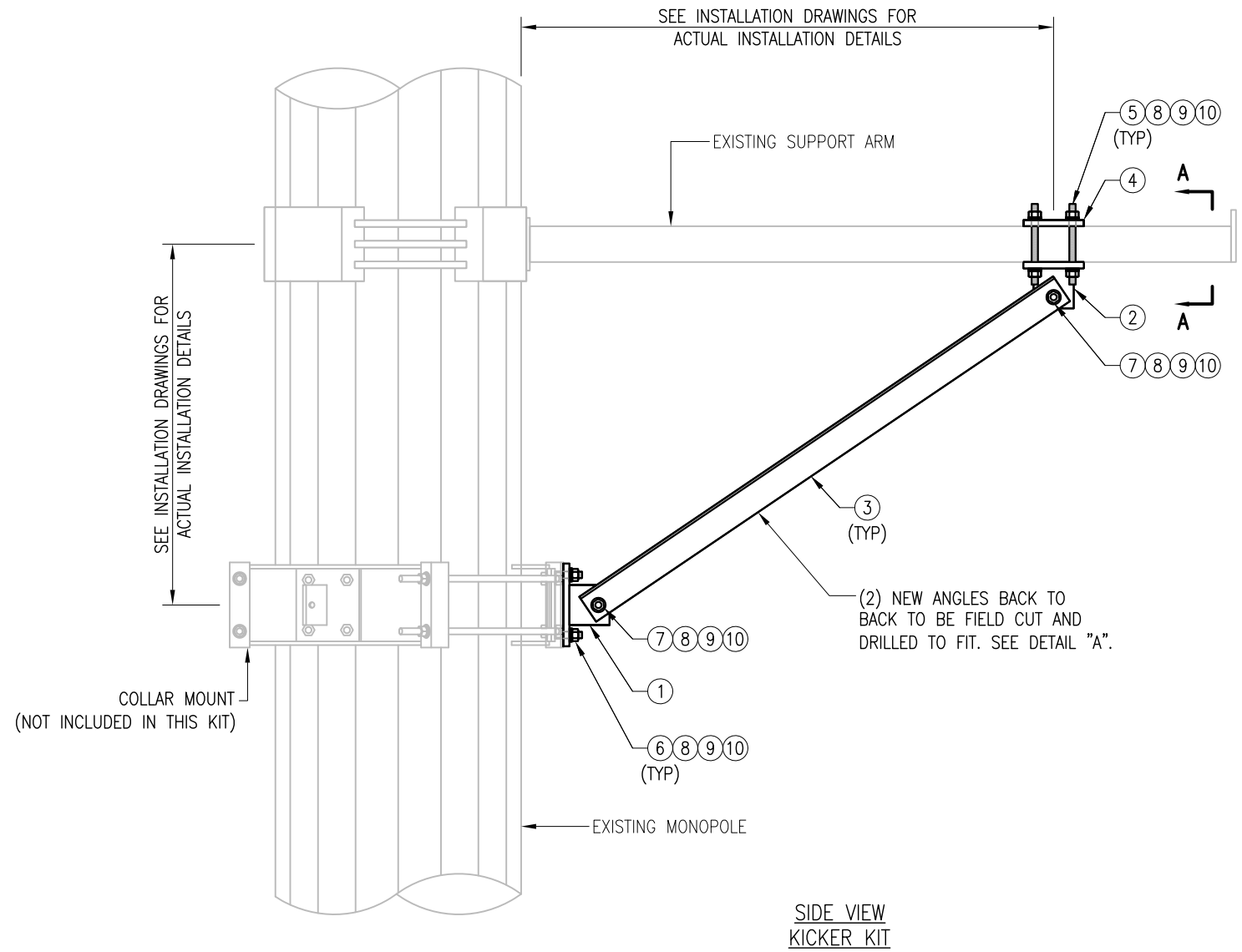
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SHEET TITLE:
 MOUNT PHOTOS

SHEET NUMBER:
 SS-2

NOTE:
THE LOCATION OF KICKER AND EXISTING ANTENNA MOUNT SHOWN ON THE DRAWING IS FOR REPRESENTATION PURPOSE ONLY. SEE INSTALLATION DRAWINGS FOR ACTUAL INSTALLATION OF DETAILS.



VZSMART-PLK5 (KICKER KIT)					
ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	3	BRKW-XXX	BRACKET WELDMENT A36	PLK5-F3	43.8
2	3	BRKW-XXXX	BRACKET WELDMENT A36	PLK5-F2	35.7
3	6	L331875-8	L 3" X 3" X 3/16" X 8'-0" A36	PLK5-F4	182.9
4	3	PL-KI	PL 5/8" X 6" X 9" A36	PLK5-F1	29.0
5	12	---	THREADED ROD 5/8" DIA. X 1'-0" F1554-36 HDG	---	---
6	6	---	BOLT 5/8" X 2" A325	---	---
7	12	---	BOLT 5/8" X 2 1/2" A325	---	---
8	42	FW-625	5/8" HDG USS FLAT WASHER	---	3
9	42	LW-625	5/8" HDG LOCK WASHER	---	1
10	42	NUT-625	5/8" HDG HEX NUT	---	5
GALVANIZED WT					291

NOTES:
1. ALL HOLES ARE 11/16" DIA. U.N.O
2. HOT-DIPPED GALVANIZED PER ASTM A123.
3. FIT UP TO 6" SQ. TUBING OR 4 1/2" O.D. PIPE

VzW
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Vendor

verizon[✓]

FOR REFERENCE ONLY

DRAWN BY: MN CHECKED BY: HMA/KW

REV.	DESCRIPTION	BY	DATE
△	FIRST ISSUE	MN	05/08/20
△			
△			
△			

SHEET TITLE:
VZSMART-PLK5
KICKER KIT

SHEET NUMBER: VZSMART-PLK5
REV #: 0



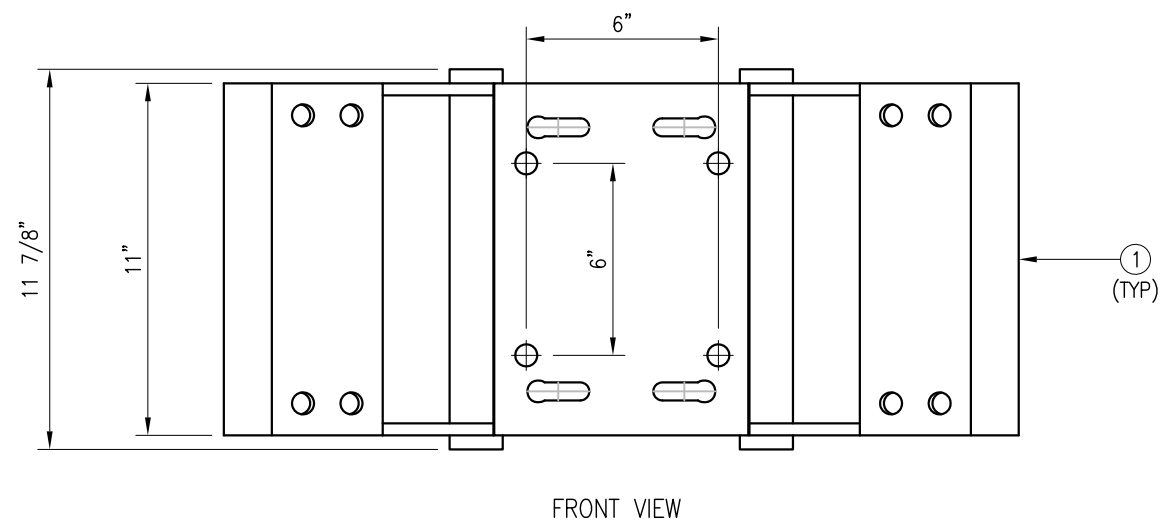
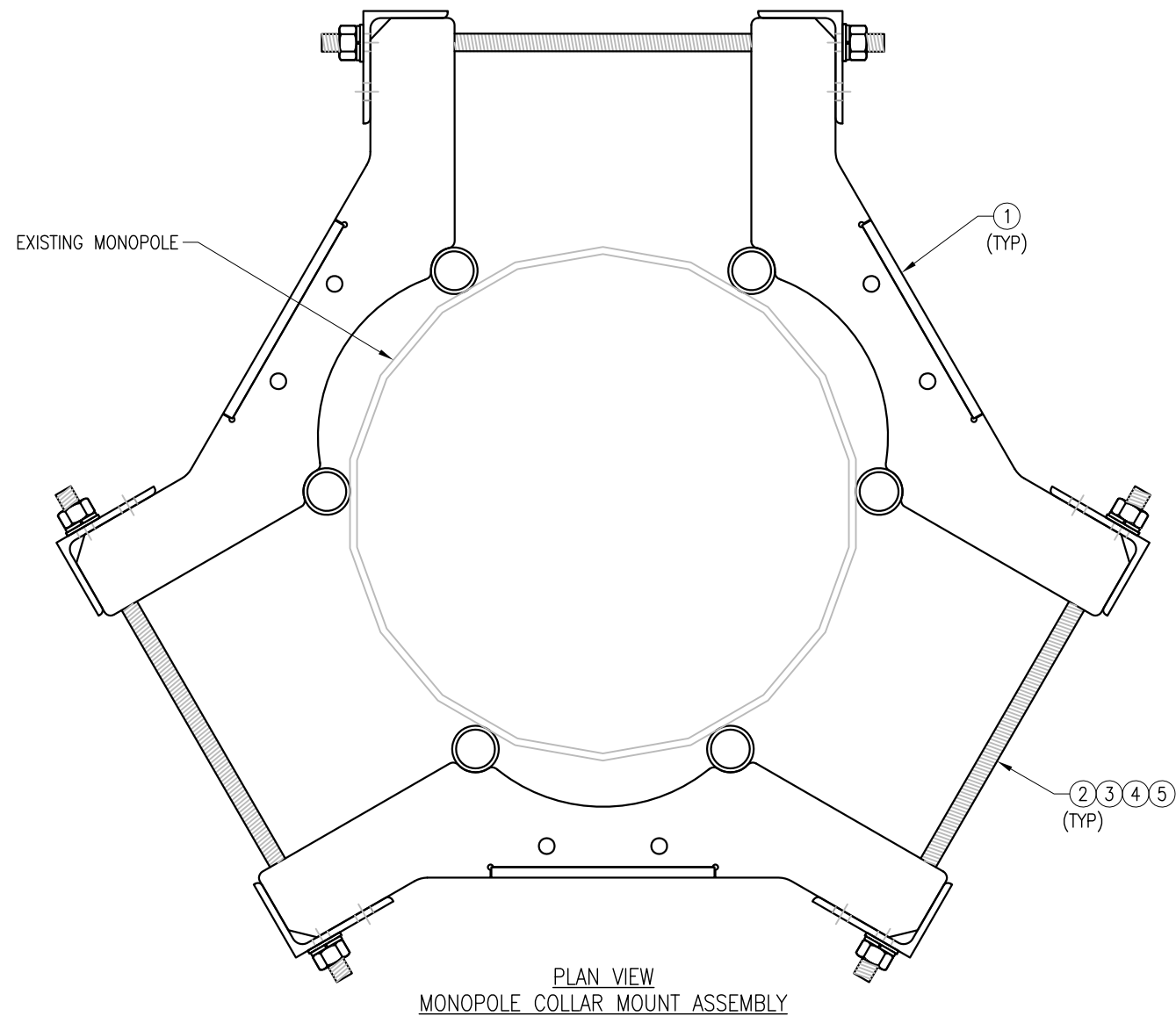
FOR REFERENCE
 ONLY

DRAWN BY: BT CHECKED BY: HMA/KW

REV.	DESCRIPTION	BY	DATE
△	FIRST ISSUE	BT	05/11/20
△			
△			
△			

SHEET TITLE:
 VZSMART-PLK7
 MONOPOLE COLLAR
 MOUNT ASSEMBLY

SHEET NUMBER: VZSMART-PLK7 REV #: 0



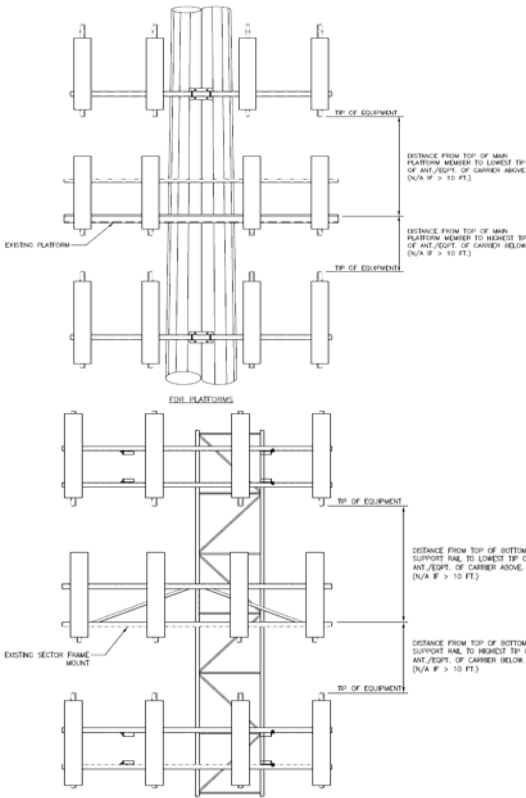
- NOTES:
 1. FIT 12" TO 45" DIA MONOPOLE.
 2. HOT-DIPPED GALVANIZED PER ASTM A123.

VZSMART-PLK7 (MONOPOLE COLLAR MOUNT ASSEMBLY)					
ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	3	CM-1245	COLLAR MOUNT ASSEMBLY	PLK7-F1	147
2	6	---	THREADED ROD 5/8" X 4'-0" A193-B7	---	
3	12	FW-625	5/8" HDG USS FLAT WASHER	---	1
4	12	LW-625	5/8" HDG LOCK WASHER	---	0
5	12	NUT-625	5/8" HDG HEX NUT	---	1
GALVANIZED WT					150

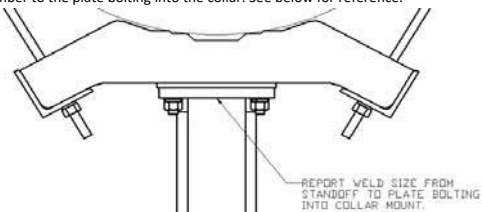


Mount Azimuth (Degree) for Each Sector			Tower Leg Azimuth (Degree) for Each Sector			Sector B								
Sector A:	40.00	Deg	Leg A:		Deg	Ant _{1a}								
Sector B:	160.00	Deg	Leg B:		Deg	Ant _{1b}	UNKNOWN-PANEL	6.25	8.00	72.00	127.954	53.25	7.25	160.00
Sector C:	280.00	Deg	Leg C:		Deg	Ant _{1c}								
Sector D:		Deg	Leg D:		Deg	Ant _{2a}								
Climbing Facility Information						Ant _{2b}	LPA-185080/12CF E-D	4.10	5.90	71.10	128.204	50.25	11.75	70.00
Location:	160.00	Deg	N/A			Ant _{2c}								
Climbing Facility	Corrosion Type:	N/A				Ant _{3a}	BXA-70063-6BF-EDIN	11.00	5.30	68.60	128.183	35.75	11.00	160.00
	Access:	Climbing path was unobstructed.				Ant _{3b}								
	Condition:	Good condition.				Ant _{3c}								

Please insert a photo of the mount centerline measurement here.



For T-Arms/Platforms on monopoles, record the weld size from the main standoff member to the plate bolting into the collar. See below for reference.



Sector C					
Ant _{1a}					
Ant _{1b}	UNKNOWN-PANEL	6.20	8.00	48.00	128.121
Ant _{1c}					
Ant _{2a}					
Ant _{2b}	LPA-185063-8CF E-DII	6.60	5.80	47.20	127.975
Ant _{2c}					
Ant _{3a}					
Ant _{3b}	BXA-70063-6BF-EDIN	11.00	5.30	68.60	127.454
Ant _{3c}					
Ant _{4a}					
Ant _{4b}	LPA-185063-8CF E-DII	6.60	5.80	47.20	127.975
Ant _{4c}					
Ant _{5a}					
Ant _{5b}	UNKNOWN-PANEL	6.20	8.00	48.00	128.121
Ant _{5c}					
Ant on Standoff					
Ant on Standoff					
Ant on Tower					
Ant on Tower					


Sector D					
Ant _{1a}					
Ant _{1b}					
Ant _{1c}					
Ant _{2a}					
Ant _{2b}					
Ant _{2c}					
Ant _{3a}					
Ant _{3b}					
Ant _{3c}					
Ant _{4a}					
Ant _{4b}					
Ant _{4c}					
Ant _{5a}					
Ant _{5b}					
Ant _{5c}					
Ant on Standoff					
Ant on Standoff					
Ant on Tower					
Ant on Tower					

Observed Safety and Structural Issues During the Mount Mapping		
Issue #	Description of Issue	Photo #
1	COAX TOTAL (18): (18) FH 1 5/8	
2		
3		
4		
5		
6		
7		
8		

Observed Obstructions to Tower Lighting System			
If the tower lighting system is being obstructed by the carrier's equipment (for example: a light nested by the antennas), please provide photos and fill in the information below.			Photo #
Description of Obstruction:			
Type of Light:	Photo #	Additional Comments:	
Lighting Technology:	Photo #		
Elevation (AGL) at base of light (Ft.):	Photo #		
Is a service loop available?	Photo #		
Is beacon installed on an extension?	Photo #		

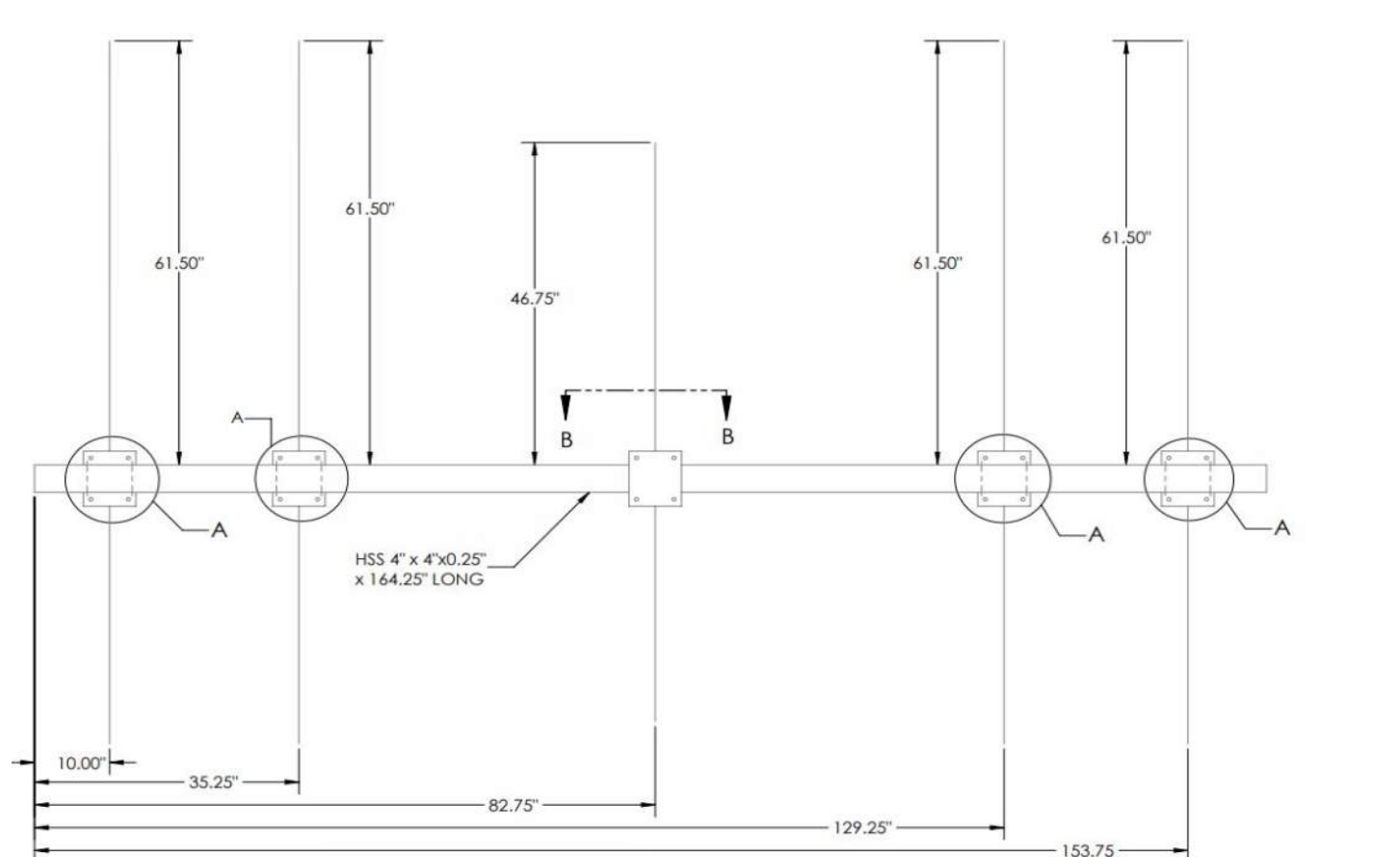
Mapping Notes
<ol style="list-style-type: none"> 1. Please report any visible structural or safety issues observed on the antenna mounts (Damaged members, loose connections, tilting mounts, safety climb issues, etc.) 2. If the thickness of the existing pipes or tubing can't be obtained from a general tool (such as Caliper), please use an ultrasonic measurement tool (thickness gauge) to measure the thickness. 3. Please create all required detail sketches of the mounts and insert them into the "Sketches" tab. 4. Please measure and enter the bolt sizes and types under the Members Box in the spreadsheet of the mount type. 5. Take and label the photos of the tower, mounts, connections, antennas and all measurements. Minimum 50 photos are required. 6. Please measure and report the size and length of all existing antenna mounting pipes. 7. Please measure and report the antenna information for all sectors. 8. Don't delete or rearrange any sheet or contents of any sheet from this mapping form.

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

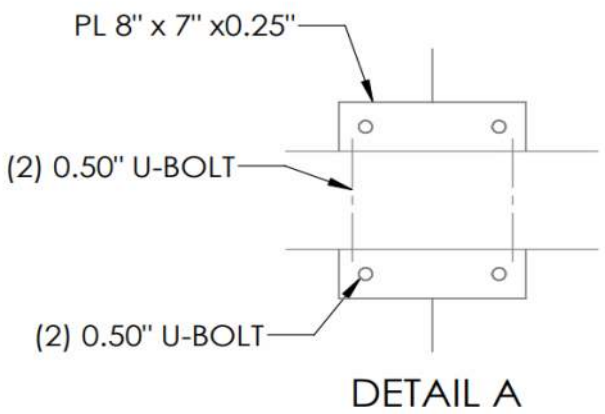
	Antenna Mount Mapping Form (PATENT PENDING)			FCC #
				UNKNOWN
Tower Owner:	ATC	Mapping Date:	7/22/2021	
Site Name:	ATC : MIDDLE HADDAM ROAD CROWN CT; VZW : PORTLAND	Tower Type:	Monopole	
Site Number or ID:	ATC : 411257	Tower Height (Ft.):	UNKNOWN	
Mapping Contractor:	RKS Design & Engineering, LLC	Mount Elevation (Ft.):	127.1	

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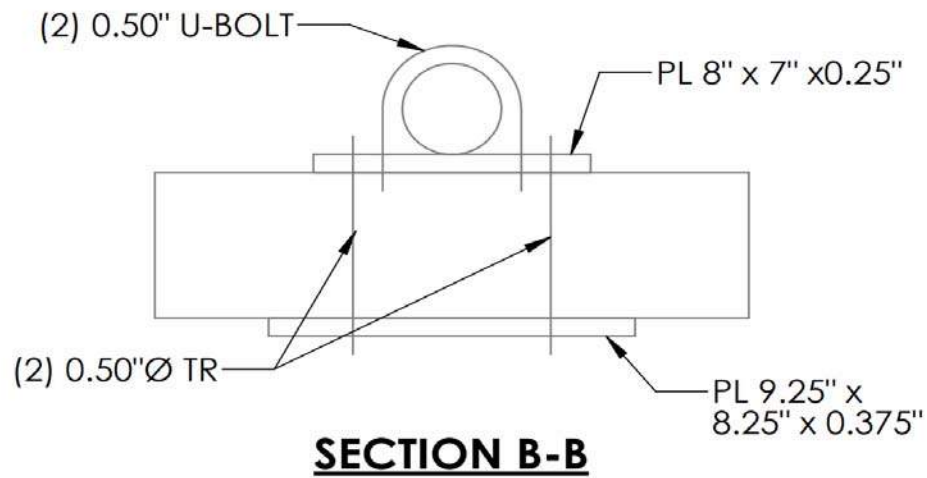
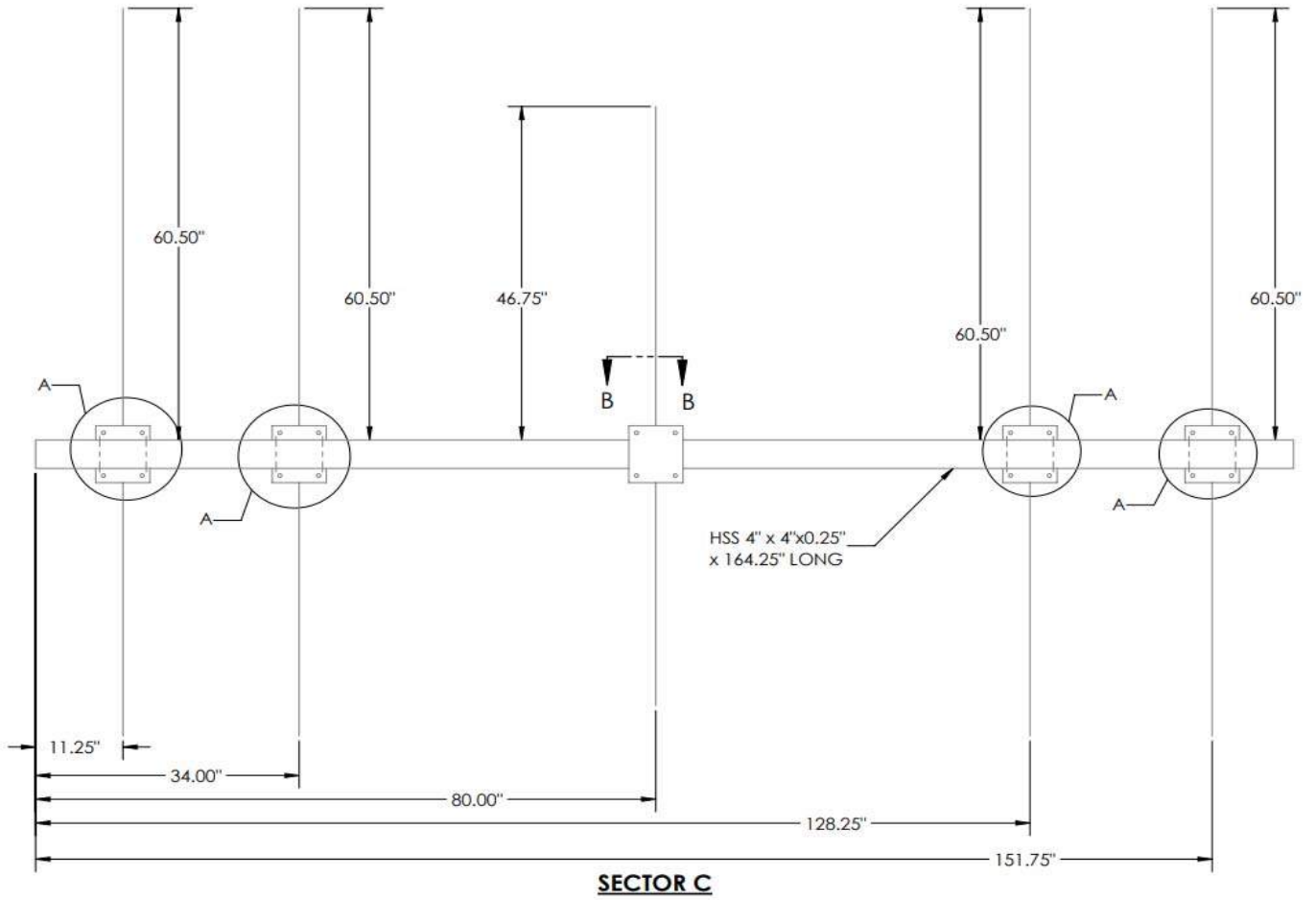
Please Insert Sketches of the Antenna Mount



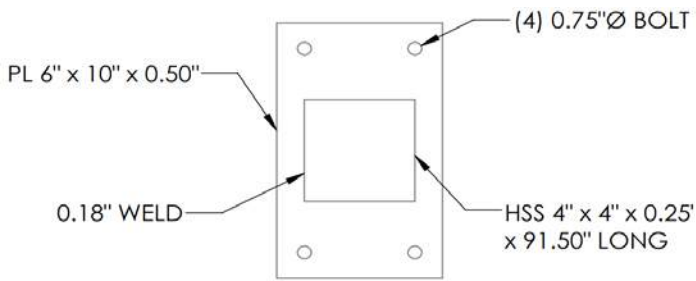
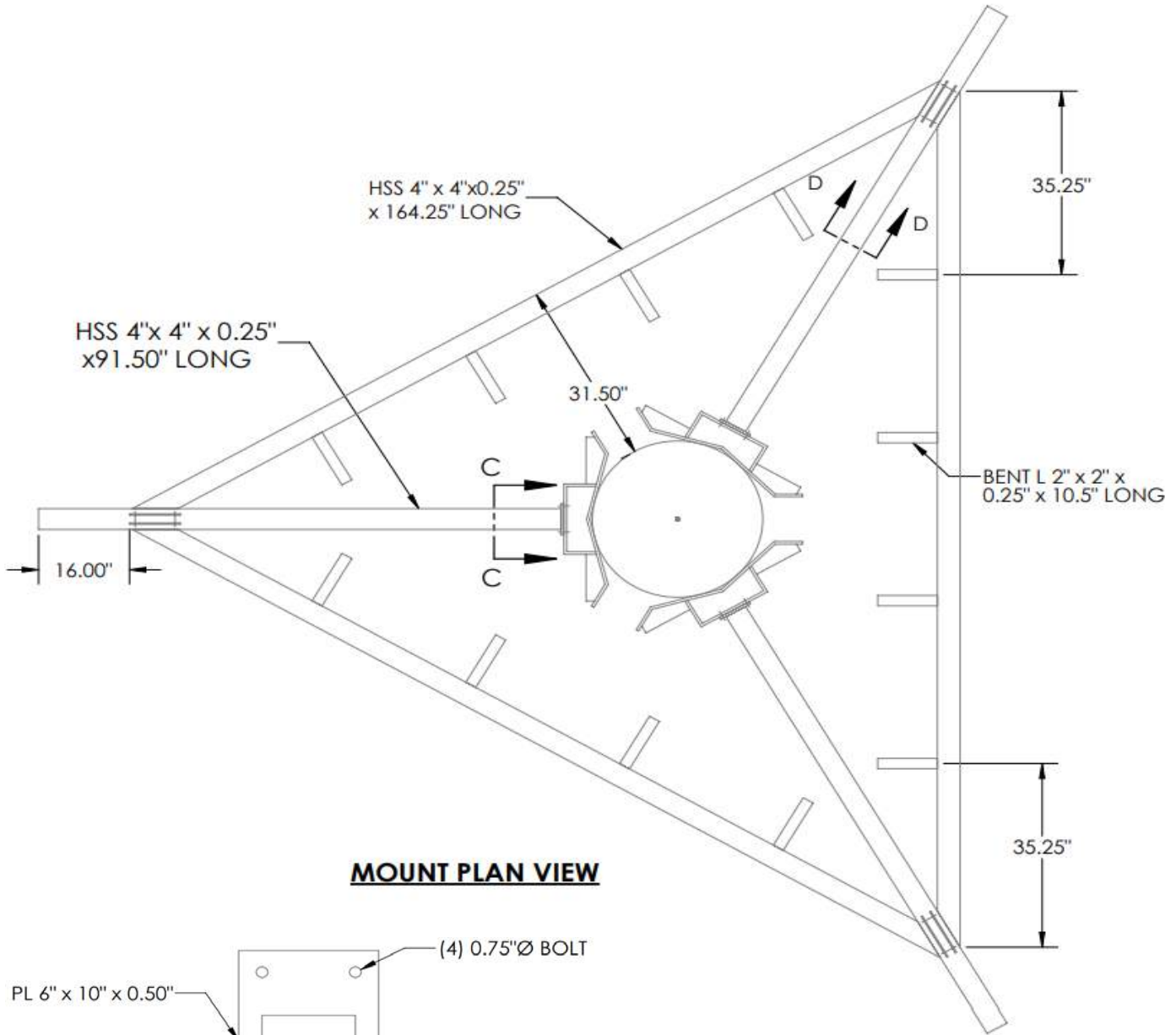
SECTOR A & B



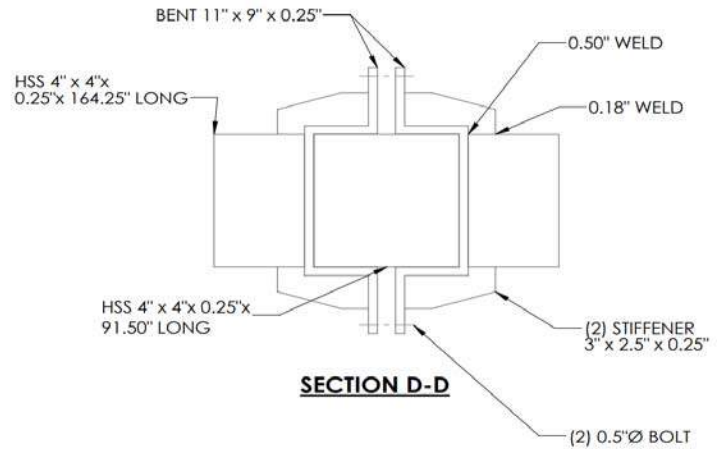
Please Insert Sketches of the Antenna Mount, cont'd



Please Insert Sketches of the Antenna Mount, cont'd

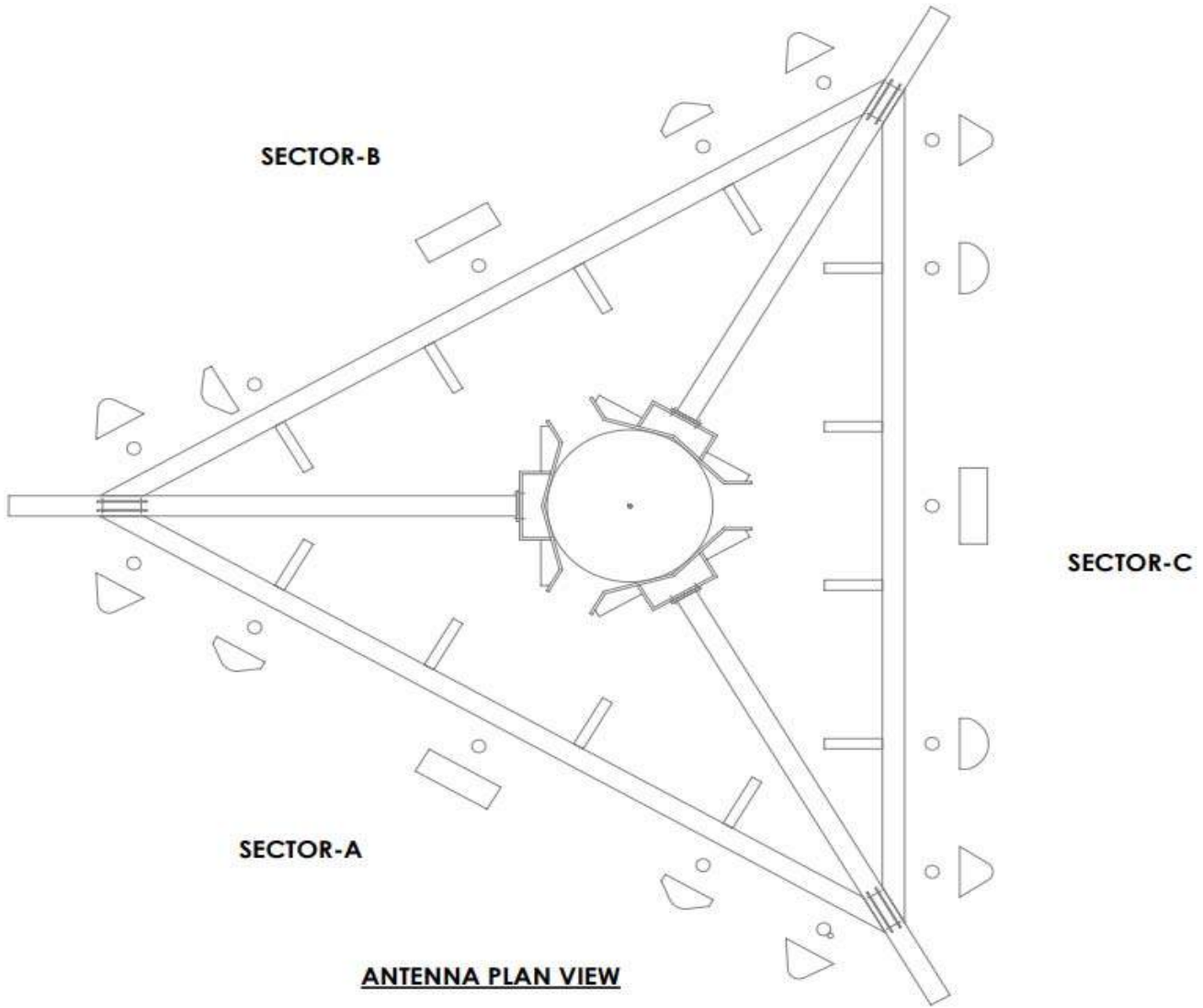


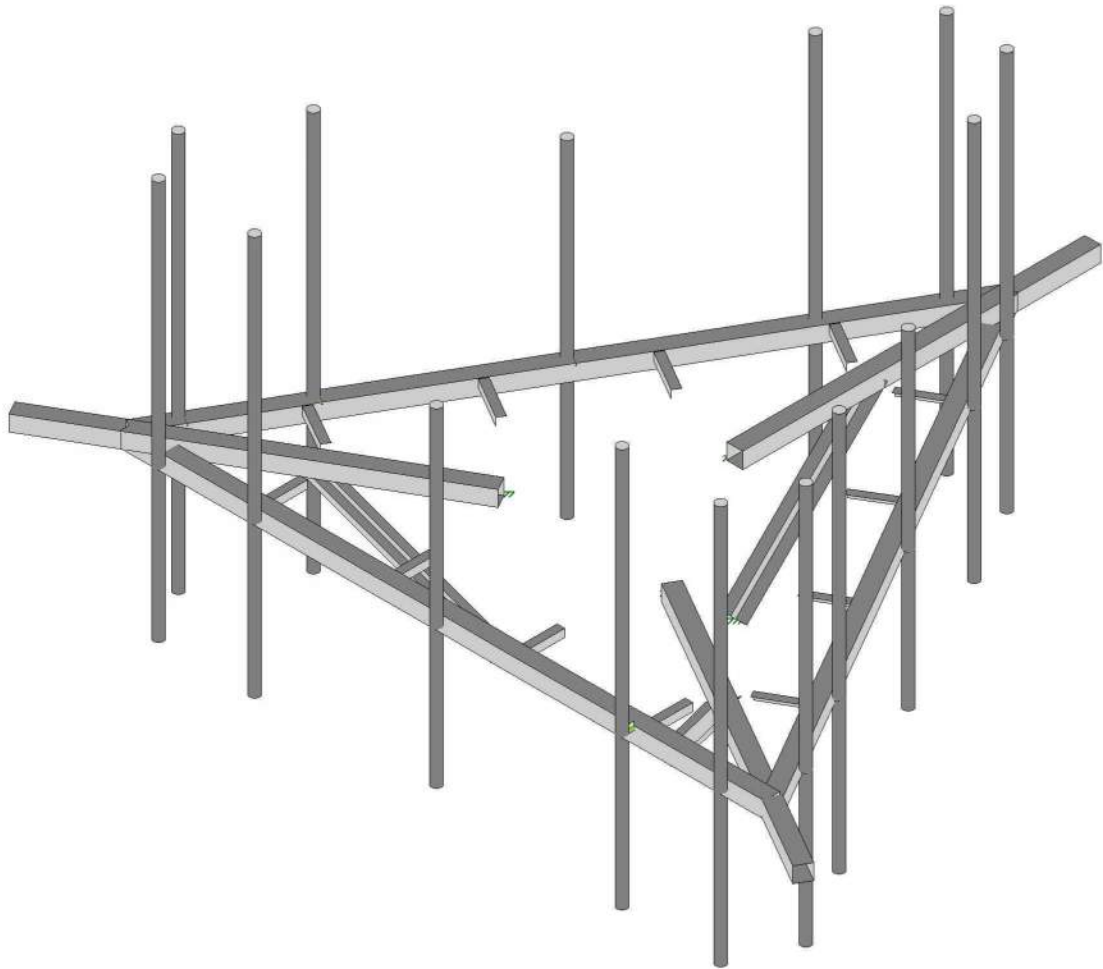
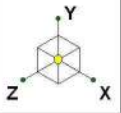
SECTION C-C



SECTION D-D

Please Insert Sketches of the Antenna Mount, cont'd





Envelope Only Solution

Colliers Engineering & Des...

5000392762-VZW_MT_LO_H

SK - 1

Aug 7, 2023 at 10:52 AM

5000392762-VZW_MT_LO_H.r3d



Company : Colliers Engineering & Design
 Designer :
 Job Number :
 Model Name : 5000392762-VZW_MT_LO_H

Aug 7, 2023
 10:53 AM
 Checked By: _____

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed Area(Me...	Surface(P...
1	Antenna D	None					123		
2	Antenna Di	None					123		
3	Antenna Wo (0 Deg)	None					123		
4	Antenna Wo (30 Deg)	None					123		
5	Antenna Wo (60 Deg)	None					123		
6	Antenna Wo (90 Deg)	None					123		
7	Antenna Wo (120 Deg)	None					123		
8	Antenna Wo (150 Deg)	None					123		
9	Antenna Wo (180 Deg)	None					123		
10	Antenna Wo (210 Deg)	None					123		
11	Antenna Wo (240 Deg)	None					123		
12	Antenna Wo (270 Deg)	None					123		
13	Antenna Wo (300 Deg)	None					123		
14	Antenna Wo (330 Deg)	None					123		
15	Antenna Wi (0 Deg)	None					123		
16	Antenna Wi (30 Deg)	None					123		
17	Antenna Wi (60 Deg)	None					123		
18	Antenna Wi (90 Deg)	None					123		
19	Antenna Wi (120 Deg)	None					123		
20	Antenna Wi (150 Deg)	None					123		
21	Antenna Wi (180 Deg)	None					123		
22	Antenna Wi (210 Deg)	None					123		
23	Antenna Wi (240 Deg)	None					123		
24	Antenna Wi (270 Deg)	None					123		
25	Antenna Wi (300 Deg)	None					123		
26	Antenna Wi (330 Deg)	None					123		
27	Antenna Wm (0 Deg)	None					123		
28	Antenna Wm (30 Deg)	None					123		
29	Antenna Wm (60 Deg)	None					123		
30	Antenna Wm (90 Deg)	None					123		
31	Antenna Wm (120 Deg)	None					123		
32	Antenna Wm (150 Deg)	None					123		
33	Antenna Wm (180 Deg)	None					123		
34	Antenna Wm (210 Deg)	None					123		
35	Antenna Wm (240 Deg)	None					123		
36	Antenna Wm (270 Deg)	None					123		
37	Antenna Wm (300 Deg)	None					123		
38	Antenna Wm (330 Deg)	None					123		
39	Structure D	None		-1				3	
40	Structure Di	None						36	3
41	Structure Wo (0 Deg)	None						72	
42	Structure Wo (30 Deg)	None						72	
43	Structure Wo (60 Deg)	None						72	
44	Structure Wo (90 Deg)	None						72	
45	Structure Wo (120 D...	None						72	
46	Structure Wo (150 D...	None						72	
47	Structure Wo (180 D...	None						72	
48	Structure Wo (210 D...	None						72	
49	Structure Wo (240 D...	None						72	
50	Structure Wo (270 D...	None						72	
51	Structure Wo (300 D...	None						72	
52	Structure Wo (330 D...	None						72	
53	Structure Wi (0 Deg)	None						72	



Basic Load Cases (Continued)

BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed Area(Me...	Surface(P...
54 Structure Wi (30 Deg)	None						72	
55 Structure Wi (60 Deg)	None						72	
56 Structure Wi (90 Deg)	None						72	
57 Structure Wi (120 De..	None						72	
58 Structure Wi (150 De..	None						72	
59 Structure Wi (180 De..	None						72	
60 Structure Wi (210 De..	None						72	
61 Structure Wi (240 De..	None						72	
62 Structure Wi (270 De..	None						72	
63 Structure Wi (300 De..	None						72	
64 Structure Wi (330 De..	None						72	
65 Structure Wm (0 Deg)	None						72	
66 Structure Wm (30 De..	None						72	
67 Structure Wm (60 De..	None						72	
68 Structure Wm (90 De..	None						72	
69 Structure Wm (120 D..	None						72	
70 Structure Wm (150 D..	None						72	
71 Structure Wm (180 D..	None						72	
72 Structure Wm (210 D..	None						72	
73 Structure Wm (240 D..	None						72	
74 Structure Wm (270 D..	None						72	
75 Structure Wm (300 D..	None						72	
76 Structure Wm (330 D..	None						72	
77 Lm1	None					1		
78 Lm2	None					1		
79 Lv1	None					1		
80 Lv2	None					1		
81 Antenna Ev	None					123		
82 Antenna Eh (0 Deg)	None					82		
83 Antenna Eh (90 Deg)	None					82		
84 Structure Ev	ELY		-0.044					3
85 Structure Eh (0 Deg)	ELZ			-0.111				3
86 Structure Eh (90 Deg)	ELX	.111						3
87 BLC 39 Transient Are..	None						20	
88 BLC 40 Transient Are..	None						20	
89 BLC 84 Transient Are..	None						53	
90 BLC 85 Transient Are..	None						53	
91 BLC 86 Transient Are..	None						53	

Load Combinations

Description	Sol...	P...	SR..	BLC Fact..	BLC Fact..	BLC Fact..	BLC Fact..	BLC Fact..	BLC Fact..	BLC Fact..	BLC Fact..	BLC Fact..	BLC Fact..	BLC Fact..	BLC Fact..	BLC Fact..	BLC Fact..	BLC Fact..
1 1.2D+1.0...	Yes	Y		1	1.2	39	1.2	3	1	41	1							
2 1.2D+1.0...	Yes	Y		1	1.2	39	1.2	4	1	42	1							
3 1.2D+1.0...	Yes	Y		1	1.2	39	1.2	5	1	43	1							
4 1.2D+1.0...	Yes	Y		1	1.2	39	1.2	6	1	44	1							
5 1.2D+1.0...	Yes	Y		1	1.2	39	1.2	7	1	45	1							
6 1.2D+1.0...	Yes	Y		1	1.2	39	1.2	8	1	46	1							
7 1.2D+1.0...	Yes	Y		1	1.2	39	1.2	9	1	47	1							
8 1.2D+1.0...	Yes	Y		1	1.2	39	1.2	10	1	48	1							
9 1.2D+1.0...	Yes	Y		1	1.2	39	1.2	11	1	49	1							
10 1.2D+1.0...	Yes	Y		1	1.2	39	1.2	12	1	50	1							
11 1.2D+1.0...	Yes	Y		1	1.2	39	1.2	13	1	51	1							
12 1.2D+1.0...	Yes	Y		1	1.2	39	1.2	14	1	52	1							
13 1.2D + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	15	1	53	1			
14 1.2D + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	16	1	54	1			



Load Combinations (Continued)

Description	Sol	P	SR	BLC Fact	BLC Fact	BLC Fact	BLC Fact	BLC Fact	BLC Fact	BLC Fact	BLC Fact	BLC Fact	BLC Fact	BLC Fact	BLC Fact
15	1.2D + 1.0..	Yes	Y	1	1.2	39	1.2	2	1	40	1	17	1	55	1
16	1.2D + 1.0..	Yes	Y	1	1.2	39	1.2	2	1	40	1	18	1	56	1
17	1.2D + 1.0..	Yes	Y	1	1.2	39	1.2	2	1	40	1	19	1	57	1
18	1.2D + 1.0..	Yes	Y	1	1.2	39	1.2	2	1	40	1	20	1	58	1
19	1.2D + 1.0..	Yes	Y	1	1.2	39	1.2	2	1	40	1	21	1	59	1
20	1.2D + 1.0..	Yes	Y	1	1.2	39	1.2	2	1	40	1	22	1	60	1
21	1.2D + 1.0..	Yes	Y	1	1.2	39	1.2	2	1	40	1	23	1	61	1
22	1.2D + 1.0..	Yes	Y	1	1.2	39	1.2	2	1	40	1	24	1	62	1
23	1.2D + 1.0..	Yes	Y	1	1.2	39	1.2	2	1	40	1	25	1	63	1
24	1.2D + 1.0..	Yes	Y	1	1.2	39	1.2	2	1	40	1	26	1	64	1
25	1.2D + 1.5..	Yes	Y	1	1.2	39	1.2	77	1.5	27	1	65	1		
26	1.2D + 1.5..	Yes	Y	1	1.2	39	1.2	77	1.5	28	1	66	1		
27	1.2D + 1.5..	Yes	Y	1	1.2	39	1.2	77	1.5	29	1	67	1		
28	1.2D + 1.5..	Yes	Y	1	1.2	39	1.2	77	1.5	30	1	68	1		
29	1.2D + 1.5..	Yes	Y	1	1.2	39	1.2	77	1.5	31	1	69	1		
30	1.2D + 1.5..	Yes	Y	1	1.2	39	1.2	77	1.5	32	1	70	1		
31	1.2D + 1.5..	Yes	Y	1	1.2	39	1.2	77	1.5	33	1	71	1		
32	1.2D + 1.5..	Yes	Y	1	1.2	39	1.2	77	1.5	34	1	72	1		
33	1.2D + 1.5..	Yes	Y	1	1.2	39	1.2	77	1.5	35	1	73	1		
34	1.2D + 1.5..	Yes	Y	1	1.2	39	1.2	77	1.5	36	1	74	1		
35	1.2D + 1.5..	Yes	Y	1	1.2	39	1.2	77	1.5	37	1	75	1		
36	1.2D + 1.5..	Yes	Y	1	1.2	39	1.2	77	1.5	38	1	76	1		
37	1.2D + 1.5..	Yes	Y	1	1.2	39	1.2	78	1.5	27	1	65	1		
38	1.2D + 1.5..	Yes	Y	1	1.2	39	1.2	78	1.5	28	1	66	1		
39	1.2D + 1.5..	Yes	Y	1	1.2	39	1.2	78	1.5	29	1	67	1		
40	1.2D + 1.5..	Yes	Y	1	1.2	39	1.2	78	1.5	30	1	68	1		
41	1.2D + 1.5..	Yes	Y	1	1.2	39	1.2	78	1.5	31	1	69	1		
42	1.2D + 1.5..	Yes	Y	1	1.2	39	1.2	78	1.5	32	1	70	1		
43	1.2D + 1.5..	Yes	Y	1	1.2	39	1.2	78	1.5	33	1	71	1		
44	1.2D + 1.5..	Yes	Y	1	1.2	39	1.2	78	1.5	34	1	72	1		
45	1.2D + 1.5..	Yes	Y	1	1.2	39	1.2	78	1.5	35	1	73	1		
46	1.2D + 1.5..	Yes	Y	1	1.2	39	1.2	78	1.5	36	1	74	1		
47	1.2D + 1.5..	Yes	Y	1	1.2	39	1.2	78	1.5	37	1	75	1		
48	1.2D + 1.5..	Yes	Y	1	1.2	39	1.2	78	1.5	38	1	76	1		
49	1.2D + 1.5..	Yes	Y	1	1.2	39	1.2	79	1.5						
50	1.2D + 1.5..	Yes	Y	1	1.2	39	1.2	80	1.5						
51	1.4D	Yes	Y	1	1.4	39	1.4								
52	1.2D + 1.0..	Yes	Y	1	1.2	39	1.2	81	1	ELY	1	82	1	83	ELZ 1 ELX
53	1.2D + 1.0..	Yes	Y	1	1.2	39	1.2	81	1	ELY	1	82	.866	83	.5 ELZ .866 ELX .5
54	1.2D + 1.0..	Yes	Y	1	1.2	39	1.2	81	1	ELY	1	82	.5	83	.866 ELZ .5 ELX .866
55	1.2D + 1.0..	Yes	Y	1	1.2	39	1.2	81	1	ELY	1	82		83	1 ELZ ELX 1
56	1.2D + 1.0..	Yes	Y	1	1.2	39	1.2	81	1	ELY	1	82	-.5	83	.866 ELZ -.5 ELX .866
57	1.2D + 1.0..	Yes	Y	1	1.2	39	1.2	81	1	ELY	1	82	-.866	83	.5 ELZ -.866 ELX .5
58	1.2D + 1.0..	Yes	Y	1	1.2	39	1.2	81	1	ELY	1	82	-1	83	ELZ -1 ELX
59	1.2D + 1.0..	Yes	Y	1	1.2	39	1.2	81	1	ELY	1	82	-.866	83	-.5 ELZ -.866 ELX -.5
60	1.2D + 1.0..	Yes	Y	1	1.2	39	1.2	81	1	ELY	1	82	-.5	83	-.866 ELZ -.5 ELX -.866
61	1.2D + 1.0..	Yes	Y	1	1.2	39	1.2	81	1	ELY	1	82		83	-1 ELZ ELX -1
62	1.2D + 1.0..	Yes	Y	1	1.2	39	1.2	81	1	ELY	1	82	.5	83	-.866 ELZ .5 ELX -.866
63	1.2D + 1.0..	Yes	Y	1	1.2	39	1.2	81	1	ELY	1	82	.866	83	-.5 ELZ .866 ELX -.5
64	0.9D - 1.0...	Yes	Y	1	.9	39	.9	81	-1	ELY	-1	82	1	83	ELZ 1 ELX
65	0.9D - 1.0...	Yes	Y	1	.9	39	.9	81	-1	ELY	-1	82	.866	83	.5 ELZ .866 ELX .5
66	0.9D - 1.0...	Yes	Y	1	.9	39	.9	81	-1	ELY	-1	82	.5	83	.866 ELZ .5 ELX .866
67	0.9D - 1.0...	Yes	Y	1	.9	39	.9	81	-1	ELY	-1	82		83	1 ELZ ELX 1
68	0.9D - 1.0...	Yes	Y	1	.9	39	.9	81	-1	ELY	-1	82	-.5	83	.866 ELZ -.5 ELX .866
69	0.9D - 1.0...	Yes	Y	1	.9	39	.9	81	-1	ELY	-1	82	-.866	83	.5 ELZ -.866 ELX .5
70	0.9D - 1.0...	Yes	Y	1	.9	39	.9	81	-1	ELY	-1	82	-1	83	ELZ -1 ELX
71	0.9D - 1.0...	Yes	Y	1	.9	39	.9	81	-1	ELY	-1	82	-.866	83	-.5 ELZ -.866 ELX -.5



Load Combinations (Continued)

	Description	Sol...	P...	SR...	BLC Fact...	BLC Fact...	BLC Fact...	BLC Fact...	BLC Fact...	BLC Fact...	BLC Fact...	BLC Fact...	BLC Fact...	BLC Fact...	BLC Fact...	BLC Fact...				
72	0.9D - 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.5	83	-.866	ELZ	-.5	ELX	-.866
73	0.9D - 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82		83	-1	ELZ		ELX	-1
74	0.9D - 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.5	83	-.866	ELZ	.5	ELX	-.866
75	0.9D - 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.866	83	-.5	ELZ	.866	ELX	-.5

