STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

IN RE:	:	
	:	
A PETITION OF CELLCO PARTNERSHIP	:	SUB-PETITION NO. 1133
D/B/A VERIZON WIRELESS FOR	:	276 NEW BRITAIN AVENUE
MODIFICATIONS TO AN EXISTING	:	PLAINVILLE, CT
WIRELESS TELECOMMUNICATIONS	:	
FACILITY AT 276 NEW BRITAIN	:	
AVENUE IN PLAINVILLE,	:	
CONNECTICUT	:	SEPTEMBER 22, 2021

SUB-PETITION FOR DECLARATORY RULING:
ELIGIBLE FACILITIES REQUEST FOR MODIFICATIONS
THAT WILL NOT SUBSTANTIALLY CHANGE THE
PHYSICAL DIMENSIONS OF AN EXISTING BASE STATION

I. Introduction

Pursuant to Section 6409(a) of the Middle Class Tax Relief and Job Creation Act of 2012, codified at 47 U.S.C. § 1455(a) ("Section 6409(a)") and the October 21, 2014 Report and Order (FCC-14-153) issued by the Federal Communications Commission ("FCC") (the "FCC Order"), Cellco Partnership d/b/a Verizon Wireless ("Cellco") hereby petitions the Connecticut Siting Council (the "Council") for a declaratory ruling ("Sub-Petition") that modifications to the existing roof-top wireless telecommunications facility at 276 New Britain Avenue in Plainville, Connecticut (the "Property") constitutes an Eligible Facilities Request ("EFR") under the FCC Order. Cellco refers to this facility as its "Plainville 4".

II. Factual Background

On May 9, 2019, the Council approved Cellco Partnership's Petition for Declaratory Ruling to construct the existing roof-top wireless telecommunications facility (Petition No. 1366). A Site Vicinity Map and Site Schematic showing the Property and surrounding land use is included in Attachment 1. The existing facility consists of three (3) roof-top ballast mounted

masts each supporting two (2) antennas, all with a centerline height of 29 feet Above Ground Level (AGL) and two (2) remote radio heads. Equipment associated with the antennas is on the ground adjacent to the building.

III. Cellco's Proposed Plainville 4 Facility Modifications

Cellco is licensed to provide wireless telecommunications services in the 700 MHz, 850 MHz, 1900 MHz and 2100 MHz frequency ranges in Plainville and throughout the State of Connecticut. The proposed modifications described in this filing will provide wireless coverage and some limited capacity relief to Cellco's existing wireless network in Plainville.

Cellco intends to install three (3) additional roof-top ballast mounted masts with one (1) antenna on each mast, adjacent to the three (3) existing roof-top masts with a same center line height of 29 feet AGL. Project Plans for the Plainville 4 Facility are included in Attachment 2. Specifications for Cellco's antennas are included in Attachment 3. A Structural Analysis Letter, which also includes analysis of the proposed mounting system, confirming that the existing structure can support Cellco's additional roof-top masts and antennas, and Mount Analysis Report are included in Attachment 4.

IV. Discussion

A. The Proposed Modification Will Not Cause a Substantial Change to the Physical Dimensions of the Existing Base Station

Section 6409(a) provides, in relevant part, that "a State or local government may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station." Pursuant to the FCC Order, the proposed modification does not substantially change the physical dimensions of the base station if the following criteria are satisfied.

1. *The proposed modified facility will not increase the height of the tower by more than ten (10) percent of the height.* Cellco does not intend to increase the height of the existing antenna support structure. Cellco's new antennas will be installed at the same 29-foot AGL height as the existing antennas.

2. *The proposed facility modification will not protrude from the edge of the structure more than six (6) feet.* Cellco's existing and proposed antennas will remain on the roof and will not extend beyond the edge of the building roof.

3. *The proposed facility does not involve installation of more than the standard number of new equipment cabinets for the technology involved, but not to exceed four cabinets.* No new equipment cabinets are planned as part of this modification.

4. *The proposed facility does not entail any excavation or deployment outside the current site of the base station.* Cellco's proposed facility modifications will remain within the limits of the Property and on the roof of the building adjacent to its existing roof-top antennas.

5. *The proposed facility does not defeat the existing concealment elements of the base station.* The existing facility does not maintain any concealment elements.

6. *The proposed facility complies with conditions associated with the prior approval of construction or modification of the base station.* Cellco's proposed facility modifications are consistent with the Siting Council's approval in Petition No. 1366.

B. FCC Compliance

Included in Attachment 5 are Far Field Approximation tables for Cellco's proposed antennas confirming that the facility will operate within the FCC safety standards for radio frequency emissions.

C. Notice to the Town, Property Owner and Abutting Landowners

On September 22, 2021, a copy of this Sub-Petition was sent to Plainville's Town Manager, Robert E. Lee; Garrett Daigle, Town Planner; and DT Connecticut Commons LLC, the owner of the Property. Copies of the letters sent to Town Manager, Robert E. Lee, Garrett Daigle, Town Planner, and DT Connecticut Commons LLC are included in Attachment 6. A copy of this Sub-Petition was also sent to the owners of land that abut the Property. A sample abutter's letter and the list of those abutting landowners who were sent notice and a copy of this filing is included in Attachment 7.

V. Conclusion

Based on the information provided above, Cellco respectfully submits that the proposed modification of the existing base station at the Property constitutes an "eligible facilities request" under Section 6409(a) and the FCC Order.

Respectfully submitted,

CELLCO PARTNERSHIP d/b/a VERIZON WIRELESS

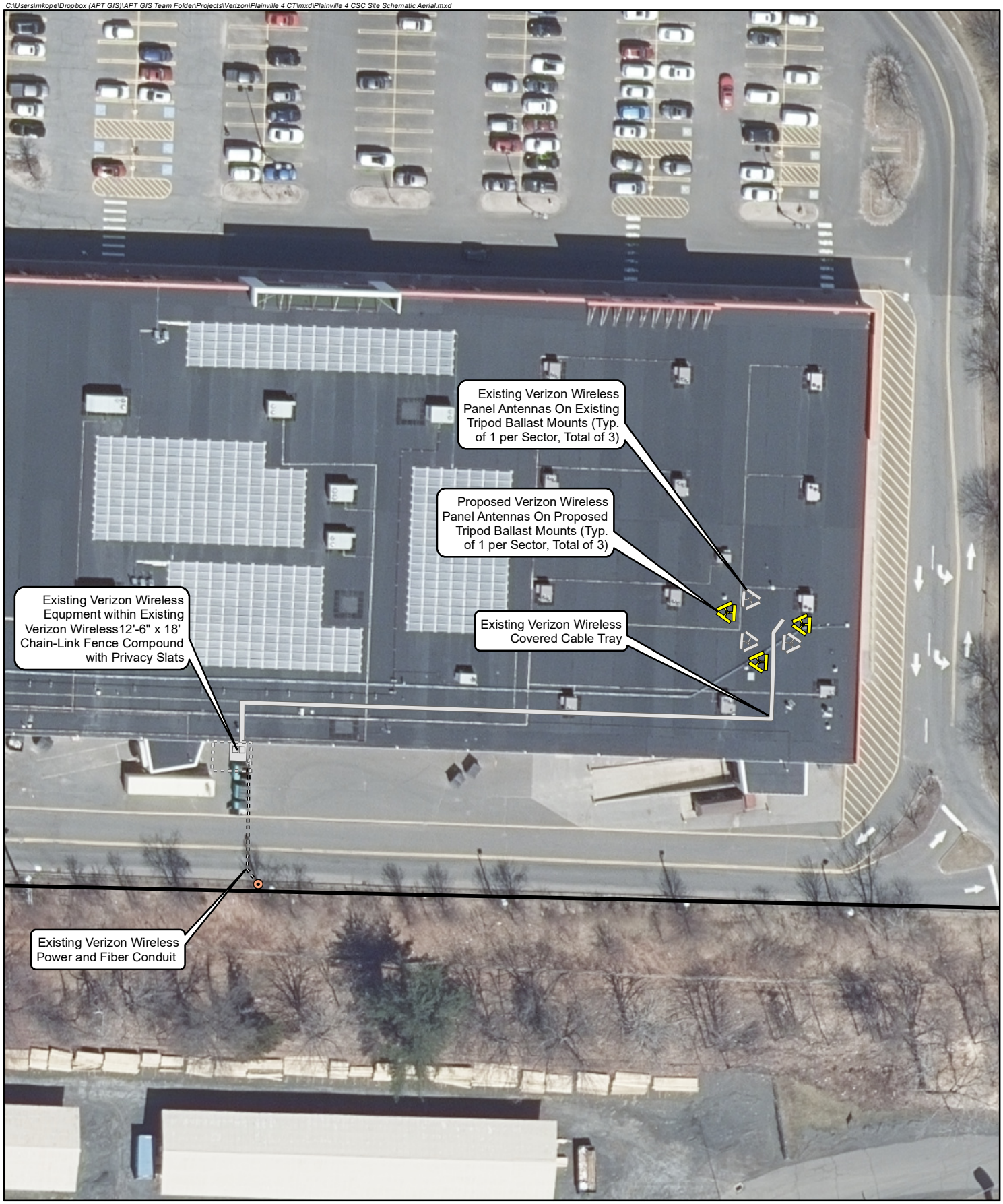
By 

Kenneth C. Baldwin, Esq.
Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103-3597
(860) 275-8200
Its Attorneys

ATTACHMENT 1


C:\Users\mkope\Dropbox (APT GIS)\APT GIS Team Folder\Projects\Verizon\Plainville 4 CT\mxd\Plainville 4 CSC Site Vicinity Map.mxd
PLAINVILLE SC 1 CT
NEW BRITAIN 7 CT
NEW BRITAIN NW CT
PLAINVILLE 4 CT
PLAINVILLE 3 CT
PLAINVILLE SC 2 CT
NEW BRITAIN 2 CT
SOUTHINGTON SC 1 CT
SOUTHINGTON NORTH CT
Farmington
Plainville
New Britain
Southington
Berlin
Pequabuck River
Quinnipiac River
Poderewski Park Pond
Hamlin Pond
Crescent Lake
Shuttle Meadow Reservoir
Reliance Road
Betsy Road
Woodford Avenue
Kristin Lane
Maria Road
View Street
Ridge Road
Hyde Road
Northwest Drive
Colt Highway
Ellen Drive
Jeffrey Drive
Bonnie Drive
Exit 37
Exit 36
Exit 35
Exit 34
Exit 33
Exit 6
Exit 7
Exit 1
Nike Road
Hillhurst Avenue
Streeterling St
Myrtle Street
Main Street
Hanford Sq
May Street
Garry Drive
Streeteele St
Victoria Road
Top Acre Road
Reservoir Road
Shuttle Street
Andrews Street
Shuttle Meadow Avenue
Roslyn Drive
Norwood Drive
Slater Road
Dean Drive
Marlene Road
Meadows Street
Metacomet Road
Pequot Road
Grant Avenue
Colonial Court
Cronk Road
Julie Road
Johnson Avenue
Perron Road
Spring Lane
Farmington Industrial Park
Fairlawn Street
New Britain Avenue
Forest Hills Drive
Ben Court
Woodside Lane
Corporate Drive
Loon Lake Road
Canal Street
Ledge Road
Lena Avenue
Carol Drive
Terre Road
Washington Street
Town Line Road
River Street
Red Oak Drive
Garden Drive
Queen Street
Flanders Road
Doral Lane
Shuttle Meadow Road
I-84
US Hwy 6
State Hwy 10
State Hwy 72
State Hwy 177
552
562
536
372
72
177
10
532
6
Legend
Proposed Verizon Wireless Facility
Surrounding Verizon Wireless Facilities
Municipal Boundary
N
W
E
S
3,000
1,500
0
3,000
Feet
Base Map Source: CT ECO 2019 Imagery
Map Scale:1 inch = 3,000 feet
Map Date: September 2021
Site Vicinity Map
Proposed Wireless
Telecommunications Facility
Plainville 4 CT
276 New Britain Avenue
Plainville, Connecticut
verizon
ALL-POINTS
TECHNOLOGY CORPORATION

C:\Users\mkope\Dropbox (APT GIS)\APT GIS Team Folder\Projects\Verizon\Plainville 4 CT\mxd\Plainville 4 CSC Site Schematic Aerial.mxd



Legend

- Proposed Verizon Wireless Equipment
- *Existing Verizon Wireless Fenced Compound
- *Existing Verizon Wireless Equipment
- Existing Verizon Wireless Conduit
- Existing Utility Pole (By Others)
- Subject Property

Map Notes:
**Existing Verizon Wireless compound and equipment not depicted on aerial photograph*
Base Map Source: 2019 CT ECO Imagery
Map Scale:1 inch = 60 feet
Map Date: September 2021

N W E S

60 30 0 60 Feet

Site Schematic

Proposed Wireless Telecommunications Facility
Plainville 4 CT
276 New Britain Avenue
Plainville, Connecticut

verizon

ALL-POINTS TECHNOLOGY CORPORATION

ATTACHMENT 2

verizon

811 72 HOURS PRIOR TO DIGGING, CONTRACTOR TO NOTIFY ALL UTILITY COMPANIES TO LOCATE ALL UNDERGROUND UTILITIES.

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

PLAINVILLE 4

276 NEW BRITAIN AVENUE
PLAINVILLE, CT. 06062
HARTFORD COUNTY

CODE COMPLIANCE

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THE LOCAL CODES:

1. 2015 INTERNATIONAL CODE COUNCIL (ICC) INTERNATIONAL BUILDING CODE
2. 2017 NATIONAL FIRE PROTECTION ASSOCIATION 70 – NATIONAL ELECTRICAL CODE

PROJECT INFORMATION

SITE NAME:	PLAINVILLE 4
SITE ADDRESS:	276 NEW BRITAIN AVENUE PLAINVILLE, CT. 06062
COUNTY:	HARTFORD COUNTY
COORDINATES:	LATITUDE: 41° 40' 22.38" N (NAD 83) LONGITUDE: 72° 50' 17.48" W (NAD 83)
CENTER LINE OF ANTENNA:	29'–0"± A.G.L. 248'–0"± A.M.S.L.
GROUND ELEVATION:	219'± A.M.S.L.
OVERALL STRUCTURE HEIGHT:	22'–6"± A.G.L. 241'–6"± A.M.S.L.
PROPERTY OWNER:	BRE DDR CONNECTICUT COMMONS LLC 3300 ENTERPRISE PARKWAY BEACHWOOD, OH 44122
APPLICANT:	VERIZON WIRELESS 20 ALEXANDER DRIVE, 2ND FLOOR WALLINGFORD, CT 06492
LOCAL POWER:	EVERSOURCE ENERGY
LOCAL TELCO:	VERIZON

VICINITY MAP

SCOPE OF WORK

THIS IS AN UNMANNED TELECOMMUNICATIONS FACILITY FOR VERIZON WIRELESS CONSISTING OF THE INSTALLATION AND OPERATION OF AN ANTENNA AND ASSOCIATED EQUIPMENT.

1. INSTALL (3) PANEL ANTENNAS (1 PER SECTOR).
2. INSTALL (3) RRUS AT ANTENNAS (1 PER SECTOR).

SHEET INDEX

SHEET	DESCRIPTION
T–1	TITLE SHEET
A–1	ROOFTOP PLAN
A–2	EQUIPMENT AND ANTENNA PLANS
A–3	ELEVATION
A–4	DETAILS
A–5	B.O.M, PROPOSED EQUIP. SCHEDULE, PLUMBING DIAGRAM & DETAILS
E–1	ELECTRICAL NOTES
E–2	ELECTRICAL DETAILS
E–3	GROUNDING DETAILS

PROJECT TEAM

APPLICANT:	VERIZON WIRELESS 20 ALEXANDER DRIVE, 2ND FLOOR WALLINGFORD, CT 06492
ARCHITECT & ENGINEER:	EBI CONSULTING 21 B STREET BURLINGTON, MA 01803 (781) 273–2500
SITE ACQUISITION:	EBI CONSULTING 21 B STREET BURLINGTON, MA 01803 (781) 273–2500
LEGAL COUNSEL:	ELLEN FREYMAN SHATLZ SCHWARTZ AND FENTIN (413) 737–1131

PREPARED FOR:

CELLCO PARTNERSHIP
d/b/a

verizon

20 ALEXANDER DRIVE, 2ND FLOOR
WALLINGFORD, CT 06492

PREPARED BY:

EBI Consulting
environmental | engineering | due diligence

21 B Street | Burlington, MA 01803
Tel: (781) 273-2500 | Fax: (781) 273-3311
www.ebiconsulting.com

Jacob Gorski — Digitally signed by Jacob Gorski — Date: 2021.07.29 15:15:06 -06'00'

STATE OF CONNECTICUT — PEN0030758 — LICENSED PROFESSIONAL ENGINEER

07/29/21

ENGINEER STAMP/SIGNATURE

SUBMITTALS

NO.	DATE	DESCRIPTION	BY
B	05/17/21	PRELIMINARY FOR REVIEW	JAJ
C	06/03/21	PRELIMINARY FOR REVIEW	JAJ
D	07/15/21	PRELIMINARY FOR REVIEW	JAJ
E	07/20/21	PRELIMINARY FOR REVIEW	JAJ
0	07/29/21	FINAL CD	JAJ

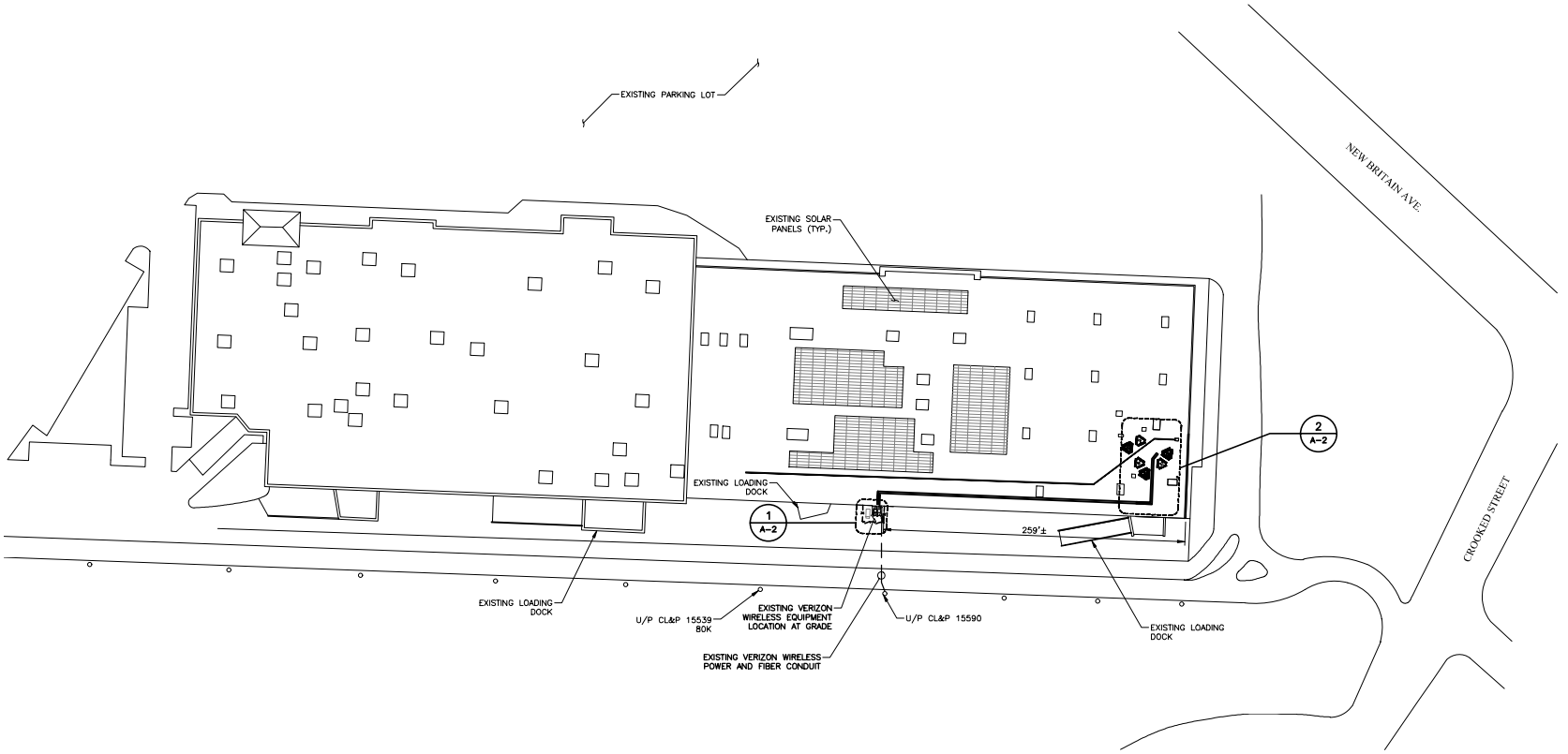
EBI JOB NO:
8121000033

SITE INFO:
PLAINVILLE 4
276 NEW BRITAIN AVENUE
PLAINVILLE, CT. 06062

SHEET TITLE:
TITLE SHEET

DRAWN BY: ----
CHECKED BY: ----
DATE: ----

SHEET NO:
T-1



APPROX. NORTH

50 0 25 50 100 200

11x17 SCALE: 1" = 100"
22x34 SCALE: 1" = 50"

1 ROOFTOP PLAN

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STATE OF CONNECTICUT
JACOB GORALSKI
PEN0030755
LICENSED
PROFESSIONAL ENGINEER
07/29/21

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SHEET TITLE:

ROOFTOP PLAN

DRAWN BY: ----
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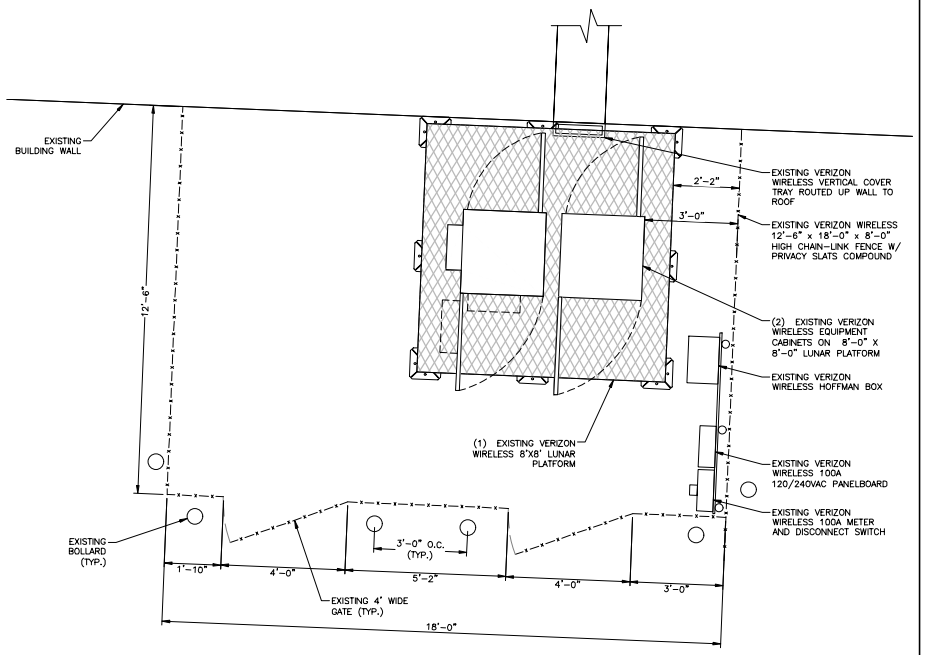
DATE: ----

SHEET NO:
A-1

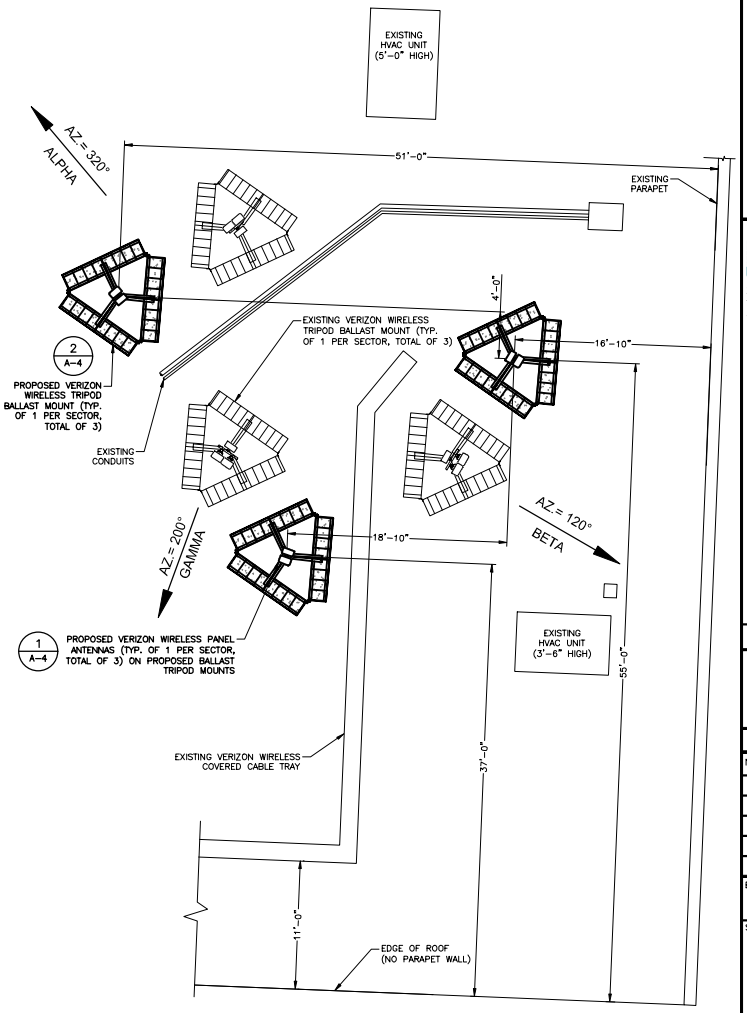


APPROX. NORTH

1 EQUIPMENT PLAN

0 2 4 8

11x17 SCALE: 1/4" = 1'-0"
22x34 SCALE: 1/2" = 1'-0"



NOTE: AFFIX TRAYS TO SLEEPERS USING 1/2" GALVANIZED LAG SCREWS WITH WASHERS AND AFFIX SLEEPERS TO BLOCKING WITH SIMPSON A34 CLIPS (2 EACH END). FIELD DRILLED HOLES IN STEEL ANGLE TRAY OF BALLAST SLEDS SHALL BE COATED GENEROUSLY WITH A ZINC-RICH PROTECTIVE COMPOUND.

APPROX. NORTH

2 ANTENNA PLAN

0 5'-4" 10'-8" 21'-4"

11x17 SCALE: 3/32" = 1'-0"
22x34 SCALE: 3/16" = 1'-0"

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EBI JOB NO:
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PLAINVILLE 4
276 NEW BRITAIN AVENUE
PLAINVILLE, CT. 06062

SHEET TITLE:

EQUIPMENT AND ANTENNA PLANS

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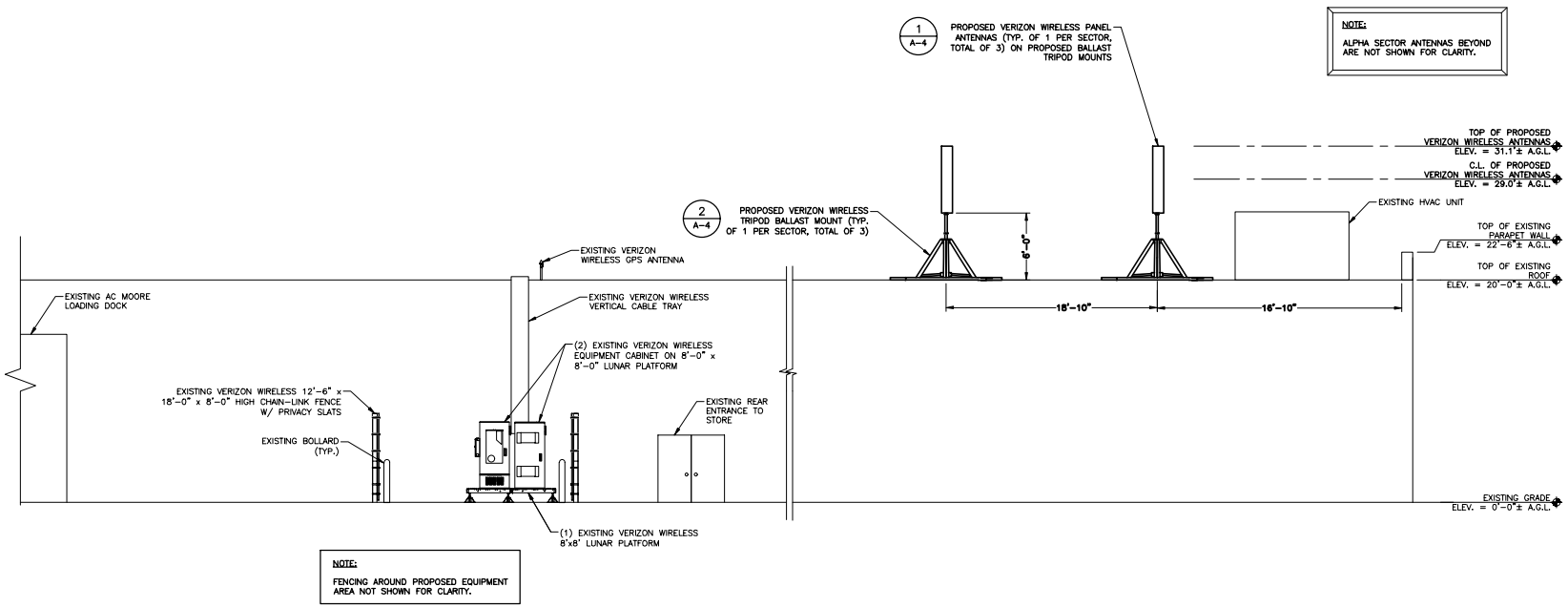
CHECKED BY: ----
DATE: ----

SHEET NO:
A-2



1 ELEVATION

0 5'-4" 10'-8" 21'-4"

11x17 SCALE: 3/32" = 1'-0"
22x34 SCALE: 3/16" = 1'-0"

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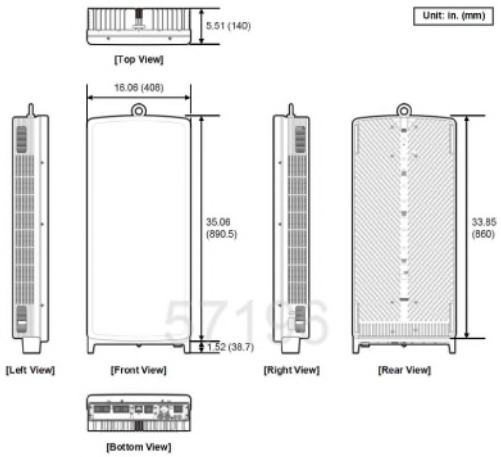
276 NEW BRITAIN AVENUE
PLAINVILLE, CT. 06062

SHEET TITLE:

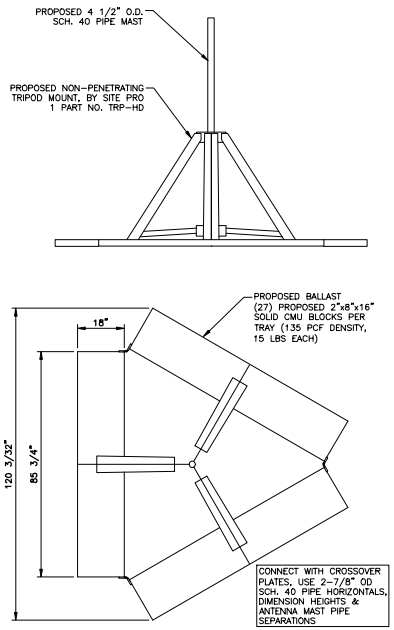
ELEVATION

DRAWN BY: ----
CHECKED BY: ----
DATE: ----

SHEET NO:
A-3



1	PANEL ANTENNA DETAILS	N.T.S.



2	NON-PENETRATING TRIPOD MOUNT	N.T.S.

3	NOT USED	N.T.S.

4	NOT USED	11x17 SCALE: N.T.S.

5	NOT USED	11x17 SCALE: N.T.S.

6	NOT USED	11x17 SCALE: N.T.S.

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PLAINVILLE 4
276 NEW BRITAIN AVENUE
PLAINVILLE, CT. 06062

SHEET TITLE:

DETAILS

DRAWN BY: ----
CHECKED BY: ----
DATE: ----

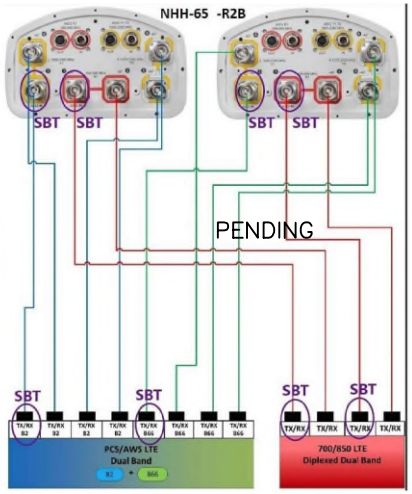
SHEET NO:
A-4

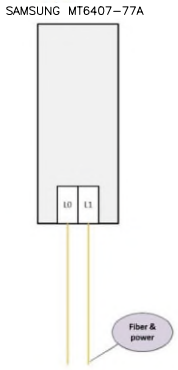
BILL OF MATERIALS (B.O.M.)			
DESCRIPTION	QTY	LENGTH	COMMENTS
PANEL ANTENNAS	3		SAMSUNG MT6407-77A PIPE MOUNTED
1x1 JUMPERS	6	6 FT.	REFER TO RF PLUMBING DIAGRAM
RET CABLE ELEVATION	2	3M - 9.8 FT.	REFER TO RF PLUMBING DIAGRAM
ANTENNA MOUNT	3		SITE PRO 1 PART NO. TRP-HD

1 **B.O.M.**

SCHEDULE OF PROPOSED EQUIPMENT						
DESCRIPTION	QTY	HEIGHT	WIDTH	DEPTH	WEIGHT	COMMENTS
ANTENNA	3	35.06"	16.06"	5.51"	87.1 LBS	SAMSUNG MT6407-77A

2 **SCHEDULE OF PROPOSED EQUIPMENT**





3 **ANTENNA PLUMBING DIAGRAM** 11x17 SCALE: N.T.S.

4 **NOT USED** 11x17 SCALE: N.T.S.

5 **NOT USED** 11x17 SCALE: N.T.S.

PREPARED FOR:

CELLCO PARTNERSHIP
d/b/a

verizon

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0	07/29/21	FINAL CD	JAJ

EBI JOB NO:
8121000033

SITE INFO:

PLAINVILLE 4
276 NEW BRITAIN AVENUE
PLAINVILLE, CT. 06062

SHEET TITLE:
B.O.M, PROPOSED EQUIP. SCHEDULE, PLUMBING DIAGRAM & DETAILS

DRAWN BY: ----
CHECKED BY: ----
DATE: ----

SHEET NO:
A-5

PART 1 – GENERAL

1.1 VERIFICATION
CONTRACTOR SHALL PERFORM ALL VERIFICATION, OBSERVATION, TESTS, AND EXAMINATION WORK PRIOR TO THE ORDERING OF THE ELECTRICAL EQUIPMENT AND THE ACTUAL CONSTRUCTION. CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE ENGINEER LISTING ALL MALFUNCTIONS, FAULTY EQUIPMENT AND DISCREPANCIES.

1.2 COMPLETE SYSTEMS
A. GENERAL: FURNISH AND INSTALL ALL MATERIALS AS REQUIRED FOR COMPLETE SYSTEMS, INCLUDING ALL PARTS OBVIOUSLY OR REASONABLY INCIDENTAL TO A COMPLETE INSTALLATION, WHETHER SPECIFICALLY INDICATED OR NOT. ALL SYSTEMS SHALL BE COMPLETELY ASSEMBLED, TESTED, ADJUSTED AND DEMONSTRATED TO BE READY FOR OPERATION PRIOR TO OWNER'S ACCEPTANCE.

B. DRAWINGS, PLANS AND DETAILS ARE DIAGRAMMATIC AND DO NOT SHOW ALL INTERFERENCES AND CONDITIONS VISIBLE AND/OR HIDDEN THAT MAY EXIST. THE CONTRACTOR MUST VISIT THE JOB SITE TO BECOME FAMILIAR WITH CONDITIONS AND ASSUME RESPONSIBILITY FOR CONDITIONS THEREOF, BEFORE BIDDING AND DURING THE CONDUCT OF THE WORK.

1.3 CODES AND REGULATIONS
A. GENERAL: COMPLY WITH THE NATIONAL ELECTRIC CODE (NEC 2017) AND ALL GOVERNING FEDERAL,STATE, AND LOCAL LAWS, ORDINANCES, CODES, RULES, AND REGULATIONS. WHERE THE CONTRACT DOCUMENTS EXCEED THESE REQUIREMENTS, THE CONTRACT DOCUMENTS SHALL GOVERN. IN NO CASE SHALL WORK BE INSTALLED CONTRARY TO OR BELOW MINIMUM LEGAL STANDARDS.

B. UTILITIES: COMPLY WITH ALL APPLICABLE RULES, RESTRICTIONS, AND REQUIREMENTS OF THE UTILITY COMPANIES SERVING THE PROJECT SITE/FACILITIES.

C. NON-COMPLIANCE: SHOULD ANY WORK BE PERFORMED WHICH IS FOUND NOT TO COMPLY WITH ANY OF THE ABOVE CODES AND REGULATIONS, PROVIDE ALL WORK AND PAY ALL COSTS NECESSARY TO CORRECT THE DEFICIENCIES.

D. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS AND ARRANGE FOR ALL REQUIRED INSPECTIONS IN ACCORDANCE WITH STATE AND LOCAL GOVERNING AUTHORITIES..

1.4 QUALITY ASSURANCE
A. WARRANTIES:
GENERAL: CONTRACTOR SHALL PROVIDE WARRANTIES FOR ALL WORK AS STATED IN THE CONTRACT.

B. SUPPLY TWO (2) COPIES OF THE WARRANTIES COUNTERSIGNED AND GUARANTEED BY THE CONTRACTOR STATING THAT IMPERFECT SYSTEM OPERATION AND ALL DEFECTS IN LABOR AND MATERIALS OF WORK WILL BE REPAIRED WITHOUT COST TO THE OWNER FOR A PERIOD OF ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION, AND STATING THAT ALL EQUIPMENT HAS BEEN FULLY SERVICED AND LEFT IN PROPER OPERATING CONDITION. ALSO GUARANTEE THAT ANY ADDITIONAL SERVICING REQUIRED WILL BE PROVIDED WITHOUT COST DURING THE GUARANTEE PERIOD.

1.5 INSPECTIONS
A. GENERAL:
DURING AND UPON COMPLETION OF THE WORK, ARRANGE AND PAY ALL ASSOCIATED COSTS FOR INSPECTIONS OF ALL ELECTRICAL WORK INSTALLED UNDER THIS CONTRACT, IN ACCORDANCE WITH THE CONDITIONS OF THE CONTRACT.

B. INSPECTIONS REQUIRED:
AS PER THE LAWS AND REGULATIONS OF THE LOCAL AND/ OR STATE AGENCIES HAVING JURISDICTION AT THE PROJECT SITE.

C. INSPECTION AGENCY:
APPROVED BY THE LOCAL AND/ OR STATE AGENCIES HAVING JURISDICTION AT THE PROJECT SITE.

D. CERTIFICATES:
SUBMIT ALL REQUIRED INSPECTION CERTIFICATES

1.6 DEFINITIONS
A. THE TERM "INDICATED" SHALL MEAN "AS SHOWN ON THE CONTRACT DOCUMENTS, SPECIFICATIONS, DRAWINGS AND RELATED ATTACHMENT(S)".

B. THE TERM "PROVIDE" SHALL MEAN "TO FURNISH, INSTALL AND CONNECT COMPLETELY, AND MAKE OPERABLE".

C. THE TERM "REMOVE" SHALL MEAN "TO DISCONNECT REMOVE AND LEGALLY DISPOSE OF BACK TO THE LAST ACTIVE DEVICE, IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS".

D. THE DEFINITION OF ELECTRICAL TERMS USED SHALL BE AS DEFINED IN THE 2017 EDITION OF THE NATIONAL ELECTRIC CODE (NEC).

E. THE TERM "SIZE" SHALL MEAN ONE OR MORE OF THE FOLLOWING: "LENGTH, CURRENT AND VOLTAGE RATING, NUMBER OF POLES, NEMA SIZE AND OTHER SIMILAR ELECTRICAL CHARACTERISTICS".

1.7 COORDINATION
A. WRITTEN REQUESTS FOR APPROVAL FOR PLANNED SHUTDOWNS OR INTERRUPTIONS OF OWNER'S EXISTING SYSTEMS AND EQUIPMENT SHALL BE MADE 72 HOURS PRIOR TO START OF REQUESTED SHUTDOWN PERIODS.

B. THE CONTRACTOR SHALL VERIFY ALL MANUFACTURERS CATALOG NUMBERS WITH THE MANUFACTURER FOR CURRENT CONFIGURATIONS AND FUNCTIONS.

C. BEFORE SELECTING MATERIAL AND EQUIPMENT TO BE INSTALLED CHECK NEEDED SPACE FOR PLACEMENT, CLEARANCES AND INTERCONNECTIONS, TO INSURE SUITABILITY.

PART 2 – PRODUCTS
2.1 GENERAL
A. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND IN PERFECT CONDITION WHEN INSTALLED AND SHALL BE OF THE BEST GRADE AND OF THE SAME MANUFACTURER THROUGHOUT FOR EACH CLASS OR GROUP OF EQUIPMENT. MATERIALS SHALL BE LISTED AND APPROVED BY UNDERWRITER'S LABORATORIES (U.L.) AND SHALL BEAR THE INSPECTION LABEL "J" WHERE SUBJECT TO SUCH APPROVAL. MATERIALS SHALL MEET WITH APPROVAL OF ALL GOVERNING BODIES HAVING JURISDICTION AND SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA AND NBFU.

B. COMMON ITEMS: WHERE MORE THAN ONE OF ANY SPECIFIC ITEM IS REQUIRED, ALL SHALL BE OF THE SAME TYPE AND MANUFACTURER.

C. UL LISTING: ALL ELECTRICAL MATERIALS AND EQUIPMENT SHALL BE UNDERWRITERS' LABORATORIES (UL) LISTED AND LABELED, WHERE UL STANDARDS AND LISTINGS EXIST FOR SUCH MATERIALS OR EQUIPMENT.

2.2 SOIL MATERIALS
A. BACKFILL AND FILL MATERIALS: MATERIALS COMPLYING WITH ASTM D2487 SOIL CLASSIFICATION GROUPS GW, GP, GM, SM, SW, AND SP, FREE OF CLAY, ROCK, OR GRAVEL LARGER THAN 2 INCHES IN ANY DIMENSION, DEBRIS, WASTE, FROZEN MATERIALS, VEGETABLE, AND OTHER DELETERIOUS MATTER.

2.3 RACEWAY SYSTEMS
A. RACEWAY SIZING: AS REQUIRED BY THE NEC (MINIMUM) WITH OVERSIZED RACEWAYS AS INDICATED AND WHERE REQUIRED FOR EASE OF PULLING CABLE. MINIMUM CONDUIT SIZE: 1/2-INCH, UNLESS INDICATED OTHERWISE.

B. RACEWAY TYPES: RIGID GALVANIZED STEEL CONDUIT, ELECTRICAL METALLIC TUBING (EMT), FLEXIBLE STEEL CONDUIT, LIQUID-TIGHT FLEXIBLE STEEL CONDUIT AND SCHEDULE 40 HEAVYWALL AND SCHEDULE 80 EXTRA-HEAVYWALL RIGID NON-METALLIC (PVC) CONDUIT, CONFORMING TO APPLICABLE ANSI, NEMA AND UL STANDARDS.

C. FITTINGS: ALL RACEWAY FITTINGS (EXCEPT FOR RIGID NON-METALLIC CONDUIT) TO BE STEEL OR MALLEABLE IRON, AND UL-LISTED FOR THE INTENDED APPLICATION. EMT FITTINGS TO BE COMPRESSION TYPE.

D. PULL AND JUNCTION BOXES, AND WIREWAYS: USE AS INDICATED AND REQUIRED. FOR EXTERIOR AND DAMP OR WET INDOOR LOCATIONS, USE BOXES AND WIREWAYS APPROVED FOR SUCH USE.

E. CONDUIT SEALS: FOR CAST-IN-PLACE CONCRETE APPLICATIONS:
ACCEPTABLE MANUFACTURERS: O-Z/GEDNEY TYPE "FSK;" THUNDERLINE CORP. "LINK SEAL" WITH "LINK SEAL WALL SLEEVE." FOR CORE DRILLED AND PRE-CAST OPENING APPLICATIONS: ACCEPTABLE MANUFACTURERS: O-Z/GEDNEY TYPE "CSML;" THUNDERLINE CORP. "LINK SEAL."

SWEEPS: ALL SWEEPS FOR COMMUNICATION EQUIPMENT OR INTO CONCRETE PAD SHALL BE 24" RADIUS.

2.4 CLASS WIRE CONDUCTORS – 600 VOLT AND BELOW
A. GENERAL: SINGLE-CONDUCTOR, 98% CONDUCTIVITY, ANNEALED, UNCOATED COPPER CONDUCTORS WITH 600-VOLT RATED TYPE "THHN/THWN" INSULATION. ALUMINUM CONDUCTORS ARE NOT ALLOWED.

B. CONNECTORS: NYLON SHELL INSULATED METALLIC SCREW-ON CONNECTORS FOR #14- 10 AWG, AND BOLTED PRESSURE OR COMPRESSION TYPE LUGS AND CONNECTORS WITH INSULATING COVERS FOR #8 AWG AND LARGER.

2.5 HANGERS AND SUPPORTS

A. GENERAL: ALL HANGERS, SUPPORTS, FASTENERS AND HARDWARE SHALL BE ZINC-COATED OR OF EQUIVALENT CORROSION RESISTANCE BY TREATMENT OR INHERENT PROPERTY, AND SHALL BE MANUFACTURED PRODUCTS DESIGNED FOR THE APPLICATION. PRODUCTS FOR OUTDOOR USE SHALL BE HOT DIP GALVANIZED.

B. TYPES: HANGERS, STRAPS, RISER SUPPORTS, CLAMPS, U-CHANNEL, THREADED RODS, ETC. AS INDICATED OR REQUIRED.

2.6 ELECTRICAL IDENTIFICATION
A. NAMEPLATES: THREE-LAYER LAMINATED PLASTIC WITH MINIMUM 3/16" HIGH WHITE ENGRAVED CHARACTERS ON BLACK BACKGROUND, AND PUNCHED FOR MECHANICAL FASTENING. FASTENERS: SELF-TAPPING STAINLESS-STEEL SCREWS OR NUMBER 10-32 STAINLESS STEEL MACHINE SCREWS WITH NUTS AND FLAT AND LOCK WASHERS.

B. UNDERGROUND WARNING TAPE: SIX-INCH WIDE POLYETHYLENE TAPE, PERMANENTLY BRIGHT COLORED WITH CONTINUOUS-PRINTED LEGEND INDICATING GENERAL TYPE OF UNDERGROUND LINE BELOW AND "CAUTION." COLORS AS FOLLOWS:

1. RED – ELECTRIC
2. ORANGE – COMMUNICATIONS

C. MARKING PENS: PERMANENT, WATERPROOF, QUICK DRYING BLACK INK. ACCEPTABLE MANUFACTURERS: SANFORD FINE POINT "SHARPIE," OR APPROVED EQUAL.

D. WIRE TAGS: VINYL OR VINYL-CLOTH SELF-ADHESIVE WRAPAROUND TYPE INDICATING APPROPRIATE CIRCUIT NUMBER, ETC.

2.7 SAFETY SWITCHES

A. GENERAL: HEAVY DUTY, HORSEPOWER RATED, FULLY ENCLOSED, FUSIBLE (WITH REJECTION FUSECLIPS) OR NON-FUSED AS INDICATED, QUICK-MAKE, QUICK BREAK SWITCHING MECHANISM INTERLOCKED WITH COVER, AND NEMA-3R ENCLOSURE FOR OUTDOOR LOCATIONS, UNLESS INDICATED OTHERWISE. SWITCHES TO BE LABELED AS "SUITABLE FOR USE AS SERVICE ENTRANCE EQUIPMENT," WHERE REQUIRED.

B. RATINGS: VOLTAGE, PHASES, AMPERAGES AND FUSING AS INDICATED.

C. IN THE FUSED CONFIGURATION, SWITCHES SHALL HAVE AN INTERRUPTING CAPACITY OF AT LEAST 100,000 AMPS SYMMETRICAL AT SIX HUNDRED (600) VOLTS WHEN USED WITH CLASS RK-5 TIME DELAY CURRENT LIMITING FUSES, AND 200,000 AMPERES SYMMETRICAL AT 600 VOLTS WHEN USED WITH CLASS RK-1 CURRENT LIMITING FUSES.

D. GUARDS: LINE SHIELD GUARDS TO PREVENT CONTACT WITH LIVE PARTS.

E. CONTACTS: SILVER ALLOY, SWITCH BLADES SHALL BE DE-ENERGIZEDIN THE OPEN POSITION.

F. LUGS: SOLDERLESS TYPE.

G. REJECTION FUSE CLIPS: PROVIDE FOR FUSIBLE SWITCHES (30-600A) TO PREVENT THE INSTALLATION OF CLASS H AND CLASS K NON-CURRENT-LIMITING FUSES.

H. ACCEPTABLE MANUFACTURER: GENERAL ELECTRIC, SQUARE D, SIEMANS.

2.8 GROUNDING
A. GENERAL: GROUNDING SHALL COMPLY WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE (2014).

B. SYSTEM DESCRIPTION: GROUNDING NETWORK SYSTEM SHALL ESTABLISH A EARTH RESISTANCE TO THE REFERENCE GROUND POINT NOT TO EXCEED 5 OHMS, CONSISTING OF BONDING OF STRUCTURE AND OTHER METAL OBJECTS: GROUNDING ELECTRODES; AND INTERCONNECTING CONDUCTORS.

C. MATERIAL: INDICATED AS FOLLOWING.

1. GROUND RODS: 5/8" DIA. X 10'-0" LONG COPPER CLAD GROUND ROD TREATED WITH EXCITE.

2. PROTECTIVE BOX: 8" DIA. X 42" LONG SCHEDULE 40 PVC PIPE WITH THREADED CAP.

3. CONDUCTORS: INSTALL #2 AWG GREEN-INSULATED STRANDED WIRE FOR ABOVE GRADE GROUNDING AND #2 BARE SOLID TIN-COATED WIRE FOR BELOW GRADE GROUNDING UNLESS OTHERWISE NOTED.

4. GROUND WIRE CLAMPS: HEAVY DUTY CLAMPS AS MANUFACTURED BY BURNDY.

5. WELDS: GROUNDING CONNECTIONS SHALL BE EXOTHERMIC TYPE ("CADWELDS") TO FENCE POSTS, ANTENNA MASTS, AND GROUND RING. REMAINING GROUNDING CONNECTIONS SHALL BE COMPRESSION FITTINGS. CONNECTIONS TO GROUND BARS SHALL BE MADE WITH TWO HOLE LUGS. WELDS SHALL BE PROTECTED FROM CORROSION WITH ZRC COLD GALVANIZING COMPOUND AS MANUFACTURED BY ZRC CHEMICAL PRODUCTS CO.

6. CHEMICAL GROUND RODS: LENGTH AND TYPE AS INDICATED.

7. ROUTING: ROUTE GROUNDING CONDUCTORS ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE. BEND GROUNDING LEADS WITH A MINIMUM 12" RADIUS.

D. TESTING:

1. TEST AND VERIFY THAT THE RESISTANCE DOES NOT EXCEED 5 OHMS TO GROUND USING AN EARTH/ GROUND RESISTANCE TESTER. GROUNDING AND OTHER OPERATIONAL TESTING SHALL BE WITNESSED BY OWNER'S REPRESENTATIVE.

2. SYSTEM TESTING SHALL BE PERFORMED PRIOR TO CONNECTING ELECTRICAL SYSTEM GROUND TO GROUND RING.

2.11 FUSES
A. UL CLASS RK-1, 250 VOLT OR 600 VOLT AS REQUIRED FOR SYSTEM VOLTAGE, DUAL ELEMENT, TIME DELAY, CURRENT LIMITING, 200,000 AIC, AMPERE RATINGS AS INDICATED.

B. ACCEPTABLE MANUFACTURERS: BUSSMANN "FUSETRON"; OR APPROVED EQUAL BY GOULD SHAWMUT.

PREPARED FOR:

CELLCO PARTNERSHIP
d/b/a

verizon

20 ALEXANDER DRIVE, 2ND FLOOR
WALLINGFORD, CT 06492

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STATE OF CONNECTICUT
JACOB GORALSKI
PEN0030755
LICENSED
PROFESSIONAL ENGINEER
07/29/21

ENGINEER STAMP/SIGNATURE

SUBMITTALS

NO.	DATE	DESCRIPTION	BY
B	05/17/21	PRELIMINARY FOR REVIEW	JAJ
C	06/03/21	PRELIMINARY FOR REVIEW	JAJ
D	07/15/21	PRELIMINARY FOR REVIEW	JAJ
E	07/20/21	PRELIMINARY FOR REVIEW	JAJ
0	07/29/21	FINAL CD	JAJ

EBI JOB NO:
8121000033

SITE INFO:

PLAINVILLE 4
276 NEW BRITAIN AVENUE
PLAINVILLE, CT. 06062

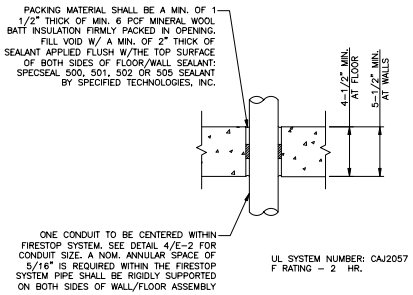
SHEET TITLE:

ELECTRICAL NOTES

DRAWN BY: ----
CHECKED BY: ----
DATE: ----

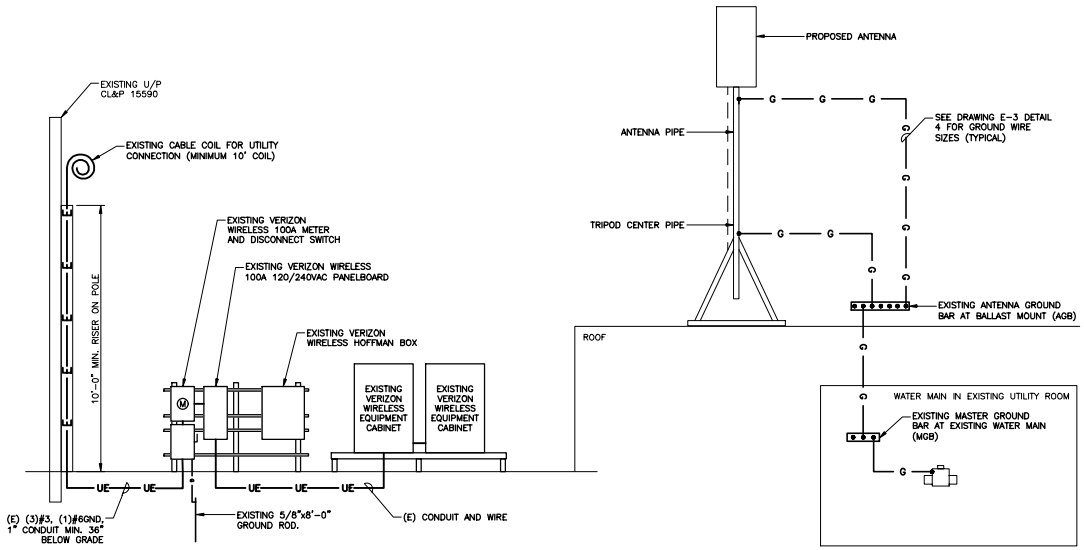
SHEET NO:
E-1

1 SPACE NOT USED SCALE: N.T.S.



PVC CONDUIT PENETRATION DETAIL
IN CONCRETE OR MASONRY

2 CONDUIT PENETRATION DETAIL SCALE: N.T.S.



3 GENERAL WIRING DIAGRAM

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SHEET TITLE:

ELECTRICAL DETAILS

DRAWN BY: ----
CHECKED BY: ----
DATE: ----

SHEET NO:
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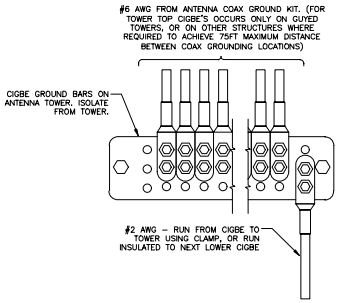


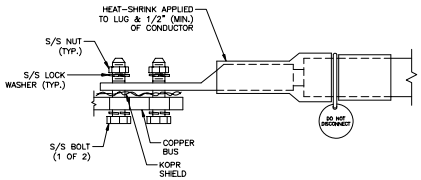
NOTES:

1. ALL CIGBE GROUND BARS ON TOWER ARE TO BE ERICO TDSGA. TYPICALLY USE TDSGA–WB17 ISOLATED FROM TOWER AND CONNECTED TO UNISTRUT BRACKET.
2. IF CIGBE CANNOT BE CONNECTED TO TOWER WITH #2 AWG AND CLAMP (OR CADWELD), THEN RUN #2 BLACK INSULATED GROUND LEAD FROM CIGBE DOWN TO NEXT LOWER CIGBE. SECURE GROUND LEAD WITH NON–METALLIC TIES AT SAME SPACING AS COAX SUPPORTS.

1 ANTENNA GROUND WIRE INSTALLATION DETAIL SCALE: N.T.S.

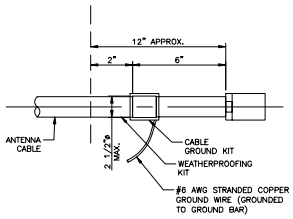
NOTES:

1. ALL HARDWARE 18–8 STAINLESS STEEL INCLUDING BELLEVILLES. COAT ALL SURFACES WITH KOPR–SHEILD BEFORE MATING.
2. FOR GROUND, BOND TO STEEL ONLY: INSERT A LOCK WASHER BETWEEN LUG & STEEL. COAT ALL SURFACES WITH KOPR–SHIELD.
3. ALL HARDWARE SHALL BE 3/8" DIAMETER.



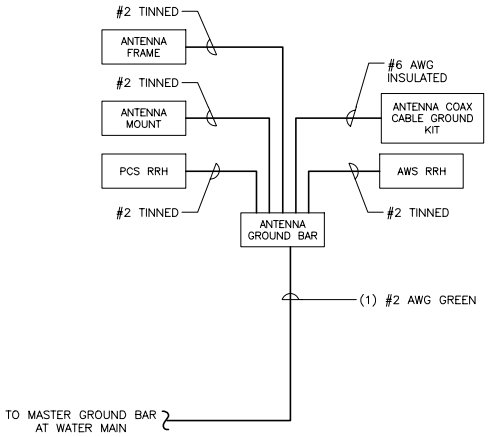
2 GROUND LUG DETAIL

NOTES:
DO NOT INSTALL CABLE GROUND KIT AT A BEND & ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR



TO ANTENNA CABLE

3 COAX CABLE GROUNDING DETAIL SCALE: N.T.S.



4 GROUNDING SCHEMATIC SCALE: N.T.S.

5 SPACE NOT USED

1. ALL GROUND CABLE IN CONCRETE OR THROUGH WALL SHALL BE IN 3/4" PVC CONDUIT. NO METALLIC CONDUIT SHALL BE USED FOR GROUNDING CONDUCTOR SLEEVES.
2. GROUND ALL EXPOSED METALLIC OBJECTS USING A TWO–HOLE NEMA DRILLED CONNECTOR SUCH AS THOMAS & BETTS #32207 OR APPROVED EQUAL.
3. ALL EXTERIOR GROUND CONDUCTORS INCLUDING GROUND RING SHALL BE #2 AWG SOLID BARE TINNED COPPER. MAKE ALL GROUND CONNECTIONS AS SHORT AND DIRECT AS POSSIBLE. AVOID SHARP BENDS. THE RADIUS OF ANY BEND SHALL NOT BE LESS THAN 8" AND THE INCLUSIVE ANGLE OF ANY BEND SHALL NOT EXCEED 90°. GROUNDING CONDUCTORS SHALL BE ROUTED DOWNWARD TOWARD THE BURIED GROUND RING.
4. ALL BELOW GROUND EXTERNAL CONNECTIONS SHALL BE EXOTHERMICALLY WELDED. ALL EXOTHERMIC WELDS TO BURIED GROUND RING SHALL BE THE PARALLEL–TYPE, EXCEPT FOR THE GROUND RODS WHICH ARE TEE–TYPE EXOTHERMIC WELDS. REPAIR ALL GALVANIZED SURFACES THAT HAVE BEEN DAMAGED BY EXOTHERMIC WELDING. USE SPRAY GALVANIZED SUCH AS HOLUB LECTROSOL #15–501.
5. WHERE MECHANICAL CONNECTORS (TWO–HOLE OR CLAMP) ARE USED, APPLY A LIBERAL PROTECTIVE COATING OF A CONDUCTIVE ANTI–OXIDE COMPOUND ON ALL CONNECTORS. PROVIDE LOCK WASHERS ON ALL MECHANICAL CONNECTORS. USE STAINLESS STEEL HARDWARE THROUGHOUT. THOROUGHLY REMOVE ALL PAINT AND CLEAN ALL DIRT FROM SURFACES REQUIRING GROUND CONNECTORS, REPAINT TO MATCH EXISTING AFTER CONNECTION IS MADE TO MAINTAIN CORROSION RESISTANCE. ALL GROUND CONNECTIONS SHALL BE APPROVED FOR THE TYPES OF METALS BEING ATTACHED TO.
6. ALL MOUNTING HARDWARE SHALL BE STAINLESS STEEL.
7. THE GROUND CONDUCTORS SHALL BE RUN STRAIGHT FOR MINIMUM INDUCTANCE AND VOLTAGE DROP. SINCE CABLE BENDS INCREASE INDUCTANCE, THE MINIMUM REQUIRED BENDING RADIUS IS 8 INCHES WHEN BENDS ARE UNAVOIDABLE. ALL METAL WORK WITHIN 6 FEET OF THE GROUND RING SHALL BE DIRECTLY BONDED TO THIS GROUND SYSTEM, WITHOUT USING SERIES OR DAISY CHAIN CONNECTION ARRANGEMENTS.
8. PAINT, ENAMEL, LACQUER AND OTHER ELECTRICALLY NON–CONDUCTIVE COATINGS SHALL BE REMOVED FROM THREADS AND SURFACE AREAS WHERE CONNECTIONS ARE MADE TO ENSURE GOOD ELECTRICAL CONTINUITY.
9. CONNECTIONS BETWEEN DISSIMILAR METALS SHALL NOT BE MADE UNLESS THE CONDUCTORS ARE SEPARATED BY A SUITABLE MATERIAL THAT IS A PART OF THE ATTACHMENT DEVICE LISTED AND APPROVED FOR USE WITH THE SPECIFIC DISSIMILAR METALS MAY BE USED FOR THE PURPOSE.
10. ALL BELOW GRADE GROUND SYSTEM CONDUCTORS SHALL BE A MINIMUM DEPTH OF 30".

6 GENERAL GROUNDING NOTES

PREPARED FOR:

CELLCO PARTNERSHIP
d/b/a

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SHEET TITLE:

GROUNDING DETAILS

DRAWN BY: ---
CHECKED BY: ---
DATE: ---

SHEET NO:
E-3

ATTACHMENT 3

SAMSUNG

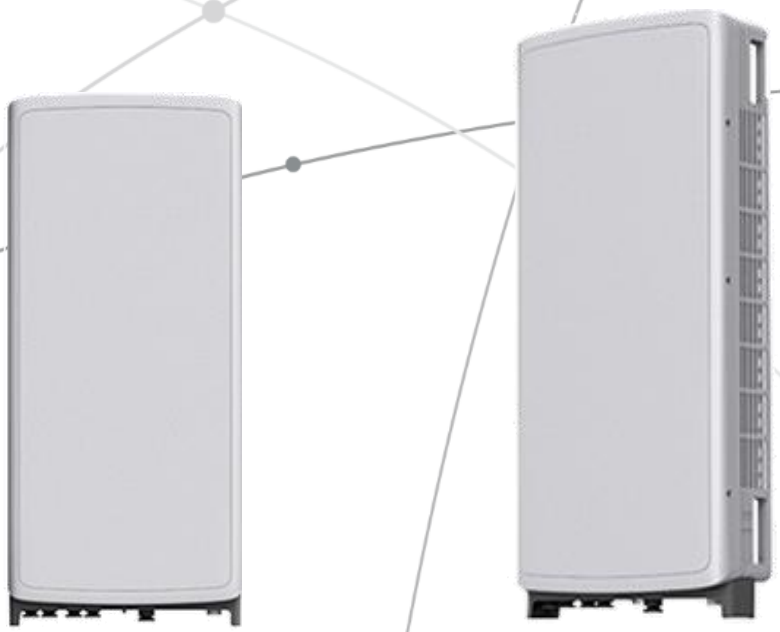
SAMSUNG

C-Band 64T64R Massive MIMO Radio

for High Capacity and Wide Coverage

Samsung C-Band 64T64R Massive MIMO Radio enables mobile operators to increase coverage range, boost data speeds and ultimately offer enriched 5G experiences to users in the U.S..

Model Code : MT6407-77A

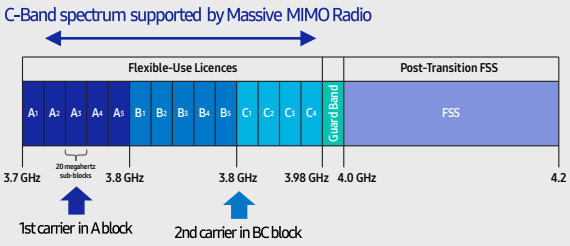


Points of Differentiation

Wide Bandwidth

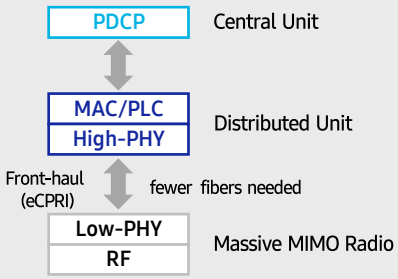
With capability to support up to 2 CC carrier configuration, Samsung C-Band massive MIMO Radio supports 200 MHz bandwidth in the C-Band spectrum.

Samsung C-Band massive MIMO Radio covers the entire C-Band 280 MHz spectrum, so it can meet the operator's needs in current A block and future B/C blocks



Future Proof Product

Samsung C-Band 64T64R Massive MIMO radio supports not only CPRI but also eCPRI as front-haul interface.
It enables operators can cut down on OPEX/CAPEX by reducing front-haul bandwidth through low layer split and using ethernet based higher efficient line.



Enhanced Performance

C-Band massive MIMO Radio creates sharp beams and extends networks' coverage on the critical mid-band spectrum using a large number of antenna elements and high output power to boost data speeds.

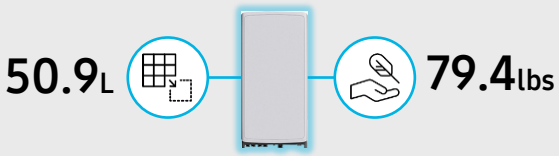
This helps operators reduce their CAPEX as they now need less products to cover the same area than before.

Furthermore, as C-Band massive MIMO Radio supports MU-MIMO(Multi-user MIMO) , it enables to increase user throughput by minimizing interference.

Well Matched Design

Samsung C-Band Massive MIMO radio utilizes 64 antennas, supports up to 280MHz bandwidth, and delivers a 200W output power. despite the above advanced performance, the Radio has a compact size of 50.9L and 79.4lbs. This makes it easy to install the Radio.

It is designed to look solid and compact, with a low profile appearance so that, when installed, harmonizes well with the surrounding environment..



Technical Specifications

Item	Specification
Tech	NR
Band	n77
Frequency Band	3700 - 3980 MHz
EIRP	78.5dBm (53.0 dBm+25.5 dBi)
IBW/OBW	280 MHz / 200 MHz
Installation	Pole/Wall
Size/ Weight	16.06 x 35.06 x 5.51 inch (50.86L)/ 79.4 lbs

SAMSUNG

About Samsung Electronics Co., Ltd.

Samsung inspires the world and shapes the future with transformative ideas and technologies. The company is redefining the worlds of TVs, smartphones, wearable devices, tablets, digital appliances, network systems, and memory, system LSI, foundry and LED solutions.

129 Samsung-ro, Yeongtong-gu, Suwon-si Gyeonggi-do, Korea

ATTACHMENT 4

September 17, 2021

EBI Consulting
6876 Susquehanna Trail South
York, PA 17403
Tel 717-991-6253
cthompson@ebiconsulting.com

ODISCOM, LLC
5305 Gulfport Drive
Garland, Texas 75043
469-531-1176

Subject:	**Structural Analysis Letter**
Carrier Designation:	**Carrier:** VZW **Site Name:** Plainville 4 CT
Site Data:	**276 New Britain Ave., Plainville, CT**

Dear Chris,

This letter is to confirm Odiscom's structural analysis of the proposed Verizon antenna mounting system on the above listed site for supporting the proposed Verizon equipment upgrade. The intent of this review is to determine if the proposed modification of antennas, RRHs, and related equipment will exceed the structural capacity of the existing and proposed supporting structure(s).

The following sources of information were considered in preparing this evaluation:

Photographs and notes taken by EBI personnel on a site visit on October 29, 2018
RFDS dated November 17, 2020

Substantial proposed equipment modification at considered in this analysis includes:

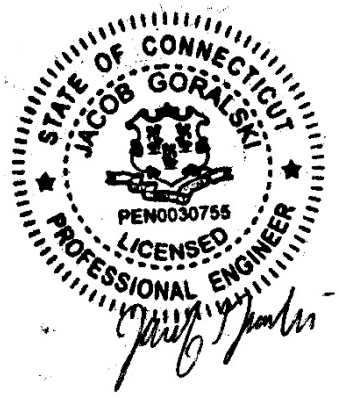
Installing (3) Sitepro1 TRPD-HD Sled Mounts (1 sled per sector)
Installing (3) Samsung MT6407-77A (1 per sector) on proposed tripod ballast sleds

By engineering analysis and/or comparison, the proposed antenna mount and existing building structure are deemed sufficient for supporting the proposed Verizon equipment listed herein.

This certification is based on the physical mount characteristics as described and as determined through site specific photos, proposed CDs, and existing structural reports. This certification also relies upon the condition that all structural members and connections are properly designed and constructed, and that the structure is in good condition. Prior to installation of any equipment, the contractor shall inspect the condition of all supporting members and connectors, report any observed existing construction discrepancies and defects to the engineer immediately, and discontinue work until further notice. The contractor shall be responsible for the means and methods of construction.

Please contact us at our office if you have any questions.

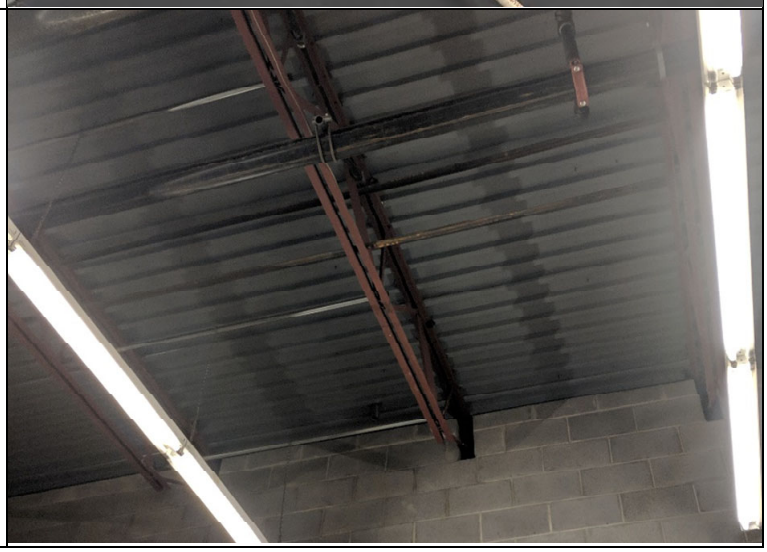
Jacob Goralski, PE
Engineering Supervisor
Connecticut PE # PEN.0030755
Expiration: 1/31/2022



9/17/2021

Jacob Goralski
Digitally signed by Jacob Goralski
Date: 2021.09.17 13:07:24 -05'00'

PHOTOGRAPH/ DOCUMENT LOG

Photo 1: Rooftop components	
Photo 2: General view of rooftop.	
Photo 3: General view of roof framing	

STRUCTURAL DESIGN PARAMETERS

BUILDING CODES:

2018 Connecticut State Building Code
ASCE 7-10
AISC Steel Manual 14th Ed.
TIA/EIA-222 Revision G

OCCUPANCY RISK CATEGORY:	II

LIVE LOADS:

Roofs:	20 PSF

SNOW LOADS:

Ground Snow Load, Pg:	35 psf
Equation 7-1 Flat Roof Conversion Factor:	0.7
Snow Exposure Factor, Ce:	1.0
Thermal factor, Ct:	1.0
Snow Load Importance Factor:	1.0
Roof Snow Load, Pf:	30 psf min. per code

WIND LOADS:

Ultimate Wind Speed	125 mph	
3-second gust wind speed:	97 mph	
Importance Factor, I:	1.0	(where applicable)
Exposure Category:	C	

SEISMIC LOADS:

Equipment Adds Negligible Load, Whole Building Seismic Analysis Not Required

Component Importance Factor, I_P:	1.0
Spectral Acceleration Short Period, S_S:	0.183
Spectral Acceleration 1-Second Period, S_1:	0.064
Site class	D
Seismic design category:	B

Below is a screenshot taken from Google Earth, included for showing surrounding terrain

ASSUMPTIONS, LIMITATIONS AND DISCLAIMERS

1) The structure was built in accordance with the designer's specifications and the structure has been maintained and is free of damage.
2) This Structural Evaluation is not a condition assessment of the building and foundation and is an evaluation of the theoretical structural capacity.
3) This evaluation is based from the information supplied, and therefore, this report's results are as accurate as the supplied data.
4) Odsicom, LLC makes no warranties, expressed and/or implied, in connection with this report, and disclaims any liability associated with material, fabrication, or erection of this building. Odiscom, LLC will not be held responsible from any consequential or incidental damages sustained by any person, firm, or organization as a result of the contents of this report. The maximum liability of Odiscom, LLC pursuant to this report will be limited to the total fee received for compilation of this report.
5) The use of this report shall be limited to the purpose for which it was commissioned and may not be used for any other purposes without the written consent of Odiscom, LLC.

EBI Consulting
environmental | engineering | due diligence
21 B Street | Burlington, MA 01803 | P: 800.786.2346

Client Verizon
Site ID Plainville 4

This spreadsheet calculates the wind forces on proposed equipment and checks the proposed ballast sled.
Shaded fields indicated user data entry. ASD method of design used.

References: (See also Structural Design Criteria Calc.)

ASCE 7-10

Dimensions and weights of existing and proposed equipment: (Loads on side control for RRH on mast pipe condition)

Description	Weight* (lbs)	Exposed Height (in)	Width (in)	Depth (in)	Qty./ sector	Wind Centroid ht (ft)	Gravity centroid dist. (ft)**	K_d	Qty * Un-shielded Face surface area (sf)
Flat Members									
Sled trays+misc	258	2.0	120.0	94.0	1	0.1	-3.6	0.95	1.67
Sled diagonals	28	48.0	3.5	4.0	3	1.5	-3.6	0.95	3.50
Samsung MT6407-77A antenna	82	35.1	16.1	5.5	1	9.0	-3.6	0.95	3.91
Round Members									
Exposed portion of 4-1/2" O.D. pipe	108	120.0	4.5	4.5	1	5.0	-3.6	0.95	3.75
Exposed portion of 2-7/8" O.D. pipe	23	48.0	2.9	2.9	2	9.0	-3.6	0.95	1.92

*weight is an estimate including required hardware, including pipe mount bracket

**Gravity centroid distance is distance from near edge of sled (negative values reduce overturning)

RRH dimensions shown above are worst case scenario, and final RRH's may be smaller than those shown above- refer to CD's.

3 Second Gust Wind Velocity, V_{3S} (no ice) =	97	mph		
Height above grade	29	ft, center of antennas		
Exposure Category	C	α = 9.5	z_g (ft) = 900	z_{min} (ft) = 15
$K_z = 2.01*(z/z_g)^{2/\alpha}$ =	0.98			
K_{zt}=	1.00	topographic category 1		
I=	1.00	Class II structure (telecom equipment)		

Wind Force on equipment = $A*G_h*q_z*C_a$

Description	Aspect ratio	C_a or C_A	G_h	Wind Pressure (psf)	Wind force (lb)	Wind OTM (lb-ft)	Equip. self-wt (lb)	Gravity OT moment (lb-ft)	Total OT moment (lb-ft)
Sled trays+misc	0.0	1.20	1.00	26.8	45	4	258	-927	-923
Sled diagonals	13.7	1.62	1.00	36.2	127	190	85	-307	-117
Samsung MT6407-77A antenna	2.2	1.20	1.00	26.8	105	942	82	-294	649
Round Members									
Exposed portion of 4-1/2" O.D. pipe	26.7	1.07	1.00	23.9	89	447	108	-389	58
Exposed portion of 2-7/8" O.D. pipe	16.7	1.02	1.00	22.7	43	391	46	-167	224
Totals:					**409**	**1975**	**579**	**-2084**	**-108**

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Client Verizon
Site ID Plainville 4

Design ballast required at worst case sector (similar sleds in each sector):

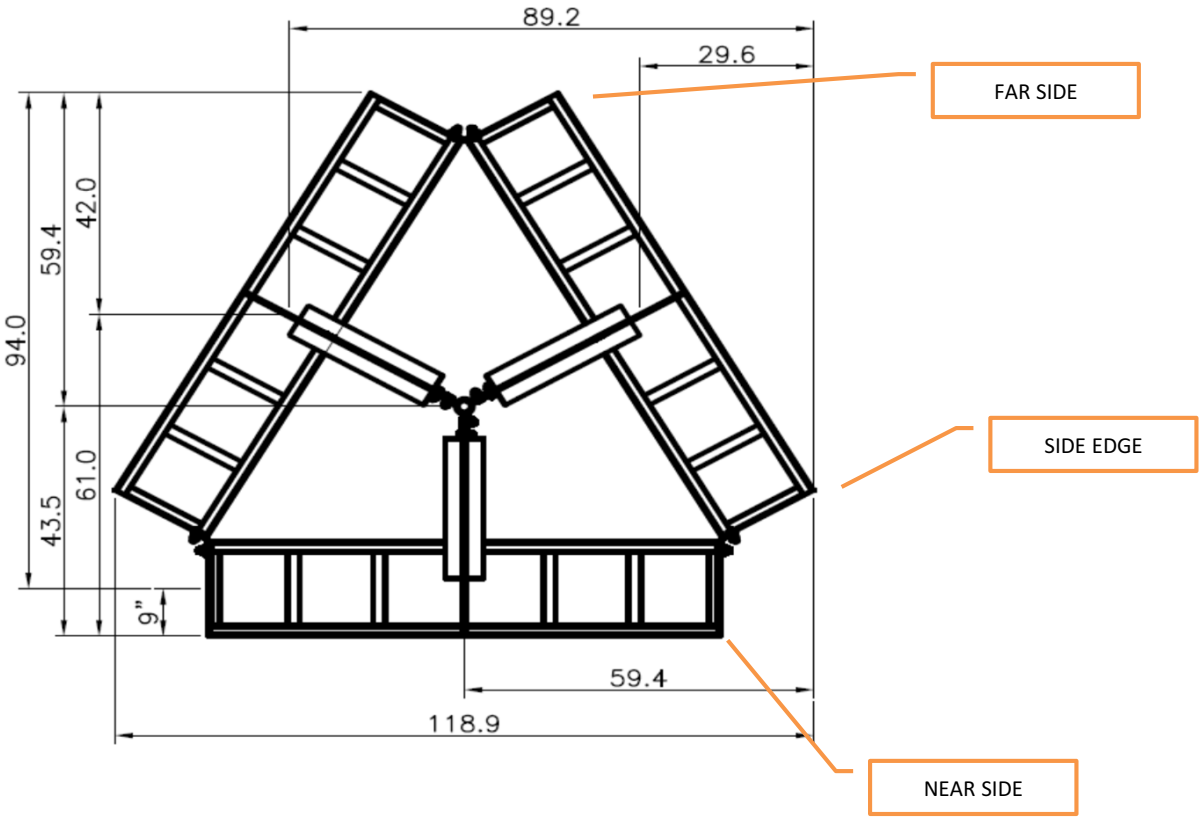
Design ballast sled for overturning moment (OTM):

Req'd factor of safety against overturning =	1.5				
Required resisting dead load moment =	879	lb-ft, includes F.S. against OT			
Weight of individual CMU block =	15	lb, modular 2"x8"x16" solid block (135 pcf density)			
Resisting Moment about near edge of sled = ballast per tray (BPT)*(61"*2 trays+9"*1 tray)					
ballast per tray required =	879 /	(61"*2 trays+9"*1 tray) * 12"/ft=	**81**	**lbs per tray**	**Near Side**
Resisting Moment about far edge of sled = ballast per tray (BPT)*(42"*2 trays+94"*1 tray)					
ballast per tray required =	879 /	(42"*2 trays+94"*1 tray) * 12"/ft =	**59**	**lbs per tray**	**Far Side**
Resisting Moment about side edge of sled = ballast per tray (BPT)*(89.2"*1 tray+29.6"*1 tray+59.4"*1 tray)					
ballast per tray required =	879 /	(89.2+29.6+59.4) * 12"/ft =	**59**	**lbs per tray**	**Side edge**
Min. ballast on BACK tray req'd, W =	81	lb, includes F.S. against OT			
Weight from additonal timber per sector=	0	lb			
Number of blocks req'd on each tray =	**6**	**block qty.**			
Weight of CMU blocks per tray =	90	lb (per tray)	Controls		

Check ballast sled for sliding:

Required safety factor against sliding =	1.5	
Coefficient of friction =	0.9	
Total weight required to resist sliding =	682	lb
Dead load without ballast	579	lb
Ballast weight required	103	lb
Total number blocks req'd to resist sliding =	**7**	**TOTAL COUNT- see below for adjusted qty in each tray**

Weight of rubber mats =	97	lb, 2 mats at 16.2 lb/ea under each tray * 3 trays				
Number of blocks to use on each tray	**8**	**OK**				
Weight of blocks per tray	**120**	**lbs**				
Total weight of blocks (all 3 trays)	**360**	**lbs**				
Total weight of everything, including mats	**1036**	**lbs**	/3 sides =	345 lbs	/ 8' tray =	43.2 plf



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Client Verizon
Site ID Plainville 4

Check proposed mast pipe for supporting antenna:

Length mast pipe cantilevered above tripod bracing	5.33	ft, estimated maximum
1.6WL+1.2DL Sum of moments	1770	ft-lbs
Mast pipe steel grade	35	ksi
Plastic Modulus Z =	4.05	4-1/2"O.D. Schedule 40 pipe
Phi	0.90	
Available Flexural Strength, LRFD	10631.25	ft-lbs
Bending unity checks:		
Bending unity check, 1.6WL+1.2DL load combo:	17%	<100% OK

Check Proposed horizontals supporting antenna pipe masts

Spacing between antennas	4	ft, estimated maximum (assumed centered on mast)	
Dead load from antennas	0	lb	
Dead load from pipe masts	46	lb	
Dead load from horizontal pipes	11.6	plf	
Wind load on horizontal pipes	21.71748	plf	
Wind load on antennas	0	lb	
Resulting moment	208.696	ft-lbs	
Horizontal pipe steel grade	35	ksi	
Plastic Modulus	1.37	2-7/8" O.D Schedule 40 pipe	
Phi	0.90		
Available flexural strength	7192.5	ft-lbs	for (2) horizontals
Bending unity checks:			
Bending unity check, 1.6WL+1.2DL load combo:	3%	<100% OK	

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Client Verizon
Site ID Plainville 4

This spreadsheet calculates the wind forces on proposed equipment and checks the existing ballast sled.
Shaded fields indicated user data entry. ASD method of design used.

References: (See also Structural Design Criteria Calc.)

ASCE 7-10

Dimensions and weights of existing and proposed equipment: (Loads on side control for RRH on mast pipe condition)

Description	Weight* (lbs)	Exposed Height (in)	Width (in)	Depth (in)	Qty./ sector	Wind Centroid ht (ft)	Gravity centroid dist. (ft)**	K_d	Qty * Un-shielded Face surface area (sf)
Flat Members									
Sled trays+misc	258	2.0	120.0	94.0	1	0.1	-3.6	0.95	1.67
Sled diagonals	28	48.0	3.5	4.0	3	1.5	-3.6	0.95	3.50
Raycap Surge Suppression	32	29.5	16.5	10.3	1	7.0	-3.6	0.95	3.38
Samsung B5/B13 RRH	75	15.0	15.0	10.0	1	4.0	-3.6	0.95	1.56
Commscope NHH-65B-R2B	45	72.0	11.9	7.1	2	9.0	-3.6	0.95	11.90
Samsung B2/B66 RRH	90	15.0	15.0	10.0	1	4.0	-3.6	0.95	1.56
Round Members									
Exposed portion of 4-1/2" O.D. pipe	76	84.7	4.5	4.5	1	3.5	-3.6	0.95	2.65
Exposed portion of 2-7/8" O.D. pipe	17	36.0	2.9	2.9	2	9.0	-3.6	0.95	1.44

*weight is an estimate including required hardware, including pipe mount bracket

**Gravity centroid distance is distance from near edge of sled (negative values reduce overturning)

RRH dimensions shown above are worst case scenario, and final RRH's may be smaller than those shown above - refer to CD's.