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N1	-6.84375	0	3.951241	0	
2	N2	6.843752	0	3.951241	0	
3	CG	0	0	0	0	
4	N21	-0.	0	-7.902483	0	
5	N65	-4.10625	0	3.951241	0	
6	N66	-1.368749	0	3.951241	0	
7	N67	1.368751	0	3.951241	0	
8	N68	4.106251	0	3.951241	0	
9	N69	-4.10625	0	2.924422	0	
10	N70	-1.368749	0	2.924422	0	
11	N71	1.368751	0	2.924422	0	
12	N72	4.106251	0	2.924422	0	
13	N74	5.475001	0	1.580496	0	
14	N75	4.10625	0	-0.790249	0	
15	N76	2.7375	0	-3.160994	0	
16	N77	1.36875	0	-5.531739	0	
17	N78	4.585749	0	2.093905	0	
18	N79	3.216999	0	-0.276839	0	
19	N80	1.848248	0	-2.647584	0	
20	N81	0.479498	0	-5.018329	0	
21	N83	-1.368751	0	-5.531737	0	
22	N84	-2.737501	0	-3.160992	0	
23	N85	-4.106251	0	-0.790247	0	
24	N86	-5.475001	0	1.580497	0	
25	N87	-0.479499	0	-5.018328	0	
26	N88	-1.848249	0	-2.647583	0	
27	N89	-3.216999	0	-0.276838	0	
28	N90	-4.58575	0	2.093907	0	
29	N90A	-4.619659	0	2.924422	0	
30	N91	4.619661	0	2.924422	0	
31	N92	-4.619659	0	3.951241	0	
32	N93	4.619661	0	3.951241	0	
33	N95	4.842454	0	2.538531	0	
34	N96	0.222793	0	-5.462955	0	
35	N97	5.731705	0	2.025122	0	
36	N98	1.112045	0	-5.976364	0	
37	N100	-0.222794	0	-5.462953	0	
38	N101	-4.842454	0	2.538533	0	
39	N102	-1.112046	0	-5.976363	0	
40	N103	-5.731706	0	2.025123	0	
41	N50	-0.	0	-9.732483	0	
42	N50A	-0.	0	-2.107483	0	
43	N50B	-8.428578	0	4.866242	0	
44	N51	-1.825134	0	1.053742	0	
45	N53	8.428578	0	4.866241	0	
46	N54	1.825134	0	1.053741	0	
47	N68B	-6.64363	0	3.10453	0	
48	N69A	-6.64363	-3.208	3.10453	0	



Company : Colliers Engineering & Design
 Designer :
 Job Number :
 Model Name : 5000392762-VZW_MT_LO_H

Aug 7, 2023
 10:53 AM
 Checked By: _____

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
49	N70A	-6.64363	5.292	3.10453	0	
50	N71A	-6.427083	0	3.229553	0	
51	N72A	-5.59163	0	1.282413	0	
52	N73	-5.59163	-3.208	1.282413	0	
53	N74A	-5.59163	5.292	1.282413	0	
54	N75A	-5.375083	0	1.407436	0	
55	N76A	-3.61263	0	-2.145316	0	
56	N77A	-3.61263	-2.9375	-2.145316	0	
57	N78A	-3.61263	4.0625	-2.145316	0	
58	N79A	-3.396084	0	-2.020293	0	
59	N80A	-1.67513	0	-5.501164	0	
60	N81A	-1.67513	-3.208	-5.501164	0	
61	N82	-1.67513	5.292	-5.501164	0	
62	N83A	-1.458584	0	-5.376142	0	
63	N84A	-0.65413	0	-7.269588	0	
64	N85A	-0.65413	-3.208	-7.269588	0	
65	N86A	-0.65413	5.292	-7.269588	0	
66	N87A	-0.437584	0	-7.144566	0	
67	N87B	6.010417	0	4.201287	0	
68	N88A	6.010417	-3.208	4.201287	0	
69	N89A	6.010417	5.292	4.201287	0	
70	N90B	6.010417	0	3.951241	0	
71	N91A	3.906417	0	4.201287	0	
72	N92A	3.906417	-3.208	4.201287	0	
73	N93A	3.906417	5.292	4.201287	0	
74	N94	3.906417	0	3.951241	0	
75	N95A	-0.051583	0	4.201287	0	
76	N96A	-0.051583	-2.9375	4.201287	0	
77	N97A	-0.051583	4.0625	4.201287	0	
78	N98A	-0.051583	0	3.951241	0	
79	N99	-3.926583	0	4.201287	0	
80	N100A	-3.926583	-3.208	4.201287	0	
81	N101A	-3.926583	5.292	4.201287	0	
82	N102A	-3.926583	0	3.951241	0	
83	N103A	-5.968583	0	4.201287	0	
84	N104	-5.968583	-3.208	4.201287	0	
85	N105	-5.968583	5.292	4.201287	0	
86	N106	-5.968583	0	3.951241	0	
87	N108	0.685295	0	-7.215608	0	
88	N109	0.685295	-3.208	-7.215608	0	
89	N110	0.685295	5.292	-7.215608	0	
90	N111	0.46875	0	-7.090585	0	
91	N112	1.633295	0	-5.573623	0	
92	N113	1.633295	-3.208	-5.573623	0	
93	N114	1.633295	5.292	-5.573623	0	
94	N115	1.41675	0	-5.448601	0	
95	N116	3.549795	0	-2.254148	0	
96	N117	3.549795	-2.9375	-2.254148	0	
97	N118	3.549795	4.0625	-2.254148	0	
98	N119	3.33325	0	-2.129125	0	
99	N120	5.560295	0	1.22814	0	
100	N121	5.560295	-3.208	1.22814	0	
101	N122	5.560295	5.292	1.22814	0	
102	N123	5.34375	0	1.353163	0	
103	N124	6.539295	0	2.923818	0	
104	N125	6.539295	-3.208	2.923818	0	
105	N126	6.539295	5.292	2.923818	0	



Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
106	N127	6.32275	0	3.04884	0	
107	N107	-0.	-3	-2.107483	0	
108	N108A	-0.	0	-5.107483	0	
109	N109A	-1.825134	-3	1.053742	0	
110	N110A	-4.42321	0	2.553742	0	
111	N111A	1.825134	-3	1.053741	0	
112	N112A	4.423211	0	2.553741	0	

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design R...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Standoff Arm	HSS4X4X4	Beam	SquareT...	A500 Gr.B Rect	Typical	3.37	7.8	7.8	12.8
2	Footrail	HSS4X4X4	Beam	SquareT...	A500 Gr.B Rect	Typical	3.37	7.8	7.8	12.8
3	Grating Angle	L2x2x3	Beam	Single An...	A36 Gr.36	Typical	.722	.271	.271	.009
4	Mount Pipe	PIPE 2.0	Beam	Pipe	A53 Gr.B	Typical	1.02	.627	.627	1.25
5	Kicker	LL3x3x3x6	Beam	Double A...	A36 Gr.36	Typical	2.18	4.97	1.9	.027

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (/1E...	Density[k/ft...	Yield[ksi]	Ry	Fu[ksi]	Rt
1	A36 Gr.36	29000	11154	.3	.65	.49	36	1.5	58	1.2
2	A572 Gr.50	29000	11154	.3	.65	.49	50	1.1	65	1.1
3	A992	29000	11154	.3	.65	.49	50	1.1	65	1.1
4	A500 Gr.B RND	29000	11154	.3	.65	.527	42	1.4	58	1.3
5	A500 Gr.B Rect	29000	11154	.3	.65	.527	46	1.4	58	1.3
6	A53 Gr.B	29000	11154	.3	.65	.49	35	1.6	60	1.2
7	A1085	29000	11154	.3	.65	.49	50	1.4	65	1.3

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M16	N50	N50A			Standoff Arm	Beam	SquareTube	A500 Gr.B...	Typical
2	M22	N65	N69		180	Grating Angle	Beam	Single Angle	A36 Gr.36	Typical
3	M23	N66	N70		180	Grating Angle	Beam	Single Angle	A36 Gr.36	Typical
4	M24	N67	N71		180	Grating Angle	Beam	Single Angle	A36 Gr.36	Typical
5	M25	N68	N72		180	Grating Angle	Beam	Single Angle	A36 Gr.36	Typical
6	M26	N74	N78		180	Grating Angle	Beam	Single Angle	A36 Gr.36	Typical
7	M27	N75	N79		180	Grating Angle	Beam	Single Angle	A36 Gr.36	Typical
8	M28	N76	N80		180	Grating Angle	Beam	Single Angle	A36 Gr.36	Typical
9	M29	N77	N81		180	Grating Angle	Beam	Single Angle	A36 Gr.36	Typical
10	M30	N83	N87		180	Grating Angle	Beam	Single Angle	A36 Gr.36	Typical
11	M31	N84	N88		180	Grating Angle	Beam	Single Angle	A36 Gr.36	Typical
12	M32	N85	N89		180	Grating Angle	Beam	Single Angle	A36 Gr.36	Typical
13	M33	N86	N90		180	Grating Angle	Beam	Single Angle	A36 Gr.36	Typical
14	M1	N1	N2			Footrail	Beam	SquareTube	A500 Gr.B...	Typical
15	M8	N2	N21			Footrail	Beam	SquareTube	A500 Gr.B...	Typical
16	M15	N21	N1			Footrail	Beam	SquareTube	A500 Gr.B...	Typical
17	M19	N50B	N51			Standoff Arm	Beam	SquareTube	A500 Gr.B...	Typical
18	M20	N53	N54			Standoff Arm	Beam	SquareTube	A500 Gr.B...	Typical
19	MP1B	N70A	N69A		120	Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
20	M30A	N68B	N71A			RIGID	None	None	RIGID	Typical
21	MP2B	N74A	N73		120	Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
22	M32A	N72A	N75A			RIGID	None	None	RIGID	Typical
23	MP3B	N78A	N77A		120	Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
24	M34	N76A	N79A			RIGID	None	None	RIGID	Typical



Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
25	MP4B	N82	N81A		120	Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
26	M36	N80A	N83A			RIGID	None	None	RIGID	Typical
27	MP5B	N86A	N85A		120	Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
28	M38	N84A	N87A			RIGID	None	None	RIGID	Typical
29	MP1A	N89A	N88A			Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
30	M40	N87B	N90B			RIGID	None	None	RIGID	Typical
31	MP2A	N93A	N92A			Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
32	M42	N91A	N94			RIGID	None	None	RIGID	Typical
33	MP3A	N97A	N96A			Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
34	M44	N95A	N98A			RIGID	None	None	RIGID	Typical
35	MP4A	N101A	N100A			Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
36	M46	N99	N102A			RIGID	None	None	RIGID	Typical
37	MP5A	N105	N104			Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
38	M48	N103A	N106			RIGID	None	None	RIGID	Typical
39	MP1C	N110	N109		240	Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
40	M50	N108	N111			RIGID	None	None	RIGID	Typical
41	MP2C	N114	N113		240	Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
42	M52	N112	N115			RIGID	None	None	RIGID	Typical
43	MP3C	N118	N117		240	Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
44	M54	N116	N119			RIGID	None	None	RIGID	Typical
45	MP4C	N122	N121		240	Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
46	M56	N120	N123			RIGID	None	None	RIGID	Typical
47	MP5C	N126	N125		240	Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
48	M58	N124	N127			RIGID	None	None	RIGID	Typical
49	M49	N108A	N107			Kicker	Beam	Double Angle (...)	A36 Gr.36	Typical
50	M50A	N110A	N109A			Kicker	Beam	Double Angle (...)	A36 Gr.36	Typical
51	M51	N112A	N111A			Kicker	Beam	Double Angle (...)	A36 Gr.36	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	M16						Yes	Default			None
2	M22						Yes				None
3	M23						Yes				None
4	M24						Yes				None
5	M25						Yes				None
6	M26						Yes				None
7	M27						Yes				None
8	M28						Yes				None
9	M29						Yes				None
10	M30						Yes				None
11	M31						Yes				None
12	M32						Yes				None
13	M33						Yes				None
14	M1						Yes				None
15	M8						Yes				None
16	M15						Yes				None
17	M19						Yes	Default			None
18	M20						Yes	Default			None
19	MP1B						Yes				None
20	M30A						Yes	** NA **			None
21	MP2B						Yes				None
22	M32A						Yes	** NA **			None
23	MP3B						Yes				None
24	M34						Yes	** NA **			None
25	MP4B						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...
26	M36						Yes	** NA **			None
27	MP5B						Yes				None
28	M38						Yes	** NA **			None
29	MP1A						Yes				None
30	M40						Yes	** NA **			None
31	MP2A						Yes				None
32	M42						Yes	** NA **			None
33	MP3A						Yes				None
34	M44						Yes	** NA **			None
35	MP4A						Yes				None
36	M46						Yes	** NA **			None
37	MP5A						Yes				None
38	M48						Yes	** NA **			None
39	MP1C						Yes				None
40	M50						Yes	** NA **			None
41	MP2C						Yes				None
42	M52						Yes	** NA **			None
43	MP3C						Yes				None
44	M54						Yes	** NA **			None
45	MP4C						Yes				None
46	M56						Yes	** NA **			None
47	MP5C						Yes				None
48	M58						Yes	** NA **			None
49	M49	BenPIN	BenPIN				Yes				None
50	M50A	BenPIN	BenPIN				Yes				None
51	M51	BenPIN	BenPIN				Yes				None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1B	Y	-17.6	2
2	MP1B	My	.003	2
3	MP1B	Mz	-.005	2
4	MP1B	Y	-17.6	2
5	MP1B	My	-.003	2
6	MP1B	Mz	.005	2
7	MP4A	Y	-43.55	2.92
8	MP4A	My	-.033	2.92
9	MP4A	Mz	0	2.92
10	MP4A	Y	-43.55	5.67
11	MP4A	My	-.033	5.67
12	MP4A	Mz	0	5.67
13	MP4B	Y	-43.55	2.92
14	MP4B	My	.016	2.92
15	MP4B	Mz	-.028	2.92
16	MP4B	Y	-43.55	5.67
17	MP4B	My	.016	5.67
18	MP4B	Mz	-.028	5.67
19	MP4C	Y	-43.55	2.92
20	MP4C	My	.016	2.92
21	MP4C	Mz	.028	2.92
22	MP4C	Y	-43.55	5.67
23	MP4C	My	.016	5.67
24	MP4C	Mz	.028	5.67
25	MP1A	Y	-84.4	3.5
26	MP1A	My	.056	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
27	MP1A	Mz	0	3.5
28	MP1B	Y	-84.4	3.5
29	MP1B	My	-.028	3.5
30	MP1B	Mz	.049	3.5
31	MP1C	Y	-84.4	3.5
32	MP1C	My	-.028	3.5
33	MP1C	Mz	-.049	3.5
34	MP2A	Y	-70.3	3.5
35	MP2A	My	.047	3.5
36	MP2A	Mz	0	3.5
37	MP2B	Y	-70.3	3.5
38	MP2B	My	-.023	3.5
39	MP2B	Mz	.041	3.5
40	MP2C	Y	-70.3	3.5
41	MP2C	My	-.023	3.5
42	MP2C	Mz	-.041	3.5
43	MP2A	Y	-31.65	1.75
44	MP2A	My	-.024	1.75
45	MP2A	Mz	.026	1.75
46	MP2A	Y	-31.65	6.75
47	MP2A	My	-.024	6.75
48	MP2A	Mz	.026	6.75
49	MP2B	Y	-31.65	1.75
50	MP2B	My	-.011	1.75
51	MP2B	Mz	-.034	1.75
52	MP2B	Y	-31.65	6.75
53	MP2B	My	-.011	6.75
54	MP2B	Mz	-.034	6.75
55	MP2C	Y	-31.65	1.75
56	MP2C	My	.035	1.75
57	MP2C	Mz	.007	1.75
58	MP2C	Y	-31.65	6.75
59	MP2C	My	.035	6.75
60	MP2C	Mz	.007	6.75
61	MP2A	Y	-31.65	1.75
62	MP2A	My	-.024	1.75
63	MP2A	Mz	-.026	1.75
64	MP2A	Y	-31.65	6.75
65	MP2A	My	-.024	6.75
66	MP2A	Mz	-.026	6.75
67	MP2B	Y	-31.65	1.75
68	MP2B	My	.035	1.75
69	MP2B	Mz	-.007	1.75
70	MP2B	Y	-31.65	6.75
71	MP2B	My	.035	6.75
72	MP2B	Mz	-.007	6.75
73	MP2C	Y	-31.65	1.75
74	MP2C	My	-.011	1.75
75	MP2C	Mz	.034	1.75
76	MP2C	Y	-31.65	6.75
77	MP2C	My	-.011	6.75
78	MP2C	Mz	.034	6.75
79	MP1C	Y	-7.85	2.42
80	MP1C	My	.003	2.42
81	MP1C	Mz	.005	2.42
82	MP1C	Y	-7.85	6
83	MP1C	My	.003	6



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
84	MP1C	Mz	.005	6
85	MP5C	Y	-7.85	2.42
86	MP5C	My	.003	2.42
87	MP5C	Mz	.005	2.42
88	MP5C	Y	-7.85	6
89	MP5C	My	.003	6
90	MP5C	Mz	.005	6
91	MP1A	Y	-8	1.75
92	MP1A	My	-.005	1.75
93	MP1A	Mz	0	1.75
94	MP1A	Y	-8	6.75
95	MP1A	My	-.005	6.75
96	MP1A	Mz	0	6.75
97	MP1B	Y	-8	1.75
98	MP1B	My	.002	1.75
99	MP1B	Mz	-.004	1.75
100	MP1B	Y	-8	6.75
101	MP1B	My	.002	6.75
102	MP1B	Mz	-.004	6.75
103	MP5A	Y	-8	1.75
104	MP5A	My	-.005	1.75
105	MP5A	Mz	0	1.75
106	MP5A	Y	-8	6.75
107	MP5A	My	-.005	6.75
108	MP5A	Mz	0	6.75
109	MP5B	Y	-8	1.75
110	MP5B	My	.002	1.75
111	MP5B	Mz	-.004	1.75
112	MP5B	Y	-8	6.75
113	MP5B	My	.002	6.75
114	MP5B	Mz	-.004	6.75
115	MP2A	Y	-10.4	2
116	MP2A	My	.004	2
117	MP2A	Mz	0	2
118	MP2B	Y	-10.4	2
119	MP2B	My	-.002	2
120	MP2B	Mz	.004	2
121	MP2C	Y	-10.4	2
122	MP2C	My	-.002	2
123	MP2C	Mz	-.004	2

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1B	Y	6.6	2
2	MP1B	My	-.001	2
3	MP1B	Mz	.002	2
4	MP1B	Y	6.6	2
5	MP1B	My	.001	2
6	MP1B	Mz	-.002	2
7	MP4A	Y	-35.279	2.92
8	MP4A	My	-.026	2.92
9	MP4A	Mz	0	2.92
10	MP4A	Y	-35.279	5.67
11	MP4A	My	-.026	5.67
12	MP4A	Mz	0	5.67
13	MP4B	Y	-35.279	2.92



Member Point Loads (BLC 2 : Antenna Di) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
14	MP4B	My	.013	2.92
15	MP4B	Mz	-.023	2.92
16	MP4B	Y	-35.279	5.67
17	MP4B	My	.013	5.67
18	MP4B	Mz	-.023	5.67
19	MP4C	Y	-35.279	2.92
20	MP4C	My	.013	2.92
21	MP4C	Mz	.023	2.92
22	MP4C	Y	-35.279	5.67
23	MP4C	My	.013	5.67
24	MP4C	Mz	.023	5.67
25	MP1A	Y	-44.473	3.5
26	MP1A	My	.03	3.5
27	MP1A	Mz	0	3.5
28	MP1B	Y	-44.473	3.5
29	MP1B	My	-.015	3.5
30	MP1B	Mz	.026	3.5
31	MP1C	Y	-44.473	3.5
32	MP1C	My	-.015	3.5
33	MP1C	Mz	-.026	3.5
34	MP2A	Y	-39.992	3.5
35	MP2A	My	.027	3.5
36	MP2A	Mz	0	3.5
37	MP2B	Y	-39.992	3.5
38	MP2B	My	-.013	3.5
39	MP2B	Mz	.023	3.5
40	MP2C	Y	-39.992	3.5
41	MP2C	My	-.013	3.5
42	MP2C	Mz	-.023	3.5
43	MP2A	Y	-69.303	1.75
44	MP2A	My	-.052	1.75
45	MP2A	Mz	.058	1.75
46	MP2A	Y	-69.303	6.75
47	MP2A	My	-.052	6.75
48	MP2A	Mz	.058	6.75
49	MP2B	Y	-69.303	1.75
50	MP2B	My	-.024	1.75
51	MP2B	Mz	-.074	1.75
52	MP2B	Y	-69.303	6.75
53	MP2B	My	-.024	6.75
54	MP2B	Mz	-.074	6.75
55	MP2C	Y	-69.303	1.75
56	MP2C	My	.076	1.75
57	MP2C	Mz	.016	1.75
58	MP2C	Y	-69.303	6.75
59	MP2C	My	.076	6.75
60	MP2C	Mz	.016	6.75
61	MP2A	Y	-69.303	1.75
62	MP2A	My	-.052	1.75
63	MP2A	Mz	-.058	1.75
64	MP2A	Y	-69.303	6.75
65	MP2A	My	-.052	6.75
66	MP2A	Mz	-.058	6.75
67	MP2B	Y	-69.303	1.75
68	MP2B	My	.076	1.75
69	MP2B	Mz	-.016	1.75
70	MP2B	Y	-69.303	6.75



Member Point Loads (BLC 2 : Antenna Di) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
71	MP2B	My	.076	6.75
72	MP2B	Mz	-.016	6.75
73	MP2C	Y	-69.303	1.75
74	MP2C	My	-.024	1.75
75	MP2C	Mz	.074	1.75
76	MP2C	Y	-69.303	6.75
77	MP2C	My	-.024	6.75
78	MP2C	Mz	.074	6.75
79	MP1C	Y	-37.792	2.42
80	MP1C	My	.015	2.42
81	MP1C	Mz	.025	2.42
82	MP1C	Y	-37.792	6
83	MP1C	My	.015	6
84	MP1C	Mz	.025	6
85	MP5C	Y	-37.792	2.42
86	MP5C	My	.015	2.42
87	MP5C	Mz	.025	2.42
88	MP5C	Y	-37.792	6
89	MP5C	My	.015	6
90	MP5C	Mz	.025	6
91	MP1A	Y	-46.51	1.75
92	MP1A	My	-.028	1.75
93	MP1A	Mz	0	1.75
94	MP1A	Y	-46.51	6.75
95	MP1A	My	-.028	6.75
96	MP1A	Mz	0	6.75
97	MP1B	Y	-46.51	1.75
98	MP1B	My	.014	1.75
99	MP1B	Mz	-.024	1.75
100	MP1B	Y	-46.51	6.75
101	MP1B	My	.014	6.75
102	MP1B	Mz	-.024	6.75
103	MP5A	Y	-46.51	1.75
104	MP5A	My	-.028	1.75
105	MP5A	Mz	0	1.75
106	MP5A	Y	-46.51	6.75
107	MP5A	My	-.028	6.75
108	MP5A	Mz	0	6.75
109	MP5B	Y	-46.51	1.75
110	MP5B	My	.014	1.75
111	MP5B	Mz	-.024	1.75
112	MP5B	Y	-46.51	6.75
113	MP5B	My	.014	6.75
114	MP5B	Mz	-.024	6.75
115	MP2A	Y	-10.626	2
116	MP2A	My	.004	2
117	MP2A	Mz	0	2
118	MP2B	Y	-10.626	2
119	MP2B	My	-.002	2
120	MP2B	Mz	.004	2
121	MP2C	Y	-10.626	2
122	MP2C	My	-.002	2
123	MP2C	Mz	-.004	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
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Member Point Loads (BLC 3 : Antenna Wo (0 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1B	X	0	2
2	MP1B	Z	-19.023	2
3	MP1B	Mx	.005	2
4	MP1B	X	0	2
5	MP1B	Z	-19.023	2
6	MP1B	Mx	-.005	2
7	MP4A	X	0	2.92
8	MP4A	Z	-81.478	2.92
9	MP4A	Mx	0	2.92
10	MP4A	X	0	5.67
11	MP4A	Z	-81.478	5.67
12	MP4A	Mx	0	5.67
13	MP4B	X	0	2.92
14	MP4B	Z	-41.415	2.92
15	MP4B	Mx	.027	2.92
16	MP4B	X	0	5.67
17	MP4B	Z	-41.415	5.67
18	MP4B	Mx	.027	5.67
19	MP4C	X	0	2.92
20	MP4C	Z	-41.415	2.92
21	MP4C	Mx	-.027	2.92
22	MP4C	X	0	5.67
23	MP4C	Z	-41.415	5.67
24	MP4C	Mx	-.027	5.67
25	MP1A	X	0	3.5
26	MP1A	Z	-64.434	3.5
27	MP1A	Mx	0	3.5
28	MP1B	X	0	3.5
29	MP1B	Z	-48.534	3.5
30	MP1B	Mx	-.028	3.5
31	MP1C	X	0	3.5
32	MP1C	Z	-48.534	3.5
33	MP1C	Mx	.028	3.5
34	MP2A	X	0	3.5
35	MP2A	Z	-64.434	3.5
36	MP2A	Mx	0	3.5
37	MP2B	X	0	3.5
38	MP2B	Z	-42.61	3.5
39	MP2B	Mx	-.025	3.5
40	MP2C	X	0	3.5
41	MP2C	Z	-42.61	3.5
42	MP2C	Mx	.025	3.5
43	MP2A	X	0	1.75
44	MP2A	Z	-189.353	1.75
45	MP2A	Mx	-.158	1.75
46	MP2A	X	0	6.75
47	MP2A	Z	-189.353	6.75
48	MP2A	Mx	-.158	6.75
49	MP2B	X	0	1.75
50	MP2B	Z	-140.612	1.75
51	MP2B	Mx	.15	1.75
52	MP2B	X	0	6.75
53	MP2B	Z	-140.612	6.75
54	MP2B	Mx	.15	6.75
55	MP2C	X	0	1.75
56	MP2C	Z	-140.612	1.75
57	MP2C	Mx	-.033	1.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP2C	X	0	6.75
59	MP2C	Z	-140.612	6.75
60	MP2C	Mx	-.033	6.75
61	MP2A	X	0	1.75
62	MP2A	Z	-189.353	1.75
63	MP2A	Mx	.158	1.75
64	MP2A	X	0	6.75
65	MP2A	Z	-189.353	6.75
66	MP2A	Mx	.158	6.75
67	MP2B	X	0	1.75
68	MP2B	Z	-140.612	1.75
69	MP2B	Mx	.033	1.75
70	MP2B	X	0	6.75
71	MP2B	Z	-140.612	6.75
72	MP2B	Mx	.033	6.75
73	MP2C	X	0	1.75
74	MP2C	Z	-140.612	1.75
75	MP2C	Mx	-.15	1.75
76	MP2C	X	0	6.75
77	MP2C	Z	-140.612	6.75
78	MP2C	Mx	-.15	6.75
79	MP1C	X	0	2.42
80	MP1C	Z	-77.396	2.42
81	MP1C	Mx	-.052	2.42
82	MP1C	X	0	6
83	MP1C	Z	-77.396	6
84	MP1C	Mx	-.052	6
85	MP5C	X	0	2.42
86	MP5C	Z	-77.396	2.42
87	MP5C	Mx	-.052	2.42
88	MP5C	X	0	6
89	MP5C	Z	-77.396	6
90	MP5C	Mx	-.052	6
91	MP1A	X	0	1.75
92	MP1A	Z	-104.134	1.75
93	MP1A	Mx	0	1.75
94	MP1A	X	0	6.75
95	MP1A	Z	-104.134	6.75
96	MP1A	Mx	0	6.75
97	MP1B	X	0	1.75
98	MP1B	Z	-117.488	1.75
99	MP1B	Mx	.061	1.75
100	MP1B	X	0	6.75
101	MP1B	Z	-117.488	6.75
102	MP1B	Mx	.061	6.75
103	MP5A	X	0	1.75
104	MP5A	Z	-104.134	1.75
105	MP5A	Mx	0	1.75
106	MP5A	X	0	6.75
107	MP5A	Z	-104.134	6.75
108	MP5A	Mx	0	6.75
109	MP5B	X	0	1.75
110	MP5B	Z	-117.488	1.75
111	MP5B	Mx	.061	1.75
112	MP5B	X	0	6.75
113	MP5B	Z	-117.488	6.75
114	MP5B	Mx	.061	6.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
115	MP2A	X	0	2
116	MP2A	Z	-15.381	2
117	MP2A	Mx	0	2
118	MP2B	X	0	2
119	MP2B	Z	-11.827	2
120	MP2B	Mx	-.004	2
121	MP2C	X	0	2
122	MP2C	Z	-11.827	2
123	MP2C	Mx	.004	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1B	X	6.042	2
2	MP1B	Z	-10.465	2
3	MP1B	Mx	.004	2
4	MP1B	X	6.042	2
5	MP1B	Z	-10.465	2
6	MP1B	Mx	-.004	2
7	MP4A	X	34.062	2.92
8	MP4A	Z	-58.997	2.92
9	MP4A	Mx	-.026	2.92
10	MP4A	X	34.062	5.67
11	MP4A	Z	-58.997	5.67
12	MP4A	Mx	-.026	5.67
13	MP4B	X	14.03	2.92
14	MP4B	Z	-24.301	2.92
15	MP4B	Mx	.021	2.92
16	MP4B	X	14.03	5.67
17	MP4B	Z	-24.301	5.67
18	MP4B	Mx	.021	5.67
19	MP4C	X	34.062	2.92
20	MP4C	Z	-58.997	2.92
21	MP4C	Mx	-.026	2.92
22	MP4C	X	34.062	5.67
23	MP4C	Z	-58.997	5.67
24	MP4C	Mx	-.026	5.67
25	MP1A	X	29.567	3.5
26	MP1A	Z	-51.212	3.5
27	MP1A	Mx	.02	3.5
28	MP1B	X	21.617	3.5
29	MP1B	Z	-37.441	3.5
30	MP1B	Mx	-.029	3.5
31	MP1C	X	29.567	3.5
32	MP1C	Z	-51.212	3.5
33	MP1C	Mx	.02	3.5
34	MP2A	X	28.58	3.5
35	MP2A	Z	-49.501	3.5
36	MP2A	Mx	.019	3.5
37	MP2B	X	17.667	3.5
38	MP2B	Z	-30.601	3.5
39	MP2B	Mx	-.024	3.5
40	MP2C	X	28.58	3.5
41	MP2C	Z	-49.501	3.5
42	MP2C	Mx	.019	3.5
43	MP2A	X	86.553	1.75
44	MP2A	Z	-149.914	1.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
45	MP2A	Mx	-.19	1.75
46	MP2A	X	86.553	6.75
47	MP2A	Z	-149.914	6.75
48	MP2A	Mx	-.19	6.75
49	MP2B	X	62.182	1.75
50	MP2B	Z	-107.703	1.75
51	MP2B	Mx	.093	1.75
52	MP2B	X	62.182	6.75
53	MP2B	Z	-107.703	6.75
54	MP2B	Mx	.093	6.75
55	MP2C	X	86.553	1.75
56	MP2C	Z	-149.914	1.75
57	MP2C	Mx	.06	1.75
58	MP2C	X	86.553	6.75
59	MP2C	Z	-149.914	6.75
60	MP2C	Mx	.06	6.75
61	MP2A	X	86.553	1.75
62	MP2A	Z	-149.914	1.75
63	MP2A	Mx	.06	1.75
64	MP2A	X	86.553	6.75
65	MP2A	Z	-149.914	6.75
66	MP2A	Mx	.06	6.75
67	MP2B	X	62.182	1.75
68	MP2B	Z	-107.703	1.75
69	MP2B	Mx	.093	1.75
70	MP2B	X	62.182	6.75
71	MP2B	Z	-107.703	6.75
72	MP2B	Mx	.093	6.75
73	MP2C	X	86.553	1.75
74	MP2C	Z	-149.914	1.75
75	MP2C	Mx	-.19	1.75
76	MP2C	X	86.553	6.75
77	MP2C	Z	-149.914	6.75
78	MP2C	Mx	-.19	6.75
79	MP1C	X	40.959	2.42
80	MP1C	Z	-70.944	2.42
81	MP1C	Mx	-.032	2.42
82	MP1C	X	40.959	6
83	MP1C	Z	-70.944	6
84	MP1C	Mx	-.032	6
85	MP5C	X	40.959	2.42
86	MP5C	Z	-70.944	2.42
87	MP5C	Mx	-.032	2.42
88	MP5C	X	40.959	6
89	MP5C	Z	-70.944	6
90	MP5C	Mx	-.032	6
91	MP1A	X	54.293	1.75
92	MP1A	Z	-94.038	1.75
93	MP1A	Mx	-.033	1.75
94	MP1A	X	54.293	6.75
95	MP1A	Z	-94.038	6.75
96	MP1A	Mx	-.033	6.75
97	MP1B	X	60.97	1.75
98	MP1B	Z	-105.603	1.75
99	MP1B	Mx	.074	1.75
100	MP1B	X	60.97	6.75
101	MP1B	Z	-105.603	6.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
102	MP1B	Mx	.074	6.75
103	MP5A	X	54.293	1.75
104	MP5A	Z	-94.038	1.75
105	MP5A	Mx	-.033	1.75
106	MP5A	X	54.293	6.75
107	MP5A	Z	-94.038	6.75
108	MP5A	Mx	-.033	6.75
109	MP5B	X	60.97	1.75
110	MP5B	Z	-105.603	1.75
111	MP5B	Mx	.074	1.75
112	MP5B	X	60.97	6.75
113	MP5B	Z	-105.603	6.75
114	MP5B	Mx	.074	6.75
115	MP2A	X	7.098	2
116	MP2A	Z	-12.294	2
117	MP2A	Mx	.003	2
118	MP2B	X	5.321	2
119	MP2B	Z	-9.216	2
120	MP2B	Mx	-.004	2
121	MP2C	X	7.098	2
122	MP2C	Z	-12.294	2
123	MP2C	Mx	.003	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1B	X	16.475	2
2	MP1B	Z	-9.512	2
3	MP1B	Mx	.005	2
4	MP1B	X	16.475	2
5	MP1B	Z	-9.512	2
6	MP1B	Mx	-.005	2
7	MP4A	X	35.866	2.92
8	MP4A	Z	-20.707	2.92
9	MP4A	Mx	-.027	2.92
10	MP4A	X	35.866	5.67
11	MP4A	Z	-20.707	5.67
12	MP4A	Mx	-.027	5.67
13	MP4B	X	35.866	2.92
14	MP4B	Z	-20.707	2.92
15	MP4B	Mx	.027	2.92
16	MP4B	X	35.866	5.67
17	MP4B	Z	-20.707	5.67
18	MP4B	Mx	.027	5.67
19	MP4C	X	70.562	2.92
20	MP4C	Z	-40.739	2.92
21	MP4C	Mx	0	2.92
22	MP4C	X	70.562	5.67
23	MP4C	Z	-40.739	5.67
24	MP4C	Mx	0	5.67
25	MP1A	X	42.031	3.5
26	MP1A	Z	-24.267	3.5
27	MP1A	Mx	.028	3.5
28	MP1B	X	42.031	3.5
29	MP1B	Z	-24.267	3.5
30	MP1B	Mx	-.028	3.5
31	MP1C	X	55.802	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
32	MP1C	Z	-32.217	3.5
33	MP1C	Mx	0	3.5
34	MP2A	X	36.901	3.5
35	MP2A	Z	-21.305	3.5
36	MP2A	Mx	.025	3.5
37	MP2B	X	36.901	3.5
38	MP2B	Z	-21.305	3.5
39	MP2B	Mx	-.025	3.5
40	MP2C	X	55.802	3.5
41	MP2C	Z	-32.217	3.5
42	MP2C	Mx	0	3.5
43	MP2A	X	121.774	1.75
44	MP2A	Z	-70.306	1.75
45	MP2A	Mx	-.15	1.75
46	MP2A	X	121.774	6.75
47	MP2A	Z	-70.306	6.75
48	MP2A	Mx	-.15	6.75
49	MP2B	X	121.774	1.75
50	MP2B	Z	-70.306	1.75
51	MP2B	Mx	.033	1.75
52	MP2B	X	121.774	6.75
53	MP2B	Z	-70.306	6.75
54	MP2B	Mx	.033	6.75
55	MP2C	X	163.985	1.75
56	MP2C	Z	-94.677	1.75
57	MP2C	Mx	.158	1.75
58	MP2C	X	163.985	6.75
59	MP2C	Z	-94.677	6.75
60	MP2C	Mx	.158	6.75
61	MP2A	X	121.774	1.75
62	MP2A	Z	-70.306	1.75
63	MP2A	Mx	-.033	1.75
64	MP2A	X	121.774	6.75
65	MP2A	Z	-70.306	6.75
66	MP2A	Mx	-.033	6.75
67	MP2B	X	121.774	1.75
68	MP2B	Z	-70.306	1.75
69	MP2B	Mx	.15	1.75
70	MP2B	X	121.774	6.75
71	MP2B	Z	-70.306	6.75
72	MP2B	Mx	.15	6.75
73	MP2C	X	163.985	1.75
74	MP2C	Z	-94.677	1.75
75	MP2C	Mx	-.158	1.75
76	MP2C	X	163.985	6.75
77	MP2C	Z	-94.677	6.75
78	MP2C	Mx	-.158	6.75
79	MP1C	X	72.902	2.42
80	MP1C	Z	-42.09	2.42
81	MP1C	Mx	0	2.42
82	MP1C	X	72.902	6
83	MP1C	Z	-42.09	6
84	MP1C	Mx	0	6
85	MP5C	X	72.902	2.42
86	MP5C	Z	-42.09	2.42
87	MP5C	Mx	0	2.42
88	MP5C	X	72.902	6



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
89	MP5C	Z	-42.09	6
90	MP5C	Mx	0	6
91	MP1A	X	101.748	1.75
92	MP1A	Z	-58.744	1.75
93	MP1A	Mx	-.061	1.75
94	MP1A	X	101.748	6.75
95	MP1A	Z	-58.744	6.75
96	MP1A	Mx	-.061	6.75
97	MP1B	X	101.748	1.75
98	MP1B	Z	-58.744	1.75
99	MP1B	Mx	.061	1.75
100	MP1B	X	101.748	6.75
101	MP1B	Z	-58.744	6.75
102	MP1B	Mx	.061	6.75
103	MP5A	X	101.748	1.75
104	MP5A	Z	-58.744	1.75
105	MP5A	Mx	-.061	1.75
106	MP5A	X	101.748	6.75
107	MP5A	Z	-58.744	6.75
108	MP5A	Mx	-.061	6.75
109	MP5B	X	101.748	1.75
110	MP5B	Z	-58.744	1.75
111	MP5B	Mx	.061	1.75
112	MP5B	X	101.748	6.75
113	MP5B	Z	-58.744	6.75
114	MP5B	Mx	.061	6.75
115	MP2A	X	10.242	2
116	MP2A	Z	-5.913	2
117	MP2A	Mx	.004	2
118	MP2B	X	10.242	2
119	MP2B	Z	-5.913	2
120	MP2B	Mx	-.004	2
121	MP2C	X	13.32	2
122	MP2C	Z	-7.691	2
123	MP2C	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP1B	X	32.902	2
2	MP1B	Z	0	2
3	MP1B	Mx	.005	2
4	MP1B	X	32.902	2
5	MP1B	Z	0	2
6	MP1B	Mx	-.005	2
7	MP4A	X	28.06	2.92
8	MP4A	Z	0	2.92
9	MP4A	Mx	-.021	2.92
10	MP4A	X	28.06	5.67
11	MP4A	Z	0	5.67
12	MP4A	Mx	-.021	5.67
13	MP4B	X	68.124	2.92
14	MP4B	Z	0	2.92
15	MP4B	Mx	.026	2.92
16	MP4B	X	68.124	5.67
17	MP4B	Z	0	5.67
18	MP4B	Mx	.026	5.67



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
19	MP4C	X	68.124	2.92
20	MP4C	Z	0	2.92
21	MP4C	Mx	.026	2.92
22	MP4C	X	68.124	5.67
23	MP4C	Z	0	5.67
24	MP4C	Mx	.026	5.67
25	MP1A	X	43.233	3.5
26	MP1A	Z	0	3.5
27	MP1A	Mx	.029	3.5
28	MP1B	X	59.134	3.5
29	MP1B	Z	0	3.5
30	MP1B	Mx	-.02	3.5
31	MP1C	X	59.134	3.5
32	MP1C	Z	0	3.5
33	MP1C	Mx	-.02	3.5
34	MP2A	X	35.335	3.5
35	MP2A	Z	0	3.5
36	MP2A	Mx	.024	3.5
37	MP2B	X	57.159	3.5
38	MP2B	Z	0	3.5
39	MP2B	Mx	-.019	3.5
40	MP2C	X	57.159	3.5
41	MP2C	Z	0	3.5
42	MP2C	Mx	-.019	3.5
43	MP2A	X	124.365	1.75
44	MP2A	Z	0	1.75
45	MP2A	Mx	-.093	1.75
46	MP2A	X	124.365	6.75
47	MP2A	Z	0	6.75
48	MP2A	Mx	-.093	6.75
49	MP2B	X	173.106	1.75
50	MP2B	Z	0	1.75
51	MP2B	Mx	-.06	1.75
52	MP2B	X	173.106	6.75
53	MP2B	Z	0	6.75
54	MP2B	Mx	-.06	6.75
55	MP2C	X	173.106	1.75
56	MP2C	Z	0	1.75
57	MP2C	Mx	.19	1.75
58	MP2C	X	173.106	6.75
59	MP2C	Z	0	6.75
60	MP2C	Mx	.19	6.75
61	MP2A	X	124.365	1.75
62	MP2A	Z	0	1.75
63	MP2A	Mx	-.093	1.75
64	MP2A	X	124.365	6.75
65	MP2A	Z	0	6.75
66	MP2A	Mx	-.093	6.75
67	MP2B	X	173.106	1.75
68	MP2B	Z	0	1.75
69	MP2B	Mx	.19	1.75
70	MP2B	X	173.106	6.75
71	MP2B	Z	0	6.75
72	MP2B	Mx	.19	6.75
73	MP2C	X	173.106	1.75
74	MP2C	Z	0	1.75
75	MP2C	Mx	-.06	1.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
76	MP2C	X	173.106	6.75
77	MP2C	Z	0	6.75
78	MP2C	Mx	-.06	6.75
79	MP1C	X	81.919	2.42
80	MP1C	Z	0	2.42
81	MP1C	Mx	.032	2.42
82	MP1C	X	81.919	6
83	MP1C	Z	0	6
84	MP1C	Mx	.032	6
85	MP5C	X	81.919	2.42
86	MP5C	Z	0	2.42
87	MP5C	Mx	.032	2.42
88	MP5C	X	81.919	6
89	MP5C	Z	0	6
90	MP5C	Mx	.032	6
91	MP1A	X	121.94	1.75
92	MP1A	Z	0	1.75
93	MP1A	Mx	-.074	1.75
94	MP1A	X	121.94	6.75
95	MP1A	Z	0	6.75
96	MP1A	Mx	-.074	6.75
97	MP1B	X	108.585	1.75
98	MP1B	Z	0	1.75
99	MP1B	Mx	.033	1.75
100	MP1B	X	108.585	6.75
101	MP1B	Z	0	6.75
102	MP1B	Mx	.033	6.75
103	MP5A	X	121.94	1.75
104	MP5A	Z	0	1.75
105	MP5A	Mx	-.074	1.75
106	MP5A	X	121.94	6.75
107	MP5A	Z	0	6.75
108	MP5A	Mx	-.074	6.75
109	MP5B	X	108.585	1.75
110	MP5B	Z	0	1.75
111	MP5B	Mx	.033	1.75
112	MP5B	X	108.585	6.75
113	MP5B	Z	0	6.75
114	MP5B	Mx	.033	6.75
115	MP2A	X	10.642	2
116	MP2A	Z	0	2
117	MP2A	Mx	.004	2
118	MP2B	X	14.196	2
119	MP2B	Z	0	2
120	MP2B	Mx	-.003	2
121	MP2C	X	14.196	2
122	MP2C	Z	0	2
123	MP2C	Mx	-.003	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1B	X	34.504	2
2	MP1B	Z	19.921	2
3	MP1B	Mx	0	2
4	MP1B	X	34.504	2
5	MP1B	Z	19.921	2



Company : Colliers Engineering & Design
 Designer :
 Job Number :
 Model Name : 5000392762-VZW_MT_LO_H

Aug 7, 2023
 10:53 AM
 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
6	MP1B	Mx	0	2
7	MP4A	X	35.866	2.92
8	MP4A	Z	20.707	2.92
9	MP4A	Mx	-.027	2.92
10	MP4A	X	35.866	5.67
11	MP4A	Z	20.707	5.67
12	MP4A	Mx	-.027	5.67
13	MP4B	X	70.562	2.92
14	MP4B	Z	40.739	2.92
15	MP4B	Mx	0	2.92
16	MP4B	X	70.562	5.67
17	MP4B	Z	40.739	5.67
18	MP4B	Mx	0	5.67
19	MP4C	X	35.866	2.92
20	MP4C	Z	20.707	2.92
21	MP4C	Mx	.027	2.92
22	MP4C	X	35.866	5.67
23	MP4C	Z	20.707	5.67
24	MP4C	Mx	.027	5.67
25	MP1A	X	42.031	3.5
26	MP1A	Z	24.267	3.5
27	MP1A	Mx	.028	3.5
28	MP1B	X	55.802	3.5
29	MP1B	Z	32.217	3.5
30	MP1B	Mx	0	3.5
31	MP1C	X	42.031	3.5
32	MP1C	Z	24.267	3.5
33	MP1C	Mx	-.028	3.5
34	MP2A	X	36.901	3.5
35	MP2A	Z	21.305	3.5
36	MP2A	Mx	.025	3.5
37	MP2B	X	55.802	3.5
38	MP2B	Z	32.217	3.5
39	MP2B	Mx	0	3.5
40	MP2C	X	36.901	3.5
41	MP2C	Z	21.305	3.5
42	MP2C	Mx	-.025	3.5
43	MP2A	X	121.774	1.75
44	MP2A	Z	70.306	1.75
45	MP2A	Mx	-.033	1.75
46	MP2A	X	121.774	6.75
47	MP2A	Z	70.306	6.75
48	MP2A	Mx	-.033	6.75
49	MP2B	X	163.985	1.75
50	MP2B	Z	94.677	1.75
51	MP2B	Mx	-.158	1.75
52	MP2B	X	163.985	6.75
53	MP2B	Z	94.677	6.75
54	MP2B	Mx	-.158	6.75
55	MP2C	X	121.774	1.75
56	MP2C	Z	70.306	1.75
57	MP2C	Mx	.15	1.75
58	MP2C	X	121.774	6.75
59	MP2C	Z	70.306	6.75
60	MP2C	Mx	.15	6.75
61	MP2A	X	121.774	1.75
62	MP2A	Z	70.306	1.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
63	MP2A	Mx	-.15	1.75
64	MP2A	X	121.774	6.75
65	MP2A	Z	70.306	6.75
66	MP2A	Mx	-.15	6.75
67	MP2B	X	163.985	1.75
68	MP2B	Z	94.677	1.75
69	MP2B	Mx	.158	1.75
70	MP2B	X	163.985	6.75
71	MP2B	Z	94.677	6.75
72	MP2B	Mx	.158	6.75
73	MP2C	X	121.774	1.75
74	MP2C	Z	70.306	1.75
75	MP2C	Mx	.033	1.75
76	MP2C	X	121.774	6.75
77	MP2C	Z	70.306	6.75
78	MP2C	Mx	.033	6.75
79	MP1C	X	67.027	2.42
80	MP1C	Z	38.698	2.42
81	MP1C	Mx	.052	2.42
82	MP1C	X	67.027	6
83	MP1C	Z	38.698	6
84	MP1C	Mx	.052	6
85	MP5C	X	67.027	2.42
86	MP5C	Z	38.698	2.42
87	MP5C	Mx	.052	2.42
88	MP5C	X	67.027	6
89	MP5C	Z	38.698	6
90	MP5C	Mx	.052	6
91	MP1A	X	101.748	1.75
92	MP1A	Z	58.744	1.75
93	MP1A	Mx	-.061	1.75
94	MP1A	X	101.748	6.75
95	MP1A	Z	58.744	6.75
96	MP1A	Mx	-.061	6.75
97	MP1B	X	90.183	1.75
98	MP1B	Z	52.067	1.75
99	MP1B	Mx	0	1.75
100	MP1B	X	90.183	6.75
101	MP1B	Z	52.067	6.75
102	MP1B	Mx	0	6.75
103	MP5A	X	101.748	1.75
104	MP5A	Z	58.744	1.75
105	MP5A	Mx	-.061	1.75
106	MP5A	X	101.748	6.75
107	MP5A	Z	58.744	6.75
108	MP5A	Mx	-.061	6.75
109	MP5B	X	90.183	1.75
110	MP5B	Z	52.067	1.75
111	MP5B	Mx	0	1.75
112	MP5B	X	90.183	6.75
113	MP5B	Z	52.067	6.75
114	MP5B	Mx	0	6.75
115	MP2A	X	10.242	2
116	MP2A	Z	5.913	2
117	MP2A	Mx	.004	2
118	MP2B	X	13.32	2
119	MP2B	Z	7.691	2



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

	Member Label	Direction	Magnitude[[lb,k-ft]	Location[ft,%]
120	MP2B	Mx	0	2
121	MP2C	X	10.242	2
122	MP2C	Z	5.913	2
123	MP2C	Mx	-.004	2

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

	Member Label	Direction	Magnitude[[lb,k-ft]	Location[ft,%]
1	MP1B	X	16.451	2
2	MP1B	Z	28.494	2
3	MP1B	Mx	-.005	2
4	MP1B	X	16.451	2
5	MP1B	Z	28.494	2
6	MP1B	Mx	.005	2
7	MP4A	X	34.062	2.92
8	MP4A	Z	58.997	2.92
9	MP4A	Mx	-.026	2.92
10	MP4A	X	34.062	5.67
11	MP4A	Z	58.997	5.67
12	MP4A	Mx	-.026	5.67
13	MP4B	X	34.062	2.92
14	MP4B	Z	58.997	2.92
15	MP4B	Mx	-.026	2.92
16	MP4B	X	34.062	5.67
17	MP4B	Z	58.997	5.67
18	MP4B	Mx	-.026	5.67
19	MP4C	X	14.03	2.92
20	MP4C	Z	24.301	2.92
21	MP4C	Mx	.021	2.92
22	MP4C	X	14.03	5.67
23	MP4C	Z	24.301	5.67
24	MP4C	Mx	.021	5.67
25	MP1A	X	29.567	3.5
26	MP1A	Z	51.212	3.5
27	MP1A	Mx	.02	3.5
28	MP1B	X	29.567	3.5
29	MP1B	Z	51.212	3.5
30	MP1B	Mx	.02	3.5
31	MP1C	X	21.617	3.5
32	MP1C	Z	37.441	3.5
33	MP1C	Mx	-.029	3.5
34	MP2A	X	28.58	3.5
35	MP2A	Z	49.501	3.5
36	MP2A	Mx	.019	3.5
37	MP2B	X	28.58	3.5
38	MP2B	Z	49.501	3.5
39	MP2B	Mx	.019	3.5
40	MP2C	X	17.667	3.5
41	MP2C	Z	30.601	3.5
42	MP2C	Mx	-.024	3.5
43	MP2A	X	86.553	1.75
44	MP2A	Z	149.914	1.75
45	MP2A	Mx	.06	1.75
46	MP2A	X	86.553	6.75
47	MP2A	Z	149.914	6.75
48	MP2A	Mx	.06	6.75
49	MP2B	X	86.553	1.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
50	MP2B	Z	149.914	1.75
51	MP2B	Mx	-.19	1.75
52	MP2B	X	86.553	6.75
53	MP2B	Z	149.914	6.75
54	MP2B	Mx	-.19	6.75
55	MP2C	X	62.182	1.75
56	MP2C	Z	107.703	1.75
57	MP2C	Mx	.093	1.75
58	MP2C	X	62.182	6.75
59	MP2C	Z	107.703	6.75
60	MP2C	Mx	.093	6.75
61	MP2A	X	86.553	1.75
62	MP2A	Z	149.914	1.75
63	MP2A	Mx	-.19	1.75
64	MP2A	X	86.553	6.75
65	MP2A	Z	149.914	6.75
66	MP2A	Mx	-.19	6.75
67	MP2B	X	86.553	1.75
68	MP2B	Z	149.914	1.75
69	MP2B	Mx	.06	1.75
70	MP2B	X	86.553	6.75
71	MP2B	Z	149.914	6.75
72	MP2B	Mx	.06	6.75
73	MP2C	X	62.182	1.75
74	MP2C	Z	107.703	1.75
75	MP2C	Mx	.093	1.75
76	MP2C	X	62.182	6.75
77	MP2C	Z	107.703	6.75
78	MP2C	Mx	.093	6.75
79	MP1C	X	37.567	2.42
80	MP1C	Z	65.069	2.42
81	MP1C	Mx	.058	2.42
82	MP1C	X	37.567	6
83	MP1C	Z	65.069	6
84	MP1C	Mx	.058	6
85	MP5C	X	37.567	2.42
86	MP5C	Z	65.069	2.42
87	MP5C	Mx	.058	2.42
88	MP5C	X	37.567	6
89	MP5C	Z	65.069	6
90	MP5C	Mx	.058	6
91	MP1A	X	54.293	1.75
92	MP1A	Z	94.038	1.75
93	MP1A	Mx	-.033	1.75
94	MP1A	X	54.293	6.75
95	MP1A	Z	94.038	6.75
96	MP1A	Mx	-.033	6.75
97	MP1B	X	54.293	1.75
98	MP1B	Z	94.038	1.75
99	MP1B	Mx	-.033	1.75
100	MP1B	X	54.293	6.75
101	MP1B	Z	94.038	6.75
102	MP1B	Mx	-.033	6.75
103	MP5A	X	54.293	1.75
104	MP5A	Z	94.038	1.75
105	MP5A	Mx	-.033	1.75
106	MP5A	X	54.293	6.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
107	MP5A	Z	94.038	6.75
108	MP5A	Mx	-.033	6.75
109	MP5B	X	54.293	1.75
110	MP5B	Z	94.038	1.75
111	MP5B	Mx	-.033	1.75
112	MP5B	X	54.293	6.75
113	MP5B	Z	94.038	6.75
114	MP5B	Mx	-.033	6.75
115	MP2A	X	7.098	2
116	MP2A	Z	12.294	2
117	MP2A	Mx	.003	2
118	MP2B	X	7.098	2
119	MP2B	Z	12.294	2
120	MP2B	Mx	.003	2
121	MP2C	X	5.321	2
122	MP2C	Z	9.216	2
123	MP2C	Mx	-.004	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1B	X	0	2
2	MP1B	Z	19.023	2
3	MP1B	Mx	-.005	2
4	MP1B	X	0	2
5	MP1B	Z	19.023	2
6	MP1B	Mx	.005	2
7	MP4A	X	0	2.92
8	MP4A	Z	81.478	2.92
9	MP4A	Mx	0	2.92
10	MP4A	X	0	5.67
11	MP4A	Z	81.478	5.67
12	MP4A	Mx	0	5.67
13	MP4B	X	0	2.92
14	MP4B	Z	41.415	2.92
15	MP4B	Mx	-.027	2.92
16	MP4B	X	0	5.67
17	MP4B	Z	41.415	5.67
18	MP4B	Mx	-.027	5.67
19	MP4C	X	0	2.92
20	MP4C	Z	41.415	2.92
21	MP4C	Mx	.027	2.92
22	MP4C	X	0	5.67
23	MP4C	Z	41.415	5.67
24	MP4C	Mx	.027	5.67
25	MP1A	X	0	3.5
26	MP1A	Z	64.434	3.5
27	MP1A	Mx	0	3.5
28	MP1B	X	0	3.5
29	MP1B	Z	48.534	3.5
30	MP1B	Mx	.028	3.5
31	MP1C	X	0	3.5
32	MP1C	Z	48.534	3.5
33	MP1C	Mx	-.028	3.5
34	MP2A	X	0	3.5
35	MP2A	Z	64.434	3.5
36	MP2A	Mx	0	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
37	MP2B	X	0	3.5
38	MP2B	Z	42.61	3.5
39	MP2B	Mx	.025	3.5
40	MP2C	X	0	3.5
41	MP2C	Z	42.61	3.5
42	MP2C	Mx	-.025	3.5
43	MP2A	X	0	1.75
44	MP2A	Z	189.353	1.75
45	MP2A	Mx	.158	1.75
46	MP2A	X	0	6.75
47	MP2A	Z	189.353	6.75
48	MP2A	Mx	.158	6.75
49	MP2B	X	0	1.75
50	MP2B	Z	140.612	1.75
51	MP2B	Mx	-.15	1.75
52	MP2B	X	0	6.75
53	MP2B	Z	140.612	6.75
54	MP2B	Mx	-.15	6.75
55	MP2C	X	0	1.75
56	MP2C	Z	140.612	1.75
57	MP2C	Mx	.033	1.75
58	MP2C	X	0	6.75
59	MP2C	Z	140.612	6.75
60	MP2C	Mx	.033	6.75
61	MP2A	X	0	1.75
62	MP2A	Z	189.353	1.75
63	MP2A	Mx	-.158	1.75
64	MP2A	X	0	6.75
65	MP2A	Z	189.353	6.75
66	MP2A	Mx	-.158	6.75
67	MP2B	X	0	1.75
68	MP2B	Z	140.612	1.75
69	MP2B	Mx	-.033	1.75
70	MP2B	X	0	6.75
71	MP2B	Z	140.612	6.75
72	MP2B	Mx	-.033	6.75
73	MP2C	X	0	1.75
74	MP2C	Z	140.612	1.75
75	MP2C	Mx	.15	1.75
76	MP2C	X	0	6.75
77	MP2C	Z	140.612	6.75
78	MP2C	Mx	.15	6.75
79	MP1C	X	0	2.42
80	MP1C	Z	77.396	2.42
81	MP1C	Mx	.052	2.42
82	MP1C	X	0	6
83	MP1C	Z	77.396	6
84	MP1C	Mx	.052	6
85	MP5C	X	0	2.42
86	MP5C	Z	77.396	2.42
87	MP5C	Mx	.052	2.42
88	MP5C	X	0	6
89	MP5C	Z	77.396	6
90	MP5C	Mx	.052	6
91	MP1A	X	0	1.75
92	MP1A	Z	104.134	1.75
93	MP1A	Mx	0	1.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
94	MP1A	X	0	6.75
95	MP1A	Z	104.134	6.75
96	MP1A	Mx	0	6.75
97	MP1B	X	0	1.75
98	MP1B	Z	117.488	1.75
99	MP1B	Mx	-.061	1.75
100	MP1B	X	0	6.75
101	MP1B	Z	117.488	6.75
102	MP1B	Mx	-.061	6.75
103	MP5A	X	0	1.75
104	MP5A	Z	104.134	1.75
105	MP5A	Mx	0	1.75
106	MP5A	X	0	6.75
107	MP5A	Z	104.134	6.75
108	MP5A	Mx	0	6.75
109	MP5B	X	0	1.75
110	MP5B	Z	117.488	1.75
111	MP5B	Mx	-.061	1.75
112	MP5B	X	0	6.75
113	MP5B	Z	117.488	6.75
114	MP5B	Mx	-.061	6.75
115	MP2A	X	0	2
116	MP2A	Z	15.381	2
117	MP2A	Mx	0	2
118	MP2B	X	0	2
119	MP2B	Z	11.827	2
120	MP2B	Mx	.004	2
121	MP2C	X	0	2
122	MP2C	Z	11.827	2
123	MP2C	Mx	-.004	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1B	X	-6.042	2
2	MP1B	Z	10.465	2
3	MP1B	Mx	-.004	2
4	MP1B	X	-6.042	2
5	MP1B	Z	10.465	2
6	MP1B	Mx	.004	2
7	MP4A	X	-34.062	2.92
8	MP4A	Z	58.997	2.92
9	MP4A	Mx	.026	2.92
10	MP4A	X	-34.062	5.67
11	MP4A	Z	58.997	5.67
12	MP4A	Mx	.026	5.67
13	MP4B	X	-14.03	2.92
14	MP4B	Z	24.301	2.92
15	MP4B	Mx	-.021	2.92
16	MP4B	X	-14.03	5.67
17	MP4B	Z	24.301	5.67
18	MP4B	Mx	-.021	5.67
19	MP4C	X	-34.062	2.92
20	MP4C	Z	58.997	2.92
21	MP4C	Mx	.026	2.92
22	MP4C	X	-34.062	5.67
23	MP4C	Z	58.997	5.67