3 Second Gust Wind Velocity, V_{3S} (no ice) =	97	mph		
Height above grade	29	ft, center of antennas		
Exposure Category	C	α = 9.5	z_g (ft) = 900	z_{min} (ft) = 15
$K_z = 2.01*(z/z_g)^{2/\alpha}$ =	0.98			
K_{zt} =	1.00	topographic category 1		
I =	1.00	Class II structure (telecom equipment)		

Wind Force on equipment = $A*G_h*q_z*C_a$

Description	Aspect ratio	C_a or C_A	G_h	Wind Pressure (psf)	Wind force (lb)	Wind OTM (lb-ft)	Equip. self-wt (lb)	Gravity OT moment (lb-ft)	Total OT moment (lb-ft)
Sled trays+misc	0.0	1.20	1.00	26.8	45	4	258	-927	-923
Sled diagonals	13.7	1.62	1.00	36.2	127	190	85	-307	-117
Raycap Surge Suppression	1.8	1.20	1.00	26.8	91	634	32	-115	518
Samsung B5/B13 RRH	1.0	1.20	1.00	26.8	42	167	75	-270	-103
Commscope NHH-65B-R2B	6.1	1.36	1.00	30.3	361	3245	90	-324	2921
Samsung B2/B66 RRH	1.0	1.20	1.00	26.8	42	167	90	-324	-157
Round Members									
Exposed portion of 4-1/2" O.D. pipe	18.8	0.96	1.00	21.5	57	201	76	-274	-74
Exposed portion of 2-7/8" O.D. pipe	12.5	0.92	1.00	20.6	30	266	35	-125	141
Totals:					**793**	**4876**	**741**	**-2667**	**2209**

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Client Verizon
Site ID Plainville 4

Design ballast required at worst case sector (similar sleds in each sector):

Design ballast sled for overturning moment (OTM):

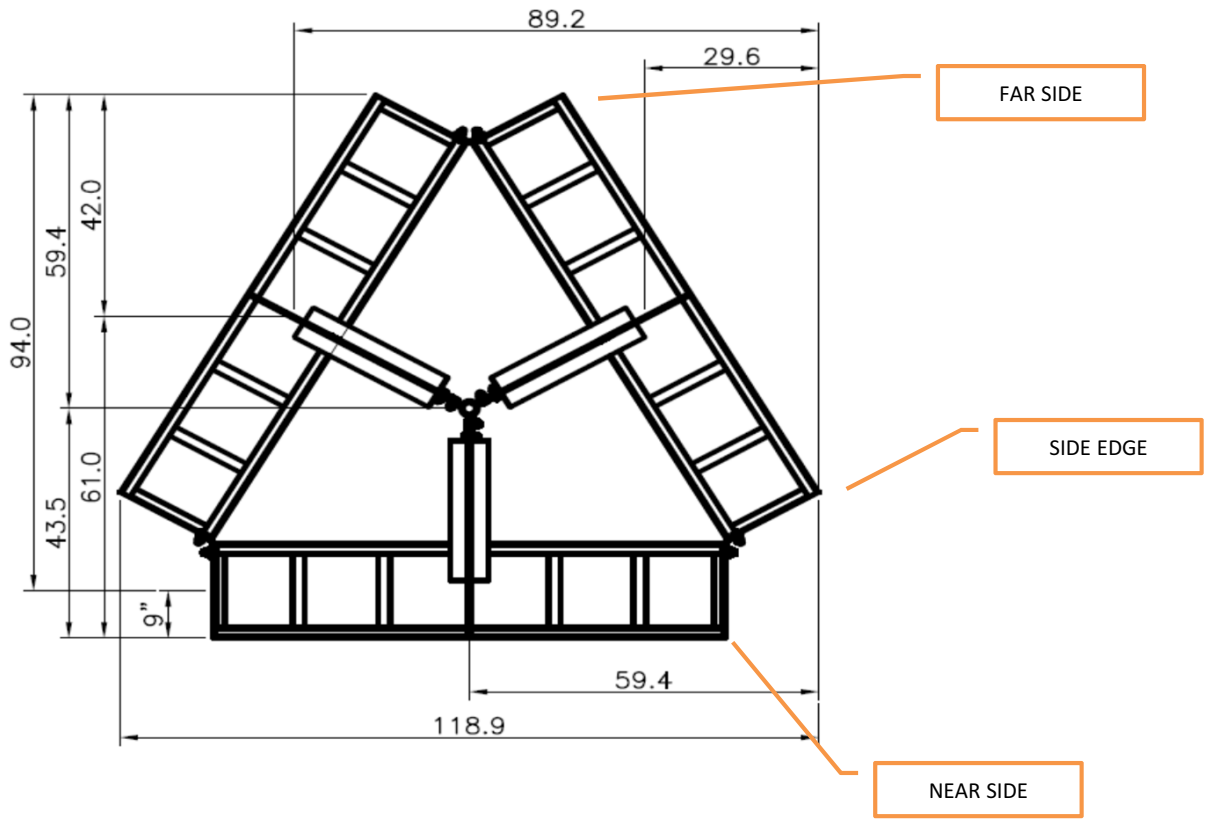
Req'd factor of safety against overturning =	1.5				
Required resisting dead load moment =	4646	lb-ft, includes F.S. against OT			
Weight of individual CMU block =	15	lb, modular 2"x8"x16" solid block (135 pcf density)			
Resisting Moment about near edge of sled = ballast per tray (BPT)*(61"*2 trays+9"*1 tray)					
ballast per tray required =	4646 /	(61"*2 trays+9"*1 tray) * 12"/ft=	**426**	**lbs per tray**	**Near Side**
Resisting Moment about far edge of sled = ballast per tray (BPT)*(42"*2 trays+94"*1 tray)					
ballast per tray required =	4646 /	(42"*2 trays+94"*1 tray) * 12"/ft =	**313**	**lbs per tray**	**Far Side**
Resisting Moment about side edge of sled = ballast per tray (BPT)*(89.2"*1 tray+29.6"*1 tray+59.4"*1 tray)					
ballast per tray required =	4646 /	(89.2+29.6+59.4) * 12"/ft =	**313**	**lbs per tray**	**Side edge**
Min. ballast on BACK tray req'd, W =	426	lb, includes F.S. against OT			
Weight from additonal timber per sector=	317	lb			
Number of blocks req'd on each tray =	**22**	**block qty.**			
Weight of CMU blocks per tray =	330	lb (per tray)	Controls		

Check ballast sled for sliding:

Required safety factor against sliding =	1.5	
Coefficient of friction =	0.9	
Total weight required to resist sliding =	1321	lb
Dead load without ballast	741	lb
Ballast weight required	263	lb
Total number blocks req'd to resist sliding =	**18**	**TOTAL COUNT - see below for adjusted qty in each tray**

Weight of rubber mats = 97 lb, 2 mats at 16.2 lb/ea under each tray * 3 trays

Number of blocks to use on each tray	**22**	**OK**				
Weight of blocks per tray	**330**	**lbs**				
Total weight of blocks (all 3 trays)	**990**	**lbs**				
Total weight of everything, including mats	**2145.2**	**lbs**	/3 sides =	715 lbs	/ 8' tray =	89.4 plf



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Client Verizon
Site ID Plainville 4

Check proposed mast pipe for supporting antenna:

Length mast pipe cantilevered above tripod bracing	5.33	ft, estimated maximum
1.6WL+1.2DL Sum of moments	2095	ft-lbs
Mast pipe steel grade	35	ksi
Plastic Modulus Z =	4.05	4-1/2"O.D. Schedule 40 pipe
Phi	0.90	
Available Flexural Strength, LRFD	10631.25	ft-lbs
Bending unity checks:		
Bending unity check, 1.6WL+1.2DL load combo:	20%	<100% OK

Check Proposed horizontals supporting antenna pipe masts

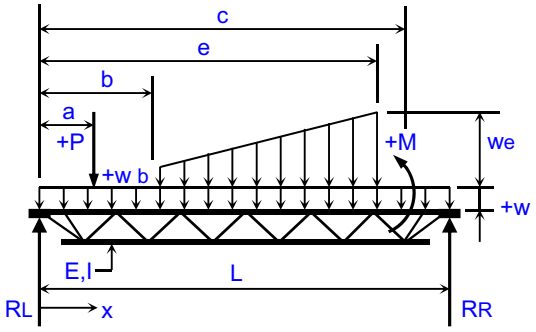
Spacing between antennas	4	ft, estimated maximum (assumed centered on mast)
Dead load from antennas	45	lb
Dead load from pipe masts	35	lb
Dead load from horizontal pipes	11.6	plf
Wind load on horizontal pipes	19.73378	plf
Wind load on antennas	180.2944	lb
Resulting moment	859.4501	ft-lbs
Horizontal pipe steel grade	35	ksi
Plastic Modulus	1.37	2-7/8" O.D Schedule 40 pipe
Phi	0.90	
Available flexural strength	7192.5	ft-lbs for (2) horizontals
Bending unity checks:		
Bending unity check, 1.6WL+1.2DL load combo:	12%	<100% OK

K-SERIES JOIST ANALYSIS

For standard K-Series Steel Joists Considered as Simple-Span Beams Subjected to Non-Standard Loads

Job Name:	Plainville 4	Subject:	Existing joists with ballasted sled load		
EBI Job Number:	8118000524	Originator:	MOB	Checker:	ID

Input Data:



Nomenclature

Joist Data (Input required in yellow highlighted areas)

Designation =	**22K4**	closest designation with info available
Span, L =	**30**	ft.
Depth, D =	22	in. (from K-Joists Load Table)
Weight, w =	8	lbs./ft. (from K-Joists Load Table)
allowable w=	**302**	lbs./ft.
allowable w_{LL}=	**219**	lbs./ft.

Intermediate Calc's

Inertia, Ix =	153.1	$inches^4$
M(allow)=	33975	ft.-# , $M=wL^2/8$
V(allow)=	4530	lbs., V=wL/2

0.7*35psf*1*1
=24.5 psf

*Loading considered is 1/3 of the total point load imposed by one sector frame applied at midspan considering distribution with 5' spacing on joists and 8' ballast trays above 15' timbers

Actual Design Loads:

Full Uniform:

Joist Spacing=	5	feet
Dead Load =	10	psf
Live load =	24.5	psf, used to model snow load
w =	173	plf, w = spacing * (DL + LL)

**Estimated HVAC per joist

Distributed:	Start b (ft.)	Start wb (plf)	End e (ft.)	End we (plf)
#1:	0.00	0	0.00	0
#2:				
#3:				
#4:				
#5:				
#6:				
#7:				
#8:				

Point Loads:	a (ft.)	P (lbs.)	
#1:	15.0000	158.963	*
#2:	19.0000	158.963	
#3:	11.0000	158.963	
#4:	5.0000	400	**
#5:			
#6:			
#7:			
#8:			
#9:			
#10:			
#11:			
#12:			
#13:			
#14:			
#15:			

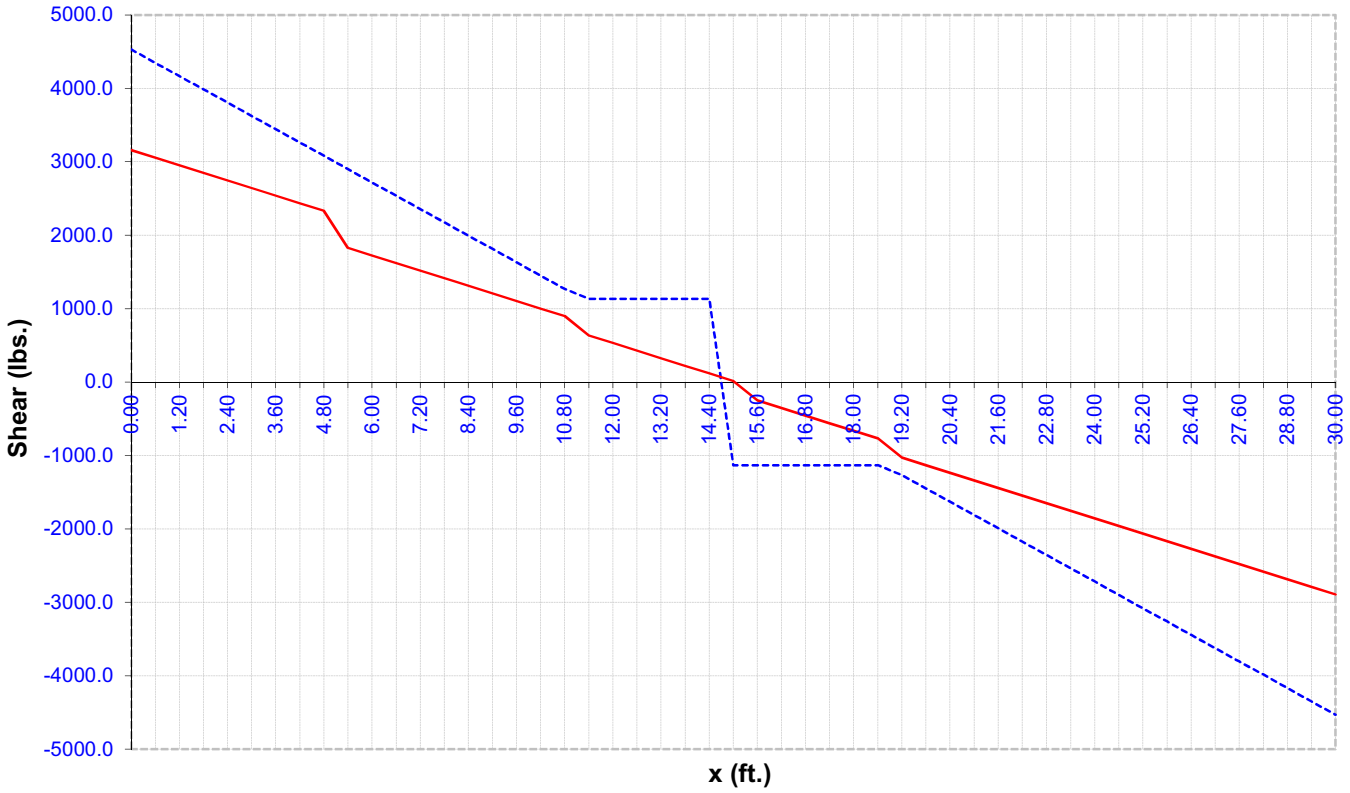
Moments:	c (ft.)	M (ft-lbs)
#1:		
#2:		
#3:		
#4:		

Maximum Stress Ratios:

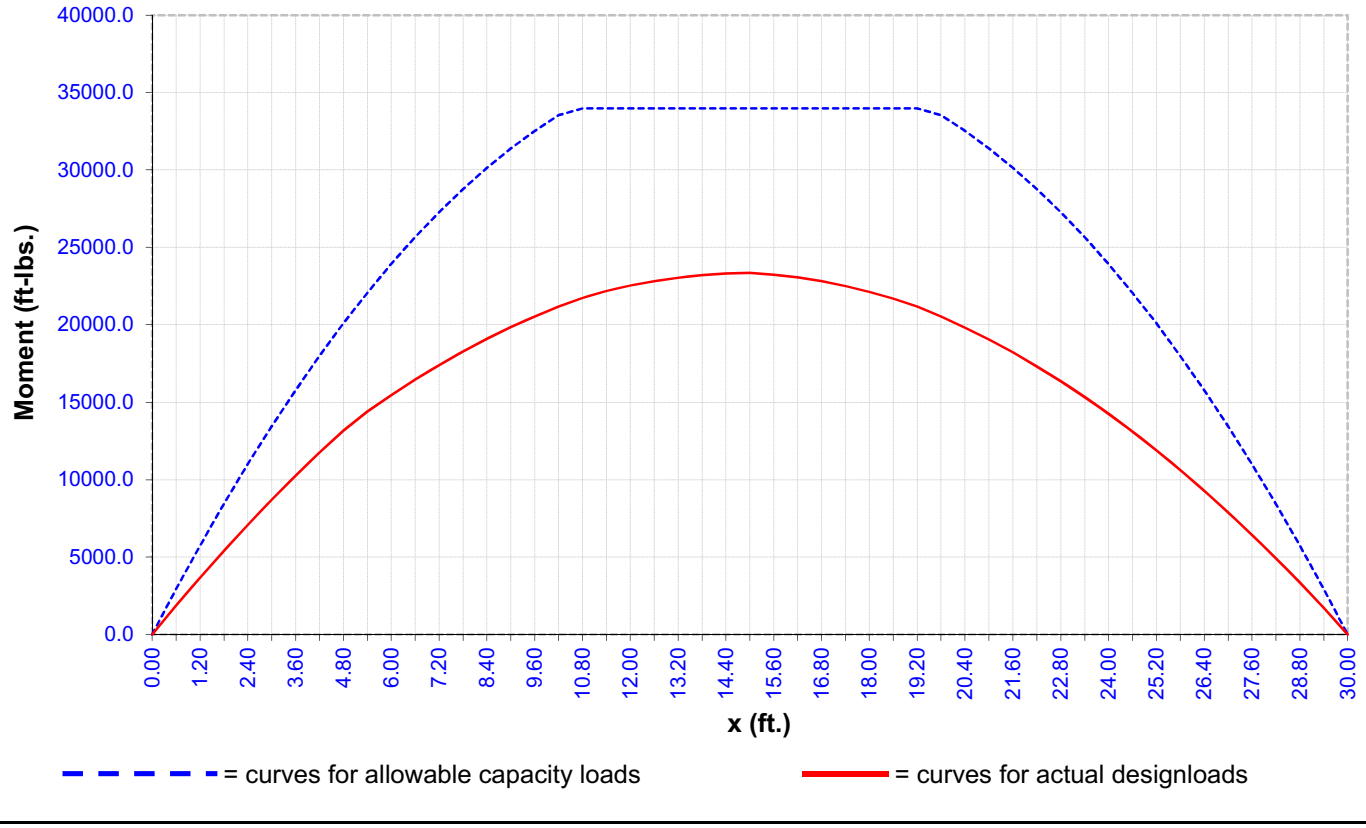
S.R. =	**0.812**	for Shear	@ x =	19.20 ft.
S.R. =	**0.687**	for Moment	@ x =	15.00 ft.

Comments

Shear Diagram

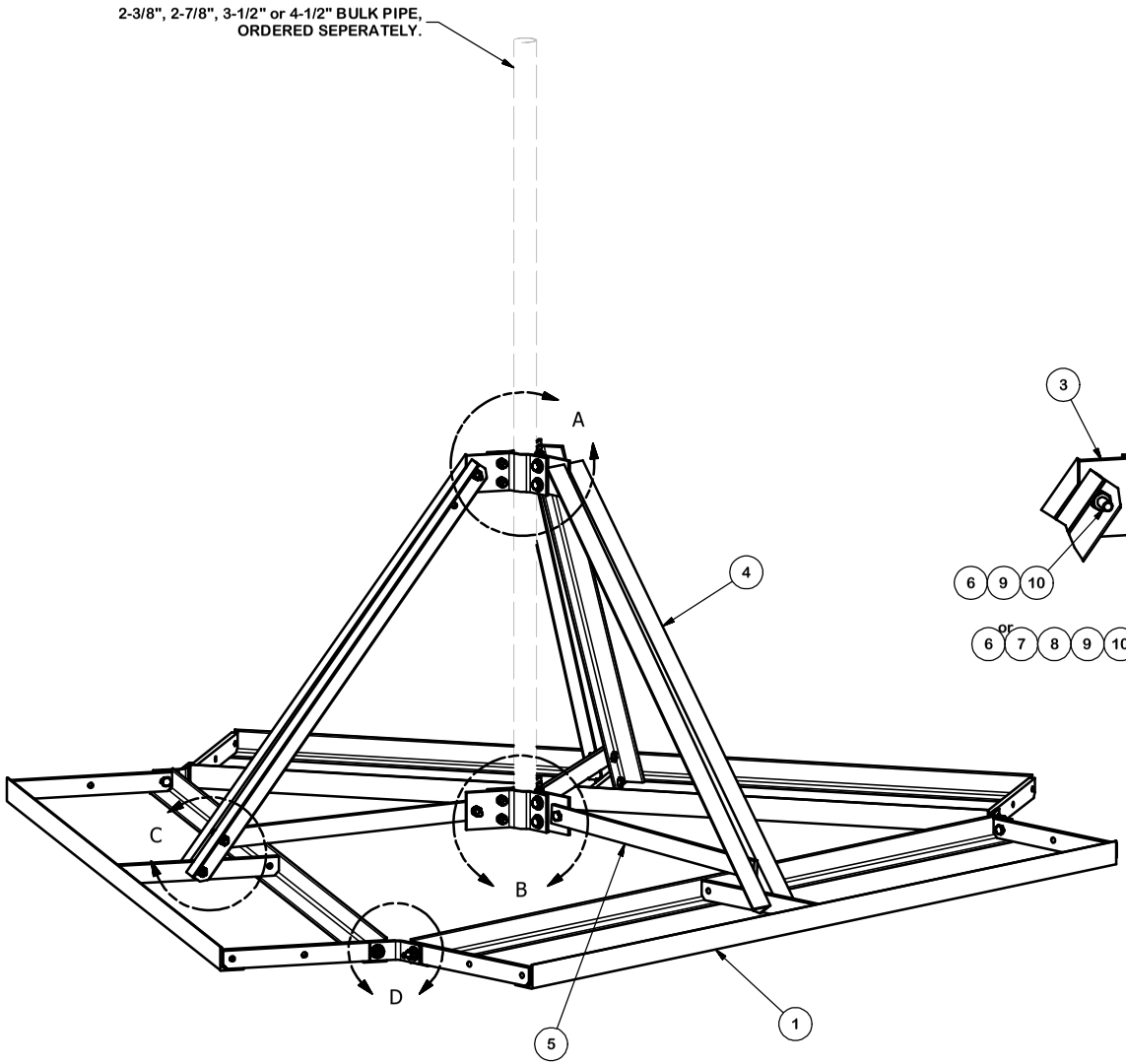


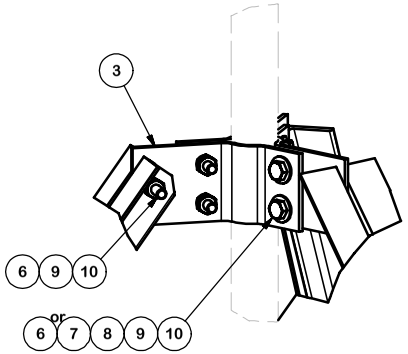
Moment Diagram



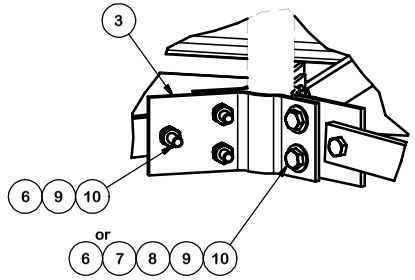
File: C:\Users\mobrien\OneDrive - EBI Consulting\Documents\Jobs\Verizon Wireless\Conneticuit\8118000524 Plainville\VzW_Site_Plainville 4 CT_Structural Analysis_05.24.19\K-JOIST Calc

PARTS LIST						
ITEM	QTY	PART NO.	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1	3	X-232696	BALLAST TRAY WELDMENT - SITE PRO 1		66.53	199.60
2	3	X-232693	FORMED PLATE 60 DEGREE SITE PRO 1		0.94	2.82
3	6	X-232691	FORMED PLATE PIPE CLAMP - SITE PRO 1		2.74	16.46
4	6	X-232697	TRPD-HD DIAGONAL ANGLE - SITR PRO 1		14.21	85.27
5	3	X-232698	TRPD-HD SUPPORT PLATE - SITE PRO 1		8.72	26.16
6	30	G12212	1/2" x 2-1/2" HDG HEX BOLT GR5		0.20	6.11
7	12	G1204	1/2" x 4" HDG HEX BOLT GR5 FULL THREAD		0.27	3.24
8	18	G12FW	1/2" HDG USS FLATWASHER		0.03	0.61
9	30	G12LW	1/2" HDG LOCKWASHER		0.01	0.42
10	30	G12NUT	1/2" HDG HEAVY 2H HEX NUT		0.07	2.15
					TOTAL WT. #	342.84





DETAIL A



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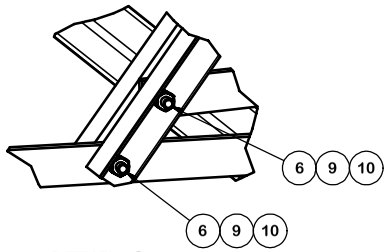
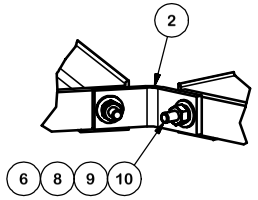


DETAIL C



DETAIL D

TOLERANCE NOTES

TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:
SAWED, SHEARED AND GAS CUT EDGES *(± 0.030")*
DRILLED AND GAS CUT HOLES *(± 0.030")* - NO CONING OF HOLES
LASER CUT EDGES AND HOLES *(± 0.010")* - NO CONING OF HOLES
BENDS ARE ± 1/2 DEGREE
ALL OTHER MACHINING *(± 0.030")*
ALL OTHER ASSEMBLY *(± 0.060")*

REVISION HISTORY				
REV	DESCRIPTION OF REVISIONS	CPD	BY	DATE
B	EDIT BALLAST EQUATION	4893	BMC	5/16/2011
A	EDIT BALLAST EQUATION	4893	BMC	4/21/2011

DESCRIPTION
NON-PENETRATING
TRIPOD
SITE PRO 1

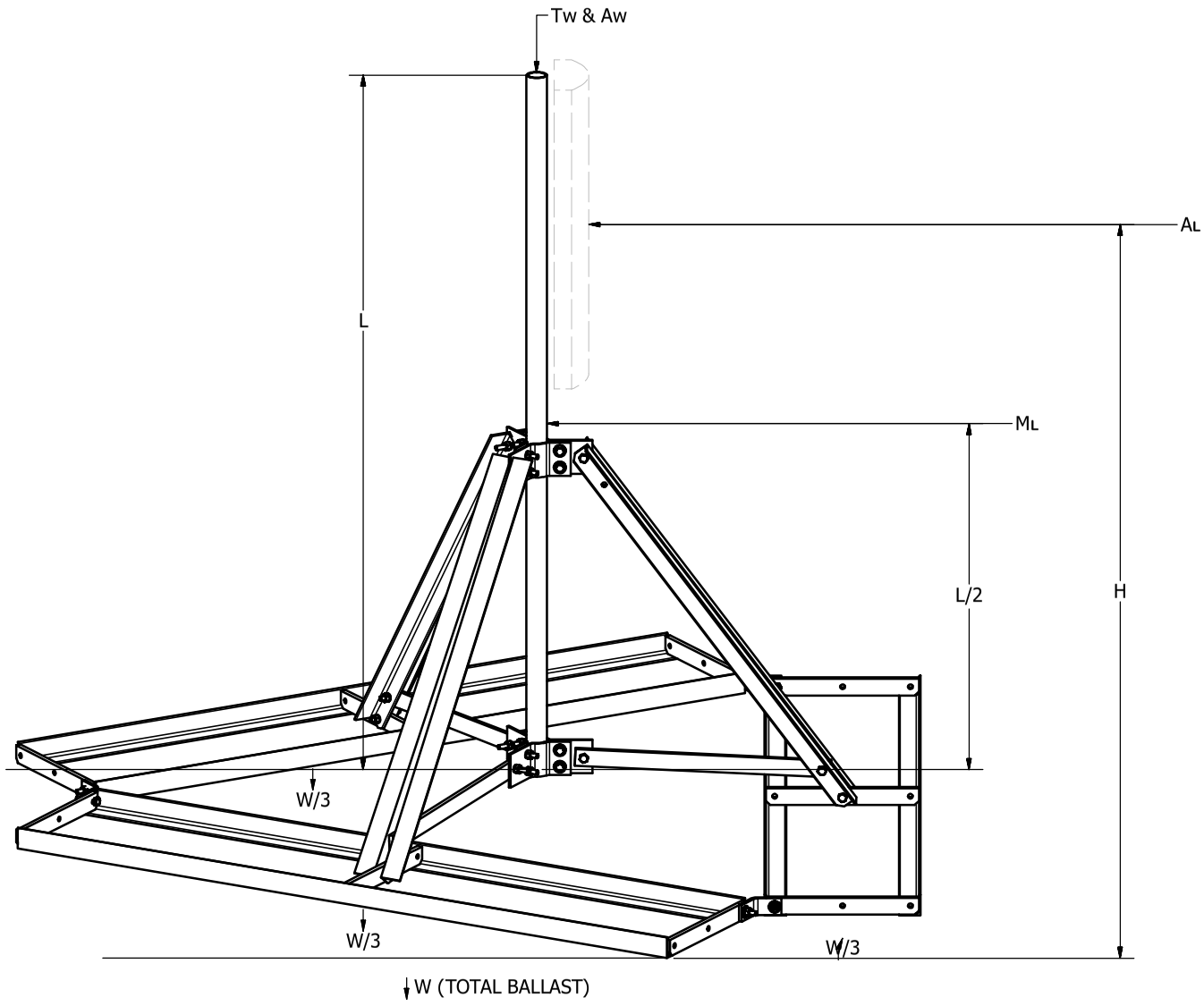
SITE PRO 1 — A valmont COMPANY

Engineering Support Team: 1-888-753-7446

Locations: New York, NY; Atlanta, GA; Los Angeles, CA; Plymouth, IN; Salem, OR; Dallas, TX

CPD NO.	DRAWN BY	ENG. APPROVAL	PART NO.
4893	RH18 11/16/2010		TRPD-HD

CLASS	SUB	DRAWING USAGE	CHECKED BY	DWG. NO.
81	01	CUSTOMER	BMC 11/29/2010	TRPD-HD



BALLAST REQUIREMENTS

NOTE: Equation includes a 1.5 factor of safety for overturning

$$W = [(AL*H) + (ML*L/2) - (Tw*2.92) - (Aw*2.92)] * 0.515$$

AL	Horizontal antenna load	lbs
Aw	Antenna Weight	lbs
H	Height from roof to center of antenna	ft
ML	Horizontal mast load	lbs
L	Length of mast	ft
Tw	Tripod weight	lbs
W	Total Ballast Required	lbs
W/3	Required ballast per Tray	lbs

REV	DESCRIPTION OF REVISIONS	CPD	BY	DATE
B	EDIT BALLAST EQUATION	4893	BMC	5/16/2011
A	EDIT BALLAST EQUATION	4893	BMC	4/21/2011

REVISION HISTORY

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ALL OTHER MACHINING *(± 0.030")*
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DESCRIPTION: NON-PENETRATING TRIPOD SITE PRO 1

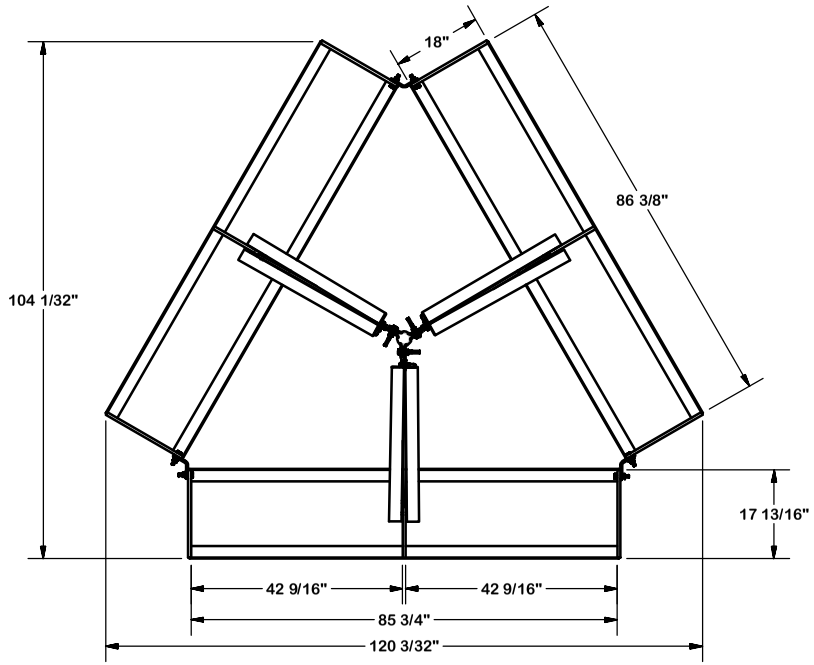
SITE PRO 1 — A valmont COMPANY

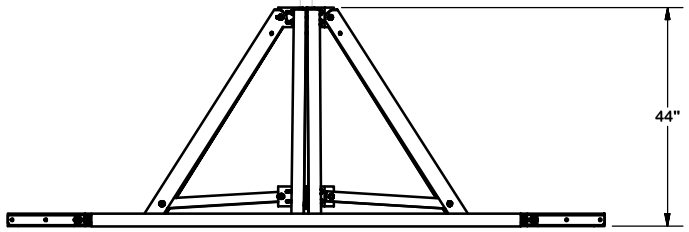
Engineering Support Team: 1-888-753-7446

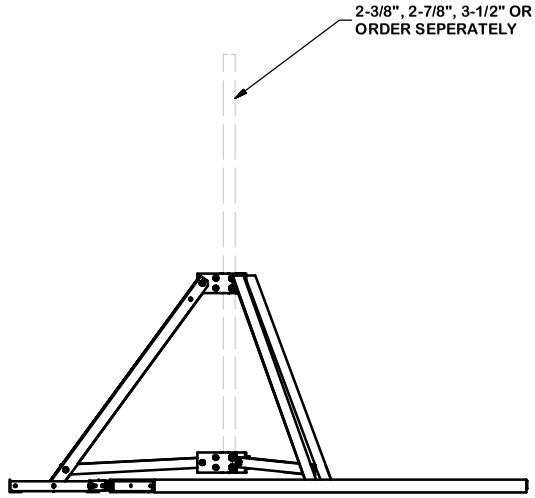
Locations:
New York, NY
Atlanta, GA
Los Angeles, CA
Plymouth, IN
Salem, OR
Dallas, TX

CPD NO.	DRAWN BY	ENG. APPROVAL	PART NO.
4893	RH18 11/16/2010		TRPD-HD

CLASS	SUB	DRAWING USAGE	CHECKED BY	DWG. NO.
81	01	CUSTOMER	BMC 11/29/2010	TRPD-HD







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REV	DESCRIPTION OF REVISIONS	CPD	BY	DATE
B	EDIT BALLAST EQUATION	4893	BMC	5/16/2011
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REVISION HISTORY

DESCRIPTION
NON-PENETRATING
TRIPOD
SITE PRO 1

SITE PRO 1
A valmont COMPANY

Engineering Support Team:
1-888-753-7446

Locations:
New York, NY
Atlanta, GA
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Dallas, TX

CPD NO.	DRAWN BY	ENG. APPROVAL	PART NO.
4893	RH18 11/16/2010		TRPD-HD

CLASS	SUB	DRAWING USAGE	CHECKED BY	DWG. NO.
81	01	CUSTOMER	BMC 11/29/2010	TRPD-HD

Maser Consulting Connecticut
2000 Midlantic Drive, Suite 100
Mt. Laurel, NJ 08054
(856) 797-0412
peter.albano@colliersengineering.com

Antenna Mount Analysis Report and PMI Requirements

Mount Analysis

SMART Tool Project #: 10037976
Maser Consulting Connecticut Project #: 21777028A

April 20, 2021

Site Information	*Site ID:*	*470205-VZW/Plainville4-DSW Shopping Center*
	Site Name:	*Plainville 4 CT – DSW Shopping Center*
	Carrier Name:	*Verizon Wireless*
	Address:	*276 New Britain Ave* *Plainville, Connecticut 06062* *Hartford County*
	Latitude:	*41.672883°*
	Longitude:	*-72.838186°*
Structure Information	*Tower Type:*	*20-Ft Rooftop*
	Mount Type:	*12.00-Ft Tripod Mount*

FUZE ID # 16272317

Analysis Results

Tripod Mount: **29.0% Pass**

******Contractor PMI Requirements*:**
Included at the end of this MA report
Available & Submitted via portal at https://pmi.vzwsmart.com
Contractor - Please Review Specific Site PMI Requirements Upon Award
Requirements also Noted on Mount Modification Drawings
Requirements may also be Noted on A & E drawings

Report Prepared By: Devin Castillo

Digitally signed by Taqi Khawaja-Ghulam
Date: 2021.04.20 17:28:34-04'00'

Executive Summary:

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

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

Sources of Information:

Document Type	Remarks
Radio Frequency Data Sheet (RFDS)	*Verizon RFDS, Site ID 2822321, dated November 17, 2021*
Mount Mapping Report	*Kimley-Horn & Associates, Inc. Site ID 470205 dated February 15, 2021*
Mount Specification	*Site Pro 1, DWG NO. TRPD-HD*
Construction Drawings	*EBI Consulting, Job NO: 8121000033, dated March 15, 2021*

Analysis Criteria:

Codes and Standards:	ANSI/TIA-222-H	
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT}:	117 mph
	Ice Wind Speed (3-sec. Gust):	50 mph
	Design Ice Thickness:	1.50 in
	Risk Category:	II
	Exposure Category:	C
	Topographic Category:	1
	Topographic Feature Considered:	N/A
	Topographic Method:	N/A
	Ground Elevation Factor, K_e:	0.993
Seismic Parameters:	S_S:	0.192
	S_1:	0.055
Maintenance Parameters:	Wind Speed (3-sec. Gust):	30 mph
	Maintenance Live Load, Lv:	250 lbs.
	Maintenance Live Load, Lm:	500 lbs.
Analysis Software:	RISA-3D (V17)	

Final Loading Configuration:

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

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
20.00	29.00	6	Commscope	NHH-65B-R2B	Retained
		3	Samsung	B2/B66ARRH-BR049	
		3	Samsung	B5/B13 RRH-BR04C	
		3	Raycap	RRFDC-3315-PF-48	
		3	Samsung	MT6407-77A	Added

Standard Conditions:

1. All engineering services are performed on the basis that the information provided to Maser Consulting Connecticut 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 Maser Consulting Connecticut 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 by Maser Consulting Connecticut, 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. Maser Consulting Connecticut is not responsible for the conclusion, opinions, and recommendations made by others based on the information supplied.

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

Discrepancies between in-field conditions and the assumptions listed above may render this analysis invalid unless explicitly approved by Maser Consulting Connecticut.

Analysis Results:

Component	Utilization %	Pass/Fail
Plate 2	6.0%	Pass
Plate 1	13.0%	Pass
Ballast Angle	29.0%	Pass
Supporting Double Angle	2.0%	Pass
Mount Pipe	10.0%	Pass

Structure Rating – *(Controlling Utilization of all Components)*	**29.0%**

In order to resist overturning, the existing ballast mounts require ballast quantities as shown in the table below. When combined with the weight of the considered equipment and frame, the overall pressure on the roof is noted.

We recommend the support structure EOR utilize these values to determine the adequacy of the supporting roof structure.

Ballast Weights		
Sector	**Required Total Tray Ballast Per each Ballast Tray (lbs.)**	**Total Load (psf)**
A/B/C	193.0	19.01

Recommendation:

The existing mounts are **SUFFICIENT** for the final loading configuration and do not require modifications.

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:

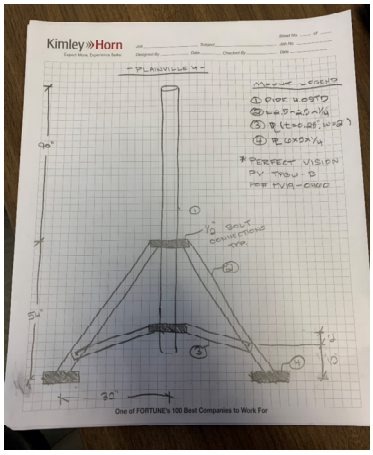
1. Mount Photos
2. Mount Mapping Report (for reference only)
3. Mount Specification
4. Analysis Calculations
5. **Contractor Required Post Installation Inspection (PMI) Report Deliverables**
6. Antenna Placement Diagrams
7. TIA Adoption and Wind Speed Usage Letter

V3.0 Updated on 8-31-2020

Antenna Mount Mapping Form (PATENT PENDING)

FCC #

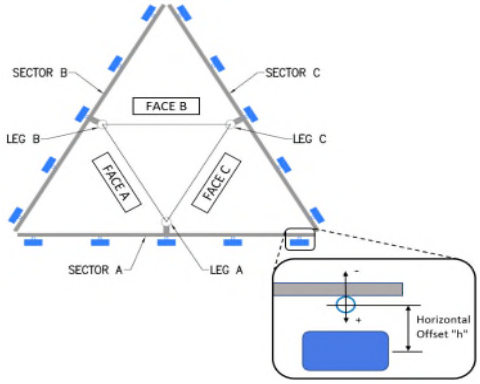
Tower Owner:	VERIZON WIRELESS	**Mapping Date:**	2/15/2021
Site Name:	PLAINVILLE 4	**Tower Type:**	Other
Site Number or ID:	470205	**Tower Height (Ft.):**	20
Mapping Contractor:	KIMLEY HORN	**Mount Elevation (Ft.):**	32

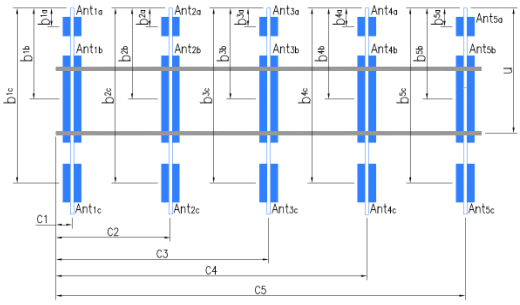


Mount Pipe Configuration and Geometries [Unit = Inches]

Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."	Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."
A1	144" PIPE 4.0STD	0.00	0.00	C1	144" PIPE 4.0STD	0.00	0.00
A2	144" PIPE 4.0STD	0.00	0.00	C2	144" PIPE 4.0STD	0.00	0.00
A3				C3			
A4				C4			
A5				C5			
A6				C6			
B1	144" PIPE 4.0STD	0.00	0.00	D1			
B2	144" PIPE 4.0STD	0.00	0.00	D2			
B3				D3			
B4				D4			
B5				D5			
B6				D6			

Distance between bottom rail and mount CL elevation (dim d). Unit is inches. See 'Mount Elev Ref' tab for details. :	
Distance from top of bottom support rail to lowest tip of ant./eqpt. of Carrier above. (N/A if > 10 ft.) :	
Distance from top of bottom support rail to highest tip of ant./eqpt. of Carrier below. (N/A if > 10 ft.) :	
Please enter additional infomation or comments below.	
Mount is a Perfect Vision PV-TPGU-B (PO# PV19-460)	
Cable Summary: (3) 1 1/2" Hybrid	
Only one mount pipe per sector. Two shown here for sake of calculating RAD of lowest radio and 2nd antenna.	
Tower Face Width at Mount Elev. (ft.):	Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.):



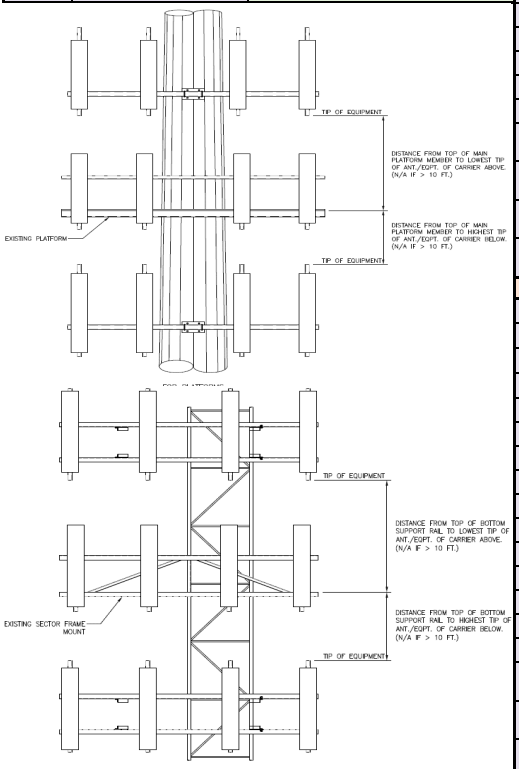


Antenna Layout (Looking Out From Tower)

Ants. Items	Enter antenna model. If not labeled, enter "Unknown". Antenna Models if Known	Width (in.)	Depth (in.)	Height (in.)	Coax Size and Qty	Antenna Center-line (Ft.)	Mounting Locations [Units are inches and degrees] Vertical Distances"b_{1a}, b_{2a}, b_{3a}, b_{1b}...." (Inches)	Horiz. Offset "h" (Use "-" if Ant. is behind)	Antenna Azimuth (Degrees)	Photos of antennas Photo Numbers
Sector A										
Ant_{1a}	CommScope NHH-65I	12.00	7.00	72.00		29	36.00	10.00	320.00	IG4892-4942
Ant_{1b}	RayCap RRFDC-3315-	16.00	10.00	29.00		26.1667	70.00	-7.00	320.00	
Ant_{1c}	Samsung RFV01U-D2	16.00	10.00	16.00		23.5	102.00	0.00	320.00	
Ant_{2a}	CommScope NHH-65I	12.00	7.00	72.00		29	36.00	10.00	320.00	
Ant_{2b}	Samsung RFV01U-D2	16.00	10.00	16.00		23	108.00	0.00	320.00	
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										

Mount Azimuth (Degree) for Each Sector				Tower Leg Azimuth (Degree) for Each Sector	
Sector A:	320.00	Deg	Leg A:		Deg
Sector B:	120.00	Deg	Leg B:		Deg
Sector C:	200.00	Deg	Leg C:		Deg
Sector D:		Deg	Leg D:		Deg

Climbing Facility Information			
Location:		Deg	
Climbing Facility	Corrosion Type:		
	Access:		
	Condition:		



Sector B										
Ant_{1a}	CommScope NHH-65I	12.00	7.00	72.00		29	36.00	10.00	120.00	MG4943-4976
Ant_{1b}	RayCap RRFDC-3315-I	16.00	10.00	29.00		26.1667	70.00	-7.00	120.00	
Ant_{1c}	Samsung RFV01U-D2A	16.00	10.00	16.00		23.5	102.00	0.00	120.00	
Ant_{2a}	CommScope NHH-65I	12.00	7.00	72.00		29	36.00	10.00	120.00	
Ant_{2b}	Samsung RFV01U-D2A	16.00	10.00	16.00		23	108.00	0.00	120.00	
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										
Sector C										
Ant_{1a}	CommScope NHH-65I	12.00	7.00	72.00		29	36.00	10.00	200.00	MG4977-5007
Ant_{1b}	RayCap RRFDC-3315-I	16.00	10.00	29.00		26.1667	70.00	-7.00	200.00	
Ant_{1c}	Samsung RFV01U-D2A	16.00	10.00	16.00		23.5	102.00	0.00	200.00	
Ant_{2a}	CommScope NHH-65I	12.00	7.00	72.00		29	36.00	10.00	200.00	
Ant_{2b}	Samsung RFV01U-D2A	16.00	10.00	16.00		23	108.00	0.00	200.00	
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										
Sector D										
Ant_{1a}										
Ant_{1b}										
Ant_{1c}										
Ant_{2a}										
Ant_{2b}										
Ant_{2c}										
Ant_{3a}										
Ant_{3b}										
Ant_{3c}										
Ant_{4a}										
Ant_{4b}										
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										

Observed Safety and Structural Issues During the Mount Mapping		
Issue #	Description of Issue	Photo #

1		
2		
3		
4		
5		
6		
7		
8		

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

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

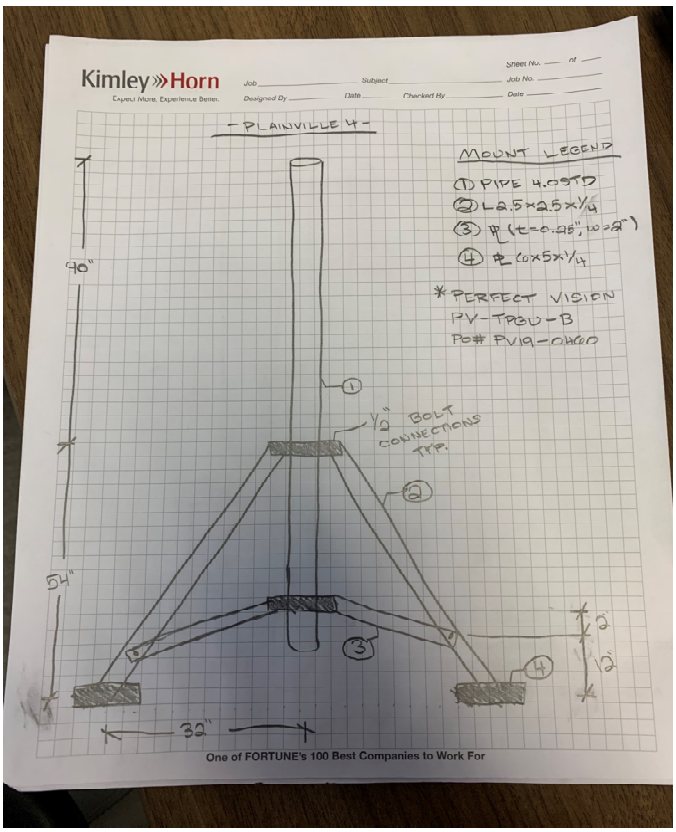
V3.0 Updated on 8-31-2020

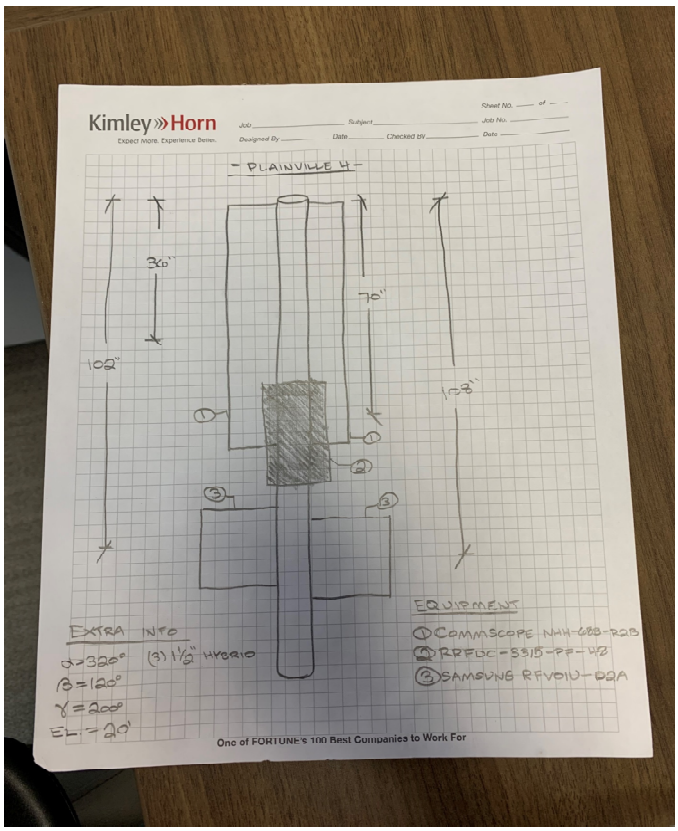
Antenna Mount Mapping Form (PATENT PENDING)

FCC #

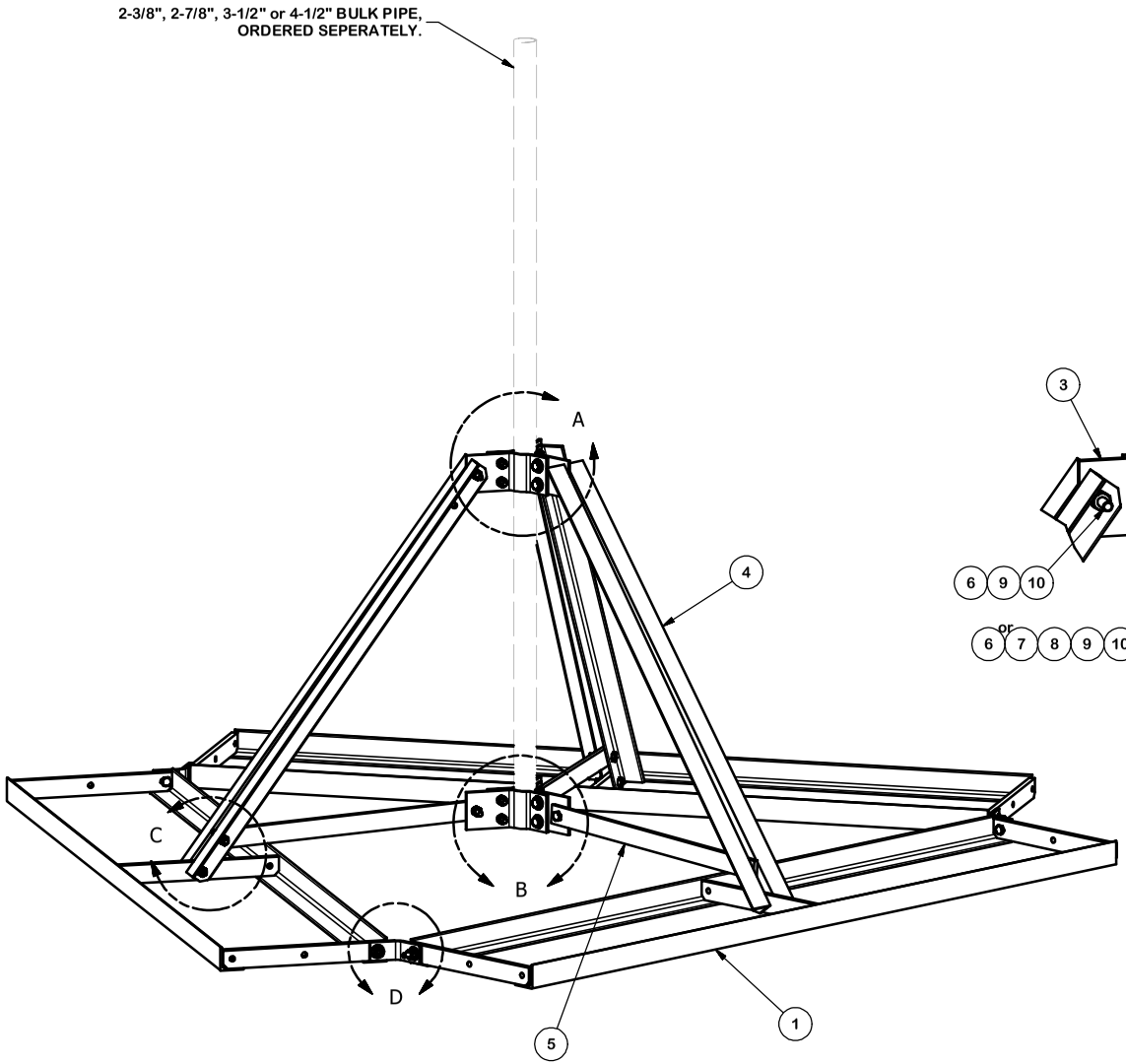
Tower Owner:	VERIZON WIRELESS	**Mapping Date:**	2/15/2021
Site Name:	PLAINVILLE 4	**Tower Type:**	Other
Site Number or ID:	470205	**Tower Height (Ft.):**	20
Mapping Contractor:	KIMLEY HORN	**Mount Elevation (Ft.):**	32

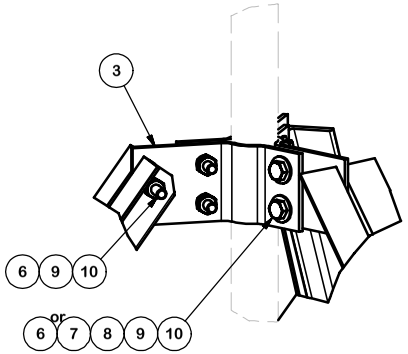
Please Insert Sketches of the Antenna Mount



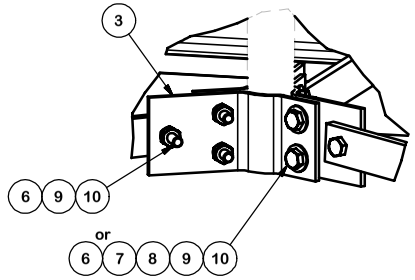


PARTS LIST						
ITEM	QTY	PART NO.	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1	3	X-232696	BALLAST TRAY WELDMENT - SITE PRO 1		66.53	199.60
2	3	X-232693	FORMED PLATE 60 DEGREE SITE PRO 1		0.94	2.82
3	6	X-232691	FORMED PLATE PIPE CLAMP - SITE PRO 1		2.74	16.46
4	6	X-232697	TRPD-HD DIAGONAL ANGLE - SITR PRO 1		14.21	85.27
5	3	X-232698	TRPD-HD SUPPORT PLATE - SITE PRO 1		8.72	26.16
6	30	G12212	1/2" x 2-1/2" HDG HEX BOLT GR5		0.20	6.11
7	12	G1204	1/2" x 4" HDG HEX BOLT GR5 FULL THREAD		0.27	3.24
8	18	G12FW	1/2" HDG USS FLATWASHER		0.03	0.61
9	30	G12LW	1/2" HDG LOCKWASHER		0.01	0.42
10	30	G12NUT	1/2" HDG HEAVY 2H HEX NUT		0.07	2.15
					TOTAL WT. #	342.84

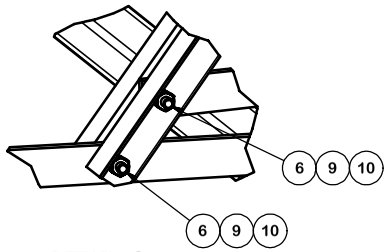




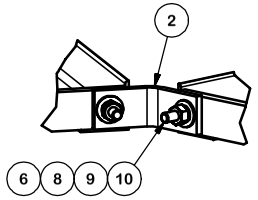
DETAIL A



DETAIL B



DETAIL C



DETAIL D

TOLERANCE NOTES

TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:
SAWED, SHEARED AND GAS CUT EDGES *(± 0.030")*
DRILLED AND GAS CUT HOLES *(± 0.030")* - NO CONING OF HOLES
LASER CUT EDGES AND HOLES *(± 0.010")* - NO CONING OF HOLES
BENDS ARE ± 1/2 DEGREE
ALL OTHER MACHINING *(± 0.030")*
ALL OTHER ASSEMBLY *(± 0.060")*

REVISION HISTORY				
REV	DESCRIPTION OF REVISIONS	CPD	BY	DATE
B	EDIT BALLAST EQUATION	4893	BMC	5/16/2011
A	EDIT BALLAST EQUATION	4893	BMC	4/21/2011

DESCRIPTION
NON-PENETRATING
TRIPOD
SITE PRO 1

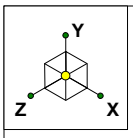
SITE PRO 1 — A valmont COMPANY

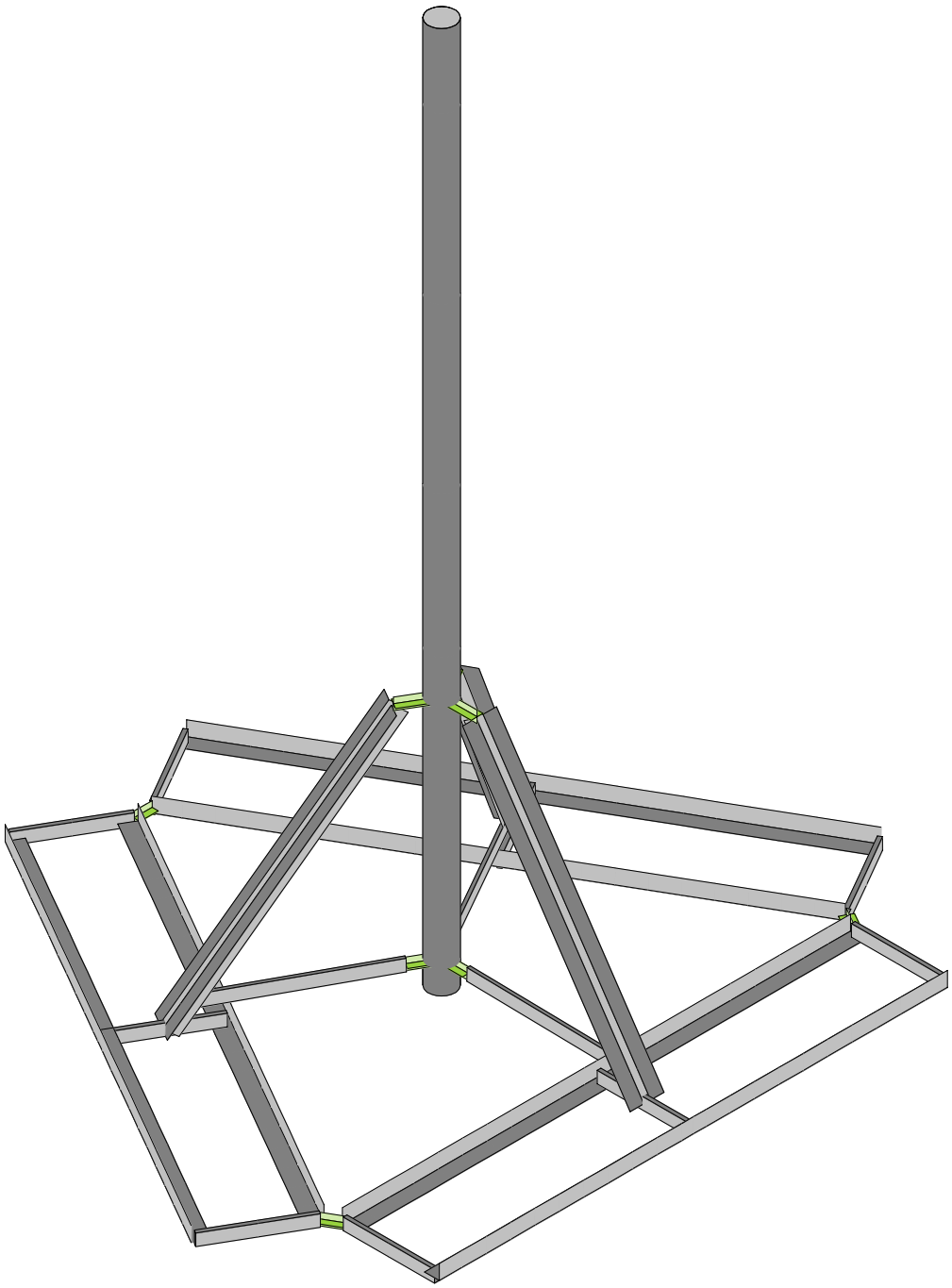
Engineering Support Team: 1-888-753-7446

Locations: New York, NY; Atlanta, GA; Los Angeles, CA; Plymouth, IN; Salem, OR; Dallas, TX

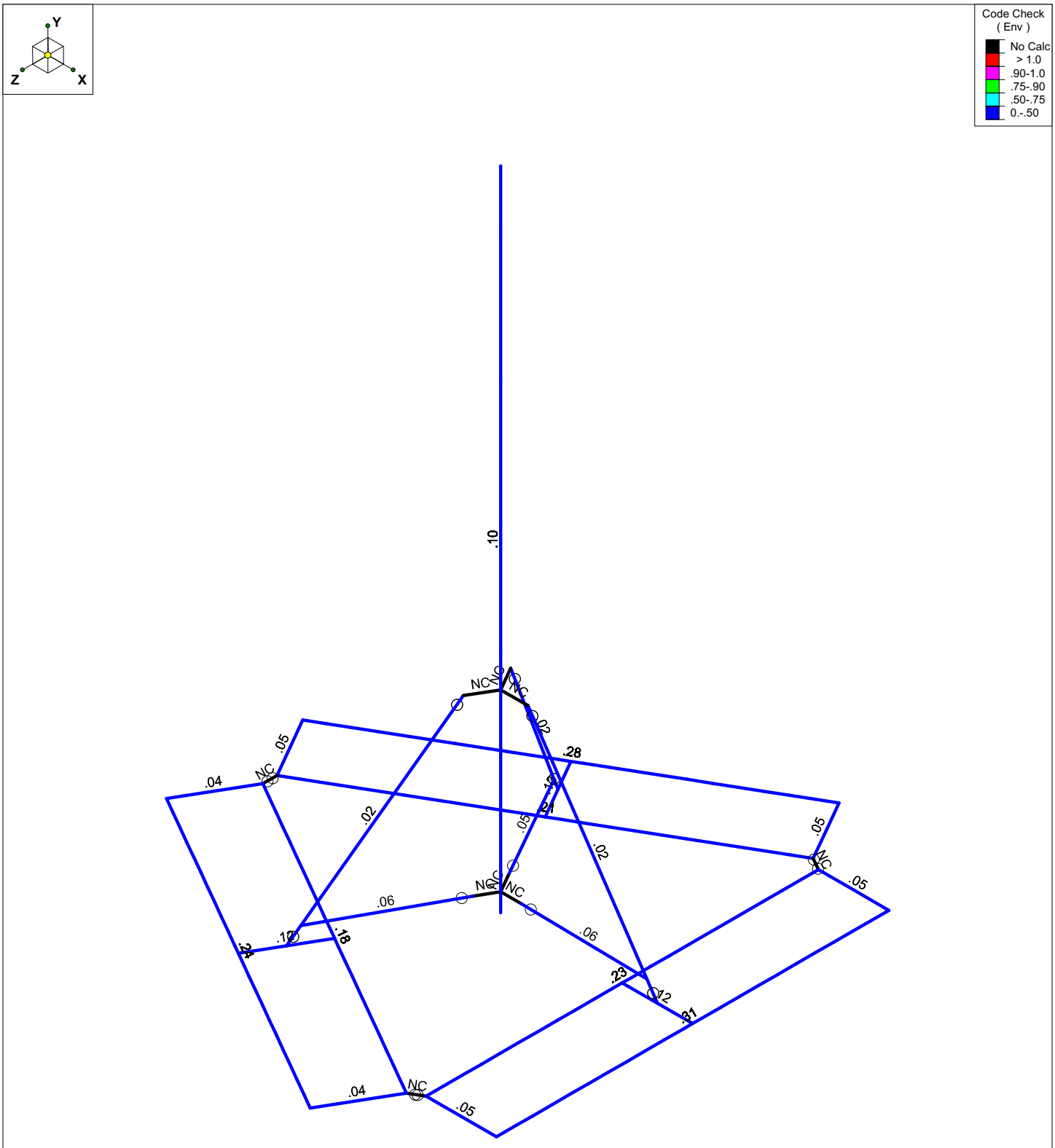
CPD NO.	DRAWN BY	ENG. APPROVAL	PART NO.
4893	RH18 11/16/2010		TRPD-HD

CLASS	SUB	DRAWING USAGE	CHECKED BY	DWG. NO.
81	01	CUSTOMER	BMC 11/29/2010	TRPD-HD



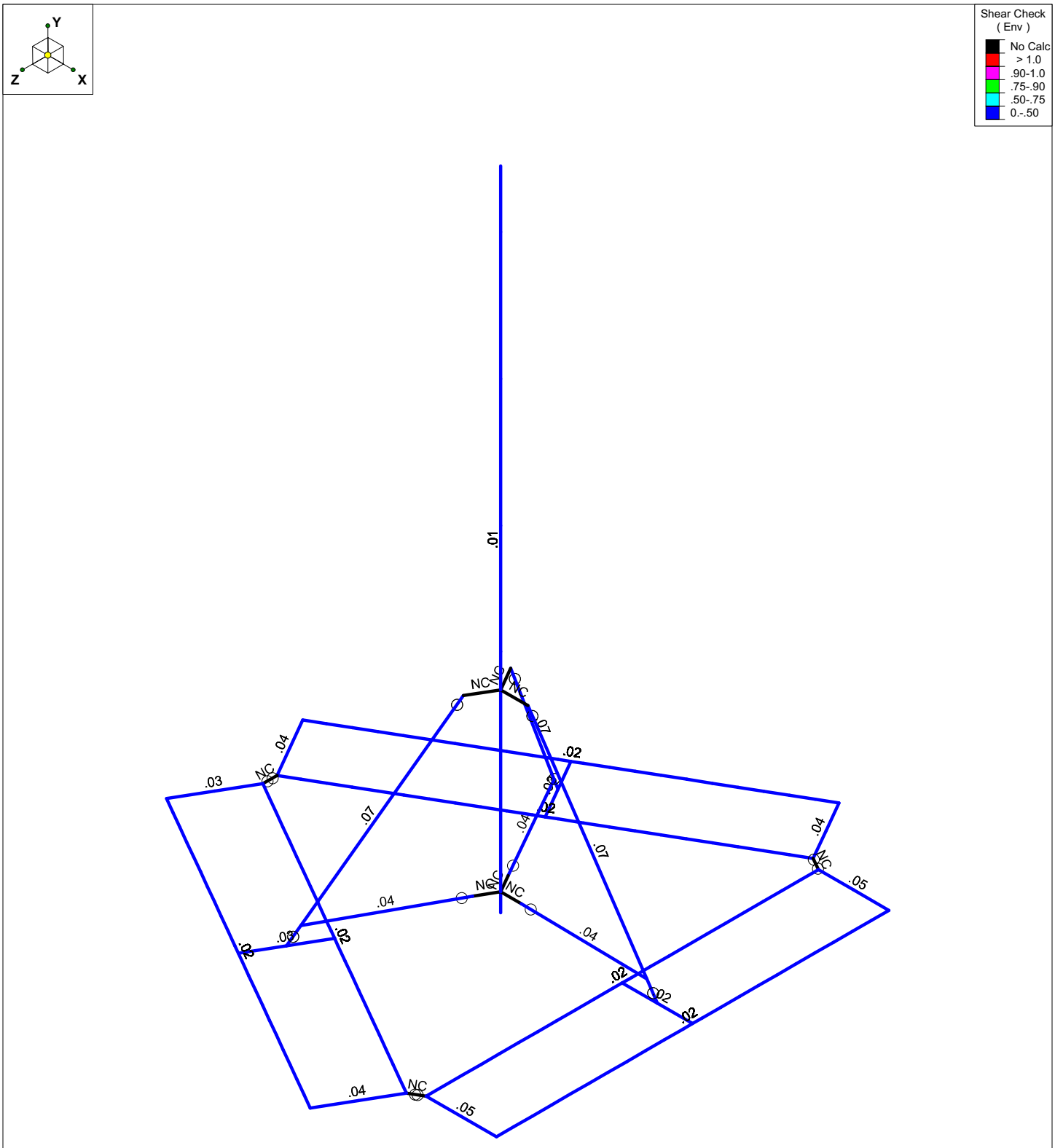


Maser Consulting P.A.	Mount Analysis	SK - 1
TK		Apr 19, 2021 at 4:31 PM
20958060		470205-VZW_MT_LOT_A_H.r3d



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

Maser Consulting P.A.	Mount Analysis	SK - 2
TK		Apr 19, 2021 at 4:31 PM
20958060		470205-VZW_MT_LOT_A_H.r3d



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

Maser Consulting P.A.	Mount Analysis	SK - 3
TK		Apr 19, 2021 at 4:31 PM
20958060		470205-VZW_MT_LOT_A_H.r3d

Basic Load Cases

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

Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distribut..	Area(M...	Surface...
57	Structure Wi (120 Deg)	None						38		
58	Structure Wi (150 Deg)	None						38		
59	Structure Wi (180 Deg)	None						38		
60	Structure Wi (210 Deg)	None						38		
61	Structure Wi (240 Deg)	None						38		
62	Structure Wi (270 Deg)	None						38		
63	Structure Wi (300 Deg)	None						38		
64	Structure Wi (330 Deg)	None						38		
65	Structure Wm (0 Deg)	None						38		
66	Structure Wm (30 Deg)	None						38		
67	Structure Wm (60 Deg)	None						38		
68	Structure Wm (90 Deg)	None						38		
69	Structure Wm (120 Deg)	None						38		
70	Structure Wm (150 Deg)	None						38		
71	Structure Wm (180 Deg)	None						38		
72	Structure Wm (210 Deg)	None						38		
73	Structure Wm (240 Deg)	None						38		
74	Structure Wm (270 Deg)	None						38		
75	Structure Wm (300 Deg)	None						38		
76	Structure Wm (330 Deg)	None						38		
77	Lm1	None					1			
78	Lm2	None					1			
79	Lv1	None					1			
80	Lv2	None					1			

Load Combinations

	Description	S...	PDelta	S...	B...	F...	BLC	F...	BLC	F...	B...	F...	B...	F...	B...	F...	B...	F...	B...	F...	B...	F...	B...	F...	B...	F...
1	1.2D+1.0Wo (0 Deg)	Y...	Y		1	1.2	39	1.2	3	1	41	1														
2	1.2D+1.0Wo (30 Deg)	Y...	Y		1	1.2	39	1.2	4	1	42	1														
3	1.2D+1.0Wo (60 Deg)	Y...	Y		1	1.2	39	1.2	5	1	43	1														
4	1.2D+1.0Wo (90 Deg)	Y...	Y		1	1.2	39	1.2	6	1	44	1														
5	1.2D+1.0Wo (120 Deg)	Y...	Y		1	1.2	39	1.2	7	1	45	1														
6	1.2D+1.0Wo (150 Deg)	Y...	Y		1	1.2	39	1.2	8	1	46	1														
7	1.2D+1.0Wo (180 Deg)	Y...	Y		1	1.2	39	1.2	9	1	47	1														
8	1.2D+1.0Wo (210 Deg)	Y...	Y		1	1.2	39	1.2	10	1	48	1														
9	1.2D+1.0Wo (240 Deg)	Y...	Y		1	1.2	39	1.2	11	1	49	1														
10	1.2D+1.0Wo (270 Deg)	Y...	Y		1	1.2	39	1.2	12	1	50	1														
11	1.2D+1.0Wo (300 Deg)	Y...	Y		1	1.2	39	1.2	13	1	51	1														
12	1.2D+1.0Wo (330 Deg)	Y...	Y		1	1.2	39	1.2	14	1	52	1														
13	1.2D + 1.0Di + 1.0Wi (0 Deg)	Y...	Y		1	1.2	39	1.2	2	1	40	1	15	1	53	1										
14	1.2D + 1.0Di + 1.0Wi (30 Deg)	Y...	Y		1	1.2	39	1.2	2	1	40	1	16	1	54	1										
15	1.2D + 1.0Di + 1.0Wi (60 Deg)	Y...	Y		1	1.2	39	1.2	2	1	40	1	17	1	55	1										
16	1.2D + 1.0Di + 1.0Wi (90 Deg)	Y...	Y		1	1.2	39	1.2	2	1	40	1	18	1	56	1										
17	1.2D + 1.0Di + 1.0Wi (120 Deg)	Y...	Y		1	1.2	39	1.2	2	1	40	1	19	1	57	1										
18	1.2D + 1.0Di + 1.0Wi (150 Deg)	Y...	Y		1	1.2	39	1.2	2	1	40	1	20	1	58	1										
19	1.2D + 1.0Di + 1.0Wi (180 Deg)	Y...	Y		1	1.2	39	1.2	2	1	40	1	21	1	59	1										
20	1.2D + 1.0Di + 1.0Wi (210 Deg)	Y...	Y		1	1.2	39	1.2	2	1	40	1	22	1	60	1										
21	1.2D + 1.0Di + 1.0Wi (240 Deg)	Y...	Y		1	1.2	39	1.2	2	1	40	1	23	1	61	1										
22	1.2D + 1.0Di + 1.0Wi (270 Deg)	Y...	Y		1	1.2	39	1.2	2	1	40	1	24	1	62	1										
23	1.2D + 1.0Di + 1.0Wi (300 Deg)	Y...	Y		1	1.2	39	1.2	2	1	40	1	25	1	63	1										
24	1.2D + 1.0Di + 1.0Wi (330 Deg)	Y...	Y		1	1.2	39	1.2	2	1	40	1	26	1	64	1										
25	1.2D + 1.5Lm1 + 1.0Wm (0 Deg)		Y		1	1.2	39	1.2	77	1.5	27	1	65	1												
26	1.2D + 1.5Lm1 + 1.0Wm (30 Deg)		Y		1	1.2	39	1.2	77	1.5	28	1	66	1												
27	1.2D + 1.5Lm1 + 1.0Wm (60 Deg)		Y		1	1.2	39	1.2	77	1.5	29	1	67	1												
28	1.2D + 1.5Lm1 + 1.0Wm (90 Deg)		Y		1	1.2	39	1.2	77	1.5	30	1	68	1												

Load Combinations (Continued)

	Description	S...	PDelta	S...	B...	F...	BLC	F...	BLC	F...	B...	F...	B...	F...	B...	F...	B...	F...	B...	F...	B...	F...	B...	F...	B...	F...
29	1.2D + 1.5Lm1 + 1.0Wm (120 D...		Y		1	1.2	39	1.2	77	1.5	31	1	69	1												
30	1.2D + 1.5Lm1 + 1.0Wm (150 D...		Y		1	1.2	39	1.2	77	1.5	32	1	70	1												
31	1.2D + 1.5Lm1 + 1.0Wm (180 D...		Y		1	1.2	39	1.2	77	1.5	33	1	71	1												
32	1.2D + 1.5Lm1 + 1.0Wm (210 D...		Y		1	1.2	39	1.2	77	1.5	34	1	72	1												
33	1.2D + 1.5Lm1 + 1.0Wm (240 D...		Y		1	1.2	39	1.2	77	1.5	35	1	73	1												
34	1.2D + 1.5Lm1 + 1.0Wm (270 D...		Y		1	1.2	39	1.2	77	1.5	36	1	74	1												
35	1.2D + 1.5Lm1 + 1.0Wm (300 D...		Y		1	1.2	39	1.2	77	1.5	37	1	75	1												
36	1.2D + 1.5Lm1 + 1.0Wm (330 D...		Y		1	1.2	39	1.2	77	1.5	38	1	76	1												
37	1.2D + 1.5Lm2 + 1.0Wm (0 Deg)		Y		1	1.2	39	1.2	78	1.5	27	1	65	1												
38	1.2D + 1.5Lm2 + 1.0Wm (30 Deg)		Y		1	1.2	39	1.2	78	1.5	28	1	66	1												
39	1.2D + 1.5Lm2 + 1.0Wm (60 Deg)		Y		1	1.2	39	1.2	78	1.5	29	1	67	1												
40	1.2D + 1.5Lm2 + 1.0Wm (90 Deg)		Y		1	1.2	39	1.2	78	1.5	30	1	68	1												
41	1.2D + 1.5Lm2 + 1.0Wm (120 D...		Y		1	1.2	39	1.2	78	1.5	31	1	69	1												
42	1.2D + 1.5Lm2 + 1.0Wm (150 D...		Y		1	1.2	39	1.2	78	1.5	32	1	70	1												
43	1.2D + 1.5Lm2 + 1.0Wm (180 D...		Y		1	1.2	39	1.2	78	1.5	33	1	71	1												
44	1.2D + 1.5Lm2 + 1.0Wm (210 D...		Y		1	1.2	39	1.2	78	1.5	34	1	72	1												
45	1.2D + 1.5Lm2 + 1.0Wm (240 D...		Y		1	1.2	39	1.2	78	1.5	35	1	73	1												
46	1.2D + 1.5Lm2 + 1.0Wm (270 D...		Y		1	1.2	39	1.2	78	1.5	36	1	74	1												
47	1.2D + 1.5Lm2 + 1.0Wm (300 D...		Y		1	1.2	39	1.2	78	1.5	37	1	75	1												
48	1.2D + 1.5Lm2 + 1.0Wm (330 D...		Y		1	1.2	39	1.2	78	1.5	38	1	76	1												
49	1.2D + 1.5Lv1		Y		1	1.2	39	1.2	79	1.5																
50	1.2D + 1.5Lv2		Y		1	1.2	39	1.2	80	1.5																
51	1.4D	Y...	Y		1	1.4	39	1.4																		
52	Seismic Mass		Y		1	1	39	1																		
53	1.2D + 1.0Ev + 1.0Eh (0 Deg)		Y		1	1.2	39	1.2	SX		SY	1	SZ	-1												
54	1.2D + 1.0Ev + 1.0Eh (30 Deg)		Y		1	1.2	39	1.2	SX	.5	SY	1	SZ	-....												
55	1.2D + 1.0Ev + 1.0Eh (60 Deg)		Y		1	1.2	39	1.2	SX	.8...	SY	1	SZ	-.5												
56	1.2D + 1.0Ev + 1.0Eh (90 Deg)		Y		1	1.2	39	1.2	SX	1	SY	1	SZ													
57	1.2D + 1.0Ev + 1.0Eh (120 Deg)		Y		1	1.2	39	1.2	SX	.8...	SY	1	SZ	.5												
58	1.2D + 1.0Ev + 1.0Eh (150 Deg)		Y		1	1.2	39	1.2	SX	.5	SY	1	SZ	.8...												
59	1.2D + 1.0Ev + 1.0Eh (180 Deg)		Y		1	1.2	39	1.2	SX		SY	1	SZ	1												
60	1.2D + 1.0Ev + 1.0Eh (210 Deg)		Y		1	1.2	39	1.2	SX	-.5	SY	1	SZ	.8...												
61	1.2D + 1.0Ev + 1.0Eh (240 Deg)		Y		1	1.2	39	1.2	SX	-....	SY	1	SZ	.5												
62	1.2D + 1.0Ev + 1.0Eh (270 Deg)		Y		1	1.2	39	1.2	SX	-1	SY	1	SZ													
63	1.2D + 1.0Ev + 1.0Eh (300 Deg)		Y		1	1.2	39	1.2	SX	-....	SY	1	SZ	-.5												
64	1.2D + 1.0Ev + 1.0Eh (330 Deg)		Y		1	1.2	39	1.2	SX	-.5	SY	1	SZ	-....												