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
24	MP4C	Mx	.026	5.67
25	MP1A	X	-29.567	3.5
26	MP1A	Z	51.212	3.5
27	MP1A	Mx	-.02	3.5
28	MP1B	X	-21.617	3.5
29	MP1B	Z	37.441	3.5
30	MP1B	Mx	.029	3.5
31	MP1C	X	-29.567	3.5
32	MP1C	Z	51.212	3.5
33	MP1C	Mx	-.02	3.5
34	MP2A	X	-28.58	3.5
35	MP2A	Z	49.501	3.5
36	MP2A	Mx	-.019	3.5
37	MP2B	X	-17.667	3.5
38	MP2B	Z	30.601	3.5
39	MP2B	Mx	.024	3.5
40	MP2C	X	-28.58	3.5
41	MP2C	Z	49.501	3.5
42	MP2C	Mx	-.019	3.5
43	MP2A	X	-86.553	1.75
44	MP2A	Z	149.914	1.75
45	MP2A	Mx	.19	1.75
46	MP2A	X	-86.553	6.75
47	MP2A	Z	149.914	6.75
48	MP2A	Mx	.19	6.75
49	MP2B	X	-62.182	1.75
50	MP2B	Z	107.703	1.75
51	MP2B	Mx	-.093	1.75
52	MP2B	X	-62.182	6.75
53	MP2B	Z	107.703	6.75
54	MP2B	Mx	-.093	6.75
55	MP2C	X	-86.553	1.75
56	MP2C	Z	149.914	1.75
57	MP2C	Mx	-.06	1.75
58	MP2C	X	-86.553	6.75
59	MP2C	Z	149.914	6.75
60	MP2C	Mx	-.06	6.75
61	MP2A	X	-86.553	1.75
62	MP2A	Z	149.914	1.75
63	MP2A	Mx	-.06	1.75
64	MP2A	X	-86.553	6.75
65	MP2A	Z	149.914	6.75
66	MP2A	Mx	-.06	6.75
67	MP2B	X	-62.182	1.75
68	MP2B	Z	107.703	1.75
69	MP2B	Mx	-.093	1.75
70	MP2B	X	-62.182	6.75
71	MP2B	Z	107.703	6.75
72	MP2B	Mx	-.093	6.75
73	MP2C	X	-86.553	1.75
74	MP2C	Z	149.914	1.75
75	MP2C	Mx	.19	1.75
76	MP2C	X	-86.553	6.75
77	MP2C	Z	149.914	6.75
78	MP2C	Mx	.19	6.75
79	MP1C	X	-40.959	2.42
80	MP1C	Z	70.944	2.42



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
81	MP1C	Mx	.032	2.42
82	MP1C	X	-40.959	6
83	MP1C	Z	70.944	6
84	MP1C	Mx	.032	6
85	MP5C	X	-40.959	2.42
86	MP5C	Z	70.944	2.42
87	MP5C	Mx	.032	2.42
88	MP5C	X	-40.959	6
89	MP5C	Z	70.944	6
90	MP5C	Mx	.032	6
91	MP1A	X	-54.293	1.75
92	MP1A	Z	94.038	1.75
93	MP1A	Mx	.033	1.75
94	MP1A	X	-54.293	6.75
95	MP1A	Z	94.038	6.75
96	MP1A	Mx	.033	6.75
97	MP1B	X	-60.97	1.75
98	MP1B	Z	105.603	1.75
99	MP1B	Mx	-.074	1.75
100	MP1B	X	-60.97	6.75
101	MP1B	Z	105.603	6.75
102	MP1B	Mx	-.074	6.75
103	MP5A	X	-54.293	1.75
104	MP5A	Z	94.038	1.75
105	MP5A	Mx	.033	1.75
106	MP5A	X	-54.293	6.75
107	MP5A	Z	94.038	6.75
108	MP5A	Mx	.033	6.75
109	MP5B	X	-60.97	1.75
110	MP5B	Z	105.603	1.75
111	MP5B	Mx	-.074	1.75
112	MP5B	X	-60.97	6.75
113	MP5B	Z	105.603	6.75
114	MP5B	Mx	-.074	6.75
115	MP2A	X	-7.098	2
116	MP2A	Z	12.294	2
117	MP2A	Mx	-.003	2
118	MP2B	X	-5.321	2
119	MP2B	Z	9.216	2
120	MP2B	Mx	.004	2
121	MP2C	X	-7.098	2
122	MP2C	Z	12.294	2
123	MP2C	Mx	-.003	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1B	X	-16.475	2
2	MP1B	Z	9.512	2
3	MP1B	Mx	-.005	2
4	MP1B	X	-16.475	2
5	MP1B	Z	9.512	2
6	MP1B	Mx	.005	2
7	MP4A	X	-35.866	2.92
8	MP4A	Z	20.707	2.92
9	MP4A	Mx	.027	2.92
10	MP4A	X	-35.866	5.67



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
11	MP4A	Z	20.707	5.67
12	MP4A	Mx	.027	5.67
13	MP4B	X	-35.866	2.92
14	MP4B	Z	20.707	2.92
15	MP4B	Mx	-.027	2.92
16	MP4B	X	-35.866	5.67
17	MP4B	Z	20.707	5.67
18	MP4B	Mx	-.027	5.67
19	MP4C	X	-70.562	2.92
20	MP4C	Z	40.739	2.92
21	MP4C	Mx	0	2.92
22	MP4C	X	-70.562	5.67
23	MP4C	Z	40.739	5.67
24	MP4C	Mx	0	5.67
25	MP1A	X	-42.031	3.5
26	MP1A	Z	24.267	3.5
27	MP1A	Mx	-.028	3.5
28	MP1B	X	-42.031	3.5
29	MP1B	Z	24.267	3.5
30	MP1B	Mx	.028	3.5
31	MP1C	X	-55.802	3.5
32	MP1C	Z	32.217	3.5
33	MP1C	Mx	0	3.5
34	MP2A	X	-36.901	3.5
35	MP2A	Z	21.305	3.5
36	MP2A	Mx	-.025	3.5
37	MP2B	X	-36.901	3.5
38	MP2B	Z	21.305	3.5
39	MP2B	Mx	.025	3.5
40	MP2C	X	-55.802	3.5
41	MP2C	Z	32.217	3.5
42	MP2C	Mx	0	3.5
43	MP2A	X	-121.774	1.75
44	MP2A	Z	70.306	1.75
45	MP2A	Mx	.15	1.75
46	MP2A	X	-121.774	6.75
47	MP2A	Z	70.306	6.75
48	MP2A	Mx	.15	6.75
49	MP2B	X	-121.774	1.75
50	MP2B	Z	70.306	1.75
51	MP2B	Mx	-.033	1.75
52	MP2B	X	-121.774	6.75
53	MP2B	Z	70.306	6.75
54	MP2B	Mx	-.033	6.75
55	MP2C	X	-163.985	1.75
56	MP2C	Z	94.677	1.75
57	MP2C	Mx	-.158	1.75
58	MP2C	X	-163.985	6.75
59	MP2C	Z	94.677	6.75
60	MP2C	Mx	-.158	6.75
61	MP2A	X	-121.774	1.75
62	MP2A	Z	70.306	1.75
63	MP2A	Mx	.033	1.75
64	MP2A	X	-121.774	6.75
65	MP2A	Z	70.306	6.75
66	MP2A	Mx	.033	6.75
67	MP2B	X	-121.774	1.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
68	MP2B	Z	70.306	1.75
69	MP2B	Mx	-.15	1.75
70	MP2B	X	-121.774	6.75
71	MP2B	Z	70.306	6.75
72	MP2B	Mx	-.15	6.75
73	MP2C	X	-163.985	1.75
74	MP2C	Z	94.677	1.75
75	MP2C	Mx	.158	1.75
76	MP2C	X	-163.985	6.75
77	MP2C	Z	94.677	6.75
78	MP2C	Mx	.158	6.75
79	MP1C	X	-72.902	2.42
80	MP1C	Z	42.09	2.42
81	MP1C	Mx	0	2.42
82	MP1C	X	-72.902	6
83	MP1C	Z	42.09	6
84	MP1C	Mx	0	6
85	MP5C	X	-72.902	2.42
86	MP5C	Z	42.09	2.42
87	MP5C	Mx	0	2.42
88	MP5C	X	-72.902	6
89	MP5C	Z	42.09	6
90	MP5C	Mx	0	6
91	MP1A	X	-101.748	1.75
92	MP1A	Z	58.744	1.75
93	MP1A	Mx	.061	1.75
94	MP1A	X	-101.748	6.75
95	MP1A	Z	58.744	6.75
96	MP1A	Mx	.061	6.75
97	MP1B	X	-101.748	1.75
98	MP1B	Z	58.744	1.75
99	MP1B	Mx	-.061	1.75
100	MP1B	X	-101.748	6.75
101	MP1B	Z	58.744	6.75
102	MP1B	Mx	-.061	6.75
103	MP5A	X	-101.748	1.75
104	MP5A	Z	58.744	1.75
105	MP5A	Mx	.061	1.75
106	MP5A	X	-101.748	6.75
107	MP5A	Z	58.744	6.75
108	MP5A	Mx	.061	6.75
109	MP5B	X	-101.748	1.75
110	MP5B	Z	58.744	1.75
111	MP5B	Mx	-.061	1.75
112	MP5B	X	-101.748	6.75
113	MP5B	Z	58.744	6.75
114	MP5B	Mx	-.061	6.75
115	MP2A	X	-10.242	2
116	MP2A	Z	5.913	2
117	MP2A	Mx	-.004	2
118	MP2B	X	-10.242	2
119	MP2B	Z	5.913	2
120	MP2B	Mx	.004	2
121	MP2C	X	-13.32	2
122	MP2C	Z	7.691	2
123	MP2C	Mx	0	2



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1B	X	-32.902	2
2	MP1B	Z	0	2
3	MP1B	Mx	-.005	2
4	MP1B	X	-32.902	2
5	MP1B	Z	0	2
6	MP1B	Mx	.005	2
7	MP4A	X	-28.06	2.92
8	MP4A	Z	0	2.92
9	MP4A	Mx	.021	2.92
10	MP4A	X	-28.06	5.67
11	MP4A	Z	0	5.67
12	MP4A	Mx	.021	5.67
13	MP4B	X	-68.124	2.92
14	MP4B	Z	0	2.92
15	MP4B	Mx	-.026	2.92
16	MP4B	X	-68.124	5.67
17	MP4B	Z	0	5.67
18	MP4B	Mx	-.026	5.67
19	MP4C	X	-68.124	2.92
20	MP4C	Z	0	2.92
21	MP4C	Mx	-.026	2.92
22	MP4C	X	-68.124	5.67
23	MP4C	Z	0	5.67
24	MP4C	Mx	-.026	5.67
25	MP1A	X	-43.233	3.5
26	MP1A	Z	0	3.5
27	MP1A	Mx	-.029	3.5
28	MP1B	X	-59.134	3.5
29	MP1B	Z	0	3.5
30	MP1B	Mx	.02	3.5
31	MP1C	X	-59.134	3.5
32	MP1C	Z	0	3.5
33	MP1C	Mx	.02	3.5
34	MP2A	X	-35.335	3.5
35	MP2A	Z	0	3.5
36	MP2A	Mx	-.024	3.5
37	MP2B	X	-57.159	3.5
38	MP2B	Z	0	3.5
39	MP2B	Mx	.019	3.5
40	MP2C	X	-57.159	3.5
41	MP2C	Z	0	3.5
42	MP2C	Mx	.019	3.5
43	MP2A	X	-124.365	1.75
44	MP2A	Z	0	1.75
45	MP2A	Mx	.093	1.75
46	MP2A	X	-124.365	6.75
47	MP2A	Z	0	6.75
48	MP2A	Mx	.093	6.75
49	MP2B	X	-173.106	1.75
50	MP2B	Z	0	1.75
51	MP2B	Mx	.06	1.75
52	MP2B	X	-173.106	6.75
53	MP2B	Z	0	6.75
54	MP2B	Mx	.06	6.75
55	MP2C	X	-173.106	1.75
56	MP2C	Z	0	1.75
57	MP2C	Mx	-.19	1.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP2C	X	-173.106	6.75
59	MP2C	Z	0	6.75
60	MP2C	Mx	-.19	6.75
61	MP2A	X	-124.365	1.75
62	MP2A	Z	0	1.75
63	MP2A	Mx	.093	1.75
64	MP2A	X	-124.365	6.75
65	MP2A	Z	0	6.75
66	MP2A	Mx	.093	6.75
67	MP2B	X	-173.106	1.75
68	MP2B	Z	0	1.75
69	MP2B	Mx	-.19	1.75
70	MP2B	X	-173.106	6.75
71	MP2B	Z	0	6.75
72	MP2B	Mx	-.19	6.75
73	MP2C	X	-173.106	1.75
74	MP2C	Z	0	1.75
75	MP2C	Mx	.06	1.75
76	MP2C	X	-173.106	6.75
77	MP2C	Z	0	6.75
78	MP2C	Mx	.06	6.75
79	MP1C	X	-81.919	2.42
80	MP1C	Z	0	2.42
81	MP1C	Mx	-.032	2.42
82	MP1C	X	-81.919	6
83	MP1C	Z	0	6
84	MP1C	Mx	-.032	6
85	MP5C	X	-81.919	2.42
86	MP5C	Z	0	2.42
87	MP5C	Mx	-.032	2.42
88	MP5C	X	-81.919	6
89	MP5C	Z	0	6
90	MP5C	Mx	-.032	6
91	MP1A	X	-121.94	1.75
92	MP1A	Z	0	1.75
93	MP1A	Mx	.074	1.75
94	MP1A	X	-121.94	6.75
95	MP1A	Z	0	6.75
96	MP1A	Mx	.074	6.75
97	MP1B	X	-108.585	1.75
98	MP1B	Z	0	1.75
99	MP1B	Mx	-.033	1.75
100	MP1B	X	-108.585	6.75
101	MP1B	Z	0	6.75
102	MP1B	Mx	-.033	6.75
103	MP5A	X	-121.94	1.75
104	MP5A	Z	0	1.75
105	MP5A	Mx	.074	1.75
106	MP5A	X	-121.94	6.75
107	MP5A	Z	0	6.75
108	MP5A	Mx	.074	6.75
109	MP5B	X	-108.585	1.75
110	MP5B	Z	0	1.75
111	MP5B	Mx	-.033	1.75
112	MP5B	X	-108.585	6.75
113	MP5B	Z	0	6.75
114	MP5B	Mx	-.033	6.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
115	MP2A	X	-10.642	2
116	MP2A	Z	0	2
117	MP2A	Mx	-.004	2
118	MP2B	X	-14.196	2
119	MP2B	Z	0	2
120	MP2B	Mx	.003	2
121	MP2C	X	-14.196	2
122	MP2C	Z	0	2
123	MP2C	Mx	.003	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1B	X	-34.504	2
2	MP1B	Z	-19.921	2
3	MP1B	Mx	0	2
4	MP1B	X	-34.504	2
5	MP1B	Z	-19.921	2
6	MP1B	Mx	0	2
7	MP4A	X	-35.866	2.92
8	MP4A	Z	-20.707	2.92
9	MP4A	Mx	.027	2.92
10	MP4A	X	-35.866	5.67
11	MP4A	Z	-20.707	5.67
12	MP4A	Mx	.027	5.67
13	MP4B	X	-70.562	2.92
14	MP4B	Z	-40.739	2.92
15	MP4B	Mx	0	2.92
16	MP4B	X	-70.562	5.67
17	MP4B	Z	-40.739	5.67
18	MP4B	Mx	0	5.67
19	MP4C	X	-35.866	2.92
20	MP4C	Z	-20.707	2.92
21	MP4C	Mx	-.027	2.92
22	MP4C	X	-35.866	5.67
23	MP4C	Z	-20.707	5.67
24	MP4C	Mx	-.027	5.67
25	MP1A	X	-42.031	3.5
26	MP1A	Z	-24.267	3.5
27	MP1A	Mx	-.028	3.5
28	MP1B	X	-55.802	3.5
29	MP1B	Z	-32.217	3.5
30	MP1B	Mx	0	3.5
31	MP1C	X	-42.031	3.5
32	MP1C	Z	-24.267	3.5
33	MP1C	Mx	.028	3.5
34	MP2A	X	-36.901	3.5
35	MP2A	Z	-21.305	3.5
36	MP2A	Mx	-.025	3.5
37	MP2B	X	-55.802	3.5
38	MP2B	Z	-32.217	3.5
39	MP2B	Mx	0	3.5
40	MP2C	X	-36.901	3.5
41	MP2C	Z	-21.305	3.5
42	MP2C	Mx	.025	3.5
43	MP2A	X	-121.774	1.75
44	MP2A	Z	-70.306	1.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
45	MP2A	Mx	.033	1.75
46	MP2A	X	-121.774	6.75
47	MP2A	Z	-70.306	6.75
48	MP2A	Mx	.033	6.75
49	MP2B	X	-163.985	1.75
50	MP2B	Z	-94.677	1.75
51	MP2B	Mx	.158	1.75
52	MP2B	X	-163.985	6.75
53	MP2B	Z	-94.677	6.75
54	MP2B	Mx	.158	6.75
55	MP2C	X	-121.774	1.75
56	MP2C	Z	-70.306	1.75
57	MP2C	Mx	-.15	1.75
58	MP2C	X	-121.774	6.75
59	MP2C	Z	-70.306	6.75
60	MP2C	Mx	-.15	6.75
61	MP2A	X	-121.774	1.75
62	MP2A	Z	-70.306	1.75
63	MP2A	Mx	.15	1.75
64	MP2A	X	-121.774	6.75
65	MP2A	Z	-70.306	6.75
66	MP2A	Mx	.15	6.75
67	MP2B	X	-163.985	1.75
68	MP2B	Z	-94.677	1.75
69	MP2B	Mx	-.158	1.75
70	MP2B	X	-163.985	6.75
71	MP2B	Z	-94.677	6.75
72	MP2B	Mx	-.158	6.75
73	MP2C	X	-121.774	1.75
74	MP2C	Z	-70.306	1.75
75	MP2C	Mx	-.033	1.75
76	MP2C	X	-121.774	6.75
77	MP2C	Z	-70.306	6.75
78	MP2C	Mx	-.033	6.75
79	MP1C	X	-67.027	2.42
80	MP1C	Z	-38.698	2.42
81	MP1C	Mx	-.052	2.42
82	MP1C	X	-67.027	6
83	MP1C	Z	-38.698	6
84	MP1C	Mx	-.052	6
85	MP5C	X	-67.027	2.42
86	MP5C	Z	-38.698	2.42
87	MP5C	Mx	-.052	2.42
88	MP5C	X	-67.027	6
89	MP5C	Z	-38.698	6
90	MP5C	Mx	-.052	6
91	MP1A	X	-101.748	1.75
92	MP1A	Z	-58.744	1.75
93	MP1A	Mx	.061	1.75
94	MP1A	X	-101.748	6.75
95	MP1A	Z	-58.744	6.75
96	MP1A	Mx	.061	6.75
97	MP1B	X	-90.183	1.75
98	MP1B	Z	-52.067	1.75
99	MP1B	Mx	0	1.75
100	MP1B	X	-90.183	6.75
101	MP1B	Z	-52.067	6.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
102	MP1B	Mx	0	6.75
103	MP5A	X	-101.748	1.75
104	MP5A	Z	-58.744	1.75
105	MP5A	Mx	.061	1.75
106	MP5A	X	-101.748	6.75
107	MP5A	Z	-58.744	6.75
108	MP5A	Mx	.061	6.75
109	MP5B	X	-90.183	1.75
110	MP5B	Z	-52.067	1.75
111	MP5B	Mx	0	1.75
112	MP5B	X	-90.183	6.75
113	MP5B	Z	-52.067	6.75
114	MP5B	Mx	0	6.75
115	MP2A	X	-10.242	2
116	MP2A	Z	-5.913	2
117	MP2A	Mx	-.004	2
118	MP2B	X	-13.32	2
119	MP2B	Z	-7.691	2
120	MP2B	Mx	0	2
121	MP2C	X	-10.242	2
122	MP2C	Z	-5.913	2
123	MP2C	Mx	.004	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1B	X	-16.451	2
2	MP1B	Z	-28.494	2
3	MP1B	Mx	.005	2
4	MP1B	X	-16.451	2
5	MP1B	Z	-28.494	2
6	MP1B	Mx	-.005	2
7	MP4A	X	-34.062	2.92
8	MP4A	Z	-58.997	2.92
9	MP4A	Mx	.026	2.92
10	MP4A	X	-34.062	5.67
11	MP4A	Z	-58.997	5.67
12	MP4A	Mx	.026	5.67
13	MP4B	X	-34.062	2.92
14	MP4B	Z	-58.997	2.92
15	MP4B	Mx	.026	2.92
16	MP4B	X	-34.062	5.67
17	MP4B	Z	-58.997	5.67
18	MP4B	Mx	.026	5.67
19	MP4C	X	-14.03	2.92
20	MP4C	Z	-24.301	2.92
21	MP4C	Mx	-.021	2.92
22	MP4C	X	-14.03	5.67
23	MP4C	Z	-24.301	5.67
24	MP4C	Mx	-.021	5.67
25	MP1A	X	-29.567	3.5
26	MP1A	Z	-51.212	3.5
27	MP1A	Mx	-.02	3.5
28	MP1B	X	-29.567	3.5
29	MP1B	Z	-51.212	3.5
30	MP1B	Mx	-.02	3.5
31	MP1C	X	-21.617	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
32	MP1C	Z	-37.441	3.5
33	MP1C	Mx	.029	3.5
34	MP2A	X	-28.58	3.5
35	MP2A	Z	-49.501	3.5
36	MP2A	Mx	-.019	3.5
37	MP2B	X	-28.58	3.5
38	MP2B	Z	-49.501	3.5
39	MP2B	Mx	-.019	3.5
40	MP2C	X	-17.667	3.5
41	MP2C	Z	-30.601	3.5
42	MP2C	Mx	.024	3.5
43	MP2A	X	-86.553	1.75
44	MP2A	Z	-149.914	1.75
45	MP2A	Mx	-.06	1.75
46	MP2A	X	-86.553	6.75
47	MP2A	Z	-149.914	6.75
48	MP2A	Mx	-.06	6.75
49	MP2B	X	-86.553	1.75
50	MP2B	Z	-149.914	1.75
51	MP2B	Mx	.19	1.75
52	MP2B	X	-86.553	6.75
53	MP2B	Z	-149.914	6.75
54	MP2B	Mx	.19	6.75
55	MP2C	X	-62.182	1.75
56	MP2C	Z	-107.703	1.75
57	MP2C	Mx	-.093	1.75
58	MP2C	X	-62.182	6.75
59	MP2C	Z	-107.703	6.75
60	MP2C	Mx	-.093	6.75
61	MP2A	X	-86.553	1.75
62	MP2A	Z	-149.914	1.75
63	MP2A	Mx	.19	1.75
64	MP2A	X	-86.553	6.75
65	MP2A	Z	-149.914	6.75
66	MP2A	Mx	.19	6.75
67	MP2B	X	-86.553	1.75
68	MP2B	Z	-149.914	1.75
69	MP2B	Mx	-.06	1.75
70	MP2B	X	-86.553	6.75
71	MP2B	Z	-149.914	6.75
72	MP2B	Mx	-.06	6.75
73	MP2C	X	-62.182	1.75
74	MP2C	Z	-107.703	1.75
75	MP2C	Mx	-.093	1.75
76	MP2C	X	-62.182	6.75
77	MP2C	Z	-107.703	6.75
78	MP2C	Mx	-.093	6.75
79	MP1C	X	-37.567	2.42
80	MP1C	Z	-65.069	2.42
81	MP1C	Mx	-.058	2.42
82	MP1C	X	-37.567	6
83	MP1C	Z	-65.069	6
84	MP1C	Mx	-.058	6
85	MP5C	X	-37.567	2.42
86	MP5C	Z	-65.069	2.42
87	MP5C	Mx	-.058	2.42
88	MP5C	X	-37.567	6



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
89	MP5C	Z	-65.069	6
90	MP5C	Mx	-.058	6
91	MP1A	X	-54.293	1.75
92	MP1A	Z	-94.038	1.75
93	MP1A	Mx	.033	1.75
94	MP1A	X	-54.293	6.75
95	MP1A	Z	-94.038	6.75
96	MP1A	Mx	.033	6.75
97	MP1B	X	-54.293	1.75
98	MP1B	Z	-94.038	1.75
99	MP1B	Mx	.033	1.75
100	MP1B	X	-54.293	6.75
101	MP1B	Z	-94.038	6.75
102	MP1B	Mx	.033	6.75
103	MP5A	X	-54.293	1.75
104	MP5A	Z	-94.038	1.75
105	MP5A	Mx	.033	1.75
106	MP5A	X	-54.293	6.75
107	MP5A	Z	-94.038	6.75
108	MP5A	Mx	.033	6.75
109	MP5B	X	-54.293	1.75
110	MP5B	Z	-94.038	1.75
111	MP5B	Mx	.033	1.75
112	MP5B	X	-54.293	6.75
113	MP5B	Z	-94.038	6.75
114	MP5B	Mx	.033	6.75
115	MP2A	X	-7.098	2
116	MP2A	Z	-12.294	2
117	MP2A	Mx	-.003	2
118	MP2B	X	-7.098	2
119	MP2B	Z	-12.294	2
120	MP2B	Mx	-.003	2
121	MP2C	X	-5.321	2
122	MP2C	Z	-9.216	2
123	MP2C	Mx	.004	2

Member Point Loads (BLC 15 : Antenna Wi (0 Deg))

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1B	X	0	2
2	MP1B	Z	-4.704	2
3	MP1B	Mx	.001	2
4	MP1B	X	0	2
5	MP1B	Z	-4.704	2
6	MP1B	Mx	-.001	2
7	MP4A	X	0	2.92
8	MP4A	Z	-19.141	2.92
9	MP4A	Mx	0	2.92
10	MP4A	X	0	5.67
11	MP4A	Z	-19.141	5.67
12	MP4A	Mx	0	5.67
13	MP4B	X	0	2.92
14	MP4B	Z	-10.896	2.92
15	MP4B	Mx	.007	2.92
16	MP4B	X	0	5.67
17	MP4B	Z	-10.896	5.67
18	MP4B	Mx	.007	5.67



Member Point Loads (BLC 15 : Antenna Wi (0 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
19	MP4C	X	0	2.92
20	MP4C	Z	-10.896	2.92
21	MP4C	Mx	-.007	2.92
22	MP4C	X	0	5.67
23	MP4C	Z	-10.896	5.67
24	MP4C	Mx	-.007	5.67
25	MP1A	X	0	3.5
26	MP1A	Z	-16.124	3.5
27	MP1A	Mx	0	3.5
28	MP1B	X	0	3.5
29	MP1B	Z	-12.44	3.5
30	MP1B	Mx	-.007	3.5
31	MP1C	X	0	3.5
32	MP1C	Z	-12.44	3.5
33	MP1C	Mx	.007	3.5
34	MP2A	X	0	3.5
35	MP2A	Z	-16.124	3.5
36	MP2A	Mx	0	3.5
37	MP2B	X	0	3.5
38	MP2B	Z	-11.04	3.5
39	MP2B	Mx	-.006	3.5
40	MP2C	X	0	3.5
41	MP2C	Z	-11.04	3.5
42	MP2C	Mx	.006	3.5
43	MP2A	X	0	1.75
44	MP2A	Z	-35.996	1.75
45	MP2A	Mx	-.03	1.75
46	MP2A	X	0	6.75
47	MP2A	Z	-35.996	6.75
48	MP2A	Mx	-.03	6.75
49	MP2B	X	0	1.75
50	MP2B	Z	-27.409	1.75
51	MP2B	Mx	.029	1.75
52	MP2B	X	0	6.75
53	MP2B	Z	-27.409	6.75
54	MP2B	Mx	.029	6.75
55	MP2C	X	0	1.75
56	MP2C	Z	-27.409	1.75
57	MP2C	Mx	-.006	1.75
58	MP2C	X	0	6.75
59	MP2C	Z	-27.409	6.75
60	MP2C	Mx	-.006	6.75
61	MP2A	X	0	1.75
62	MP2A	Z	-35.996	1.75
63	MP2A	Mx	.03	1.75
64	MP2A	X	0	6.75
65	MP2A	Z	-35.996	6.75
66	MP2A	Mx	.03	6.75
67	MP2B	X	0	1.75
68	MP2B	Z	-27.409	1.75
69	MP2B	Mx	.006	1.75
70	MP2B	X	0	6.75
71	MP2B	Z	-27.409	6.75
72	MP2B	Mx	.006	6.75
73	MP2C	X	0	1.75
74	MP2C	Z	-27.409	1.75
75	MP2C	Mx	-.029	1.75



Member Point Loads (BLC 15 : Antenna Wi (0 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
76	MP2C	X	0	6.75
77	MP2C	Z	-27.409	6.75
78	MP2C	Mx	-.029	6.75
79	MP1C	X	0	2.42
80	MP1C	Z	-15.498	2.42
81	MP1C	Mx	-.01	2.42
82	MP1C	X	0	6
83	MP1C	Z	-15.498	6
84	MP1C	Mx	-.01	6
85	MP5C	X	0	2.42
86	MP5C	Z	-15.498	2.42
87	MP5C	Mx	-.01	2.42
88	MP5C	X	0	6
89	MP5C	Z	-15.498	6
90	MP5C	Mx	-.01	6
91	MP1A	X	0	1.75
92	MP1A	Z	-20.843	1.75
93	MP1A	Mx	0	1.75
94	MP1A	X	0	6.75
95	MP1A	Z	-20.843	6.75
96	MP1A	Mx	0	6.75
97	MP1B	X	0	1.75
98	MP1B	Z	-23.295	1.75
99	MP1B	Mx	.012	1.75
100	MP1B	X	0	6.75
101	MP1B	Z	-23.295	6.75
102	MP1B	Mx	.012	6.75
103	MP5A	X	0	1.75
104	MP5A	Z	-20.843	1.75
105	MP5A	Mx	0	1.75
106	MP5A	X	0	6.75
107	MP5A	Z	-20.843	6.75
108	MP5A	Mx	0	6.75
109	MP5B	X	0	1.75
110	MP5B	Z	-23.295	1.75
111	MP5B	Mx	.012	1.75
112	MP5B	X	0	6.75
113	MP5B	Z	-23.295	6.75
114	MP5B	Mx	.012	6.75
115	MP2A	X	0	2
116	MP2A	Z	-3.907	2
117	MP2A	Mx	0	2
118	MP2B	X	0	2
119	MP2B	Z	-3.175	2
120	MP2B	Mx	-.001	2
121	MP2C	X	0	2
122	MP2C	Z	-3.175	2
123	MP2C	Mx	.001	2

Member Point Loads (BLC 16 : Antenna Wi (30 Deg))

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1B	X	1.663	2
2	MP1B	Z	-2.88	2
3	MP1B	Mx	.001	2
4	MP1B	X	1.663	2
5	MP1B	Z	-2.88	2



Member Point Loads (BLC 16 : Antenna Wi (30 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
6	MP1B	Mx	-0.01	2
7	MP4A	X	8.196	2.92
8	MP4A	Z	-14.196	2.92
9	MP4A	Mx	-0.06	2.92
10	MP4A	X	8.196	5.67
11	MP4A	Z	-14.196	5.67
12	MP4A	Mx	-0.06	5.67
13	MP4B	X	4.074	2.92
14	MP4B	Z	-7.056	2.92
15	MP4B	Mx	.006	2.92
16	MP4B	X	4.074	5.67
17	MP4B	Z	-7.056	5.67
18	MP4B	Mx	.006	5.67
19	MP4C	X	8.196	2.92
20	MP4C	Z	-14.196	2.92
21	MP4C	Mx	-0.06	2.92
22	MP4C	X	8.196	5.67
23	MP4C	Z	-14.196	5.67
24	MP4C	Mx	-0.06	5.67
25	MP1A	X	7.448	3.5
26	MP1A	Z	-12.901	3.5
27	MP1A	Mx	.005	3.5
28	MP1B	X	5.606	3.5
29	MP1B	Z	-9.71	3.5
30	MP1B	Mx	-0.07	3.5
31	MP1C	X	7.448	3.5
32	MP1C	Z	-12.901	3.5
33	MP1C	Mx	.005	3.5
34	MP2A	X	7.215	3.5
35	MP2A	Z	-12.497	3.5
36	MP2A	Mx	.005	3.5
37	MP2B	X	4.673	3.5
38	MP2B	Z	-8.094	3.5
39	MP2B	Mx	-0.06	3.5
40	MP2C	X	7.215	3.5
41	MP2C	Z	-12.497	3.5
42	MP2C	Mx	.005	3.5
43	MP2A	X	16.567	1.75
44	MP2A	Z	-28.695	1.75
45	MP2A	Mx	-0.36	1.75
46	MP2A	X	16.567	6.75
47	MP2A	Z	-28.695	6.75
48	MP2A	Mx	-0.36	6.75
49	MP2B	X	12.274	1.75
50	MP2B	Z	-21.258	1.75
51	MP2B	Mx	.018	1.75
52	MP2B	X	12.274	6.75
53	MP2B	Z	-21.258	6.75
54	MP2B	Mx	.018	6.75
55	MP2C	X	16.567	1.75
56	MP2C	Z	-28.695	1.75
57	MP2C	Mx	.011	1.75
58	MP2C	X	16.567	6.75
59	MP2C	Z	-28.695	6.75
60	MP2C	Mx	.011	6.75
61	MP2A	X	16.567	1.75
62	MP2A	Z	-28.695	1.75



Member Point Loads (BLC 16 : Antenna Wi (30 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
63	MP2A	Mx	.011	1.75
64	MP2A	X	16.567	6.75
65	MP2A	Z	-28.695	6.75
66	MP2A	Mx	.011	6.75
67	MP2B	X	12.274	1.75
68	MP2B	Z	-21.258	1.75
69	MP2B	Mx	.018	1.75
70	MP2B	X	12.274	6.75
71	MP2B	Z	-21.258	6.75
72	MP2B	Mx	.018	6.75
73	MP2C	X	16.567	1.75
74	MP2C	Z	-28.695	1.75
75	MP2C	Mx	-.036	1.75
76	MP2C	X	16.567	6.75
77	MP2C	Z	-28.695	6.75
78	MP2C	Mx	-.036	6.75
79	MP1C	X	8.161	2.42
80	MP1C	Z	-14.135	2.42
81	MP1C	Mx	-.006	2.42
82	MP1C	X	8.161	6
83	MP1C	Z	-14.135	6
84	MP1C	Mx	-.006	6
85	MP5C	X	8.161	2.42
86	MP5C	Z	-14.135	2.42
87	MP5C	Mx	-.006	2.42
88	MP5C	X	8.161	6
89	MP5C	Z	-14.135	6
90	MP5C	Mx	-.006	6
91	MP1A	X	10.83	1.75
92	MP1A	Z	-18.758	1.75
93	MP1A	Mx	-.007	1.75
94	MP1A	X	10.83	6.75
95	MP1A	Z	-18.758	6.75
96	MP1A	Mx	-.007	6.75
97	MP1B	X	12.056	1.75
98	MP1B	Z	-20.882	1.75
99	MP1B	Mx	.015	1.75
100	MP1B	X	12.056	6.75
101	MP1B	Z	-20.882	6.75
102	MP1B	Mx	.015	6.75
103	MP5A	X	10.83	1.75
104	MP5A	Z	-18.758	1.75
105	MP5A	Mx	-.007	1.75
106	MP5A	X	10.83	6.75
107	MP5A	Z	-18.758	6.75
108	MP5A	Mx	-.007	6.75
109	MP5B	X	12.056	1.75
110	MP5B	Z	-20.882	1.75
111	MP5B	Mx	.015	1.75
112	MP5B	X	12.056	6.75
113	MP5B	Z	-20.882	6.75
114	MP5B	Mx	.015	6.75
115	MP2A	X	1.832	2
116	MP2A	Z	-3.172	2
117	MP2A	Mx	.000763	2
118	MP2B	X	1.465	2
119	MP2B	Z	-2.538	2



Member Point Loads (BLC 16 : Antenna Wi (30 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
120	MP2B	Mx	-0.001	2
121	MP2C	X	1.832	2
122	MP2C	Z	-3.172	2
123	MP2C	Mx	.000763	2

Member Point Loads (BLC 17 : Antenna Wi (60 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1B	X	4.074	2
2	MP1B	Z	-2.352	2
3	MP1B	Mx	.001	2
4	MP1B	X	4.074	2
5	MP1B	Z	-2.352	2
6	MP1B	Mx	-0.001	2
7	MP4A	X	9.436	2.92
8	MP4A	Z	-5.448	2.92
9	MP4A	Mx	-0.007	2.92
10	MP4A	X	9.436	5.67
11	MP4A	Z	-5.448	5.67
12	MP4A	Mx	-0.007	5.67
13	MP4B	X	9.436	2.92
14	MP4B	Z	-5.448	2.92
15	MP4B	Mx	.007	2.92
16	MP4B	X	9.436	5.67
17	MP4B	Z	-5.448	5.67
18	MP4B	Mx	.007	5.67
19	MP4C	X	16.576	2.92
20	MP4C	Z	-9.57	2.92
21	MP4C	Mx	0	2.92
22	MP4C	X	16.576	5.67
23	MP4C	Z	-9.57	5.67
24	MP4C	Mx	0	5.67
25	MP1A	X	10.774	3.5
26	MP1A	Z	-6.22	3.5
27	MP1A	Mx	.007	3.5
28	MP1B	X	10.774	3.5
29	MP1B	Z	-6.22	3.5
30	MP1B	Mx	-0.007	3.5
31	MP1C	X	13.964	3.5
32	MP1C	Z	-8.062	3.5
33	MP1C	Mx	0	3.5
34	MP2A	X	9.561	3.5
35	MP2A	Z	-5.52	3.5
36	MP2A	Mx	.006	3.5
37	MP2B	X	9.561	3.5
38	MP2B	Z	-5.52	3.5
39	MP2B	Mx	-0.006	3.5
40	MP2C	X	13.964	3.5
41	MP2C	Z	-8.062	3.5
42	MP2C	Mx	0	3.5
43	MP2A	X	23.737	1.75
44	MP2A	Z	-13.705	1.75
45	MP2A	Mx	-0.029	1.75
46	MP2A	X	23.737	6.75
47	MP2A	Z	-13.705	6.75
48	MP2A	Mx	-0.029	6.75
49	MP2B	X	23.737	1.75



Member Point Loads (BLC 17 : Antenna Wi (60 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
50	MP2B	Z	-13.705	1.75
51	MP2B	Mx	.006	1.75
52	MP2B	X	23.737	6.75
53	MP2B	Z	-13.705	6.75
54	MP2B	Mx	.006	6.75
55	MP2C	X	31.173	1.75
56	MP2C	Z	-17.998	1.75
57	MP2C	Mx	.03	1.75
58	MP2C	X	31.173	6.75
59	MP2C	Z	-17.998	6.75
60	MP2C	Mx	.03	6.75
61	MP2A	X	23.737	1.75
62	MP2A	Z	-13.705	1.75
63	MP2A	Mx	-.006	1.75
64	MP2A	X	23.737	6.75
65	MP2A	Z	-13.705	6.75
66	MP2A	Mx	-.006	6.75
67	MP2B	X	23.737	1.75
68	MP2B	Z	-13.705	1.75
69	MP2B	Mx	.029	1.75
70	MP2B	X	23.737	6.75
71	MP2B	Z	-13.705	6.75
72	MP2B	Mx	.029	6.75
73	MP2C	X	31.173	1.75
74	MP2C	Z	-17.998	1.75
75	MP2C	Mx	-.03	1.75
76	MP2C	X	31.173	6.75
77	MP2C	Z	-17.998	6.75
78	MP2C	Mx	-.03	6.75
79	MP1C	X	14.491	2.42
80	MP1C	Z	-8.367	2.42
81	MP1C	Mx	0	2.42
82	MP1C	X	14.491	6
83	MP1C	Z	-8.367	6
84	MP1C	Mx	0	6
85	MP5C	X	14.491	2.42
86	MP5C	Z	-8.367	2.42
87	MP5C	Mx	0	2.42
88	MP5C	X	14.491	6
89	MP5C	Z	-8.367	6
90	MP5C	Mx	0	6
91	MP1A	X	20.174	1.75
92	MP1A	Z	-11.648	1.75
93	MP1A	Mx	-.012	1.75
94	MP1A	X	20.174	6.75
95	MP1A	Z	-11.648	6.75
96	MP1A	Mx	-.012	6.75
97	MP1B	X	20.174	1.75
98	MP1B	Z	-11.648	1.75
99	MP1B	Mx	.012	1.75
100	MP1B	X	20.174	6.75
101	MP1B	Z	-11.648	6.75
102	MP1B	Mx	.012	6.75
103	MP5A	X	20.174	1.75
104	MP5A	Z	-11.648	1.75
105	MP5A	Mx	-.012	1.75
106	MP5A	X	20.174	6.75



Member Point Loads (BLC 17 : Antenna Wi (60 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
107	MP5A	Z	-11.648	6.75
108	MP5A	Mx	-.012	6.75
109	MP5B	X	20.174	1.75
110	MP5B	Z	-11.648	1.75
111	MP5B	Mx	.012	1.75
112	MP5B	X	20.174	6.75
113	MP5B	Z	-11.648	6.75
114	MP5B	Mx	.012	6.75
115	MP2A	X	2.749	2
116	MP2A	Z	-1.587	2
117	MP2A	Mx	.001	2
118	MP2B	X	2.749	2
119	MP2B	Z	-1.587	2
120	MP2B	Mx	-.001	2
121	MP2C	X	3.384	2
122	MP2C	Z	-1.954	2
123	MP2C	Mx	0	2

Member Point Loads (BLC 18 : Antenna Wi (90 Deg))

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1B	X	7.463	2
2	MP1B	Z	0	2
3	MP1B	Mx	.001	2
4	MP1B	X	7.463	2
5	MP1B	Z	0	2
6	MP1B	Mx	-.001	2
7	MP4A	X	8.147	2.92
8	MP4A	Z	0	2.92
9	MP4A	Mx	-.006	2.92
10	MP4A	X	8.147	5.67
11	MP4A	Z	0	5.67
12	MP4A	Mx	-.006	5.67
13	MP4B	X	16.392	2.92
14	MP4B	Z	0	2.92
15	MP4B	Mx	.006	2.92
16	MP4B	X	16.392	5.67
17	MP4B	Z	0	5.67
18	MP4B	Mx	.006	5.67
19	MP4C	X	16.392	2.92
20	MP4C	Z	0	2.92
21	MP4C	Mx	.006	2.92
22	MP4C	X	16.392	5.67
23	MP4C	Z	0	5.67
24	MP4C	Mx	.006	5.67
25	MP1A	X	11.212	3.5
26	MP1A	Z	0	3.5
27	MP1A	Mx	.007	3.5
28	MP1B	X	14.896	3.5
29	MP1B	Z	0	3.5
30	MP1B	Mx	-.005	3.5
31	MP1C	X	14.896	3.5
32	MP1C	Z	0	3.5
33	MP1C	Mx	-.005	3.5
34	MP2A	X	9.346	3.5
35	MP2A	Z	0	3.5
36	MP2A	Mx	.006	3.5



Member Point Loads (BLC 18 : Antenna Wi (90 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
37	MP2B	X	14.43	3.5
38	MP2B	Z	0	3.5
39	MP2B	Mx	-.005	3.5
40	MP2C	X	14.43	3.5
41	MP2C	Z	0	3.5
42	MP2C	Mx	-.005	3.5
43	MP2A	X	24.547	1.75
44	MP2A	Z	0	1.75
45	MP2A	Mx	-.018	1.75
46	MP2A	X	24.547	6.75
47	MP2A	Z	0	6.75
48	MP2A	Mx	-.018	6.75
49	MP2B	X	33.134	1.75
50	MP2B	Z	0	1.75
51	MP2B	Mx	-.011	1.75
52	MP2B	X	33.134	6.75
53	MP2B	Z	0	6.75
54	MP2B	Mx	-.011	6.75
55	MP2C	X	33.134	1.75
56	MP2C	Z	0	1.75
57	MP2C	Mx	.036	1.75
58	MP2C	X	33.134	6.75
59	MP2C	Z	0	6.75
60	MP2C	Mx	.036	6.75
61	MP2A	X	24.547	1.75
62	MP2A	Z	0	1.75
63	MP2A	Mx	-.018	1.75
64	MP2A	X	24.547	6.75
65	MP2A	Z	0	6.75
66	MP2A	Mx	-.018	6.75
67	MP2B	X	33.134	1.75
68	MP2B	Z	0	1.75
69	MP2B	Mx	.036	1.75
70	MP2B	X	33.134	6.75
71	MP2B	Z	0	6.75
72	MP2B	Mx	.036	6.75
73	MP2C	X	33.134	1.75
74	MP2C	Z	0	1.75
75	MP2C	Mx	-.011	1.75
76	MP2C	X	33.134	6.75
77	MP2C	Z	0	6.75
78	MP2C	Mx	-.011	6.75
79	MP1C	X	16.321	2.42
80	MP1C	Z	0	2.42
81	MP1C	Mx	.006	2.42
82	MP1C	X	16.321	6
83	MP1C	Z	0	6
84	MP1C	Mx	.006	6
85	MP5C	X	16.321	2.42
86	MP5C	Z	0	2.42
87	MP5C	Mx	.006	2.42
88	MP5C	X	16.321	6
89	MP5C	Z	0	6
90	MP5C	Mx	.006	6
91	MP1A	X	24.112	1.75
92	MP1A	Z	0	1.75
93	MP1A	Mx	-.015	1.75



Member Point Loads (BLC 18 : Antenna Wi (90 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
94	MP1A	X	24.112	6.75
95	MP1A	Z	0	6.75
96	MP1A	Mx	-.015	6.75
97	MP1B	X	21.66	1.75
98	MP1B	Z	0	1.75
99	MP1B	Mx	.007	1.75
100	MP1B	X	21.66	6.75
101	MP1B	Z	0	6.75
102	MP1B	Mx	.007	6.75
103	MP5A	X	24.112	1.75
104	MP5A	Z	0	1.75
105	MP5A	Mx	-.015	1.75
106	MP5A	X	24.112	6.75
107	MP5A	Z	0	6.75
108	MP5A	Mx	-.015	6.75
109	MP5B	X	21.66	1.75
110	MP5B	Z	0	1.75
111	MP5B	Mx	.007	1.75
112	MP5B	X	21.66	6.75
113	MP5B	Z	0	6.75
114	MP5B	Mx	.007	6.75
115	MP2A	X	2.931	2
116	MP2A	Z	0	2
117	MP2A	Mx	.001	2
118	MP2B	X	3.663	2
119	MP2B	Z	0	2
120	MP2B	Mx	-.000763	2
121	MP2C	X	3.663	2
122	MP2C	Z	0	2
123	MP2C	Mx	-.000763	2

Member Point Loads (BLC 19 : Antenna Wi (120 Deg))

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1B	X	7.658	2
2	MP1B	Z	4.421	2
3	MP1B	Mx	0	2
4	MP1B	X	7.658	2
5	MP1B	Z	4.421	2
6	MP1B	Mx	0	2
7	MP4A	X	9.436	2.92
8	MP4A	Z	5.448	2.92
9	MP4A	Mx	-.007	2.92
10	MP4A	X	9.436	5.67
11	MP4A	Z	5.448	5.67
12	MP4A	Mx	-.007	5.67
13	MP4B	X	16.576	2.92
14	MP4B	Z	9.57	2.92
15	MP4B	Mx	0	2.92
16	MP4B	X	16.576	5.67
17	MP4B	Z	9.57	5.67
18	MP4B	Mx	0	5.67
19	MP4C	X	9.436	2.92
20	MP4C	Z	5.448	2.92
21	MP4C	Mx	.007	2.92
22	MP4C	X	9.436	5.67
23	MP4C	Z	5.448	5.67



Member Point Loads (BLC 19 : Antenna Wi (120 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
24	MP4C	Mx	.007	5.67
25	MP1A	X	10.774	3.5
26	MP1A	Z	6.22	3.5
27	MP1A	Mx	.007	3.5
28	MP1B	X	13.964	3.5
29	MP1B	Z	8.062	3.5
30	MP1B	Mx	0	3.5
31	MP1C	X	10.774	3.5
32	MP1C	Z	6.22	3.5
33	MP1C	Mx	-.007	3.5
34	MP2A	X	9.561	3.5
35	MP2A	Z	5.52	3.5
36	MP2A	Mx	.006	3.5
37	MP2B	X	13.964	3.5
38	MP2B	Z	8.062	3.5
39	MP2B	Mx	0	3.5
40	MP2C	X	9.561	3.5
41	MP2C	Z	5.52	3.5
42	MP2C	Mx	-.006	3.5
43	MP2A	X	23.737	1.75
44	MP2A	Z	13.705	1.75
45	MP2A	Mx	-.006	1.75
46	MP2A	X	23.737	6.75
47	MP2A	Z	13.705	6.75
48	MP2A	Mx	-.006	6.75
49	MP2B	X	31.173	1.75
50	MP2B	Z	17.998	1.75
51	MP2B	Mx	-.03	1.75
52	MP2B	X	31.173	6.75
53	MP2B	Z	17.998	6.75
54	MP2B	Mx	-.03	6.75
55	MP2C	X	23.737	1.75
56	MP2C	Z	13.705	1.75
57	MP2C	Mx	.029	1.75
58	MP2C	X	23.737	6.75
59	MP2C	Z	13.705	6.75
60	MP2C	Mx	.029	6.75
61	MP2A	X	23.737	1.75
62	MP2A	Z	13.705	1.75
63	MP2A	Mx	-.029	1.75
64	MP2A	X	23.737	6.75
65	MP2A	Z	13.705	6.75
66	MP2A	Mx	-.029	6.75
67	MP2B	X	31.173	1.75
68	MP2B	Z	17.998	1.75
69	MP2B	Mx	.03	1.75
70	MP2B	X	31.173	6.75
71	MP2B	Z	17.998	6.75
72	MP2B	Mx	.03	6.75
73	MP2C	X	23.737	1.75
74	MP2C	Z	13.705	1.75
75	MP2C	Mx	.006	1.75
76	MP2C	X	23.737	6.75
77	MP2C	Z	13.705	6.75
78	MP2C	Mx	.006	6.75
79	MP1C	X	13.421	2.42
80	MP1C	Z	7.749	2.42



Member Point Loads (BLC 19 : Antenna Wi (120 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
81	MP1C	Mx	.01	2.42
82	MP1C	X	13.421	6
83	MP1C	Z	7.749	6
84	MP1C	Mx	.01	6
85	MP5C	X	13.421	2.42
86	MP5C	Z	7.749	2.42
87	MP5C	Mx	.01	2.42
88	MP5C	X	13.421	6
89	MP5C	Z	7.749	6
90	MP5C	Mx	.01	6
91	MP1A	X	20.174	1.75
92	MP1A	Z	11.648	1.75
93	MP1A	Mx	-.012	1.75
94	MP1A	X	20.174	6.75
95	MP1A	Z	11.648	6.75
96	MP1A	Mx	-.012	6.75
97	MP1B	X	18.051	1.75
98	MP1B	Z	10.421	1.75
99	MP1B	Mx	0	1.75
100	MP1B	X	18.051	6.75
101	MP1B	Z	10.421	6.75
102	MP1B	Mx	0	6.75
103	MP5A	X	20.174	1.75
104	MP5A	Z	11.648	1.75
105	MP5A	Mx	-.012	1.75
106	MP5A	X	20.174	6.75
107	MP5A	Z	11.648	6.75
108	MP5A	Mx	-.012	6.75
109	MP5B	X	18.051	1.75
110	MP5B	Z	10.421	1.75
111	MP5B	Mx	0	1.75
112	MP5B	X	18.051	6.75
113	MP5B	Z	10.421	6.75
114	MP5B	Mx	0	6.75
115	MP2A	X	2.749	2
116	MP2A	Z	1.587	2
117	MP2A	Mx	.001	2
118	MP2B	X	3.384	2
119	MP2B	Z	1.954	2
120	MP2B	Mx	0	2
121	MP2C	X	2.749	2
122	MP2C	Z	1.587	2
123	MP2C	Mx	-.001	2

Member Point Loads (BLC 20 : Antenna Wi (150 Deg))

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1B	X	3.732	2
2	MP1B	Z	6.463	2
3	MP1B	Mx	-.001	2
4	MP1B	X	3.732	2
5	MP1B	Z	6.463	2
6	MP1B	Mx	.001	2
7	MP4A	X	8.196	2.92
8	MP4A	Z	14.196	2.92
9	MP4A	Mx	-.006	2.92
10	MP4A	X	8.196	5.67



Member Point Loads (BLC 20 : Antenna Wi (150 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
11	MP4A	Z	14.196	5.67
12	MP4A	Mx	-.006	5.67
13	MP4B	X	8.196	2.92
14	MP4B	Z	14.196	2.92
15	MP4B	Mx	-.006	2.92
16	MP4B	X	8.196	5.67
17	MP4B	Z	14.196	5.67
18	MP4B	Mx	-.006	5.67
19	MP4C	X	4.074	2.92
20	MP4C	Z	7.056	2.92
21	MP4C	Mx	.006	2.92
22	MP4C	X	4.074	5.67
23	MP4C	Z	7.056	5.67
24	MP4C	Mx	.006	5.67
25	MP1A	X	7.448	3.5
26	MP1A	Z	12.901	3.5
27	MP1A	Mx	.005	3.5
28	MP1B	X	7.448	3.5
29	MP1B	Z	12.901	3.5
30	MP1B	Mx	.005	3.5
31	MP1C	X	5.606	3.5
32	MP1C	Z	9.71	3.5
33	MP1C	Mx	-.007	3.5
34	MP2A	X	7.215	3.5
35	MP2A	Z	12.497	3.5
36	MP2A	Mx	.005	3.5
37	MP2B	X	7.215	3.5
38	MP2B	Z	12.497	3.5
39	MP2B	Mx	.005	3.5
40	MP2C	X	4.673	3.5
41	MP2C	Z	8.094	3.5
42	MP2C	Mx	-.006	3.5
43	MP2A	X	16.567	1.75
44	MP2A	Z	28.695	1.75
45	MP2A	Mx	.011	1.75
46	MP2A	X	16.567	6.75
47	MP2A	Z	28.695	6.75
48	MP2A	Mx	.011	6.75
49	MP2B	X	16.567	1.75
50	MP2B	Z	28.695	1.75
51	MP2B	Mx	-.036	1.75
52	MP2B	X	16.567	6.75
53	MP2B	Z	28.695	6.75
54	MP2B	Mx	-.036	6.75
55	MP2C	X	12.274	1.75
56	MP2C	Z	21.258	1.75
57	MP2C	Mx	.018	1.75
58	MP2C	X	12.274	6.75
59	MP2C	Z	21.258	6.75
60	MP2C	Mx	.018	6.75
61	MP2A	X	16.567	1.75
62	MP2A	Z	28.695	1.75
63	MP2A	Mx	-.036	1.75
64	MP2A	X	16.567	6.75
65	MP2A	Z	28.695	6.75
66	MP2A	Mx	-.036	6.75
67	MP2B	X	16.567	1.75