Joint Coordinates and Temperatures

	Label	X [in]	Y [in]	Z [in]	Temp [F]	Detach From Diap...
1	N1	-42.25	142.38	0	0	
2	N2	-42.25	0	0	0	
3	N3	-42.25	42.5	0	0	
4	N4	-36.25	42.5	0	0	
5	N5	-7.75	0	0	0	
6	N6	-42.25	4	0	0	
7	N7	-37.75	4	0	0	
8	N9	-45.25	42.5	-5.196152	0	
9	N10	-59.5	0	-29.877876	0	
10	N11	-44.5	4	-3.897114	0	
11	N13	-45.25	42.5	5.196152	0	
12	N14	-59.5	0	29.877876	0	
13	N15	-44.5	4	3.897114	0	
14	N17	-15.5	0	0	0	
15	N18	0	0	0	0	
16	N19	-15.5	0	39.357143	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [in]	Y [in]	Z [in]	Temp [F]	Detach From Diap...
17	N20	-15.5	0	35.214286	0	
18	N21	-15.5	0	31.071429	0	
19	N22	-15.5	0	26.928571	0	
20	N23	-15.5	0	22.785714	0	
21	N24	-15.5	0	18.642857	0	
22	N25	-15.5	0	14.5	0	
23	N26	-15.5	0	10.357143	0	
24	N27	-15.5	0	6.214286	0	
25	N28	-15.5	0	2.071429	0	
26	N29	-15.5	0	-2.071429	0	
27	N30	-15.5	0	-6.214286	0	
28	N31	-15.5	0	-10.357143	0	
29	N32	-15.5	0	-14.5	0	
30	N33	-15.5	0	-18.642857	0	
31	N34	-15.5	0	-22.785714	0	
32	N35	-15.5	0	-26.928571	0	
33	N36	-15.5	0	-31.071429	0	
34	N37	-15.5	0	-35.214286	0	
35	N38	-15.5	0	-39.357143	0	
36	N39	0	0	-39.357143	0	
37	N40	0	0	-35.214286	0	
38	N41	0	0	-31.071429	0	
39	N42	0	0	-26.928571	0	
40	N43	0	0	-22.785714	0	
41	N44	0	0	-18.642857	0	
42	N45	0	0	-14.5	0	
43	N46	0	0	-10.357143	0	
44	N47	0	0	-6.214286	0	
45	N48	0	0	-2.071429	0	
46	N49	0	0	2.071429	0	
47	N50	0	0	6.214286	0	
48	N51	0	0	10.357143	0	
49	N52	0	0	14.5	0	
50	N53	0	0	18.642857	0	
51	N54	0	0	22.785714	0	
52	N55	0	0	26.928571	0	
53	N56	0	0	31.071429	0	
54	N57	0	0	35.214286	0	
55	N58	0	0	39.357143	0	
56	N59	-15.5	0	43.187	0	
57	N60	-15.5	0	-43.188	0	
58	N61	0	0	43.187	0	
59	N62	-7.75	0	43.187	0	
60	N63	0	0	-43.188	0	
61	N64	-7.75	0	-43.188	0	
62	N65	-55.625	0	-23.16618	0	
63	N66	-63.375	0	-36.589573	0	
64	N67	-21.540714	0	-42.844751	0	
65	N68	-25.128534	0	-40.773322	0	
66	N69	-28.716354	0	-38.701894	0	
67	N70	-32.304173	0	-36.630465	0	
68	N71	-35.891993	0	-34.559037	0	
69	N72	-39.479812	0	-32.487608	0	
70	N73	-43.067632	0	-30.41618	0	
71	N74	-46.655451	0	-28.344751	0	
72	N75	-50.243271	0	-26.273322	0	
73	N76	-53.83109	0	-24.201894	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [in]	Y [in]	Z [in]	Temp [F]	Detach From Diap...
74	N77	-57.41891	0	-22.130465	0	
75	N78	-61.006729	0	-20.059037	0	
76	N79	-64.594549	0	-17.987608	0	
77	N80	-68.182368	0	-15.91618	0	
78	N81	-71.770188	0	-13.844751	0	
79	N82	-75.358007	0	-11.773322	0	
80	N83	-78.945827	0	-9.701894	0	
81	N84	-82.533646	0	-7.630465	0	
82	N85	-86.121466	0	-5.559037	0	
83	N86	-89.709286	0	-3.487608	0	
84	N87	-97.459286	0	-16.911002	0	
85	N88	-93.871466	0	-18.98243	0	
86	N89	-90.283646	0	-21.053859	0	
87	N90	-86.695827	0	-23.125288	0	
88	N91	-83.108007	0	-25.196716	0	
89	N92	-79.520188	0	-27.268145	0	
90	N93	-75.932368	0	-29.339573	0	
91	N94	-72.344549	0	-31.411002	0	
92	N95	-68.756729	0	-33.48243	0	
93	N96	-65.16891	0	-35.553859	0	
94	N97	-61.58109	0	-37.625288	0	
95	N98	-57.993271	0	-39.696716	0	
96	N99	-54.405451	0	-41.768145	0	
97	N100	-50.817632	0	-43.839573	0	
98	N101	-47.229812	0	-45.911002	0	
99	N102	-43.641993	0	-47.98243	0	
100	N103	-40.054173	0	-50.053859	0	
101	N104	-36.466354	0	-52.125288	0	
102	N105	-32.878534	0	-54.196716	0	
103	N106	-29.290714	0	-56.268145	0	
104	N107	-18.223961	0	-44.75968	0	
105	N108	-93.026905	0	-1.57218	0	
106	N109	-25.973961	0	-58.183073	0	
107	N110	-22.098961	0	-51.471376	0	
108	N111	-100.776905	0	-14.995573	0	
109	N112	-96.901905	0	-8.283876	0	
110	N113	-55.625	0	23.16618	0	
111	N114	-63.375	0	36.589573	0	
112	N115	-89.709286	0	3.487608	0	
113	N116	-86.121466	0	5.559037	0	
114	N117	-82.533646	0	7.630465	0	
115	N118	-78.945827	0	9.701894	0	
116	N119	-75.358007	0	11.773322	0	
117	N120	-71.770188	0	13.844751	0	
118	N121	-68.182368	0	15.91618	0	
119	N122	-64.594549	0	17.987608	0	
120	N123	-61.006729	0	20.059037	0	
121	N124	-57.41891	0	22.130465	0	
122	N125	-53.83109	0	24.201894	0	
123	N126	-50.243271	0	26.273322	0	
124	N127	-46.655451	0	28.344751	0	
125	N128	-43.067632	0	30.41618	0	
126	N129	-39.479812	0	32.487608	0	
127	N130	-35.891993	0	34.559037	0	
128	N131	-32.304173	0	36.630465	0	
129	N132	-28.716354	0	38.701894	0	
130	N133	-25.128534	0	40.773322	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [in]	Y [in]	Z [in]	Temp [F]	Detach From Diap...
131	N134	-21.540714	0	42.844751	0	
132	N135	-29.290714	0	56.268145	0	
133	N136	-32.878534	0	54.196716	0	
134	N137	-36.466354	0	52.125288	0	
135	N138	-40.054173	0	50.053859	0	
136	N139	-43.641993	0	47.98243	0	
137	N140	-47.229812	0	45.911002	0	
138	N141	-50.817632	0	43.839573	0	
139	N142	-54.405451	0	41.768145	0	
140	N143	-57.993271	0	39.696716	0	
141	N144	-61.58109	0	37.625288	0	
142	N145	-65.16891	0	35.553859	0	
143	N146	-68.756729	0	33.48243	0	
144	N147	-72.344549	0	31.411002	0	
145	N148	-75.932368	0	29.339573	0	
146	N149	-79.520188	0	27.268145	0	
147	N150	-83.108007	0	25.196716	0	
148	N151	-86.695827	0	23.125288	0	
149	N152	-90.283646	0	21.053859	0	
150	N153	-93.871466	0	18.98243	0	
151	N154	-97.459286	0	16.911002	0	
152	N155	-93.026039	0	1.57268	0	
153	N156	-18.223095	0	44.76018	0	
154	N157	-100.776039	0	14.996073	0	
155	N158	-96.901039	0	8.284376	0	
156	N159	-25.973095	0	58.183573	0	
157	N160	-22.098095	0	51.471876	0	
158	N161	-42.25	49.8	0	0	
159	N162	-42.25	129.8	0	0	
160	N163	-42.25	101.8	0	0	
161	N164	-42.25	73.8	0	0	
162	N165	-10.073208	3.464432	0	0	
163	N166	-58.338396	3.464432	-27.86592	0	
164	N167	-58.338396	3.464432	27.86592	0	

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rules	A [in2]	Iyy [i...	Izz [i...	J [in4]
1	4.0 STD PIPE	PIPE 4.0	Beam	Pipe	A53 Gr. B	Typical	2.96	6.82	6.82	13.6
2	Supporting Single...	LL2.5x2.5x4x6	Beam	Double Angle (3/8 Ga...	A36 Gr.36	Typical	2.38	4.21	1.38	.052
3	Plate 1	2"x5/8"	Beam	RECT	A36 Gr.36	Typical	1.25	.041	.417	.131
4	Ballast Angle	L2.5x2.5x3	Beam	Single Angle	A36 Gr.36	Typical	.901	.535	.535	.011
5	Plate 2	2"x1/2"	Beam	RECT	A36 Gr.36	Typical	1	.021	.333	.07

Hot Rolled Steel Properties

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

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	MP1A	N1	N2			4.0 STD PIPE	Beam	Pipe	A53 Gr. B	Typical
2	M2	N3	N4			RIGID	None	None	RIGID	Typical
3	M5	N4	N5			Supporting Sin...	Beam	Double Angle (...	A36 Gr.36	Typical
4	M6	N6	N7			RIGID	None	None	RIGID	Typical
5	M10	N17	N18			Plate 1	Beam	RECT	A36 Gr.36	Typical
6	M11	N3	N9			RIGID	None	None	RIGID	Typical
7	M12	N9	N10			Supporting Sin...	Beam	Double Angle (...	A36 Gr.36	Typical
8	M13	N6	N11			RIGID	None	None	RIGID	Typical
9	M20	N3	N13			RIGID	None	None	RIGID	Typical
10	M21	N13	N14			Supporting Sin...	Beam	Double Angle (...	A36 Gr.36	Typical
11	M22	N6	N15			RIGID	None	None	RIGID	Typical
12	M32	N59	N60			Ballast Angle	Beam	Single Angle	A36 Gr.36	Typical
13	M32A	N63	N61			Ballast Angle	Beam	Single Angle	A36 Gr.36	Typical
14	M32B	N59	N61			Plate 1	Beam	RECT	A36 Gr.36	Typical
15	M32C	N60	N63			Plate 1	Beam	RECT	A36 Gr.36	Typical
16	M19	N65	N66			Plate 1	Beam	RECT	A36 Gr.36	Typical
17	M20A	N107	N108			Ballast Angle	Beam	Single Angle	A36 Gr.36	Typical
18	M21A	N111	N109			Ballast Angle	Beam	Single Angle	A36 Gr.36	Typical
19	M22A	N107	N109			Plate 1	Beam	RECT	A36 Gr.36	Typical
20	M23A	N108	N111			Plate 1	Beam	RECT	A36 Gr.36	Typical
21	M24	N113	N114			Plate 1	Beam	RECT	A36 Gr.36	Typical
22	M25	N155	N156			Ballast Angle	Beam	Single Angle	A36 Gr.36	Typical
23	M26	N159	N157			Ballast Angle	Beam	Single Angle	A36 Gr.36	Typical
24	M27	N155	N157			Plate 1	Beam	RECT	A36 Gr.36	Typical
25	M28	N156	N159			Plate 1	Beam	RECT	A36 Gr.36	Typical
26	M29	N156	N59			RIGID	None	None	RIGID	Typical
27	M30	N60	N107			RIGID	None	None	RIGID	Typical
28	M31	N155	N108			RIGID	None	None	RIGID	Typical
29	M29A	N167	N15			Plate 2	Beam	RECT	A36 Gr.36	Typical
30	M30A	N7	N165			Plate 2	Beam	RECT	A36 Gr.36	Typical
31	M31A	N11	N166			Plate 2	Beam	RECT	A36 Gr.36	Typical

Hot Rolled Steel Design Parameters

	Label	Shape	Length[in]	Lbyy[in]	Lbzz[in]	Lcomp t...	Lcomp b...	L-tor...	Kyy	Kzz	Cb	Function
1	MP1A	4.0 STD PIPE	142.38			Lbyy						Lateral
2	M5	Supporting Single An...	51.171			Lbyy						Lateral
3	M10	Plate 1	15.5			Lbyy						Lateral
4	M12	Supporting Single An...	51.171			Lbyy						Lateral
5	M21	Supporting Single An...	51.171			Lbyy						Lateral
6	M32	Ballast Angle	86.375			Lbyy						Lateral
7	M32A	Ballast Angle	86.375			Lbyy						Lateral
8	M32B	Plate 1	15.5			Lbyy						Lateral
9	M32C	Plate 1	15.5			Lbyy						Lateral
10	M19	Plate 1	15.5			Lbyy						Lateral
11	M20A	Ballast Angle	86.375			Lbyy						Lateral
12	M21A	Ballast Angle	86.375			Lbyy						Lateral
13	M22A	Plate 1	15.5			Lbyy						Lateral
14	M23A	Plate 1	15.5			Lbyy						Lateral
15	M24	Plate 1	15.5			Lbyy						Lateral
16	M25	Ballast Angle	86.375			Lbyy						Lateral
17	M26	Ballast Angle	86.375			Lbyy						Lateral
18	M27	Plate 1	15.5			Lbyy						Lateral
19	M28	Plate 1	15.5			Lbyy						Lateral
20	M29A	Plate 2	27.682			Lbyy						Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length[in]	Lbyy[in]	Lbzz[in]	Lcomp t...	Lcomp b...	L-tor...	Kyy	Kzz	Cb	Function
21	M30A	Plate 2	27.682			Lbyy						Lateral
22	M31A	Plate 2	27.682			Lbyy						Lateral

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	Y	-44	24
2	MP1A	My	.018	24
3	MP1A	Mz	-.032	24
4	MP1A	Y	-44	60
5	MP1A	My	.018	60
6	MP1A	Mz	-.032	60

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	Y	-55.373	24
2	MP1A	My	.023	24
3	MP1A	Mz	-.04	24
4	MP1A	Y	-55.373	60
5	MP1A	My	.023	60
6	MP1A	Mz	-.04	60

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	X	0	24
2	MP1A	Z	-46.493	24
3	MP1A	Mx	.034	24
4	MP1A	X	0	60
5	MP1A	Z	-46.493	60
6	MP1A	Mx	.034	60

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	X	20.799	24
2	MP1A	Z	-36.025	24
3	MP1A	Mx	.035	24
4	MP1A	X	20.799	60
5	MP1A	Z	-36.025	60
6	MP1A	Mx	.035	60

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	X	40.264	24
2	MP1A	Z	-23.247	24
3	MP1A	Mx	.034	24
4	MP1A	X	40.264	60
5	MP1A	Z	-23.247	60
6	MP1A	Mx	.034	60

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	X	56.284	24
2	MP1A	Z	0	24
3	MP1A	Mx	.023	24

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
4	MP1A	X	56.284	60
5	MP1A	Z	0	60
6	MP1A	Mx	.023	60

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	X	52.983	24
2	MP1A	Z	30.59	24
3	MP1A	Mx	0	24
4	MP1A	X	52.983	60
5	MP1A	Z	30.59	60
6	MP1A	Mx	0	60

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	X	28.142	24
2	MP1A	Z	48.743	24
3	MP1A	Mx	-.023	24
4	MP1A	X	28.142	60
5	MP1A	Z	48.743	60
6	MP1A	Mx	-.023	60

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	X	0	24
2	MP1A	Z	46.493	24
3	MP1A	Mx	-.034	24
4	MP1A	X	0	60
5	MP1A	Z	46.493	60
6	MP1A	Mx	-.034	60

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	X	-20.799	24
2	MP1A	Z	36.025	24
3	MP1A	Mx	-.035	24
4	MP1A	X	-20.799	60
5	MP1A	Z	36.025	60
6	MP1A	Mx	-.035	60

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	X	-40.264	24
2	MP1A	Z	23.247	24
3	MP1A	Mx	-.034	24
4	MP1A	X	-40.264	60
5	MP1A	Z	23.247	60
6	MP1A	Mx	-.034	60

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	X	-56.284	24
2	MP1A	Z	0	24
3	MP1A	Mx	-.023	24

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
4	MP1A	X	-56.284	60
5	MP1A	Z	0	60
6	MP1A	Mx	-.023	60

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	X	-52.983	24
2	MP1A	Z	-30.59	24
3	MP1A	Mx	0	24
4	MP1A	X	-52.983	60
5	MP1A	Z	-30.59	60
6	MP1A	Mx	0	60

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	X	-28.142	24
2	MP1A	Z	-48.743	24
3	MP1A	Mx	.023	24
4	MP1A	X	-28.142	60
5	MP1A	Z	-48.743	60
6	MP1A	Mx	.023	60

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	X	0	24
2	MP1A	Z	-10.225	24
3	MP1A	Mx	.007	24
4	MP1A	X	0	60
5	MP1A	Z	-10.225	60
6	MP1A	Mx	.007	60

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	X	4.627	24
2	MP1A	Z	-8.013	24
3	MP1A	Mx	.008	24
4	MP1A	X	4.627	60
5	MP1A	Z	-8.013	60
6	MP1A	Mx	.008	60

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	X	8.855	24
2	MP1A	Z	-5.113	24
3	MP1A	Mx	.007	24
4	MP1A	X	8.855	60
5	MP1A	Z	-5.113	60
6	MP1A	Mx	.007	60

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	X	12.169	24
2	MP1A	Z	0	24
3	MP1A	Mx	.005	24

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
4	MP1A	X	12.169	60
5	MP1A	Z	0	60
6	MP1A	Mx	.005	60

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	X	11.381	24
2	MP1A	Z	6.571	24
3	MP1A	Mx	0	24
4	MP1A	X	11.381	60
5	MP1A	Z	6.571	60
6	MP1A	Mx	0	60

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	X	6.085	24
2	MP1A	Z	10.539	24
3	MP1A	Mx	-.005	24
4	MP1A	X	6.085	60
5	MP1A	Z	10.539	60
6	MP1A	Mx	-.005	60

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	X	0	24
2	MP1A	Z	10.225	24
3	MP1A	Mx	-.007	24
4	MP1A	X	0	60
5	MP1A	Z	10.225	60
6	MP1A	Mx	-.007	60

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	X	-4.627	24
2	MP1A	Z	8.013	24
3	MP1A	Mx	-.008	24
4	MP1A	X	-4.627	60
5	MP1A	Z	8.013	60
6	MP1A	Mx	-.008	60

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	X	-8.855	24
2	MP1A	Z	5.113	24
3	MP1A	Mx	-.007	24
4	MP1A	X	-8.855	60
5	MP1A	Z	5.113	60
6	MP1A	Mx	-.007	60

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	X	-12.169	24
2	MP1A	Z	0	24
3	MP1A	Mx	-.005	24

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
4	MP1A	X	-12.169	60
5	MP1A	Z	0	60
6	MP1A	Mx	-.005	60

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	X	-11.381	24
2	MP1A	Z	-6.571	24
3	MP1A	Mx	0	24
4	MP1A	X	-11.381	60
5	MP1A	Z	-6.571	60
6	MP1A	Mx	0	60

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	X	-6.085	24
2	MP1A	Z	-10.539	24
3	MP1A	Mx	.005	24
4	MP1A	X	-6.085	60
5	MP1A	Z	-10.539	60
6	MP1A	Mx	.005	60

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	X	0	24
2	MP1A	Z	-3.057	24
3	MP1A	Mx	.002	24
4	MP1A	X	0	60
5	MP1A	Z	-3.057	60
6	MP1A	Mx	.002	60

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	X	1.367	24
2	MP1A	Z	-2.368	24
3	MP1A	Mx	.002	24
4	MP1A	X	1.367	60
5	MP1A	Z	-2.368	60
6	MP1A	Mx	.002	60

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	X	2.647	24
2	MP1A	Z	-1.528	24
3	MP1A	Mx	.002	24
4	MP1A	X	2.647	60
5	MP1A	Z	-1.528	60
6	MP1A	Mx	.002	60

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	X	3.7	24
2	MP1A	Z	0	24
3	MP1A	Mx	.002	24

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
4	MP1A	X	3.7	60
5	MP1A	Z	0	60
6	MP1A	Mx	.002	60

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	X	3.483	24
2	MP1A	Z	2.011	24
3	MP1A	Mx	0	24
4	MP1A	X	3.483	60
5	MP1A	Z	2.011	60
6	MP1A	Mx	0	60

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	X	1.85	24
2	MP1A	Z	3.205	24
3	MP1A	Mx	-.002	24
4	MP1A	X	1.85	60
5	MP1A	Z	3.205	60
6	MP1A	Mx	-.002	60

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	X	0	24
2	MP1A	Z	3.057	24
3	MP1A	Mx	-.002	24
4	MP1A	X	0	60
5	MP1A	Z	3.057	60
6	MP1A	Mx	-.002	60

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	X	-1.367	24
2	MP1A	Z	2.368	24
3	MP1A	Mx	-.002	24
4	MP1A	X	-1.367	60
5	MP1A	Z	2.368	60
6	MP1A	Mx	-.002	60

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	X	-2.647	24
2	MP1A	Z	1.528	24
3	MP1A	Mx	-.002	24
4	MP1A	X	-2.647	60
5	MP1A	Z	1.528	60
6	MP1A	Mx	-.002	60

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	X	-3.7	24
2	MP1A	Z	0	24
3	MP1A	Mx	-.002	24

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
4	MP1A	X	-3.7	60
5	MP1A	Z	0	60
6	MP1A	Mx	-.002	60

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	X	-3.483	24
2	MP1A	Z	-2.011	24
3	MP1A	Mx	0	24
4	MP1A	X	-3.483	60
5	MP1A	Z	-2.011	60
6	MP1A	Mx	0	60

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	MP1A	X	-1.85	24
2	MP1A	Z	-3.205	24
3	MP1A	Mx	.002	24
4	MP1A	X	-1.85	60
5	MP1A	Z	-3.205	60
6	MP1A	Mx	.002	60

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	M2	Y	-500	0

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	M2	Y	-500	%50

Member Point Loads (BLC 79 : Lv1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	M2	Y	-250	0

Member Point Loads (BLC 80 : Lv2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	M2	Y	-250	%50

Member Distributed Loads (BLC 40 : Structure Di)

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	Y	-10.953	-10.953	0	%100
2	M5	Y	-9.191	-9.191	0	%100
3	M10	Y	-13.703	-13.703	0	%100
4	M12	Y	-9.191	-9.191	0	%100
5	M21	Y	-9.191	-9.191	0	%100
6	M32	Y	-9.191	-9.191	0	%100
7	M32A	Y	-9.191	-9.191	0	%100
8	M32B	Y	-13.703	-13.703	0	%100
9	M32C	Y	-13.703	-13.703	0	%100
10	M19	Y	-13.703	-13.703	0	%100
11	M20A	Y	-9.191	-9.191	0	%100
12	M21A	Y	-9.191	-9.191	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
13	M22A	Y	-13.703	-13.703	0	%100
14	M23A	Y	-13.703	-13.703	0	%100
15	M24	Y	-13.703	-13.703	0	%100
16	M25	Y	-9.191	-9.191	0	%100
17	M26	Y	-9.191	-9.191	0	%100
18	M27	Y	-13.703	-13.703	0	%100
19	M28	Y	-13.703	-13.703	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	X	0	0	0	%100
2	MP1A	Z	-11.918	-11.918	0	%100
3	M5	X	0	0	0	%100
4	M5	Z	-12.226	-12.226	0	%100
5	M10	X	0	0	0	%100
6	M10	Z	-17.831	-17.831	0	%100
7	M12	X	0	0	0	%100
8	M12	Z	-10.228	-10.228	0	%100
9	M21	X	0	0	0	%100
10	M21	Z	-10.228	-10.228	0	%100
11	M32	X	0	0	0	%100
12	M32	Z	0	0	0	%100
13	M32A	X	0	0	0	%100
14	M32A	Z	0	0	0	%100
15	M32B	X	0	0	0	%100
16	M32B	Z	-17.831	-17.831	0	%100
17	M32C	X	0	0	0	%100
18	M32C	Z	-17.831	-17.831	0	%100
19	M19	X	0	0	0	%100
20	M19	Z	-4.458	-4.458	0	%100
21	M20A	X	0	0	0	%100
22	M20A	Z	-9.258	-9.258	0	%100
23	M21A	X	0	0	0	%100
24	M21A	Z	-9.258	-9.258	0	%100
25	M22A	X	0	0	0	%100
26	M22A	Z	-4.458	-4.458	0	%100
27	M23A	X	0	0	0	%100
28	M23A	Z	-4.458	-4.458	0	%100
29	M24	X	0	0	0	%100
30	M24	Z	-4.458	-4.458	0	%100
31	M25	X	0	0	0	%100
32	M25	Z	-9.258	-9.258	0	%100
33	M26	X	0	0	0	%100
34	M26	Z	-9.258	-9.258	0	%100
35	M27	X	0	0	0	%100
36	M27	Z	-4.458	-4.458	0	%100
37	M28	X	0	0	0	%100
38	M28	Z	-4.458	-4.458	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	X	5.959	5.959	0	%100
2	MP1A	Z	-10.321	-10.321	0	%100
3	M5	X	5.78	5.78	0	%100
4	M5	Z	-10.011	-10.011	0	%100
5	M10	X	6.687	6.687	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
6	M10	Z	-11.582	-11.582	0	%100
7	M12	X	5.78	5.78	0	%100
8	M12	Z	-10.011	-10.011	0	%100
9	M21	X	4.781	4.781	0	%100
10	M21	Z	-8.281	-8.281	0	%100
11	M32	X	1.543	1.543	0	%100
12	M32	Z	-2.673	-2.673	0	%100
13	M32A	X	1.543	1.543	0	%100
14	M32A	Z	-2.673	-2.673	0	%100
15	M32B	X	6.687	6.687	0	%100
16	M32B	Z	-11.582	-11.582	0	%100
17	M32C	X	6.687	6.687	0	%100
18	M32C	Z	-11.582	-11.582	0	%100
19	M19	X	6.687	6.687	0	%100
20	M19	Z	-11.582	-11.582	0	%100
21	M20A	X	1.543	1.543	0	%100
22	M20A	Z	-2.673	-2.673	0	%100
23	M21A	X	1.543	1.543	0	%100
24	M21A	Z	-2.673	-2.673	0	%100
25	M22A	X	6.687	6.687	0	%100
26	M22A	Z	-11.582	-11.582	0	%100
27	M23A	X	6.687	6.687	0	%100
28	M23A	Z	-11.582	-11.582	0	%100
29	M24	X	0	0	0	%100
30	M24	Z	0	0	0	%100
31	M25	X	6.172	6.172	0	%100
32	M25	Z	-10.691	-10.691	0	%100
33	M26	X	6.172	6.172	0	%100
34	M26	Z	-10.691	-10.691	0	%100
35	M27	X	0	0	0	%100
36	M27	Z	0	0	0	%100
37	M28	X	0	0	0	%100
38	M28	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	X	10.321	10.321	0	%100
2	MP1A	Z	-5.959	-5.959	0	%100
3	M5	X	8.858	8.858	0	%100
4	M5	Z	-5.114	-5.114	0	%100
5	M10	X	3.861	3.861	0	%100
6	M10	Z	-2.229	-2.229	0	%100
7	M12	X	10.588	10.588	0	%100
8	M12	Z	-6.113	-6.113	0	%100
9	M21	X	8.858	8.858	0	%100
10	M21	Z	-5.114	-5.114	0	%100
11	M32	X	8.018	8.018	0	%100
12	M32	Z	-4.629	-4.629	0	%100
13	M32A	X	8.018	8.018	0	%100
14	M32A	Z	-4.629	-4.629	0	%100
15	M32B	X	3.861	3.861	0	%100
16	M32B	Z	-2.229	-2.229	0	%100
17	M32C	X	3.861	3.861	0	%100
18	M32C	Z	-2.229	-2.229	0	%100
19	M19	X	15.442	15.442	0	%100
20	M19	Z	-8.915	-8.915	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
21	M20A	X	0	0	0	%100
22	M20A	Z	0	0	0	%100
23	M21A	X	0	0	0	%100
24	M21A	Z	0	0	0	%100
25	M22A	X	15.442	15.442	0	%100
26	M22A	Z	-8.915	-8.915	0	%100
27	M23A	X	15.442	15.442	0	%100
28	M23A	Z	-8.915	-8.915	0	%100
29	M24	X	3.861	3.861	0	%100
30	M24	Z	-2.229	-2.229	0	%100
31	M25	X	8.018	8.018	0	%100
32	M25	Z	-4.629	-4.629	0	%100
33	M26	X	8.018	8.018	0	%100
34	M26	Z	-4.629	-4.629	0	%100
35	M27	X	3.861	3.861	0	%100
36	M27	Z	-2.229	-2.229	0	%100
37	M28	X	3.861	3.861	0	%100
38	M28	Z	-2.229	-2.229	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	X	11.918	11.918	0	%100
2	MP1A	Z	0	0	0	%100
3	M5	X	9.562	9.562	0	%100
4	M5	Z	0	0	0	%100
5	M10	X	0	0	0	%100
6	M10	Z	0	0	0	%100
7	M12	X	11.56	11.56	0	%100
8	M12	Z	0	0	0	%100
9	M21	X	11.56	11.56	0	%100
10	M21	Z	0	0	0	%100
11	M32	X	12.344	12.344	0	%100
12	M32	Z	0	0	0	%100
13	M32A	X	12.344	12.344	0	%100
14	M32A	Z	0	0	0	%100
15	M32B	X	0	0	0	%100
16	M32B	Z	0	0	0	%100
17	M32C	X	0	0	0	%100
18	M32C	Z	0	0	0	%100
19	M19	X	13.373	13.373	0	%100
20	M19	Z	0	0	0	%100
21	M20A	X	3.086	3.086	0	%100
22	M20A	Z	0	0	0	%100
23	M21A	X	3.086	3.086	0	%100
24	M21A	Z	0	0	0	%100
25	M22A	X	13.373	13.373	0	%100
26	M22A	Z	0	0	0	%100
27	M23A	X	13.373	13.373	0	%100
28	M23A	Z	0	0	0	%100
29	M24	X	13.373	13.373	0	%100
30	M24	Z	0	0	0	%100
31	M25	X	3.086	3.086	0	%100
32	M25	Z	0	0	0	%100
33	M26	X	3.086	3.086	0	%100
34	M26	Z	0	0	0	%100
35	M27	X	13.373	13.373	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
36	M27	Z	0	0	0	%100
37	M28	X	13.373	13.373	0	%100
38	M28	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	X	10.321	10.321	0	%100
2	MP1A	Z	5.959	5.959	0	%100
3	M5	X	8.858	8.858	0	%100
4	M5	Z	5.114	5.114	0	%100
5	M10	X	3.861	3.861	0	%100
6	M10	Z	2.229	2.229	0	%100
7	M12	X	8.858	8.858	0	%100
8	M12	Z	5.114	5.114	0	%100
9	M21	X	10.588	10.588	0	%100
10	M21	Z	6.113	6.113	0	%100
11	M32	X	8.018	8.018	0	%100
12	M32	Z	4.629	4.629	0	%100
13	M32A	X	8.018	8.018	0	%100
14	M32A	Z	4.629	4.629	0	%100
15	M32B	X	3.861	3.861	0	%100
16	M32B	Z	2.229	2.229	0	%100
17	M32C	X	3.861	3.861	0	%100
18	M32C	Z	2.229	2.229	0	%100
19	M19	X	3.861	3.861	0	%100
20	M19	Z	2.229	2.229	0	%100
21	M20A	X	8.018	8.018	0	%100
22	M20A	Z	4.629	4.629	0	%100
23	M21A	X	8.018	8.018	0	%100
24	M21A	Z	4.629	4.629	0	%100
25	M22A	X	3.861	3.861	0	%100
26	M22A	Z	2.229	2.229	0	%100
27	M23A	X	3.861	3.861	0	%100
28	M23A	Z	2.229	2.229	0	%100
29	M24	X	15.442	15.442	0	%100
30	M24	Z	8.915	8.915	0	%100
31	M25	X	0	0	0	%100
32	M25	Z	0	0	0	%100
33	M26	X	0	0	0	%100
34	M26	Z	0	0	0	%100
35	M27	X	15.442	15.442	0	%100
36	M27	Z	8.915	8.915	0	%100
37	M28	X	15.442	15.442	0	%100
38	M28	Z	8.915	8.915	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	X	5.959	5.959	0	%100
2	MP1A	Z	10.321	10.321	0	%100
3	M5	X	5.78	5.78	0	%100
4	M5	Z	10.011	10.011	0	%100
5	M10	X	6.687	6.687	0	%100
6	M10	Z	11.582	11.582	0	%100
7	M12	X	4.781	4.781	0	%100
8	M12	Z	8.281	8.281	0	%100
9	M21	X	5.78	5.78	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
10	M21	Z	10.011	10.011	0	%100
11	M32	X	1.543	1.543	0	%100
12	M32	Z	2.673	2.673	0	%100
13	M32A	X	1.543	1.543	0	%100
14	M32A	Z	2.673	2.673	0	%100
15	M32B	X	6.687	6.687	0	%100
16	M32B	Z	11.582	11.582	0	%100
17	M32C	X	6.687	6.687	0	%100
18	M32C	Z	11.582	11.582	0	%100
19	M19	X	0	0	0	%100
20	M19	Z	0	0	0	%100
21	M20A	X	6.172	6.172	0	%100
22	M20A	Z	10.691	10.691	0	%100
23	M21A	X	6.172	6.172	0	%100
24	M21A	Z	10.691	10.691	0	%100
25	M22A	X	0	0	0	%100
26	M22A	Z	0	0	0	%100
27	M23A	X	0	0	0	%100
28	M23A	Z	0	0	0	%100
29	M24	X	6.687	6.687	0	%100
30	M24	Z	11.582	11.582	0	%100
31	M25	X	1.543	1.543	0	%100
32	M25	Z	2.673	2.673	0	%100
33	M26	X	1.543	1.543	0	%100
34	M26	Z	2.673	2.673	0	%100
35	M27	X	6.687	6.687	0	%100
36	M27	Z	11.582	11.582	0	%100
37	M28	X	6.687	6.687	0	%100
38	M28	Z	11.582	11.582	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	X	0	0	0	%100
2	MP1A	Z	11.918	11.918	0	%100
3	M5	X	0	0	0	%100
4	M5	Z	12.226	12.226	0	%100
5	M10	X	0	0	0	%100
6	M10	Z	17.831	17.831	0	%100
7	M12	X	0	0	0	%100
8	M12	Z	10.228	10.228	0	%100
9	M21	X	0	0	0	%100
10	M21	Z	10.228	10.228	0	%100
11	M32	X	0	0	0	%100
12	M32	Z	0	0	0	%100
13	M32A	X	0	0	0	%100
14	M32A	Z	0	0	0	%100
15	M32B	X	0	0	0	%100
16	M32B	Z	17.831	17.831	0	%100
17	M32C	X	0	0	0	%100
18	M32C	Z	17.831	17.831	0	%100
19	M19	X	0	0	0	%100
20	M19	Z	4.458	4.458	0	%100
21	M20A	X	0	0	0	%100
22	M20A	Z	9.258	9.258	0	%100
23	M21A	X	0	0	0	%100
24	M21A	Z	9.258	9.258	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
25	M22A	X	0	0	0	%100
26	M22A	Z	4.458	4.458	0	%100
27	M23A	X	0	0	0	%100
28	M23A	Z	4.458	4.458	0	%100
29	M24	X	0	0	0	%100
30	M24	Z	4.458	4.458	0	%100
31	M25	X	0	0	0	%100
32	M25	Z	9.258	9.258	0	%100
33	M26	X	0	0	0	%100
34	M26	Z	9.258	9.258	0	%100
35	M27	X	0	0	0	%100
36	M27	Z	4.458	4.458	0	%100
37	M28	X	0	0	0	%100
38	M28	Z	4.458	4.458	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	X	-5.959	-5.959	0	%100
2	MP1A	Z	10.321	10.321	0	%100
3	M5	X	-5.78	-5.78	0	%100
4	M5	Z	10.011	10.011	0	%100
5	M10	X	-6.687	-6.687	0	%100
6	M10	Z	11.582	11.582	0	%100
7	M12	X	-5.78	-5.78	0	%100
8	M12	Z	10.011	10.011	0	%100
9	M21	X	-4.781	-4.781	0	%100
10	M21	Z	8.281	8.281	0	%100
11	M32	X	-1.543	-1.543	0	%100
12	M32	Z	2.673	2.673	0	%100
13	M32A	X	-1.543	-1.543	0	%100
14	M32A	Z	2.673	2.673	0	%100
15	M32B	X	-6.687	-6.687	0	%100
16	M32B	Z	11.582	11.582	0	%100
17	M32C	X	-6.687	-6.687	0	%100
18	M32C	Z	11.582	11.582	0	%100
19	M19	X	-6.687	-6.687	0	%100
20	M19	Z	11.582	11.582	0	%100
21	M20A	X	-1.543	-1.543	0	%100
22	M20A	Z	2.673	2.673	0	%100
23	M21A	X	-1.543	-1.543	0	%100
24	M21A	Z	2.673	2.673	0	%100
25	M22A	X	-6.687	-6.687	0	%100
26	M22A	Z	11.582	11.582	0	%100
27	M23A	X	-6.687	-6.687	0	%100
28	M23A	Z	11.582	11.582	0	%100
29	M24	X	0	0	0	%100
30	M24	Z	0	0	0	%100
31	M25	X	-6.172	-6.172	0	%100
32	M25	Z	10.691	10.691	0	%100
33	M26	X	-6.172	-6.172	0	%100
34	M26	Z	10.691	10.691	0	%100
35	M27	X	0	0	0	%100
36	M27	Z	0	0	0	%100
37	M28	X	0	0	0	%100
38	M28	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	X	-10.321	-10.321	0	%100
2	MP1A	Z	5.959	5.959	0	%100
3	M5	X	-8.858	-8.858	0	%100
4	M5	Z	5.114	5.114	0	%100
5	M10	X	-3.861	-3.861	0	%100
6	M10	Z	2.229	2.229	0	%100
7	M12	X	-10.588	-10.588	0	%100
8	M12	Z	6.113	6.113	0	%100
9	M21	X	-8.858	-8.858	0	%100
10	M21	Z	5.114	5.114	0	%100
11	M32	X	-8.018	-8.018	0	%100
12	M32	Z	4.629	4.629	0	%100
13	M32A	X	-8.018	-8.018	0	%100
14	M32A	Z	4.629	4.629	0	%100
15	M32B	X	-3.861	-3.861	0	%100
16	M32B	Z	2.229	2.229	0	%100
17	M32C	X	-3.861	-3.861	0	%100
18	M32C	Z	2.229	2.229	0	%100
19	M19	X	-15.442	-15.442	0	%100
20	M19	Z	8.915	8.915	0	%100
21	M20A	X	0	0	0	%100
22	M20A	Z	0	0	0	%100
23	M21A	X	0	0	0	%100
24	M21A	Z	0	0	0	%100
25	M22A	X	-15.442	-15.442	0	%100
26	M22A	Z	8.915	8.915	0	%100
27	M23A	X	-15.442	-15.442	0	%100
28	M23A	Z	8.915	8.915	0	%100
29	M24	X	-3.861	-3.861	0	%100
30	M24	Z	2.229	2.229	0	%100
31	M25	X	-8.018	-8.018	0	%100
32	M25	Z	4.629	4.629	0	%100
33	M26	X	-8.018	-8.018	0	%100
34	M26	Z	4.629	4.629	0	%100
35	M27	X	-3.861	-3.861	0	%100
36	M27	Z	2.229	2.229	0	%100
37	M28	X	-3.861	-3.861	0	%100
38	M28	Z	2.229	2.229	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	X	-11.918	-11.918	0	%100
2	MP1A	Z	0	0	0	%100
3	M5	X	-9.562	-9.562	0	%100
4	M5	Z	0	0	0	%100
5	M10	X	0	0	0	%100
6	M10	Z	0	0	0	%100
7	M12	X	-11.56	-11.56	0	%100
8	M12	Z	0	0	0	%100
9	M21	X	-11.56	-11.56	0	%100
10	M21	Z	0	0	0	%100
11	M32	X	-12.344	-12.344	0	%100
12	M32	Z	0	0	0	%100
13	M32A	X	-12.344	-12.344	0	%100
14	M32A	Z	0	0	0	%100
15	M32B	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
16	M32B	Z	0	0	0	%100
17	M32C	X	0	0	0	%100
18	M32C	Z	0	0	0	%100
19	M19	X	-13.373	-13.373	0	%100
20	M19	Z	0	0	0	%100
21	M20A	X	-3.086	-3.086	0	%100
22	M20A	Z	0	0	0	%100
23	M21A	X	-3.086	-3.086	0	%100
24	M21A	Z	0	0	0	%100
25	M22A	X	-13.373	-13.373	0	%100
26	M22A	Z	0	0	0	%100
27	M23A	X	-13.373	-13.373	0	%100
28	M23A	Z	0	0	0	%100
29	M24	X	-13.373	-13.373	0	%100
30	M24	Z	0	0	0	%100
31	M25	X	-3.086	-3.086	0	%100
32	M25	Z	0	0	0	%100
33	M26	X	-3.086	-3.086	0	%100
34	M26	Z	0	0	0	%100
35	M27	X	-13.373	-13.373	0	%100
36	M27	Z	0	0	0	%100
37	M28	X	-13.373	-13.373	0	%100
38	M28	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	X	-10.321	-10.321	0	%100
2	MP1A	Z	-5.959	-5.959	0	%100
3	M5	X	-8.858	-8.858	0	%100
4	M5	Z	-5.114	-5.114	0	%100
5	M10	X	-3.861	-3.861	0	%100
6	M10	Z	-2.229	-2.229	0	%100
7	M12	X	-8.858	-8.858	0	%100
8	M12	Z	-5.114	-5.114	0	%100
9	M21	X	-10.588	-10.588	0	%100
10	M21	Z	-6.113	-6.113	0	%100
11	M32	X	-8.018	-8.018	0	%100
12	M32	Z	-4.629	-4.629	0	%100
13	M32A	X	-8.018	-8.018	0	%100
14	M32A	Z	-4.629	-4.629	0	%100
15	M32B	X	-3.861	-3.861	0	%100
16	M32B	Z	-2.229	-2.229	0	%100
17	M32C	X	-3.861	-3.861	0	%100
18	M32C	Z	-2.229	-2.229	0	%100
19	M19	X	-3.861	-3.861	0	%100
20	M19	Z	-2.229	-2.229	0	%100
21	M20A	X	-8.018	-8.018	0	%100
22	M20A	Z	-4.629	-4.629	0	%100
23	M21A	X	-8.018	-8.018	0	%100
24	M21A	Z	-4.629	-4.629	0	%100
25	M22A	X	-3.861	-3.861	0	%100
26	M22A	Z	-2.229	-2.229	0	%100
27	M23A	X	-3.861	-3.861	0	%100
28	M23A	Z	-2.229	-2.229	0	%100
29	M24	X	-15.442	-15.442	0	%100
30	M24	Z	-8.915	-8.915	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
31	M25	X	0	0	0	%100
32	M25	Z	0	0	0	%100
33	M26	X	0	0	0	%100
34	M26	Z	0	0	0	%100
35	M27	X	-15.442	-15.442	0	%100
36	M27	Z	-8.915	-8.915	0	%100
37	M28	X	-15.442	-15.442	0	%100
38	M28	Z	-8.915	-8.915	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	X	-5.959	-5.959	0	%100
2	MP1A	Z	-10.321	-10.321	0	%100
3	M5	X	-5.78	-5.78	0	%100
4	M5	Z	-10.011	-10.011	0	%100
5	M10	X	-6.687	-6.687	0	%100
6	M10	Z	-11.582	-11.582	0	%100
7	M12	X	-4.781	-4.781	0	%100
8	M12	Z	-8.281	-8.281	0	%100
9	M21	X	-5.78	-5.78	0	%100
10	M21	Z	-10.011	-10.011	0	%100
11	M32	X	-1.543	-1.543	0	%100
12	M32	Z	-2.673	-2.673	0	%100
13	M32A	X	-1.543	-1.543	0	%100
14	M32A	Z	-2.673	-2.673	0	%100
15	M32B	X	-6.687	-6.687	0	%100
16	M32B	Z	-11.582	-11.582	0	%100
17	M32C	X	-6.687	-6.687	0	%100
18	M32C	Z	-11.582	-11.582	0	%100
19	M19	X	0	0	0	%100
20	M19	Z	0	0	0	%100
21	M20A	X	-6.172	-6.172	0	%100
22	M20A	Z	-10.691	-10.691	0	%100
23	M21A	X	-6.172	-6.172	0	%100
24	M21A	Z	-10.691	-10.691	0	%100
25	M22A	X	0	0	0	%100
26	M22A	Z	0	0	0	%100
27	M23A	X	0	0	0	%100
28	M23A	Z	0	0	0	%100
29	M24	X	-6.687	-6.687	0	%100
30	M24	Z	-11.582	-11.582	0	%100
31	M25	X	-1.543	-1.543	0	%100
32	M25	Z	-2.673	-2.673	0	%100
33	M26	X	-1.543	-1.543	0	%100
34	M26	Z	-2.673	-2.673	0	%100
35	M27	X	-6.687	-6.687	0	%100
36	M27	Z	-11.582	-11.582	0	%100
37	M28	X	-6.687	-6.687	0	%100
38	M28	Z	-11.582	-11.582	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	X	0	0	0	%100
2	MP1A	Z	-4.053	-4.053	0	%100
3	M5	X	0	0	0	%100
4	M5	Z	-3.714	-3.714	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
5	M10	X	0	0	0	%100
6	M10	Z	-4.281	-4.281	0	%100
7	M12	X	0	0	0	%100
8	M12	Z	-3.107	-3.107	0	%100
9	M21	X	0	0	0	%100
10	M21	Z	-3.107	-3.107	0	%100
11	M32	X	0	0	0	%100
12	M32	Z	0	0	0	%100
13	M32A	X	0	0	0	%100
14	M32A	Z	0	0	0	%100
15	M32B	X	0	0	0	%100
16	M32B	Z	-4.281	-4.281	0	%100
17	M32C	X	0	0	0	%100
18	M32C	Z	-4.281	-4.281	0	%100
19	M19	X	0	0	0	%100
20	M19	Z	-1.07	-1.07	0	%100
21	M20A	X	0	0	0	%100
22	M20A	Z	-2.905	-2.905	0	%100
23	M21A	X	0	0	0	%100
24	M21A	Z	-2.905	-2.905	0	%100
25	M22A	X	0	0	0	%100
26	M22A	Z	-1.07	-1.07	0	%100
27	M23A	X	0	0	0	%100
28	M23A	Z	-1.07	-1.07	0	%100
29	M24	X	0	0	0	%100
30	M24	Z	-1.07	-1.07	0	%100
31	M25	X	0	0	0	%100
32	M25	Z	-2.905	-2.905	0	%100
33	M26	X	0	0	0	%100
34	M26	Z	-2.905	-2.905	0	%100
35	M27	X	0	0	0	%100
36	M27	Z	-1.07	-1.07	0	%100
37	M28	X	0	0	0	%100
38	M28	Z	-1.07	-1.07	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	X	2.027	2.027	0	%100
2	MP1A	Z	-3.51	-3.51	0	%100
3	M5	X	1.756	1.756	0	%100
4	M5	Z	-3.041	-3.041	0	%100
5	M10	X	1.605	1.605	0	%100
6	M10	Z	-2.78	-2.78	0	%100
7	M12	X	1.756	1.756	0	%100
8	M12	Z	-3.041	-3.041	0	%100
9	M21	X	1.452	1.452	0	%100
10	M21	Z	-2.515	-2.515	0	%100
11	M32	X	.484	.484	0	%100
12	M32	Z	-.838	-.838	0	%100
13	M32A	X	.484	.484	0	%100
14	M32A	Z	-.838	-.838	0	%100
15	M32B	X	1.605	1.605	0	%100
16	M32B	Z	-2.78	-2.78	0	%100
17	M32C	X	1.605	1.605	0	%100
18	M32C	Z	-2.78	-2.78	0	%100
19	M19	X	1.605	1.605	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
20	M19	Z	-2.78	-2.78	0	%100
21	M20A	X	.484	.484	0	%100
22	M20A	Z	-.838	-.838	0	%100
23	M21A	X	.484	.484	0	%100
24	M21A	Z	-.838	-.838	0	%100
25	M22A	X	1.605	1.605	0	%100
26	M22A	Z	-2.78	-2.78	0	%100
27	M23A	X	1.605	1.605	0	%100
28	M23A	Z	-2.78	-2.78	0	%100
29	M24	X	0	0	0	%100
30	M24	Z	0	0	0	%100
31	M25	X	1.936	1.936	0	%100
32	M25	Z	-3.354	-3.354	0	%100
33	M26	X	1.936	1.936	0	%100
34	M26	Z	-3.354	-3.354	0	%100
35	M27	X	0	0	0	%100
36	M27	Z	0	0	0	%100
37	M28	X	0	0	0	%100
38	M28	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	X	3.51	3.51	0	%100
2	MP1A	Z	-2.027	-2.027	0	%100
3	M5	X	2.691	2.691	0	%100
4	M5	Z	-1.553	-1.553	0	%100
5	M10	X	.927	.927	0	%100
6	M10	Z	-.535	-.535	0	%100
7	M12	X	3.216	3.216	0	%100
8	M12	Z	-1.857	-1.857	0	%100
9	M21	X	2.691	2.691	0	%100
10	M21	Z	-1.553	-1.553	0	%100
11	M32	X	2.515	2.515	0	%100
12	M32	Z	-1.452	-1.452	0	%100
13	M32A	X	2.515	2.515	0	%100
14	M32A	Z	-1.452	-1.452	0	%100
15	M32B	X	.927	.927	0	%100
16	M32B	Z	-.535	-.535	0	%100
17	M32C	X	.927	.927	0	%100
18	M32C	Z	-.535	-.535	0	%100
19	M19	X	3.707	3.707	0	%100
20	M19	Z	-2.14	-2.14	0	%100
21	M20A	X	0	0	0	%100
22	M20A	Z	0	0	0	%100
23	M21A	X	0	0	0	%100
24	M21A	Z	0	0	0	%100
25	M22A	X	3.707	3.707	0	%100
26	M22A	Z	-2.14	-2.14	0	%100
27	M23A	X	3.707	3.707	0	%100
28	M23A	Z	-2.14	-2.14	0	%100
29	M24	X	.927	.927	0	%100
30	M24	Z	-.535	-.535	0	%100
31	M25	X	2.515	2.515	0	%100
32	M25	Z	-1.452	-1.452	0	%100
33	M26	X	2.515	2.515	0	%100
34	M26	Z	-1.452	-1.452	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
35	M27	X	.927	.927	0	%100
36	M27	Z	-.535	-.535	0	%100
37	M28	X	.927	.927	0	%100
38	M28	Z	-.535	-.535	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	X	4.053	4.053	0	%100
2	MP1A	Z	0	0	0	%100
3	M5	X	2.905	2.905	0	%100
4	M5	Z	0	0	0	%100
5	M10	X	0	0	0	%100
6	M10	Z	0	0	0	%100
7	M12	X	3.511	3.511	0	%100
8	M12	Z	0	0	0	%100
9	M21	X	3.511	3.511	0	%100
10	M21	Z	0	0	0	%100
11	M32	X	3.873	3.873	0	%100
12	M32	Z	0	0	0	%100
13	M32A	X	3.873	3.873	0	%100
14	M32A	Z	0	0	0	%100
15	M32B	X	0	0	0	%100
16	M32B	Z	0	0	0	%100
17	M32C	X	0	0	0	%100
18	M32C	Z	0	0	0	%100
19	M19	X	3.211	3.211	0	%100
20	M19	Z	0	0	0	%100
21	M20A	X	.968	.968	0	%100
22	M20A	Z	0	0	0	%100
23	M21A	X	.968	.968	0	%100
24	M21A	Z	0	0	0	%100
25	M22A	X	3.211	3.211	0	%100
26	M22A	Z	0	0	0	%100
27	M23A	X	3.211	3.211	0	%100
28	M23A	Z	0	0	0	%100
29	M24	X	3.211	3.211	0	%100
30	M24	Z	0	0	0	%100
31	M25	X	.968	.968	0	%100
32	M25	Z	0	0	0	%100
33	M26	X	.968	.968	0	%100
34	M26	Z	0	0	0	%100
35	M27	X	3.211	3.211	0	%100
36	M27	Z	0	0	0	%100
37	M28	X	3.211	3.211	0	%100
38	M28	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	X	3.51	3.51	0	%100
2	MP1A	Z	2.027	2.027	0	%100
3	M5	X	2.691	2.691	0	%100
4	M5	Z	1.553	1.553	0	%100
5	M10	X	.927	.927	0	%100
6	M10	Z	.535	.535	0	%100
7	M12	X	2.691	2.691	0	%100
8	M12	Z	1.553	1.553	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
9	M21	X	3.216	3.216	0	%100
10	M21	Z	1.857	1.857	0	%100
11	M32	X	2.515	2.515	0	%100
12	M32	Z	1.452	1.452	0	%100
13	M32A	X	2.515	2.515	0	%100
14	M32A	Z	1.452	1.452	0	%100
15	M32B	X	.927	.927	0	%100
16	M32B	Z	.535	.535	0	%100
17	M32C	X	.927	.927	0	%100
18	M32C	Z	.535	.535	0	%100
19	M19	X	.927	.927	0	%100
20	M19	Z	.535	.535	0	%100
21	M20A	X	2.515	2.515	0	%100
22	M20A	Z	1.452	1.452	0	%100
23	M21A	X	2.515	2.515	0	%100
24	M21A	Z	1.452	1.452	0	%100
25	M22A	X	.927	.927	0	%100
26	M22A	Z	.535	.535	0	%100
27	M23A	X	.927	.927	0	%100
28	M23A	Z	.535	.535	0	%100
29	M24	X	3.707	3.707	0	%100
30	M24	Z	2.14	2.14	0	%100
31	M25	X	0	0	0	%100
32	M25	Z	0	0	0	%100
33	M26	X	0	0	0	%100
34	M26	Z	0	0	0	%100
35	M27	X	3.707	3.707	0	%100
36	M27	Z	2.14	2.14	0	%100
37	M28	X	3.707	3.707	0	%100
38	M28	Z	2.14	2.14	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	X	2.027	2.027	0	%100
2	MP1A	Z	3.51	3.51	0	%100
3	M5	X	1.756	1.756	0	%100
4	M5	Z	3.041	3.041	0	%100
5	M10	X	1.605	1.605	0	%100
6	M10	Z	2.78	2.78	0	%100
7	M12	X	1.452	1.452	0	%100
8	M12	Z	2.515	2.515	0	%100
9	M21	X	1.756	1.756	0	%100
10	M21	Z	3.041	3.041	0	%100
11	M32	X	.484	.484	0	%100
12	M32	Z	.838	.838	0	%100
13	M32A	X	.484	.484	0	%100
14	M32A	Z	.838	.838	0	%100
15	M32B	X	1.605	1.605	0	%100
16	M32B	Z	2.78	2.78	0	%100
17	M32C	X	1.605	1.605	0	%100
18	M32C	Z	2.78	2.78	0	%100
19	M19	X	0	0	0	%100
20	M19	Z	0	0	0	%100
21	M20A	X	1.936	1.936	0	%100
22	M20A	Z	3.354	3.354	0	%100
23	M21A	X	1.936	1.936	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
24	M21A	Z	3.354	3.354	0	%100
25	M22A	X	0	0	0	%100
26	M22A	Z	0	0	0	%100
27	M23A	X	0	0	0	%100
28	M23A	Z	0	0	0	%100
29	M24	X	1.605	1.605	0	%100
30	M24	Z	2.78	2.78	0	%100
31	M25	X	.484	.484	0	%100
32	M25	Z	.838	.838	0	%100
33	M26	X	.484	.484	0	%100
34	M26	Z	.838	.838	0	%100
35	M27	X	1.605	1.605	0	%100
36	M27	Z	2.78	2.78	0	%100
37	M28	X	1.605	1.605	0	%100
38	M28	Z	2.78	2.78	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	X	0	0	0	%100
2	MP1A	Z	4.053	4.053	0	%100
3	M5	X	0	0	0	%100
4	M5	Z	3.714	3.714	0	%100
5	M10	X	0	0	0	%100
6	M10	Z	4.281	4.281	0	%100
7	M12	X	0	0	0	%100
8	M12	Z	3.107	3.107	0	%100
9	M21	X	0	0	0	%100
10	M21	Z	3.107	3.107	0	%100
11	M32	X	0	0	0	%100
12	M32	Z	0	0	0	%100
13	M32A	X	0	0	0	%100
14	M32A	Z	0	0	0	%100
15	M32B	X	0	0	0	%100
16	M32B	Z	4.281	4.281	0	%100
17	M32C	X	0	0	0	%100
18	M32C	Z	4.281	4.281	0	%100
19	M19	X	0	0	0	%100
20	M19	Z	1.07	1.07	0	%100
21	M20A	X	0	0	0	%100
22	M20A	Z	2.905	2.905	0	%100
23	M21A	X	0	0	0	%100
24	M21A	Z	2.905	2.905	0	%100
25	M22A	X	0	0	0	%100
26	M22A	Z	1.07	1.07	0	%100
27	M23A	X	0	0	0	%100
28	M23A	Z	1.07	1.07	0	%100
29	M24	X	0	0	0	%100
30	M24	Z	1.07	1.07	0	%100
31	M25	X	0	0	0	%100
32	M25	Z	2.905	2.905	0	%100
33	M26	X	0	0	0	%100
34	M26	Z	2.905	2.905	0	%100
35	M27	X	0	0	0	%100
36	M27	Z	1.07	1.07	0	%100
37	M28	X	0	0	0	%100
38	M28	Z	1.07	1.07	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	X	-2.027	-2.027	0	%100
2	MP1A	Z	3.51	3.51	0	%100
3	M5	X	-1.756	-1.756	0	%100
4	M5	Z	3.041	3.041	0	%100
5	M10	X	-1.605	-1.605	0	%100
6	M10	Z	2.78	2.78	0	%100
7	M12	X	-1.756	-1.756	0	%100
8	M12	Z	3.041	3.041	0	%100
9	M21	X	-1.452	-1.452	0	%100
10	M21	Z	2.515	2.515	0	%100
11	M32	X	-.484	-.484	0	%100
12	M32	Z	.838	.838	0	%100
13	M32A	X	-.484	-.484	0	%100
14	M32A	Z	.838	.838	0	%100
15	M32B	X	-1.605	-1.605	0	%100
16	M32B	Z	2.78	2.78	0	%100
17	M32C	X	-1.605	-1.605	0	%100
18	M32C	Z	2.78	2.78	0	%100
19	M19	X	-1.605	-1.605	0	%100
20	M19	Z	2.78	2.78	0	%100
21	M20A	X	-.484	-.484	0	%100
22	M20A	Z	.838	.838	0	%100
23	M21A	X	-.484	-.484	0	%100
24	M21A	Z	.838	.838	0	%100
25	M22A	X	-1.605	-1.605	0	%100
26	M22A	Z	2.78	2.78	0	%100
27	M23A	X	-1.605	-1.605	0	%100
28	M23A	Z	2.78	2.78	0	%100
29	M24	X	0	0	0	%100
30	M24	Z	0	0	0	%100
31	M25	X	-1.936	-1.936	0	%100
32	M25	Z	3.354	3.354	0	%100
33	M26	X	-1.936	-1.936	0	%100
34	M26	Z	3.354	3.354	0	%100
35	M27	X	0	0	0	%100
36	M27	Z	0	0	0	%100
37	M28	X	0	0	0	%100
38	M28	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	X	-3.51	-3.51	0	%100
2	MP1A	Z	2.027	2.027	0	%100
3	M5	X	-2.691	-2.691	0	%100
4	M5	Z	1.553	1.553	0	%100
5	M10	X	-.927	-.927	0	%100
6	M10	Z	.535	.535	0	%100
7	M12	X	-3.216	-3.216	0	%100
8	M12	Z	1.857	1.857	0	%100
9	M21	X	-2.691	-2.691	0	%100
10	M21	Z	1.553	1.553	0	%100
11	M32	X	-2.515	-2.515	0	%100
12	M32	Z	1.452	1.452	0	%100
13	M32A	X	-2.515	-2.515	0	%100
14	M32A	Z	1.452	1.452	0	%100
15	M32B	X	-.927	-.927	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
16	M32B	Z	.535	.535	0	%100
17	M32C	X	-.927	-.927	0	%100
18	M32C	Z	.535	.535	0	%100
19	M19	X	-3.707	-3.707	0	%100
20	M19	Z	2.14	2.14	0	%100
21	M20A	X	0	0	0	%100
22	M20A	Z	0	0	0	%100
23	M21A	X	0	0	0	%100
24	M21A	Z	0	0	0	%100
25	M22A	X	-3.707	-3.707	0	%100
26	M22A	Z	2.14	2.14	0	%100
27	M23A	X	-3.707	-3.707	0	%100
28	M23A	Z	2.14	2.14	0	%100
29	M24	X	-.927	-.927	0	%100
30	M24	Z	.535	.535	0	%100
31	M25	X	-2.515	-2.515	0	%100
32	M25	Z	1.452	1.452	0	%100
33	M26	X	-2.515	-2.515	0	%100
34	M26	Z	1.452	1.452	0	%100
35	M27	X	-.927	-.927	0	%100
36	M27	Z	.535	.535	0	%100
37	M28	X	-.927	-.927	0	%100
38	M28	Z	.535	.535	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	X	-4.053	-4.053	0	%100
2	MP1A	Z	0	0	0	%100
3	M5	X	-2.905	-2.905	0	%100
4	M5	Z	0	0	0	%100
5	M10	X	0	0	0	%100
6	M10	Z	0	0	0	%100
7	M12	X	-3.511	-3.511	0	%100
8	M12	Z	0	0	0	%100
9	M21	X	-3.511	-3.511	0	%100
10	M21	Z	0	0	0	%100
11	M32	X	-3.873	-3.873	0	%100
12	M32	Z	0	0	0	%100
13	M32A	X	-3.873	-3.873	0	%100
14	M32A	Z	0	0	0	%100
15	M32B	X	0	0	0	%100
16	M32B	Z	0	0	0	%100
17	M32C	X	0	0	0	%100
18	M32C	Z	0	0	0	%100
19	M19	X	-3.211	-3.211	0	%100
20	M19	Z	0	0	0	%100
21	M20A	X	-.968	-.968	0	%100
22	M20A	Z	0	0	0	%100
23	M21A	X	-.968	-.968	0	%100
24	M21A	Z	0	0	0	%100
25	M22A	X	-3.211	-3.211	0	%100
26	M22A	Z	0	0	0	%100
27	M23A	X	-3.211	-3.211	0	%100
28	M23A	Z	0	0	0	%100
29	M24	X	-3.211	-3.211	0	%100
30	M24	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
31	M25	X	-.968	-.968	0	%100
32	M25	Z	0	0	0	%100
33	M26	X	-.968	-.968	0	%100
34	M26	Z	0	0	0	%100
35	M27	X	-3.211	-3.211	0	%100
36	M27	Z	0	0	0	%100
37	M28	X	-3.211	-3.211	0	%100
38	M28	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	X	-3.51	-3.51	0	%100
2	MP1A	Z	-2.027	-2.027	0	%100
3	M5	X	-2.691	-2.691	0	%100
4	M5	Z	-1.553	-1.553	0	%100
5	M10	X	-.927	-.927	0	%100
6	M10	Z	-.535	-.535	0	%100
7	M12	X	-2.691	-2.691	0	%100
8	M12	Z	-1.553	-1.553	0	%100
9	M21	X	-3.216	-3.216	0	%100
10	M21	Z	-1.857	-1.857	0	%100
11	M32	X	-2.515	-2.515	0	%100
12	M32	Z	-1.452	-1.452	0	%100
13	M32A	X	-2.515	-2.515	0	%100
14	M32A	Z	-1.452	-1.452	0	%100
15	M32B	X	-.927	-.927	0	%100
16	M32B	Z	-.535	-.535	0	%100
17	M32C	X	-.927	-.927	0	%100
18	M32C	Z	-.535	-.535	0	%100
19	M19	X	-.927	-.927	0	%100
20	M19	Z	-.535	-.535	0	%100
21	M20A	X	-2.515	-2.515	0	%100
22	M20A	Z	-1.452	-1.452	0	%100
23	M21A	X	-2.515	-2.515	0	%100
24	M21A	Z	-1.452	-1.452	0	%100
25	M22A	X	-.927	-.927	0	%100
26	M22A	Z	-.535	-.535	0	%100
27	M23A	X	-.927	-.927	0	%100
28	M23A	Z	-.535	-.535	0	%100
29	M24	X	-3.707	-3.707	0	%100
30	M24	Z	-2.14	-2.14	0	%100
31	M25	X	0	0	0	%100
32	M25	Z	0	0	0	%100
33	M26	X	0	0	0	%100
34	M26	Z	0	0	0	%100
35	M27	X	-3.707	-3.707	0	%100
36	M27	Z	-2.14	-2.14	0	%100
37	M28	X	-3.707	-3.707	0	%100
38	M28	Z	-2.14	-2.14	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	X	-2.027	-2.027	0	%100
2	MP1A	Z	-3.51	-3.51	0	%100
3	M5	X	-1.756	-1.756	0	%100
4	M5	Z	-3.041	-3.041	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
5	M10	X	-1.605	-1.605	0	%100
6	M10	Z	-2.78	-2.78	0	%100
7	M12	X	-1.452	-1.452	0	%100
8	M12	Z	-2.515	-2.515	0	%100
9	M21	X	-1.756	-1.756	0	%100
10	M21	Z	-3.041	-3.041	0	%100
11	M32	X	-.484	-.484	0	%100
12	M32	Z	-.838	-.838	0	%100
13	M32A	X	-.484	-.484	0	%100
14	M32A	Z	-.838	-.838	0	%100
15	M32B	X	-1.605	-1.605	0	%100
16	M32B	Z	-2.78	-2.78	0	%100
17	M32C	X	-1.605	-1.605	0	%100
18	M32C	Z	-2.78	-2.78	0	%100
19	M19	X	0	0	0	%100
20	M19	Z	0	0	0	%100
21	M20A	X	-1.936	-1.936	0	%100
22	M20A	Z	-3.354	-3.354	0	%100
23	M21A	X	-1.936	-1.936	0	%100
24	M21A	Z	-3.354	-3.354	0	%100
25	M22A	X	0	0	0	%100
26	M22A	Z	0	0	0	%100
27	M23A	X	0	0	0	%100
28	M23A	Z	0	0	0	%100
29	M24	X	-1.605	-1.605	0	%100
30	M24	Z	-2.78	-2.78	0	%100
31	M25	X	-.484	-.484	0	%100
32	M25	Z	-.838	-.838	0	%100
33	M26	X	-.484	-.484	0	%100
34	M26	Z	-.838	-.838	0	%100
35	M27	X	-1.605	-1.605	0	%100
36	M27	Z	-2.78	-2.78	0	%100
37	M28	X	-1.605	-1.605	0	%100
38	M28	Z	-2.78	-2.78	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	X	0	0	0	%100
2	MP1A	Z	-.784	-.784	0	%100
3	M5	X	0	0	0	%100
4	M5	Z	-.804	-.804	0	%100
5	M10	X	0	0	0	%100
6	M10	Z	-1.172	-1.172	0	%100
7	M12	X	0	0	0	%100
8	M12	Z	-.672	-.672	0	%100
9	M21	X	0	0	0	%100
10	M21	Z	-.672	-.672	0	%100
11	M32	X	0	0	0	%100
12	M32	Z	0	0	0	%100
13	M32A	X	0	0	0	%100
14	M32A	Z	0	0	0	%100
15	M32B	X	0	0	0	%100
16	M32B	Z	-1.172	-1.172	0	%100
17	M32C	X	0	0	0	%100
18	M32C	Z	-1.172	-1.172	0	%100
19	M19	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
20	M19	Z	-.293	-.293	0	%100
21	M20A	X	0	0	0	%100
22	M20A	Z	-.609	-.609	0	%100
23	M21A	X	0	0	0	%100
24	M21A	Z	-.609	-.609	0	%100
25	M22A	X	0	0	0	%100
26	M22A	Z	-.293	-.293	0	%100
27	M23A	X	0	0	0	%100
28	M23A	Z	-.293	-.293	0	%100
29	M24	X	0	0	0	%100
30	M24	Z	-.293	-.293	0	%100
31	M25	X	0	0	0	%100
32	M25	Z	-.609	-.609	0	%100
33	M26	X	0	0	0	%100
34	M26	Z	-.609	-.609	0	%100
35	M27	X	0	0	0	%100
36	M27	Z	-.293	-.293	0	%100
37	M28	X	0	0	0	%100
38	M28	Z	-.293	-.293	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	X	.392	.392	0	%100
2	MP1A	Z	-.679	-.679	0	%100
3	M5	X	.38	.38	0	%100
4	M5	Z	-.658	-.658	0	%100
5	M10	X	.44	.44	0	%100
6	M10	Z	-.761	-.761	0	%100
7	M12	X	.38	.38	0	%100
8	M12	Z	-.658	-.658	0	%100
9	M21	X	.314	.314	0	%100
10	M21	Z	-.544	-.544	0	%100
11	M32	X	.101	.101	0	%100
12	M32	Z	-.176	-.176	0	%100
13	M32A	X	.101	.101	0	%100
14	M32A	Z	-.176	-.176	0	%100
15	M32B	X	.44	.44	0	%100
16	M32B	Z	-.761	-.761	0	%100
17	M32C	X	.44	.44	0	%100
18	M32C	Z	-.761	-.761	0	%100
19	M19	X	.44	.44	0	%100
20	M19	Z	-.761	-.761	0	%100
21	M20A	X	.101	.101	0	%100
22	M20A	Z	-.176	-.176	0	%100
23	M21A	X	.101	.101	0	%100
24	M21A	Z	-.176	-.176	0	%100
25	M22A	X	.44	.44	0	%100
26	M22A	Z	-.761	-.761	0	%100
27	M23A	X	.44	.44	0	%100
28	M23A	Z	-.761	-.761	0	%100
29	M24	X	0	0	0	%100
30	M24	Z	0	0	0	%100
31	M25	X	.406	.406	0	%100
32	M25	Z	-.703	-.703	0	%100
33	M26	X	.406	.406	0	%100
34	M26	Z	-.703	-.703	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
35	M27	X	0	0	0	%100
36	M27	Z	0	0	0	%100
37	M28	X	0	0	0	%100
38	M28	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	X	.679	.679	0	%100
2	MP1A	Z	-.392	-.392	0	%100
3	M5	X	.582	.582	0	%100
4	M5	Z	-.336	-.336	0	%100
5	M10	X	.254	.254	0	%100
6	M10	Z	-.147	-.147	0	%100
7	M12	X	.696	.696	0	%100
8	M12	Z	-.402	-.402	0	%100
9	M21	X	.582	.582	0	%100
10	M21	Z	-.336	-.336	0	%100
11	M32	X	.527	.527	0	%100
12	M32	Z	-.304	-.304	0	%100
13	M32A	X	.527	.527	0	%100
14	M32A	Z	-.304	-.304	0	%100
15	M32B	X	.254	.254	0	%100
16	M32B	Z	-.147	-.147	0	%100
17	M32C	X	.254	.254	0	%100
18	M32C	Z	-.147	-.147	0	%100
19	M19	X	1.015	1.015	0	%100
20	M19	Z	-.586	-.586	0	%100
21	M20A	X	0	0	0	%100
22	M20A	Z	0	0	0	%100
23	M21A	X	0	0	0	%100
24	M21A	Z	0	0	0	%100
25	M22A	X	1.015	1.015	0	%100
26	M22A	Z	-.586	-.586	0	%100
27	M23A	X	1.015	1.015	0	%100
28	M23A	Z	-.586	-.586	0	%100
29	M24	X	.254	.254	0	%100
30	M24	Z	-.147	-.147	0	%100
31	M25	X	.527	.527	0	%100
32	M25	Z	-.304	-.304	0	%100
33	M26	X	.527	.527	0	%100
34	M26	Z	-.304	-.304	0	%100
35	M27	X	.254	.254	0	%100
36	M27	Z	-.147	-.147	0	%100
37	M28	X	.254	.254	0	%100
38	M28	Z	-.147	-.147	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	X	.784	.784	0	%100
2	MP1A	Z	0	0	0	%100
3	M5	X	.629	.629	0	%100
4	M5	Z	0	0	0	%100
5	M10	X	0	0	0	%100
6	M10	Z	0	0	0	%100
7	M12	X	.76	.76	0	%100
8	M12	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
9	M21	X	.76	.76	0	%100
10	M21	Z	0	0	0	%100
11	M32	X	.812	.812	0	%100
12	M32	Z	0	0	0	%100
13	M32A	X	.812	.812	0	%100
14	M32A	Z	0	0	0	%100
15	M32B	X	0	0	0	%100
16	M32B	Z	0	0	0	%100
17	M32C	X	0	0	0	%100
18	M32C	Z	0	0	0	%100
19	M19	X	.879	.879	0	%100
20	M19	Z	0	0	0	%100
21	M20A	X	.203	.203	0	%100
22	M20A	Z	0	0	0	%100
23	M21A	X	.203	.203	0	%100
24	M21A	Z	0	0	0	%100
25	M22A	X	.879	.879	0	%100
26	M22A	Z	0	0	0	%100
27	M23A	X	.879	.879	0	%100
28	M23A	Z	0	0	0	%100
29	M24	X	.879	.879	0	%100
30	M24	Z	0	0	0	%100
31	M25	X	.203	.203	0	%100
32	M25	Z	0	0	0	%100
33	M26	X	.203	.203	0	%100
34	M26	Z	0	0	0	%100
35	M27	X	.879	.879	0	%100
36	M27	Z	0	0	0	%100
37	M28	X	.879	.879	0	%100
38	M28	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	X	.679	.679	0	%100
2	MP1A	Z	.392	.392	0	%100
3	M5	X	.582	.582	0	%100
4	M5	Z	.336	.336	0	%100
5	M10	X	.254	.254	0	%100
6	M10	Z	.147	.147	0	%100
7	M12	X	.582	.582	0	%100
8	M12	Z	.336	.336	0	%100
9	M21	X	.696	.696	0	%100
10	M21	Z	.402	.402	0	%100
11	M32	X	.527	.527	0	%100
12	M32	Z	.304	.304	0	%100
13	M32A	X	.527	.527	0	%100
14	M32A	Z	.304	.304	0	%100
15	M32B	X	.254	.254	0	%100
16	M32B	Z	.147	.147	0	%100
17	M32C	X	.254	.254	0	%100
18	M32C	Z	.147	.147	0	%100
19	M19	X	.254	.254	0	%100
20	M19	Z	.147	.147	0	%100
21	M20A	X	.527	.527	0	%100
22	M20A	Z	.304	.304	0	%100
23	M21A	X	.527	.527	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
24	M21A	Z	.304	.304	0	%100
25	M22A	X	.254	.254	0	%100
26	M22A	Z	.147	.147	0	%100
27	M23A	X	.254	.254	0	%100
28	M23A	Z	.147	.147	0	%100
29	M24	X	1.015	1.015	0	%100
30	M24	Z	.586	.586	0	%100
31	M25	X	0	0	0	%100
32	M25	Z	0	0	0	%100
33	M26	X	0	0	0	%100
34	M26	Z	0	0	0	%100
35	M27	X	1.015	1.015	0	%100
36	M27	Z	.586	.586	0	%100
37	M28	X	1.015	1.015	0	%100
38	M28	Z	.586	.586	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	X	.392	.392	0	%100
2	MP1A	Z	.679	.679	0	%100
3	M5	X	.38	.38	0	%100
4	M5	Z	.658	.658	0	%100
5	M10	X	.44	.44	0	%100
6	M10	Z	.761	.761	0	%100
7	M12	X	.314	.314	0	%100
8	M12	Z	.544	.544	0	%100
9	M21	X	.38	.38	0	%100
10	M21	Z	.658	.658	0	%100
11	M32	X	.101	.101	0	%100
12	M32	Z	.176	.176	0	%100
13	M32A	X	.101	.101	0	%100
14	M32A	Z	.176	.176	0	%100
15	M32B	X	.44	.44	0	%100
16	M32B	Z	.761	.761	0	%100
17	M32C	X	.44	.44	0	%100
18	M32C	Z	.761	.761	0	%100
19	M19	X	0	0	0	%100
20	M19	Z	0	0	0	%100
21	M20A	X	.406	.406	0	%100
22	M20A	Z	.703	.703	0	%100
23	M21A	X	.406	.406	0	%100
24	M21A	Z	.703	.703	0	%100
25	M22A	X	0	0	0	%100
26	M22A	Z	0	0	0	%100
27	M23A	X	0	0	0	%100
28	M23A	Z	0	0	0	%100
29	M24	X	.44	.44	0	%100
30	M24	Z	.761	.761	0	%100
31	M25	X	.101	.101	0	%100
32	M25	Z	.176	.176	0	%100
33	M26	X	.101	.101	0	%100
34	M26	Z	.176	.176	0	%100
35	M27	X	.44	.44	0	%100
36	M27	Z	.761	.761	0	%100
37	M28	X	.44	.44	0	%100
38	M28	Z	.761	.761	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	X	0	0	0	%100
2	MP1A	Z	.784	.784	0	%100
3	M5	X	0	0	0	%100
4	M5	Z	.804	.804	0	%100
5	M10	X	0	0	0	%100
6	M10	Z	1.172	1.172	0	%100
7	M12	X	0	0	0	%100
8	M12	Z	.672	.672	0	%100
9	M21	X	0	0	0	%100
10	M21	Z	.672	.672	0	%100
11	M32	X	0	0	0	%100
12	M32	Z	0	0	0	%100
13	M32A	X	0	0	0	%100
14	M32A	Z	0	0	0	%100
15	M32B	X	0	0	0	%100
16	M32B	Z	1.172	1.172	0	%100
17	M32C	X	0	0	0	%100
18	M32C	Z	1.172	1.172	0	%100
19	M19	X	0	0	0	%100
20	M19	Z	.293	.293	0	%100
21	M20A	X	0	0	0	%100
22	M20A	Z	.609	.609	0	%100
23	M21A	X	0	0	0	%100
24	M21A	Z	.609	.609	0	%100
25	M22A	X	0	0	0	%100
26	M22A	Z	.293	.293	0	%100
27	M23A	X	0	0	0	%100
28	M23A	Z	.293	.293	0	%100
29	M24	X	0	0	0	%100
30	M24	Z	.293	.293	0	%100
31	M25	X	0	0	0	%100
32	M25	Z	.609	.609	0	%100
33	M26	X	0	0	0	%100
34	M26	Z	.609	.609	0	%100
35	M27	X	0	0	0	%100
36	M27	Z	.293	.293	0	%100
37	M28	X	0	0	0	%100
38	M28	Z	.293	.293	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	X	-.392	-.392	0	%100
2	MP1A	Z	.679	.679	0	%100
3	M5	X	-.38	-.38	0	%100
4	M5	Z	.658	.658	0	%100
5	M10	X	-.44	-.44	0	%100
6	M10	Z	.761	.761	0	%100
7	M12	X	-.38	-.38	0	%100
8	M12	Z	.658	.658	0	%100
9	M21	X	-.314	-.314	0	%100
10	M21	Z	.544	.544	0	%100
11	M32	X	-.101	-.101	0	%100
12	M32	Z	.176	.176	0	%100
13	M32A	X	-.101	-.101	0	%100
14	M32A	Z	.176	.176	0	%100
15	M32B	X	-.44	-.44	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
16	M32B	Z	.761	.761	0	%100
17	M32C	X	-.44	-.44	0	%100
18	M32C	Z	.761	.761	0	%100
19	M19	X	-.44	-.44	0	%100
20	M19	Z	.761	.761	0	%100
21	M20A	X	-.101	-.101	0	%100
22	M20A	Z	.176	.176	0	%100
23	M21A	X	-.101	-.101	0	%100
24	M21A	Z	.176	.176	0	%100
25	M22A	X	-.44	-.44	0	%100
26	M22A	Z	.761	.761	0	%100
27	M23A	X	-.44	-.44	0	%100
28	M23A	Z	.761	.761	0	%100
29	M24	X	0	0	0	%100
30	M24	Z	0	0	0	%100
31	M25	X	-.406	-.406	0	%100
32	M25	Z	.703	.703	0	%100
33	M26	X	-.406	-.406	0	%100
34	M26	Z	.703	.703	0	%100
35	M27	X	0	0	0	%100
36	M27	Z	0	0	0	%100
37	M28	X	0	0	0	%100
38	M28	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	X	-.679	-.679	0	%100
2	MP1A	Z	.392	.392	0	%100
3	M5	X	-.582	-.582	0	%100
4	M5	Z	.336	.336	0	%100
5	M10	X	-.254	-.254	0	%100
6	M10	Z	.147	.147	0	%100
7	M12	X	-.696	-.696	0	%100
8	M12	Z	.402	.402	0	%100
9	M21	X	-.582	-.582	0	%100
10	M21	Z	.336	.336	0	%100
11	M32	X	-.527	-.527	0	%100
12	M32	Z	.304	.304	0	%100
13	M32A	X	-.527	-.527	0	%100
14	M32A	Z	.304	.304	0	%100
15	M32B	X	-.254	-.254	0	%100
16	M32B	Z	.147	.147	0	%100
17	M32C	X	-.254	-.254	0	%100
18	M32C	Z	.147	.147	0	%100
19	M19	X	-1.015	-1.015	0	%100
20	M19	Z	.586	.586	0	%100
21	M20A	X	0	0	0	%100
22	M20A	Z	0	0	0	%100
23	M21A	X	0	0	0	%100
24	M21A	Z	0	0	0	%100
25	M22A	X	-1.015	-1.015	0	%100
26	M22A	Z	.586	.586	0	%100
27	M23A	X	-1.015	-1.015	0	%100
28	M23A	Z	.586	.586	0	%100
29	M24	X	-.254	-.254	0	%100
30	M24	Z	.147	.147	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
31	M25	X	-.527	-.527	0	%100
32	M25	Z	.304	.304	0	%100
33	M26	X	-.527	-.527	0	%100
34	M26	Z	.304	.304	0	%100
35	M27	X	-.254	-.254	0	%100
36	M27	Z	.147	.147	0	%100
37	M28	X	-.254	-.254	0	%100
38	M28	Z	.147	.147	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	X	-.784	-.784	0	%100
2	MP1A	Z	0	0	0	%100
3	M5	X	-.629	-.629	0	%100
4	M5	Z	0	0	0	%100
5	M10	X	0	0	0	%100
6	M10	Z	0	0	0	%100
7	M12	X	-.76	-.76	0	%100
8	M12	Z	0	0	0	%100
9	M21	X	-.76	-.76	0	%100
10	M21	Z	0	0	0	%100
11	M32	X	-.812	-.812	0	%100
12	M32	Z	0	0	0	%100
13	M32A	X	-.812	-.812	0	%100
14	M32A	Z	0	0	0	%100
15	M32B	X	0	0	0	%100
16	M32B	Z	0	0	0	%100
17	M32C	X	0	0	0	%100
18	M32C	Z	0	0	0	%100
19	M19	X	-.879	-.879	0	%100
20	M19	Z	0	0	0	%100
21	M20A	X	-.203	-.203	0	%100
22	M20A	Z	0	0	0	%100
23	M21A	X	-.203	-.203	0	%100
24	M21A	Z	0	0	0	%100
25	M22A	X	-.879	-.879	0	%100
26	M22A	Z	0	0	0	%100
27	M23A	X	-.879	-.879	0	%100
28	M23A	Z	0	0	0	%100
29	M24	X	-.879	-.879	0	%100
30	M24	Z	0	0	0	%100
31	M25	X	-.203	-.203	0	%100
32	M25	Z	0	0	0	%100
33	M26	X	-.203	-.203	0	%100
34	M26	Z	0	0	0	%100
35	M27	X	-.879	-.879	0	%100
36	M27	Z	0	0	0	%100
37	M28	X	-.879	-.879	0	%100
38	M28	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	X	-.679	-.679	0	%100
2	MP1A	Z	-.392	-.392	0	%100
3	M5	X	-.582	-.582	0	%100
4	M5	Z	-.336	-.336	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
5	M10	X	-.254	-.254	0	%100
6	M10	Z	-.147	-.147	0	%100
7	M12	X	-.582	-.582	0	%100
8	M12	Z	-.336	-.336	0	%100
9	M21	X	-.696	-.696	0	%100
10	M21	Z	-.402	-.402	0	%100
11	M32	X	-.527	-.527	0	%100
12	M32	Z	-.304	-.304	0	%100
13	M32A	X	-.527	-.527	0	%100
14	M32A	Z	-.304	-.304	0	%100
15	M32B	X	-.254	-.254	0	%100
16	M32B	Z	-.147	-.147	0	%100
17	M32C	X	-.254	-.254	0	%100
18	M32C	Z	-.147	-.147	0	%100
19	M19	X	-.254	-.254	0	%100
20	M19	Z	-.147	-.147	0	%100
21	M20A	X	-.527	-.527	0	%100
22	M20A	Z	-.304	-.304	0	%100
23	M21A	X	-.527	-.527	0	%100
24	M21A	Z	-.304	-.304	0	%100
25	M22A	X	-.254	-.254	0	%100
26	M22A	Z	-.147	-.147	0	%100
27	M23A	X	-.254	-.254	0	%100
28	M23A	Z	-.147	-.147	0	%100
29	M24	X	-1.015	-1.015	0	%100
30	M24	Z	-.586	-.586	0	%100
31	M25	X	0	0	0	%100
32	M25	Z	0	0	0	%100
33	M26	X	0	0	0	%100
34	M26	Z	0	0	0	%100
35	M27	X	-1.015	-1.015	0	%100
36	M27	Z	-.586	-.586	0	%100
37	M28	X	-1.015	-1.015	0	%100
38	M28	Z	-.586	-.586	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
1	MP1A	X	-.392	-.392	0	%100
2	MP1A	Z	-.679	-.679	0	%100
3	M5	X	-.38	-.38	0	%100
4	M5	Z	-.658	-.658	0	%100
5	M10	X	-.44	-.44	0	%100
6	M10	Z	-.761	-.761	0	%100
7	M12	X	-.314	-.314	0	%100
8	M12	Z	-.544	-.544	0	%100
9	M21	X	-.38	-.38	0	%100
10	M21	Z	-.658	-.658	0	%100
11	M32	X	-.101	-.101	0	%100
12	M32	Z	-.176	-.176	0	%100
13	M32A	X	-.101	-.101	0	%100
14	M32A	Z	-.176	-.176	0	%100
15	M32B	X	-.44	-.44	0	%100
16	M32B	Z	-.761	-.761	0	%100
17	M32C	X	-.44	-.44	0	%100
18	M32C	Z	-.761	-.761	0	%100
19	M19	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,F,ksf]	End Magnitude[lb/ft,F,ksf]	Start Location...	End Location[i...
20	M19	Z	0	0	0	%100
21	M20A	X	-.406	-.406	0	%100
22	M20A	Z	-.703	-.703	0	%100
23	M21A	X	-.406	-.406	0	%100
24	M21A	Z	-.703	-.703	0	%100
25	M22A	X	0	0	0	%100
26	M22A	Z	0	0	0	%100
27	M23A	X	0	0	0	%100
28	M23A	Z	0	0	0	%100
29	M24	X	-.44	-.44	0	%100
30	M24	Z	-.761	-.761	0	%100
31	M25	X	-.101	-.101	0	%100
32	M25	Z	-.176	-.176	0	%100
33	M26	X	-.101	-.101	0	%100
34	M26	Z	-.176	-.176	0	%100
35	M27	X	-.44	-.44	0	%100
36	M27	Z	-.761	-.761	0	%100
37	M28	X	-.44	-.44	0	%100
38	M28	Z	-.761	-.761	0	%100