Member Point Loads (BLC 20 : Antenna Wi (150 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
68	MP2B	Z	28.695	1.75
69	MP2B	Mx	.011	1.75
70	MP2B	X	16.567	6.75
71	MP2B	Z	28.695	6.75
72	MP2B	Mx	.011	6.75
73	MP2C	X	12.274	1.75
74	MP2C	Z	21.258	1.75
75	MP2C	Mx	.018	1.75
76	MP2C	X	12.274	6.75
77	MP2C	Z	21.258	6.75
78	MP2C	Mx	.018	6.75
79	MP1C	X	7.543	2.42
80	MP1C	Z	13.065	2.42
81	MP1C	Mx	.012	2.42
82	MP1C	X	7.543	6
83	MP1C	Z	13.065	6
84	MP1C	Mx	.012	6
85	MP5C	X	7.543	2.42
86	MP5C	Z	13.065	2.42
87	MP5C	Mx	.012	2.42
88	MP5C	X	7.543	6
89	MP5C	Z	13.065	6
90	MP5C	Mx	.012	6
91	MP1A	X	10.83	1.75
92	MP1A	Z	18.758	1.75
93	MP1A	Mx	-.007	1.75
94	MP1A	X	10.83	6.75
95	MP1A	Z	18.758	6.75
96	MP1A	Mx	-.007	6.75
97	MP1B	X	10.83	1.75
98	MP1B	Z	18.758	1.75
99	MP1B	Mx	-.007	1.75
100	MP1B	X	10.83	6.75
101	MP1B	Z	18.758	6.75
102	MP1B	Mx	-.007	6.75
103	MP5A	X	10.83	1.75
104	MP5A	Z	18.758	1.75
105	MP5A	Mx	-.007	1.75
106	MP5A	X	10.83	6.75
107	MP5A	Z	18.758	6.75
108	MP5A	Mx	-.007	6.75
109	MP5B	X	10.83	1.75
110	MP5B	Z	18.758	1.75
111	MP5B	Mx	-.007	1.75
112	MP5B	X	10.83	6.75
113	MP5B	Z	18.758	6.75
114	MP5B	Mx	-.007	6.75
115	MP2A	X	1.832	2
116	MP2A	Z	3.172	2
117	MP2A	Mx	.000763	2
118	MP2B	X	1.832	2
119	MP2B	Z	3.172	2
120	MP2B	Mx	.000763	2
121	MP2C	X	1.465	2
122	MP2C	Z	2.538	2
123	MP2C	Mx	-.001	2



Member Point Loads (BLC 21 : Antenna Wi (180 Deg))

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1B	X	0	2
2	MP1B	Z	4.704	2
3	MP1B	Mx	-.001	2
4	MP1B	X	0	2
5	MP1B	Z	4.704	2
6	MP1B	Mx	.001	2
7	MP4A	X	0	2.92
8	MP4A	Z	19.141	2.92
9	MP4A	Mx	0	2.92
10	MP4A	X	0	5.67
11	MP4A	Z	19.141	5.67
12	MP4A	Mx	0	5.67
13	MP4B	X	0	2.92
14	MP4B	Z	10.896	2.92
15	MP4B	Mx	-.007	2.92
16	MP4B	X	0	5.67
17	MP4B	Z	10.896	5.67
18	MP4B	Mx	-.007	5.67
19	MP4C	X	0	2.92
20	MP4C	Z	10.896	2.92
21	MP4C	Mx	.007	2.92
22	MP4C	X	0	5.67
23	MP4C	Z	10.896	5.67
24	MP4C	Mx	.007	5.67
25	MP1A	X	0	3.5
26	MP1A	Z	16.124	3.5
27	MP1A	Mx	0	3.5
28	MP1B	X	0	3.5
29	MP1B	Z	12.44	3.5
30	MP1B	Mx	.007	3.5
31	MP1C	X	0	3.5
32	MP1C	Z	12.44	3.5
33	MP1C	Mx	-.007	3.5
34	MP2A	X	0	3.5
35	MP2A	Z	16.124	3.5
36	MP2A	Mx	0	3.5
37	MP2B	X	0	3.5
38	MP2B	Z	11.04	3.5
39	MP2B	Mx	.006	3.5
40	MP2C	X	0	3.5
41	MP2C	Z	11.04	3.5
42	MP2C	Mx	-.006	3.5
43	MP2A	X	0	1.75
44	MP2A	Z	35.996	1.75
45	MP2A	Mx	.03	1.75
46	MP2A	X	0	6.75
47	MP2A	Z	35.996	6.75
48	MP2A	Mx	.03	6.75
49	MP2B	X	0	1.75
50	MP2B	Z	27.409	1.75
51	MP2B	Mx	-.029	1.75
52	MP2B	X	0	6.75
53	MP2B	Z	27.409	6.75
54	MP2B	Mx	-.029	6.75
55	MP2C	X	0	1.75
56	MP2C	Z	27.409	1.75
57	MP2C	Mx	.006	1.75



Member Point Loads (BLC 21 : Antenna Wi (180 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP2C	X	0	6.75
59	MP2C	Z	27.409	6.75
60	MP2C	Mx	.006	6.75
61	MP2A	X	0	1.75
62	MP2A	Z	35.996	1.75
63	MP2A	Mx	-.03	1.75
64	MP2A	X	0	6.75
65	MP2A	Z	35.996	6.75
66	MP2A	Mx	-.03	6.75
67	MP2B	X	0	1.75
68	MP2B	Z	27.409	1.75
69	MP2B	Mx	-.006	1.75
70	MP2B	X	0	6.75
71	MP2B	Z	27.409	6.75
72	MP2B	Mx	-.006	6.75
73	MP2C	X	0	1.75
74	MP2C	Z	27.409	1.75
75	MP2C	Mx	.029	1.75
76	MP2C	X	0	6.75
77	MP2C	Z	27.409	6.75
78	MP2C	Mx	.029	6.75
79	MP1C	X	0	2.42
80	MP1C	Z	15.498	2.42
81	MP1C	Mx	.01	2.42
82	MP1C	X	0	6
83	MP1C	Z	15.498	6
84	MP1C	Mx	.01	6
85	MP5C	X	0	2.42
86	MP5C	Z	15.498	2.42
87	MP5C	Mx	.01	2.42
88	MP5C	X	0	6
89	MP5C	Z	15.498	6
90	MP5C	Mx	.01	6
91	MP1A	X	0	1.75
92	MP1A	Z	20.843	1.75
93	MP1A	Mx	0	1.75
94	MP1A	X	0	6.75
95	MP1A	Z	20.843	6.75
96	MP1A	Mx	0	6.75
97	MP1B	X	0	1.75
98	MP1B	Z	23.295	1.75
99	MP1B	Mx	-.012	1.75
100	MP1B	X	0	6.75
101	MP1B	Z	23.295	6.75
102	MP1B	Mx	-.012	6.75
103	MP5A	X	0	1.75
104	MP5A	Z	20.843	1.75
105	MP5A	Mx	0	1.75
106	MP5A	X	0	6.75
107	MP5A	Z	20.843	6.75
108	MP5A	Mx	0	6.75
109	MP5B	X	0	1.75
110	MP5B	Z	23.295	1.75
111	MP5B	Mx	-.012	1.75
112	MP5B	X	0	6.75
113	MP5B	Z	23.295	6.75
114	MP5B	Mx	-.012	6.75



Member Point Loads (BLC 21 : Antenna Wi (180 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
115	MP2A	X	0	2
116	MP2A	Z	3.907	2
117	MP2A	Mx	0	2
118	MP2B	X	0	2
119	MP2B	Z	3.175	2
120	MP2B	Mx	.001	2
121	MP2C	X	0	2
122	MP2C	Z	3.175	2
123	MP2C	Mx	-.001	2

Member Point Loads (BLC 22 : Antenna Wi (210 Deg))

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1B	X	-1.663	2
2	MP1B	Z	2.88	2
3	MP1B	Mx	-.001	2
4	MP1B	X	-1.663	2
5	MP1B	Z	2.88	2
6	MP1B	Mx	.001	2
7	MP4A	X	-8.196	2.92
8	MP4A	Z	14.196	2.92
9	MP4A	Mx	.006	2.92
10	MP4A	X	-8.196	5.67
11	MP4A	Z	14.196	5.67
12	MP4A	Mx	.006	5.67
13	MP4B	X	-4.074	2.92
14	MP4B	Z	7.056	2.92
15	MP4B	Mx	-.006	2.92
16	MP4B	X	-4.074	5.67
17	MP4B	Z	7.056	5.67
18	MP4B	Mx	-.006	5.67
19	MP4C	X	-8.196	2.92
20	MP4C	Z	14.196	2.92
21	MP4C	Mx	.006	2.92
22	MP4C	X	-8.196	5.67
23	MP4C	Z	14.196	5.67
24	MP4C	Mx	.006	5.67
25	MP1A	X	-7.448	3.5
26	MP1A	Z	12.901	3.5
27	MP1A	Mx	-.005	3.5
28	MP1B	X	-5.606	3.5
29	MP1B	Z	9.71	3.5
30	MP1B	Mx	.007	3.5
31	MP1C	X	-7.448	3.5
32	MP1C	Z	12.901	3.5
33	MP1C	Mx	-.005	3.5
34	MP2A	X	-7.215	3.5
35	MP2A	Z	12.497	3.5
36	MP2A	Mx	-.005	3.5
37	MP2B	X	-4.673	3.5
38	MP2B	Z	8.094	3.5
39	MP2B	Mx	.006	3.5
40	MP2C	X	-7.215	3.5
41	MP2C	Z	12.497	3.5
42	MP2C	Mx	-.005	3.5
43	MP2A	X	-16.567	1.75
44	MP2A	Z	28.695	1.75



Member Point Loads (BLC 22 : Antenna Wi (210 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
45	MP2A	Mx	.036	1.75
46	MP2A	X	-16.567	6.75
47	MP2A	Z	28.695	6.75
48	MP2A	Mx	.036	6.75
49	MP2B	X	-12.274	1.75
50	MP2B	Z	21.258	1.75
51	MP2B	Mx	-.018	1.75
52	MP2B	X	-12.274	6.75
53	MP2B	Z	21.258	6.75
54	MP2B	Mx	-.018	6.75
55	MP2C	X	-16.567	1.75
56	MP2C	Z	28.695	1.75
57	MP2C	Mx	-.011	1.75
58	MP2C	X	-16.567	6.75
59	MP2C	Z	28.695	6.75
60	MP2C	Mx	-.011	6.75
61	MP2A	X	-16.567	1.75
62	MP2A	Z	28.695	1.75
63	MP2A	Mx	-.011	1.75
64	MP2A	X	-16.567	6.75
65	MP2A	Z	28.695	6.75
66	MP2A	Mx	-.011	6.75
67	MP2B	X	-12.274	1.75
68	MP2B	Z	21.258	1.75
69	MP2B	Mx	-.018	1.75
70	MP2B	X	-12.274	6.75
71	MP2B	Z	21.258	6.75
72	MP2B	Mx	-.018	6.75
73	MP2C	X	-16.567	1.75
74	MP2C	Z	28.695	1.75
75	MP2C	Mx	.036	1.75
76	MP2C	X	-16.567	6.75
77	MP2C	Z	28.695	6.75
78	MP2C	Mx	.036	6.75
79	MP1C	X	-8.161	2.42
80	MP1C	Z	14.135	2.42
81	MP1C	Mx	.006	2.42
82	MP1C	X	-8.161	6
83	MP1C	Z	14.135	6
84	MP1C	Mx	.006	6
85	MP5C	X	-8.161	2.42
86	MP5C	Z	14.135	2.42
87	MP5C	Mx	.006	2.42
88	MP5C	X	-8.161	6
89	MP5C	Z	14.135	6
90	MP5C	Mx	.006	6
91	MP1A	X	-10.83	1.75
92	MP1A	Z	18.758	1.75
93	MP1A	Mx	.007	1.75
94	MP1A	X	-10.83	6.75
95	MP1A	Z	18.758	6.75
96	MP1A	Mx	.007	6.75
97	MP1B	X	-12.056	1.75
98	MP1B	Z	20.882	1.75
99	MP1B	Mx	-.015	1.75
100	MP1B	X	-12.056	6.75
101	MP1B	Z	20.882	6.75



Member Point Loads (BLC 22 : Antenna Wi (210 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
102	MP1B	Mx	-.015	6.75
103	MP5A	X	-10.83	1.75
104	MP5A	Z	18.758	1.75
105	MP5A	Mx	.007	1.75
106	MP5A	X	-10.83	6.75
107	MP5A	Z	18.758	6.75
108	MP5A	Mx	.007	6.75
109	MP5B	X	-12.056	1.75
110	MP5B	Z	20.882	1.75
111	MP5B	Mx	-.015	1.75
112	MP5B	X	-12.056	6.75
113	MP5B	Z	20.882	6.75
114	MP5B	Mx	-.015	6.75
115	MP2A	X	-1.832	2
116	MP2A	Z	3.172	2
117	MP2A	Mx	-.000763	2
118	MP2B	X	-1.465	2
119	MP2B	Z	2.538	2
120	MP2B	Mx	.001	2
121	MP2C	X	-1.832	2
122	MP2C	Z	3.172	2
123	MP2C	Mx	-.000763	2

Member Point Loads (BLC 23 : Antenna Wi (240 Deg))

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1B	X	-4.074	2
2	MP1B	Z	2.352	2
3	MP1B	Mx	-.001	2
4	MP1B	X	-4.074	2
5	MP1B	Z	2.352	2
6	MP1B	Mx	.001	2
7	MP4A	X	-9.436	2.92
8	MP4A	Z	5.448	2.92
9	MP4A	Mx	.007	2.92
10	MP4A	X	-9.436	5.67
11	MP4A	Z	5.448	5.67
12	MP4A	Mx	.007	5.67
13	MP4B	X	-9.436	2.92
14	MP4B	Z	5.448	2.92
15	MP4B	Mx	-.007	2.92
16	MP4B	X	-9.436	5.67
17	MP4B	Z	5.448	5.67
18	MP4B	Mx	-.007	5.67
19	MP4C	X	-16.576	2.92
20	MP4C	Z	9.57	2.92
21	MP4C	Mx	0	2.92
22	MP4C	X	-16.576	5.67
23	MP4C	Z	9.57	5.67
24	MP4C	Mx	0	5.67
25	MP1A	X	-10.774	3.5
26	MP1A	Z	6.22	3.5
27	MP1A	Mx	-.007	3.5
28	MP1B	X	-10.774	3.5
29	MP1B	Z	6.22	3.5
30	MP1B	Mx	.007	3.5
31	MP1C	X	-13.964	3.5



Member Point Loads (BLC 23 : Antenna Wi (240 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
32	MP1C	Z	8.062	3.5
33	MP1C	Mx	0	3.5
34	MP2A	X	-9.561	3.5
35	MP2A	Z	5.52	3.5
36	MP2A	Mx	-.006	3.5
37	MP2B	X	-9.561	3.5
38	MP2B	Z	5.52	3.5
39	MP2B	Mx	.006	3.5
40	MP2C	X	-13.964	3.5
41	MP2C	Z	8.062	3.5
42	MP2C	Mx	0	3.5
43	MP2A	X	-23.737	1.75
44	MP2A	Z	13.705	1.75
45	MP2A	Mx	.029	1.75
46	MP2A	X	-23.737	6.75
47	MP2A	Z	13.705	6.75
48	MP2A	Mx	.029	6.75
49	MP2B	X	-23.737	1.75
50	MP2B	Z	13.705	1.75
51	MP2B	Mx	-.006	1.75
52	MP2B	X	-23.737	6.75
53	MP2B	Z	13.705	6.75
54	MP2B	Mx	-.006	6.75
55	MP2C	X	-31.173	1.75
56	MP2C	Z	17.998	1.75
57	MP2C	Mx	-.03	1.75
58	MP2C	X	-31.173	6.75
59	MP2C	Z	17.998	6.75
60	MP2C	Mx	-.03	6.75
61	MP2A	X	-23.737	1.75
62	MP2A	Z	13.705	1.75
63	MP2A	Mx	.006	1.75
64	MP2A	X	-23.737	6.75
65	MP2A	Z	13.705	6.75
66	MP2A	Mx	.006	6.75
67	MP2B	X	-23.737	1.75
68	MP2B	Z	13.705	1.75
69	MP2B	Mx	-.029	1.75
70	MP2B	X	-23.737	6.75
71	MP2B	Z	13.705	6.75
72	MP2B	Mx	-.029	6.75
73	MP2C	X	-31.173	1.75
74	MP2C	Z	17.998	1.75
75	MP2C	Mx	.03	1.75
76	MP2C	X	-31.173	6.75
77	MP2C	Z	17.998	6.75
78	MP2C	Mx	.03	6.75
79	MP1C	X	-14.491	2.42
80	MP1C	Z	8.367	2.42
81	MP1C	Mx	0	2.42
82	MP1C	X	-14.491	6
83	MP1C	Z	8.367	6
84	MP1C	Mx	0	6
85	MP5C	X	-14.491	2.42
86	MP5C	Z	8.367	2.42
87	MP5C	Mx	0	2.42
88	MP5C	X	-14.491	6



Member Point Loads (BLC 23 : Antenna Wi (240 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
89	MP5C	Z	8.367	6
90	MP5C	Mx	0	6
91	MP1A	X	-20.174	1.75
92	MP1A	Z	11.648	1.75
93	MP1A	Mx	.012	1.75
94	MP1A	X	-20.174	6.75
95	MP1A	Z	11.648	6.75
96	MP1A	Mx	.012	6.75
97	MP1B	X	-20.174	1.75
98	MP1B	Z	11.648	1.75
99	MP1B	Mx	-.012	1.75
100	MP1B	X	-20.174	6.75
101	MP1B	Z	11.648	6.75
102	MP1B	Mx	-.012	6.75
103	MP5A	X	-20.174	1.75
104	MP5A	Z	11.648	1.75
105	MP5A	Mx	.012	1.75
106	MP5A	X	-20.174	6.75
107	MP5A	Z	11.648	6.75
108	MP5A	Mx	.012	6.75
109	MP5B	X	-20.174	1.75
110	MP5B	Z	11.648	1.75
111	MP5B	Mx	-.012	1.75
112	MP5B	X	-20.174	6.75
113	MP5B	Z	11.648	6.75
114	MP5B	Mx	-.012	6.75
115	MP2A	X	-2.749	2
116	MP2A	Z	1.587	2
117	MP2A	Mx	-.001	2
118	MP2B	X	-2.749	2
119	MP2B	Z	1.587	2
120	MP2B	Mx	.001	2
121	MP2C	X	-3.384	2
122	MP2C	Z	1.954	2
123	MP2C	Mx	0	2

Member Point Loads (BLC 24 : Antenna Wi (270 Deg))

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1B	X	-7.463	2
2	MP1B	Z	0	2
3	MP1B	Mx	-.001	2
4	MP1B	X	-7.463	2
5	MP1B	Z	0	2
6	MP1B	Mx	.001	2
7	MP4A	X	-8.147	2.92
8	MP4A	Z	0	2.92
9	MP4A	Mx	.006	2.92
10	MP4A	X	-8.147	5.67
11	MP4A	Z	0	5.67
12	MP4A	Mx	.006	5.67
13	MP4B	X	-16.392	2.92
14	MP4B	Z	0	2.92
15	MP4B	Mx	-.006	2.92
16	MP4B	X	-16.392	5.67
17	MP4B	Z	0	5.67
18	MP4B	Mx	-.006	5.67



Member Point Loads (BLC 24 : Antenna Wi (270 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
19	MP4C	X	-16.392	2.92
20	MP4C	Z	0	2.92
21	MP4C	Mx	-.006	2.92
22	MP4C	X	-16.392	5.67
23	MP4C	Z	0	5.67
24	MP4C	Mx	-.006	5.67
25	MP1A	X	-11.212	3.5
26	MP1A	Z	0	3.5
27	MP1A	Mx	-.007	3.5
28	MP1B	X	-14.896	3.5
29	MP1B	Z	0	3.5
30	MP1B	Mx	.005	3.5
31	MP1C	X	-14.896	3.5
32	MP1C	Z	0	3.5
33	MP1C	Mx	.005	3.5
34	MP2A	X	-9.346	3.5
35	MP2A	Z	0	3.5
36	MP2A	Mx	-.006	3.5
37	MP2B	X	-14.43	3.5
38	MP2B	Z	0	3.5
39	MP2B	Mx	.005	3.5
40	MP2C	X	-14.43	3.5
41	MP2C	Z	0	3.5
42	MP2C	Mx	.005	3.5
43	MP2A	X	-24.547	1.75
44	MP2A	Z	0	1.75
45	MP2A	Mx	.018	1.75
46	MP2A	X	-24.547	6.75
47	MP2A	Z	0	6.75
48	MP2A	Mx	.018	6.75
49	MP2B	X	-33.134	1.75
50	MP2B	Z	0	1.75
51	MP2B	Mx	.011	1.75
52	MP2B	X	-33.134	6.75
53	MP2B	Z	0	6.75
54	MP2B	Mx	.011	6.75
55	MP2C	X	-33.134	1.75
56	MP2C	Z	0	1.75
57	MP2C	Mx	-.036	1.75
58	MP2C	X	-33.134	6.75
59	MP2C	Z	0	6.75
60	MP2C	Mx	-.036	6.75
61	MP2A	X	-24.547	1.75
62	MP2A	Z	0	1.75
63	MP2A	Mx	.018	1.75
64	MP2A	X	-24.547	6.75
65	MP2A	Z	0	6.75
66	MP2A	Mx	.018	6.75
67	MP2B	X	-33.134	1.75
68	MP2B	Z	0	1.75
69	MP2B	Mx	-.036	1.75
70	MP2B	X	-33.134	6.75
71	MP2B	Z	0	6.75
72	MP2B	Mx	-.036	6.75
73	MP2C	X	-33.134	1.75
74	MP2C	Z	0	1.75
75	MP2C	Mx	.011	1.75



Member Point Loads (BLC 24 : Antenna Wi (270 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
76	MP2C	X	-33.134	6.75
77	MP2C	Z	0	6.75
78	MP2C	Mx	.011	6.75
79	MP1C	X	-16.321	2.42
80	MP1C	Z	0	2.42
81	MP1C	Mx	-.006	2.42
82	MP1C	X	-16.321	6
83	MP1C	Z	0	6
84	MP1C	Mx	-.006	6
85	MP5C	X	-16.321	2.42
86	MP5C	Z	0	2.42
87	MP5C	Mx	-.006	2.42
88	MP5C	X	-16.321	6
89	MP5C	Z	0	6
90	MP5C	Mx	-.006	6
91	MP1A	X	-24.112	1.75
92	MP1A	Z	0	1.75
93	MP1A	Mx	.015	1.75
94	MP1A	X	-24.112	6.75
95	MP1A	Z	0	6.75
96	MP1A	Mx	.015	6.75
97	MP1B	X	-21.66	1.75
98	MP1B	Z	0	1.75
99	MP1B	Mx	-.007	1.75
100	MP1B	X	-21.66	6.75
101	MP1B	Z	0	6.75
102	MP1B	Mx	-.007	6.75
103	MP5A	X	-24.112	1.75
104	MP5A	Z	0	1.75
105	MP5A	Mx	.015	1.75
106	MP5A	X	-24.112	6.75
107	MP5A	Z	0	6.75
108	MP5A	Mx	.015	6.75
109	MP5B	X	-21.66	1.75
110	MP5B	Z	0	1.75
111	MP5B	Mx	-.007	1.75
112	MP5B	X	-21.66	6.75
113	MP5B	Z	0	6.75
114	MP5B	Mx	-.007	6.75
115	MP2A	X	-2.931	2
116	MP2A	Z	0	2
117	MP2A	Mx	-.001	2
118	MP2B	X	-3.663	2
119	MP2B	Z	0	2
120	MP2B	Mx	.000763	2
121	MP2C	X	-3.663	2
122	MP2C	Z	0	2
123	MP2C	Mx	.000763	2

Member Point Loads (BLC 25 : Antenna Wi (300 Deg))

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1B	X	-7.658	2
2	MP1B	Z	-4.421	2
3	MP1B	Mx	0	2
4	MP1B	X	-7.658	2
5	MP1B	Z	-4.421	2



Member Point Loads (BLC 25 : Antenna Wi (300 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
6	MP1B	Mx	0	2
7	MP4A	X	-9.436	2.92
8	MP4A	Z	-5.448	2.92
9	MP4A	Mx	.007	2.92
10	MP4A	X	-9.436	5.67
11	MP4A	Z	-5.448	5.67
12	MP4A	Mx	.007	5.67
13	MP4B	X	-16.576	2.92
14	MP4B	Z	-9.57	2.92
15	MP4B	Mx	0	2.92
16	MP4B	X	-16.576	5.67
17	MP4B	Z	-9.57	5.67
18	MP4B	Mx	0	5.67
19	MP4C	X	-9.436	2.92
20	MP4C	Z	-5.448	2.92
21	MP4C	Mx	-.007	2.92
22	MP4C	X	-9.436	5.67
23	MP4C	Z	-5.448	5.67
24	MP4C	Mx	-.007	5.67
25	MP1A	X	-10.774	3.5
26	MP1A	Z	-6.22	3.5
27	MP1A	Mx	-.007	3.5
28	MP1B	X	-13.964	3.5
29	MP1B	Z	-8.062	3.5
30	MP1B	Mx	0	3.5
31	MP1C	X	-10.774	3.5
32	MP1C	Z	-6.22	3.5
33	MP1C	Mx	.007	3.5
34	MP2A	X	-9.561	3.5
35	MP2A	Z	-5.52	3.5
36	MP2A	Mx	-.006	3.5
37	MP2B	X	-13.964	3.5
38	MP2B	Z	-8.062	3.5
39	MP2B	Mx	0	3.5
40	MP2C	X	-9.561	3.5
41	MP2C	Z	-5.52	3.5
42	MP2C	Mx	.006	3.5
43	MP2A	X	-23.737	1.75
44	MP2A	Z	-13.705	1.75
45	MP2A	Mx	.006	1.75
46	MP2A	X	-23.737	6.75
47	MP2A	Z	-13.705	6.75
48	MP2A	Mx	.006	6.75
49	MP2B	X	-31.173	1.75
50	MP2B	Z	-17.998	1.75
51	MP2B	Mx	.03	1.75
52	MP2B	X	-31.173	6.75
53	MP2B	Z	-17.998	6.75
54	MP2B	Mx	.03	6.75
55	MP2C	X	-23.737	1.75
56	MP2C	Z	-13.705	1.75
57	MP2C	Mx	-.029	1.75
58	MP2C	X	-23.737	6.75
59	MP2C	Z	-13.705	6.75
60	MP2C	Mx	-.029	6.75
61	MP2A	X	-23.737	1.75
62	MP2A	Z	-13.705	1.75



Member Point Loads (BLC 25 : Antenna Wi (300 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
63	MP2A	Mx	.029	1.75
64	MP2A	X	-23.737	6.75
65	MP2A	Z	-13.705	6.75
66	MP2A	Mx	.029	6.75
67	MP2B	X	-31.173	1.75
68	MP2B	Z	-17.998	1.75
69	MP2B	Mx	-.03	1.75
70	MP2B	X	-31.173	6.75
71	MP2B	Z	-17.998	6.75
72	MP2B	Mx	-.03	6.75
73	MP2C	X	-23.737	1.75
74	MP2C	Z	-13.705	1.75
75	MP2C	Mx	-.006	1.75
76	MP2C	X	-23.737	6.75
77	MP2C	Z	-13.705	6.75
78	MP2C	Mx	-.006	6.75
79	MP1C	X	-13.421	2.42
80	MP1C	Z	-7.749	2.42
81	MP1C	Mx	-.01	2.42
82	MP1C	X	-13.421	6
83	MP1C	Z	-7.749	6
84	MP1C	Mx	-.01	6
85	MP5C	X	-13.421	2.42
86	MP5C	Z	-7.749	2.42
87	MP5C	Mx	-.01	2.42
88	MP5C	X	-13.421	6
89	MP5C	Z	-7.749	6
90	MP5C	Mx	-.01	6
91	MP1A	X	-20.174	1.75
92	MP1A	Z	-11.648	1.75
93	MP1A	Mx	.012	1.75
94	MP1A	X	-20.174	6.75
95	MP1A	Z	-11.648	6.75
96	MP1A	Mx	.012	6.75
97	MP1B	X	-18.051	1.75
98	MP1B	Z	-10.421	1.75
99	MP1B	Mx	0	1.75
100	MP1B	X	-18.051	6.75
101	MP1B	Z	-10.421	6.75
102	MP1B	Mx	0	6.75
103	MP5A	X	-20.174	1.75
104	MP5A	Z	-11.648	1.75
105	MP5A	Mx	.012	1.75
106	MP5A	X	-20.174	6.75
107	MP5A	Z	-11.648	6.75
108	MP5A	Mx	.012	6.75
109	MP5B	X	-18.051	1.75
110	MP5B	Z	-10.421	1.75
111	MP5B	Mx	0	1.75
112	MP5B	X	-18.051	6.75
113	MP5B	Z	-10.421	6.75
114	MP5B	Mx	0	6.75
115	MP2A	X	-2.749	2
116	MP2A	Z	-1.587	2
117	MP2A	Mx	-.001	2
118	MP2B	X	-3.384	2
119	MP2B	Z	-1.954	2



Member Point Loads (BLC 25 : Antenna Wi (300 Deg)) (Continued)

	Member Label	Direction	Magnitude[[lb,k-ft]	Location[ft,%]
120	MP2B	Mx	0	2
121	MP2C	X	-2.749	2
122	MP2C	Z	-1.587	2
123	MP2C	Mx	.001	2

Member Point Loads (BLC 26 : Antenna Wi (330 Deg))

	Member Label	Direction	Magnitude[[lb,k-ft]	Location[ft,%]
1	MP1B	X	-3.732	2
2	MP1B	Z	-6.463	2
3	MP1B	Mx	.001	2
4	MP1B	X	-3.732	2
5	MP1B	Z	-6.463	2
6	MP1B	Mx	-.001	2
7	MP4A	X	-8.196	2.92
8	MP4A	Z	-14.196	2.92
9	MP4A	Mx	.006	2.92
10	MP4A	X	-8.196	5.67
11	MP4A	Z	-14.196	5.67
12	MP4A	Mx	.006	5.67
13	MP4B	X	-8.196	2.92
14	MP4B	Z	-14.196	2.92
15	MP4B	Mx	.006	2.92
16	MP4B	X	-8.196	5.67
17	MP4B	Z	-14.196	5.67
18	MP4B	Mx	.006	5.67
19	MP4C	X	-4.074	2.92
20	MP4C	Z	-7.056	2.92
21	MP4C	Mx	-.006	2.92
22	MP4C	X	-4.074	5.67
23	MP4C	Z	-7.056	5.67
24	MP4C	Mx	-.006	5.67
25	MP1A	X	-7.448	3.5
26	MP1A	Z	-12.901	3.5
27	MP1A	Mx	-.005	3.5
28	MP1B	X	-7.448	3.5
29	MP1B	Z	-12.901	3.5
30	MP1B	Mx	-.005	3.5
31	MP1C	X	-5.606	3.5
32	MP1C	Z	-9.71	3.5
33	MP1C	Mx	.007	3.5
34	MP2A	X	-7.215	3.5
35	MP2A	Z	-12.497	3.5
36	MP2A	Mx	-.005	3.5
37	MP2B	X	-7.215	3.5
38	MP2B	Z	-12.497	3.5
39	MP2B	Mx	-.005	3.5
40	MP2C	X	-4.673	3.5
41	MP2C	Z	-8.094	3.5
42	MP2C	Mx	.006	3.5
43	MP2A	X	-16.567	1.75
44	MP2A	Z	-28.695	1.75
45	MP2A	Mx	-.011	1.75
46	MP2A	X	-16.567	6.75
47	MP2A	Z	-28.695	6.75
48	MP2A	Mx	-.011	6.75
49	MP2B	X	-16.567	1.75



Member Point Loads (BLC 26 : Antenna Wi (330 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
50	MP2B	Z	-28.695	1.75
51	MP2B	Mx	.036	1.75
52	MP2B	X	-16.567	6.75
53	MP2B	Z	-28.695	6.75
54	MP2B	Mx	.036	6.75
55	MP2C	X	-12.274	1.75
56	MP2C	Z	-21.258	1.75
57	MP2C	Mx	-.018	1.75
58	MP2C	X	-12.274	6.75
59	MP2C	Z	-21.258	6.75
60	MP2C	Mx	-.018	6.75
61	MP2A	X	-16.567	1.75
62	MP2A	Z	-28.695	1.75
63	MP2A	Mx	.036	1.75
64	MP2A	X	-16.567	6.75
65	MP2A	Z	-28.695	6.75
66	MP2A	Mx	.036	6.75
67	MP2B	X	-16.567	1.75
68	MP2B	Z	-28.695	1.75
69	MP2B	Mx	-.011	1.75
70	MP2B	X	-16.567	6.75
71	MP2B	Z	-28.695	6.75
72	MP2B	Mx	-.011	6.75
73	MP2C	X	-12.274	1.75
74	MP2C	Z	-21.258	1.75
75	MP2C	Mx	-.018	1.75
76	MP2C	X	-12.274	6.75
77	MP2C	Z	-21.258	6.75
78	MP2C	Mx	-.018	6.75
79	MP1C	X	-7.543	2.42
80	MP1C	Z	-13.065	2.42
81	MP1C	Mx	-.012	2.42
82	MP1C	X	-7.543	6
83	MP1C	Z	-13.065	6
84	MP1C	Mx	-.012	6
85	MP5C	X	-7.543	2.42
86	MP5C	Z	-13.065	2.42
87	MP5C	Mx	-.012	2.42
88	MP5C	X	-7.543	6
89	MP5C	Z	-13.065	6
90	MP5C	Mx	-.012	6
91	MP1A	X	-10.83	1.75
92	MP1A	Z	-18.758	1.75
93	MP1A	Mx	.007	1.75
94	MP1A	X	-10.83	6.75
95	MP1A	Z	-18.758	6.75
96	MP1A	Mx	.007	6.75
97	MP1B	X	-10.83	1.75
98	MP1B	Z	-18.758	1.75
99	MP1B	Mx	.007	1.75
100	MP1B	X	-10.83	6.75
101	MP1B	Z	-18.758	6.75
102	MP1B	Mx	.007	6.75
103	MP5A	X	-10.83	1.75
104	MP5A	Z	-18.758	1.75
105	MP5A	Mx	.007	1.75
106	MP5A	X	-10.83	6.75



Member Point Loads (BLC 26 : Antenna Wi (330 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
107	MP5A	Z	-18.758	6.75
108	MP5A	Mx	.007	6.75
109	MP5B	X	-10.83	1.75
110	MP5B	Z	-18.758	1.75
111	MP5B	Mx	.007	1.75
112	MP5B	X	-10.83	6.75
113	MP5B	Z	-18.758	6.75
114	MP5B	Mx	.007	6.75
115	MP2A	X	-1.832	2
116	MP2A	Z	-3.172	2
117	MP2A	Mx	-.000763	2
118	MP2B	X	-1.832	2
119	MP2B	Z	-3.172	2
120	MP2B	Mx	-.000763	2
121	MP2C	X	-1.465	2
122	MP2C	Z	-2.538	2
123	MP2C	Mx	.001	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1B	X	0	2
2	MP1B	Z	-1.189	2
3	MP1B	Mx	.000343	2
4	MP1B	X	0	2
5	MP1B	Z	-1.189	2
6	MP1B	Mx	-.000343	2
7	MP4A	X	0	2.92
8	MP4A	Z	-5.092	2.92
9	MP4A	Mx	0	2.92
10	MP4A	X	0	5.67
11	MP4A	Z	-5.092	5.67
12	MP4A	Mx	0	5.67
13	MP4B	X	0	2.92
14	MP4B	Z	-2.588	2.92
15	MP4B	Mx	.002	2.92
16	MP4B	X	0	5.67
17	MP4B	Z	-2.588	5.67
18	MP4B	Mx	.002	5.67
19	MP4C	X	0	2.92
20	MP4C	Z	-2.588	2.92
21	MP4C	Mx	-.002	2.92
22	MP4C	X	0	5.67
23	MP4C	Z	-2.588	5.67
24	MP4C	Mx	-.002	5.67
25	MP1A	X	0	3.5
26	MP1A	Z	-4.027	3.5
27	MP1A	Mx	0	3.5
28	MP1B	X	0	3.5
29	MP1B	Z	-3.033	3.5
30	MP1B	Mx	-.002	3.5
31	MP1C	X	0	3.5
32	MP1C	Z	-3.033	3.5
33	MP1C	Mx	.002	3.5
34	MP2A	X	0	3.5
35	MP2A	Z	-4.027	3.5
36	MP2A	Mx	0	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
37	MP2B	X	0	3.5
38	MP2B	Z	-2.663	3.5
39	MP2B	Mx	-.002	3.5
40	MP2C	X	0	3.5
41	MP2C	Z	-2.663	3.5
42	MP2C	Mx	.002	3.5
43	MP2A	X	0	1.75
44	MP2A	Z	-11.835	1.75
45	MP2A	Mx	-.01	1.75
46	MP2A	X	0	6.75
47	MP2A	Z	-11.835	6.75
48	MP2A	Mx	-.01	6.75
49	MP2B	X	0	1.75
50	MP2B	Z	-8.788	1.75
51	MP2B	Mx	.009	1.75
52	MP2B	X	0	6.75
53	MP2B	Z	-8.788	6.75
54	MP2B	Mx	.009	6.75
55	MP2C	X	0	1.75
56	MP2C	Z	-8.788	1.75
57	MP2C	Mx	-.002	1.75
58	MP2C	X	0	6.75
59	MP2C	Z	-8.788	6.75
60	MP2C	Mx	-.002	6.75
61	MP2A	X	0	1.75
62	MP2A	Z	-11.835	1.75
63	MP2A	Mx	.01	1.75
64	MP2A	X	0	6.75
65	MP2A	Z	-11.835	6.75
66	MP2A	Mx	.01	6.75
67	MP2B	X	0	1.75
68	MP2B	Z	-8.788	1.75
69	MP2B	Mx	.002	1.75
70	MP2B	X	0	6.75
71	MP2B	Z	-8.788	6.75
72	MP2B	Mx	.002	6.75
73	MP2C	X	0	1.75
74	MP2C	Z	-8.788	1.75
75	MP2C	Mx	-.009	1.75
76	MP2C	X	0	6.75
77	MP2C	Z	-8.788	6.75
78	MP2C	Mx	-.009	6.75
79	MP1C	X	0	2.42
80	MP1C	Z	-4.837	2.42
81	MP1C	Mx	-.003	2.42
82	MP1C	X	0	6
83	MP1C	Z	-4.837	6
84	MP1C	Mx	-.003	6
85	MP5C	X	0	2.42
86	MP5C	Z	-4.837	2.42
87	MP5C	Mx	-.003	2.42
88	MP5C	X	0	6
89	MP5C	Z	-4.837	6
90	MP5C	Mx	-.003	6
91	MP1A	X	0	1.75
92	MP1A	Z	-6.508	1.75
93	MP1A	Mx	0	1.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
94	MP1A	X	0	6.75
95	MP1A	Z	-6.508	6.75
96	MP1A	Mx	0	6.75
97	MP1B	X	0	1.75
98	MP1B	Z	-7.343	1.75
99	MP1B	Mx	.004	1.75
100	MP1B	X	0	6.75
101	MP1B	Z	-7.343	6.75
102	MP1B	Mx	.004	6.75
103	MP5A	X	0	1.75
104	MP5A	Z	-6.508	1.75
105	MP5A	Mx	0	1.75
106	MP5A	X	0	6.75
107	MP5A	Z	-6.508	6.75
108	MP5A	Mx	0	6.75
109	MP5B	X	0	1.75
110	MP5B	Z	-7.343	1.75
111	MP5B	Mx	.004	1.75
112	MP5B	X	0	6.75
113	MP5B	Z	-7.343	6.75
114	MP5B	Mx	.004	6.75
115	MP2A	X	0	2
116	MP2A	Z	-.961	2
117	MP2A	Mx	0	2
118	MP2B	X	0	2
119	MP2B	Z	-.739	2
120	MP2B	Mx	-.000267	2
121	MP2C	X	0	2
122	MP2C	Z	-.739	2
123	MP2C	Mx	.000267	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1B	X	.378	2
2	MP1B	Z	-.654	2
3	MP1B	Mx	.000252	2
4	MP1B	X	.378	2
5	MP1B	Z	-.654	2
6	MP1B	Mx	-.000252	2
7	MP4A	X	2.129	2.92
8	MP4A	Z	-3.687	2.92
9	MP4A	Mx	-.002	2.92
10	MP4A	X	2.129	5.67
11	MP4A	Z	-3.687	5.67
12	MP4A	Mx	-.002	5.67
13	MP4B	X	.877	2.92
14	MP4B	Z	-1.519	2.92
15	MP4B	Mx	.001	2.92
16	MP4B	X	.877	5.67
17	MP4B	Z	-1.519	5.67
18	MP4B	Mx	.001	5.67
19	MP4C	X	2.129	2.92
20	MP4C	Z	-3.687	2.92
21	MP4C	Mx	-.002	2.92
22	MP4C	X	2.129	5.67
23	MP4C	Z	-3.687	5.67



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
24	MP4C	Mx	-0.002	5.67
25	MP1A	X	1.848	3.5
26	MP1A	Z	-3.201	3.5
27	MP1A	Mx	.001	3.5
28	MP1B	X	1.351	3.5
29	MP1B	Z	-2.34	3.5
30	MP1B	Mx	-0.002	3.5
31	MP1C	X	1.848	3.5
32	MP1C	Z	-3.201	3.5
33	MP1C	Mx	.001	3.5
34	MP2A	X	1.786	3.5
35	MP2A	Z	-3.094	3.5
36	MP2A	Mx	.001	3.5
37	MP2B	X	1.104	3.5
38	MP2B	Z	-1.913	3.5
39	MP2B	Mx	-0.001	3.5
40	MP2C	X	1.786	3.5
41	MP2C	Z	-3.094	3.5
42	MP2C	Mx	.001	3.5
43	MP2A	X	5.41	1.75
44	MP2A	Z	-9.37	1.75
45	MP2A	Mx	-0.012	1.75
46	MP2A	X	5.41	6.75
47	MP2A	Z	-9.37	6.75
48	MP2A	Mx	-0.012	6.75
49	MP2B	X	3.886	1.75
50	MP2B	Z	-6.731	1.75
51	MP2B	Mx	.006	1.75
52	MP2B	X	3.886	6.75
53	MP2B	Z	-6.731	6.75
54	MP2B	Mx	.006	6.75
55	MP2C	X	5.41	1.75
56	MP2C	Z	-9.37	1.75
57	MP2C	Mx	.004	1.75
58	MP2C	X	5.41	6.75
59	MP2C	Z	-9.37	6.75
60	MP2C	Mx	.004	6.75
61	MP2A	X	5.41	1.75
62	MP2A	Z	-9.37	1.75
63	MP2A	Mx	.004	1.75
64	MP2A	X	5.41	6.75
65	MP2A	Z	-9.37	6.75
66	MP2A	Mx	.004	6.75
67	MP2B	X	3.886	1.75
68	MP2B	Z	-6.731	1.75
69	MP2B	Mx	.006	1.75
70	MP2B	X	3.886	6.75
71	MP2B	Z	-6.731	6.75
72	MP2B	Mx	.006	6.75
73	MP2C	X	5.41	1.75
74	MP2C	Z	-9.37	1.75
75	MP2C	Mx	-0.012	1.75
76	MP2C	X	5.41	6.75
77	MP2C	Z	-9.37	6.75
78	MP2C	Mx	-0.012	6.75
79	MP1C	X	2.56	2.42
80	MP1C	Z	-4.434	2.42



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
81	MP1C	Mx	-.002	2.42
82	MP1C	X	2.56	6
83	MP1C	Z	-4.434	6
84	MP1C	Mx	-.002	6
85	MP5C	X	2.56	2.42
86	MP5C	Z	-4.434	2.42
87	MP5C	Mx	-.002	2.42
88	MP5C	X	2.56	6
89	MP5C	Z	-4.434	6
90	MP5C	Mx	-.002	6
91	MP1A	X	3.393	1.75
92	MP1A	Z	-5.877	1.75
93	MP1A	Mx	-.002	1.75
94	MP1A	X	3.393	6.75
95	MP1A	Z	-5.877	6.75
96	MP1A	Mx	-.002	6.75
97	MP1B	X	3.811	1.75
98	MP1B	Z	-6.6	1.75
99	MP1B	Mx	.005	1.75
100	MP1B	X	3.811	6.75
101	MP1B	Z	-6.6	6.75
102	MP1B	Mx	.005	6.75
103	MP5A	X	3.393	1.75
104	MP5A	Z	-5.877	1.75
105	MP5A	Mx	-.002	1.75
106	MP5A	X	3.393	6.75
107	MP5A	Z	-5.877	6.75
108	MP5A	Mx	-.002	6.75
109	MP5B	X	3.811	1.75
110	MP5B	Z	-6.6	1.75
111	MP5B	Mx	.005	1.75
112	MP5B	X	3.811	6.75
113	MP5B	Z	-6.6	6.75
114	MP5B	Mx	.005	6.75
115	MP2A	X	.444	2
116	MP2A	Z	-.768	2
117	MP2A	Mx	.000185	2
118	MP2B	X	.333	2
119	MP2B	Z	-.576	2
120	MP2B	Mx	-.000277	2
121	MP2C	X	.444	2
122	MP2C	Z	-.768	2
123	MP2C	Mx	.000185	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1B	X	1.03	2
2	MP1B	Z	-.594	2
3	MP1B	Mx	.000343	2
4	MP1B	X	1.03	2
5	MP1B	Z	-.594	2
6	MP1B	Mx	-.000343	2
7	MP4A	X	2.242	2.92
8	MP4A	Z	-1.294	2.92
9	MP4A	Mx	-.002	2.92
10	MP4A	X	2.242	5.67



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
11	MP4A	Z	-1.294	5.67
12	MP4A	Mx	-0.02	5.67
13	MP4B	X	2.242	2.92
14	MP4B	Z	-1.294	2.92
15	MP4B	Mx	.002	2.92
16	MP4B	X	2.242	5.67
17	MP4B	Z	-1.294	5.67
18	MP4B	Mx	.002	5.67
19	MP4C	X	4.41	2.92
20	MP4C	Z	-2.546	2.92
21	MP4C	Mx	0	2.92
22	MP4C	X	4.41	5.67
23	MP4C	Z	-2.546	5.67
24	MP4C	Mx	0	5.67
25	MP1A	X	2.627	3.5
26	MP1A	Z	-1.517	3.5
27	MP1A	Mx	.002	3.5
28	MP1B	X	2.627	3.5
29	MP1B	Z	-1.517	3.5
30	MP1B	Mx	-.002	3.5
31	MP1C	X	3.488	3.5
32	MP1C	Z	-2.014	3.5
33	MP1C	Mx	0	3.5
34	MP2A	X	2.306	3.5
35	MP2A	Z	-1.332	3.5
36	MP2A	Mx	.002	3.5
37	MP2B	X	2.306	3.5
38	MP2B	Z	-1.332	3.5
39	MP2B	Mx	-.002	3.5
40	MP2C	X	3.488	3.5
41	MP2C	Z	-2.014	3.5
42	MP2C	Mx	0	3.5
43	MP2A	X	7.611	1.75
44	MP2A	Z	-4.394	1.75
45	MP2A	Mx	-.009	1.75
46	MP2A	X	7.611	6.75
47	MP2A	Z	-4.394	6.75
48	MP2A	Mx	-.009	6.75
49	MP2B	X	7.611	1.75
50	MP2B	Z	-4.394	1.75
51	MP2B	Mx	.002	1.75
52	MP2B	X	7.611	6.75
53	MP2B	Z	-4.394	6.75
54	MP2B	Mx	.002	6.75
55	MP2C	X	10.249	1.75
56	MP2C	Z	-5.917	1.75
57	MP2C	Mx	.01	1.75
58	MP2C	X	10.249	6.75
59	MP2C	Z	-5.917	6.75
60	MP2C	Mx	.01	6.75
61	MP2A	X	7.611	1.75
62	MP2A	Z	-4.394	1.75
63	MP2A	Mx	-.002	1.75
64	MP2A	X	7.611	6.75
65	MP2A	Z	-4.394	6.75
66	MP2A	Mx	-.002	6.75
67	MP2B	X	7.611	1.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
68	MP2B	Z	-4.394	1.75
69	MP2B	Mx	.009	1.75
70	MP2B	X	7.611	6.75
71	MP2B	Z	-4.394	6.75
72	MP2B	Mx	.009	6.75
73	MP2C	X	10.249	1.75
74	MP2C	Z	-5.917	1.75
75	MP2C	Mx	-.01	1.75
76	MP2C	X	10.249	6.75
77	MP2C	Z	-5.917	6.75
78	MP2C	Mx	-.01	6.75
79	MP1C	X	4.556	2.42
80	MP1C	Z	-2.631	2.42
81	MP1C	Mx	0	2.42
82	MP1C	X	4.556	6
83	MP1C	Z	-2.631	6
84	MP1C	Mx	0	6
85	MP5C	X	4.556	2.42
86	MP5C	Z	-2.631	2.42
87	MP5C	Mx	0	2.42
88	MP5C	X	4.556	6
89	MP5C	Z	-2.631	6
90	MP5C	Mx	0	6
91	MP1A	X	6.359	1.75
92	MP1A	Z	-3.672	1.75
93	MP1A	Mx	-.004	1.75
94	MP1A	X	6.359	6.75
95	MP1A	Z	-3.672	6.75
96	MP1A	Mx	-.004	6.75
97	MP1B	X	6.359	1.75
98	MP1B	Z	-3.672	1.75
99	MP1B	Mx	.004	1.75
100	MP1B	X	6.359	6.75
101	MP1B	Z	-3.672	6.75
102	MP1B	Mx	.004	6.75
103	MP5A	X	6.359	1.75
104	MP5A	Z	-3.672	1.75
105	MP5A	Mx	-.004	1.75
106	MP5A	X	6.359	6.75
107	MP5A	Z	-3.672	6.75
108	MP5A	Mx	-.004	6.75
109	MP5B	X	6.359	1.75
110	MP5B	Z	-3.672	1.75
111	MP5B	Mx	.004	1.75
112	MP5B	X	6.359	6.75
113	MP5B	Z	-3.672	6.75
114	MP5B	Mx	.004	6.75
115	MP2A	X	.64	2
116	MP2A	Z	-.37	2
117	MP2A	Mx	.000267	2
118	MP2B	X	.64	2
119	MP2B	Z	-.37	2
120	MP2B	Mx	-.000267	2
121	MP2C	X	.833	2
122	MP2C	Z	-.481	2
123	MP2C	Mx	0	2