Member Area Loads

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

Envelope Joint Reactions

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [...	LC	MZ [k-ft]	LC
1	N19	m...	3.684	10	8.801	23	2.39	12	0	51	0	51	0	51
2		min	-3.69	4	0	1	-2.431	8	0	1	0	1	0	1
3	N20	m...	5.611	10	6.514	22	2.391	12	0	51	0	51	0	51
4		min	-5.402	4	0	1	-2.429	8	0	1	0	1	0	1
5	N21	m...	7.245	10	5.228	18	2.392	12	0	51	0	51	0	51
6		min	-7.146	4	0	1	-2.428	8	0	1	0	1	0	1
7	N22	m...	8.702	10	5.464	17	2.393	12	0	51	0	51	0	51
8		min	-8.931	4	0	1	-2.428	8	0	1	0	1	0	1
9	N23	m...	10.075	10	7.019	16	2.394	12	0	51	0	51	0	51
10		min	-10.732	4	0	1	-2.427	8	0	1	0	1	0	1
11	N24	m...	11.423	10	11.758	5	2.396	12	0	51	0	51	0	51
12		min	-12.482	4	0	1	-2.427	8	0	1	0	1	0	1
13	N25	m...	12.763	10	19.102	4	2.398	12	0	51	0	51	0	51
14		min	-14.078	4	0	1	-2.427	8	0	1	0	1	0	1
15	N26	m...	14.049	10	29.474	4	2.4	12	0	51	0	51	0	51
16		min	-15.395	4	0	8	-2.428	8	0	1	0	1	0	1
17	N27	m...	15.17	10	40.764	4	2.403	12	0	51	0	51	0	51
18		min	-16.322	4	0	8	-2.429	8	0	1	0	1	0	1
19	N28	m...	15.928	10	49.807	4	2.405	12	0	51	0	51	0	51
20		min	-16.803	4	0	8	-2.43	8	0	1	0	1	0	1
21	N29	m...	15.957	10	49.576	4	2.406	12	0	51	0	51	0	51
22		min	-16.813	4	0	8	-2.429	8	0	1	0	1	0	1
23	N30	m...	15.236	10	40.335	4	2.406	12	0	51	0	51	0	51
24		min	-16.337	4	0	8	-2.426	8	0	1	0	1	0	1
25	N31	m...	14.13	10	29.095	4	2.405	12	0	51	0	51	0	51
26		min	-15.402	4	0	8	-2.423	8	0	1	0	1	0	1
27	N32	m...	12.844	10	18.925	4	2.405	12	0	51	0	51	0	51
28		min	-14.073	4	0	7	-2.421	8	0	1	0	1	0	1

Envelope Joint Reactions (Continued)

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [..	LC	MZ [k-ft]	LC
29	N33	m...	11.496	10	10.971	4	2.406	12	0	51	0	51	0	51
30		min	-12.463	4	0	6	-2.419	8	0	1	0	1	0	1
31	N34	m...	10.136	10	6.989	16	2.406	12	0	51	0	51	0	51
32		min	-10.701	4	0	5	-2.417	8	0	1	0	1	0	1
33	N35	m...	8.754	10	5.423	15	2.407	12	0	51	0	51	0	51
34		min	-8.893	4	0	5	-2.416	8	0	1	0	1	0	1
35	N36	m...	7.294	10	5.227	14	2.408	12	0	51	0	51	0	51
36		min	-7.115	4	0	4	-2.415	8	0	1	0	1	0	1
37	N37	m...	5.667	10	6.518	22	2.41	12	0	51	0	51	0	51
38		min	-5.4	4	0	4	-2.414	8	0	1	0	1	0	1
39	N38	m...	3.761	10	8.752	23	2.411	12	0	51	0	51	0	51
40		min	-3.752	4	0	3	-2.413	8	0	1	0	1	0	1
41	N39	m...	2.061	10	15.911	6	1.925	12	0	51	0	51	0	51
42		min	-2.884	4	0	8	-1.882	6	0	1	0	1	0	1
43	N40	m...	2.9	10	6.967	6	1.925	12	0	51	0	51	0	51
44		min	-3.713	4	0	2	-1.883	6	0	1	0	1	0	1
45	N41	m...	4.081	10	5.584	22	1.925	12	0	51	0	51	0	51
46		min	-4.73	4	0	2	-1.885	6	0	1	0	1	0	1
47	N42	m...	5.564	10	5.083	22	1.926	12	0	51	0	51	0	51
48		min	-5.957	4	0	2	-1.886	6	0	1	0	1	0	1
49	N43	m...	7.303	10	5.336	21	1.926	12	0	51	0	51	0	51
50		min	-7.417	4	0	2	-1.888	6	0	1	0	1	0	1
51	N44	m...	9.232	10	8.374	16	1.927	12	0	51	0	51	0	51
52		min	-9.125	4	0	8	-1.889	6	0	1	0	1	0	1
53	N45	m...	11.25	10	16.444	4	1.928	12	0	51	0	51	0	51
54		min	-11.07	4	0	8	-1.892	6	0	1	0	1	0	1
55	N46	m...	13.205	10	31.433	4	1.929	12	0	51	0	51	0	51
56		min	-13.168	4	0	8	-1.894	6	0	1	0	1	0	1
57	N47	m...	14.875	10	48.582	4	1.931	12	0	51	0	51	0	51
58		min	-15.182	4	0	8	-1.896	6	0	1	0	1	0	1
59	N48	m...	15.947	10	62.736	4	1.933	12	0	51	0	51	0	51
60		min	-16.63	4	0	8	-1.899	6	0	1	0	1	0	1
61	N49	m...	16.015	10	63.05	4	1.933	12	0	51	0	51	0	51
62		min	-16.667	4	0	8	-1.9	6	0	1	0	1	0	1
63	N50	m...	15.042	10	49.19	4	1.933	12	0	51	0	51	0	51
64		min	-15.261	4	0	8	-1.9	6	0	1	0	1	0	1
65	N51	m...	13.428	10	32.069	4	1.933	12	0	51	0	51	0	51
66		min	-13.26	4	0	8	-1.901	6	0	1	0	1	0	1
67	N52	m...	11.495	10	17.008	4	1.933	12	0	51	0	51	0	51
68		min	-11.16	4	0	8	-1.901	6	0	1	0	1	0	1
69	N53	m...	9.475	10	8.455	16	1.933	12	0	51	0	51	0	51
70		min	-9.203	4	0	8	-1.902	6	0	1	0	1	0	1
71	N54	m...	7.524	10	5.32	24	1.934	12	0	51	0	51	0	51
72		min	-7.475	4	0	2	-1.903	6	0	1	0	1	0	1
73	N55	m...	5.747	10	5.066	23	1.934	12	0	51	0	51	0	51
74		min	-5.988	4	0	2	-1.904	6	0	1	0	1	0	1
75	N56	m...	4.212	10	5.574	22	1.935	12	0	51	0	51	0	51
76		min	-4.727	4	0	3	-1.906	6	0	1	0	1	0	1
77	N57	m...	2.964	10	6.77	22	1.936	12	0	51	0	51	0	51
78		min	-3.666	4	0	4	-1.907	6	0	1	0	1	0	1
79	N58	m...	2.043	10	13.739	2	1.938	12	0	51	0	51	0	51
80		min	-2.783	4	0	5	-1.909	6	0	1	0	1	0	1
81	N62	m...	1.53	10	14.252	2	2.66	11	0	51	0	51	0	51
82		min	-2.114	4	0	8	-2.438	6	0	1	0	1	0	1
83	N59	m...	1.541	10	1.137	23	2.39	12	0	51	0	51	0	51
84		min	-2.113	4	-40.438	10	-2.432	8	0	1	0	1	0	1
85	N61	m...	1.52	10	2.287	2	1.939	12	0	51	0	51	0	51

Envelope Joint Reactions (Continued)

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [..	LC	MZ [k-ft]	LC
86		min	-2.115	4	-101.074	10	-1.911	6	0	1	0	1	0	1
87	N64	m...	1.664	9	15.079	6	2.409	2	0	51	0	51	0	51
88		min	-2.276	4	0	8	-2.429	8	0	1	0	1	0	1
89	N60	m...	1.671	9	1.13	21	2.413	12	0	51	0	51	0	51
90		min	-2.275	4	-39.93	10	-2.413	8	0	1	0	1	0	1
91	N63	m...	1.657	9	2.655	6	1.925	12	0	51	0	51	0	51
92		min	-2.277	4	-100.557	10	-1.882	6	0	1	0	1	0	1
93	N67	m...	3.244	11	8.434	17	3.475	1	0	51	0	51	0	51
94		min	-3.168	5	0	1	-3.408	7	0	1	0	1	0	1
95	N68	m...	4.146	11	6.223	17	4.709	12	0	51	0	51	0	51
96		min	-3.93	5	0	4	-4.671	6	0	1	0	1	0	1
97	N69	m...	4.92	11	5.002	14	6.234	12	0	51	0	51	0	51
98		min	-4.602	5	0	4	-6.056	6	0	1	0	1	0	1
99	N70	m...	5.63	11	5.39	13	7.775	12	0	51	0	51	0	51
100		min	-5.229	5	0	4	-7.317	6	0	1	0	1	0	1
101	N71	m...	6.321	11	7.356	24	9.323	12	0	51	0	51	0	51
102		min	-5.848	5	0	4	-8.525	6	0	1	0	1	0	1
103	N72	m...	7.009	11	11.481	1	10.825	12	0	51	0	51	0	51
104		min	-6.478	5	0	4	-9.723	6	0	1	0	1	0	1
105	N73	m...	7.675	11	19.77	12	12.19	12	0	51	0	51	0	51
106		min	-7.116	5	0	4	-10.917	6	0	1	0	1	0	1
107	N74	m...	8.265	11	31.148	12	13.309	12	0	51	0	51	0	51
108		min	-7.731	5	0	4	-12.063	6	0	1	0	1	0	1
109	N75	m...	8.711	11	43.421	12	14.087	12	0	51	0	51	0	51
110		min	-8.259	5	0	4	-13.059	6	0	1	0	1	0	1
111	N76	m...	8.964	11	53.213	12	14.483	12	0	51	0	51	0	51
112		min	-8.597	5	0	4	-13.729	6	0	1	0	1	0	1
113	N77	m...	8.992	11	52.988	12	14.493	12	0	51	0	51	0	51
114		min	-8.566	5	0	4	-13.755	6	0	1	0	1	0	1
115	N78	m...	8.796	11	43.016	12	14.105	12	0	51	0	51	0	51
116		min	-8.184	5	0	4	-13.12	6	0	1	0	1	0	1
117	N79	m...	8.385	11	30.825	12	13.325	12	0	51	0	51	0	51
118		min	-7.628	5	0	4	-12.141	6	0	1	0	1	0	1
119	N80	m...	7.782	11	19.998	11	12.197	12	0	51	0	51	0	51
120		min	-6.998	5	0	3	-10.998	6	0	1	0	1	0	1
121	N81	m...	7.041	11	12.354	11	10.82	12	0	51	0	51	0	51
122		min	-6.356	5	0	2	-9.8	6	0	1	0	1	0	1
123	N82	m...	6.224	11	7.331	23	9.308	12	0	51	0	51	0	51
124		min	-5.731	5	0	1	-8.595	6	0	1	0	1	0	1
125	N83	m...	5.385	11	5.418	23	7.754	12	0	51	0	51	0	51
126		min	-5.124	5	0	1	-7.383	6	0	1	0	1	0	1
127	N84	m...	4.569	11	5.006	22	6.239	1	0	51	0	51	0	51
128		min	-4.516	5	0	1	-6.124	6	0	1	0	1	0	1
129	N85	m...	3.802	11	6.225	18	5.033	1	0	51	0	51	0	51
130		min	-3.872	5	0	1	-4.749	6	0	1	0	1	0	1
131	N86	m...	3.097	11	8.482	17	3.693	1	0	51	0	51	0	51
132		min	-3.146	5	0	1	-3.485	7	0	1	0	1	0	1
133	N87	m...	2.783	11	13.977	2	2.697	1	0	51	0	51	0	51
134		min	-2.847	4	0	4	-2.717	7	0	1	0	1	0	1
135	N88	m...	3.114	11	6.475	3	3.248	12	0	51	0	51	0	51
136		min	-2.97	4	0	4	-3.209	7	0	1	0	1	0	1
137	N89	m...	3.533	11	5.366	18	4.111	12	0	51	0	51	0	51
138		min	-3.366	5	0	1	-3.935	7	0	1	0	1	0	1
139	N90	m...	4.057	11	5.042	18	5.162	12	0	51	0	51	0	51
140		min	-3.994	5	0	1	-5.026	6	0	1	0	1	0	1
141	N91	m...	4.702	11	5.688	19	6.422	12	0	51	0	51	0	51
142		min	-4.747	5	0	1	-6.514	6	0	1	0	1	0	1

Envelope Joint Reactions (Continued)

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [..	LC	MZ [k-ft]	LC
143	N92	m...	5.476	11	9.415	24	7.906	12	0	51	0	51	0	51
144		min	-5.598	5	0	4	-8.163	6	0	1	0	1	0	1
145	N93	m...	6.372	11	17.458	12	9.606	12	0	51	0	51	0	51
146		min	-6.499	5	0	4	-9.891	6	0	1	0	1	0	1
147	N94	m...	7.348	11	33.159	12	11.447	12	0	51	0	51	0	51
148		min	-7.377	5	0	4	-11.567	6	0	1	0	1	0	1
149	N95	m...	8.281	11	51.135	12	13.224	12	0	51	0	51	0	51
150		min	-8.12	5	0	4	-13	6	0	1	0	1	0	1
151	N96	m...	8.929	11	65.972	12	14.505	12	0	51	0	51	0	51
152		min	-8.576	5	0	4	-13.924	6	0	1	0	1	0	1
153	N97	m...	8.873	11	66.286	12	14.538	12	0	51	0	51	0	51
154		min	-8.547	5	0	4	-13.985	6	0	1	0	1	0	1
155	N98	m...	8.134	11	51.742	12	13.295	12	0	51	0	51	0	51
156		min	-8.049	5	0	4	-13.149	6	0	1	0	1	0	1
157	N99	m...	7.124	11	33.796	12	11.533	12	0	51	0	51	0	51
158		min	-7.281	5	0	4	-11.766	6	0	1	0	1	0	1
159	N100	m...	6.077	11	18.024	12	9.691	12	0	51	0	51	0	51
160		min	-6.39	5	0	4	-10.113	6	0	1	0	1	0	1
161	N101	m...	5.111	11	9.496	24	7.983	12	0	51	0	51	0	51
162		min	-5.483	5	0	4	-8.385	6	0	1	0	1	0	1
163	N102	m...	4.271	11	5.671	16	6.485	12	0	51	0	51	0	51
164		min	-4.631	5	0	1	-6.72	6	0	1	0	1	0	1
165	N103	m...	3.571	11	5.016	17	5.346	1	0	51	0	51	0	51
166		min	-3.878	5	0	1	-5.265	7	0	1	0	1	0	1
167	N104	m...	3.013	11	5.356	18	4.489	1	0	51	0	51	0	51
168		min	-3.251	5	0	1	-4.24	7	0	1	0	1	0	1
169	N105	m...	2.597	11	7.959	10	3.789	1	0	51	0	51	0	51
170		min	-2.764	5	0	1	-3.424	7	0	1	0	1	0	1
171	N106	m...	2.32	11	18.144	10	3.218	1	0	51	0	51	0	51
172		min	-2.649	4	0	1	-2.826	7	0	1	0	1	0	1
173	N107	m...	2.225	11	1.092	19	2.505	1	0	51	0	51	0	51
174		min	-2.386	4	-34.987	6	-2.214	7	0	1	0	1	0	1
175	N108	m...	2.505	11	1.103	17	2.245	1	0	51	0	51	0	51
176		min	-2.538	4	-34.469	6	-2.271	7	0	1	0	1	0	1
177	N109	m...	2.265	10	3.03	10	2.78	1	0	51	0	51	0	51
178		min	-2.605	4	-88.821	6	-2.468	7	0	1	0	1	0	1
179	N110	m...	1.523	8	15.5	10	2.79	1	0	51	0	51	0	51
180		min	-2.363	4	0	4	-2.619	7	0	1	0	1	0	1
181	N111	m...	2.649	10	2.349	2	2.48	1	0	51	0	51	0	51
182		min	-2.784	4	-88.3	6	-2.477	7	0	1	0	1	0	1
183	N112	m...	2.815	11	13.88	2	1.945	1	0	51	0	51	0	51
184		min	-2.974	5	0	4	-2.078	8	0	1	0	1	0	1
185	N115	m...	3.27	9	8.591	15	3.517	1	0	51	0	51	0	51
186		min	-3.253	3	0	1	-3.657	7	0	1	0	1	0	1
187	N116	m...	3.897	9	6.34	13	4.705	1	0	51	0	51	0	51
188		min	-3.899	3	0	1	-4.961	7	0	1	0	1	0	1
189	N117	m...	4.587	9	5.118	22	5.785	2	0	51	0	51	0	51
190		min	-4.482	3	0	1	-6.157	7	0	1	0	1	0	1
191	N118	m...	5.329	9	5.4	21	6.947	2	0	51	0	51	0	51
192		min	-5.04	3	0	1	-7.319	7	0	1	0	1	0	1
193	N119	m...	6.098	9	7.052	21	8.069	2	0	51	0	51	0	51
194		min	-5.602	3	0	1	-8.714	8	0	1	0	1	0	1
195	N120	m...	6.856	9	10.95	9	9.184	2	0	51	0	51	0	51
196		min	-6.181	3	0	1	-10.133	8	0	1	0	1	0	1
197	N121	m...	7.552	9	17.808	8	10.29	2	0	51	0	51	0	51
198		min	-6.775	3	0	1	-11.422	8	0	1	0	1	0	1
199	N122	m...	8.127	9	27.187	8	11.339	2	0	51	0	51	0	51

Envelope Joint Reactions (Continued)

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [..	LC	MZ [k-ft]	LC
200		min	-7.354	3	0	1	-12.481	8	0	1	0	1	0	1
201	N123	m...	8.53	9	37.661	8	12.231	2	0	51	0	51	0	51
202		min	-7.86	3	0	1	-13.219	8	0	1	0	1	0	1
203	N124	m...	8.731	9	46.359	8	12.801	2	0	51	0	51	0	51
204		min	-8.198	3	0	1	-13.589	8	0	1	0	1	0	1
205	N125	m...	8.713	9	46.7	8	12.763	2	0	51	0	51	0	51
206		min	-8.208	3	0	1	-13.577	8	0	1	0	1	0	1
207	N126	m...	8.477	9	38.295	8	12.145	2	0	51	0	51	0	51
208		min	-7.887	3	0	1	-13.2	8	0	1	0	1	0	1
209	N127	m...	8.059	9	27.766	8	11.232	2	0	51	0	51	0	51
210		min	-7.398	3	0	1	-12.47	8	0	1	0	1	0	1
211	N128	m...	7.501	9	18.134	8	10.181	2	0	51	0	51	0	51
212		min	-6.833	3	0	1	-11.424	8	0	1	0	1	0	1
213	N129	m...	6.866	9	11.192	7	9.084	2	0	51	0	51	0	51
214		min	-6.248	3	0	1	-10.148	8	0	1	0	1	0	1
215	N130	m...	6.204	9	7.095	20	7.981	2	0	51	0	51	0	51
216		min	-5.672	3	0	1	-8.739	8	0	1	0	1	0	1
217	N131	m...	5.539	9	5.413	19	6.867	2	0	51	0	51	0	51
218		min	-5.104	3	0	1	-7.279	8	0	1	0	1	0	1
219	N132	m...	4.863	9	5.116	18	5.706	2	0	51	0	51	0	51
220		min	-4.529	3	0	1	-5.827	8	0	1	0	1	0	1
221	N133	m...	4.141	9	6.335	15	4.592	1	0	51	0	51	0	51
222		min	-3.915	3	0	1	-4.598	7	0	1	0	1	0	1
223	N134	m...	3.321	9	8.575	13	3.436	1	0	51	0	51	0	51
224		min	-3.22	3	0	1	-3.471	7	0	1	0	1	0	1
225	N135	m...	2.11	9	17.904	10	2.783	1	0	51	0	51	0	51
226		min	-2.158	4	0	1	-3.233	7	0	1	0	1	0	1
227	N136	m...	2.406	9	8.572	11	3.377	1	0	51	0	51	0	51
228		min	-2.474	3	0	1	-3.812	7	0	1	0	1	0	1
229	N137	m...	2.818	9	5.392	14	4.195	1	0	51	0	51	0	51
230		min	-2.939	3	0	1	-4.518	7	0	1	0	1	0	1
231	N138	m...	3.35	9	4.974	13	5.227	1	0	51	0	51	0	51
232		min	-3.525	3	0	1	-5.381	7	0	1	0	1	0	1
233	N139	m...	4.004	9	5.446	16	6.542	2	0	51	0	51	0	51
234		min	-4.221	3	0	1	-6.427	7	0	1	0	1	0	1
235	N140	m...	4.781	9	8.879	20	8.064	2	0	51	0	51	0	51
236		min	-5.004	3	0	1	-7.801	8	0	1	0	1	0	1
237	N141	m...	5.668	9	16.254	8	9.637	2	0	51	0	51	0	51
238		min	-5.831	3	0	1	-9.361	8	0	1	0	1	0	1
239	N142	m...	6.623	9	30.261	8	11.137	2	0	51	0	51	0	51
240		min	-6.635	3	0	1	-11.035	8	0	1	0	1	0	1
241	N143	m...	7.537	9	46.162	8	12.383	2	0	51	0	51	0	51
242		min	-7.318	3	0	1	-12.627	8	0	1	0	1	0	1
243	N144	m...	8.191	9	58.969	8	13.122	2	0	51	0	51	0	51
244		min	-7.74	3	0	1	-13.739	8	0	1	0	1	0	1
245	N145	m...	8.21	9	58.505	8	13.033	2	0	51	0	51	0	51
246		min	-7.72	3	0	1	-13.691	8	0	1	0	1	0	1
247	N146	m...	7.599	9	45.263	8	12.168	2	0	51	0	51	0	51
248		min	-7.27	3	0	1	-12.522	8	0	1	0	1	0	1
249	N147	m...	6.734	9	29.32	8	10.849	2	0	51	0	51	0	51
250		min	-6.572	3	0	1	-10.908	8	0	1	0	1	0	1
251	N148	m...	5.834	9	15.422	8	9.318	2	0	51	0	51	0	51
252		min	-5.764	3	0	1	-9.236	8	0	1	0	1	0	1
253	N149	m...	5.007	9	8.756	20	7.746	2	0	51	0	51	0	51
254		min	-4.943	3	0	1	-7.689	8	0	1	0	1	0	1
255	N150	m...	4.294	9	5.517	13	6.249	2	0	51	0	51	0	51
256		min	-4.176	3	0	1	-6.333	8	0	1	0	1	0	1

Envelope Joint Reactions (Continued)

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [..	LC	MZ [k-ft]	LC
257	N151	m...	3.701	9	5.016	15	4.902	2	0	51	0	51	0	51
258		min	-3.505	3	0	1	-5.175	8	0	1	0	1	0	1
259	N152	m...	3.221	9	5.407	14	3.889	1	0	51	0	51	0	51
260		min	-2.953	3	0	1	-4.201	8	0	1	0	1	0	1
261	N153	m...	2.841	9	7.458	5	3.161	1	0	51	0	51	0	51
262		min	-2.534	3	0	1	-3.391	8	0	1	0	1	0	1
263	N154	m...	2.547	9	16.124	6	2.675	1	0	51	0	51	0	51
264		min	-2.368	4	0	1	-2.746	7	0	1	0	1	0	1
265	N155	m...	2.751	9	1.113	15	2.245	1	0	51	0	51	0	51
266		min	-2.736	4	-28.305	2	-2.271	7	0	1	0	1	0	1
267	N156	m...	2.417	9	1.11	13	2.219	12	0	51	0	51	0	51
268		min	-2.483	4	-29.086	2	-2.514	7	0	1	0	1	0	1
269	N157	m...	2.339	9	2.703	6	2.449	1	0	51	0	51	0	51
270		min	-2.36	4	-74.593	2	-2.506	7	0	1	0	1	0	1
271	N158	m...	2.806	9	14.866	6	1.99	1	0	51	0	51	0	51
272		min	-2.899	3	0	1	-2.001	7	0	1	0	1	0	1
273	N159	m...	1.932	9	2.978	10	2.439	1	0	51	0	51	0	51
274		min	-2.078	4	-75.367	2	-2.788	7	0	1	0	1	0	1
275	N160	m...	1.52	12	15.725	10	2.615	1	0	51	0	51	0	51
276		min	-2.141	4	0	1	-2.793	7	0	1	0	1	0	1
277	Totals:	m...	763.524	10	1534.361	20	743.972	1						
278		min	-763.536	4	619.815	3	-743.972	7						

Envelope AISC 14th(360-10): LRFD Steel Code Checks

	Member	Shape	Code Ch...	Loc[in]	LC	Shear Check	Loc[in]	Dir	LC	phi*...	phi*...	phi*...	phi*...	...	Eqn
1	MP1A	PIPE_...	.104	99.369	11	.014	99.369		9	5943...	93240	10.631	10.631	...	H1-...
2	M5	LL2.5x...	.017	47.44	4	.066	0	y	9	6079...	77112	6.326	3.332	...	H1-...
3	M10	2"x5/8"	.120	7.75	4	.024	0	y	4	2746...	40500	.527	1.688	...	H1-...
4	M12	LL2.5x...	.019	47.44	12	.070	0	z	2	6079...	77112	6.326	3.332	...	H1-...
5	M21	LL2.5x...	.016	47.44	8	.067	0	y	2	6079...	77112	6.326	3.332	...	H1-...
6	M32	L2.5x2....	.233	43.188	10	.018	41.388	y	4	6338...	2919...	.873	1.613	...	H2-1
7	M32A	L2.5x2....	.307	43.188	10	.018	44.987	y	4	6338...	2919...	.873	1.556	...	H2-1
8	M32B	2"x5/8"	.048	0	10	.045	0	y	10	2746...	40500	.527	1.688	...	H1-...
9	M32C	2"x5/8"	.050	0	10	.045	0	y	10	2746...	40500	.527	1.688	...	H1-...
10	M19	2"x5/8"	.127	7.75	12	.027	0	y	1	2746...	40500	.527	1.688	...	H1-...
11	M20A	L2.5x2....	.205	43.187	6	.019	41.388	y	12	6338...	2919...	.873	1.615	...	H2-1
12	M21A	L2.5x2....	.275	43.187	6	.019	44.987	y	12	6338...	2919...	.873	1.554	...	H2-1
13	M22A	2"x5/8"	.045	0	10	.041	0	y	6	2746...	40500	.527	1.688	...	H1-...
14	M23A	2"x5/8"	.046	0	6	.040	0	y	6	2746...	40500	.527	1.688	...	H1-...
15	M24	2"x5/8"	.116	7.75	8	.026	0	y	7	2746...	40500	.527	1.688	...	H1-...
16	M25	L2.5x2....	.180	43.188	2	.017	44.987	y	8	6338...	2919...	.873	1.617	...	H2-1
17	M26	L2.5x2....	.239	43.187	2	.017	41.388	y	8	6338...	2919...	.873	1.554	...	H2-1
18	M27	2"x5/8"	.041	0	6	.035	0	y	2	2746...	40500	.527	1.688	...	H1-...
19	M28	2"x5/8"	.044	0	10	.035	0	y	2	2746...	40500	.527	1.688	...	H1-...
20	M29A	2"x1/2"	.064	0	9	.036	27.682	y	9	6141...	32400	.338	1.35	...	H1-...
21	M30A	2"x1/2"	.062	27.682	3	.035	0	y	3	6141...	32400	.338	1.35	...	H1-...
22	M31A	2"x1/2"	.049	27.682	8	.035	0	y	8	6141...	32400	.338	1.35	...	H1-...

IV. OVERTURNING CALCULATIONS

Antenna/ Appurtenance	Type of Appurtenance	Number of Appurtenances	Non-Iced Condition		Moment Arm (in.)	Overturning Moment (lb-ft)
			Wind Force (lb.)	Gravity (lb.)		
	Antenna					

RISA Section Set Name	AISC Member Label	Number of Members	Actual Length (in.)	Wind Projected Length (in.)	Force Coefficient	Wind Load (lb)	Moment Arm (in.)	Overturning Moment (lb-ft)	Weight (lb.)
	Pipe 4.0								
Double Angle	2L2.5x2.5								
Plate 1	2.5x0.625								
Angle	L2.5x2.5x3/16								
Plate 2	2x0.5								

IV. OVERTURNING CALCULATIONS

▪ ***Ballast Mount Information***

Number of Trays:		
Total Frame Depth:		in.
Total Frame Width:		in.
Center of Gravity (Distance to front line):		in. (From RISA 3D)
Tray 1 Moment Arm (Distance to front line):		in.

▪ ***Required Ballast***

Dead Load Combination Factor of		
Wind Load Combination Factor of		
Block Weight (lb.):		8x16 Hollow CMU Blocks

Required Ballast Tray 1 (lb.):		Block #:	

▪ ***Loading Summary***

Appurtenance Overturning Moment:		lb-ft
Mount Overturning Moment:		lb-ft
Total Overturning Moment:		lb-ft
Total Weight without Ballast:		lb
Total Weight including Ballast:		lb
Total Resisting Moment		lb-ft

▪***Roof Pressure Comparison***

Assumed Live Load:		
Applied Roof Pressure:		psf
Check:		psf

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – Passing Mount Analysis

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Purpose – to provide Maser Consulting Connecticut the proper documentation in order to complete the required Mount Desktop review of the Post Modification Inspection Report.

Contractor is responsible for making certain the photos provided as noted below provide confirmation that the installation was completed in accordance with this Passing Mount Analysis.

Contractor shall relay any data that can impact the performance of the mount, this includes safety issues.

Base Requirements:

Any special photos outside of the standard requirements will be indicated on the passing MA Verification that loading is as communicated in the Passing Mount Analysis. NOTE If loading is different than what is conveyed contact Maser Consulting Connecticut immediately.

Each photo should be time and date stamped

Photos should be high resolution and submitted in a Zip File and should be organized in the file structure as depicted in Schedule A attached.

Contractor shall ensure that the safety climb wire rope is supported and not adversely impacted by the install of the modification components. This may involve the install of wire rope guides, or other items to protect the wire rope.

The photos in the file structure should be uploaded to ***https://pmi.vzwsmart.com*** as depicted on the drawings

Photo Requirements:

Base and "During Installation Photos"

- Base pictures include
  - Photo of Gate Signs showing the tower owner, site name, and number
  - Photo of carrier shelter showing the carrier site name and number if available
  - Photos of the galvanizing compound and/or paint used (if applicable), clearly showing the label and name
- "During Installation Photos if provided - must be placed only in this folder

Photos taken at ground level

- Overall tower structure before and after installation of the equipment modifications
- Photos of the appropriate mount before and 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 each individual sector before and also after installation of equipment.

- These photos should also certify that the placement and geometry of the equipment on the mount is as depicted on the sketch and table in the mount analysis
- 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.

Antenna & equipment placement and Geometry Confirmation:

- The contractor must certify that the antenna & equipment placement and geometry is in accordance with the antenna placement diagrams as included in this mount analysis.

☐ The contractor certifies that the photos support and the equipment on the mount is as depicted on the antenna placement diagrams as included in this mount analysis.

☐ The contractor notes that the equipment on the mount is not in accordance with the antenna placement diagrams and has accordingly marked up the diagrams or provided a diagram outlining the differences.

Certifying Individual: Company _____

Name _____

Signature _____

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

Issue:

Response:

Schedule A – Photo & Document File Structure

- VzW Site Number / Name
  - Base & "During Installation" Photos
  - Pre-Installation Photos
    - Alpha
    - Beta
    - Gamma
    - Ground Level
    - Tape Drop
  - Post-Installation Photos
    - Alpha
    - Beta
    - Gamma
    - Ground Level
    - Tape Drop
    - Photos of climbing facility and safety climb – If Present
  - Certifications – Submission of this document including certifications
  - Specific Required Additional Photos

Structure: 470205-VZW - Plainville 4

Sector: **A**

Structure Type: Rooftop

Mount Elev: 20.00

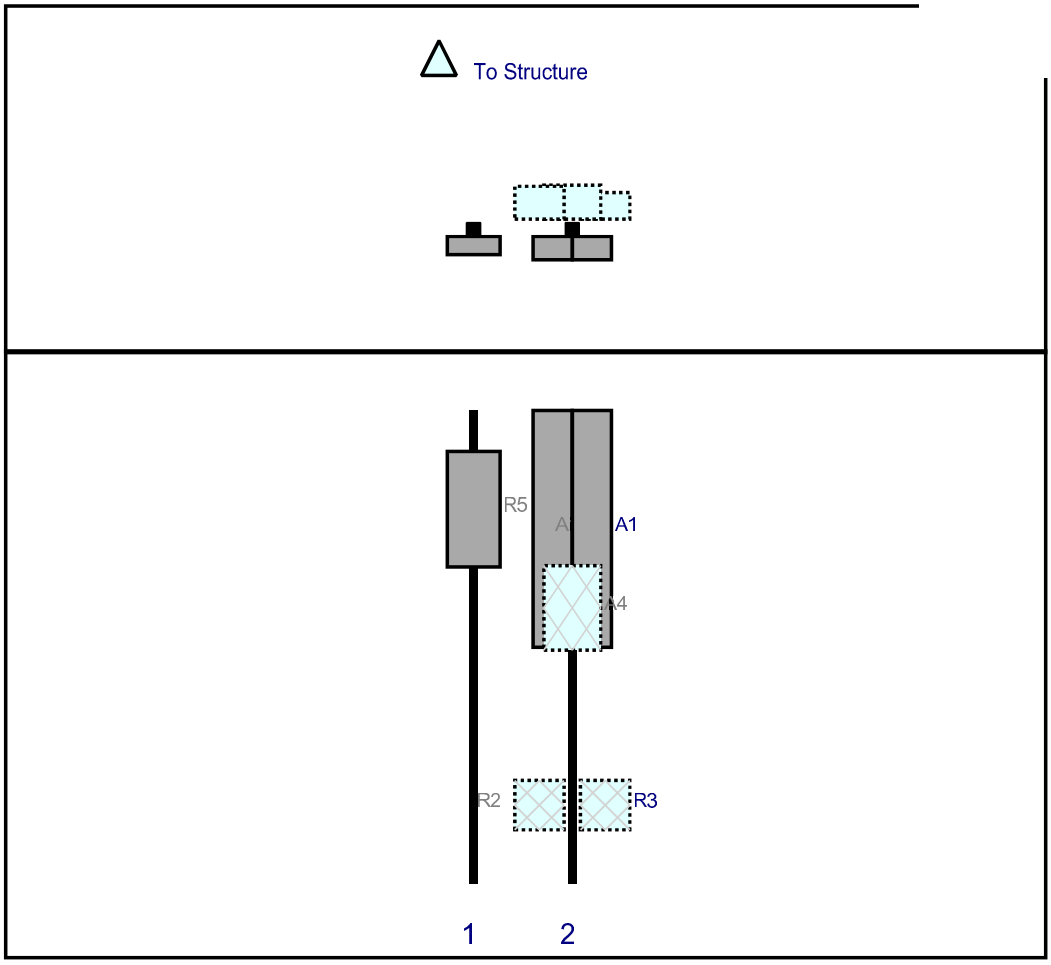
4/19/2021

Page: 1

MASER CONSULTING —CONNECTICUT—

Plan View

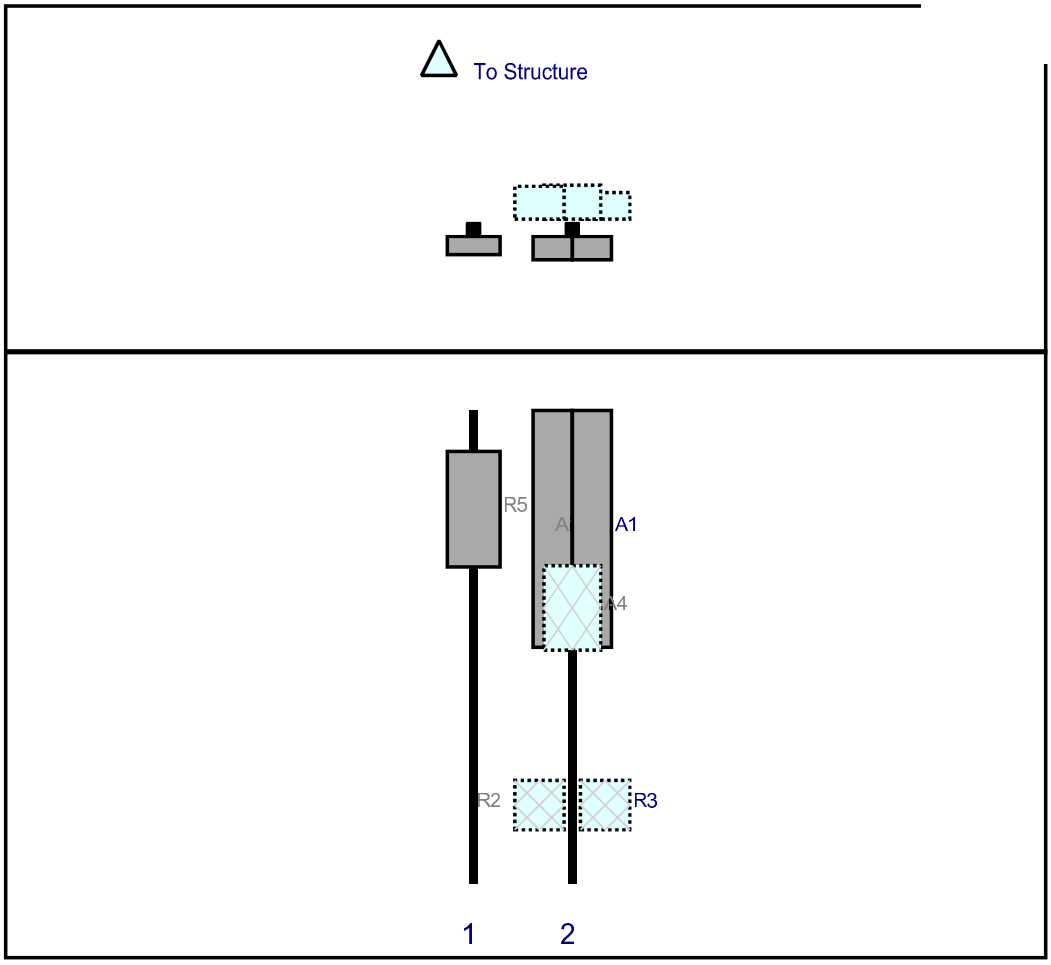
Front View
Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
R5	MT6407-77A	35.1	16.1	0	1	a	Front	30	0	Added	
A1	NHH-65B-R2B	72	11.9	30	2	a	Front	36	-6	Retained	02/15/2021
A1	NHH-65B-R2B	72	11.9	30	2	b	Front	36	6	Retained	02/15/2021
R2	RFV01U-D1A	15	15	30	2	b	Behind	120	-10	Retained	02/15/2021
R3	RFV01U-D2A	15	15	30	2	c	Behind	120	10	Retained	02/15/2021
A4	RHSDC-3315-PF-48	25.7	17.3	30	2	c	Behind	60	0	Retained	02/15/2021

Plan View

Front View
Looking at Structure

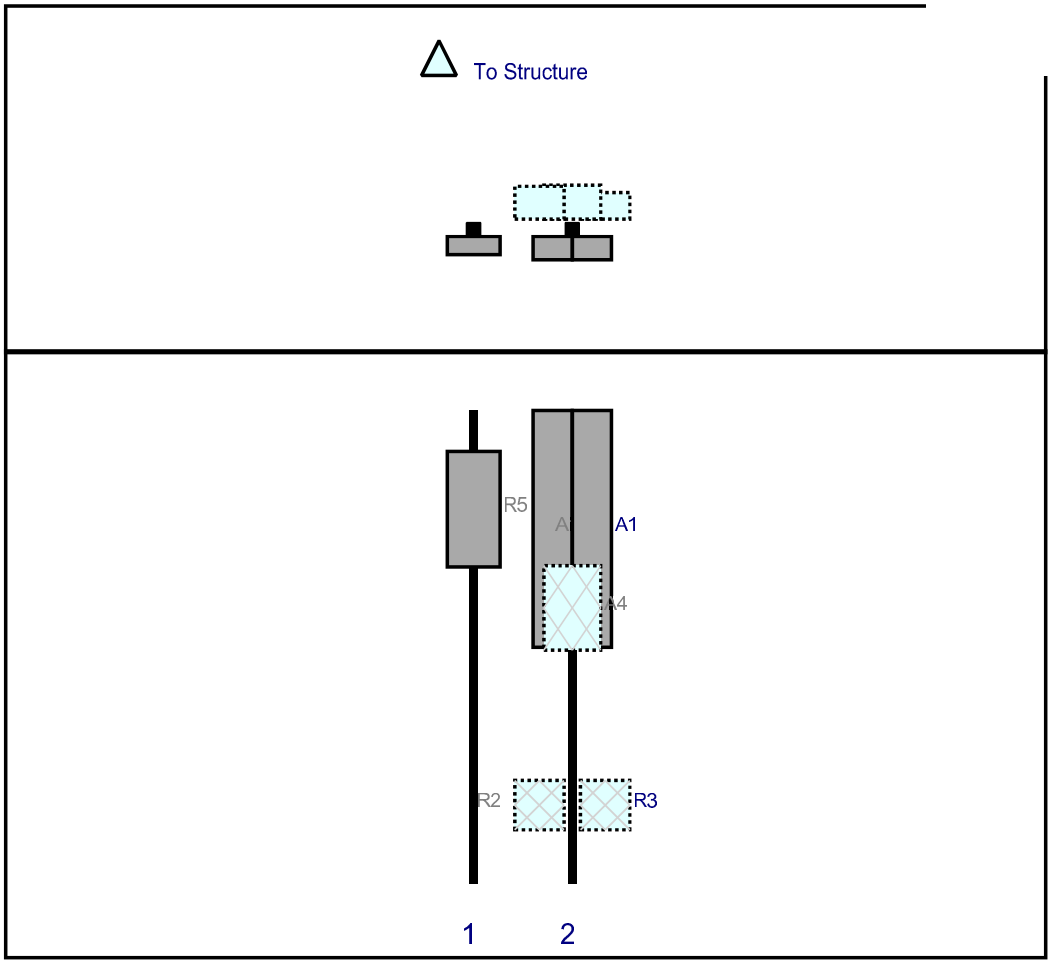


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
R5	MT6407-77A	35.1	16.1	0	1	a	Front	30	0	Added	
A1	NHH-65B-R2B	72	11.9	30	2	a	Front	36	-6	Retained	02/15/2021
A1	NHH-65B-R2B	72	11.9	30	2	b	Front	36	6	Retained	02/15/2021
R2	RFV01U-D1A	15	15	30	2	b	Behind	120	-10	Retained	02/15/2021
R3	RFV01U-D2A	15	15	30	2	c	Behind	120	10	Retained	02/15/2021
A4	RHSDC-3315-PF-48	25.7	17.3	30	2	c	Behind	60	0	Retained	02/15/2021

MASER CONSULTING —CONNECTICUT—

Plan View

Front View
Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
R5	MT6407-77A	35.1	16.1	0	1	a	Front	30	0	Added	
A1	NHH-65B-R2B	72	11.9	30	2	a	Front	36	-6	Retained	02/15/2021
A1	NHH-65B-R2B	72	11.9	30	2	b	Front	36	6	Retained	02/15/2021
R2	RFV01U-D1A	15	15	30	2	b	Behind	120	-10	Retained	02/15/2021
R3	RFV01U-D2A	15	15	30	2	c	Behind	120	10	Retained	02/15/2021
A4	RHSDC-3315-PF-48	25.7	17.3	30	2	c	Behind	60	0	Retained	02/15/2021

Maser Consulting

Subject	TIA-222-H Usage
Site Information	Site ID: 470205-VZW Site Name: Plainville 4 CT – DSW Shopping Center Carrier Name: Verizon wireless Address: 276 New Britain Ave Plainville, Connecticut 06062 Hartford County Latitude: 41.672883° Longitude: -72.838186°
Structure Information	Tower Type: 20-Ft Rooftop Mount Type: 12.00-Ft Tripod Mount

To Whom It May Concern,

We respectfully submit the above referenced Antenna Mount Structural Analysis report in conformance with ANSI/TIA-222-H, Structural Standard for Antenna Supporting Structures and Antennas and Small Wind Turbine Support Structures.