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1B	X	2.056	2
2	MP1B	Z	0	2
3	MP1B	Mx	.000343	2
4	MP1B	X	2.056	2
5	MP1B	Z	0	2
6	MP1B	Mx	-.000343	2
7	MP4A	X	1.754	2.92
8	MP4A	Z	0	2.92
9	MP4A	Mx	-.001	2.92
10	MP4A	X	1.754	5.67
11	MP4A	Z	0	5.67
12	MP4A	Mx	-.001	5.67
13	MP4B	X	4.258	2.92
14	MP4B	Z	0	2.92
15	MP4B	Mx	.002	2.92
16	MP4B	X	4.258	5.67
17	MP4B	Z	0	5.67
18	MP4B	Mx	.002	5.67
19	MP4C	X	4.258	2.92
20	MP4C	Z	0	2.92
21	MP4C	Mx	.002	2.92
22	MP4C	X	4.258	5.67
23	MP4C	Z	0	5.67
24	MP4C	Mx	.002	5.67
25	MP1A	X	2.702	3.5
26	MP1A	Z	0	3.5
27	MP1A	Mx	.002	3.5
28	MP1B	X	3.696	3.5
29	MP1B	Z	0	3.5
30	MP1B	Mx	-.001	3.5
31	MP1C	X	3.696	3.5
32	MP1C	Z	0	3.5
33	MP1C	Mx	-.001	3.5
34	MP2A	X	2.208	3.5
35	MP2A	Z	0	3.5
36	MP2A	Mx	.001	3.5
37	MP2B	X	3.572	3.5
38	MP2B	Z	0	3.5
39	MP2B	Mx	-.001	3.5
40	MP2C	X	3.572	3.5
41	MP2C	Z	0	3.5
42	MP2C	Mx	-.001	3.5
43	MP2A	X	7.773	1.75
44	MP2A	Z	0	1.75
45	MP2A	Mx	-.006	1.75
46	MP2A	X	7.773	6.75
47	MP2A	Z	0	6.75
48	MP2A	Mx	-.006	6.75
49	MP2B	X	10.819	1.75
50	MP2B	Z	0	1.75
51	MP2B	Mx	-.004	1.75
52	MP2B	X	10.819	6.75
53	MP2B	Z	0	6.75
54	MP2B	Mx	-.004	6.75
55	MP2C	X	10.819	1.75
56	MP2C	Z	0	1.75
57	MP2C	Mx	.012	1.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP2C	X	10.819	6.75
59	MP2C	Z	0	6.75
60	MP2C	Mx	.012	6.75
61	MP2A	X	7.773	1.75
62	MP2A	Z	0	1.75
63	MP2A	Mx	-.006	1.75
64	MP2A	X	7.773	6.75
65	MP2A	Z	0	6.75
66	MP2A	Mx	-.006	6.75
67	MP2B	X	10.819	1.75
68	MP2B	Z	0	1.75
69	MP2B	Mx	.012	1.75
70	MP2B	X	10.819	6.75
71	MP2B	Z	0	6.75
72	MP2B	Mx	.012	6.75
73	MP2C	X	10.819	1.75
74	MP2C	Z	0	1.75
75	MP2C	Mx	-.004	1.75
76	MP2C	X	10.819	6.75
77	MP2C	Z	0	6.75
78	MP2C	Mx	-.004	6.75
79	MP1C	X	5.12	2.42
80	MP1C	Z	0	2.42
81	MP1C	Mx	.002	2.42
82	MP1C	X	5.12	6
83	MP1C	Z	0	6
84	MP1C	Mx	.002	6
85	MP5C	X	5.12	2.42
86	MP5C	Z	0	2.42
87	MP5C	Mx	.002	2.42
88	MP5C	X	5.12	6
89	MP5C	Z	0	6
90	MP5C	Mx	.002	6
91	MP1A	X	7.621	1.75
92	MP1A	Z	0	1.75
93	MP1A	Mx	-.005	1.75
94	MP1A	X	7.621	6.75
95	MP1A	Z	0	6.75
96	MP1A	Mx	-.005	6.75
97	MP1B	X	6.787	1.75
98	MP1B	Z	0	1.75
99	MP1B	Mx	.002	1.75
100	MP1B	X	6.787	6.75
101	MP1B	Z	0	6.75
102	MP1B	Mx	.002	6.75
103	MP5A	X	7.621	1.75
104	MP5A	Z	0	1.75
105	MP5A	Mx	-.005	1.75
106	MP5A	X	7.621	6.75
107	MP5A	Z	0	6.75
108	MP5A	Mx	-.005	6.75
109	MP5B	X	6.787	1.75
110	MP5B	Z	0	1.75
111	MP5B	Mx	.002	1.75
112	MP5B	X	6.787	6.75
113	MP5B	Z	0	6.75
114	MP5B	Mx	.002	6.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
115	MP2A	X	.665	2
116	MP2A	Z	0	2
117	MP2A	Mx	.000277	2
118	MP2B	X	.887	2
119	MP2B	Z	0	2
120	MP2B	Mx	-.000185	2
121	MP2C	X	.887	2
122	MP2C	Z	0	2
123	MP2C	Mx	-.000185	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1B	X	2.156	2
2	MP1B	Z	1.245	2
3	MP1B	Mx	0	2
4	MP1B	X	2.156	2
5	MP1B	Z	1.245	2
6	MP1B	Mx	0	2
7	MP4A	X	2.242	2.92
8	MP4A	Z	1.294	2.92
9	MP4A	Mx	-.002	2.92
10	MP4A	X	2.242	5.67
11	MP4A	Z	1.294	5.67
12	MP4A	Mx	-.002	5.67
13	MP4B	X	4.41	2.92
14	MP4B	Z	2.546	2.92
15	MP4B	Mx	0	2.92
16	MP4B	X	4.41	5.67
17	MP4B	Z	2.546	5.67
18	MP4B	Mx	0	5.67
19	MP4C	X	2.242	2.92
20	MP4C	Z	1.294	2.92
21	MP4C	Mx	.002	2.92
22	MP4C	X	2.242	5.67
23	MP4C	Z	1.294	5.67
24	MP4C	Mx	.002	5.67
25	MP1A	X	2.627	3.5
26	MP1A	Z	1.517	3.5
27	MP1A	Mx	.002	3.5
28	MP1B	X	3.488	3.5
29	MP1B	Z	2.014	3.5
30	MP1B	Mx	0	3.5
31	MP1C	X	2.627	3.5
32	MP1C	Z	1.517	3.5
33	MP1C	Mx	-.002	3.5
34	MP2A	X	2.306	3.5
35	MP2A	Z	1.332	3.5
36	MP2A	Mx	.002	3.5
37	MP2B	X	3.488	3.5
38	MP2B	Z	2.014	3.5
39	MP2B	Mx	0	3.5
40	MP2C	X	2.306	3.5
41	MP2C	Z	1.332	3.5
42	MP2C	Mx	-.002	3.5
43	MP2A	X	7.611	1.75
44	MP2A	Z	4.394	1.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
45	MP2A	Mx	-.002	1.75
46	MP2A	X	7.611	6.75
47	MP2A	Z	4.394	6.75
48	MP2A	Mx	-.002	6.75
49	MP2B	X	10.249	1.75
50	MP2B	Z	5.917	1.75
51	MP2B	Mx	-.01	1.75
52	MP2B	X	10.249	6.75
53	MP2B	Z	5.917	6.75
54	MP2B	Mx	-.01	6.75
55	MP2C	X	7.611	1.75
56	MP2C	Z	4.394	1.75
57	MP2C	Mx	.009	1.75
58	MP2C	X	7.611	6.75
59	MP2C	Z	4.394	6.75
60	MP2C	Mx	.009	6.75
61	MP2A	X	7.611	1.75
62	MP2A	Z	4.394	1.75
63	MP2A	Mx	-.009	1.75
64	MP2A	X	7.611	6.75
65	MP2A	Z	4.394	6.75
66	MP2A	Mx	-.009	6.75
67	MP2B	X	10.249	1.75
68	MP2B	Z	5.917	1.75
69	MP2B	Mx	.01	1.75
70	MP2B	X	10.249	6.75
71	MP2B	Z	5.917	6.75
72	MP2B	Mx	.01	6.75
73	MP2C	X	7.611	1.75
74	MP2C	Z	4.394	1.75
75	MP2C	Mx	.002	1.75
76	MP2C	X	7.611	6.75
77	MP2C	Z	4.394	6.75
78	MP2C	Mx	.002	6.75
79	MP1C	X	4.189	2.42
80	MP1C	Z	2.419	2.42
81	MP1C	Mx	.003	2.42
82	MP1C	X	4.189	6
83	MP1C	Z	2.419	6
84	MP1C	Mx	.003	6
85	MP5C	X	4.189	2.42
86	MP5C	Z	2.419	2.42
87	MP5C	Mx	.003	2.42
88	MP5C	X	4.189	6
89	MP5C	Z	2.419	6
90	MP5C	Mx	.003	6
91	MP1A	X	6.359	1.75
92	MP1A	Z	3.672	1.75
93	MP1A	Mx	-.004	1.75
94	MP1A	X	6.359	6.75
95	MP1A	Z	3.672	6.75
96	MP1A	Mx	-.004	6.75
97	MP1B	X	5.636	1.75
98	MP1B	Z	3.254	1.75
99	MP1B	Mx	0	1.75
100	MP1B	X	5.636	6.75
101	MP1B	Z	3.254	6.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
102	MP1B	Mx	0	6.75
103	MP5A	X	6.359	1.75
104	MP5A	Z	3.672	1.75
105	MP5A	Mx	-.004	1.75
106	MP5A	X	6.359	6.75
107	MP5A	Z	3.672	6.75
108	MP5A	Mx	-.004	6.75
109	MP5B	X	5.636	1.75
110	MP5B	Z	3.254	1.75
111	MP5B	Mx	0	1.75
112	MP5B	X	5.636	6.75
113	MP5B	Z	3.254	6.75
114	MP5B	Mx	0	6.75
115	MP2A	X	.64	2
116	MP2A	Z	.37	2
117	MP2A	Mx	.000267	2
118	MP2B	X	.833	2
119	MP2B	Z	.481	2
120	MP2B	Mx	0	2
121	MP2C	X	.64	2
122	MP2C	Z	.37	2
123	MP2C	Mx	-.000267	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1B	X	1.028	2
2	MP1B	Z	1.781	2
3	MP1B	Mx	-.000343	2
4	MP1B	X	1.028	2
5	MP1B	Z	1.781	2
6	MP1B	Mx	.000343	2
7	MP4A	X	2.129	2.92
8	MP4A	Z	3.687	2.92
9	MP4A	Mx	-.002	2.92
10	MP4A	X	2.129	5.67
11	MP4A	Z	3.687	5.67
12	MP4A	Mx	-.002	5.67
13	MP4B	X	2.129	2.92
14	MP4B	Z	3.687	2.92
15	MP4B	Mx	-.002	2.92
16	MP4B	X	2.129	5.67
17	MP4B	Z	3.687	5.67
18	MP4B	Mx	-.002	5.67
19	MP4C	X	.877	2.92
20	MP4C	Z	1.519	2.92
21	MP4C	Mx	.001	2.92
22	MP4C	X	.877	5.67
23	MP4C	Z	1.519	5.67
24	MP4C	Mx	.001	5.67
25	MP1A	X	1.848	3.5
26	MP1A	Z	3.201	3.5
27	MP1A	Mx	.001	3.5
28	MP1B	X	1.848	3.5
29	MP1B	Z	3.201	3.5
30	MP1B	Mx	.001	3.5
31	MP1C	X	1.351	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
32	MP1C	Z	2.34	3.5
33	MP1C	Mx	-0.02	3.5
34	MP2A	X	1.786	3.5
35	MP2A	Z	3.094	3.5
36	MP2A	Mx	.001	3.5
37	MP2B	X	1.786	3.5
38	MP2B	Z	3.094	3.5
39	MP2B	Mx	.001	3.5
40	MP2C	X	1.104	3.5
41	MP2C	Z	1.913	3.5
42	MP2C	Mx	-0.01	3.5
43	MP2A	X	5.41	1.75
44	MP2A	Z	9.37	1.75
45	MP2A	Mx	.004	1.75
46	MP2A	X	5.41	6.75
47	MP2A	Z	9.37	6.75
48	MP2A	Mx	.004	6.75
49	MP2B	X	5.41	1.75
50	MP2B	Z	9.37	1.75
51	MP2B	Mx	-0.12	1.75
52	MP2B	X	5.41	6.75
53	MP2B	Z	9.37	6.75
54	MP2B	Mx	-0.12	6.75
55	MP2C	X	3.886	1.75
56	MP2C	Z	6.731	1.75
57	MP2C	Mx	.006	1.75
58	MP2C	X	3.886	6.75
59	MP2C	Z	6.731	6.75
60	MP2C	Mx	.006	6.75
61	MP2A	X	5.41	1.75
62	MP2A	Z	9.37	1.75
63	MP2A	Mx	-0.12	1.75
64	MP2A	X	5.41	6.75
65	MP2A	Z	9.37	6.75
66	MP2A	Mx	-0.12	6.75
67	MP2B	X	5.41	1.75
68	MP2B	Z	9.37	1.75
69	MP2B	Mx	.004	1.75
70	MP2B	X	5.41	6.75
71	MP2B	Z	9.37	6.75
72	MP2B	Mx	.004	6.75
73	MP2C	X	3.886	1.75
74	MP2C	Z	6.731	1.75
75	MP2C	Mx	.006	1.75
76	MP2C	X	3.886	6.75
77	MP2C	Z	6.731	6.75
78	MP2C	Mx	.006	6.75
79	MP1C	X	2.348	2.42
80	MP1C	Z	4.067	2.42
81	MP1C	Mx	.004	2.42
82	MP1C	X	2.348	6
83	MP1C	Z	4.067	6
84	MP1C	Mx	.004	6
85	MP5C	X	2.348	2.42
86	MP5C	Z	4.067	2.42
87	MP5C	Mx	.004	2.42
88	MP5C	X	2.348	6



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
89	MP5C	Z	4.067	6
90	MP5C	Mx	.004	6
91	MP1A	X	3.393	1.75
92	MP1A	Z	5.877	1.75
93	MP1A	Mx	-.002	1.75
94	MP1A	X	3.393	6.75
95	MP1A	Z	5.877	6.75
96	MP1A	Mx	-.002	6.75
97	MP1B	X	3.393	1.75
98	MP1B	Z	5.877	1.75
99	MP1B	Mx	-.002	1.75
100	MP1B	X	3.393	6.75
101	MP1B	Z	5.877	6.75
102	MP1B	Mx	-.002	6.75
103	MP5A	X	3.393	1.75
104	MP5A	Z	5.877	1.75
105	MP5A	Mx	-.002	1.75
106	MP5A	X	3.393	6.75
107	MP5A	Z	5.877	6.75
108	MP5A	Mx	-.002	6.75
109	MP5B	X	3.393	1.75
110	MP5B	Z	5.877	1.75
111	MP5B	Mx	-.002	1.75
112	MP5B	X	3.393	6.75
113	MP5B	Z	5.877	6.75
114	MP5B	Mx	-.002	6.75
115	MP2A	X	.444	2
116	MP2A	Z	.768	2
117	MP2A	Mx	.000185	2
118	MP2B	X	.444	2
119	MP2B	Z	.768	2
120	MP2B	Mx	.000185	2
121	MP2C	X	.333	2
122	MP2C	Z	.576	2
123	MP2C	Mx	-.000277	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1B	X	0	2
2	MP1B	Z	1.189	2
3	MP1B	Mx	-.000343	2
4	MP1B	X	0	2
5	MP1B	Z	1.189	2
6	MP1B	Mx	.000343	2
7	MP4A	X	0	2.92
8	MP4A	Z	5.092	2.92
9	MP4A	Mx	0	2.92
10	MP4A	X	0	5.67
11	MP4A	Z	5.092	5.67
12	MP4A	Mx	0	5.67
13	MP4B	X	0	2.92
14	MP4B	Z	2.588	2.92
15	MP4B	Mx	-.002	2.92
16	MP4B	X	0	5.67
17	MP4B	Z	2.588	5.67
18	MP4B	Mx	-.002	5.67



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%,]
19	MP4C	X	0	2.92
20	MP4C	Z	2.588	2.92
21	MP4C	Mx	.002	2.92
22	MP4C	X	0	5.67
23	MP4C	Z	2.588	5.67
24	MP4C	Mx	.002	5.67
25	MP1A	X	0	3.5
26	MP1A	Z	4.027	3.5
27	MP1A	Mx	0	3.5
28	MP1B	X	0	3.5
29	MP1B	Z	3.033	3.5
30	MP1B	Mx	.002	3.5
31	MP1C	X	0	3.5
32	MP1C	Z	3.033	3.5
33	MP1C	Mx	-.002	3.5
34	MP2A	X	0	3.5
35	MP2A	Z	4.027	3.5
36	MP2A	Mx	0	3.5
37	MP2B	X	0	3.5
38	MP2B	Z	2.663	3.5
39	MP2B	Mx	.002	3.5
40	MP2C	X	0	3.5
41	MP2C	Z	2.663	3.5
42	MP2C	Mx	-.002	3.5
43	MP2A	X	0	1.75
44	MP2A	Z	11.835	1.75
45	MP2A	Mx	.01	1.75
46	MP2A	X	0	6.75
47	MP2A	Z	11.835	6.75
48	MP2A	Mx	.01	6.75
49	MP2B	X	0	1.75
50	MP2B	Z	8.788	1.75
51	MP2B	Mx	-.009	1.75
52	MP2B	X	0	6.75
53	MP2B	Z	8.788	6.75
54	MP2B	Mx	-.009	6.75
55	MP2C	X	0	1.75
56	MP2C	Z	8.788	1.75
57	MP2C	Mx	.002	1.75
58	MP2C	X	0	6.75
59	MP2C	Z	8.788	6.75
60	MP2C	Mx	.002	6.75
61	MP2A	X	0	1.75
62	MP2A	Z	11.835	1.75
63	MP2A	Mx	-.01	1.75
64	MP2A	X	0	6.75
65	MP2A	Z	11.835	6.75
66	MP2A	Mx	-.01	6.75
67	MP2B	X	0	1.75
68	MP2B	Z	8.788	1.75
69	MP2B	Mx	-.002	1.75
70	MP2B	X	0	6.75
71	MP2B	Z	8.788	6.75
72	MP2B	Mx	-.002	6.75
73	MP2C	X	0	1.75
74	MP2C	Z	8.788	1.75
75	MP2C	Mx	.009	1.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
76	MP2C	X	0	6.75
77	MP2C	Z	8.788	6.75
78	MP2C	Mx	.009	6.75
79	MP1C	X	0	2.42
80	MP1C	Z	4.837	2.42
81	MP1C	Mx	.003	2.42
82	MP1C	X	0	6
83	MP1C	Z	4.837	6
84	MP1C	Mx	.003	6
85	MP5C	X	0	2.42
86	MP5C	Z	4.837	2.42
87	MP5C	Mx	.003	2.42
88	MP5C	X	0	6
89	MP5C	Z	4.837	6
90	MP5C	Mx	.003	6
91	MP1A	X	0	1.75
92	MP1A	Z	6.508	1.75
93	MP1A	Mx	0	1.75
94	MP1A	X	0	6.75
95	MP1A	Z	6.508	6.75
96	MP1A	Mx	0	6.75
97	MP1B	X	0	1.75
98	MP1B	Z	7.343	1.75
99	MP1B	Mx	-.004	1.75
100	MP1B	X	0	6.75
101	MP1B	Z	7.343	6.75
102	MP1B	Mx	-.004	6.75
103	MP5A	X	0	1.75
104	MP5A	Z	6.508	1.75
105	MP5A	Mx	0	1.75
106	MP5A	X	0	6.75
107	MP5A	Z	6.508	6.75
108	MP5A	Mx	0	6.75
109	MP5B	X	0	1.75
110	MP5B	Z	7.343	1.75
111	MP5B	Mx	-.004	1.75
112	MP5B	X	0	6.75
113	MP5B	Z	7.343	6.75
114	MP5B	Mx	-.004	6.75
115	MP2A	X	0	2
116	MP2A	Z	.961	2
117	MP2A	Mx	0	2
118	MP2B	X	0	2
119	MP2B	Z	.739	2
120	MP2B	Mx	.000267	2
121	MP2C	X	0	2
122	MP2C	Z	.739	2
123	MP2C	Mx	-.000267	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1B	X	-.378	2
2	MP1B	Z	.654	2
3	MP1B	Mx	-.000252	2
4	MP1B	X	-.378	2
5	MP1B	Z	.654	2



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
6	MP1B	Mx	.000252	2
7	MP4A	X	-2.129	2.92
8	MP4A	Z	3.687	2.92
9	MP4A	Mx	.002	2.92
10	MP4A	X	-2.129	5.67
11	MP4A	Z	3.687	5.67
12	MP4A	Mx	.002	5.67
13	MP4B	X	-877	2.92
14	MP4B	Z	1.519	2.92
15	MP4B	Mx	-.001	2.92
16	MP4B	X	-877	5.67
17	MP4B	Z	1.519	5.67
18	MP4B	Mx	-.001	5.67
19	MP4C	X	-2.129	2.92
20	MP4C	Z	3.687	2.92
21	MP4C	Mx	.002	2.92
22	MP4C	X	-2.129	5.67
23	MP4C	Z	3.687	5.67
24	MP4C	Mx	.002	5.67
25	MP1A	X	-1.848	3.5
26	MP1A	Z	3.201	3.5
27	MP1A	Mx	-.001	3.5
28	MP1B	X	-1.351	3.5
29	MP1B	Z	2.34	3.5
30	MP1B	Mx	.002	3.5
31	MP1C	X	-1.848	3.5
32	MP1C	Z	3.201	3.5
33	MP1C	Mx	-.001	3.5
34	MP2A	X	-1.786	3.5
35	MP2A	Z	3.094	3.5
36	MP2A	Mx	-.001	3.5
37	MP2B	X	-1.104	3.5
38	MP2B	Z	1.913	3.5
39	MP2B	Mx	.001	3.5
40	MP2C	X	-1.786	3.5
41	MP2C	Z	3.094	3.5
42	MP2C	Mx	-.001	3.5
43	MP2A	X	-5.41	1.75
44	MP2A	Z	9.37	1.75
45	MP2A	Mx	.012	1.75
46	MP2A	X	-5.41	6.75
47	MP2A	Z	9.37	6.75
48	MP2A	Mx	.012	6.75
49	MP2B	X	-3.886	1.75
50	MP2B	Z	6.731	1.75
51	MP2B	Mx	-.006	1.75
52	MP2B	X	-3.886	6.75
53	MP2B	Z	6.731	6.75
54	MP2B	Mx	-.006	6.75
55	MP2C	X	-5.41	1.75
56	MP2C	Z	9.37	1.75
57	MP2C	Mx	-.004	1.75
58	MP2C	X	-5.41	6.75
59	MP2C	Z	9.37	6.75
60	MP2C	Mx	-.004	6.75
61	MP2A	X	-5.41	1.75
62	MP2A	Z	9.37	1.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
63	MP2A	Mx	-.004	1.75
64	MP2A	X	-5.41	6.75
65	MP2A	Z	9.37	6.75
66	MP2A	Mx	-.004	6.75
67	MP2B	X	-3.886	1.75
68	MP2B	Z	6.731	1.75
69	MP2B	Mx	-.006	1.75
70	MP2B	X	-3.886	6.75
71	MP2B	Z	6.731	6.75
72	MP2B	Mx	-.006	6.75
73	MP2C	X	-5.41	1.75
74	MP2C	Z	9.37	1.75
75	MP2C	Mx	.012	1.75
76	MP2C	X	-5.41	6.75
77	MP2C	Z	9.37	6.75
78	MP2C	Mx	.012	6.75
79	MP1C	X	-2.56	2.42
80	MP1C	Z	4.434	2.42
81	MP1C	Mx	.002	2.42
82	MP1C	X	-2.56	6
83	MP1C	Z	4.434	6
84	MP1C	Mx	.002	6
85	MP5C	X	-2.56	2.42
86	MP5C	Z	4.434	2.42
87	MP5C	Mx	.002	2.42
88	MP5C	X	-2.56	6
89	MP5C	Z	4.434	6
90	MP5C	Mx	.002	6
91	MP1A	X	-3.393	1.75
92	MP1A	Z	5.877	1.75
93	MP1A	Mx	.002	1.75
94	MP1A	X	-3.393	6.75
95	MP1A	Z	5.877	6.75
96	MP1A	Mx	.002	6.75
97	MP1B	X	-3.811	1.75
98	MP1B	Z	6.6	1.75
99	MP1B	Mx	-.005	1.75
100	MP1B	X	-3.811	6.75
101	MP1B	Z	6.6	6.75
102	MP1B	Mx	-.005	6.75
103	MP5A	X	-3.393	1.75
104	MP5A	Z	5.877	1.75
105	MP5A	Mx	.002	1.75
106	MP5A	X	-3.393	6.75
107	MP5A	Z	5.877	6.75
108	MP5A	Mx	.002	6.75
109	MP5B	X	-3.811	1.75
110	MP5B	Z	6.6	1.75
111	MP5B	Mx	-.005	1.75
112	MP5B	X	-3.811	6.75
113	MP5B	Z	6.6	6.75
114	MP5B	Mx	-.005	6.75
115	MP2A	X	-.444	2
116	MP2A	Z	.768	2
117	MP2A	Mx	-.000185	2
118	MP2B	X	-.333	2
119	MP2B	Z	.576	2



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
120	MP2B	Mx	.000277	2
121	MP2C	X	-.444	2
122	MP2C	Z	.768	2
123	MP2C	Mx	-.000185	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1B	X	-1.03	2
2	MP1B	Z	.594	2
3	MP1B	Mx	-.000343	2
4	MP1B	X	-1.03	2
5	MP1B	Z	.594	2
6	MP1B	Mx	.000343	2
7	MP4A	X	-2.242	2.92
8	MP4A	Z	1.294	2.92
9	MP4A	Mx	.002	2.92
10	MP4A	X	-2.242	5.67
11	MP4A	Z	1.294	5.67
12	MP4A	Mx	.002	5.67
13	MP4B	X	-2.242	2.92
14	MP4B	Z	1.294	2.92
15	MP4B	Mx	-.002	2.92
16	MP4B	X	-2.242	5.67
17	MP4B	Z	1.294	5.67
18	MP4B	Mx	-.002	5.67
19	MP4C	X	-4.41	2.92
20	MP4C	Z	2.546	2.92
21	MP4C	Mx	0	2.92
22	MP4C	X	-4.41	5.67
23	MP4C	Z	2.546	5.67
24	MP4C	Mx	0	5.67
25	MP1A	X	-2.627	3.5
26	MP1A	Z	1.517	3.5
27	MP1A	Mx	-.002	3.5
28	MP1B	X	-2.627	3.5
29	MP1B	Z	1.517	3.5
30	MP1B	Mx	.002	3.5
31	MP1C	X	-3.488	3.5
32	MP1C	Z	2.014	3.5
33	MP1C	Mx	0	3.5
34	MP2A	X	-2.306	3.5
35	MP2A	Z	1.332	3.5
36	MP2A	Mx	-.002	3.5
37	MP2B	X	-2.306	3.5
38	MP2B	Z	1.332	3.5
39	MP2B	Mx	.002	3.5
40	MP2C	X	-3.488	3.5
41	MP2C	Z	2.014	3.5
42	MP2C	Mx	0	3.5
43	MP2A	X	-7.611	1.75
44	MP2A	Z	4.394	1.75
45	MP2A	Mx	.009	1.75
46	MP2A	X	-7.611	6.75
47	MP2A	Z	4.394	6.75
48	MP2A	Mx	.009	6.75
49	MP2B	X	-7.611	1.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
50	MP2B	Z	4.394	1.75
51	MP2B	Mx	-.002	1.75
52	MP2B	X	-7.611	6.75
53	MP2B	Z	4.394	6.75
54	MP2B	Mx	-.002	6.75
55	MP2C	X	-10.249	1.75
56	MP2C	Z	5.917	1.75
57	MP2C	Mx	-.01	1.75
58	MP2C	X	-10.249	6.75
59	MP2C	Z	5.917	6.75
60	MP2C	Mx	-.01	6.75
61	MP2A	X	-7.611	1.75
62	MP2A	Z	4.394	1.75
63	MP2A	Mx	.002	1.75
64	MP2A	X	-7.611	6.75
65	MP2A	Z	4.394	6.75
66	MP2A	Mx	.002	6.75
67	MP2B	X	-7.611	1.75
68	MP2B	Z	4.394	1.75
69	MP2B	Mx	-.009	1.75
70	MP2B	X	-7.611	6.75
71	MP2B	Z	4.394	6.75
72	MP2B	Mx	-.009	6.75
73	MP2C	X	-10.249	1.75
74	MP2C	Z	5.917	1.75
75	MP2C	Mx	.01	1.75
76	MP2C	X	-10.249	6.75
77	MP2C	Z	5.917	6.75
78	MP2C	Mx	.01	6.75
79	MP1C	X	-4.556	2.42
80	MP1C	Z	2.631	2.42
81	MP1C	Mx	0	2.42
82	MP1C	X	-4.556	6
83	MP1C	Z	2.631	6
84	MP1C	Mx	0	6
85	MP5C	X	-4.556	2.42
86	MP5C	Z	2.631	2.42
87	MP5C	Mx	0	2.42
88	MP5C	X	-4.556	6
89	MP5C	Z	2.631	6
90	MP5C	Mx	0	6
91	MP1A	X	-6.359	1.75
92	MP1A	Z	3.672	1.75
93	MP1A	Mx	.004	1.75
94	MP1A	X	-6.359	6.75
95	MP1A	Z	3.672	6.75
96	MP1A	Mx	.004	6.75
97	MP1B	X	-6.359	1.75
98	MP1B	Z	3.672	1.75
99	MP1B	Mx	-.004	1.75
100	MP1B	X	-6.359	6.75
101	MP1B	Z	3.672	6.75
102	MP1B	Mx	-.004	6.75
103	MP5A	X	-6.359	1.75
104	MP5A	Z	3.672	1.75
105	MP5A	Mx	.004	1.75
106	MP5A	X	-6.359	6.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
107	MP5A	Z	3.672	6.75
108	MP5A	Mx	.004	6.75
109	MP5B	X	-6.359	1.75
110	MP5B	Z	3.672	1.75
111	MP5B	Mx	-.004	1.75
112	MP5B	X	-6.359	6.75
113	MP5B	Z	3.672	6.75
114	MP5B	Mx	-.004	6.75
115	MP2A	X	-.64	2
116	MP2A	Z	.37	2
117	MP2A	Mx	-.000267	2
118	MP2B	X	-.64	2
119	MP2B	Z	.37	2
120	MP2B	Mx	.000267	2
121	MP2C	X	-.833	2
122	MP2C	Z	.481	2
123	MP2C	Mx	0	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1B	X	-2.056	2
2	MP1B	Z	0	2
3	MP1B	Mx	-.000343	2
4	MP1B	X	-2.056	2
5	MP1B	Z	0	2
6	MP1B	Mx	.000343	2
7	MP4A	X	-1.754	2.92
8	MP4A	Z	0	2.92
9	MP4A	Mx	.001	2.92
10	MP4A	X	-1.754	5.67
11	MP4A	Z	0	5.67
12	MP4A	Mx	.001	5.67
13	MP4B	X	-4.258	2.92
14	MP4B	Z	0	2.92
15	MP4B	Mx	-.002	2.92
16	MP4B	X	-4.258	5.67
17	MP4B	Z	0	5.67
18	MP4B	Mx	-.002	5.67
19	MP4C	X	-4.258	2.92
20	MP4C	Z	0	2.92
21	MP4C	Mx	-.002	2.92
22	MP4C	X	-4.258	5.67
23	MP4C	Z	0	5.67
24	MP4C	Mx	-.002	5.67
25	MP1A	X	-2.702	3.5
26	MP1A	Z	0	3.5
27	MP1A	Mx	-.002	3.5
28	MP1B	X	-3.696	3.5
29	MP1B	Z	0	3.5
30	MP1B	Mx	.001	3.5
31	MP1C	X	-3.696	3.5
32	MP1C	Z	0	3.5
33	MP1C	Mx	.001	3.5
34	MP2A	X	-2.208	3.5
35	MP2A	Z	0	3.5
36	MP2A	Mx	-.001	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
37	MP2B	X	-3.572	3.5
38	MP2B	Z	0	3.5
39	MP2B	Mx	.001	3.5
40	MP2C	X	-3.572	3.5
41	MP2C	Z	0	3.5
42	MP2C	Mx	.001	3.5
43	MP2A	X	-7.773	1.75
44	MP2A	Z	0	1.75
45	MP2A	Mx	.006	1.75
46	MP2A	X	-7.773	6.75
47	MP2A	Z	0	6.75
48	MP2A	Mx	.006	6.75
49	MP2B	X	-10.819	1.75
50	MP2B	Z	0	1.75
51	MP2B	Mx	.004	1.75
52	MP2B	X	-10.819	6.75
53	MP2B	Z	0	6.75
54	MP2B	Mx	.004	6.75
55	MP2C	X	-10.819	1.75
56	MP2C	Z	0	1.75
57	MP2C	Mx	-.012	1.75
58	MP2C	X	-10.819	6.75
59	MP2C	Z	0	6.75
60	MP2C	Mx	-.012	6.75
61	MP2A	X	-7.773	1.75
62	MP2A	Z	0	1.75
63	MP2A	Mx	.006	1.75
64	MP2A	X	-7.773	6.75
65	MP2A	Z	0	6.75
66	MP2A	Mx	.006	6.75
67	MP2B	X	-10.819	1.75
68	MP2B	Z	0	1.75
69	MP2B	Mx	-.012	1.75
70	MP2B	X	-10.819	6.75
71	MP2B	Z	0	6.75
72	MP2B	Mx	-.012	6.75
73	MP2C	X	-10.819	1.75
74	MP2C	Z	0	1.75
75	MP2C	Mx	.004	1.75
76	MP2C	X	-10.819	6.75
77	MP2C	Z	0	6.75
78	MP2C	Mx	.004	6.75
79	MP1C	X	-5.12	2.42
80	MP1C	Z	0	2.42
81	MP1C	Mx	-.002	2.42
82	MP1C	X	-5.12	6
83	MP1C	Z	0	6
84	MP1C	Mx	-.002	6
85	MP5C	X	-5.12	2.42
86	MP5C	Z	0	2.42
87	MP5C	Mx	-.002	2.42
88	MP5C	X	-5.12	6
89	MP5C	Z	0	6
90	MP5C	Mx	-.002	6
91	MP1A	X	-7.621	1.75
92	MP1A	Z	0	1.75
93	MP1A	Mx	.005	1.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
94	MP1A	X	-7.621	6.75
95	MP1A	Z	0	6.75
96	MP1A	Mx	.005	6.75
97	MP1B	X	-6.787	1.75
98	MP1B	Z	0	1.75
99	MP1B	Mx	-.002	1.75
100	MP1B	X	-6.787	6.75
101	MP1B	Z	0	6.75
102	MP1B	Mx	-.002	6.75
103	MP5A	X	-7.621	1.75
104	MP5A	Z	0	1.75
105	MP5A	Mx	.005	1.75
106	MP5A	X	-7.621	6.75
107	MP5A	Z	0	6.75
108	MP5A	Mx	.005	6.75
109	MP5B	X	-6.787	1.75
110	MP5B	Z	0	1.75
111	MP5B	Mx	-.002	1.75
112	MP5B	X	-6.787	6.75
113	MP5B	Z	0	6.75
114	MP5B	Mx	-.002	6.75
115	MP2A	X	-.665	2
116	MP2A	Z	0	2
117	MP2A	Mx	-.000277	2
118	MP2B	X	-.887	2
119	MP2B	Z	0	2
120	MP2B	Mx	.000185	2
121	MP2C	X	-.887	2
122	MP2C	Z	0	2
123	MP2C	Mx	.000185	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1B	X	-2.156	2
2	MP1B	Z	-1.245	2
3	MP1B	Mx	0	2
4	MP1B	X	-2.156	2
5	MP1B	Z	-1.245	2
6	MP1B	Mx	0	2
7	MP4A	X	-2.242	2.92
8	MP4A	Z	-1.294	2.92
9	MP4A	Mx	.002	2.92
10	MP4A	X	-2.242	5.67
11	MP4A	Z	-1.294	5.67
12	MP4A	Mx	.002	5.67
13	MP4B	X	-4.41	2.92
14	MP4B	Z	-2.546	2.92
15	MP4B	Mx	0	2.92
16	MP4B	X	-4.41	5.67
17	MP4B	Z	-2.546	5.67
18	MP4B	Mx	0	5.67
19	MP4C	X	-2.242	2.92
20	MP4C	Z	-1.294	2.92
21	MP4C	Mx	-.002	2.92
22	MP4C	X	-2.242	5.67
23	MP4C	Z	-1.294	5.67



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
24	MP4C	Mx	-0.002	5.67
25	MP1A	X	-2.627	3.5
26	MP1A	Z	-1.517	3.5
27	MP1A	Mx	-0.002	3.5
28	MP1B	X	-3.488	3.5
29	MP1B	Z	-2.014	3.5
30	MP1B	Mx	0	3.5
31	MP1C	X	-2.627	3.5
32	MP1C	Z	-1.517	3.5
33	MP1C	Mx	.002	3.5
34	MP2A	X	-2.306	3.5
35	MP2A	Z	-1.332	3.5
36	MP2A	Mx	-0.002	3.5
37	MP2B	X	-3.488	3.5
38	MP2B	Z	-2.014	3.5
39	MP2B	Mx	0	3.5
40	MP2C	X	-2.306	3.5
41	MP2C	Z	-1.332	3.5
42	MP2C	Mx	.002	3.5
43	MP2A	X	-7.611	1.75
44	MP2A	Z	-4.394	1.75
45	MP2A	Mx	.002	1.75
46	MP2A	X	-7.611	6.75
47	MP2A	Z	-4.394	6.75
48	MP2A	Mx	.002	6.75
49	MP2B	X	-10.249	1.75
50	MP2B	Z	-5.917	1.75
51	MP2B	Mx	.01	1.75
52	MP2B	X	-10.249	6.75
53	MP2B	Z	-5.917	6.75
54	MP2B	Mx	.01	6.75
55	MP2C	X	-7.611	1.75
56	MP2C	Z	-4.394	1.75
57	MP2C	Mx	-0.009	1.75
58	MP2C	X	-7.611	6.75
59	MP2C	Z	-4.394	6.75
60	MP2C	Mx	-0.009	6.75
61	MP2A	X	-7.611	1.75
62	MP2A	Z	-4.394	1.75
63	MP2A	Mx	.009	1.75
64	MP2A	X	-7.611	6.75
65	MP2A	Z	-4.394	6.75
66	MP2A	Mx	.009	6.75
67	MP2B	X	-10.249	1.75
68	MP2B	Z	-5.917	1.75
69	MP2B	Mx	-.01	1.75
70	MP2B	X	-10.249	6.75
71	MP2B	Z	-5.917	6.75
72	MP2B	Mx	-.01	6.75
73	MP2C	X	-7.611	1.75
74	MP2C	Z	-4.394	1.75
75	MP2C	Mx	-0.002	1.75
76	MP2C	X	-7.611	6.75
77	MP2C	Z	-4.394	6.75
78	MP2C	Mx	-0.002	6.75
79	MP1C	X	-4.189	2.42
80	MP1C	Z	-2.419	2.42



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
81	MP1C	Mx	-.003	2.42
82	MP1C	X	-4.189	6
83	MP1C	Z	-2.419	6
84	MP1C	Mx	-.003	6
85	MP5C	X	-4.189	2.42
86	MP5C	Z	-2.419	2.42
87	MP5C	Mx	-.003	2.42
88	MP5C	X	-4.189	6
89	MP5C	Z	-2.419	6
90	MP5C	Mx	-.003	6
91	MP1A	X	-6.359	1.75
92	MP1A	Z	-3.672	1.75
93	MP1A	Mx	.004	1.75
94	MP1A	X	-6.359	6.75
95	MP1A	Z	-3.672	6.75
96	MP1A	Mx	.004	6.75
97	MP1B	X	-5.636	1.75
98	MP1B	Z	-3.254	1.75
99	MP1B	Mx	0	1.75
100	MP1B	X	-5.636	6.75
101	MP1B	Z	-3.254	6.75
102	MP1B	Mx	0	6.75
103	MP5A	X	-6.359	1.75
104	MP5A	Z	-3.672	1.75
105	MP5A	Mx	.004	1.75
106	MP5A	X	-6.359	6.75
107	MP5A	Z	-3.672	6.75
108	MP5A	Mx	.004	6.75
109	MP5B	X	-5.636	1.75
110	MP5B	Z	-3.254	1.75
111	MP5B	Mx	0	1.75
112	MP5B	X	-5.636	6.75
113	MP5B	Z	-3.254	6.75
114	MP5B	Mx	0	6.75
115	MP2A	X	-.64	2
116	MP2A	Z	-.37	2
117	MP2A	Mx	-.000267	2
118	MP2B	X	-.833	2
119	MP2B	Z	-.481	2
120	MP2B	Mx	0	2
121	MP2C	X	-.64	2
122	MP2C	Z	-.37	2
123	MP2C	Mx	.000267	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1B	X	-1.028	2
2	MP1B	Z	-1.781	2
3	MP1B	Mx	.000343	2
4	MP1B	X	-1.028	2
5	MP1B	Z	-1.781	2
6	MP1B	Mx	-.000343	2
7	MP4A	X	-2.129	2.92
8	MP4A	Z	-3.687	2.92
9	MP4A	Mx	.002	2.92
10	MP4A	X	-2.129	5.67



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%,]
11	MP4A	Z	-3.687	5.67
12	MP4A	Mx	.002	5.67
13	MP4B	X	-2.129	2.92
14	MP4B	Z	-3.687	2.92
15	MP4B	Mx	.002	2.92
16	MP4B	X	-2.129	5.67
17	MP4B	Z	-3.687	5.67
18	MP4B	Mx	.002	5.67
19	MP4C	X	-0.877	2.92
20	MP4C	Z	-1.519	2.92
21	MP4C	Mx	-.001	2.92
22	MP4C	X	-0.877	5.67
23	MP4C	Z	-1.519	5.67
24	MP4C	Mx	-.001	5.67
25	MP1A	X	-1.848	3.5
26	MP1A	Z	-3.201	3.5
27	MP1A	Mx	-.001	3.5
28	MP1B	X	-1.848	3.5
29	MP1B	Z	-3.201	3.5
30	MP1B	Mx	-.001	3.5
31	MP1C	X	-1.351	3.5
32	MP1C	Z	-2.34	3.5
33	MP1C	Mx	.002	3.5
34	MP2A	X	-1.786	3.5
35	MP2A	Z	-3.094	3.5
36	MP2A	Mx	-.001	3.5
37	MP2B	X	-1.786	3.5
38	MP2B	Z	-3.094	3.5
39	MP2B	Mx	-.001	3.5
40	MP2C	X	-1.104	3.5
41	MP2C	Z	-1.913	3.5
42	MP2C	Mx	.001	3.5
43	MP2A	X	-5.41	1.75
44	MP2A	Z	-9.37	1.75
45	MP2A	Mx	-.004	1.75
46	MP2A	X	-5.41	6.75
47	MP2A	Z	-9.37	6.75
48	MP2A	Mx	-.004	6.75
49	MP2B	X	-5.41	1.75
50	MP2B	Z	-9.37	1.75
51	MP2B	Mx	.012	1.75
52	MP2B	X	-5.41	6.75
53	MP2B	Z	-9.37	6.75
54	MP2B	Mx	.012	6.75
55	MP2C	X	-3.886	1.75
56	MP2C	Z	-6.731	1.75
57	MP2C	Mx	-.006	1.75
58	MP2C	X	-3.886	6.75
59	MP2C	Z	-6.731	6.75
60	MP2C	Mx	-.006	6.75
61	MP2A	X	-5.41	1.75
62	MP2A	Z	-9.37	1.75
63	MP2A	Mx	.012	1.75
64	MP2A	X	-5.41	6.75
65	MP2A	Z	-9.37	6.75
66	MP2A	Mx	.012	6.75
67	MP2B	X	-5.41	1.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
68	MP2B	Z	-9.37	1.75
69	MP2B	Mx	-0.04	1.75
70	MP2B	X	-5.41	6.75
71	MP2B	Z	-9.37	6.75
72	MP2B	Mx	-0.04	6.75
73	MP2C	X	-3.886	1.75
74	MP2C	Z	-6.731	1.75
75	MP2C	Mx	-0.06	1.75
76	MP2C	X	-3.886	6.75
77	MP2C	Z	-6.731	6.75
78	MP2C	Mx	-0.06	6.75
79	MP1C	X	-2.348	2.42
80	MP1C	Z	-4.067	2.42
81	MP1C	Mx	-0.04	2.42
82	MP1C	X	-2.348	6
83	MP1C	Z	-4.067	6
84	MP1C	Mx	-0.04	6
85	MP5C	X	-2.348	2.42
86	MP5C	Z	-4.067	2.42
87	MP5C	Mx	-0.04	2.42
88	MP5C	X	-2.348	6
89	MP5C	Z	-4.067	6
90	MP5C	Mx	-0.04	6
91	MP1A	X	-3.393	1.75
92	MP1A	Z	-5.877	1.75
93	MP1A	Mx	.002	1.75
94	MP1A	X	-3.393	6.75
95	MP1A	Z	-5.877	6.75
96	MP1A	Mx	.002	6.75
97	MP1B	X	-3.393	1.75
98	MP1B	Z	-5.877	1.75
99	MP1B	Mx	.002	1.75
100	MP1B	X	-3.393	6.75
101	MP1B	Z	-5.877	6.75
102	MP1B	Mx	.002	6.75
103	MP5A	X	-3.393	1.75
104	MP5A	Z	-5.877	1.75
105	MP5A	Mx	.002	1.75
106	MP5A	X	-3.393	6.75
107	MP5A	Z	-5.877	6.75
108	MP5A	Mx	.002	6.75
109	MP5B	X	-3.393	1.75
110	MP5B	Z	-5.877	1.75
111	MP5B	Mx	.002	1.75
112	MP5B	X	-3.393	6.75
113	MP5B	Z	-5.877	6.75
114	MP5B	Mx	.002	6.75
115	MP2A	X	-0.444	2
116	MP2A	Z	-0.768	2
117	MP2A	Mx	-0.00185	2
118	MP2B	X	-0.444	2
119	MP2B	Z	-0.768	2
120	MP2B	Mx	-0.00185	2
121	MP2C	X	-0.333	2
122	MP2C	Z	-0.576	2
123	MP2C	Mx	0.00277	2



Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	M1	Y	-500	%79

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	M1	Y	-500	%94

Member Point Loads (BLC 79 : Lv1)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	M1	Y	-250	%50

Member Point Loads (BLC 80 : Lv2)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	M1	Y	-250	%100

Member Point Loads (BLC 81 : Antenna Ev)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1B	Y	-.781	2
2	MP1B	My	.00013	2
3	MP1B	Mz	-.000225	2
4	MP1B	Y	-.781	2
5	MP1B	My	-.00013	2
6	MP1B	Mz	.000225	2
7	MP4A	Y	-1.932	2.92
8	MP4A	My	-.001	2.92
9	MP4A	Mz	0	2.92
10	MP4A	Y	-1.932	5.67
11	MP4A	My	-.001	5.67
12	MP4A	Mz	0	5.67
13	MP4B	Y	-1.932	2.92
14	MP4B	My	.000725	2.92
15	MP4B	Mz	-.001	2.92
16	MP4B	Y	-1.932	5.67
17	MP4B	My	.000725	5.67
18	MP4B	Mz	-.001	5.67
19	MP4C	Y	-1.932	2.92
20	MP4C	My	.000725	2.92
21	MP4C	Mz	.001	2.92
22	MP4C	Y	-1.932	5.67
23	MP4C	My	.000725	5.67
24	MP4C	Mz	.001	5.67
25	MP1A	Y	-3.745	3.5
26	MP1A	My	.002	3.5
27	MP1A	Mz	0	3.5
28	MP1B	Y	-3.745	3.5
29	MP1B	My	-.001	3.5
30	MP1B	Mz	.002	3.5
31	MP1C	Y	-3.745	3.5
32	MP1C	My	-.001	3.5
33	MP1C	Mz	-.002	3.5
34	MP2A	Y	-3.119	3.5
35	MP2A	My	.002	3.5
36	MP2A	Mz	0	3.5
37	MP2B	Y	-3.119	3.5
38	MP2B	My	-.001	3.5
39	MP2B	Mz	.002	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
40	MP2C	Y	-3.119	3.5
41	MP2C	My	-.001	3.5
42	MP2C	Mz	-.002	3.5
43	MP2A	Y	-1.404	1.75
44	MP2A	My	-.001	1.75
45	MP2A	Mz	.001	1.75
46	MP2A	Y	-1.404	6.75
47	MP2A	My	-.001	6.75
48	MP2A	Mz	.001	6.75
49	MP2B	Y	-1.404	1.75
50	MP2B	My	-.000487	1.75
51	MP2B	Mz	-.001	1.75
52	MP2B	Y	-1.404	6.75
53	MP2B	My	-.000487	6.75
54	MP2B	Mz	-.001	6.75
55	MP2C	Y	-1.404	1.75
56	MP2C	My	.002	1.75
57	MP2C	Mz	.000327	1.75
58	MP2C	Y	-1.404	6.75
59	MP2C	My	.002	6.75
60	MP2C	Mz	.000327	6.75
61	MP2A	Y	-1.404	1.75
62	MP2A	My	-.001	1.75
63	MP2A	Mz	-.001	1.75
64	MP2A	Y	-1.404	6.75
65	MP2A	My	-.001	6.75
66	MP2A	Mz	-.001	6.75
67	MP2B	Y	-1.404	1.75
68	MP2B	My	.002	1.75
69	MP2B	Mz	-.000327	1.75
70	MP2B	Y	-1.404	6.75
71	MP2B	My	.002	6.75
72	MP2B	Mz	-.000327	6.75
73	MP2C	Y	-1.404	1.75
74	MP2C	My	-.000487	1.75
75	MP2C	Mz	.001	1.75
76	MP2C	Y	-1.404	6.75
77	MP2C	My	-.000487	6.75
78	MP2C	Mz	.001	6.75
79	MP1C	Y	-.348	2.42
80	MP1C	My	.000134	2.42
81	MP1C	Mz	.000233	2.42
82	MP1C	Y	-.348	6
83	MP1C	My	.000134	6
84	MP1C	Mz	.000233	6
85	MP5C	Y	-.348	2.42
86	MP5C	My	.000134	2.42
87	MP5C	Mz	.000233	2.42
88	MP5C	Y	-.348	6
89	MP5C	My	.000134	6
90	MP5C	Mz	.000233	6
91	MP1A	Y	-.355	1.75
92	MP1A	My	-.000214	1.75
93	MP1A	Mz	0	1.75
94	MP1A	Y	-.355	6.75
95	MP1A	My	-.000214	6.75
96	MP1A	Mz	0	6.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
97	MP1B	Y	-.355	1.75
98	MP1B	My	.000107	1.75
99	MP1B	Mz	-.000186	1.75
100	MP1B	Y	-.355	6.75
101	MP1B	My	.000107	6.75
102	MP1B	Mz	-.000186	6.75
103	MP5A	Y	-.355	1.75
104	MP5A	My	-.000214	1.75
105	MP5A	Mz	0	1.75
106	MP5A	Y	-.355	6.75
107	MP5A	My	-.000214	6.75
108	MP5A	Mz	0	6.75
109	MP5B	Y	-.355	1.75
110	MP5B	My	.000107	1.75
111	MP5B	Mz	-.000186	1.75
112	MP5B	Y	-.355	6.75
113	MP5B	My	.000107	6.75
114	MP5B	Mz	-.000186	6.75
115	MP2A	Y	-.461	2
116	MP2A	My	.000192	2
117	MP2A	Mz	0	2
118	MP2B	Y	-.461	2
119	MP2B	My	-9.6e-5	2
120	MP2B	Mz	.000167	2
121	MP2C	Y	-.461	2
122	MP2C	My	-9.6e-5	2
123	MP2C	Mz	-.000167	2

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1B	Z	-1.952	2
2	MP1B	Mx	.000564	2
3	MP1B	Z	-1.952	2
4	MP1B	Mx	-.000564	2
5	MP4A	Z	-4.831	2.92
6	MP4A	Mx	0	2.92
7	MP4A	Z	-4.831	5.67
8	MP4A	Mx	0	5.67
9	MP4B	Z	-4.831	2.92
10	MP4B	Mx	.003	2.92
11	MP4B	Z	-4.831	5.67
12	MP4B	Mx	.003	5.67
13	MP4C	Z	-4.831	2.92
14	MP4C	Mx	-.003	2.92
15	MP4C	Z	-4.831	5.67
16	MP4C	Mx	-.003	5.67
17	MP1A	Z	-9.363	3.5
18	MP1A	Mx	0	3.5
19	MP1B	Z	-9.363	3.5
20	MP1B	Mx	-.005	3.5
21	MP1C	Z	-9.363	3.5
22	MP1C	Mx	.005	3.5
23	MP2A	Z	-7.799	3.5
24	MP2A	Mx	0	3.5
25	MP2B	Z	-7.799	3.5
26	MP2B	Mx	-.005	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
27	MP2C	Z	-7.799	3.5
28	MP2C	Mx	.005	3.5
29	MP2A	Z	-3.511	1.75
30	MP2A	Mx	-.003	1.75
31	MP2A	Z	-3.511	6.75
32	MP2A	Mx	-.003	6.75
33	MP2B	Z	-3.511	1.75
34	MP2B	Mx	.004	1.75
35	MP2B	Z	-3.511	6.75
36	MP2B	Mx	.004	6.75
37	MP2C	Z	-3.511	1.75
38	MP2C	Mx	-.000818	1.75
39	MP2C	Z	-3.511	6.75
40	MP2C	Mx	-.000818	6.75
41	MP2A	Z	-3.511	1.75
42	MP2A	Mx	.003	1.75
43	MP2A	Z	-3.511	6.75
44	MP2A	Mx	.003	6.75
45	MP2B	Z	-3.511	1.75
46	MP2B	Mx	.000818	1.75
47	MP2B	Z	-3.511	6.75
48	MP2B	Mx	.000818	6.75
49	MP2C	Z	-3.511	1.75
50	MP2C	Mx	-.004	1.75
51	MP2C	Z	-3.511	6.75
52	MP2C	Mx	-.004	6.75
53	MP1C	Z	-.871	2.42
54	MP1C	Mx	-.000581	2.42
55	MP1C	Z	-.871	6
56	MP1C	Mx	-.000581	6
57	MP5C	Z	-.871	2.42
58	MP5C	Mx	-.000581	2.42
59	MP5C	Z	-.871	6
60	MP5C	Mx	-.000581	6
61	MP1A	Z	-.887	1.75
62	MP1A	Mx	0	1.75
63	MP1A	Z	-.887	6.75
64	MP1A	Mx	0	6.75
65	MP1B	Z	-.887	1.75
66	MP1B	Mx	.000464	1.75
67	MP1B	Z	-.887	6.75
68	MP1B	Mx	.000464	6.75
69	MP5A	Z	-.887	1.75
70	MP5A	Mx	0	1.75
71	MP5A	Z	-.887	6.75
72	MP5A	Mx	0	6.75
73	MP5B	Z	-.887	1.75
74	MP5B	Mx	.000464	1.75
75	MP5B	Z	-.887	6.75
76	MP5B	Mx	.000464	6.75
77	MP2A	Z	-1.154	2
78	MP2A	Mx	0	2
79	MP2B	Z	-1.154	2
80	MP2B	Mx	-.000416	2
81	MP2C	Z	-1.154	2
82	MP2C	Mx	.000416	2



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP1B	X	1.952	2
2	MP1B	Mx	.000325	2
3	MP1B	X	1.952	2
4	MP1B	Mx	-.000325	2
5	MP4A	X	4.831	2.92
6	MP4A	Mx	-.004	2.92
7	MP4A	X	4.831	5.67
8	MP4A	Mx	-.004	5.67
9	MP4B	X	4.831	2.92
10	MP4B	Mx	.002	2.92
11	MP4B	X	4.831	5.67
12	MP4B	Mx	.002	5.67
13	MP4C	X	4.831	2.92
14	MP4C	Mx	.002	2.92
15	MP4C	X	4.831	5.67
16	MP4C	Mx	.002	5.67
17	MP1A	X	9.363	3.5
18	MP1A	Mx	.006	3.5
19	MP1B	X	9.363	3.5
20	MP1B	Mx	-.003	3.5
21	MP1C	X	9.363	3.5
22	MP1C	Mx	-.003	3.5
23	MP2A	X	7.799	3.5
24	MP2A	Mx	.005	3.5
25	MP2B	X	7.799	3.5
26	MP2B	Mx	-.003	3.5
27	MP2C	X	7.799	3.5
28	MP2C	Mx	-.003	3.5
29	MP2A	X	3.511	1.75
30	MP2A	Mx	-.003	1.75
31	MP2A	X	3.511	6.75
32	MP2A	Mx	-.003	6.75
33	MP2B	X	3.511	1.75
34	MP2B	Mx	-.001	1.75
35	MP2B	X	3.511	6.75
36	MP2B	Mx	-.001	6.75
37	MP2C	X	3.511	1.75
38	MP2C	Mx	.004	1.75
39	MP2C	X	3.511	6.75
40	MP2C	Mx	.004	6.75
41	MP2A	X	3.511	1.75
42	MP2A	Mx	-.003	1.75
43	MP2A	X	3.511	6.75
44	MP2A	Mx	-.003	6.75
45	MP2B	X	3.511	1.75
46	MP2B	Mx	.004	1.75
47	MP2B	X	3.511	6.75
48	MP2B	Mx	.004	6.75
49	MP2C	X	3.511	1.75
50	MP2C	Mx	-.001	1.75
51	MP2C	X	3.511	6.75
52	MP2C	Mx	-.001	6.75
53	MP1C	X	.871	2.42
54	MP1C	Mx	.000336	2.42
55	MP1C	X	.871	6
56	MP1C	Mx	.000336	6
57	MP5C	X	.871	2.42



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP5C	Mx	.000336	2.42
59	MP5C	X	.871	6
60	MP5C	Mx	.000336	6
61	MP1A	X	.887	1.75
62	MP1A	Mx	-.000536	1.75
63	MP1A	X	.887	6.75
64	MP1A	Mx	-.000536	6.75
65	MP1B	X	.887	1.75
66	MP1B	Mx	.000268	1.75
67	MP1B	X	.887	6.75
68	MP1B	Mx	.000268	6.75
69	MP5A	X	.887	1.75
70	MP5A	Mx	-.000536	1.75
71	MP5A	X	.887	6.75
72	MP5A	Mx	-.000536	6.75
73	MP5B	X	.887	1.75
74	MP5B	Mx	.000268	1.75
75	MP5B	X	.887	6.75
76	MP5B	Mx	.000268	6.75
77	MP2A	X	1.154	2
78	MP2A	Mx	.000481	2
79	MP2B	X	1.154	2
80	MP2B	Mx	-.00024	2
81	MP2C	X	1.154	2
82	MP2C	Mx	-.00024	2

Member Distributed Loads (BLC 40 : Structure Di)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M16	Y	-9.499	-9.499	0	%100
2	M22	Y	-5.548	-5.548	0	%100
3	M23	Y	-5.548	-5.548	0	%100
4	M24	Y	-5.548	-5.548	0	%100
5	M25	Y	-5.548	-5.548	0	%100
6	M26	Y	-5.548	-5.548	0	%100
7	M27	Y	-5.548	-5.548	0	%100
8	M28	Y	-5.548	-5.548	0	%100
9	M29	Y	-5.548	-5.548	0	%100
10	M30	Y	-5.548	-5.548	0	%100
11	M31	Y	-5.548	-5.548	0	%100
12	M32	Y	-5.548	-5.548	0	%100
13	M33	Y	-5.548	-5.548	0	%100
14	M1	Y	-9.499	-9.499	0	%100
15	M8	Y	-9.499	-9.499	0	%100
16	M15	Y	-9.499	-9.499	0	%100
17	M19	Y	-9.499	-9.499	0	%100
18	M20	Y	-9.499	-9.499	0	%100
19	MP1B	Y	-4.915	-4.915	0	%100
20	MP2B	Y	-4.915	-4.915	0	%100
21	MP3B	Y	-4.915	-4.915	0	%100
22	MP4B	Y	-4.915	-4.915	0	%100
23	MP5B	Y	-4.915	-4.915	0	%100
24	MP1A	Y	-4.915	-4.915	0	%100
25	MP2A	Y	-4.915	-4.915	0	%100
26	MP3A	Y	-4.915	-4.915	0	%100
27	MP4A	Y	-4.915	-4.915	0	%100



Company : Colliers Engineering & Design
 Designer :
 Job Number :
 Model Name : 5000392762-VZW_MT_LO_H

Aug 7, 2023
 10:53 AM
 Checked By: _____

Member Distributed Loads (BLC 40 : Structure Di) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
28	MP5A	Y	-4.915	-4.915	0	%100
29	MP1C	Y	-4.915	-4.915	0	%100
30	MP2C	Y	-4.915	-4.915	0	%100
31	MP3C	Y	-4.915	-4.915	0	%100
32	MP4C	Y	-4.915	-4.915	0	%100
33	MP5C	Y	-4.915	-4.915	0	%100
34	M49	Y	-11.026	-11.026	0	%100
35	M50A	Y	-11.026	-11.026	0	%100
36	M51	Y	-11.026	-11.026	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M16	X	0	0	0	%100
2	M16	Z	0	0	0	%100
3	M22	X	0	0	0	%100
4	M22	Z	0	0	0	%100
5	M23	X	0	0	0	%100
6	M23	Z	0	0	0	%100
7	M24	X	0	0	0	%100
8	M24	Z	0	0	0	%100
9	M25	X	0	0	0	%100
10	M25	Z	0	0	0	%100
11	M26	X	0	0	0	%100
12	M26	Z	-7.069	-7.069	0	%100
13	M27	X	0	0	0	%100
14	M27	Z	-7.069	-7.069	0	%100
15	M28	X	0	0	0	%100
16	M28	Z	-7.069	-7.069	0	%100
17	M29	X	0	0	0	%100
18	M29	Z	-7.069	-7.069	0	%100
19	M30	X	0	0	0	%100
20	M30	Z	-7.069	-7.069	0	%100
21	M31	X	0	0	0	%100
22	M31	Z	-7.069	-7.069	0	%100
23	M32	X	0	0	0	%100
24	M32	Z	-7.069	-7.069	0	%100
25	M33	X	0	0	0	%100
26	M33	Z	-7.069	-7.069	0	%100
27	M1	X	0	0	0	%100
28	M1	Z	-17.292	-17.292	0	%100
29	M8	X	0	0	0	%100
30	M8	Z	-4.323	-4.323	0	%100
31	M15	X	0	0	0	%100
32	M15	Z	-4.323	-4.323	0	%100
33	M19	X	0	0	0	%100
34	M19	Z	-12.54	-12.54	0	%100
35	M20	X	0	0	0	%100
36	M20	Z	-12.54	-12.54	0	%100
37	MP1B	X	0	0	0	%100
38	MP1B	Z	-9.857	-9.857	0	%100
39	MP2B	X	0	0	0	%100
40	MP2B	Z	-9.857	-9.857	0	%100
41	MP3B	X	0	0	0	%100
42	MP3B	Z	-9.857	-9.857	0	%100
43	MP4B	X	0	0	0	%100
44	MP4B	Z	-9.857	-9.857	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]	
45	MP5B	X	0	0	0	%100
46	MP5B	Z	-9.857	-9.857	0	%100
47	MP1A	X	0	0	0	%100
48	MP1A	Z	-9.857	-9.857	0	%100
49	MP2A	X	0	0	0	%100
50	MP2A	Z	-9.857	-9.857	0	%100
51	MP3A	X	0	0	0	%100
52	MP3A	Z	-9.857	-9.857	0	%100
53	MP4A	X	0	0	0	%100
54	MP4A	Z	-9.857	-9.857	0	%100
55	MP5A	X	0	0	0	%100
56	MP5A	Z	-9.857	-9.857	0	%100
57	MP1C	X	0	0	0	%100
58	MP1C	Z	-9.857	-9.857	0	%100
59	MP2C	X	0	0	0	%100
60	MP2C	Z	-9.857	-9.857	0	%100
61	MP3C	X	0	0	0	%100
62	MP3C	Z	-9.857	-9.857	0	%100
63	MP4C	X	0	0	0	%100
64	MP4C	Z	-9.857	-9.857	0	%100
65	MP5C	X	0	0	0	%100
66	MP5C	Z	-9.857	-9.857	0	%100
67	M49	X	0	0	0	%100
68	M49	Z	-16.552	-16.552	0	%100
69	M50A	X	0	0	0	%100
70	M50A	Z	-17.618	-17.618	0	%100
71	M51	X	0	0	0	%100
72	M51	Z	-17.618	-17.618	0	%100

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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]	
1	M16	X	2.09	2.09	0	%100
2	M16	Z	-3.62	-3.62	0	%100
3	M22	X	1.178	1.178	0	%100
4	M22	Z	-2.041	-2.041	0	%100
5	M23	X	1.178	1.178	0	%100
6	M23	Z	-2.041	-2.041	0	%100
7	M24	X	1.178	1.178	0	%100
8	M24	Z	-2.041	-2.041	0	%100
9	M25	X	1.178	1.178	0	%100
10	M25	Z	-2.041	-2.041	0	%100
11	M26	X	1.178	1.178	0	%100
12	M26	Z	-2.041	-2.041	0	%100
13	M27	X	1.178	1.178	0	%100
14	M27	Z	-2.041	-2.041	0	%100
15	M28	X	1.178	1.178	0	%100
16	M28	Z	-2.041	-2.041	0	%100
17	M29	X	1.178	1.178	0	%100
18	M29	Z	-2.041	-2.041	0	%100
19	M30	X	4.713	4.713	0	%100
20	M30	Z	-8.163	-8.163	0	%100
21	M31	X	4.713	4.713	0	%100
22	M31	Z	-8.163	-8.163	0	%100
23	M32	X	4.713	4.713	0	%100
24	M32	Z	-8.163	-8.163	0	%100
25	M33	X	4.713	4.713	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
26	M33	Z	-8.163	-8.163	0	%100
27	M1	X	6.485	6.485	0	%100
28	M1	Z	-11.232	-11.232	0	%100
29	M8	X	6.485	6.485	0	%100
30	M8	Z	-11.232	-11.232	0	%100
31	M15	X	0	0	0	%100
32	M15	Z	0	0	0	%100
33	M19	X	2.09	2.09	0	%100
34	M19	Z	-3.62	-3.62	0	%100
35	M20	X	8.36	8.36	0	%100
36	M20	Z	-14.48	-14.48	0	%100
37	MP1B	X	4.928	4.928	0	%100
38	MP1B	Z	-8.536	-8.536	0	%100
39	MP2B	X	4.928	4.928	0	%100
40	MP2B	Z	-8.536	-8.536	0	%100
41	MP3B	X	4.928	4.928	0	%100
42	MP3B	Z	-8.536	-8.536	0	%100
43	MP4B	X	4.928	4.928	0	%100
44	MP4B	Z	-8.536	-8.536	0	%100
45	MP5B	X	4.928	4.928	0	%100
46	MP5B	Z	-8.536	-8.536	0	%100
47	MP1A	X	4.928	4.928	0	%100
48	MP1A	Z	-8.536	-8.536	0	%100
49	MP2A	X	4.928	4.928	0	%100
50	MP2A	Z	-8.536	-8.536	0	%100
51	MP3A	X	4.928	4.928	0	%100
52	MP3A	Z	-8.536	-8.536	0	%100
53	MP4A	X	4.928	4.928	0	%100
54	MP4A	Z	-8.536	-8.536	0	%100
55	MP5A	X	4.928	4.928	0	%100
56	MP5A	Z	-8.536	-8.536	0	%100
57	MP1C	X	4.928	4.928	0	%100
58	MP1C	Z	-8.536	-8.536	0	%100
59	MP2C	X	4.928	4.928	0	%100
60	MP2C	Z	-8.536	-8.536	0	%100
61	MP3C	X	4.928	4.928	0	%100
62	MP3C	Z	-8.536	-8.536	0	%100
63	MP4C	X	4.928	4.928	0	%100
64	MP4C	Z	-8.536	-8.536	0	%100
65	MP5C	X	4.928	4.928	0	%100
66	MP5C	Z	-8.536	-8.536	0	%100
67	M49	X	8.454	8.454	0	%100
68	M49	Z	-14.642	-14.642	0	%100
69	M50A	X	8.454	8.454	0	%100
70	M50A	Z	-14.642	-14.642	0	%100
71	M51	X	8.987	8.987	0	%100
72	M51	Z	-15.566	-15.566	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M16	X	10.86	10.86	0	%100
2	M16	Z	-6.27	-6.27	0	%100
3	M22	X	6.122	6.122	0	%100
4	M22	Z	-3.535	-3.535	0	%100
5	M23	X	6.122	6.122	0	%100
6	M23	Z	-3.535	-3.535	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
7	M24	X	6.122	6.122	0	%100
8	M24	Z	-3.535	-3.535	0	%100
9	M25	X	6.122	6.122	0	%100
10	M25	Z	-3.535	-3.535	0	%100
11	M26	X	0	0	0	%100
12	M26	Z	0	0	0	%100
13	M27	X	0	0	0	%100
14	M27	Z	0	0	0	%100
15	M28	X	0	0	0	%100
16	M28	Z	0	0	0	%100
17	M29	X	0	0	0	%100
18	M29	Z	0	0	0	%100
19	M30	X	6.122	6.122	0	%100
20	M30	Z	-3.535	-3.535	0	%100
21	M31	X	6.122	6.122	0	%100
22	M31	Z	-3.535	-3.535	0	%100
23	M32	X	6.122	6.122	0	%100
24	M32	Z	-3.535	-3.535	0	%100
25	M33	X	6.122	6.122	0	%100
26	M33	Z	-3.535	-3.535	0	%100
27	M1	X	3.744	3.744	0	%100
28	M1	Z	-2.162	-2.162	0	%100
29	M8	X	14.976	14.976	0	%100
30	M8	Z	-8.646	-8.646	0	%100
31	M15	X	3.744	3.744	0	%100
32	M15	Z	-2.162	-2.162	0	%100
33	M19	X	0	0	0	%100
34	M19	Z	0	0	0	%100
35	M20	X	10.86	10.86	0	%100
36	M20	Z	-6.27	-6.27	0	%100
37	MP1B	X	8.536	8.536	0	%100
38	MP1B	Z	-4.928	-4.928	0	%100
39	MP2B	X	8.536	8.536	0	%100
40	MP2B	Z	-4.928	-4.928	0	%100
41	MP3B	X	8.536	8.536	0	%100
42	MP3B	Z	-4.928	-4.928	0	%100
43	MP4B	X	8.536	8.536	0	%100
44	MP4B	Z	-4.928	-4.928	0	%100
45	MP5B	X	8.536	8.536	0	%100
46	MP5B	Z	-4.928	-4.928	0	%100
47	MP1A	X	8.536	8.536	0	%100
48	MP1A	Z	-4.928	-4.928	0	%100
49	MP2A	X	8.536	8.536	0	%100
50	MP2A	Z	-4.928	-4.928	0	%100
51	MP3A	X	8.536	8.536	0	%100
52	MP3A	Z	-4.928	-4.928	0	%100
53	MP4A	X	8.536	8.536	0	%100
54	MP4A	Z	-4.928	-4.928	0	%100
55	MP5A	X	8.536	8.536	0	%100
56	MP5A	Z	-4.928	-4.928	0	%100
57	MP1C	X	8.536	8.536	0	%100
58	MP1C	Z	-4.928	-4.928	0	%100
59	MP2C	X	8.536	8.536	0	%100
60	MP2C	Z	-4.928	-4.928	0	%100
61	MP3C	X	8.536	8.536	0	%100
62	MP3C	Z	-4.928	-4.928	0	%100
63	MP4C	X	8.536	8.536	0	%100



Company : Colliers Engineering & Design
 Designer :
 Job Number :
 Model Name : 5000392762-VZW_MT_LO_H

Aug 7, 2023
 10:53 AM
 Checked By: _____

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
64	MP4C	Z	-4.928	-4.928	0	%100
65	MP5C	X	8.536	8.536	0	%100
66	MP5C	Z	-4.928	-4.928	0	%100
67	M49	X	15.258	15.258	0	%100
68	M49	Z	-8.809	-8.809	0	%100
69	M50A	X	14.335	14.335	0	%100
70	M50A	Z	-8.276	-8.276	0	%100
71	M51	X	15.258	15.258	0	%100
72	M51	Z	-8.809	-8.809	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M16	X	16.721	16.721	0	%100
2	M16	Z	0	0	0	%100
3	M22	X	9.426	9.426	0	%100
4	M22	Z	0	0	0	%100
5	M23	X	9.426	9.426	0	%100
6	M23	Z	0	0	0	%100
7	M24	X	9.426	9.426	0	%100
8	M24	Z	0	0	0	%100
9	M25	X	9.426	9.426	0	%100
10	M25	Z	0	0	0	%100
11	M26	X	2.356	2.356	0	%100
12	M26	Z	0	0	0	%100
13	M27	X	2.356	2.356	0	%100
14	M27	Z	0	0	0	%100
15	M28	X	2.356	2.356	0	%100
16	M28	Z	0	0	0	%100
17	M29	X	2.356	2.356	0	%100
18	M29	Z	0	0	0	%100
19	M30	X	2.356	2.356	0	%100
20	M30	Z	0	0	0	%100
21	M31	X	2.356	2.356	0	%100
22	M31	Z	0	0	0	%100
23	M32	X	2.356	2.356	0	%100
24	M32	Z	0	0	0	%100
25	M33	X	2.356	2.356	0	%100
26	M33	Z	0	0	0	%100
27	M1	X	0	0	0	%100
28	M1	Z	0	0	0	%100
29	M8	X	12.969	12.969	0	%100
30	M8	Z	0	0	0	%100
31	M15	X	12.969	12.969	0	%100
32	M15	Z	0	0	0	%100
33	M19	X	4.18	4.18	0	%100
34	M19	Z	0	0	0	%100
35	M20	X	4.18	4.18	0	%100
36	M20	Z	0	0	0	%100
37	MP1B	X	9.857	9.857	0	%100
38	MP1B	Z	0	0	0	%100
39	MP2B	X	9.857	9.857	0	%100
40	MP2B	Z	0	0	0	%100
41	MP3B	X	9.857	9.857	0	%100
42	MP3B	Z	0	0	0	%100
43	MP4B	X	9.857	9.857	0	%100
44	MP4B	Z	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
45	MP5B	X	9.857	9.857	0	%100
46	MP5B	Z	0	0	0	%100
47	MP1A	X	9.857	9.857	0	%100
48	MP1A	Z	0	0	0	%100
49	MP2A	X	9.857	9.857	0	%100
50	MP2A	Z	0	0	0	%100
51	MP3A	X	9.857	9.857	0	%100
52	MP3A	Z	0	0	0	%100
53	MP4A	X	9.857	9.857	0	%100
54	MP4A	Z	0	0	0	%100
55	MP5A	X	9.857	9.857	0	%100
56	MP5A	Z	0	0	0	%100
57	MP1C	X	9.857	9.857	0	%100
58	MP1C	Z	0	0	0	%100
59	MP2C	X	9.857	9.857	0	%100
60	MP2C	Z	0	0	0	%100
61	MP3C	X	9.857	9.857	0	%100
62	MP3C	Z	0	0	0	%100
63	MP4C	X	9.857	9.857	0	%100
64	MP4C	Z	0	0	0	%100
65	MP5C	X	9.857	9.857	0	%100
66	MP5C	Z	0	0	0	%100
67	M49	X	17.974	17.974	0	%100
68	M49	Z	0	0	0	%100
69	M50A	X	16.908	16.908	0	%100
70	M50A	Z	0	0	0	%100
71	M51	X	16.908	16.908	0	%100
72	M51	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M16	X	10.86	10.86	0	%100
2	M16	Z	6.27	6.27	0	%100
3	M22	X	6.122	6.122	0	%100
4	M22	Z	3.535	3.535	0	%100
5	M23	X	6.122	6.122	0	%100
6	M23	Z	3.535	3.535	0	%100
7	M24	X	6.122	6.122	0	%100
8	M24	Z	3.535	3.535	0	%100
9	M25	X	6.122	6.122	0	%100
10	M25	Z	3.535	3.535	0	%100
11	M26	X	6.122	6.122	0	%100
12	M26	Z	3.535	3.535	0	%100
13	M27	X	6.122	6.122	0	%100
14	M27	Z	3.535	3.535	0	%100
15	M28	X	6.122	6.122	0	%100
16	M28	Z	3.535	3.535	0	%100
17	M29	X	6.122	6.122	0	%100
18	M29	Z	3.535	3.535	0	%100
19	M30	X	0	0	0	%100
20	M30	Z	0	0	0	%100
21	M31	X	0	0	0	%100
22	M31	Z	0	0	0	%100
23	M32	X	0	0	0	%100
24	M32	Z	0	0	0	%100
25	M33	X	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
26	M33	Z	0	0	0	%100
27	M1	X	3.744	3.744	0	%100
28	M1	Z	2.162	2.162	0	%100
29	M8	X	3.744	3.744	0	%100
30	M8	Z	2.162	2.162	0	%100
31	M15	X	14.976	14.976	0	%100
32	M15	Z	8.646	8.646	0	%100
33	M19	X	10.86	10.86	0	%100
34	M19	Z	6.27	6.27	0	%100
35	M20	X	0	0	0	%100
36	M20	Z	0	0	0	%100
37	MP1B	X	8.536	8.536	0	%100
38	MP1B	Z	4.928	4.928	0	%100
39	MP2B	X	8.536	8.536	0	%100
40	MP2B	Z	4.928	4.928	0	%100
41	MP3B	X	8.536	8.536	0	%100
42	MP3B	Z	4.928	4.928	0	%100
43	MP4B	X	8.536	8.536	0	%100
44	MP4B	Z	4.928	4.928	0	%100
45	MP5B	X	8.536	8.536	0	%100
46	MP5B	Z	4.928	4.928	0	%100
47	MP1A	X	8.536	8.536	0	%100
48	MP1A	Z	4.928	4.928	0	%100
49	MP2A	X	8.536	8.536	0	%100
50	MP2A	Z	4.928	4.928	0	%100
51	MP3A	X	8.536	8.536	0	%100
52	MP3A	Z	4.928	4.928	0	%100
53	MP4A	X	8.536	8.536	0	%100
54	MP4A	Z	4.928	4.928	0	%100
55	MP5A	X	8.536	8.536	0	%100
56	MP5A	Z	4.928	4.928	0	%100
57	MP1C	X	8.536	8.536	0	%100
58	MP1C	Z	4.928	4.928	0	%100
59	MP2C	X	8.536	8.536	0	%100
60	MP2C	Z	4.928	4.928	0	%100
61	MP3C	X	8.536	8.536	0	%100
62	MP3C	Z	4.928	4.928	0	%100
63	MP4C	X	8.536	8.536	0	%100
64	MP4C	Z	4.928	4.928	0	%100
65	MP5C	X	8.536	8.536	0	%100
66	MP5C	Z	4.928	4.928	0	%100
67	M49	X	15.258	15.258	0	%100
68	M49	Z	8.809	8.809	0	%100
69	M50A	X	15.258	15.258	0	%100
70	M50A	Z	8.809	8.809	0	%100
71	M51	X	14.335	14.335	0	%100
72	M51	Z	8.276	8.276	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M16	X	2.09	2.09	0	%100
2	M16	Z	3.62	3.62	0	%100
3	M22	X	1.178	1.178	0	%100
4	M22	Z	2.041	2.041	0	%100
5	M23	X	1.178	1.178	0	%100
6	M23	Z	2.041	2.041	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
7	M24	X	1.178	1.178	0	%100
8	M24	Z	2.041	2.041	0	%100
9	M25	X	1.178	1.178	0	%100
10	M25	Z	2.041	2.041	0	%100
11	M26	X	4.713	4.713	0	%100
12	M26	Z	8.163	8.163	0	%100
13	M27	X	4.713	4.713	0	%100
14	M27	Z	8.163	8.163	0	%100
15	M28	X	4.713	4.713	0	%100
16	M28	Z	8.163	8.163	0	%100
17	M29	X	4.713	4.713	0	%100
18	M29	Z	8.163	8.163	0	%100
19	M30	X	1.178	1.178	0	%100
20	M30	Z	2.041	2.041	0	%100
21	M31	X	1.178	1.178	0	%100
22	M31	Z	2.041	2.041	0	%100
23	M32	X	1.178	1.178	0	%100
24	M32	Z	2.041	2.041	0	%100
25	M33	X	1.178	1.178	0	%100
26	M33	Z	2.041	2.041	0	%100
27	M1	X	6.485	6.485	0	%100
28	M1	Z	11.232	11.232	0	%100
29	M8	X	0	0	0	%100
30	M8	Z	0	0	0	%100
31	M15	X	6.485	6.485	0	%100
32	M15	Z	11.232	11.232	0	%100
33	M19	X	8.36	8.36	0	%100
34	M19	Z	14.48	14.48	0	%100
35	M20	X	2.09	2.09	0	%100
36	M20	Z	3.62	3.62	0	%100
37	MP1B	X	4.928	4.928	0	%100
38	MP1B	Z	8.536	8.536	0	%100
39	MP2B	X	4.928	4.928	0	%100
40	MP2B	Z	8.536	8.536	0	%100
41	MP3B	X	4.928	4.928	0	%100
42	MP3B	Z	8.536	8.536	0	%100
43	MP4B	X	4.928	4.928	0	%100
44	MP4B	Z	8.536	8.536	0	%100
45	MP5B	X	4.928	4.928	0	%100
46	MP5B	Z	8.536	8.536	0	%100
47	MP1A	X	4.928	4.928	0	%100
48	MP1A	Z	8.536	8.536	0	%100
49	MP2A	X	4.928	4.928	0	%100
50	MP2A	Z	8.536	8.536	0	%100
51	MP3A	X	4.928	4.928	0	%100
52	MP3A	Z	8.536	8.536	0	%100
53	MP4A	X	4.928	4.928	0	%100
54	MP4A	Z	8.536	8.536	0	%100
55	MP5A	X	4.928	4.928	0	%100
56	MP5A	Z	8.536	8.536	0	%100
57	MP1C	X	4.928	4.928	0	%100
58	MP1C	Z	8.536	8.536	0	%100
59	MP2C	X	4.928	4.928	0	%100
60	MP2C	Z	8.536	8.536	0	%100
61	MP3C	X	4.928	4.928	0	%100
62	MP3C	Z	8.536	8.536	0	%100
63	MP4C	X	4.928	4.928	0	%100



Company : Colliers Engineering & Design
 Designer :
 Job Number :
 Model Name : 5000392762-VZW_MT_LO_H

Aug 7, 2023
 10:53 AM
 Checked By: _____

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
64	MP4C	Z	8.536	8.536	0	%100
65	MP5C	X	4.928	4.928	0	%100
66	MP5C	Z	8.536	8.536	0	%100
67	M49	X	8.454	8.454	0	%100
68	M49	Z	14.642	14.642	0	%100
69	M50A	X	8.987	8.987	0	%100
70	M50A	Z	15.566	15.566	0	%100
71	M51	X	8.454	8.454	0	%100
72	M51	Z	14.642	14.642	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M16	X	0	0	0	%100
2	M16	Z	0	0	0	%100
3	M22	X	0	0	0	%100
4	M22	Z	0	0	0	%100
5	M23	X	0	0	0	%100
6	M23	Z	0	0	0	%100
7	M24	X	0	0	0	%100
8	M24	Z	0	0	0	%100
9	M25	X	0	0	0	%100
10	M25	Z	0	0	0	%100
11	M26	X	0	0	0	%100
12	M26	Z	7.069	7.069	0	%100
13	M27	X	0	0	0	%100
14	M27	Z	7.069	7.069	0	%100
15	M28	X	0	0	0	%100
16	M28	Z	7.069	7.069	0	%100
17	M29	X	0	0	0	%100
18	M29	Z	7.069	7.069	0	%100
19	M30	X	0	0	0	%100
20	M30	Z	7.069	7.069	0	%100
21	M31	X	0	0	0	%100
22	M31	Z	7.069	7.069	0	%100
23	M32	X	0	0	0	%100
24	M32	Z	7.069	7.069	0	%100
25	M33	X	0	0	0	%100
26	M33	Z	7.069	7.069	0	%100
27	M1	X	0	0	0	%100
28	M1	Z	17.292	17.292	0	%100
29	M8	X	0	0	0	%100
30	M8	Z	4.323	4.323	0	%100
31	M15	X	0	0	0	%100
32	M15	Z	4.323	4.323	0	%100
33	M19	X	0	0	0	%100
34	M19	Z	12.54	12.54	0	%100
35	M20	X	0	0	0	%100
36	M20	Z	12.54	12.54	0	%100
37	MP1B	X	0	0	0	%100
38	MP1B	Z	9.857	9.857	0	%100
39	MP2B	X	0	0	0	%100
40	MP2B	Z	9.857	9.857	0	%100
41	MP3B	X	0	0	0	%100
42	MP3B	Z	9.857	9.857	0	%100
43	MP4B	X	0	0	0	%100
44	MP4B	Z	9.857	9.857	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
45	MP5B	X	0	0	0	%100
46	MP5B	Z	9.857	9.857	0	%100
47	MP1A	X	0	0	0	%100
48	MP1A	Z	9.857	9.857	0	%100
49	MP2A	X	0	0	0	%100
50	MP2A	Z	9.857	9.857	0	%100
51	MP3A	X	0	0	0	%100
52	MP3A	Z	9.857	9.857	0	%100
53	MP4A	X	0	0	0	%100
54	MP4A	Z	9.857	9.857	0	%100
55	MP5A	X	0	0	0	%100
56	MP5A	Z	9.857	9.857	0	%100
57	MP1C	X	0	0	0	%100
58	MP1C	Z	9.857	9.857	0	%100
59	MP2C	X	0	0	0	%100
60	MP2C	Z	9.857	9.857	0	%100
61	MP3C	X	0	0	0	%100
62	MP3C	Z	9.857	9.857	0	%100
63	MP4C	X	0	0	0	%100
64	MP4C	Z	9.857	9.857	0	%100
65	MP5C	X	0	0	0	%100
66	MP5C	Z	9.857	9.857	0	%100
67	M49	X	0	0	0	%100
68	M49	Z	16.552	16.552	0	%100
69	M50A	X	0	0	0	%100
70	M50A	Z	17.618	17.618	0	%100
71	M51	X	0	0	0	%100
72	M51	Z	17.618	17.618	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M16	X	-2.09	-2.09	0	%100
2	M16	Z	3.62	3.62	0	%100
3	M22	X	-1.178	-1.178	0	%100
4	M22	Z	2.041	2.041	0	%100
5	M23	X	-1.178	-1.178	0	%100
6	M23	Z	2.041	2.041	0	%100
7	M24	X	-1.178	-1.178	0	%100
8	M24	Z	2.041	2.041	0	%100
9	M25	X	-1.178	-1.178	0	%100
10	M25	Z	2.041	2.041	0	%100
11	M26	X	-1.178	-1.178	0	%100
12	M26	Z	2.041	2.041	0	%100
13	M27	X	-1.178	-1.178	0	%100
14	M27	Z	2.041	2.041	0	%100
15	M28	X	-1.178	-1.178	0	%100
16	M28	Z	2.041	2.041	0	%100
17	M29	X	-1.178	-1.178	0	%100
18	M29	Z	2.041	2.041	0	%100
19	M30	X	-4.713	-4.713	0	%100
20	M30	Z	8.163	8.163	0	%100
21	M31	X	-4.713	-4.713	0	%100
22	M31	Z	8.163	8.163	0	%100
23	M32	X	-4.713	-4.713	0	%100
24	M32	Z	8.163	8.163	0	%100
25	M33	X	-4.713	-4.713	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
26	M33	Z	8.163	8.163	0	%100
27	M1	X	-6.485	-6.485	0	%100
28	M1	Z	11.232	11.232	0	%100
29	M8	X	-6.485	-6.485	0	%100
30	M8	Z	11.232	11.232	0	%100
31	M15	X	0	0	0	%100
32	M15	Z	0	0	0	%100
33	M19	X	-2.09	-2.09	0	%100
34	M19	Z	3.62	3.62	0	%100
35	M20	X	-8.36	-8.36	0	%100
36	M20	Z	14.48	14.48	0	%100
37	MP1B	X	-4.928	-4.928	0	%100
38	MP1B	Z	8.536	8.536	0	%100
39	MP2B	X	-4.928	-4.928	0	%100
40	MP2B	Z	8.536	8.536	0	%100
41	MP3B	X	-4.928	-4.928	0	%100
42	MP3B	Z	8.536	8.536	0	%100
43	MP4B	X	-4.928	-4.928	0	%100
44	MP4B	Z	8.536	8.536	0	%100
45	MP5B	X	-4.928	-4.928	0	%100
46	MP5B	Z	8.536	8.536	0	%100
47	MP1A	X	-4.928	-4.928	0	%100
48	MP1A	Z	8.536	8.536	0	%100
49	MP2A	X	-4.928	-4.928	0	%100
50	MP2A	Z	8.536	8.536	0	%100
51	MP3A	X	-4.928	-4.928	0	%100
52	MP3A	Z	8.536	8.536	0	%100
53	MP4A	X	-4.928	-4.928	0	%100
54	MP4A	Z	8.536	8.536	0	%100
55	MP5A	X	-4.928	-4.928	0	%100
56	MP5A	Z	8.536	8.536	0	%100
57	MP1C	X	-4.928	-4.928	0	%100
58	MP1C	Z	8.536	8.536	0	%100
59	MP2C	X	-4.928	-4.928	0	%100
60	MP2C	Z	8.536	8.536	0	%100
61	MP3C	X	-4.928	-4.928	0	%100
62	MP3C	Z	8.536	8.536	0	%100
63	MP4C	X	-4.928	-4.928	0	%100
64	MP4C	Z	8.536	8.536	0	%100
65	MP5C	X	-4.928	-4.928	0	%100
66	MP5C	Z	8.536	8.536	0	%100
67	M49	X	-8.454	-8.454	0	%100
68	M49	Z	14.642	14.642	0	%100
69	M50A	X	-8.454	-8.454	0	%100
70	M50A	Z	14.642	14.642	0	%100
71	M51	X	-8.987	-8.987	0	%100
72	M51	Z	15.566	15.566	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M16	X	-10.86	-10.86	0	%100
2	M16	Z	6.27	6.27	0	%100
3	M22	X	-6.122	-6.122	0	%100
4	M22	Z	3.535	3.535	0	%100
5	M23	X	-6.122	-6.122	0	%100
6	M23	Z	3.535	3.535	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
7	M24	X	-6.122	-6.122	0	%100
8	M24	Z	3.535	3.535	0	%100
9	M25	X	-6.122	-6.122	0	%100
10	M25	Z	3.535	3.535	0	%100
11	M26	X	0	0	0	%100
12	M26	Z	0	0	0	%100
13	M27	X	0	0	0	%100
14	M27	Z	0	0	0	%100
15	M28	X	0	0	0	%100
16	M28	Z	0	0	0	%100
17	M29	X	0	0	0	%100
18	M29	Z	0	0	0	%100
19	M30	X	-6.122	-6.122	0	%100
20	M30	Z	3.535	3.535	0	%100
21	M31	X	-6.122	-6.122	0	%100
22	M31	Z	3.535	3.535	0	%100
23	M32	X	-6.122	-6.122	0	%100
24	M32	Z	3.535	3.535	0	%100
25	M33	X	-6.122	-6.122	0	%100
26	M33	Z	3.535	3.535	0	%100
27	M1	X	-3.744	-3.744	0	%100
28	M1	Z	2.162	2.162	0	%100
29	M8	X	-14.976	-14.976	0	%100
30	M8	Z	8.646	8.646	0	%100
31	M15	X	-3.744	-3.744	0	%100
32	M15	Z	2.162	2.162	0	%100
33	M19	X	0	0	0	%100
34	M19	Z	0	0	0	%100
35	M20	X	-10.86	-10.86	0	%100
36	M20	Z	6.27	6.27	0	%100
37	MP1B	X	-8.536	-8.536	0	%100
38	MP1B	Z	4.928	4.928	0	%100
39	MP2B	X	-8.536	-8.536	0	%100
40	MP2B	Z	4.928	4.928	0	%100
41	MP3B	X	-8.536	-8.536	0	%100
42	MP3B	Z	4.928	4.928	0	%100
43	MP4B	X	-8.536	-8.536	0	%100
44	MP4B	Z	4.928	4.928	0	%100
45	MP5B	X	-8.536	-8.536	0	%100
46	MP5B	Z	4.928	4.928	0	%100
47	MP1A	X	-8.536	-8.536	0	%100
48	MP1A	Z	4.928	4.928	0	%100
49	MP2A	X	-8.536	-8.536	0	%100
50	MP2A	Z	4.928	4.928	0	%100
51	MP3A	X	-8.536	-8.536	0	%100
52	MP3A	Z	4.928	4.928	0	%100
53	MP4A	X	-8.536	-8.536	0	%100
54	MP4A	Z	4.928	4.928	0	%100
55	MP5A	X	-8.536	-8.536	0	%100
56	MP5A	Z	4.928	4.928	0	%100
57	MP1C	X	-8.536	-8.536	0	%100
58	MP1C	Z	4.928	4.928	0	%100
59	MP2C	X	-8.536	-8.536	0	%100
60	MP2C	Z	4.928	4.928	0	%100
61	MP3C	X	-8.536	-8.536	0	%100
62	MP3C	Z	4.928	4.928	0	%100
63	MP4C	X	-8.536	-8.536	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]	
64	MP4C	Z	4.928	4.928	0	%100
65	MP5C	X	-8.536	-8.536	0	%100
66	MP5C	Z	4.928	4.928	0	%100
67	M49	X	-15.258	-15.258	0	%100
68	M49	Z	8.809	8.809	0	%100
69	M50A	X	-14.335	-14.335	0	%100
70	M50A	Z	8.276	8.276	0	%100
71	M51	X	-15.258	-15.258	0	%100
72	M51	Z	8.809	8.809	0	%100

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

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]	
1	M16	X	-16.721	-16.721	0	%100
2	M16	Z	0	0	0	%100
3	M22	X	-9.426	-9.426	0	%100
4	M22	Z	0	0	0	%100
5	M23	X	-9.426	-9.426	0	%100
6	M23	Z	0	0	0	%100
7	M24	X	-9.426	-9.426	0	%100
8	M24	Z	0	0	0	%100
9	M25	X	-9.426	-9.426	0	%100
10	M25	Z	0	0	0	%100
11	M26	X	-2.356	-2.356	0	%100
12	M26	Z	0	0	0	%100
13	M27	X	-2.356	-2.356	0	%100
14	M27	Z	0	0	0	%100
15	M28	X	-2.356	-2.356	0	%100
16	M28	Z	0	0	0	%100
17	M29	X	-2.356	-2.356	0	%100
18	M29	Z	0	0	0	%100
19	M30	X	-2.356	-2.356	0	%100
20	M30	Z	0	0	0	%100
21	M31	X	-2.356	-2.356	0	%100
22	M31	Z	0	0	0	%100
23	M32	X	-2.356	-2.356	0	%100
24	M32	Z	0	0	0	%100
25	M33	X	-2.356	-2.356	0	%100
26	M33	Z	0	0	0	%100
27	M1	X	0	0	0	%100
28	M1	Z	0	0	0	%100
29	M8	X	-12.969	-12.969	0	%100
30	M8	Z	0	0	0	%100
31	M15	X	-12.969	-12.969	0	%100
32	M15	Z	0	0	0	%100
33	M19	X	-4.18	-4.18	0	%100
34	M19	Z	0	0	0	%100
35	M20	X	-4.18	-4.18	0	%100
36	M20	Z	0	0	0	%100
37	MP1B	X	-9.857	-9.857	0	%100
38	MP1B	Z	0	0	0	%100
39	MP2B	X	-9.857	-9.857	0	%100
40	MP2B	Z	0	0	0	%100
41	MP3B	X	-9.857	-9.857	0	%100
42	MP3B	Z	0	0	0	%100
43	MP4B	X	-9.857	-9.857	0	%100
44	MP4B	Z	0	0	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
45	MP5B	X	-9.857	-9.857	0 %100
46	MP5B	Z	0	0	0 %100
47	MP1A	X	-9.857	-9.857	0 %100
48	MP1A	Z	0	0	0 %100
49	MP2A	X	-9.857	-9.857	0 %100
50	MP2A	Z	0	0	0 %100
51	MP3A	X	-9.857	-9.857	0 %100
52	MP3A	Z	0	0	0 %100
53	MP4A	X	-9.857	-9.857	0 %100
54	MP4A	Z	0	0	0 %100
55	MP5A	X	-9.857	-9.857	0 %100
56	MP5A	Z	0	0	0 %100
57	MP1C	X	-9.857	-9.857	0 %100
58	MP1C	Z	0	0	0 %100
59	MP2C	X	-9.857	-9.857	0 %100
60	MP2C	Z	0	0	0 %100
61	MP3C	X	-9.857	-9.857	0 %100
62	MP3C	Z	0	0	0 %100
63	MP4C	X	-9.857	-9.857	0 %100
64	MP4C	Z	0	0	0 %100
65	MP5C	X	-9.857	-9.857	0 %100
66	MP5C	Z	0	0	0 %100
67	M49	X	-17.974	-17.974	0 %100
68	M49	Z	0	0	0 %100
69	M50A	X	-16.908	-16.908	0 %100
70	M50A	Z	0	0	0 %100
71	M51	X	-16.908	-16.908	0 %100
72	M51	Z	0	0	0 %100

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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M16	X	-10.86	-10.86	0 %100
2	M16	Z	-6.27	-6.27	0 %100
3	M22	X	-6.122	-6.122	0 %100
4	M22	Z	-3.535	-3.535	0 %100
5	M23	X	-6.122	-6.122	0 %100
6	M23	Z	-3.535	-3.535	0 %100
7	M24	X	-6.122	-6.122	0 %100
8	M24	Z	-3.535	-3.535	0 %100
9	M25	X	-6.122	-6.122	0 %100
10	M25	Z	-3.535	-3.535	0 %100
11	M26	X	-6.122	-6.122	0 %100
12	M26	Z	-3.535	-3.535	0 %100
13	M27	X	-6.122	-6.122	0 %100
14	M27	Z	-3.535	-3.535	0 %100
15	M28	X	-6.122	-6.122	0 %100
16	M28	Z	-3.535	-3.535	0 %100
17	M29	X	-6.122	-6.122	0 %100
18	M29	Z	-3.535	-3.535	0 %100
19	M30	X	0	0	0 %100
20	M30	Z	0	0	0 %100
21	M31	X	0	0	0 %100
22	M31	Z	0	0	0 %100
23	M32	X	0	0	0 %100
24	M32	Z	0	0	0 %100
25	M33	X	0	0	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
26	M33	Z	0	0	0	%100
27	M1	X	-3.744	-3.744	0	%100
28	M1	Z	-2.162	-2.162	0	%100
29	M8	X	-3.744	-3.744	0	%100
30	M8	Z	-2.162	-2.162	0	%100
31	M15	X	-14.976	-14.976	0	%100
32	M15	Z	-8.646	-8.646	0	%100
33	M19	X	-10.86	-10.86	0	%100
34	M19	Z	-6.27	-6.27	0	%100
35	M20	X	0	0	0	%100
36	M20	Z	0	0	0	%100
37	MP1B	X	-8.536	-8.536	0	%100
38	MP1B	Z	-4.928	-4.928	0	%100
39	MP2B	X	-8.536	-8.536	0	%100
40	MP2B	Z	-4.928	-4.928	0	%100
41	MP3B	X	-8.536	-8.536	0	%100
42	MP3B	Z	-4.928	-4.928	0	%100
43	MP4B	X	-8.536	-8.536	0	%100
44	MP4B	Z	-4.928	-4.928	0	%100
45	MP5B	X	-8.536	-8.536	0	%100
46	MP5B	Z	-4.928	-4.928	0	%100
47	MP1A	X	-8.536	-8.536	0	%100
48	MP1A	Z	-4.928	-4.928	0	%100
49	MP2A	X	-8.536	-8.536	0	%100
50	MP2A	Z	-4.928	-4.928	0	%100
51	MP3A	X	-8.536	-8.536	0	%100
52	MP3A	Z	-4.928	-4.928	0	%100
53	MP4A	X	-8.536	-8.536	0	%100
54	MP4A	Z	-4.928	-4.928	0	%100
55	MP5A	X	-8.536	-8.536	0	%100
56	MP5A	Z	-4.928	-4.928	0	%100
57	MP1C	X	-8.536	-8.536	0	%100
58	MP1C	Z	-4.928	-4.928	0	%100
59	MP2C	X	-8.536	-8.536	0	%100
60	MP2C	Z	-4.928	-4.928	0	%100
61	MP3C	X	-8.536	-8.536	0	%100
62	MP3C	Z	-4.928	-4.928	0	%100
63	MP4C	X	-8.536	-8.536	0	%100
64	MP4C	Z	-4.928	-4.928	0	%100
65	MP5C	X	-8.536	-8.536	0	%100
66	MP5C	Z	-4.928	-4.928	0	%100
67	M49	X	-15.258	-15.258	0	%100
68	M49	Z	-8.809	-8.809	0	%100
69	M50A	X	-15.258	-15.258	0	%100
70	M50A	Z	-8.809	-8.809	0	%100
71	M51	X	-14.335	-14.335	0	%100
72	M51	Z	-8.276	-8.276	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M16	X	-2.09	-2.09	0	%100
2	M16	Z	-3.62	-3.62	0	%100
3	M22	X	-1.178	-1.178	0	%100
4	M22	Z	-2.041	-2.041	0	%100
5	M23	X	-1.178	-1.178	0	%100
6	M23	Z	-2.041	-2.041	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
7	M24	X	-1.178	-1.178	0	%100
8	M24	Z	-2.041	-2.041	0	%100
9	M25	X	-1.178	-1.178	0	%100
10	M25	Z	-2.041	-2.041	0	%100
11	M26	X	-4.713	-4.713	0	%100
12	M26	Z	-8.163	-8.163	0	%100
13	M27	X	-4.713	-4.713	0	%100
14	M27	Z	-8.163	-8.163	0	%100
15	M28	X	-4.713	-4.713	0	%100
16	M28	Z	-8.163	-8.163	0	%100
17	M29	X	-4.713	-4.713	0	%100
18	M29	Z	-8.163	-8.163	0	%100
19	M30	X	-1.178	-1.178	0	%100
20	M30	Z	-2.041	-2.041	0	%100
21	M31	X	-1.178	-1.178	0	%100
22	M31	Z	-2.041	-2.041	0	%100
23	M32	X	-1.178	-1.178	0	%100
24	M32	Z	-2.041	-2.041	0	%100
25	M33	X	-1.178	-1.178	0	%100
26	M33	Z	-2.041	-2.041	0	%100
27	M1	X	-6.485	-6.485	0	%100
28	M1	Z	-11.232	-11.232	0	%100
29	M8	X	0	0	0	%100
30	M8	Z	0	0	0	%100
31	M15	X	-6.485	-6.485	0	%100
32	M15	Z	-11.232	-11.232	0	%100
33	M19	X	-8.36	-8.36	0	%100
34	M19	Z	-14.48	-14.48	0	%100
35	M20	X	-2.09	-2.09	0	%100
36	M20	Z	-3.62	-3.62	0	%100
37	MP1B	X	-4.928	-4.928	0	%100
38	MP1B	Z	-8.536	-8.536	0	%100
39	MP2B	X	-4.928	-4.928	0	%100
40	MP2B	Z	-8.536	-8.536	0	%100
41	MP3B	X	-4.928	-4.928	0	%100
42	MP3B	Z	-8.536	-8.536	0	%100
43	MP4B	X	-4.928	-4.928	0	%100
44	MP4B	Z	-8.536	-8.536	0	%100
45	MP5B	X	-4.928	-4.928	0	%100
46	MP5B	Z	-8.536	-8.536	0	%100
47	MP1A	X	-4.928	-4.928	0	%100
48	MP1A	Z	-8.536	-8.536	0	%100
49	MP2A	X	-4.928	-4.928	0	%100
50	MP2A	Z	-8.536	-8.536	0	%100
51	MP3A	X	-4.928	-4.928	0	%100
52	MP3A	Z	-8.536	-8.536	0	%100
53	MP4A	X	-4.928	-4.928	0	%100
54	MP4A	Z	-8.536	-8.536	0	%100
55	MP5A	X	-4.928	-4.928	0	%100
56	MP5A	Z	-8.536	-8.536	0	%100
57	MP1C	X	-4.928	-4.928	0	%100
58	MP1C	Z	-8.536	-8.536	0	%100
59	MP2C	X	-4.928	-4.928	0	%100
60	MP2C	Z	-8.536	-8.536	0	%100
61	MP3C	X	-4.928	-4.928	0	%100
62	MP3C	Z	-8.536	-8.536	0	%100
63	MP4C	X	-4.928	-4.928	0	%100



Company : Colliers Engineering & Design
 Designer :
 Job Number :
 Model Name : 5000392762-VZW_MT_LO_H

Aug 7, 2023
 10:53 AM
 Checked By: _____

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
64	MP4C	Z	-8.536	-8.536	0	%100
65	MP5C	X	-4.928	-4.928	0	%100
66	MP5C	Z	-8.536	-8.536	0	%100
67	M49	X	-8.454	-8.454	0	%100
68	M49	Z	-14.642	-14.642	0	%100
69	M50A	X	-8.987	-8.987	0	%100
70	M50A	Z	-15.566	-15.566	0	%100
71	M51	X	-8.454	-8.454	0	%100
72	M51	Z	-14.642	-14.642	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M16	X	0	0	0	%100
2	M16	Z	0	0	0	%100
3	M22	X	0	0	0	%100
4	M22	Z	0	0	0	%100
5	M23	X	0	0	0	%100
6	M23	Z	0	0	0	%100
7	M24	X	0	0	0	%100
8	M24	Z	0	0	0	%100
9	M25	X	0	0	0	%100
10	M25	Z	0	0	0	%100
11	M26	X	0	0	0	%100
12	M26	Z	-2.018	-2.018	0	%100
13	M27	X	0	0	0	%100
14	M27	Z	-2.018	-2.018	0	%100
15	M28	X	0	0	0	%100
16	M28	Z	-2.018	-2.018	0	%100
17	M29	X	0	0	0	%100
18	M29	Z	-2.018	-2.018	0	%100
19	M30	X	0	0	0	%100
20	M30	Z	-2.018	-2.018	0	%100
21	M31	X	0	0	0	%100
22	M31	Z	-2.018	-2.018	0	%100
23	M32	X	0	0	0	%100
24	M32	Z	-2.018	-2.018	0	%100
25	M33	X	0	0	0	%100
26	M33	Z	-2.018	-2.018	0	%100
27	M1	X	0	0	0	%100
28	M1	Z	-4.657	-4.657	0	%100
29	M8	X	0	0	0	%100
30	M8	Z	-1.164	-1.164	0	%100
31	M15	X	0	0	0	%100
32	M15	Z	-1.164	-1.164	0	%100
33	M19	X	0	0	0	%100
34	M19	Z	-3.419	-3.419	0	%100
35	M20	X	0	0	0	%100
36	M20	Z	-3.419	-3.419	0	%100
37	MP1B	X	0	0	0	%100
38	MP1B	Z	-3.364	-3.364	0	%100
39	MP2B	X	0	0	0	%100
40	MP2B	Z	-3.364	-3.364	0	%100
41	MP3B	X	0	0	0	%100
42	MP3B	Z	-3.364	-3.364	0	%100
43	MP4B	X	0	0	0	%100
44	MP4B	Z	-3.364	-3.364	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
45	MP5B	X	0	0	0	%100
46	MP5B	Z	-3.364	-3.364	0	%100
47	MP1A	X	0	0	0	%100
48	MP1A	Z	-3.364	-3.364	0	%100
49	MP2A	X	0	0	0	%100
50	MP2A	Z	-3.364	-3.364	0	%100
51	MP3A	X	0	0	0	%100
52	MP3A	Z	-3.364	-3.364	0	%100
53	MP4A	X	0	0	0	%100
54	MP4A	Z	-3.364	-3.364	0	%100
55	MP5A	X	0	0	0	%100
56	MP5A	Z	-3.364	-3.364	0	%100
57	MP1C	X	0	0	0	%100
58	MP1C	Z	-3.364	-3.364	0	%100
59	MP2C	X	0	0	0	%100
60	MP2C	Z	-3.364	-3.364	0	%100
61	MP3C	X	0	0	0	%100
62	MP3C	Z	-3.364	-3.364	0	%100
63	MP4C	X	0	0	0	%100
64	MP4C	Z	-3.364	-3.364	0	%100
65	MP5C	X	0	0	0	%100
66	MP5C	Z	-3.364	-3.364	0	%100
67	M49	X	0	0	0	%100
68	M49	Z	-3.662	-3.662	0	%100
69	M50A	X	0	0	0	%100
70	M50A	Z	-4.435	-4.435	0	%100
71	M51	X	0	0	0	%100
72	M51	Z	-4.435	-4.435	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M16	X	.57	.57	0	%100
2	M16	Z	-.987	-.987	0	%100
3	M22	X	.336	.336	0	%100
4	M22	Z	-.582	-.582	0	%100
5	M23	X	.336	.336	0	%100
6	M23	Z	-.582	-.582	0	%100
7	M24	X	.336	.336	0	%100
8	M24	Z	-.582	-.582	0	%100
9	M25	X	.336	.336	0	%100
10	M25	Z	-.582	-.582	0	%100
11	M26	X	.336	.336	0	%100
12	M26	Z	-.582	-.582	0	%100
13	M27	X	.336	.336	0	%100
14	M27	Z	-.582	-.582	0	%100
15	M28	X	.336	.336	0	%100
16	M28	Z	-.582	-.582	0	%100
17	M29	X	.336	.336	0	%100
18	M29	Z	-.582	-.582	0	%100
19	M30	X	1.345	1.345	0	%100
20	M30	Z	-2.33	-2.33	0	%100
21	M31	X	1.345	1.345	0	%100
22	M31	Z	-2.33	-2.33	0	%100
23	M32	X	1.345	1.345	0	%100
24	M32	Z	-2.33	-2.33	0	%100
25	M33	X	1.345	1.345	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
26	M33	Z	-2.33	-2.33	0	%100
27	M1	X	1.747	1.747	0	%100
28	M1	Z	-3.025	-3.025	0	%100
29	M8	X	1.747	1.747	0	%100
30	M8	Z	-3.025	-3.025	0	%100
31	M15	X	0	0	0	%100
32	M15	Z	0	0	0	%100
33	M19	X	.57	.57	0	%100
34	M19	Z	-.987	-.987	0	%100
35	M20	X	2.279	2.279	0	%100
36	M20	Z	-3.947	-3.947	0	%100
37	MP1B	X	1.682	1.682	0	%100
38	MP1B	Z	-2.914	-2.914	0	%100
39	MP2B	X	1.682	1.682	0	%100
40	MP2B	Z	-2.914	-2.914	0	%100
41	MP3B	X	1.682	1.682	0	%100
42	MP3B	Z	-2.914	-2.914	0	%100
43	MP4B	X	1.682	1.682	0	%100
44	MP4B	Z	-2.914	-2.914	0	%100
45	MP5B	X	1.682	1.682	0	%100
46	MP5B	Z	-2.914	-2.914	0	%100
47	MP1A	X	1.682	1.682	0	%100
48	MP1A	Z	-2.914	-2.914	0	%100
49	MP2A	X	1.682	1.682	0	%100
50	MP2A	Z	-2.914	-2.914	0	%100
51	MP3A	X	1.682	1.682	0	%100
52	MP3A	Z	-2.914	-2.914	0	%100
53	MP4A	X	1.682	1.682	0	%100
54	MP4A	Z	-2.914	-2.914	0	%100
55	MP5A	X	1.682	1.682	0	%100
56	MP5A	Z	-2.914	-2.914	0	%100
57	MP1C	X	1.682	1.682	0	%100
58	MP1C	Z	-2.914	-2.914	0	%100
59	MP2C	X	1.682	1.682	0	%100
60	MP2C	Z	-2.914	-2.914	0	%100
61	MP3C	X	1.682	1.682	0	%100
62	MP3C	Z	-2.914	-2.914	0	%100
63	MP4C	X	1.682	1.682	0	%100
64	MP4C	Z	-2.914	-2.914	0	%100
65	MP5C	X	1.682	1.682	0	%100
66	MP5C	Z	-2.914	-2.914	0	%100
67	M49	X	1.96	1.96	0	%100
68	M49	Z	-3.394	-3.394	0	%100
69	M50A	X	1.96	1.96	0	%100
70	M50A	Z	-3.394	-3.394	0	%100
71	M51	X	2.346	2.346	0	%100
72	M51	Z	-4.064	-4.064	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M16	X	2.961	2.961	0	%100
2	M16	Z	-1.709	-1.709	0	%100
3	M22	X	1.747	1.747	0	%100
4	M22	Z	-1.009	-1.009	0	%100
5	M23	X	1.747	1.747	0	%100
6	M23	Z	-1.009	-1.009	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
7	M24	X	1.747	1.747	0	%100
8	M24	Z	-1.009	-1.009	0	%100
9	M25	X	1.747	1.747	0	%100
10	M25	Z	-1.009	-1.009	0	%100
11	M26	X	0	0	0	%100
12	M26	Z	0	0	0	%100
13	M27	X	0	0	0	%100
14	M27	Z	0	0	0	%100
15	M28	X	0	0	0	%100
16	M28	Z	0	0	0	%100
17	M29	X	0	0	0	%100
18	M29	Z	0	0	0	%100
19	M30	X	1.747	1.747	0	%100
20	M30	Z	-1.009	-1.009	0	%100
21	M31	X	1.747	1.747	0	%100
22	M31	Z	-1.009	-1.009	0	%100
23	M32	X	1.747	1.747	0	%100
24	M32	Z	-1.009	-1.009	0	%100
25	M33	X	1.747	1.747	0	%100
26	M33	Z	-1.009	-1.009	0	%100
27	M1	X	1.008	1.008	0	%100
28	M1	Z	-.582	-.582	0	%100
29	M8	X	4.033	4.033	0	%100
30	M8	Z	-2.329	-2.329	0	%100
31	M15	X	1.008	1.008	0	%100
32	M15	Z	-.582	-.582	0	%100
33	M19	X	0	0	0	%100
34	M19	Z	0	0	0	%100
35	M20	X	2.961	2.961	0	%100
36	M20	Z	-1.709	-1.709	0	%100
37	MP1B	X	2.914	2.914	0	%100
38	MP1B	Z	-1.682	-1.682	0	%100
39	MP2B	X	2.914	2.914	0	%100
40	MP2B	Z	-1.682	-1.682	0	%100
41	MP3B	X	2.914	2.914	0	%100
42	MP3B	Z	-1.682	-1.682	0	%100
43	MP4B	X	2.914	2.914	0	%100
44	MP4B	Z	-1.682	-1.682	0	%100
45	MP5B	X	2.914	2.914	0	%100
46	MP5B	Z	-1.682	-1.682	0	%100
47	MP1A	X	2.914	2.914	0	%100
48	MP1A	Z	-1.682	-1.682	0	%100
49	MP2A	X	2.914	2.914	0	%100
50	MP2A	Z	-1.682	-1.682	0	%100
51	MP3A	X	2.914	2.914	0	%100
52	MP3A	Z	-1.682	-1.682	0	%100
53	MP4A	X	2.914	2.914	0	%100
54	MP4A	Z	-1.682	-1.682	0	%100
55	MP5A	X	2.914	2.914	0	%100
56	MP5A	Z	-1.682	-1.682	0	%100
57	MP1C	X	2.914	2.914	0	%100
58	MP1C	Z	-1.682	-1.682	0	%100
59	MP2C	X	2.914	2.914	0	%100
60	MP2C	Z	-1.682	-1.682	0	%100
61	MP3C	X	2.914	2.914	0	%100
62	MP3C	Z	-1.682	-1.682	0	%100
63	MP4C	X	2.914	2.914	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
64	MP4C	Z	-1.682	-1.682	0	%100
65	MP5C	X	2.914	2.914	0	%100
66	MP5C	Z	-1.682	-1.682	0	%100
67	M49	X	3.841	3.841	0	%100
68	M49	Z	-2.217	-2.217	0	%100
69	M50A	X	3.171	3.171	0	%100
70	M50A	Z	-1.831	-1.831	0	%100
71	M51	X	3.841	3.841	0	%100
72	M51	Z	-2.217	-2.217	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M16	X	4.558	4.558	0	%100
2	M16	Z	0	0	0	%100
3	M22	X	2.69	2.69	0	%100
4	M22	Z	0	0	0	%100
5	M23	X	2.69	2.69	0	%100
6	M23	Z	0	0	0	%100
7	M24	X	2.69	2.69	0	%100
8	M24	Z	0	0	0	%100
9	M25	X	2.69	2.69	0	%100
10	M25	Z	0	0	0	%100
11	M26	X	.673	.673	0	%100
12	M26	Z	0	0	0	%100
13	M27	X	.673	.673	0	%100
14	M27	Z	0	0	0	%100
15	M28	X	.673	.673	0	%100
16	M28	Z	0	0	0	%100
17	M29	X	.673	.673	0	%100
18	M29	Z	0	0	0	%100
19	M30	X	.673	.673	0	%100
20	M30	Z	0	0	0	%100
21	M31	X	.673	.673	0	%100
22	M31	Z	0	0	0	%100
23	M32	X	.673	.673	0	%100
24	M32	Z	0	0	0	%100
25	M33	X	.673	.673	0	%100
26	M33	Z	0	0	0	%100
27	M1	X	0	0	0	%100
28	M1	Z	0	0	0	%100
29	M8	X	3.493	3.493	0	%100
30	M8	Z	0	0	0	%100
31	M15	X	3.493	3.493	0	%100
32	M15	Z	0	0	0	%100
33	M19	X	1.14	1.14	0	%100
34	M19	Z	0	0	0	%100
35	M20	X	1.14	1.14	0	%100
36	M20	Z	0	0	0	%100
37	MP1B	X	3.364	3.364	0	%100
38	MP1B	Z	0	0	0	%100
39	MP2B	X	3.364	3.364	0	%100
40	MP2B	Z	0	0	0	%100
41	MP3B	X	3.364	3.364	0	%100
42	MP3B	Z	0	0	0	%100
43	MP4B	X	3.364	3.364	0	%100
44	MP4B	Z	0	0	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
45	MP5B	X	3.364	3.364	0 %100
46	MP5B	Z	0	0	0 %100
47	MP1A	X	3.364	3.364	0 %100
48	MP1A	Z	0	0	0 %100
49	MP2A	X	3.364	3.364	0 %100
50	MP2A	Z	0	0	0 %100
51	MP3A	X	3.364	3.364	0 %100
52	MP3A	Z	0	0	0 %100
53	MP4A	X	3.364	3.364	0 %100
54	MP4A	Z	0	0	0 %100
55	MP5A	X	3.364	3.364	0 %100
56	MP5A	Z	0	0	0 %100
57	MP1C	X	3.364	3.364	0 %100
58	MP1C	Z	0	0	0 %100
59	MP2C	X	3.364	3.364	0 %100
60	MP2C	Z	0	0	0 %100
61	MP3C	X	3.364	3.364	0 %100
62	MP3C	Z	0	0	0 %100
63	MP4C	X	3.364	3.364	0 %100
64	MP4C	Z	0	0	0 %100
65	MP5C	X	3.364	3.364	0 %100
66	MP5C	Z	0	0	0 %100
67	M49	X	4.692	4.692	0 %100
68	M49	Z	0	0	0 %100
69	M50A	X	3.919	3.919	0 %100
70	M50A	Z	0	0	0 %100
71	M51	X	3.919	3.919	0 %100
72	M51	Z	0	0	0 %100