The 2021 International Building Code states that, in Section 3108, telecommunication towers shall be designed and constructed in accordance with the provisions of TIA-222. The TIA-222-H is the latest revision of the TIA-222 Standard, effective as of January 01, 2018.

As with all ANSI standards and engineering best practice is to apply the most current revision of the standard. This ensures the engineer is applying all updates. As an example, the TIA-222-H standard includes updates to bring it in line with the latest AISC and ACI standards and it also incorporates the latest wind speed maps by ASCE 7 based on updated studies of the wind data.

The TIA-222-H standard clarifies these specific requirements for the antenna mount analysis such as modeling methods, seismic analysis, 30-degree increment wind directions and maintenance loading. Therefore, it is our opinion that TIA-222-H is the most appropriate standard for antenna mount structural analysis and is acceptable for use at this tower site to ensure the engineer is taking into account the most current engineering standard available.

Sincerely,

Taqi Khawaja, PE
Technical Manager

ATTACHMENT 5

Far Field Approximation
with downtilt variation

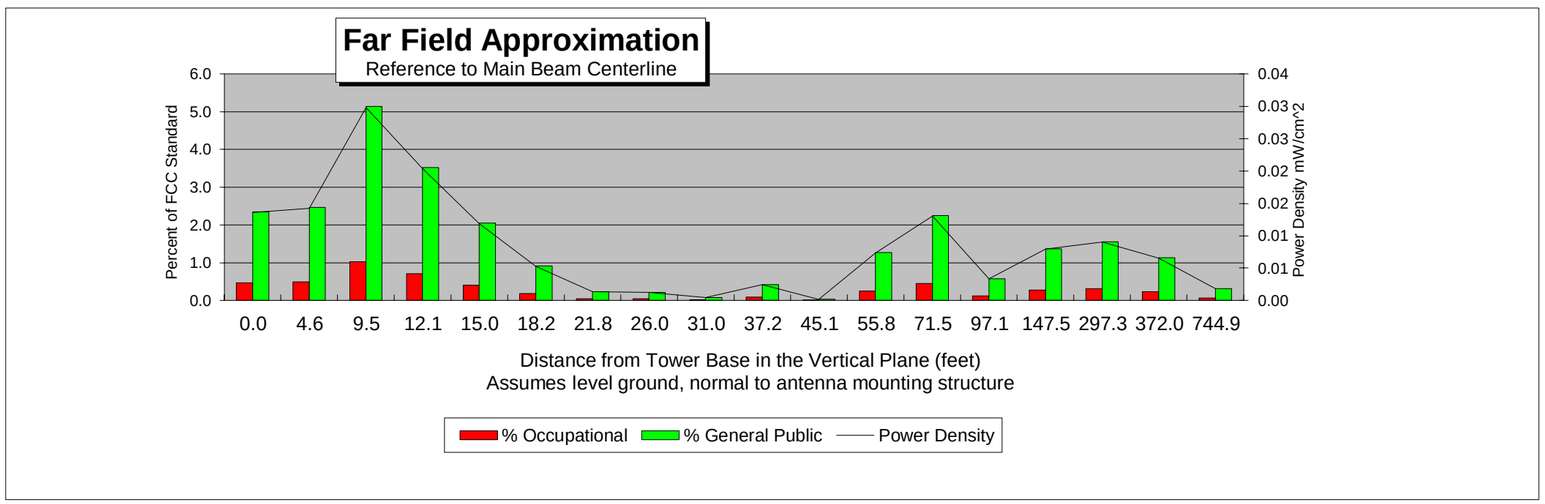
Estimated Radiated Emission

Single Emitter Far Field Model

Dipole / Wire/ Yagi Antenna Types

Location:	Plainville 4 CT
Site #:	
Date:	06/22/21
Name:	Mark Brauer
File Name:	Plainville 4, CT - FF Power

Operating Freq. (MHz	**869.0**
Antenna Height (ft):	**29.0**
Antenna Gain (dBi):	**14.8**
Antenna Size (in.):	**72.0**
Downtilt (degrees):	**0.0**
Feedline Loss (dB):	**0.0**
Power @ J4 (w):	**160.0**
Number of channels:	



Calc Angle	90.0	80.0	70.0	65.0	60.0	55.0	50.0	45.0	40.0	35.0	30.0	25.0	20.0	15.0	10.0	5.0	4.0	2.0	
Solve for r, dx to antenna	26.0	26.4	27.7	28.7	30.0	31.8	34.0	36.8	40.5	45.3	52.0	61.6	76.1	100.5	149.8	298.5	372.9	745.4	
Distance from Antenna Structure Base in Horizontal plan	0.0	4.6	9.5	12.1	15.0	18.2	21.8	26.0	31.0	37.2	45.1	55.8	71.5	97.1	147.5	297.3	372.0	744.9	
Angle from Main Beam (reference to horizontal plane)	90	80	70	65	60	55	50	45	40	35	30	25	20	15	10	5	4	2	
dB down from centerline (referenced to centerline)	20.47	20.13	16.52	17.85	19.8	22.85	28.26	27.9	31.62	23.11	33.3	15.68	11.33	14.82	7.59	1.06	0.5	0	
Reflection Coefficient (1 to 4, 2.56 typical)	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	
Power Density (mW/cm^2)	0.01	0.01	0.03	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.01	0.00	
Percent of Occupational Standard	0.5	0.5	1.0	0.7	0.4	0.2	0.0	0.0	0.0	0.1	0.0	0.3	0.4	0.1	0.3	0.3	0.2	0.1	
Percent of General Population Standard	2.3	2.5	5.1	3.5	2.1	0.9	0.2	0.2	0.1	0.4	0.0	1.3	2.2	0.6	1.4	1.6	1.1	0.3	

Antenna Type NHH-65B
Max% 5.14%

Instructions:

1) Fill in Site Location, Site number, Date, Name of Person Responsible for Date, and enter File Name to ba saved as.
2) References to J4 refer to a point where the transmission line exits the equipment shelter and proceeds to the antenna(s). There is typically a connector located here where power measurements are made.
3) Enter Antenna Height (in feet to bottom of antenna), Antenna Gain (expressed as dBi, add 2.17 to dBd to obtain dBi), Antenna Size (vertical size in inches), Downtilt (in Degrees, enter zero if none), Feedline loss from J4 to Antenna, and J4 Power (in watts).
4) From manufacturer's plots, or data sheet, input Angle from mainbeam and dB below mainbeam centerline.
5) Enter Reflection coefficient (2.56 would be typical, 1 for free space)
6) Spreadsheet calculates actual power density, then relates as Occupational or General Population percentage of FCC Standard.
7) An odd distance may be entered in the rightmost column of the lower table.

Far Field Approximation
with downtilt variation

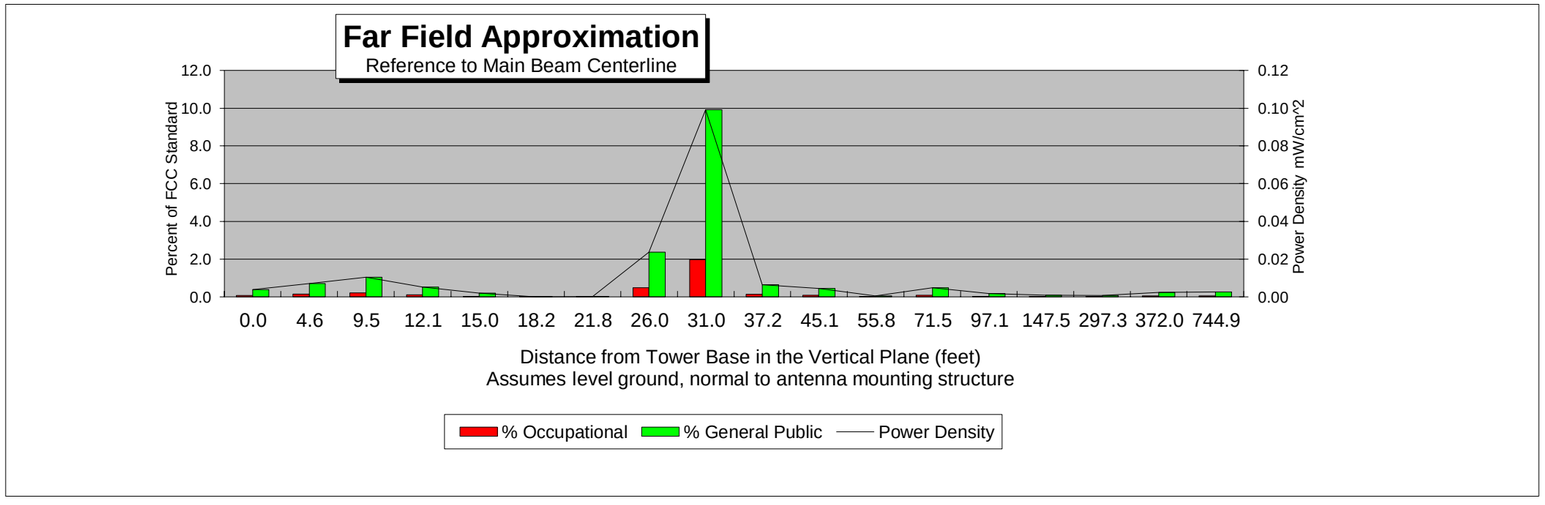
Estimated Radiated Emission

Single Emitter Far Field Model

Dipole / Wire/ Yagi Antenna Types

Location:	Plainville 4, CT
Site #:	
Date:	06/22/21
Name:	Mark Brauer
File Name:	Plainville 4, CT - FF Power

Operating Freq. (MHz	**1970.0**
Antenna Height (ft):	**29.0**
Antenna Gain (dBi):	**17.8**
Antenna Size (in.):	**72.0**
Downtilt (degrees):	**0.0**
Feedline Loss (dB):	**0.0**
Power @ J4 (w):	**160.0**
Number of channels:	**4**



Calc Angle	90.0	80.0	70.0	65.0	60.0	55.0	50.0	45.0	40.0	35.0	30.0	25.0	20.0	15.0	10.0	5.0	4.0	2.0	
Solve for r, dx to antenna	26.0	26.4	27.7	28.7	30.0	31.8	34.0	36.8	40.5	45.3	52.0	61.6	76.1	100.5	149.8	298.5	372.9	745.4	
Distance from Antenna Structure Base in Horizontal plan	0.0	4.6	9.5	12.1	15.0	18.2	21.8	26.0	31.0	37.2	45.1	55.8	71.5	97.1	147.5	297.3	372.0	744.9	
Angle from Main Beam (reference to horizontal plane)	90	80	70	65	60	55	50	45	40	35	30	25	20	15	10	5	4	2	
dB down from centerline (referenced to centerline)	29.19	26.28	24.2	26.86	30.94	49.08	46.65	18.19	11.15	22.02	22.49	31.22	18.88	20.82	20.68	15.19	8.23	1.84	
Reflection Coefficient (1 to 4, 2.56 typical)	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	
Power Density (mW/cm^2)	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.02	0.10	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Percent of Occupational Standard	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.5	2.0	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	
Percent of General Population Standard	0.4	0.7	1.0	0.5	0.2	0.0	0.0	2.4	9.9	0.6	0.4	0.0	0.5	0.2	0.1	0.1	0.2	0.2	

Antenna Type NHH-65B
Max% 9.91%

Instructions:

1) Fill in Site Location, Site number, Date, Name of Person Responsible for Date, and enter File Name to ba saved as.
2) References to J4 refer to a point where the transmission line exits the equipment shelter and proceeds to the antenna(s). There is typically a connector located here where power measurements are made.
3) Enter Antenna Height (in feet to bottom of antenna), Antenna Gain (expressed as dBi, add 2.17 to dBd to obtain dBi), Antenna Size (vertical size in inches), Downtilt (in Degrees, enter zero if none), Feedline loss from J4 to Antenna, and J4 Power (in watts).
4) From manufacturer's plots, or data sheet, input Angle from mainbeam and dB below mainbeam centerline.
5) Enter Reflection coefficient (2.56 would be typical, 1 for free space)
6) Spreadsheet calculates actual power density, then relates as Occupational or General Population percentage of FCC Standard.
7) An odd distance may be entered in the rightmost column of the lower table.

Far Field Approximation
with downtilt variation

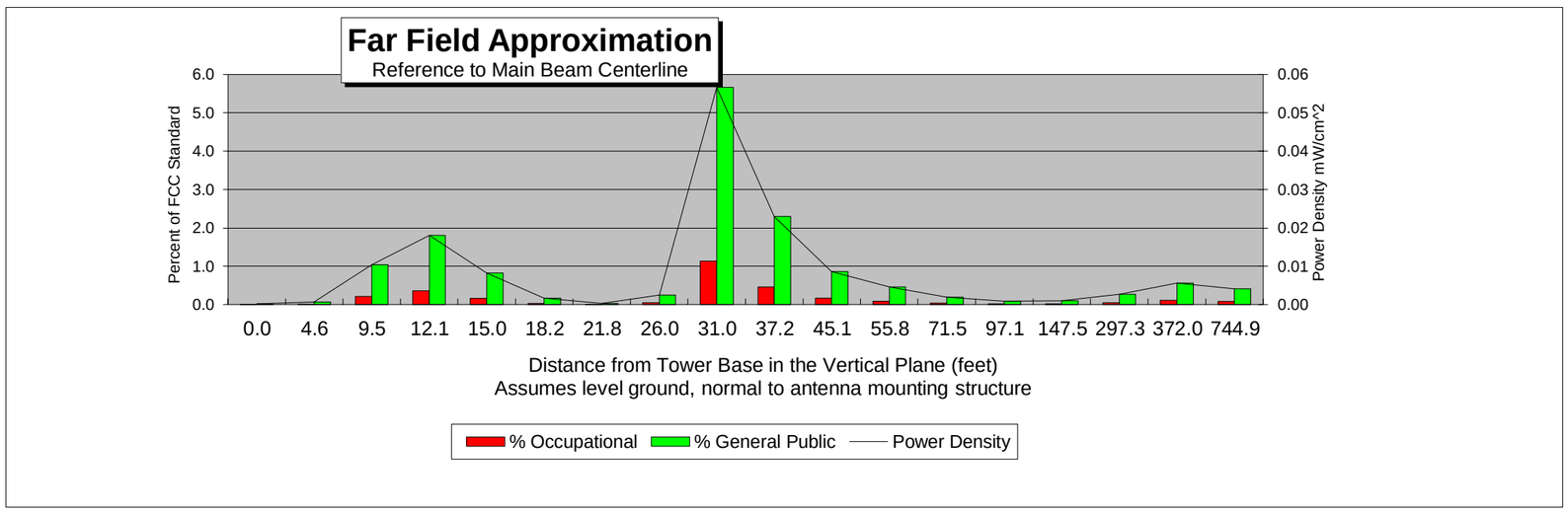
Estimated Radiated Emission

Single Emitter Far Field Model

Dipole / Wire/ Yagi Antenna Types

Location:	Plainville 4, CT
Site #:	
Date:	06/22/21
Name:	Mark Brauer
File Name:	Plainville 4, CT - FF Power

Operating Freq. (MHz)	**2110.0**
Antenna Height (ft):	**29.0**
Antenna Gain (dBi):	**18.6**
Antenna Size (in.):	**72.0**
Downtilt (degrees):	**0.0**
Feedline Loss (dB):	**0.0**
Power @ J4 (w):	**160.0**
Number of channels:	**4**



Calc Angle	90.0	80.0	70.0	65.0	60.0	55.0	50.0	45.0	40.0	35.0	30.0	25.0	20.0	15.0	10.0	5.0	4.0	2.0	
Solve for r, dx to antenna	26.0	26.4	27.7	28.7	30.0	31.8	34.0	36.8	40.5	45.3	52.0	61.6	76.1	100.5	149.8	298.5	372.9	745.4	
Distance from Antenna Structure Base in Horizontal plane	0.0	4.6	9.5	12.1	15.0	18.2	21.8	26.0	31.0	37.2	45.1	55.8	71.5	97.1	147.5	297.3	372.0	744.9	
Angle from Main Beam (reference to horizontal plane)	90	80	70	65	60	55	50	45	40	35	30	25	20	15	10	5	4	2	
dB down from centerline (referenced to centerline)	42.63	37.22	25.04	22.32	25.35	31.65	39	28.67	14.38	17.32	20.35	21.65	23.66	24.41	20.35	10.22	5.09	0.5	
Reflection Coefficient (1 to 4, 2.56 typical)	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	
Power Density (mW/cm^2)	0.00	0.00	0.01	0.02	0.01	0.00	0.00	0.00	0.06	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	
Percent of Occupational Standard	0.0	0.0	0.2	0.4	0.2	0.0	0.0	0.1	1.1	0.5	0.2	0.1	0.0	0.0	0.0	0.1	0.1	0.1	
Percent of General Population Standard	0.0	0.1	1.0	1.8	0.8	0.2	0.0	0.3	5.7	2.3	0.9	0.5	0.2	0.1	0.1	0.3	0.6	0.4	

Antenna Type NHH-65B
Max% 5.66%

Instructions:

1) Fill in Site Location, Site number, Date, Name of Person Responsible for Date, and enter File Name to ba saved as.
2) References to J4 refer to a point where the transmission line exits the equipment shelter and proceeds to the antenna(s). There is typically a connector located here where power measurements are made.
3) Enter Antenna Height (in feet to bottom of antenna), Antenna Gain (expressed as dBi, add 2.17 to dBd to obtain dBi), Antenna Size (vertical size in inches), Downtilt (in Degrees, enter zero if none), Feedline loss from J4 to Antenna, and J4 Power (in watts)
4) From manufacturer's plots, or data sheet, input Angle from mainbeam and dB below mainbeam centerline.
5) Enter Reflection coefficient (2.56 would be typical, 1 for free space)
6) Spreadsheet calculates actual power density, then relates as Occupational or General Population percentage of FCC Standard.
7) An odd distance may be entered in the rightmost column of the lower table.

Far Field Approximation
with downtilt variation

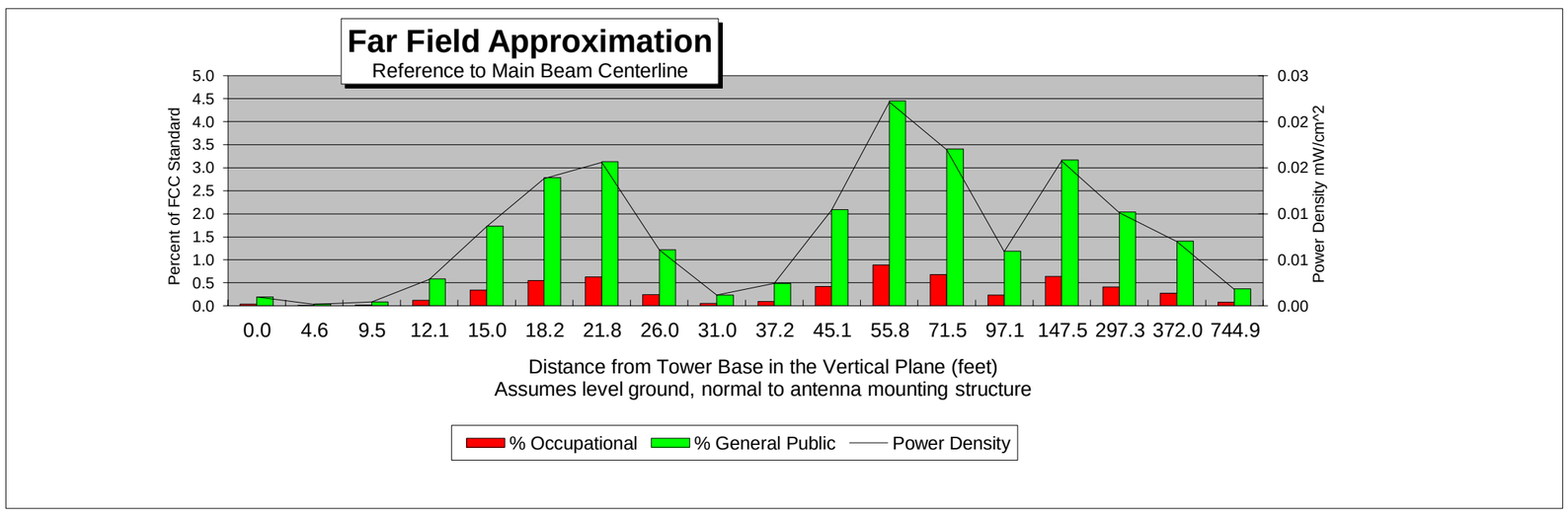
Estimated Radiated Emission

Single Emitter Far Field Model

Dipole / Wire/ Yagi Antenna Types

Location:	Plainville 4, CT
Site #:	
Date:	06/22/21
Name:	Mark Brauer
File Name:	Plainville 4, CT - FF Power

Operating Freq. (MHz):	**746.0**
Antenna Height (ft):	**29.0**
Antenna Gain (dBi):	**14.6**
Antenna Size (in.):	**72.0**
Downtilt (degrees):	**0.0**
Feedline Loss (dB):	**0.0**
Power @ J4 (w):	**160.0**
Number of channels:	**4**



Calc Angle	90.0	80.0	70.0	65.0	60.0	55.0	50.0	45.0	40.0	35.0	30.0	25.0	20.0	15.0	10.0	5.0	4.0	2.0	
Solve for r, dx to antenna	26.0	26.4	27.7	28.7	30.0	31.8	34.0	36.8	40.5	45.3	52.0	61.6	76.1	100.5	149.8	298.5	372.9	745.4	
Distance from Antenna Structure Base in Horizontal plane	0.0	4.6	9.5	12.1	15.0	18.2	21.8	26.0	31.0	37.2	45.1	55.8	71.5	97.1	147.5	297.3	372.0	744.9	
Angle from Main Beam (reference to horizontal plane)	90	80	70	65	60	55	50	45	40	35	30	25	20	15	10	5	4	2	
dB down from centerline (referenced to centerline)	31.96	39.61	35.13	26.28	21.15	18.61	17.51	20.91	27.16	23.07	15.56	10.82	10.14	12.3	4.57	0.5	0.18	0	
Reflection Coefficient (1 to 4, 2.56 typical)	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	
Power Density (mW/cm^2)	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.01	0.00	0.00	0.01	0.02	0.02	0.01	0.02	0.01	0.01	0.00	
Percent of Occupational Standard	0.0	0.0	0.0	0.1	0.3	0.6	0.6	0.2	0.0	0.1	0.4	0.9	0.7	0.2	0.6	0.4	0.3	0.1	
Percent of General Population Standard	0.2	0.0	0.1	0.6	1.7	2.8	3.1	1.2	0.2	0.5	2.1	4.4	3.4	1.2	3.2	2.0	1.4	0.4	

Antenna Type NHH-65B
Max% 4.45%

Instructions:

1) Fill in Site Location, Site number, Date, Name of Person Responsible for Date, and enter File Name to ba saved as.
2) References to J4 refer to a point where the transmission line exits the equipment shelter and proceeds to the antenna(s). There is typically a connector located here where power measurements are made.
3) Enter Antenna Height (in feet to bottom of antenna), Antenna Gain (expressed as dBi, add 2.17 to dBd to obtain dBi), Antenna Size (vertical size in inches), Downtilt (in Degrees, enter zero if none), Feedline loss from J4 to Antenna, and J4 Power (in watts
4) From manufacturer's plots, or data sheet, input Angle from mainbeam and dB below mainbeam centerline.
5) Enter Reflection coefficient (2.56 would be typical, 1 for free space)
6) Spreadsheet calculates actual power density, then relates as Occupational or General Population percentage of FCC Standard.
7) An odd distance may be entered in the rightmost column of the lower table.

Far Field Approximation
with downtilt variation

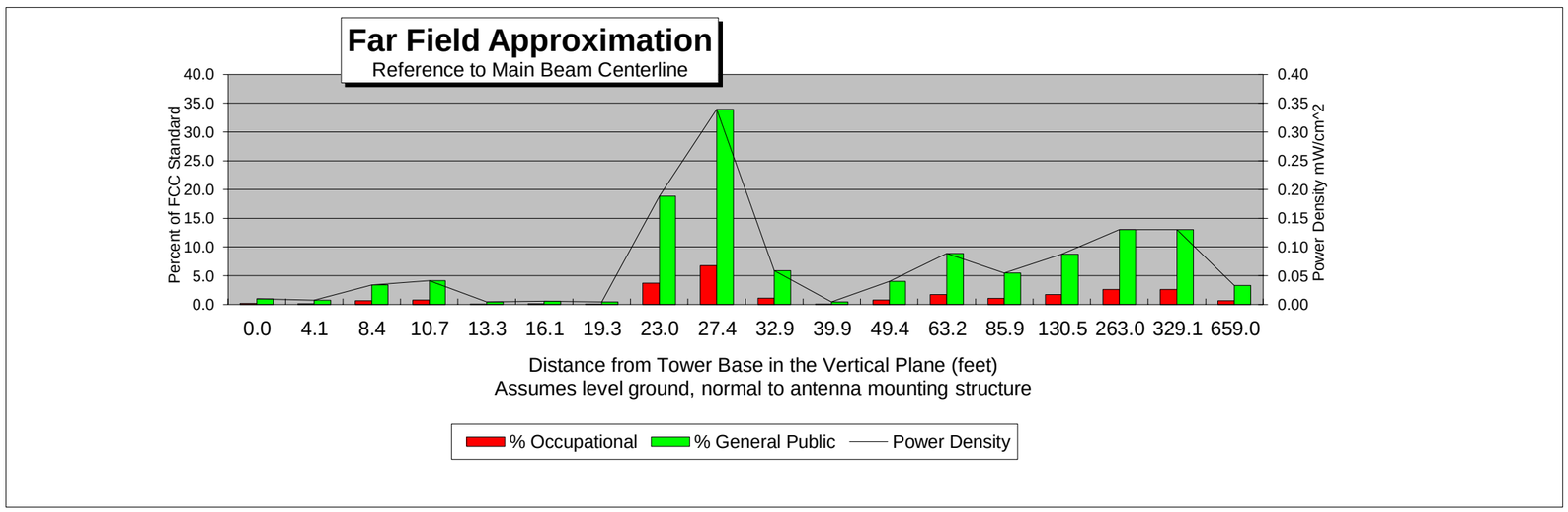
Estimated Radiated Emission

Single Emitter Far Field Model

Dipole / Wire/ Yagi Antenna Types

Location:	PLAINVILLE 4 CT
Site #:	
Date:	06/22/21
Name:	Mark Brauer
File Name:	PLAINVILLE 4 CT CBAND

Operating Freq. (MHz)	**3800.0**
Antenna Height (ft):	**29.0**
Antenna Gain (dBi):	**25.7**
Antenna Size (in.):	**35.0**
Downtilt (degrees):	**0.0**
Feedline Loss (dB):	**0.0**
Power @ J4 (w):	**200.0**
Number of channels:	**1**



Calc Angle	90.0	80.0	70.0	65.0	60.0	55.0	50.0	45.0	40.0	35.0	30.0	25.0	20.0	15.0	10.0	5.0	4.0	2.0	
Solve for r, dx to antenna	23.0	23.4	24.5	25.4	26.6	28.1	30.0	32.5	35.8	40.1	46.0	54.4	67.3	88.9	132.5	264.0	329.9	659.4	
Distance from Antenna Structure Base in Horizontal plane	0.0	4.1	8.4	10.7	13.3	16.1	19.3	23.0	27.4	32.9	39.9	49.4	63.2	85.9	130.5	263.0	329.1	659.0	
Angle from Main Beam (reference to horizontal plane)	90	80	70	65	60	55	50	45	40	35	30	25	20	15	10	5	4	2	
dB down from centerline (referenced to centerline)	34.89	35.96	28.97	27.84	36.74	35.29	35.49	19.12	15.74	22.35	31.84	21.37	16.08	15.74	10.26	2.53	0.6	0.49	
Reflection Coefficient (1 to 4, 2.56 typical)	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	
Power Density (mW/cm^2)	0.01	0.01	0.03	0.04	0.00	0.01	0.01	0.19	0.34	0.06	0.01	0.04	0.09	0.05	0.09	0.13	0.13	0.03	
Percent of Occupational Standard	0.2	0.2	0.7	0.8	0.1	0.1	0.1	3.8	6.8	1.2	0.1	0.8	1.8	1.1	1.7	2.6	2.6	0.7	
Percent of General Population Standard	1.0	0.8	3.4	4.2	0.5	0.6	0.5	18.9	33.9	5.9	0.5	4.0	8.9	5.5	8.7	13.1	13.0	3.3	

Antenna Type MT6407
Max% 33.93%

Instructions:

1) Fill in Site Location, Site number, Date, Name of Person Responsible for Date, and enter File Name to ba saved as.
2) References to J4 refer to a point where the transmission line exits the equipment shelter and proceeds to the antenna(s). There is typically a connector located here where power measurements are made.
3) Enter Antenna Height (in feet to bottom of antenna), Antenna Gain (expressed as dBi, add 2.17 to dBd to obtain dBi), Antenna Size (vertical size in inches), Downtilt (in Degrees, enter zero if none), Feedline loss from J4 to Antenna, and J4 Power (in watts
4) From manufacturer's plots, or data sheet, input Angle from mainbeam and dB below mainbeam centerline.
5) Enter Reflection coefficient (2.56 would be typical, 1 for free space)
6) Spreadsheet calculates actual power density, then relates as Occupational or General Population percentage of FCC Standard.
7) An odd distance may be entered in the rightmost column of the lower table.

ATTACHMENT 6

Robinson+Cole

KENNETH C. BALDWIN

280 Trumbull Street
Hartford, CT 06103-3597
Main (860) 275-8200
Fax (860) 275-8299
kbaldwin@rc.com
Direct (860) 275-8345

Also admitted in Massachusetts
and New York

September 22, 2021

Via Certificate of Mailing

Robert E. Lee, Town Manager
Town of Plainville
One Central Square
Plainville, CT 06062

Re: **Proposed Modifications to a Roof-top Telecommunications Facility at 276 New Britain Avenue in Plainville, Connecticut**

Dear Mr. Lee:

This firm represents Cellco Partnership d/b/a Verizon Wireless ("Cellco"). Today, Cellco filed a Sub-Petition for Declaratory Ruling ("Sub-Petition") with the Connecticut Siting Council ("Council") seeking approval to modify its existing roof-top wireless telecommunications facility on the DWS Building at 276 New Britain Avenue in Plainville, Connecticut (the "Property"). Cellco currently maintains a roof-top wireless telecommunications facility on the roof of the building consisting of three (3) roof-top ballast-mounted masts each supporting two (2) antennas, all with a centerline height of 29 feet, and two (2) remote radio heads. Equipment associated with the antennas is located on the ground adjacent to the building. Cellco is seeking Council approval to install three (3) additional antennas on similar ballast-mounted masts, adjacent to the three (3) existing masts. The new antennas will be installed at the same height as the existing antennas.

As presented in the Sub-Petition, the proposed facility modifications constitute an eligible facility request pursuant to Section 6409(a) of the Federal Middle Class Tax Relief and Job Creation act of 2012 (47 U.S.C. § 1455(a)) and the October 21, 2014 Order of the Federal Communications Commission (FCC-14-153). A copy of the full Sub-Petition is attached for your review. Landowners whose property abuts the Property were also sent notice of this filing along with a copy of the Sub-Petition.

Pursuant to its decision in Petition No. 1133, comments or concerns regarding this proposal should be submitted to the Council within thirty (30) days of the date of the attached Sub-Petition.

Please contact me if you have any questions regarding this proposal.

Sincerely,

Kenneth C. Baldwin

Attachment

Robinson+Cole

KENNETH C. BALDWIN

280 Trumbull Street
Hartford, CT 06103-3597
Main (860) 275-8200
Fax (860) 275-8299
kbaldwin@rc.com
Direct (860) 275-8345

Also admitted in Massachusetts
and New York

September 22, 2021

Via Certificate of Mailing

Garrett Daigle, Town Planner
Town of Plainville
One Central Square
Plainville, CT 06062

Re: **Proposed Modifications to a Roof-top Telecommunications Facility at 276 New Britain Avenue in Plainville, Connecticut**

Dear Mr. Daigle:

This firm represents Cellco Partnership d/b/a Verizon Wireless ("Cellco"). Today, Cellco filed a Sub-Petition for Declaratory Ruling ("Sub-Petition") with the Connecticut Siting Council ("Council") seeking approval to modify its existing roof-top wireless telecommunications facility on the DWS Building at 276 New Britain Avenue in Plainville, Connecticut (the "Property"). Cellco currently maintains a roof-top wireless telecommunications facility on the roof of the building consisting of three (3) roof-top ballast-mounted masts each supporting two (2) antennas, all with a centerline height of 29 feet, and two (2) remote radio heads. Equipment associated with the antennas is located on the ground adjacent to the building. Cellco is seeking Council approval to install three (3) additional antennas on similar ballast-mounted masts, adjacent to the three (3) existing masts. The new antennas will be installed at the same height as the existing antennas.

As presented in the Sub-Petition, the proposed facility modifications constitute an eligible facility request pursuant to Section 6409(a) of the Federal Middle Class Tax Relief and Job Creation act of 2012 (47 U.S.C. § 1455(a)) and the October 21, 2014 Order of the Federal Communications Commission (FCC-14-153). A copy of the full Sub-Petition is attached for your review. Landowners whose property abuts the Property were also sent notice of this filing along with a copy of the Sub-Petition.

Pursuant to its decision in Petition No. 1133, comments or concerns regarding this proposal should be submitted to the Council within thirty (30) days of the date of the attached Sub-Petition.

Please contact me if you have any questions regarding this proposal.

Sincerely,

Kenneth C. Baldwin

Attachment

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Also admitted in Massachusetts
and New York

September 22, 2021

Via Certificate of Mailing

DT Connecticut Commons LLC
c/o Site Centers Corp.
330 Enterprise Parkway
Beachwood, OH 44122

Re: **Proposed Modifications to a Roof-top Telecommunications Facility at 276 New Britain Avenue in Plainville, Connecticut**

Dear Sir/Madam:

This firm represents Cellco Partnership d/b/a Verizon Wireless ("Cellco"). Today, Cellco filed a Sub-Petition for Declaratory Ruling ("Sub-Petition") with the Connecticut Siting Council ("Council") seeking approval to modify its existing roof-top wireless telecommunications facility on the DWS Building at 276 New Britain Avenue in Plainville, Connecticut (the "Property"). Cellco currently maintains a wireless telecommunications facility on the roof of the building consisting of three (3) ballast-mounted masts each supporting two (2) antennas and two (2) remote radio heads. Equipment associated with the antennas is on the ground adjacent to the building. Cellco now intends to install three (3) additional ballast-mounted masts each supporting an additional antenna, adjacent to the existing roof-top masts.

As presented in the Sub-Petition, the proposed facility modifications constitute an eligible facility request pursuant to Section 6409(a) of the Federal Middle Class Tax Relief and Job Creation act of 2012 (47 U.S.C. § 1455(a)) and the October 21, 2014 Order of the Federal Communications Commission (FCC-14-153). A copy of the full Sub-Petition is attached for your review. Landowners whose property abuts the Property were also sent notice of this filing along with a copy of the Sub-Petition.

Pursuant to its decision in Petition No. 1133, comments or concerns regarding this proposal should be submitted to the Council within thirty (30) days of the date of the attached Sub-Petition.

Please contact me if you have any questions regarding this proposal.

Sincerely,

Kenneth C. Baldwin

Attachment

ATTACHMENT 6

Robinson+Cole

KENNETH C. BALDWIN

280 Trumbull Street
Hartford, CT 06103-3597
Main (860) 275-8200
Fax (860) 275-8299
kbaldwin@rc.com
Direct (860) 275-8345

Also admitted in Massachusetts
and New York

September 22, 2021

Via Certificate of Mailing

«Name_and_Address»

Re: **Proposed Modifications to a Telecommunications Facility at 276 New Britain Avenue in Plainville, Connecticut**

Dear «Salutation»:

This firm represents Cellco Partnership d/b/a Verizon Wireless ("Cellco"). Today, Cellco filed a Sub-Petition for Declaratory Ruling ("Sub-Petition") with the Connecticut Siting Council ("Council") seeking approval to modify its existing roof-top wireless telecommunications facility on the DWS Building at 276 New Britain Avenue in Plainville, Connecticut (the "Property"). Cellco currently maintains a wireless telecommunications facility on the roof of the building consisting of three (3) ballast-mounted masts each supporting two (2) antennas and two (2) remote radio heads. Equipment associated with the antennas is on the ground adjacent to the building. Cellco now intends to install three (3) additional ballast-mounted masts each supporting an additional antenna, adjacent to the existing roof-top masts.

As presented in the Sub-Petition, the proposed facility modifications constitute an eligible facility request pursuant to Section 6409(a) of the Federal Middle Class Tax Relief and Job Creation act of 2012 (47 U.S.C. § 1455(a)) and the October 21, 2014 Order of the Federal Communications Commission (FCC-14-153). A copy of the full Sub-Petition is attached for your review.

Pursuant to its decision in Petition No. 1133, comments or concerns regarding this proposal should be submitted to the Council within thirty (30) days of the date of the Sub-Petition.

This notice is being sent to you because you are listed as an owner of land that abuts the Property. If you have any questions regarding the Sub-Petition, the Council's process for reviewing the Sub-Petition or the details of the filing itself, please feel free to contact me at the number listed above. You may also contact me or the Council directly at 860-827-2935.

Sincerely,

Kenneth C. Baldwin

Attachment

CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS

ABUTTING PROPERTY OWNERS

276 NEW BRITAIN AVENUE
PLAINVILLE, CONNECTICUT

	MBL	Property Address	Owner's and Mailing Address
1.	22-E-03	22 Colonial Court	Colonial of Plainville LLC 270 Sylvan Avenue Englewood Cliffs, NJ 07632
2.	22-E-06	3 Colonial Court	Teresa Taylor 3 Colonial Court Plainville, CT 06062
3.	22-E-05	1 Colonial Court	Constance Francis 1 Colonial Court Plainville, CT 06062
4.	22-E-04	156 New Britain Avenue	Pasqual Francis 156 New Britain Avenue Plainville, CT 06062
5.	22-B-13	167 New Britain Avenue	Gateway Square LLC 24 Old Kings Highway South #203 Darien, CT 06820
6.	22-B-11	175 New Britain Avenue	Mortgage Assistance Company LLC 175 New Britain Avenue Plainville, CT 06062
7.	22-B-10	181 New Britain Avenue	181 New Britain Avenue LLC 7600 Jericho Turnpike, Suite 400 Woodbury, NY 11797
8.	22-B-09	225 New Britain Avenue	The Beaudoin Family LLC P.O. Box 6000 Bristol, CT 06010
9.	22-D-29	245 New Britain Avenue	Peru Partners LLC 300 Connecticut Boulevard East Hartford, CT 06108

	MBL	Property Address	Owner's and Mailing Address
10.	22-D-30	275 New Britain Avenue	Hayes-Kaufman Plainville LLC 1471 Pleasant Valley Road Manchester, CT 06040
11.	21-A-01	297 New Britain Avenue	SEP Enterprises LLC 685 3rd Avenue, 4th Floor New York, NY 10017
12.	21-A-02	305 New Britain Avenue	SEP Enterprises LLC 685 3rd Avenue, 4th Floor New York, NY 10017
13.	21-A-03	349 New Britain Avenue	311 NB Plainville LLC 321 Main Street Farmington, CT 06032
14.	21-A-04	361 New Britain Avenue	JBW Enterprises LLC 321 Main Street Farmington, CT 06032
15.	21-A-05A	367 New Britain Avenue	JBW Enterprises LLC 321 Main Street Farmington, CT 06032
16.	21-A-05	0 New Britain Avenue	Gasoline Alley Holdings LLC 1 Hartford Square New Britain, CT 06052
17.	32-A-01	383 New Britain Avenue	Gasoline Alley Holdings LLC 1 Hartford Square New Britain, CT 06052
18.	31-B-01-1	380 New Britain Avenue	JS and MS LLC 380 New Britain Avenue Plainville, CT 06062
19.	31-B-01	0 Crooked Street	Rishabh LLC 440 Bedford Street Lexington, MA 02420
20.	31-A-01	84 Crooked Street	84 SLB1 LLC 1019 Route 519 Eighty-Four, PA 15330

PLAINVILLE 4

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	Postmaster, per *(name of receiving employee)* V.P.		

USPS® Tracking Number / Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)	Postage	Fee	Special Handling	Parcel Airlift
1.	181 New Britain Avenue LLC 7600 Jericho Turnpike, Suite 400 Woodbury, NY 11797				
2.	311 NB Plainville LLC 321 Main Street Farmington, CT 06032				
3.	84 SLB1 LLC 1019 Route 519 Eighty-Four, PA 15330				
4.	Colonial of Plainville LLC 270 Sylvan Avenue Englewood Cliffs, NJ 07632				
5.	Constance Francis 1 Colonial Court Plainville, CT 06062				
6.	Gasoline Alley Holdings LLC 1 Hartford Square New Britain, CT 06052				

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	Postmaster, per *(name of receiving employee)* V.P		

	USPS® Tracking Number / Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)	Postage	Fee	Special Handling	Parcel Airlift
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2.		Hayes-Kaufman Plainville LLC 1471 Pleasant Valley Road Manchester, CT 06040				
3.		JBW Enterprises LLC 321 Main Street Farmington, CT 06032				
4.		JS and MS LLC 380 New Britain Avenue Plainville, CT 06062				
5.		Mortgage Assistance Company LLC 175 New Britain Avenue Plainville, CT 06062				
6.		Pasqual Francis 156 New Britain Avenue Plainville, CT 06062				

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1.	Peru Partners LLC 300 Connecticut Boulevard East Hartford, CT 06108				
2.	Rishabh LLC 440 Bedford Street Lexington, MA 02420				
3.	SEP Enterprises LLC 685 3rd Avenue, 4th Floor New York, NY 10017				
4.	Teresa Taylor 3 Colonial Court Plainville, CT 06062				
5.	The Beaudoin Family LLC P.O. Box 6000 Bristol, CT 06010				
6.					

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1.	Robert E. Lee, Town Manager Town of Plainville One Central Square Plainville, CT 06062				
2.	Garrett Daigle, Town Planner Town of Plainville One Central Square Plainville, CT 06062				
3.	DT Connecticut Commons LLC c/o Site Centers Corp. 330 Enterprise Parkway Beachwood, OH 44122				
4.					
5.					
6.					

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