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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M16	X	2.961	2.961	0 %100
2	M16	Z	1.709	1.709	0 %100
3	M22	X	1.747	1.747	0 %100
4	M22	Z	1.009	1.009	0 %100
5	M23	X	1.747	1.747	0 %100
6	M23	Z	1.009	1.009	0 %100
7	M24	X	1.747	1.747	0 %100
8	M24	Z	1.009	1.009	0 %100
9	M25	X	1.747	1.747	0 %100
10	M25	Z	1.009	1.009	0 %100
11	M26	X	1.747	1.747	0 %100
12	M26	Z	1.009	1.009	0 %100
13	M27	X	1.747	1.747	0 %100
14	M27	Z	1.009	1.009	0 %100
15	M28	X	1.747	1.747	0 %100
16	M28	Z	1.009	1.009	0 %100
17	M29	X	1.747	1.747	0 %100
18	M29	Z	1.009	1.009	0 %100
19	M30	X	0	0	0 %100
20	M30	Z	0	0	0 %100
21	M31	X	0	0	0 %100
22	M31	Z	0	0	0 %100
23	M32	X	0	0	0 %100
24	M32	Z	0	0	0 %100
25	M33	X	0	0	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
26	M33	Z	0	0	0	%100
27	M1	X	1.008	1.008	0	%100
28	M1	Z	.582	.582	0	%100
29	M8	X	1.008	1.008	0	%100
30	M8	Z	.582	.582	0	%100
31	M15	X	4.033	4.033	0	%100
32	M15	Z	2.329	2.329	0	%100
33	M19	X	2.961	2.961	0	%100
34	M19	Z	1.709	1.709	0	%100
35	M20	X	0	0	0	%100
36	M20	Z	0	0	0	%100
37	MP1B	X	2.914	2.914	0	%100
38	MP1B	Z	1.682	1.682	0	%100
39	MP2B	X	2.914	2.914	0	%100
40	MP2B	Z	1.682	1.682	0	%100
41	MP3B	X	2.914	2.914	0	%100
42	MP3B	Z	1.682	1.682	0	%100
43	MP4B	X	2.914	2.914	0	%100
44	MP4B	Z	1.682	1.682	0	%100
45	MP5B	X	2.914	2.914	0	%100
46	MP5B	Z	1.682	1.682	0	%100
47	MP1A	X	2.914	2.914	0	%100
48	MP1A	Z	1.682	1.682	0	%100
49	MP2A	X	2.914	2.914	0	%100
50	MP2A	Z	1.682	1.682	0	%100
51	MP3A	X	2.914	2.914	0	%100
52	MP3A	Z	1.682	1.682	0	%100
53	MP4A	X	2.914	2.914	0	%100
54	MP4A	Z	1.682	1.682	0	%100
55	MP5A	X	2.914	2.914	0	%100
56	MP5A	Z	1.682	1.682	0	%100
57	MP1C	X	2.914	2.914	0	%100
58	MP1C	Z	1.682	1.682	0	%100
59	MP2C	X	2.914	2.914	0	%100
60	MP2C	Z	1.682	1.682	0	%100
61	MP3C	X	2.914	2.914	0	%100
62	MP3C	Z	1.682	1.682	0	%100
63	MP4C	X	2.914	2.914	0	%100
64	MP4C	Z	1.682	1.682	0	%100
65	MP5C	X	2.914	2.914	0	%100
66	MP5C	Z	1.682	1.682	0	%100
67	M49	X	3.841	3.841	0	%100
68	M49	Z	2.217	2.217	0	%100
69	M50A	X	3.841	3.841	0	%100
70	M50A	Z	2.217	2.217	0	%100
71	M51	X	3.171	3.171	0	%100
72	M51	Z	1.831	1.831	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M16	X	.57	.57	0	%100
2	M16	Z	.987	.987	0	%100
3	M22	X	.336	.336	0	%100
4	M22	Z	.582	.582	0	%100
5	M23	X	.336	.336	0	%100
6	M23	Z	.582	.582	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
7	M24	X	.336	.336	0	%100
8	M24	Z	.582	.582	0	%100
9	M25	X	.336	.336	0	%100
10	M25	Z	.582	.582	0	%100
11	M26	X	1.345	1.345	0	%100
12	M26	Z	2.33	2.33	0	%100
13	M27	X	1.345	1.345	0	%100
14	M27	Z	2.33	2.33	0	%100
15	M28	X	1.345	1.345	0	%100
16	M28	Z	2.33	2.33	0	%100
17	M29	X	1.345	1.345	0	%100
18	M29	Z	2.33	2.33	0	%100
19	M30	X	.336	.336	0	%100
20	M30	Z	.582	.582	0	%100
21	M31	X	.336	.336	0	%100
22	M31	Z	.582	.582	0	%100
23	M32	X	.336	.336	0	%100
24	M32	Z	.582	.582	0	%100
25	M33	X	.336	.336	0	%100
26	M33	Z	.582	.582	0	%100
27	M1	X	1.747	1.747	0	%100
28	M1	Z	3.025	3.025	0	%100
29	M8	X	0	0	0	%100
30	M8	Z	0	0	0	%100
31	M15	X	1.747	1.747	0	%100
32	M15	Z	3.025	3.025	0	%100
33	M19	X	2.279	2.279	0	%100
34	M19	Z	3.947	3.947	0	%100
35	M20	X	.57	.57	0	%100
36	M20	Z	.987	.987	0	%100
37	MP1B	X	1.682	1.682	0	%100
38	MP1B	Z	2.914	2.914	0	%100
39	MP2B	X	1.682	1.682	0	%100
40	MP2B	Z	2.914	2.914	0	%100
41	MP3B	X	1.682	1.682	0	%100
42	MP3B	Z	2.914	2.914	0	%100
43	MP4B	X	1.682	1.682	0	%100
44	MP4B	Z	2.914	2.914	0	%100
45	MP5B	X	1.682	1.682	0	%100
46	MP5B	Z	2.914	2.914	0	%100
47	MP1A	X	1.682	1.682	0	%100
48	MP1A	Z	2.914	2.914	0	%100
49	MP2A	X	1.682	1.682	0	%100
50	MP2A	Z	2.914	2.914	0	%100
51	MP3A	X	1.682	1.682	0	%100
52	MP3A	Z	2.914	2.914	0	%100
53	MP4A	X	1.682	1.682	0	%100
54	MP4A	Z	2.914	2.914	0	%100
55	MP5A	X	1.682	1.682	0	%100
56	MP5A	Z	2.914	2.914	0	%100
57	MP1C	X	1.682	1.682	0	%100
58	MP1C	Z	2.914	2.914	0	%100
59	MP2C	X	1.682	1.682	0	%100
60	MP2C	Z	2.914	2.914	0	%100
61	MP3C	X	1.682	1.682	0	%100
62	MP3C	Z	2.914	2.914	0	%100
63	MP4C	X	1.682	1.682	0	%100



Company : Colliers Engineering & Design
 Designer :
 Job Number :
 Model Name : 5000392762-VZW_MT_LO_H

Aug 7, 2023
 10:53 AM
 Checked By: _____

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
64	MP4C	Z	2.914	2.914	0	%100
65	MP5C	X	1.682	1.682	0	%100
66	MP5C	Z	2.914	2.914	0	%100
67	M49	X	1.96	1.96	0	%100
68	M49	Z	3.394	3.394	0	%100
69	M50A	X	2.346	2.346	0	%100
70	M50A	Z	4.064	4.064	0	%100
71	M51	X	1.96	1.96	0	%100
72	M51	Z	3.394	3.394	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M16	X	0	0	0	%100
2	M16	Z	0	0	0	%100
3	M22	X	0	0	0	%100
4	M22	Z	0	0	0	%100
5	M23	X	0	0	0	%100
6	M23	Z	0	0	0	%100
7	M24	X	0	0	0	%100
8	M24	Z	0	0	0	%100
9	M25	X	0	0	0	%100
10	M25	Z	0	0	0	%100
11	M26	X	0	0	0	%100
12	M26	Z	2.018	2.018	0	%100
13	M27	X	0	0	0	%100
14	M27	Z	2.018	2.018	0	%100
15	M28	X	0	0	0	%100
16	M28	Z	2.018	2.018	0	%100
17	M29	X	0	0	0	%100
18	M29	Z	2.018	2.018	0	%100
19	M30	X	0	0	0	%100
20	M30	Z	2.018	2.018	0	%100
21	M31	X	0	0	0	%100
22	M31	Z	2.018	2.018	0	%100
23	M32	X	0	0	0	%100
24	M32	Z	2.018	2.018	0	%100
25	M33	X	0	0	0	%100
26	M33	Z	2.018	2.018	0	%100
27	M1	X	0	0	0	%100
28	M1	Z	4.657	4.657	0	%100
29	M8	X	0	0	0	%100
30	M8	Z	1.164	1.164	0	%100
31	M15	X	0	0	0	%100
32	M15	Z	1.164	1.164	0	%100
33	M19	X	0	0	0	%100
34	M19	Z	3.419	3.419	0	%100
35	M20	X	0	0	0	%100
36	M20	Z	3.419	3.419	0	%100
37	MP1B	X	0	0	0	%100
38	MP1B	Z	3.364	3.364	0	%100
39	MP2B	X	0	0	0	%100
40	MP2B	Z	3.364	3.364	0	%100
41	MP3B	X	0	0	0	%100
42	MP3B	Z	3.364	3.364	0	%100
43	MP4B	X	0	0	0	%100
44	MP4B	Z	3.364	3.364	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
45	MP5B	X	0	0	0	%100
46	MP5B	Z	3.364	3.364	0	%100
47	MP1A	X	0	0	0	%100
48	MP1A	Z	3.364	3.364	0	%100
49	MP2A	X	0	0	0	%100
50	MP2A	Z	3.364	3.364	0	%100
51	MP3A	X	0	0	0	%100
52	MP3A	Z	3.364	3.364	0	%100
53	MP4A	X	0	0	0	%100
54	MP4A	Z	3.364	3.364	0	%100
55	MP5A	X	0	0	0	%100
56	MP5A	Z	3.364	3.364	0	%100
57	MP1C	X	0	0	0	%100
58	MP1C	Z	3.364	3.364	0	%100
59	MP2C	X	0	0	0	%100
60	MP2C	Z	3.364	3.364	0	%100
61	MP3C	X	0	0	0	%100
62	MP3C	Z	3.364	3.364	0	%100
63	MP4C	X	0	0	0	%100
64	MP4C	Z	3.364	3.364	0	%100
65	MP5C	X	0	0	0	%100
66	MP5C	Z	3.364	3.364	0	%100
67	M49	X	0	0	0	%100
68	M49	Z	3.662	3.662	0	%100
69	M50A	X	0	0	0	%100
70	M50A	Z	4.435	4.435	0	%100
71	M51	X	0	0	0	%100
72	M51	Z	4.435	4.435	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M16	X	-.57	-.57	0	%100
2	M16	Z	.987	.987	0	%100
3	M22	X	-.336	-.336	0	%100
4	M22	Z	.582	.582	0	%100
5	M23	X	-.336	-.336	0	%100
6	M23	Z	.582	.582	0	%100
7	M24	X	-.336	-.336	0	%100
8	M24	Z	.582	.582	0	%100
9	M25	X	-.336	-.336	0	%100
10	M25	Z	.582	.582	0	%100
11	M26	X	-.336	-.336	0	%100
12	M26	Z	.582	.582	0	%100
13	M27	X	-.336	-.336	0	%100
14	M27	Z	.582	.582	0	%100
15	M28	X	-.336	-.336	0	%100
16	M28	Z	.582	.582	0	%100
17	M29	X	-.336	-.336	0	%100
18	M29	Z	.582	.582	0	%100
19	M30	X	-1.345	-1.345	0	%100
20	M30	Z	2.33	2.33	0	%100
21	M31	X	-1.345	-1.345	0	%100
22	M31	Z	2.33	2.33	0	%100
23	M32	X	-1.345	-1.345	0	%100
24	M32	Z	2.33	2.33	0	%100
25	M33	X	-1.345	-1.345	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
26	M33	Z	2.33	2.33	0	%100
27	M1	X	-1.747	-1.747	0	%100
28	M1	Z	3.025	3.025	0	%100
29	M8	X	-1.747	-1.747	0	%100
30	M8	Z	3.025	3.025	0	%100
31	M15	X	0	0	0	%100
32	M15	Z	0	0	0	%100
33	M19	X	-.57	-.57	0	%100
34	M19	Z	.987	.987	0	%100
35	M20	X	-2.279	-2.279	0	%100
36	M20	Z	3.947	3.947	0	%100
37	MP1B	X	-1.682	-1.682	0	%100
38	MP1B	Z	2.914	2.914	0	%100
39	MP2B	X	-1.682	-1.682	0	%100
40	MP2B	Z	2.914	2.914	0	%100
41	MP3B	X	-1.682	-1.682	0	%100
42	MP3B	Z	2.914	2.914	0	%100
43	MP4B	X	-1.682	-1.682	0	%100
44	MP4B	Z	2.914	2.914	0	%100
45	MP5B	X	-1.682	-1.682	0	%100
46	MP5B	Z	2.914	2.914	0	%100
47	MP1A	X	-1.682	-1.682	0	%100
48	MP1A	Z	2.914	2.914	0	%100
49	MP2A	X	-1.682	-1.682	0	%100
50	MP2A	Z	2.914	2.914	0	%100
51	MP3A	X	-1.682	-1.682	0	%100
52	MP3A	Z	2.914	2.914	0	%100
53	MP4A	X	-1.682	-1.682	0	%100
54	MP4A	Z	2.914	2.914	0	%100
55	MP5A	X	-1.682	-1.682	0	%100
56	MP5A	Z	2.914	2.914	0	%100
57	MP1C	X	-1.682	-1.682	0	%100
58	MP1C	Z	2.914	2.914	0	%100
59	MP2C	X	-1.682	-1.682	0	%100
60	MP2C	Z	2.914	2.914	0	%100
61	MP3C	X	-1.682	-1.682	0	%100
62	MP3C	Z	2.914	2.914	0	%100
63	MP4C	X	-1.682	-1.682	0	%100
64	MP4C	Z	2.914	2.914	0	%100
65	MP5C	X	-1.682	-1.682	0	%100
66	MP5C	Z	2.914	2.914	0	%100
67	M49	X	-1.96	-1.96	0	%100
68	M49	Z	3.394	3.394	0	%100
69	M50A	X	-1.96	-1.96	0	%100
70	M50A	Z	3.394	3.394	0	%100
71	M51	X	-2.346	-2.346	0	%100
72	M51	Z	4.064	4.064	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M16	X	-2.961	-2.961	0	%100
2	M16	Z	1.709	1.709	0	%100
3	M22	X	-1.747	-1.747	0	%100
4	M22	Z	1.009	1.009	0	%100
5	M23	X	-1.747	-1.747	0	%100
6	M23	Z	1.009	1.009	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
7	M24	X	-1.747	-1.747	0	%100
8	M24	Z	1.009	1.009	0	%100
9	M25	X	-1.747	-1.747	0	%100
10	M25	Z	1.009	1.009	0	%100
11	M26	X	0	0	0	%100
12	M26	Z	0	0	0	%100
13	M27	X	0	0	0	%100
14	M27	Z	0	0	0	%100
15	M28	X	0	0	0	%100
16	M28	Z	0	0	0	%100
17	M29	X	0	0	0	%100
18	M29	Z	0	0	0	%100
19	M30	X	-1.747	-1.747	0	%100
20	M30	Z	1.009	1.009	0	%100
21	M31	X	-1.747	-1.747	0	%100
22	M31	Z	1.009	1.009	0	%100
23	M32	X	-1.747	-1.747	0	%100
24	M32	Z	1.009	1.009	0	%100
25	M33	X	-1.747	-1.747	0	%100
26	M33	Z	1.009	1.009	0	%100
27	M1	X	-1.008	-1.008	0	%100
28	M1	Z	.582	.582	0	%100
29	M8	X	-4.033	-4.033	0	%100
30	M8	Z	2.329	2.329	0	%100
31	M15	X	-1.008	-1.008	0	%100
32	M15	Z	.582	.582	0	%100
33	M19	X	0	0	0	%100
34	M19	Z	0	0	0	%100
35	M20	X	-2.961	-2.961	0	%100
36	M20	Z	1.709	1.709	0	%100
37	MP1B	X	-2.914	-2.914	0	%100
38	MP1B	Z	1.682	1.682	0	%100
39	MP2B	X	-2.914	-2.914	0	%100
40	MP2B	Z	1.682	1.682	0	%100
41	MP3B	X	-2.914	-2.914	0	%100
42	MP3B	Z	1.682	1.682	0	%100
43	MP4B	X	-2.914	-2.914	0	%100
44	MP4B	Z	1.682	1.682	0	%100
45	MP5B	X	-2.914	-2.914	0	%100
46	MP5B	Z	1.682	1.682	0	%100
47	MP1A	X	-2.914	-2.914	0	%100
48	MP1A	Z	1.682	1.682	0	%100
49	MP2A	X	-2.914	-2.914	0	%100
50	MP2A	Z	1.682	1.682	0	%100
51	MP3A	X	-2.914	-2.914	0	%100
52	MP3A	Z	1.682	1.682	0	%100
53	MP4A	X	-2.914	-2.914	0	%100
54	MP4A	Z	1.682	1.682	0	%100
55	MP5A	X	-2.914	-2.914	0	%100
56	MP5A	Z	1.682	1.682	0	%100
57	MP1C	X	-2.914	-2.914	0	%100
58	MP1C	Z	1.682	1.682	0	%100
59	MP2C	X	-2.914	-2.914	0	%100
60	MP2C	Z	1.682	1.682	0	%100
61	MP3C	X	-2.914	-2.914	0	%100
62	MP3C	Z	1.682	1.682	0	%100
63	MP4C	X	-2.914	-2.914	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
64	MP4C	Z	1.682	1.682	0	%100
65	MP5C	X	-2.914	-2.914	0	%100
66	MP5C	Z	1.682	1.682	0	%100
67	M49	X	-3.841	-3.841	0	%100
68	M49	Z	2.217	2.217	0	%100
69	M50A	X	-3.171	-3.171	0	%100
70	M50A	Z	1.831	1.831	0	%100
71	M51	X	-3.841	-3.841	0	%100
72	M51	Z	2.217	2.217	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M16	X	-4.558	-4.558	0	%100
2	M16	Z	0	0	0	%100
3	M22	X	-2.69	-2.69	0	%100
4	M22	Z	0	0	0	%100
5	M23	X	-2.69	-2.69	0	%100
6	M23	Z	0	0	0	%100
7	M24	X	-2.69	-2.69	0	%100
8	M24	Z	0	0	0	%100
9	M25	X	-2.69	-2.69	0	%100
10	M25	Z	0	0	0	%100
11	M26	X	-.673	-.673	0	%100
12	M26	Z	0	0	0	%100
13	M27	X	-.673	-.673	0	%100
14	M27	Z	0	0	0	%100
15	M28	X	-.673	-.673	0	%100
16	M28	Z	0	0	0	%100
17	M29	X	-.673	-.673	0	%100
18	M29	Z	0	0	0	%100
19	M30	X	-.673	-.673	0	%100
20	M30	Z	0	0	0	%100
21	M31	X	-.673	-.673	0	%100
22	M31	Z	0	0	0	%100
23	M32	X	-.673	-.673	0	%100
24	M32	Z	0	0	0	%100
25	M33	X	-.673	-.673	0	%100
26	M33	Z	0	0	0	%100
27	M1	X	0	0	0	%100
28	M1	Z	0	0	0	%100
29	M8	X	-3.493	-3.493	0	%100
30	M8	Z	0	0	0	%100
31	M15	X	-3.493	-3.493	0	%100
32	M15	Z	0	0	0	%100
33	M19	X	-1.14	-1.14	0	%100
34	M19	Z	0	0	0	%100
35	M20	X	-1.14	-1.14	0	%100
36	M20	Z	0	0	0	%100
37	MP1B	X	-3.364	-3.364	0	%100
38	MP1B	Z	0	0	0	%100
39	MP2B	X	-3.364	-3.364	0	%100
40	MP2B	Z	0	0	0	%100
41	MP3B	X	-3.364	-3.364	0	%100
42	MP3B	Z	0	0	0	%100
43	MP4B	X	-3.364	-3.364	0	%100
44	MP4B	Z	0	0	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
45	MP5B	X	-3.364	-3.364	0 %100
46	MP5B	Z	0	0	0 %100
47	MP1A	X	-3.364	-3.364	0 %100
48	MP1A	Z	0	0	0 %100
49	MP2A	X	-3.364	-3.364	0 %100
50	MP2A	Z	0	0	0 %100
51	MP3A	X	-3.364	-3.364	0 %100
52	MP3A	Z	0	0	0 %100
53	MP4A	X	-3.364	-3.364	0 %100
54	MP4A	Z	0	0	0 %100
55	MP5A	X	-3.364	-3.364	0 %100
56	MP5A	Z	0	0	0 %100
57	MP1C	X	-3.364	-3.364	0 %100
58	MP1C	Z	0	0	0 %100
59	MP2C	X	-3.364	-3.364	0 %100
60	MP2C	Z	0	0	0 %100
61	MP3C	X	-3.364	-3.364	0 %100
62	MP3C	Z	0	0	0 %100
63	MP4C	X	-3.364	-3.364	0 %100
64	MP4C	Z	0	0	0 %100
65	MP5C	X	-3.364	-3.364	0 %100
66	MP5C	Z	0	0	0 %100
67	M49	X	-4.692	-4.692	0 %100
68	M49	Z	0	0	0 %100
69	M50A	X	-3.919	-3.919	0 %100
70	M50A	Z	0	0	0 %100
71	M51	X	-3.919	-3.919	0 %100
72	M51	Z	0	0	0 %100

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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M16	X	-2.961	-2.961	0 %100
2	M16	Z	-1.709	-1.709	0 %100
3	M22	X	-1.747	-1.747	0 %100
4	M22	Z	-1.009	-1.009	0 %100
5	M23	X	-1.747	-1.747	0 %100
6	M23	Z	-1.009	-1.009	0 %100
7	M24	X	-1.747	-1.747	0 %100
8	M24	Z	-1.009	-1.009	0 %100
9	M25	X	-1.747	-1.747	0 %100
10	M25	Z	-1.009	-1.009	0 %100
11	M26	X	-1.747	-1.747	0 %100
12	M26	Z	-1.009	-1.009	0 %100
13	M27	X	-1.747	-1.747	0 %100
14	M27	Z	-1.009	-1.009	0 %100
15	M28	X	-1.747	-1.747	0 %100
16	M28	Z	-1.009	-1.009	0 %100
17	M29	X	-1.747	-1.747	0 %100
18	M29	Z	-1.009	-1.009	0 %100
19	M30	X	0	0	0 %100
20	M30	Z	0	0	0 %100
21	M31	X	0	0	0 %100
22	M31	Z	0	0	0 %100
23	M32	X	0	0	0 %100
24	M32	Z	0	0	0 %100
25	M33	X	0	0	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
26	M33	Z	0	0	0	%100
27	M1	X	-1.008	-1.008	0	%100
28	M1	Z	-.582	-.582	0	%100
29	M8	X	-1.008	-1.008	0	%100
30	M8	Z	-.582	-.582	0	%100
31	M15	X	-4.033	-4.033	0	%100
32	M15	Z	-2.329	-2.329	0	%100
33	M19	X	-2.961	-2.961	0	%100
34	M19	Z	-1.709	-1.709	0	%100
35	M20	X	0	0	0	%100
36	M20	Z	0	0	0	%100
37	MP1B	X	-2.914	-2.914	0	%100
38	MP1B	Z	-1.682	-1.682	0	%100
39	MP2B	X	-2.914	-2.914	0	%100
40	MP2B	Z	-1.682	-1.682	0	%100
41	MP3B	X	-2.914	-2.914	0	%100
42	MP3B	Z	-1.682	-1.682	0	%100
43	MP4B	X	-2.914	-2.914	0	%100
44	MP4B	Z	-1.682	-1.682	0	%100
45	MP5B	X	-2.914	-2.914	0	%100
46	MP5B	Z	-1.682	-1.682	0	%100
47	MP1A	X	-2.914	-2.914	0	%100
48	MP1A	Z	-1.682	-1.682	0	%100
49	MP2A	X	-2.914	-2.914	0	%100
50	MP2A	Z	-1.682	-1.682	0	%100
51	MP3A	X	-2.914	-2.914	0	%100
52	MP3A	Z	-1.682	-1.682	0	%100
53	MP4A	X	-2.914	-2.914	0	%100
54	MP4A	Z	-1.682	-1.682	0	%100
55	MP5A	X	-2.914	-2.914	0	%100
56	MP5A	Z	-1.682	-1.682	0	%100
57	MP1C	X	-2.914	-2.914	0	%100
58	MP1C	Z	-1.682	-1.682	0	%100
59	MP2C	X	-2.914	-2.914	0	%100
60	MP2C	Z	-1.682	-1.682	0	%100
61	MP3C	X	-2.914	-2.914	0	%100
62	MP3C	Z	-1.682	-1.682	0	%100
63	MP4C	X	-2.914	-2.914	0	%100
64	MP4C	Z	-1.682	-1.682	0	%100
65	MP5C	X	-2.914	-2.914	0	%100
66	MP5C	Z	-1.682	-1.682	0	%100
67	M49	X	-3.841	-3.841	0	%100
68	M49	Z	-2.217	-2.217	0	%100
69	M50A	X	-3.841	-3.841	0	%100
70	M50A	Z	-2.217	-2.217	0	%100
71	M51	X	-3.171	-3.171	0	%100
72	M51	Z	-1.831	-1.831	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M16	X	-.57	-.57	0	%100
2	M16	Z	-.987	-.987	0	%100
3	M22	X	-.336	-.336	0	%100
4	M22	Z	-.582	-.582	0	%100
5	M23	X	-.336	-.336	0	%100
6	M23	Z	-.582	-.582	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
7	M24	X	-.336	-.336	0 %100
8	M24	Z	-.582	-.582	0 %100
9	M25	X	-.336	-.336	0 %100
10	M25	Z	-.582	-.582	0 %100
11	M26	X	-1.345	-1.345	0 %100
12	M26	Z	-2.33	-2.33	0 %100
13	M27	X	-1.345	-1.345	0 %100
14	M27	Z	-2.33	-2.33	0 %100
15	M28	X	-1.345	-1.345	0 %100
16	M28	Z	-2.33	-2.33	0 %100
17	M29	X	-1.345	-1.345	0 %100
18	M29	Z	-2.33	-2.33	0 %100
19	M30	X	-.336	-.336	0 %100
20	M30	Z	-.582	-.582	0 %100
21	M31	X	-.336	-.336	0 %100
22	M31	Z	-.582	-.582	0 %100
23	M32	X	-.336	-.336	0 %100
24	M32	Z	-.582	-.582	0 %100
25	M33	X	-.336	-.336	0 %100
26	M33	Z	-.582	-.582	0 %100
27	M1	X	-1.747	-1.747	0 %100
28	M1	Z	-3.025	-3.025	0 %100
29	M8	X	0	0	0 %100
30	M8	Z	0	0	0 %100
31	M15	X	-1.747	-1.747	0 %100
32	M15	Z	-3.025	-3.025	0 %100
33	M19	X	-2.279	-2.279	0 %100
34	M19	Z	-3.947	-3.947	0 %100
35	M20	X	-.57	-.57	0 %100
36	M20	Z	-.987	-.987	0 %100
37	MP1B	X	-1.682	-1.682	0 %100
38	MP1B	Z	-2.914	-2.914	0 %100
39	MP2B	X	-1.682	-1.682	0 %100
40	MP2B	Z	-2.914	-2.914	0 %100
41	MP3B	X	-1.682	-1.682	0 %100
42	MP3B	Z	-2.914	-2.914	0 %100
43	MP4B	X	-1.682	-1.682	0 %100
44	MP4B	Z	-2.914	-2.914	0 %100
45	MP5B	X	-1.682	-1.682	0 %100
46	MP5B	Z	-2.914	-2.914	0 %100
47	MP1A	X	-1.682	-1.682	0 %100
48	MP1A	Z	-2.914	-2.914	0 %100
49	MP2A	X	-1.682	-1.682	0 %100
50	MP2A	Z	-2.914	-2.914	0 %100
51	MP3A	X	-1.682	-1.682	0 %100
52	MP3A	Z	-2.914	-2.914	0 %100
53	MP4A	X	-1.682	-1.682	0 %100
54	MP4A	Z	-2.914	-2.914	0 %100
55	MP5A	X	-1.682	-1.682	0 %100
56	MP5A	Z	-2.914	-2.914	0 %100
57	MP1C	X	-1.682	-1.682	0 %100
58	MP1C	Z	-2.914	-2.914	0 %100
59	MP2C	X	-1.682	-1.682	0 %100
60	MP2C	Z	-2.914	-2.914	0 %100
61	MP3C	X	-1.682	-1.682	0 %100
62	MP3C	Z	-2.914	-2.914	0 %100
63	MP4C	X	-1.682	-1.682	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
64	MP4C	Z	-2.914	-2.914	0	%100
65	MP5C	X	-1.682	-1.682	0	%100
66	MP5C	Z	-2.914	-2.914	0	%100
67	M49	X	-1.96	-1.96	0	%100
68	M49	Z	-3.394	-3.394	0	%100
69	M50A	X	-2.346	-2.346	0	%100
70	M50A	Z	-4.064	-4.064	0	%100
71	M51	X	-1.96	-1.96	0	%100
72	M51	Z	-3.394	-3.394	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M16	X	0	0	0	%100
2	M16	Z	0	0	0	%100
3	M22	X	0	0	0	%100
4	M22	Z	0	0	0	%100
5	M23	X	0	0	0	%100
6	M23	Z	0	0	0	%100
7	M24	X	0	0	0	%100
8	M24	Z	0	0	0	%100
9	M25	X	0	0	0	%100
10	M25	Z	0	0	0	%100
11	M26	X	0	0	0	%100
12	M26	Z	-0.443	-0.443	0	%100
13	M27	X	0	0	0	%100
14	M27	Z	-0.443	-0.443	0	%100
15	M28	X	0	0	0	%100
16	M28	Z	-0.443	-0.443	0	%100
17	M29	X	0	0	0	%100
18	M29	Z	-0.443	-0.443	0	%100
19	M30	X	0	0	0	%100
20	M30	Z	-0.443	-0.443	0	%100
21	M31	X	0	0	0	%100
22	M31	Z	-0.443	-0.443	0	%100
23	M32	X	0	0	0	%100
24	M32	Z	-0.443	-0.443	0	%100
25	M33	X	0	0	0	%100
26	M33	Z	-0.443	-0.443	0	%100
27	M1	X	0	0	0	%100
28	M1	Z	-1.083	-1.083	0	%100
29	M8	X	0	0	0	%100
30	M8	Z	-0.271	-0.271	0	%100
31	M15	X	0	0	0	%100
32	M15	Z	-0.271	-0.271	0	%100
33	M19	X	0	0	0	%100
34	M19	Z	-0.785	-0.785	0	%100
35	M20	X	0	0	0	%100
36	M20	Z	-0.785	-0.785	0	%100
37	MP1B	X	0	0	0	%100
38	MP1B	Z	-0.617	-0.617	0	%100
39	MP2B	X	0	0	0	%100
40	MP2B	Z	-0.617	-0.617	0	%100
41	MP3B	X	0	0	0	%100
42	MP3B	Z	-0.617	-0.617	0	%100
43	MP4B	X	0	0	0	%100
44	MP4B	Z	-0.617	-0.617	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
45	MP5B	X	0	0	0	%100
46	MP5B	Z	-.617	-.617	0	%100
47	MP1A	X	0	0	0	%100
48	MP1A	Z	-.617	-.617	0	%100
49	MP2A	X	0	0	0	%100
50	MP2A	Z	-.617	-.617	0	%100
51	MP3A	X	0	0	0	%100
52	MP3A	Z	-.617	-.617	0	%100
53	MP4A	X	0	0	0	%100
54	MP4A	Z	-.617	-.617	0	%100
55	MP5A	X	0	0	0	%100
56	MP5A	Z	-.617	-.617	0	%100
57	MP1C	X	0	0	0	%100
58	MP1C	Z	-.617	-.617	0	%100
59	MP2C	X	0	0	0	%100
60	MP2C	Z	-.617	-.617	0	%100
61	MP3C	X	0	0	0	%100
62	MP3C	Z	-.617	-.617	0	%100
63	MP4C	X	0	0	0	%100
64	MP4C	Z	-.617	-.617	0	%100
65	MP5C	X	0	0	0	%100
66	MP5C	Z	-.617	-.617	0	%100
67	M49	X	0	0	0	%100
68	M49	Z	-1.036	-1.036	0	%100
69	M50A	X	0	0	0	%100
70	M50A	Z	-1.103	-1.103	0	%100
71	M51	X	0	0	0	%100
72	M51	Z	-1.103	-1.103	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M16	X	.131	.131	0	%100
2	M16	Z	-.227	-.227	0	%100
3	M22	X	.074	.074	0	%100
4	M22	Z	-.128	-.128	0	%100
5	M23	X	.074	.074	0	%100
6	M23	Z	-.128	-.128	0	%100
7	M24	X	.074	.074	0	%100
8	M24	Z	-.128	-.128	0	%100
9	M25	X	.074	.074	0	%100
10	M25	Z	-.128	-.128	0	%100
11	M26	X	.074	.074	0	%100
12	M26	Z	-.128	-.128	0	%100
13	M27	X	.074	.074	0	%100
14	M27	Z	-.128	-.128	0	%100
15	M28	X	.074	.074	0	%100
16	M28	Z	-.128	-.128	0	%100
17	M29	X	.074	.074	0	%100
18	M29	Z	-.128	-.128	0	%100
19	M30	X	.295	.295	0	%100
20	M30	Z	-.511	-.511	0	%100
21	M31	X	.295	.295	0	%100
22	M31	Z	-.511	-.511	0	%100
23	M32	X	.295	.295	0	%100
24	M32	Z	-.511	-.511	0	%100
25	M33	X	.295	.295	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
26	M33	Z	-.511	-.511	0	%100
27	M1	X	.406	.406	0	%100
28	M1	Z	-.703	-.703	0	%100
29	M8	X	.406	.406	0	%100
30	M8	Z	-.703	-.703	0	%100
31	M15	X	0	0	0	%100
32	M15	Z	0	0	0	%100
33	M19	X	.131	.131	0	%100
34	M19	Z	-.227	-.227	0	%100
35	M20	X	.523	.523	0	%100
36	M20	Z	-.907	-.907	0	%100
37	MP1B	X	.309	.309	0	%100
38	MP1B	Z	-.534	-.534	0	%100
39	MP2B	X	.309	.309	0	%100
40	MP2B	Z	-.534	-.534	0	%100
41	MP3B	X	.309	.309	0	%100
42	MP3B	Z	-.534	-.534	0	%100
43	MP4B	X	.309	.309	0	%100
44	MP4B	Z	-.534	-.534	0	%100
45	MP5B	X	.309	.309	0	%100
46	MP5B	Z	-.534	-.534	0	%100
47	MP1A	X	.309	.309	0	%100
48	MP1A	Z	-.534	-.534	0	%100
49	MP2A	X	.309	.309	0	%100
50	MP2A	Z	-.534	-.534	0	%100
51	MP3A	X	.309	.309	0	%100
52	MP3A	Z	-.534	-.534	0	%100
53	MP4A	X	.309	.309	0	%100
54	MP4A	Z	-.534	-.534	0	%100
55	MP5A	X	.309	.309	0	%100
56	MP5A	Z	-.534	-.534	0	%100
57	MP1C	X	.309	.309	0	%100
58	MP1C	Z	-.534	-.534	0	%100
59	MP2C	X	.309	.309	0	%100
60	MP2C	Z	-.534	-.534	0	%100
61	MP3C	X	.309	.309	0	%100
62	MP3C	Z	-.534	-.534	0	%100
63	MP4C	X	.309	.309	0	%100
64	MP4C	Z	-.534	-.534	0	%100
65	MP5C	X	.309	.309	0	%100
66	MP5C	Z	-.534	-.534	0	%100
67	M49	X	.529	.529	0	%100
68	M49	Z	-.917	-.917	0	%100
69	M50A	X	.529	.529	0	%100
70	M50A	Z	-.917	-.917	0	%100
71	M51	X	.563	.563	0	%100
72	M51	Z	-.974	-.974	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M16	X	.68	.68	0	%100
2	M16	Z	-.393	-.393	0	%100
3	M22	X	.383	.383	0	%100
4	M22	Z	-.221	-.221	0	%100
5	M23	X	.383	.383	0	%100
6	M23	Z	-.221	-.221	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
7	M24	X	.383	.383	0	%100
8	M24	Z	-.221	-.221	0	%100
9	M25	X	.383	.383	0	%100
10	M25	Z	-.221	-.221	0	%100
11	M26	X	0	0	0	%100
12	M26	Z	0	0	0	%100
13	M27	X	0	0	0	%100
14	M27	Z	0	0	0	%100
15	M28	X	0	0	0	%100
16	M28	Z	0	0	0	%100
17	M29	X	0	0	0	%100
18	M29	Z	0	0	0	%100
19	M30	X	.383	.383	0	%100
20	M30	Z	-.221	-.221	0	%100
21	M31	X	.383	.383	0	%100
22	M31	Z	-.221	-.221	0	%100
23	M32	X	.383	.383	0	%100
24	M32	Z	-.221	-.221	0	%100
25	M33	X	.383	.383	0	%100
26	M33	Z	-.221	-.221	0	%100
27	M1	X	.234	.234	0	%100
28	M1	Z	-.135	-.135	0	%100
29	M8	X	.938	.938	0	%100
30	M8	Z	-.541	-.541	0	%100
31	M15	X	.234	.234	0	%100
32	M15	Z	-.135	-.135	0	%100
33	M19	X	0	0	0	%100
34	M19	Z	0	0	0	%100
35	M20	X	.68	.68	0	%100
36	M20	Z	-.393	-.393	0	%100
37	MP1B	X	.534	.534	0	%100
38	MP1B	Z	-.309	-.309	0	%100
39	MP2B	X	.534	.534	0	%100
40	MP2B	Z	-.309	-.309	0	%100
41	MP3B	X	.534	.534	0	%100
42	MP3B	Z	-.309	-.309	0	%100
43	MP4B	X	.534	.534	0	%100
44	MP4B	Z	-.309	-.309	0	%100
45	MP5B	X	.534	.534	0	%100
46	MP5B	Z	-.309	-.309	0	%100
47	MP1A	X	.534	.534	0	%100
48	MP1A	Z	-.309	-.309	0	%100
49	MP2A	X	.534	.534	0	%100
50	MP2A	Z	-.309	-.309	0	%100
51	MP3A	X	.534	.534	0	%100
52	MP3A	Z	-.309	-.309	0	%100
53	MP4A	X	.534	.534	0	%100
54	MP4A	Z	-.309	-.309	0	%100
55	MP5A	X	.534	.534	0	%100
56	MP5A	Z	-.309	-.309	0	%100
57	MP1C	X	.534	.534	0	%100
58	MP1C	Z	-.309	-.309	0	%100
59	MP2C	X	.534	.534	0	%100
60	MP2C	Z	-.309	-.309	0	%100
61	MP3C	X	.534	.534	0	%100
62	MP3C	Z	-.309	-.309	0	%100
63	MP4C	X	.534	.534	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
64	MP4C	Z	-.309	-.309	0	%100
65	MP5C	X	.534	.534	0	%100
66	MP5C	Z	-.309	-.309	0	%100
67	M49	X	.955	.955	0	%100
68	M49	Z	-.551	-.551	0	%100
69	M50A	X	.897	.897	0	%100
70	M50A	Z	-.518	-.518	0	%100
71	M51	X	.955	.955	0	%100
72	M51	Z	-.551	-.551	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M16	X	1.047	1.047	0	%100
2	M16	Z	0	0	0	%100
3	M22	X	.59	.59	0	%100
4	M22	Z	0	0	0	%100
5	M23	X	.59	.59	0	%100
6	M23	Z	0	0	0	%100
7	M24	X	.59	.59	0	%100
8	M24	Z	0	0	0	%100
9	M25	X	.59	.59	0	%100
10	M25	Z	0	0	0	%100
11	M26	X	.148	.148	0	%100
12	M26	Z	0	0	0	%100
13	M27	X	.148	.148	0	%100
14	M27	Z	0	0	0	%100
15	M28	X	.148	.148	0	%100
16	M28	Z	0	0	0	%100
17	M29	X	.148	.148	0	%100
18	M29	Z	0	0	0	%100
19	M30	X	.148	.148	0	%100
20	M30	Z	0	0	0	%100
21	M31	X	.148	.148	0	%100
22	M31	Z	0	0	0	%100
23	M32	X	.148	.148	0	%100
24	M32	Z	0	0	0	%100
25	M33	X	.148	.148	0	%100
26	M33	Z	0	0	0	%100
27	M1	X	0	0	0	%100
28	M1	Z	0	0	0	%100
29	M8	X	.812	.812	0	%100
30	M8	Z	0	0	0	%100
31	M15	X	.812	.812	0	%100
32	M15	Z	0	0	0	%100
33	M19	X	.262	.262	0	%100
34	M19	Z	0	0	0	%100
35	M20	X	.262	.262	0	%100
36	M20	Z	0	0	0	%100
37	MP1B	X	.617	.617	0	%100
38	MP1B	Z	0	0	0	%100
39	MP2B	X	.617	.617	0	%100
40	MP2B	Z	0	0	0	%100
41	MP3B	X	.617	.617	0	%100
42	MP3B	Z	0	0	0	%100
43	MP4B	X	.617	.617	0	%100
44	MP4B	Z	0	0	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
45	MP5B	X	.617	.617	0 %100
46	MP5B	Z	0	0	0 %100
47	MP1A	X	.617	.617	0 %100
48	MP1A	Z	0	0	0 %100
49	MP2A	X	.617	.617	0 %100
50	MP2A	Z	0	0	0 %100
51	MP3A	X	.617	.617	0 %100
52	MP3A	Z	0	0	0 %100
53	MP4A	X	.617	.617	0 %100
54	MP4A	Z	0	0	0 %100
55	MP5A	X	.617	.617	0 %100
56	MP5A	Z	0	0	0 %100
57	MP1C	X	.617	.617	0 %100
58	MP1C	Z	0	0	0 %100
59	MP2C	X	.617	.617	0 %100
60	MP2C	Z	0	0	0 %100
61	MP3C	X	.617	.617	0 %100
62	MP3C	Z	0	0	0 %100
63	MP4C	X	.617	.617	0 %100
64	MP4C	Z	0	0	0 %100
65	MP5C	X	.617	.617	0 %100
66	MP5C	Z	0	0	0 %100
67	M49	X	1.125	1.125	0 %100
68	M49	Z	0	0	0 %100
69	M50A	X	1.058	1.058	0 %100
70	M50A	Z	0	0	0 %100
71	M51	X	1.058	1.058	0 %100
72	M51	Z	0	0	0 %100

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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M16	X	.68	.68	0 %100
2	M16	Z	.393	.393	0 %100
3	M22	X	.383	.383	0 %100
4	M22	Z	.221	.221	0 %100
5	M23	X	.383	.383	0 %100
6	M23	Z	.221	.221	0 %100
7	M24	X	.383	.383	0 %100
8	M24	Z	.221	.221	0 %100
9	M25	X	.383	.383	0 %100
10	M25	Z	.221	.221	0 %100
11	M26	X	.383	.383	0 %100
12	M26	Z	.221	.221	0 %100
13	M27	X	.383	.383	0 %100
14	M27	Z	.221	.221	0 %100
15	M28	X	.383	.383	0 %100
16	M28	Z	.221	.221	0 %100
17	M29	X	.383	.383	0 %100
18	M29	Z	.221	.221	0 %100
19	M30	X	0	0	0 %100
20	M30	Z	0	0	0 %100
21	M31	X	0	0	0 %100
22	M31	Z	0	0	0 %100
23	M32	X	0	0	0 %100
24	M32	Z	0	0	0 %100
25	M33	X	0	0	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
26	M33	Z	0	0	0	%100
27	M1	X	.234	.234	0	%100
28	M1	Z	.135	.135	0	%100
29	M8	X	.234	.234	0	%100
30	M8	Z	.135	.135	0	%100
31	M15	X	.938	.938	0	%100
32	M15	Z	.541	.541	0	%100
33	M19	X	.68	.68	0	%100
34	M19	Z	.393	.393	0	%100
35	M20	X	0	0	0	%100
36	M20	Z	0	0	0	%100
37	MP1B	X	.534	.534	0	%100
38	MP1B	Z	.309	.309	0	%100
39	MP2B	X	.534	.534	0	%100
40	MP2B	Z	.309	.309	0	%100
41	MP3B	X	.534	.534	0	%100
42	MP3B	Z	.309	.309	0	%100
43	MP4B	X	.534	.534	0	%100
44	MP4B	Z	.309	.309	0	%100
45	MP5B	X	.534	.534	0	%100
46	MP5B	Z	.309	.309	0	%100
47	MP1A	X	.534	.534	0	%100
48	MP1A	Z	.309	.309	0	%100
49	MP2A	X	.534	.534	0	%100
50	MP2A	Z	.309	.309	0	%100
51	MP3A	X	.534	.534	0	%100
52	MP3A	Z	.309	.309	0	%100
53	MP4A	X	.534	.534	0	%100
54	MP4A	Z	.309	.309	0	%100
55	MP5A	X	.534	.534	0	%100
56	MP5A	Z	.309	.309	0	%100
57	MP1C	X	.534	.534	0	%100
58	MP1C	Z	.309	.309	0	%100
59	MP2C	X	.534	.534	0	%100
60	MP2C	Z	.309	.309	0	%100
61	MP3C	X	.534	.534	0	%100
62	MP3C	Z	.309	.309	0	%100
63	MP4C	X	.534	.534	0	%100
64	MP4C	Z	.309	.309	0	%100
65	MP5C	X	.534	.534	0	%100
66	MP5C	Z	.309	.309	0	%100
67	M49	X	.955	.955	0	%100
68	M49	Z	.551	.551	0	%100
69	M50A	X	.955	.955	0	%100
70	M50A	Z	.551	.551	0	%100
71	M51	X	.897	.897	0	%100
72	M51	Z	.518	.518	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M16	X	.131	.131	0	%100
2	M16	Z	.227	.227	0	%100
3	M22	X	.074	.074	0	%100
4	M22	Z	.128	.128	0	%100
5	M23	X	.074	.074	0	%100
6	M23	Z	.128	.128	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
7	M24	X	.074	.074	0	%100
8	M24	Z	.128	.128	0	%100
9	M25	X	.074	.074	0	%100
10	M25	Z	.128	.128	0	%100
11	M26	X	.295	.295	0	%100
12	M26	Z	.511	.511	0	%100
13	M27	X	.295	.295	0	%100
14	M27	Z	.511	.511	0	%100
15	M28	X	.295	.295	0	%100
16	M28	Z	.511	.511	0	%100
17	M29	X	.295	.295	0	%100
18	M29	Z	.511	.511	0	%100
19	M30	X	.074	.074	0	%100
20	M30	Z	.128	.128	0	%100
21	M31	X	.074	.074	0	%100
22	M31	Z	.128	.128	0	%100
23	M32	X	.074	.074	0	%100
24	M32	Z	.128	.128	0	%100
25	M33	X	.074	.074	0	%100
26	M33	Z	.128	.128	0	%100
27	M1	X	.406	.406	0	%100
28	M1	Z	.703	.703	0	%100
29	M8	X	0	0	0	%100
30	M8	Z	0	0	0	%100
31	M15	X	.406	.406	0	%100
32	M15	Z	.703	.703	0	%100
33	M19	X	.523	.523	0	%100
34	M19	Z	.907	.907	0	%100
35	M20	X	.131	.131	0	%100
36	M20	Z	.227	.227	0	%100
37	MP1B	X	.309	.309	0	%100
38	MP1B	Z	.534	.534	0	%100
39	MP2B	X	.309	.309	0	%100
40	MP2B	Z	.534	.534	0	%100
41	MP3B	X	.309	.309	0	%100
42	MP3B	Z	.534	.534	0	%100
43	MP4B	X	.309	.309	0	%100
44	MP4B	Z	.534	.534	0	%100
45	MP5B	X	.309	.309	0	%100
46	MP5B	Z	.534	.534	0	%100
47	MP1A	X	.309	.309	0	%100
48	MP1A	Z	.534	.534	0	%100
49	MP2A	X	.309	.309	0	%100
50	MP2A	Z	.534	.534	0	%100
51	MP3A	X	.309	.309	0	%100
52	MP3A	Z	.534	.534	0	%100
53	MP4A	X	.309	.309	0	%100
54	MP4A	Z	.534	.534	0	%100
55	MP5A	X	.309	.309	0	%100
56	MP5A	Z	.534	.534	0	%100
57	MP1C	X	.309	.309	0	%100
58	MP1C	Z	.534	.534	0	%100
59	MP2C	X	.309	.309	0	%100
60	MP2C	Z	.534	.534	0	%100
61	MP3C	X	.309	.309	0	%100
62	MP3C	Z	.534	.534	0	%100
63	MP4C	X	.309	.309	0	%100



Company : Colliers Engineering & Design
 Designer :
 Job Number :
 Model Name : 5000392762-VZW_MT_LO_H

Aug 7, 2023
 10:53 AM
 Checked By: _____

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
64	MP4C	Z	.534	.534	0	%100
65	MP5C	X	.309	.309	0	%100
66	MP5C	Z	.534	.534	0	%100
67	M49	X	.529	.529	0	%100
68	M49	Z	.917	.917	0	%100
69	M50A	X	.563	.563	0	%100
70	M50A	Z	.974	.974	0	%100
71	M51	X	.529	.529	0	%100
72	M51	Z	.917	.917	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M16	X	0	0	0	%100
2	M16	Z	0	0	0	%100
3	M22	X	0	0	0	%100
4	M22	Z	0	0	0	%100
5	M23	X	0	0	0	%100
6	M23	Z	0	0	0	%100
7	M24	X	0	0	0	%100
8	M24	Z	0	0	0	%100
9	M25	X	0	0	0	%100
10	M25	Z	0	0	0	%100
11	M26	X	0	0	0	%100
12	M26	Z	.443	.443	0	%100
13	M27	X	0	0	0	%100
14	M27	Z	.443	.443	0	%100
15	M28	X	0	0	0	%100
16	M28	Z	.443	.443	0	%100
17	M29	X	0	0	0	%100
18	M29	Z	.443	.443	0	%100
19	M30	X	0	0	0	%100
20	M30	Z	.443	.443	0	%100
21	M31	X	0	0	0	%100
22	M31	Z	.443	.443	0	%100
23	M32	X	0	0	0	%100
24	M32	Z	.443	.443	0	%100
25	M33	X	0	0	0	%100
26	M33	Z	.443	.443	0	%100
27	M1	X	0	0	0	%100
28	M1	Z	1.083	1.083	0	%100
29	M8	X	0	0	0	%100
30	M8	Z	.271	.271	0	%100
31	M15	X	0	0	0	%100
32	M15	Z	.271	.271	0	%100
33	M19	X	0	0	0	%100
34	M19	Z	.785	.785	0	%100
35	M20	X	0	0	0	%100
36	M20	Z	.785	.785	0	%100
37	MP1B	X	0	0	0	%100
38	MP1B	Z	.617	.617	0	%100
39	MP2B	X	0	0	0	%100
40	MP2B	Z	.617	.617	0	%100
41	MP3B	X	0	0	0	%100
42	MP3B	Z	.617	.617	0	%100
43	MP4B	X	0	0	0	%100
44	MP4B	Z	.617	.617	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
45	MP5B	X	0	0	0	%100
46	MP5B	Z	.617	.617	0	%100
47	MP1A	X	0	0	0	%100
48	MP1A	Z	.617	.617	0	%100
49	MP2A	X	0	0	0	%100
50	MP2A	Z	.617	.617	0	%100
51	MP3A	X	0	0	0	%100
52	MP3A	Z	.617	.617	0	%100
53	MP4A	X	0	0	0	%100
54	MP4A	Z	.617	.617	0	%100
55	MP5A	X	0	0	0	%100
56	MP5A	Z	.617	.617	0	%100
57	MP1C	X	0	0	0	%100
58	MP1C	Z	.617	.617	0	%100
59	MP2C	X	0	0	0	%100
60	MP2C	Z	.617	.617	0	%100
61	MP3C	X	0	0	0	%100
62	MP3C	Z	.617	.617	0	%100
63	MP4C	X	0	0	0	%100
64	MP4C	Z	.617	.617	0	%100
65	MP5C	X	0	0	0	%100
66	MP5C	Z	.617	.617	0	%100
67	M49	X	0	0	0	%100
68	M49	Z	1.036	1.036	0	%100
69	M50A	X	0	0	0	%100
70	M50A	Z	1.103	1.103	0	%100
71	M51	X	0	0	0	%100
72	M51	Z	1.103	1.103	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M16	X	-.131	-.131	0	%100
2	M16	Z	.227	.227	0	%100
3	M22	X	-.074	-.074	0	%100
4	M22	Z	.128	.128	0	%100
5	M23	X	-.074	-.074	0	%100
6	M23	Z	.128	.128	0	%100
7	M24	X	-.074	-.074	0	%100
8	M24	Z	.128	.128	0	%100
9	M25	X	-.074	-.074	0	%100
10	M25	Z	.128	.128	0	%100
11	M26	X	-.074	-.074	0	%100
12	M26	Z	.128	.128	0	%100
13	M27	X	-.074	-.074	0	%100
14	M27	Z	.128	.128	0	%100
15	M28	X	-.074	-.074	0	%100
16	M28	Z	.128	.128	0	%100
17	M29	X	-.074	-.074	0	%100
18	M29	Z	.128	.128	0	%100
19	M30	X	-.295	-.295	0	%100
20	M30	Z	.511	.511	0	%100
21	M31	X	-.295	-.295	0	%100
22	M31	Z	.511	.511	0	%100
23	M32	X	-.295	-.295	0	%100
24	M32	Z	.511	.511	0	%100
25	M33	X	-.295	-.295	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
26	M33	Z	.511	.511	0	%100
27	M1	X	-.406	-.406	0	%100
28	M1	Z	.703	.703	0	%100
29	M8	X	-.406	-.406	0	%100
30	M8	Z	.703	.703	0	%100
31	M15	X	0	0	0	%100
32	M15	Z	0	0	0	%100
33	M19	X	-.131	-.131	0	%100
34	M19	Z	.227	.227	0	%100
35	M20	X	-.523	-.523	0	%100
36	M20	Z	.907	.907	0	%100
37	MP1B	X	-.309	-.309	0	%100
38	MP1B	Z	.534	.534	0	%100
39	MP2B	X	-.309	-.309	0	%100
40	MP2B	Z	.534	.534	0	%100
41	MP3B	X	-.309	-.309	0	%100
42	MP3B	Z	.534	.534	0	%100
43	MP4B	X	-.309	-.309	0	%100
44	MP4B	Z	.534	.534	0	%100
45	MP5B	X	-.309	-.309	0	%100
46	MP5B	Z	.534	.534	0	%100
47	MP1A	X	-.309	-.309	0	%100
48	MP1A	Z	.534	.534	0	%100
49	MP2A	X	-.309	-.309	0	%100
50	MP2A	Z	.534	.534	0	%100
51	MP3A	X	-.309	-.309	0	%100
52	MP3A	Z	.534	.534	0	%100
53	MP4A	X	-.309	-.309	0	%100
54	MP4A	Z	.534	.534	0	%100
55	MP5A	X	-.309	-.309	0	%100
56	MP5A	Z	.534	.534	0	%100
57	MP1C	X	-.309	-.309	0	%100
58	MP1C	Z	.534	.534	0	%100
59	MP2C	X	-.309	-.309	0	%100
60	MP2C	Z	.534	.534	0	%100
61	MP3C	X	-.309	-.309	0	%100
62	MP3C	Z	.534	.534	0	%100
63	MP4C	X	-.309	-.309	0	%100
64	MP4C	Z	.534	.534	0	%100
65	MP5C	X	-.309	-.309	0	%100
66	MP5C	Z	.534	.534	0	%100
67	M49	X	-.529	-.529	0	%100
68	M49	Z	.917	.917	0	%100
69	M50A	X	-.529	-.529	0	%100
70	M50A	Z	.917	.917	0	%100
71	M51	X	-.563	-.563	0	%100
72	M51	Z	.974	.974	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M16	X	-.68	-.68	0	%100
2	M16	Z	.393	.393	0	%100
3	M22	X	-.383	-.383	0	%100
4	M22	Z	.221	.221	0	%100
5	M23	X	-.383	-.383	0	%100
6	M23	Z	.221	.221	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
7	M24	X	-.383	-.383	0	%100
8	M24	Z	.221	.221	0	%100
9	M25	X	-.383	-.383	0	%100
10	M25	Z	.221	.221	0	%100
11	M26	X	0	0	0	%100
12	M26	Z	0	0	0	%100
13	M27	X	0	0	0	%100
14	M27	Z	0	0	0	%100
15	M28	X	0	0	0	%100
16	M28	Z	0	0	0	%100
17	M29	X	0	0	0	%100
18	M29	Z	0	0	0	%100
19	M30	X	-.383	-.383	0	%100
20	M30	Z	.221	.221	0	%100
21	M31	X	-.383	-.383	0	%100
22	M31	Z	.221	.221	0	%100
23	M32	X	-.383	-.383	0	%100
24	M32	Z	.221	.221	0	%100
25	M33	X	-.383	-.383	0	%100
26	M33	Z	.221	.221	0	%100
27	M1	X	-.234	-.234	0	%100
28	M1	Z	.135	.135	0	%100
29	M8	X	-.938	-.938	0	%100
30	M8	Z	.541	.541	0	%100
31	M15	X	-.234	-.234	0	%100
32	M15	Z	.135	.135	0	%100
33	M19	X	0	0	0	%100
34	M19	Z	0	0	0	%100
35	M20	X	-.68	-.68	0	%100
36	M20	Z	.393	.393	0	%100
37	MP1B	X	-.534	-.534	0	%100
38	MP1B	Z	.309	.309	0	%100
39	MP2B	X	-.534	-.534	0	%100
40	MP2B	Z	.309	.309	0	%100
41	MP3B	X	-.534	-.534	0	%100
42	MP3B	Z	.309	.309	0	%100
43	MP4B	X	-.534	-.534	0	%100
44	MP4B	Z	.309	.309	0	%100
45	MP5B	X	-.534	-.534	0	%100
46	MP5B	Z	.309	.309	0	%100
47	MP1A	X	-.534	-.534	0	%100
48	MP1A	Z	.309	.309	0	%100
49	MP2A	X	-.534	-.534	0	%100
50	MP2A	Z	.309	.309	0	%100
51	MP3A	X	-.534	-.534	0	%100
52	MP3A	Z	.309	.309	0	%100
53	MP4A	X	-.534	-.534	0	%100
54	MP4A	Z	.309	.309	0	%100
55	MP5A	X	-.534	-.534	0	%100
56	MP5A	Z	.309	.309	0	%100
57	MP1C	X	-.534	-.534	0	%100
58	MP1C	Z	.309	.309	0	%100
59	MP2C	X	-.534	-.534	0	%100
60	MP2C	Z	.309	.309	0	%100
61	MP3C	X	-.534	-.534	0	%100
62	MP3C	Z	.309	.309	0	%100
63	MP4C	X	-.534	-.534	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
64	MP4C	Z	.309	.309	0	%100
65	MP5C	X	-.534	-.534	0	%100
66	MP5C	Z	.309	.309	0	%100
67	M49	X	-.955	-.955	0	%100
68	M49	Z	.551	.551	0	%100
69	M50A	X	-.897	-.897	0	%100
70	M50A	Z	.518	.518	0	%100
71	M51	X	-.955	-.955	0	%100
72	M51	Z	.551	.551	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M16	X	-1.047	-1.047	0	%100
2	M16	Z	0	0	0	%100
3	M22	X	-.59	-.59	0	%100
4	M22	Z	0	0	0	%100
5	M23	X	-.59	-.59	0	%100
6	M23	Z	0	0	0	%100
7	M24	X	-.59	-.59	0	%100
8	M24	Z	0	0	0	%100
9	M25	X	-.59	-.59	0	%100
10	M25	Z	0	0	0	%100
11	M26	X	-.148	-.148	0	%100
12	M26	Z	0	0	0	%100
13	M27	X	-.148	-.148	0	%100
14	M27	Z	0	0	0	%100
15	M28	X	-.148	-.148	0	%100
16	M28	Z	0	0	0	%100
17	M29	X	-.148	-.148	0	%100
18	M29	Z	0	0	0	%100
19	M30	X	-.148	-.148	0	%100
20	M30	Z	0	0	0	%100
21	M31	X	-.148	-.148	0	%100
22	M31	Z	0	0	0	%100
23	M32	X	-.148	-.148	0	%100
24	M32	Z	0	0	0	%100
25	M33	X	-.148	-.148	0	%100
26	M33	Z	0	0	0	%100
27	M1	X	0	0	0	%100
28	M1	Z	0	0	0	%100
29	M8	X	-.812	-.812	0	%100
30	M8	Z	0	0	0	%100
31	M15	X	-.812	-.812	0	%100
32	M15	Z	0	0	0	%100
33	M19	X	-.262	-.262	0	%100
34	M19	Z	0	0	0	%100
35	M20	X	-.262	-.262	0	%100
36	M20	Z	0	0	0	%100
37	MP1B	X	-.617	-.617	0	%100
38	MP1B	Z	0	0	0	%100
39	MP2B	X	-.617	-.617	0	%100
40	MP2B	Z	0	0	0	%100
41	MP3B	X	-.617	-.617	0	%100
42	MP3B	Z	0	0	0	%100
43	MP4B	X	-.617	-.617	0	%100
44	MP4B	Z	0	0	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
45	MP5B	X	-.617	-.617	0 %100
46	MP5B	Z	0	0	0 %100
47	MP1A	X	-.617	-.617	0 %100
48	MP1A	Z	0	0	0 %100
49	MP2A	X	-.617	-.617	0 %100
50	MP2A	Z	0	0	0 %100
51	MP3A	X	-.617	-.617	0 %100
52	MP3A	Z	0	0	0 %100
53	MP4A	X	-.617	-.617	0 %100
54	MP4A	Z	0	0	0 %100
55	MP5A	X	-.617	-.617	0 %100
56	MP5A	Z	0	0	0 %100
57	MP1C	X	-.617	-.617	0 %100
58	MP1C	Z	0	0	0 %100
59	MP2C	X	-.617	-.617	0 %100
60	MP2C	Z	0	0	0 %100
61	MP3C	X	-.617	-.617	0 %100
62	MP3C	Z	0	0	0 %100
63	MP4C	X	-.617	-.617	0 %100
64	MP4C	Z	0	0	0 %100
65	MP5C	X	-.617	-.617	0 %100
66	MP5C	Z	0	0	0 %100
67	M49	X	-1.125	-1.125	0 %100
68	M49	Z	0	0	0 %100
69	M50A	X	-1.058	-1.058	0 %100
70	M50A	Z	0	0	0 %100
71	M51	X	-1.058	-1.058	0 %100
72	M51	Z	0	0	0 %100

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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M16	X	-.68	-.68	0 %100
2	M16	Z	-.393	-.393	0 %100
3	M22	X	-.383	-.383	0 %100
4	M22	Z	-.221	-.221	0 %100
5	M23	X	-.383	-.383	0 %100
6	M23	Z	-.221	-.221	0 %100
7	M24	X	-.383	-.383	0 %100
8	M24	Z	-.221	-.221	0 %100
9	M25	X	-.383	-.383	0 %100
10	M25	Z	-.221	-.221	0 %100
11	M26	X	-.383	-.383	0 %100
12	M26	Z	-.221	-.221	0 %100
13	M27	X	-.383	-.383	0 %100
14	M27	Z	-.221	-.221	0 %100
15	M28	X	-.383	-.383	0 %100
16	M28	Z	-.221	-.221	0 %100
17	M29	X	-.383	-.383	0 %100
18	M29	Z	-.221	-.221	0 %100
19	M30	X	0	0	0 %100
20	M30	Z	0	0	0 %100
21	M31	X	0	0	0 %100
22	M31	Z	0	0	0 %100
23	M32	X	0	0	0 %100
24	M32	Z	0	0	0 %100
25	M33	X	0	0	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
26	M33	Z	0	0	0	%100
27	M1	X	-.234	-.234	0	%100
28	M1	Z	-.135	-.135	0	%100
29	M8	X	-.234	-.234	0	%100
30	M8	Z	-.135	-.135	0	%100
31	M15	X	-.938	-.938	0	%100
32	M15	Z	-.541	-.541	0	%100
33	M19	X	-.68	-.68	0	%100
34	M19	Z	-.393	-.393	0	%100
35	M20	X	0	0	0	%100
36	M20	Z	0	0	0	%100
37	MP1B	X	-.534	-.534	0	%100
38	MP1B	Z	-.309	-.309	0	%100
39	MP2B	X	-.534	-.534	0	%100
40	MP2B	Z	-.309	-.309	0	%100
41	MP3B	X	-.534	-.534	0	%100
42	MP3B	Z	-.309	-.309	0	%100
43	MP4B	X	-.534	-.534	0	%100
44	MP4B	Z	-.309	-.309	0	%100
45	MP5B	X	-.534	-.534	0	%100
46	MP5B	Z	-.309	-.309	0	%100
47	MP1A	X	-.534	-.534	0	%100
48	MP1A	Z	-.309	-.309	0	%100
49	MP2A	X	-.534	-.534	0	%100
50	MP2A	Z	-.309	-.309	0	%100
51	MP3A	X	-.534	-.534	0	%100
52	MP3A	Z	-.309	-.309	0	%100
53	MP4A	X	-.534	-.534	0	%100
54	MP4A	Z	-.309	-.309	0	%100
55	MP5A	X	-.534	-.534	0	%100
56	MP5A	Z	-.309	-.309	0	%100
57	MP1C	X	-.534	-.534	0	%100
58	MP1C	Z	-.309	-.309	0	%100
59	MP2C	X	-.534	-.534	0	%100
60	MP2C	Z	-.309	-.309	0	%100
61	MP3C	X	-.534	-.534	0	%100
62	MP3C	Z	-.309	-.309	0	%100
63	MP4C	X	-.534	-.534	0	%100
64	MP4C	Z	-.309	-.309	0	%100
65	MP5C	X	-.534	-.534	0	%100
66	MP5C	Z	-.309	-.309	0	%100
67	M49	X	-.955	-.955	0	%100
68	M49	Z	-.551	-.551	0	%100
69	M50A	X	-.955	-.955	0	%100
70	M50A	Z	-.551	-.551	0	%100
71	M51	X	-.897	-.897	0	%100
72	M51	Z	-.518	-.518	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M16	X	-.131	-.131	0	%100
2	M16	Z	-.227	-.227	0	%100
3	M22	X	-.074	-.074	0	%100
4	M22	Z	-.128	-.128	0	%100
5	M23	X	-.074	-.074	0	%100
6	M23	Z	-.128	-.128	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
7	M24	X	-.074	-.074	0	%100
8	M24	Z	-.128	-.128	0	%100
9	M25	X	-.074	-.074	0	%100
10	M25	Z	-.128	-.128	0	%100
11	M26	X	-.295	-.295	0	%100
12	M26	Z	-.511	-.511	0	%100
13	M27	X	-.295	-.295	0	%100
14	M27	Z	-.511	-.511	0	%100
15	M28	X	-.295	-.295	0	%100
16	M28	Z	-.511	-.511	0	%100
17	M29	X	-.295	-.295	0	%100
18	M29	Z	-.511	-.511	0	%100
19	M30	X	-.074	-.074	0	%100
20	M30	Z	-.128	-.128	0	%100
21	M31	X	-.074	-.074	0	%100
22	M31	Z	-.128	-.128	0	%100
23	M32	X	-.074	-.074	0	%100
24	M32	Z	-.128	-.128	0	%100
25	M33	X	-.074	-.074	0	%100
26	M33	Z	-.128	-.128	0	%100
27	M1	X	-.406	-.406	0	%100
28	M1	Z	-.703	-.703	0	%100
29	M8	X	0	0	0	%100
30	M8	Z	0	0	0	%100
31	M15	X	-.406	-.406	0	%100
32	M15	Z	-.703	-.703	0	%100
33	M19	X	-.523	-.523	0	%100
34	M19	Z	-.907	-.907	0	%100
35	M20	X	-.131	-.131	0	%100
36	M20	Z	-.227	-.227	0	%100
37	MP1B	X	-.309	-.309	0	%100
38	MP1B	Z	-.534	-.534	0	%100
39	MP2B	X	-.309	-.309	0	%100
40	MP2B	Z	-.534	-.534	0	%100
41	MP3B	X	-.309	-.309	0	%100
42	MP3B	Z	-.534	-.534	0	%100
43	MP4B	X	-.309	-.309	0	%100
44	MP4B	Z	-.534	-.534	0	%100
45	MP5B	X	-.309	-.309	0	%100
46	MP5B	Z	-.534	-.534	0	%100
47	MP1A	X	-.309	-.309	0	%100
48	MP1A	Z	-.534	-.534	0	%100
49	MP2A	X	-.309	-.309	0	%100
50	MP2A	Z	-.534	-.534	0	%100
51	MP3A	X	-.309	-.309	0	%100
52	MP3A	Z	-.534	-.534	0	%100
53	MP4A	X	-.309	-.309	0	%100
54	MP4A	Z	-.534	-.534	0	%100
55	MP5A	X	-.309	-.309	0	%100
56	MP5A	Z	-.534	-.534	0	%100
57	MP1C	X	-.309	-.309	0	%100
58	MP1C	Z	-.534	-.534	0	%100
59	MP2C	X	-.309	-.309	0	%100
60	MP2C	Z	-.534	-.534	0	%100
61	MP3C	X	-.309	-.309	0	%100
62	MP3C	Z	-.534	-.534	0	%100
63	MP4C	X	-.309	-.309	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
64	MP4C	Z	-.534	-.534	0	%100
65	MP5C	X	-.309	-.309	0	%100
66	MP5C	Z	-.534	-.534	0	%100
67	M49	X	-.529	-.529	0	%100
68	M49	Z	-.917	-.917	0	%100
69	M50A	X	-.563	-.563	0	%100
70	M50A	Z	-.974	-.974	0	%100
71	M51	X	-.529	-.529	0	%100
72	M51	Z	-.917	-.917	0	%100

Member Distributed Loads (BLC 87 : BLC 39 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M22	Y	-2.742	-19.081	0	.205
2	M22	Y	-19.081	-16.254	.205	.411
3	M22	Y	-16.254	-16.25	.411	.616
4	M22	Y	-16.25	-19.076	.616	.821
5	M22	Y	-19.076	-2.745	.821	1.027
6	M23	Y	-26.896	-26.896	5e-6	1.027
7	M24	Y	-26.896	-26.896	0	1.027
8	M25	Y	-2.745	-19.076	0	.205
9	M25	Y	-19.076	-16.25	.205	.411
10	M25	Y	-16.25	-16.254	.411	.616
11	M25	Y	-16.254	-19.081	.616	.821
12	M25	Y	-19.081	-2.742	.821	1.027
13	M30	Y	-18.479	-18.479	0	1.027
14	M31	Y	-23.098	-23.098	0	1.027
15	M32	Y	-23.098	-23.098	0	1.027
16	M33	Y	-18.479	-18.479	0	1.027
17	M26	Y	-18.479	-18.479	1e-6	1.027
18	M27	Y	-23.098	-23.098	0	1.027
19	M28	Y	-23.098	-23.098	0	1.027
20	M29	Y	-18.479	-18.479	0	1.027

Member Distributed Loads (BLC 88 : BLC 40 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M22	Y	-3.351	-23.321	0	.205
2	M22	Y	-23.321	-19.866	.205	.411
3	M22	Y	-19.866	-19.861	.411	.616
4	M22	Y	-19.861	-23.315	.616	.821
5	M22	Y	-23.315	-3.355	.821	1.027
6	M23	Y	-32.873	-32.873	5e-6	1.027
7	M24	Y	-32.873	-32.873	0	1.027
8	M25	Y	-3.355	-23.315	0	.205
9	M25	Y	-23.315	-19.861	.205	.411
10	M25	Y	-19.861	-19.866	.411	.616
11	M25	Y	-19.866	-23.321	.616	.821
12	M25	Y	-23.321	-3.352	.821	1.027
13	M30	Y	-22.585	-22.585	0	1.027
14	M31	Y	-28.231	-28.231	0	1.027
15	M32	Y	-28.231	-28.231	0	1.027
16	M33	Y	-22.585	-22.585	0	1.027
17	M26	Y	-22.585	-22.585	1e-6	1.027
18	M27	Y	-28.231	-28.231	0	1.027
19	M28	Y	-28.231	-28.231	0	1.027
20	M29	Y	-22.585	-22.585	0	1.027



Member Distributed Loads (BLC 89 : BLC 84 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M22	Y	-.153	-.194	0	.205
2	M22	Y	-.194	-.158	.205	.411
3	M22	Y	-.158	-.244	.411	.616
4	M22	Y	-.244	-.317	.616	.821
5	M22	Y	-.317	-.177	.821	1.027
6	M23	Y	-.222	-.222	0	1.027
7	M24	Y	-.222	-.222	0	1.027
8	M25	Y	-.153	-.194	0	.205
9	M25	Y	-.194	-.158	.205	.411
10	M25	Y	-.158	-.244	.411	.616
11	M25	Y	-.244	-.317	.616	.821
12	M25	Y	-.317	-.177	.821	1.027
13	M1	Y	-.005	-.115	1.369	3.559
14	M1	Y	-.115	-.178	3.559	5.749
15	M1	Y	-.178	-.178	5.749	7.939
16	M1	Y	-.178	-.115	7.939	10.129
17	M1	Y	-.115	-.005	10.129	12.319
18	M30	Y	-.296	-.296	0	1.027
19	M31	Y	-.237	-.237	0	1.027
20	M32	Y	-.237	-.237	0	1.027
21	M33	Y	-.296	-.296	0	1.027
22	M15	Y	-.064	-.182	3.251	3.764
23	M15	Y	-.182	-.241	3.764	4.277
24	M15	Y	-.241	-.182	4.277	4.791
25	M15	Y	-.182	-.064	4.791	5.304
26	M15	Y	-.064	-.064	5.304	5.817
27	M15	Y	-.064	-.182	5.817	6.33
28	M15	Y	-.182	-.241	6.33	6.844
29	M15	Y	-.241	-.182	6.844	7.357
30	M15	Y	-.182	-.064	7.357	7.87
31	M15	Y	-.064	-.064	7.87	8.384
32	M15	Y	-.064	-.182	8.384	8.897
33	M15	Y	-.182	-.241	8.897	9.41
34	M15	Y	-.241	-.182	9.41	9.924
35	M15	Y	-.182	-.064	9.924	10.437
36	M26	Y	-.296	-.296	1e-6	1.027
37	M27	Y	-.237	-.237	0	1.027
38	M28	Y	-.237	-.237	0	1.027
39	M29	Y	-.296	-.296	0	1.027
40	M8	Y	-.064	-.182	3.251	3.764
41	M8	Y	-.182	-.241	3.764	4.277
42	M8	Y	-.241	-.182	4.277	4.791
43	M8	Y	-.182	-.064	4.791	5.304
44	M8	Y	-.064	-.064	5.304	5.817
45	M8	Y	-.064	-.182	5.817	6.33
46	M8	Y	-.182	-.241	6.33	6.844
47	M8	Y	-.241	-.182	6.844	7.357
48	M8	Y	-.182	-.064	7.357	7.87
49	M8	Y	-.064	-.064	7.87	8.384
50	M8	Y	-.064	-.182	8.384	8.897
51	M8	Y	-.182	-.241	8.897	9.41
52	M8	Y	-.241	-.182	9.41	9.924
53	M8	Y	-.182	-.064	9.924	10.437

Member Distributed Loads (BLC 90 : BLC 85 Transient Area Loads)

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
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Member Distributed Loads (BLC 90 : BLC 85 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M22	Z	- .381	- .483	0	.205
2	M22	Z	- .483	- .395	.205	.411
3	M22	Z	- .395	- .61	.411	.616
4	M22	Z	- .61	- .791	.616	.821
5	M22	Z	- .791	- .443	.821	1.027
6	M23	Z	- .555	- .555	0	1.027
7	M24	Z	- .555	- .555	0	1.027
8	M25	Z	- .381	- .483	0	.205
9	M25	Z	- .483	- .395	.205	.411
10	M25	Z	- .395	- .61	.411	.616
11	M25	Z	- .61	- .791	.616	.821
12	M25	Z	- .791	- .443	.821	1.027
13	M1	Z	- .012	- .288	1.369	3.559
14	M1	Z	- .288	- .444	3.559	5.749
15	M1	Z	- .444	- .444	5.749	7.939
16	M1	Z	- .444	- .288	7.939	10.129
17	M1	Z	- .288	- .012	10.129	12.319
18	M30	Z	- .74	- .74	0	1.027
19	M31	Z	- .592	- .592	0	1.027
20	M32	Z	- .592	- .592	0	1.027
21	M33	Z	- .74	- .74	0	1.027
22	M15	Z	- .159	- .455	3.251	3.764
23	M15	Z	- .455	- .603	3.764	4.277
24	M15	Z	- .603	- .455	4.277	4.791
25	M15	Z	- .455	- .159	4.791	5.304
26	M15	Z	- .159	- .159	5.304	5.817
27	M15	Z	- .159	- .455	5.817	6.33
28	M15	Z	- .455	- .603	6.33	6.844
29	M15	Z	- .603	- .455	6.844	7.357
30	M15	Z	- .455	- .159	7.357	7.87
31	M15	Z	- .159	- .159	7.87	8.384
32	M15	Z	- .159	- .455	8.384	8.897
33	M15	Z	- .455	- .603	8.897	9.41
34	M15	Z	- .603	- .455	9.41	9.924
35	M15	Z	- .455	- .159	9.924	10.437
36	M26	Z	- .74	- .74	1e-6	1.027
37	M27	Z	- .592	- .592	0	1.027
38	M28	Z	- .592	- .592	0	1.027
39	M29	Z	- .74	- .74	0	1.027
40	M8	Z	- .159	- .455	3.251	3.764
41	M8	Z	- .455	- .603	3.764	4.277
42	M8	Z	- .603	- .455	4.277	4.791
43	M8	Z	- .455	- .159	4.791	5.304
44	M8	Z	- .159	- .159	5.304	5.817
45	M8	Z	- .159	- .455	5.817	6.33
46	M8	Z	- .455	- .603	6.33	6.844
47	M8	Z	- .603	- .455	6.844	7.357
48	M8	Z	- .455	- .159	7.357	7.87
49	M8	Z	- .159	- .159	7.87	8.384
50	M8	Z	- .159	- .455	8.384	8.897
51	M8	Z	- .455	- .603	8.897	9.41
52	M8	Z	- .603	- .455	9.41	9.924
53	M8	Z	- .455	- .159	9.924	10.437

Member Distributed Loads (BLC 91 : BLC 86 Transient Area Loads)

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
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Member Distributed Loads (BLC 91 : BLC 86 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M22	X	.381	.483	0	.205
2	M22	X	.483	.395	.205	.411
3	M22	X	.395	.61	.411	.616
4	M22	X	.61	.791	.616	.821
5	M22	X	.791	.443	.821	1.027
6	M23	X	.555	.555	0	1.027
7	M24	X	.555	.555	0	1.027
8	M25	X	.381	.483	0	.205
9	M25	X	.483	.395	.205	.411
10	M25	X	.395	.61	.411	.616
11	M25	X	.61	.791	.616	.821
12	M25	X	.791	.443	.821	1.027
13	M1	X	.012	.288	1.369	3.559
14	M1	X	.288	.444	3.559	5.749
15	M1	X	.444	.444	5.749	7.939
16	M1	X	.444	.288	7.939	10.129
17	M1	X	.288	.012	10.129	12.319
18	M30	X	.74	.74	0	1.027
19	M31	X	.592	.592	0	1.027
20	M32	X	.592	.592	0	1.027
21	M33	X	.74	.74	0	1.027
22	M15	X	.159	.455	3.251	3.764
23	M15	X	.455	.603	3.764	4.277
24	M15	X	.603	.455	4.277	4.791
25	M15	X	.455	.159	4.791	5.304
26	M15	X	.159	.159	5.304	5.817
27	M15	X	.159	.455	5.817	6.33
28	M15	X	.455	.603	6.33	6.844
29	M15	X	.603	.455	6.844	7.357
30	M15	X	.455	.159	7.357	7.87
31	M15	X	.159	.159	7.87	8.384
32	M15	X	.159	.455	8.384	8.897
33	M15	X	.455	.603	8.897	9.41
34	M15	X	.603	.455	9.41	9.924
35	M15	X	.455	.159	9.924	10.437
36	M26	X	.74	.74	1e-6	1.027
37	M27	X	.592	.592	0	1.027
38	M28	X	.592	.592	0	1.027
39	M29	X	.74	.74	0	1.027
40	M8	X	.159	.455	3.251	3.764
41	M8	X	.455	.603	3.764	4.277
42	M8	X	.603	.455	4.277	4.791
43	M8	X	.455	.159	4.791	5.304
44	M8	X	.159	.159	5.304	5.817
45	M8	X	.159	.455	5.817	6.33
46	M8	X	.455	.603	6.33	6.844
47	M8	X	.603	.455	6.844	7.357
48	M8	X	.455	.159	7.357	7.87
49	M8	X	.159	.159	7.87	8.384
50	M8	X	.159	.455	8.384	8.897
51	M8	X	.455	.603	8.897	9.41
52	M8	X	.603	.455	9.41	9.924
53	M8	X	.455	.159	9.924	10.437



Member Area Loads (BLC 39 : Structure D)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N92	N90A	N91	N93	Y	B-C	-.009
2	N103	N101	N100	N102	Y	B-C	-.009
3	N97	N95	N96	N98	Y	B-C	-.009

Member Area Loads (BLC 40 : Structure Di)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N92	N90A	N91	N93	Y	B-C	-.011
2	N103	N101	N100	N102	Y	B-C	-.011
3	N97	N95	N96	N98	Y	B-C	-.011

Member Area Loads (BLC 84 : Structure Ev)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N92	N90A	N91	N93	Y	Two Way	-.000231
2	N103	N101	N100	N102	Y	Two Way	-.000231
3	N97	N95	N96	N98	Y	Two Way	-.000231

Member Area Loads (BLC 85 : Structure Eh (0 Deg))

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N92	N90A	N91	N93	Z	Two Way	-.000577
2	N103	N101	N100	N102	Z	Two Way	-.000577
3	N97	N95	N96	N98	Z	Two Way	-.000577

Member Area Loads (BLC 86 : Structure Eh (90 Deg))

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N92	N90A	N91	N93	X	Two Way	.000577
2	N103	N101	N100	N102	X	Two Way	.000577
3	N97	N95	N96	N98	X	Two Way	.000577

Envelope Joint Reactions

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	N50A	max	679.21	10	-114.644	7	5120.951	1	-.11	7	1.512	4	.824	4
2		min	-678.61	4	-1144.55	13	-2835.248	7	-.906	13	-1.514	10	-.681	10
3	N51	max	4630.609	9	-114.297	3	1391.966	3	.976	11	1.892	12	.864	19
4		min	-2522.621	3	-1169.049	21	-2609.501	9	-.541	5	-1.893	6	-.119	1
5	N54	max	2504.271	11	-95.497	11	1463.155	11	.776	2	1.48	8	.119	1
6		min	-4413.332	5	-1100.545	17	-2563.096	5	-.504	8	-1.481	2	-.917	19
7	N107	max	36.431	10	3590.286	13	-871.871	7	0	75	0	12	0	6
8		min	-36.444	4	855.663	7	-3541.253	13	0	1	0	6	0	12
9	N109A	max	-776.341	3	3627.436	21	1789.236	21	0	10	0	4	0	4
10		min	-3098.995	21	880.216	3	448.184	3	0	4	0	10	0	10
11	N111A	max	2985.436	17	3496.288	17	1723.479	17	0	12	0	12	0	12
12		min	714.745	11	809.204	11	412.845	11	0	6	0	6	0	6
13	Totals:	max	5913.11	10	7008.233	22	5831.634	1						
14		min	-5913.11	4	2454.712	67	-5831.634	7						

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

Member	Shape	Code Check	Loc[ft]	LC Shear	Loc[ft]	Dir	LC phi*Pnc	phi*Pnt	phi*Mn y	phi*Mn z	Cb	Eqn		
1	M16	HSS4X4X4	.247	1.906	16	.088	4.607	y	4	109384....	139518	16.181	16.181	1... H1-1b
2	M22	L2x2x3	.044	0	22	.006	0	y	15	22189.2...	23392.8	.558	1.239	2... H2-1
3	M23	L2x2x3	.072	0	22	.010	0	y	15	22189.2...	23392.8	.558	1.239	2... H2-1
4	M24	L2x2x3	.072	0	22	.010	0	y	23	22189.2...	23392.8	.558	1.239	2... H2-1

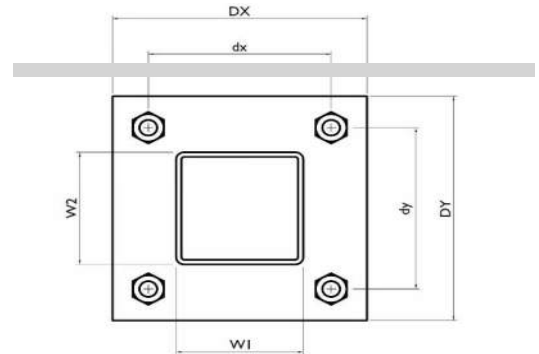


Envelope AISC 15th(360-16): LRFD Steel Code Checks (Continued)

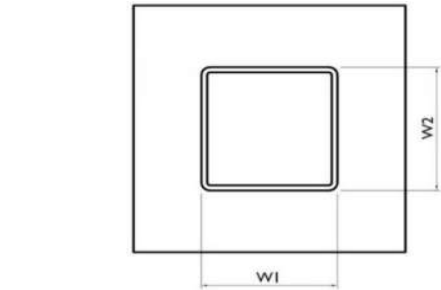
Member	Shape	Code Check	Loc[ft]	LC Shear	...	Loc[ft]	Dir	LC	phi*Pnc	...	phi*Pnt	...	phi*Mn y	...	phi*Mn z	...	Cb	Eqn
5	M25	L2x2x3	.044	0	22	.006	0	y	23	22189.2...	23392.8	.558	1.239	2...				H2-1
6	M26	L2x2x3	.053	0	18	.007	0	y	17	22189.2...	23392.8	.558	1.239	2...				H2-1
7	M27	L2x2x3	.063	0	18	.009	0	y	24	22189.2...	23392.8	.558	1.239	2...				H2-1
8	M28	L2x2x3	.063	0	18	.009	0	y	24	22189.2...	23392.8	.558	1.239	2...				H2-1
9	M29	L2x2x3	.053	0	18	.007	0	y	24	22189.2...	23392.8	.558	1.239	2...				H2-1
10	M30	L2x2x3	.053	0	14	.007	0	y	23	22189.2...	23392.8	.558	1.239	2...				H2-1
11	M31	L2x2x3	.063	0	14	.009	0	y	23	22189.2...	23392.8	.558	1.239	2...				H2-1
12	M32	L2x2x3	.063	0	14	.009	0	y	23	22189.2...	23392.8	.558	1.239	2...				H2-1
13	M33	L2x2x3	.053	0	14	.007	0	y	23	22189.2...	23392.8	.558	1.239	2...				H2-1
14	M1	HSS4X4X4	.207	13.688	1	.137	13.688	z	7	63696.2...	139518	16.181	16.181	3...				H1-1b
15	M8	HSS4X4X4	.213	13.688	9	.129	13.688	z	3	63696.2...	139518	16.181	16.181	3...				H1-1b
16	M15	HSS4X4X4	.224	13.688	5	.151	13.688	z	11	63696.2...	139518	16.181	16.181	3...				H1-1b
17	M19	HSS4X4X4	.249	1.906	18	.090	4.607	y	12	109384....	139518	16.181	16.181	1...				H1-1b
18	M20	HSS4X4X4	.243	1.906	14	.085	4.607	y	8	109384....	139518	16.181	16.181	1...				H1-1b
19	MP1B	PIPE 2.0	.490	5.224	11	.063	3.453		8	13511.2...	32130	1.872	1.872	1...				H1-1b
20	MP2B	PIPE 2.0	.877	5.224	11	.142	5.313		1	13511.2...	32130	1.872	1.872	1...				H1-1b
21	MP3B	PIPE 2.0	.043	4.01	5	.004	4.01		5	17855.0...	32130	1.872	1.872	1				H1-1b
22	MP4B	PIPE 2.0	.187	5.224	5	.028	5.224		4	13511.2...	32130	1.872	1.872	1...				H1-1b
23	MP5B	PIPE 2.0	.302	5.224	2	.062	5.224		8	13511.2...	32130	1.872	1.872	2...				H1-1b
24	MP1A	PIPE 2.0	.365	5.224	1	.061	3.453		10	13511.2...	32130	1.872	1.872	1...				H1-1b
25	MP2A	PIPE 2.0	.878	5.224	1	.142	5.313		9	13511.2...	32130	1.872	1.872	1...				H1-1b
26	MP3A	PIPE 2.0	.043	4.01	7	.004	4.01		7	17855.0...	32130	1.872	1.872	1				H1-1b
27	MP4A	PIPE 2.0	.197	5.224	7	.028	5.224		6	13511.2...	32130	1.872	1.872	1...				H1-1b
28	MP5A	PIPE 2.0	.300	5.224	4	.062	5.224		4	13511.2...	32130	1.872	1.872	2...				H1-1b
29	MP1C	PIPE 2.0	.285	5.224	4	.046	3.453		6	13511.2...	32130	1.872	1.872	2...				H1-1b
30	MP2C	PIPE 2.0	.877	5.224	3	.142	5.313		5	13511.2...	32130	1.872	1.872	1...				H1-1b
31	MP3C	PIPE 2.0	.043	4.01	3	.004	4.01		3	17855.0...	32130	1.872	1.872	1				H1-1b
32	MP4C	PIPE 2.0	.187	5.224	9	.028	5.224		2	13511.2...	32130	1.872	1.872	1...				H1-1b
33	MP5C	PIPE 2.0	.201	5.224	9	.048	5.224		12	13511.2...	32130	1.872	1.872	1...				H1-1b
34	M49	LL3x3x3x6	.108	4.243	13	.004	0	z	5	46544.1...	70632	6.362	3.751	1				H1-1b*
35	M50A	LL3x3x3x6	.109	4.243	21	.004	0	y	10	46544.1...	70632	6.362	3.751	1				H1-1b*
36	M51	LL3x3x3x6	.105	4.243	17	.004	4.243	y	6	46544.1...	70632	6.362	3.751	1				H1-1b*

I. Mount-to-Tower Connection Check

<u>Custom Orientation Required</u>	No
<u>Tower Connection Bolt Checks</u>	Yes
<u>Bolt Orientation</u>	Parallel
Bolt Quantity per Reaction:	4
d_x (in) (Delta X of typ. bolt config. sketch):	3
d_y (in) (Delta Y of typ. bolt config. sketch):	8
Bolt Type:	A325N
Bolt Diameter (in):	0.75
Required Tensile Strength / bolt (kips):	4.1
Required Shear Strength / bolt (kips):	0.7
Tensile Capacity / bolt (kips):	29.8
Shear Capacity / bolt (kips):	17.9
Bolt Overall Utilization:	13.7%



<u>Tower Connection Baseplate Checks</u>	Yes
Connecting Standoff Member Shape:	Rect Tube
Weld Stiffener Configuration:	No Stiffeners
Plate Width, D_x (in):	6
Plate Height, D_y (in):	10
W_1 (in):	4
W_2 (in):	4
Member Thickness (in):	0.25
Stiffener location a_1 (in):	
Stiffener location b_1 (in):	
Stiffener location a_2 (in):	
Stiffener location b_2 (in):	
F_y (ksi, plate):	36
Plate Thickness (in):	0.5
Length of Yield Line, L_y (in):	4.90
Bolt Eccentricity, e (in):	1.86
M_u (kip-in):	7.59
$\Phi * M_n$ (kip-in):	9.92
Plate Bending Utilization:	76.5%



Tower Connection Weld Checks

Weld Shape:
Weld Stiffener Configuration:
Weld Size (1/16 in):
W1 (in):
W2 (in):
Weld Total Length (in):
 Z_x (in³/in):
 Z_y (in³/in):
 J_p (in⁴/in):
 c_x (in)
 c_y (in)
Required combined strength (kip/in):
Weld Capacity (kip/in):
Weld Utilization:

Yes
Rectangle
None
4
4
4
16.00
21.33
21.33
85.33
2.25
2.25
0.92
5.57
16.5%

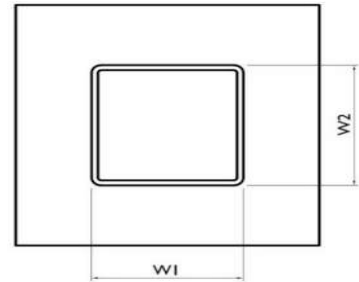
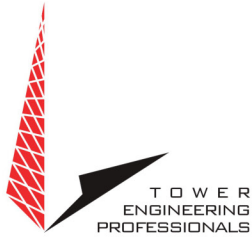


EXHIBIT 5





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Non-Ionizing Electromagnetic Radiation (NIER) Study

Site Number:

411257

Site Name:

Middle Haddam Road-CROWN CT

Location:

Portland, Connecticut

Tenants:

City of Middletown, AT&T Mobility, Dish Wireless, T-Mobile, & Verizon
Wireless

Prepared For:

American Tower, Inc.
Woburn, Massachusetts

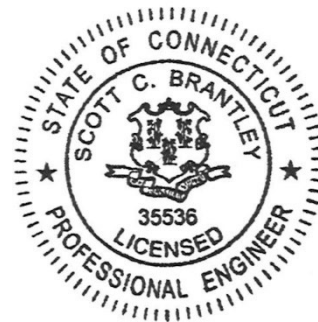
September 25th, 2023

69008 P-406630

Prepared By:

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

Approved By:

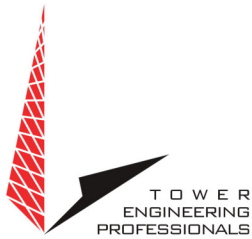




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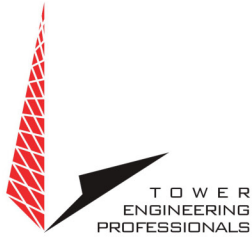
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Non-Ionizing Electromagnetic Radiation (NIER) Study

411257 Middle Haddam Road-Crown CT
Portland, Connecticut

INTRODUCTION

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

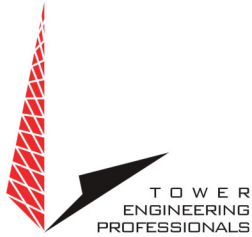
SITE AND FACILITY CONSIDERATIONS

Site 411257 Middle Haddam Road-Crown CT is located at 191 Middle Haddam Rd., in Portland, Connecticut at coordinates 41.562292, -72.573803. The support structure is a 140' monopole. An aerial view of the tower can be found in Appendix 1, Site Photos. The tenants are the City of Middleton CT (COM), AT&T Mobility (AT&T), Dish Wireless (Dish), T-Mobile (T-Mobile), & Verizon Wireless (VZW). A table listing all antennae and effective radiated power (ERP) levels that were used in this study may be found in Appendix 2, Antenna Inventory.

POWER DENSITY CALCULATIONS

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

For the purpose of this study, a radius of 180 from the base of the tower with a height of 6' above ground level was used, beyond 180' the MPE levels become *di minimus*. This study utilized FCC recognized and accepted software programs using the maximum ERP levels for the antenna models provided by ATC. Diagrams depicting the predicted spatial average power density level at any specific location may be found in Appendix 3, MPE Limit Study. A discussion regarding the FCC limits may be found in Appendix 4, Information Pertaining to MPE Studies. Study methodology describing Non-ionizing Radiation Prediction Models used in this study may be found in Appendix 5, MPE Standards Methodology.



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

- ATC furnished data and does not include other unidentified communication facilities.
- Load List at 411257 MIDDLE HADDAM ROAD-CROWN CT.RF NIER Study 9/05/23.
- FCC databases.
- Carrier standard configurations.
- Empirical data collected by TEP.

SITE MITIGATION & CONTROL

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

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

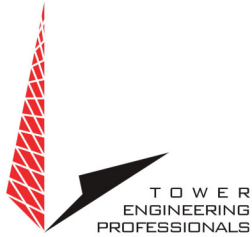
COMPLIANCE DETERMINATION

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

APPENDIX 1 Site Photos



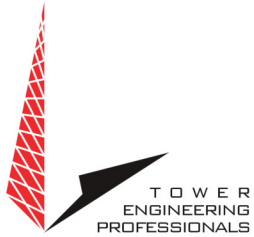
Aerial View of Site



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Appendix 2.1 Antenna Inventory

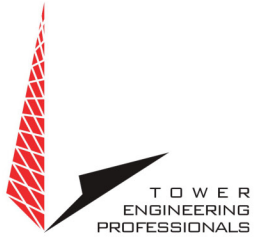
411257 Middle Haddam Road-Crown							
Antenna Inventory							
Antenna #	Carrier	Antenna Manufacturer	Antenna Model	Frequency Band (MHz)	Azimuth (°)	Effective Radiated Power (W)	Radiation Center (ft)
1	Verizon	Generic	10' Omni	100	030	275	138
2	Verizon	Generic	10' Omni	100	030	275	138
3	T-Mobile	RFS	APXVAALL24	600/700/1900/2100	000	27933	137
4	T-Mobile	RFS	APXVAALL24	600/700/1900/2100	120	27933	137
5	T-Mobile	RFS	APXVAALL24	600/700/1900/2100	240	27933	137
6	Verizon	Decibel	DB846H80E-SX	800	030	29452	128
7	Verizon	Decibel	DB846H80E-SX	800	150	29452	128
8	Verizon	Decibel	DB846H80E-SX	800	030	29452	128
9	Verizon	Decibel	DB846H80E-SX	800	150	29452	128
10	Verizon	Samsung	MT6407-77A	3700/3800/3900	030	18700	128
11	Verizon	Samsung	MT6407-77A	3700/3800/3900	150	18700	128
12	Verizon	Samsung	MT6407-77A	3700/3800/3900	270	18700	128
13	Verizon	Commscope	JAHH-65B-R3B	700/800/1900/2100	030	59387	128
14	Verizon	Commscope	JAHH-65B-R3B	700/800/1900/2100	150	59387	128
15	Verizon	Commscope	JAHH-65B-R3B	700/800/1900/2100	270	59387	128
16	Verizon	Commscope	JAHH-65B-R3B	700/800/1900/2100	030	59387	128
17	Verizon	Commscope	JAHH-65B-R3B	700/800/1900/2100	150	59387	128
18	Verizon	Commscope	JAHH-65B-R3B	700/800/1900/2100	270	59387	128
19	Verizon	RFS	APL866513-44T0	800	270	19724	128
20	Verizon	RFS	APL866513-44T0	800	270	19724	128



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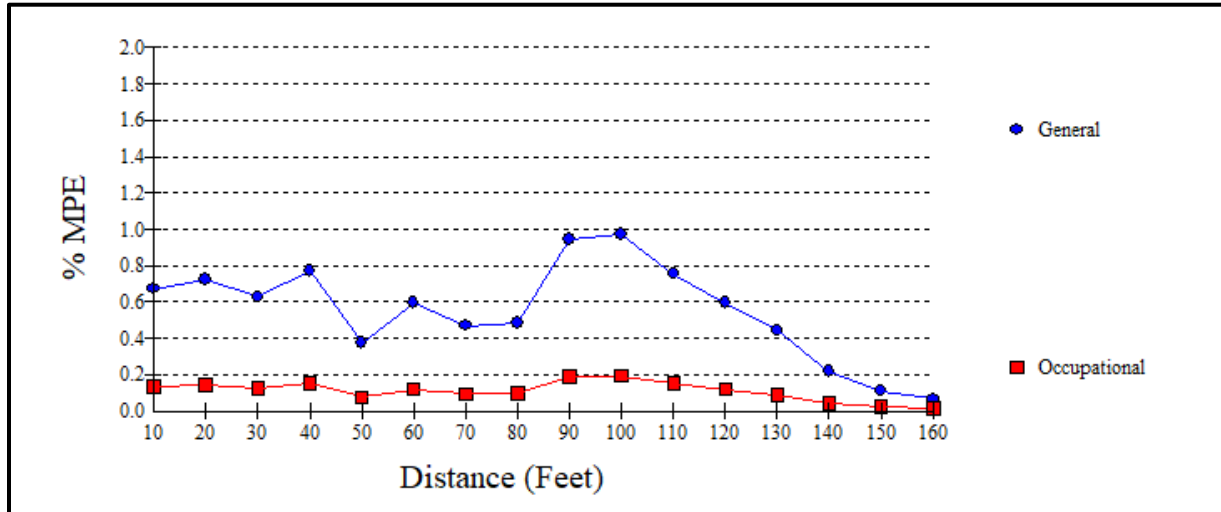
Appendix 2.2 Antenna Inventory

411257 Middle Haddam Road-Crown							
Antenna Inventory							
Antenna #	Carrier	Antenna Manufacturer	Antenna Model	Frequency Band (MHz)	Azimuth (°)	Effective Radiated Power (W)	Radiation Center (ft)
21	AT&T	CCI	DMP65R-BU8D	1900	030	12680	119
22	AT&T	CCI	DMP65R-BU8D	1900	160	12680	119
23	AT&T	CCI	DMP65R-BU8D	1900	280	12680	119
24	AT&T	Commscope	NNH4-65B-R6	700/800/2100	030	30365	119
25	AT&T	Commscope	NNH4-65B-R6	700/800/2100	160	30365	119
26	AT&T	Commscope	NNH4-65B-R6	700/800/2100	280	30365	119
27	AT&T	Allgon	7770	700/1900	030	44009	119
28	AT&T	Allgon	7770	700/1900	160	44009	119
29	AT&T	Allgon	7770	700/1900	280	44009	119
30	COM	RFI	CC807-08	800	000	96376	104
31	COM	RFI	CC807-08	800	000	96376	87
32	COM	Radio Wave	HP3-11	11000	140	172607	87
33	COM	Radio Wave	HP3-11	11000	261	172607	87
34	COM	RFI	OA20-41-DIN	100	215	273	80
35	Dish	JMA	MX08FRO665-21	600/1900/2000/2100	000	48332	69
36	Dish	JMA	MX08FRO665-21	600/1900/2000/2100	120	48332	69
37	Dish	JMA	MX08FRO665-21	600/1900/2000/2100	240	48332	69



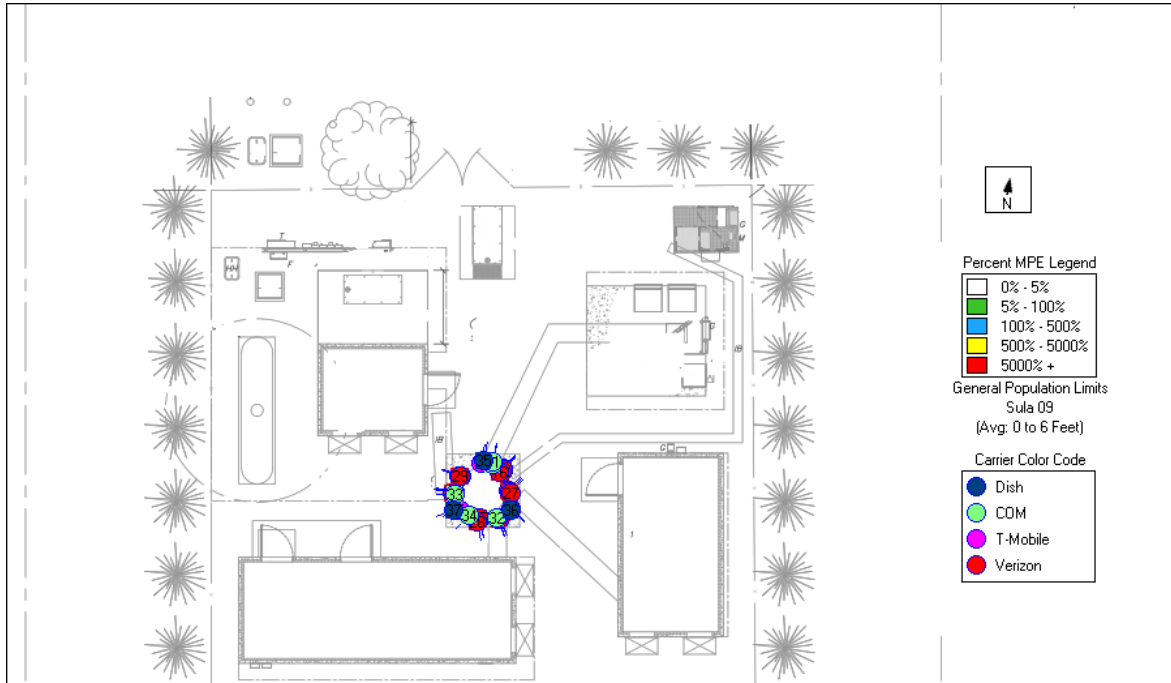
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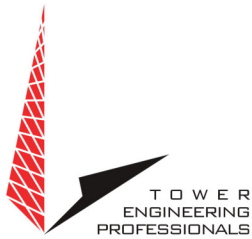
Appendix 3.1 MPE Limit Study



Maximum Power Density (@100'):	0.0059 mW/cm ²
General Population MPE (@100'):	0.9731%
Occupational MPE (@100'):	0.1946%

Appendix 3.2 MPE Limit Study





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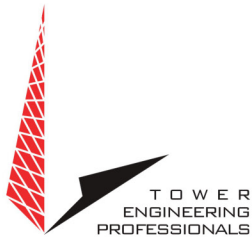
Appendix 4 Information Pertaining to MPE Studies

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

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

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

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



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

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

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

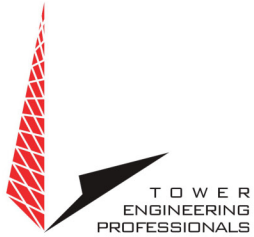


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Appendix 5 MPE Standards Methodology

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

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



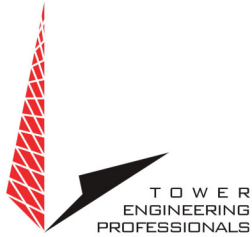
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The FCC's limits for exposure at different frequencies are shown in the following Tables.

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

f = frequency

* = Plane-wave equivalent power density



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

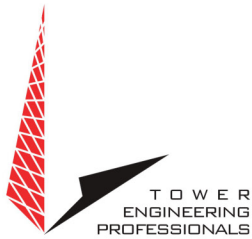
Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3 - 1.34	614	1.63	100*	30
1.34 - 30	824/f	2.19/f	180/F ²	30
30 -300	27.5	0.073	0.2	30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

f = frequency

* = Plane-wave equivalent power density

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

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



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

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

Cylindrical Model (Near Field Predictions)

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

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

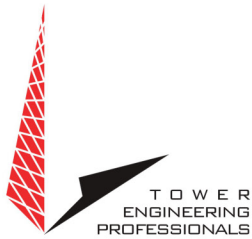
Where:

S = Power Density

P = Total Power into antenna

R = Distance from the antenna

L = Antenna aperture length



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

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

Where:

S = Power Density

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

P = Total Power into antenna

R = Distance from the antenna

L = Antenna aperture length

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



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Spherical Model (Far Field Predictions)

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

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

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

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

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

Where:

S = Power Density

EIRP = Effective Radiated Power from antenna

Rc = Reflection Coefficient (2.56)

R = Distance from the antenna

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

EXHIBIT 6



Connecticut Siting Council^(/CSC)

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DOCKET NO. 206 - Crown Atlantic Company LLC and Cellco Partnership d/b/a Verizon Wireless application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a cellular telecommunications facility at 191 Middle Haddam Road, Portland, Connecticut.	}	Connecticut
	}	Siting
	}	Council
		July 11, 2002

Decision and Order

Pursuant to the foregoing Findings of Fact and Opinion, the Connecticut Siting Council (Council) finds that the effects associated with the construction, operation, and maintenance of a telecommunications facility at the proposed prime site in Portland, Connecticut, including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not disproportionate either alone or cumulatively with other effects when compared to need, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the application and therefore directs that a Certificate of Environmental Compatibility and Public Need, as provided by General Statutes § 16-50k, be issued to Crown Atlantic Company LLC and Cellco Partnership d/b/a Verizon Wireless for the construction, maintenance and operation of a cellular telecommunications facility at the proposed prime site located at 191 Middle Haddam Road, Portland, Connecticut. We deny certification of the proposed alternate site located at 191 Middle Haddam Road, Portland, Connecticut.

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

1. The tower shall be constructed as a monopole, no taller than necessary to provide the proposed telecommunications services, sufficient to accommodate the antennas of Cellco and other entities, both public and private, but such tower shall not exceed a height of 130 feet above ground level unless the need for other wireless telecommunications providers require a height greater than 130 feet, which if approved by the Council through a petition pursuant to Sections 16-50j-38 through 16-50j-40 of the Regulations of Connecticut State Agencies, shall authorize the extension of the tower to a maximum height of 180 feet above ground level.
2. The Certificate Holder shall prepare a Development and Management (D&M) Plan for this site in compliance with Sections 16-50j-75 through 16-50j-77 of the Regulations of Connecticut State Agencies. The D&M Plan shall be submitted to and approved by the Council prior to the commencement of facility construction and shall include: a final site plan(s) for site development to include the location for the tower 180 feet west of the east property boundary and 180 feet north of the south property boundary that incorporates the tower radius within the lessor's property, tower foundation, antennas, equipment building, security fence, access road, utility line, and landscaping plan. The Certificate holder shall provide plans for either an architecturally treated equipment building or security fence. The D&M Plan shall also include construction plans to be submitted prior to construction for site clearing, water drainage, and erosion and sedimentation control consistent with the Connecticut Guidelines for Soil Erosion and Sediment Control, as amended.
3. The Certificate Holder shall provide a recalculated report of electromagnetic radio frequency power density if and when circumstances in operation cause a change in power density above the levels calculated and provided pursuant to this Decision and Order.
4. Upon the establishment of any new State or federal radio frequency standards applicable to frequencies of this facility, the facility granted herein shall be brought into compliance with such standards.
5. The Certificate Holder shall permit public or private entities to share space on the proposed tower for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing.
6. Following completion of construction, if the facility does not initially provide, or permanently ceases to provide wireless telecommunications services following completion of construction, this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment within sixty days or reapply for any continued or new use to the Council before any such use is made.
7. Any antenna that becomes obsolete and ceases to function shall be removed within sixty days after such antennas become obsolete and ceases to function.

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

Pursuant to General Statutes § 16-50p, we hereby direct that a copy of the Findings of Fact, Opinion, and Decision and Order be served on each person listed below, and notice of issuance shall be published in The Hartford Courant, New Haven Register, and The Middletown Press.

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

The party to this proceeding is:

Crown Atlantic Company LLC

And Cellco Partnership d/b/a

Verizon Wireless

Robert Stanford, Project Manager

Crown Atlantic Company LLC

703 Hebron Avenue

Glastonbury, CT 06033

Kenneth C. Baldwin, Esq.

Robinson & Cole LLP

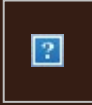
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EXHIBIT 7



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Number of Packages:	1
UPS Service:	UPS Ground
Package Weight:	1.0 LBS
Reference Number:	14519456

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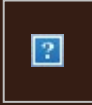
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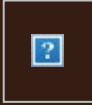
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Number of Packages:	1
UPS Service:	UPS Ground
Package Weight:	1.0 LBS
Reference Number:	14519456

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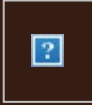
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Delivery Date: Monday, 10/09/2023

Delivery Time: 10:28 AM

Left At: DOCK

Signed by: DEMONE

CENTERLINE SITE ACQUISITION

Tracking Number:	1Z9Y45030317704463
Ship To:	VERIZON WIRELESS 1 VERIZON WAY BASKING RIDGE, NJ 079201025 US
Number of Packages:	1
UPS Service:	UPS Ground
Package Weight:	1.0 LBS
Reference Number:	14519456

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